Yokohama Environmental, Social, and Governance Management

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Operational Sustainability Management (formerly Environmental, Social, and Governance)

The ServiceNow® Operational Sustainability Management application helps you centrally manage your sustainability commitments and report on progress toward your sustainability initiatives.

Operational Sustainability Management overview

Operational Sustainability Management refers to the systematic integration of environmental, social, and governance considerations into daily business operations and strategic decision-making. Organizations increasingly recognize that operational excellence extends beyond traditional efficiency metrics to encompass their broader impact on society and the environment.

Modern stakeholders—including customers, employees, regulators, and partners—expect organizations to demonstrate how sustainability commitments are woven into their operational fabric. Leading organizations embed sustainability into core processes, from supply chain management to workforce practices.

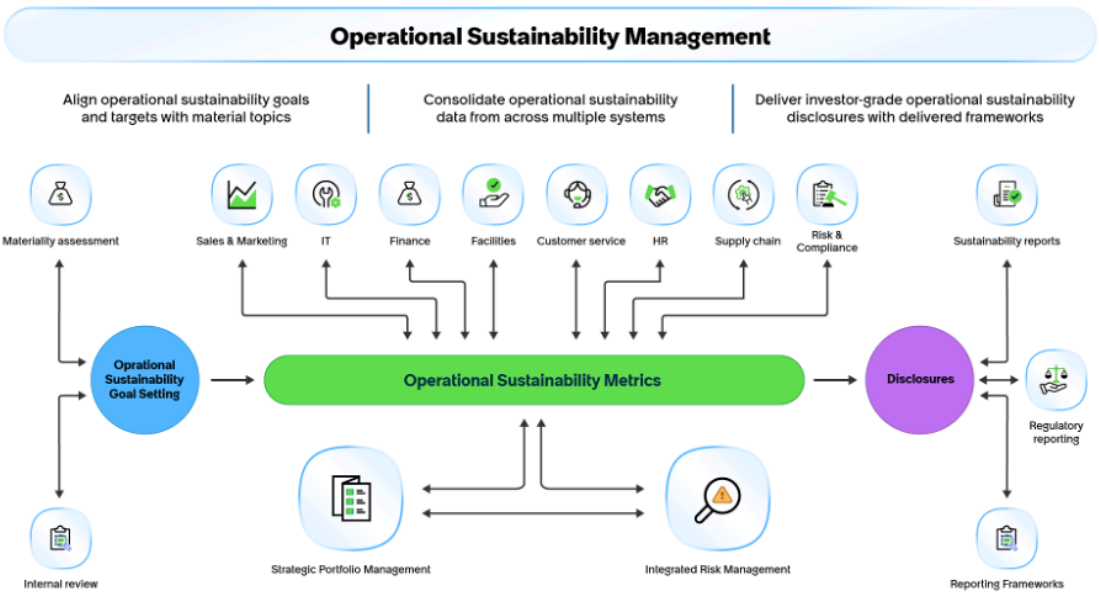
Organizations tailor their sustainability focus based on industry context, stakeholder expectations, and material impacts. Common operational sustainability initiatives include:

- Responsible procurement and sustainable supply chain practices
- Diversity, inclusion, and belonging in the workplace
- Electronic waste reduction and circular economy practices
- Carbon footprint reduction and energy efficiency programs

By managing sustainability operationally, organizations can drive measurable improvements in both business performance and positive impact, creating value that extends beyond financial returns to encompass environmental stewardship and social responsibility.

The following image shows how different departments collaborate for operational sustainability reporting.

Operational Sustainability Management uses



Get started

Explore	Configure	Integrate
		
Learn about how Operational Sustainability program managers use the ESG Management application for addressing their sustainability commitments.	Configure your ESG Management application.	Integrate your ESG Management application with other applications such as Project Portfolio Management, Integrated Risk Management and Watershed.
Use	**Overview pages**	**Reference**
		
Use the ESG Management application for tasks such as importing citations, creating disclosures, updating disclosures, and so on.	View the ESG Management workspace overview pages for various reports.	Get details about components like fields, tables, roles, and properties installed with ESG Management.

Implement Operational Sustainability Management

Use the Setup checklist for the Operational Sustainability Management (formerly ESG Management) application to quickly implement the ESG Management application.

Learn

What is Environmental, Social, and Governance (ESG)?

Exploring Operational Sustainability Management (formerly ESG Management)

The ServiceNow® ESG Management application helps you to manage your sustainability commitments.

ESG Management overview

While most organizations engage in sustainability initiatives, many lack a central tool to manage their operational sustainability programs. Without a centralized system, organizations lack visibility into sustainability efforts and struggle to track progress. The Operational Sustainability

Management application addresses these challenges by enabling companies to manage their sustainability programs and communicate their goals and progress.

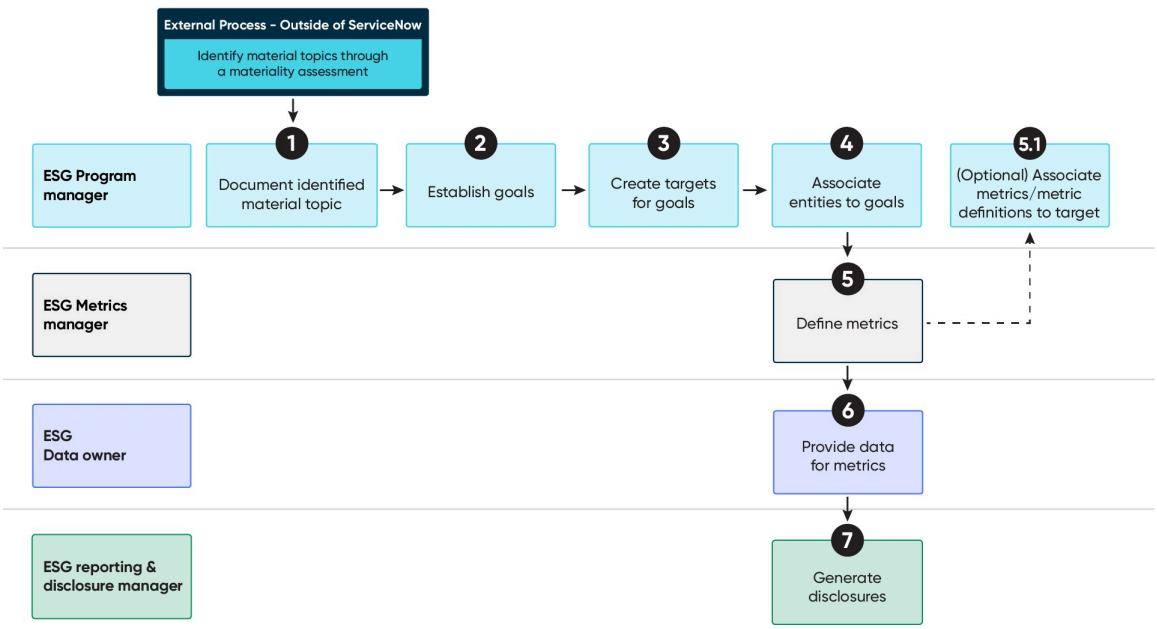
The business benefits of sustainability reporting using the Operational Sustainability Management application are as follows:

- Improves your brand reputation.
- Creates a competitive advantage.
- Attracts investors and more capital.
- Enables you to comply with regulatory requirements.
- Establishes strong corporate governance through ethical, transparent, and secure business practices.
- Improves corporate reputation.
- Improves customer confidence.
- Promotes transparency about the risks and opportunities.

ESG Management workflow

The following diagram shows the workflow of ESG Management for each user role.

Workflow of setting up and using the ESG Management application



Document material topics

Determine the material topics you'd like to track, such as managing carbon emissions. See Create material topics to get started and review Material topic workflow and states for more details.

Establish goals

Goals are the outcomes you want to achieve, and targets are specific, measurable milestones that help you reach the goals. The Create an Operational Sustainability Management goal page explains how to enter your goals and includes links to useful information like how goal progress is calculated. See Create an Operational Sustainability Management (formerly ESG Management) goal for details.

Create targets

A target shows you how well you are doing against your goal. The Create an Operational Sustainability Management (formerly ESG Management) target page shows you how to do it.

Associate entities with goals

Associate the entities that must be tracked for the goals and subgoals. This association is created for tracking purposes. Entities that are associated with the goal are responsible for tracking the goal. See Associate entities to goals for more details.

Define metrics

Create metric definitions and metrics to measure performance and how the organization is progressing toward its goals and targets. To gain an in-depth understanding of what are metrics and how they're useful in Operational Sustainability Management, refer to Exploring GRC: Metrics

Add metrics to targets

Optionally, after you create a target, you can add a source for the target. The source can be a metric or a metric definition that contributes to the target. See Add a source for a target for more details.

Provide data for manual metrics or automatically collect data for automated metrics

Collect data for metrics either manually or automatically. Data must be provided manually for manual metrics and is automatically collected at the scheduled time for automated metrics. See Provide data for a metric data task for more details.

Generate disclosures

The disclosure is sent for review to the ESG program manager and after approval, it can be downloaded to a spreadsheet for easier reporting. Using the Microsoft 365 for ServiceNow Reporting, you can create disclosures in a Microsoft Word document. See Integrating Microsoft 365 with ServiceNow reporting to get started and review Disclosures in Operational Sustainability Management (formerly ESG Management) for details.

Operational Sustainability Management benefits

Benefit	Feature	Users
Manage your operational sustainability activities from the interactive dashboard in the Home page.	Operational Sustainability Workspace (formerly ESG Workspace)	ESG program manager, disclosure manager.
Monitor your individual and team tasks from a single dashboard in the My tasks view.	My tasks page view	ESG program manager
Create material topics to determine your sustainability initiatives	Create a material topic	ESG program manager
Establish operational sustainability goals to track your progress toward your chosen material topics.	Create an Operational Sustainability Management (formerly ESG Management) goal	ESG program manager
Create a sustainability target to help track the progress towards your sustainability goal.	Create an Operational Sustainability Management	ESG program manager

Benefit	Feature	Users
	(formerly ESG Management) target	
Use GRC: Metrics to track goals and targets, collect data, and report data.	Exploring GRC: Metrics	Metrics manager
Create disclosures for your organization. Disclosures enable investors to make informed decisions about companies, their risk posture, and sustainability standards.	Create a narrative disclosure on remote storage	Reporting disclosure manager, ESG program manager

Elements of Operational Sustainability Management (formerly ESG Management)

Before you start your sustainability initiatives, familiarize yourself with the key elements such as material topics, metrics, and disclosures that make up the Operational Sustainability Management application.

The key components of the operational sustainability program are as follows:

- Material topics: Themes that you want to work on.
- Goals: Objectives that you want to reach based on your topics.
- Targets: Set targets to track and measure the progress of the goals.
- Emission activities and factors: Activities that lead to emissions.
- Disclosures: Reports generated to show the company's progress on the chosen material topic.

Material topics

Material topics are topics that represent an organization's most significant impacts on the economy, environment, and people. Companies identify these material topics by performing materiality assessments. These topics reflect the organization’s most significant impacts on the society, environment, and people, including impacts on human rights. Some examples of material topics are E-waste management, giving and volunteering, and so on. To learn about the states of the material topic, refer to Material topic workflow and states.

Goals

Goals refer to objectives that an organization sets for itself to make an impact on their chosen material topics. You can link goals to material topics. Some examples of goals are as follows:

- Using renewable energy by the end of the year 2035.
- Increase diversity in the workplace by 50 percent.

A goal can also have subgoals. You can also associate different entities to the goal so that you can track who is responsible for fulfilling the goal.

If you integrate Operational Sustainability Management with other products, you can also do the following:

- If you integrate with Project Portfolio Management, you can add programs and projects to capture the work being done to meet your goal.
- If you integrate with Integrated Risk Management, you can add risks, risk statements, policies, control objectives, and issues to your goals and build a governance framework.

For more information on integrations, see Integrating Operational Sustainability Management (formerly ESG) with other applications.

Targets

Targets help you to measure your goal. For example, to meet the goal of increasing diversity in the workplace by 50 percent, the target can be to hire 30 percent diverse workforce by the first quarter of 2035.

Disclosures

An operational sustainability disclosure is a form of public reporting by an organization about its performance across various sustainability issues.

Emission activities and factors

An emission activity refers to any activity that is associated with the release of pollutants such as Greenhouse gases (GHG).

The release of GHG into the atmosphere depends mainly on the activity and the product that emits the gases. To estimate GHG emissions per unit of available activity, you must use a factor called an emission factor. An emission factor is a coefficient which allows to convert activity data into GHG emissions. It is the average emission rate of a given source, relative to units of an activity or processes. As an ESG program manager, you must set up your library of emission activities and factors.

Material topic workflow and states

Material topics are the point of origin for sustainability initiatives. A material topic must be identified before it can be tracked and measured for success.The workflow states for a material topic depend on how the material topic was created.

Default workflow

The states of a material topic are:

1. **Draft**: All material topics begin in this state. The following fields can be updated in this state:
   - Name
   - Classification
   - Importance to business success
   - Importance to stakeholders
   - Priority
   - Approver
2. **Approval**:The Operational Sustainability program manager reviews the material topic and ensures that all fields are accurate and complete. After the review completes, the material topic moves to Monitor. For example, if the material topic is Carbon emissions, the reviewer might verify:
   - The material topic is accurately defined.
   - The description of the material topic is accurate.
3. **Monitor**: The material topic remains in this state until a modification is needed. If an update is necessary, you can return the material topic to the Draft state. This may occur after a subsequent materiality assessment, where there could be a shift in the following attributes:

- Priority
- Significance to business success
- Significance to stakeholders

Moving a material topic back to the Draft state does not affect downstream goals and targets.

Only material topics that are in the Monitor state are shown in the Materiality matrix on the Operational Sustainability Workspace home page.

4. **Retired**: The material topic is no longer tracked by the organization as a relevant sustainability issue.

Socialsuite workflow

Material topics imported from Socialsuite do not require approval in your ServiceNow instance. These topics use different workflow states than the default workflow. The following table shows how Socialsuite states map to states in your ServiceNow instance:

Socialsuite to the ServiceNow instance state mapping

Socialsuite state	ServiceNow instance state
Not started	Draft
Open for input	Materiality Assessment
Input closed	Materiality Assessment
Complete	Monitor
Historical	Monitor

Material topics imported from Socialsuite progress through the following states in your ServiceNow instance:

1. Draft: Material topics in the Not started state in Socialsuite appear in Draft. The material topic details are read-only and cannot be updated.
2. Materiality Assessment: The ESG program manager validates and reviews the materiality assessment data in this state.
3. Monitor: Only material topics in Monitor appear in the materiality matrix on the Operational Sustainability Workspace home page. Material topics imported from Socialsuite cannot be moved back to Draft.

Fields for Socialsuite material topics

Material topics imported from Socialsuite include additional fields that store materiality assessment data. These fields are visible and read-only for topics imported from Socialsuite. All data for these fields is managed through Socialsuite. For a complete list of fields, see Socialsuite material topic fields.

Related topics

Integrating Operational Sustainability Management (formerly ESG) with other applications

Set Material topic selection system property

Operational Sustainability Management (formerly ESG Management) use case

The operational sustainability use case consists of multiple processes such as setting up your operational sustainability program, defining metrics, collecting data for metrics, adhering to regulatory frameworks, and generating disclosures.

Setting up the Operational Sustainability Management program

As an ESG administrator and ESG program manager, you must begin by setting up the operational sustainability program. The set up requires the following steps:

- Assessing materiality: Assessing materiality enables you to discern the most significant material topics and their respective areas of impact on your stakeholders and organization. Firstly, you identify the material topics that hold the greatest importance for your stakeholders and possess the most substantial influence. The identification of topics happens externally and then they are documented in the Operational Sustainability Management application.
- Defining goals and targets: As an ESG program manager, you can choose to create goals and targets for your material topics.

  Goals and targets play a crucial role in driving and measuring the success of an operational sustainability initiative. Here's a brief explanation:

  1. Goals: Goals in an operational sustainability initiative are broad, long-term aspirations that define the overall purpose and direction of sustainability efforts. They are often aligned with the company's mission, values, and stakeholder expectations. Examples of operational sustainability goals include reducing greenhouse gas emissions, promoting diversity and inclusion, and improving corporate governance.

  2. Targets: Targets are specific, measurable, and time-bound objectives set to achieve the broader operational sustainability goals. They provide clarity and focus, enabling organizations to track progress and demonstrate accountability. Targets can be established for different aspects of operational sustainability, such as environmental impact, social issues, and governance practices. When you set targets, you must also specify the sources from where the target will obtain data.

     - Environmental targets: These relate to reducing the company's environmental footprint and promoting sustainable practices. They can include targets for carbon emissions reduction, water and energy conservation, waste management, and adoption of renewable energy sources.
     - Social targets: These focus on addressing social issues and fostering positive impacts on communities and employees. Examples of social targets include increasing workforce diversity, ensuring fair labor practices, promoting employee well-being and safety, and supporting community development initiatives.
     - Governance targets: These targets emphasize the implementation of robust governance frameworks and ethical business practices. They may involve enhancing transparency and accountability, strengthening board independence, promoting responsible executive compensation, and ensuring compliance with legal and regulatory requirements.
- Scoping entities: Each goal is associated to an entity that must be tracked for the progress being made.

Defining metrics

As an ESG metrics administrator, establish a comprehensive data collection process to gather relevant sustainability data across all operations. The data can be collected using metric definitions. The three types of metric definitions are manual, calculated, and automated. Identify the key operational sustainability metrics aligned with industry best practices, such as carbon emissions, energy consumption, waste management, employee diversity, workplace safety, supply chain sustainability, and corporate governance. Ensure data accuracy by implementing appropriate tracking systems and engaging relevant stakeholders such as data providers for manual metrics.

Measurement reporting

Once the material topics are identified, the ESG metrics administrator and an ESG program manager collect the metrics that are of utmost importance to the organization. You can report on the performance of these metrics against predetermined thresholds and objectives, as well as document any issues that arise when the metrics fail to meet the thresholds.

Reporting framework

As an ESG program manager, develop an operational sustainability reporting framework based on recognized standards like the Global Reporting Initiative (GRI), Sustainability Accounting Standards Board (SASB), and Task Force on Climate-related Financial Disclosures (TCFD). The framework defines reporting boundaries, disclosure protocols, and data.

Generating disclosures

As an ESG disclosure manager, using the collected data, generate an annual sustainability report. The report provides a comprehensive overview of the company's sustainability performance, including quantitative and qualitative data. Highlight the achievements, challenges, goals, and future initiatives related to environmental impact, social responsibility, and corporate governance.

Operational Sustainability Workspace (formerly ESG Workspace)

The Operational Sustainability Workspace is a simplified user interface designed for different users to perform their respective tasks. The home page of the Operational Sustainability Workspace displays various quick actions and reports.

The Operational Sustainability Workspace displays different sections to provide data visualization for different components. These sections reference the three pillars of Environmental, Social, and Governance commitments.

Each section of the dashboard is explained in the following sections.

Quick actions

When you log in to the Operational Sustainability Workspace, the Operational Sustainability dashboard is the first page that is available to you. Using the Quick actions section on the Operational Sustainability Workspace, you can perform the following tasks:

- Document a material topic
- Create a goal
- Create a program
- Create a project
- Start a disclosure

Note: The options to create a program and a project are available only when you integrate with Project Portfolio Management.

Tasks

The Tasks section enables you to view the following:

- Provides a single page for viewing all the operational sustainability related tasks.
- Enables you to view the individual user tasks, user group tasks, my items, and watch list on the Tasks page in the workspace view.
- Enables you to view the pending approvals if you are a manager.

You can launch the Tasks page by selecting the Task icon on the Operational Sustainability Workspace ()

Overview section

Material topics are the areas selected by your company. The Overview section shows you the status of all those material topics that have associated goals and sub-goals for the three pillars.

Each link is clickable and leads you to the related pages. You can see if the goals are on-track, at risk, or off-track. Using the filter on the page, you can either view all your goals or only your top-level goals.

Top Level Goals Summary

The Top Level Goals Summary section provides a more detailed view of the goals and their status. In this section, you can filter your goals by the three pillars. You can see only the top level goals and when the filter is changed, you can still see only the top level goals but the data includes all the child-level goals. Under this section, you can view the following items for your goals:

- Goal: Shows all the goals.
- Classification: Shows if the goal belongs to environmental, social, or governance.
- Status: Shows if the goal is on track or off track.
- Progress: Shows the progress value of the goal.
- Off-track goals: Shows the number of off-track goals.
- Off-track targets: Shows the number of off-track targets.
- Overdue metrics: Shows the overdue metrics.
- Overdue Programs/Projects: Shows the number of programs and projects that are associated with the goal.
- Non-compliant policies: Shows the number of non-compliant policies that are applied to the goal.
- High risks: Shows the number of risks for the goal.

Note: Non-compliant policies and High risks appear only when you install Integrated Risk Management (IRM).

Target summary by goal

This section provides a summary of the targets by goals and their status, owners, measure, target value, actual value, progress, check in frequency, and who is the goal updated by.

Disclosures

The Disclosures section provides a breakdown of the different disclosures. Disclosure refers to the disclosure of data relating to an organization's environmental, social and governance performance. Such disclosures enable investors to make informed decisions by identifying companies that may pose a risk. This section displays the following information:

- Open disclosures
- Overdue disclosures
- Disclosures due in 30 days

Disclosures are of different types and each disclosure has a workflow. You can filter the disclosures using either the **By type** or **By state** filters.

Pending disclosures

The Pending disclosures section displays all the disclosures that are pending. These disclosures are displayed along with their state, type, and the person who is assigned the disclosure.

Material topics

The Material topics section displays the status of your material topics. The visualization format depends on the Material topic selection system property and the type of materiality assessment conducted.

The material topic selection system property settings are:

- ServiceNow Default- The heatmap displays material topics according to their importance to stakeholders (Y-axis) and importance to business success (X-axis).
- Socialsuite- The visualization changes based on the type of materiality assessment conducted in Socialsuite for the selected reporting period. Additional filters for reporting period and classification appear above the material topics visualization.

You can view material topics in one of the following formats:

Heatmap

Displays when a double materiality assessment is conducted. The heatmap shows material topics according to their impact materiality score (Y-axis) and financial materiality score (X-axis). Both scores range from 0-100 in increments of 25 (0-25, 26-50, 51-75, 76-100). Each tile in the heatmap is clickable and navigates to the material topic details.

Bar chart

Displays when a single materiality assessment is conducted. This view appears when either impact materiality only or financial materiality only is assessed.

List

Displays material topics in a table format showing the priority, classification, and material topic source of the material topics.

Filters

When the Material topic selection property is set to Socialsuite, the following filters appear above the material topics visualization:

- Reporting period: Select from the last five years of reporting periods. For example, if the current year is 2026, you can select from 2026, 2025, 2024, 2023, or 2022.
- Classification: Filter material topics by Environmental, Social, Governance, or All.

Note: Only the material topics in the Monitor state contribute to this report.

Searching in the Operational Sustainability Workspace

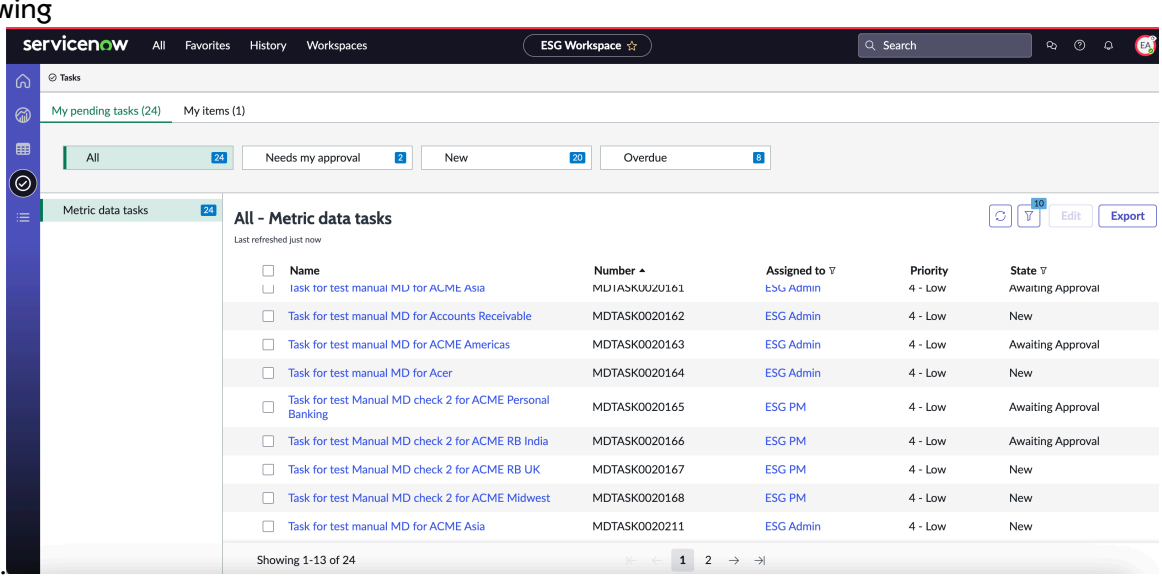
You can use the ability to search the Operational Sustainability Workspace by using the Search field. To search the Operational Sustainability Workspace, select **Operational Sustainability Workspace** from the list. The search results appear on the contextual side panel.

My tasks page view

My tasks page displays a single-pane view of your pending tasks, and the tasks assigned to your user group.

Tabs on the Tasks page

The Tasks page displays the assigned tasks for the logged-in user in different tabs as shown in the following example.



The Tasks page in the Operational Sustainability Workspace displays the following tabs:

- **My pending tasks**: Displays an overview of the pending tasks that are assigned to you and the tasks that require an action from you. You can filter your pending tasks by using the following types of the states:
  - All
  - Draft/New
  - In progress
  - Needs my approval
  - Needs my review
  - Overdue
  - Pending response

  Note: The data displayed in the Tasks page is based on the roles of the users.

- **My items**: Displays a list of the tasks that are assigned to the logged-in user.

A typical My tasks page for a logged-in user is shown in the following example.

Note: On the **My pending tasks**, **My items** tab, you can only view the records that are in-progress. The closed and canceled records are not displayed on these tabs. You can view the closed and canceled records in their respective forms in the Operational Sustainability Workspace.

If you have the ESG Management administrator role, you can customize the Operational Sustainability Workspace by updating the Tasks page configurations module.

Operational Sustainability Workspace (formerly ESG Workspace) users

The Operational Sustainability Workspace displays the relevant data for the environmental, social, and governance pillars and enables you to take appropriate actions according to your role. These roles include the ESG administrator, ESG program manager, ESG reporting and disclosure manager, ESG metrics manager, and ESG data owner.

The Operational Sustainability Workspace is highly configurable and role-driven. Being role-driven means that the Operational Sustainability Workspace is customized or unique for each user or role in your organization.

The following table lists the key tasks that each role performs in your organization.

Operational Sustainability Management users and their tasks

User	Tasks
ESG Administrator	Set up the ESG Management application so that it can be used by the users. • Create material topics • Create an Operational Sustainability Management (formerly ESG Management) goal • Set targets for goals • Add a goal to a material topic • Approve a material topic • Manage entities in Operational Sustainability Management (formerly ESG Management) • Create a new emission activity • Create an emission factor • Manage all integrations • Create a new schedule for calculating the due date of the metric data task. • Manage metrics. • Create unit family, units, and unit conversions.

Operational Sustainability Management users and their tasks (continued)

User	Tasks
ESG program manager	• Create material topics • Create an Operational Sustainability Management (formerly ESG Management) goal • Set targets for goals • Add a goal to a material topic • Approve a material topic • Manage entities in Operational Sustainability Management (formerly ESG Management) • Manage metrics
ESG reporting and disclosure manager	Create disclosures for internal and external stakeholders
ESG metrics manager	• Create an automated metric definition • Create a manual metric definition • Create a calculated metric definition • Create a metric • Integrating Operational Sustainability Management (formerly ESG) with Watershed
ESG data owner	• Provide data for the metrics • Provide responses for multiple metrics
ESG Risk Manager **Note:** This role is installed if you activate the sn_esg_risk_mgmt plugin	• Create a risk statement • Generate a risk from a risk statement • Create a risk assessment scope and initiate an assessment

For more information on the roles, see Components installed with Operational Sustainability Management (formerly ESG Management).

Managing Sustainable IT

The Sustainable IT application enables you to effectively manage and monitor the emissions generated by your hardware assets. Additionally, it enables you to keep track of the energy consumption of your assets and their proper disposal after they reach the end of their lifespan.

As an ESG program manager, the Sustainable IT application empowers you to track the sustainability performance of your hardware assets such as laptops, servers, desktops, printers and scanners, and so on. With this tool, you can easily monitor and assess the operational

sustainability impact of your hardware assets. The application provides valuable insights through a dashboard, enabling you to make informed decisions on whether to retire or repurpose these assets. The dashboard also displays important data such as electricity consumption and emissions. To use the Sustainable IT application, you must install and activate the Sustainable IT (sn_esg_sustain) plugin and the Hardware Asset Management (sn_hamp) plugin.

With the Sustainable IT application, hardware asset managers can make informed decisions regarding asset purchases, focusing on reduced energy consumption. By providing insights into devices with the lowest emissions, the application enables managers to prioritize sustainability friendly choices.

Using this application, you can monitor your data center's emission performance and identify your most sustainable or greenest data centers.

To collect data of the hardware asset emissions, consumption, e-waste, and energy star assets, by default, 27 metric definitions such as Energy from solar power, Energy from biomass, and so on are provided. You must activate those metric definitions for which you want to collect data and configure your entities appropriately so that the correct data is collected and displayed. The data is always collected on a monthly basis and is only displayed for the completed metric data.

For the Digital End-User Experience (DEX), data on energy emissions from laptops and desktops is collected using 10 metrics definitions by default. These include metric definitions such as Real-Time CO2e Emissions by Model and Real-Time Energy Consumption by Asset Location, all grouped under Dex-Real Time Emissions. Data collection occurs monthly.

- Activate all metric definitions grouped under “Dex-Real Time Emissions” and ensure all required details are filled in.
- Assign appropriate entities (locations/models) to each metric definition.
- For emissions-related metrics configure the emission factor “CO2 equivalent from Purchased Electricity eGRID” from the eGRID source via Content Accelerator.

  Note: Confirm that the emission factor’s location matches the asset location records. If no emission factor is found for a location, the calculated value will be zero #unique_44_Connect_42_ul_nhx_5t3_fdc.

- Set the metric period date to the previous month.

  Note: DEX agents report the previous day's energy consumption data (example, September 15 data is sent on September 16). If the metric period is not set properly, data may be labeled with incorrect dates (example, May's data appearing under June dates).

Related topics

Methods to set up entities for Sustainable IT

Sustainable IT dashboard

The Sustainable IT dashboard displays a variety of information to easily gauge the sustainability impact of the IT assets of an organization.

The Sustainable IT dashboard displays data for Hardware assets, datacenters, and your organization's IT footprint on the world map. Datacenters refer to the facilities that house the IT infrastructure. All these tabs are explained in the following sections.

Note: To view the **Hardware assets** tab and the **Data centers** tab on the dashboard, you must activate the Hardware Asset Management (sn_hamp) plugin. Additionally, to activate the **IT footprint map** tab, you must activate the Geo Map component (sn_geo_map) plugin. For more information on the required Geo Map component, see the Understanding Google Maps APIs in geo-map component [KB1588661] article in the Now Support knowledge base.

IT footprint map

The first tab on the Sustainable IT dashboard showcases a global map depicting the carbon footprint of your datacenters, office buildings, and so on, highlighting your most energy-efficient facilities. The data displayed is determined by the configuration that you configure on the map marker. For more information, refer to Configure a map marker. When you hover over the icons on the map, you can view the classification of the configured marker's efficiency, the metric name, the entity name, and the most recent metric data available. You can configure any of the metric definitions that are provided along with the Sustainable IT plugin. Only those metric definitions that are grouped under Sustainable IT are available for selection. For example, you can use the following the metric definitions:

- **Carbon intensity for office locations**
- **DCiE by data center**

Note: DCiE stands for datacenter infrastructure efficiency.

For more information on how you can filter the metric definitions that are grouped under Sustainable IT, refer to Filter Sustainable IT metric definitions.

When you move the cursor over the icon, a popover is displayed. On the popover, you can select the entity name and a side panel opens that shows the metrics related to the selected entity of the following metric definitions.

- PUE by Data Center
- WUE by Data Center
- CUE by Data Center
- CO2e emissions from energy usage
- Total energy used
- Hardware energy consumption by location
- CO2e from hardware assets by location

You can select **Open link** to navigate to the metric record page for details. An entity class filter on the right side of the dashboard is available to select the data that you want to view.

Hardware assets

Overview: In the overview section, you can see the Trend chart that displays the data for the following metric definitions:

- Carbon emissions from hardware assets.
- Hardware energy consumption.

You can select the chart to further explore or delve into more detailed information or data related to the chart. The fields from where the data is obtained are specified in the metric definition form. For more information, see Create an automated metric definition.

Energy consumption: The energy consumption section displays the information in the subsequent formats:

- Total energy consumption (kWh): This figure represents the total energy consumption for the **Hardware energy consumption by model category** metric definition. Hardware energy consumption by model category refers to the amount of energy or power consumed by different categories of hardware. Hardware model category refers to various types of devices, such as computers, servers, or other devices. The configuration of the metric definition includes specifying the model category column in the hardware table for the purpose of data collection.
- Energy consumption by model category (kWh) or location: This horizontal bar graph displays the energy consumption data. You can filter the data either by the **Location** filter or the **Model category** filter. You have the option to sort the bar chart in either ascending or descending order using the available filters. If you drill down on this bar chart, a new page opens that displays further details about the assets that are in use and that consume maximum energy. By default, this new page shows all the assets of the first bar in the chart at the bottom and shows the top models by energy consumption on the right.
- Energy star assets: The dial chart showcases the number of energy star-certified assets out of the total number of assets.

Emissions: Within the emissions section, the data is presented in the following format.

- Total emission (days): You can view both the total emissions value and the variation in emissions when compared to the previous month.
- Emissions by model category or by location (days): This horizontal bar graph displays the emissions data. You can filter the data either by the **Location** filter or the **Model category** filter. You have the option to sort the bar chart in either ascending or descending order using the available filters. If you drill down on this bar chart, a new page opens that displays further details about the assets that are in use and that generate maximum emissions. By default, this new page shows all the assets of the first bar in the chart at the bottom and shows the top models by emissions on the right. The data that is displayed depends on the selection you make in the filters, that is, whether you selected Location or Model category.

E-waste reused, donated, or landfilled: In this section, the data is presented in the following format:

- Retired assets (lbs): The donut chart displays the number of assets reused, donated, and disposed.
- Landfills (lbs): The pie chart in this section displays the weight of hardware assets, by model categories, that have been disposed. This weight is in pounds.

The data for this section is obtained from the Hardware asset table. Each chart is interactive, enabling you to select specific segments to access more detailed information.

Data centers

Overview: In the overview section, you can view the Trend chart that displays the data for the following metric definitions:

- Co2e from energy usage
- Total energy used

You can select the chart to further explore or delve into detailed information about the energy use or emission for each data center. The overview section also displays the number of data centers from where the data for emissions and energy is sourced. You can also see the top three

greenest data centers based on the DCiE where the data center with the highest DCiE is ranked at the top. Greenest data centers refer to data centers have the minimum amount of emissions.

Data center efficiency: In the data center efficiency section, the data is presented in the following formats:

- Power usage effectiveness: Power Usage Effectiveness (PUE) is a metric used to assess the energy efficiency of a data center. It's a ratio that quantifies the amount of energy consumed by a data center facility compared to the energy used by the IT equipment it houses.
- Water usage effectiveness (KgCO2e): Water Usage Effectiveness (WUE) is a metric used to evaluate the water efficiency of a data center or a facility. Similar to Power Usage Effectiveness (PUE), which measures energy efficiency, WUE quantifies the amount of water consumed by a data center facility in relation to the water used by the IT equipment.
- Carbon usage effectiveness (KgCO2e/kWh): Carbon Usage Effectiveness (CUE) is a metric used to assess the carbon efficiency and sustainability impact of a data center or facility. It quantifies the number of carbon dioxide emissions produced per unit of IT load or computing work performed by the data center.

Energy consumption: Within the energy consumption section, the information is displayed in the subsequent formats:

- Total energy consumption (kWh): This figure represents the combined energy consumption of all the data centers. It provides an overview of the overall energy usage across all the data centers.
- Total energy consumption by source: A donut chart is used to illustrate the distribution of energy consumption in kilowatt hours (kWh) from different energy sources. The energy sources are specified in the form of metric definitions. Each section of the semi donut chart is interactive, enabling you to select specific segments to access more detailed information.
- Energy consumption by data centers (kWh): The bar chart showcases the energy consumption for each individual data center, considering all the active metric definitions. You have the option to sort the bar chart in either ascending or descending order using the available filters. This enables you to analyze and compare the energy usage of different data centers more effectively.

Emissions: In the emissions section, the data is presented in the following formats:

- Total emissions (KgCO2e): This figure represents the total emissions for all the data centers.
- Emissions by data center (KgCO2e): The bar chart showcases the emissions for each individual data center, considering all the active metric definitions. You can use the provided filters to sort the bar chart in either ascending or descending order. Additionally, each bar of the bar chart is interactive, enabling you to select specific segments to access more detailed information.

Note: The data is aggregated by using the summation method.

Digital end-user experience

The Digital End-User Experience (DEX) tab on the Sustainable IT Dashboard integrates real-time energy consumption data from DEX into the dashboard. This integration enhances the accuracy and reliability of sustainability reporting for IT assets, particularly desktops and laptops. By leveraging real-time usage data from DEX, organizations can move beyond estimated hardware energy metrics and promote a more precise calculation of CO_2e emissions.

Overview: In the overview section, you can see the Trends chart that displays the data for the following metric definitions:

- Real time CO2e Emissions by Models
- Real-time Energy Consumption by Models

You can select the chart to further explore or delve into more detailed information or data related to the chart. The fields from where the data is obtained are specified in the metric definition form. For more information, see Create an automated metric definition. In the overview section, you can also see the Asset coverage, which displays the number of assets from where the usage and consumption data is sourced. You can select the asset number to further explore or delve into more detailed information into the asset details.

Energy consumption: Within the energy consumption section, the information is displayed in the subsequent formats:

- Total energy consumption (kWh): This figure represents the combined energy consumption of all the assets. It provides an overview of the overall energy usage across assets.
- Energy consumption by models (kWh): The bar chart showcases the energy consumption for assets by brand model or location of that asset. Each bar of the bar chart is interactive, enabling you to select specific segments to access more detailed information. The available filters enable you to analyze and compare the energy usage of different models more effectively. You have the following filters available:
  - Use the Group by filter to group data by asset location or asset models.
  - Use the Sort by filter to sort the data in ascending or descending order.
  - Use Filter by model to view data for only selected models.
- Energy consumption breakdown: The dial chart displays the energy consumption breakdown by asset components, including central processing unit (CPU), network, energy loss, display, and others.

Emissions: In the emissions section, the data is presented in the following formats:

- Total emissions (KgCO2e): This figure represents the total emissions for all the assets.
- Emissions by models (KgCO2e): The bar chart showcases the emissions for assets by brand model or location of that asset. Each bar of the bar chart is interactive, enabling you to select specific segments to access more detailed information. You have the following filters available:
  - Use the Group by filter to group data by asset location or asset models.
  - After selecting the group as location, you can use filter by location to view data for only selected locations.
  - Use the Sort by filter to sort the data in ascending or descending order.
  - Use Filter by model to view data for only selected models.

For more information on DEX, see Digital End-User Experience.

Scope 3 dashboard

The Scope 3 dashboard helps you to calculate and track scope 3 emissions to gain a complete understanding of your organization's operational sustainability impact and ensure compliance with evolving regulations. Scope 3 emissions refer to indirect emissions in your value chain, for example, the emissions generated from procurement of equipment.

Integrated with the Operational Sustainability Workspace, the Scope 3 dashboard is useful for ESG program managers and ESG administrators to get an overview of the trends of the organization's scope 3 emissions. To view the scope 3 dashboard, you must activate the Scope 3 emissions management (sn_esg_scope3) plugin. This application starts collecting data only after

the plugin is activated and the necessary categories and models tables are configured. If you want to view historical data on the dashboard, then the data must be imported into the system.

Note: A total of 10 metric definitions are provided to collect data for this dashboard. By default, these metric definitions are in the inactive state and must be activated. These metric definitions are grouped under **Scope 3 emissions** for you to easily find them.

You can access the Scope 3 dashboard by selecting the  icon on the Operational Sustainability Workspace.

There are 15 categories of greenhouse gases (GHGs) for which you can report your Scope 3 emissions. Organizations can choose which categories to report, and with the Scope 3 emissions management application, you can report on the following two categories.

- Category 1 Purchased goods and services: This category refers to the extraction, production, and transportation of goods and services purchased or acquired by the reporting company in the reporting year.
- Category 2 Capital goods: This category refers to the extraction, production, and transportation of capital goods purchased or acquired by the reporting company in the reporting year. Capital goods are physical assets like buildings, machinery, and equipment that are used to produce consumer goods or services.

The dashboard displays the scope 3 data for GHG category, spend category, and supplier category. The following sections explain these categories. Understanding these types of data helps you to understand the data that is displayed on the Scope 3 dashboard.

Spend category data

Spend-based emission factors assign typical levels of greenhouse gas (GHG) emissions to different spending categories. For instance, the emissions generated from spending $1 on office equipment may differ from those generated from spending $1 on transportation services. By multiplying the amount spent in each category by the relevant emission factor, you can estimate your indirect emissions. For example, if you categorize all your laptops as assets spend category, you can aggregate the expenditure on all those assets and then multiply the figure by the emission factor value provided by the Environmentally extended input-output (EEIO).

Supplier category data

The supplier category data uses the following calculation methodologies.

- Environmentally extended input-output (EEIO) data: EEIO data integrates environmental data with economic input-output models to assess the environmental impacts associated with economic activities. This type of data is crucial for understanding how economic activities contribute to environmental pressures and can be used to evaluate the environmental impacts of different sectors and products throughout their supply chains. This data can either be entered manually in the ServiceNow instance or can be uploaded in bulk if the data is available in a spreadsheet. EEIO data is derived from the emission tables that are filled by activating from the ESG content accelerator application.
- Life cycle assessment (LCA) data: LCA data is used for evaluating the environmental impacts associated with all stages of a product's life from raw material extraction through materials processing, manufacture, distribution, use, repair and maintenance, and disposal or recycling. LCA data is crucial for conducting these assessments and includes detailed information about the environmental impacts of materials, processes, energy use, and waste management throughout the product life cycle.
- Supplier category data: Each organization has several suppliers for a variety of goods and services. Some examples of suppliers are laptop suppliers, monitor suppliers, desktop

suppliers, and so on. You can categorize each of the suppliers into different categories. The scope 3 dashboard displays the emissions generated by these suppliers using the metric definitions that are provided by default. This information helps you to identify the scope for reduction of emissions. This data can either be entered manually in the ServiceNow instance or can be uploaded in bulk if the data is available in a spreadsheet.

Note: For more information on the data calculation, see the Overview of Calculation Methodologies for Metric Definitions in the Scope 3 Dashboard [KB1648880] article in the Now Support Knowledge Base.

GHG category

Emissions from purchased goods and services, classified under Scope 3 category 1 of the Greenhouse Gas (GHG) Protocol and capital goods classified under category 2, refer to the indirect emissions generated from a company's procurement of goods and services. The GHG category also uses the EEIO, LCA, and supplier calculation methodologies.

Related topics

Configuring the Scope 3 dashboard

Reports on the scope 3 dashboard

The Scope 3 dashboard displays a variety of reports to easily gauge the sustainability impact of the scope 3 emissions of an organization. All the reports on this dashboard can be drilled down for detailed metric definitions and the entities that provide the data for each report.

Scope 3 dashboard

The following section explains each of the reports that are displayed.

Data visualizations

As an ESG administrator and an ESG program manager, you can view the following reports on the Scope 3 dashboard.

Title	Type	Description
Total emissions	Area chart 	Displays the total emissions generated by asset procurement fo years. The data in this widget gets aggregated for each year. The measurement for this report is KgCO2e. You can view the data fo 5 years to obtain a comparative analysis. **Note:** You can configure the number of years for which you the data in the *sn_esg_scope3.historical_years* property. By default, the data for 5 years is displayed.
Emissions by calculation methodologies	Line chart 	Displays the emissions generated based on the various calculat methodologies such as EEIO data, LCA data, and supplier data. information about these calculation methodologies, refer to Sco The unit of emission measurement for this report is also KgCO2e the data for the past 3, 4, or 5 years to obtain a comparative ana
Emissions by supplier and spend category (KgCO2e)	Bar graph	Displays detailed and granular data for supplier category and sp Select either **Supplier category** or **Spend category** to view the r You can choose the desired year to view the data from the drop- provided. The data for the last 5 years is available for this report

Title	Type	Description
		
Suppliers with SBTi approved targets	Donut 	Shows the supplier data obtained using the Science Based Targ (SBTi) standard that suppliers must adhere to. SBTi defines and strategies for emissions reductions and net-zero targets in line w science. This report enables you to identify which of your suppli to the SBTi standards. The data for this report comes from the re manual metrics definition that is provided by default. **Note:** For the metric data tasks of this metric definition, the owner must enter their responses as either `Yes` or `No`.
Emissions by GHG scope 3 categories (KgCO2e)	Bar graph 	Displays the data for the GHG categories that are category 1 Pur and services and category 2 Capital goods. You can choose the view the data from the drop-down list that is provided. The data is available for this report.
Suppliers with CDP data	Donut 	Displays the supplier data obtained using the Carbon disclosure standard that the suppliers must adhere to. CDP requires organi disclose their climate impact. The data for this report comes fron of the manual metrics definition that is provided by default. **Note:** For the metric data tasks of this metric definition, the owner must enter their responses as either `Yes` or `No`.

Related topics

Configuring the Scope 3 dashboard

ESG content accelerator

The ESG content accelerator application is a centralized repository of frameworks, citations, metric definitions, and emission factors. Using this application accelerates the adoption of operational sustainability frameworks.

You can install ESG content accelerator from the ServiceNow Store. After installation, you can launch the application by selecting the ESG content accelerator icon ().

Frameworks and regulations

The application contains the following frameworks and regulations.

- Global Reporting Initiative (GRI)
- Sustainability Accounting Standards Board (SASB)
- Task Force on Climate-related Financial Disclosures (TCFD)
- United Nations Sustainable Development Goals
- SustainableIT.org (Available on version 18.0.3)
- European Sustainability Reporting Standards (ESRS/CSRD) (Available on version 18.0.3)

- The International Sustainability Standards Board (ISSB) (Available on version 19.1.0)
- IFRS Sustainability Disclosure Standards (ISSB) (Available on version 19.1.0)

Note: The list of frameworks supported isn't exhaustive and may evolve over the future releases.

Emission factors

An emission factor is a coefficient that quantifies the emissions released per unit of activity or output. It is used extensively in environmental science, engineering, and regulatory contexts to estimate the amount of pollutants or greenhouse gases emitted into the atmosphere from various sources. The ESG content accelerator also contains several emission factors. For more information on emission factors, refer to Emission factor library.

Emission factors are sourced from certain standard content providers. These content providers publish the emission factors for a variety of industries and geographies. As an ESG administrator, while you can create your own emission factor to calculate your emissions, you can also use the emission factors provided through the ESG content accelerator application. Using the emission factors through the ESG content accelerator application saves your time and effort. The following emission factors are provided by this application.

- eGRID
- GHG Emission Factors by US EPA
- UK GHG factors (From DEFRA and DESNZ)
- US Environmentally-Extended Input-Output (USEEIO)

You can activate or update the ones that meet your requirement. Whenever there is a latest version of the emission factors available, you can update it using the ESG content accelerator application.

Note: Selecting the information icon on any tile displays the description of the framework or the emission factor.

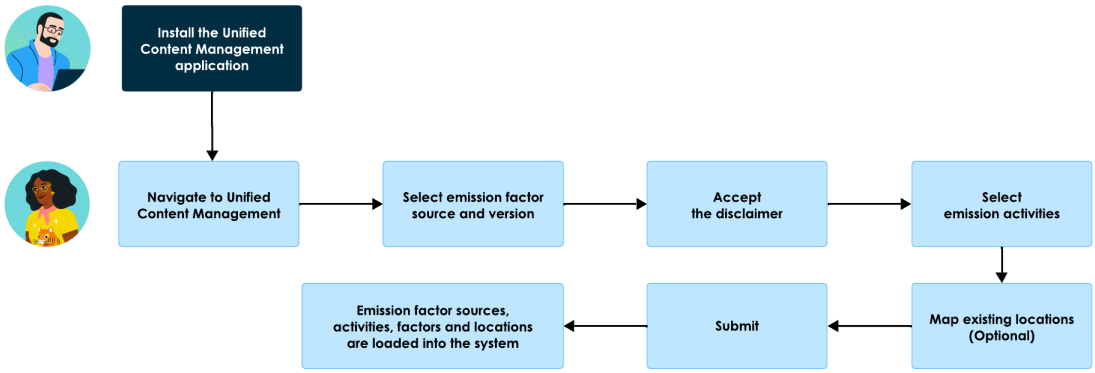
Benefits of the ESG content accelerator application

The following are the benefits of the ESG content accelerator application:

- Provides the ability to choose the framework you want to use.
- Facilitates the alignment of the metric definitions with the relevant citations from different frameworks. This helps achieve interoperability between citations of different frameworks and ensures consistent reporting of operational sustainability performance across various standards and regulations.
- Enables you to choose the citations that are associated with a particular framework and install them in the active state in your instance.
- Allows the installation of the metric definitions, which are associated with the citations, in the inactive state.
- Eliminates the need to manually create the metric definitions.
- Enables the users to edit the metric definitions.
- Aims to integrate updates as they become available and are listed in the versions under the respective frameworks and regulations.

Workflow of the ESG content accelerator application

The following figure displays the life cycle of the ESG content accelerator



application.

For more information see, Activate or update a framework and install citations using the ESG content accelerator.

Emission factor library

An emission factor library consists of emission factors, emission activities and emission activity sources. It is crucial to set up your emission factor library to calculate your emissions accurately.

The following sections explain the differences between emission factors, emission activities, and emission activity sources.

Emission factor

An emission factor is a coefficient that quantifies the emissions released per unit of activity or output. It is used extensively in environmental science, engineering, and regulatory contexts to estimate the amount of pollutants or greenhouse gases emitted into the atmosphere from various sources.

An example of an emission factor is Carbon dioxide (CO_2) emissions from the combustion of diesel fuel. Its value, for example, is 2.68 kilograms of CO_2 per liter of diesel fuel burned. If an organization consumes 10,000 liters of diesel fuel in a year, the total CO_2 emissions can be estimated as: Total CO_2 Emissions=Diesel Fuel Consumed×Emission Factor. Total CO_2 Emissions=10,000 liters×2.68 kg CO_2/liter. Total CO_2 Emissions=26,800 kg CO_2. So, the organization would emit approximately 26,800 kilograms (or 26.8 metric tons) of CO_2 annually from diesel fuel combustion.

Following are some uses of emission factors.

- Estimation of emissions
- Environmental reporting and disclosures
- Life cycle assessment

Audit tracking is enabled by default on Emission Factor tables, ensuring that all modifications are systematically recorded in a audit log. Access to this log is restricted to authorised users, who can review detailed entries for compliance and traceability. The audit log captures:

- User details initiating the change
- Timestamp of the modification

- Type of change performed
- Modified data entries

Emission activity

An emission activity refers to any process or action that produces pollutants or greenhouse gases released into the atmosphere. These activities can occur in various sectors such as industry, transportation, agriculture, and residential areas. Some examples of emission activities are:

- Burning coal in a power plant to generate electricity.
- Cement production.
- Activities such as livestock farming.

Emission activity sources

Emission activity sources provide data and methodologies to estimate greenhouse gas (GHG) emissions from various activities. These sources can be categorized based on the type of activity and the pollutants they emit. Some examples of emission activity sources are:

- Greenhouse Gas (GHG) emission sources
- Department for environment, food and rural affairs (DEFRA)
- Environmentally extended input-output models (EEIO)
- Emissions and generation resource integrated database (eGRID)

Related topics

Set up the emission factor library

Usage of emission factors in a calculated metric definition

When using an emission factor in a calculated metric definition (CMD), follow the specified guidelines to confirm accurate results.

1. Date alignment:
   - The start and end dates of your metric data must fall within the date range specified by the emission factor location.
   - If your metric data start and end dates aren’t within this range, the calculation defaults to a value of 0.
2. Location matching:
   - The location associated with your metric data must match the location specified for the emission factor.
   - If these locations don’t match, the system checks the parent location of the metric data. If the parent location matches an emission factor location, that emission factor value is used in the calculation.
   - If the location matches but doesn’t fall within the valid date range of the emission factor location, the parent hierarchy of the location isn’t checked for calculations.
3. Updating emission factor for older CMD's:

- Older emission factors does not have a recalculate button, making it challenging to update linked CMDs when emission factor values changes. While newly created CMDs offer a recalculate option when emission factors are updated, existing CMDs don't have this capability. To address this limitation, refer to Enable recalculation for historical CMDs to update older CMDs and enable the recalculate button, ensuring they reflect the latest emission factor values.
- When you update an emission factor value and recalculate it, the system automatically reruns the calculations when a scheduled job automatically recalculates the data. This recalculation applies to the relevant dates within the emission factor's validity period. This confirms that CMD metrics data and CMD data are always up to date with the latest calculations, providing more accurate and reliable insights.

By verifying both the date and location alignment, you can accurately build your formulas for calculations.

Forecasting planning and analysis

You can use the forecast planning and analysis feature to simulate various scenarios. The forecast planning and analysis tools enable for the creation, saving, visualization, and comparison of multiple analyses, enabling better planning.

You can install Forecast planning analysis from the ServiceNow Store. After installation, you can navigate to Forecast planning analysis by selecting the list icon .

Analysis contexts

An analysis context is used to group different analyses for a specific use case. This context enables you to organize and manage multiple analyses within a single, cohesive structure. Creating an analysis context involves selecting a metric definition or a metric that you want to simulate and specifying the number of periods to forecast and the number of previous periods of data to use. By setting up an analysis context, you can help confirm that all relevant analyses are considered and compared systematically, providing a comprehensive view of potential outcomes.

Note: You can choose a manual, automated, or calculated metric definition when creating analysis contexts. You must have at least 12 periods of historical data for forecast planning analysis. This provides the necessary foundation for simulating different analyses.

Analysis creations

An analysis is a simulation that models different outcomes based on specific interventions or changes. After creating an analysis context record, you can create different analyses. You can create the analysis by selecting the forecast method and adjusting the formula parameters. These analyses can be used to compare the outcomes with other analyses and make informed decisions for future planning.

Forecasts

After creating an analysis record, a standard forecast graph and adjustable parameters are generated. This standard forecast acts as a baseline, showing how the metric would likely perform if no external changes were made. The original values used for the forecast are displayed for each of the parameter fields. In the following example a calculated metric definition is used to display the forecast model.

The following example shows a generated standard forecast.

Example of importing a template

You can create forecast interventions, to explore different possible outcomes by updating input parameters. A graph is generated showing the standard forecast and the new adjusted forecast.

The following example shows a generated standard and adjusted forecast.

Example of importing a template

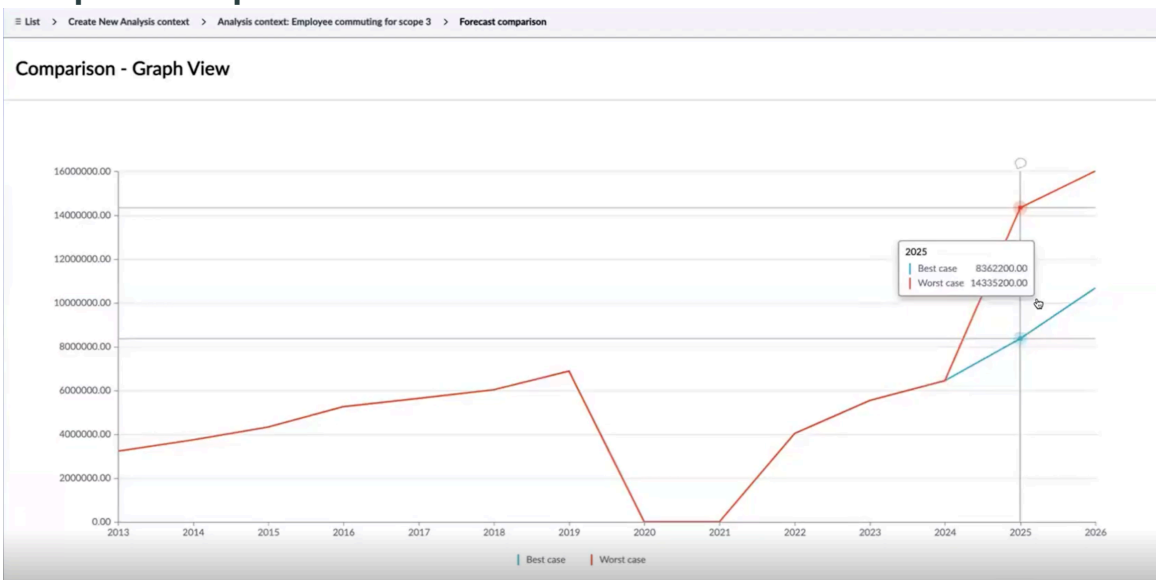
After creating and publishing multiple analyses and forecasts, you can compare the analyses and view a graph that captures the data for each analysis you select.

Note: After publishing an analysis and forecast, you can't change the parameters.

By comparing these analyses, you can better understand the potential impacts of your decisions, aiding in more strategic and informed planning.

The following example shows a generated comparison graph for two different analyses.

Example of a Comparison



Note: You can select up to five analysis records for comparison. If the selected analysis have adjusted values, those are plotted in the comparison. Otherwise, the standard forecast values are plotted.

Related topics

- Set up analysis contexts and analyses
- Create an analysis context
- Create an analysis
- Adjust parameters
- Create a forecast comparison graph

Configure Operational Sustainability Management (formerly ESG Management)

As an administrator, use this section to set up the ESG Management application. You must first create your material topics, your goals and targets, emission activities, and emission factors. You can then create entities and entity types for which you want to report the metrics and measure the sustainability performance of your organization.

Operational Sustainability Management (formerly ESG Management) implementation

Use the steps in the ServiceNow® ESG Management application checklist to download the ESG Management from the ServiceNow Store, and get it ready for operation. Mandatory and optional setup steps, as well as an implementation checklist are provided to simplify the setup.

The flow of mandatory steps in the checklist are as follows:

1. Install the Operational Sustainability Management application from the Servicenow Store
2. Create material topics
3. Create goals
4. Create targets

5. Create entity and entity types
6. Define metric definitions
7. Define metrics
8. Provide data for metrics
9. Import citations (optional)
10. Create disclosures
11. Integrate with other apps such as Watershed, PPM, and Urjanet (optional)

Install Operational Sustainability Management (formerly ESG Management)

You can install the ESG Management application (sn_esg) if you have the sys_admin role.The application includes demo data and installs related ServiceNow® Store applications and plugins if they are not already installed.

Before you begin

- Ensure that the application and all of its associated ServiceNow Store applications have valid ServiceNow entitlements. For more information, see Get entitlement for a ServiceNow product or application.
- ESG Management requires the following ServiceNow Store applications. Ensure that these applications are installed before you install ESG Management.

Required ServiceNow Store applications

GRC: Profiles

The GRC: Profiles application is a set of common components shared by the GRC suite of applications. The application includes common architecture, issue management, and indicators.

GRC: Common Workspace Elements

The GRC Base Workspace is the container of all the shared seismic workspace parts among GRC applications.

Goal Framework

The Goal Framework application enables you to add goals that track your progress towards your chosen material topics.

GRC: Metrics

The GRC: Metrics application enables you to define the metrics that are used to assess, compare, track, and report the performance of the other applications.

Microsoft 365 for ServiceNow Reporting

The Microsoft 365 for ServiceNow Reporting (sn_esg_msoff_intg) provides disclosure reporting capabilities to ESG reporting managers to seamlessly report ServiceNow ESG Management system data, list reports, charts, pivot, and multi pivot reports using Microsoft Word.

Note: With the ESG Management application, you can use the authority documents and citations in the GRC: Policy and Compliance Management application and entities in the GRC: Profiles application.

Role required: admin

About this task

The following items are installed with ESG Management:

- Roles
- Scheduled jobs
- Tables

For more information, see Components installed with Operational Sustainability Management (formerly ESG Management).

Procedure

1. Navigate to **All** > **System Applications** > **All Available Applications** > **All**.
2. Find the ESG Management application (sn_esg) using the filter criteria and search bar.

   You can search for the application by its name or ID. If you cannot find the application, you might have to request it from the ServiceNow Store.

   Visit the ServiceNow Store website to view all the available apps and for information about submitting requests to the store. For cumulative release notes information for all released apps, see the ServiceNow Store version history release notes.
3. In the Application installation dialog box, review the application dependencies.

   Dependent plugins and applications are listed if they will be installed, are currently installed, or need to be installed. If any plugins or applications need to be installed, you must install them before you can install ESG Management.
4. **Optional:** If demo data is available and you want to install it, select the **Load demo data** check box.
   Demo data are sample records that describe application features for common use cases. Load the demo data when you first install the application on a development or test instance.
5. Select **Install**.

Complete the entitlements for Operational Sustainability Management (formerly ESG Management)

After you install the ESG Management application from the ServiceNow® Store, you must complete the entitlements to gain complete access to the application and use it.

Before you begin

Role required: admin

Procedure

1. Navigate to ServiceNow® Store.
2. Search for and select **Operational Sustainability Management**.
3. **Optional:** On the product page, to change the version, select the **Other App Versions** link.
   a. To view the details of the other versions, select any version.
   b. Select **View Details**.
4. Select **View Products**.
5. Select **Operational Sustainability Management**.
6. To entitle all instances to the applications, select **Opt-in**.
   The eligible list displays all the application dependencies you are licensed for.
7. Select the option to agree to the ServiceNow® terms and conditions.

8. Select **Accept**.
   A checkmark appears next to the product name, and the **Manage Entitlements** button appears.
9. **Optional:** Select **Manage Entitlements** to change the instances affected by the applications to which you are entitled.
10. After you agree to the ServiceNow® terms and conditions and manage the entitlements, you can entitle the other products with a single click.

Setup checklist for the Operational Sustainability Management (formerly ESG Management) application

This checklist includes the set up tasks that you are required to complete in your ServiceNow AI Platform® instance. When you have completed these tasks, the base system is ready for operation.

Before you begin

Role required: none

Consider creating and printing a PDF of this checklist topic. You can then check off tasks as you complete them. To generate a PDF, click the **Save As PDF** icon and at the top of the topic and click **Selected topic**.

ESG Management application checklist

Item	Checklist
☐	A user with the sn_esg.program_manager role, can download and install the ESG Management application. For details, see Install Operational Sustainability Management (formerly ESG Management).
☐	A user with the sn_esg.program_manager role performs the following tasks: • Creates material topics • Creates goals • Creates targets • Creates an emission activity • Creates an emission factor
☐	A user with the sn_esg.program_manager role also manages entities and performs the following tasks: • Creates an entity • Creates an entity type • Creates an entity class
☐	A user with the sn_esg.metrics_manager role defines the various types of metric definitions and metrics. This user performs the following tasks:

ESG Management application checklist (continued)

Item	Checklist
	• Creates an automated metric definition • Creates a manual metric • Creates a composite metric definition • Create a metric
☐	A user with the sn_esg.data_owner role can provide data for the manual metrics data tasks and a user with the sn_esg.program_manager can override the data that is provided. For more information, see Provide data for a metric data task
☐	A user with the sn_esg.reporting_disclosure_manager, sn_esg.program_manager roles can create disclosure. Disclosures enable the investors to make informed decisions about the companies, their risk posture, sustainability standards, and ESG Management compliance.
☐	Optionally, users of the Install Operational Sustainability Management (formerly ESG Management) application can integrate with other applications such as Project Portfolio Management and Integrated Risk Management. These integrations provide more features and capabilities. For more information, see Integrating Operational Sustainability Management (formerly ESG) with other applications

Create a material topic

Create material topics for your organization so that you can identify the areas where you want to make an operational sustainability impact.

Before you begin

Role required: sn_esg.program_manager

About this task

Material topics are topics that reflect the organization's most significant impacts on the economy, environment, and people. After you create a material topic, you must send the topic for approval.

Procedure

1. Navigate to **All** > **Operational Sustainability Management** > **Operational Sustainability Workspace** > **Lists** > **Program Setup** > **Material topics**.
2. Select **New**.
3. On the form, fill in the fields.

Material topic form

Field	Description
Name	Name of the material topic. For example, `Climate and Energy`.
Classification	Category of the material topic. Choices are the following: ○ **Environmental** ○ **Social** ○ **Governance**
Approver	Person responsible for the review and for approval of the material topic.
State	State of the material topic. This field is automatically set to **Draft**.
Importance to business success	Effect of the material topic on the business success. Choices are the following: ○ **None** ○ **Very important** ○ **Important** ○ **Moderately important** ○ **Slightly important**
Importance to stakeholders	Importance of the material topic for the stakeholders. Choices are the following: ○ **None** ○ **Very important** ○ **Important** ○ **Moderately important** ○ **Slightly important**
Url	Links to any online information that the teams may use.
Priority	Priority of the material topic. Choices are the following: ○ **None** ○ **High** ○ **Moderate** ○ **Low**
Description	Brief description of the material topic.

4. Select **Save**.
5. To send the topic for review, select **Ready for Review**.
6. To mark a material topic as confidential, in the Security section, select the **Confidential** option.

a. In the **Allowed users** field, select the users who can view the record.

b. In the **Allowed groups**, select the groups that can view the record.
This Security section only appears if the *sn_grc.enable_record_confidentiality* property is enabled under GRC properties. By default, the logged-in user is added to the list of confidential users.

Result
The material topic is sent to the approver. The state changes to **Review**.

What to do next
Create a metric

Approve or reject a material topic

Review and approve or reject a material topic if it is assigned to you for approval.

Before you begin
Role required: sn_esg.program_manager

Procedure

1. Navigate to **All** > **Operational Sustainability Management** > **Operational Sustainability Workspace** > **Tasks** > **My pending tasks** > **Material topics**.
2. Open the material topic to review.
3. To approve or reject the topic, set the **State** field to one of the following.

Choice	Action
To approve	To approve the topic.
To reject	To reject the topic.

4. Click **Save**.

Result
If the material topic is approved, its state changes to Monitor. If the topic is rejected, the state changes to Draft.

Create an Operational Sustainability Management (formerly ESG Management) goal

Establish operational sustainability goals to track your progress toward your chosen material topics.

Before you begin
Role required: sn_esg.program_manager

About this task
After you create a material topic, you must also create goals to track your progress toward the material topic. After you create a goal, you can do the following:

- Assign targets to track the progress of goal achievement.
- If you integrate with Integrated Risk Management, you can add policies. You can also monitor the goal-related risks, policy and control compliance, and issues that are due. This integration enables you to create policies and implement controls to reinforce company goals.
- If you integrate with Project Portfolio Management, you can add programs and projects for the goal.

For more information, see Goal framework

Procedure

1. Navigate to **All** > **Operational Sustainability Management** > **Operational Sustainability Workspace** > **Lists** > **Program Setup** > **Goals**.
2. Click **New**.
3. On the form, fill in the fields.

Goal form

Field	Description
Name	Name of the goal. For example, `Climate change strategies`.
Classification	Category of the goal. Choices are the following: ○ **Environmental** ○ **Social** ○ **Governance**
Start date	Start date for the goal.
Owner	Person who owns the goal.
Status	Status to indicate the goal progress. Choices are the following: ○ **Red** ○ **Yellow** ○ **Green**
State	State of the goal.
Category	Category to which the goal belongs. Choices are the following: ○ **Total Applications** ○ **Total Cost** ○ **Opex** ○ **Capex** ○ **Cloud Applications** ○ **Homegrown Applications** ○ **Support Cost** ○ **Labor Cost**

Field	Description
	○ **Standards Compliance** ○ **Strategic** ○ **Operational** ○ **Tactical**
End date	End date for the goal.
Contributors	Users contributing to the goal.
Progress	Percentage complete for the goal. The progress value is calculated automatically. For more information, on how the progress value is calculated, see Goal progress value calculation.
Description	Description of the goal.

4. Click **Save**.

What to do next

To view the goal's relationship with other sub goals, targets, metric definitions, and so on, click **360° view**.

Related topics

Goals overview in the Operational Sustainability Workspace (formerly ESG Workspace)

Goal progress value calculation

The progress or percentage complete value of goals is auto-calculated using different formulas. The formula depends on whether the goal has only targets, a combination of sub-goals and targets, and if it has weighted average calculation enabled.

Scenario	Formula used to calculate the progress value of the goal
• The goal has targets. • The goal doesn't have sub-goals. • No weight scale defined for targets.	`Progress value of the goal = Sum of progress values of its associated targets / number of targets`
• The goal has sub-goals and targets. • No weight scale defined for sub-goals and targets.	`Progress value of the goal = Sum of progress values of its sub-goals and associated targets / number of sub-goals and targets`
• The goal has two targets (target 1 and target 2). • The goal doesn't have sub-goals.	`Progress value of the goal = [(Progress of target 1 * Weight scale of target 1) + (Progress of target 2 * Weight scale of target 2)] / (Weight scale of target 1 + Weight scale of target 2)`

Scenario	Formula used to calculate the progress value of the goal
• Weight scale defined for targets and the sn_gf.weighted_average_enabled system property is set to *Yes*.	
• The goal has two targets (target 1 and target 2). • The goal has two sub-goals (sub-goal 1 and sub-goal 2). • Weight scale defined for sub-goals and targets and the sn_gf.weighted_average_enabled system property is set to *Yes*.	`Progress value of the goal = [(Progress of sub-goal 1 * Weight scale of sub-goal 1) + (Progress of sub-goal 2 * Weight scale of sub-goal 2) + (Progress of target 1 * Weight scale of target 1) + (Progress of target 2 * Weight scale of target 2)] / (Weight scale of sub-goal 1 + Weight scale of sub-goal 2 + Weight scale of target 1 + Weight scale of target 2)`

Migrate existing goals data to Goal Framework

With the admin role, you can migrate the existing goals data to the Goal Framework tables by running the scheduled job.

Before you begin

Role required: sys_admin

About this task

If you are an existing user of IT Business Management, then you must migrate your existing goals to the Goal Framework. New customers automatically have the new framework and they do not need to run the job mentioned in this procedure.

Procedure

1. Navigate to **All** > **System Definition** > **Scheduled Jobs**.
2. Search and click the **Migrating Goal, Strategy, and related Work Item data to the new tables** scheduled job.
3. On the Scheduled Script Execution form, perform the following steps:

   a. Ensure that the frequency is selected as **On Demand** in the **Run** field.

   b. Set the value to **true** for the required parameters in the **Run this script** field.

Parameter	Description
migrateGoalData	▪ Migrates all existing goal records from the Goal [goal] table to the Goal [sn_gf_goal] table. The sys_ID remains the same. The corresponding target records will be created in the Target [sn_gf_goal_target] table. ▪ Creates the existing relationship between the goal and work items (Project, Demand, Program) in the Goal Relationship [sn_gf_goal_m2m_relationship] table with the first goal as the primary goal.

Parameter	Description
	Note: Only existing goal records that have the **Direction** field populated on the Goal [goal] table are migrated to the Goal [sn_gf_goal] table.
migrateStrategyData	Migrates all existing strategy records from the Enterprise Strategy [enterprise_strategy], Business Unit Strategy [business_unit_strategy], and Strategic Objective [strategic_objective] tables to the Strategic Priority [sn_gf_strategy] table. The sys_ID remains the same.
migratingGoalStrategyM2Mdata	In Goal Framework, a goal can be mapped to only one strategy. If an existing goal has two strategies mapped to it, a clone of the goal will be created (one as a generic goal and another as a sub-goal) with the same strategy populated for both. And, for the sub-goal, the first goal will be set as the parent goal. For example, consider a scenario where an existing goal (G1) is mapped to five strategies (S1, S2, S3, S4, and S5). Then, four clones of G1 will be created as sub-goals (G2, G3, G4, and G5) and the parent goal is populated as G1. For the sub-goals (G2, G3, G4, and G5), the **Strategy** field is populated respectively (S1, S2, S3, S4, and S5). **Note:** The name of the cloned sub-goal will be prefixed with `Cloned SubGoal:`, followed by the parent goal name.
migrateStrategyWorkItemRelData	▪ Migrates the existing relationship of strategy and work items (Project, Demand, Program) to the Goal Relationship [sn_gf_goal_m2m_relationship] table. ▪ If a goal does not have an association between the strategy (as current strategy) and the work item in the Goal Relationship [sn_gf_goal_m2m_relationship] table, a dummy goal will be created with a strategy value of current strategy. And, a goal relationship is created with the dummy goal and the work item in the Goal Relationship [sn_gf_goal_m2m_relationship] table. **Note:** The name of the dummy goal will be prefixed with `Goal:`, followed by the strategy name.

4. Click **Execute Now**.

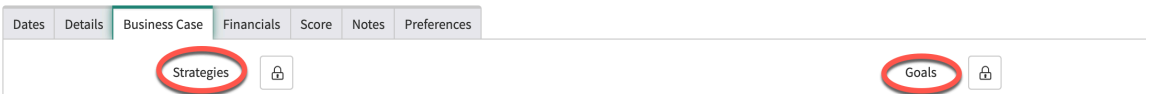
Display the priorities and goals on the project form

If you are an existing user, configure the project form to upgrade to the Goal Framework. The benefit of the Goal Framework is that it enables you to set targets for goals. You can also define strategic priorities and associated goals as part of the organization's strategic plans.

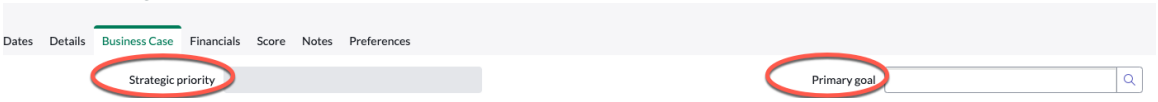
Before you begin
Role required: sys_admin

About this task
If you have preconfigured forms, you must do this configuration to make the new framework features and fields available. The following images show the form fields before and after configurations.

Before configuration of new fields



After configuration of new fields



The same procedure can be performed on the Demand and Program forms as well. For more information, see Goal framework.

Procedure
1. Navigate to **All** > **Project** > **Projects** > **All**.
2. Open a project.
3. Click the additional actions icon ( ) and do the following:
   a. Click **Configure**.
   b. Click **Form Layout**.
   c. Under the Form view and section, set the **View name** field to the view that has the goal and strategy Glide list.
   d. Under the Form view and section, set the **Section** field to **Business Case**.
   e. In the Available list, select **Primary goal [+]** and click the tree workflow icon ( ).
   f. In the Available list, double-click **Strategic priority [+]**.
      The Selected list shows **Primary goal.Strategic priority**.
   g. Click **Save**.

   Repeat this step for all the views that have the goal and strategy Glide list, such as Score and Financial.

Result
The Project form shows the **Strategic priority** field and the **Primary goal** field.

Map a goal to a material topic

Map a goal to a material topic so that you can track the actions being taken for the chosen topic. Based on this mapping exercise, you can act on the goals with the most significant material impact.

Before you begin
Role required: sn_esg.program_manager

About this task
You can add or remove goals from a material topic only when the material topic is in the Draft state. In other workflow states (Approval, Materiality Assessment, Monitor, or Retired), you cannot add or remove goal associations. This restriction applies to both material topics created in ServiceNow and material topics imported from Socialsuite.

Procedure
1. Navigate to **All** > **Operational Sustainability Management** > **Operational Sustainability Workspace** > **Lists** > **Program Setup** > **Material topics**.
2. Open the material topic to which you want to map a goal.
3. To add a goal, do the following:
   a. Click the Goals related list.
   b. Click **Add**.
   c. Select the goals to add.
   d. Click **Add**.
   e. Click **Save**.

Result
The goal is mapped to the material topic. This goal can now track the progress toward your chosen theme or topic.

Associate entities to goals

After you create the goals, you must associate those entities, which you want to track, to the goals.

Before you begin
Role required: sn_esg.program.manager

Procedure
1. Navigate to **All** > **Operational Sustainability Management** > **Operational Sustainability Workspace** > **Lists** > **Program Setup** > **Goals**.
2. Open the goal for which you want to add the entities.
3. Select the entities related list.
4. Select **Add**.
   a. Select the entities to add.
   b. Select **Add**.

Create an Operational Sustainability Management (formerly ESG Management) target

Create an operational sustainability target to help track the progress towards your operational sustainability goal.

Before you begin
Role required: sn_esg.program_manager

About this task

When you create a target, you can use the target to see how well you are meeting your goals. You can treat the status of the target as a report card about your goals. After you create a target, you can create and collect metrics to measure whether the targets are met.

Procedure

1. Navigate to **All** > **Operational Sustainability Management** > **Operational Sustainability Workspace** > **Lists** > **Program Setup** > **Targets**.
2. Click **New**.
3. On the form, fill in the fields.

Target form

Field	Description
Name	Name of the target. For example, `Launch diversity programs each quarter`.
Goal	Goal that this target will track.
Start date	Date the target begins
Owner	Owner of the target.
Type	Target type that shows the direction of achievement. Choices are the following: ○ **Maximize**: The direction of the progress is towards the **Target value** from the **Base value**. The base value must be less than the target value. ○ **Minimize**: The direction of the progress is towards the **Target value** from the **Base value**. The target value must be less than the base value. ○ **Milestone**: Fixed type. Only the progress field is available. The values of the field (0-100) capture the achievement of a milestone.
State	State of the target.
Status	Status to indicate the target progress. Choices are the following: ○ Green: Indicates that the target is on track. ○ Yellow: Indicates that the target needs improvement. ○ Red: Indicates that the target needs immediate attention.
End date	Date when the target ends.
Contributors	Users who contribute to achieving the target.
Check in frequency	Option to specify how frequently should the owner or contributor be updating the actual value of the target. The available options

Field	Description
	are Daily, Weekly, Fortnightly, Monthly, and Quarterly.
Measure	Measure type for the specified value. The available measure types are stored in the Units [sn_gf_units] table.
Base value	Base value of the target. The base value can also be considered as the present or current value.
Actual value	Actual value of the target at a given time. This field is available only when the **Type** field is set to **Maximize** or **Minimize**.
Target value	Target value of the target. This value is the goal that your team wants to reach. This field is available only when the **Type** field is set to **Maximize** or **Minimize**.

Progress	Percentage of target that is complete. This value is calculated automatically.
	
	If the **Type** field is set to **Maximize**, then the progress value is calculated using the following formula.
	
	`Progress = (Actual value - Base value) / (Target value - Base value) x 100`
	
	If the **Type** field is set to **Minimize**, then the progress value is calculated using the following formula.
	
	`Progress = (Actual value - Target value) / (Base value - Target value) x 100`

Weight scale	A numerical value that represents the importance of the target relative to the other targets of the goal. If there are any sub-goals present, they are also considered for relative weights and consequent progress calculation. By default, the weight scale is 1. **Note:** This field is available only when the *sn_gf.weighted_average_enabled* system property is set to **Yes**.
Source for target	The metric definition or the metric that acts as a source of the target. This field only appears when the **Type** field contains either **Maximize** or **Minimize**. For information on how to add a source, see Add a source for a target.

4. To mark a material topic as confidential, in the Security section, select the **Confidential** option.
   a. In the **Allowed users** field, select the users who can view the record.
   b. In the **Allowed groups**, select the groups that can view the record.
   This Security section only appears if the *sn_grc.enable_record_confidentiality* property is enabled under GRC properties. By default, the logged in user is added to the list of confidential users.
5. Click **Save**.
   The Metric Definitions and the Metric related lists appear.
6. To add a metric definition, do the following:
   a. Click the Metric Definition related list.
   b. Click **Add**.
   c. Select the metric definitions to add.
   d. Click **Add**.

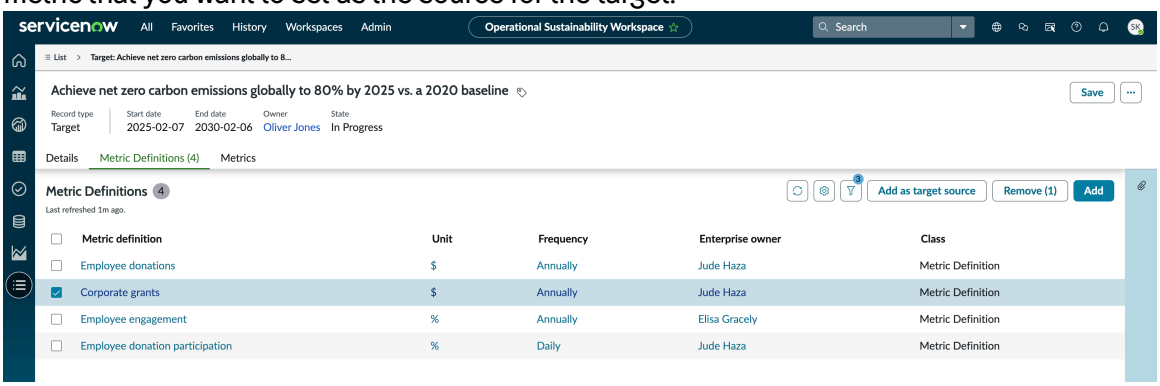
Result
The target with metric definitions is created.

Add a source for a target

After you create a target, you must add a source for the target. The source can be a metric or a metric definition that contributes to the parent target.

Before you begin
Role required: sn_esg.program_manager

Procedure
1. Navigate to **All** > **Operational Sustainability Management** > **Operational Sustainability Workspace** > **Lists** > **Program Setup** > **Targets**.
2. Select and open the target for which you want to add the source.
3. From either the Metric Definitions or the Metrics related list, select the metric definition or the metric that you want to set as the source for the target.



4. Select **Add as target source**.

Set up the emission factor library

To calculate your emissions accurately, you must set up your emission factor library. The emission factor library consists of emission factors, emission activities, activity sources and factor locations.

Create a new emission activity

Create new emission activities to track the activity that leads to emissions if you do not want to use the standard emission activities provided through the ESG content accelerator application.

Before you begin

Role required: sn_esg.program_manager, sn_esg.admin

Procedure

1. Navigate to **All** > **Operational Sustainability Management** > **Operational Sustainability Workspace** > **Lists** > **Emission Factor Library** > **Activity**.
2. Select **New**.
3. On the form, fill in the fields.

Emission activity form

Field	Description
Name	Name of the emission activity. For example, `Cars`.
Type	Type of activity. For example, `Luxury`.
Subtype	Subtype of the activity. For example, `Diesel`.

4. Select **Submit**.

Import emission activities and map their locations

Use the ESG content accelerator application to import the standard emission activities and add their locations. These emission factors identify which activities within your organization are producing specific amounts of pollution. The reason you must add locations to a factor is that an organization may have different locations and each location may have a different factor value for different periods.

Before you begin

Role required: sn_esg.program_manager, sn_esg.admin

Procedure

1. Navigate to **All** > **Operational Sustainability Management** > **Operational Sustainability Workspace** > **Content accelerator**.
2. Select the **Emission factors** tab.
3. Select the emission factor that you want to activate or update.
4. Select either **Update** or **Activate**.
5. Select **Agree** for the disclaimer.
6. Select the emission activities that you want to import in your system.
7. Select **Next**.
8. **Optional:** In the **Map existing location** column, select the location for each activity.
9. Select **Submit**.

Result
The emission activities are mapped to the emission factor sources and the factors are ready to be used in calculate metric definitions.

Create an emission factor

Create your own custom emission factors if you don't want to use the standard emission factors provided by the ESG content accelerator application. An emission factor is a representative value that relates the quantity of a pollutant released to the atmosphere with the activity associated with the release of that pollutant.

Before you begin
Role required: sn_esg.program_manager, sn_esg.admin

About this task
An emission factor is a coefficient that enables conversion of activity data into emissions. It's the average emission rate of a given source, relative to the units of an activity or process. When you create an emission factor, you can select the unit from which you want to convert the data into the unit that you want to use to measure your emissions. For example, you can convert miles, which is the activity data, to the emissions the activity causes.

Procedure
1. Navigate to **All** > **Operational Sustainability Management** > **Operational Sustainability Workspace** > **Lists** > **Emission Factor Library** > **Factor**.
2. Select **New**.
3. On the form, fill in the fields.

Emission factor form

Field	Description
Name	Name of the emission factor. For example, `Cars-Mini-Diesel-miles-KgCO2e`.
From unit	Unit in which the data is collected.
To unit	Unit to which the data must be converted.
Emission activity	Emission activity or source of the factor.

4. Select **Submit**.

Result
- Two related lists are now available on the emission factor: 'Emission Factor Location', which was previously available and displays linked locations, and 'Calculated Metric Definition', a new addition that displays linked calculated metric definitions.
- You can now use this emission factor in a calculated metric definition.

Add locations to an emission factor

Add locations to an emission factor after you create the factor. The reason you must add locations to a factor is that an organization may have different locations and each location may have a different factor value for different periods.

Before you begin
Role required: sn_esg.program_manager, sn_esg.admin

About this task

Usually, the factors are obtained from standard sources such as the Greenhouse Gas (GHG) protocol. Each factor for a location is effective for a specified time period. When you add locations to an emission factor, you specify the factor value for that particular location.

Procedure

1. Navigate to **All** > **Operational Sustainability Management** > **Operational Sustainability Workspace** > **Lists** > **Emission Factor Library** > **Factor**.
2. Open the emission factor for which you want to add locations.
3. In the Emission factor locations related list, select **New**.
4. On the form, fill in the fields.

Emission factor location

Field	Description
Emission factor	Name of the emission factor for which you are adding the location. This field is automatically set.
Effective from	Date the emission is effective from.
Effective to	Date until which the emission would last. **Note:** If you do not specify the end date, then the factor value is applied indefinitely.
Location	Location of your emissions. **Note:** If you do not specify a location, then the factor value applies to all the locations of your organization.
Value	Value for the factor. For example, if natural gas emits 0.375 kg CO2eq/kWh ICV, then you can provide 0.375 as the value.

5. Select **Submit**.

Example: Calculation logic for a location

Each location may have a parent location. For example, if your location is **Tokyo**, the parent location of Tokyo is Japan. Similarly, the parent location of Japan is Asia Pacific. If you select a parent location such as **Japan** in the **Location** field and specify the value as **1.5**, then the metrics are calculated using the value of 1.5 for any location that does not have a record but has the parent location as Japan. Similarly, if you select **Asia Pacific** in the **Location** field and specify the value as **2.5**, then the metrics are calculated using the value of 2.5 for any location that does not have a record but has the parent location as Asia Pacific.

Recalculate emission factor

When an emission factor value is updated, you can recalculate the emission factor to initiate the system to automatically recalculate the data for all linked calculated metric definitions (CMD),

using the new value for dates within the emission factor's validity period. This ensures that metrics data remains consistent and accurate, reflecting the latest changes.

Before you begin
Role required: sn_esg.program_manager, sn_esg.admin

Procedure

1. Navigate to **All** > **Operational Sustainability Management** > **Operational Sustainability Workspace** > **Lists** > **Emission Factor Library** > **Factor**.
2. Open the emission factor that is updated and for which you want to recalculate the data.
3. Select **Recalculate**.
   - CMDs are automatically re-executed every 24 hours, updating emission factor values for all linked definitions.
   - For immediate updates, you can manually execute a CMD by opening it and execute it.

Create a new schedule

Create a schedule or modify an existing schedule to calculate the due date for metric data tasks.

Before you begin
Role required: admin

About this task
Using schedules, you can specify that the due date for a metric data task. For example, you can specify that the due date does not fall over a weekend or a holiday. Another example could be that you can specify your working hours so that the due date automatically is set based your specifications. By default, the **8-5 weekdays** schedule is used to set the due date.

Procedure

1. Navigate to **All** > **Operational Sustainability Management** > **Administration** > **Schedules**.
2. Select **New** and provide a unique and meaningful **Name** and **Description**, and then fill in the form.

   For detailed information on Schedule form fields, see Schedule fields.

Create related list groupings

Simplify the groupings of related lists on a record page and customize them to your specific needs, assigning meaningful names in the process. This configuration enhances readability and user experience when interacting with the forms.

Before you begin
Role required: admin or sn_grc_workspace.record_view_admin

About this task
On a form there can be numerous related lists that can occasionally result in a cluttered view. To streamline the display, you have the option to select and configure the related lists you want to see on the form. By default, the ability to configure the related lists is given for the following tables:

- Calculated metric definition table
- Goal table
- Manual and automated metric definition table

While you can select any table and configure the related lists for that table, as an example, this procedure describes how you can create groupings for the Goal configuration table. Apart from the related lists, you can also specify a UX page that you want to display under a group.

Procedure

1. Navigate to **All** > **Operational Sustainability Management** > **Administration** > **Record View Configurations**.
2. Select **Operational Sustainability Workspace configuration**.
3. In the Table configurations related list, select **Goal configuration**.
4. In the Group configurations related list, select **New**.
5. On the form, fill in the fields.

Group configuration form

Field	Description
Table configuration	Name of the table for which you're configuring the related list. This field is automatically set.
Name	Name of the group that will be displayed on the related list of the form. For example, you can provide a name such as `Program set up`.
Active	Option to indicate if the configuration is active.
Order	Order number of the group on the form. **Note:** If you want to display the order before the Details tab, then the order number must be less than or equal to `100`.
Condition	Conditions that must be met in order to be displayed on the form. For example, you can specify that if a goal is of type Environmental, only then it must be displayed on the form.

6. Select **Submit**.
7. In the Group configurations related list, select the entry you created.
   a. In the Group entries related list, select **New**.
   b. On the form, fill in the fields.

Group entry form

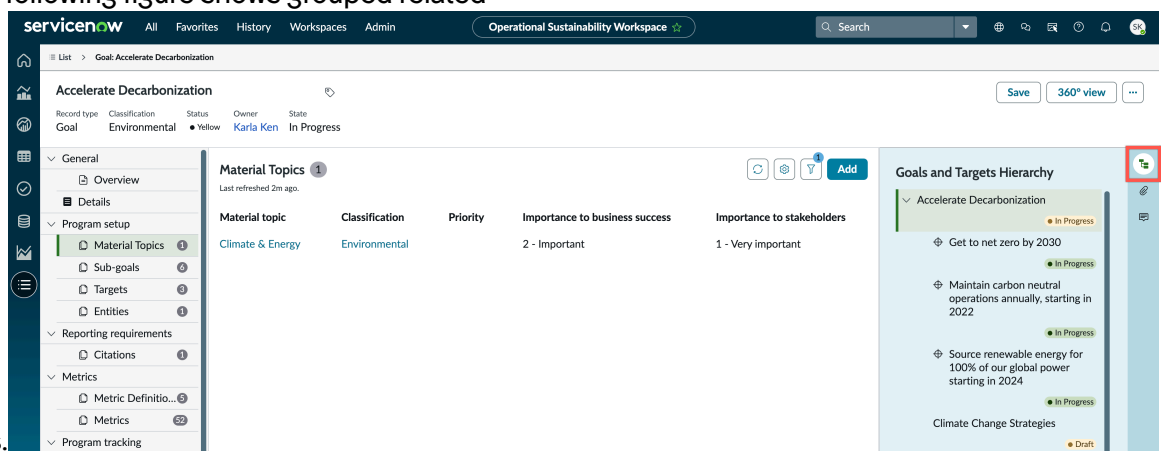
Field	Description
Group configuration	Group for which the related list is being created. For example, in this procedure, the

Field	Description
	group for which you're configuring the entry is **Program setup**.
Order	Order of the entry on the UI page.
Application	Application for which the related list is being created. This field is automatically set to **Operational Sustainability Management**.
Active	Option to indicate if the entry is active.
Type	Choice to indicate the type of item the group will contain. The choices are as follows: ▪ **UX page** ▪ **Related list**
Related list	Related list that you want must appear under the group. This option appears only when the **Type** field contains **Related list**.
Screen	Specific variation or version of a page. This option appears only when the **Type** field contains **UX page**.
Route	The path of the UX screen. This option appears only when the **Type** field contains **UX page**.

c. Select **Submit**.

Result

The following figure shows grouped related lists.



Configure Sustainable IT

Follow the order of the steps to configure the Sustainable IT plugin.

Activate the Sustainable IT plugin

The Sustainable IT is used to effectively manage and monitor the emissions generated by your hardware assets.

Before you begin

Role required: admin

About this task

For more information, see Components installed with Operational Sustainability Management (formerly ESG Management).

Procedure

1. Navigate to **All** > **System Applications** > **All Available Applications** > **All**.
2. Find the Sustainable IT plugin (sn_esg_sustain) using the filter criteria and search bar.

   You can search for the plugin by its name or ID. If you cannot find a plugin, you might have to request it from ServiceNow personnel.
3. Select **Install** to start the installation process.

   Note: When domain separation and delegated admin are enabled in an instance, the administrative user must be in the **global** domain. Otherwise, the following error appears: `Application installation is unavailable because another operation is running: Plugin Activation for <plugin name>.`

   You will see a message after installation is completed. For information about the components installed with a plugin, see Find components installed with an application.

Filter Sustainable IT metric definitions

Apply the filter to obtain the metric definitions that are shipped with the Sustainable IT plugin. The filter must be applied to all the three types of metric definitions namely manual, automated, and calculated.

Before you begin

Role required: admin

About this task

Procedure

1. Navigate to **All** > **Operational Sustainability Management** > **Operational Sustainability Workspace** > **Lists** > **Metrics**.
2. Select a type of metric definition.
3. Select the filter icon.
4. Select **Advanced view**.
5. Build a filter by selecting **Group**, **is**, **Sustainable IT**.
6. Select **Update**.

Methods to set up entities for Sustainable IT

There are two methods, manual and automatic, to set up your entities for data collection for the Sustainable IT application. You can select any one and proceed to collect your data.

You can set up the entities in one of the following ways:

- Use the cmdb_ci_datacenter table to create your entities. After you create the entities, you can add the locations for each entity. For more information, see Create new entities for data centers. Usually, this method is the preferred method for configuring entities.
- Manually create entities for data centers and add them to an entity type. The entity type is then added to the metric definitions that enables the metric definitions to collect data from various data centers. For more information, see Manually set up entities for Sustainable IT data centers.

Create new entities for data centers

Use the cmdb_ci_datacenter table to create entities for all your data centers.

Before you begin
Role required: sn_esg.admin

Procedure

1. Navigate to **All** > **Operational Sustainability Management** > **Operational Sustainability Workspace** > **Lists** > **Scoping** > **All Entities**.
2. Select **New**.
3. Ensure that the **Refers to existing record** option is selected.
4. In the **Table** field, select **cmdb_ci_datacenter**.
5. In the **Applies to record** field, select the data center you want to add.
6. In the **Location** field, select the data center location from where you want to collect data.
7. In the **Class** field, select **Sites**.
8. Add the entity to the metric definition for which you want to collect data.
9. Save the metric definition form.

Result
When the metric definition is executed, the metrics for the selected data center will be collected and displayed on the Sustainable IT dashboard.

Manually set up entities for Sustainable IT data centers

Create entities for data centers and add them to an entity type. The entity type is then added to the metric definitions that enables the metric definitions to collect data from various data centers.

Before you begin
Role required: sn_esg.admin

About this task
To gather emissions data pertaining to your data centers, it is necessary to give a unique name to your entities and associate a location in such a way that they can retrieve data from all of your data center locations. For instance, if you wish to utilize the metric definition named Energy from coal, it implies that you want the coal energy emissions data from four locations, for example, Bangalore, New York, Paris, and Berlin when the metrics are executed. To accomplish this task, you need to create entities with names such as New York, Bangalore, and so on. To use the Sustainable IT application, when you create entities, it is mandatory to add a location to them. You can then group the entities within an entity type. For example, you can call the entity type "Data centers." This entity type is then added to the metric definition named Energy from coal.

Procedure

1. Navigate to **All** > **Operational Sustainability Management** > **Operational Sustainability Workspace** > **Lists** > **Scoping** > **All Entities**.
2. Create new entities with names such as `Paris data center`.
   For information on how to create a new entity, refer to Create an entity. The name that you use when creating an entity is the name that is displayed on the Sustainable IT dashboard. It is important to provide a value in the **Location** field on the entity form. If a particular data center has multiple locations, you can name the entities accordingly.
3. Create an entity type called `Data center`.
   For information on how to create a new entity, refer to Create an entity type. The name that you use when creating an entity is the name that is displayed on the Sustainable IT dashboard.
4. Add the entities that you created to the Data center entity type.
5. Add the entity type to the metric definition that you would use to collect metrics.

Result

When the metrics are executed, data from all four entities is collected and displayed on the Sustainable IT dashboard.

Configure a map marker

Configure the items that you want to view on the IT footprint map tab of the Sustainable IT dashboard.

Before you begin

Role required: sn_esg.admin

Procedure

1. Navigate to **All** > **Operational Sustainability Management** > **Operational Sustainability Workspace** > **Sustainable IT** > **Map marker configuration**.
2. Select **New**.
3. On the form, fill in the fields.

Map marker configuration table

Field	Description
Name	Name of the configuration.
Metric definition	Active metric definition related to Sustainable IT.
Map marker icon	Icon used to represent the configuration on the map.
Show on map by default	Option to show the configuration on the map, by default, during the initial loading of the map.
Active	Option to mark the configuration as active. Only active configurations are displayed on the map during the initial loading of the map.
Entity class	Unique entity class of the entities associated with the selected metric definition.

Field	Description
Default icon color	Hex color code of the icon when it's displayed on the map. You can change the default color that is automatically set in this field.

4. Select **Submit**.

What to do next
Define data range configurations. See Map data range configurations.

Map data range configurations

Define the criteria for classifying map markers based on their metric data values. You can specify a range of values and assign a corresponding classification and color to markers that fall within that range.

Before you begin
Role required: sn_esg.admin

Procedure
1. Navigate to **All** > **Operational Sustainability Management** > **Operational Sustainability Workspace** > **Sustainable IT** > **Map marker configuration**.
2. Select and open the map marker configuration for which you want to add the data range.
3. Select **New**.
4. On the form, fill in the fields.

Map data range configuration

Field	Description
Name	Name of the data range. For example, `High emission`.
Lower interval	Lowest value in the range that you want to set.
Map marker configuration	Name of the configuration for which you're defining the range. This field is automatically set.
Classification	Classification that is assigned to ranges based on the values within the upper and lower intervals. For instance, a range of 250000 Co2e emissions can be categorized as Good.
Upper interval	Highest value in the range that you want to set.
Icon color	Hex color code of the icon when it's displayed on the map for the range specified.

5. Select **Submit**.

Activate or update a framework and install citations using the ESG content accelerator

Activate or update your chosen framework and select the citations for the framework you've selected. This will install the framework and the selected citations and metric definitions on your instance.

Before you begin

Role required: sn_esg.admin

Procedure

1. Navigate to **All** > **Operational Sustainability Management** > **Operational Sustainability Workspace**.
2. Select **Unified content management**.
3. Select the version for the required framework.
   a. Select **Activate**.
   b. Read the disclaimer and select **Agree**.
4. On the citations page, select the required citations.
5. Select **Next**.
6. On the metric definitions page, select the required metric definitions.
7. Select **Submit**.
8. To update a framework, select a framework and select **Update**.

Filter citations documents for Operational Sustainability Management (formerly ESG Management)

Set the functional domain to **Operational Sustainability Management** to view only those citations that are specific to the operational sustainability domain. This ability to select the domain enables you to see only those citations that are relevant to you. The same procedure applies to authority documents as well.

Before you begin

Role required: sn_esg.reporting_disclosure_manager

About this task

When you view the citations and authority documents in an instance, all the citations and authority documents that are available are displayed. Not all citations and authority documents are relevant for your domain. In this case, you can apply a filter to display only those documents that are specific to your domain. After you apply the filter and a relevant citation or authority document is not displayed, then it means that the document's functional domain is not set to **Operational Sustainability Management**.

Procedure

1. Navigate to **All** > **Operational Sustainability Management** > **Operational Sustainability Workspace** > **Lists** > **Disclosure requirements** > **Citations**.
2. Select the filter icon.
3. Select **Advanced view**.

4. Build a filter by selecting **Functional domain**, **contains**, **Operational Sustainability Management**.
5. Select **Update**.

Related topics

Create or deactivate a citation

Configuring the Scope 3 dashboard

To view data on the Scope 3 dashboard, you must configure the emission category types to define the categories for which you want to report scope 3 data.

The following are the tables that you must configure to view your supplier category, spend category, and GHG category data on the Scope 3 dashboard. After configuration, the metric definitions for Scope 3 emissions use the data from these tables.

Create an emission category type

Create emission category types to define the categories for which you want to report scope 3 data that will be displayed on the Scope 3 dashboard.

Before you begin
Role required: sn_esg.admin and sn_esg.program_manager

Procedure

1. Navigate to **All** > **Operational Sustainability Management** > **Scope 3 configurations** > **Emission category types**.
2. Select **New**.
3. On the form, fill in the fields.

Scope 3 emission category types form

Field	Description
Category type	Type of category for which you are creating the record. The choices are as follows. ○ **Supplier category** ○ **Spend category** ○ **GHG category**
Model category	Relevant model categories that must be associated with the category type. For example, for a Supplier category, you can select Linux server, rack, and so on as the model category.
Category name	Name of the category.
EEIO emission activity	EEIO emission activity associated with the category type. The selection made in this field helps in the calculation of the emissions.

Field	Description
	Note: You must activate the emission activities from the ESG content accelerator application.

4. Select **Submit**.

Configure the supplier emissions by model table

Configure your supplier emission data collection to capture emissions by specific models of assets to report and calculate Scope 3 emissions accurately.

Before you begin

Role required: sn_esg.admin and sn_esg.program_manager

About this task

The data that is configured in the supplier emissions by model table is used in the automated metric definition for supplier data collection. Ensure that data is populated in supplier emissions by model table before the first run date of the metric definition.

Procedure

1. Navigate to **All** > **Operational Sustainability Management** > **Scope 3 configurations** > **Supplier emissions by model**.
2. Select **New**.
3. On the form, fill in the fields.

Supplier emissions by model form

Field	Description
Model	Model of your hardware for which you want to collect data.
Supplier emission factor	Measure used to quantify the amount of greenhouse gas (GHG) emissions produced per unit of a product or service provided by a supplier.
Supplier emission factor year	Specific year for which the emission factors provided by a supplier are applicable. Because the emission factors can vary every year, select a specific year in this field.
Supplier	Name of the supplier.
Supplier emission factor unit	Unit of measurement used to quantify the emissions per unit of activity, material, or energy consumed. The units supported are as follows.

Field	Description
	○ **KgCO2e/$**: If you select this unit, then the calculation happens by multiplying the sum of cost by the dollar. ○ **KgCO2e/unit**: If you select this unit, then the calculation happens by multiplying the units by the emission factors.

4. Select **Submit**.

Create an inflation factor

Create inflation factors for spend-based emission factors to account for price changes over time, which can otherwise make these factors inaccurate. Spend-based emission factors estimate pollution based on monetary expenditure. Adjusting spending for inflation before applying the emission factor ensures a more realistic picture of your emissions footprint.

Before you begin

Role required: sn_esg.admin

Procedure

1. Navigate to **All** > **Operational Sustainability Management** > **Administration** > **Inflation Factors**.
2. Select **New**.
3. On the form, fill in the fields.

Inflation factor form

Field	Description
Country	Name of the country. **Note:** If you want to create an inflation factor for the United States of America, you must provide the country name as `United States`. Using any other form of naming such as US or USA, will result in data not being collected.
Inflation factor	Value that is used to compare the value of money across different years. For example, to find out what a $100 purchase in 2018 would cost in today's dollars, you would apply the inflation factor to adjust for the change in value.
Year	Year for which the inflation factor is applicable.

4. Select **Submit**.

Manage entities in Operational Sustainability Management (formerly ESG Management)

You can learn about how Operational Sustainability Management is used by the investors and reporting agencies to evaluate different entities that they want to invest in, such as different business units in an organization.

Entities can be people, processes, departments, or applications. For example, if your goal is to reduce the carbon emission from the datacenters, then you can consider datacenters as entities.

As another example, assume you're a company that has subsidiary companies. Your goal is to measure greenhouse gas emissions (GHG) in your subsidiary companies. Both your company and your subsidiary companies are your entities. Your company is the parent entity, while the subsidiary companies are the child entities. Typically, the parent entity handles reporting and measuring the GHG of the child entities.

As part of your ESG Management strategy, you have to provide disclosures to your stakeholders. ESG Management disclosures refer to the disclosure of data that relate to an organization's Operational Sustainability Management performance. These disclosures concern the goals, targets, and metrics that are associated with your entities. By using these disclosures and other metrics, the investors assess and rate the performance of entities based on the operational sustainability parameters.

A parent entity that has the child entities is said to have downstream entities. Any child entity that has the parent entities is said to have upstream entities.

After creating the entities, you can tag similar entities by individually defining an entity class for them or by linking them to an existing entity class.

Entity classes

Entity classes are used to tag an entity or to add the conceptual information about an entity. For example, consider a company that has office branches in three cities. The office space is considered as an entity, while the entity class for these entities is the location of the offices.

Entity types

An entity type is a grouping of entities that is based on filtering attributes. An entity type defines a set of the entities that have the same attributes. An entity type is used to describe and identify an entity that is based on a set of filter conditions.

Consider the following two entity types: Employee and Product. Each entity type has its own attributes.

For Employee, its attributes are employee number, name, department, and designation. In the Employee table of the company database, the sample attributes of an employee are displayed in row E1 as 1001 (employee number), Paul (name), Marketing (department), and PM (designation).

For Product, its attributes are product ID, name, cost, and currency. In the Product table in the company database, the sample attributes of an energy-efficient product are displayed in row P1 as 800 (product ID), Solar Panel (name), 200 (cost), and USD (currency).

Entities and entity types can have a one-to-many relationship. For example, an entity called Hope can have an entity type called Person and an entity type called Organization.

Related topics

- Create an entity

Create an entity

Create an entity and measure its performance against the goals. Defining an entity ensures that the entity owners are also identified. After an entity is defined, ESG Management goals are applied to the entity.

Before you begin

Role required: (per product)

- In Operational Sustainability Management: sn_esg.program_manager
- In GRC: Metrics: sn_grc_metric.manager
- In Risk Management: sn_risk_workspace.IT_risk_manager and sn_risk_workspace.operational_risk_manager

Procedure

1. Navigate to **All** > **Operational Sustainability Management** > **Operational Sustainability Workspace** > **Scoping** > **All entities**.
2. Click **New**.
3. On the form, fill in the fields.

New entity form

Field	Description
Entity	
Refers to existing record	Option that refers the new entity to an existing record.
Table	Table to be queried to create an entity.
Applies to record	Records that are associated with the selected table.
Name	Name of the entity.
Owned by	Details of the owner of the entity such as system administrator.
Active	Option that indicates whether the entity is active.
Class	Name of the class that is associated with the entity such as Application or Business Entity.
Location	Location record of the entity with details such as address, city, state, and country.
Description	Description of the entity.

4. To save the entity, click **Save**.

> **Note:** On the New Entity form, only the **Details** tab is displayed. After a new entity is created, the **Overview** tab, the **Details** tab, and other related lists are displayed on the form.

Result

The entity is created. The New Entity form is displayed with the **Details** tab, **Hierarchy** tab, and the related lists:

- Entity types
- Goals
- Mapping

What to do next

Update an entity

Update an entity

Update the details of an existing entity.

Before you begin

Role required: (per product)

- In Operational Sustainability Management: sn_esg.program_manager
- In GRC: Metrics: sn_grc_metric.manager
- In Risk Management: sn_risk_workspace.IT_risk_manager and sn_risk_workspace.operational_risk_manager

Procedure

1. Navigate to **All** > **Operational Sustainability Management** > **Operational Sustainability Workspace** > **Scoping** > **All entities**.
2. Click an entity from the list.
3. On the form, update the fields as necessary.

Entity tabs and related lists

Field	Description
Tabs	
Overview tab	Compliance status and risk status of the entities. Tracking details of the issues, controls, and policy exceptions. This field is automatically set to display the overview of the status and the tracking details.
Details tab	Information on the entity. For more information on the **Details** tab, see Create an entity for more information.
Hierarchy tab	Upstream entities and downstream entities for the selected entity. A parent entity that has the child entities is said to have the downstream entities. Any child entity that has the parent entities is said to have the upstream entities. Select an entity and click **Add** to add an upstream or downstream entity to the parent entity.
Related lists	
Entity types	Details of the entity type, description, filter condition for the entity type, and the compliance score in percentage.

Field	Description
Downstream risks	Details of the downstream risk for the selected entity such as number, name, entity, class, risk statement, risk assessment methodology, owner group, and owner of the entity. To add new risk statements, click **Add**. To create a new risk statement, click **New**.
Downstream controls	Details of the downstream controls such as name, number, entity, control objective, state, status, exempt, owner, and description. To add the new downstream controls, click **Add**.
Downstream engagements	Details of the downstream engagements such as name, number, type, parent plan, state, engagement lead, remaining expense budget (%), remaining resource budget (%), and engagement planned start. To create a new downstream engagement, click **New**.
Downstream issues	Details of the downstream issues, such as name, number, issue source, issue type, state, issue manager, assigned to, priority, and due date. To add a new issue, click **New**.
Downstream tasks	Details of the downstream tasks, such as name, number, parent, state, assigned to, and planned end date.
Policy exceptions	Details of the policy exceptions, such as name, number, state, substate, policy, control objective, issue, reason, requester, valid from, valid to, and risk rating.
Content References	Details of the content references for the entity such as content reference, description, and version. To add new content references, click **Add**.
Goals	Details of the goals for the entity such as the goal, owner, state, status, progress, start date, and end date for the goal. To add a new goal, click **Add**.

Note: Some related lists display in the entity form only when certain applications are installed. For example, the Downstream risks related list displays only when the Risk Management application is installed. The Downstream engagements related list displays only when the Audit Management application is installed. The Downstream controls, Downstream issues, and Policy exceptions related lists display only if you have the IRM license.

4. To save the updates to an entity, click **Save**.
5. To retire an entity, click **Retire**.
6. To delete an entity, click **Delete**.
7. To visually explore the relationship between the upstream entities, downstream entities, entity class, and entity type associated with the entity, select **360° view**.

Create an entity type

Create an entity type for the entities in your system. Entity types enable you to find and create entities that have the same attributes and that match a set of filter conditions.

Before you begin

Role required: (per product)

- In Operational Sustainability Management: sn_esg.program_manager
- In GRC: Metrics: sn_grc_metric.manager
- In Risk Management: sn_risk_workspace.IT_risk_manager and sn_risk_workspace.operational_risk_manager

Procedure

1. Navigate to **All** > **Operational Sustainability Management** > **Operational Sustainability Workspace**.
2. Under **Scoping**, select **Entity types** and click **New**.
3. On the form, fill in the fields.

New entity type form

Field	Description
Name	Name of the entity type.
Active	Option to set the entity type as active.
Description	Description of the entity type.

4. To save the entity type, click **Save**.

> **Note:** In the new entity type form, only the **Details** tab is displayed. After a new entity type is created, the **Details** tab and other related lists are displayed in the entity type form.

5. To activate the entity type, do the following:
   a. Click **Activate**.
   The following message displays: `Are you sure you want to activate this entity type?`
   b. To activate the entity type, click **OK**.
6. To delete the entity type, click **Delete**.

Result

The entity type is created. The new entity type form is displayed with the **Details** tab and the related lists:

- Entities
- Entity Filters
- Content References
- Mapping

What to do next
You can also update an entity type.

Update an entity type

Update an existing entity type to add entity filters, policies, and control objectives.

Before you begin
Role required: (per product)

- In Operational Sustainability Management: sn_esg.program_manager
- In GRC: Metrics: sn_grc_metric.manager
- In Risk Management: sn_risk_workspace.IT_risk_manager and sn_risk_workspace.operational_risk_manager

Procedure

1. Navigate to **All** > **Operational Sustainability Management** > **Operational Sustainability Workspace**.
2. Under **Scoping**, click an entity type from **Entity types**.
3. On the form, update the fields as necessary.

Entity type tabs and related lists

Field	Description
Tabs	
Details tab	Information on the entity. See Create an entity for more information.
Related lists	
Entities	Details of the entity, the condition for the entity if it was created manually, and the compliance score as a percentage.
Entity Filters	Details of the entity filter type, table for the entity, filter condition of the entity filter, use owner field, and the owner field.
Risk Frameworks	Details of the risk frameworks for the selected entity type. Click **Add** to add a new risk framework.
Risk Statements	Details of the risk statements, such as title, framework, category, and description. Click **Add** to add a new risk statement.
Policies	Details of the policies, such as name, number, type, owner, state, valid from, valid to, and the compliance score in percentage. Click **Add** to add a new policy.
Control Objectives	Details of the control objectives, such as category, type, classification, and the compliance score as a percentage. Click **Add** to add a new control objective.

Field	Description
Policy exceptions	Details of the policy exceptions, such as name, number, requester, reason, policy, control objective, issue, state, substate, valid from, valid to, and risk rating.
Content References	Details of the content references, such as content reference, description, and version. To add a new content reference, click **Add**.

Note: Some related lists display in the entity type form only when certain applications are installed. For example, the Risk Frameworks and Risk Statements related lists display only when the Risk Management application is installed. The Policies, Control Objectives, and Policy exceptions related lists display only when the Policy and Compliance Management application is installed.

4. To save the updates to the entity, click **Save**.
5. To retire an entity, click **Retire**.
6. To delete an entity, click **Delete**.
7. To visually explore the relationship between the upstream entities, downstream entities, entity class, and entity type that is associated with the entity, click **360° view**.

Create an entity class

Create an entity class that is to be associated with an entity. Define the parent class, root entity, and tier for an entity class.

Before you begin

Role required: (per product)

- In Operational Sustainability Management: sn_esg.program_manager
- In GRC: Metrics: sn_grc_metric.manager
- In Risk Management: sn_risk_workspace.IT_risk_manager and sn_risk_workspace.operational_risk_manager

About this task

Entity classes are used to add conceptual information about an entity. Entity classes represent a collection of entities that have the same attributes such as Department, Business Unit, or Business Service. You can gather data about an entity based on its entity class.

Procedure

1. Navigate to **All** > **Operational Sustainability Management** > **Operational Sustainability Workspace** > **Scoping** > **Entity classes**.
2. Click **New**.
3. On the form, fill in the fields.

New entity class form

Field	Description
Name	Name of the entity class.

Field	Description
Parent class	Parent class that is associated with the entity class, such as Company or Department.
Is root	Condition to check if the new entity class has a root entity. Options are **True** or **False**.
Tier	Tier for the new entity class, such as Application or Business.

4. To save the entity class, click **Save**.

> **Note:** In the New entity class form, only the **Details** tab is displayed. Only after an entity class is created, the **Details** tab, **Entities** related list, and **Child classes** related list are displayed in the entity class form.

What to do next
Update an entity class

Update an entity class

Update an existing entity class that is associated with an entity. Entity classes are used to add the conceptual information about an entity or tag the entity.

Before you begin
Role required: (per product)

- In Operational Sustainability Management: sn_esg.program_manager
- In GRC: Metrics: sn_grc_metric.manager
- In Risk Management: sn_risk_workspace.IT_risk_manager and sn_risk_workspace.operational_risk_manager

Procedure

1. Navigate to **All** > **Operational Sustainability Management** > **Operational Sustainability Workspace** > **Scoping** > **Entity classes**.
2. Select an entity class.
3. On the form, update the fields as necessary.

Entity class tabs and related lists

Field	Description
Tabs	
Details tab	Information on the entity. See Create an entity class for more information.
Related lists	
Entities	Details of the entity, such as name, owned by, and compliance score percentage. To add a new entity, click **New**.
Child classes	Details of the child classes for the selected parent entity class. To add a new child entity class for the parent entity class, click **New**.

4. To save the entity class, click **Save**.
5. To visually explore the relationship between the upstream entities, downstream entities, entity, and entity type that is associated with the entity class, click **360° view**.

Monitoring assessment data using Operational Sustainability Management (formerly ESG) dashboards

You can monitor and analyze assessment data at various levels in the Operational Sustainability Management application using the Analytics dashboard. The custom dashboards you create provide tailored insights and deliver relevant information at a glance, improving the decision-making process.

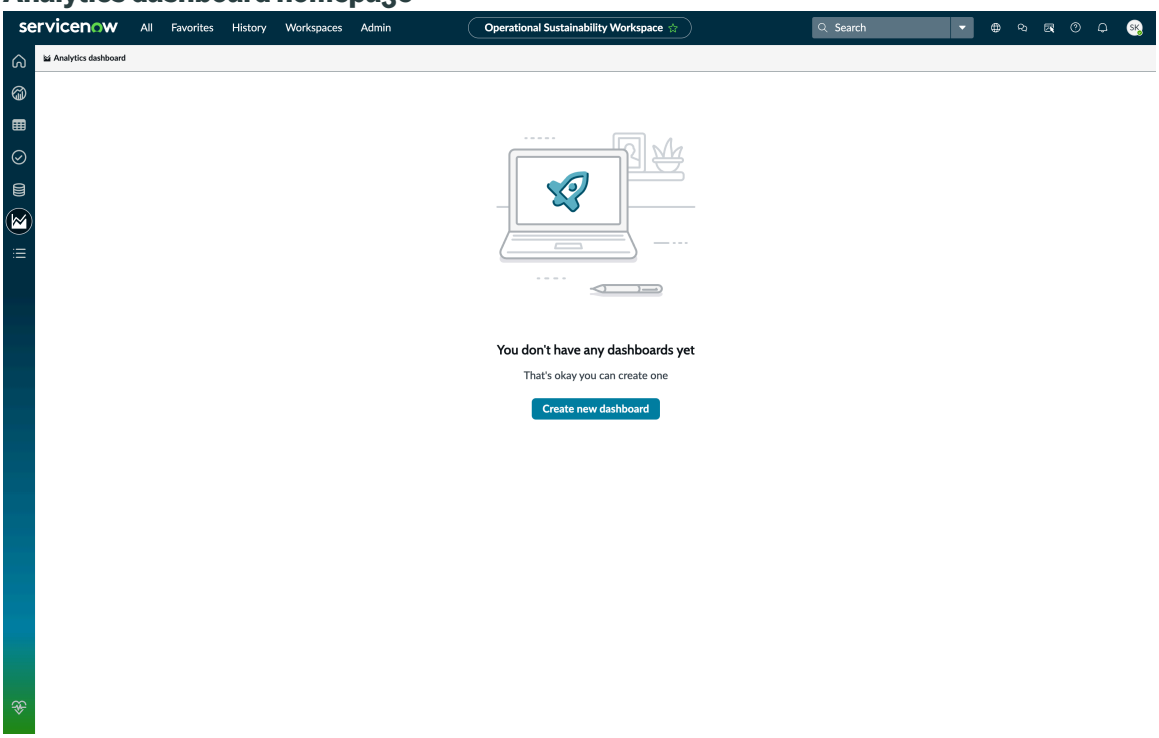
Analytics dashboard in Operational Sustainability Workspace

You can view the page by navigating to **All** > **Operational Sustainability Management** > **Operational Sustainability Workspace** and selecting the Analytics dashboard icon. From the Analytics dashboards page, you can create dashboards, customize them, and share them with others.

Analytics dashboard

The Analytics dashboard landing page opens as a blank canvas, allowing users to create new dashboards. Once a dashboard is created, users can add various elements such as data visualizations, bar charts, trend analyzes, and score reports to create custom sections and data visualizations. ESG data owners and metric managers can create, edit, and share this dashboard.

Analytics dashboard homepage



To learn more about creating and using ESG Management dashboards, see:

- Create an Operational Sustainability Management dashboard using the In-line editor
- Edit Operational Sustainability Management dashboard details
- Edit Operational Sustainability Management dashboards

- Edit Operational Sustainability Management dashboard elements
- Share an Operational Sustainability Management dashboard
- Delete an Operational Sustainability Management dashboard

For more information on dashboards, see Dashboards in Platform Analytics.

Create an Operational Sustainability Management dashboard using the In-line editor

You can create dashboards with data visualizations, filters, and other elements that you can share with others. You can also create elements and add existing elements from the in-line editor.

Before you begin

Save your work regularly.

Role required: sn_esg.data_owner, sn_esg.metrics_manager

Note: Data visualizations based on table data are automatically shared with users that you share a dashboard with.

Procedure

1. Navigate to **All** > **Operational Sustainability Management** > **Operational Sustainability Workspace** > **Analytics dashboard**.
2. Select the Analytics dashboard icon.
3. Select the More actions menu icon and select**Create new**.
4. Select the **In-line editor** tile and give the dashboard a name and a description.
   The Technical editor option opens a page in UI Builder that is treated as a dashboard, with a list of available components. For more information, see UI Builder and Create a technical dashboard in UI Builder.
5. Select **Create new dashboard**.
6. Select **Add new element** to add content to the dashboard.
   See Exploring Platform Analytics dashboards for information about what you can add to a dashboard.

   When you add a data visualization, select **New data visualization** to create a new visualization or **Saved data visualization** to choose one from the library. When you add a filter, select **New filter** to create the filter without pre-configured data or **Saved filter** to reuse an existing filter.
7. Select the View dashboard details icon to view all the details of the dashboard.
   You can also edit the details as required. For more information, see Edit Operational Sustainability Management dashboard details
8. Arrange the data on the canvas to make it useful.
   You can select and drag from the corners of the elements to resize them on the canvas.
9. Select **Add a tab** to create room for more information on additional tabs.
10. Select **Save**.
    The dashboard in-line editor doesn't automatically save your dashboard when you're creating it. Be sure to save your work regularly.

What to do next

- Edit Operational Sustainability Management dashboard details
- Edit Operational Sustainability Management dashboard elements

Edit Operational Sustainability Management dashboard details

You can change a dashboard name, add a description, certify it, configure visibility, and specify the requester, the owner, the owner group.

Before you begin

Role required: sn_esg.data_owner, sn_esg.metrics_manager

Procedure

1. Navigate to **All** > **Operational Sustainability Management** > **Operational Sustainability Workspace** > **Analytics dashboard**.
2. Select the Analytics dashboard icon and then select the dashboard you want to edit.
3. Select the View dashboard details icon to open the **Details** panel.
4. Edit the fields as necessary.

Field	Description
Name	Edit the name of the dashboard.
Description	Fill in the description to provide further con text about the purpose of the dashboard.
Mark as certified	Mark the dashboard as certified to inform the user that the dashboard is for use across the organization. **Note:** You must have an admin role to mark a dashboard as certified. For more information, see Certify a Platform Ana
Dashboard visibility	View, add, or remove workspaces in which the dashboard can be viewed. **Note:** If you have the admin role, you can change the workspaces for any dashboard. Other users can change workspaces only for dashboards they create. For more information, see Edit Operational Sustainability Management dashboards.
Create new category	Specify one or more dashboard categories. **Note:** For more information, see Plat form Analytics experience dashboard

Field	Description
Requested by	Specify who requested the dashboard. **Note:** This user is considered a re sponsible user. The data visualization is shared with them, with editing permis sions.
Owner	Specify the owner of the dashboard. **Note:** By default, the owner is the cre ator of the dashboard, but the creator or owner can assign ownership to another user.
Owner Group	Specify an owner group. **Note:** The owner of a dashboard can be an entire group rather than a single person.
Created by	See who created the dashboard.
Last updated by	See who updated the dashboard along with the date and time details.
Shared with	See who the dashboard has been shared with.

Edit Operational Sustainability Management dashboards

You can edit dashboard and dashboard tab information in the in-line editor. If the dashboard has been shared, any changes you make are applied globally.

Before you begin

Role required: sn_esg.data_owner, sn_esg.metrics_manager

About this task

You can edit the details of the dashboards you have created. When you edit the content of dashboards created in the technical editor, you're redirected to UI Builder.

Important: By default, dashboards are subject to edit lock. Only one person at a time can have the same dashboard in edit mode. If you're viewing a locked dashboard, you aren't able to make edits even with edit permissions. You'll see the locking user's initials next to the **Refresh** and **View dashboard details** icons. Hover on the initials to see the user's name, company, and roles.

The **More actions** menu includes the option to clear the edit lock. Use this option with caution.

Procedure

1. Navigate to **All** > **Operational Sustainability Management** > **Operational Sustainability Workspace** > **Analytics dashboard**.
2. Select the Analytics dashboard icon and then select the dashboard you want to edit.

3. Perform any of the following actions.

Action	Steps
Edit dashboard details	To edit the details of a dashboard created in the in-line edi tor: **a.** Select the View dashboard details icon. **b.** Select **Edit** to put the dashboard into edit mode. **c.** Edit the details of the dashboard and then select **Exit editing mode**. To edit the details of a technical dashboard: **a.** Select the View dashboard details icon. **b.** Select the arrow next to the **Edit in UI builder** button and then select **Edit dashboard details** to put the dashboard into edit mode. **Note:** If you don't see this option, you don't have permission to edit the dashboard. **c.** Edit the details of the dashboard and then select **Exit editing mode**. For more information, see Edit Operational Sustainability Management dashboard details.
Configure the dashboard lay out	Select and drag an element's handlebars to resize it. Select and drag an entire element to move it around the dashboard layout. Elements include data visualizations, fil ters, and other dashboard content.
Add a tab to a dashboard	Select **Add a tab**. A tab labeled `New Tab` is added next to any existing tabs. When you add your first tab to a dash board, there's a new part of the layout below the title and above the tabs. Add elements above the tabs that are visi ble no matter which tab has focus. Select the pencil icon to rename the tab.
Reorder a dashboard tab	You can reorder tabs by dragging and dropping them. You can also reorder dashboard tabs using keyboard actions: **a.** Select **Edit** to put the dashboard into edit mode. **b.** Use the TAB key to move the focus to a dashboard tab. **c.** Use the LEFT and RIGHT arrow keys to select a tab to move. **d.** Use the SHIFT+LEFT arrow or SHIFT+RIGHT arrow com mand to move the selected tab left or right. **e.** Select **Save**.
Duplicate a dashboard tab	You can duplicate a tab on the current dashboard.

Action	Steps
	a. Select **Edit** to put the dashboard into edit mode. **b.** Select the More actions icon next to the tab's name and choose **Duplicate**. A new tab with the same content as the duplicated tab opens with the name `New Tab`. Choose the pencil icon to rename the tab.
Delete a dashboard tab	**a.** Select **Edit** to put the dashboard into edit mode. **b.** Select the More actions icon next to the tab's name and choose **Delete**. **Note:** There's no confirmation message. The tab dis appears from the dashboard.
Rename a tab	**a.** Select the tab to make it active. **b.** Point to the tab name and select the pencil icon. **c.** Enter the new name. **Note:** If you rename a tab on a dashboard that has been translated, the translations are replaced with the new English tab name. To translate the new name: **a.** Navigate to User Menu > Preferences. **b.** On the Display tab, select the target language. **c.** On the translated dashboard, rename the tab with the translation of its new name.
Configure the refresh settings	Role required: admin. **a.** Select **Edit** to put the dashboard into edit mode. **b.** Select the Dashboard settings icon to open the Set tings panel. **c.** Select **Show refresh information** to show the time of the last refresh under the dashboard's title. **d.** Select **Scheduled repetition** to configure the number of minutes that the dashboard is automatically refreshed. The minimum refresh interval is 10 minutes.
Configure background colors	**a.** Select **Edit** to put the dashboard into edit mode. **b.** Select the Dashboard settings icon to open the Set tings panel. **c.** Open the Background Color menu to show the pre-con figured colors.

Action	Steps
	d. Choose an existing color or select the Color Palette icon to open the palette. Specify Hex or RGBA values, or choose from the color picker.
Configure Insights	Choose whether and which analytics to show in the **Insights** section. When you select **Show insights panel**, an Insights button is added to the dashboard and the selected analytics options are shown. For more information, see Proactive analyt

Note: If you aren't able to edit, either you don't have permission to edit the dashboard, or it is in edit lock.

Edit Operational Sustainability Management dashboard elements

You can edit the contents of a dashboard or dashboard tab, including data visualizations and filters. Because dashboards are shared, any changes you make are applied globally.

Before you begin

Role required: sn_esg.data_owner, sn_esg.metrics_manager

About this task

You can edit the details of dashboards created in the in-line editor and in the technical editor in the Operational Sustainability Workspace. When you edit the content of dashboards created in the technical editor, you're redirected to UI Builder.

Procedure

1. Navigate to **All** > **Operational Sustainability Management** > **Operational Sustainability Workspace** > **Analytics dashboard**.
2. Select the Analytics dashboard icon and then select the dashboard you want to edit.
3. Perform any of the following actions.

Action	Steps
Add an element	**a.** Select **Edit** to put the dashboard into edit mode. **b.** Select **Add new element**. From the list, select the component you want to add. Select **Saved data visualization** or **Saved filter** to add one or more saved elements from the library to the dashboard. You can also select **Add new element** on any selected dashboard element to see the list of elements. **c.** Select the element. The element is added to the dashboard where you can edit it. **d.** Drag to move the widget or resize it.

Action	Steps
Save a data visualization to the Visualization Library	**a.** Select **Edit** to put the dashboard into edit mode. **b.** Select **Add new element**. From the list, select **Data visualization**. **c.** Create the visualization as described in Data visualiza **d.** Select the More actions icon and select **Add to library**. **e.** Give the visualization a name and a description. **f.** Select **Add to library**. The data visualization is available in the Visualization library for use on other dashboards.
Delete an element from the dashboard	**a.** Select **Edit** to put the dashboard into edit mode **b.** Select the element that you want to delete. **c.** In the header, select the More actions icon and select **Delete**. **Note:** There's no confirmation message. The widget disappears from the dashboard.
Configure an element	**a.** Select **Edit** to put the dashboard into edit mode. **b.** Select the element that you want to edit. **c.** In the element's header, select the Configure icon to open the Configuration panel. **d.** Configure the element and choose **Save**. For more information about configuring an element, see one of the following: ▪ ▪ ▪ ▪ ▪ **Note:** If you change a visualization from the Visualization Library, you have the choice to save the change only to the dashboard or to the element in the library. When you change an element in the library, the change is reflected everywhere the element is used. When you change only in the dashboard, you create a copy of the visualization that exists only in that dashboard.
Move an element between tabs	When you have multiple tabs, you can move elements from tab to another or to the pane above the tabs.

Action	Steps
	a. Select **Edit** to put the dashboard into edit mode. **b.** Select the More actions icon and choose **Move to a different tab** or **Move above the tabs**. **c.** When you choose **Move to a different tab**, choose the tab and select **Move**.
Add filters to the dashboard	Filters let users filter data for all report widgets on a dash board that follow them. You can add filters to both the en tire dashboard and to individual dashboard tabs. For more information, see
Configure a data visualization to follow or not follow filters	Data visualizations follow filters by default. A data visual ization follows filters in the same tab as itself or above the tabs. Data visualizations either follow all such tabs that tar get their data sources, or none. **a.** Select **Edit** to put the dashboard into edit mode. **b.** Select the dashboard element that you want to follow or not follow filters. **c.** In the header, select the Configure icon to open the Configuration panel. **d.** In the Data update section, select or deselect **Follow fil ters**. **e.** To show a filter icon on the data visualization when it follows an interactive filter, select the **Show filter icon**.
Enable chart interaction	Choose what happens when a user selects a visualization or one of its segments. **a.** Select the **Edit** to put the dashboard into edit mode. **b.** Select **Allow chart interaction**. **c.** Select **Go to data view** to open the records view of the associated segment or visualization. **d.** Select **Apply as filter** to filter the visualizations on the dashboard on the selected element. **Note:** This option is only available on pie, donut, semi-donut, horizontal bar, and vertical bar visual izations. It's available in the Dashboard inline edi tor, but not in the Visualization Designer. **e.** Select **Go to URL** to open a specified web page.
View the description of a dash board element	Point to the element, then select the information icon . If the element doesn't have a description, the info icon doesn't appear.

Note: If you're unable to edit the dashboard, you don't have permissions to edit the dashboard.

Share an Operational Sustainability Management dashboard

Share a dashboard with other users, groups, or roles to create a shared view of data that you can use to collaborate. You can grant viewing permissions or both viewing and editing permissions.

Before you begin

Role required: sn_esg.data_owner, sn_esg.metrics_manager

About this task

You can share dashboards that have been shared with you, if sharing is enabled. If you have permissions to edit a dashboard that has been shared with you, you can pass that ability along to whomever you share it with. Users with the administrator role can share all dashboards.

Edit permissions granted by sharing a dashboard don't apply to the underlying data visualizations on the dashboard. View permissions granted don't apply to that dashboard's visualizations outside of the dashboard itself.

Only admins can see roles in the Sharing panel.

Note: Data visualizations based on table data are automatically shared with users that you share a dashboard with.

Procedure

1. Navigate to **All** > **Operational Sustainability Management** > **Operational Sustainability Workspace** > **Analytics dashboard**.
2. Select the Analytics dashboard icon and then select the dashboard you want to share.
3. Select the More actions icon and select **Share**.
4. Enter the names of one or more users, groups, or roles you want to share the dashboard with.
5. To enable the people you share the dashboard with to share the dashboard as well, select **Allow recipients to add, edit, or delete sharing permissions associated with this dashboard**. When you add a user, group, or role as a viewer, they can only share the dashboard as a viewer. When you add a user, group, or role as an editor, they can share the dashboard as a viewer or as an editor.

   Important: Granting permission to share a dashboard or data visualization includes the ability to add, edit, and delete sharing permissions for any user, group, or role on that dashboard or data visualization. A user can't use this ability to give themselves or others edit permissions if they weren't originally given edit permissions.

6. Select one of the following options.

Option	Description
Add as viewer	Grant only viewing permissions to the users, groups, or roles you're sharing the dashboard with. They can't edit it.
Add as editor	Grant editing permissions to the users, groups, or roles you're sharing the dashboard with. You must be in the same application scope as the dashboard to add a user as an editor.

7. **Optional:** Select **Copy link with filter** or **Copy link** to copy the dashboard's URL to the clipboard.
   The URL points to the tab that was open when you opened the **Share dashboard** dialogue. **Copy link with filter** also applies the filters as they're configured on the dashboard or dashboard tab.
8. Select **Confirm**.
9. **Optional:** Select the View dashboard details icon to view who the dashboard has been shared with and where it's visible.

Delete an Operational Sustainability Management dashboard

You can delete a dashboard that is no longer useful. The Analytics Center invokes the Workflow Studio to remove the dashboard from your instance.

Before you begin

Inform any users who can view the dashboard that you're deleting it. Users who have bookmarked a deleted dashboard see an error when they try to access it.

Role required: sn_esg.data_owner, sn_esg.metrics_manager

Procedure

1. Navigate to **All** > **Operational Sustainability Management** > **Operational Sustainability Workspace** > **Analytics dashboard**.
2. Select the Analytics dashboard icon and then select the dashboard that you want to delete.
3. From the More actions menu , select**Delete**.
4. Confirm the deletion.
   You can't undo this action. If you accidentally delete a dashboard associated with a plugin, an admin can restore the original version of the dashboard.
   a. Navigate to **All** > **System Applications** > **All Available Applications** > **All**.
   b. Find the plugin using the filter criteria and search bar.
   c. Select the More actions icon and choose **Repair**.
   d. Select **Repair** in the Activate Plugin window.

GRC: Metrics

The ServiceNow® GRC: Metrics application enables organizations to track their goals and targets, collect data, and report data.

Explore	Configure	Use
 Learn about how Metrics administrators use the GRC: Metrics application for tracking their goals.	 Configure your GRC: Metrics application.	 Use the GRC: Metrics application for tasks such as creating metric definitions, providing data for metrics, managing your integrations, and so on.
Reference		
 Get details about components like fields, tables, roles, and properties installed with GRC: Metrics.		

Exploring GRC: Metrics

A metric is used to measure and evaluate the effectiveness of your organizational processes. A metric or a combination of metrics can provide an insight into a system, component, or process. The GRC: Metrics application enables other applications to assess, compare, and track the performance of the processes.

Metrics

The GRC: Metrics application is installed automatically with the ESG Management application from the ServiceNow® Store. The user role that is responsible to read, create, and update the metric definitions and metrics is the ESG Management metrics manager (sn_esg.metrics_manager).

With the GRC: Metrics application, you can define metrics by using the metrics form. Metrics are a combination of a metric definition and an entity. Applying the metric definition to an entity creates a metric. Once the metrics are defined, data is gathered to track the effectiveness and performance of your processes. For example, consider a metric that measures the effectiveness of an incident resolution process by calculating the time it takes to resolve an incident.

Every organization has a range of data sources for building and structuring their own metric analysis. To establish a useful metric, the metrics manager must first assess and set the goals.

Next, the manager sets the targets for the metrics that are integrated with their business decisions.

Qualitative and quantitative metrics

You can classify your metrics into qualitative and quantitative measurements.

Qualitative metrics in ESG Management are derived from the subjective opinion that you form based on other information. Some examples of qualitative metrics in the ESG Management sectors are brand credibility, corporate value, and so on.

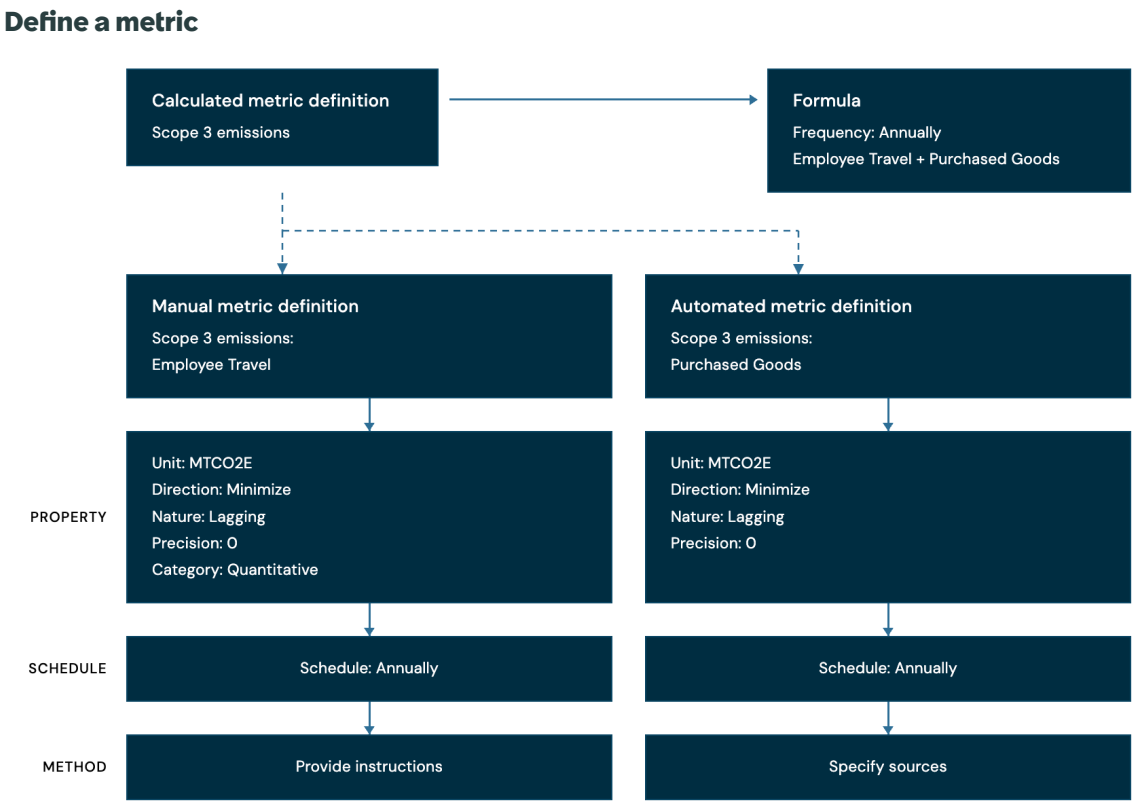
Quantitative metrics in ESG Management are the metrics that you can measure in a specific number through certain formulas. Some examples of quantitative metrics for an organization include reporting total energy use, energy use by region, and so on.

Examples of metrics

Consider the example of measuring greenhouse gas emissions for business entities in your organization. Greenhouse gas emissions are categorized into three groups called Scopes by the international Greenhouse Gas (GHG) Protocol.

You want to measure the metrics for Scope 3 Emissions for the following categories: employee travel and purchased goods. The employee travel policy applies to all the employees in the organization. You can collect the metrics for the employee travel policy manually by providing instructions in the metric definition.

On the other hand, the metrics for the purchased goods are collected automatically based on the specified conditions method, schedule, and core property in the metric definition. The metric collection process is illustrated in the following image.



Metric data by entity

The metric data by entity table (sn_grc_metric_data_by_entity) includes metric definition data and metric data for entities and the aggregated data for parent entities defined in the entity hierarchy. For example, if an ESG reporting disclosure manager wants to understand the total emissions for an entire year for a particular location and if the location has sub-locations, you can also aggregate the data and use it for reporting purposes. For example, consider that your organization has a location Japan. Japan, in turn, has two sub locations, Tokyo and Kyoto. Assume that you want to find your total yearly Scope 1 emissions for the year 2022 for Japan. Using the time dimensions feature, you can aggregate your data and get a view of your total emissions for a year. You can also aggregate the data for a quarter, week, or a month depending on your reporting requirements. The data in this table is collected according to the calendar of metric or entity.

Components of GRC: Metrics

A metric consists of several components such metric definition, metric data, metric definition data, metric data tasks. All of these elements or parts contribute to the metric collection process in various ways.

Metric definitions

A metric definition is a template-level record that helps set the core properties of a metric. These properties include the unit, direction, nature, precision, frequency of data collection, and category of the metric. The metric itself collects scores, which are then aggregated into the defined metric template. The advantage of creating and using a metric definition lies in its ability to streamline the process of creating metrics using these metric definition templates. For instance, imagine you have several business units, and you need to collect revenue data for each of them. Without a metric definition, you would have to create separate templates for every business unit and repeatedly specify the metric properties. However, by using a metric definition, you simplify this task. Once you've created the metric definition, you can easily attach your entities (business units in this case) and collect the metrics without duplicating efforts.

The GRC: Metrics application provides the following types of metric definitions:

- Automated metric definition: Data is collected automatically.
- Manual metric definition: Data is collected manually.
- Calculated metric definition: Data is collected by aggregating data from other child metrics.

Metric data

When you execute a metric, the metric data gets created. In the case of manual metric definitions, the values of metric data are copied from the metric data tasks when the metric data tasks are closed. To address off-cycle requests for the most up-to-date information on existing metric definitions and metrics, you can create ad hoc metric data tasks on manual metrics. On the metric data form, the option **Ad hoc** denotes if the metric data task was created as an ad hoc task. It is important to note that these ad hoc tasks do not contribute to the aggregated metric definition data, are not considered for entity hierarchy rollup, and are not evaluated for threshold rating, Variance(%). However, in a calculated metric definition, if the **Calculation level** is set to **Entity**, and there are ad hoc tasks from the manual metric definitions, then these tasks are aggregated to derive the calculated metric definition data.

For a scripted automated metric definition, the values are updated when you execute the script. For a basic automated metric definition, the values are updated from the selected table. The field **Variance (%)** shows the variation in between current period and the previous period metric data. This difference is displayed in percentage. The field **Last period data** refers to the previous period's metric data.

Metric definition data

Metric definition data gets automatically created when the metric definition gets executed and aggregated. On the metric definition data page, the field **Variance (%)** shows the variation in between the current period and the previous period's metric definition data. This difference is displayed in percentage. The field **Last period data** refers to the previous period's metric definition data.

Metric data tasks

Metric data tasks only apply to manual metric definitions. These tasks are generated whenever manual metrics are executed and the data owners provide responses for these tasks manually. You can provide responses to multiple metric data tasks using the metric data table. For more information, see Metric data table.

A metrics manager has the authority to determine whether a metric data task needs approval. If approval is necessary, you can choose between two methods: Simple Approval or Advanced Approval by using the *Metric approval* property. For more information about this property, see Components installed with Operational Sustainability Management (formerly ESG Management).

Types of metric definitions

A metrics manager defines the metrics by creating a metric definition. A metric definition is a template-level record. In the metric definition, you set the core properties of the metric, such as unit, direction, nature, precision, and category. The metrics collect the scores, and these scores get rolled up into the metric definition.

The GRC: Metrics application provides the following types of metric definitions:

- Automated metric definition: Data is collected automatically.
- Manual metric definition: Data is collected manually.
- Calculated metric definition: Data is collected by aggregating scores from other child metrics.

These types of metric definitions are further explained in the following sections.

Automated metric definition

In automated metric definitions, the data is collected automatically based on the conditions defined in the metric definition, such as metric properties, method, and schedule. For the method, the metrics manager specifies the source table or the script that is used for collecting the metric data and the filtering criteria to filter the metric data.

In an automated metric definition, you can enabled a metric data task, approval flow, and collection of supporting data in the metric definition. If enabled, the metric data task is generated depending upon the frequency defined in the metric definition. As a metrics manager, you can assign the task to a data owner. See Create an automated metric definition for more information. When a metric data task is created, the task owner receives a system-generated email notification. As the metric data owner, you can verify and override automatically collected data if needed. If approval is enabled, verified data is submitted for approval to the designated approver from the metric definition.

Note: For automated metric definitions where the method type is "External" or "Scripted", the "Supporting Data" option isn't available.

Manual metric definition

In manual metric definitions, the mode of data collection is manual. The data owner for a particular metric provides the metric data by going through the instructions. As the metrics manager, you have to define the metric properties, method, and schedule for the metric definition. In the method, specify the instructions for the metric definition as the metrics manager. Also, specify the data collection details such as data owner type, data owner, and approval details.

In a manual metric definition, a metric data task is generated depending upon the frequency defined in the metric definition. As a metrics manager, you can assign the task to a data owner who provides the data for the task. See Create a manual metric definition for more information. When a metric data task is created, a system-generated email notification is sent to the task owner. As a metric data owner, you can provide the data for multiple metrics using the Metrics tasks module (). For more information, refer to Provide data for multiple metrics.

Each metric data task has a due date defined in the manual metric definition form. By default, the due date follows the schedule of 8-5. However, an ESG administrator can also modify the schedule. For more information, refer to Create a new schedule. If the ESG administrator wants to overwrite the schedule, then the ESG administrator can modify the *sn_grc_metric.metric_data_task_schedule* property.

Both quantitative and qualitative category of metrics can be created using the manual metric definition.

It's possible to convert a manual metric definition to an automated metric definition and an automated metric definition to a manual metric definition. In the event that a manual metric definition has open tasks, it's necessary to first close them prior to converting the manual metric definition.

When a manual metric definition is executed, the first metric data is created and then metric data task is created. This task is then referred to the metric data.

Calculated metric definition

A calculated metric definition calculates the scores from its children. It can include the automated and manual metric definitions, metrics (quantitative), and other calculated metric definitions of identical frequency. As the metrics manager, you have to specify how you want to calculate the metric definitions score and how frequently you want to calculate them. Deactivating or activating a calculated metric definition automatically deactivates or activates all its associated metrics.

The calculated metric definition rolls up the scores from its children. The rollup property defined in the calculated metric definition consists of a rollup formula and schedule for the rollup frequency. A calculated metric definition can include those automated and manual metric definitions, and metrics as its children, which are of the same frequency as that of the parent calculated metric definition. See Create a calculated metric definition for more information.

Applying the metric definition to the entities

You can apply the metric definitions to the entities in your organization. Instead of defining the metric for each entity, you can define the metric definition once and then apply that metric definition to your entities.

For example, assume that you want to measure the greenhouse gas emissions for the entities in your organization. Defining the metric for each entity is a time-consuming process. By creating a metric definition, you can define the metric once and then apply that metric definition to your entities.

The following illustration shows how you can apply the metric data definition to an entity. If you have an automated metric definition for the purchased goods metric category, the metric can be applied to the Products entity and IT entity in your organization. If you have a manual metric definition such as Employee Travel, the metric can be applied to the Enterprise entity in your organization as the travel policy applies to everyone across the enterprise.

Apply the metric data definition to an entity

Thresholds for metrics

In the context of metrics, thresholds refer to predetermined values or limits used to assess the performance of a metric. These thresholds are typically defined based on specific criteria or objectives and serve as reference points to determine whether the measured value or performance meets, exceeds, or falls below the desired level.

Thresholds use color-coded indicators to signify#different levels#of performance or status.#These colors help users quickly assess#metric performance#at#a glance. While green traditionally signifies the metric is performing well, amber signals caution, and red signifies a critical situation, you can now customize colors for each threshold level to match your organization's monitoring requirements. ESG administrators, ESG program managers, and ESG metrics managers can define multiple threshold levels and assign unique colors to each level for precise performance monitoring. For example, you can create a threshold to#monitor#pollution levels. Using the condition builder, you can define when threshold breaches occur, such as when pollution values exceed 100 units or fall between 50 and 75 units. Each threshold level can be assigned a unique color to provide visual indicators in dashboards, list pages, and record pages. When pollution data meets these conditions,#the system triggers configured actions. Thresholds only apply to quantitative metrics.

Types of thresholds

The two types of threshold for a metric are static and dynamic:

- Static: A static threshold for a metric or a metric definition refers to a fixed value used as a limit for tracking a metric.
- Dynamic: Dynamic thresholds are specified in percentages and calculate variance based on#previous#period data. For example, if you track electricity consumption#and the value in January 2026 is 700 kWh, you can define threshold conditions to#monitor#changes in#subsequent#periods. Using the condition builder, you can specify conditions such as "percentage change is between 5% and 10%" or "percentage change exceeds 15%." Each threshold level is#assigned#a unique color to provide visual indicators. When February 2026 data is collected and the percentage change from January falls within your defined conditions, the system displays the corresponding color indicator and triggers any configured actions such as sending notifications or creating issues.

Related topics

Create a threshold for a metric

Copy a threshold

Metrics landing page

The metrics landing page offers an overview of all your metrics and metric definitions.

The metrics landing page provides a consolidated view of all your metrics and metric definitions for the users with the following roles:

- sn_esg.metrics_manager
- sn_esg.program_manager

You can launch the metrics landing page using the metrics icon ().

The landing page displays the following sections:

- Overview
- Aggregated metric data

Overview section

The Overview section shows the data for the manual metrics in the following tiles.

- Number of open metrics: Number of open tasks for manual metric definitions
- Number of metrics where the metric data tasks are past their due date: Number of metrics for which the metric data tasks are overdue.
- Number of metrics due in the next seven days: Number of metrics for which metrics must be submitted in the next seven days.
- Number of metrics awaiting approval for the metric data tasks: Number of metric data tasks that have not been approved.
- Number of metrics rejected: Number of metric data tasks that have been rejected.

When you select a tile, the data on the page is filtered. You can also filter the data that is visible using the reporting classification filters that are provided. The options displayed for the reporting classification filter can be configured by the users. For more information on how to configure the options, refer to Create a grouping for metric definitions.

The data displayed on this page is always the latest data.

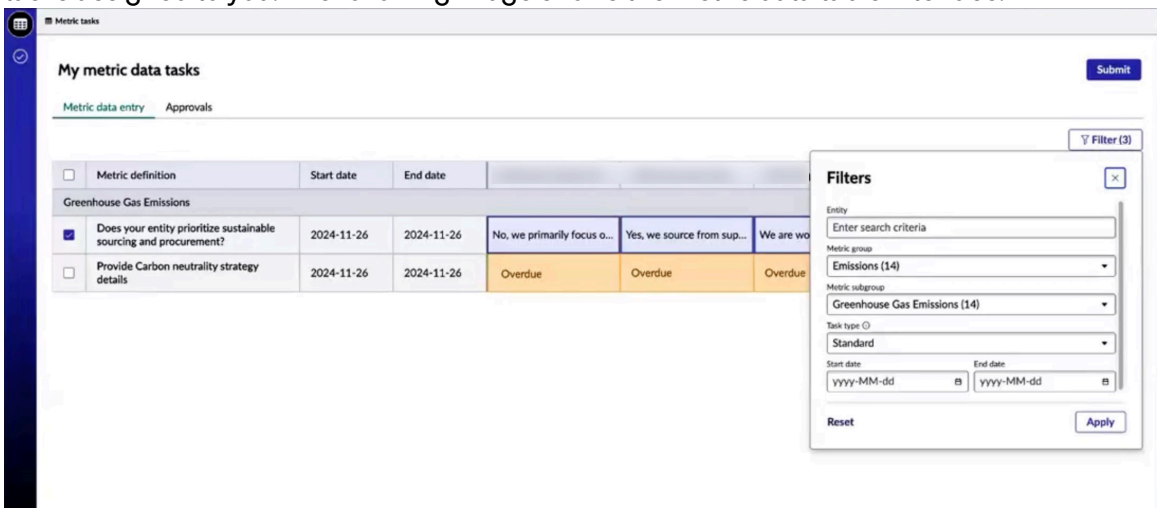
Aggregated metric data

The Aggregated metric data section shows you the data for metric definitions. You can scroll horizontally to select a tile to view the data related to that tile. The tiles display the groups that you specify in the metric definitions. For example, you can select Emissions to see all the metric definitions related to Emissions.

Metric data table

The metric data table enables data collection for metrics across the organization using an easy-to-use interface like a spreadsheet with multiple filters and a task management workflow.

As a data owner, you can access the metric data table ( ) and complete the tasks assigned to you. The following image shows the metric data table interface.



The metric data table offers the following benefits:

- Simplifies data collection across the entire organization.
- Enables you to view all the metrics that the data owner must respond to in a single place instead of navigating across multiple tasks.
- Displays a maximum of 700 tasks at a time.
- Simplifies the process of providing data by enabling you to filter metric data tasks by entity, metric groups, metric subgroups, start date, end date, and approval level.
- Displays the open tasks with the number of open tasks in parentheses.
- Maintains an audit trail of all changes to the data and the users who made the changes.
- Enables you to view the metrics segregated by entities.
- Gives additional information to the data owner for reference such as instructions to follow while providing the data.
- Provides the ability for the users to attach files in the Contextual side panel and attach the relevant documents and links.
- Enables ESG program managers and metrics managers to view the data submitted by the data owners and approve or reject multiple data tasks with comments.
- Enables data owners to view the rejection comments in the Activity tab.
- Helps you to view how the past three data for quantitative metrics is trending.
- Enables you to see the approvers of your task and the approval status.
- Displays the percentage variance of data when compared to the data of the previous period.
- Displays the threshold status if the metric exceeds the threshold.
- Enables you to view the last period's data.

Metric integration

The metric integration tool enables you to manage your third-party ESG Management data by normalizing and mass loading data using flat file. The terms flat file and normalized data refer to how data is stored electronically.

Metric integrations is a common import utility tool for GRC: Metrics, which can be used by multiple integrations to import data from an external source, such as a spreadsheet, into the metric data. This tool uses different mapping configurations to obtain the data needed to create or update existing metric data.

The following are the benefits of the metric integration tool:

- Provides flat file normalization for bulk data uploads.
- Enables configurations for your own integrations or uses the default configurations provided by ServiceNow, such as the Watershed integration.
- Enables the automatic creation of metric definitions.
- Provides the ability to automate the creation or update of data in bulk.
- Provides the ability to automate the creation of entity types and entities.
- Provides the ability to set up your own normalization and upload rules for metrics.
- Helps to stage data to verify the upload format of data being updated or created.
- Enables users to clean up data before loading to the database using the error log.

The Metric integration form also enables you to create data mappings. Data mappings enable you to map the columns from any source of data such as the Watershed spreadsheet with the metric definitions. You must ensure that the data is mapped according to your system. For example, Watershed may name an entity as Office at Atlanta, US, whereas the metric definition may have the entity name as Atlanta, US-office. This difference would result in a mismatch when importing the data. To prevent this issue, you must ensure that the data mapping is accurate. When you map data, it is important to understand that metrics are derived from the combination of entity, entity type, and metric definition. Therefore, you must have the following tables in your data mapping.

- sn_grc_profile
- sn_grc_profile_type
- sn_grc_metric_definition

Managing different fiscal years

Many global organizations have operations in different countries and each country could follow their own fiscal calendars instead of following the standard Gregorian calendar. When you create fiscal calendars, you enable the entities in other locations to collect data according to their own fiscal calendars.

You can create multiple fiscal calendars, including a reporting calendar for global reporting. This reporting calendar must be used in the metric definition and set as the Target calendar. The other calendars, known as Source calendars, are then mapped to the Target calendar.

Consider a parent organization in India with two subsidiaries operating in different countries: the US and Australia. The US government's fiscal year runs from October 1 to September 30, while Australia's fiscal year spans from July 1 to June 30. The parent organization adheres to the Indian fiscal calendar, which is from April 1 to March 31. In this context, metric data is collected according to each country's fiscal year and then aggregated according into the global calendar used for data aggregation. If the metric data for the US is 100 and for Australia is 200, the combined data on the global calendar used by the parent organization would be 300. Here, the US and Australian fiscal calendars are considered source calendars, and the global calendar used by the parent organization is the target calendar.

There are four data collection frequencies that are supported for the fiscal year and they are as follows:

- Monthly
- Quarterly
- Semi-annually
- Annually

After you create fiscal calendars, you must map the calendars to specify which is your target calendar and your source calendar. You can then use these calendars in metric definitions and metrics. The calendar specified on the metric is used for data collection and the calendar specified on the metric definition is used for data aggregation. This means that if the metric definition has **Global calendar** specified, and the metric has **US calendar** specified, then the Global calendar will be used for data aggregation. For more information on mapping calendars, see Map target and source calendars.

Note: The calendars must begin on the first of every month.

Related topics

Create fiscal calendars

Configuring GRC: Metrics

You can configure GRC: Metrics to meet the needs of your organization.

As a metrics administrator, you can configure the following types of metric definitions.

- Automated metric definitions
- Manual metric definitions
- Calculated metric definitions

Create a manual metric definition

Create a manual metric definition to collect the data manually for a metric.

Before you begin

Role required: sn_esg.metric_manager

About this task

In the manual metric definition, the mode of data collection is manual. An option is available to set up the qualitative and quantitative metrics.

Note: The forms for creating an automated metric definition or a manual metric definition point to the same sn_grc_metric_definition table. The difference between the two forms is the method of the collection.

Procedure

1. Navigate to **All** > **Operational Sustainability Management** > **Operational Sustainability Workspace** > **Metrics** > **Manual metric definitions**.
2. Click **New**.
3. On the form, fill in the fields.
   For information about the fields, refer to Manual metric definition fields.
4. Click **Save**.

Result

The metric definition is saved in the Metric definitions list.

What to do next

You can associate an entity type, create metrics, and add citations to the metric definition. See Update a metric definition for more information.

Manual metric definition fields

Detailed explanation of the fields on the manual metric definition form.

New manual metric definition form

Field	Description
Basic details	
Name	Name of the manual metric definition. For example, `Number of incidents`.
Active	Option to mark the manual metric definition as active.
Description	Brief description of the manual metric definition.
Category	Category of the metrics data. The choices are as follows: • **Qualitative**: Qualitative data is intangible and non-numerical in nature. It's defined by the characteristics of a process or business activity. • **Quantitative**: Quantitative data is tangible and numerical in nature. It's defined by the numbers or key performance indicators. **Note:** This fields **Nature**, **Direction**, **Precision**, and **Unit** are only displayed only when the category of the manual metric definition is **Quantitative**.
Calendar	Calendar to use for metric aggregation. Only the configured calendar options are available for selection. This field is automatically set to **Standard Calendar**. **Note:** Standard calendar refers to the Gregorian calendar.
Aggregation method	Method used to calculate the metric data for all the entities. For example, if you have a metric that you want to measure for multiple entities such as people, departments, or regions, you might want to know how to calculate the scores for each entity into a single score that represents the overall performance. Your choice of aggregation method depends on your goal of metric collection. For example, if you're interested in overall performance and want to account for

New manual metric definition form (continued)

Field	Description
	differences in scale or size between entities, the sum or average may be more appropriate. If you're interested in identifying the best-performing entity, the maximum may be more appropriate, while if you're interested in identifying the worst-performing entity, the minimum may be more appropriate. The aggregation happens across time periods based on the frequency defined in the metric definition. If the frequency is monthly, the calculation takes place every month. The four choices for aggregation methods are as follows: • **Sum**: The metric data for all entities are added together to create a single score. • **Average**: The metric data for all entities are averaged to create a single score. • **Maximum**: The highest metric data among all entities is used as the single score. • **Minimum**: The lowest metric data among all entities is used as the single score.
Unit	Unit for the manual metric definition.
Precision	Number of decimal places after the decimal point on a score. This field is automatically set to **0**. When the Precision is set to 0, the result is rounded to the nearest whole number. For example, if a metric definition with Precision 0 calculates the values 7 + (5 / 2), the result rounds up to 10. When the Precision is set to greater than 0, the result is rounded to the nearest decimal point for the given precision. For example, Precision 1 rounds a result of 4.45 as 4.5.
Frequency	Frequency at which the metric definition should collect the scores. The choices are as follows: • **Daily** • **Weekly** • **Monthly** • **Quarterly**

New manual metric definition form (continued)

Field	Description
	• **Semi-annually** • **Annually**
First run date	Start date of the metric definition execution for the collection of data according to the frequency.
Data collection	
Data owner assignment type	Type of the data owner assignment for the metrics within the metric definition. The choices are as follows: • **Simple** The system assigns the specified Data owner or Data owner group to the Metric. • **Advanced** The system assigns a Data owner based on the assignment configuration. ESG admins [sn_esg.admin] or Risk admins [sn_risk.admin] can set assignment configurations to dynamically assign data owners. For more information on creating assignment configurations see, Create an assignment configuration and Assignment Configuration New Record. **Note:** This is available if you have the GRC: Approver Configurator application installed. For more information see, Using Approver Configurator for setting up approvals.
Data owner type	Type of the data owner responsible for the manual metric definition. The choices are as follows: • **User** • **User group** **Note:** Only groups that include at least one member with the ESG Metrics Manager role or higher can be selected for this field.
Data owner	Data owner responsible for the manual metric definition. Select a data owner from the list.

New manual metric definition form (continued)

Field	Description
	Note: If you selected the advanced option for **Data owner assignment type**, this will be the assigned data owner if the assignment configuration doesn't return any results.
Result type	The format that you want to be available for responses in assigned metric data tasks. This applies to responses and overridden responses. • Text: Users can enter a plain text response. • HTML: Users can enter HTML code as a response. • Choice: Users can select a choice from a list. This field appears when the **Category** field is set to **Qualitative**.
Choice table	Table the choices are being populated from. This field appears when the **Category** field is set to **Qualitative**.
Choice field	Field and its values from the selected table that are displayed for each choice. This field appears when the **Category** field is set to **Qualitative**.
Choice condition	Option to only show certain fields or certain values within the Choice field under set conditions. Select **Set conditions** to open the condition builder. This field appears when the **Category** field is set to **Qualitative**.
Instructions	Instructions for the data owner. Method of collection for the manual metric definition.
Approval required	Option to indicate if an approval is required for the manual metric definition. **Note:** When the **Approval required** option is enabled, the **Approver type** and **Approver** fields are displayed.
Approver type	Type of the approver of the metric definition. The choices are as follows: • **User** • **User group**

New manual metric definition form (continued)

Field	Description
	Note: This field appears only when the Metric approval property is set to **Simple**. For more information see, Components installed with Operational Sustainability Management (formerly ESG Management). **Note:** Only groups that include at least one member with the ESG Metrics Manager role or higher can be selected the User Group.
Approver	Approver user or approver group that is responsible to approve the metric definition. The choices are as follows: • **Approver**: Displayed when the User option is selected. • **Approver group**: Displayed when the User option is selected. **Note:** This field appears only when the Metric approval property is set to **Simple**. For more information see, Components installed with Operational Sustainability Management (formerly ESG Management). **Note:** Only users with the ESG Program Manager role or higher can be selected.
Metric Properties	
Type	Method used to determine if the score is collected manually or in an automated manner. The choices are as follows: • **Automated** • **Manual** Select **Manual**.
Enterprise Owner Type	Type of enterprise owner responsible for the manual metric definition. The choices are as follows: • **User** • **User group**

New manual metric definition form (continued)

Field	Description
	Note: Only groups with at least one member with the ESG Metrics Manager role or higher can be selected in this field.
Direction	Direction that you want to see the metric in. The choices are as follows: • **None**: If you don't want any change in the metric direction, select this option. • **Minimize**: If the desired metric direction is downward, select this option. • **Maximize**: If the desired metric direction is upward, select this option. • **Milestone**: When the metric direction isn't applicable, but the metric is tracked against a milestone, select this option. **Note:** Thresholds can be set for all directions excluding **Milestone**. For more information on creating thresholds, see Create a threshold for a metric
Group	Area that the metric relates to.
Reporting classification	Tag used to categorize the metric.
Due date offset	Number of business days after the schedule end date when the metric data task becomes overdue. For example, if the frequency of a metric definition is monthly and if you enter `15` in this field, then the due date for metric data task will be overdue 15 business days after the month ends. If set to 0, the due date is set to one day after the end date. **Note:** The offset is based on the applied schedule.
Enterprise owner	Enterprise owner of the manual metric definition. **Note:** Only users with the ESG Metrics Manager role or higher can be selected in this field.
Nature	Nature of the manual metric definition. The choices are as follows:

New manual metric definition form (continued)

Field	Description
	• **None**: If you don't want any change in the metric direction, select this option. • **Leading** (Predictive) Metric: Is predictive and helps anticipate future outcomes. In this case, the company may use a leading metric related to GHG emissions, such as the amount of energy consumed per production unit. By tracking energy consumption, the company can predict its future GHG emissions based on the energy sources used and the efficiency of its production processes. This leading metric enables the company to proactively identify areas for improvement and make informed decisions to reduce emissions. • **Lagging** (Measures Impact) Metric: Measures the impact of past actions or events. In the example, a lagging metric related to GHG emissions could be the total emissions produced by the company in a given year. This metric provides an assessment of the company's historical environmental impact. By monitoring this metric over time, the company can evaluate the effectiveness of its emission reduction efforts and identify areas where further improvements are needed. Lagging metrics help measure the outcomes of past actions and inform future strategies. • **Current** metric: Monitors ongoing processes and identifies real-time improvement areas. For GHG emissions, a current metric could be the emissions intensity, which measures the emissions generated per unit of production. By tracking emissions intensity, the company can identify specific areas within its operations that contribute to higher emissions. This metric helps the company identify real-time improvement opportunities, such as optimizing energy usage, implementing energy-efficient technologies, or adopting renewable energy sources.
Subgroup	Subgroup that the metric relates to
Key metric	Option to indicate if it's a key metric for your business.
Confidentiality	

New manual metric definition form (continued)

Field	Description
Note: This section only appears when: • The *sn_grc.enable_record_confidentiality* property is enabled under GRC properties. • The record is in **Draft** state.	
Confidential	Option to mark the record as confidential.
Allowed users	Users who can view the record. **Note:** By default, the logged-in user is added to the list of confidential users.
Allowed groups	Groups that can view the record.

Set up estimation for manual metric definition

Enable or disable the estimation property to enable the use of estimated data when actual data is unavailable, using either pre-defined or custom methods in manual metric definitions.

Before you begin
Role required: admin

Procedure

1. Navigate to **All** > **System Properties** > **All Properties**.
2. Select the Metric estimation property (sn_esg.metric_estimation).

   This property is enabled by default, allowing you to add estimated data when actual data is not available. To restrict data entry to actual values only, disable this property by setting it to False.
3. Select the **Value** filed and set it to true.
4. Select **Update**.
   Based on your selected settings, the estimation property is configured in your system.

Create an assignment configuration

Create an assignment configuration for a manual metric definition to have data owners dynamically assigned to metrics.

Before you begin
Role required: admin, sn_esg.admin, or sn_risk.admin

About this task
In the manual metric definition, you can choose between a simple or advanced option for the assignment of data owners. For the advanced option, you must configure how the data owner is assigned by creating a new assignment configuration record. For more information, on the manual metric definition form and fields, see Manual metric definition fields.

Procedure

1. Navigate to **All** > **Assignment and Approval Configurations** > **Assignment configurations**.
2. Click **New**.
3. On the form, fill in the fields.
   For information about the fields, refer to Assignment Configuration New Record.

   Note: You cannot have more than one approval configuration applying to the table with the same priority.

4. Select **Save**.

Result

Data owners will be assigned to metrics based on the parameters set in your assignment configuration.

Note: If the assignment configuration does not return any results the user defined in the **Data owner** field of the metric definition record will be the assigned as the data owner.

Create an automated metric definition

Create an automated metric definition to collect the data for a metric. A metric definition specifies the method and key properties of the metric, such as the unit, direction, or nature of the metric.

Before you begin

Role required: sn_grc_metric.manager, sn_risk.user, and sn_compliance.user

About this task

In automated metric definitions, the data is collected automatically based on the conditions that you define in the metric definition. In the conditions, you could specify the tables that are used for collecting the metric data. For example, if you want to obtain data for all the incidents logged in a particular month, you can specify the Incident table as a source for data collection.

Procedure

1. Navigate to **All** > **Environmental, Social, and Governance** > **ESG Workspace** > **Metrics** > **Automated metric definitions**.
2. Select **New**.
3. On the form, fill in the fields.
   For information on the fields of the form, see Automated metric definition fields.
4. Select **Save**.

   Note: In the new automated metric definition form, only the **Details** tab is displayed. After a new automated metric definition is created, additional related lists are displayed with the **Details** tab in the form.

Result

The automated metric definition is saved in the Metric definitions list.

What to do next

You can associate an entity type, create metrics, and add citations to the metric definition. See Update a metric definition for more information.

Automated metric definition fields

The fields of the automated metric definition form are explained in this topic.

New automated metric definition form

Field	Description
Basic details	
Name	Name of the automated metric definition. For example, `Number of incidents`.
Active	Option to mark the automated metric definition as active. When enabled, the metric definition becomes active and ready for use.
Description	Brief description of the automated metric definition.
Unit	Unit for the automated metric definition. You can define the units in which the data is shown.
Aggregation method	The Aggregation method refers to the method used to calculate the metric data for all the entities. For example, if you have a metric that you want to measure for multiple entities such as people, departments, or regions, you might want to know how to calculate the data for each entity into a single score that represents the overall performance. Your choice of aggregation method depends on your goal of metric collection. For example, if you are interested in overall performance and want to account for differences in scale or size between entities, the sum or average may be more appropriate. If you are interested in identifying the best-performing entity, the maximum may be more appropriate, while if you are interested in identifying the worst-performing entity, the minimum may be more appropriate. The aggregation happens across time periods based on the frequency defined in the metric definition. If the frequency is monthly, the calculation will take place every month. The four choices for aggregation methods are as follows: • **Sum**: The metric data for all entities are added together to create a single score. • **Average**: The metric data for all entities are averaged to create a single score. • **Maximum**: The highest metric data among all entities is used as the single score. • **Minimum**: The lowest metric data among all entities is used as the single score.

New automated metric definition form (continued)

Field	Description
Class	Class to which the metric definition belongs. The choices are as follows: • **KPI**: Indicates how well the risk exposure is managed against objectives. Use this option to add entities and additional entities to the metric definition. • **KRI**: Indicates the amount of exposure to a given risk or set of risks. Use this option to add risks and risk statements to the metric definition. This option is available if the Advanced Risk plugin is activated. • **KCI**: Indicates the effectiveness of any controls that have been implemented to reduce or mitigate a given risk exposure. Use this option to add controls and control objectives to the metric definition. This option is available if the Policy and Compliance Management plugin is activated. **Important:** This field appears only when the metric definition is created from the IRM suite of applications. It does not appear for Operational Sustainability Management.
Precision	Number of decimal places after the decimal point on a score. When an indicator has a Precision of 0, the indicator rounds the result to the nearest whole number. For example, if an indicator with Precision 0 calculates the values 7 + (5 / 2), the indicator rounds the result up to 10. When an indicator has a Precision greater than 0, the indicator rounds to the nearest decimal point for the given precision. For example, an indicator with Precision 1 rounds a result of 4.45 as 4.5.
Calendar	Calendar to use for metric aggregation. Only the configured calendar options are available for selection. This field is automatically set to **Standard Calendar**. **Note:** Standard calendar refers to the Gregorian calendar.

New automated metric definition form (continued)

Field	Description
Frequency	Collection frequency with which the metric is executed. Indicates how often the metric definition should collect the data. The choices are as follows: • **Daily** • **Weekly** • **Monthly** • **Quarterly** • **Semi-annually** • **Annually**
First run date	Start date for the collection frequency schedule for the automated metric definition.
Data collection	
Method Type	Type of automated metric. The choices are as follows: • **Basic**: Indicates using aggregation methods such as sum, average, maximum, minimum, and count distinct. • **Scripted**: Indicates using a script to collect the data. This option can be used when, for example, you want to collect data from multiple tables. • **External Source**: Indicates that the data will be collected from external sources. For example, if you want to source data about the number of employees in your organization and their gender ratio, you can obtain the information from an external source such as Workday which is an application that stores human resources data. **Note:** If you select **Scripted**, you must save the form and select **Add script** to add your script. Only users with the sn_grc_metric.developer role can add scripts.
Table	Table from which data is obtained for the metrics. This field only appears if the **Method Type** field is set to **Basic**.
Criteria	Condition for the record from which data is collected. Build a filter by adding conditions that contain a field, operator, and values and

New automated metric definition form (continued)

Field	Description
	then click **Set**. For example, you can build a condition that you want to collect data for only those incidents the due date for which is in the current month. **Note:** Select a value for the **Table** field before modifying this field.
Aggregate	Method or the calculation used to aggregate the data from the chosen table. When an option is selected in the **Aggregate** field, a new **Aggregation Field** is displayed next to the **Aggregate** field. The **Aggregation Field** displays the selected record. The choices for the **Aggregate** field are as follows: • **Count**: Count of the number of records that are obtained from the chosen table. For example, if you want a count of the incidents, you can select this option. **Note:** The **Aggregation Field** is not displayed when **Count** is selected. • **Sum**: Sum of the column that is selected in the **Aggregation Field**. • **Average**: Average of the values of the column that is selected in the **Aggregation Field**. • **Maximum**: Maximum of the values of column that is selected in the **Aggregation Field**. • **Minimum**: Minimum of the values of the column that is selected in the **Aggregation Field**. • **Count Distinct**: Number of groups in the result set that is grouped by the **Aggregation Field**.
Table field	Column or field of the table that is selected in the **Table** field. For example, you can select the **Caller** column in the Incident table. This selection enables you to understand that which callers are associated with the Incident table and compare them with the callers of your entities.

New automated metric definition form (continued)

Field	Description
	Note: Select a table before modifying this field.
Aggregation field	Column or field from the table that is selected in the **Table** field on which the aggregation must be performed. **Note:** This field does not appear if **Count** is selected in the **Aggregate** field.
Entity field	Column or field from the entity table. The entities are matched based on the field selected in the **Table field** and the field selected in the **Entity field**. This field is automatically set to **Applies to record**. In the context of the Incident table in this procedure, this field enables you to compare, for example, which particular incident has been logged by which caller.
Create metric data task	Option to mark the creation of metric data task.
Data owner assignment type	Type of the data owner assignment for the metrics within the metric definition. The choices are as follows: • **Simple** The system assigns the specified Data owner or Data owner group to the Metric. • **Advanced** The system assigns a Data owner based on the assignment configuration. ESG admins [sn_esg.admin] or Risk admins [sn_risk.admin] can set assignment configurations to dynamically assign data owners. For more information on creating assignment configurations see, Create an assignment configuration and Assignment Configuration New Record. **Note:** This is available if you have the GRC: Approver Configurator application installed. For more information see, Using Approver Configurator for setting up approvals.
Data owner type	Type of the data owner responsible for the metric definition. The choices are as follows:

New automated metric definition form (continued)

Field	Description
	• **User** • **User group**
Data owner	Data owner responsible for the metric definition. Select a data owner from the list. **Note:** If you selected the advanced option for **Data owner assignment type**, this will be the assigned data owner if the assignment configuration doesn't return any results.
Instructions	Instructions for the data owner.
Collect supporting data	Option to enable collection for supporting data. **Note:** Collected supporting data is automatically deleted after a certain period, with the retention time varying according to the data frequency. • Daily: After 30 days • Weekly: After 30 days • Monthly: After 3 months • Quarterly: After 3 quarters • Semiannually: After 3 semi-annual periods • Yearly: After 3 years
Supporting data fields	Specifies the data fields to be shown in the supporting data. **Note:** For optimal performance, please limit your selection to 4-5 fields if your data is extensive. Selecting more fields may result in performance issues.
Approval required	Option to indicate if an approval is required for the metric definition. **Note:** When the **Approval required** option is enabled, the **Approver type** and **Approver** fields are displayed.
Approver type	Specifies the type of approver for the metric definition. The choices are as follows:

New automated metric definition form (continued)

Field	Description
	• **User** • **User group** **Note:** This field appears only when the Metric approval property is set to **Simple**. For more information see, Components installed with Operational Sustainability Management (formerly ESG Management).
Approver	Approver user or approver group that is responsible to approve the metric definition. The choices are as follows: • **Approver**: Displayed when the User option is selected. • **Approver group**: Displayed when the User option is selected. **Note:** This field appears only when the Metric approval property is set to **Simple**. For more information see, Components installed with Operational Sustainability Management (formerly ESG Management).
Metric Properties	
Type	Method used to determine if the data is collected manually or in an automated manner. The choices are as follows: • **Automated** • **Manual** Select **Automated** because the procedure is to create an automated metric definition.
Enterprise Owner Type	Type of enterprise owner who is responsible for the automated metric definition. The choices are as follows: • **User** • **User group**
Direction	Direction that you want to see the metric in. The choices are as follows:

New automated metric definition form (continued)

Field	Description
	• **None**: If you don't want any change in the metric direction, select this option. • **Minimize**: If the desired metric direction is downward or descending, select this option. For example, you want to minimize the fuel consumption. • **Maximize**: If the desired metric direction is upward or ascending, select this option. For example, you want to maximize the use of natural resources in your organization. • **Milestone**: When the metric direction isn't applicable, but the metric is tracked against a milestone, select this option. For example, if your organization is going to launch a new renewable energy product in the market, the upcoming launch date is considered as a milestone.
Group	Area that the metric relates to. For example, the metric may be related to the area of gender diversity, energy, water consumption, or may be related to Scope 3 emissions, and so on.
Reporting classification	Tag used to categorise the metric.
Enterprise owner	User who is the owner of the metric and is responsible for the metric. For example, for a metric such as revenue collection, the vice president or the general manager of the business unit could be the enterprise owner.
Nature	Nature of the automated metric definition. The choices are as follows: • **None**: If you don't want any change in the metric direction, select this option. • **Leading** (Predictive) Metric: Is predictive and helps anticipate future outcomes. In this case, the company may use a leading metric related to GHG emissions, such as the amount of energy consumed per production unit. By tracking energy consumption, the company can predict its future GHG emissions based on the energy sources used and the efficiency of its production processes. This leading metric enables the company to proactively identify areas for improvement and make informed decisions to reduce emissions.

New automated metric definition form (continued)

Field	Description
	• **Lagging** (Measures Impact) Metric: Measures the impact of past actions or events. In our example, a lagging metric related to GHG emissions could be the total emissions produced by the company in a given year. This metric provides an assessment of the company's historical environmental impact. By monitoring this metric over time, the company can evaluate the effectiveness of its emission reduction efforts and identify areas where further improvements are needed. Lagging metrics help measure the outcomes of past actions and inform future strategies. • **Current** metric: Monitors ongoing processes and identifies real-time improvement areas. For GHG emissions, a current metric could be the emissions intensity, which measures the emissions generated per unit of production. By tracking emissions intensity, the company can identify specific areas within its operations that contribute to higher emissions. This metric helps the company identify real-time improvement opportunities, such as optimizing energy usage, implementing energy-efficient technologies, or adopting renewable energy sources.
Subgroup	Subgroup that the metric relates to.
Key metric	Option to indicate if the metric is a key metric for your business.
Confidentiality	
Note: This section only appears when: • The *sn_grc.enable_record_confidentiality* property is enabled under GRC properties. • The record is in **Draft** state.	
Confidential	Option to mark the record as confidential.
Allowed users	Users who can view the record. **Note:** By default, the logged in user is added to the list of confidential users.
Allowed groups	Groups that can view the record.

Create a calculated metric definition

Create a calculated metric definition by aggregating the automatic metric definitions, the manual metric definitions, and the calculated metric definitions.

Before you begin

Role required: sn_esg.metric_manager

About this task

You can create calculated metric definitions which can be a combination of other metric definitions and use the data collected in child metric definitions to calculate and aggregate data for complex scenarios. You can also specify the frequency and the method to aggregate the metric definitions.

Procedure

1. Navigate to **All** > **Operational Sustainability Management** > **Operational Sustainability Workspace** > **Metrics** > **Calculated metric definitions**.
2. Click **New**.
3. On the form, fill in the fields.
   For a detailed explanation of the fields, see Calculated metric definition form.
4. Click **Save**.
5. To aggregate the data, select **Aggregate**.

Result

The metric definition is saved in the Metric definitions list.

What to do next

Specify the formula for metric calculation. Refer to Formula building in a calculated metric definition.

Calculated metric definition form

The fields of the calculated metric definition form are explained in this topic.

New calculated metric definition form

Field	Description
Basic details	
Name	Name of the calculated metric definition. For example, `Number of employees`.
Active	Option to mark the calculated metric definition as active.
Description	Brief description of the calculated metric definition.
Unit	Unit for the metric definition. You can define the units in which the scores are shown. The most commonly used units are provided by default.
Precision	Number of decimal places after the decimal point on a score. This field is automatically set to **0**.

New calculated metric definition form (continued)

Field	Description
	When the Precision is set to 0, the result is rounded to the nearest whole number. For example, if a metric definition with Precision 0 calculates the values 7 + (5 / 2), the result rounds up to 10. When the Precision is set to greater than 0, the result is rounded to the nearest decimal point for the given precision. For example, Precision 1 rounds a result of 4.45 as 4.5.
Calendar	Calendar to use for metric aggregation. Only the configured calendar options are available for selection. This field is automatically set to **Standard Calendar**. **Note:** Standard calendar refers to the Gregorian calendar.
Frequency	Frequency for the calculated metric definition. This field indicates how often the metric definition should roll up the scores. The choices are as follows: • **Daily** • **Weekly** • **Monthly** • **Quarterly** • **Semi-annually** • **Annually**
Calculation	
Calculation level	Level at which the calculation is performed. The choices are as follows: • **Metric definition**: If you calculate the data at the metric definition level, then the data across all child metric definitions or child metrics is used for calculation. • **Entity**: If you calculate data at the entity level and specify the calculation method using the formula builder, then the common entities across all the child metric definitions are matched and the data is calculated for each entity. To aggregate the data to get an overall score at the metric definition level, select **Entity**.

New calculated metric definition form (continued)

Field	Description
Aggregation method	Method to aggregate the metric score at the entity level. The choices are as follows: • **None** • **Sum** • **Average** • **Maximum** • **Minimum** This field only appears when the **Calculation level** field is set to **Entity**.
Metric Properties	
Enterprise Owner Type	Enterprise owner responsible for the calculated metric definition. The choices are as follows: • **User** • **User group**
Enterprise owner	Enterprise owner of the metric definition.
Direction	Direction that you want to see the metric in. The choices are as follows: • **None**: If you do not want any change in the metric direction, select this option. • **Minimize**: If the desired metric direction is downward, select this option. For example, if you want to minimize the carbon emission from the datacenters. • **Maximize**: If the desired metric direction is upward, select this option. For example, if you want to maximize the use of energy-efficient resources in your organization. • **Milestone**: When the metric direction is not applicable, but the metric is tracked against a milestone, select this option. For example, if your organization has a goal to use 100% renewable energy by the end of 2029, the upcoming date for the goal is considered as a milestone.
Nature	Nature of the calculated metric definition. The choices are as follows: • **None**: • **Leading** (Predictive) Metric: Is predictive and helps anticipate future outcomes. In this

New calculated metric definition form (continued)

Field	Description
	case, the company may use a leading metric related to GHG emissions, such as the amount of energy consumed per production unit. By tracking energy consumption, the company can predict its future GHG emissions based on the energy sources used and the efficiency of its production processes. This leading metric enables the company to proactively identify areas for improvement and make informed decisions to reduce emissions. • **Lagging** (Measures Impact) Metric: Measures the impact of past actions or events. In our example, a lagging metric related to GHG emissions could be the total emissions produced by the company in a given year. This metric provides an assessment of the company's historical environmental impact. By monitoring this metric over time, the company can evaluate the effectiveness of its emission reduction efforts and identify areas where further improvements are needed. Lagging metrics help measure the outcomes of past actions and inform future strategies. • **Current** metric: Monitors ongoing processes and identifies real-time improvement areas. For GHG emissions, a current metric could be the emissions intensity, which measures the emissions generated per unit of production. By tracking emissions intensity, the company can identify specific areas within its operations that contribute to higher emissions. This metric helps the company identify real-time improvement opportunities, such as optimizing energy usage, implementing energy-efficient technologies, or adopting renewable energy sources.
Group	Area that the metric relates to. For example, the,metric may be related to the area of energy, water emissions, and so on.
Reporting classification	Tag used to categorise the metric.
Subgroup	Subgroup that the metric relates to.
Key metric	Option to indicate if it is a key metric for your business.
Confidentiality	

New calculated metric definition form (continued)

Field	Description
Note: This section only appears if the following situations are true: • The *sn_grc.enable_record_confidentiality* property is enabled under GRC properties. • The record is in Draft state.	
Confidential	Option to mark the record as confidential.
Allowed users	Users who can view the record. **Note:** By default, the logged in user is added to the list of confidential users.
Allowed groups	Groups that can view the record.

Formula building in a calculated metric definition

In a calculated metric definition, you can create formulas to perform calculations for any data that you may require.

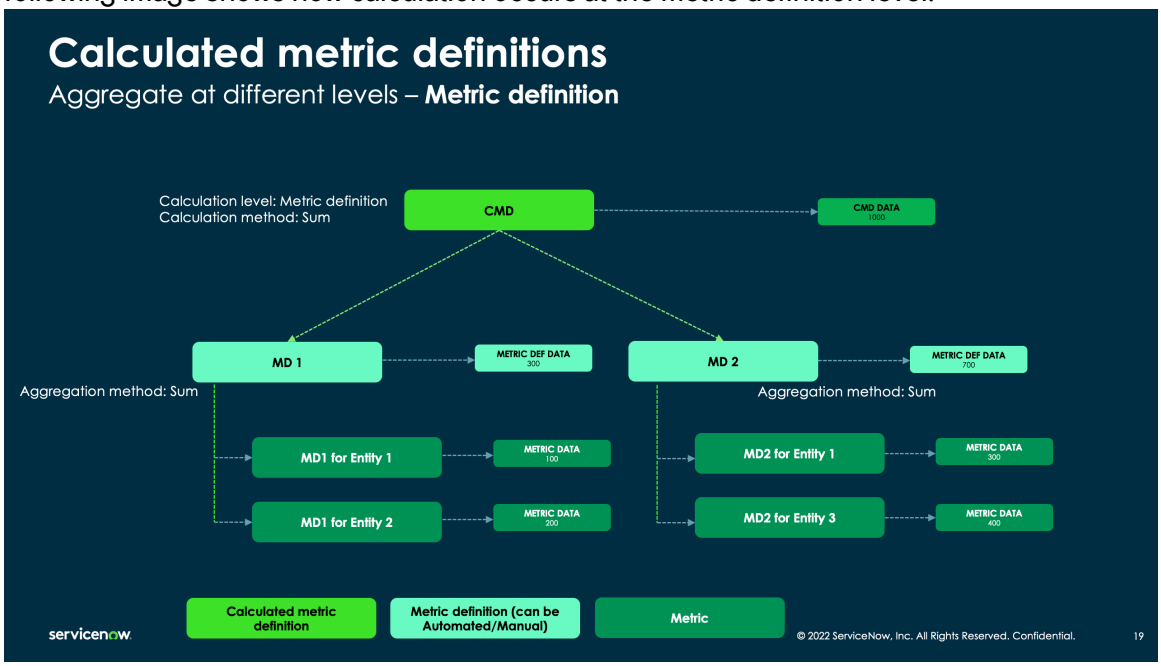
A formula consists of operands, operators, and functions. For example, if you want to calculate the total employee count from two metric definitions namely number of male employees and number of female employees, then the selected metric definitions are the operands and the operator is the symbol or function that performs a specific operation on the operands to obtain a result. Examples of operators include addition (+), subtraction (-), multiplication (*), and division (/).

You can set default values for operands in the Calculated Metric Definition Settings table to ensure metric calculations continue smoothly even when data is missing or undefined. When a formula encounters an empty operand, the system automatically applies the configured default value from this table, allowing the calculation to proceed without interruption. Users can activate the shipped default record or create custom entries with preferred values for specific operands. This setup enhances the reliability and flexibility of metric logic, reduces manual intervention, and supports consistent results across varying data conditions.

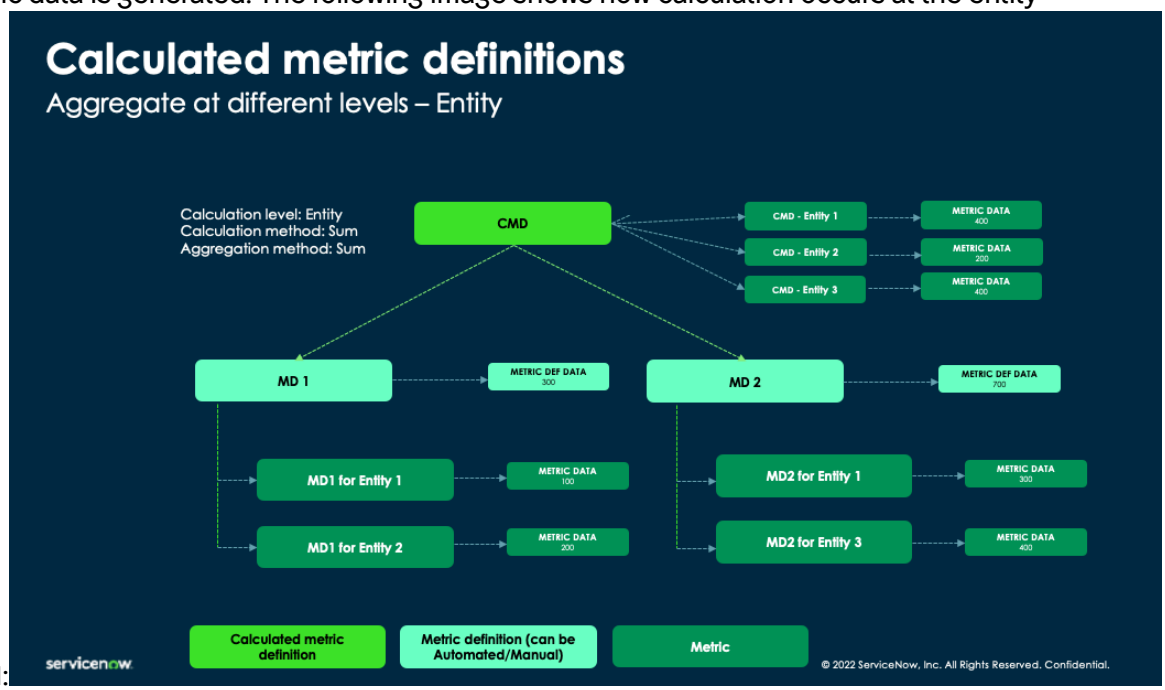
When you build a formula in a calculated metric definition, you can choose to build it at either the metric definition level or at the entity level. Before you save the calculated metric definition form and build the formula for metric definition score calculation, you must specify the calculation level in the calculated metric definition form. The two levels are as follows:

- **Metric definition**: If you select **Metric definition** in the **Calculation level** field, then the data across all child metric definitions or child metrics is used for calculation. When you select **Execute**, the formula is applied and the calculated metric definition data is generated. For more information, see Configure the formula builder. The

following image shows how calculation occurs at the metric definition level:



- **Entity**: If you select **Entity** in the **Calculation level** field and specify the calculation method using the formula builder, then the child metrics are created for the calculated metric definition. These metrics are created for each distinct entity that is associated with the metric definitions that have been used as operands in the formula. When you Execute the metric definition, the formula is applied and the metric data is generated. When you Aggregate the metric definition, the metric data is aggregated and the calculated metric data is generated. The following image shows how calculation occurs at the entity level:



General guidelines for formula building

While building a custom formula in a calculated metric definition, keep these general guidelines in mind to easily create your formulas.

Overview of formula building

A formula consists of operands, operators, and functions. Examples of operators include addition (+), subtraction (-), multiplication (*), and division (/).

Tips to use the formula builder

- As an administrator, when you start using the formula builder, you must begin by typing \ (slash) in the text area.
- It's better to select the operands from the available list instead of typing the operand names.
- Ensure that before you build a formula, the configurations are done by specifying the formula context, the tables, and the identifiers.
- If there are large formulas, it's easier to use the **Copy** button instead of manually selecting the whole formula as manual copy may result in an omission of certain parts of the formula.
- To reset the formula, use the **Reset** button to revert the formula to its last saved state.
- Use the **Preview** button to view the formula in a neat format without the visual clutter of identifiers.
- While each identifier is an abbreviated two-letter combination of lowercase letters, don't use fn as an identifier because generally the fn refers to a function
- Use the formula builders on all browsers except Safari.
- Specify the primary and the secondary columns to identify the right emission factors in case of emission factors with duplicate names. When defining calculated metric definitions, you can use emission factors with different units than the collected data.

Configure the formula builder

Specify the formula context, the tables, and the identifiers before you can build a formula.

Before you begin

Role required: admin

About this task

It's necessary to configure the formula builder before a formula can be built in a calculated metric definition. During configuring, you can specify the formula context, the tables to use, and their conditions. In the context of ESG Management, if you build the formula at the metric definition level, you must select the metric definition table and the metric table during configuration. To build the formula at the entity level, you must select the metric definition and the emission factor table. Other applications can use the tables that are required for their use. You can configure the columns and their labels that you want to display along with the emission factor during building the formula. These labels help in easily identifying the emission factors.

Procedure

1. Navigate to **All** > **Formula builder** > **Configuration**.
2. Select **New**.
3. On the form, fill in the fields.

Formula builder configuration form

Field	Description
Formula context	Configuration available to create the formula for a specific option. The choices for operational sustainability are as follows: ○ **Calculation level - entity** ○ **Calculation level - metric definition** **Note:** Users of other applications can select different context options.
Application	Scope of the application. This field is automatically set.
Table	Tables that you want to use while building the formula.
Condition	Criteria using which the records are filtered from the selected table when building the formula. For example, you can build a condition that **Domain is Operational Sustainability Management**.
Display field	Unique display name for the operands such as the **Name** field or the **ID** field.
Identifier	An abbreviated two-letter combination of lowercase letters that is associated with a specific table name. For example, if your table name is Hardware accessories, your identifier can be ha. **Note:** Using `fn` as an identifier isn't permitted as fn refers to function.
Show additional columns	Option to decide if you want additional columns to be displayed. **Note:** This option is useful in cases where there are duplicate emission factor names. Showing additional details can help metric managers to select the right emission factor.
Primary column	Primary column that you 'd like displayed for the emission factor during formula building. For example, if you select **From unit**, then the emission factor's From unit will be displayed along with the factor name.
Secondary column	Secondary column that you'd like displayed for the emission factor during formula building. For example, if you select **To unit**,

Field	Description
	then the emission factor's To unit will be displayed along with the factor name. **Note:** When defining calculated metric definitions, you can use emission factors with different units than the collected data.
Primary column label	Preferred label of the primary column selected. For example, if you selected **Short Description** in the **Primary column** field, you can provide the preferred label as `Short Desc`.
Secondary column label	Preferred label of the secondary column selected.

4. Select **Submit**.

Import a formula into a calculated metric definition

Directly import any formula that is stored in Microsoft Excel spreadsheets into a calculated metric definition. This import helps in quickly building your formula for performing calculations.

Before you begin
Role required: system admin

About this task
Sometimes, you might have a formula saved in a spreadsheet that you want to include into a calculated metric definition for use in formula building. In these instances, the formula import functionality proves beneficial. It's crucial to verify that the spreadsheet includes the following columns with precisely the same column names.

- Name
- Frequency
- Formula
- Calculation level
- Domain area

Procedure
1. Navigate to **All** > **System Import Sets** > **Administration** > **Data Sources**.
2. Select Metric definition data source.
3. Select the Manage attachment icon and upload the file that contains the formula.
4. Select the **Load All Records** related link.
5. Select **Run Transform**.
6. Select **Transform**.

Result
The calculated metric definition becomes available with the formula in the list of all the metric definitions.

Create a formula

Build your own formula using either entities or metric definitions.

Before you begin

Role required: sn_esg.program_manager

sn_risk.user (for Risk users).

About this task

When creating a formula, you can utilize functions like maximum, minimum, or average, as well as operators such as +, -, /, or * to define the method of computation. To build a formula successfully, it's important that at least one metric definition operand or an entity operand is present.

Note: The formula can be built using all browsers except Safari.

Procedure

1. Navigate to one of the following locations depending on which application you're using for creating the formula.
   - **All** > **Operational Sustainability Management** > **Operational Sustainability Workspace** > **Metrics** > **Calculated metric definitions**.
   - **All** > **Risk Management** > **Risk Workspace** > **Metrics** > **Calculated metric definitions**.
2. Open the metric definition for which you want to build a formula and select **Build formula** > **Formula builder**.
3. In the formula text field, type \ to start building your formula.
4. To build the formula either at the metric definition level or the entity level, perform the following steps.

   a. To build a formula at the metric definition level, select two metric definitions or metrics, and an operator between them.

      Example
      For example, you can select GHG emissions from employee commuting + Data Center emissions (market-based) to calculate a sum.

   b. To build a formula at the entity level, select two metric definitions or emission factors, and an operator between them.

5. To copy, reset, or preview the formula, do the following.
   a. To copy the formula, select **Copy**.
   b. To reset the formula to its initial state, select **Reset**.
   c. To view the formula without any identifiers in a neat format, select **Preview**.
6. To save the formula, select **Save formula**.
7. To execute the formula, select **Execute**.
   It's important to save the formula before you execute it.
8. On the formula builder page, select **Need help?** to receive guidance on the necessary steps to build the formula.

Activate default values for CMD calculations

Activate default values for missing operands in CMD formulas using the Calculated Metric Definition Settings table, or configure new records as needed. This ensures uninterrupted calculations and allows customization for specific operand requirements.

Before you begin

Role required: sn_esg.program_manager

Procedure

1. Navigate to **All** > **Operational Sustainability Management** > **Administration** > **Metric Definition Settings**.
2. To setup default values you can do one of the following:
   - Select the default record on the list and activate the record.

     Note: If required you can make updates to the default record.

   - Select **New**.
3. On the form, fill in the fields.
   For information on the fields of the form, see Metric definition setting record fields.
4. Select **Submit**.

Metric definition setting record fields

The fields of the metric definition setting record form are explained in this topic.

Metric definition setting record

Field	Description
Name	Name for the record. For example, `Default record for CMD calculations`.
Active	Option to mark the default values record as active.
One for null record	You can select relevant operators in the field. If a metric operand is null or undefined during formula execution, and the adjacent operator matches the one selected, the system assigns a default value of 1 to that operand—ensuring the calculation proceeds without error.
Order	Determines the priority of the record when multiple records are available. The record which has the highest number is selected
Skip null record	You can select relevant operators in the field. If a metric operand is null or undefined during formula execution and the adjacent operator matches the one selected, the system will skip that operand from the calculation. This prevents errors and ensures the formula continues without interruption.
Zero for null record	You can select relevant operators in the field.If a metric operand is null or undefined during

Metric definition setting record (continued)

Field	Description
	formula execution and the adjacent operator matches the one selected in this field, the system assigns a value of 0 to that operand. This ensures the calculation proceeds without error and maintains consistency in results.
Type	Displays the type of metric definition. This field is automatically set to **Calculated metric definition**.
Table name	Specifies the name of the table where the default values are stored. This field is auto-populated.
Filter	Specifies the condition under which the default values defined in this record should be applied during CMD formula execution. You can setup multiple criteria conditions.

Update a metric definition

Update an existing metric definition to collect the new metrics. You can associate new goals, targets, and entities with the metric definition.

Before you begin

Role required: sn_esg.metric_manager

About this task

You can use the same form for updating the automated metric definition, manual metric definition, and calculated metric definition.

Procedure

1. Navigate to **All** > **Operational Sustainability Management** > **Operational Sustainability Workspace** > **Metrics**.
2. Select a metric definition from the list.
3. To update the metric definition Name field, do the following:
   a. Select the edit icon on the **Name** field.
   b. Update the metric definition name.
   c. **Optional:** Select **Apply name changes to selected metrics**.
   d. **Optional:** Select the associated metrics where you want the name change should apply.
   e. Select **Update**.

   Note: After creating a metric, its name is read only but can be edited via a pop-up modal. When updated, you can choose which associated child metrics to apply the change to, and their related tasks are updated automatically.
4. On the form, update the fields as necessary.

Update metric definitions tabs and related lists

Field	Description
Tabs and related lists	
Details tab	Details of the metric, such as metric definition name, metric properties, method, and schedule in the automated metric definition. Details of the metric, such as collection method, schedule, data collection details, are approved in the manual metric definition. Details of the metric, metric properties, and roll up properties in the calculated metric definition. The fields on the Details tab are explained in the Metric definition forms.
Entity type	Details of the entity type to be associated with the metric. For example, provides the name, description, and conditions, such as active, need update, and processing entities. To add a new entity type, select **Add**. **Note:** The Entity type related list is displayed only for an automated metric definition and a manual metric definition. It isn't displayed for the calculated metric definition.
Entities	Entities that can be associated with the metric definition. Provides details, such as name, owned by, class, and compliance score in percentage (%). To add new entities, select **Add**. **Note:** This related list is displayed only for an automated metric definition and a manual metric definition. It isn't displayed for the calculated metric definition.
Metrics	Details of the metrics, such as name, associated entity, and active state of the metric. To add a new metric, select **New**.
Citations	Details of the citations such as reference, name, authority document, description, and compliance score in percentage (%). To add a new citation, select **Add**.
Goals	Details of the goals, such as name, state, category, start date, end date, owner, and status. To add a new goal, select **Add**.

Field	Description
Targets	Details of the target, such as name, owner, state, status, progress, actual value, target value, and end date. To add a new target, select **Add**.
Metric definition data	Details of the metric definition data, such as collection frequency, collection definition, interval end date, value, and state. **Note:** This related list is displayed only for an automated metric definition and a manual metric definition. It isn't displayed for the calculated metric definition.
Calculated metric data	Details of the calculated metric data, such as interval end date, roll up frequency, and value. **Note:** This related list is displayed only for the calculated metric definition. It isn't displayed for the automated metric definition and the manual metric definition.
Thresholds	Details of the metric definition thresholds, such as threshold type, metric definition, valid from, valid until, red threshold, amber threshold, and target value. **Note:** This related list is displayed only for an automated metric definition and a manual metric definition. It isn't displayed for the calculated metric definition.

5. To save the metric definition, select **Save**.
6. To calculate the calculated metric data for the calculated metric definition, select **Aggregate**. The **Aggregate** action calculates the calculated metric data for the current interval end date and roll-up frequency to its parent metric definition. The calculated metric data record is displayed under the calculated metric data related list. A calculated metric definition score is created if it doesn't exist for the current interval.
7. To delete the metric definition, select **Delete**.
8. To visually explore the 360° relationship view of the metric definition, select **360° view**.

Create a metric

Create a metric to perform calculations on your data.

Before you begin

Role required: sn_esg.metric_manager

About this task

To create a metric, you need a metric definition and an entity. A metric definition defines the method for collecting the score for an entity. When a metric definition gets associated with an entity, it creates a metric.

Procedure

1. Navigate to **All** > **Operational Sustainability Management** > **Operational Sustainability Workspace** > **Metrics**.
2. Select **New**.
3. On the form, fill in the fields.

New metric form

Field	Description
Name	Name for the metric. For example, `Number of incidents- ACME Asia`.
Description	Brief description of the metric.
Active	Option to mark the metric definition as active.
Key metric	Option to mark the metric definition as a key metric.
Metric definition	Metric definition associated with the metric.
Type	Method used to determine if the score is collected manually or in an automated manner. This field is automatically set to **Automated** but the value changes when you select the metric definition and gets updated to the type of the metric definition.
Entity	Entity associated with the metric.
Enterprise Owner Type	Enterprise owner type who is responsible for the metric. This field is automatically set.
Enterprise owner	Enterprise owner of the metric definition. This field is automatically set.
Metric Properties	
Direction	Direction of the automated metric definition. The choices are as follows: ○ **None**: If you don't want any change in the metric direction, select this option. ○ **Minimize**: If the desired metric direction is downward or descending, select this option. For example, you want to minimize the fuel consumption. ○ **Maximize**: If the desired metric direction is upward or ascending, select this option. For example, you want to maximize the use of natural resources in your organization. ○ **Milestone**: When the metric direction isn't applicable, but the metric is tracked

Field	Description
	against a milestone, select this option. For example, if your organization is going to launch a new renewable energy product in the market, the upcoming launch date is considered as a milestone.
Precision	Number of decimal places after the decimal point on a score. When an indicator has a Precision of 0, the indicator rounds the result to the nearest even, whole number. For example, if an indicator with Precision 0 calculates the values 7 + (5 / 2), the indicator rounds the result up to 10. However, if the formula calculates 2 + (5 / 2), the indicator rounds the result down to 4. When an indicator has a Precision greater than 0, the indicator rounds to the nearest decimal point for the given precision. For example, an indicator with Precision 1 rounds a result of 4.45 as 4.5.
Unit	Unit for the automated metric definition. You can define the units in which the scores are shown. The most commonly used units are provided by default.
Nature	Nature of the automated metric definition. The choices are as follows: ○ **None** ○ **Leading**: If the metric is an indicator of future events, select this option. For example, consider the number of sales that a store makes on new solar batteries. This number is a leading indicator for the support requests that the store may receive in the future. ○ **Lagging**: If the metric is an indicator of past events, select this option. For example, consider the number of sales that a store has made in the previous year. This number is a lagging indicator for the support requests that the store has received in the past year. ○ **Current**: If the metric is an indicator of the current state of the events, select this option. For example, consider the number of sales that a store has made in the current year. This number is an indicator of the current support requests received by the store.

Field	Description
Method	
Table	Table that is queried for creating the metric definition. This field is automatically set.
Method Type	Type of automated metric. The choices are as follows: ○ **Basic** ○ **Scripted** **Note:** If you select **Scripted**, you must save the form and select **Add script** to add your script. Only users with the sn_grc.developer role can add scripts.
Table	Table that is queried for creating the metric definition. This field is automatically set.
Criteria	Condition for the record from which a score is obtained. Build a filter by adding conditions that contain a field, operator, and values and then select **Set**. **Note:** Select a value for the **Table** field before modifying this field.
Aggregate	Method to aggregate the automated metric definition score. When an option is selected in the **Aggregate** field, a new **Aggregation Field** is displayed next to the **Aggregate** field. The **Aggregation Field** displays the selected record. The choices for the **Aggregate** field are as follows: ○ **Count**: Count of the number of records that are rendered by the table query that is set in the filter criteria. ○ **Sum**: Sum of the values of the parameters based on the selected value in the **Aggregation Field**. ○ **Average**: Average of the values of the parameters based on the selected value in the **Aggregation Field**. ○ **Maximum**: Maximum of the values of the parameters based on the selected value in the **Aggregation Field**. ○ **Minimum**: Minimum of the values of the parameters based on the selected value in the **Aggregation Field**. ○ **Count Distinct**: Number of groups in the result set that is grouped by the **Aggregation Field**.

Field	Description
	Note: The **Aggregation Field** is displayed for all the options except **Count**.
Reference field	Field based on which the metric data can be segregated. This field connects the entity to the selected scoring table and it calculates a score that is specific to an entity. **Note:** Ensure that the table that the reference field points to matches with the table of the records that the associated entities point to, through the **Applies to** field in the entity form. **Note:** It's the user's responsibility to validate the criteria mentioned in the note as the system doesn't validate it. Select a table before modifying this field.
Schedule	
Calendar	Calendar to use for metric collection. Only the configured calendar options are available. This field is automatically set to **Standard Calendar**. Standard calendar refers to the Gregorian calendar. This field can be modified only if the metric definition for this metric doesn't use the standard calendar.
Frequency	Collection frequency for the metric definition. This field is automatically set based on the frequency of the selected metric definition.
First run date	Date the metric is run the first time.
Due date offset	Number of days after the schedule end date when the metric data task becomes overdue. For example, if the frequency of a metric definition is monthly and if the you enter `15` in this field, then the due date for metric data task will be overdue 15 days after the month ends. This field only appears when the metric definition associated with the metric is of type Manual.
Next run date	Date when the metric going to be executed.
Period date	Date used to specify the start and end dates for the data collection period.
Data Collection Details	
Data owner type	Data owner type, such as User.
Data owner	Name of the user as the data owner.
Approval	

Field	Description
Note: This section appears only when the Metric approval property is set to Simple. For more information see, Components installed with Operational Sustainability Management (formerly ESG Management).	
Approval required	Option to indicate if an approval is required.
Approver type	Type of the approver of the metric definition. The choices are as follows: ○ **User** ○ **User group**
User	Approver user or approver group that is responsible to approve the metric definition. The choices are as follows: ○ **Approver**: Displayed when the User option is selected. ○ **Approver group**: Displayed when the User group option is selected. **Note:** By default, the approver is the user specified in the metric definition, but this can be overridden at the metric level.
Classification	
Group	Area that the metric relates to.
Reporting classification	Tag used to categorise the metric.
Subgroup	Subgroup that the metric relates to.
Confidentiality	
Note: This section only appears when: ○ The *sn_grc.enable_record_confidentiality* property is enabled under GRC properties. ○ The record is in **Draft** state.	
Allowed users	Users who can view the record. **Note:** By default, the logged in user is added to the list of confidential users.
Allowed groups	Groups that can view the record.

4. Click **Save**.

Note: After a new metric is created, the related lists along with the **Details** tab are displayed on the form. You can view the metric data overview in the **Overview** tab. The Metrics overview page displays the metrics data details when you execute a metric along with the duration for which the data is collected.

Result
The metric is saved in the Metrics list.

Create a threshold for a metric

Create thresholds for metrics and metric definitions to monitor performance. Thresholds serve as reference points based on specific criteria. Each threshold can be assigned a unique color and configured with conditions and subsequent actions.

Before you begin
Role required: sn_esg.admin, sn_esg.program_manager, or sn_esg.metrics_manager

Note: Thresholds can only be applied to quantitative metric definitions.

About this task
Configure thresholds to define multiple performance levels, set specific ranges for each level, customize visual indicators, and configure automated actions that trigger when thresholds are breached. The threshold configuration supports both static values and dynamic percentage-based calculations.

Procedure
1. Navigate to **All** > **Operational Sustainability Management** > **Operational Sustainability Workspace** > **Metrics**.
2. Open the quantitative metric definition for which you want to add thresholds.
3. Select the Thresholds related list.
4. Select **New**.
5. On the form, fill in the fields.
   For a description of the field values, see Metric Threshold form fields.
6. Select **Submit**.
   - If the threshold configuration validation is successful, the threshold is saved and becomes active based on the configured settings.
   - If validation errors occur, the system displays error messages indicating the specific field and recommended actions. Review these messages and correct the issues before resubmitting.

   The configured threshold is now active for the metric. When the Enable threshold breach monitoring check box is selected, the system monitors metric values and immediately triggers the specified actions when threshold levels are exceeded. Metric values are displayed with the appropriate color indicators in dashboards and reports.

Copy a threshold

You can copy existing thresholds to create similar threshold configurations for the same metric or metric definition.

Before you begin
Role required: sn_esg.admin, sn_esg.program_manager, or sn_esg.metrics_manager

About this task
Copying a threshold duplicates all threshold parameters including type, color, valid dates, conditions, and actions.

Procedure

1. Navigate to **All** > **Operational Sustainability Management** > **Operational Sustainability Workspace** > **Metrics**.
2. Open the metric that contains the threshold you want to copy.
3. Select **Copy**.

   Review the pre-filled threshold information in the Metric Threshold form and modify the threshold fields as needed. For example, you can change the name, color, valid dates, or actions.

4. Select **Save**.
   - The system validates the copied threshold configuration. If any validation errors occur (such as duplicate colors), you must resolve them before saving.
   - Copied thresholds are created as inactive by default. To activate the copied threshold, select the Active checkbox before saving.

Result
A new threshold is created for the metric with the configuration from the original threshold. You can now modify either threshold independently.

Customize threshold colors

Customize the available threshold colors by enabling inactive colors in the Color dictionary.

Before you begin
Role required: sn_esg.admin, sn_esg.program_manager, or sn_esg.metrics_manager

About this task
The Color dictionary includes multiple color options. By default, Amber, Red, and Green are active. Other colors are available but marked as inactive. Change the inactive status to make these colors available for threshold levels.

Note: The Color dictionary entry is in the GRC: Metrics application scope. If the current application scope is different, change the scope before editing.

Procedure

1. Navigate to **All** > **System Definition** > **Tables**.
2. Search for and select sn_grc_metric_threshold.
3. In the Columns section, select **Color**.
4. Review the colors in the Choices related list.
5. For each color to make available, change the Inactive value from true to false.
6. Save the form and refresh.

Result
The selected colors are now available in the **Color** field when creating thresholds for a metric.

Create a metric unit

Define the units in which the metric scores are displayed. The units can be numbers, percentages, currencies, quantities of time, or any other unit that you define. The commonly used units are provided with the ESG Management application by default.

Before you begin
Role required: sn_esg.metric_manager

Procedure

1. Navigate to **All** > **Operational Sustainability Management** > **Operational Sustainability Workspace** > **Metrics** > **Units**.
2. Click **New**.
3. On the form, fill in the fields.

New unit form

Field	Description
Name	Name of the unit. For example, `Megawatt-hour`.
Format	Format of the unit. For example, `{0} MWh` gives you the number of Megawatt-hours with the abbreviation MWh.
Unit family	Family to which the unit belongs. For example, Gallon can be associated with the Volume unit family.

4. To save the metric unit, click **Save**.

Result
The metric unit is saved in the Units list.

Create a unit family

Create a unit family to group similar units together. For example, the various units of distance such as miles and kilometers can be grouped. Unit families help you to organize units during unit conversion.

Before you begin
Role required: sn_esg.metric_manager

About this task
Creating unit families also supports conversion of units. Sometimes, the unit in which metric data is entered may be different from the reporting unit of the metric definition. In such cases, the units must be converted. For example, the metric data may be entered in US gallons and the reporting unit in the metric definition is Liters. If US gallon and liters belong to the same unit family such as Volume, you can convert the units.

Various formulas are used to convert different units. If the reporting unit of a metric definition belongs to a unit family that has the conversion factor as **Calculated**, then the metric data tasks for that metric must be provided in the same unit as the metric definition. For example, if the reporting unit for temperature in a metric definition is Celsius, and if the conversion factor of temperature is set to **Calculated**, then all the metric data tasks for that metric definition can only be provided in Celsius. In such cases, users can specify the formula that must be used for the conversion. For more information see, Configure the formula builder.

Procedure

1. Navigate to **All** > **Operational Sustainability Management** > **Administration** > **Unit family**.
2. Select **New**.
3. On the form, fill in the fields.

Unit family form

Field	Description
Name	Name of the unit family. For example, `Temperature`.
Conversion factor	Conversion factor that must be applied when converting units from the family. The choices are as follows: ○ **Direct**: Use this option if the conversion of the units in the family can be done directly. For example, you can convert kilometers to miles using direct conversion. ○ **Calculated**: Use this option if the conversion formulas are complex. For example, to convert temperatures in degrees Celsius to Fahrenheit, the formula is °F = °C × (9/5) + 32.

4. Select **Submit**.

Create fiscal calendars

Collect, aggregate, and report data based on your fiscal calendars, which may differ from the standard Gregorian calendar. Global organizations often operate in countries with unique fiscal calendars. By creating fiscal calendars in the ESG Management application, you enable local entities to collect data according to their own schedules.

Before you begin

Role required: sn_grc_metric.admin

Procedure

1. Navigate to **All** > **Operational Sustainability Management** > **Metric Calendar Configurations**.
2. Select **New**.
3. On the form, fill in the fields.

Metric calendar configuration form

Field	Description
Name	Calendar name. For example, `Australia calendar`.
Description	Brief description of the calendar.
Start month	Month the fiscal year begins.

Field	Description
End month	Month the fiscal year ends. This field is automatically set based on the start month. This field cannot be modified.
Year representation	Specify how you want to represent the fiscal year. In some countries, such as India, the fiscal year starts in one calendar year and ends in the next. For instance, the fiscal year in India starts on April 1, 2024, and ends on March 31, 2025. In this field, the choices are as follows: ○ **Start year**: Represents the fiscal year by its starting year. For example, 2024 for the fiscal year starting April 1, 2024. ○ **End Year**: Represents the fiscal year by its ending year. For example, 2025 for the fiscal year ending March 31, 2025.

4. Select **Submit**.

What to do next

Map the source and target calendars. For more information, see Map target and source calendars.

Map target and source calendars

Map target calendars with source calendars to establish the data roll up hierarchy. You can create multiple calendar mappings depending on your requirements.

Before you begin

Role required: sn_grc_metric.admin

Procedure

1. Navigate to **All** > **Operational Sustainability Management** > **Metric Calendar Configurations**.
2. Select the **Map Calendars** related link.
3. On the form, fill in the fields.

Metric calendar configuration mapping form

Field	Description
Target calendar	Calendar to which data will roll up.
Source calendar	Calendar from which data will roll up.

4. Select **Submit**.
5. Navigate back to the Metric calendar configurations page.
   a. Select the calendars you created.
   b. Select **Generate metric calendars**.

Result
The metric calendars with the frequencies annually, semi-annually, and quarterly are generated.

Add entities for fiscal calendars

Identify the entities that will follow the fiscal calendars you have created. This ensures that data collection is consistent, as each entity follows the designated calendar.

Before you begin
Role required: sn_grc_metric.admin

Procedure

1. Navigate to **All** > **Operational Sustainability Management** > **Metric Calendar Configurations**.
2. Open the calendar configuration for which you want to add entities.
3. Select the Entities related list.
   a. Select **Edit**.
   b. Move the required entities from the Collection list to the Entities list
   c. Select **Save**.

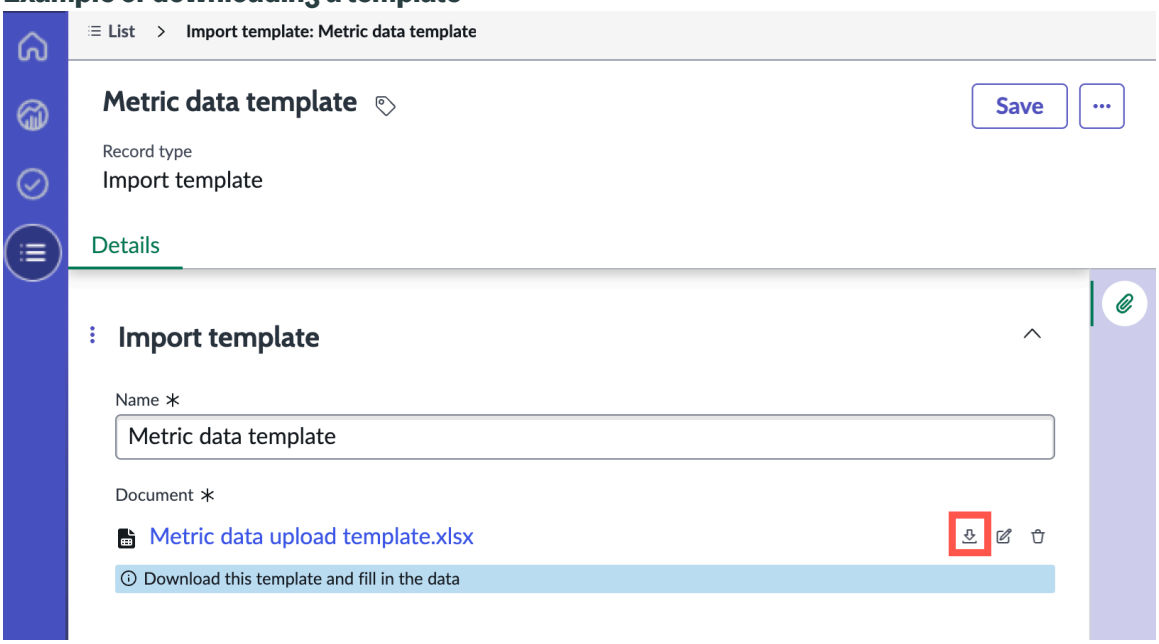
Importing historical metric data

Import historical metric data by using a pre-defined import template with instructions. This process helps with updating and managing metric data within an organization, helping ensure that all data complies with established business rules and maintains integrity throughout the process.

Importing data and task creation

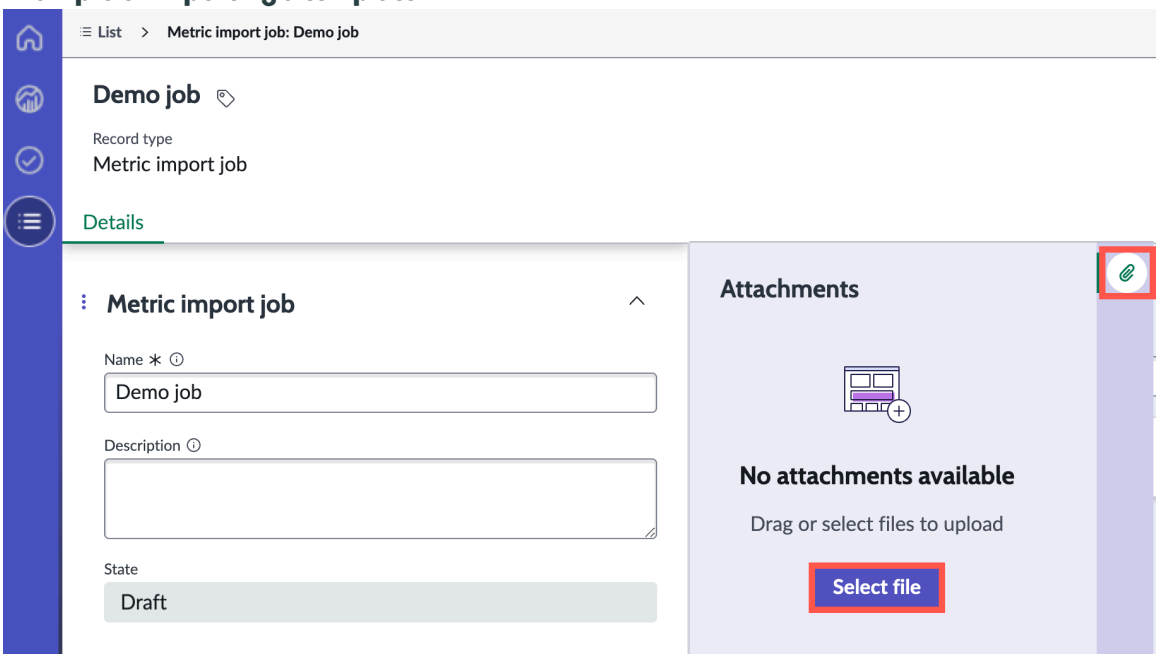
The metric import process involves you downloading a template, filling it out with required data per the instructions, and you importing it back to the system. As shown in the following example, you can download the template by navigating to the list of Metric import templates, selecting the Metric data template, and then selecting the download icon to download the Metric data upload template.xlsx file.

Example of downloading a template



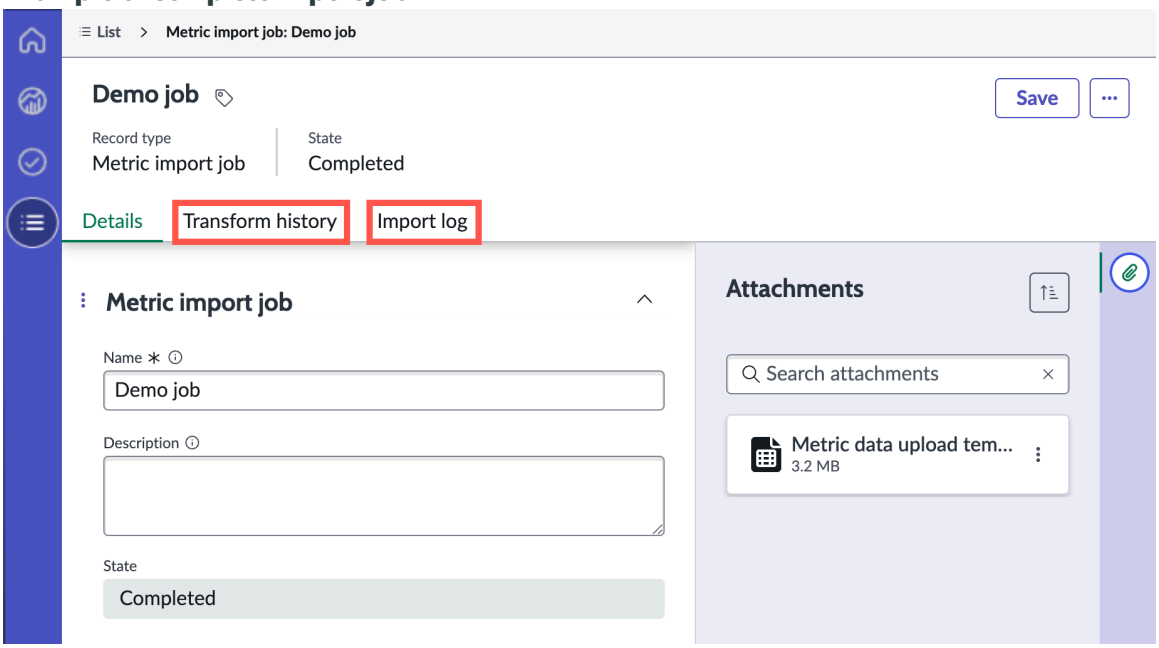
You can import the completed template by navigating to the Metric import jobs list, selecting **New**, providing a name and description for the job, attaching the completed template by selecting the attachment icon , and then selecting the .xlsx file from your file browser. The following example shows an import job and how to attach the completed template.

Example of importing a template



The system then performs validations to check for mandatory fields like metric start date, end date, and state, as well as duplicate records. If the data meets these criteria, it is imported into the metric data table, and corresponding metric data tasks are created if you specified a task as required in the template. You can review import job details such as metrics that were ignored, skipped or updated as well as import log information by navigating to the transform history and import log tabs as shown in the following example.

Example of complete import job



Note: When the due date for metric data tasks are calculated during an import job, non-working days are not included.

To learn more about importing historical data, see:

Download a metric import template

Download and populate a metric import template that you can use for importing historical metric data and tasks. This template includes directions and is formatted specifically for this type of data import.

Before you begin
Role required: sn_esg.metric_manager or esg.program_manager

About this task
The metric import template must be used for importing historical metric data and tasks.

Procedure

1. Navigate to **All** > **Operational Sustainability Management** > **Operational Sustainability Workspace** > **Lists** > **Metric Import templates**.
2. Select the metric data upload template from the list and download the metric data upload template by selecting the download icon  .
3. Fill out the metric data upload template.
   You can view directions for filling out the template by navigating to the **Directions** tab of the template file.

> **Important:** If approval is required for any of the imported metric data tasks, select **pending** for the state and confirm that the Is metric data task required field is set to **true**.

What to do next
Upload the complete metric import template as part of an metric import job. For more information, see Import historical metric data and tasks.

Import historical metric data and tasks

Import historical metric data with or without corresponding metric data tasks.

Before you begin
Download the metric template and follow the instructions to fill it out. You must use this .xlsx template for importing historical metric data. For more information on creating a metric data template, see Download a metric import template.

Role required: sn_esg.metric_manager or esg.program_manager

About this task
Importing historical metric data enables program managers and metric managers to manage and analyze past performance, identify trends, and make informed decisions. This process includes downloading a template, filling it with necessary data, and uploading it back into the system, which then creates metric data tasks.

Procedure

1. Navigate to **All** > **Operational Sustainability Management** > **Operational Sustainability Workspace** > **Lists** > **Metric Import jobs**.
2. Select **New** to create a new metric import job.
3. Fill in the form and then select **Save**.

Create New Metric import job form

Field	Description
Name	Provide a name for the metric data import job.
Description	Provide a brief description of the metric data import job.
State	The state of a job is updated as the metric import job is processed. ○ Draft ○ In progress ○ Completed with errors ○ Completed

4. Attach the completed template file by selecting the attachments icon and selecting the file from your local hard drive.

   Important: The questionnaire template is downloaded in the .xlsx format and after being completed must be uploaded in the same format.

5. Select **Save**.
   The template file has been uploaded and a metric import job has been created.
6. Navigate to the **Transform history** tab and **Import log** tab to review potential errors, the number of metrics processed, ignored, or skipped, error messages, and their levels of severity, and so on.

   a. Correct any errors in the Microsoft Excel spreadsheet.

   b. Attach the updated template file by selecting the attachments icon and selecting the file from your local hard drive.

   c. Select **Re-import** and repeat until all errors are resolved and the import metrics job is completed successfully.
   Select the help icon for additional instructions on re-importing a metric job.

   The metrics are imported and their associated metric data task records are created.

   Note: Metric data tasks are assigned based on the state of the metric data and the approval requirements. If data is provided, the state of the metric data task moves to Work In Progress. You must submit the task for the state to update to Awaiting approval or closed. Approval records are created and assigned according to the metric definition approval. If approval is not required, the task is created in a new state. Additionally, if the metric data is completed, a metadata task is created for audit purposes.

Convert metric data to a different unit

Convert any metric data into a preferred reporting unit.

Before you begin

Role required: sn_esg.program_manager

About this task

The preferred reporting unit for any data is specified in a metric definition. When users enter the data in a metric data task, they may do so in a unit that is different from the unit set in the metric definition. For example, a user may enter data about water usage in liters but the organization needs the report in US gallons. And therefore, the metric definition is also set to gallons. In this case, liters must be converted to US gallons.

Note: In the metric data task, only those units that belong to the same unit family are available for the data. Unit conversion only applies to units that have the unit family conversion factor set to **Direct**.

Procedure

1. Navigate to **All** > **Operational Sustainability Management** > **Administration** > **Unit Conversions**.
2. Select **New**.
3. On the form, fill in the fields.

Unit conversion form

Field	Description
Name	Name of the unit conversion. For example, `Litres to gallons`.
From unit	Unit to convert.
To unit	Unit to convert to.
Unit family	Unit family to which the unit belongs. For example, **Volume**.
Value	Conversion value. For example, the conversion value from liters to gallons is `0.264172`.

4. Select **Submit**.

Using GRC: Metrics to provide data

Using the GRC: Metrics application you can track your business goals, define your key risk indicators (KRIs) and key performance indicators (KPIs), and generate reports for the management to provide insights into the progress.

Update a metric

Update a metric to add goals, metric data, and targets. Associate citations to the metric.

Before you begin

Role required: sn_esg.metric_manager

Procedure

1. Navigate to **All** > **Operational Sustainability Management** > **Operational Sustainability Workspace** > **Metrics**.
2. Select a metric from the list.
3. On the form, update the fields as necessary.

Update metric tabs and related lists

Field	Description
Tabs	
Name	Name for the metric. For example, `Number of incidents- ACME Asia`.
Description	Brief description of the metric.
Metric definition	Metric definition associated with the metric.
Entity	Entity associated with the metric.
Enterprise Owner Type	Enterprise owner type who is responsible for the metric. This field is automatically set to display the enterprise owner type.
Type	Type of the automated metric definition. This field is automatically set.
Active	Option to mark the metric definition as active.
Key metric	Option to mark the metric definition as a key metric.
Enterprise owner	Enterprise owner of the metric definition. This field is automatically set.
Metric Properties	
Direction	Direction of the metric definition. This field is automatically set.
Precision	Precision for the metric definition. This field is automatically set.
Unit	Unit for the metric definition. This field is automatically set.
Nature	Nature of the metric definition. This field is automatically set.
Method	
Method Type	Type of method used to collect the metric data.
Table	Table that is queried for creating the metric definition. This field is automatically set.
Criteria	Conditions for querying the table. This field is automatically set.
Aggregate	Method to aggregate the metric definition. This field is automatically set.
Reference field	Reference field for the metric definition method. This field is automatically set.
Schedule	
Schedule	Collection frequency for the metric definition. This field is automatically set.

Field	Description
First run date	Date for the first run time. This field is automatically set.
Next run date	Date for the next run time.
Data Collection Details	
Data owner type	Data owner type such as User.
Data owner	Name of the user as the data owner.
Approval	
Approval required	Option to be enabled if an approval is requested for the metric.
Metric data tasks tab	Information about the metric data task, such as name, number, assigned to, priority, and state.
Related lists	
Goals	Details of the goals associated with the metric, such as name, state, category, start date, end date, owner, and status. To add a new goal, click **Add**.
Metric data	Details of the metric data such as start date, end date, value, collector metric data, collection frequency, and type. Start date: The start date is the date the data collection begins. End date: The end date is the end of the period date that determines the interval for which the score is calculated. The end date depends on the frequency of the metric definition. The end date is used for tracking the scores. Every score is time-dependent and it has a reference to the interval end date. Collection frequency: The options in the collection frequency field are: ○ **Daily**: Score that gets created for each day. ○ **Weekly**: Score that gets created by the end of the week date (Sunday). Monday is the start of the week and Sunday is the end of the week. ○ **Monthly**: Score that gets created by the end of the month. ○ **Quarterly**: Score that gets created by the end of the quarter. For example, Q1 ends on March 31, Q2 ends on June 30, Q3 ends on September 30, and Q4 ends on December 31 in a year.

Field	Description
	○ **Semi-annually**: Score that gets created by the end of the 6-month period. The end date for the semester is June 30 and December 31 in a year. ○ **Annually**: Score that gets created by the end of the year. The end date for the year is December 31.
Targets	Details of the targets associated with the metric, such as name, state, owner, start date, end date, type, and measure. To add a new target, click **Add**.
Citations	Details of the citations, such as reference, name, authority document, description, and compliance score percentage (%). To add a new citation, click **Add**.

4. To save the metric, click **Save**.
5. To delete the metric definition, click **Delete**.
6. To execute the metric, click **Execute**.
   A metric data score is created if it doesn't exist for the current interval. Re-executing a metric or a metric definition for the current interval only updates the score.
7. To visually explore the 360° relationship view of the metric definition, click **360° view**.

Update a manually created metric

Update a manually created manual metric to add goals, metric data, and targets. Associate citations to the metric.

Before you begin

Role required: sn_esg.metric_manager

Procedure

1. Navigate to **All** > **Operational Sustainability Management** > **Operational Sustainability Workspace** > **Metrics**.
2. Select a manually created metric from the list.
3. On the form, update the fields as necessary.

Update metric tabs and related lists

Field	Description
Tabs	
Name	Name for the metric. For example, `Number of incidents- ACME Asia`.
Description	Brief description of the metric.
Metric definition	Metric definition associated with the metric.
Entity	Entity associated with the metric.

Field	Description
Enterprise Owner Type	Enterprise owner type who is responsible for the metric. This field is automatically set to display the enterprise owner type.
Type	Type of metric definition. This field is automatically set.
Active	Option to mark the metric definition as active. This field is automatically set.
Key metric	Option to mark the metric definition as a key metric. This field is automatically set.
Enterprise owner	Enterprise owner of the metric definition. This field is automatically set.
Metric Properties	
Direction	Direction of the metric definition. This field is automatically set.
Precision	Precision for the metric definition. This field is automatically set.
Unit	Unit for the metric definition. This field is automatically set.
Nature	Nature of the metric definition. This field is automatically set.
Method	
Instructions	Instructions for the data owner. Method of collection for the manual metric definition. This field is automatically set.
Schedule	
Calendar	Calendar to use for metric aggregation. Only the configured calendar options are available for selection. This field is automatically set to **Standard Calendar**. **Note:** Standard calendar refers to the Gregorian calendar.
Frequency	Collection frequency with which the metric is executed. Indicates how often the metric definition should collect the data. The choices are as follows: ○ **Daily** ○ **Weekly** ○ **Monthly** ○ **Quarterly** ○ **Semi-annually** ○ **Annually** This field is automatically set.

Field	Description
First run date	Date for the first run time. This field is automatically set.
Next run date	Date for the next run time.
Period date	Date used to specify the start and end dates for the data collection period.
Due date offset	Number of days after the schedule end date when the metric data task becomes overdue. For example, if the frequency of a metric definition is monthly and if you enter 15 in this field, then the due date for metric data task will be overdue 15 days after the month ends. This field is automatically set.
Data Collection Details	
Data owner type	Data owner type such as User.
Data owner	Name of the user as the data owner.
Approval	
Approval required	Option to be enabled if an approval is requested for the metric.
Metric data tasks tab	Information about the metric data task, such as name, number, assigned to, priority, and state
Classification	
Group	Area that the metric relates to. This field is automatically set.
Subgroup	Tag used to categorise the metric. This field is automatically set.
Reporting classification	Tag under which the metric definition and metric is categorized. For example, **GRI**, **SASB**, or **Steering Committee Review**.
Related lists	
Goals	Details of the goals associated with the metric, such as name, state, category, start date, end date, owner, and status. To add a new goal, select **Add**.
Metric data	Details of the metric data such as start date, end date, value, collector metric data, collection frequency, and type. Start date: The start date is the date that the data collection begins. End date: The end date is the end of the period date that determines the interval for which the score is calculated. The end date depends on the frequency of the metric

Field	Description
	definition. The end date is used for tracking the scores. Every score is time-dependent and it has a reference to the interval end date. Collection frequency: The options in the collection frequency field are: ○ **Daily**: Score that gets created for each day. ○ **Weekly**: Score that gets created by the end of the week date (Sunday). Monday is the start of the week and Sunday is the end of the week. ○ **Monthly**: Score that gets created by the end of the month. ○ **Quarterly**: Score that gets created by the end of the quarter. For example, Q1 ends on March 31, Q2 ends on June 30, Q3 ends on September 30, and Q4 ends on December 31 in a year. ○ **Semi-annually**: Score that is created by the end of the 6-month period. The end date for the semester is June 30 and December 31 in a year. ○ **Annually**: Score that gets created by the end of the year. The end date for the year is December 31.
Targets	Details of the targets associated with the metric, such as name, state, owner, start date, end date, type, and measure. To add a new target, select **Add**.
Citations	Details of the citations, such as reference, name, authority document, description, and compliance score percentage (%). To add a new citation, select **Add**.
Thresholds	Details of the thresholds associated with the metric, such as type, related metric, valid dates, threshold color, and target value. To add a new citation, select **Add**.

4. To save the metric, select **Save**.
5. To delete the metric definition, select **Delete**.
6. To execute the metric, select **Execute**.
   A metric data score is created if it doesn't exist for the current interval. Re-executing a metric or a metric definition for the current interval only updates the score.
7. To visually explore the 360° relationship view of the metric definition, select **360° view**.

Provide data for a metric data task

Use the metric data task to provide data for a manual metric. Metric data helps you analyze your progress toward your goals.

Before you begin

- To enable support for data estimation refer to Set up estimation for manual metric definition.
- Role required: sn_esg.data_owner

Procedure

1. Navigate to **All** > **Operational Sustainability Management** > **Operational Sustainability Workspace** > **Metrics** > **My metric data tasks**.
2. Open the task for which you want to provide the data.
3. Select **Move to In Progress**.
4. On the Metric information form, under the Metric input section, fill in the following fields.

Field	Description
Type of Data	Indicates whether the data provided is actual or estimated.
Estimation method	Estimation value for the data. You can choose from the following options: ○ **Manual**: Enter a custom estimated value manually. ○ **Average**: Calculate the estimated value based on the average of historical data. ○ **Same period as last year**: Use the value from the same period in the previous year as the estimated value. This field appears only when **Estimate** is selected in the **Type of Data** field in the metric form.
Number of past periods	Number of past periods data to be included in the average calculation. This field appears only when **Average** is selected in the **Estimation method** field in the metric form. **Note:** The maximum past period limit varies by frequency, confirm that your selection is within these limits: ○ Daily: Up to 180 days ○ Weekly: Up to 52 weeks ○ Monthly: Up to 36 months ○ Quarterly: Up to 12 quarters ○ Semiannually: Up to 6 semi-annual periods ○ Yearly: Up to 3 years

Field	Description
Same period last year	Specifies the period from the previous year to use as the estimated value. This field appears only when **Same period as last year** is selected in the **Estimation method** field in the metric form.
Metric data	Value for the metric. This field appears only when **Quantitative** is selected in the **Category** field in the metric form. **Note:** When **Estimate** is selected in the **Type of Data** a refresh icon is available on **Metric data** field. Selecting that calculates the estimated metric data value.
Unit	Unit of the data. For example, US gallon. **Note:** You can provide the data in any unit and it gets converted to the reporting unit specified in the metric definition.
Variance (%)	The variation between the current period and the previous period's metric data.
Response	Response for the metric. This field appears only when **Qualitative** is selected in the **Category** field in the metric form.
I certify and acknowledge that the response I have submitted is accurate.	Option to certify data accuracy.
Additional comments (Customer visible)	Additional information for the metric data.

5. Select **Save**.
6. To provide evidence or supporting information, in the Related documents, related list, select **New**.
7. On the Related Document form, fill in the fields.

Related Document form

Field	Description
Name	Provide a name for the supporting information.
Url	Select the lock icon to add a supporting URL.
Metric data task	This field is automatically set to the name of the metric data task for which you're providing information.

8. Select **Submit**.

Provide responses for multiple metrics

Use the metric tasks module to provide responses for multiple metrics in an easy-to-use format.

Before you begin

Role required: sn_esg.data_owner

About this task

As a data owner, you have to provide data or responses for multiple metric data tasks. The data that you provide comes from multiple sources and there can be multiple data owners. In such a scenario, it's hard to maintain the audit trail for data input. The metric tasks module enables you to provide data for multiple metric data tasks. Use the filters such as metric data tasks by entity, metric groups, metric subgroups, start date, end date and approval level to select the metrics for which you want to provide data. You can view the responses that you've entered, submitted, and also if the dates for data or for response submission are overdue. You can only provide metric data responses for tasks that aren't in the Closed or Awaiting approval state.

Procedure

1. Navigate to **All** > **Operational Sustainability Management** > **Operational Sustainability Workspace**.
2. Select the Metric data table icon ( ).
3. Select the filter icon and set the Entity, Metric group, Metric subgroup, Task type, Start date, End date, and Approval level filters to show the tasks for which you want to provide data.

   Only those Groups which have open metric data tasks appear in the filter.
4. Select **Apply.**
5. Double-click the cell for the entity in which you want to provide data.
6. Enter the information needed for your response and select **Save**.
   Perform this step for each cell for which you want to provide data. You can scroll the cells to provide responses for all the tasks.

   Note: You have the option to select a choice or enter HTML depending on how the related metric definition has been set up. These formats are available when the manual metric definition **Category** field is set to **Qualitative**. For more information, see Create a manual metric definition and Manual metric definition fields.
7. Select the tasks for which you want to submit the responses.

Operating system	Keys
If you're a macOS user	Press the Command key and then click the cell to select.
If you're a Windows user	Press the Control key and then click to select the cell in focus.

8. To provide any evidence for the data that you've entered, select the **Attachments and links** tab on the Contextual side panel and add the links and attachments as required.

Operating system	Keys
After selecting the cell, press the Control key and then and then the I key to open the side panel. **Press the Escape key to close the side pan el.**	After selecting the cell, press the Command key and then the I key to open the side panel. Press the Escape key to close the side panel.
If you're a Windows user	

9. Select **Submit**.
   To select all cells for each individual metric definition for submission, select the check box in the corresponding row. To select all cells for submission, select the check box in the header row of the Metric data tasks table.
10. **Optional:** Select the check boxes that you want and then select **Submit**.

Operating system	Keys
If you're a macOS user	(Optional) Press the Tab key to get the focus on to the select all check box. Press the Enter key to select the select all check box. If you don't want to use the select all check box, press the Tab key again to get focus on to the table body. After getting focus on to the body, you can use the arrow keys to navigate between the cells. Press enter to select each check box.
If you're a Windows user	(Optional) Press the Tab key to get the focus on to the select all check box. Press the Enter key to select the select all check box. If you don't want to use the select all check box, press the Tab key again to get focus on to the table body. After getting focus on to the body, you can use the arrow keys to navigate between the cells. Press enter to select each check box.

Review a metric data task

Review a metric data task for a manual or automated metric definition, and then either approve or reject the task based on your review.

Before you begin

Role required: sn_esg.data_owner, sn_esg.program_manager, or sn_esg.metric_manager

About this task

If you have been assigned as an approver as part of a metric definition record, your approval task appears in the approvals tab of a metric data task.

Procedure

1. Navigate to **All** > **Operational Sustainability Management** > **Operational Sustainability Workspace**.
2. Select the Metric data table icon ().
3. Review the metric data tasks and perform one of the following actions.

Choice	Action
Reject	**a.** Select the cell for which you want to reject the data. **b.** Select **Reject** and provide your reason for rejection.
Approve	**a.** Select the cell for which you want to accept the data. **b.** Select **Approve**.

You can approve or reject cells in bulk at the individual metric definition level or for all cells by selecting the check box for each row or the check box in the header row of the Metric data tasks table.

4. **Optional:** Select the check boxes that you want and then select **Reject** or **Approve**.

Create ad hoc metric data tasks

Handle off-cycle requests for up-to-date information on existing metric definitions and metrics by creating ad hoc metric data tasks. These tasks address off-cycle requests and provide the latest information.

Before you begin

Role required: sn_grc_metric.manager

About this task

When you create an ad hoc task, it is automatically assigned to the data owner specified in the metric definition form. It is important to note that for manual metric definitions these ad hoc tasks:

- do not contribute to the aggregated metric definition data.
- are not considered for entity hierarchy rollup.
- are not evaluated for threshold rating, Variance(%)

However, for calculated metric definitions that have the **Calculation level** field set to **Entity**, the ad hoc tasks data contribute to the metric score.

Procedure

1. Navigate to **All** > **Operational Sustainability Management** > **Operational Sustainability Workspace** > **Lists** > **Metrics** > **Manual metric definitions**.
2. Select and open the required metric definition.
3. Open the metric for which you want to create ad hoc tasks.
4. Select **Create ad hoc task**.

5. In the Ad hoc metric data task dialog box, provide the start date, end date, and due date of the task.
6. Select **Submit**.

Override metric data

Modify or override the metric data if it's inaccurate, whether provided by the data owner or automatically collected based on the conditions defined in the metric definition.

Before you begin
Role required: sn_esg.admin

About this task
After a metric data task is closed, the ESG administrator can modify the metric data as needed. The administrator must also provide a valid justification for modifying the data.

Procedure

1. Navigate to **All** > **Operational Sustainability Management** > **Operational Sustainability Workspace** > **List** > **Metrics** > **My metric data tasks**.
2. Open the record that you want to modify.
3. On the Metric information form, under the Metric input section, select the **Override Metric Data** option.
4. In the **Overridden metric data** field, provide a new value.
5. In the **Justification** field, provide a valid justification for overriding the data.
6. In the **Additional comments** field, provide additional comments, if any.
7. Select **Save**.

Result
The metric data task value is overridden and the same value is updated in the metric data.

Override metric data task response

As a metrics administrator, if the response provided for a quantitative or qualitative metric must be modified, you can edit the data and provide a justification for the modification.

Before you begin
Role required: admin

Procedure

1. Navigate to **All** > **Operational Sustainability Management** > **Operational Sustainability Workspace** > **Metrics** > **Metric data tasks**.
2. Open the task for which you want to edit the data.
3. Under the Metric input section, select the **Override Response** option.
4. In the **Overridden response** field, provide the new response.
5. In the **Justification** field, provide a justification for overriding the previous data.
6. In the **Additional comments** field, provide any additional comments that you have.
7. Select **Save**.

Create a grouping for metric definitions

Create a group and a subgroup for similar metric definitions. Creating these groups facilitates easy reporting and tracking. You can set the values for the group and the subgroup through choices.

Before you begin

Role required: sn_esg.admin

About this task

If you have many metric definitions that are similar, then you can create groups and or subgroups for those metric definitions. For example, Scope 1, Scope 2, and Scope 3 are all different types of emissions but they can be grouped together under one group titled Emissions and a subgroup titled Greenhouse gas emissions.

Procedure

1. Navigate to **All** > **Operational Sustainability Management** > **Operational Sustainability Workspace** > **Lists** > **Administration** > **Choices**.
2. Select **New**.
3. On the form, fill in the fields.

GRC Choice table

Field	Description
Set	Area where you want to create the choice. This field is set to **ESG Metrics**. You can modify this field.
Name	Name of the choice. For example, `Emissions`.
Reporting classification	Tag under which the metric definition and metric is categorized. For example, **GRI**, **SASB**, or **Steering Committee Review**.
Choice category	Classification of the choice. Example, groups, subgroups, labels.
Order	Order of the metric definition within the sub-group. By default, the order can be given from 100, 200, and so on as they are added to the group and sub-group.
Parent	Parent choice.

Result

The grouping is ready to be used in the metric definition form under the Classification section.

Create a unique metric definition name

Specify the value formula in the sn_grc_metric_definition in the required record table to create unique metric definition names to import data from an external source such as Watershed spreadsheets.

Before you begin

Role required: sn_grc_metric.admin

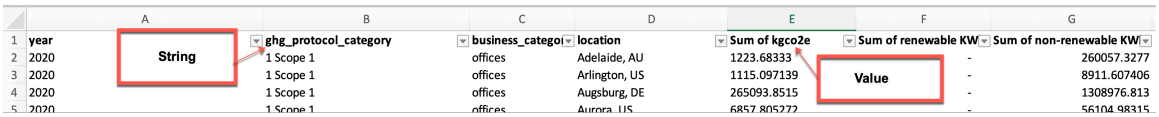
About this task

Any external source that contains data must be imported into the metric definitions and each metric definition must have a unique name. The metric definition name can either use a single column from the spreadsheet or it can be a combination of multiple columns. This procedure uses the Operational Sustainability Integration with Watershed and the sn_grc_metric_definition table as an example. You can specify the formulae in the sn_grc_metric_definition table to create the unique metric definition names. The same procedure can be repeated for the other tables as well. The following tables are installed by default.

- sn_grc_profile
- sn_grc_profile_type
- sn_grc_metric_definition

The following image shows the string and value columns from a sample spreadsheet.

Value formula combinations



Procedure

1. Navigate to **All** > **Metrics** > **Metric Integrations**.
2. Select **Watershed Integration**.
3. In the Data Mappings section, select the data mapping for which you want to specify the formula.
4. On the Required Records form, in the Value Formulas section select **New**.
5. On the form, fill in the fields.

Value Formula form

Field	Description
Source table.	Name of the source table. This field is automatically set to **Watershed Data [sn_esg_watershed_data]**.
Required record	Name of the table being modified. **Note:** In this procedure, the example used is the sn_grc_metric_definition table.
Column	Column containing GHG protocol category.
Format	Format of the name. The choices are as follows ○ **String**: Use this option to specify a text string. ○ **Value**: Use this option to use any value of the column.

Field	Description
	○ **String+Value**: Use this option prepend text to beginning of column value. ○ **Value+String**: Use this option to append text to end of column value. Specify the text in the **String** field.
String	Text to use in the format.
Sequence	Specify the sequence of the formula. Multiple value formula under same required record will be concatenated following the sequence specified.

6. Select **Submit**.

Metric and metric definition overview pages

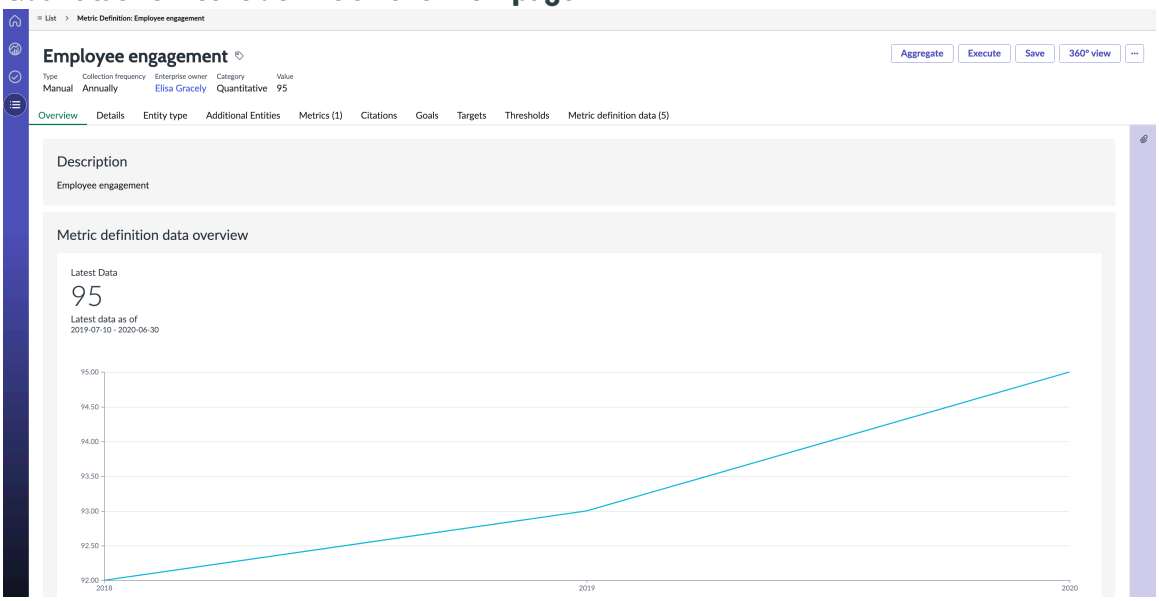
The metric and the metric definition overview pages provide visualization for the metric trends and help you to monitor the tasks and activities that need attention.

The overview pages are available for the following.

- Quantitative automated, manual, calculated metric definition
- Qualitative metrics

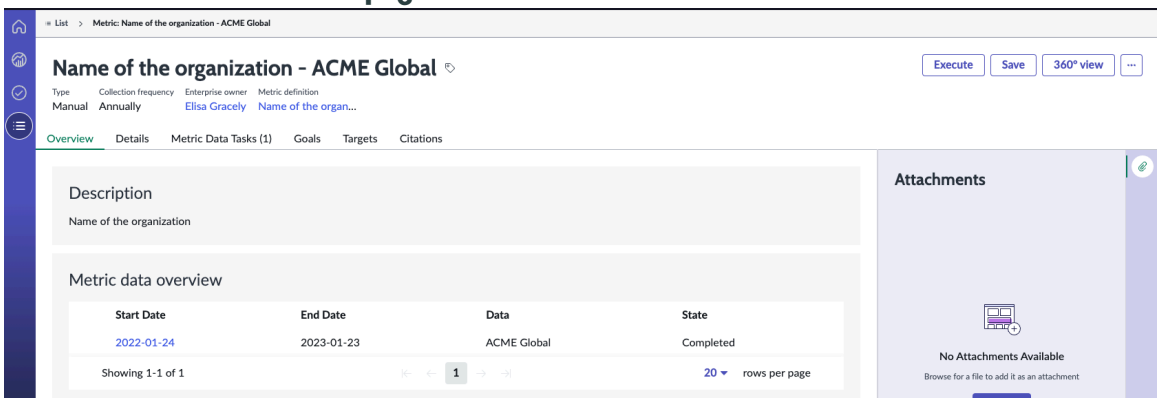
The overview pages display the latest data in the form of lists and charts only when the latest metric data tasks are closed. Charts are displayed for quantitative metric definitions and lists are displayed for qualitative metrics. For qualitative metric definitions, only the description of the metric definition appears on the overview page. The data displayed shows the start date and the end date of the data collection period. The following image shows the overview page for an automated metric definition.

Quantitative metric definition overview page

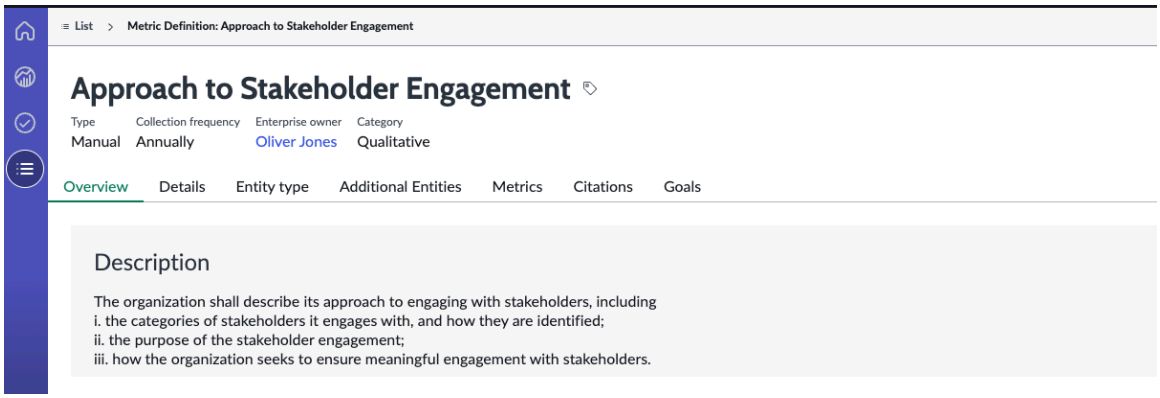


The following image shows the qualitative metric overview page with the data start date and end date.

Qualitative metric overview page



Qualitative metric definition



Reviewing calculation details with formula trees

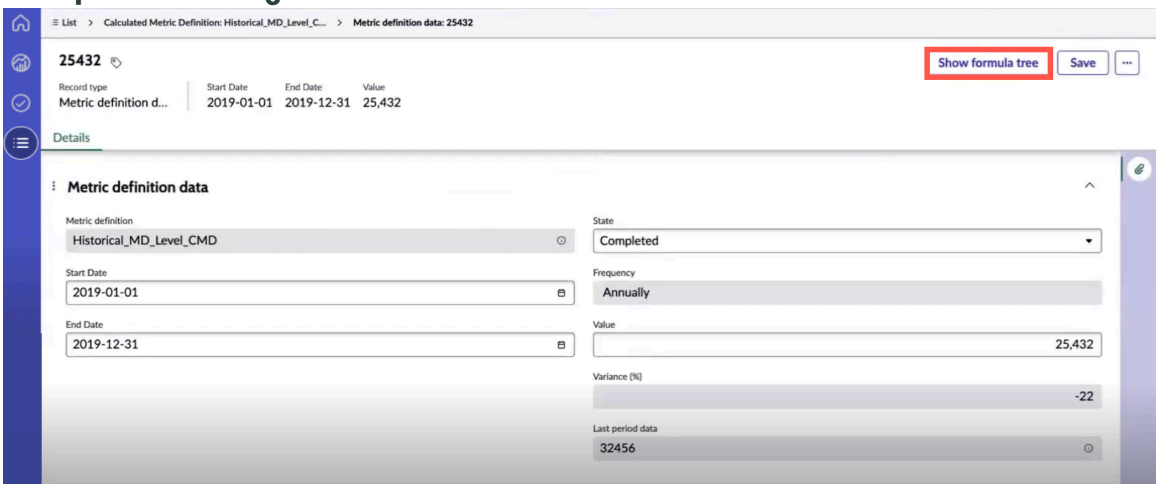
Review calculated metric definitions by viewing a structured and visual representation of the entire calculation chain. By using a formula tree, you can access the calculation details and view how the different metrics and emission factors are interconnected.

The formula tree is a tool that enhances transparency in calculated metric values. Navigate to the calculated metric data record you want and view the formula tree, which shows a detailed breakdown of the calculation. It displays the values of the operands and how they're combined to produce the final result. This feature helps users and auditors understand and verify the accuracy of complex calculations.

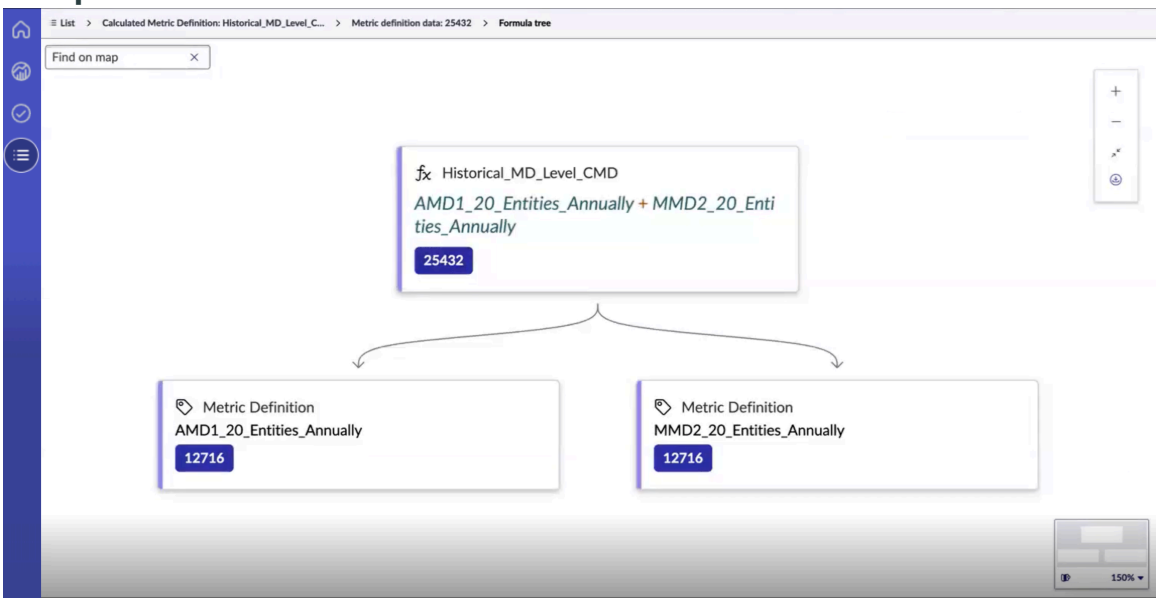
Note: Formula trees are available for the generated Calculated metric data when the **Calculation level** is set to Metric Definition and for the generated metrics when the **Calculation level** is set to Entity. For more information on Formula building, see Formula building in a calculated metric definition.

As shown in the following examples, you can navigate to the calculated metric data record and select **Show formula tree** to view the associated formula tree.

Example of accessing a formula tree



Example of a formula tree



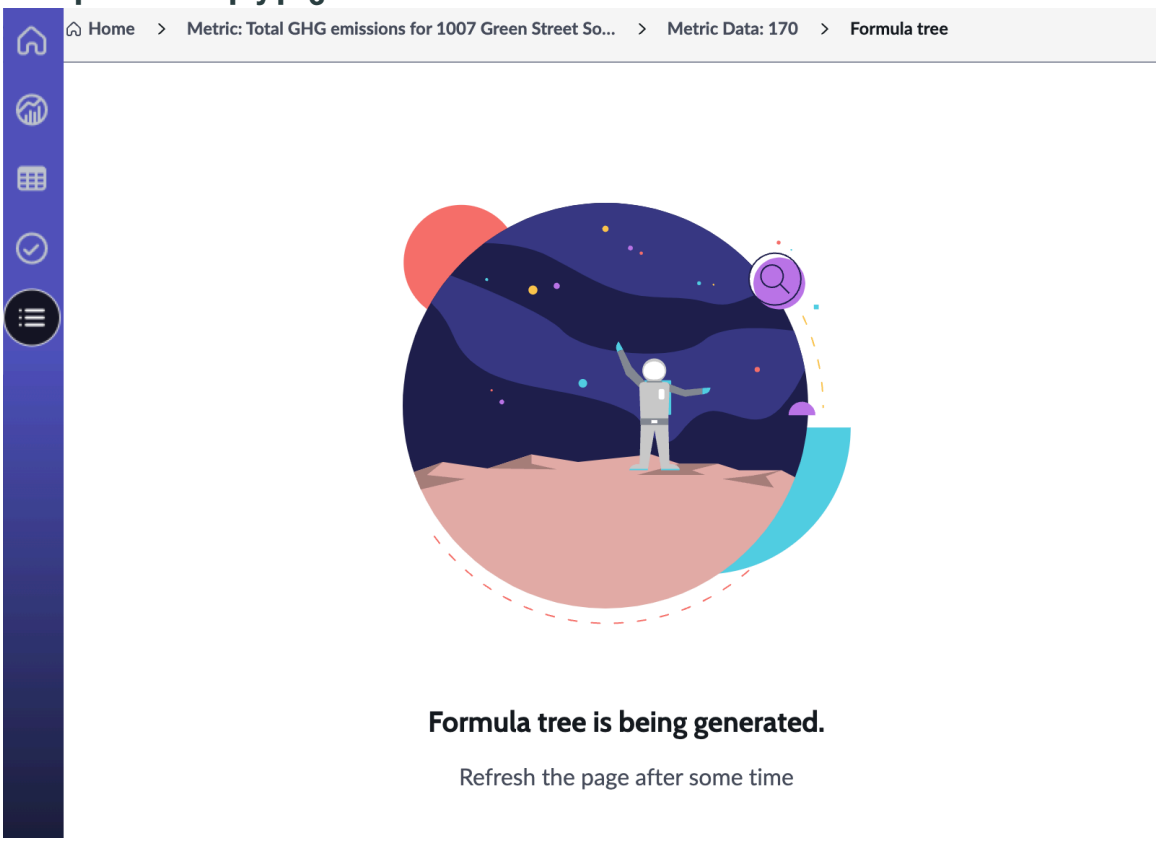
Note: A formula tree displays the values of operands by applying the level of precision provided in the CMD.

For example, if the CMD specifies a precision of 2 decimal places, the formula tree displays all operand values with two decimal places, even if the actual values have more or fewer decimal places.

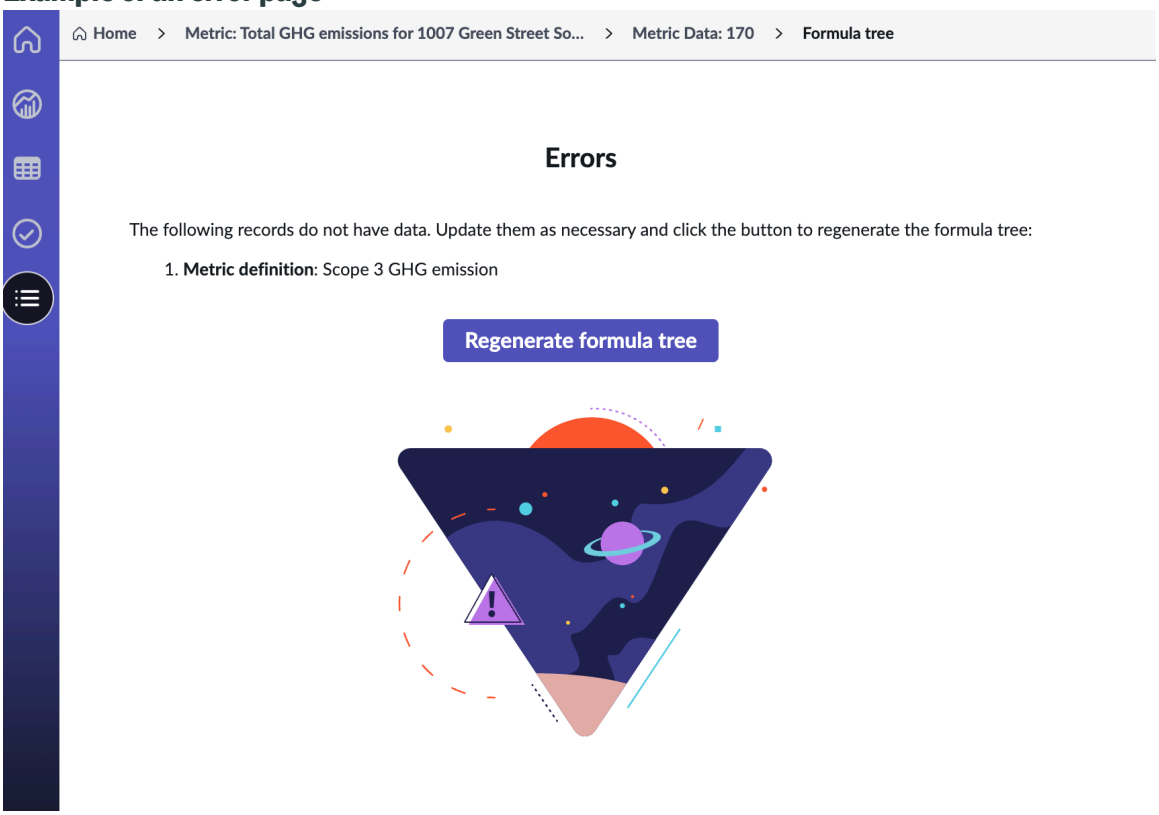
As shown in the following examples, if you're seeing an empty page, it's because the formula tree or formula operands are currently empty and are being updated asynchronously. If you're seeing an error page, it's due to errors in the formula operands that need to be corrected.

Note: If a value is missing for any operand in a CMD formula, you can use the Calculated Metric Definition Settings table to define a default value for that operand. The system will automatically retrieve and apply the specified default value, ensuring the formula executes without interruption. Users can customize these default values or add new records as needed to suit their calculation requirements. For more information, refer to Activate default values for CMD calculations.

Example of an empty page



Example of an error page



To learn more about formula trees, see:

View the calculation breakdown in a formula tree

View a structured and visual representation of the entire calculation chain.

Before you begin

Role required: sn_esg.admin, sn_esg.metric_manager, sn_esg.program_manager, sn_esg.reporting_disclosure_manager

sn_risk.user (for Risk users).

About this task

A formula tree provides transparency by displaying the detailed breakdown of how values are calculated, including all the operands and operations. This is especially helpful for auditing data and debugging.

Procedure

1. Navigate to one of the following locations depending on which application you're using.
   - **All** > **Operational Sustainability Management** > **Operational Sustainability Workspace** > **Metrics** > **Calculated metric definitions**.
   - **All** > **Risk Management** > **Risk Workspace** > **Metrics** > **Calculated metric definitions**.
2. Open the metric definition for which you want to view formula tree data for and select **Calculated Metric Data**.
3. Select the calculated metric data record that you want and then select **Show formula tree**. You can view a visual representation of the entire calculation chain. The formula, associated metric definitions, sub formulas, functions, and so on, are shown.

> **Note:** If you're seeing an empty page, it's because the formula tree or formula operands are currently empty and are being updated asynchronously. If you're seeing an error page, it's due to errors in the formula operands that need to be corrected.

GRC: Metrics reference

Several properties, tables, and roles are installed with the GRC: Metrics application.

Components installed with the GRC: Metrics application

When the ESG Management application is activated, the GRC: Metrics application is automatically installed. The GRC: Metrics application adds several tables, properties, and roles that are listed here.

Roles installed

The following roles are installed with the GRC: Metrics application.

Roles installed with the GRC: Metrics application

Role	Description	Contains
sn_grc_metric.admin	This role is the admin role for the application. This role can do the following:	sn_grc_metric.manager, sn_grc.library_admin

Roles installed with the GRC: Metrics application (continued)

Role	Description	Contains
	• Create, read, write, and delete metric definitions, metrics, and metric units. • Override the results in metric data tasks. • Read metric data. • Create schedule.	
sn_grc_metric.manager	Enterprise owner and approver role for the application. This role can do the following: • Create, read, write, and delete material topics, goals, targets, metric definitions, metrics, citations, and metric units. • Override the results in metric data tasks. • Read metric data, metric data tasks, disclosures, and authority documents. If there's an integration with Project Portfolio Management • Create, read, and write, projects and programs • Delete projects and programs If there's an integration with Integrated Risk Management, this role can do the following: • Create, read, write, and delete control objectives, controls, risk statements, and policies. • Read risks and issues.	sn_grc_metric.user
sn_grc_metric.user	This role is a read-only role. Users with this role can't create, edit, or update any metric definitions or metrics	None
sn_grc_metric.developer	User with this role can edit the script in automated metric definition.	None

Tables installed

The following tables are installed with the GRC: Metrics application.

Tables installed with the GRC: Metrics application

Name	Description
Base Metric Definition (sn_grc_metric_base_definition)	Base table for all metric definitions.
Calculated Metric Definition (sn_grc_metric_composite_definition)	Calculated metric definitions that are used to aggregate data for two or more metric definitions.
Metric Definition (sn_grc_metric_definition)	Metric definitions that are used to define automated and manual metrics.
Metric (sn_grc_metric_metric)	Metric instances that are generated when a metric definition is applied to an entity.
Metric Unit (sn_grc_metric_unit)	Unit for a metric definition or metric.
Parent Data (sn_grc_metric_parent_data)	Parent table for metric data.
Metric definition data (sn_grc_metric_collector_data)	Data for automated and manual metric definitions.
Metric Data (sn_grc_metric_metric_data)	Data for metric instances.
Metric Data Task (sn_grc_metric_data_task)	Task to collect data for manual metrics.
Entity type to Metric Definition (sn_grc_metric_m2m_definition_profile_type)	Association between Entity type and Metric definition.
Entity to Metric Definition	Association between Entity and Metric definition.

Tables installed with the GRC: Metrics application (continued)

Name	Description
(sn_grc_metric_m2m_definition_profile)	
Metric to Calculated Metric Definition (sn_grc_metric_m2m_metric_composite_defnition)	Association between Metric and Calculated Metric definition.
Child Metric Definition (sn_grc_metric_m2m_metric_definition)	Association between Metric and Metric definition.
Control objective to Metric Definition (sn_grc_metric_m2m_definition_control_objective)	Association between Control objective and Metric definition.
Control to Metric Definition (sn_grc_metric_m2m_definition_control)	Association between a control and a metric definition
Unit family (sn_grc_metric_unit_family)	A unit family to group similar units together.
Unit conversion (sn_grc_metric_unit_conversion)	Convert any metric data into a preferred reporting unit.
Metric to Calculated Metric Definition (sn_grc_metric_m2m_metric_composite_definition)	Association between a metric and calculated metric definition.
Metric data process queue (sn_grc_metric_data_process_queue)	Indicates the metric definitions that are in the queue for refreshing the data for calculated metric definitions or updating the entity hierarchical data for all the types of metric definitions.
Metric data by entity (sn_grc_metric_data_by_entity)	Includes data for entities in metric definition and aggregated data for its parent entities defined in the entity hierarchy.
Time dimension (sn_grc_metric_time_dimension)	Includes date, week, quarter, month, semi_annual, year for each day in the year.
Metric import job (sn_grc_metric_import_job)	Table that holds the details of import jobs for metrics.
Metric data import	Staging table that stores the records parsed from input data file.

Tables installed with the GRC: Metrics application (continued)

Name	Description
sn_grc_metric_data_import	
Metric import log sn_grc_metric_st_import_log	Remote table that has data for showing import logs for import jobs.
Metric transform history sn_grc_metric_st_transform_history	Remote table that has data of transaction history for import jobs.
Metric import template sn_grc_metric_import_template	Table that stores the import templates used for preparing input data file for import job.

Scheduled jobs

The scheduled jobs installed with the GRC: Metrics application run automatically at a specific time or schedule. Scheduled jobs can be set up to perform a wide variety of tasks such as running reports or data exports on a regular schedule.

Scheduled jobs installed with GRC: Metrics

Name	Description
Aggregate metric definitions	This job is executed every 30 minutes. It pulls all types of metric definitions data which are active and have the state as **Pending**. It updates the "state" and "value" for each metric definitions data based on the aggregation of its corresponding metric data for that period.
CMD validity check	This job is executed once everyday at 12AM. For Each calculated metric definition, it updates the "status" to valid/invalid and the "notes" based on its duplicate child metric definitions and child metrics.
Execute calculated metric definitions	This job is executed for each calculated metric definition for both the entity level as well as the metric data definition level and updates with the calculated value.
Execute metrics	This job is executed daily once at 4:30PM. This executes for each metric definition and its metrics that create metric data and the metric data task if it does not exists for that period.
Generate metric data by entity	This job runs daily to do entity hierarchy rollup for all the metric definitions.
Generate time dimensions	This job runs on first day of every year and creates time dimensions for that year.

Properties installed

Properties installed with GRC: Metrics

Name	Description	Default value
sn_grc_metric.metric_data_spec_schedule	Specifies the schedule to be used for due date calculation	08fcd0830a0a0b2600079f56b1adb9ae
sn_grc_metric.all_words	Is used to replace all comma separated defined string in value to 'All' while importing metric data using Metric Integration.	(blank), blank, na, all, empty, (empty)
com.glide.event_manager.grc_metric_queue.even_load_distribution.enabled	Is used to distribute the events in the 'grc_metric_queue' queue equally between two worker threads.	true
com.glide.event_manager.grc_metric_queue.claim_limit	Defines the maximum number of events that one worker thread can claim from the event queue.	500

Metric Threshold form fields

Describes the fields in the Metric Threshold form.

Metric Threshold form

Field	Description
Name	Name for the threshold.
Threshold type	Type of threshold. The available options are: • Static: A fixed value used as a limit for tracking a metric. • Dynamic: Percentage-based thresholds where variance is calculated based on previous period data For more information, see Thresholds for metrics
Color	Color that represents this threshold level. The available color list can be customized, and each threshold level must have a unique color. For information on how to customize colors, see Customize threshold colors.
Valid from	Date from which the threshold configuration is valid.

Metric Threshold form (continued)

Field	Description
Valid until	Date until the threshold configuration is valid.
Active	Indicates whether the threshold is active.
Enable threshold breach monitoring	Indicates whether the system prompts for justification when a threshold is breached.
Condition	Conditions that determine when the threshold applies.
Actions	Actions to execute when the threshold condition is satisfied. By default, Send email is available. Additional actions can be created using decision tables.

Using Operational Sustainability Management (formerly Environmental, Social, and Governance)

By using the ESG Management application, you can import citations from various frameworks and create disclosures.

Using the ESG Management application, you can perform the following tasks:

- Set up the ESG program with all the material topics, goals and targets, activities and emission factors.
- Define metrics to start collecting data, both automatically and manually, for the entire ESG program across the enterprise.
- Create disclosures for internal and external stakeholders.
- Use content packs such as Global Reporting Initiative (GRI) Content Accelerator for Operational Sustainability or Sustainability Accounting Standards Board (SASB) for ESG frameworks.

Disclosures in Operational Sustainability Management (formerly ESG Management)

An Operational Sustainability Management disclosure refers to the practice of companies and organizations providing information and reports on their operational sustainability performance. These disclosures are designed to offer insights into how a company manages and addresses various sustainability-related issues. Users with the sn_esg.reporting_disclosure_manager role are responsible to manage the disclosure reports.

Disclosure requirements

Disclosure requirements refer to the specific expectations or obligations an organization must meet when preparing operational sustainability reports. These requirements ensure that the organization transparently communicates its sustainability performance, risks, and impacts. They are prerequisites for creating disclosures and are often defined by external regulatory bodies or frameworks. In your context, these are surfaced in the Operational Sustainability Workspace as a separate entity to guide what needs to be reported. There are two types of disclosure requirements:

Authority document

An Authority Document is a regulatory framework or standard that outlines what an organization should report in its operational sustainability disclosures. It acts as a reference point for compliance and reporting. Examples include: GRI (Global Reporting Initiative), SASB (Sustainability Accounting Standards Board), and CSRD (Corporate Sustainability Reporting Directive).

Citations

Citations are the individual reporting requirements or metrics defined within an authority document. They represent the specific items an organization must disclose. Each authority document can have multiple citations, forming a one-to-many relationship. These citations are what the organization responds to in its operational sustainability report, often with quantitative or qualitative data. For example, from GRI: “Energy consumption from renewable sources” and from SASB: “Total energy consumed (TCSI 220)”.

Importance of Operational Sustainability Management disclosures

Operational Sustainability Management disclosures are important for several reasons.

- Transparency and accountability: Operational sustainability disclosures enhance transparency, allowing stakeholders such as investors, customers, employees, and the public to understand a company's performance in key sustainability areas. This transparency fosters accountability and trust.
- Risk management: Companies that disclose operational sustainability information can better identify and manage potential risks associated with operational sustainability factors. This is crucial for long-term sustainability and resilience.
- Investor decision-making: Investors are increasingly considering operational sustainability factors in their decision-making processes. Operational Sustainability Management disclosures provide investors with information to assess a company's sustainability, ethical practices, and long-term viability.
- Corporate reputation: Positive operational sustainability performance can enhance a company's reputation and brand value. Conversely, poor operational sustainability practices can lead to reputational damage, affecting customer and investor confidence.
- Regulatory compliance: In some regions, there are regulatory requirements for companies to disclose operational sustainability information. Compliance with these regulations is essential to avoid legal and financial consequences.
- Stakeholder engagement: Operational sustainability disclosures facilitate communication with various stakeholders by demonstrating a company's commitment to responsible business practices. Engaging with stakeholders on sustainability issues can lead to improved relationships and collaboration.

Narrative disclosures

Starting with version 18.0.3, all new users of ESG Management have access to only narrative disclosures. Narrative disclosures refer to disclosures that are created using the Microsoft 365 for ServiceNow Reporting add in. When you create a narrative disclosure, you have the option to store the disclosure either on Microsoft SharePoint or on your local system. Microsoft SharePoint integration in narrative disclosures is available for ESG Management version 18.0.3 and the Yokohama release. The document that is generated when you create a narrative disclosure can be opened using Microsoft Word and the data points that are configured can be inserted in the document using the ServiceNow Reporting add-in. If there is any change in the data that is inserted, an email is automatically sent to the owners of the disclosure data notifying them that the data has changed and that they must refresh the Microsoft Word document.

In a narrative disclosure, multiple collaborators can contribute to create the disclosure. You can also define templates for each type of disclosure report. Refer to Types of disclosure reports to understand each report type. Each disclosure can be approved by one or more approvers.

When generating a disclosure, it is important to note that the automatically generated document is considered the primary document. Additionally, you have the option to attach secondary documents as part of the disclosure process.

To create narrative disclosures on remote storage, you must install and activate the sn_docs_onedrive plugin.

For steps to integrate the ServiceNow® instance and Microsoft OneDrive, refer to the following articles.

- Setup Microsoft OneDrive for Document Services
- Connecting to Microsoft Sharepoint [KB1646310] article in the Now Support Knowledge Base.

You can download the disclosures in an Excel format from the overview tab in the Operational Sustainability Workspace.

Additional information about disclosures

The following list provides detailed information about disclosures.

Types of disclosure reports

The ESG Management application provides the multiple types of disclosures reports and each type is used for a specific purpose.

The ESG Management application supports the following types of disclosures reports.

- **Annual report**: An annual report is a comprehensive document that companies publish at the end of each fiscal year to communicate their financial performance and overall business activities to shareholders and other stakeholders. It typically includes financial statements, management discussions and analysis, corporate governance information, and may also touch upon sustainability matters.
- **ESG report**: An ESG report, also known as a sustainability report or corporate social responsibility (CSR) report, focuses specifically on a company's environmental, social, and governance performance. It provides detailed information on the company's efforts, initiatives, and performance related to sustainability, ethical practices, and social responsibility. ESG reports are increasingly important for companies looking to communicate their commitment to responsible business practices.
- **Regulatory and framework**: Companies are often required to disclose specific information in accordance with regulatory requirements or established frameworks. Regulatory disclosures are mandated by government authorities and may include financial reporting, environmental impact assessments, and other relevant information. Framework disclosures refer to reporting standards or guidelines set by organizations or industry groups, such as the Global Reporting Initiative (GRI) or the Sustainability Accounting Standards Board (SASB), which provide a structured framework for reporting on sustainability matters.
- **Request for information**: A request for information is a formalized process where a company seeks detailed information from its suppliers or partners. In the context of operational sustainability, an RFI may include questions about the supplier's sustainability practices, environmental impact, labor standards, and other sustainability-related factors. This helps the company assess the operational sustainability performance of its supply chain and make informed decisions about its business partners.

- **Rating and indices**: Ratings and indices disclosures involve a company providing information to external organizations that assess and rank companies based on their operational sustainability performance. Companies may disclose data and details to entities that compile sustainability ratings, indices, or rankings. These assessments are often used by investors, stakeholders, and customers to make decisions based on a company's sustainability standing.
- **Supplier questionnaire**: A supplier questionnaire is a document or set of questions that a company uses to gather information from its suppliers regarding various aspects of their business, including operational sustainability related practices. The questionnaire may cover topics such as environmental impact, social responsibility, labor practices, and governance. Companies use this information to evaluate the operational sustainability performance of their supply chain and make informed procurement decisions aligned with sustainability goals.
- **Others**: Any other type of disclosure.

Approval workflow of a disclosure

If a narrative disclosure specifies a single approver or multiple approvers during its creation, it is mandatory for those designated approvers to grant approval before the disclosure can transition to the next state.

When creating a disclosure, you have the choice to specify one or multiple approvers. If multiple approvers are designated, all the approvers must give their approval for the disclosure to transition to the **Completed** state. In the event that any approver rejects the disclosure, it moves back to the **Work in Progress** state, requiring resubmission to the approvers for approval.

Create a disclosure template

Create your own unique Microsoft Word disclosure templates tailored to different types of disclosures. Utilize these templates that you create when you generate specific disclosures. The templates help to streamline the disclosure process by implementing customized templates for efficiency and consistency.

Before you begin

Role required: admin

Procedure

1. Navigate to **All** > **Operational Sustainability Management** > **Administration** > **Disclosure Templates**.
2. Select **New**.
3. On the form, fill in the fields.

Disclosure template form

Field	Description
Disclosure type	Type of disclosure. The choices are as follows: ○ **Annual report** ○ **ESG report** ○ **Regulatory and framework** ○ **Request for information** ○ **Ratings and indices**

Field	Description
	○ **Supplier questionnaire** ○ **Others**
Template document	Document to add. **Note:** The file extension must be .docx.

4. Select **Click to add...**.
5. Select **Choose file**.
   a. Select a file of your choice from your local system.
   b. Select **Open**.
   c. Select **OK**.

Note: Ensure that the size of the file does not exceed 10 MB and only one template for each disclosure type is defined.

Create a narrative disclosure on remote storage

Create an ESG Management narrative disclosure for your organization and store it on remote storage such as Microsoft SharePoint. Disclosures can be of several types such as ESG report, annual report, and so on.

Before you begin

Ensure that you follow the procedure to integrate the ServiceNow® instance and Microsoft OneDrive. Refer to Setup Microsoft OneDrive for Document Services and Connecting to Microsoft Sharepoint [KB1646310] article in the Now Support Knowledge Base.

Role required: sn_esg.reporting_disclosure_manager or sn_esg.program_manager

About this task

When you create a disclosure, you can specify if you want to save the disclosure on your local system or on some remote storage such as Microsoft SharePoint. The disclosure that is created serves as the primary document. This procedure provides the instructions for creating a narrative disclosure on remote storage.

Note: After you create a disclosure, you must not use Ctrl+A and delete to delete the content in the Disclosure document. If this is done, the metrics associated with the document would not be deleted and will be tracked. Ensure that the custom properties Document ID and Disclosure Number are not updated or deleted after the disclosure document is created.

Procedure

1. Navigate to **All** > **Operational Sustainability Management** > **Operational Sustainability Workspace** > **Lists** > **Disclosures** > **Narrative disclosures**.
2. Select **New**.
3. On the form, fill in the fields.

New disclosure form

Field	Description
Number	Identification number for the disclosure. This field is automatically set.
State	State of the disclosure. This field is automatically set to **Draft**.
Name	Name of the disclosure.
Description	Description of the disclosure.
Type	Type of disclosure. The choices are as follows: ○ **Annual report** ○ **ESG report** ○ **Regulatory and framework** ○ **Request for information** ○ **Ratings and indices** ○ **Supplier questionnaire** ○ **Others** **Note:** If a template is available, the disclosure document is created based on the template. Otherwise a blank document is created.
Owner	User responsible to move the disclosure to different states and perform actions such as synchronizing the disclosure. **Note:** Only users with the sn_esg.reporting_disclosure_manager role can be selected in this field.
Upload to remote storage	Option to decide if the disclosure must be stored on remote storage such Microsoft SharePoint. If this option is selected, the Remote storage section appears on the form.
Data classification	Classification of the disclosure information. The choices are as follows: ○ **Public**: Determines if the disclosure will be made public. ○ **Private**: Determines if the disclosure must remain private.
Approvers	Users who must approve the disclosure. **Note:** Only users with the sn_esg.reporting_disclosure_manager role can be selected in this field.
Remote storage	
Storage type	Location of where the disclosure must be stored. The available option is **Sharepoint**. If this option is selected, a blank document is created.
Document path	Path on Microsoft SharePoint in the user's home folder. This field appears only when the **Upload to remote storage** option is selected.
Collaborators	Users who contribute to the disclosure document. This field appears only when the **Upload to remote storage** option is selected.

Field	Description
	Note: Only users with the sn_esg.reporting_disclosure_manager role can be selected in this field.

4. To save the disclosure, select **Save**.
   Ensure that the custom properties, Document ID and Disclosure Number of the disclosure documents for a disclosure record are not updated or deleted.
5. To open and edit the document that is created, **Open document**.
   To insert data points in the document, open the add-in in the Word document. For details, refer to Import data in to a Microsoft Word disclosure report. If the link does not open the disclosure, see the Troubleshooting checklist for narrative disclosures [KB1702819] article in the Now Support Knowledge Base.
6. Close the document before syncing data.
   Before you perform the next step, wait for one minute for the data to reflect in the tracking table.
7. Select **Sync disclosure data** to synchronize any modifications made to the disclosure document, ensuring that the changes are reflected on the Overview page under Disclosure summary.
   The **Sync disclosure data** button is only available if the **Storage type** field is set to **Sharepoint**.
8. To move the disclosure to the next state, select **Move to Work in Progress**.
9. To request approval from the necessary approvers, select **Request Approval**.

Create a narrative disclosure on local system

Create an ESG Management narrative disclosure for your organization and store it on your local system. After you create a disclosure, you can download the document, edit it, add metrics to it, and upload it back into the ESG Management instance.

Before you begin

Role required: sn_esg.reporting_disclosure_manager or sn_esg.admin

About this task

When you create a disclosure, you can specify if you want to save the disclosure on your local system or on some remote storage such as Microsoft OneDrive. The disclosure that is created serves as the primary document. This procedure provides the instructions for creating a narrative disclosure on local storage.

Note: After you create a disclosure, you must not use Ctrl+A and delete to delete the content in the Disclosure document. If this is done, the metrics associated with the document would not be deleted and will be tracked. Ensure that the custom properties Document ID and Disclosure Number are not updated or deleted after the disclosure document is created.

Procedure

1. Navigate to **All** > **Operational Sustainability Management** > **Operational Sustainability Workspace** > **Lists** > **Disclosures** > **Narrative disclosures**.
2. Select **New**.
3. On the form, fill in the fields.

New disclosure form

Field	Description
Number	Identification number for the disclosure. This field is automatically set.
State	State of the disclosure. This field is automatically set to **Draft**.
Name	Name of the disclosure.
Description	Description of the disclosure.
Type	Type of disclosure. The choices are as follows: ○ **Annual report** ○ **ESG report** ○ **Regulatory and framework** ○ **Request for information** ○ **Ratings and indices** ○ **Supplier questionnaire** ○ **Others**
Owner	Assignee of the disclosure.
Upload to remote storage	Option to decide if the disclosure must be stored on remote storage such Microsoft OneDrive. If this option is selected, the Remote storage section appears on the form. For this procedure, do not select this option.
Data classification	Classification of the disclosure information. The choices are as follows: ○ **Public**: Determines if the disclosure will be made public. ○ **Private**: Determines if the disclosure must remain private.
Approvers	Users who must approve the disclosure.

4. To save the disclosure, click **Save**.
   Before you perform the next step, wait for one minute for the data to reflect in the tracking table. Ensure that the custom properties, Document ID and Disclosure Number of the disclosure documents for a disclosure record are not updated or deleted.
5. To modify and upload the document that is created, refer to Upload a disclosure document.
6. To move the disclosure to the next state, select **Move to Work in Progress**.
7. To request approval from the necessary approvers, select **Request Approval**.

Upload a disclosure document

Upload locally created disclosures in the ESG Management application instance.

Before you begin

Role required: sn_esg.admin or the owner of the disclosure

Procedure

1. Navigate to **All** > **Operational Sustainability Management** > **Operational Sustainability Workspace** > **Lists** > **Disclosures** > **Narrative disclosures**.
2. Open the locally created disclosure.

3. Select **Upload disclosure document**.
4. Open the document and copy the unique document ID by selecting the copy icon.
   a. In the **Document ID** field, provide the unique ID by opening the document and copying the ID.
   b. Select **Save**.
5. Select the download icon to download the document.
6. Delete the document already present.
7. Make the necessary edits to the document.
8. To upload the new document, select **Attach file** and browse for the document to upload.
9. Select **Save**.

Result

- The disclosure document is synced. The data takes some time to sync.
- The corresponding claim records are synced and created in the disclosure.

Add disclosure documents

Add secondary related or supporting documents to any disclosure you create. Supporting documents may include sustainability reports, corporate governance documents, third-party certifications, and relevant policies such as those on ethics and supply chain practices. These documents provide additional context and validation for environmental, social, and governance disclosures.

Before you begin

Role required: sn_esg.admin or the owner of the disclosure

About this task

When you create a disclosure, that disclosure is the primary document. While you can add secondary documents, you cannot delete the primary document. Every time a document is updated, only the latest version of the document is stored in the instance.

Procedure

1. Navigate to **All** > **Operational Sustainability Management** > **Operational Sustainability Workspace** > **Lists** > **Disclosures** > **Narrative disclosures**.
2. Open the disclosure for which you want to add documents.
3. Select the Documents related list.
4. Select **Add**.
5. On the form, fill in the fields.

Disclosure documents form

Field	Description
Name	Name of the document.
Type	Type of document. This field is automatically set to **Secondary** because the primary document is always the blank document for the disclosure that is automatically created.

Field	Description
URL	URL of the document if the document is hosted elsewhere.
Document	Supporting files to attach.

6. Select **Save**.
7. To view the document details, select the document and on the Attachments side panel, the details are displayed.

Add metrics to a disclosure

Add any metrics to the disclosure that would help to contribute to the disclosure data.

Before you begin

Role required: sn_esg.admin or the owner of the disclosure

About this task

After you manually add metrics to the disclosure, you can also delete those metrics if they no longer contribute to the disclosure or if you add them by mistake. However, you cannot delete a metric that is added from the Microsoft 365 for ServiceNow Reporting application.

Procedure

1. Navigate to **All** > **Operational Sustainability Management** > **Operational Sustainability Workspace** > **Lists** > **Disclosures** > **Narrative disclosures**.
2. Open the disclosure for which you want to add related metrics.
3. Select the Related metrics related list.
4. Select **Add**.
5. Select the metrics to add.
6. Select **Add**.
7. Select **Save**.

Create a authority document using Operational Sustainability Workspace

The authority document is a regulatory framework or standard issued by a recognized organization or governing body that outlines the reporting obligations for operational sustainability disclosures.

Before you begin

Role required: sn_esg.program_manager

Procedure

1. Navigate to **All** > **Operational Sustainability Management** > **Operational Sustainability Workspace** > **Lists** > **Disclosure requirements**.
2. Select **Authority document** and select **New**.
3. On the form, fill in the fields.

Create New Authority document form

Field	Description
Number	Read-only field that is automatically populated with a unique identification number.
Name	Name of the document.
Source	A non-editable field with the source of the policy. For example, if the statement is from the UCF import, the source is UCF.
Source ID	The unique identification number used by the source to catalog this authority document.
Category	Category for this authority document.
Common name	Abbreviated version of the **Name** field.
Type	The document type: ○ Audit Guideline ○ Best Practice Guideline ○ Bill or Act ○ Contractual Obligation ○ International or National Standard ○ Not Set ○ Organizational Directive ○ Regulation of Statute ○ Safe Harbor ○ Self-Regulatory Body Requirement ○ Vendor Documentation
Version	The unique version number used by the source to identify this authority document.
Active	The Active option in a authority document indicates whether the authority document is active or inactive. It is set to Active by default.
Description	More information about the authority document.
Url	The URL of the stored authority document.
Schedule	
Valid From	The date and time for which the policy becomes valid.
Valid To	The date and time for which the policy is no longer valid.
Settings	
Functional domain	Functional domain for the authority document, for example, ESG.

4. Select **Save**.

Result

The authority document is created, the Overview page opens, displaying its description along with the related lists for easy reference and further configuration. The following related lists are available:

- Details
- Citations
- Content reference

Create a citation using Operational Sustainability Workspace

The citations are the individual reporting requirements or metrics defined within an authority document. They specify the exact data points or qualitative information an organization must disclose.

Before you begin

Role required: sn_esg.program_manager

Procedure

1. Navigate to **All** > **Operational Sustainability Management** > **Operational Sustainability Workspace** > **Lists** > **Disclosure requirements**.
2. Select **Citations** and select **New**.
   You can also open citation by navigating to a authority document and select New in the Citations related list.
3. On the form, fill in the fields.

Create New citation form

Field	Description
Name	User-defined name that identifies this citation.
Source	Source of the policy. For example, if the statement is from a third-party provider, indicate which one.
Source ID	Unique identification number used by the source to catalog this authority document.
Type	Type of citation created. Optional field not used for any processing. Use the value in this field in reports or to query for records of a specific type. ○ Core Topic ○ Process ○ Control Objective ○ Control ○ Supporting information
Reference	Content reference.
Parent	References the parent content.
Authority document	Name of the parent authority document for this citation. When you create citations from the authority document form, the system completes this field automatically.

Field	Description
Active	Option that indicates if a policy is active. A policy is marked active if it is not in the **Draft** or **Retired** state. To deactivate a citation, clear the check box marked **Active**. It is set to Active by default.
Description	Description of the citation.
Reporting	
Reporting requirement	Guidelines about the reporting requirements provided by the reporting organization.
Supplemental guidance	Additional guidance about the citation.

4. Select **Save**.

Result
The citation is created, the Overview page opens, displaying its description along with the related lists for easy reference and further configuration. The following related lists are available:

- Details
- Citations
- Content references
- Goals
- Metric definitions
- Metrics

Claims for reporting

Claims for reporting are narrative statements or data points that organizations wish to document and track for potential future use in disclosures.

Using claims

Claims for reporting allows organizations to create, manage, and track narrative statements (claims) used in ESG Management reporting and disclosures. A claim could be any assertion a company makes about its achievements, commitments, events, or activities. For example, a statement like “25 employees from ACME Inc. attended the UN conference on sustainability in New York on January 21, 2026” would constitute a claim. These claims can be used across multiple reports and help provide credibility and specificity to disclosures by clearly detailing actions or accomplishments. It serves as a centralized repository for narratives that can be reused in annual reports or sustainability disclosures.

Benefits of claims for reporting

Claims for reporting in ESG Management offers numerous benefits, enabling structured and efficient way to manage the factual narratives for disclosures.

- Streamline reporting through reusable claims, reducing redundancy and increasing efficiency.
- Improve accuracy and consistency by centrally tracking and approving claims for uniform use across disclosures.
- Enhance discoverability by allowing users to search and leverage existing claims.

- Enhances organizational reputation and trust by supporting better, more consistent disclosures that reflect various projects and initiatives.
- Helps large organizations manage narratives across global teams, reducing silos and ensuring awareness of all relevant initiatives.
- Provides flexibility to create both qualitative and quantitative claims, not limited by reporting cadence, and supports review and approval workflows.
- Allows tracking of which claims are used in which disclosures and supports associating related claims for comprehensive reporting

Create or edit a claim

Create or edit a claim that accurately documents a specific achievement, commitment, event, or activity performed by your organization, suitable for use in future disclosures or reports.

Before you begin

Role required: sn_grc_claims.manager

Procedure

1. Navigate to **All** > **Operational Sustainability Management** > **Operational Sustainability Workspace** > **Lists** > **Claims**.
2. Create or edit a claim.
   - To create a claim, select **New**.
   - To update details of an existing claim, select the claim.
3. On the **Claims for reporting** form, fill in the fields.
4. Select **Save**.

What to do next

Learn about the fields of the **Claims for reporting** form. Use this form to create a new claim.

Claims for reporting fields

Learn about the fields of the **Claims for reporting** form. Use this form to create a new claim.

Create New Claims for reporting

Field	Description
Name	Name of the claim.
Start date	The date when the claim process or period begins.
End date	The date when the claim process or period ends.
Due date	The date by which the claim needs to be completed.
Owner type	The category or classification of the owner responsible for the claim (e.g., individual, team).
Owner	The person or entity responsible for managing or overseeing the claim. This field appears

Create New Claims for reporting (continued)

Field	Description
	only when **User** is selected in the **Owner type** field.
Owner Group	The group or department to which the owner belongs.This field appears only when **Group** is selected in the **Owner type** field.
Group	The group of the claims that shows the classification of the claim.
Subgroup	A more specific categorization within the group.
Claim	The specific statement or assertion being made about an achievement, commitment, event, or activity performed by your organization.
Footnotes	Additional explanatory notes or references related to the claim, providing further context or supporting information.
Approval required	Option to indicate if an approval is required for the metric definition. **Note:** When the **Approval required** option is enabled, the **Approver type** and **Approver** fields are displayed.
Approver assignment type	The method or rule used to assign an approver to the claim (e.g., simple, advanced)
Approver type	Specifies the type of approver for the metric definition. The choices are as follows: • **User** • **User group** **Note:** This field appears only when **Simple** is selected in the **Approver assignment type** field.
Approver	Approver user or approver group that is responsible to approve the metric definition. The choices are as follows: • **Approver**: Displayed when the User option is selected. • **Approver group**: Displayed when the User option is selected. **Note:** This field appears only when **Simple** is selected in the **Approver assignment type** field.

Create New Claims for reporting (continued)

Field	Description
Additional comments	Any extra remarks or observations related to the claim.

Reporting frameworks

The ESG Management application uses several sustainability reporting frameworks to help organizations report their economic, environmental, social, and governance performance. The ESG content accelerator application is a centralized repository of frameworks, citations, metric definitions, and emission factors. Using this application accelerates the adoption of ESG frameworks.

Important:

Starting with the Xanadu release, Sustainability Accounting Standards Board (SASB) Global Reporting Initiative (GRI) content accelerator are deprecated. It will be hidden and no longer activated on new instances but will continue to be supported. The ESG content accelerator application provides the latest experience for this functionality.

The GRI Standards enable any organization to understand and report on their impacts on the economy, environment, and people in a comparable and credible way, thereby increasing transparency on their contribution to sustainable development.

The Sustainability Accounting Standards Board (SASB) is an ESG guidance framework that sets the standards for the disclosure of financially material sustainability information by companies to their investors. SASB Standards enable businesses to identify, manage, and communicate financially material sustainability information to their investors.

The ESG Management application is shipped with the Global Reporting Initiative (GRI) Content Accelerator for Operational Sustainability and Sustainability Accounting Standards Board (SASB) content pack.

Updates in the citation form

When the ESG Management application is installed in the instance, the citation form displays a new field titled as **Reporting requirements and recommendations** in the Reporting section. This field provides the guidelines about the reporting requirements provided by the reporting organization.

Note: The **Reporting requirements** field is displayed only when the ESG Management application is installed.

See the following sample information that is provided by the reporting organization in the **Reporting requirements** field in the citation form: `The reporting organization shall report the following information: a. GHG emissions intensity ratio for the organization. b. Organization-specific metric (the denominator) chosen to calculate the ratio. c. Types of GHG emissions included in the intensity ratio; whether direct (Scope 1), energy indirect (Scope 2), and/or other indirect (Scope 3). d. Gases included in the calculation; whether CO2, CH4, N2O, HFCs, PFCs, SF6, NF3, or all. 2.7 When compiling the information specified in Disclosure 305-4, the reporting organization shall: 2.7.1 calculate the ratio by dividing the absolute GHG emissions (the numerator) by the organization-specific metric (the`

denominator); 2.7.2 if reporting an intensity ratio for other indirect (Scope 3) GHG emissions, report this intensity ratio separately from the intensity ratios for direct (Scope 1) and energy indirect (Scope 2) emissions. Reporting recommendations 2.8 When compiling the information specified in Disclosure 305-4, the reporting organization should, where it aids transparency or comparability over time, provide a breakdown of the GHG emissions intensity ratio by: 2.8.1 business unit or facility; 2.8.2 country; 2.8.3 type of source; 2.8.4 type of activity.

Set up analysis contexts and analyses

To simulate different analyses, create an analysis context and define the metric and forecast periods, then create analyses. Use the forecast planning and analysis tools to generate and compare the outcomes of these analyses, evaluating the impact of different interventions.

Create an analysis context

Create an analysis context to group different analyses for a specific use case. By setting up an analysis context, you can help confirm that all relevant analyses are considered and compared systematically, providing a comprehensive view of potential outcomes.

Before you begin

Role required: sn_esg.program_manager

Procedure

1. Navigate to **All** > **Operational Sustainability Management** > **Operational Sustainability Workspace** > **Lists** > **Analysis contexts**.
2. Select **New**.
3. On the form, fill in the fields.

Create New Analysis context form

Field	Description
Name	Name for the analysis context.
Type	Metric definition or metric for the analysis context record.
Metric definition	Metric definition associated with the metric. This field appears only when **Metric definition** is selected in the **Type** field.
Metric	Metric to be selected for analysis context record. This field appears only when **Metric** is selected in the **Type** field.
No. of periods to be forecasted	Number of periods to be forecasted. Number of periods in the future to see forecast data for.
Previous periods	Number of previous periods to be used as historical data. You must have at least 12 periods of historical data for forecast planning analysis. This

Field	Description
	provides the necessary foundation for simulating different analyses.

4. Select save.
   Your analysis context record has been created. An analysis tab has been added where you can start to create scenarios.

What to do next
Create analyses to use for forecasting. For more information, see Create an analysis.

Create an analysis

Create analyses to model different outcomes based on specific interventions or changes. You can generate forecasts for each analysis and use that information to compare the different outcomes and better understand the impact of potential interventions.

Before you begin
Role required: sn_esg.program_manager

Procedure

1. Navigate to **All** > **Operational Sustainability Management** > **Operational Sustainability Workspace** > **Lists** > **Analysis contexts**.
2. Select an analysis context record that you want and navigate to the **Analysis** tab.
3. Select **New**.
4. On the form, fill in the fields.

Create New Analysis form

Field	Description
Name	Name for the analysis. For example, `Best case`.
Forecast Method	Method used to generate forecasting data. ○ Auto By default, the instance chooses the best method for you automatically, based on the fit of the method. For more information, see Automatic selection of forecast methods. ○ Linear Generates a linear regression forecast based on the historical scores, using constant and trend as explanatory variables. ○ Seasonal Generates a linear regression forecast based on the historical scores, using seasonal dummies as explanatory

Field	Description
	variables. A 'season' for this analysis is one period. ○ Seasonal Trend As Seasonal, but includes a trend as an explanatory variable. ○ Seasonal Trend Loess (STL) Generates a seasonal forecast based on a best-fit function. This method fits a trend, a season, and a random noise process to the data using an exponentially weighted moving average approach. The forecast is based on the full data set, with more weight given to more recent observationsA 'season' for this analysis is one period. ○ Random Forest (RF) Creates a combination of decision trees where the predictions produced by these trees are averaged to get a single prediction. The randomness comes from each tree being built from a random subset of the available data and inputs. ○ Autoregressive (AR) The autoregressive (AR) model forecasts future values of an indicator by using a linear combination of a trend, seasonal dummies, and past values. Like the Random Forest (RF) model, the AR model checks for the best number of lags. However, the AR model relates current to past values linearly, whereas the RF model is non-linear. For more information, see Forecast methods.
State	State of the analysis record. ○ Draft ○ In progress ○ Published
Description	Description of the analysis.

5. Select save.
6. **Optional:** Navigate to the **Emission factor analysis** tab.
   This tab is only available if a formula associated with the analysis uses an emission factor.

a. Enter the location in the **Emission factor location** field.

b. Select **Save**.
This step is only required if a formula associated with the analysis uses an emission factor.

7. Select **Forecast**.
Your analysis record has been created. A Forecast tab has been added where you can view the generated standard forecast.

What to do next
Adjust parameters to model different outcomes based on specific interventions or changes. For more information, see Adjust parameters.

Adjust parameters

Adjust parameters to model different outcomes based on specific interventions or changes. When you update these parameters it enables your organization to explore the potential impacts of different decisions, providing a clear comparison of outcomes.

Before you begin
Role required: sn_esg.program_manager

Procedure

1. Navigate to **All** > **Operational Sustainability Management** > **Operational Sustainability Workspace** > **Lists** > **Analysis contexts**.
2. Select the Analysis context record that you want and navigate to the **Analysis** tab.
3. Select the Analysis record that you want and then navigate to the **Forecast** tab.
4. Select the information icon ⓘ to open the forecast sidebar and fill in the parameter fields.

Input parameters

Field	Description
Period	The timeframe used for simulating the adjusted forecast information.
Calculated metric definition (CMD) formula operands	The parameters that were used in the formula. Original values used for the forecast are displayed for each of the parameter fields. You can adjust each parameter to model different interventions and their outcomes. For example, if your formula is as follows: `(Total electricity consumption - Solar panel contribution) * Emission factor` , the following parameter fields would be available to adjust: Total electricity consumption, Solar panel contribution, Emission factor. By modifying these parameters, you can simulate various

Field	Description
	analyses to assess the impact of different sustainability interventions on emissions. **Note:** ○ The fields displayed vary based on the operands chosen in the CMD formula and differ according to the specific CMD. ○ These fields appear when creating an analysis context with a metric definition selected in the **Type** field and a calculated metric definition selected in the **Metric definition** field. For more information, refer to Create an analysis context.
Adjustment	Choose an adjustment type absolute (123) or percentage (%) and enter the corresponding adjustment value. **Note:** ○ This fields appear when while creating a analysis context, the metric definition is selected in **Type** field, a manual or automated metric definition is selected in **Metric definition** field. ○ This fields appears when creating a analysis context, a metric is selected in **Type** field and a metric is selected in the **Metric** field. For more information, refer to Create an analysis context.

5. Select **Save**.
   The updated parameters are used to simulate the calculation based upon the updated values that were entered. The forecast graph shows the original standard forecast and the new adjusted forecast and the formula parameters for each are shown in the Formula parameters section.
6. Repeat the above until the new adjusted forecast and formula parameters meet your requirements.
7. Select **Publish**.
   After publishing, you will not be able to make any changes to the parameters.

What to do next

After creating and publishing multiple analyses and forecasts, you can compare the analyses and view a graph that captures the data for each analysis you select. For more information on viewing a Comparison graph see, Create a forecast comparison graph. For more information on creating analyses, see Create an analysis.

Create a forecast comparison graph

Create a forecast comparison graph to compare the different outcomes based on specific interventions or changes.

Before you begin

Role required: sn_esg.program_manager

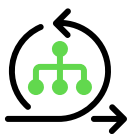
Procedure

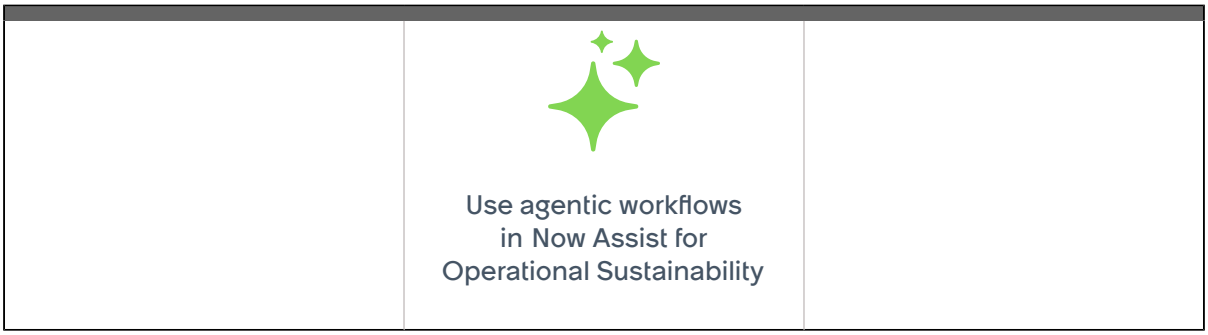
1. Navigate to **All** > **Operational Sustainability Management** > **Operational Sustainability Workspace** > **Lists** > **Analysis contexts**.
2. Select the Analysis context record that you want and navigate to the **Analysis** tab.
3. Select the Analysis records that you want to compare and then select **Compare**.
   You can select up to five analysis records for comparison. If the selected analyses have adjusted values, those are plotted in the comparison. Otherwise, the standard forecast values are plotted.
4. Select **Confirm**.
   A graph has been generated showing the data for each analysis record that you selected.

Now Assist for Operational Sustainability (formerly ESG)

Use the Now Assist for Operational Sustainability application to empower your sustainability teams with Generative AI-powered capabilities to automate and streamline data collection, and confirm accurate, auditable reporting at enterprise scale.

Get started

Exploring Now Assist for Operational Sustainability (formerly ESG) **Explore**  Learn more about Now Assist for Operational Sustainability skills	Configure Now Assist for Operational Sustainability (formerly ESG) **Configure**  Configure the Now Assist for Operational Sustainability application to get started	Using Now Assist for Operational Sustainability (formerly ESG) skills **Use**  Use generative AI capabilities offered by Now Assist for Operational Sustainability
	Use Operational Sustainability Management AI agent collection	



- ServiceNow Community on AI and Intelligence
- Search the Known Error Portal for known error articles
- Contact Customer Service and Support

AI limitations

This application uses artificial intelligence (AI) and machine learning, which are rapidly evolving fields of study that generate predictions based on patterns in data. As a result, this application may not always produce accurate, complete, or appropriate information. Furthermore, there is no guarantee that this application has been fully trained or tested for your use case. To mitigate these issues, it is your responsibility to test and evaluate your use of this application for accuracy, harm, and appropriateness for your use case, employ human oversight of output, and refrain from relying solely on AI-generated outputs for decision-making purposes. This is especially important if you choose to deploy this application in areas with consequential impacts such as healthcare, finance, legal, employment, security, or infrastructure. You agree to abide by ServiceNow's AI Acceptable Use Policy, which may be updated by ServiceNow.

Data processing

This application requires data to be transferred from ServiceNow customers' individual instances to a centralized ServiceNow environment, which may be located in a different data center region from the one where your instance is, and potentially to a third-party cloud provider, such as Microsoft Azure. This data is handled per ServiceNow's internal policies and procedures, including our policies available through our CORE Compliance Portal.

Data collection

ServiceNow collects and uses the inputs, outputs, and edits to outputs of this application to develop and improve ServiceNow technologies including ServiceNow models and AI products. In addition, this application will collect incident data (for Incident Assist and Knowledge Assist) and chat transcripts (for Chat Assist). Customers can opt out of future data collection at any time, as described in the Now Assist Opt-Out page.

For more information, see the Now Assist documentation.

Exploring Now Assist for Operational Sustainability (formerly ESG)

With the Operational Sustainability Management application, you can use the skills to automate the collection of operational sustainability metric data from utility bill documents.

Now Assist for Operational Sustainability overview

The Now Assist for Operational Sustainability Management is designed to enable you to leverage various Now Assist skills and agentic workflows focused on Operational Sustainability Management. Now Assist for Operational Sustainability Management is available based on entitlements.

Now Assist for Operational Sustainability benefits

The generative AI skill in the Now Assist for Operational Sustainability Management application offers the following benefits:

- Automation of operational sustainability data processes, reducing manual effort in collecting, validating, and reporting of data.
- Minimized human intervention in repetitive tasks, enabling operational sustainability teams to focus on strategic initiatives and compliance goals.
- Accelerated data processing and reporting, enabling faster turnaround for audits and disclosures.
- Scalable and future-ready framework, supporting integration of new operational sustainability skills and workflows for evolving regulatory requirements.

Now Assist for Operational Sustainability skills

The following generative AI skill and agentic workflows are available in Now Assist for Operational Sustainability:

Skill	Description	User
Document Intelligence for Utility Invoices	Streamlines data management by automating the extraction of utility bill data, including consumption, billing dates, amounts, and units of measurement, within the Operational Sustainability Workspace. For more information, refer to Document intelligence for utility invoices.	sn_esg_gen_ai.docintel_user

What to explore next

To learn more about configuring and using Now Assist for Operational Sustainability skills, see:

- Configure Now Assist for Operational Sustainability (formerly ESG)
- Using Now Assist for Operational Sustainability (formerly ESG) skills

Document intelligence for utility invoices

The AI-driven document intelligence for utility invoices feature is designed to automate metric data collection. It automates the metric data collection by extracting utility bill data such as consumption, billing dates, amounts, and units of measurement within the Operational Sustainability Workspace.

Document intelligence overview

Document Intelligence for Utility Invoices automates utility bill data extraction and processing, removing manual entry for metric reporting. It streamlines the data collection process, improving accuracy and efficiency while reducing the burden on data owners. This capability addresses the challenges of manual data collection, aggregation, and entry from diverse utility bill formats and languages. It promotes consistent and reliable operational sustainability reporting.

The AI-extracted fields are clearly marked for verification, and you can override and justify changes to confirm data integrity. The original bill is attached to the metric data task for traceability and audit. After the extraction is completed, the extracted data is mapped to the correct metric definitions and entities using configurable mapping tables. The system extracts units of measurement from invoices and attempts to match them to existing units in the Metric

Unit (sn_grc_metric_unit) table. If a matching unit is found, the unit reference is populated in the Metric Data record. If no matching unit is found, the Metric Data record is created without a unit reference, the extraction status shows **Completed with Errors**, and a warning message appears on the Invoice Detail record. Data owners can review, validate, or override extracted data as needed. If the extraction process fails, you can correct the errors and rerun the extraction by selecting reprocess option.

Note: The sn_esg_gen_ai.docintel_user role is required to view the option to document intelligence for utility bills. This role must be manually assigned to an ESG user.

To understand how you can extract details from the utility bills, refer to Extract data from utility invoices.

Note: The fields extracted by AI on the Metric Data task page must be verified for accuracy before use.

Metric definition date restriction

When using Document Intelligence with manual metric definitions, the system only processes documents that cover standard monthly periods—where the start date is the first day of the month and the end date is the last day of the same month.

If your source documents cover irregular date ranges, use automated metric definitions instead. Automated definitions can map and process data for any date range without the first/last day restriction, providing flexibility for irregular billing cycles or custom periods. This limitation ensures consistency with operational sustainability reporting standards that require standard monthly periods for manual metric entries.

Benefits of document intelligence for utility invoices

- Reduces manual workload and errors in operational sustainability data collection.
- Promotes consistency and accuracy in operational sustainability metric reporting.
- Enhances auditability and compliance with evidence management.
- Scales to handle diverse document types and languages.
- Supports manual uploads and can be extended to integrate with email or other intake flows.

Viewing extracted data summary

After the extraction and data mapping you can view the following:

- The extracted key details from the utility bill, such as consumption, billing dates, bill amount, and units of measurement, mapped to the relevant operational sustainability metric data task.
- The state of the extraction process (for example, complete or failed).
- AI-extracted fields clearly marked for user review.
- The option to review extracted data in the document intelligence review screen.
- The ability to override extracted data and provide justification if needed.
- The original utility bill attached as evidence for audit and compliance.

Related topics

Activate the document intelligence for utility invoices skill

Using Now Assist for Operational Sustainability (formerly ESG) skills

Supporting information for Now Assist for Operational Sustainability Management

Get a quick overview of the important information that is related to the Now Assist for Operational Sustainability application.

Supported versions

Now Assist for Operational Sustainability is supported starting from the Yokohama patch 6 release.

Supported user interfaces

The Now Assist for Operational Sustainability application skill Document Intelligence for Utility Invoices can be accessed on Operational Sustainability Workspace.

Application information

Activate the Now Assist for Operational Sustainability store app Environmental, Social, Governance Management and Now Assist for Operational Sustainability plugin (com.sn_esg_gen_ai) to use the skills and agentic workflows.

This store app has the following dependencies:

- Now Assist Platform
- Environmental, Social, Governance Management

For more information, see Configure Now Assist for Operational Sustainability (formerly ESG).

Configure Now Assist for Operational Sustainability (formerly ESG)

If you have the admin role, you can configure the Now Assist for Operational Sustainability application so that your users can use the generative AI skills in the Operational Sustainability Workspace.

Now Assist for Operational Sustainability Configuration overview

Use the Now Assist Admin console to configure Now Assist for Operational Sustainability. This console contains everything that you must install the plugins and configure the generative AI skills. For additional information, see Now Assist Admin console.

You can access the **Document Intelligence for Utility Invoices** skill from the Now Assist Admin console.

Note: Now LLM Service is the only provider for this Now Assist application's skills.

For earlier versions, go to Application Manager to upgrade it to a later version.

Now Assist for Operational Sustainability plugins

You can install the Now Assist for Operational Sustainability plugin (com.sn_esg_gen_ai). This store app has the following dependencies:

- Now Assist Platform
- Environmental, Social, Governance Management

For information about the installation process, see Install Now Assist plugins.

Note: For more information on Retrieval Augmented Generation (RAG) and Retention policies, see Indexed sources in AI Search and User data usage policy for Now Assist.

Activate Now Assist skills in Now Assist for Operational Sustainability

Activate a skill before you can use the generative AI capabilities for Now Assist for Operational Sustainability Management.

Before you begin

Role required: sn_nowassist_admin.nsa_admin

Procedure

1. Navigate to **All** > **Admin Center** > **Now Assist Admin**.
2. On the **Now Assist Skills** tab, under the **Technology** workflow group, select **ESG**.
3. On the Now Assist skills for ESG page, activate a skill by selecting **Activate skill**.
4. Review the details of the skills on each tab, configure the skills, and select **Save and continue**.

   You can return to a previous step by using the **Back** button.
5. Review your choices and select **Activate**.
   Your skill is configured.

What to do next

If you have the sn_generative_ai.nsa_admin role, you can perform the following actions on Now Assist skills:

- Edit a Now Assist skill.
- Make a copy of a Now Assist skill.
- Troubleshoot a Now Assist skill.

Activate the document intelligence for utility invoices skill

Activate and then configure document intelligence for utility invoices skill from Now Assist to automate the extraction of metrics data from utility invoices. Once activated, map the extracted data to the correct metric definitions and entities.

Before you begin

Role required: sn_nowassist_admin.nsa_admin

About this task

Important: This Now Assist skill is turned on by default. The skill will be automatically available to appropriate role users for the application. For more information, see Now Assist skills, agents, and agentic workflows on by default.

Procedure

1. Navigate to **All** > **Admin Center** > **Now Assist Admin**.
2. On the **Now Assist Skills** tab, under the **Technology** workflow group, select **Risk and Sustainability**.
3. On the Now Assist skills for Risk & Sustainability page, select **Activate skill** under the **Document Intelligence for Utility Invoices** skill.
4. A predefined usecase is available in the **Usecase overview** tab, select **Save and continue** to proceed.

You can use an extraction use case to define the data you must extract from a document.

5. In the **Review and activate** tab, view the details of the skill, select **Done**.

Result

The document intelligence for utility invoices skill is active and is available to be used in the Operational Sustainability Workspace.

Setup metric definition and entity-mapping records

Configure your environment so that values extracted using the Document Intelligence for Utility Invoices skill are mapped to the correct Environmental, Social, and Governance metrics and entities. This eliminates manual data entry and improves accuracy.

Before you begin

Role required: sn_nowassist_admin.nsa_admin

About this task

- Preconfigured metric definitions with corresponding entity mappings are provided to simplify the initial setup for Now Assist for Operational Sustainability Management. The four preconfigured metric definitions are water, waste, electricity, and natural gas consumption.
- If the preconfigured metric definitions don't meet your requirements, you can create a new or use an existing metric definition. Then update the Metric Definition table and create or update mapping records to link the new definition to the appropriate record identifiers. When using custom metric definitions, confirm that all relevant mapping records are updated to reference the new definitions for accurate data association.
- The metric definition must be activated before using the Document Intelligence for Utility Invoices skill.

Once the metric definitions and entity mappings have been configured, you can begin extracting information from utility invoices. The system then uses the configured mappings to determine where the extracted data should be stored. The extracted utility type (for example, electricity) is matched to the correct metric definition based on the metric definition mapping, and the billing address or service address is used to identify the relevant organizational entity via the entity mapping. This process verifies that the extracted consumption or bill amount is accurately assigned to the right metric and entity, streamlining data collection and eliminating manual data entry.

Procedure

1. Navigate to **All** > **Environmental, Social, and Governance** > **ESG Workspace** > **Metrics** > **Automated metric definitions**.
2. Select the filter icon and select **Advanced view**.
3. Build a filter by selecting **Group**, **is**, **Document Intelligence for Utility bills** and select **OK**.
4. Select a metric definition and select **Details** tab.
5. On the form, fill in the fields.
   For information on the fields of the form, see Automated metric definition fields.
6. Select **Entities** tab and add the entities related to your organization for which you want to collect data.

   Note: Repeat the steps before this note for each metric definition you must activate.

7. Select **Save**.
8. Navigate to **All** > **Operational Sustainability Management** > **Administration** > **Entity Mapping**.

9. Select **New**.
10. On the form, fill in the fields.

Entity-Mapping form

Field	Description
Record identifier	A unique record identifier of the entity from which the data is mapped. The identifier should typically be the billing address or service address.
Related record	Entity record associated with the metric definition to be mapped.
Additional information	Field used to specify the information that must be filled in by the administrator. Certain fields such as **Entity class** and **Entity owner** must be manually filled.
State	Review state. Based on the information provided in the **Additional information** field, the administrator must fill in the required information and then change the state of this field. The choices are as follows. ○ **No review required**: Use this option when there are no fields to be filled in the entity record by the administrator. ○ **Review required**: Use this option if the administrator must fill some fields in the entity record. ○ **Reviewed**: Use this option if the administrator has already provided the information in the specified fields in the entity records. This field is automatically set to **No review required**. You must change the state to **Reviewed** after you provide the information.

11. Select **Submit**.

Using Now Assist for Operational Sustainability (formerly ESG) skills

If you have the sn_esg_gen_ai.docintel_user role, you can leverage the Now Assist for Operational Sustainability skill to automate the extraction of metrics data from utility invoices. Then map the extracted data to the correct metric definitions and entities.

The document intelligence for utility invoices reduces manual entry, and increases accuracy as it enables you to streamline the data collection process. The Document Intelligence for Utility Invoices skills automates the extraction of utility bill data, including consumption, billing dates, and amounts, within the Operational Sustainability Workspace. Then the extracted data is mapped to the correct metric definitions and entities.

Modifying the instructions for Now Assist for Operational Sustainability skills

Starting with the Yokohama release, users who have the Now Assist for Operational Sustainability plugin installed can use the document intelligence for utility invoices skill.

To modify the instructions for the Document Intelligence for utility invoices skill, follow the steps that are mentioned in KB1806035.

Extract data from utility invoices

The AI-driven Document Intelligence for utility invoices feature automates the extraction of utility bill data, including consumption, billing dates, and amounts. Then the extracted data is mapped to the correct metric definitions and entities using configurable mapping tables within the Operational Sustainability Workspace. This streamlines data processing and enhances accuracy.

Before you begin

Role required: sn_esg_gen_ai.docintel_user

About this task

- The fields from which the data is extracted is based on the extraction use case selected. One predefined use case is shipped for utility invoices, if necessary you can create a custom extraction use case. After the data is extracted and mapped to the required fields, you can directly use it or update as required.
- To avoid utility bill extraction failures, the system must have a valid entity mapping. This mapping links source data such as billing address or utility type to the correct entity in the metric definition.

Important: Be sure to check AI-extracted information for accuracy.

Important: This Now Assist skill is turned on by default. The skill will be automatically available to appropriate role users for the application. For more information, see Now Assist skills, agents, and agentic workflows on by default.

Procedure

1. Navigate to **All** > **Operational Sustainability Management** > **Operational Sustainability Workspace** > **Lists** > **Document intelligence** > **Metric document extraction**.
2. Select **Upload document**.
3. Select the **+ Add file** link to browse and open the utility invoice document that exists in your local machine.
   The name of the uploaded file defaults as the Title of the file in the **Upload a file** pop-up. If necessary, you can change the name of the file in the **Title** field.

   Note: You can upload only one file at a time to the folder.

4. Select **Upload**.
   The selected file from your local machine is uploaded.
5. Select **Done**.
   The newly created metric document extraction opens automatically.
6. Select **Initiate extraction**.
   The extraction process is initiated, and after a short while, the extracted data is accurately mapped to its corresponding fields. The AI-extracted fields are clearly marked for verification, confirming transparency and facilitating review.

7. **Optional:** Review the extracted data and complete any of the following options.

Option	Description
Reprocess	Initiates a rerun of the extraction and map ping process for a utility bill using the latest metric definition and entity-mapping records. This option appears only when extraction fails, allowing users to retry after correcting er rors.
Review in Docintel	Enables review of key details extracted from utility bills. It displays the mapping of extract ed fields to their respective data points, facili tating verification and accuracy checks.
Save	Save the mapped data in the record.
Delete	Delete the record.

The fields extracted by AI must be verified for accuracy before use.

Integrating Operational Sustainability Management (formerly ESG) with other applications

You can integrate ESG Management with Project Portfolio Management and Integrated Risk Management (IRM). These integrations provide you with more options to track your goals.

Integration with Project Portfolio Management

If you integrate ESG Management with Project Portfolio Management, you can plan, build a roadmap, and prioritize activities to achieve your sustainability goals. You can view all the programs and projects associated with operational sustainability under **All** > **Operational Sustainability Management** > **Operational Sustainability Workspace** > **Lists** > **Program Setup**.

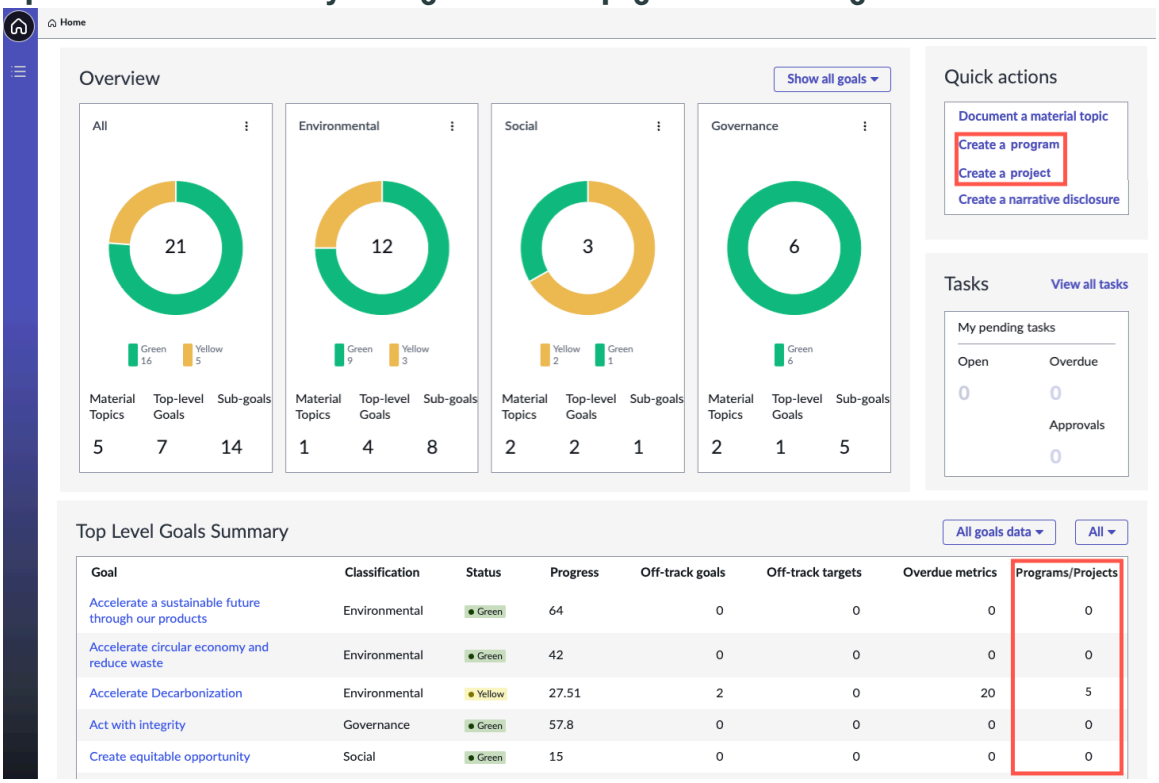
When you create goals for your material topics, you perform some activity to accomplish those goals. The work that you do is captured in the form of programs and projects. When you integrate with Project Portfolio Management, you can create programs and projects for your goals. To learn more about program management and how to create programs, see Program Management.

To see the configurations that you must perform on the project form, see Display the priorities and goals on the project form.

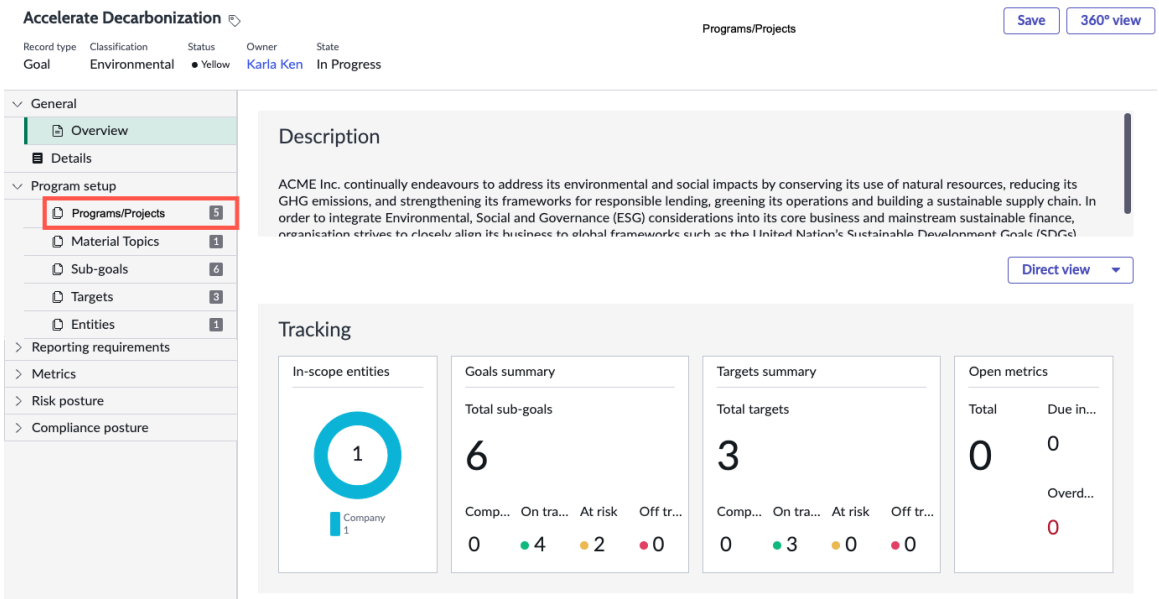
To see the tables installed with Goal Framework, see Roles installed with the Goal Framework.

The following image shows the Operational Sustainability Management home page with Project Portfolio Management integration. The integration adds new actions in the Quick Actions section, and it creates the Programs/Projects column in the Top Level Goals Summary section.

Operational Sustainability Management home page with PPM integration



After you integrate with Project Portfolio Management, you can see the Programs/Projects list on the Goal form.

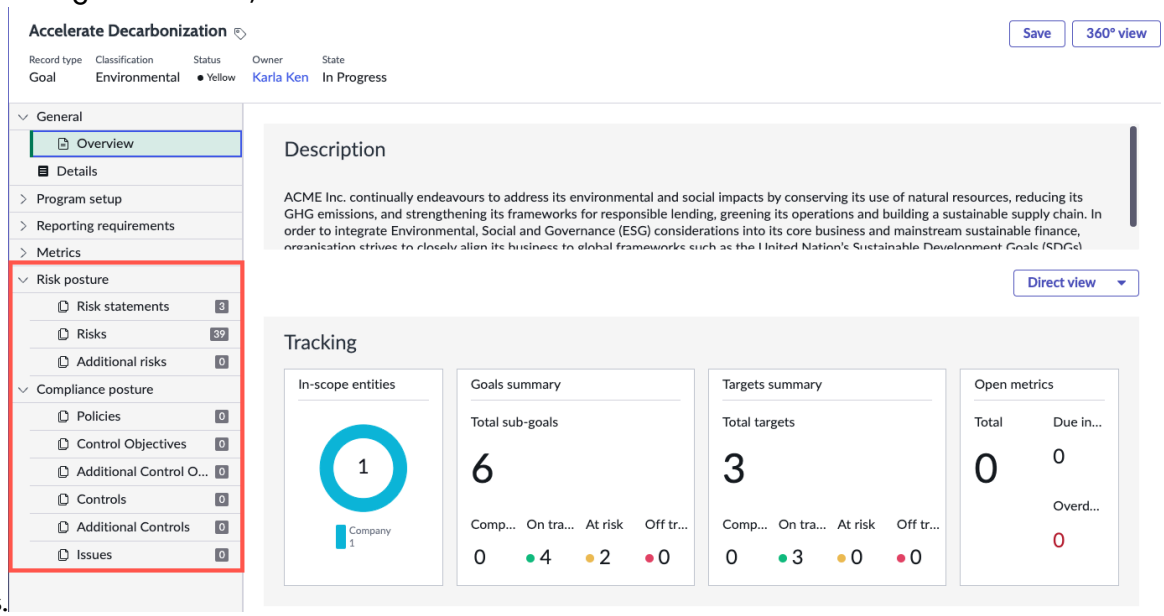


Integration with IRM

If you integrate ESG Management with IRM, you can add risks, risk statements, policies, control objectives, and issues to your goals. For example, if you add a policy to your goal, then all the related control objectives and controls get associated with this goal. This integration helps you to identify and assess the risks that pose threats to your goals.

Note: As an ESG user, you are not required to create policies. The policies are created by the IRM administrators. You only need to associate the policies to your goals.

After you integrate with IRM, the Goal form lists additional options.



For more information on the roles and tables that are installed with the ESG Management, see Components installed with Operational Sustainability Management (formerly ESG Management).

Related topics

Migrate existing goals data to Goal Framework

Integrating Microsoft 365 with ServiceNow reporting

The Microsoft 365 for ServiceNow Reporting (sn_esg_msoff_intg) integration provides disclosure reporting capabilities to ESG reporting disclosure managers to seamlessly report ServiceNow ESG Management system data, list reports, charts, pivot, and multi pivot reports using Microsoft Word.

An ESG reporting disclosure manager may need to create disclosures to be transparent with the stakeholders about the impact of their activities. For example, if an organization is planning to engage in an activity that requires them to drill for oil in a protected area, the disclosure manager may create a disclosure that outlines the potential impacts of the activity on the environment and local communities as well as the measures being taken to mitigate those impacts.

This integration allows the reporting managers to view the inventory of the ServiceNow ESG Management data links on the disclosure report and refresh the inserted data to be in synchronization with the latest ServiceNow ESG Management data. An audit trail is also established between the data imported and the ServiceNow instance. The audit trail provides any auditor the ability to click the links in the document and access the source of the data in the ServiceNow instance.

You can also track any changes made to the data inserted using configuration and log those changes in the log table. For more information see, Set up Microsoft 365 reporting configuration.

Note: This integration is compatible with the desktop version 16.71 (23031200) and the web version 16.0.16412.41005 of Microsoft Word. However, the charts are not interactive in the web version. This means that you cannot modify the chart colors, formats, and so on. The supported Windows Office version is 2303 (Build 16130.20394).

You can change the format, style, and colors of the imported data. The following chart styles are supported in this integration:

Supported chart styles

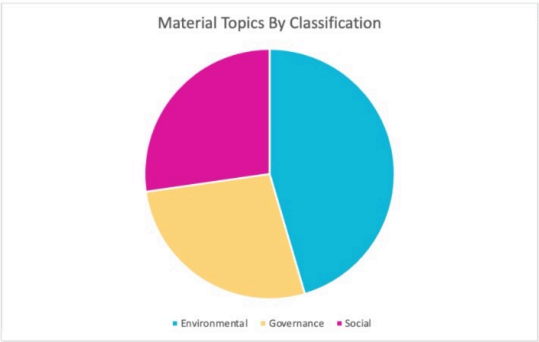
Chart type	Styles supported
Pie chart	• Chart color • Display data label • Chart title • Show legend

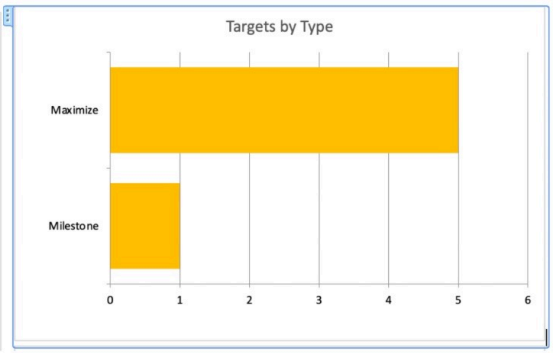
Bar chart	• Chart color
	• Display data label
	• Chart title
	• X-Axis and Y-Axis
	  ○ Title
	  ○ Title bold
	  ○ Display grid
	  ○ Label bold

Horizontal bar chart	• Chart color
	• Display data label
	• Chart title
	• X-Axis
	  ○ Title
	  ○ Title bold
	  ○ Display grid
	  ○ Label bold
	• Y-Axis
	  ○ Display grid
	  ○ Label bold

The following image shows how the imported data appears in a document.

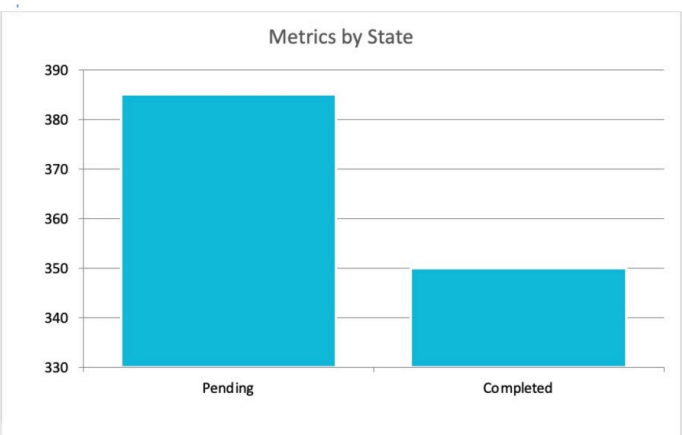
How various types of imported data appears in a document





	Classification	Environmental	Governance	Social	Total
	Priority	Low	Low	Low	
Status					
Green		9	6	1	16
Yellow		3		2	5
Total		12	6	3	21

	Frequency	Annually	Daily	Monthly	Quarterly	Semi-annually	Weekly	Total
Data owner								
Albert Washington		51	9	4			2	66
Happy Singh		1						1
Adam Haro		12		3			2	17
Brandon Hardley			3					3
Felipe Gould		5						5
Gale Nolau		3	1					4
Oliver Jones			20		24	6		50
Rene Dummermuth		6						6
Valli Raman		4						4
Total		82	33	7	24	6	4	156



Workflow of Microsoft 365 for ServiceNow Reporting

The Microsoft 365 for ServiceNow Reporting integration utilizes a workflow that requires participation from multiple user roles such as system administrators, ESG administrators, and disclosure managers. By defining a clear workflow, individuals and teams can better understand their roles and responsibilities and generate the necessary disclosures.

To generate Microsoft Word disclosures:

1. Download the ServiceNow Reporting add-in: As a system administrator, download and install the ESG manifest file. A manifest file contains information about the files included in a software application or package. It is used by the software installer to ensure that all the necessary files are installed in the correct locations. At this stage, you must also work with your Microsoft 365 administrator to upload the manifest file to the Microsoft Word application. The Microsoft 365 administrator has the necessary access rights.
2. As an ESG administrator, set up the Microsoft 365 reporting configuration records to specify which tables, reports, and charts from your ServiceNow® instance must be used to import data into your Microsoft Word. You can also specify the columns from a table from which you want to import data.
3. As an ESG administrator, you can configure additional reporting filters. These filters specify at a granular level what data must be imported to the disclosure report from a table.
4. As an ESG reporting and disclosure manager, go to your Microsoft Word document, authenticate yourself, and import the data from your instance to the document. You can alter the formatting of the data according to your preferences.

Install the ServiceNow Reporting add-in

Install the ServiceNow Reporting add-in to your Microsoft Word document. This add-in is required to import reports and data from your ServiceNow® instance to Microsoft Word documents to create disclosure reports.

Before you begin

Ensure that the following plugins are activated:

- sn_esg
- sn_esg_msoff_intg
- sn_outlook_addin

Role required: sys_admin

Procedure

1. Navigate to **All** > **ServiceNow Add-Ins for Office** > **Office Add-In Manifests**.
2. From the Office Manifests list, select **ServiceNow Reporting**.
3. Select **Download Manifest**.
4. To enable the add-in, contact your Microsoft 365 account manager who can use the manifest file you downloaded in step 3.

What to do next

For detailed instructions on how to deploy the manifest file, see the Deploy add-ins in the Microsoft 365 admin center [KB1307378] article in the Now Support Knowledge Base.

To configure the HTTP response headers for add-in for Microsoft Word in the browser, see the Response header resolution [KB1434453] article in the Now Support Knowledge Base.

Set up Microsoft 365 reporting configuration

Set up the Microsoft 365 reporting configuration records to specify the data points and reports that you want to import in to a Microsoft Word document for disclosure reporting purposes.

Before you begin

Role required: (per product)

- In Operational Sustainability Management: sn_esg_msoff_intg.admin
- In Audit Management: sn_audit.admin

About this task

Data is imported into a Microsoft Word document for disclosure reporting purposes. When creating these Microsoft Word disclosures, you must specify which tables, reports, and data visualizations from your ServiceNow instance must be used to import data into your Microsoft Word document. You can also specify the columns from a table from which you want to import data. Only those reports that are either created by or shared with the ESG administrator are available for selection.

Procedure

1. Navigate to once of the following locations:
   - **All** > **Operational Sustainability Management** > **Microsoft 365 Reporting Integration** > **Reporting Configurations**
   - **All** > **Audit** > **Audit report** > **Reporting Configurations**
2. From the Microsoft 365 reporting configurations list, select **New**.
3. On the Microsoft 365 reporting configuration form, fill in the fields.

Microsoft 365 reporting configuration form

Field	Description
Business domain	Domain from where the configuration is created. This field is automatically set to Operational Sustainability Management.
Reporting item	Name of the configuration. For example, if you want to get data about your operational sustainability goals in your word document, you can provide a name such as `My sustainability goals`.
Source type	Source from which you want to fetch the data. The choices are as follows: ○ **Table**: Select this option when you want to import data from a table. ○ **Report**: Select this option if you want to import data from a predefined report or chart. For more information on how to create a report, see Create a report with Analytics Q&A. ○ **Data visualization**: Select this option if you want to import data from a data visualization in the Performance Analytics library. For more information, see Overview of data visualization types.

Field	Description
	Note: Only list reports, pivot reports, multi-level pivot reports, horizontal and vertical bar charts, and pie charts are available for selection. Stacked bar charts and grouped bar charts are not supported.
Source table	Source table to fetch data from. This field only appears when **Table** is selected from the **Source type** field.
Filter	Filter conditions to filter the records. This field only appears when **Table** is selected from the **Source type** field.
Columns	Column from the table whose values are to be inserted. This field only appears when **Table** is selected from the **Source type** field.
Source report	Available report to be inserted in the disclosure report. This field only appears when **Report** is selected from the **Source type** field.
Active	Option to indicate if the record is active. Only active records are available for selection in the document.
Track configuration	Option to track any changes made to the data inserted using configuration and log those changes in the log table.

4. Select **Submit**.

What to do next

Add additional reporting configuration filters to the reporting configuration. These filters help to fetch the data into your Microsoft Word disclosure report. For more information, see Add additional reporting configuration filters for a Microsoft 365 configuration record.

Configure a business domain role

Configure the business domain roles so that users of a particular domain can select the domain for which they want to import the data. Only those users who are added during the configuration are able to view the domain on the Microsoft Word document.

Before you begin

Role required: sn_esg_msoff_intg.admin

Procedure

1. Navigate to **All** > **Operational Sustainability Management** > **Microsoft 365 Reporting Integration** > **Business Domains**.
2. Select the default operational sustainability domain name record.
3. Select the **Roles** field.

4. Add or remove the roles as required.
5. Select **Update**.

Add additional reporting configuration filters for a Microsoft 365 configuration record

Add additional reporting filters to specify at a granular level what data must be imported to the disclosure report from a table.

Before you begin

Role required: (per product)

- In Operational Sustainability Management: sn_esg_msoff_intg.admin
- In Audit Management: sn_audit.admin

About this task

When you specify that you want to import data from a particular table, you must also specify from which exact record of the table you need the data. For example, assume that you specify that you want to fetch data from the sn_gf_goal table. This table may have multiple records. Therefore, you must specify the exact record from which you want to fetch the data. You can specify as many filters as you require.

Procedure

1. Navigate to once of the following locations:
   - **All** > **Operational Sustainability Management** > **Microsoft 365 Reporting Integration** > **Reporting Configurations**
   - **All** > **Audit** > **Audit report** > **Reporting Configurations**
2. Open the record for which you want to add the additional reporting configuration filters.
3. On the Microsoft 365 reporting configuration filters related list, select **New**.
4. On the form, fill in the fields.

Microsoft 365 reporting configurations filter form

Field	Description
Reporting configuration	Name of the configuration to which you're adding additional filters. This field is automatically set.
Field name	Name of the field from which data must be fetched. For example, for the goals table, you can specify the **Name** field. If you select name, then all the names of the goals are available for selection during data import.
Related fields	Fields in the add-in pane that are dependent on the selected **Field name**. Only records relevant to the selected **Field name** will be displayed as choices. For example, only entities related to a selected metric definition will be available as a choice. For more information, see Add related fields to a Microsoft 365 configuration record.

Field	Description
Order	Order of the field as it would appear on the add-in pane of the document.
Aggregate on time dimension	Option to aggregate the report configuration source table data based on the chosen time dimension. For more information about this option, see the example in the procedure. This field only appears when the **Field name** has **Time dimension**.
Time dimension	Time dimension for which data must be aggregated. The list of time dimensions are: ○ Year ○ Semi-annual ○ Quarter ○ Month ○ Week ○ Date Select the dimensions according to your requirement and move them from the Available list to the Selected list. **Note:** This field only appears when the **Aggregate on time dimension** option is selected.

5. Select **Submit**.

Result
The configuration data is now ready to be imported in to your add-in.

Example: Data aggregation for entities
If an ESG reporting disclosure manager wants to understand the total emissions for an entire year for a particular location and if the location has sub-locations, you can also aggregate the data and use it for reporting purposes. For example, consider that your organization has a location Japan. Japan, in turn, has two sub locations, Tokyo and Kyoto. Assume that you want to find your total yearly Scope 1 emissions for the year 2022 for Japan. Using the time dimensions feature, you can aggregate your data and get a view of your total emissions for a year. You can also aggregate the data for a quarter, week, or a month depending on your reporting requirements. The metric data is aggregated at frequencies higher than the metric data collection frequency. To achieve this, in the **Source table** field, select **Metric data by entity [sn_grc_metric_data_by_entity]** and select the **Aggregate on time dimension** option, and select the time dimension field from the source table.

Add related fields to a Microsoft 365 configuration record

Add related fields to filter values based on the chosen primary field. These filter values will automatically adjust according to the selected filter criteria.

Before you begin

Create additional reporting configuration filters for a Microsoft 365 configuration record. For more information, see Set up Microsoft 365 reporting configuration and Add additional reporting configuration filters for a Microsoft 365 configuration record.

Role required: (per product)

- In Operational Sustainability Management: sn_esg_msoff_intg.admin
- In Audit Management: sn_audit.admin

About this task

Filter the fields dynamically and set up dependencies by using related fields. In the Microsoft 365, you can configure fields so that cascading filters are supported dynamically. You can select a value in a field and have the related fields automatically update to show the relevant options. This process helps you to streamline data entry and improve efficiency.

Procedure

1. Navigate to once of the following locations:
   - **All** > **Operational Sustainability Management** > **Microsoft 365 Reporting Integration** > **Reporting Configurations**
   - **All** > **Audit** > **Audit report** > **Reporting Configurations**
2. Open the record for which you want to add the additional reporting configuration filters.
3. On the Microsoft 365 reporting configuration filters related list, select the field name of the filter you want to add related fields to.
4. Select the lock icon to unlock the related fields and then choose the fields that the **Field name** should be related to.
5. Add related fields by selecting the magnifying glass icon and choosing the fields that you want.
   Only fields with a greater order values can be selected as related fields.
6. Select update.
   The available **Field name** values are now dependent on what value is selected for the fields added as related fields. For example, if you selected the city field name you can select the country field name as a related field so that only cities from that country show when you make selections.
7. Repeat steps 3 through 6 until all the related fields that you want are set up.

Result

The related fields are ready to be used as part of your configuration data.

Example: Data aggregation for entities in Japan

If an ESG reporting disclosure manager wants to understand the total emissions for an entire year for a particular location in Japan and if the location has sub-locations, you can make this process easier by using related fields. To add related fields, select the field that you want to set a dependency with. For instance, select the City field and add the Country field as a related field. Now, when you select Japan as the location's country, the options for the city field will be limited to only cities located in Japan. This setup helps ensure that the data aggregation for Scope 1 emissions is focused on Japan and its specified sub-locations, such as Tokyo and Kyoto.

Add the ServiceNow Reporting add-in into Microsoft Word

Before you can import data into your Microsoft Word document to create your disclosure reports, you must add the ServiceNow Reporting add-in to your Microsoft Word.

Before you begin

Role required: Any user of the Microsoft Word document.

Procedure

1. Open the Microsoft Word application.
2. On the menu bar, select **Home**.
3. Select **Add-ins**.
4. Select **ADMIN MANAGED**.
5. Select the **ServiceNow Reporting** add-in.
6. Select **Add**.

Result

The Microsoft 365 for ServiceNow Reporting integration is activated and the following buttons are available on the Microsoft Word document in the **ServiceNow Reporting** add-in.

- **Insert Link**
- **Manage Links**
- **Create claim**

Import data in to a Microsoft Word disclosure report

Import and insert data and reports into a Microsoft Word disclosure report document from a ServiceNow instance. You can only import and insert the data that is configured in your reporting configurations.

Before you begin

Role required: sn_esg_msoff_intg.reader

Procedure

1. Navigate to the Microsoft Word document in which you want to insert data.
2. On the ribbon, select **Insert Link**.
   On the right side pane, the ServiceNow log in screen appears.
3. To log in to your ServiceNow instance, select **Log in**.
   a. A message is displayed that states that ServiceNow Reporting will display in a new window, select **Allow**.
   b. On the ServiceNow login screen, provide your credentials.
   c. Select **Allow**.
4. To insert an Operational Sustainability Management data point from a table into the document, move the cursor at the point where you want to insert data.
   a. Select the **Data** tab on the right side pane.
   b. The **Business domain** field is set to **Operational Sustainability Management**.

c. In the **Reporting Item** field, select the Microsoft 365 reporting configuration record you want to insert.
The additional filters dynamically appear based on the configuration record selected.

d. In the **Value to insert** field, select the column from which you want to insert data.

e. Select **Add**.

5. To insert data in HTML format move the cursor at the point where you want to insert data.
   a. Select the **Data** tab on the right side pane.
   b. The **Business domain** field is set to **Operational Sustainability Management**.
   c. In the **Reporting item** field, select the configured report that you want to insert.
   d. In the **Metric definition** field, select the Metric definition that contains the HTML content you want.
   e. In the **Response** field, select the HTML content you want.
   f. In the **Value to insert** field, select **Response**
   g. Select **Add**.
   The HTML content excluding images is inserted in to the disclosure report document.
6. To insert a report, move the cursor at the point where you want to insert data.
   a. Select the **Table** tab on the right side pane.
   b. The **Business domain** field is set to **Operational Sustainability Management**.
   c. In the **Reporting item** field, select the configured report that you want to insert.
   d. Select **Add**.
   The data is inserted in to the disclosure report document. The inserted text takes the formatting of the document. You can modify the formatting as required.
7. To insert a chart, move the cursor at the point where you want to insert the chart.
   a. Select the **Chart** tab on the right side pane.
   b. The **Business domain** field is set to **Operational Sustainability Management**.
   c. In the **Reporting item** field, select the configured report that you want to insert.
   d. Select **Add**.
   The chart is inserted in to the disclosure report document. The inserted chart can be modified according to your preferences. For example, you can change the colors, the type of chart and so on.
8. To copy the document ID, select the copy icon.
9. To view the details of any record that is inserted in the document, select the content control, and then select **Open link**.
10. To view the list of all ServiceNow links that you've inserted in the report and obtain the latest data on the document, select **Manage Links**.

    a. Select the check boxes for the links that you want to refresh.

    b. Select the refresh icon.
    The data is refreshed while displaying the time of refresh and retaining the formatting of the document.

11. To identify and highlight which content control is selected on the report, select the three vertical dots or the more actions icon.
    The content control is highlighted in the right pane.
12. To create a claim to be used in the disclosure report, refer to Create a claim from Microsoft Word.

Related topics

Add additional reporting configuration filters for a Microsoft 365 configuration record

Add related fields to a Microsoft 365 configuration record

Add the ServiceNow Reporting add-in into Microsoft Word

Create a claim from Microsoft Word

You can create a claim directly from Microsoft Word for use in future disclosures or reports.

Before you begin
Role required: Any user of the Microsoft Word document and sn_grc_claims.manager

Procedure

1. Navigate to the Microsoft Word document.
2. On the ribbon, select **Create claim** under **ServiceNow Reporting**.
   On the right side pane, the ServiceNow log in screen appears.
3. To log in to your ServiceNow instance, select **Log in**.
   a. A message is displayed that states that ServiceNow Reporting displays in a new window, select **Allow**.
   b. On the ServiceNow login screen, provide your credentials.
   c. Select **Allow**.
4. On the **Claims for reporting** form, fill in the fields.
   For more information regarding the field descriptions, see Claims for reporting fields.
5. Select **Save**.

Integrating Operational Sustainability Management (formerly ESG) with Advanced risk assessment

The Operational Sustainability Risk Management capability enables you to assess and evaluate operational sustainability risks for businesses. This capability is an integration of ESG Management with Advanced risk assessment. To use the risk assessment feature, you must install and activate the sn_esg_risk_mgmt plugin.

The Advanced risk assessment feature enables you to integrate risk assessment as part of your overall decision-making process.

Risk assessment is of two types: Quantitative and qualitative. Qualitative risk assessments rely on the assessor's perceptions of the probability and impact of a risk. If the method is purely qualitative, then the ratings are based on the list values such as high, medium, or low. In this case, the risk scores do not roll up. Because this method has minimal mathematical dependency, qualitative risk assessment is easy and quick to perform. This method also enables an organization to take advantage of the assessor's knowledge of the process or asset that is being assessed. Users who are new to risk assessments usually use qualitative assessment. A quantitative risk assessment focuses on data that is fact-based, measurable, and highly

mathematical. In a quantitative risk rating that uses advanced simulation techniques, the risk is quantified in purely numerical terms.

The Operational Sustainability Risk Management application provides both types of risk assessments and is employed for assessing both entities and material topics. Object-based assessments focus on material topics, while risk-based assessments are applied to entities. The resulting risk assessment scores are then aggregated for risk-based assessments. Object-based assessment allows for evaluating risks on ServiceNow records or objects even in the absence of a comprehensive GRC setup for entities, risk statements, controls, and so on. An example of object assessment involves assessing change management or assessing a citation. For a more in-depth exploration of Advanced risk assessments, refer to the Advanced Risk Assessment documentation.

To learn about the roles are installed with the sn_esg_risk_mgmt plugin, refer to Components installed with Operational Sustainability Management (formerly ESG Management).

Workflow of Operational Sustainability Risk Management

To perform risk assessments for your material topics and your entities, the ESG administrator, the ESG risk manager, and the ESG data owner must perform a set of defined steps.

The following steps are necessary to successfully perform your ESG risk assessments.

1. The system administrator enables the *`Migrate to Advanced Risk Assessments`* property located under **Advanced Risk Assessment > Administration > Properties**.
2. As an ESG administrator, complete the following tasks.
   a. Configure the two risk assessment methodologies (RAMs) that are provided by default. One RAM is designed for evaluating material topics, while the other is tailored for assessing entities. When you configure the methodologies, you specify the risks that you want to assess such as inherent risk and residual risk. To understand each of these types, refer to Advanced Risk Assessment.
   b. Configure the factors for the risk assessments. Factors are questions that appear during the risk assessment to which the risk assessor responds. To understand more about factors and their types, refer to Factors in Advanced Risk Assessment.
3. As an ESG risk manager, complete the following tasks.
   a. Create risk statements and associate entities with the risk statement. To learn how to create a risk statement, refer to Create a risk statement.
   b. Create risks. To learn how to create a risk, refer to Generate a risk from a risk statement.
   c. Create a risk assessment scope to define and identify risks for an entity, identify assessors and approvers for assessments, define the frequency of assessments, and initiate the risk assessment. To learn about how to create a risk assessment scope, refer to Create a risk assessment scope and initiate assessments.
4. For risk-based assessments, as an ESG data owner, from the Tasks pane in the Operational Sustainability Workspace, respond to an assessment, review, and submit the assessment for approval if the approvers are defined. If there are no approvers defined, the risk score is rolled up to the risks and entities.
5. For object-based assessments, as an ESG program manager, from the Tasks pane in the Operational Sustainability Workspace, respond to the assessment, review, and submit for the assessment for approval if the approvers are defined.

Configure a risk assessment methodology

Configure the risk assessment methodologies (RAMs) that are provided by default. A RAM is a configuration or a record in the risk assessment engine.

Before you begin
Role required: sn_esg.admin

About this task
You can use a RAM to assess either the risks or objects in your organization. For example, you can configure a RAM to specify the types of risk assessments and the entities on which a risk assessment is performed. There are two RAMs that are provided by default with the domain area set to **Operational Sustainability Management**.

Procedure
1. Navigate to **All** > **Operational Sustainability Management** > **Risk administration** > **Risk assessment methodologies**.
2. Select the RAM that you want to modify or configure.
3. On the form, modify the fields.
   For information on the RAM fields, refer to Risk Assessment Methodology form.

Create a risk assessment scope and initiate an assessment

Create a risk assessment scope to define and identify risks for an entity. Identify assessors and approvers for assessments and define the frequency of assessments. After creating the scope, initiate the risk assessments.

Before you begin
Role required: sn_esg_risk_mgmt.risk_manager

Procedure
1. Navigate to **All** > **Operational Sustainability Management** > **Risk assessment planning** > **Scoped entities**.
2. Select **New**.
3. On the form, fill in the fields.
   For information on the fields of the Risk Assessment Scope form, refer to Create a risk assessment scope and initiate assessments.

Initiate risk assessments on material topics

Assess the risks to your material topics by initiating a risk assessment and sending it to the owner of the material topic.

Before you begin
Role required: sn_esg.program.manager

Procedure
1. Navigate to **All** > **Operational Sustainability Management** > **Operational Sustainability Workspace** > **Lists** > **Program Setup** > **Material topics**.
2. Open the material topic for which you want to assess the risks.
3. Select **Initiate risk assessment**.

Result
The risk assessment is sent to the owner of the material topic. The assessor then responds to the assessment.

Respond to a risk assessment

Conduct risk assessments to assess risks in the ESG Management application.

Before you begin

Role required: sn_esg.data_owner

Procedure

1. Navigate to **All** > **Operational Sustainability Management** > **Operational Sustainability Workspace** > **My tasks**.
2. Open the risk assessment that you want to assess and do one of the following.
   - If you want to start the assessment, select **Let's get started**.
   - If you think that the risk assessment must be assigned to someone else, select **Reassign** and fill in the necessary details.
   - If this risk was previously assessed, to view the previous assessment, select **Review last assessment**.
3. To perform inherent assessment, respond to the all inherent assessment questions.
4. **Optional:** To view the qualitative and quantitative weightage, select **Overall rating**.
5. To save and view the scores, select **Save**.
6. **Optional:** To change the computed inherent risk results, do the following:
   a. Select the **I would like to change the computed score** option.
   b. From the **Override inherent risk** field, select the appropriate value.
   c. Enter comments that explain the reasons for the change in the computed score.
   d. Select **Save**.
7. To assess the leftover risks after the implementation of mitigating controls, select **Move to residual assessment** and respond to the factors.
   You can also change the computed residual score by providing a justification for changing the score.
8. **Optional:** If you want to modify the assessment, select **Edit assessment**.
9. If you have defined approvers, then select **Review and submit**.
   The assessment home page is displayed. You can review the summary of your assessment.
10. To request approval, edit assignment, or reassign, select one of the following.

Choice	Description
Request approval	If an approver is specified, select this option to send the assessment for approval. You can also provide additional comments for the ap prover.
Edit assessment	If you want to modify your responses in the as sessment, select this option.
Reassign	If the assessment must be assigned to some one else, select this option.

Integrating Operational Sustainability Management (formerly ESG) with Watershed

Watershed is a tool that enables organizations to measure their carbon emissions and renewable energy and its impact. It also enables organizations to act to reduce emissions, and to report on the progress to reduce their carbon footprint.

ESG Management users can use Watershed to calculate their Scope 1, 2, and 3 emissions for their business. A company's greenhouse gas (GHG) emissions are classified into three Scopes. The following table explains the difference between each Scope.

Difference between Scope 1, 2, and 3 emissions

Scope 1	Scope 2	Scope 3
Direct GHG emissions from the following sources: • Fuel combustion • Emissions from company vehicles • Emissions from chemical production in owned or controlled process equipment • Fugitive emissions	Indirect emissions from the following sources: • Purchased electricity • Heat and steam.	Indirect emissions from the following sources: • Purchased goods and services • Business travel • Employee commuting • Waste disposal • Use of sold products • Transportation and distribution (up- and downstream) • Investments • Leased assets and franchises

Watershed maintains its data in spreadsheets and provides those spreadsheets to the ESG Management program manager. As an ESG Management program manager, with the role sn_esg.program_manager, you must import the data from the spreadsheets into the source tables in the ESG Management application. The source tables are then specified in the metric definitions in a ServiceNow instance.

To use the features of Watershed, you must activate the Operational Sustainability Integration with Watershed plugin and configure the metric integrations.

Note:

- To successfully import data, you must add the import_admin role to the sn_grc_metric.admin role.
- Only automated metric definitions with **External source** as the Method type support data import. If you already have a manual metric definition in your system, you must change its Type to **Automated** and the Method type to **External source** before you can import data. For more information, refer to Create an automated metric definition.

Before you import data from the spreadsheets, you can either create the metric definitions or you can rely on the system to create placeholders and add the details later.

The metrics are generated based on the frequency that you have defined in the metric definition. The metric values, along with their units, are displayed on the metrics related list in the metric definition. The values are then rolled up based on the formula specified in the metric definition.

Note: You can convert any metric data into a preferred reporting unit.

By default, the ServiceNow AI Platform provides the following data that you can import from Watershed.

- Carbon emissions
- Renewable energy
- Non-renewable energy

You may also want to import other data such as water usage or waste disposal. To import other types of data, you can use the Metric integrations to import your data.

Modify the Operational Sustainability Integration with Watershed

Modify the Operational Sustainability Integration with Watershed configurations to specify how you want to import data from Watershed to generate metrics.

Before you begin

Role required: sn_esg.program_manager

About this task

The ServiceNow AI Platform provides a pre-configured integration to import data from Watershed. However, you can update or modify the configuration properties based on your requirements. For example, when you modify the configuration, you can specify if you want the system to automatically create metric definitions or if you want to override metric data.

Procedure

1. Navigate to **All** > **Operational Sustainability Management** > **Watershed** > **Metric Integration**.
2. On the Metric Integrations page, select **Watershed Integration**.
3. On the form, edit the fields as required.

Watershed Integration form

Field	Description
Name	Name of the mapping.
Source	Source of the mapping. This field is automatically set to **Watershed Data**.
Domain area	Domain from which the integration is created. This field is automatically set to **Operational Sustainability Management** when the integration is created from Operational Sustainability Management.
Source table	The source table is automatically set to **Watershed Data**.
Automatically create metric definition	Option to automatically create the metric definitions during data import.
Automatically create metric unit	Option to automatically create the metric unit during data import.

Field	Description
Automatically create entity type	Option to automatically create the entity type during data import.
Automatically create entity	Option to automatically create the entity during data import.
Overwrite metric data	Option to overwrite metric data during data import.

4. Select **Update**.

Create data mapping

Create data mappings to import Watershed data from columns other than the pre-configured columns of the Watershed spreadsheet. By default, data import from three columns is supported.

Before you begin

Role required: sn_esg.program_manager

About this task

By default, you can import data related to carbon emissions, renewable energy, and non-renewable energy. If you want to import other types of data such as water usage or waste disposal from the spreadsheet, then you can create data mappings for them. You can create as many mappings as you need.

Procedure

1. Navigate to **All** > **Metrics** > **Metrics Integrations**.
2. Select **Watershed Integration**.
3. In the Data mapping section, select **New**.
4. On the form, fill in the fields.

Data mapping form

Field	Description
Name	Name of the mapping.
Source table	Source table of the mapping. This field is automatically set to **Watershed Data**.
Data column	Column from which you want to import data.
Start date column	Column in the source table that has the start date.
Start date	Start date of the mapping. If there is no start date column, specify the start date.
Frequency	Frequency of the data in the spreadsheet. For example, monthly data, annual data, or so on.
End date column	Column in the source table that has end date.
End date	End date of the mapping. If there is no end date column, specify the end date.
Unit column	Unit column from the imported data set.

Field	Description
Unit	Unit of the data.
Default owner	Metric definition owner or the entity owner.
Metric integration	Metric integration. This field is automatically set to **Watershed Integration**.

5. Select **Submit**.

Result
The new mapping is ready to import data.

Create a record identifier in an entity

Create record identifiers with text for correctly mapping the entities. This activity saves time for the ESG program managers by not having to create new entities.

Before you begin
Role required: sn_esg.program_manager

About this task
You can map the existing data in your system, such as an entity, an entity type, and the metric definition, with the data from the Watershed spreadsheets. If the format of the data is different in the spreadsheets, you can create mapping record identifiers. This procedure uses an entity with the entity class as Location as an example. For example, assume that you already have an entity titled Akaska, Japan in your system and the spreadsheet contains the entity name as Akaska, Minato, JP. In this case, you must enable the system to map Akaska, Minato, JP with Akaska, Japan. To do this task, you must create a record identifier to identify the entity in your system.

Procedure
1. Navigate to **All** > **Operational Sustainability Management** > **Scoping** > **All Entities**.
2. Search for and open the entity for which you want to add a record identifier.
3. Select the Mapping related list.
4. Select **New**.
5. Copy the text that you want to map to the entity from the spreadsheet.
6. In the **Record identifier** field, paste the text that you copied in the previous step.
7. Select **Submit**.

Result
The identifier is added to the entity. When the system detects the record identifier text during the importing of data, the record will be mapped to the correct entity.

Load data from Watershed into ESG Management

Load data from the Watershed spreadsheets into the staging table. After you load the data and complete the setup, you can start using the Operational Sustainability Integration with Watershed.

Before you begin
You must add the import_admin role to the sn_grc_metric.admin role.

Role required: sn_esg.program_manager

Procedure

1. Navigate to **All** > **Operational Sustainability Management** > **Load Data**.
2. On the Load Data form, select **Existing table**.
3. In the Import set field, select **Watershed Data [sn_esg_watershed_data]**.
4. Select **Choose File**, and select the file that you want to load.
5. Select **Open**.
6. In the **Sheet number** field, verify that the sheet number is appropriate.
7. In the **Header row** field, verify that the header row is appropriate.
8. Select **Submit**.

Result

The spreadsheet is loaded in the staging table. All the columns from the spreadsheet are created.

What to do next

View the import set.

View and verify the import sets

Verify if your data is imported correctly from an external source. This verification enables you to identify if there were any errors during the data import.

Before you begin

Role required: sn_esg.program_manager

About this task

After the data is loaded to the ESG Management application from an external source, such as a spreadsheet, import sets are created where the state of each row is available. If there are errors during import, the state is updated as **Error**. If the data is imported, the state is updated as **Inserted**. You can also view the cause of the error in the error log. If the metric data is overridden, then the state is set to **Ignore**.

Procedure

1. Navigate to **All** > **Operational Sustainability Management** > **Import Sets**.
2. Open the import set you want to verify.
3. In the Import Set Rows section, view the state of each row.
   If you want to reload the data to check for errors, you must import your data again. Do not select **Reprocess** under Related Links in the Import set.
4. To view the error log, select the Import Log section.

What to do next

Create a transform map.

Create a transform map

Create a transform map to match the columns from the staging table to the columns in the target table. The transformation helps to convert the data from the source table into metric data.

Before you begin

If you already have manual Metric Definition in the system before the import, you must change the type of metric definition to **Automated** and the method type to **External source**.

Role required: sn_esg.program_manager

About this task

A map is transformed when you import data from a staging table such as Watershed Data [sn_esg_watershed_data] to a target table such as Metric Data [sn_grc_metric_metric_data]. By default, there are three transform maps available for each table when you import data from Watershed.

Procedure

1. Navigate to **Operational Sustainability Management** > **Watershed** > **Import Sets**.
2. Open the import set that you created.
3. Under Related Links, select **Transform**.
4. On the Specify Import Set and Transform map form, move the required maps from the **Available** column to the **Selected maps run in order** column.
5. Select **Transform**.

Integrating Operational Sustainability Management (formerly ESG) with Urjanet

Urjanet is a cloud-based platform that extracts different utility bills directly from the source, and delivers it into the business systems and applications that rely on it. As an ESG program manager or a metrics manager you can get your utilities data automatically from Urjanet and avoid manual data entry from your various facilities or office owners.

A utility bill is a detailed invoice, issued and paid once a month from utilities, including electricity, natural gas, water, and waste. With the Operational Sustainability Integration with Urjanet, organizations can obtain historical or real-time utility data from Urjanet into the ServiceNow AI Platform in the form of metrics. These metrics can then be tracked using the Operational Sustainability Workspace and are associated with other operational sustainability components such as goals and targets thus enabling organizations to take the necessary actions for sustainability.

Using this integration, you can automatically bring the following types of data from Urjanet into the ESG Management application.

- Water and electricity consumption
- Waste generated and so on.

The workflow of the Operational Sustainability Integration with Urjanet is as follows:

1. Create entities: Each utility data for all your locations is tracked as an entity in the ESG Management application. For example, your electricity consumption in your Atlanta office is considered to be an entity. Therefore, you must create entities for all the utility data that you want to track. If you've already created the entities, then you must map the utility data that is imported from Urjanet with the entities created. Certain fields such as **Entity class** and **Entity owner** in the entity forms must be manually filled in by the users of the integration.
2. Activate the metric definitions: For the Operational Sustainability Integration with Urjanet, ServiceNow® provides a few metric definitions by default. You must activate the ones that you require for your metric collection. Only those metric definitions that are active are considered and their data is loaded into the system. Certain fields such as **Unit**, **Frequency** and **Enterprise owner** in the default metric definitions must be manually filled in by the users

of the integration. If you don't want to use the metric definitions provided by default, you can create your own metric definitions.

3. Import the data for the metrics: After the user activates the required metric definitions, the data for those metric definitions and their entities will be imported into the ESG Management as metrics and metric data.

Install Operational Sustainability Integration with Urjanet

You can install the Operational Sustainability Integration with Urjanet application (sn_esg_urjanet) if you have the admin role. The application installs related ServiceNow® Store applications and plugins if they are not already installed.

Before you begin

- Ensure that the application and all of its associated ServiceNow Store applications have valid ServiceNow entitlements. For more information, see Get entitlement for a ServiceNow product or application.
- Ensure that you create an Urjanet account and obtain the login credentials.

Role required: sn_esg.admin

About this task

The following items are installed with Operational Sustainability Integration with Urjanet:

- Plugins
- Store applications
- Roles
- Scheduled jobs
- Tables

For more information, see Components installed with Operational Sustainability Management (formerly ESG Management).

Procedure

1. Navigate to **All** > **System Applications** > **All Available Applications** > **All**.
2. Find the Operational Sustainability Integration with Urjanet application (sn_esg_urjanet) using the filter criteria and search bar.

   You can search for the application by its name or ID. If you cannot find the application, you might have to request it from the ServiceNow Store.

   In the list next to the **Install** button, the versions that are available to you are displayed.
3. Select a version from the list and select **Install**.

   In the Review Installation Details dialog box, any dependencies installed with your application are listed.
4. If you're prompted, follow the links to the ServiceNow Store to get any additional entitlements for dependencies.
5. **Optional:** If demo data is available and you want to install it, select the **Load demo data** check box.

Demo data are sample records that describe application features for common use cases. Load the demo data when you first install the application on a development or test instance.

6. Select **Install**.

Create an Urjanet connection

Create an Urjanet account connection with valid credentials to establish a connection between Urjanet and ServiceNow®. Only one connection can be active for each domain for the integration. You can separate the imported data into logically defined domains. Data access is restricted among the domains.

Before you begin

Role required: admin or connection_admin

Procedure

1. Navigate to **All** > **Operational Sustainability Management** > **Urjanet** > **Connection & Credential Alias**.
2. Select the **Create New Connection & Credential**.
3. On the form, fill in the fields.

Create Connection and Credential form

Field	Description
Connection name	Name of the connection. This field is automatically set to **Urjanet Connection**.
Connection URL	Urjanet API base URL. This field is automatically set to **https://api.urjanet.com**.
Date	Date from which the historical data must be loaded. This date must be in the past. **Note:** The date must be in the yyyy-mm-dd format.
Credential name	Name of the credential. This field is automatically set to **Urjanet Credential**.
Username	Urjanet account username.
Password	Urjanet account password.

4. Select **Create**.

Create an entity mapping for Urjanet

Create entity mappings for Urjanet because the Operational Sustainability Integration with Urjanet considers each Urjanet account meter as an entity.

Before you begin

Ensure that you activate the sn_esg_urjanet plugin.

Role required: sn_esg.admin

About this task

Before starting with the integration, if you do not have entity mappings, you can create entity mappings so that the Urjanet account meter data can be mapped to an entity. The Operational Sustainability Integration with Urjanet considers the Urjanet account meters as entities. This procedure is optional.

Procedure

1. Navigate to **All** > **Operational Sustainability Management** > **Urjanet** > **Entity Mapping**.
2. Select **New**.
3. On the form, fill in the fields.

Entity Mapping form

Field	Description
Record identifier	Urjanet meter ID.
Related record	Entity to be mapped.
Additional information	Field used to specify the information that must be filled in by the administrator. Certain fields such as **Entity class** and **Entity owner** must be manually filled by the user.
State	Review state. Based on the information provided in the **Additional information** field, the administrator must fill in the required information and then change the state of this field. The choices are as follows. ○ **No review required**: Use this option when there are no fields to be filled in the entity record by the administrator. ○ **Review required**: Use this option if the administrator must fill some fields in the entity record. ○ **Reviewed**: Use this option if the administrator has already provided the information in the specified fields in the entity records. This field is automatically set to **No review required**. You must change the state to **Reviewed** after you provide the information.

4. Select **Submit**.

Create a metric definition mapping

Create a metric definition mapping to map the imported data from Urjanet with the correct metric definitions.

Before you begin

Role required: sn_esg.metrics_manager

Procedure

1. Navigate to **All** > **Operational Sustainability Management** > **Urjanet** > **Metric Definition Mapping**.
2. Select **New**.
3. On the form, fill in the fields.

Metric Definition Mapping form

Field	Description
Record identifier	Name of the record that will be used to map data. For example, `Electric - Demand usage`.
Related record	Metric definition to which the record is mapped.
Additional information	Any notes or comments.
State	Review state. This field is used to provide information to sn_esg.admin that there are a few entity mapping records to be reviewed and those records require the missing information. The choices are as follows. ○ **No review required**: Use this option when there are no fields to be filled in the entity form by the admin. ○ **Review required**: Use this option if the admin must fill some fields in the record. ○ **Reviewed**: Use this option if the admin has already provided the information in fields. This field is automatically set to **No review required**.

4. Select **Submit**.

Generate Webhook URL

Define a Webhook registry for generating the Webhook URL. Urjanet uses the Webhook URL to send real time data to the ESG Management application when an Urjanet statement data is either generated or modified.

Before you begin

Role required: sn_esg.admin

About this task

A statement in Urjanet refers to a bill. Whenever a new statement is generated in Urjanet, using the defined Webhook, the ESG Management application is notified about the new statement generation and the data is fetched into the ESG Management application without any manual intervention.

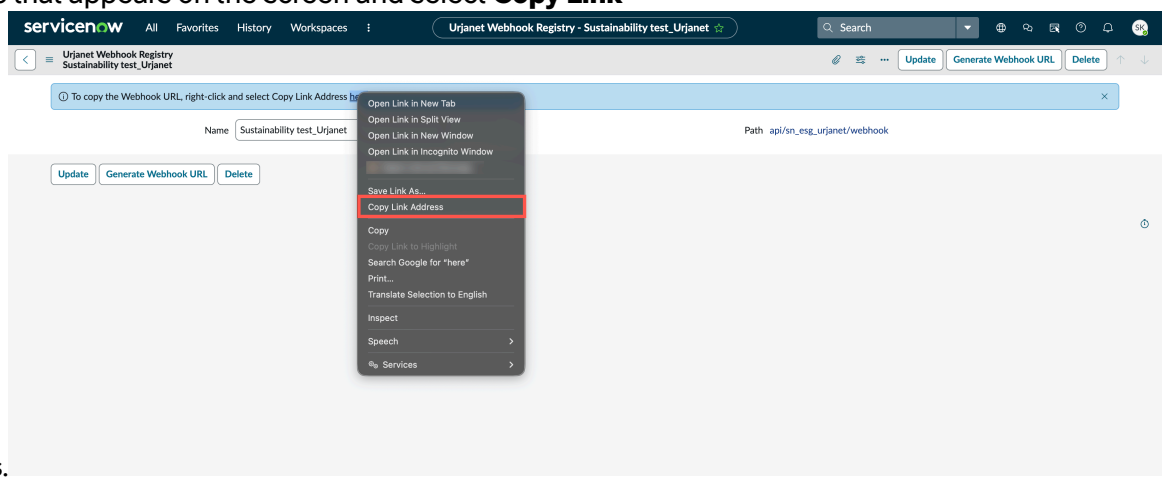
Procedure

1. Navigate to **All** > **Operational Sustainability Management** > **Urjanet** > **Webhook Registry**.
2. Select **New**.
3. On the form, fill in the fields.

Urjanet Webhook Registry form

Field	Description
Name	Name of the registry.
Path	Resource path of the Scripted REST API to be used for inbound Urjanet API calls. This field is automatically set to **api/sn_esg_urjanet/webhook**.

4. Select **Submit**.
5. Open the record that you created and select **Generate Webhook URL**.
6. To copy the Webhook URL, right-click the information message that appears on the screen and select **Copy Link Address**.



What to do next

Paste the URL that is generated in the Urjanet console to get real-time Urjanet statement data. For more information, contact your system administrator.

Import meter details from Urjanet

Using scheduled jobs, import meter details such as meter number, meter ID, and so on from Urjanet into the ESG Management application for reporting purposes. The details are imported in the form of entities.

Before you begin

Role required: import_scheduler

Procedure

1. Navigate to **All** > **System Import Sets** > **Administration** > **Scheduled Imports**.
2. Select and open the **Urjanet Entity Scheduled Data Import** record.

3. Select **Execute Now**.
   By default, the data import is set to run every 90 days but you can modify the frequency in the **Run** field. For more information on configuring a scheduled data import, see Schedule a data import.

Result
The entities are created with the following details.

- Name: Urjanet meter's site name and Urjanet meter's meter number.
- Location: Service address of the Urjanet meter.
- Description: Provider of the Urjanet meter.

Load historical Urjanet data

Load historical Urjanet account statement data as metric data by creating new metrics that can be managed as part of Operational Sustainability Management. Data is retrieved from the date that you specify while configuring the Urjanet connection.

Before you begin
Role required: import_scheduler

Procedure

1. Navigate to **All** > **System Import Sets** > **Administration** > **Scheduled Imports**.
2. Select and open the **Urjanet Metric Data Scheduled Data Import** record.
3. Select **Execute Now**.
   By default, the data import is set to run every 90 days but you can modify the frequency in the **Run** field on the Scheduled Data Import form. For more information on configuring a scheduled data import, see Schedule a data import.

Result
The metrics are created by using the configured entities and metric definitions.

Integrating Operational Sustainability Management (formerly ESG) with Workday

The Operational Sustainability Integration with Workday plugin enables users to import HR data that is required for operational sustainability reporting from Workday into the ESG Management application.

Using this integration, an ESG administrator can import monthly and yearly metric data from a wide range of categories such as benefits, demographics, compensation, and so on. This integration saves time for HR, Operational Sustainability Management, and IT teams by making the data transfer process secure and automatic. The integration is also configurable according to an organization's requirements. By default, 150 metric definitions in **Inactive** state and 15 corresponding reports are provided to the users. To configure the reports on Workday, see the Workday ESG Integration Workday Reports' Configuration [KB1220842] article in the Now Support Knowledge Base. The article also provides mappings between the metric definitions and the Workday reports. ESG administrators must activate those metric definitions from which they want data. The data that is obtained is then used for disclosure reporting.

The following are the different types of reports that can be obtained using the integration:

- **Point in time**: In this type of report, the metric data is obtained until a given point in time. For example, you may want to obtain data for the number of hires in an organization on a specific date such as Jan 25, 2023. In this case, if the metric definition has the frequency set to **Annual**, the data until Dec 31, 2022 will be available for reporting.
- **Cumulative**: In this type of report, the metric data is obtained for a given period. For example, you may want to obtain the data for the number of hires for a particular quarter in the year 2023.

Workflow of Operational Sustainability Integration with Workday

To import data from Workday into ESG Management, you must perform a sequence of tasks and configure the system properly.

The workflow of the integration is described as follows.

1. The ESG administrator installs the Operational Sustainability Integration with Workday plugin and does the following:
   a. Creates a connection and credential with the help of the Workday administrator.
   b. Activates the necessary metric definitions.
2. The Workday administrator configures the Workday reports.
3. The administrator offboards the webhook configuration.
4. The ESG administrator generates the webhook registry.
5. The system administrator executes the necessary scheduled jobs.
6. After the report is ready, the metric definitions and their corresponding data is available in a comma-separated values (CSV) file.

Install Operational Sustainability Integration with Workday

You can install the Operational Sustainability Integration with Workday application (sn_esg_workday) if you have the admin role. The application includes demo data and installs related ServiceNow® Store applications and plugins if they are not already installed.

Before you begin

- Ensure that the application and all of its associated ServiceNow Store applications have valid ServiceNow entitlements. For more information, see Get entitlement for a ServiceNow product or application.

Activate the ServiceNow IntegrationHub Enterprise Pack Installer (com.glide.hub.integrations.enterprise) plugin.

Role required: admin

About this task

The following items are installed with Operational Sustainability Integration with Workday:

- Plugins
- Store applications
  - Operational Sustainability Management
  - GRC: Profiles Dependencies
  - GRC: Policy and Compliance Management

  - GRC: Metrics
  - Goal Framework
- Roles
- Scheduled jobs
- Tables

For more information, see Components installed with Operational Sustainability Management (formerly ESG Management).

Procedure

1. Navigate to **All** > **System Applications** > **All Available Applications** > **All**.
2. Find the Operational Sustainability Integration with Workday application (sn_esg_workday) using the filter criteria and search bar.

   You can search for the application by its name or ID. If you cannot find the application, you might have to request it from the ServiceNow Store.

   In the list next to the **Install** button, the versions that are available to you are displayed.
3. Select a version from the list and select **Install**.

   In the Review Installation Details dialog box, any dependencies installed with your application are listed.
4. If you're prompted, follow the links to the ServiceNow Store to get any additional entitlements for dependencies.
5. **Optional:** If demo data is available and you want to install it, select the **Load demo data** check box.
   Demo data are sample records that describe application features for common use cases. Load the demo data when you first install the application on a development or test instance.
6. Select **Install**.

Create a Workday connection

Create connection and credential records for the Operational Sustainability Integration with Workday so that you can establish a new connection.

Before you begin

Role required: admin or connection_admin

Procedure

1. Navigate to **All** > **Operational Sustainability Management** > **Operational Sustainability Integration with Workday** > **Connection & Credential Alias**.
2. On the Connection and Credentials Aliases form, select the **Create New Connection & Credential** related link.
   Contact your Workday administrator to obtain the information for the required fields.
3. On the form, fill in the fields.

Create Connection and Credential form

Field	Description
Connection information	
Connection name	Name of the OAuth connection.
Connection URL	Workday Connection URL.
Soap version	Latest version of simple object access protocol (SOAP) available in Workday
Tenant name	Tenant Name of Workday.
Credential information	
Credential name	Name of the OAuth credential.
OAuth Client ID	OAuth Client ID configured in Workday.
OAuth Client Secret	OAuth Client Secret configured in Workday.
OAuth Redirect URL	OAuth callback endpoint. This field is automatically set.
Auth URL	Workday OAuth Server's auth code flow endpoint.
Token URL	Workday OAuth Server's token endpoint.

4. Select **Create and Get OAuth Token**.

Result
A new connection is created in the connections related list.

What to do next
Configure the Workday reports. See the Workday ESG Integration Workday Reports' Configuration [KB1220842] article in the Now Support Knowledge Base article in the Now Support Knowledge Base.

Activate the Workday reports

Activate the corresponding Workday report for each of the metric definitions that is provided by default.

Before you begin
Role required: sn_esg.admin

Procedure
1. Navigate to **All** > **Operational Sustainability Management** > **Operational Sustainability Integration with Workday** > **Workday Reports**.
2. Select and open the report you want to activate.
3. Select the **Active** option.
4. In the **Frequency** field, select the frequency to run the report.
5. Select **Update**.

Generate webhook registry username and password

Generate a user name and password in your ServiceNow instance to authenticate webhook requests and retrieve the required metric data from the Workday application.

Before you begin

Role required: sn_esg.admin

Procedure

1. Navigate to **All** > **Operational Sustainability Management** > **Operational Sustainability Integration with Workday** > **Webhook Registry**.
2. Select **New**.
3. On the form, fill in the fields.

Workday webhook registry form

Field	Description
Name	Unique name for the webhook.
Workday instance URL	Workday host URL and tenant name. This URL will be provided by your Workday administrator.
Username	Username that will be generated. This field is automatically set after you generate the username and password.
Password	Password that will be generated to log in to the Workday instance. This field is automatically set after you generate the username and password.
Domain	Domain in which the registry is being created. Select **global** in this field.

4. Right-click the form header and select **Save**.
5. Select **Generate username and password**.
   Copy and record the values of username and password. These values must be specified in the Workday instance to authenticate the webhook requests.

Activate the metric definitions to track data

Activate those metric definitions for which you want to track or import data.

Before you begin

Role required: sn_esg.admin, sn_esg.program_manager

About this task

As part of the Operational Sustainability Integration with Workday, 150 automated metric definitions are provided by default. You must activate those metric definitions which are relevant for you and which you want to track. For example, if you want to track the metric data for the number of employees in critical role, then you must activate this particular metric definition.

Procedure

1. Navigate to **All** > **Operational Sustainability Management** > **Operational Sustainability Workspace** > **Lists** > **Automated metric definitions**.
2. Select the filter icon on the top-right.
3. Select **Advanced view**.
4. In the Advanced view filter conditions, to add a filter, select **and**.
5. Create a condition with **Source is ESG Workday**.
6. Select **Update**.
7. Select and open the metric definition you want to activate.
   a. Select the Details related list.
   b. In the **Description** field, provide a brief description of the metric definition.
   c. In the **Enterprise owner** field, select an enterprise owner.
   d. Select the **Active** option.
   e. Select **Save**.

Result
The metric definition is now active and the data from this metric definition can be imported.

Run the entity onboarding job for Workday reports

Run the specified scheduled job to get new entities that may have been added in Workday. Running this job ensures that the entity mapping table is updated.

Before you begin
At least one Workday report must be activated.

Role required: admin

About this task
When you run the *`Workday entity onboarding`* scheduled job, the job uses the first activated report in the system to invoke Workday. Workday then sends the entity ID in the CSV file along with the activated report value.

Procedure

1. Navigate to **All** > **System Definition** > **Scheduled Jobs**.
2. In the **Search** field, enter `Workday`.
3. From the filtered search results, select and open the *`Workday entity onboarding`* scheduled job.
4. Select **Execute Now**.

Run the Workday data import job

Run the scheduled integration job that runs that pulls data for the activated reports based on the frequency specified in the job.

Before you begin
At least one Workday report must be activated.

Role required: admin

Procedure

1. Navigate to **All** > **System Definition** > **Scheduled Jobs**.
2. In the **Search** field, enter `Workday`.
3. From the filtered search results, select and open the *`Workday data import`* scheduled job.
4. Select **Execute Now**.

Run the Workday on demand job

Use the ad-hoc Workday on-demand data import job to pull data for all activated Workday reports.

Before you begin

Role required: admin

Procedure

1. Navigate to **All** > **System Definition** > **Scheduled Jobs**.
2. In the **Search** field, enter `Workday`.
3. From the filtered search results, select and open the *`Workday on-demand data import`* scheduled job.
4. Select **Execute Now**.

Integrating Operational Sustainability Management (formerly ESG) with SAP Concur

Use the Operational Sustainability Integration with Concur to calculate your carbon emissions when your employees travel by car, airplane, and train for business. Tracking these emissions enables you to manage them and take the necessary actions to reduce them.

Business travel is an essential aspect of many organizations. However, such travel often results in the emission of harmful greenhouse gases. SAP Concur is a travel and expense management solution that automates the spend management process. It also integrates with other enterprise systems, such as accounting and financial management software, to provide a complete view of travel and expense data.

When you use the Operational Sustainability Integration with Concur, you can better understand the impact of employee travel on the environment, and calculate the carbon emissions generated when employees travel by plane, train, or car for business purposes. This information can help organizations take steps towards reducing their carbon footprint and promoting environmentally sustainable practices. Using this integration, you can import travel data for employees for Scope 3 emission calculation and avoid manual data entry.

To track the emissions, by default, the following metric definitions are provided in inactive state:

- Total distance travelled by all employees by car
- Total distance travelled by all employees by train
- Total distance travelled by all employees by airplane

You must activate those metric definitions that you require. After you create the necessary connections and credentials and subscribe to the webhook registry, the scheduled jobs that are provided run and every time there is a trip created or updated in Concur, the data gets imported into ESG Management.

Install the Operational Sustainability Integration with Concur

You can install the Operational Sustainability Integration with Concur application (sn_esg_concur) if you have the admin role. The application includes demo data and installs related ServiceNow® Store applications and plugins if they are not already installed.

Before you begin

- Ensure that the application and all of its associated ServiceNow Store applications have valid ServiceNow entitlements. For more information, see Get entitlement for a ServiceNow product or application.

Role required: admin

About this task

The following items are installed with Operational Sustainability Integration with Concur:

- Roles
- Scheduled jobs
- Tables

Procedure

1. Navigate to **All** > **System Applications** > **All Available Applications** > **All**.
2. Find the Operational Sustainability Integration with Concur application (sn_esg_concur) using the filter criteria and search bar.

   You can search for the application by its name or ID. If you cannot find the application, you might have to request it from the ServiceNow Store.

   In the list next to the **Install** button, the versions that are available to you are displayed.
3. Select a version from the list and select **Install**.

   In the Review Installation Details dialog box, any dependencies installed with your application are listed.
4. If you're prompted, follow the links to the ServiceNow Store to get any additional entitlements for dependencies.
5. **Optional:** If demo data is available and you want to install it, select the **Load demo data** check box.
   Demo data are sample records that describe application features for common use cases. Load the demo data when you first install the application on a development or test instance.
6. Select **Install**.

Activate the SAP Concur metric definitions

Activate those metric definitions for which you want to track emissions data. By default, three metric definitions are provided to track the emissions generated by employees traveling by airplane, car, and train.

Before you begin

Role required: admin

Procedure

1. Navigate to **All** > **Operational Sustainability Management** > **Operational Sustainability Workspace** > **List** > **Automated metric definitions**.
2. Select the filter icon on the top-right.
3. Select **Advanced view**.
4. In the Advanced view filter conditions, to add a filter, select **and**.
5. Create a condition with **Source is ESG SAP Concur**.
6. Select **Update**.
7. Select and open the metric definitions you want to activate.
   a. Select the Details related list.
   b. Select the **Active** option.
   c. Select **Save**.

Create a connection for SAP concur event subscription service

Create connection and credential records for the Operational Sustainability Integration with Concur so that you can establish a new connection.

Before you begin

Role required: admin or connection_esg.admin

Procedure

1. Navigate to **All** > **Environmental, Social, and Governance** > **SAP Concur** > **Connection and Credentials Alias**.
2. Select **SAP Concur Event Subscription Service**.
3. On the Connection and Credentials Aliases form, select the **Create New Connection & Credential** related link.
   Contact your Concur administrator to obtain the information for the required fields.
4. On the form, fill in the fields.

Create Connection and Credential form

Field	Description
Connection information	
Name	Name of the OAuth connection.
Connection URL	Concur Connection URL.
Version	Version of the API. This field is automatically set to **v4**.
Credential information	
Token URL	Concur OAuth Server's token endpoint.
Client ID	OAuth Client ID configured in Concur.
Client Secret	OAuth Client Secret configured in Concur.

5. Select **Create and Get OAuth Token**.

Result
The Oauth token is created successfully.

Create a SAP Concur webhook registry

Create a webhook registry to be notified whenever a trip is either created or modified in SAP Concur.

Before you begin
Role required: sys_admin

Procedure
1. Navigate to **All** > **Operational Sustainability Management** > **SAP Concur** > **Webhook Registry**.
2. Select **New**.
3. On the form, fill in the fields.

SAP Concur webhook registry form

Field	Description
Name	Name of the registry. For example, ESG `integration`.
Path	This field is automatically set.
Token	Select a token.

4. Right click the form header and select **Save**.
5. Select **Callback URL**.
6. Copy the URL that is generated.
7. Select **Submit**.

Create a webhook subscription

Webhooks are used to simplify communication between two applications. Create a webhook subscription to connect to Concur through webhook.

Before you begin
Role required: sys_admin

Procedure
1. Navigate to **All** > **Process Automation** > **Flow Designer**.
2. Select **Actions**.
3. Using the **Search** field, search for Create webhook subscription.
4. Select**Create webhook subscription**.
5. Select **Test**.
6. In the Test Action dialog box fill in the fields.

   a. In the **Name** field provide a name for the test.
   Ensure that the name has no spaces and special characters.

b. In the **Endpoint** field, paste the URL that you generated when you created the SAP webhook registry.

c. In the **Topic** field, select **Public.concur.travel.itinerary**.

d. Select **Run Test**.

Run the entity onboarding job for SAP Concur

Run the specified scheduled job to get new entities that may have been added in Concur. Running this job ensures that the entity mapping table is updated.

Before you begin

Role required: admin

Procedure

1. Navigate to **All** > **System Definition** > **Scheduled Jobs**.
2. Search for the **SAP Concur entity onboarding** scheduled job.
3. Select **Execute Now**.

Run SAP Concur trip data import scheduled job

Run the trip data import scheduled job to obtain the trip data from Concur. The trip data consists of details such as the distance traveled, trip start date and end date, and so on. This job runs automatically but can also be executed manually.

Before you begin

Role required: admin

Procedure

1. Navigate to **All** > **System Definition** > **Scheduled Jobs**.
2. Search for the **SAP Concur trip data import** scheduled job.
3. Select **Execute Now**.

Run SAP Concur data import scheduled job

The data import scheduled job automatically runs monthly and can also be executed manually. When this job runs, it aggregates the data from the SAP Concur trip data staging table based on the trip end date and creates metric data for the respective metric definitions.

Before you begin

Role required: admin

Procedure

1. Navigate to **All** > **System Definition** > **Scheduled Jobs**.
2. Search for the **SAP Concur data import** scheduled job.
3. Select **Execute Now**.

Integrating Operational Sustainability Management with Socialsuite

Socialsuite is a platform for conducting materiality assessments. You can import material topics from Socialsuite into your ServiceNow instance and manage them in the Operational Sustainability Management application.

The integration supports both double materiality and single materiality assessments. Double materiality assesses both impact and financial materiality. Single materiality assesses either impact or financial materiality. Assessments comply with the Corporate Sustainability Reporting Directive (CSRD), European Sustainability Reporting Standards (ESRS), Global Reporting Initiative (GRI), and International Financial Reporting Standards (IFRS).

Assessment data

The integration imports the following data from Socialsuite:

- Material topics
- Impact materiality scores
- Financial materiality scores

Integration workflow

1. Conduct materiality assessments in Socialsuite.
2. Sync the assessment results to your ServiceNow instance.

   For more information, see Sync material topics from Socialsuite.

   The imported material topics appear in your ServiceNow instance in workflow states based on their status in Socialsuite. For details about how Socialsuite states map to the ServiceNow instance states, see Material topic workflow and states.
3. Associate the material topics with goals and targets.

Related topics

Socialsuite material topic fields

Socialsuite import log

Activate Operational Sustainability Integration with Socialsuite

You can activate the Operational Sustainability Integration with Socialsuite plugin (sn_osm_ma) for Operational Sustainability Management if you have the admin role. The plugin enables you to import materiality assessment results from Socialsuite for reporting and compliance.

Before you begin

Operational Sustainability Management requires a separate subscription from the rest of the ServiceNow AI Platform.

To purchase a subscription, contact your ServiceNow account manager. When you purchase a subscription, certain plugins are activated automatically. If a paid plugin isn't activated automatically, you can manually activate it from the All Applications list in your instance.

Note:

Before purchasing a subscription, you can evaluate the feature on a non-production instance without charge by requesting it from the Now Support Service Catalog.

Role required: admin

About this task

Tables and fields are installed with Operational Sustainability Integration with Socialsuite.

For more information on items installed with Operational Sustainability Management, see Components installed with Operational Sustainability Management (formerly ESG Management).

Procedure

1. Navigate to **All** > **System Applications** > **All Available Applications** > **All**.
2. Find the Operational Sustainability Integration with Socialsuite plugin (sn_osm_ma) using the filter criteria and search bar.

   You can search for the plugin by its name or ID. If you cannot find a plugin, you might have to request it from ServiceNow personnel.
3. Select **Install** to start the installation process.

   Note: When domain separation and delegated admin are enabled in an instance, the administrative user must be in the **global** domain. Otherwise, the following error appears: `Application installation is unavailable because another operation is running: Plugin Activation for <plugin name>.`

   You will see a message after installation is completed. For information about the components installed with a plugin, see Find components installed with an application.

What to do next

Configure the Material topic selection system property. Set the property to Socialsuite to enable the **Sync Topics** button and update the material topics visualization. For details, see Set Material topic selection system property.

Set Material topic selection system property

Set the Material topic selection system property to enable the Socialsuite integration features.

Before you begin

Role required: admin

About this task

The Material topic selection system property determines how material topics are visualized on the Operational Sustainability Workspace. When set to Social Suite, the heatmap displays material topics imported from Socialsuite and shows their impact materiality score and financial materiality score instead of the default importance rankings. The **Sync Topics**button becomes available for importing material topics.

Procedure

1. Navigate to **All** > **Operational Sustainability Management** > **Administration** > **Properties**.
2. In the **Material topic selection** field, select **Social Suite**.
3. Select **Save**.

Result
The **Sync Topics** button becomes available and the material topics heatmap displays material topics based on their impact materiality score and financial materiality score.

What to do next
Create a Socialsuite connection

Create a Socialsuite connection

Create a Socialsuite connection to sync material topics and materiality assessment results from Socialsuite into your ServiceNow instance.

Before you begin
You must obtain the following information from your Socialsuite administrator before creating the connection:

- Socialsuite API connection URL
- Socialsuite API key

Role required: admin or connection_admin

Procedure
1. Navigate to **All** > **Connections & Credentials** > **Connection & Credential Aliases**.
2. Select the Social Suite record.
3. Select **Create New Connection & Credential** related link.
4. On the form, fill in the fields.

Field	Description
Connection Name	Name for the connection.
Connection URL	URL endpoint for the Socialsuite API.
API Key	API key for authenticating with Socialsuite.

5. Select **Create**.

What to do next
After establishing the connection, you can sync material topics from Socialsuite. For more information, see Sync material topics from Socialsuite.

Sync material topics from Socialsuite

Sync material topics from Socialsuite to import materiality assessment results into the Operational Sustainability Management application.

Before you begin
Role required: sn_esg.program_manager

About this task
When you sync material topics, the system imports assessment data from Socialsuite for the selected reporting period. Each reporting period may contain different topics based on organizational priorities and external landscape.

Procedure

1. Navigate to **All** > *Operational Sustainability Workspace*.
2. Select **List**.
3. Under **Program setup**, select **Material topics**.
4. Select **Sync Topics**.
   The **Sync Topics** button is available in the list view only when the Operational Sustainability Integration with Socialsuite plugin is installed and the Material topic selection system property is set to Socialsuite.
5. In the Sync from SocialSuite dialog box, select a reporting period from the **Reporting period** field.
6. Select **Import**.

Result

Material topics from the selected reporting period are imported from Socialsuite. The imported topics display **Socialsuite** in the Material topic source column and appear in workflow states based on their status in Socialsuite. For more information about how Socialsuite states map to your ServiceNow instance states, see Material topic workflow and states.

Related topics

Socialsuite material topic fields

Socialsuite import log

Overview pages in the Operational Sustainability Workspace (formerly ESG Workspace)

In the Operational Sustainability Workspace, you can view various dashboards and relevant data based on the overview pages of records. The data displayed is based on the user role of the users.

Goals overview in the Operational Sustainability Workspace (formerly ESG Workspace)

Goals refer to objectives that an organization sets for itself to make an impact on their ESG initiatives. They help you to track your progress toward the material topics that you have identified.

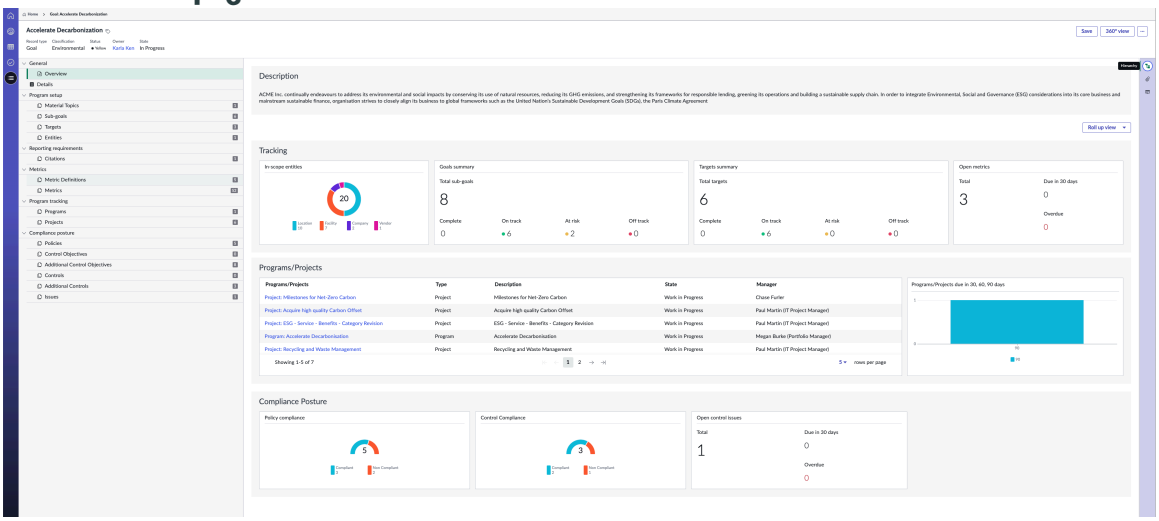
When you create a goal, the overview page of the goal displays the summary of all the relevant information for the goal. To view the goals overview page for a goal, navigate to **Operational Sustainability Workspace** > **Program setup** > **Goals**. You can then select and open the goal for which you want to view the information.

The following sections are displayed on this page:

- Description
- Tracking
- Programs/Projects if you integrate with Project Portfolio Management.
- Risk and Compliance Posture if you integrate with Integrated Risk Management.
- Goals and Targets Hierarchy

The following image shows the overview page for a single goal.

Goal overview page



Description

This section displays the description of the goal. For example, `Aim to be 100% carbon neutral by 2025`.

Tracking

When you create a goal, you can associate an entity with the goal to enable tracking. You can view the following sections:

- In-scope entities: By associating an entity, you can identify who is responsible for the goal. This section shows the number of entities associated with the goal.
- Goals summary: Displays the total number of sub-goals associated with the goal. This section also shows the numbers of completed goals, the number of goals on track, the number of goals at risk, and the number of goals that are off-track.
- Targets summary: Displays the total number of targets. This section also shows the numbers of completed targets, the number of targets on track, the number of targets at risk, and the number of targets that are off-track.
- Metrics: Displays the different metrics associated with the goal. You can also see the number of metrics that are due in 30 days and the number of metrics that are overdue.

You can filter the tracking section to view the data only for the goal. You can see the roll up view to view the data of all the sub-goals. The default view is the roll up view.

Programs/Projects

The programs and projects section only appears if you integrate with Project Portfolio Management. In this section, you can view the projects and programs associated with the goals. You can view the managers and states of these projects and programs.

Risk and Compliance Posture

The risk and compliance posture sections only appears if you integrate with Integrated Risk Management. In this section, you can view the following information:

- Policy compliance: The status of compliant and non-compliant policies.
- Control compliance: The status of compliant and non-compliant controls.

- Risk profile: Risk status of the goal based on the risk assessment.
- Open control issues: The number of open issues related to the goal.

Goals and Targets Hierarchy

In the Contextual side panel, you can view the main goal, the associated sub-goals, and their statuses.

Disclosure overview in the Operational Sustainability Workspace (formerly ESG Workspace)

The **Overview** tab for the disclosure records in the Operational Sustainability Workspace is designed for different users to view the state and summary of the disclosures.

The new Operational Sustainability Workspace is enhanced to ease the way that you perform your daily tasks. The list view in the workspace shows a simplified list of all the modules. You can access the disclosures by navigating to **Disclosures** in the List view.

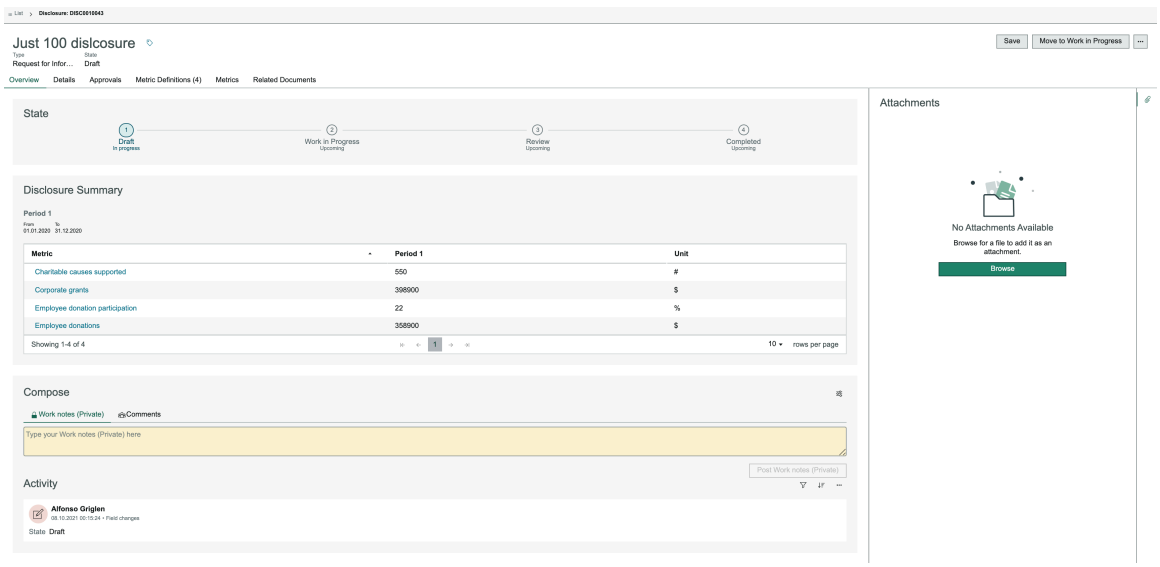
Click a disclosure in the List view to display the details of the disclosure. The top section displays the title of the disclosure, the type of the disclosure, its state, and the owner that the disclosure is assigned to.

Sections in the Disclosure Overview tab

The Disclosure Overview tab displays the following sections:

- State
- Disclosure summary

Disclosure Overview tab



The State section displays the stepper component for the disclosure. The stepper component displays the completion of various states of the disclosure such as Draft, Work in Progress, Review, and Completed.

The Disclosure summary section displays the goals that are listed in the disclosure. Each goal record displays the metric, period, and unit associated with the disclosure. For example, the goal listed in the disclosure for a particular organization is to reduce its carbon footprint and aspire to be 100% Carbon Neutral by 2025. The metric to measure the goal is the criteria defined in the

Scope 1 GHG emissions. The unit to measure the metric is Metric tons of carbon dioxide for the given period.

If you want to export the data in the disclosure to an Excel spreadsheet, click **Export to excel** in the Disclosure summary section.

Operational Sustainability Management (formerly ESG) reference

The following sections show the roles, tables, and properties installed with the ESG Management application.

Components installed with Operational Sustainability Management (formerly ESG Management)

Several types of components such as roles, tables, and properties are installed with the ESG Management application and the GRC: Metrics application.

Roles

The following roles are installed with the ESG Management application.

Note: For the tables and roles installed with the GRC: Metrics application, see Components installed with the GRC: Metrics application.

Roles installed with ESG Management

Role	Description	Privileges	Contains
sn_esg.admin	Manages all the items within the application and configures the setup for ESG integrations.	Users with this role can read, write, update, and delete the following: • Material topics • Goals • Targets • Metric definitions • Metrics • Metric data • Metric data task • Disclosures • Authority documents • Citations • Citations and metric definitions from the ESG content accelerator application	sn_esg.program_manager, sn_esg.integrations_admin, sn_esg.internal_admin, sn_grc_metric.admin, sn_esg.internal_disclosure_manager, report_user, sn_esg_msoff_intg.admin, If the ESG Risk Management plugin is activated, sn_risk_advanced.ara_admin, and sn_risk.manager roles are installed. If the com.snc.multiprovider_documents plugin is activated, the mp_document_user role is added.

Roles installed with ESG Management (continued)

Role	Description	Privileges	Contains
		• Risk assessment factors • Update and publish risk assessments methodologies • Emission activity • Emission activity source • Emission factor • Emission factor location If Scope 3 emissions is installed, this role can do the read, write, update, and delete the following. • Scope 3 emission category types • Supplier emissions by model • Inflation factors These users can read and update the *sn_esg_scope3.historical_years_selector* system property and can access the Scope 3 dashboard.	
sn_esg.metrics_manager	Manages metrics in the ESG workspace.	Users with this role can read the following: • Material topics • Goals • Targets • Metric data • Metric data task • Authority documents • Citations These users can read, write, and update the metrics and	sn_esg.reader, sn_grc_metric.manager

Roles installed with ESG Management (continued)

Role	Description	Privileges	Contains
		metric definitions. These users can only delete those metrics definitions and metrics that they have created.	
sn_esg.reporting_disclosure_manager	Manage disclosure report in the ESG workspace.	Users with this role can read the following: • Material topics • Goals • Targets • Metric definitions • Metrics • Metric data • Metric data task • Authority documents • Citations • Scope 3 emission category types • Supplier emissions by model • Inflation factors These users can read, write, and update the disclosures. These users can only delete those disclosure that they have created.	sn_esg.internal_disclosure_manager, sn_esg.reader, report_user, sn_esg_msoff_intg.reader If the com.snc.multiprovider_documents plugin is activated, the mp_document_user role is added.
sn_esg.data_owner	Data owner role to provide input to the assigned metric data tasks.	Users with this role can read the following: • Goals • Targets • Metric definitions • Metrics • Metric data • Authority documents • Citations	sn_grc_metric.user, workspace_user, sn_gf.goal_user_read, canvas_user, sn_grc_metric.reader, sn_grc_workspace.task_reader,sn_grc_ sn_grc.library_reader If the ESG Risk Management plugin is activated, sn_risk_advanced.ara_assessor sn_risk.reader roles are installed.

Roles installed with ESG Management (continued)

Role	Description	Privileges	Contains
		These users can read, and update the metric data tasks.	
sn_esg.program_manager	Supports the execution and management of ESG program development, implementation, and reporting.	Users with this role can read, write, update, and delete the following: • Material topics • Goals • Targets • Metric definitions • Metrics • Metric data • Metric data task • Content accelerator • Emission activity • Emission activity source • Emission factor • Emission factor location • Scope 3 emission category types • Supplier emissions by model • Inflation factors These users can read authority documents, citations, framework status, GRI citation, Metric definition, SASB citation, TCFD citation, UN SDG citation, Scope 3 dashboard, inflation factors. If the ESG content accelerator, application is installed, these users can read emission activity source, emission activity,	sn_esg.reader, sn_gf.epmo_strategy_planner, sn_grc_metric.manager, sn_gf.goal_user, sn_esg.internal_manager, sn_grc.library_admin, sn_compliance.library_admin If the ESG Risk Management plugin is activated, sn_risk.reader sn_risk_advanced.ara_approver,sn_risk roles are installed.

Roles installed with ESG Management (continued)

Role	Description	Privileges	Contains
		emission factor location, emission unit, and disclosures. They can read and update Emission activity location. They can also delete only those metrics and metric definitions that they have created. They can read and update the system property Scope 3 dashboard's historical years selector.	
sn_esg_risk_mgmt.risk_manager	Manages risk assessments in the ESG domain. **Note:** This role is available only when the sn_esg_risk_mgmt is installed and activated.	Users with this role can do the following tasks: • Create the risk framework • Create risk statements • Create risks • Create the risk scope to generate risks • Initiate risk assessments • Approve risk assessments	sn_risk.manager
sn_grc_claims.manager	Manages claims in the ESG domain.	Users with this role can do the following tasks: • Create a claim • Edit a claim • Export a claim	sn_grc_claims.manager

Tables

The following tables are installed with the ESG Management application.

Tables installed with Operational Sustainability Management

Table	Description
Material Topic [sn_esg_material_topic]	Material topics to define ESG material issues
Unit family [sn_grc_metric_unit_family]	Categorize and group units
Unit conversion [sn_grc_metric_unit_conversion]	Set up unit conversion value for From and To units
Emission activity [sn_esg_emission_activity]	An emission activity is any activity that leads to emissions
Emission factor [sn_esg_emission_factor]	An emission factor is a coefficient that allows to convert activity data into greenhouse gas (GHG) emissions
Emission factor location [sn_esg_emission_factor_location]	To capture emission factor at location level
Calculated metric definition to Emission factor sn_esg_m2m_calculated_definition_emission_factor	Association between calculated metric definitions and emission factor
Metric to Goal [sn_esg_m2m_metric_goal]	Association between metric and goal
Metric to Target [sn_esg_m2m_metric_target]	Association between metric and target
Material Topic to Goal [sn_esg_m2m_material_topic_goal]	Association between material topic and goal
Goal to Disclosure [sn_esg_m2m_goal_disclosure]	Association between goal and disclosure
Goal to Citation	Association between goal and citation

Tables installed with Operational Sustainability Management (continued)

Table	Description
[sn_esg_m2m_goal_citation]	
Entity to Goal [sn_esg_m2m_entity_goal]	Association between entity and goal
Metric to Disclosure [sn_esg_m2m_disclosure_metric]	Association between metric and disclosure
Metric Definition to Disclosure [sn_esg_m2m_disclosure_metric_definition]	Association between metric definition and disclosure
Related URL [sn_grc_metric_data_task_url]	Used to upload relevant documents and resources for the data task.
Threshold [sn_grc_metric_threshold]	Threshold used to measure the achieved progress of the metric target. This table is the parent table of sn_grc_metric_metric_threshold.
Metric Threshold [sn_grc_metric_metric_threshold]	Parent table of sn_grc_metric_metric_threshold
Disclosure Summary [sn_esg_disclosure_summary]	Disclosure summary report to display related information such as citation, metric, metric data associated to the disclosure. It will be refreshed via a daily scheduled job.
Disclosure [sn_esg_disclosure]	Disclosure of the company's E,S, and G data.
Related Document [sn_esg_disclosure_url]	Related document URL associated with the disclosure.
Goal Activity Summary [sn_esg_goal_activity_summary]	Goal activity summary report to display related info in a summarized format. It will be refreshed via a scheduled job.
Goal Summary [sn_esg_goal_summary]	Top level goal information along with related sub-goal and target info

Tables installed with Operational Sustainability Management (continued)

Table	Description
Heatmap Chart Color [sn_esg_heatmap_chart_color]	ESG program manager is able to configure the color for heatmap chart
ISSB citation [sn_esg_content_issb_citation]	Holds ISSB framework and citation content data.
Analysis [sn_grc_forecast_analysis]	Holds the details of forecast analysis for forecast context and forecast method.
Analysis context [sn_grc_forecast_context]	Holds the details of forecast context like Name, Metric definition, Periods to forecast and Previous periods.
Analysis data [sn_grc_forecast_data]	Table that stores forecast data for future periods data for given a context and analysis.
Analysis parameter data [sn_grc_forecast_parameter_data]	Table that stores operands forecast data for future periods data for given a context and analysis.
If Policy and Compliance Management is installed	
Control to Goal [sn_esg_m2m_control_goal]	Association between Goal and Control
Control Objective to Goal [sn_esg_m2m_control_obj_goal]	Association between Control Objective and Goal
Citation to Disclosure [sn_esg_m2m_disclosure_citation]	Association between Citation and Disclosure
Policy to Goal [sn_esg_m2m_policy_goal]	Association between Policy and Goal
Base metric definition to citation [sn_esg_m2m_base_metric_definition_citation]	Association between Base metric definition and Citation

Tables installed with Operational Sustainability Management (continued)

Table	Description
Base metric definition to target [sn_esg_m2m_base_metric_definition_target]	Association between Base metric definition and Target
Base metric definition to goal [sn_esg_m2m_base_metric_definition_goal]	Association between Base metric definition and Goal
If Integrated Risk Management is installed	
Risk to Goal [sn_esg_m2m_risk_goal]	Association between Risk and Goal
Risk Statement to Goal [sn_esg_m2m_risk_statement_goal]	Association between Risk Statement and Goal
If Operational Sustainability Integration with Socialsuite is installed	
Socialsuite import log sn_osm_ma_import_log	Relationship between imported material topic data and Socialsuite materiality assessments

Properties

The following properties are installed with the ESG Management application.

Properties installed with ESG

Name	Description
glide.ui.sn_esg_disclosure_activity.fields	Disclosure activity formatter fields.
glide.ui.sn_esg_material_topic_activity.fields	Material topic activity formatter fields.
sn_esg.metric_approval	Enables ESG administrators to define either the simple approval flow or the advanced approval flow for all the metrics and metric definitions. **Note:** This property is available only when the sn_grc_appr plugin is activated and must be set while configuring the ESG Management application. The choices are as follows: • **Simple**: By choosing this option, the Approval section will be enabled both on the manual metric definition form and within the metrics. Using this section, you can

Properties installed with ESG (continued)

Name	Description
	designate approvers directly on the metric definition form. • **Advanced**: When you choose this option, the Approval section will be unavailable on the manual metric definition form and the metric form. Instead, approval can be configured by setting the approval conditions, tables, and approvers in the GRC: Approver Configurator application. This application also allows you to define multiple levels of approvals. For more information see, Using Approver Configurator for setting up approvals.
sn_esg_scope3.historical_years_selector	Enables you to configure the number of historical years for which you want to view the data on the Scope 3 dashboard.

Scheduled jobs

The following scheduled jobs are installed with the ESG Management application.

Scheduled jobs installed with ESG

Name	Description
Generate ESG goals summary	This job executes daily at 12 AM. This job clears all existing goals summary and creates new goal summaries for all active goals classified as "environmental,social,governance".
Generate ESG disclosure summary	This job is executes daily once at 12AM. This job deletes existing summary and creates disclosure summary for all types of disclosure like goals,citations,metrics.
Calculate ESG license count	This Job executes daily at 11:00 PM. It calculates the license based on active data in base metric definition where domain area is ESG.
Generate ESG goals activity summary	This job executes periodically for every 12 hours. This job deletes the existing goal activity summary and creates new goal activity summary for all goals classified on "environmental, social, governance".

Roles installed with the Goal Framework

Several roles are installed with activation of the Goal Framework plugin.

Roles installed

Role	Description	Contains roles
sn_gf.goal_user_read	Can view the goals. This role can be given to users such as project user and demand user.	None
sn_gf.goal_user	Can create, view, edit, and delete goals, sub-goals, and associated targets. **Note:** • A goal or sub-goal can be deleted only by the owner and contributors when the sn_gf.allow_goal_deletion system property is set to **Yes**. • An associated target can be deleted only by the owner and contributors when the sn_gf.allow_goal_deletion system property is set to **Yes**. • A goal or target can be edited only by the respective owner and contributors of the goal and target.	sn_gf.goal_user_read
sn_gf.goal_admin	Can update the goal preferences.	• sn_gf.goal_user_read • sn_gf.goal_user
sn_gf.strategy_planner_read	Can view all strategic plans and strategic values.	None
sn_gf.strategy_planner	Can create, view, edit, and delete strategic plans and strategic values. **Note:** • A strategic plan can be edited only by the owner and sponsor of the strategic plan. • A strategic value can be edited only by the sponsor of the strategic plan.	sn_gf.strategy_planner_read

Role	Description	Contains roles
sn_gf.epmo_strategy_planner	Can create, view, edit, and delete any goal.	• sn_gf.goal_user_read • sn_gf.goal_user • sn_gf.goal_admin • sn_gf.strategy_planner

Domain separation and Operational Sustainability Management

Domain separation is supported for ESG Management. Domain separation enables you to separate data, processes, and administrative tasks into logical groupings called domains. You can control several aspects of this separation, including which users can see and access data.

Support level: Basic

- Business logic: Ensure that data goes into the proper domain for the application's service provider use cases.
- The application supports domain separation at run time. The domain separation includes separation from the user interface, cache keys, reporting, rollups, and aggregations.
- The owner of the instance must set up the application to function across multiple tenants.

Sample use case: When a service provider (SP) uses chat to respond to a tenant-customer's message, the customer must be able to see the SP's response.

For more information on support levels, see Application support for domain separation.

Overview of domain separation

Domain separation is useful for users who:

- Enforce absolute data segregation between business entities (data separation).
- Customize business process definitions and user interfaces for each domain (delegated administration).
- Maintain global processes and global reporting in a single instance.

These users can choose to expand or collapse the domain scope to show or hide data from other domains.

Note: Users always have access to data from domains that have been explicitly granted to them by domain visibility.

How domain separation works in ESG Management

While ESG Management supports separation of data, separation of logic and process is not fully supported. Many types of records in the ESG Management application are automatically generated through user processes. Integrations with Project Portfolio Management and GRC: Metrics can create and associate data automatically. For records that are automatically and manually generated, the domain of the record is the same as the domain of the user responsible for creating or generating the records. Users must ensure that they are creating and generating records at the right domain level so that they are visible to the right set of users.

For example, suppose you have domains that look like:

- Global
- TOP
  - Domain A
  - Domain B

If you have ESG goals, material topics and targets that you want to be assessed by users in domains A and B, the ESG goals, material topics and targets should be manually created at the global level. If ESG goals, material topics and targets are created in Domain B, you will not be able to use them in Domain A due to indexing.

If you have ESG goals, material topics and targets that you want to be assessed by users in Top and Domain A, you can create the risk or control in Domain A. Unless the ESG goals, material topics and targets are in the Global domain, users must not assign risks or controls in a higher domain to users in a lower domain. In the example given, if you have an ESG goal in the Top domain, you should not assign it to program manager in Domains A or B since those users would not have access to the this goal.

Domain separated tables

The following is the list of domain separated tables:

- Disclosure
- Disclosure Summary
- Goal Activity Summary
- Heatmap Chart Color
- Composite Metric Definition to Citation
- Composite Metric Definition to Goal
- Composite Metric Definition to Target
- Control to Goal
- Control Objective to Goal
- Citation to Disclosure
- Metric to Disclosure
- Metric Definition to Disclosure
- Entity to Goal
- Goal to Citation
- Goal to Disclosure
- Material Topic to Goal
- Metric to Citation
- Metric Definition to Citation
- Metric Definition to Goal
- Metric Definition to Target
- Metric to Goal
- Metric to Target
- Policy to Goal

- Risk to Goal
- Risk Statement to Goal
- Material Topic

For more information on these tables, see Components installed with Operational Sustainability Management (formerly ESG Management).

Use case

ESG data can be separated from the data of other departments. Each business area using the ESG Management application can have separate data that cannot be shared with other departments. Therefore, each department can have its own goals, targets, material topics, and so on. When looking at a goal from the ESG domain, the user can choose to expand the domain scope to show values from the ESG domain or collapse the domain scope to show only goals that match the ESG domain. By default, domain separation adds a domain field to the Task [task]and Configuration Items [cmdb_ci] tables and their extensions. You can extend domain separation to any new tables you create by adding a sys_domain field to the table's dictionary definition. By default, the system only domain-separates platform and baseline application tables where appropriate.

Note: ServiceNow® does not recommend domain separating platform tables such as any table with the sys_ prefix such as the Dictionary Entry [sys_dictionary] and Dictionary Entry Override [sys_dictionary_override] tables because it can produce unexpected results.

In this use case, client scripts, business rules, workflows, processes, and so on can be domain-separated. While the behavior offered with domain separation provides multi-tenancy support, multi-tenancy is still contained within a single instance. This means that some global properties, some global data, and some global processes are shared across all domains. For example, the system's "Remember me" option on the login page is global and cannot be specified per domain. If you need complete and total separation of all system properties and do not require global reporting or global processes, separate instances are the best option.

Related topics

Domain separation for service providers

Socialsuite material topic fields

Fields added to the Material Topic (sn_esg_material_topic) table for Socialsuite integration.

Field	Description
Material Topic Source	Source system where the material topic was created. For topics imported from Socialsuite, this field displays **Socialsuite**.
Assessment Methodology	Methodology used for the materiality assessment in Socialsuite. The possible values are:

Field	Description
	• • Double Materiality: Assesses both impact and financial materiality. • • Financial Materiality: Assesses financial impacts only. • • Impact Materiality: Assesses impact on society and environment only.
Reporting Period	Reporting period associated with the materiality assessment.
Reporting Period Start Date	Start date of the reporting period.
Reporting Period End Date	End date of the reporting period.
Impact Materiality Score	Score indicating the organization's impact on society and the environment. Scores range from 0-100.
Financial Materiality Score	Score indicating how sustainability issues affect the organization's financial performance. Scores range from 0-100.
Material Topic Score	Overall materiality score for the topic.
Topic Source	Additional source information for the material topic.
Materiality Decision	Decision outcome from the materiality assessment.

Socialsuite import log

The Socialsuite import log table (sn_osm_ma_import_log) tracks material topic data imported from Socialsuite into your ServiceNow instance. When you sync material topics, the assessment data is first imported into this table before the system creates corresponding material topic records. The import log is read-only and automatically maintained by the system.

Import log fields

Field	Description
Assessment name	Name of the materiality assessment from Socialsuite.
Topic name	Name of the material topic being imported.
Reporting period ID	Identifier for the reporting period associated with the assessment.
Sync status	Current status of the import process.
Data record	Reference to the material topic record created from the imported data.
Comments	Additional information or error messages about the import.