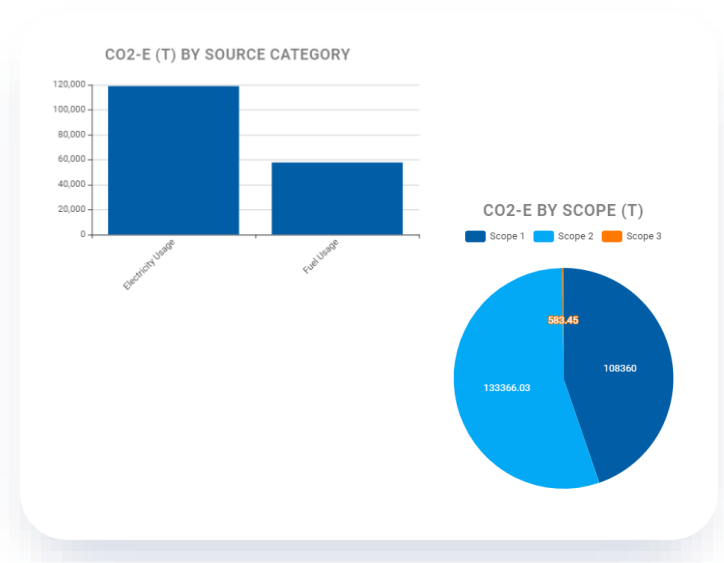EVOTIX
AN SAI360 COMPANY

Emissions Management

Designed to automate emissions management and reporting.

Complying with Air Emissions, including Greenhouse Gas regulations, is a must to continue doing business and avoid costly fines. Over and above ensuring compliance, businesses want to demonstrate greater and sustainable environmental performance management to internal and external stakeholders.

Our Emissions Management capabilities automate the process of collecting data, calculating emissions, reporting and analytics in one centralized solution. Digitizing emissions management takes the complexity out of ensuring compliance with permits and regulations and provides reliable information to demonstrate continuous environmental performance. Our flexible technology allows tailoring the solution to meet unique requirements to ensure internal and external obligations are met.

The emissions data can be included in a number of reports to assist in submitting the information required by regulations such as Energy Reporting Scheme (NGERS), GHG MRR, and Clean Air Act (CAA).

Powerful data analytics and reporting capabilities allow users to analyze and report on emissions across the enterprise, monitor trends, identify areas for improvement, and take targeted actions that will positively impact operational performance.

CO2-E (T) BY SOURCE CATEGORY

120,000	
100,000	
80,000	
60,000	
40,000	
20,000	
0	

Electricity Usage   Fuel Usage

CO2-E BY SCOPE (T)

■ Scope 1   ■ Scope 2   ■ Scope 3

583.45
108360
133366.03

Save time and cost associated with emissions reporting

Analyze data and identify areas to improve environmental performance

Streamline regulatory reporting requirements

Take the complexity out of ensuring compliance with permits

Core Functionalities

Key features and pre-configured functionality include the ability to:

- Manage all emission sources centrally

  Define location, validity periods, material, scope type and category, and other relevant attributes.

  Define associated metrics (e.g. Sulphur dioxide, Nitrogen oxides, Carbon dioxide, etc.) for calculation and monitoring.

  Configure additional properties and categorization to support more granular data analytics and reporting.

- Maintain a library of materials with associated emissions factors and other attributes by location and time periods. Additional company-specific attributes can be configured.

- An API is available to automatically provide and update GHG Emission Factors directly into the module.

- Define constants for use in calculations. Constants can be defined for a time period and location.

- Access a pre-defined and configurable library of units of measure and conversion factors.

- Build formulas using a graphical and intuitive builder. Formulas can be maintained by time periods and location.

- Set data collection frequency and responsible owners. Data collection reminders are emailed to responsible owners.

Details | Usage

NAME *
Underground Coal Mines Subpart FF

FORMULA INPUTS

* IDENTIFIER	NAME	DESCRIPTION	* TARGET UNIT
C	CH4 concentration	CH4 concentration of ventilation gas for the quarter (%).	%
n	Number days	The number of days in the quarter where active ventilation of mining operations is taking place a...	day
p	Pressure	Absolute pressure at which flow is measured (atm) for the quarter. The annual average barometric ...	atm
T	Temperature	Temperature at which flow is measured (°R) for the quarter.	R
V	Volumetric flor rate	Volumetric flow rate for the quarter (acfm) based on sampling or a flow rate meter.	m3/s

+ Add Row   🗑 Delete

FORMULAS

FORMULA	DATE ACTIVE ▾	DATE INACTIVE	OUTPUT METRIC	RESULT UNIT
"Input.n" *("Input.V" *"Constant.MCF"*("Input.C")/(1)*0.0423*(520)/("Input.T")*("Input.P")/(1)*1440* (0.454)/(1000))	01/01/2021		CH4	t

1 - 1 of 1 results   + Add New   🗑 Delete   « ‹ 1 › » 10 ▾

Calculations (CALC-0000003) > Formulas

Details

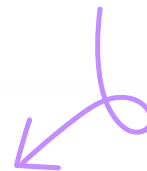DATE ACTIVE *
01/01/2021

DATE INACTIVE
DD/MM/YYYY

FORMULA CODE *

$$\text{Input.n} \cdot \left(\text{Input.V} \cdot \text{Constant.MCF} \cdot \frac{\text{Input.C}}{1} \cdot 0.0423 \cdot \frac{520}{\text{Input.T}} \cdot \frac{\text{Input.P}}{1} \cdot 1440 \cdot \frac{0.454}{1000} \right)$$

FORMULA TEXT
"Input.n" *("Input.V" *"Constant.MCF"*("Input.C")/(1)*0.0423*(520)/("Input.T")*("Input.P")/(1)*1440*(0.454)/(1000))

OUTPUT METRIC *
CH4, t

- Collect data using personalized forms for fast data entry or import data in bulk.

- Validate data collected, including the ability to set an acceptable input deviation. When data is outside the acceptable input deviation, users must provide an explanation to support their entry.

- View missing or invalid data that is required to complete reporting.

- Access a full audit trail of all changes.

- Track Emission Metrics against allowable Permit Limits. Manage Permit Conditions and Limits using the Permit Management module.

- Report against Emission targets to know if emission reduction plans are effective.

- Bring together emissions inventory, calculations, factors, results and other information in user-customizable data list views that can be searched and filtered.

All Results (85)

Quick Filter

Visualize

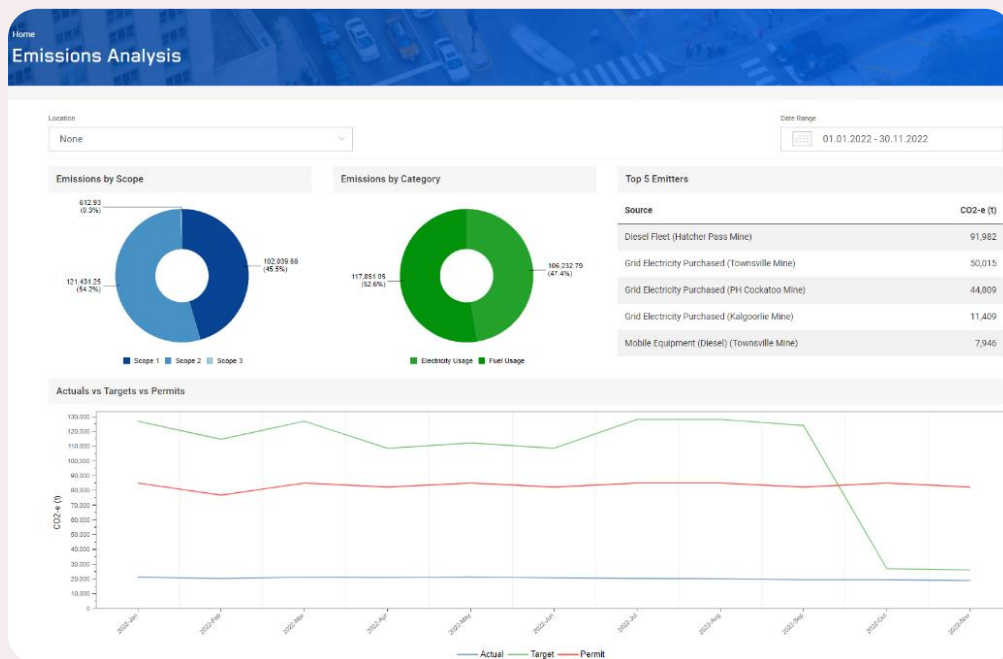| TIME PERIOD	EMISSION SOURCE NAME	LOCATION	FORMULA	OUTPUT METRIC	RESULT VALUE	RESULT UNIT
2022 Year, Year, 01/01/2022, 31/12/2022	General Operations (Gasoline)	Kalgoorlie Mine	("Input.Q" * "Material.EC" * "Material.C...	CO2-e	2,500.5433	t
			("Input.Q" * "Material.EC" * "Material.C...	CO2	2,418.0289	t
			("Input.Q" * "Material.EC" * "Material.N...	N2O	3,874.5864	t
			("Input.Q" * "Material.EC" * "Material.C...	CH4	17.9379	t
2022 Year, Year, 01/01/2022, 31/12/2022	General Operations (Diesel)	Paradox Valley Mine	("Input.Q" * "Material.EC" * "Material.C...	CO2-e	41.3953	t
			("Input.Q" * "Material.EC" * "Material.C...	CO2	41.3504	t
			("Input.Q" * "Material.EC" * "Material.N...	N2O	0.0385	t
			("Input.Q" * "Material.EC" * "Material.C...	CH4	0.0091	t
2022 Q4, Quarter, 01/10/2022, 31/12/2022	Grid Electricity Purchased	PH Cockatoo Mine	"Input.Q"*(("Material.CO2eEF")/(1000))...	CO2-e	11,861.9004	t
2022 Q4, Quarter, 01/10/2022, 31/12/2022	Grid Electricity Purchased	Kalgoorlie Mine	"Input.Q"*(("Material.CO2eEF")/(1000))...	CO2-e	3,174.218	t

Data Analytics, Reports, and Dashboards

The module provides reporting and data analytics capabilities to:

- Automatically save details from a record as a formatted PDF.

- Transform data into visualizations on the fly.

- Query, analyze and build custom reports and dashboards with pivot tables and charts, including geo-maps using any of the data captured in the module.

We have the following pre-configured reports and dashboards:

- Generate reports for emissions, time period comparisons, materials, emission sources across organizational hierarchies and any other categorizations defined.

- Line Chart by Time Period (e.g., Month) for a given Metric, tracking (a) Actual Emissions, (b) Emissions Targets and (c) Permit Limits.

- Detailed list report, listing all emissions for each metric, grouped by location.

Integrated Processes

The module integrates with:

Action Management
To manage actions for all modules in a consistent and centralized way across the entire solution.

Permit Management
To track emissions against allowable limits.

Our solution is highly configurable, and the above forms, workflow, reports, dashboards, and integrated processes can be tailored or extended to suit your needs.

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Let's chat

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Our Evotix team is passionate about applying market leading technology to create safer, smarter workplaces, partnering with organizations that value people's safety, communities and the planet.

As safety professionals and long-term leaders in the Verdantix EHS Green Quadrant, our deep and practical insight addresses your evolving needs, helping you achieve your health, safety and sustainability goals.

Evotix: your all-around partner for the journey.

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