Electrification X

Sustainability/Energy Management Feature Set

Energy Performance Monitoring

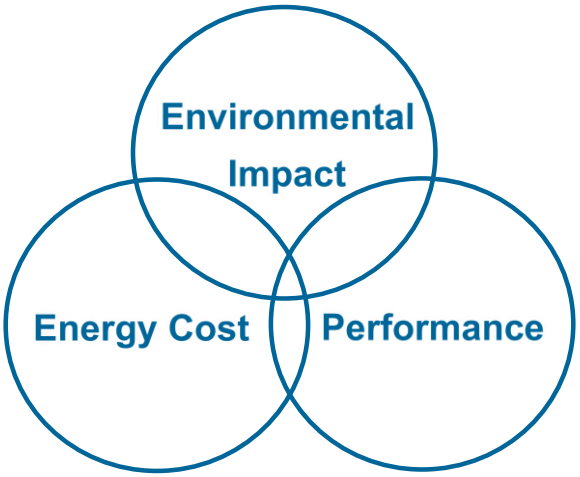
SIEMENS

Contents

Overview

The incessant growth in electricity demand, increased share of renewables, electrification, infrastructure aging and IoTzation are key challenges for smooth energy transition.

For continuous improvement, a strategic approach is required to maintain a balance among production performance, cost and environmental impact. This demands transparency on all aforementioned factors as first step.



Improve energy efficiency – proactive approach

Sustainability/Energy Management in Electrification X addresses a wide range of audience from management to shopfloor level. From a global energy performance overview to device level data transparency, you can monitor, track, improve and report all key performance indicators.

The module delivers a comprehensive summary of your facility which helps identify potential hotspots for improvement. As the same time, you can accelerate your response to anomalies and variance with the help of notifications.

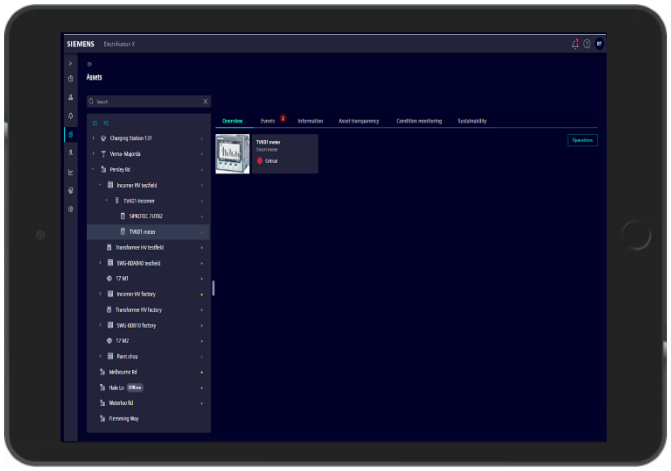
The monitoring solution offers energy performance evaluation against other business KPIs to further support energy strategy, operation, maintenance and decarbonization roadmap.

Functions

Asset Data Transparency

The asset data transparency allows the monitoring of status and energy data for connected assets. Asset information, cost center allocation, energy data logs and notification against asset are all represented in the asset view. Furthermore, load profiles, peak loads and heat maps facilitate load management and source mix optimization.

All related KPIs are established and the selection of time period is customized in order to generate desired energy log.



Electrification X – Sustainability/Energy Management: Asset Transparency

Energy Overview

The energy overview allows energy performance overview of all industrial locations. The global energy performance dashboard is design to reflect cumulative results for energy, cost, carbon emissions and green electricity contribution. Other measuring variable for water and heat can also be displayed. The geographical location view illustrates energy KPI performance marked with color coding. This helps the user with quick visualization of under-performing sites. In addition to EnPIs, all scope emissions are displayed along with source mix information. Upon site selection from map view, the user is directed to individual site energy performance dashboard.

All events/notification related to sustainability can be visualized in main geographical location view.

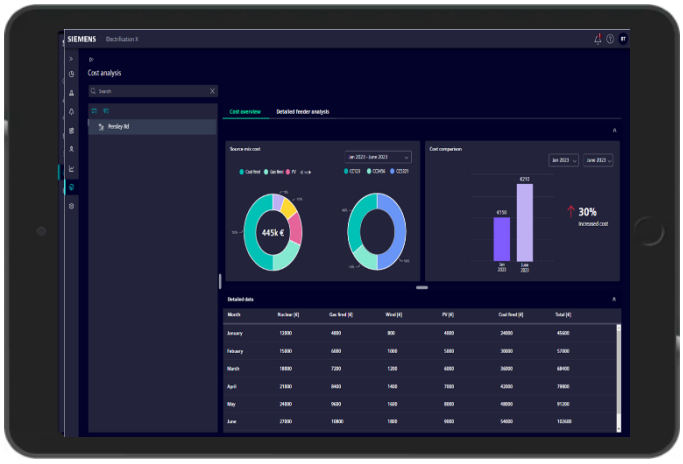
Electrification X – Sustainability/Energy Management: Global Energy Overview

Electrification X – Sustainability/Energy Management: Site Energy Overview

Cost Analysis

The cost analysis feature provides cost overview with respect to source mix, both renewable and non-renewable. Also, cost allocation is made easy with energy spent per cost center visualization.

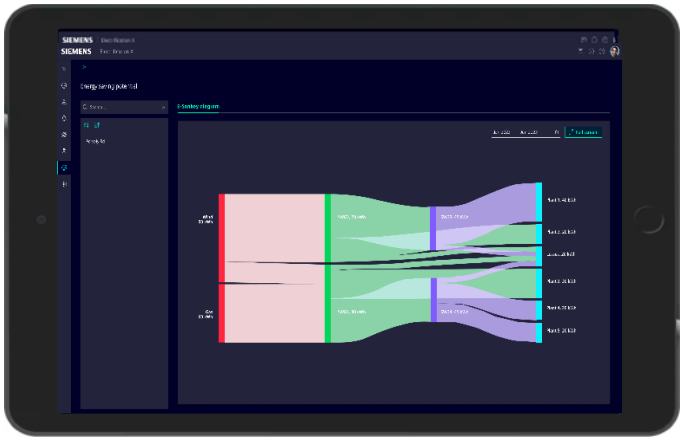
To report variance in energy cost, a comparative analysis can be performed for customized period. The analysis facilitates the identification of cost optimization measures.



Electrification X – Sustainability/Energy Management: Cost Overview

Saving Potential Identification

eSankey provides transparency on energy flow from generation to consumption. Losses are identified at each stage of the process flow. The interactive display allows to trace back the source of each consumer. This functionality facilitates better understanding on energy network.

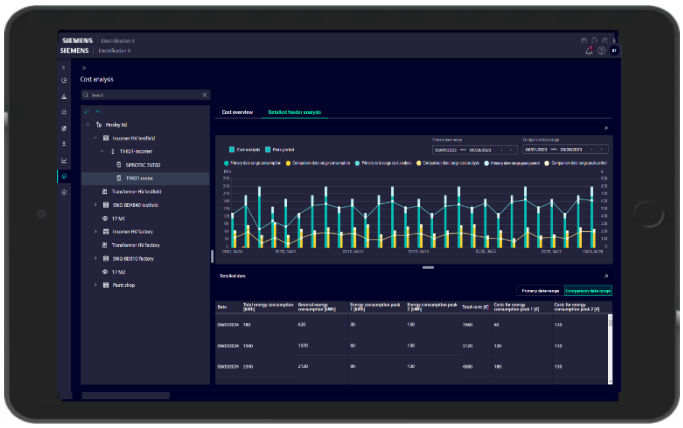


Electrification X – Sustainability/Energy Management: eSankey

Energy Benchmarking

A detailed feeder analysis, as the name suggests, allows a comprehensive insight of energy consumption trends for selected feeder(s) and provides the possibility for comparative study across different time ranges as well as comparison across peer facilities. The details related to energy consumption and respective unit prices for the selected time range are exportable.

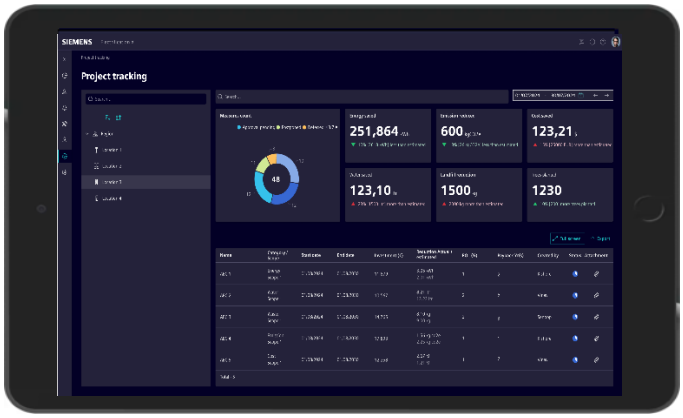
This encourages standardization of processes across locations, identification of underperforming assets/facilities and implementation of best practices.



Electrification X – Sustainability/Energy Management: Asset Analysis

Project Tracking

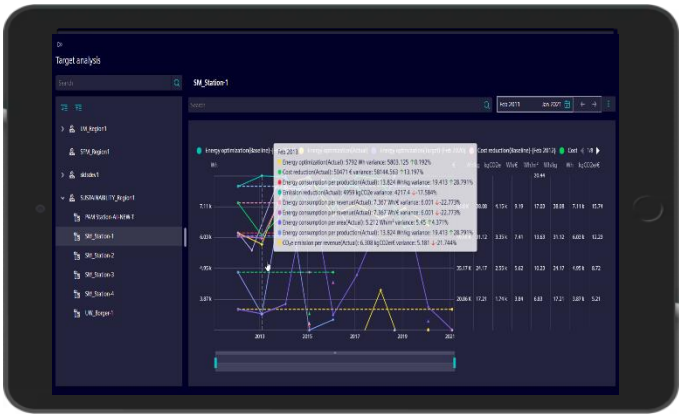
Project tracker enables monitoring of the progress, performance, and impact of energy initiatives. It helps ensure accountability, manage timelines and budgets, and measure energy savings and emission reductions. Integrated tracking supports continuous improvement by aligning projects with energy goals and sustainability targets.



Electrification X – Sustainability/Energy Management: Project Tracking

Target Setting and Dynamic Roadmap

Set specific, measurable targets across energy use, cost, emission, and EnPI(s). Added value stems from dynamic roadmap which updates automatically based on update performance data, enabling organizations to track progress, adjust actions, close gaps, and stay aligned with evolving goals. This ensures continuous alignment with cost-efficiency and sustainability strategies.



Electrification X – Sustainability/Energy Management: Target Analysis

Regression Analysis

Use statistical modeling to identify relationships between energy consumption and influencing factors like weather, area, production, or revenue. This enables accurate baseline creation, performance tracking, and anomaly detection for better decision-making and energy optimization.

Electrification X – Sustainability/Energy Management: Energy Analysis

Customizable Reporting

Generate customizable reports on energy, cost, and emissions over any desired time range or frequency, in multiple formats (.csv,.pdf) and in multiple languages (English, German). Reports can be extracted at any asset level within the topology for tailored insights and can be accessible for relevant stakeholders.

Electrification X – Sustainability/Energy Management: Reporting Engine

Subscription

Standard Subscription Plan	Electrification X Sustainability/Energy Management
Functions	All
Subscription metric	• Feature set subscription per month • Energy Monitoring base package per location per month • Energy Monitoring Value package per asset bundle per month
Subscription term	Annually, auto-renewal
Billing term	Annually, payment in advance
Upscale	Effective immediately, pro-rated billing
Downscale/Cancellation	Effective with end of subscription term
Connected Devices	To be purchased separately
Permitted Users	Unlimited, Extended Use

The Electrification X – Sustainability/Energy Management feature set subscription plan is the regular, scalable Offering for this Cloud Service. The subscription term is twelve (12) months with automatic renewal; the Cloud Service fee is paid in advance. The subscription plan can be upscaled at any time and Cloud Service fees for upscales are calculated on a pro-rated basis. The Customer can also scale down the Cloud Service effective with the end of the current subscription term. The subscription fee will be adjusted for the upcoming billing term. The Cloud Service can be cancelled any time, effective with the end of the current subscription term.

The subscription plan can be purchased in packages per industrial location and per asset connected. The subscription plan assumes an industrial location is referring to one unique postal address or geographical coordinates.

Extended Use entitles the Customer to authorize its Affiliates and third parties to access and use the Cloud Services in accordance with the rights set out in the Terms and Conditions.

Prerequisites

Supported Connected Devices	The Cloud Service is currently compatible with commercially available Connected Devices from Siemens. A description of the available Connected Devices is provided below. A Connected Device must be purchased and installed on premise at a site specified by the Customer as agreed between the Customer and Siemens to use the Cloud Service. Customer is responsible for installing the Connected Device at the site and any associated costs to perform said Cloud Service in accordance with related Documentation for the Connected Device. List of supported Connected Devices: **SICAM A8000 Gateway** For order information, Customer may contact its local sales representative
Web browser and viewing devices	Chrome is recommended to use the Cloud Service, but other standard browsers might also serve this function. Screen resolution of 1920x1080 pixels or higher is recommended for best user experience
Internet Connection	The bandwidth of Customer's internet connection determines the performance of the Cloud Service.

Ordering

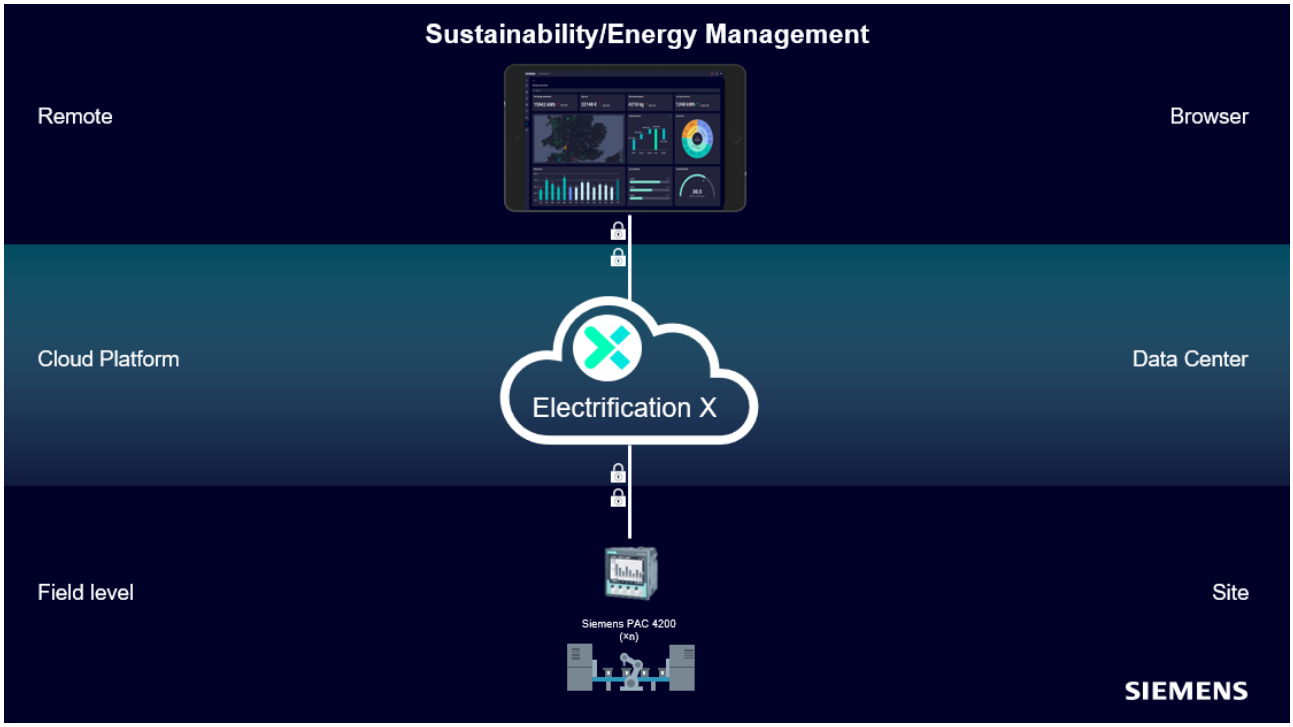
Ordering Process for the Subscription	To order the Cloud Service for the first time, Customer must request a quote from its Siemens sales representative. Customer will receive a link to the shopping cart. Customer needs to (i) choose the payment options and (ii) accept the Terms and Conditions to start using the Cloud Service. The "Terms and Conditions" consist of the "Supplemental Terms Electrification & Automation", the Base Terms and the General Software and Cloud Supplemental Terms, the Acceptable Use Policy, the Siemens Data Processing Terms, this Product and Service Data Sheet and any other Supplemental Terms which may be referenced in either of the mentioned documents. Customer may upgrade, downgrade, and cancel the Cloud Services directly in the Subscription Manager store https://subscribe.siemens.com
Ordering Connected Devices	To order Connected Devices the Customer may request a quote from its Siemens sales representative
Connected Device	**SIEMENS: SICAM A8000**
Ordering	For order information, Customer may contact its local sales representative

Product Documentation

Technical Documents	Document ID	Document ID German	Document ID English
Building X – Accounts User Guide	A6V12050070		
Electrification X – General Package User Manual		E50417-H7500-C200-A1	E50417-H7540-C200-A1
Electrification X – Sustainability/ Energy Management User Manual		To be defined	To be defined
Electrification X – Engineering Guide		E50417-H7500-C203-A1	E50417-H7540-C203-A1
Electrification X – Security Manual		E50417-H7500-C204-A1	E50417-H7540-C204-A1
Electrification X – Protocols Manual		E50417-L7500-C200-A1	E50417-L7540-C200-A1

Technical Documents can be downloaded here:
https://support.industry.siemens.com/

Topology



Data communication between the Connected Devices on premise and the Cloud Service requires internet connectivity (to be provided by the Customer).

Customer Support

Siemens may offer helpdesk support. Customer may contact its local Siemens representative for support requests.

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