

# Energy Manager

Building X



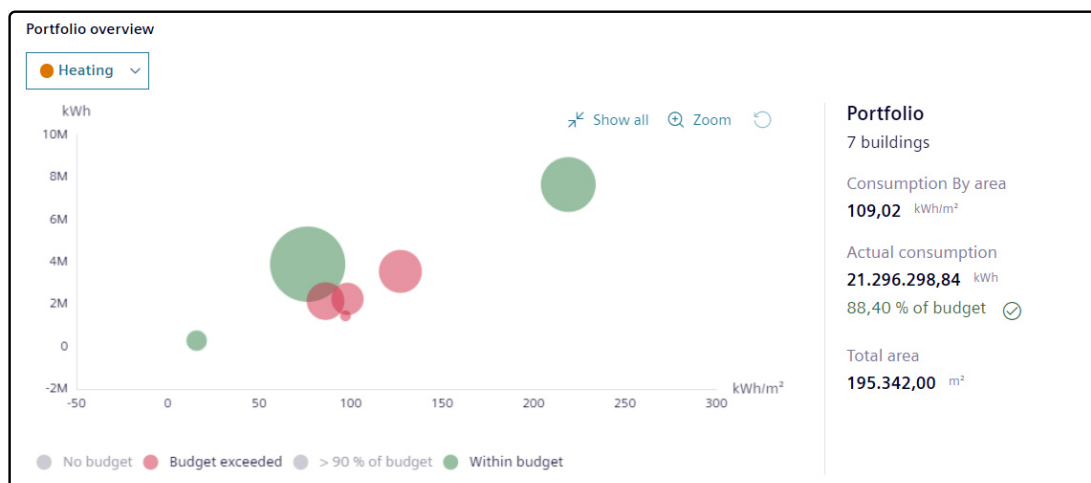
**Energy Manager is a Building X offering that monitors, analyzes, and helps to optimize energy and sustainability figures and KPIs for the entire building portfolio. The available multi-site performance dashboard visualizes historical and near real-time series data for energy consumption, costs, and emissions values. Building X energy manager is compliant with ISO 50001 standard. This allows you to identify cost-reduction and optimization opportunities relevant to your business within an easy-to-use interface.**

- Multi- and single-site monitoring
- Submetering with Sankey diagrams for campus, building, floor and room levels
- Evaluation of business specific Energy performance indicators (EnPIs)
- Monitoring operational carbon emissions as per GHG Scope 1 to 3
- Machine learning-based anomaly detection for energy consumption
- Building performance benchmarking with Energy Star
- View near real-time and historical time series data
- Forecasting of energy consumption
- Threshold notifications to own email
- Data export and (scheduled) reporting
- Extracting energy data with the additional Building Energy Management API offering

[buildingx.siemens.com](https://buildingx.siemens.com)

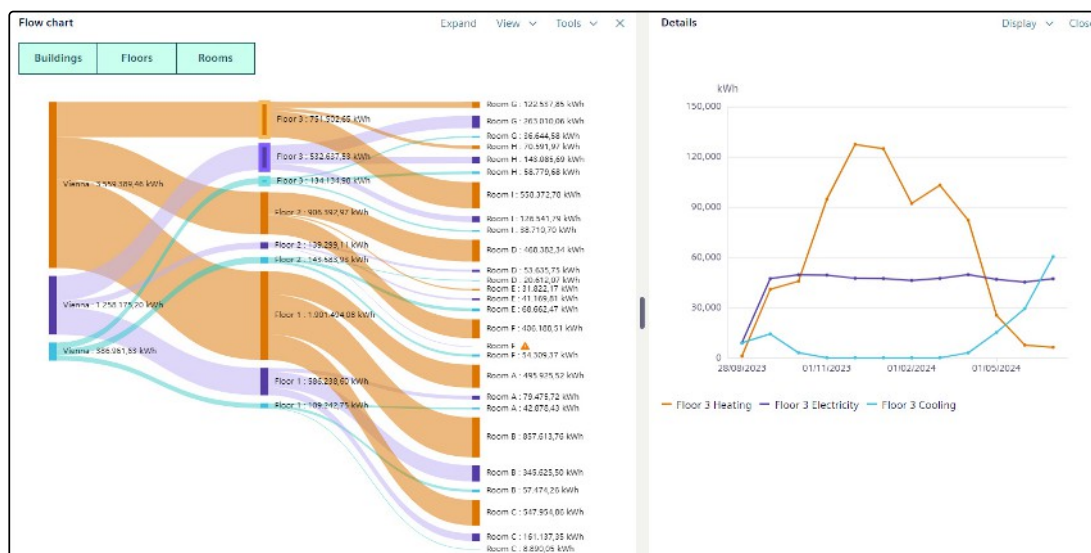
## Multi-site Monitoring

Monitoring of relative and absolute values for multi-site portfolio (consumption/cost/emission). Benchmarking based on buildings of similar nature or type.



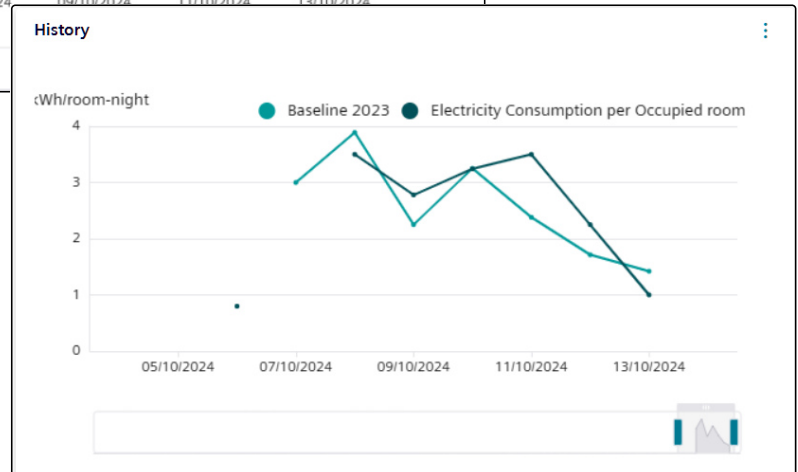
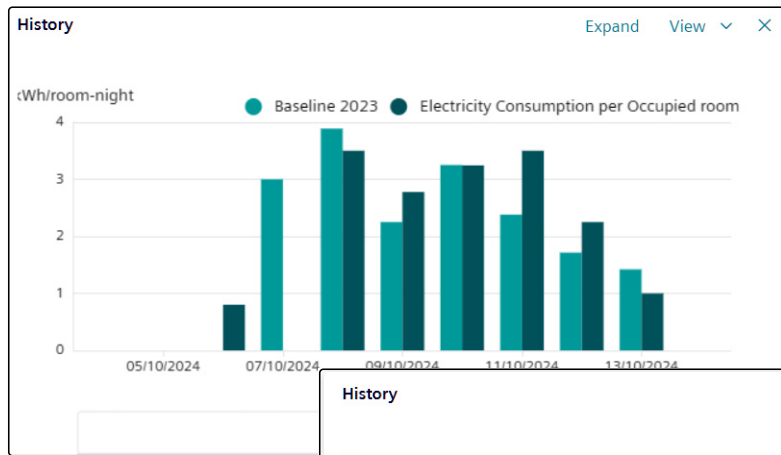
## Single-site Monitoring and Submetering

Detailed monitoring of the distribution of consumption, costs and emissions at campus, building, floor and room level combined energy flow (Sankey) and time series diagrams.



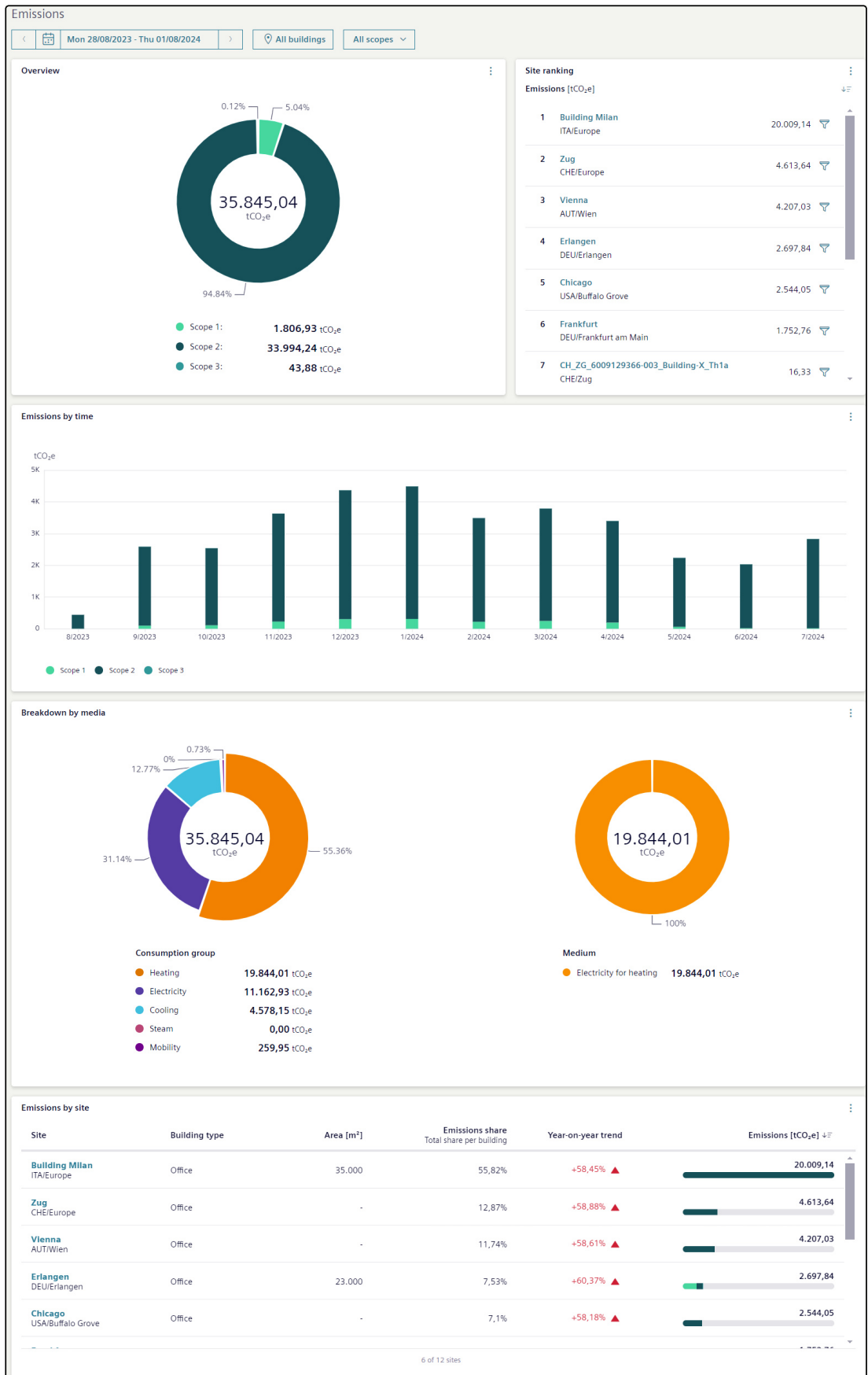
## Evaluation of business specific energy performance indicators (EnPIs)

Flexible creation of energy performance indicators relevant to a business and detailed evaluation over time in compliance with ISO 50001 standard, comparison to baseline periods to ensure progress on right track



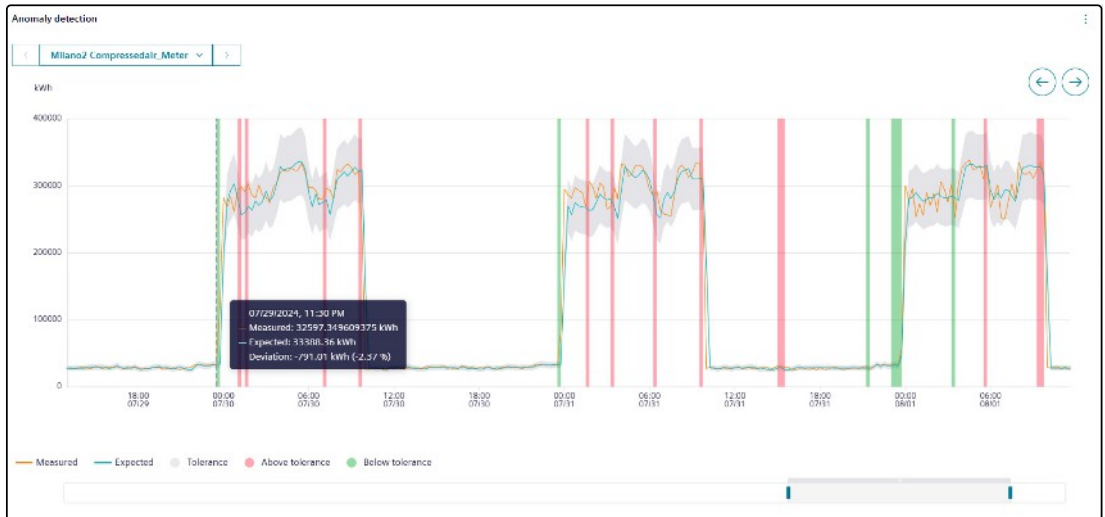
### Emission Monitoring and Reporting

Automatically monitor, report, and manage the carbon emissions of your building portfolio along Scope 1 to 3 with a single dashboard.



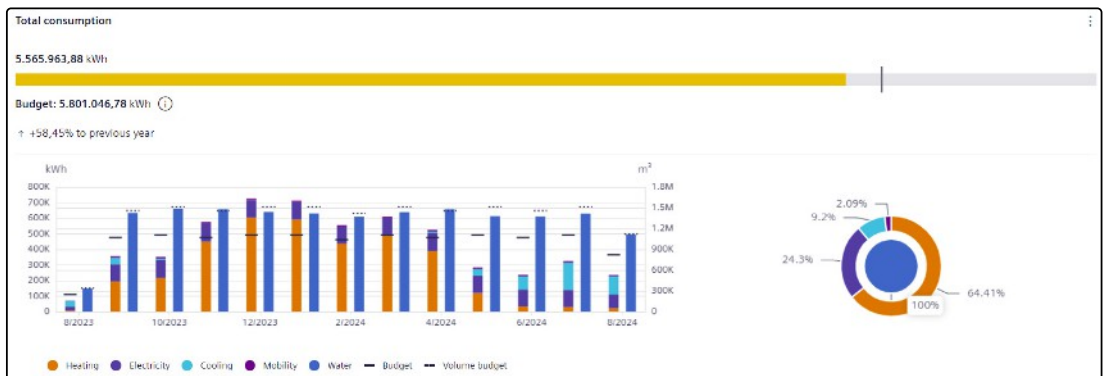
## Machine Learning-based Anomaly Detection

Let machine learning algorithms detect anomalies and unexpected behavior in your energy consumption data on meter level.



## Data History and Aggregation

Automatically logs, stores and aggregates meter data points for energy and water. It presents the data history to view the trend over different time periods, highlighting defined budget overruns.



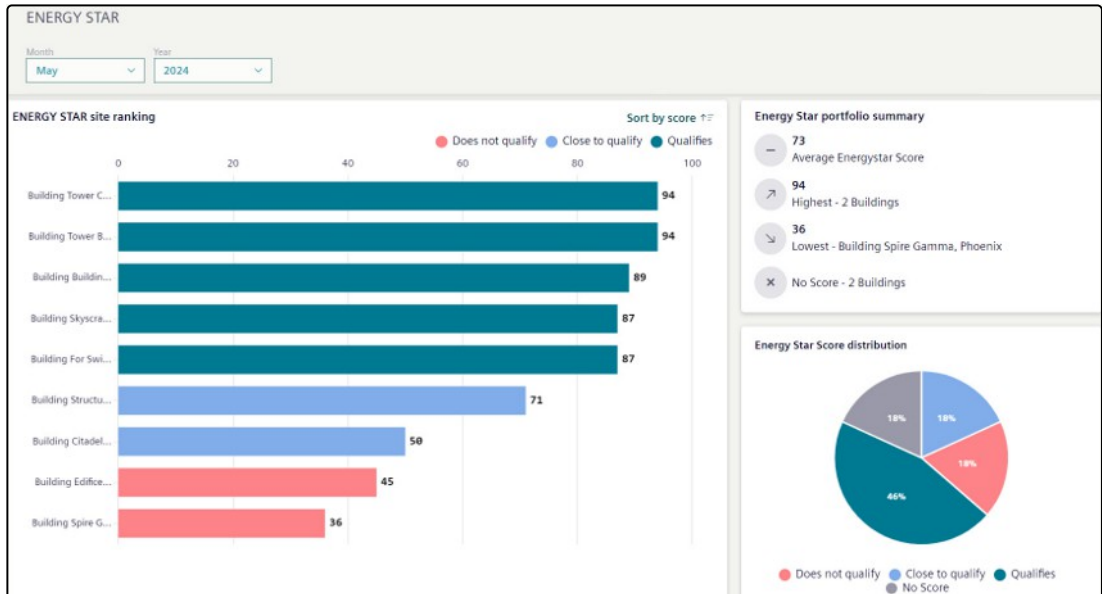
## Benchmarking

Ranking view and matrix view comparing own buildings based on absolute or relative consumption/cost/emission values. Available detailed view of single buildings and respective energy and water metrics. View of energy consumption, cost or emission data over time enabling year-over-year comparison via selection in time filter.

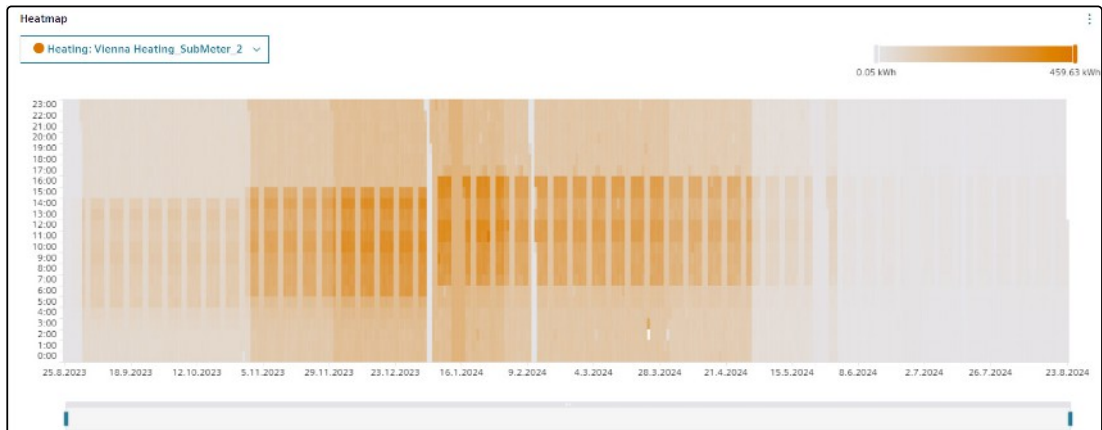
Weather normalization of heating and cooling consumption data to provide transparency on consumption patterns and efficiency improvements regardless of local weather influences.

Monitor consumption, costs, and emissions compared with defined budgets to derive measures at an early stage.

Benchmarking building performance using Energy Star scores. Easily connect your Building XEnergy Manager with the Energy Star Portfolio Manager.

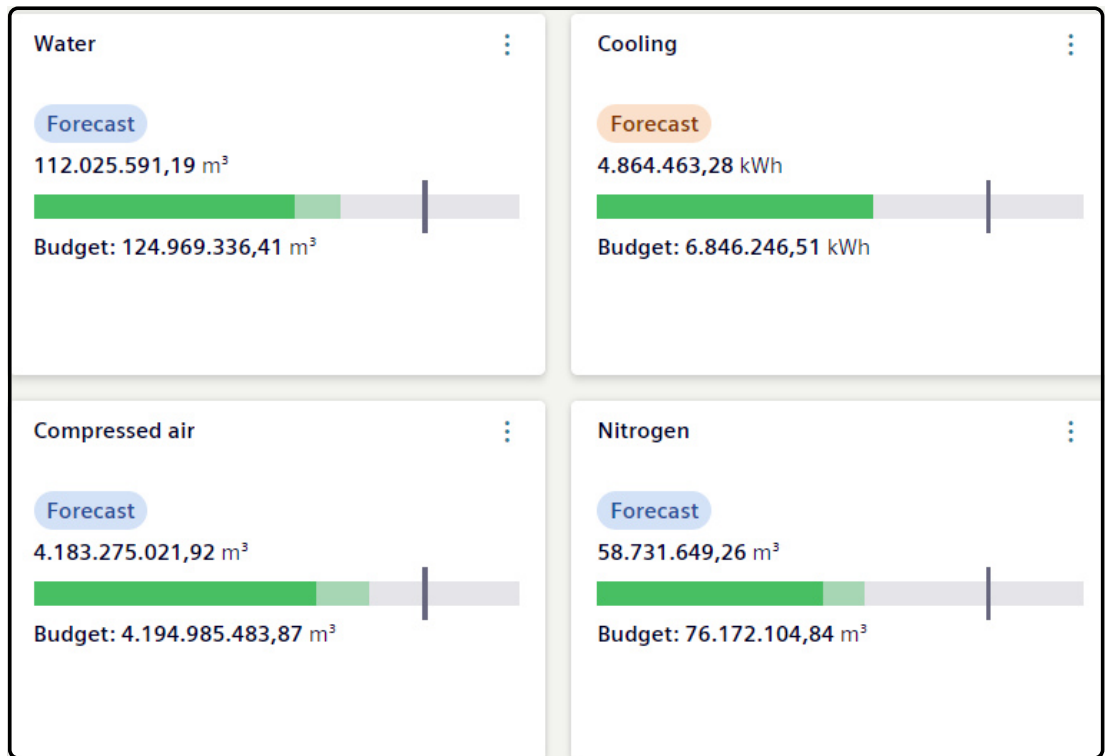


View building specific insights related to energy mix, individual consumption groups and identify inefficiency patterns using heat map.



### Forecasting for Energy Consumption

Forecasting service enabling projection of energy consumption for up to twelve months based on historical values.

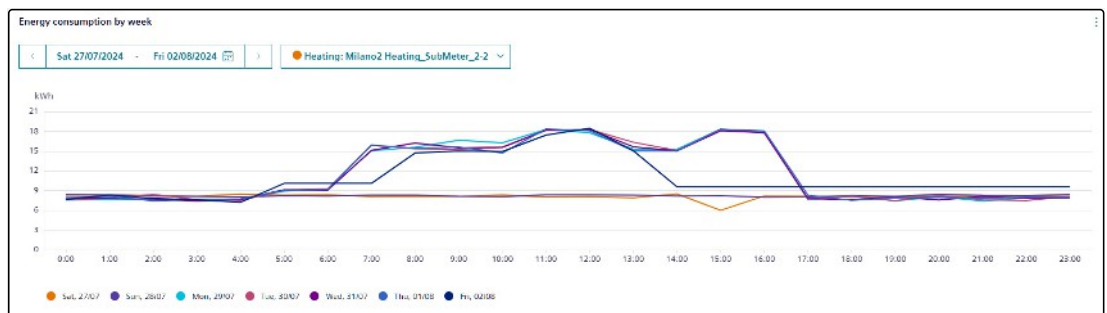


## Meter level analysis

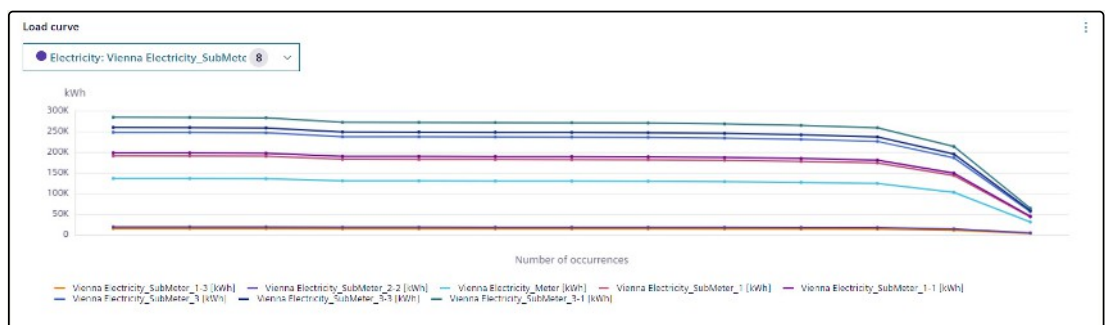
Monitoring and analysis of single or multiple meters to drill down in consumption details.



Compare daily consumption patterns in 15 minutes or hourly granularity for main and submeters.



Compare load duration curves for different meters, identify peak loads and flexibility potential.



### Threshold Notifications

Option to define thresholds and set notifications to own email address. The Users can define their own notification rules.

### Data Export

Exports selected data to a .csv, .xlsx, .pdf, .png file.

### Scheduled Reports

Enables the User to conduct a data export as a custom report containing one or more charts, optional data table as well as a comment. It can be generated immediately or scheduled at regular time intervals.

### Accounts Application

Ability to manage users with a role-based access control. New users can be invited to access the Cloud Service and given appropriate access rights via user groups. Users can log in with two-factor authentication and manage their user account themselves. Data can be logically grouped into partitions and given access via user groups.

### Devices Application

Ability to manage Connected Devices compatible with the Cloud Service.

### Data Setup Application

Ability to onboard data by adding meaning and structure to it. The data can be onboarded from multiple sources, such as Connected Devices, 3<sup>rd</sup> party cloud systems and files.

### Data Hosting and Data Usage

Hosts and processes personal and non-personal data in data centers located in Europe. For information regarding processing of personal data and locations Customer may refer to the Data Privacy Terms.

### Building Energy Management API

The additional Building Energy Management API offering enables the extraction of raw meter data as well as energy consumption, cost and emissions data. Meter data can be ingested via API for non-hardware connected meters.

### Ask Building X

Ability to ask questions in different languages about Building X technical information, utilizing GenAI.

## Subscription

The subscription plan depends on the agreement between Customer and Siemens.

### 1) Standard Subscription Plan if the customer purchases the subscription via the Siemens online store

	Energy Manager
Functions	All
Subscription metric	per Meter per year
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

	Energy Manager API
Functions	All
Subscription metric	API calls per year: 100,000
Subscription term	Annually, auto-renewal
Billing term	Annually, payment in advance
Upscale	Effective immediately, pro-rated billing



	<b>Energy Manager API</b>
<b>Downscale/Cancellation</b>	Effective with end of subscription term
<b>Connected Devices</b>	To be purchased separately
<b>Permitted Users</b>	Unlimited, Extended Use
<b>Additional information</b>	<p>The Building Energy Management API offering can only be purchased in addition to an active Energy Manager subscription.</p> <p>The offering includes the following endpoints and the 100,000 calls/year split as follows:</p> <ul style="list-style-type: none"> <li>• Building Energy Management API calls/year: 70,000</li> <li>• Point Value Ingest API calls/year: 25,000</li> <li>• Structure API calls/year: 2,500</li> <li>• Operations API calls/year: 2,500</li> </ul>

The Standard 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 for the Energy Manager in packages per meter starting with a minimum of 10 meters. Quantity discounts are applied for larger subscription plans. Meters can be distributed across multiple buildings. The additional subscription plan for the Building Energy Management API can be purchased in packages per 100,000 calls/year. API calls can be distributed across multiple buildings or meters part of the existing Energy Manager subscription.

Customer may purchase required Connected Devices separately.

Extended Use entitles 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.

## 2) Custom Subscription Plan

Any subscriptions that are not purchased via a Siemens online store are Custom Subscription Plans. Under a Custom Subscription Plan the details regarding functions, subscription metric, term, billing, up- and downscaling, Connected Devices as well as Permitted Users are set out in the agreement between the Customer and Siemens.

## Prerequisites

### Supported Connected Devices

The Cloud Service is currently compatible with commercially available Connected Devices. Connected Devices enable the Cloud Service to exchange data with the technical building infrastructure. A description of the available Connected Devices is provided below.

	<b>List of Supported Connected Devices</b>
<b>SIEMENS: Connect X200</b>	<p>The Connect X200 edge gateway is powered with DC 24V or AC 24V and may require an enclosure.</p> <p>The Connect X200 includes embedded software (for example, firmware and factory installed applications collectively referenced herein as Software) to supply building data to this Cloud Service.</p>
<b>SIEMENS: Connect X300</b>	<p>The Connect X300 edge gateway is powered with DC 24V and may require an enclosure.</p> <p>The Connect X300 includes embedded software (for example, firmware and factory installed applications collectively referenced herein as Software) to supply building data to this Cloud Service.</p>
<b>SIEMENS: Connect Software</b>	Connect Software edge gateway is running on Windows 10 or Windows 11 Hyper-V and requires computer hardware.

	List of Supported Connected Devices
	Connect Software includes multiple software applications collectively referenced herein as Software to supply building equipment data to this Cloud Service.
<b>SIEMENS: Desigo CC</b>	Desigo CC software product is running on Windows computer hardware. The supported software version is Desigo CC V6 or higher. Desigo CC includes multiple software extensions collectively referenced herein as Software to supply building data to this Cloud Service.
<b>SIEMENS: Desigo PXC 4/5/7</b>	Desigo PXC4/5/7 hardware is powered with AC 24V. The supported hardware devices for this Cloud Service are PXC4-2.E16S, PXC4-2.E16, PXC5.E24, PXC7.E400S/M/L and PXC5.E003 with firmware version v02.21.194.xx or higher.
<b>SIEMENS: Desigo Optic F200</b>	Desigo Optic hosted on CFG3.F200 hardware is powered with AC 24V. The supported software version is V5.1.5 or higher to connect to this Cloud Service.
<b>SIEMENS: Connect Box</b>	Connect Box hardware is powered with DC 24 V. Connect Box includes Software and BSP version V5.x.x or higher to connect to this Cloud Service. The building management data hosted on the hardware can currently only be accessed in read-only mode.

To use the Cloud Service, a Connected Device must be installed on site, fully operational and connected to the Internet. The Customer is responsible for the provision of the Connected Device on site and all associated costs for the provision of the Cloud Service in accordance with the associated documentation for the Connected Device.

### Supported Third-Party Software Connectivity

The Cloud Service is currently compatible with commercially available Third-Party Software. Third-Party Software Connectivity enable the Cloud Service to exchange data with Third-Party Software. A description of the available Third-Party Software connectivity is provided below.

	List of Supported Third-Party Software
Software Specific connectors	<ul style="list-style-type: none"> <li>Siemens Navigator</li> </ul>

The customer is responsible for the Third-Party Software at the site and all associated costs for the provision of the cloud service in accordance with the associated documentation for the Third-Party Software.

### 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

To order a subscription plan and connected devices, Customer must request a quote from its Siemens sales representative.

### 1) Product Documentation under a Standard Subscription Plan

General Contractual Documents	Links
Building X - Energy Manager Data Sheet	<a href="http://www.siemens.com/buildingx/data-sheet/energy-manager">www.siemens.com/buildingx/data-sheet/energy-manager</a>
Supplemental Terms for Buildings	<a href="http://www.siemens.com/buildingx/data-sheet/supplemental-terms">www.siemens.com/buildingx/data-sheet/supplemental-terms</a>
General Software Terms and Cloud Supplemental Terms	<a href="https://www.siemens.com/si/cloud/terms">https://www.siemens.com/si/cloud/terms</a>
Base Terms International	<a href="https://www.siemens.com/si/cloud/terms">https://www.siemens.com/si/cloud/terms</a>
Siemens Acceptable Use Policy	<a href="https://www.siemens.com/si/cloud/terms">https://www.siemens.com/si/cloud/terms</a>
Minimum Terms	<a href="http://www.siemens.com/buildingx/data-sheet/minimum-terms">www.siemens.com/buildingx/data-sheet/minimum-terms</a>

### 2) Product Documentation under a Custom Subscription Plan

The contractual documents and the Product Documentation are set out in Siemens' offer to the Customer.

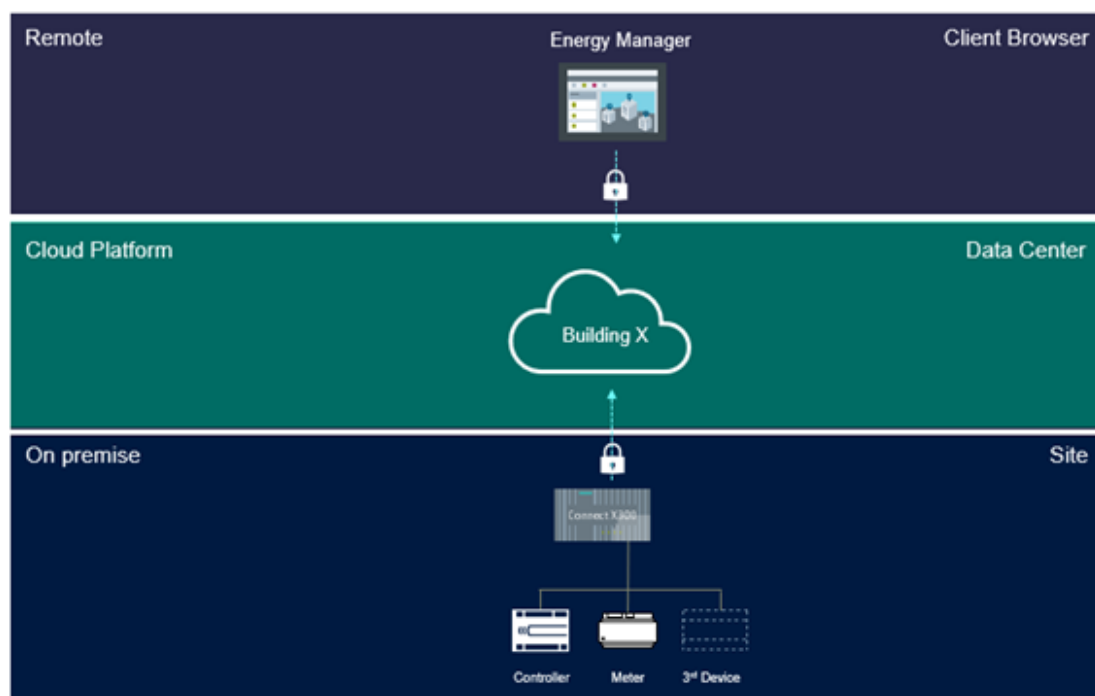
### 3) Data Privacy Terms

Data Privacy Terms	Links
Data Privacy Terms	<a href="https://www.siemens.com/dpt/si">https://www.siemens.com/dpt/si</a>
Data Privacy Terms Annexes Building X	<a href="https://www.siemens.com/dpt/si">https://www.siemens.com/dpt/si</a>

### 4) Technical Documents

Technical Documentation	Link
Building X - Online help	<a href="http://www.siemens.com/buildingx/sid">www.siemens.com/buildingx/sid</a>

## Topology



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

### High-Risk Use

Customer acknowledges and agrees that:

- a) the Offerings are not designed to be used for the operation of or within a High-Risk System if the functioning of the High-Risk System is dependent on the proper functioning of the Offerings; and
- b) the outcome from any processing of data through the use of the Offerings is beyond Siemens' control.

### Gen AI disclaimer

This Offering is based on Artificial Intelligence technology, i.e. machine learning is used to forecast energy consumption and detect anomalies in energy consumption patterns. The Offering may be accompanied by Generative artificial intelligence ("GenAI") service such as Ask BX, including chatbots and assistants at a price or free of charge. AI generated or based Content, results and responses may not be entirely accurate or reliable.

For details on GenAI services, refer to Siemens' "[Generative AI Terms of Use - Siemens Global](#)" and "[Generative AI Chat Privacy Information - Siemens Global](#)".

### Service Level Agreement

Siemens shall use commercially reasonable efforts to make the Cloud Services available for a monthly uptime percentage of ninety-eight percent (98%).

Except for:

- a) Planned downtime, agreed downtime, routine and emergency maintenance,
- b) Cyberattacks,
- c) the public, third party and/or customer's internet and communications networks,
- d) data, software, hardware, telecommunications, infrastructure, power, build-packs or networking equipment not provided by Siemens,
- e) Customers and Users negligence or failure in using the Cloud Service and/or in not following the instructions of published documentation,
- f) system configurations and platforms not supported by Siemens,
- g) system administrations, action, commands and file transfers of Customer or User,
- h) modifications or alterations not made by Siemens,
- i) unauthorized access via Customer's credentials and/or
- j) any other failure outside of Siemens reasonable control.

### Customer Support

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