N4 **Energy**Manager

Version 3.8.0

Forest Rock

THE PEAK OF IOT INNOVATION

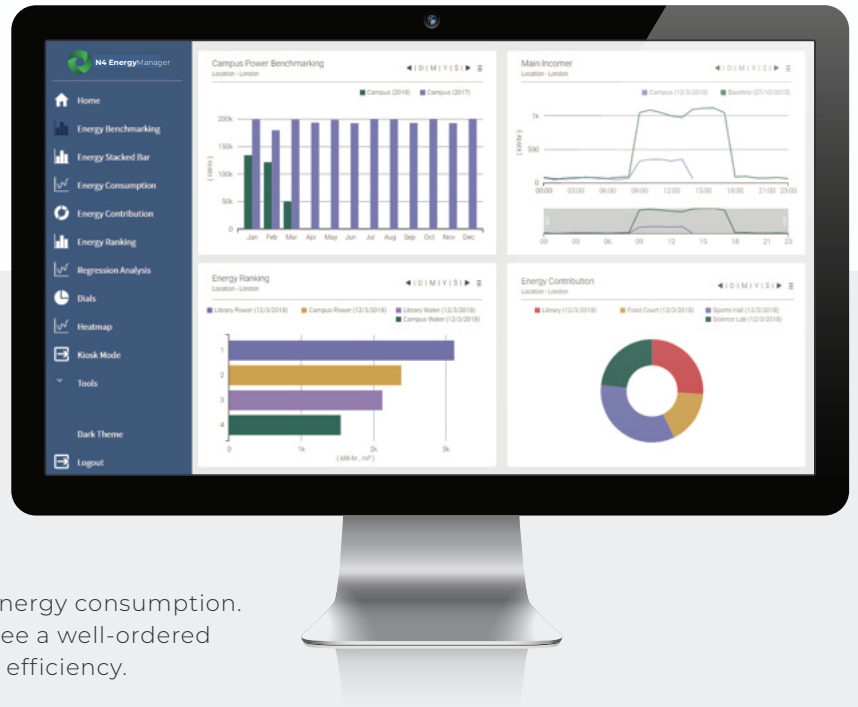forestrock.co.uk

N4 **Energy**Manager

- Monitoring
- Benchmarking
- Targeting
- Reporting
- Bill Creation

Understand your energy consumption

Maximise the energy efficiency of your buildings.

Automatically collect and analyse all forms of energy consumption. Visually appealing graphics and charts guarantee a well-ordered and intuitive presentation of energy usage and efficiency.

Easily collect, evaluate and visualise your energy consumption to help realise substantial savings in energy costs.

Energy Benchmarking

Consumption bar charts visualise the energy profile of your building and benchmark the current day, week & month against the previous period and same period last year.

Energy Ranking

Easily identify and compare the high and low consumers between groups of meters, floors, zones or buildings as needed in ascending or descending order. Selecting a particular consumer hides that consumption data from the chart and recalculates the ranking.

Advanced Bar Charts

See a breakdown of how different consumers contribute to your daily energy consumption in our advanced daily, weekly, monthly or yearly bar charts.

Contribution Analysis

Discover how particular buildings or zones contribute to your total energy cost and consumption using easily customisable pie charts.
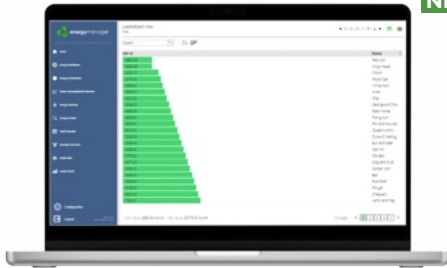
What's New in **N4 Energy**Manager v3.8.0?

NEW Estate View

The Estate View facilitates comprehensive data analysis through quadrant segmentation. It employs normalisation techniques to display output values like cost and area, enabling users to compare metrics such as energy consumption against costs. By plotting kWh/m² on the x-axis and cost on the y-axis, users can identify outliers with high energy usage and costs for targeted analysis.

NEW Leaderboard Chart

The Leaderboard Chart is a visualisation tool that enhances traditional Ranking Charts by presenting aggregator output as horizontal bars with names. It offers optional period and percentage columns for deeper insights. This chart is highly customisable; users can toggle visibility for columns, sort data, search by names, and navigate through results. Configuring it is straightforward: drag and drop the widget and manage column visibility in data binding settings for a tailored view that meets energy analysis needs.

NEW Tree Menu

The Tree Menu improves navigation with a user-friendly interface for moving between defined Px Pages. This customisable widget easily integrates into a Px Page, creating a consistent navigation experience. Key features include adjustable hover and selection colors, customisable font sizes, and flexible menu styles—allowing the display of icons, text, or both.

Unlike other menus, it uses a unique menu configurator. This enables users to select a Menu Item using drag-and-drop, ensuring accurate paths to Px Pages for improved efficiency in energy management.

NEW Machine Learning

N4 Energy Manager harnesses the power of advanced AI and Machine Learning to revolutionize energy management in buildings.
This cutting-edge technology enables automated analysis and understanding of energy consumption patterns, providing users with intelligent insights without the need for complex configurations.

NEW Anomaly Detection

The state-of-the-art anomaly detection feature identifies unusual energy usage patterns with remarkable precision. By automatically flagging irregularities and potential inefficiencies, it empowers users to take proactive measures in optimizing energy consumption across multiple sites, enhancing overall building performance and reducing operational costs.

NEW Weather Service

N4 Energy Manager integrates a comprehensive online weather data service, providing accurate historical weather information for each system's precise location at no additional ongoing cost. This valuable data is combined with local energy consumption data to create a powerful synergy, enabling the software to detect anomalies with heightened accuracy.

Regression Analysis

View the relationship between weather data (average temperature or degree days) and your buildings energy consumption in a Regression Analysis chart. Measure actual consumption against predicted energy consumption.

The multi regression analysis option performs three independent linear regressions for heating, zero-energy periods and cooling periods.

Heat Map

See your energy data in a heatmap chart to easily identify outliers. Data is displayed in 1-hour coloured blocks allowing you to spot trends and patterns over the course of the year. Ranges are automatically calculated based on minimum & maximum values. Whether you are viewing energy meter data to identify peaks in consumption or outside air temperature to look for seasonal trends, the heat map chart provides insightful information to the user.

Automated Reports

Share data by generating instant reports for each graph or chart in either csv, png or pdf formats. Save time and never miss data with automated reporting, configure our reporting tool to save a PDF file locally and send it periodically via email.
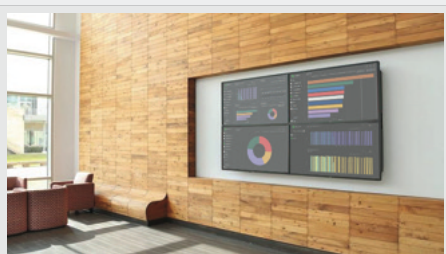
Meter Aggregation

N4 Energy Manager allows you to group together and normalise a collection of meters for a particular zone, site or building. This key component provides valuable data for graphical representation of energy consumption and peak demand for a range of different periods using either a single meter, or a group of sub meters.
Consumption and peak demand is automatically calculated for the current & last hour, current & last day, current & last week etc. **N4 Energy**Manager keeps a record of the hourly energy consumption for individual meters, groups of meters, and calculated virtual energy meters.

Menu Builder

Navigate your station with ease with our vertical navigation menu. See your **N4 Energy**Manager dashboard come to life with our sophisticated and intuitive drag and drop Menu Builder widget. Our Menu Builder allows you to preview and build the contents of your navigation menu without any coding experience.

Kiosk Mode for Public Display

Display a selection of pages in a rotating sequence in your building reception, office, meeting or breakout areas. The order of pages, and dwell time between pages can be easily configured to display your buildings energy consumption alongside your corporate messages and public announcements.

Energy Temperature Curve

Visualise the effect of variations in the outside temperature on your building's energy consumption over a year with our Energy Temperature Curve. Define ideal consumption for various temperature ranges along with tolerance values to quickly draw conclusions on the performance of your building

Data Integrity

Easily identify problems in the quality of your data with our Data Integrity Tool. View at a glance the overall integrity % of your data per chart with intuitive colour coding and helpful summary tool tips. Drill down to pinpoint the actual number of meters on & off line for each data set within a chosen time period, via a separate Data Integrity pop up window.

Customisable to your BMS

N4 Energy Manager uses Niagara Workbench to enable you to create a custom user interface to suit your specific project and customer branding. Access to a library of graphical charts, dial, and widgets allows you to build the pages you need, with the content that matters, to suit any screen resolution.

Tablet

View **N4 Energy**Manager on a range of handheld tablet devices. Using HMTL, graphs and charts automatically scale to suit your needs giving you greater flexibility to manage your buildings performance remotely.
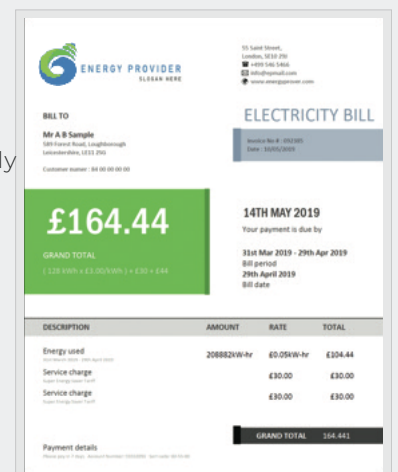
Tenant Billing and Reporting

N4 Energy Manager allows you to build your reports, or tenant bills using template Excel spreadsheets built using Microsoft Excel. **N4 Energy**Manager will automatically create monthly bills or reports from the templates, and enable you to generate pdf documents for email or print.

Reports and bills can be created in any format, including logos, text, charts or images.

N4 Energy Manager exports raw energy data to Excel allowing users to calculate KPIs or invoice costs using any mathematical methods, tariffs or look up tables.

On the right is an example of report templates that comes included.

Technical Specification

Platform : Niagara v4.10 and above
Technology : Built on HTML5 & CSS3
Recommended Browser : Chrome

System Recommendations

OS: Windows 10 - Win 64bit recommended
Memory: 16GB RAM
Processor: Core i5 Quad-Core
Storage: 128GB SSD

Licensing

Licenses are based on history point packs and can be purchased by
contacting Sales@ForestRock.co.uk.

Package	History points
N4 Energy Manager Controller Core licence	12 histories
Pro Supervisor 25	25 histories
Pro Supervisor 50	50 histories
Pro Supervisor 100	100 histories
Pro Supervisor 500	500 histories
Pro Supervisor 1K	1000 histories

To arrange a demo, discuss your energy dashboard needs and discuss licencing, pricing and more
contact us at Sales@ForestRock.co.uk

niagara⁴ Architecture

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