



Your Technological Partner  
For a Rational use of Energy



**You speak Energy**  
**We speak Technology**  
Together, we enable a  
rational use of energy



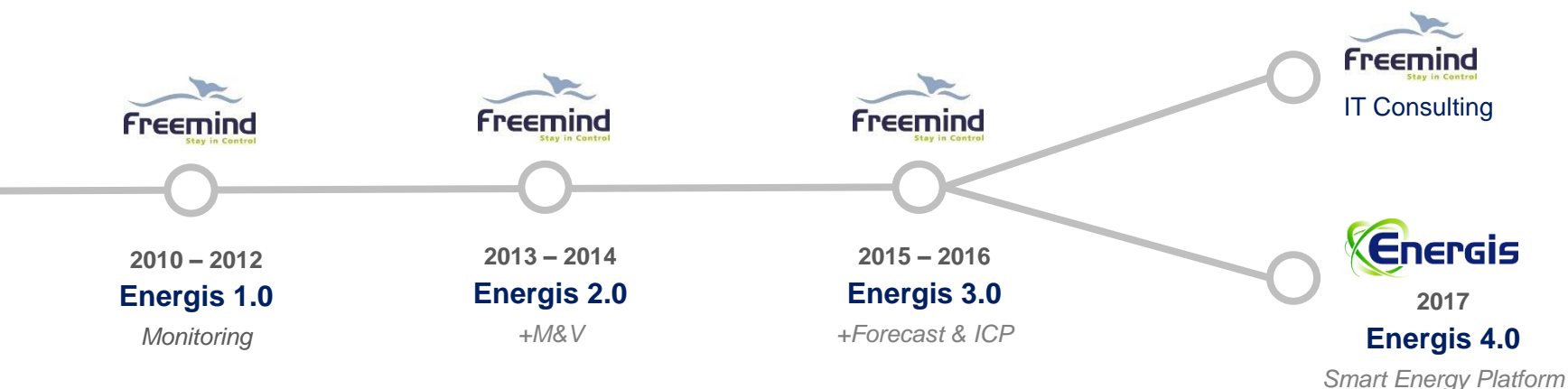


## About us

# A bit of history

At Energis, we specialise in ICT solutions. Our aim is to optimise the energy performance of buildings by empowering energy services providers with the most innovative technologies.

The company was created in July 2017 as the result of years of experience and developments that started at Freemind Group in 2012, a Belgian company specialized in ICT projects and consulting services.



## Energis SA

Founding members



**Angelo Santoro**  
CEO and Founder



**Frederic Wauters**  
Co-founder  
and Product Manager



**Lisiane Goffaux**  
Co-founder  
and CEO of Freemind



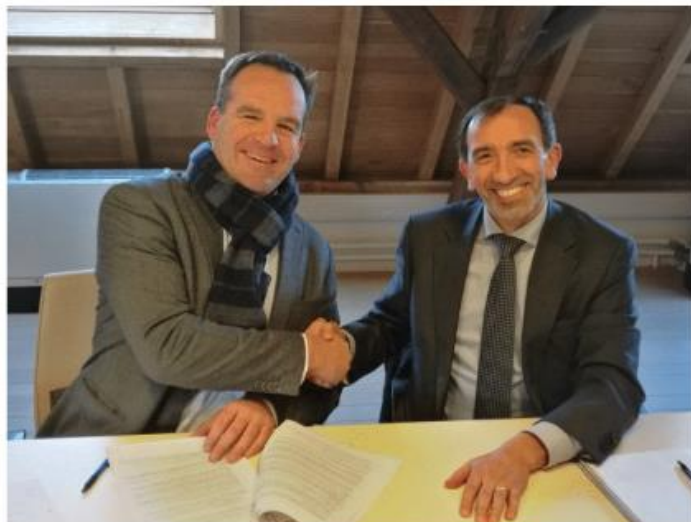
**Mario Rubino**  
Co-founder  
and Country Manager Italy



## Nieuwsbrief Energie- en Onderhoudsprestatiecontracten 2017

### Ingenium zet in op energiemonitoring

**INGENIUM** was op zoek naar een energiemonitoringpakket dat bruikbaar is om in te zetten in energie-efficiëntieprojecten. **Energis** biedt hiervoor de nodige mogelijkheden. **INGENIUM** en **Energis** sloten hierover een partnership.



*Nicolas Vyncke en Angelo Santoro*

van het pakket en het uitwerken en toevoegen van nieuwe eigenschappen.

Het bijhorende persbericht kan u [hier](#) nalezen.

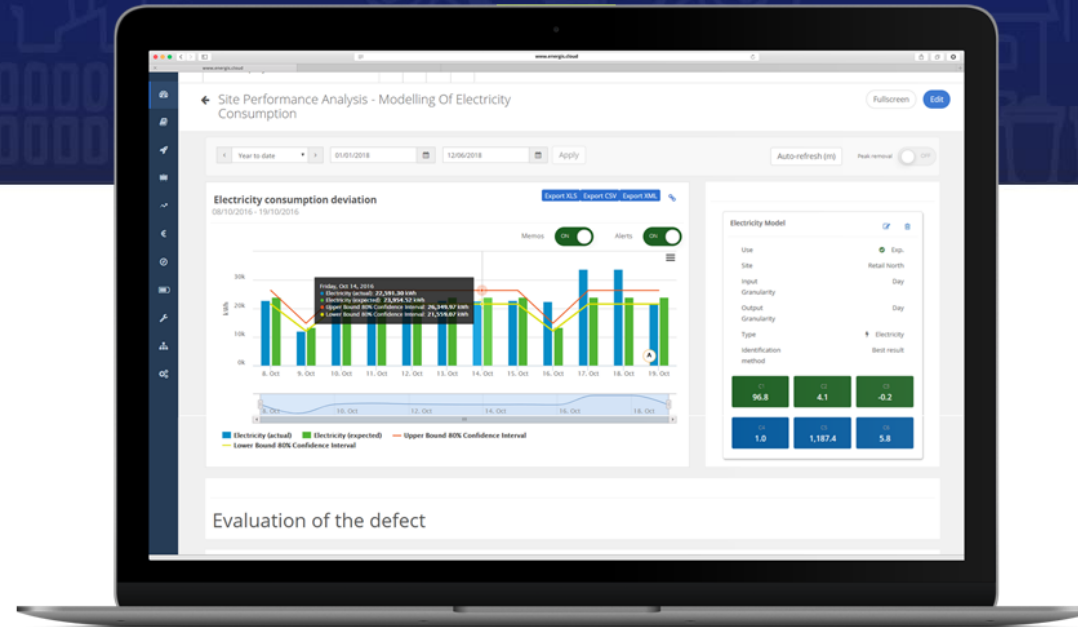
### Meer informatie?



*ir. Matthias Zuliani  
expert energy*

*Matthias.zuliani@ingenium.be*

# What should you expect from Energis.Cloud?



Reduce energy consumption & costs



Be environmentally responsible



Improve comfort

# Our Markets

Belgium

Italy

France

Netherlands

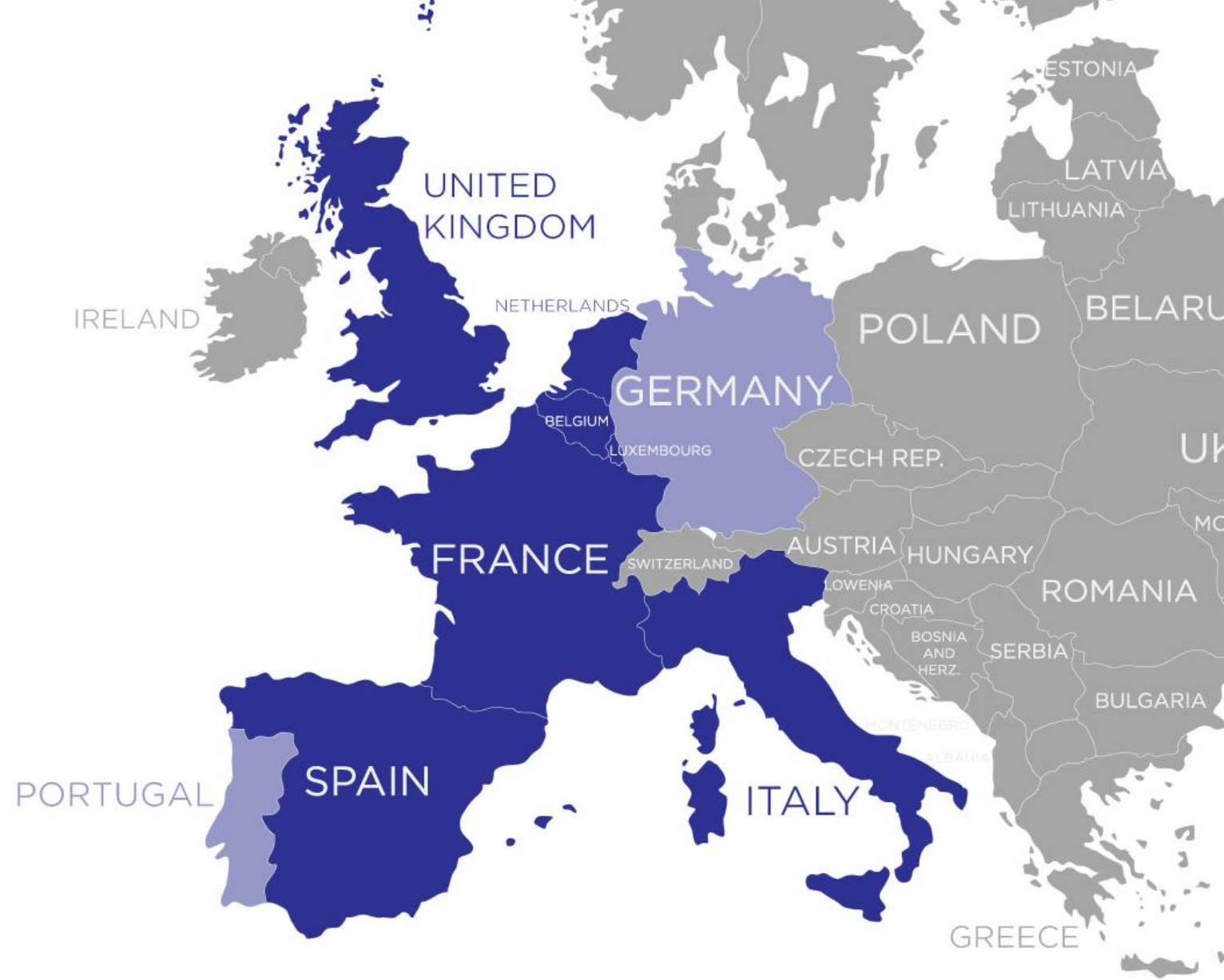
Luxemburg

Spain

UK





























Germany

Portugal



## End-users

# Final customers

PUBLIC ADMIN.	   	UTILITIES	 
RETAIL	   	TELCO & DC	  
INDUSTRIES	    	SCHOOLS	   
SPORT CENTERS	  	HOTELS	
HOSPITALS	 		

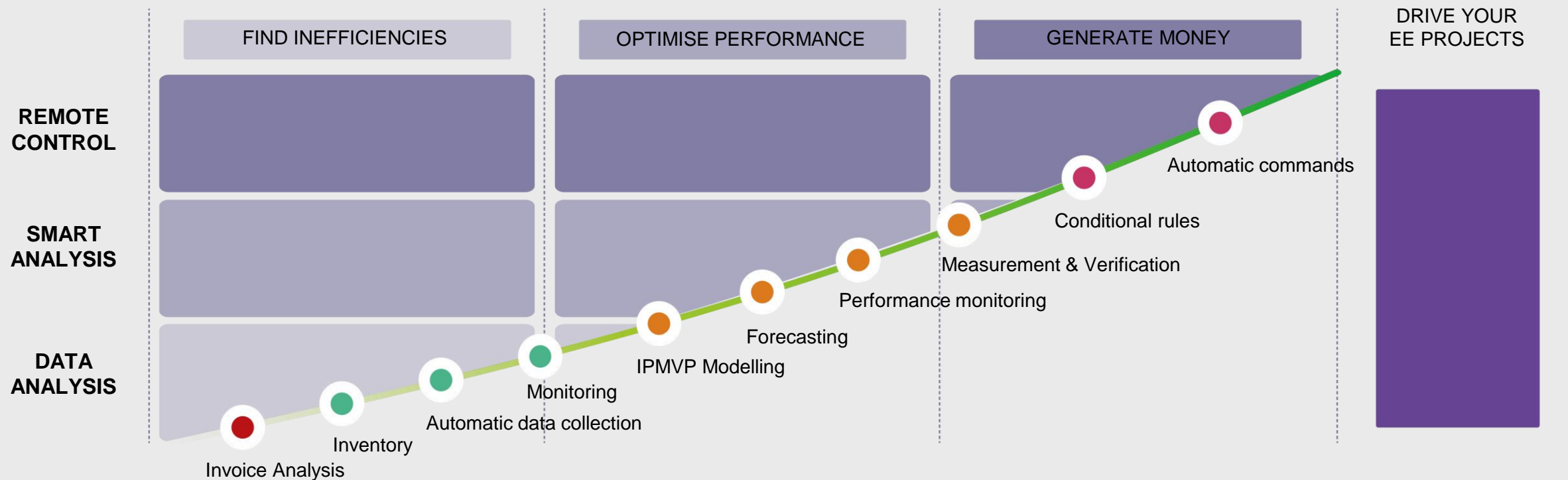




# Your **Energy Management** Software Solution







# Take Control over Energy Performance

- Digitise, verify and analyse thousands of invoices in just a few clicks
- Collect and analyse high volumes of data from a variety of sources
- Define baselines according to IPMVP guidelines in a few clicks
- Remotely control devices to optimise energy use, storage and production
- Comply to regulations via certified project management & reporting tools



### Invoice Verifier

Digitise, verify and  
analyse thousands of  
utility invoice in just a  
few clicks



### Standard Analysis

Easily identify  
inefficiencies and  
Quick Wins thanks to  
Big Data and IoT



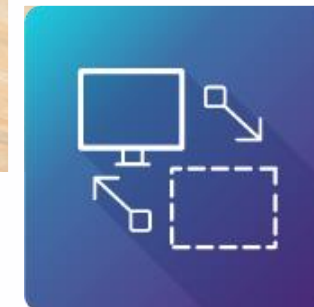
### Advanced Analysis

Reach Optimal  
Energy Performance  
easily thanks to  
Artificial Intelligence



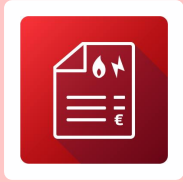
### Remote control & Optimisation

Automate  
optimisation schemes  
& take control of  
devices remotely

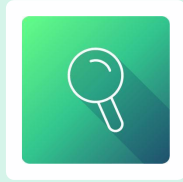


### Two-directional communication

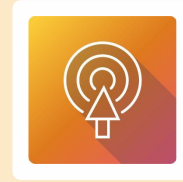
Simplify data  
acquisition and  
remote control



Invoice Analysis



Standard Analysis

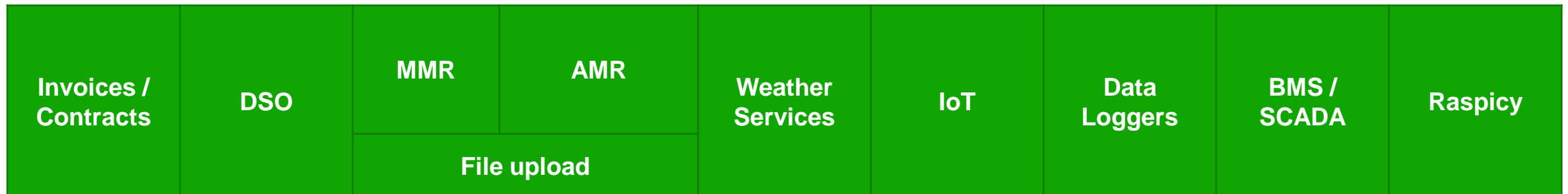


Advanced Analysis



Optimisation &  
Control




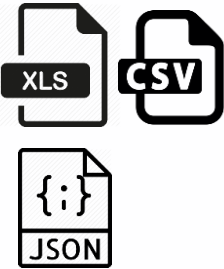







Bi-directional Data Communication





# We simplify data acquisition

Automatically Collect data from a variety of sources

Invoices / Contracts	DSO	MMR	AMR	Weather Services	IoT	Data Loggers	BMS / SCADA	Raspicy
								 <p>Raspicy is our own HW. It is naturally integrated with Energis.Cloud, highly scalable and customisable. It uses Modbus protocol.</p> 
		File Upload						
								



# Invoice Verifier

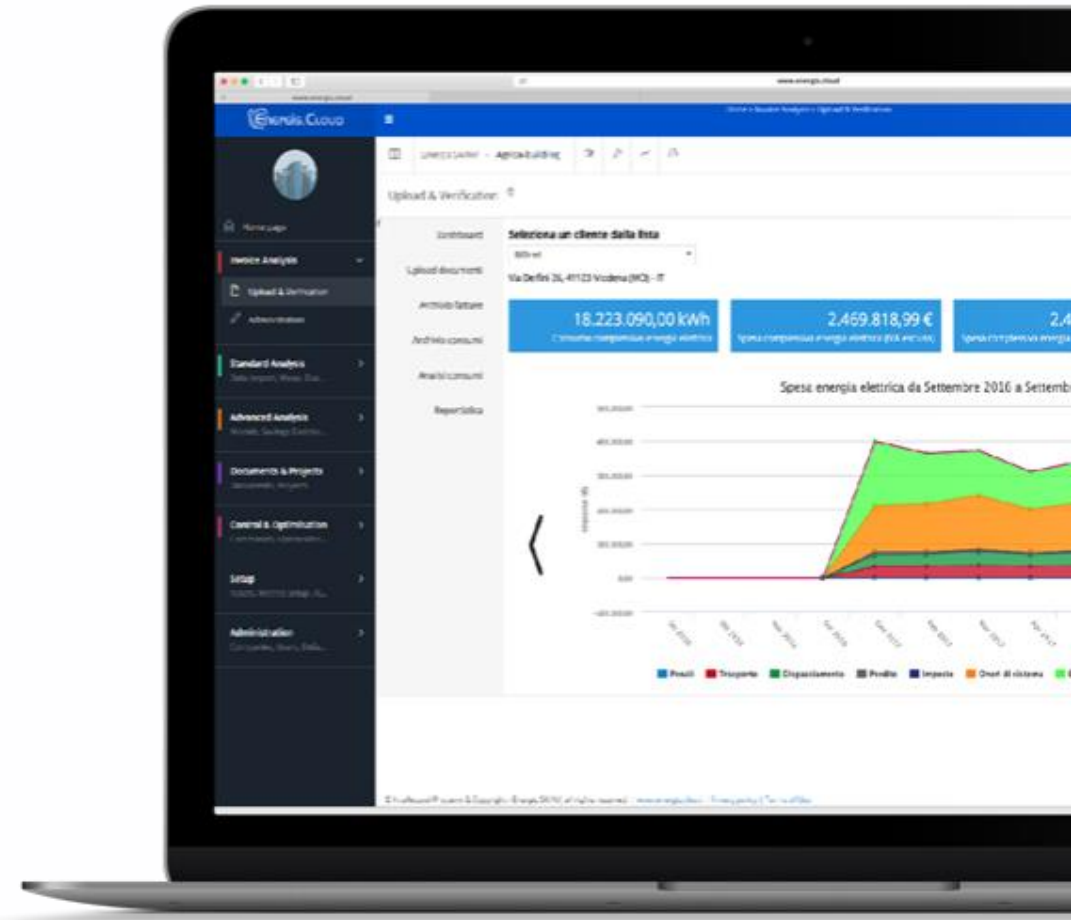
**Save up to 30 minutes/invoice**  
**digitised and verified!**

Did you know that **10%** of customer invoices contain errors?

- ✓ Digitise and upload thousands of invoices in one click
- ✓ Verify their correctness effortlessly
- ✓ **Transform errors in €€€**

ERP/SAP-integrated

Benchmarking





# Standard Analysis

## Easily identify inefficiencies and Quick Wins thanks to Big Data and IoT

- Organise and analyse energy measures to identify easily the sites and the equipment that consume the most
- Get alerts in case of anomalies
- Take immediate corrective actions that will generate savings
- Inform your clients through interactive dashboards and reports
- Centralise and manage documents in accordance with the ICP guidelines and be able to finance your EPCs
- Enhance collaboration among all people active in the project

Weather normalisation

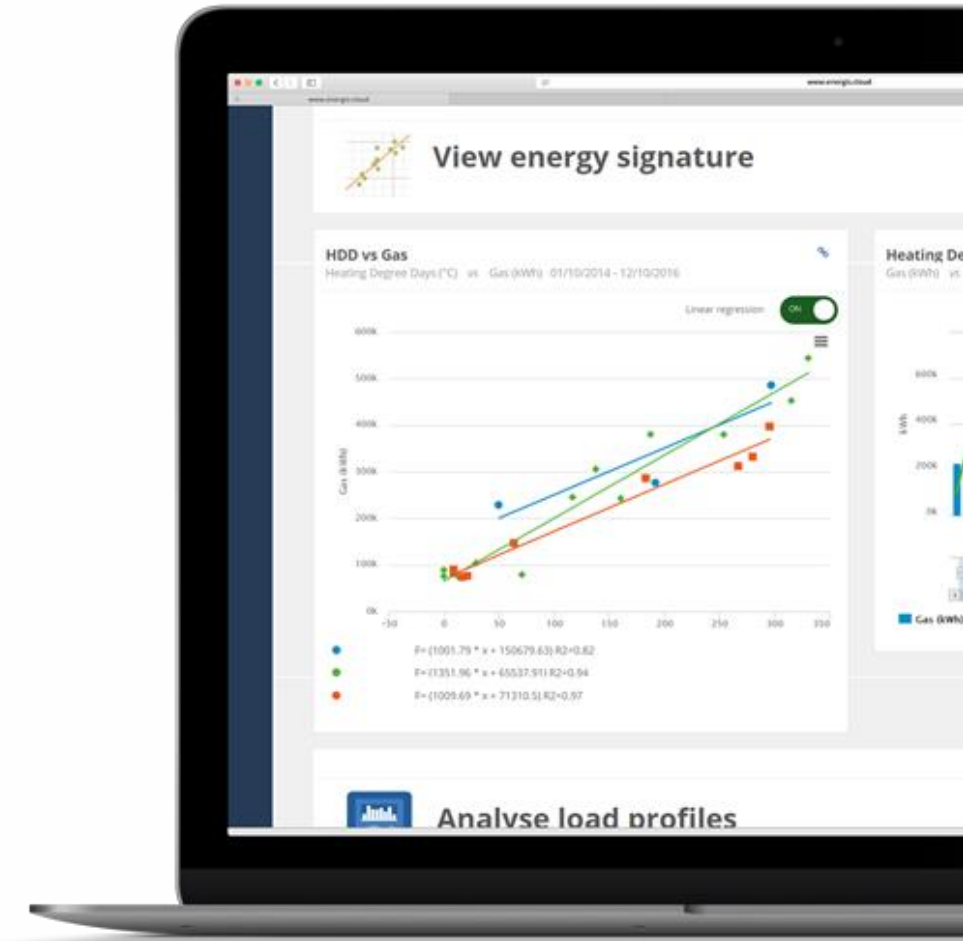
Production normalisation

Benchmarking



Memos

Emissions monitoring







# Standard Analysis

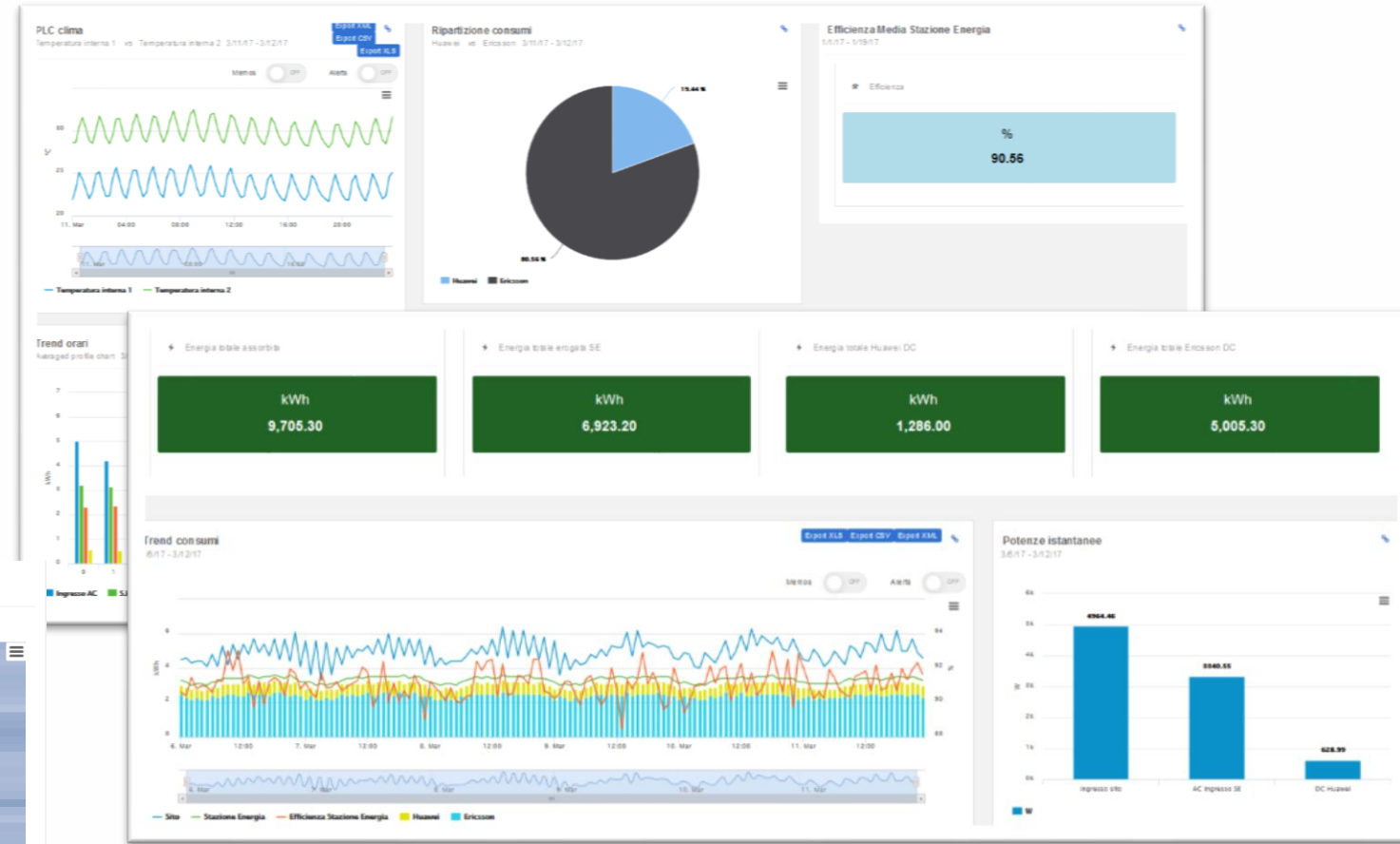
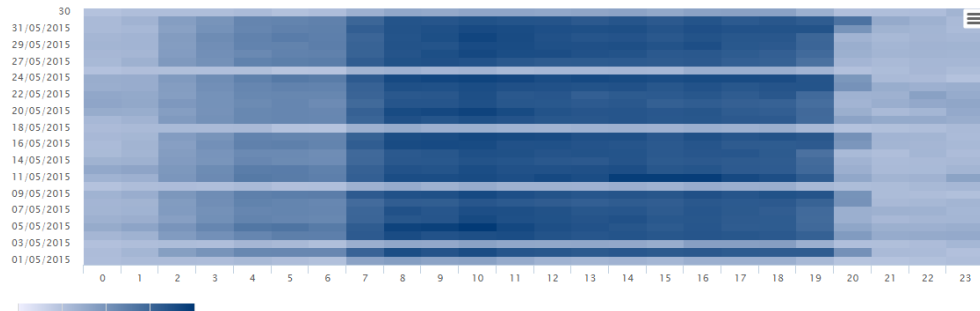
## Analysis Views

Visualise your data in views such as profile chart, pie chart, heat map, single value, ranking chart or table.

Easily derive new KPIs (e.g kWh/m2, kWh/num. of occupants) for your business needs with formulas.

Implement weather normalisation in your analysis with built in heating/cooling degree days formulas.

Power (W)





# Standard Analysis

## Alerts

Use straightforward rules to generate alerts.

Get alerts straight in your (client's) mailbox.

Define corrective actions to be taken when alerts are generated.

Document the results of actions taken and close the alert when appropriate to do so.

The top screenshot displays the 'Alerts' section of the Energis interface. It features a table with columns for Action, Name, Severity, Asset, Open time, Close time, and Status. The table lists several alerts, including 'Water leakage', 'Déviation de consommation', 'Occupancy', 'Fuite d'eau', and multiple 'Inverter alert' entries. A 'Create Alert Configuration' button is visible in the top right corner.

The bottom screenshot shows the details of an alert. It includes a section for 'Opening variable values' which contains a table of variables at the time the alert was opened. The table has columns for Name, Asset, Metric, Period, From, To, and Value.

Name	Asset	Metric	Period	From	To	Value
X1	Site (en)	Water Consumption Act. (m³)	Month	01/07/2017 02:00	01/08/2017 02:00	2,878.60
X2	Site (en)	Water Consumption Act. (m³)	Same month of last year	01/07/2016 02:00	01/08/2016 02:00	1,990.43

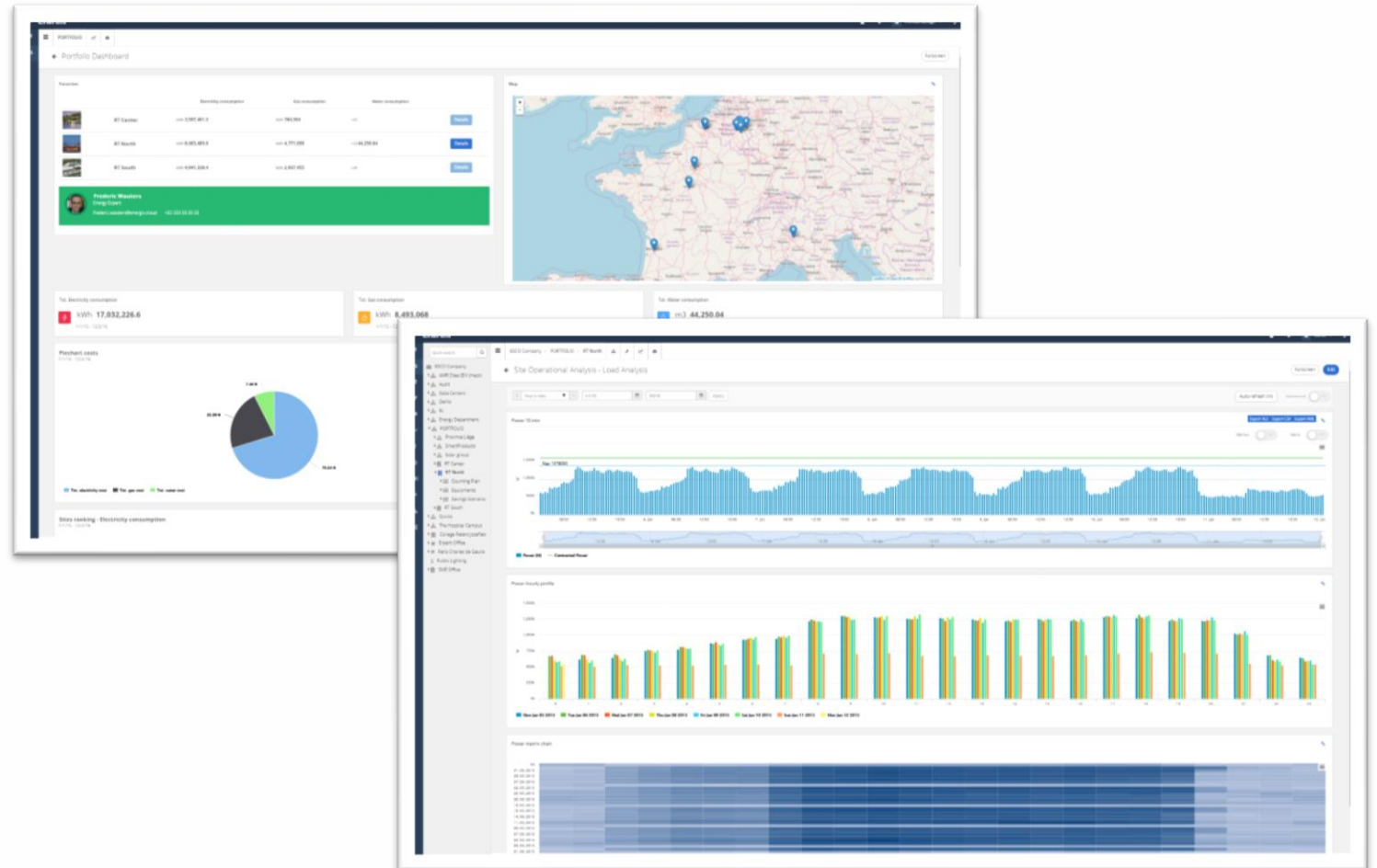


# Standard Analysis

## Dashboards

Use various analysis views to quickly build personalised dashboards.

Use interactive dashboards to benchmark, analyse, monitor and report the energy performance of the sites in a continuous way so that corrective actions can be taken.







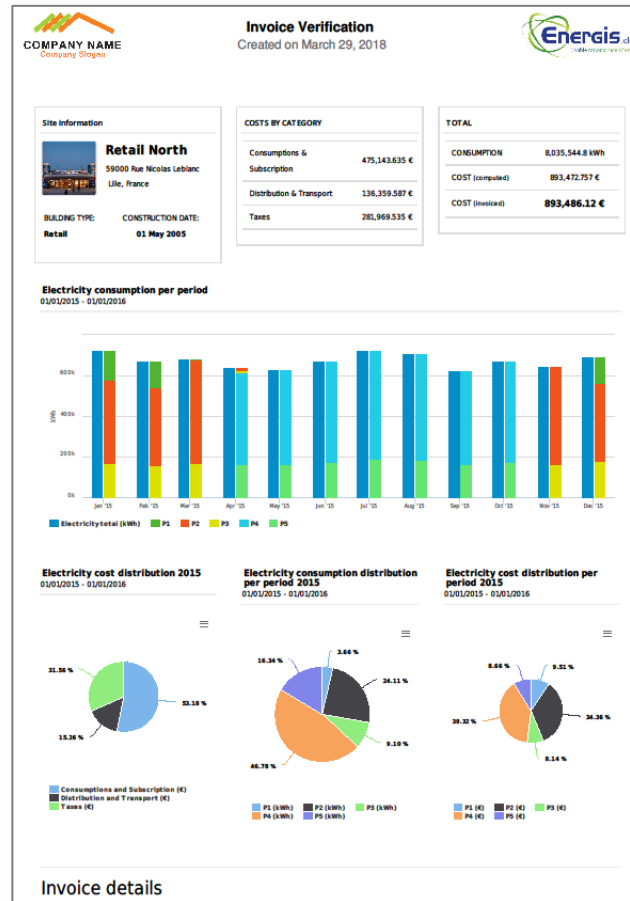
# Standard Analysis

## Reports

Apply the same approach for building reports as done for creating dashboards.

Combine text and pictures to create reports that immediately convey the appropriate message.

Automate the sending of reports to the right people on the right time, using automatically updated consumption and production data.

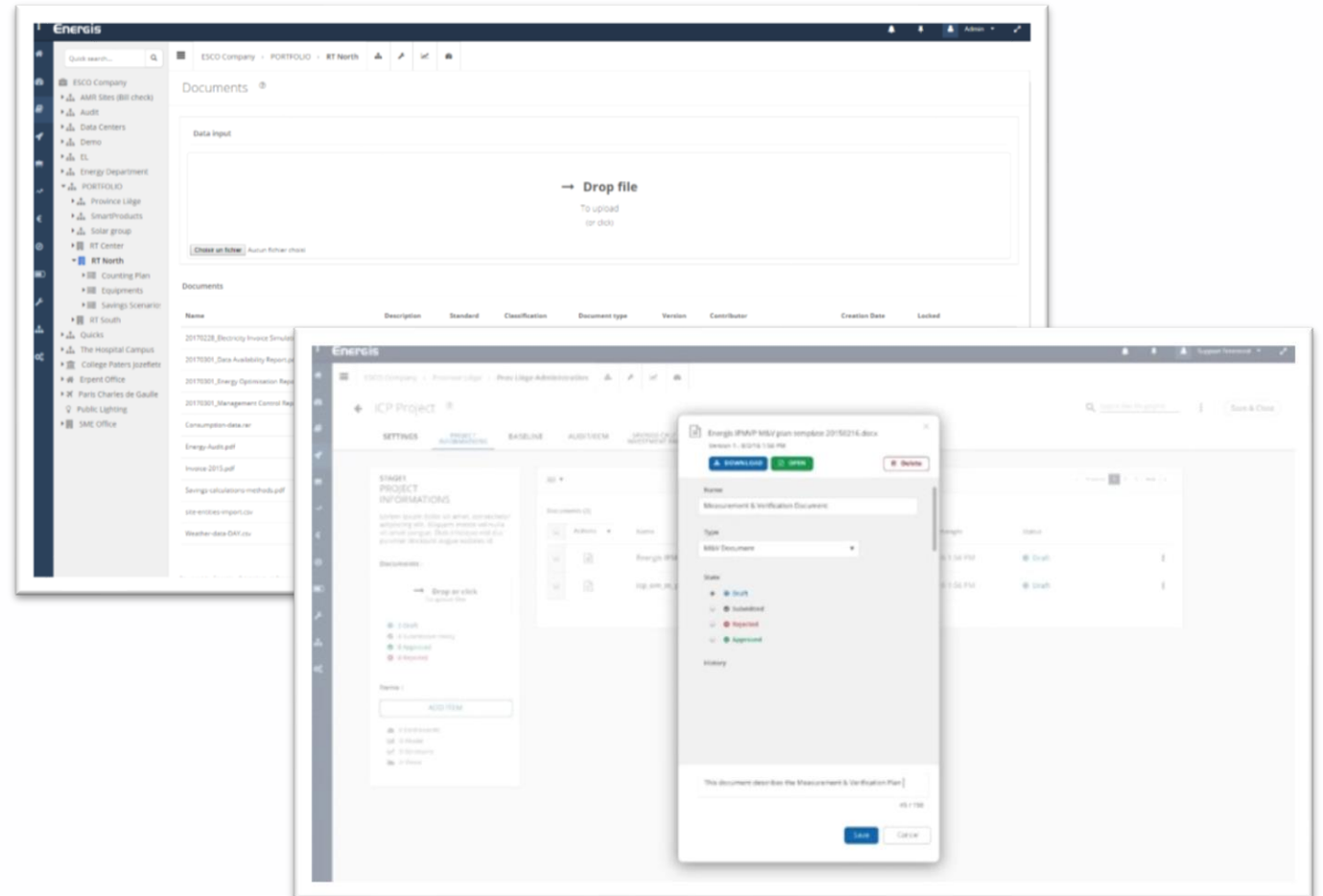




# Standard Analysis

## Document Management

Upload and manage documents related to the site and managed assets.





# Standard Analysis

## Project Management

Upload and manage documents related to energy-related projects.

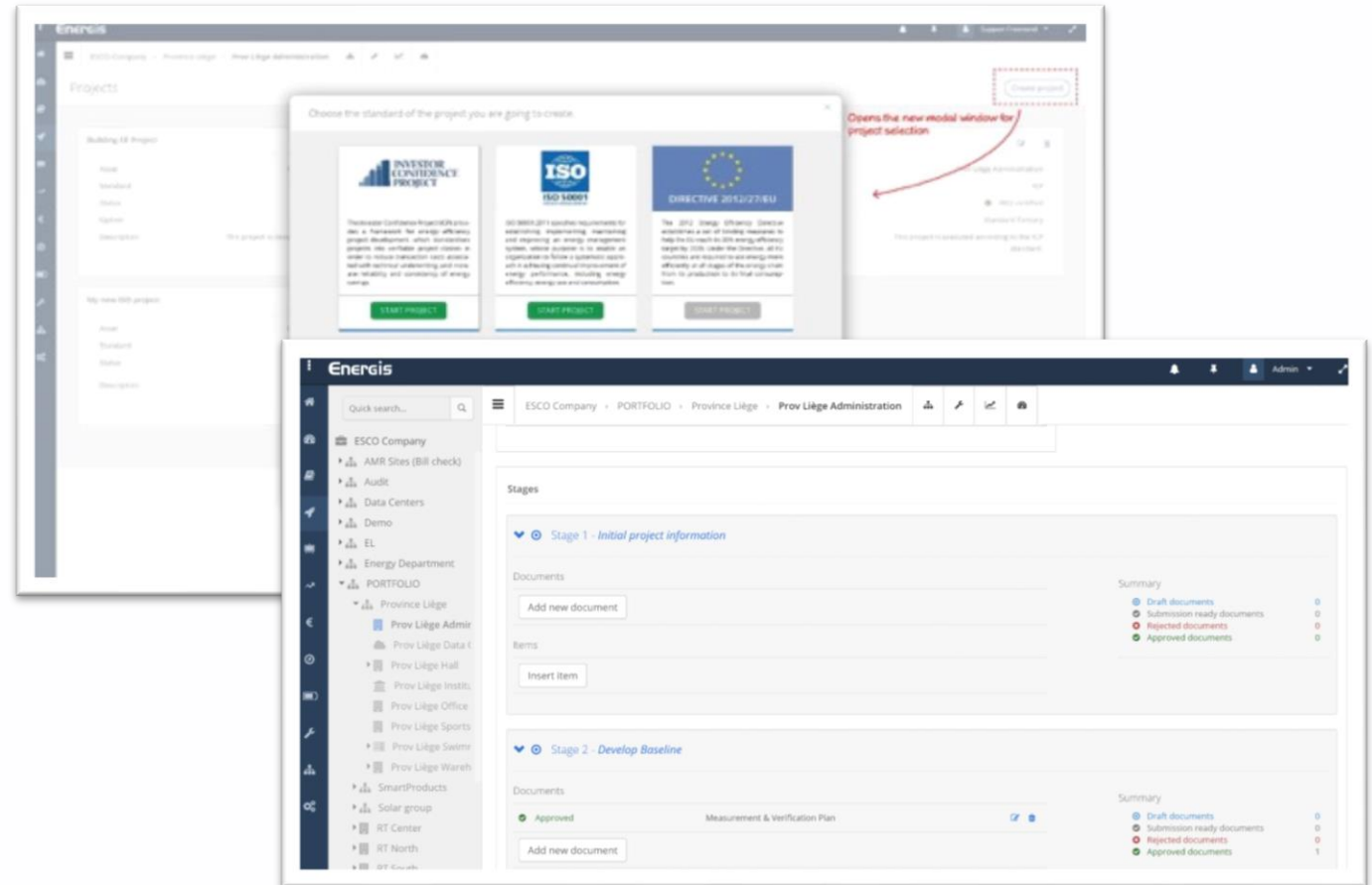
Develop bankable energy projects in accordance with the Investor Confidence Protocol guidelines.

Use the predefined process and invite accredited auditors to review and approve project data.

Automate the reporting of your energy performance and energy management activities following your obligations under the ISO 50001 and/or other standards.



**CERTIFIED SOFTWARE  
PLATFORM**







# Advanced Analysis

Reach **Optimal Energy Performance** easily  
thanks to **Artificial Intelligence**

Create baselines in accordance with IPMVP guidelines in just a few clicks!

- Consumption is influenced by numerous factors (i.e. weather conditions and building occupation)
- Identify and link them to consumption using AI algorithms
- Use the baseline to calculate energy savings before and after the implementation of your projects, under same conditions
- **Validate your EPCs.**

Optimal Performance identification

Budgeting and forecasting

Data quality management

SMART alerts



Efficiency  
Valuation  
Organization





# Advanced Analysis

## Modelling

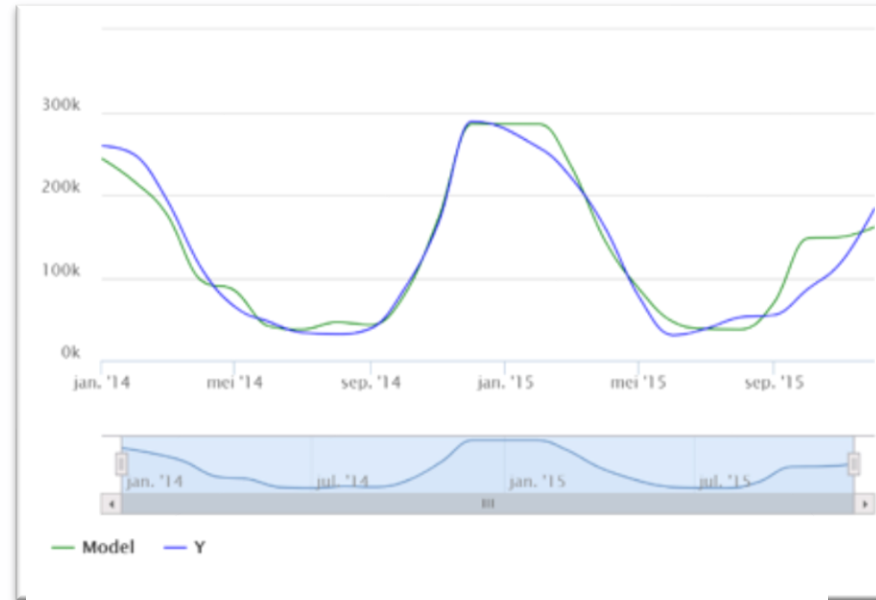
Identify models easily and rapidly for your sites and equipment in accordance with the EVO IPMVP\* and ASHRAE 14\*\* guidelines.

The most advanced modelling engine in energy management identifies those parameters that are instrumental for the energy behavior of systems, buildings and sites

Use these models to detect over-consumption automatically, correct missing data, forecast your future consumption/production, baseline and make budgeting.

\* IPMVP: International Performance Measurement and Verification Protocol

\*\* ASHRAE: American Society of Heating, Refrigerating and Air-Conditioning Engineers



C1 92,5

C2 9,5

C3 0,9

C4 0,0

C5 154,7

C6 14,6

## Model Formula

$$\begin{cases} -3.864 + 0.01186 \times X1 & \text{WINTER} \\ 8.496 + \frac{71.95}{1 + e^{-6.267 \times 10^{-4} \times X1 + 3.318}} & \text{SPRING} \\ -29.38 + \frac{122.8}{1 + e^{-3.738 \times 10^{-4} \times X1 + 1.448}} & \text{SUMMER} \\ -2.844 + 0.01177 \times X1 & \text{AUTUMN} \end{cases}$$



# Advanced Analysis

## Smart Alerts

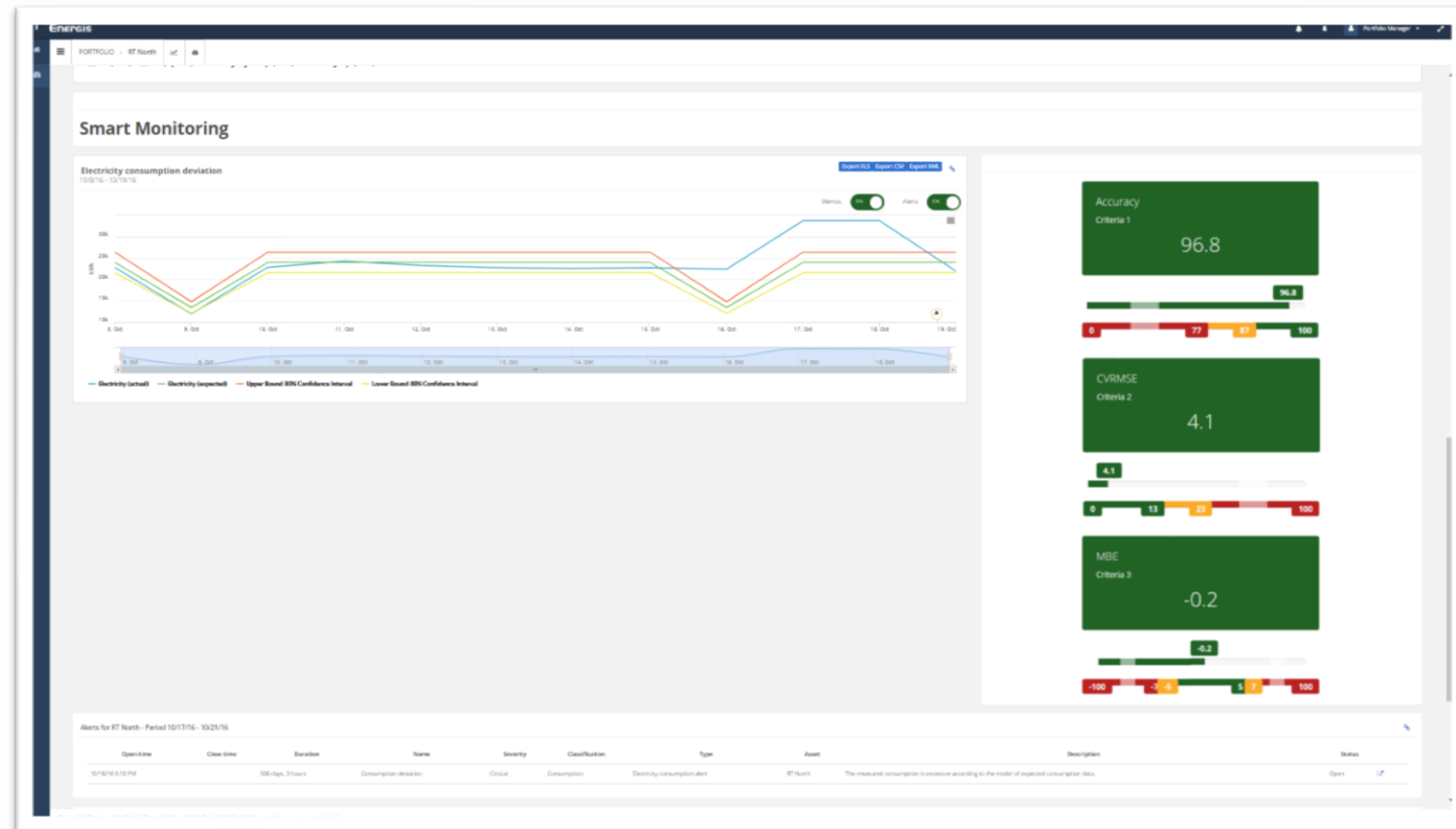
Use baselines to generate smart alerts based on deviations from expected behavior.

Identify baselines for your sites and equipment in accordance with the EVO IPMVP\* and ASHRAE 14\*\* guidelines.

The most advanced modelling engine in energy management identifies those parameters that are instrumental for the energy behavior of systems, buildings and sites.

Use baselines to forecast expected behavior, before and after implementing energy projects.

Accurately calculate deviations (in energy and monetary value).



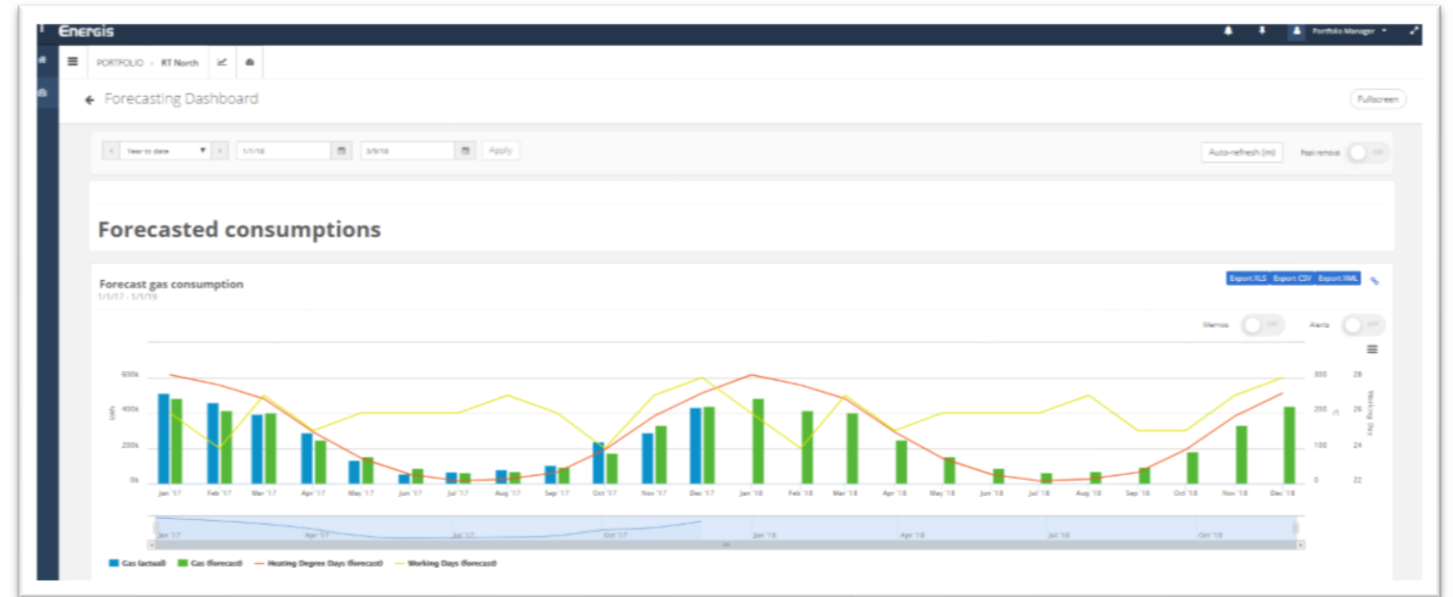


# Advanced Analysis

## Forecasting

Determine future consumption and costs. Make accurate utility budgeting.

Determine weather dependent power generation.







# Advanced Analysis

## Measurement & Verification

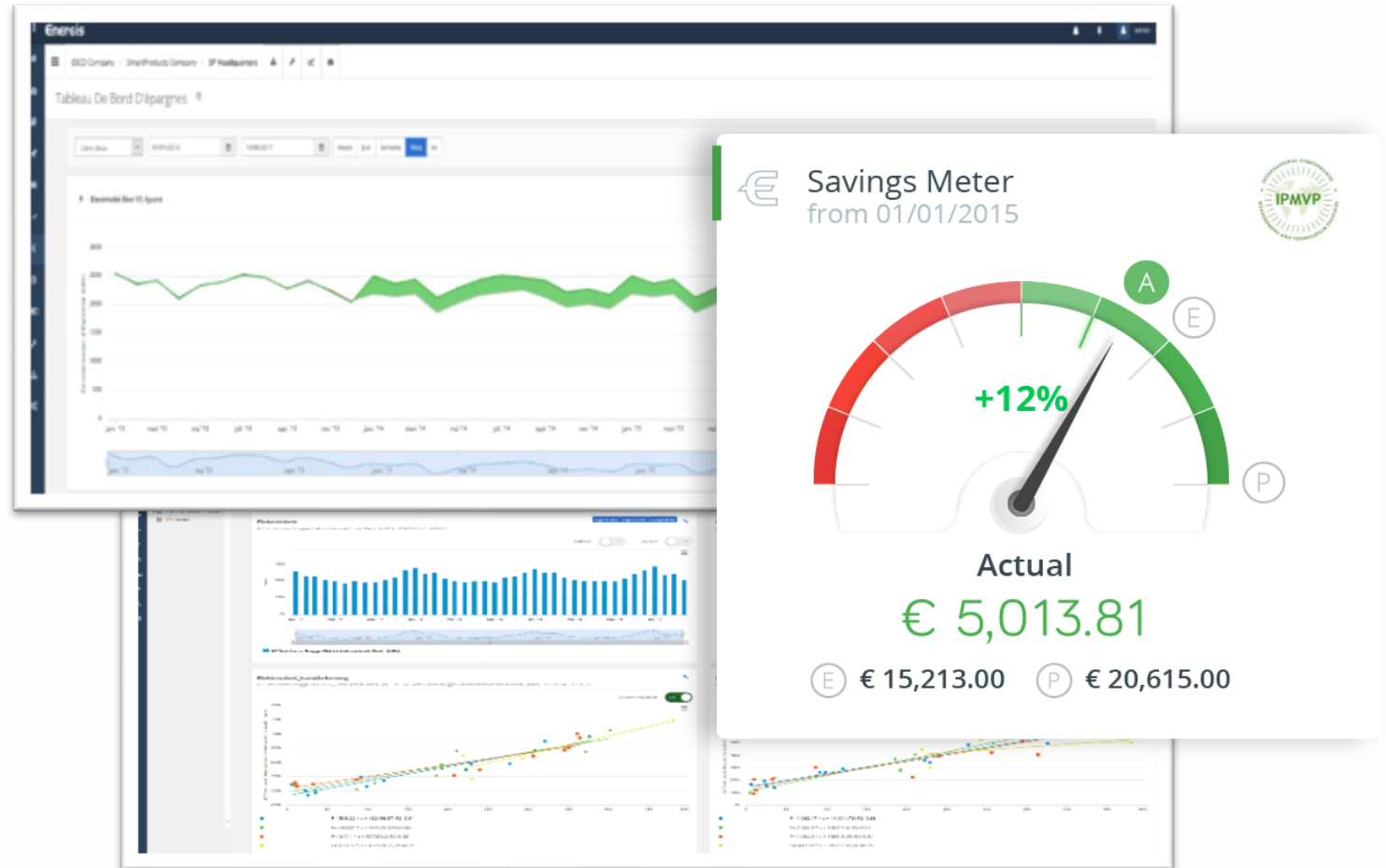
Determine actual savings at site and/or equipment level as a result of energy projects.

Savings are determined by comparing measured use before and after the implementation of a project, making appropriate adjustments for changes in usage or environmental conditions.

Avoid discussions using IPMVP-approved calculations.



As the IPMVP is used to verify the accuracy of all calculations, Energis.Cloud is seen as the preferred platform to structure, guide and monitor Energy Performance Contracts.





# Remote control & Optimisation

Take control of devices remotely & automate the optimisation of Energy Performance

Correct consumption anomalies directly from your desk!

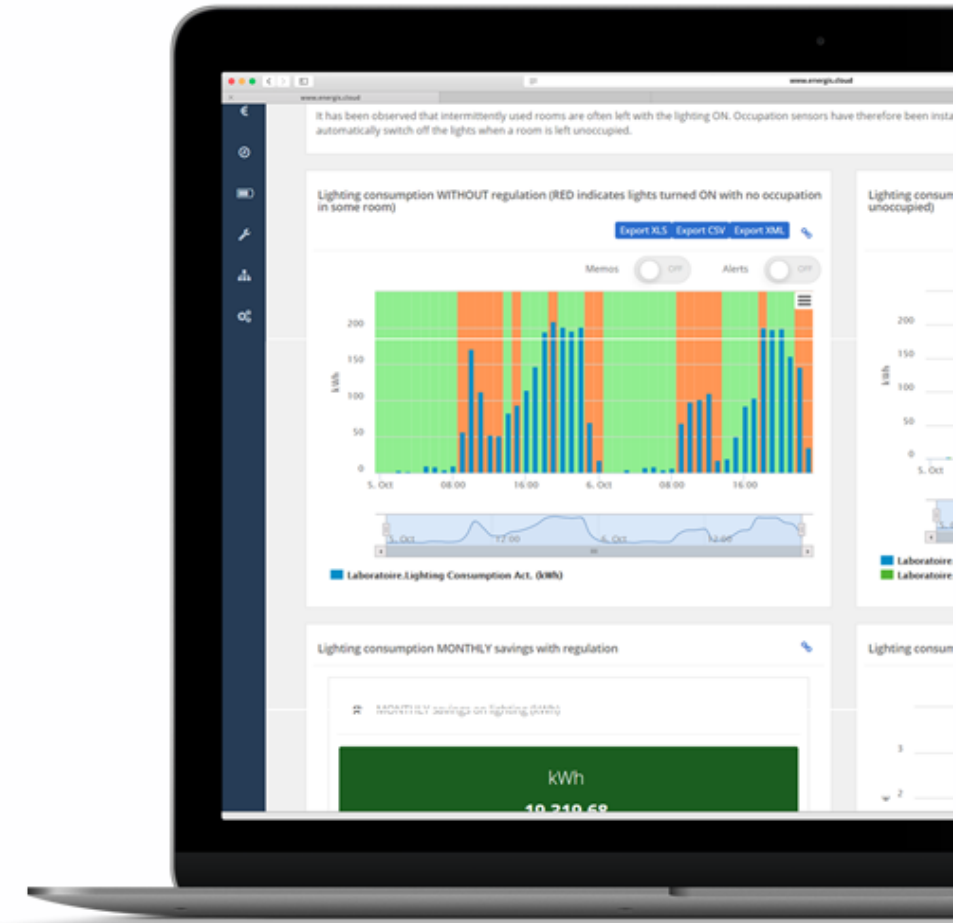
- Be alerted when consumption anomalies are detected
- Commands are sent to the technical system on site based on *your rules*
- Anomalies are corrected and the energy usage optimised

Boost your savings

- Stop immediately energy waste
- Reduce intervention costs & time
- Improve the service you offer to your customers

Optimisation schemes

Remote control





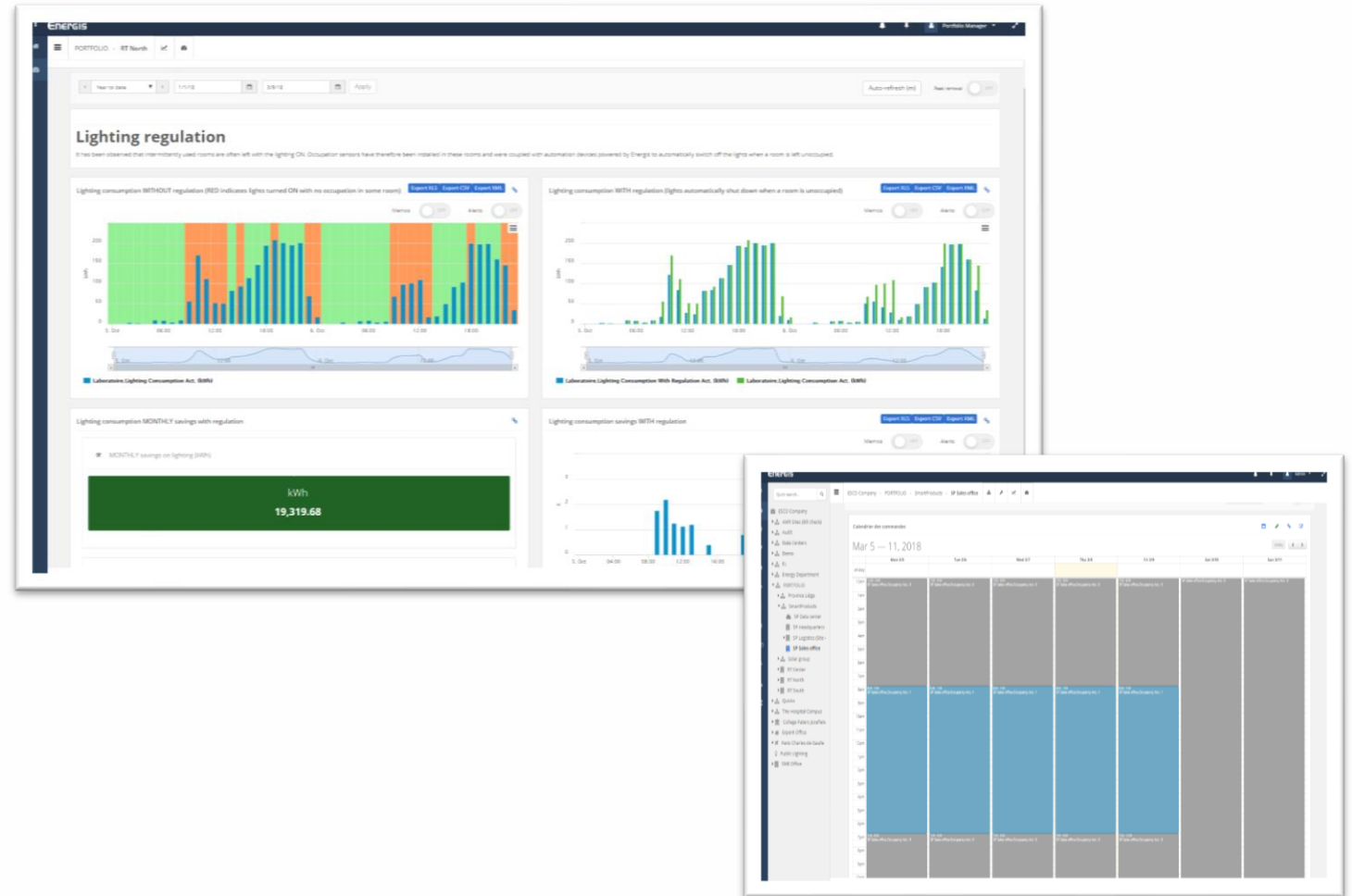
# Remote control & Optimisation

## Automated Optimisation

Automate actions based on thresholds, alerts and expected deviations from baselines.

Retrieve information from other sources like reservation systems and calendars to determine actions to be taken.

When available, Energis.Cloud can be linked to a building management platform to execute commands through the existing control system.





# Two-directional communication

## Direct Data acquisition

upload files in Energis.Cloud csv format

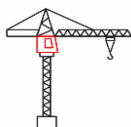
## Connectors

- BMS/SCADA
- weather services
- DSO
- IoT



## Raspicy data loggers

- Highly scalable and naturally integrated with Energis.Cloud
- Data flow monitoring **in real time**
- Flexible and robust, fit for any indoor & outdoor environment, even the least common ones:



Lifting cranes at  
harbours



Breweries silos



Cement silos



ON DIN RAIL





# Open Platform

## USERS



Administrator



Portfolio Manager



Site Manager



Occupants

## INVENTORY



Data base



FMS

Sites  
Inverters  
Junction box  
Meteo station  
Meters  
Sub-meters  
Sensors  
Equipments



https://



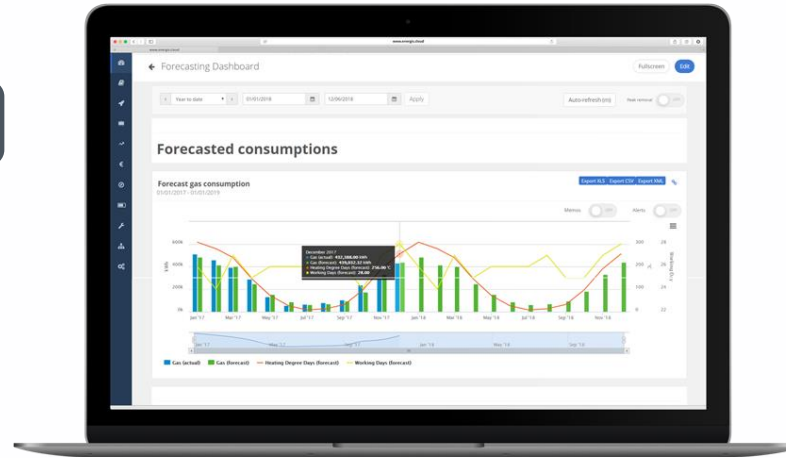
REST API



https://



FTP



## 3° PARTY APPLICATIONS

https://



REST API

Web portal  
ERP system  
3° party algorithms  
CMMS

Invoices /  
Contracts

DSO

MMR

AMR

Weather  
Services

IoT

Data  
Loggers

BMS /  
SCADA

Raspicy

File upload

# YOU SPEAK ENERGY

# WE SPEAK TECHNOLOGY

Together, we enable a rational use of energy



YOUR TECHNOLOGICAL PARTNER

Do you wish to take your energy offer to the next level?  
We can work hand in hand with you to develop *your* ideal solution.

Contact us:

[info@energis.cloud](mailto:info@energis.cloud)

Our Offices:

Brussels (BE)

Ottignies-Louvain-la-Neuve (BE)

Caserta (IT)

Barcelona (ES)

