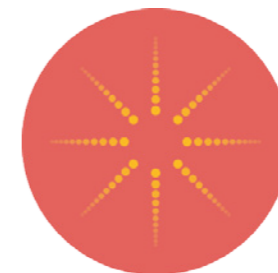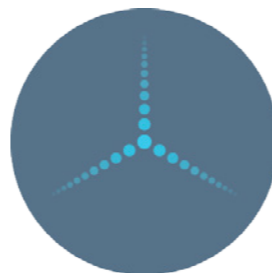# Nnergix

Energy Forecasting Services

About Nnergix

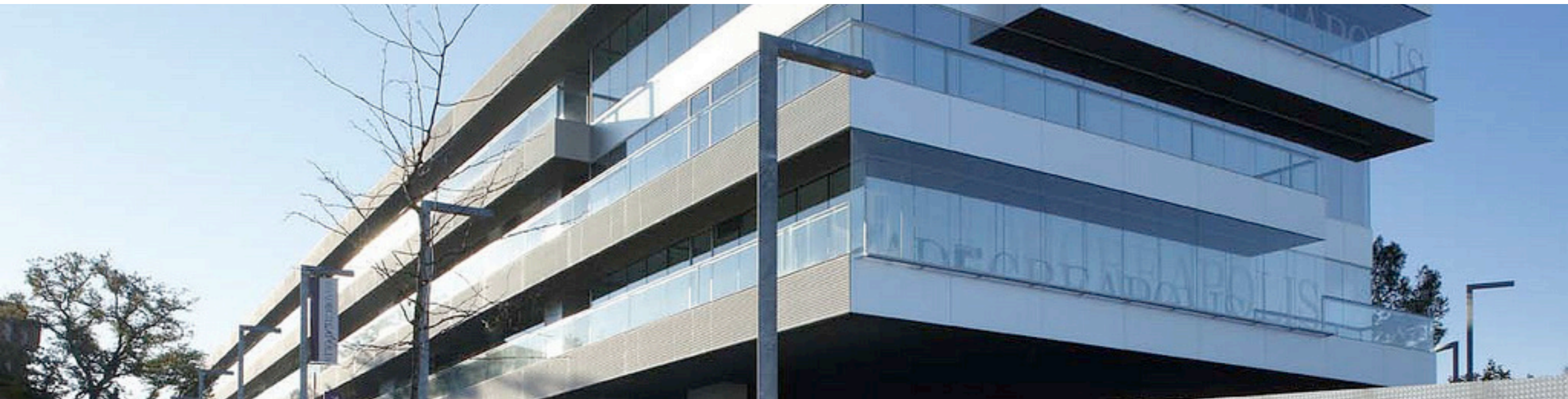**+2,5**

More than 2,5 GW forecasted

5

Forecasting in 5 countries

4

4 predictive technologies

+20.000

More than 20.000 power facilities

Nnergix's Timeline

First Solar
Photovoltaic energy
production forecast

First Wind energy
production forecast

1,5GW

2012

Born in mid 2012

2013

1,5 GW forecasted

Smart monitor 1.0
is launched

2,5GW

Smart monitor 2.0
is launched

2014

supported by KIC
Innoenergy

2,5 GW forecasted

2015

VENTURE
SUPPORTED BY
KIC INNOENERGY

eit
KIC InnoEnergy

SMART
monitor
powered by *Nnergix*
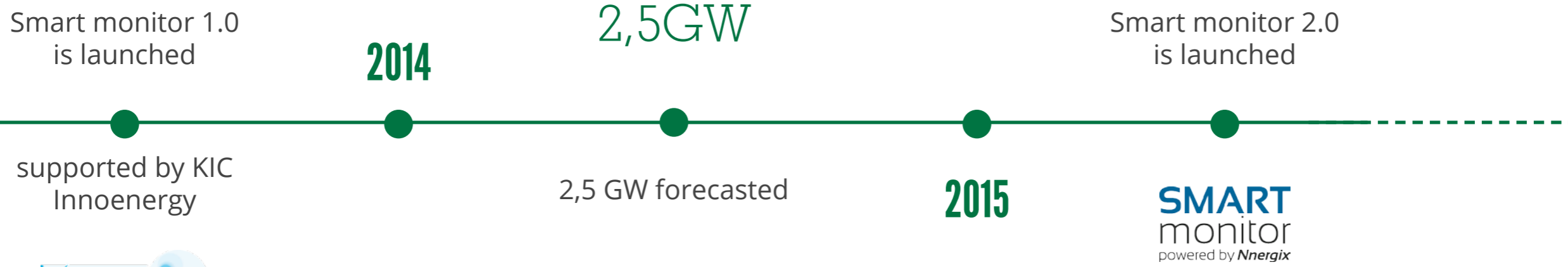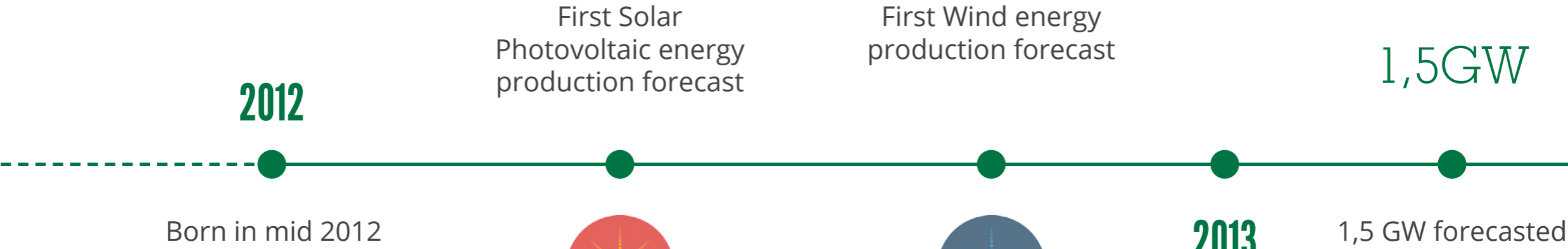
Solutions

1 POWER GRID MANAGEMENT
**Working for best renewable energies integration**

Renewable energies integration into power grids is a challenge for the dispatchers who are responsible for network stability. They need to know the amount of energy production for the coming days in order to optimize it as well as the right production-consumption is guaranteed.

Our Energy nowcasting and forecasting becomes an essential tool for Grid operators. We provide a wide range of products (standard or customized), which will fulfill every grid management need
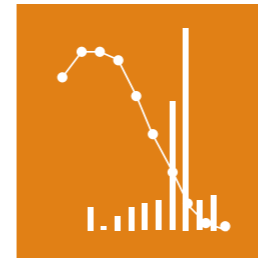
2 SOLAR & WIND ENERGY TRADING
Getting the best sales

Solar and wind energies are carrying out relevant price dropping, they have already gotten grid parity in several countries. That involves new power market situations where green energies producers will compete with conventional sources. Therefore production must be forecasted from minutes ahead until several days in advance if traders want to get the best sales and reduce imbalances costs.

Solutions

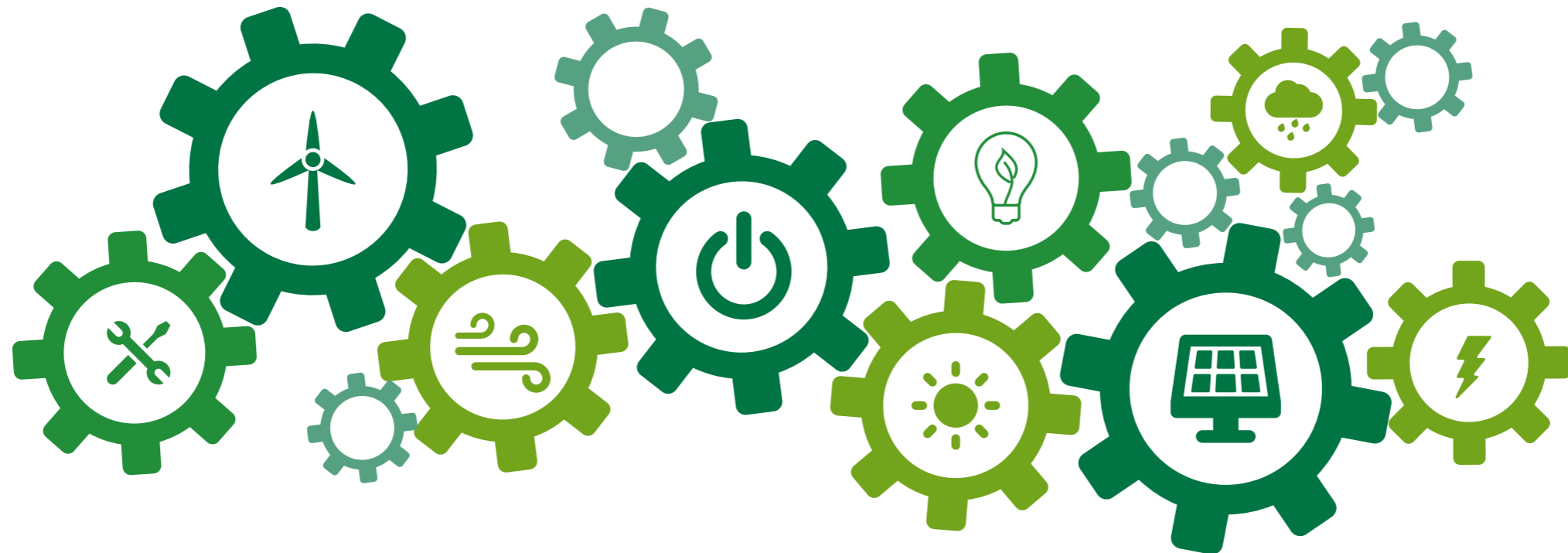## 3 SCHEDULING FOR MAINTENANCE

Optimiziong technical stops

Energy forecasting and maintenance scheduling in conjunction will enable plant operator companies improve it services getting the best performance. Maintenance energy forecasting will allow you to optimize the technical and maintenance stops. Sunny and windy days will never be wasted, and maintenance works will take place when the energy resource is smaller which means lower loss profits.
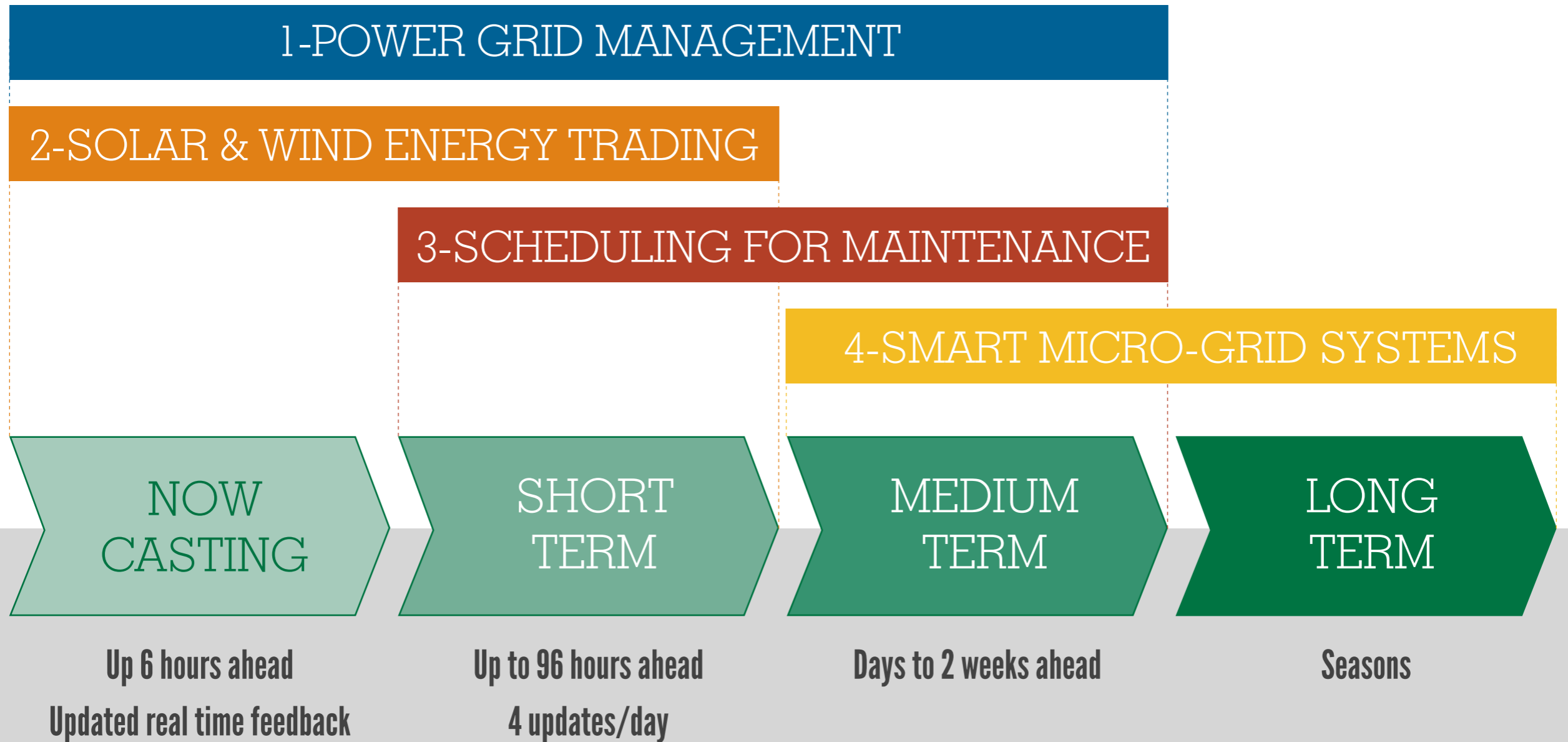
4 SMART MICRO-GRID SYSTEMS

Network stability Guaranteed

Renewable energy booming is spreading this kind of technologies worldwide. It means that insular or non-interconnected grids are becoming mix systems where conventional sources and green energies coexist. Solar and wind farms are increasing its proportion in this type of systems, as a consequence accurate and reliable energy forecasting are needed by grid operator in order to guarantee network stability.

Needs

1-POWER GRID MANAGEMENT

2-SOLAR & WIND ENERGY TRADING

3-SCHEDULING FOR MAINTENANCE

4-SMART MICRO-GRID SYSTEMS

NOW CASTING	SHORT TERM	MEDIUM TERM	LONG TERM
Up 6 hours ahead	Up to 96 hours ahead	Days to 2 weeks ahead	Seasons
Updated real time feedback	4 updates/day		

Values: Reliability, accuracy and usability

Technology

Forecasting for renewable energy markets

PV forecast

Next coming days solar PV production forecast. This technology is based on short-term numerical weather forecast prediction and it is combined with artificial intelligence methods. Machine learning algorithms are the key to take maximum advantage of the available data and to achieve high accuracy and reliability.

Up to 30 minutes of time resolution
4 daily updates or even more depending on availability of monitored data.

EO forecast

Accurate wind power forecast for next coming days. Technology based on a combination of high-resolution weather forecast models and non-linear machine learning techniques.

Up to 30 minutes of time resolution
4 daily updates or even more depending on availability of monitored data.

WE forecast

Forecasting of a wide variety of weather variables. Information that complement energy output to go further in deep analysis.
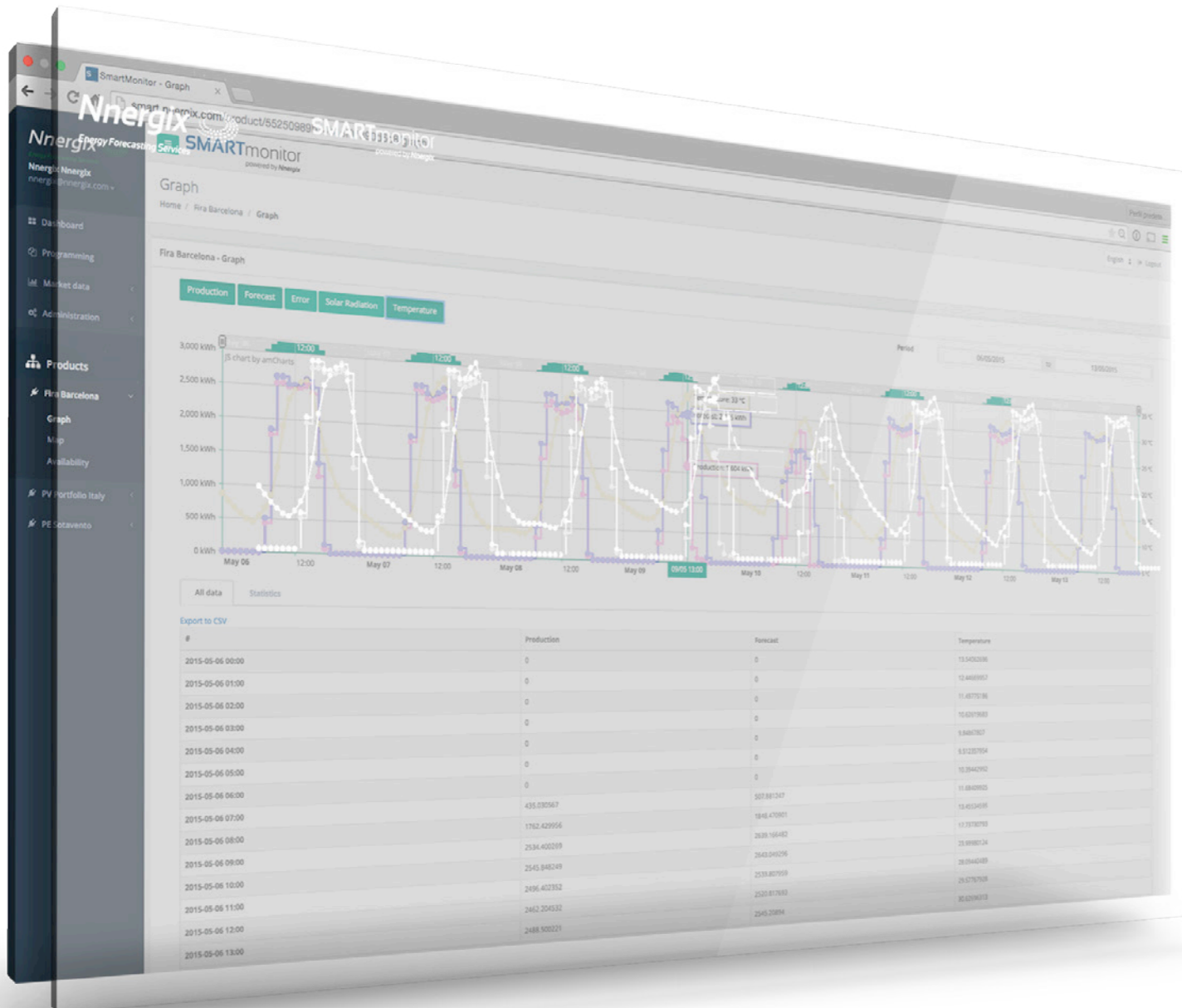
Worldwide   GIS   Customization   Artificial Intelligence

SMARTmonitor

powered by *Nnergix*

Smart Monitor is an online tool for managing energy forecasts. It provides a variety of forecasting solutions covering worldwide geographic area:
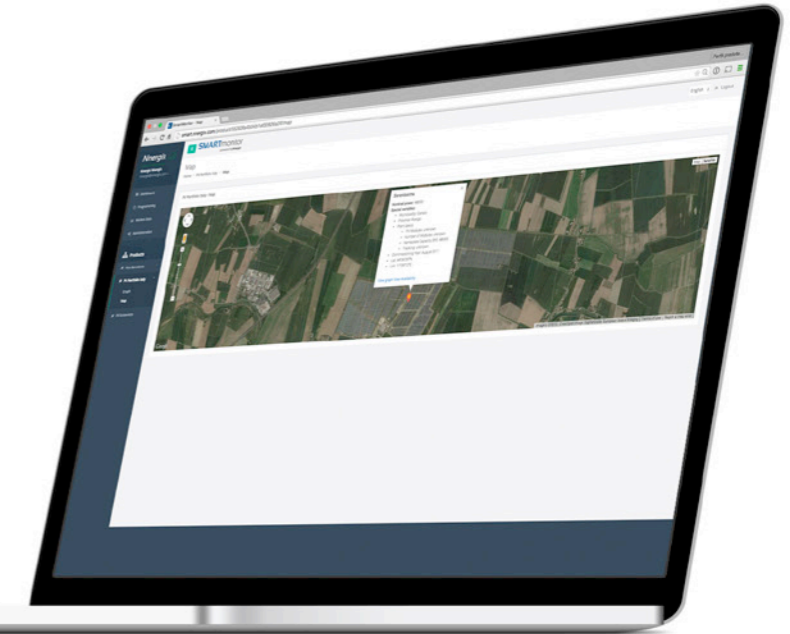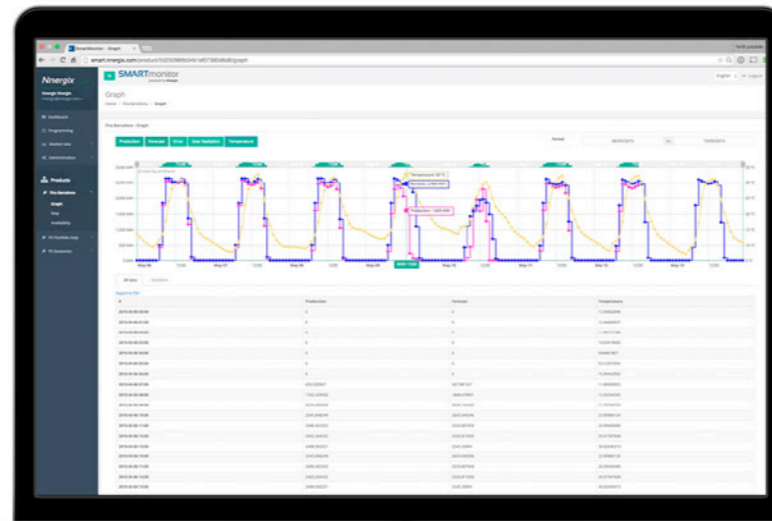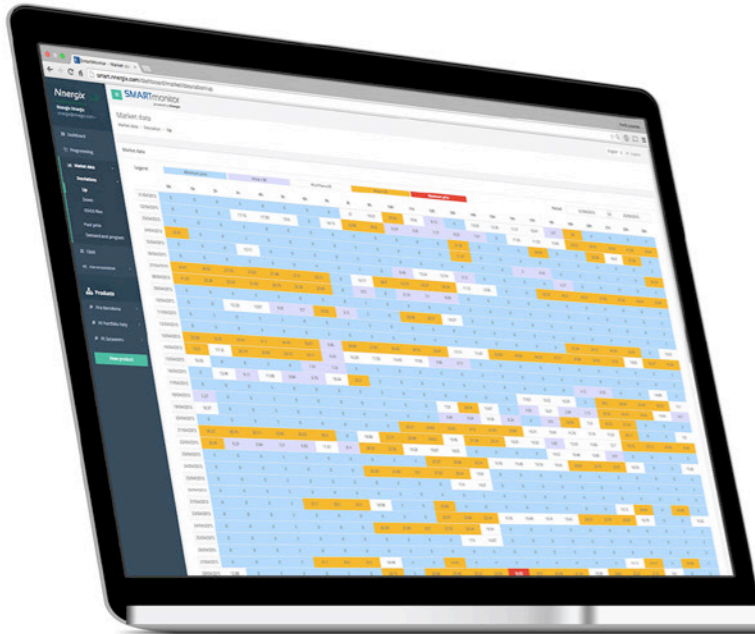
/ Have access to whole Nnergix expertise in solar & wind power technologies.

/ Benefit of its best usability, making your time more profitable with less effort.

/ Take advantage of a powerful analytics tool and reporting platform.

SMARTmonitor

powered by ***Nnergix***

EXPERTISE

/ Specialized solutions for client's needs

/ Deep knowledge of solar & wind power technologies

/ Focused into adding value

/ Global electricity markets coverage

EASY TO USE

/ Maps & Chart visualization online software

/ Fast set up implementation

/ No training required for software users

/ Data integration with any customer system

ANALYTICS

/ Interactive dashboard with the main forecasting indicators: performance, accuracy, imbalances, costs, etc.

/ Automatic reporting generation (weekly/monthly/yearly)

/ Statistics calculations

/ Archiving and retrieval of historical time series data

Why Nnergix:

Energy professionals

Validated accuracy

Forecast is complex,
AI is the answer

Constant improving

Customization

Cloud based

Save Money

Reports