

### INNOVATION AND FLEXIBILITY

# About us

Managed renewable Countries 5000+ Monitoring systems 800+ Control systems

More efficient management, more productive plants, better economic profit.

Higeco More designs and develops innovative and effective turnkey solutions for the **monitoring and** control of commercial and utility grade renewable assets.

Our experience guarantees customers a complete service that includes design, supply and commissioning of monitoring and control systems for renewable energy power plants.

We design our systems ensuring optimization according to specific requests. Monitoring and control devices are supplied from our **in-house production** facility and they can integrate third-party devices to offer complete SCADA solutions. We install and commission our systems, always guaranteeing the customer a practical and problem-solving approach and dedicated aftersales support.

Choosing Higeco More means relying on a multi-disciplinary team of professionals with consolidated international experience in the field of monitoring and control systems.

#### MONITOR YOUR RENEWABLE SOURCES

# **Turnkey solutions**

Higeco More offers a complete turnkey service that includes design, supply and implementation of monitoring and control systems for energy power plants from renewable sources, the offer includes hardware, software, services and customized engineering.



# **HARDWARE**

Our hardware, the result of a solid experience in the industrial control and monitoring sectors, is completely made in house and made in Italy. Each device is the consequence of the constant commitment to achieve the highest standards of quality, robustness and reliability.

# **SOFTWARE**

Our complete and customizable software solutions make the management of renewable assets simpler and more organized: digitization and automation of O&M processes, real-time monitoring, remote control of energy flows, etc.

# SERVIZI e INGEGNERIA

Higeco More always ensures efficient and quick installations, reducing time and costs. Technical support is guaranteed to customers in real-time. Higeco More's support team provides a proper solution to the most various technical problems.

#### **HARDWARE**

# Monitoring and control devices

Thanks to the experience gained over years of designing and installing hardware for monitoring and control, Higeco More guarantees reliable and complete solutions. The design of our systems is optimized according to the specific needs and requests of the customer and, for this reason, it is constantly evolving to keep up with technological innovation.

We provide monitoring and control devices and integrate third-party devices to offer complete SCADA solutions.



100% Made in Italy



Compatibility with third-party systems



Real-time monitoring of all plant devices



Internal storage for preserving data



Real-time data synchronization with the cloud



Reliability and security



Turnkey solutions



Intuitive and easy-to-use user interfaces



# **Monitoring Panels**

The Higeco More monitoring panels can be configured according to the communication architecture to be implemented and the devices to be acquired. Each monitoring panel guarantees order and efficiency in the collection of all the signals coming from the field. Equipped with backup battery, switch for network connectivity or modem/router with SIM card, and modules for acquiring analogue and digital signals, it is the perfect solution for medium-large systems.



CONFIGURABLE PRODUCT



We create complete and flexible server infrastructures to best host our SCADA software. The metal rack cabinets, equipped with UPS continuity systems, can be sized and configured according to the level of protection and the conditions of use.



# **Meteo Station**

Higeco More meteo stations are advanced instruments designed to monitor environmental conditions in a precise and reliable way. With the ability to integrate a wide range of dedicated sensors, such as pyranometers, cell sensors, and temperature, humidity, pressure, precipitations and wind speed sensors, these stations offer complete control of the meteorological variables that influence the performance of renewable energy power plants.





# **Datalogger** GWC 4DIN e 2DIN

Higeco dataloggers (GWC-2DIN and GWC-4DIN) represent the ideal solution for precise and efficient monitoring of renewable energy power plants.

GWCs are compatible with different types and brands of devices (inverters, string boxes, energy meters, irradiation sensors, trackers, I-Os, etc.). The data is synchronized in real time with the Cloud and it is stored in an internal storage in order to avoid any loss even in the absence of an internet connection.



MADE IN ITALY - MADE IN HIGECO

# **Energy Management System** Senergy EMS

Senergy EMS is a compact electrical panel, designed to be installed directly at the electricity grid delivery point. Equipped with a network analyzer, the system is able to interface with the main brands of inverters, batteries and sensors needed to monitor and optimize energy consumption.

#### SENERGY PPC-CCI-EMS

# Control solutions

# Senergy

Senergy is the brand that brings together all the control solutions developed by Higeco More. The result of years of experience, it is designed to guarantee maximum integration and flexibility. The Senergy family includes three products: Senergy PPC, Senergy CCI and Senergy EMS. Three solutions, one vision: intelligent, reliable and scalable control for every type of system.

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Monito



# Power Plant Controller Senergy PPC

In response to the challenges posed by different grid codes and inverter manufacturers, Higeco More offers a powerful and flexible Power Plant Controller (PPC). It allows the regulation of frequency (active power) and voltage (reactive power) of large photovoltaic plants making them compliant with several international grid codes:

- European regulation 2016/631
- Italian CEI 0-16 2022-03 (see the Senergy CCI section below) and Terna Grid Code annex A68
- Romanian Ordin 208-18
- · UK Ena Ggg recommendation
- Spanish grid code TED 749/2020
- South African Grid Code 2.9
- Uzbekistan Regulation for RES
- · Panama Anexo B Código de Red
- Uganda UETCL Grid Code
- and many more



# Power Plant Controller for Standard CEI 0-16 - Senergy CCI

After the recent introduction in Italy of the obligation to install the CCI - Central Plant Controller, for systems connected in MV with a power greater than 1 MW, Higeco More has designed a new product that meets all the CEI 0-16 2022-03 requirements.

The Higeco More CCI solution was designed to satisfy, in a single product, all the functions required by legislation and by network operators, both monitoring and control. The CCI Higeco More was the first to obtain the overall certificate of conformity to CEI 0-16.



CERTIFIED PRODUCT CEI 0-16



#### SOFTWARE

# Smart plant management with Vision and Senergy

Higeco More offers cutting-edge software solutions to optimize the management and monitoring of energy plants.

The two main platforms, Vision Asset Management Platform and Senergy EMS, stand out for their ability to analyze data in real time, ensuring a complete and precise view of plant performance.

With these platforms, Higeco More helps companies improve performance, reduce operating costs and ensure intelligent and long-term energy management.



- **Vision Asset Management Platform** Complete solution for asset management and monitoring, designed to simplify maintenance planning, performance monitoring and operating cost management.
- **Senergy Control Systems** Advanced solution for the control of renewable power plants designed to regulate frequency and voltage according to grid codes, improve efficiency and maximize selfconsumption.

#### **CREATE VALUE FROM YOUR DATA**

# **Vision - Asset Management Platform**

Vision is a web-based platform for the operational management of mixed portfolios of renewable energy power plants. Vision simplifies and makes extremely effective all the activities related to asset management from the analysis of productivity and economic return in real time, to the management of maintenance activities in the field, the warehouse and advanced reporting, up to the custom development of new functions.

Vision offers a modular structure based on plug-ins that can be added or removed according to needs. Furthermore, each customer (O&M, EPC, asset manager, or owner) has the possibility of creating their own platform by adding new customized functions.

Vision guarantees extreme flexibility and compatibility with third-party systems, allowing the integration of any monitoring system already present in the plant.



**Vision CORE** for in-depth monitoring of the portfolio



Vision O&M for maintenance management



**Vision Asset** for total control of the asset















#### ONE SYSTEM TO RULE THEM ALL

# Senergy - Control Systems

Senergy is the advanced control platform developed by Higeco More for the smart and efficient power management. It is able to regulate the frequency (active power) and voltage (reactive power) of large renewable power plants, making them compliant with the main international grid codes.

Thanks to the EMS functionality, the system optimizes energy storage and release based on demand, self-consumption logics and operating conditions, ensuring more flexible and high-performance management of the entire energy system.

The platform is divided into three complementary modules, designed to meet the needs of modern power plants:



#### **Senergy PPC**

Power Plant Controller



#### Senergy CCI

Power Plant Controller for CEI 0-16



#### Senergy EMS

Energy Management System



- Scalable solution based on the type of plant (C&I, utility scale, hybrid, etc.)
- Optimized management of storage systems (BESS)
- Advanced control policy (peak shaving, load leveling, zero feed in, etc)
- Integrated management of hybrid plants, independent of manufacturers
- Turnkey service, from configuration to field testing
- Precise regulation of active and reactive power, and voltage

# SERVICES AND ENGINEERING

# Engineering and technical support

Thanks to the combination of technical expertise and in-depth knowledge of international regulations and standards, Higeco More is able to support clients from specification definition to project development. Each client is constantly supported by professionals capable of meeting a wide variety of technical requirements who have developed a practical, "problem-solving" approach.

Our experience allows us to successfully complete commissioning both in the field and remotely, with the help of local technicians chosen by the customer and to guarantee precise and punctual organization of the work. The delivery of our systems to the customer is always accompanied by a training phase on the use of the monitoring and control systems installed.





**COMMISSIONING** 







# **TRACK RECORD**

# Reference projects





### Rietkoof - 144 MW

WIND

South Africa

SCADA



### Ratesti - 154 MW

PHOTOVOLTAIC

Romania

SCADA, PPC and METEOSTATIONS



# Penonome - 150 MW

PHOTOVOLTAIC

Panama

SCADA, PPC and METEOSTATIONS



# Kaposvar - 100 MW

PHOTOVOLTAIC

Hungary

SCADA, PPC and METEOSTATIONS



# Kruisvallei - 4 MW

**HYDROELECTRIC** 

South Africa

SCADA



# **Srem - 49 MW**

PHOTOVOLTAIC

Bulgaria

SCADA, PPC e stazioni meteo



# **Tutly - 150 MW**

PHOTOVOLTAIC

Uzbekistan

SCADA, PPC and METEOSTATIONS



# Roggeveld - 147 MW

WIND

South Africa

SCADA



# Anguillara - 40 MW

PHOTOVOLTAIC

Italy

SCADA, PPC and METEOSTATIONS



# AESO-ABESO - 126 MW Benban complex

PHOTOVOLTAIC

Egypt

SCADA, PPC and METEOSTATIONS



# Big Fish Nord - 59 MW

**PHOTOVOLTAIC** 

Italy

SCADA



### Magsistem - 6 MW

Hybrid (PV + BESS)

Italy

CCI and EMS



#### **Noto - 16 MW**

PHOTOVOLTAIC

Italy

SCADA, CCI and METEOSTATIONS



# BKW Hydro Italia - 19 MW

**HYDROELECTRIC** 

Italy

CCI on 9 power plants



# Sardinia Solar Energy 2 - 24 MW

**PHOTOVOLTAIC** 

Italy

SCADA and PPC



# Montalto La Viola - 35 MW

PHOTOVOLTAIC

Italy

SCADA and PPC



#### **ERG - 12 MW**

WIND

Italy

CCI on 3 power plants



#### Ovidiu - 60 MW

PHOTOVOLTAIC

Romania

SCADA, PPC and METEOSTATIONS



# Sardella - 42 MW

PHOTOVOLTAIC

Italy

SCADA and PPC



# Città San't Angelo -21.5 MW

PHOTOVOLTAIC

Italy

SCADA, PPC and METEOSTATIONS





# Cheremule - 6 MW

BESS (Battery Energy Storage Systems)

#### Italy

SCADA, PPC - Fast Reserve



# Espe - 90 MW

PHOTOVOLTAIC

#### **Italy and Romania**

SCADA, PPC and VISION



# Oppido - 20 MW

PHOTOVOLTAIC

### Italy

SCADA, PPC and METEOSTATION



# Green Arrow - 209 MW

PHOTOVOLTAIC

#### Italy

SCADA, CCI and VISION



# Dolomiti Energia - 35 MW

**HYDROELECTRIC** 

#### Italy

CCI on 11 power plants



# **GSF - 135 MW**

PHOTOVOLTAIC

#### Italy

SCADA, CCI, METEOSTATION and VISION

# **Our partners**



































































After an intense market research, we discovered Higeco More solution: a range of hardware and software solutions able to satisfy the most diverse necessities of data acquisition and management and we started to test them successfully in our plants.

Valerio Senatore - Sunnerg Group

# WHY HIGECO MORE

# The strengths of our solution



#### **FLEXIBILITY**

Modularity of the solution that allows Higeco More to satisfy the needs of every type of system and customer.



#### **TRAINING**

Provision of training courses for customers in order to get the most out of the investment made.



#### **EXPERIENCE**

In-depth expertise acquired over years of international applications of control and monitoring systems for renewable source plants.



#### **COMPLETE SOLUTION**

Provision by our professionals of hardware and software components, installation, technical support, asset management and O&M



#### **ASSIGNED TEAM**

Key Account that will become your company's strategic partner by managing the "mile stones" and the objectives of the project.



#### **COMPANY CERTIFICATIONS**

ISO 9001:2015 and 14001:2015 certifications.

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