



## **BANKABILITY of Ingeteam inverters**

A key differentiation factor in global competition in the PV, BESS and Green H2 industries

***Ingeteam***



## INGETEAM AS A COMPANY

### Not just another manufacturer

Over 80 years' experience in the electrical sector and more than 30 years in the Renewable Energy sector have allowed us to take part in some of the most important projects in the world, and we are continuing to do so.

With a global staff of nearly 5,000 people across 21 countries, we want to consolidate our position as a leader in renewable generation (wind, photovoltaic and hydroelectric), in storage, in the intelligent transport network and in the efficient and clean consumption of electrical energy through our electric vehicle chargers, converters, generators and motors for traction, marine, iron and steel, mining and for the production of green hydrogen and submersible pumps and motors for water.

#### **Big enough to handle, small enough to care**

Our Management is fully available to our customers should the need arise. Given that we are 100% bankable and have the capacity to undertake major challenges, while we are "just the right size" to be flexible and to build a very close relationship with our customers.

#### **Electrifying a sustainable future**

Ingeteam is committed to energy decarbonization, and with its solutions, it is contributing to the transition towards climate neutrality. Our solutions allow us to support our customers so that they can become key actors in the electrification of the future.

#### **Innovation as part of Ingeteam's DNA**

With the objective to be one step forward and lead the market, we invest annually 5.5% of sales in R&D.

This commitment has led us to become leaders in many of the product lines that we are developing.

#### **Ingeteam as a European key player in Power Electronics**

Ingeteam is one of the most prominent European manufacturers in the energy sector and more specifically in the power electronics field.

This translates into a clear commitment in European production. We also have production facilities in India and Brazil due to the need for local content and shortly we will also be manufacturing in the USA.



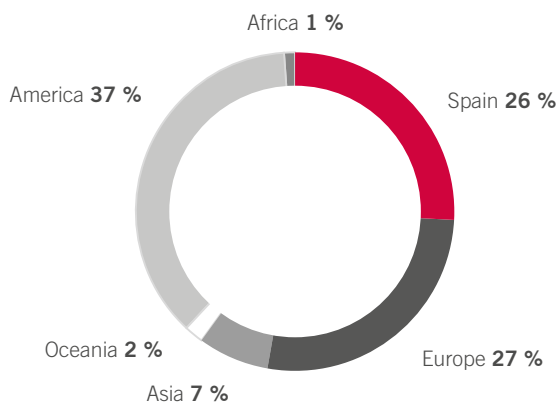


*Ingeteam's headquarters in Zamudio (Spain)*

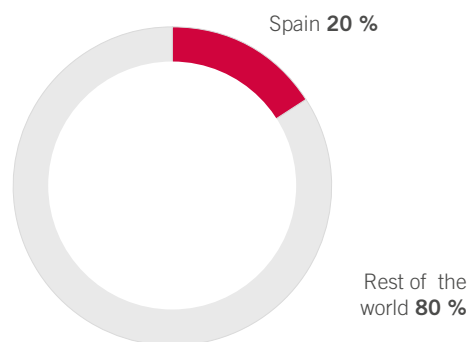


# 2022 SALES BREAKDOWN

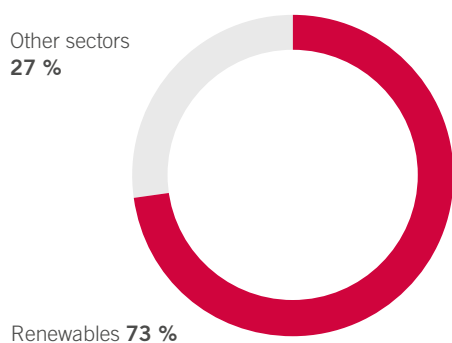
WORLDWIDE TURNOVER



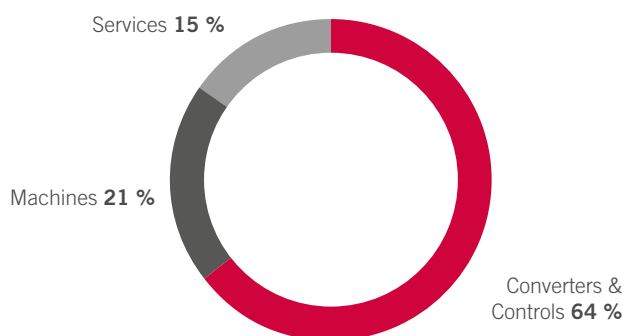
FINAL DESTINATION PRODUCTS / SERVICES



TURNOVER RENEWABLES / OTHERS



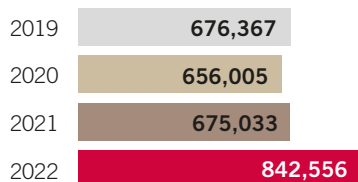
TURNOVER BY TECHNOLOGY



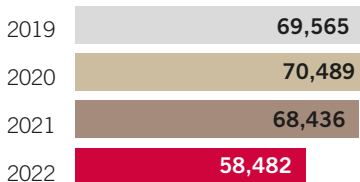
## MAIN KPIS

*In thousand euros*

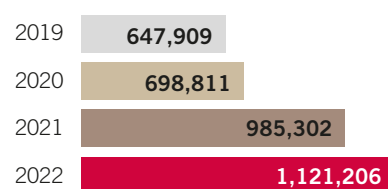
TURNOVER



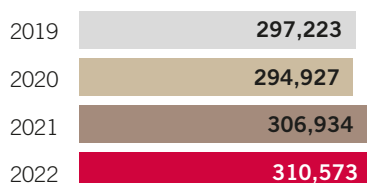
EBITDA



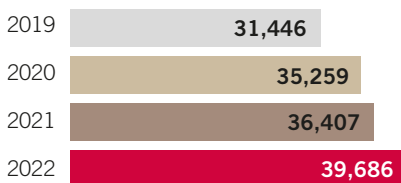
ORDER INTAKE



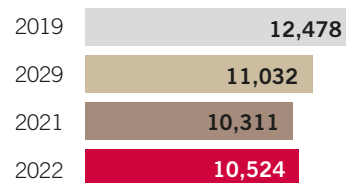
NET EQUITY



INVESTMENT IN R&D&I



INVESTMENT IN TANGIBLE ASSETS



# CONSOLIDATED BALANCE SHEET

Audit consolidated annual accounts as of 31<sup>st</sup> December 2022  
(thousand EUR)

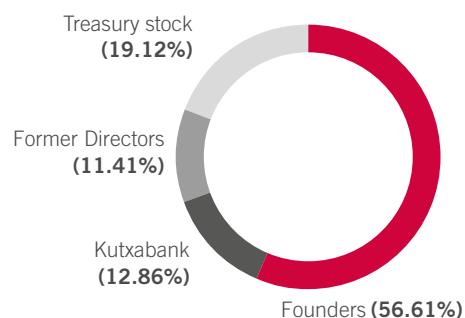
TOTAL ASSETS  
**935,978€**

<b>NON CURRENT ASSETS</b> 236,361€	<b>WORKING CAPITAL</b> 150,442€	<b>NET EQUITY</b> 310,573€
<b>CURRENT ASSETS</b> 699,617€		<b>NON CURRENT LIABILITIES</b> 76,230€
		<b>CURRENT LIABILITIES</b> 549,175€

CURRENT RATIOS	
WORKING CAPITAL RATIO % (Working Capital / Total Assets)	16.07%
FINANCIAL STRENGTH RATIO % (Shareholders' Funds / Non Current Assets)	126.56%
LIQUIDITY RATIOS	
LIQUIDITY RATIO % (Current Assets / Current Liabilities)	127.39%
SHORT-TERM LIQUIDITY RATIO % (Liquid Assets + Short-Term Investments / Current Liabilities)	8.92%
DEBT RATIOS	
DEBT RATIOS (Long-Term Liabilities + Short-Term Liabilities / Total Liabilities)	24.38%

# SHAREHOLDERS AND FINANCING

## SHAREHOLDERS



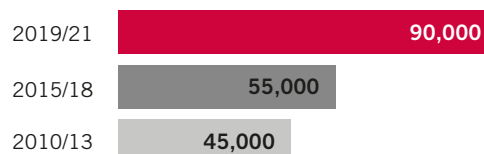
## FINANCIAL INSTITUTIONS

2022-12-31

KUTXABANK / SABADELL / SANTANDER / BBVA / BANCA MARCH / ABANCA / CAIXABANK

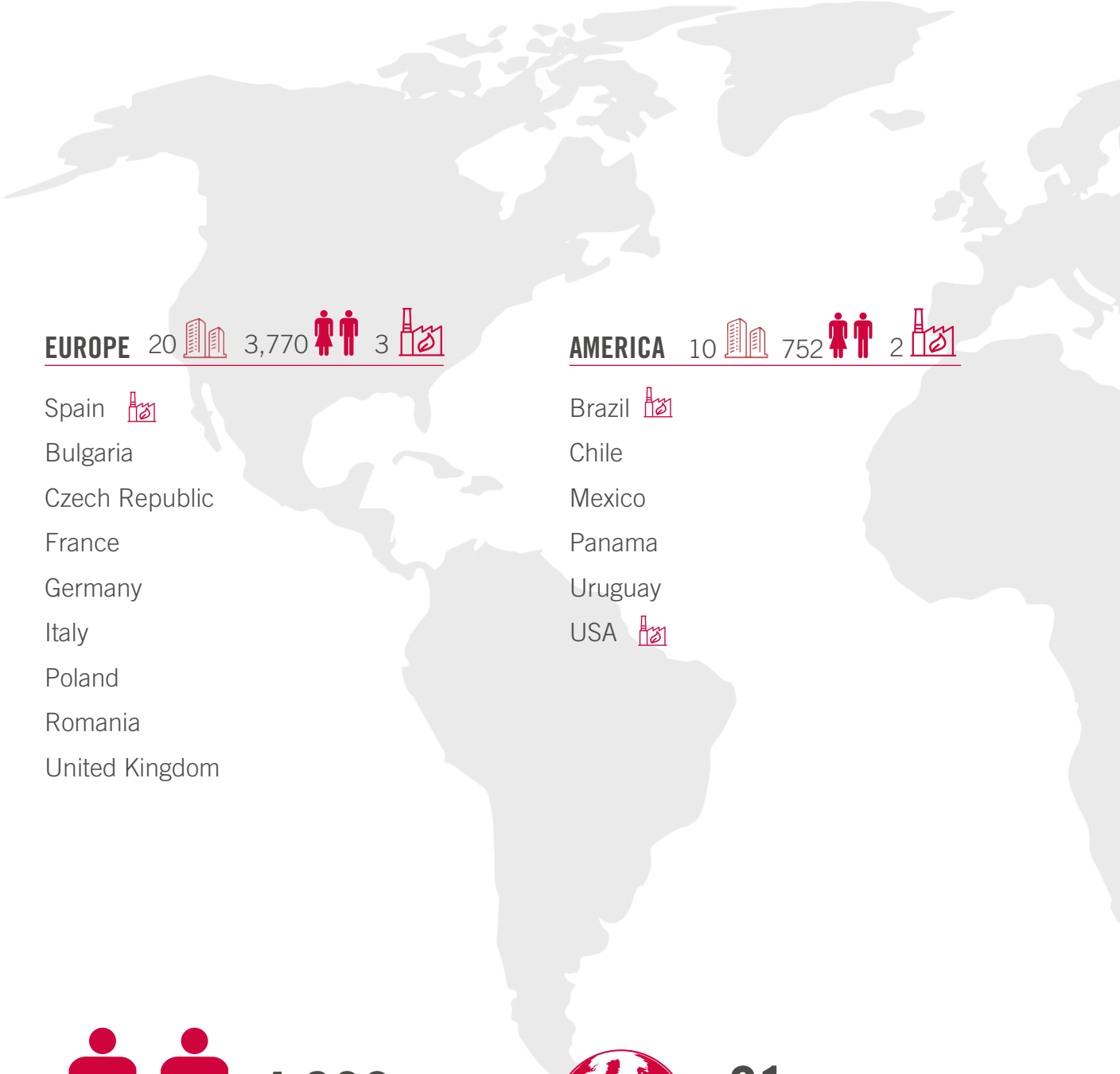
## EIB FINANCING OUR R&D EFFORT:

Landed three rounds of financing from EIB for the period 2010-2021, for a total of 190 Million EUR: (thousand EUR)








# INTERNATIONAL PRESENCE

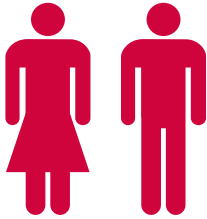


**EUROPE** 20  3,770  3 

- Spain 
- Bulgaria
- Czech Republic
- France
- Germany
- Italy
- Poland
- Romania
- United Kingdom

**AMERICA** 10  752  2 

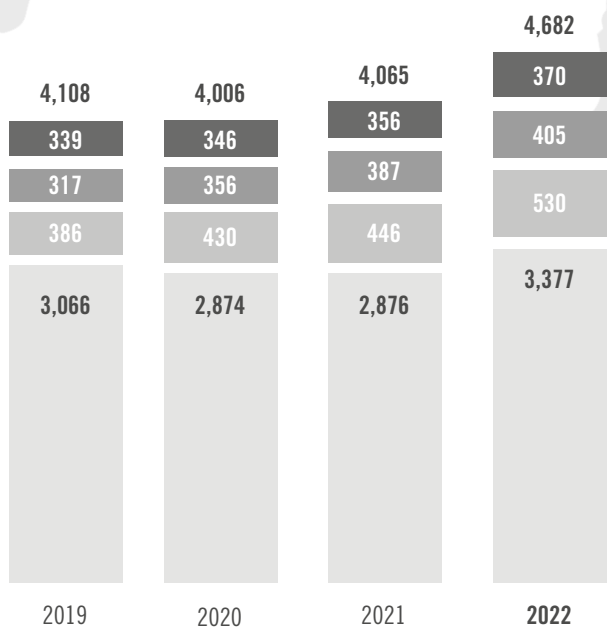
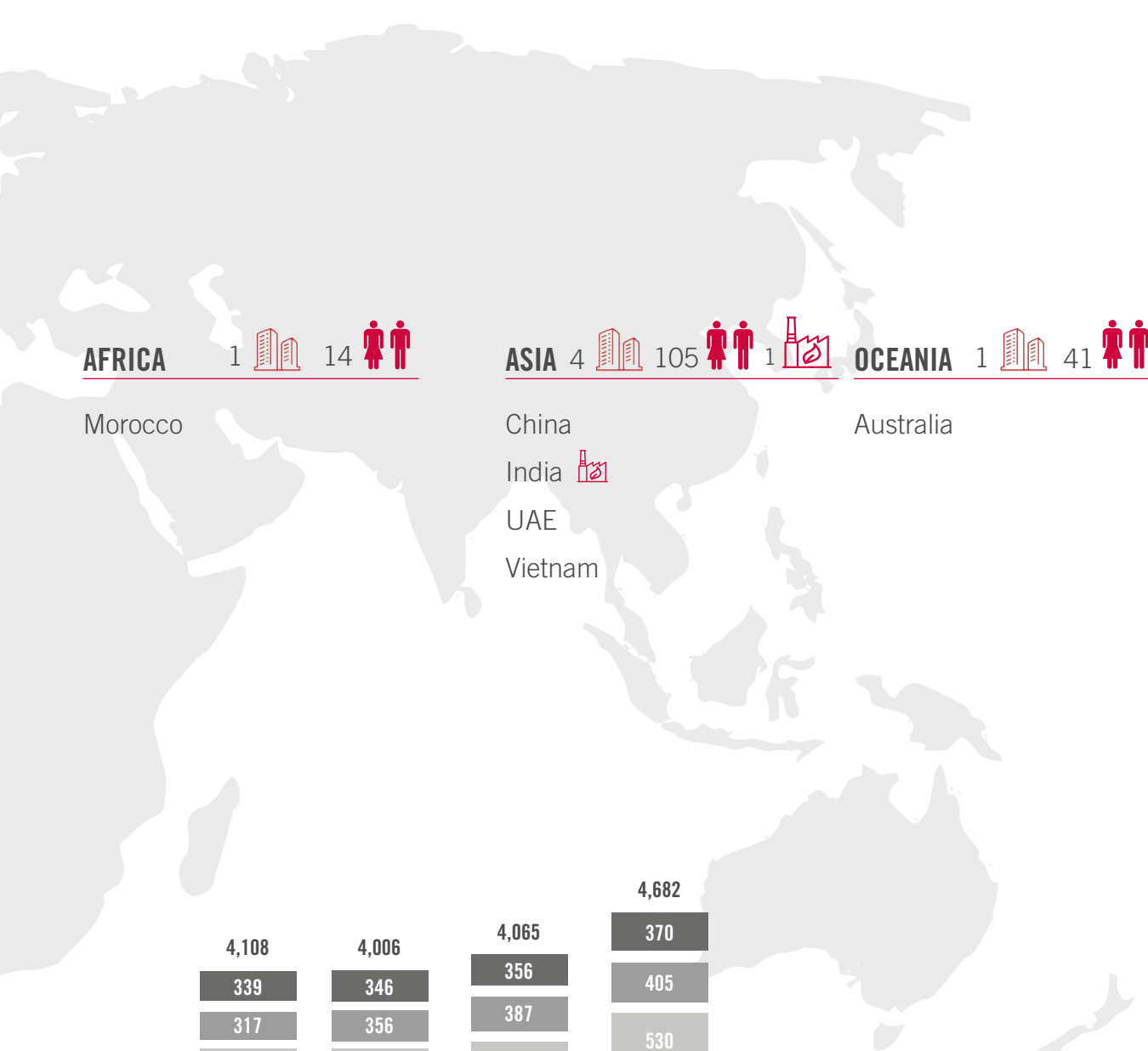
- Brazil 
- Chile
- Mexico
- Panama
- Uruguay
- USA 



**4,682**  
employees



**21**  
countries



- Management and Administration
  - Sales
  - Research & Development
  - Production
- (IN F.T.E.)



## MULTI-SECTOR OFFERING FOR A WIDER SCOPE

Ingeteam has the same Hardware platform for Solar, BESS and Green H2, permitting synergies on the O&M side and thereby reducing OPEX in order to gain in competitiveness.

### PV & BESS SOLUTIONS

We offer guaranteed support as a technology partner in all the project phases and extensive experience, starting with the design of the plant (dimensioning and simulations), products-solutions, possibility to engage the same technologist for the O&M part, right up to the decommissioning of the plant.

No other technologist has the capability to make such a wide-ranging offering within the scope of a power plant, this automatically lessens the risk for the end customer. This makes us the ideal technological partner.

The Ingeteam network of sales offices are strategically located in 21 countries to provide effective sales coverage and after-sales services.

### Key technological partner in all the project stages

#### DESIGN AND MANUFACTURE OF A WIDE RANGE OF PV & BES SOLUTIONS

With more than 50 years' experience in the power electronics sector, and more than 30-year track record in renewable energy, Ingeteam has designed an extensive range of PV solar and storage inverters with rated capacities from 5 kW up to 7,650 kW.

Since 1999, Ingeteam has supplied more than 28 GW, equipping residential, C&I and also large-scale multi-megawatt PV plants.

We provide guaranteed support as a technological partner in all the project phases and extensive experience right from the design of the plant (dimensioning and simulations), products-solutions, possibility of engaging the same technologist for the O&M side, up to the decommissioning of the plant. No other technologist has the capability to make such a wide-ranging offer within an energy plant, this automatically minimizes the risk for the end customer.





## THE POWER STATION AS THE HEART OF THE PROJECT

Although it is the most important part of the installation in terms of responsibility, it accounts for less than 10% of the total cost. The technologist offering this part of the installation must be able to offer guarantees in the face of possible changes in the future grid code or other types of requirements that are sure to occur as more renewables are progressively integrated into the system, as has already happened in the past.

The FSK solution has been developed with the focus on increasing its performance characteristics, minimizing the start-up risks, improving the LCOE, with regard to CAPEX and OPEX alike.

We are working with a liquid cooling system. This makes it possible to have a greater power density, higher IP protection rating for the equipment, greater efficiency of the system and more efficient cooling of the most critical part of the equipment: the IGBTs.

Given that Ingeteam has been using this type of technology for more than 30 years now, it was very easy to implement and the advantages achieved directly improve the performance of the solution.

The complete full skid solution is designed to minimize any risk that may arise in the FAT and SAT tests. This system, which is fully tested at our facilities, is a Plug & Play solution to minimize field tasks, thereby offering peace of mind and convenience.

## We are increasing the performance characteristics and improving the LCOE

### STORAGE SOLUTIONS FOR DC- AND AC-COUPLED SYSTEMS

Both technologies are tested in real installations with the standards of the most demanding customers in the world. Furthermore, we offer 21 types of battery technologies connected with Ingeteam projects. We have considerable control over the battery market, allowing us to give support to the end customer. We offer the possibility to type test new batteries in our laboratory.

We have a team of experts specialized in the generation of models in the main platforms required by the world's major grid operators (DigSilent, PSSE, PSCAD, MATLAB, EMTP),

validated and with the real inverter code, as well as local support in those countries in which grid integration is a key differentiating factor.

There are a number of projects made in Spain which offer different types of systems (stand-alone, solar+storage hybrid systems, DC-coupled, AC-coupled) and advanced functionalities that are pioneering in Spain (synthetic inertia, grid-forming). Major hybrid projects combine solar + BESS + O&M solutions and services.

More than 3 GWh of installations are equipped with Ingeteam's BESS technology globally in Spain, Italy, USA, UK, Australia, LATAM, etc.

**Ingeteam's products are customized to suit the requirements of each and every customer, in line with one of our core values: Customer guidance, service and adaptability.**



# COMPATIBILITY WITH DIFFERENT TYPES OF ELECTROLYZERS

## GREEN H2

### COMPATIBILITY WITH DIFFERENT TYPES OF ELECTROLYZERS

We have extensive knowledge of the Green Hydrogen market, and electrolyzers in particular. We already developed an in-house electrolyzer between 2006 and 2012.

At present, we have two different business lines:

On one hand, we offer rectifiers to manufacturers of electrolyzers, allowing us to use our expertise in the electrical sector, in order to advise chemical experts, making it possible to develop products that are adapted to each electrolyzer.

On the other hand, we provide our solutions, services and knowledge to developers and utilities, which increasingly purchase from technologists with whom they feel most comfortable.

We are working with the different types of electrolyzers: Alkaline, PEM, SOEC and AEM and this year we expect to exceed 100MW.

**We already have three references in Belgium, Spain and USA.**









# A TEAM OF 1,600 TECHNICIANS PROVIDES MULTI-BRAND O&M SERVICES TO POWER PLANTS THROUGHOUT THE WORLD

## O&M SERVICE

The Maintenance service is an absolute must for any plant. Ingeteam, uses its experience on multi-technology to develop maintenance protocols that are based on the most demanding standards, for guaranteed plant operation and extended service life.

Each Plant is constantly monitored from our Control Centre. Besides, we are committed to offering our customers a proactive service, always planning for any potential contingences at the PV plant.

We compile data on production, performance, maintenance, etc. and we act immediately to ensure the correct operation of the plant, whilst also providing plant status reports.

**We have more than  
20 years' experience  
in providing O&M  
services at power  
plants totaling  
over 22 GW.**

We adapt to the specific stock size requirements of each plant. With our own logistics centres, we are able to guarantee the supply and an immediate response time in spares.

Also, we guarantee the procurement of all brands of spares and components, thanks to agreements with leading manufacturers and distributors.

We have the necessary technical capability to achieve the production expected from your plant and the necessary financial standing to cover the production cost of possible deviations.

The operational availability of components is guaranteed, and so is the Performance Ratio. Our commitment is to guarantee a return on investment.

## REVAMPING AS A KEY FACTOR

Revamping is an operation that allows the revision and restructuring of the existing elements in a photovoltaic plant, in order to extend its useful life within the productive process and obtain benefits.

The modernization of an existing facility allows a better overall result at lower costs compared to a new project, which is generally more sustainable, both economically and environmentally.





# 11.5 GW

**MANTAINED SOLAR PV POWER (MW)**

2022	11,500
2021	9,470
2020	8,100
2019	6,115
2018	5,200
2017	3,350



# THE MAIN INTERNATIONAL BANKS TRUST US

Since the early 2000s we have provided our customers with more than 28 GW of power with INGECON® SUN photovoltaic inverters. This confirms Ingeteam as one of the world leaders in the PV sector.

At Ingeteam, we have extensive experience in the design and supply of on-grid inverters for power ratings

ranging from 5 kW to 7.65 MW, for large-scale PV plants. We also specialize in the design and manufacture of highpower battery inverters for stand-alone and grid connected PV installations with energy management requirements.

The following projects have been financed by leading financial institutions worldwide such as:

**Banco Santander** , **BBVA** and **Banco Sabadell**, S.A. (Spain); **Unicredit Corporate Banking** and **Intesa Sanpaolo** (Italy); **Société Générale** and **Crédit Agricole** (France); **National Australia Bank** and **ANZ** (Australia); **DnB NOR ASA** (Norway); **Banco Itaú** (Brazil) and **CorpBanca** (Chile); **BancoMext** and **NAFIN, Nacional Financiera** (Mexico); **Rand Merchant Bank** (South Africa) and **China Citic Bank International** (China).



**1. ACEN RENEWABLES**  
**NEW SOUTH WALES (AUSTRALIA)**  
 INGECON® SUN Power & FSK Power Station  
 472 MW  
 (2023)

**2. ELECNOR**  
 São João do Piauí (Brazil)  
 INGECON® SUN Power  
 & Power Station  
 233 MW  
 (2020)

**3. ACCIONA**  
 Malgarida I&II, Atacama (Chile)  
 INGECON® SUN Power  
 & Power Station  
 227 MW  
 (2020)





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**4. GRUPO COBRA**  
Mula (Spain)  
INGECON® SUN Power  
& Power Station  
**500 MW**  
(2019)

**5. CTIEC-WELINK**  
Vaqueiros (Portugal)  
INGECON® SUN Power  
& Power Station  
**220 MW**  
(2020)

**6. IBERDROLA**  
Francisco Pizarro,  
Cáceres (Spain)  
INGECON® SUN Power  
& MSK Power Station & PPC  
**504 MW**  
(2021)

**7. SESELEC**  
Puerto Peñasco, Sonora (Mexico)  
INGECON® SUN 3Power & FSK  
Power Station  
**146 MW**  
(2022)

**8. QAIR**  
Serra do Mato,  
Rio de Janeiro (Brazil)  
INGECON® SUN 3Power  
& SKL Power Station  
**101.5 MW**  
(2023)



REFERENCES



- |   |  |   |   |   |
|---|--|---|---|---|
| <p><b>9. ACCIONA</b><br/>Puerto Libertad,<br/>Sonora (Mexico)<br/>INGECON® SUN 3Power<br/>&amp; FSK Power Station<br/>7 MW<br/>(2023)</p> | <p><b>10. ROSENDIN ELECTRIC</b><br/>Sacramento County, CA (USA)<br/>INGECON® SUN Power U<br/>&amp; Power Station U<br/>180 MW<br/>(2020)</p> | <p><b>11. XUAN THIEN</b><br/>Xuan Thien Thuan Bac<br/>Thuan Bac District (Vietnam)<br/>INGECON® SUN Power<br/>&amp; Power Station<br/>200 MW<br/>(2020)</p> | <p><b>12. ENEL GREEN POWER</b><br/>Stampede, Texas (USA)<br/>INGECON® SUN STORAGE<br/>3Power U &amp; FSK Power Station<br/>(PV + BESS)<br/>71 MW / 130 MWh<br/>(2022)</p> | <p><b>13. STERLING &amp; WILSON</b><br/>Wellington – NSW (Australia)<br/>INGECON® SUN Power<br/>&amp; Power Station<br/>200 MW<br/>(2020)</p> |
|---|--|---|---|---|





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**14. PRODIELL**  
Alcalá de Guadaíra,  
Sevilla (Spain)  
INGECON® SUN Power  
& Power Station  
182.5 MW  
(2020)

**15. IENOVA**  
Tecate (Baja California, Mexico)  
INGECON® SUN Power  
& Power Station  
163 MW  
(2018)

**16. SOLARPACK**  
Granja Solar,  
Pozo Almonte (Chile)  
INGECON® SUN Power  
& Power Station  
123 MW  
(2019)

**17. DEPCOM POWER**  
Dragonfly, Altavista, VA  
(USA)  
INGECON® SUN Power  
U & Power Station  
110 MW  
(2020)

**18. ATLAS RENEWABLE ENERGY**  
Sertão Solar, Bahia (Brazil)  
INGECON® SUN Power  
& Power Station  
117 MW  
(2020)



REFERENCES



<p><b>19. IBERDROLA</b> Ceclavín, Cáceres (Spain) INGECON® SUN Power &amp; Power Station <b>328 MW</b> (2020)</p>	<p><b>20. NATURGY</b> Berrybank (Australia) INGECON® SUN STORAGE &amp; STORAGE FSK Power Station <b>10 MW</b> (2021)</p>	<p><b>21. IBERDROLA</b> CUYOACO, PUEBLA (MEXICO) INGECON® SUN Power Power Station <b>200 MW</b> (2020)</p>	<p><b>22. STERLING &amp; WILSON</b> Abu Dhabi (U.A.E.) INGECON® SUN Power &amp; Power Station <b>1.177 MW (1.17 GW)</b> (2019)</p>	<p><b>23. IBERDROLA</b> Puertollano (Spain) INGECON® SUN STORAGE Power &amp; ISS MSK Power Station <b>5 MW / 20 MWh</b> (2022)</p>
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**24. ENVIROMENA**  
 Bayouna (Jordan)  
 INGECON® SUN Power  
 & Power Station  
**256 MW**  
 (2020)

**25. ELAWAN**  
 Torrijos, Toledo (Spain)  
 INGECON® SUN 3Power  
 & FSK Power Station  
**53 MW**  
 (2022)

**26. CUMMINS**  
 H2 Testbench, Rumst  
 (Belgium)  
 H2 C-Lyzer, H2 FSK  
 C6000  
**9.5 MW**  
 (2022)

**27. ACCIONA**  
 Red-Tailed Hawk, Texas (USA)  
 INGECON® SUN 3Power U &  
 FSK Power Station U  
**410 MW**  
 (2023)

**28. SWINERTON**  
 Aquamarine, CA (USA)  
 INGECON® SUN Power  
 & Power Station  
**250 MW**  
 (2021)



# Ingeteam

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