

# OCI POWER

## DRIVING SUSTAINABLE ENERGY

COMPANY PROFILE

PV INVERTER | ESS | EPC | O&M | EV INFRASTRUCTURE



# OCI POWER DRIVING SUSTAINABLE ENERGY

## COMPANY PROFILE



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[Seoul Office] 4F, OCI Building, 94 Sogong-ro, Jung-gu, Seoul 04532, Republic of Korea [R&D Center] 12F, Building B, SK V1, 128 Beobwon-ro, Songpa-gu, Seoul 05854, Republic of Korea



# CONTENTS

## COMPANY OVERVIEW

- 04 OCI Holdings
- 05 About Us
- 06 Our History
- 07 Locations
- 08 Organization Structure

## TECHNOLOGICAL CAPABILITY

- 10 Core Technologies
- 11 Certifications, Testing & Patents

## PRODUCTS

- 13 Solar Inverters
- 18 Energy Storage Systems (ESS)

## BUSINESS

- 20 EPC
- 21 O&M

# COMPANY OVERVIEW

- 04 OCI Holdings
- 05 About Us
- 06 Our History
- 07 Locations
- 08 Organization Structure



# OCI Holdings

## Business Divisions & Subsidiaries Overview

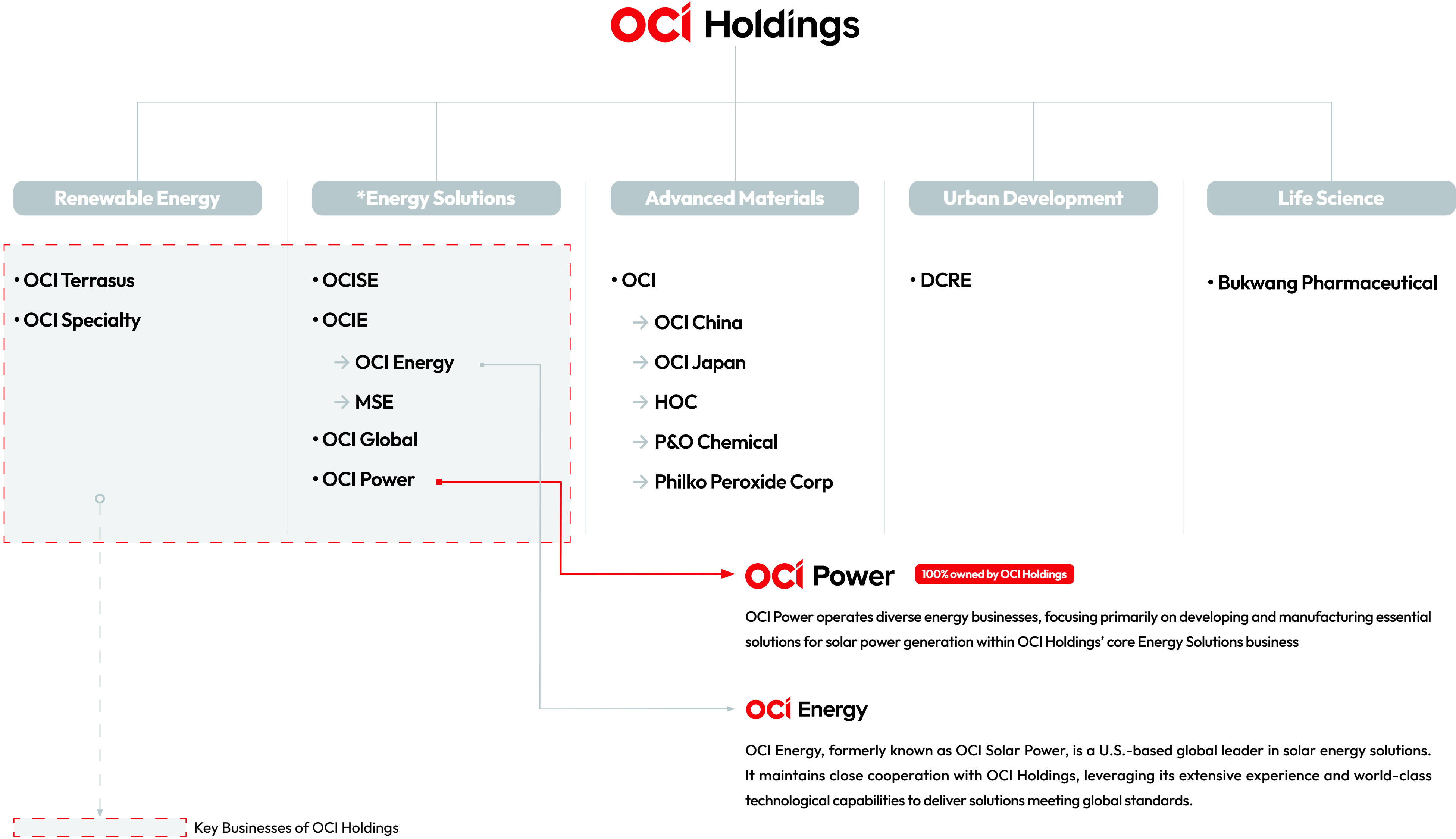
OCI Holdings, committed to “Making Sustainability Possible,” has achieved outstanding results through strategic planning and continuous innovation-driven investments over the past 60 years.

Currently, OCI Holdings operates across five key segments: Renewable Energy, Energy Solutions, Advanced Chemical Materials, Pharmaceuticals & Bio, and Urban Development.

Our diverse portfolio actively promotes growth and advancement by fostering cooperation among all stakeholders, as we continuously strive to optimize efforts across industries for a sustainable, shared future.



OCI Building, Sogong-dong, Jung District, Seoul, Republic of Korea



# The Green Energy Company

OCI Power was established to promote OCI’s solar power business. We develop, manufacture, and sell photovoltaic (PV) inverters and ESS (Energy Storage System) PCS (Power Conditioning Systems). Our operations also include Independent Power Producer (IPP) busienss, EPC (Engineering, Procurement & Construction), ESS system integration and installation, electric vehicle (EV) charging infrastructure, and other environmentally friendly renewable energy projects. We leverage the outstanding technologies of Germany and Korea to independently research and develop solutions tailored to domestic solar power generation needs. All developed products are directly **manufactured at our factory in Gunsan, South Korea.**

OCI Power supplies key equipment, such as inverters, to large-scale solar power plants over 600 MW in Texas, USA, invested by OCI. Drawing from extensive experience in the construction and operation of numerous solar power plants and ESS system installations both domestically and internationally, OCI Power is committed to maximizing customer value in the renewable energy sector, aiming to lead as a Global Leading Green Energy Company, and contributing toward a successful, sustainable future.

## Business Area



PV Inverter (Photovoltaic Inverter)



ESS (Energy Storage System)



EPC (Engineering, Procurement, Construction)



EV Infrastructure



IPP (Independent Power Producer)



O&M (Operation & Maintenance)

# Key Milestones

## OCI Power & KACO New Energy

OCI Power was established in 2012 as a wholly-owned subsidiary of OCI Holdings. Starting with the Alamo Project in the United States in 2012, OCI Power actively entered the solar energy solutions market in partnership with KACO New Energy, maintaining close cooperation. By 2019, OCI Power acquired the solar energy business from KACO New Energy, effectively integrating advanced technologies from Germany and Korea.

Currently, OCI Power is responsible for developing and manufacturing large-scale inverters as Korea's leading inverter manufacturer.



- 2024

• Launch of ultra-large capacity inverters (1.1~4.4 MW)
- 2023

• Achieved export milestone: USD 70 million  
• Installed 1500Vdc inverter system (OP series) domestically (Cumulative capacity: 547 MW)
- 2020

• First domestic installation of 1500Vdc inverter system (OP series) with 96 MW capacity
- 2019

• Acquired KACO New Energy's solar energy business
- 2018

• Installed 51 MWh peak-shaving ESS at OCI Gunsan factory
- 2014

• Installed 17 MW rooftop solar IPP project at Seoul Water Purification Plant
- 2012

• Established OCI Power (OCI Holdings subsidiary)



- 2018

• Relocated headquarters and factory to the Gunsan Free Trade Zone
- 2016

• Released 2 MW inverter for North American market (UL)  
• Launched 1MW ESS PCS
- 2014

• Supplied 1 MW outdoor inverter to North American market (UL)  
• Participated in the Korean government's FR ESS project
- 2012

• Won Alamo project in the United States
- 2011

• Obtained Korea-EU FTA certification  
• Achieved export milestone: USD 50 million
- 2010

• Certified 100,350 kW inverter by CGC  
• Achieved \$20 million in export volume  
• Received the Presidential Citation for Excellence  
• First in Korea to obtain CE certification for PV inverters
- 2007

• Established KACO Korea as a corporate R&D center



# Locations

OCI Power operates its headquarters and manufacturing plant, Seoul offices, and R&D division. The headquarters and manufacturing facility are located within the Free Trade Zone in Gunsan, Jeollabuk-do, with a total operating area of 7,476m<sup>2</sup> (approximately 2,265 pyeong). At this facility, OCI Power manufactures photovoltaic (PV) inverters and ESS PCS units, with an annual production capacity of 270 MW (equivalent to approximately 360 units of OP750). The Seoul offices and R&D division are located in Sogong-ro, Jung-gu, Seoul, and Beopwon-ro, Songpa-gu, Seoul, respectively.



**Headquarters & Manufacturing Plant**  
Building 5, Standard Factory Complex, 2-gil, Jayumuyeok, Gunsan-si, Jeollabuk-do (Zip: 54001)



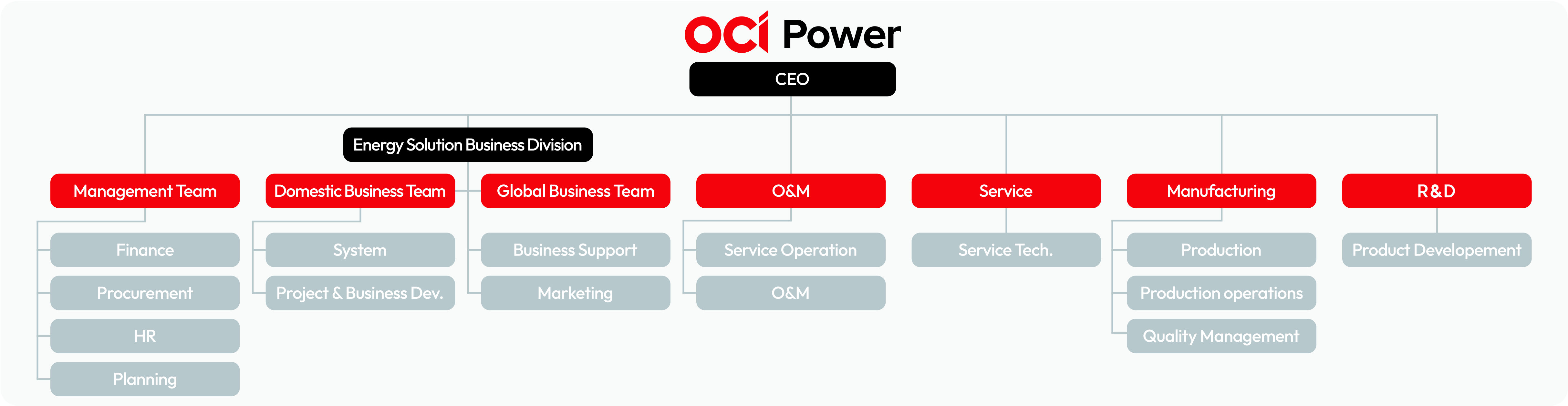
**Seoul Office**  
OCI Building, 4F, 94 Sogong-ro, Jung-gu, Seoul (Zip: 04532)



**R&D Center**  
SK V1 Building B-dong, 12F, 128 Beopwon-ro, Songpa-gu, Seoul (Zip: 05854)

# Organization Structure

OCI Power is structured into one business headquarters, six teams, and one research institute, collaboratively working to create a sustainable future.



# Mission & Core Values

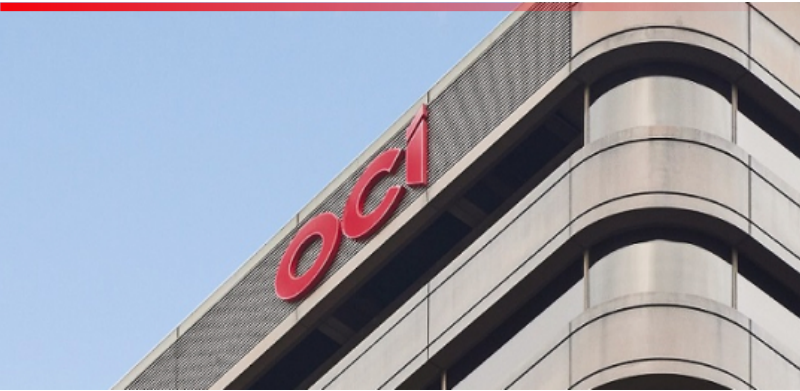
Every member of OCI Power is dedicated to the continuous advancement of solar energy in Korea. With responsibility as a leader in inverter development and manufacturing, we strive to deliver innovative energy solutions, building on OCI Group’s reliability, stability, and proven performance.

## Trusted Leadership in Solar Inverter Innovation



As Korea’s premier inverter manufacturer, we proudly lead both domestic and global markets with proven expertise and trusted solutions

## Driving Sustainable Growth



We power a cleaner future with relentless innovation, delivering high-performance inverters tailored to evolving energy needs worldwide.

## Pioneering Technology with Proven Reliability



Our cutting-edge technology and industry-leading reliability have made us a benchmark in the Korean solar energy sector.

## Maximizing Energy & Business Value



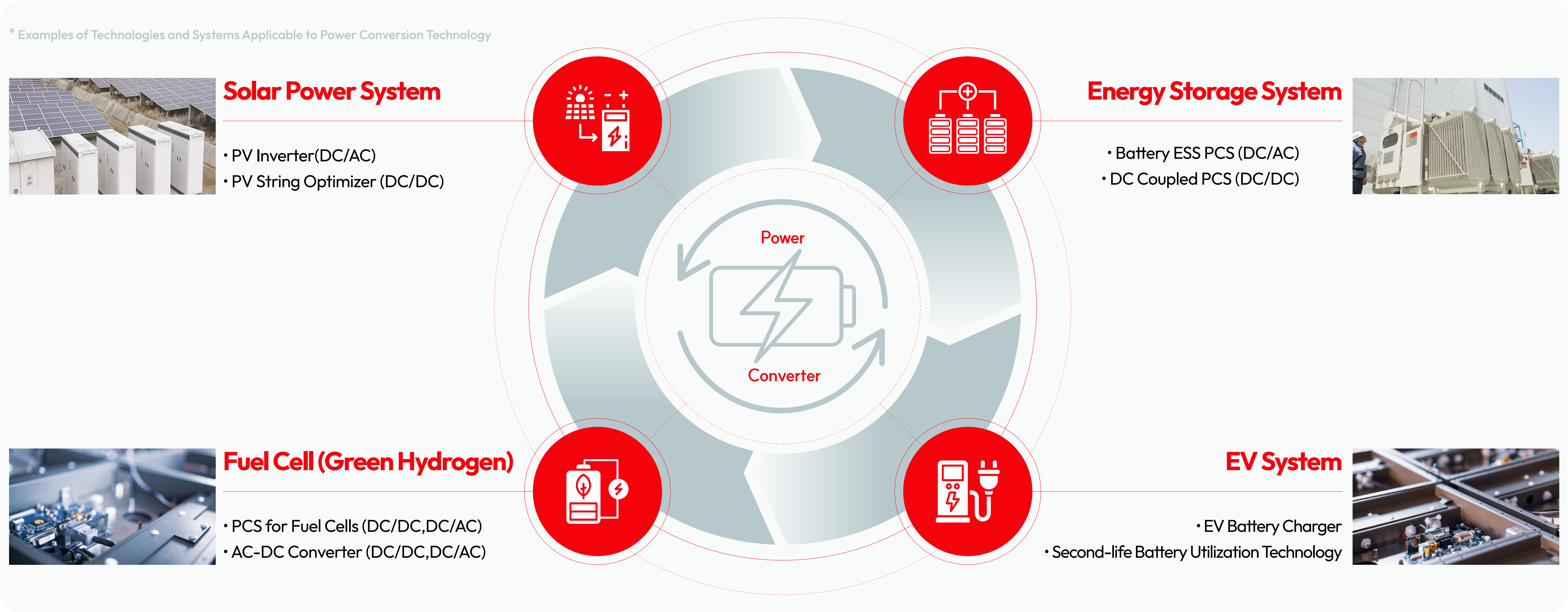
We deliver differentiated, high-efficiency solutions that enhance energy output and boost profitability for our partners.

# TECHNOLOGICAL CAPABILITY

- 10 Core Technologies
- 11 Certifications, Testing & Patents

# Core Technologies

OCI Power leverages extensive global experience from solar inverter markets in the U.S., Europe, and Japan to lead the industry, specializing in the development of high-efficiency, high-quality power conversion equipment.



# Certifications, Testing & Patents

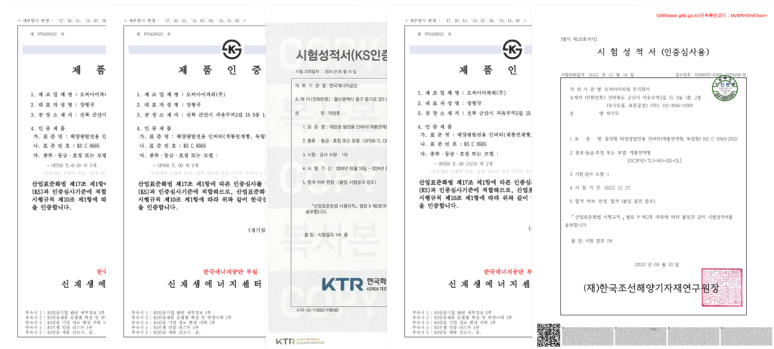
OCI Power operates management systems certified according to international standards, including ISO 9001 (Quality Management), ISO 14001 (Environmental Management and Sustainability), and ISO 45001 (Occupational Health and Safety Management). Alongside these global certifications, OCI Power holds multiple certifications and test reports, including KS product certification. Additionally, OCI Power has secured numerous patents, further reinforcing its proprietary technological expertise. These certifications and patents demonstrate OCI Power’s exceptional technological capabilities and superior quality management.

## Certifications & Test Reports

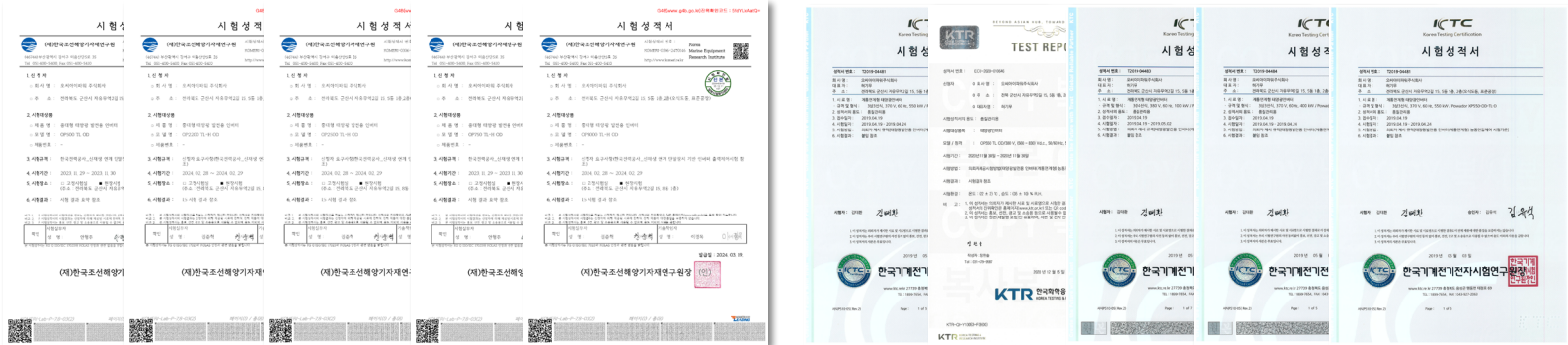
### ISO Certifications



### KS Certification



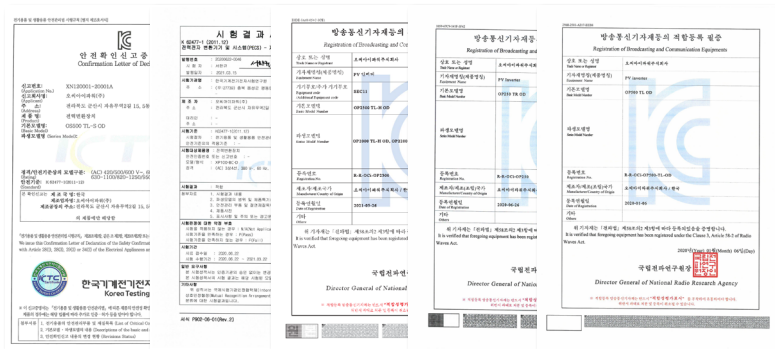
### Korean Electrical Safety Testing Certificates (Type Testing, Efficiency Testing)



### DC Grounding Certificates

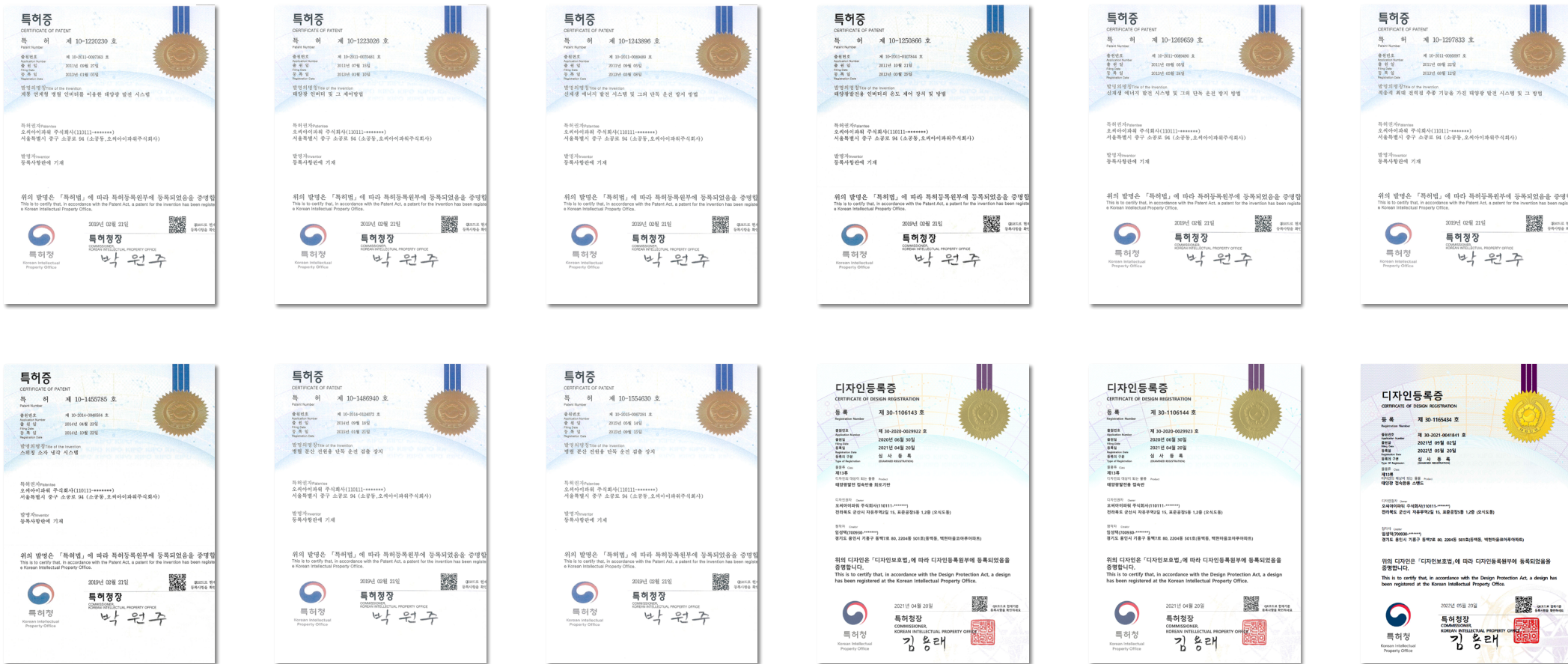


### KC Certifications



## Key Patents Held

Patent No. 10-1220230	Photovoltaic Power Generation System Utilizing Grid-Connected Parallel Inverters
Patent No. 10-1223026	Solar Inverter and Method for Controlling the Same
Patent No. 10-1243896	Renewable Energy Generation System and Anti-Islanding Method Thereof
Patent No. 10-1250866	Temperature Control Apparatus and Method for Photovoltaic Power Inverters
Patent No. 10-1269659	Renewable Energy Power System and Anti-Islanding Method Thereof
Patent No. 10-1297833	Adaptive Max. Power Point Tracking Photovoltaic System & Method for Operating the Same
Patent No. 10-1455785	Switching Element Cooling System
Patent No. 10-1486940	Device for Detecting Islanding in Parallel Distributed Generation Systems
Patent No. 10-1554630	Device for Detecting Islanding in Parallel Distributed Generation Systems
Patent No. 30-1106143	Circuit Board for PV Combiner Box
Patent No. 30-1106144	Solar power connection socket
Patent No. 30-1165434	Mounting Stand for PV Junction Box



# PRODUCTS

- 13 Solar Inverter
- 18 ESS



# PV Inverter

OCI Power leads solar innovation through its in-house research institute, developing and producing advanced solar equipment at its manufacturing plant in Gunsan, Jeollabuk-do. Our product lineup includes both string and central inverters, as well as junction boxes, designed to meet the diverse needs of solar power projects. In 2020, we became the first company in Korea to independently develop a DC 1500V inverter — a milestone that highlights our ongoing commitment to research and development. With over 3 GW of cumulative installations across domestic and international markets, OCI Power delivers efficient, dependable inverter solutions that ensure stable performance and long-term value for solar power operators.

## Key Projects & Performance Examples

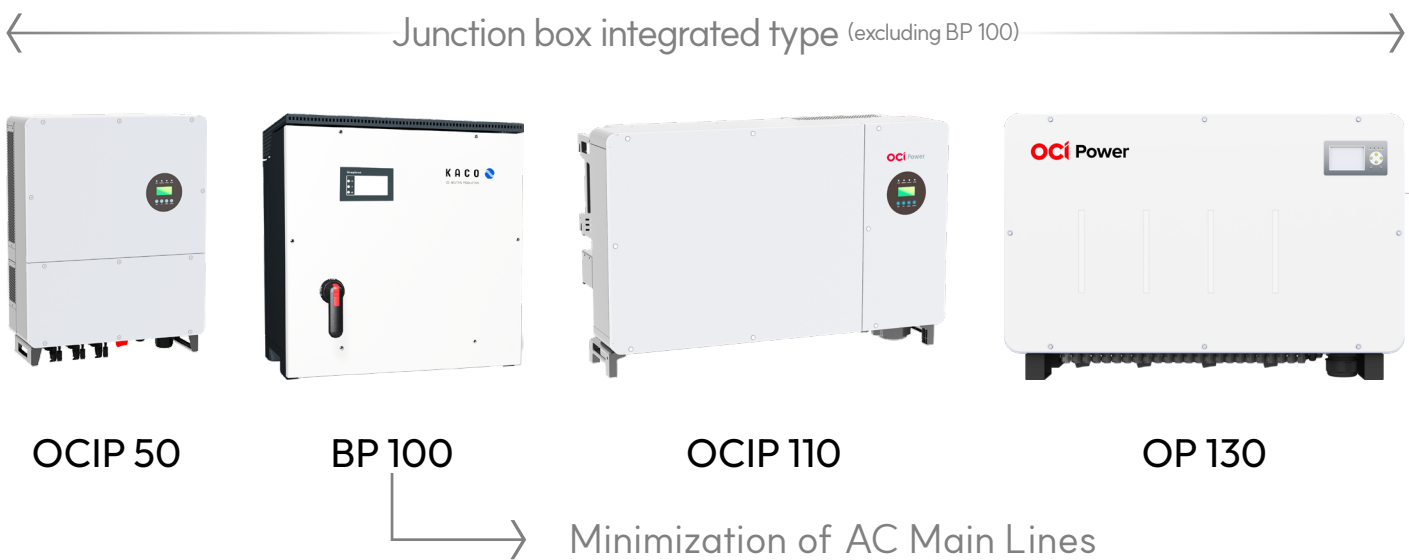


# PV Inverter Product Lineup

OCI Power offers a diverse range of products including string inverters, central inverters, and junction boxes. In 2020, OCI Power became the first company in Korea to independently develop DC 1500V inverters, also establishing the first domestic track record of supplying DC 1500V central inverters. OCI Power provides highly efficient and reliable inverter solutions to support stable operations and successful solar power plant management.

## High-Efficiency Central Inverters

- Maximum Efficiency: 99.4%, EU Efficiency: 99%
- Maximum parallel operation capability
- Developed and manufactured in Korea
- KS certified products (below 1MW)



## Multi-functional String Inverters

- Equipped with AC leakage current detection and DC ground fault interrupter
- Highest-level protection rating (IP66)
- Integrated junction box type available
- Certified for major global standards

# Central Inverters (1500V, 1.1MW~4.4MW)

## High-Efficiency System

- Maximum efficiency: 99.4%, EU efficiency: 99%
- Modular design reduces maintenance downtime and minimizes energy losses

## Smart Inverter

- Latest 3-level topology
- Capable of reactive power and active power control Fully supports
- Grid Code compliance (LVRT, LFRT)

## Flexible Plant Configuration

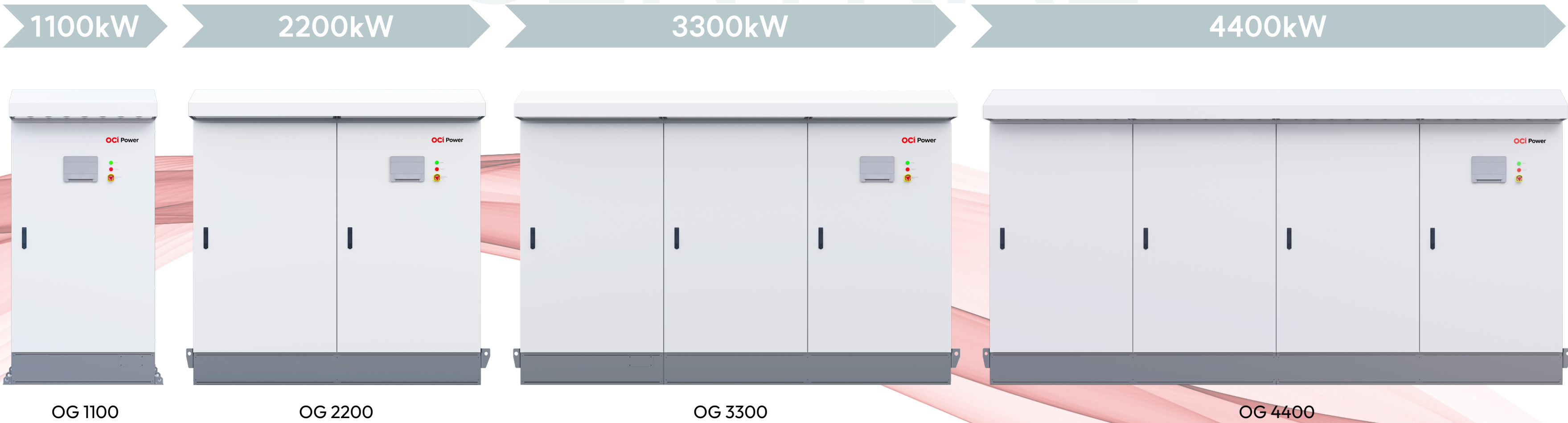
- Compatible with transformer type SFCL with two secondary windings
- Compatible with bifacial modules

## Protective Features

- IP65 rating (Optional anti-corrosion level C5)
- Integrated DC ground fault detection and interruption

## Customizable Combination (1 MW units)

- Designed in standardized 1.1MW modules for flexible plant configuration
- Parallel operation allows up to 4.4 MW configuration in one integrated package



# Central Inverters (1500V, 750kW~3MW)

## High-Efficiency System

- Maximum efficiency: 99.1%, EU efficiency: 98.80%
- Modular design reduces maintenance downtime and minimizes energy losses

## Smart Inverter

- Latest 3-level topology

## Quality Certifications

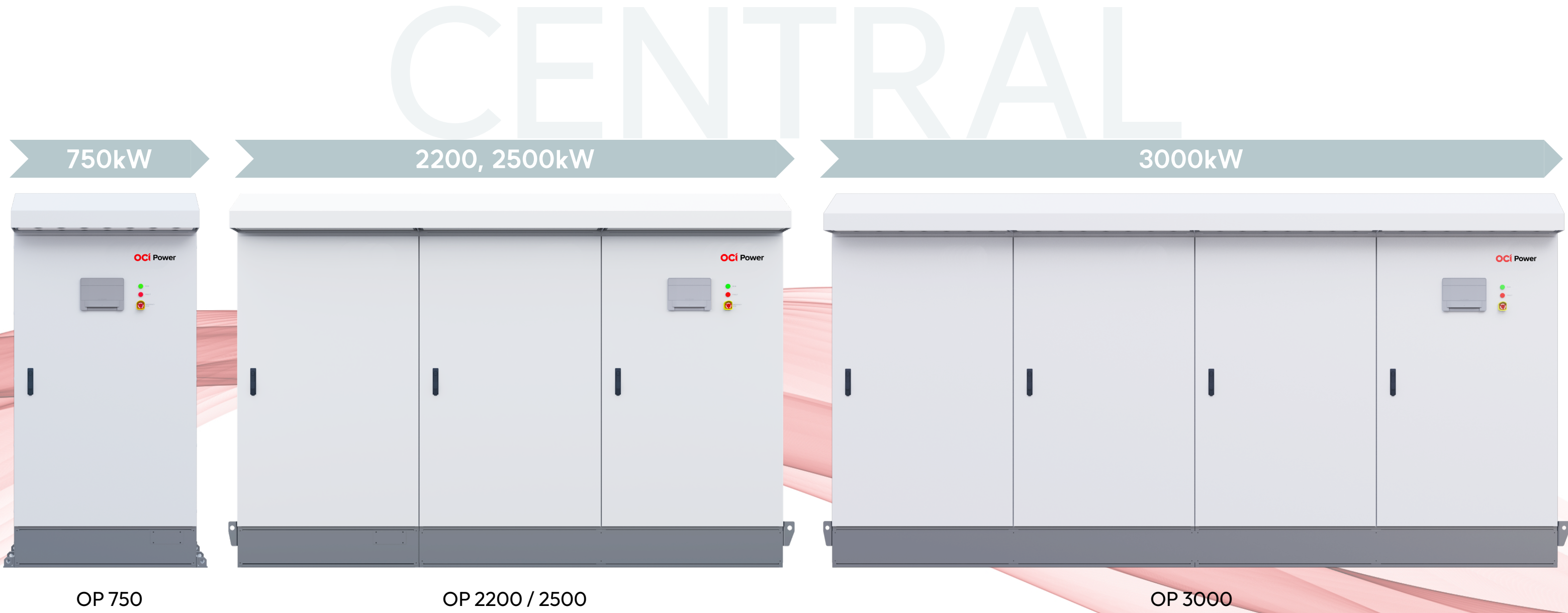
- KS certification completed (750 kW model)
- Various testing performance reports available

## Protective Features

- IP65 protection rating / Optional anti-corrosion class C5-M
- Integrated DC ground fault detection and interruption

## Customizable Combination (750kW Blocks)

- Designed for flexible configuration in modular blocks of 750 kW
- Scalable up to 3 MW in one integrated package through parallel operation



# String Inverter (50~130kW)

## Protective Features

- DC overvoltage, reverse-polarity protection, and reactive power control (selected models)
- DC ground-fault detection and interruption, integrated PV fuse (selected models)

## Quality Certification

- Complies with KS C 8565 and KS C 8567 standards (selected models)
- Integrated smart inverter functionality

## Monitoring (HMI)

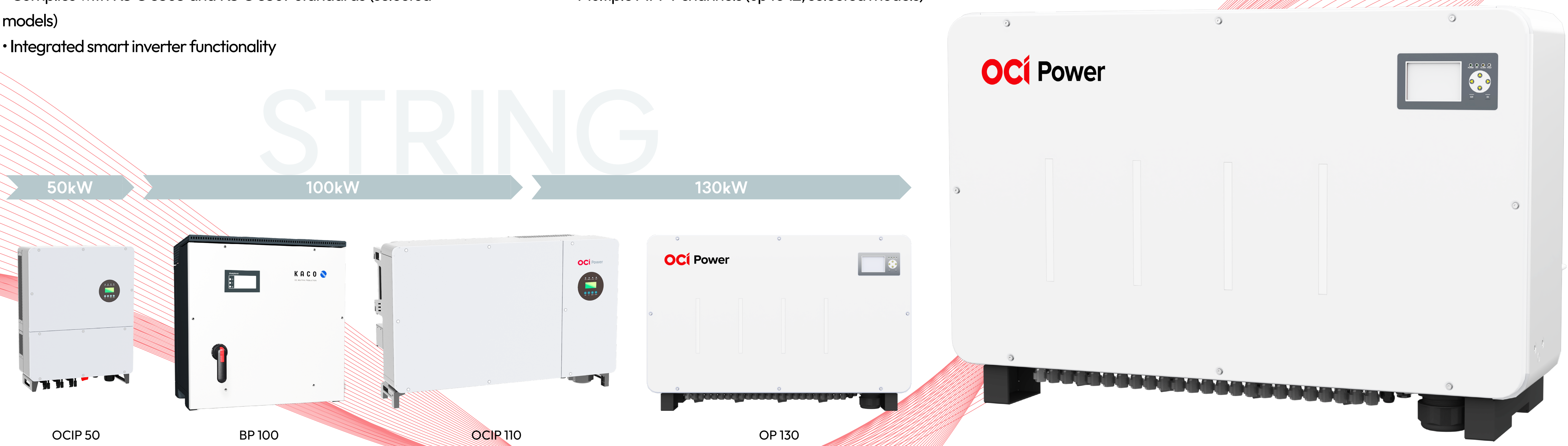
- Built-in HMI compatible with KACO GMT monitoring (External monitoring equipment installation required; selected models only)

## Flexible Plant Configuration

- Multiple MPPT channels (up to 12, selected models)

## High-Level Protection

- High protection rating: IP66 (selected models)
- Suitable for outdoor installation



# ESS

OCI Power designs, installs, and maintains optimized ESS solutions by leveraging extensive collaboration with power-system experts and experienced maintenance specialists. Utilizing advanced battery systems, proprietary PCS (Power Conditioning Systems), and integrated operation technology, OCI Power delivers rapid, accurate, and reliable solutions, ensuring economic and stable system operation with minimized risks. The specialized integrated solution ESS Cube, optimized for solar applications, provides enhanced safety and efficient ESS management.



**High-Efficiency System**  
Comprehensive in-house development and production capabilities for ESS engineering and design



**Systematic Operation Techniques**  
Advanced battery analytics technology ensures economical and stable ESS operation



**Superior Durability**  
Enhanced cooling efficiency through optimized fan capacity, airflow management, and speed control, designed for 20-year lifespan




**Cost Competitiveness**  
Competitive pricing through reduced construction timelines and efficient modular configurations

## Key Project References



## ESS PCS



OS 500

**Compact Size**

- Compact design enhances price competitiveness and shortens construction periods
- Suitable for outdoor installation of PCS and electrical equipment

**IP65 Protection Level**

- IP65 rated for outdoor installations
- Optional high-level corrosion protection (C5-M High)

**Wide Voltage Range Compatibility**

- Compatible with various voltage levels (AC690V, 800V, 420Vac)
- Flexible adjustment according to battery voltage ranges

BUSINESS

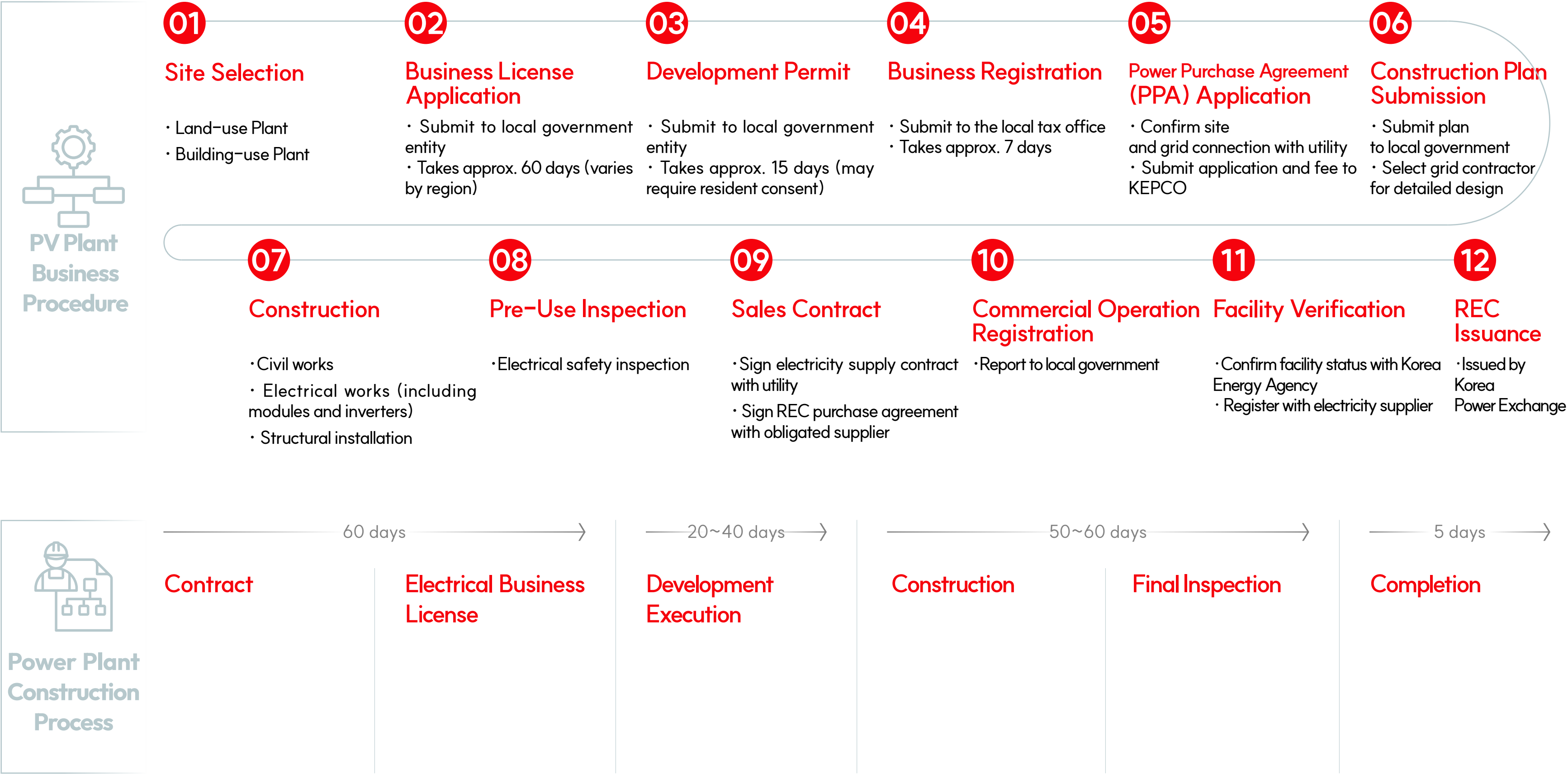
20 EPC

21 O&M



# EPC Business

OCI Power delivers fully integrated, end-to-end EPC solutions that go beyond simple system design and construction. Backed by extensive project experience and strong capabilities across development, financing, permitting, and operations, we provide trusted, value-added services that guarantee successful project execution and long-term solar power generation. We aim to be the most trusted partner in the industry, offering best-in-class service to help our customers achieve success.



# Power Plant O&M (Operation & Maintenance)

OCI Power provides professional plant operation and maintenance (O&M) services based on extensive experience, proven construction expertise, and advanced proprietary technology. Utilizing specialized field technicians and our rapid-response system, we apply advanced predictive technologies to all aspects of plant operations. This ensures customers can confidently and efficiently operate their assets, maximizing operational reliability and effectiveness. OCI Power serves as a trusted partner, guaranteeing outstanding plant performance and profitability.

## O&M Service



**Free Inverter Repair Service After Warranty Period**

Inverter repair services apply exclusively to OCI Power inverters. The scope of provided services may vary based on inverter condition at the time of contract..

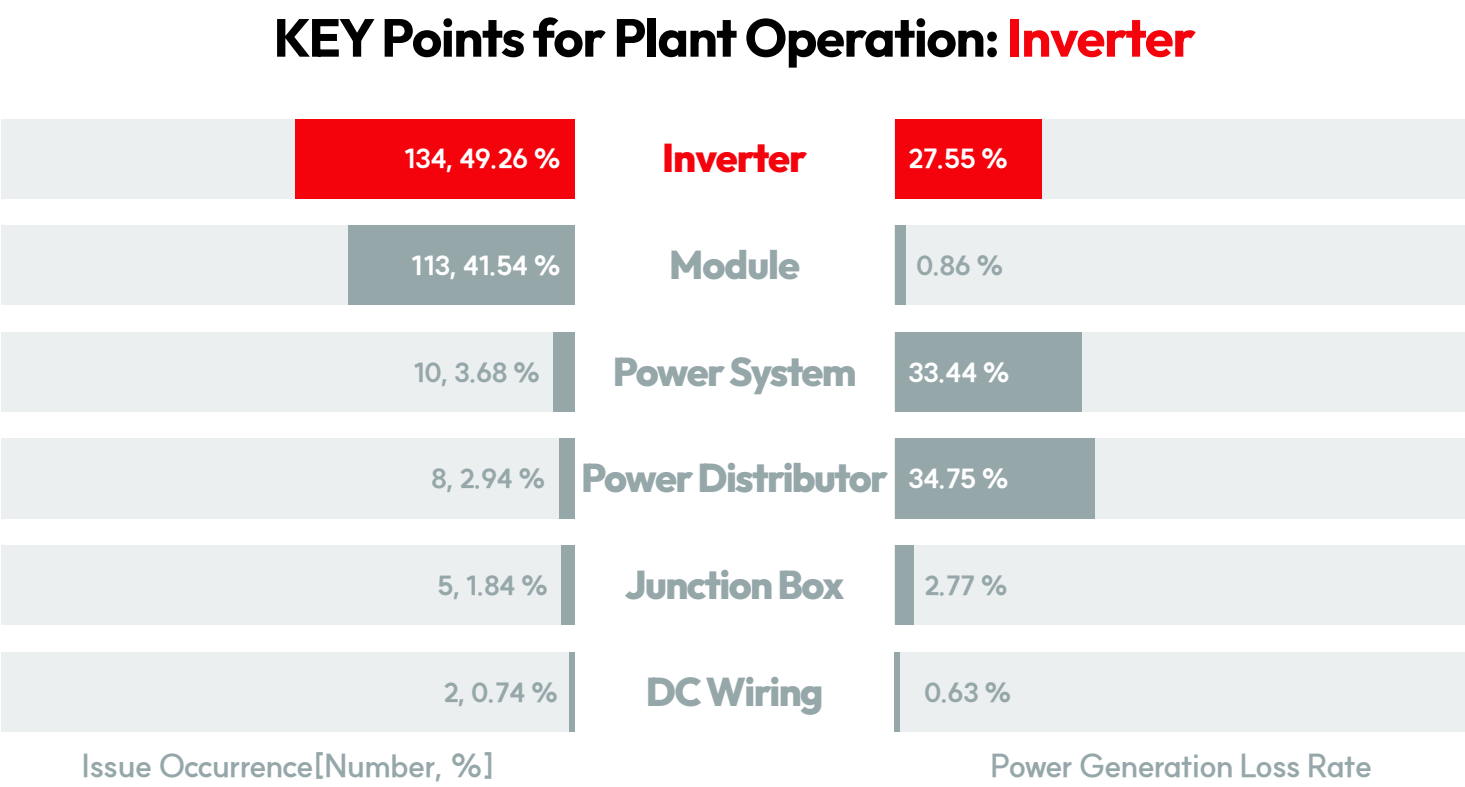


**Inverter-Specialized Regular Inspections and Preventive Maintenance**

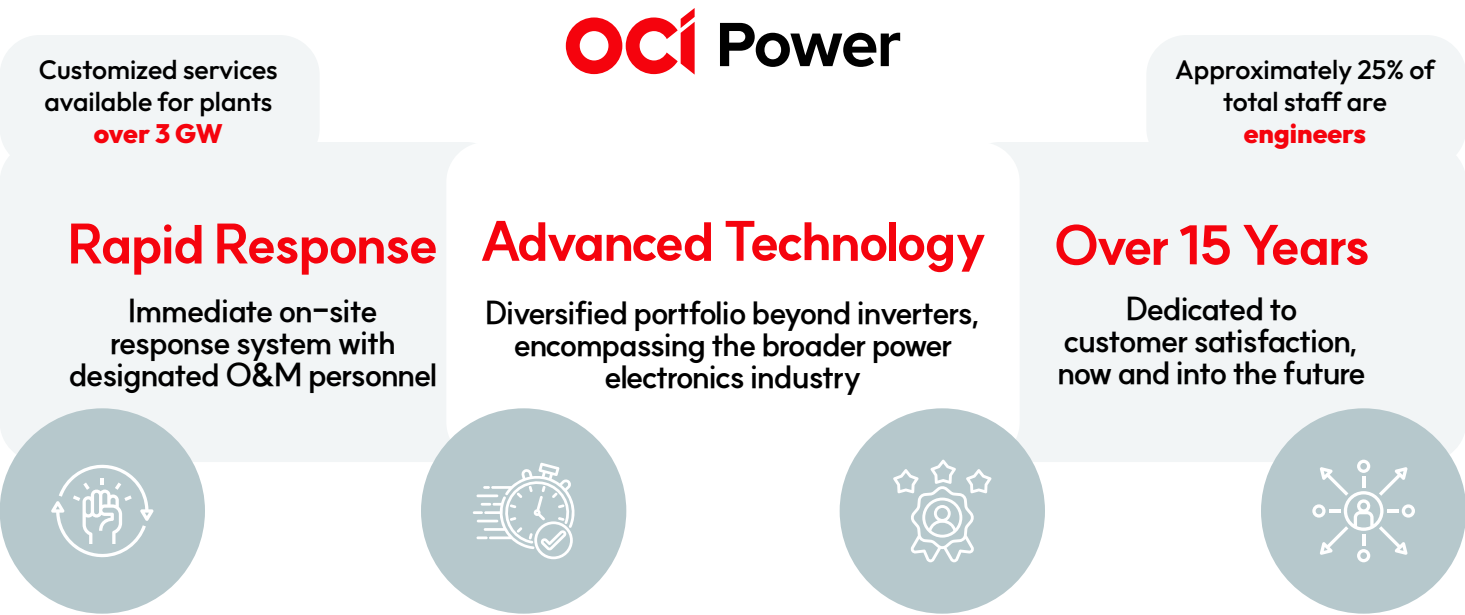


**Linked Service Offerings**

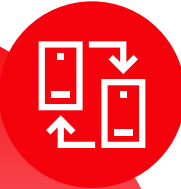
Replacement of Aging Inverters  
Assistance with Power Plant Transactions and Acquisitions



## Service Program




## Integrated One-Stop Services Linked to O&M




**Old Inverter Replacement Service**

- ✓ Replacement models available for discontinued or unsupported inverters due to manufacturer closure or domestic business withdrawal
- ✓ Selected products allow direct 1:1 replacements without additional electrical work or transformer changes



**Power Plant Performance Improvement**

- ✓ Provide solutions addressing root causes of energy yield reduction identified during plant management and diagnostics
- ✓ EPC-linked construction provided by OCI Power if required



**Power Plant Transaction Review**

- ✓ Property and plant asset valuation based on historical energy generation data
- ✓ Support for business transfer processes, including contractual transfers related to business permits/licenses

## Inverter Replacement Service

Closure of inverter manufacturer

Extended repair times and increased maintenance costs

Errors in initial plant design

Need for inverter performance improvement (addition of FRT capabilities)

**Inverter Replacement**


Improved Plant Efficiency

Increased Revenue

Reduced Operating Costs

## Inverter Replacement Process Steps

01




**Application**

Provide power plant information

Module specs, inverter specs, electrical diagram

02




**Plant Design Review**

Analyze current plant conditions

Module and inverter array review, equipment compatibility, and monitoring integration check

03




**On-Site Survey**

Determine the scope of work

Assessment of existing equipment removal and replacement scope

04




**Quotation Proposal**

Finalize quotation

Inverter and equipment removal cost, new installation cost, electrical and communication installation cost

05




**Contract**

Installation and construction contract

Contract documentation and construction scheduling

06




**Installation**

Apply for pre-construction technical review

• Report commencement of construction  
• Conduct pre-usage inspection


07



**Pre-Commissioning Inspection**

Complete system commissioning and pre-operation inspection

08



**After-Service Management**

Establish final quotation and contract amount

Expert engineering team and customer support center management

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