



Investments for the energy transition

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An aerial photograph showing a large-scale solar farm with rows of photovoltaic panels installed on a grassy hillside. To the right of the solar panels is a water treatment facility featuring several large, cylindrical storage tanks with blue and yellow exteriors, and a central circular structure. The facility is situated near a body of water, with a small settlement visible in the background under a soft, hazy sky.

Clean energy and water. The fundamentals of life.

We deploy technology to provide these fundamentals
and help build a thriving, sustainable world.

Photon Energy in numbers



100+ MWp
PV plants installed



Own portfolio
74.7 MWp



43.8 GWh
produced in 2019



O&M services
300+ MWp



Photon Water in numbers



605 ha
lakes and ponds
managed



3500 m of wells
drilled, maintained
or decommissioned



47 partners
around the world



PFAS remediation
pilot project



We are close to our customers

 Power plants owned by Photon Energy Group

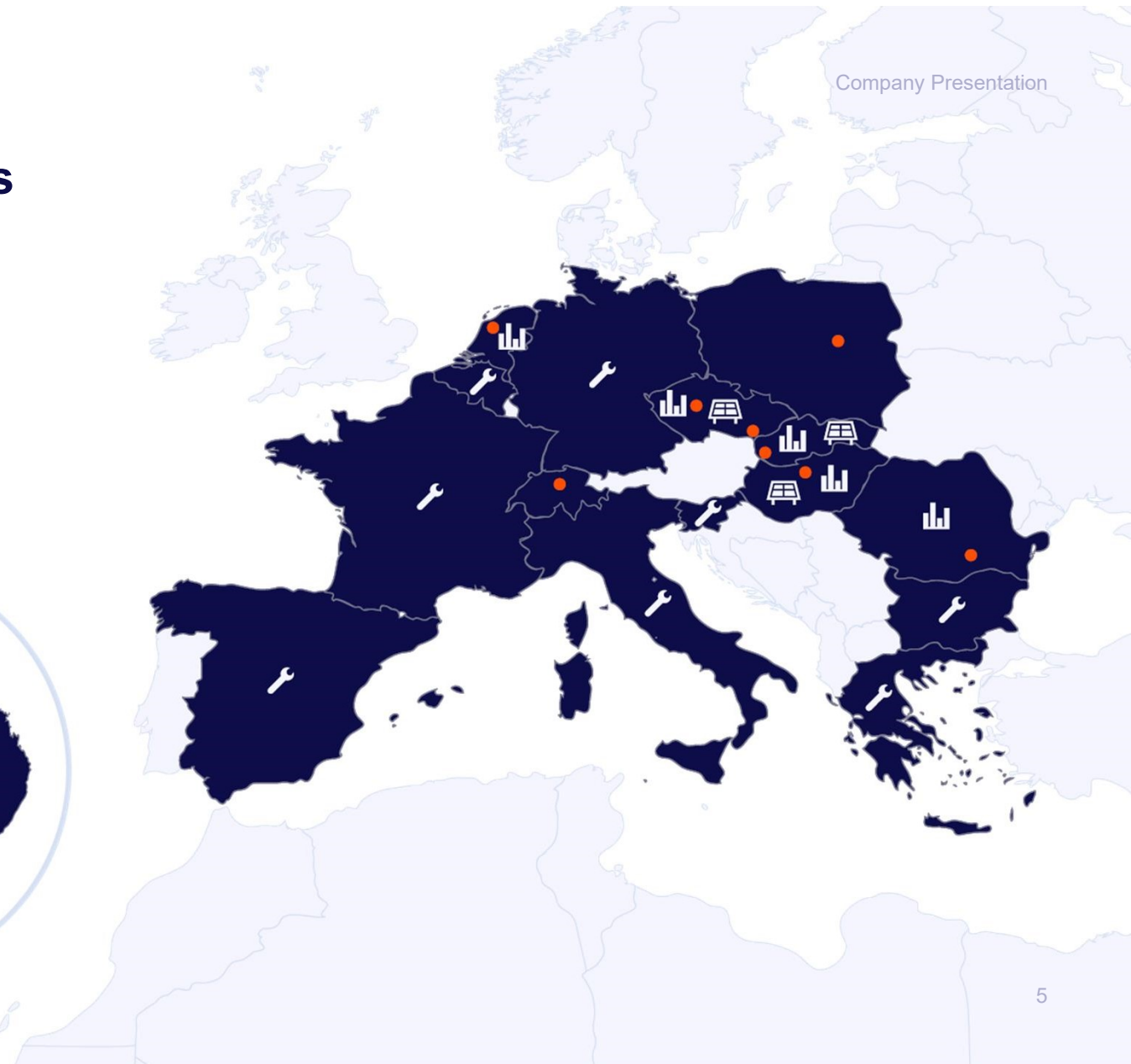
 Power plants under O&M

 Other O&M services

 Offices



28 January 2021



Our business model

**We manage projects
from start to finish**



Projects

Project development for rooftop and green-field installations from **300 kWp to 300 MWp**



Operations

Operations and maintenance of PV power plants, including own **control room** and **monitoring platform**



Solutions

Design and construction of **on-grid** and **off-grid** installations, including **battery storage solutions**



Investments

Investments in PV power plants for the **sustainable** production and sale of **solar energy**



Technology

Trading of **PV components** (panels, inverters and substructure)

Projects

Project development from concept to completion

We develop green fields from scratch and acquire both large- and smaller-scale PV projects at all stages of the development process. Our current project pipeline is **790+ MWp** globally (of which **350 MWp** fully developed in Australia).

- ▶ Land acquisition
- ▶ Administration and legal landscape
- ▶ Permitting and implementation
- ▶ Joint ventures
- ▶ Partnerships with banks and investors







Recent projects

- ▶ Three large-scale PV projects of **580 MWp** with **Canadian Solar**
- ▶ Rooftop installations, including a **4.6 MWp** project for **ALDI Stores Australia**
- ▶ Hybrid solar and battery storage system on **Lord Howe Island**, a World Heritage Site
- ▶ Two PV power plants with a combined capacity of **14 MWp** in Leeton, Australia
- ▶ **3 MWp** PV power plant for a large-scale water treatment plant in Wodonga, Australia
- ▶ In Hungary, 61 PV power plants built and connected with a total capacity of **49.1 MWp**



Project pipeline

Country	1. Feasibility	2. Early development	3. Advanced development	4. Ready-to-build technical	5. Under construction	Total in MWp
 Australia	-	200.0	380.0	-	14.6	594.6
 Hungary	68.0	28.6	-	-	-	96.6
 Romania	19.9	77.5	-	-	-	97.4
 Poland	4.6	-	-	-	-	4.6
Total in MWp	92.6	306.1	380.0	-	14.6	793.2



Challenges in Romania

For a stable energy transition

- ▶ Romania renewables target for 2030 – 30,7%
- ▶ Amendments to Energy Law 123/2012 – to allow concluding PPA's as bilateral agreements outside centralized markets
- ▶ Sale-Purchase Agriculture land – Law 175/2020
- ▶ Access to Grid and connection costs



Solutions

**We design and build
power plants with quality
and longevity in mind**

- ▶ Consultancy and yield studies
- ▶ Concept design
- ▶ Project planning and management
- ▶ Counterparty negotiations and contracting
- ▶ Turn-key construction of PV projects
- ▶ Customised off-grid and energy storage solutions

Czech Republic	30.4 MWp
Slovakia	13.6 MWp
Hungary	49.1 MWp
Australia	9.2 MWp
Germany	1.4 MWp
Italy	1.3 MWp
EPC delivered	105.0 MWp



Technology

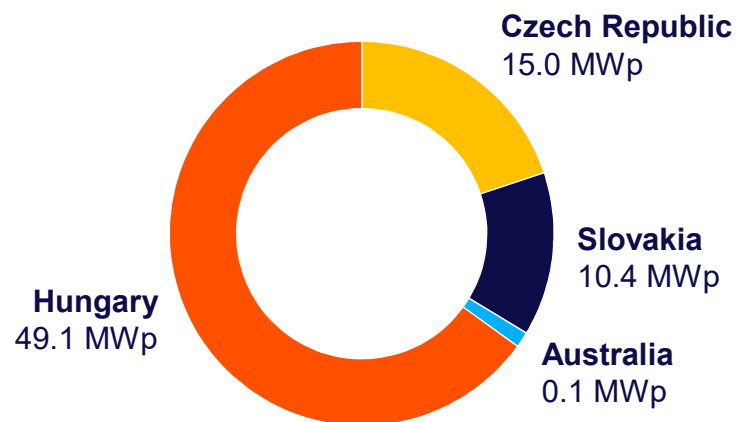
We procure world-class technology

- ▶ High-quality, bankable crystalline modules
- ▶ High-performance mono PERC modules from Longi Solar, JA Solar and Jinko Solar
- ▶ Powerful and robust inverters
- ▶ Integrated power storage and backup systems
- ▶ Monitoring and control devices



Investments

We own PV plants with 74.7 MWp in our proprietary portfolio



Expansion of proprietary portfolio from 74.7 MWp to 115 MWp by 2022

Hungary	75 MWp
Australia	15 MWp
Czech Republic	15 MWp
Slovakia	10 MWp
Target portfolio by 2022	115 MWp



Operations and maintenance

We take care of solar assets with a combined capacity of over 300 MWp



Our O&M services are always set up to achieve the highest possible production and performance throughout its lifespan. We're always growing. By the end of 2021, we expect to be providing O&M services for solar assets with a combined capacity of more than **700 MWp**.



Preventive maintenance



Service interventions



Compliance & Reporting



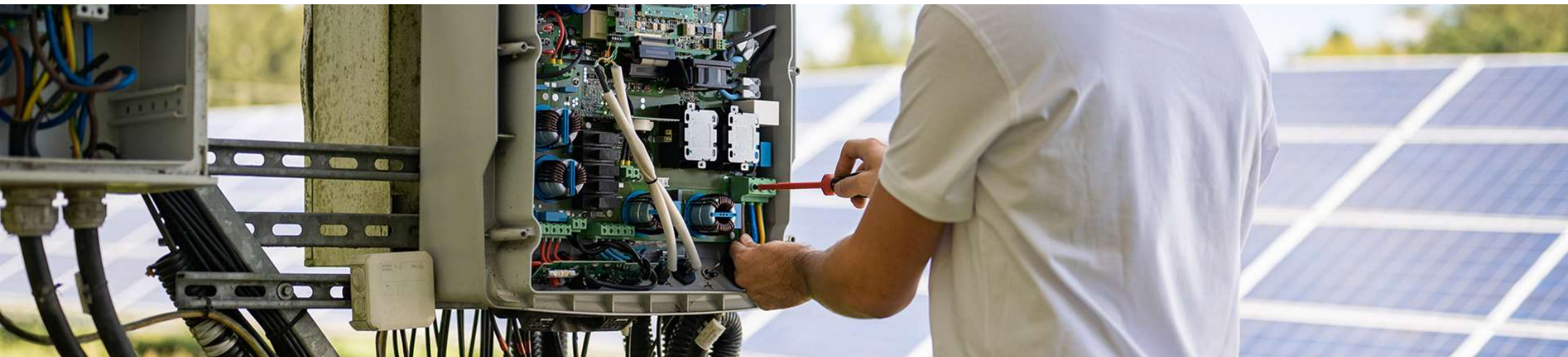
Performance monitoring



Accounting services



Security support



Operations and maintenance

Maximise yield while minimising cost

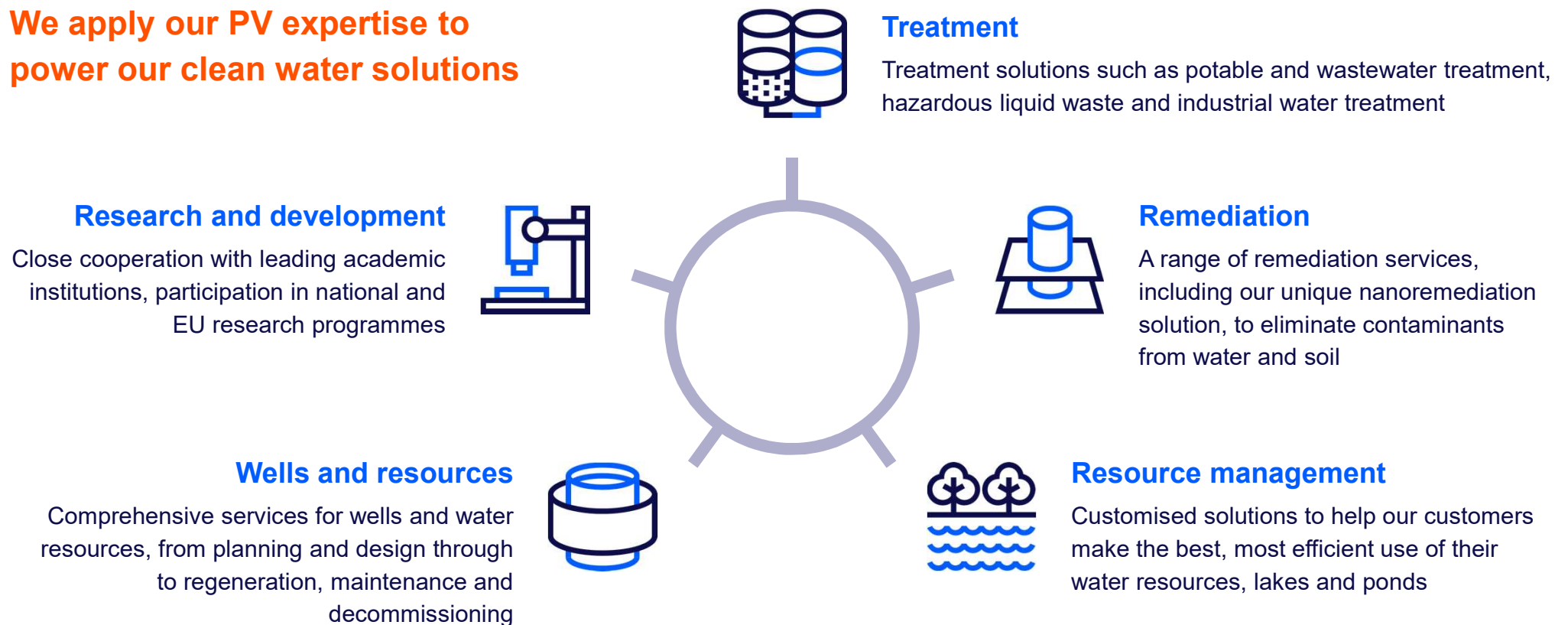
Our fully-integrated solar monitoring systems – programmed and commissioned by our experienced programmers and technicians – allow us to provide comprehensive monitoring and control of your PV power plants.

- ▶ Optimises installation and hardware costs
- ▶ Detects threats in a timely manner
- ▶ Used by industry-scale owners, operators and investors
- ▶ Connects to external systems free of charge
- ▶ Provides expert 24/7 technical support
- ▶ Delivers reporting and notifications



Photon Water

We apply our PV expertise to power our clean water solutions



References

Tuřany Airport, Czech Republic

Largest project to date

7.5 MWp, 2010 (EPC)

21 MWp, 2010 (Procurement provided for total capacity)



References

Monor, Hungary

5.6 MWp, 2019 (EPC, O&M)



Nagyecsed, Hungary

2.1 MWp, 2019 (EPC, O&M)



Almásfüzitő, Hungary

5.5 MWp, 2019 (EPC, O&M)



Fertőd II, Hungary

3.5 MWp, 2019 (EPC, O&M)



Ground-mounted power plants

References

Tiszakéscke, Hungary

5.5 MWp, 2018 (EPC, O&M)



Ellrich, Germany

1 MWp, 2012 (EPC)



Les Mees, France

18 MWp, 2014 (O&M)



Ráztoka, Slovakia

1 MWp, 2011 (EPC)



Ground-mounted power plants

References

ALDI stores, Australia

4.6 MWp, 2019 (EPC, O&M)



Biella, Italy

1 MWp, 2012 (EPC, O&M)



Symonston, Australia

200 kWp, 2016 (EPC, O&M)



Sydney, Australia

283 kWp, 2012 (EPC, O&M)



Rooftop installations

References

Muswellbrook, Australia
39 kWp / 216 kWh, 2014 (EPC, O&M)

Project designed in association with the German Energy Agency, Deutsche Energie-Agentur GmbH (dena), and the Australian communications infrastructure company BAI.

Solar Storage





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