



Let **Greece**
inspire you

**RES investments in an
emerging energy hub**

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Energy Sector Drivers | Electricity: production & Grid development | RES facts & prospects
FDIs Review | EG: Intro & Services (sel.)

The Greek Energy sector's Transition as a Regional Energy Hub

- The Greek Energy market currently provides many investment opportunities:
 - ✓ Electricity production (new RES and “clean” thermal power plants)
 - ✓ Network expansion in Gas/Electricity Grids and distribution systems
 - ✓ Exploration and Development of hydrocarbon reserves (onshore and offshore)
 - ✓ Energy Efficiency and Storage
 - ✓ High-end Energy R&D projects
 - ✓ WTE projects (new framework)
- Upcoming Corporate **Privatisations** in key Energy Companies (PPC, HEDNO, DEPA, HELPE)
- Upscale Infrastructure **EU-backed energy projects**, in electricity and gas, reinforcing energy security and the “**Southern Energy Corridor**”: TAP, IGB and EastMed gas pipelines, Alexandroupolis FSRU, Kavala LNG Reserve, EUROASIA

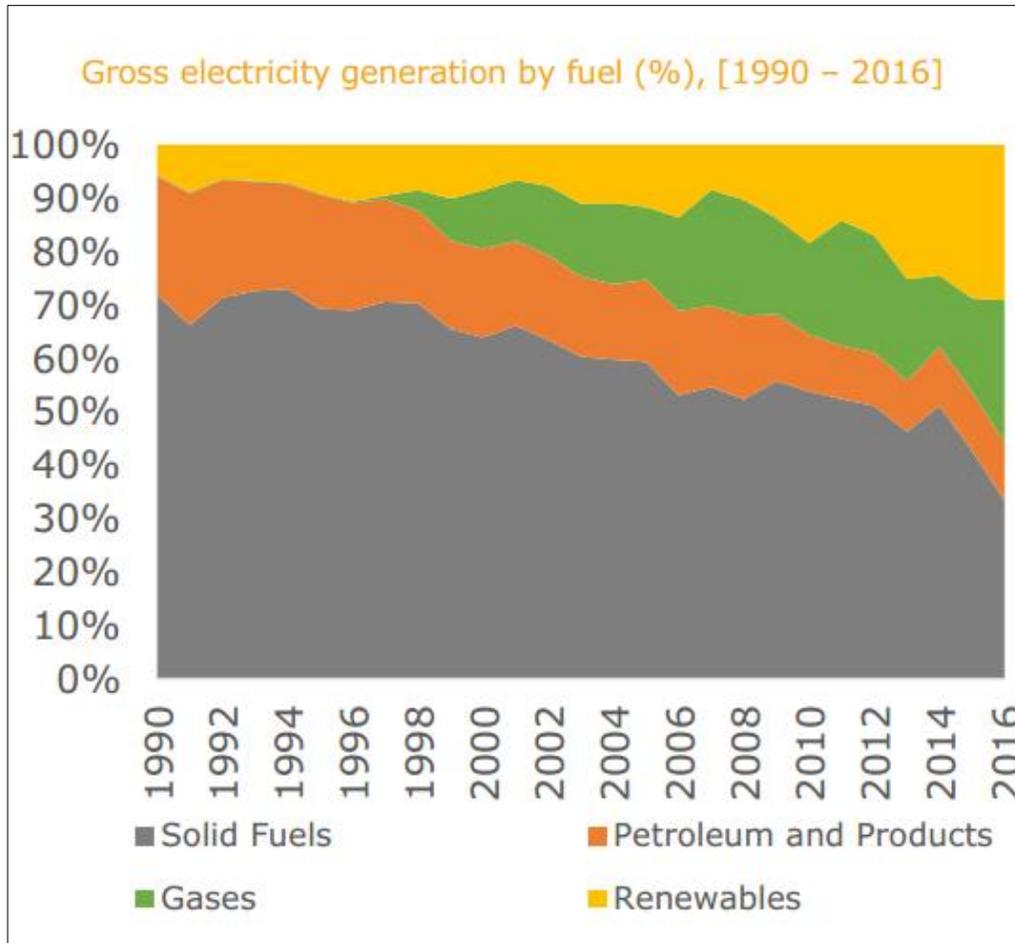
Nationwide PCI's drive Energy Sector's Transition & Upgrade



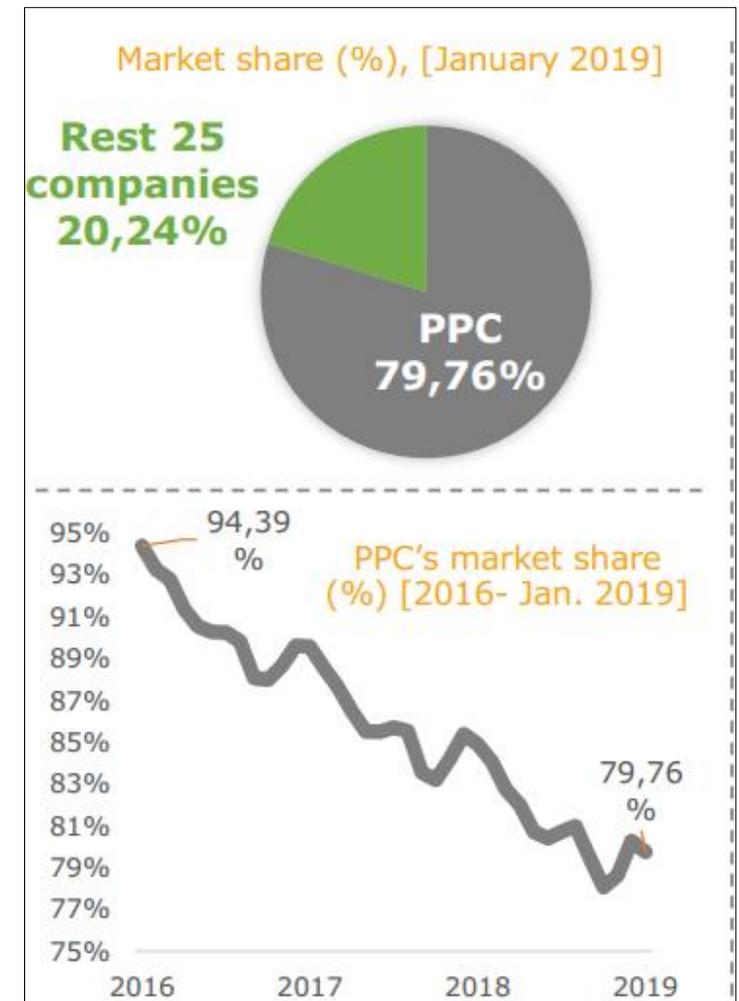


Electricity Production mix and Grid development

Electricity market deregulation unfolds and generation mix redefined

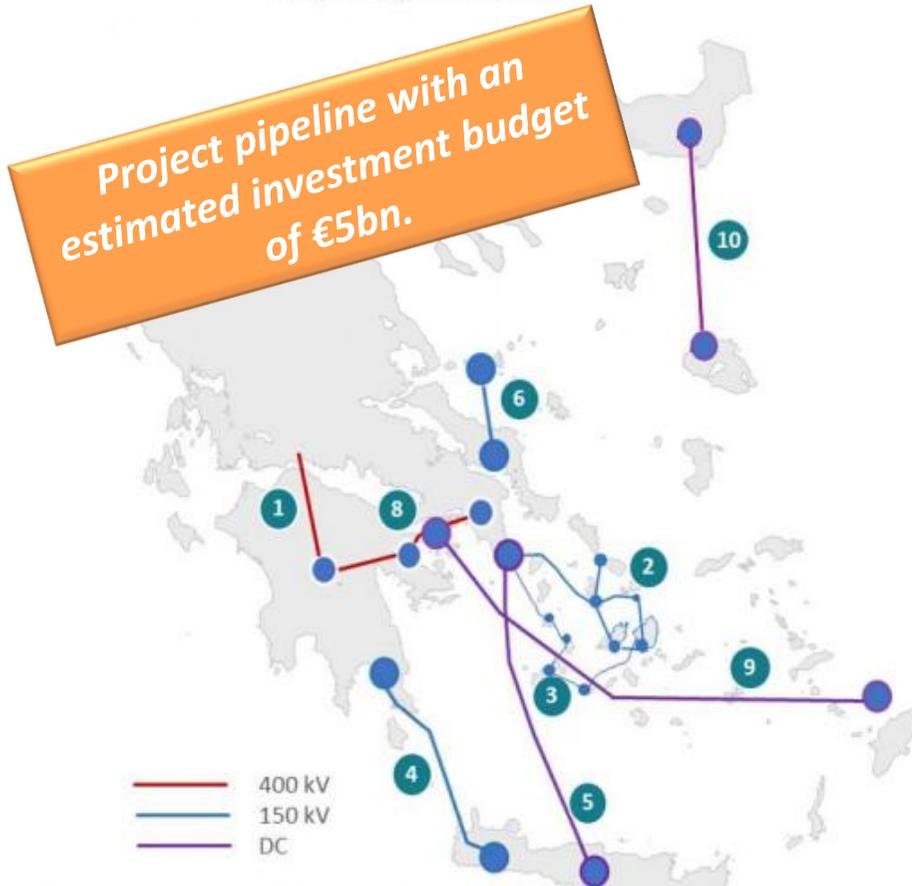


Source: Eurostat, HEnEx, HAAE's analysis



Capex for the period according to the submitted Ten Year Network Development Plan (TYNPD)

Major Project Locations



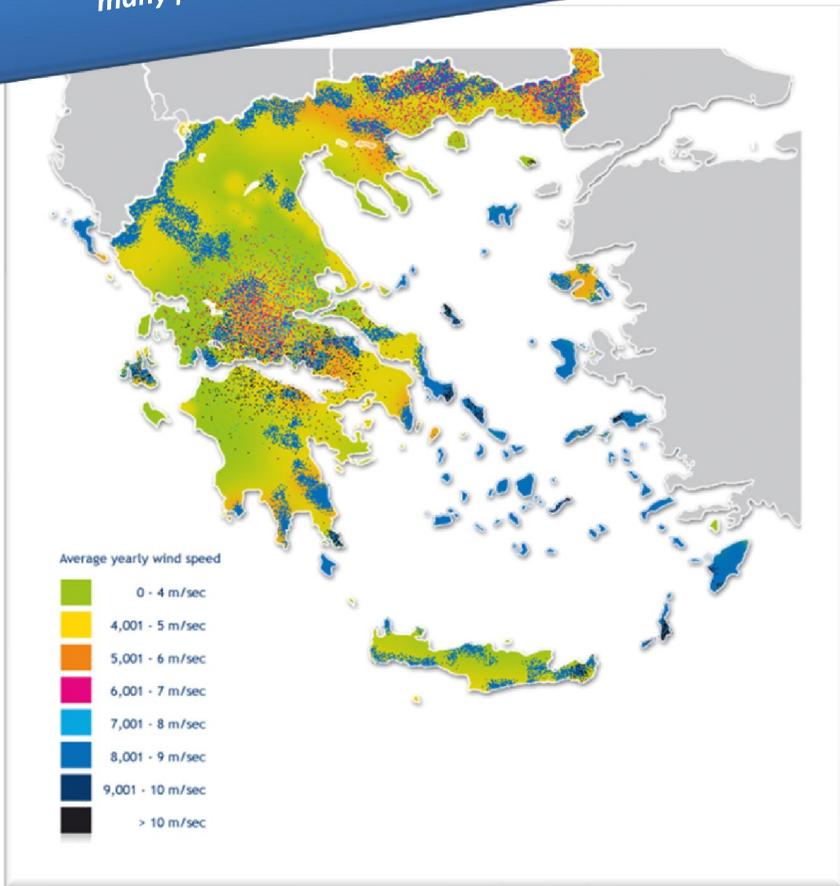
*Approximate figures, based on initial estimates.

ID	Project description	Expected commissioning	Project Cost (2019-28) €m
1	Corridor A' 400 kV to Peloponnese (OHL Megalopoli – Patras – Achelooos)	2019	67
2	Cycladic Islands Interconnection (Phases B and C)	2020 Phase B 2019 Phase C 2020	146
3	Cycladic Islands Interconnection Phase D	2023	386
4	Crete Interconnection (Phase A)	2020	292
5	Crete Interconnection (Phase B) Ariadne Interconnection	2022	1,006
6	Skiathos Island Interconnection	2021	50
7	High Voltage Substations (Koumoundourou, Patra, Rouf)	2023-25	205
8	Corridor B' 400 kV to Peloponnese (OHL Megalopoli – Korinthos – Koumoundouros)	2024	99
9	Dodecanese Interconnection	2027	1,500*
10	North Aegean Interconnection	2028	1,000*
	Various projects		285
Total Capex			5,036
Subsidies			1,000



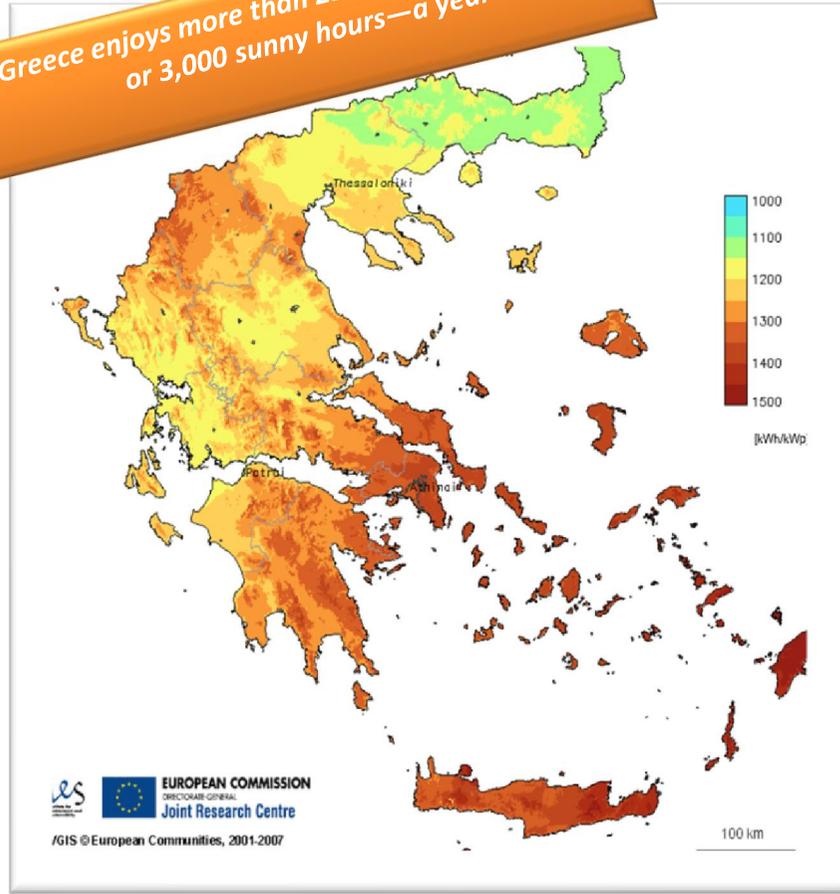
Untapped potential in RES Development

The superb wind resources in Greece are among the most attractive in Europe, with a profile of more than 8 meters/second and/or 2,500 wind hours in many parts of the country.



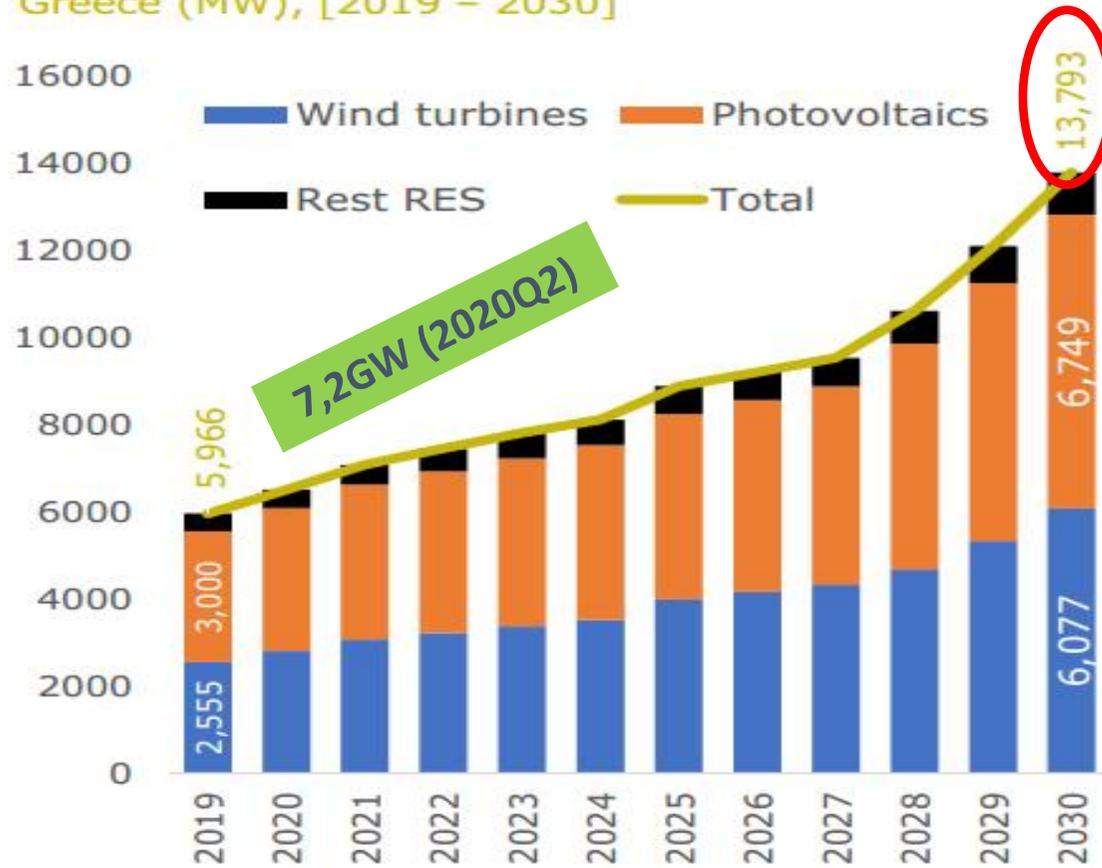
Renewables: Greece is well-endowed with RES potential for solar-wind project development

Greece enjoys more than 250 days of sunshine— or 3,000 sunny hours—a year



... and expected to increase its installed capacity and power generation contribution by more than double by 2030

Long-term forecast of RES installed capacity in Greece (MW), [2019 – 2030]



Source: DAPEEP, ADMIE, HAEE's analysis

National plan for Energy and Climate (2021-2030) has set a target for €9 bn. of new RES investments

Strong momentum for new project development

23,4 GW of new Production License applications within the last 4 Licensing rounds, indicating the escalation of international investment interest for new large-scale RES projects

RAE Application Round	License Applications	Total Capacity (GW)
December 2018	260	2,9
March 2019	273	2,7
September 2019	115	2,2
December 2019	485	15,6

Source: RAE 2020

- New CCGT plants: > 4 GW in total of licensing requests
- Lignite phase out: By 2023, Apart from new plant (Ptolemaida V)
- RES Integration progress: Island interconnections, Network upgrading, Energy Storage, Hybrid stations



ENTERPRISE GREECE
INVEST & TRADE

Successful market entry of foreign key energy players



 **ENTERPRISE GREECE**
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Global RES players market presence (selected)

 **Vestas**

 **ENERCON**
ENERGY FOR THE WORLD

 **VALOREM**
green energy operator

 **juwi**

 **energies
nouvelles**

 **IEGIL**

 **IBERDROLA**

 **Enel**
L'ENERGIA CHE TI ASCOLTA.

 **Gamesa**

 **SMA**

 **中国神华**
CHINA SHENHUA

 **ABO
WIND**

 **NORDEX**

 **acciona**

“We are very pleased to increase our wind portfolio in Greece, in addition to our PV development through this acquisition. Greece is a priority market for VALOREM” Jean-Yves Grandidier, President, VALOREM (January 2020)

(Following the acquisition of an 82MW Wind Park Portfolio, under development)

RES, a market of infinite opportunities...

Wind
(onshore-offshore)

**PV & Solar
Thermal**

Geothermal

Hydro

Biofuels

**Energy
Efficiency/Storage**

Enterprise Greece is the national agency of the Greek State, under the supervision of the **Ministry of Foreign Affairs...**

...to showcase Greece as an outstanding destination for **investment** and to promote the highly competitive products and services produced in Greece for **export**.

Enterprise Greece offers a set of integrated investment promotion and support services

- Identifying and proposing **investment opportunities** in key sectors of the economy
- Preparing **customized investment proposals** and introducing specific available **investment projects (project portfolio)**
- Providing **matchmaking services** to investors and local entrepreneurs
- Offering **site location services** for project development
- Informing on **sector-specific required licenses**
- Informing on available **financial tools and incentives**



- **Flagship private energy projects** open to investor entry
- Developed and supported by well-established **Greek energy firms** with a global footprint and a proven experience in the development and operation of scalable projects
- Sub-sectors covered: **Wind (Onshore-Offshore), Large hydro, Pumped storage, Hybrid RES, Gas**
- Geographic coverage: All over Greece (**Mainland, Islands**)
- Total Investment Cost: **> 4 billion Euro**
- Type of cooperation: **Equity participation, Acquisition, Co-development**





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