



High Level Energy Conference
Renewable Energy and Infrastructure Development
in Southeastern Europe and the HELIOS Project



HELLENIC ASSOCIATION OF PHOTOVOLTAIC COMPANIES



HELIOS PROJECT

The view of the Greek PV Industry

Dr. Alexander Zachariou, HELAPCO Chairman of the Board
Athens, 3.4.2012

HELLENIC ASSOCIATION OF PHOTOVOLTAIC COMPANIES

HELAPCO is a non profit organization, established in 2002, representing the major PV companies active in the production, trading, installation and maintenance of photovoltaic systems in Greece.

HELAPCO represents the domestic market in international meetings and fora, and is a member of the European Photovoltaic Industry Association (EPIA).

HELLENIC ASSOCIATION OF PHOTOVOLTAIC COMPANIES

www.helapco.gr



Is the HELIOS Project a good idea?

In principle, **yes**.

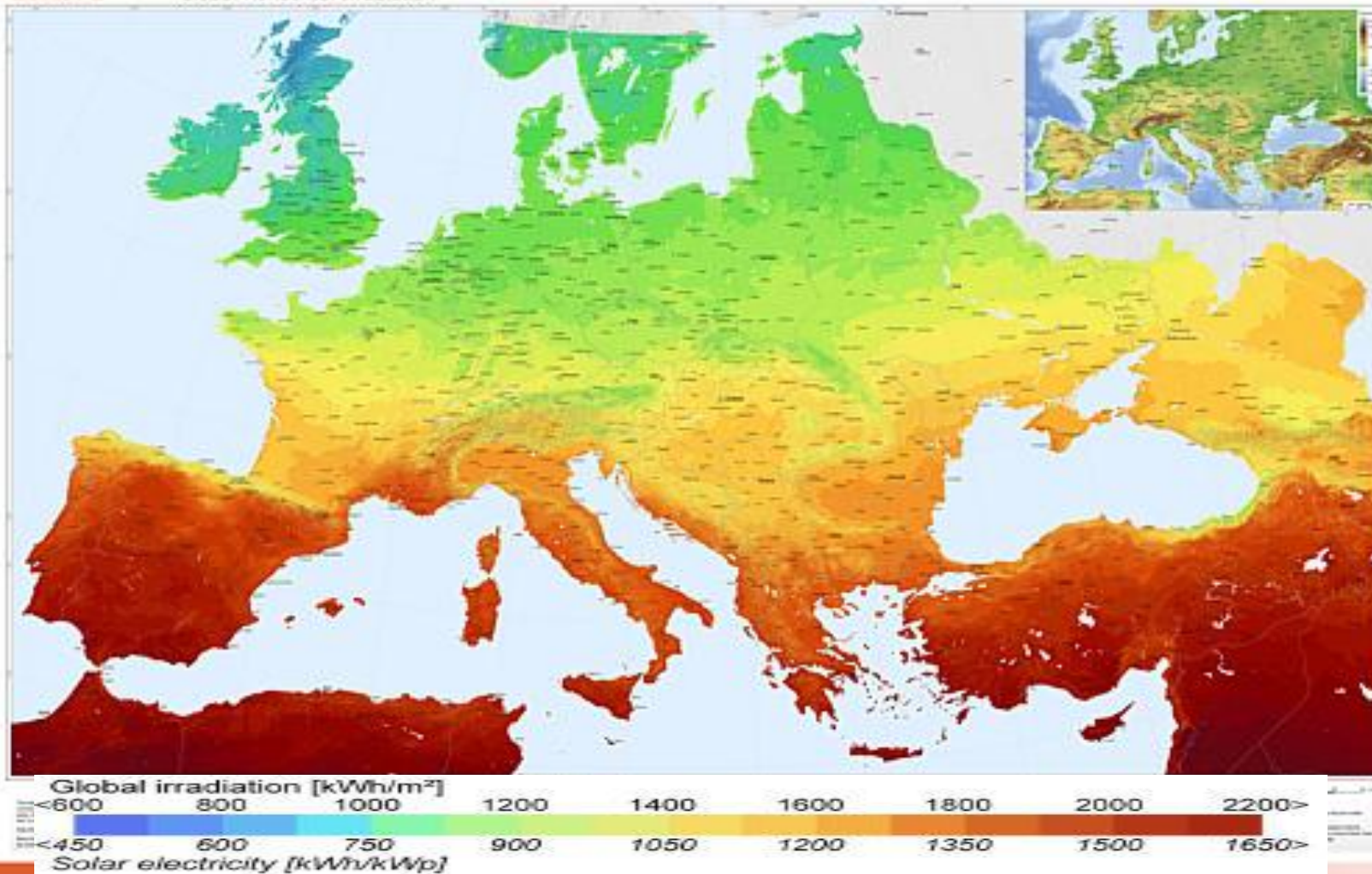
- Electricity is traded among European countries
- Solar electricity should be produced where solar energy is abundant



Solar Irradiance Map

EUROPE

Global Horizontal Irradiation



Is it technically feasible?

- The technology is definitely mature
- Large scale PV installations are possible - space is available
- Grid connections across Europe exist (capacity increase is necessary)
- Grid losses are compensated by higher solar irradiation in Greece

Is it economically feasible?

- Depends on the project details
- A feasibility study is necessary
- PV equipment cost has decreased significantly in the last few years
- Grid parity in Germany has been achieved under the Greek sun

The Devil is in the details



Who is the investor?

With no investor, there is no project.

The Greek state is not in a position to make such investments. Any foreign investor has to be convinced about the payback.

Who buys the exported electricity?

With no buyer, there is no project.

It makes sense to export solar electricity from Greece to less sunny countries of Central Europe, so the potential buyers should be there.

Who pays for the solar electricity?

The ones who buy and consume it.

The price is therefore a key issue.



How does HELIOS Project affect domestic PV markets?

If existing grids, are used for inland electricity transfer, this may hinder the smooth development of the local PV market, reaching national targets.

This is the threat for the **Greek** PV market.

How does HELIOS Project affect domestic PV markets?

Once solar electricity requirements are covered by imports, development of domestic PV market is no longer necessary.

This is the threat for the **German** PV market.

What is the added value for the PV industry?

- Equipment produced in Greece/EU
- Local job creation (installers, EPCs, O&M)
- Fast Track procedures introduced for PV. These could be adopted for all types of projects

How does HELIOS Project affect the national PV target?

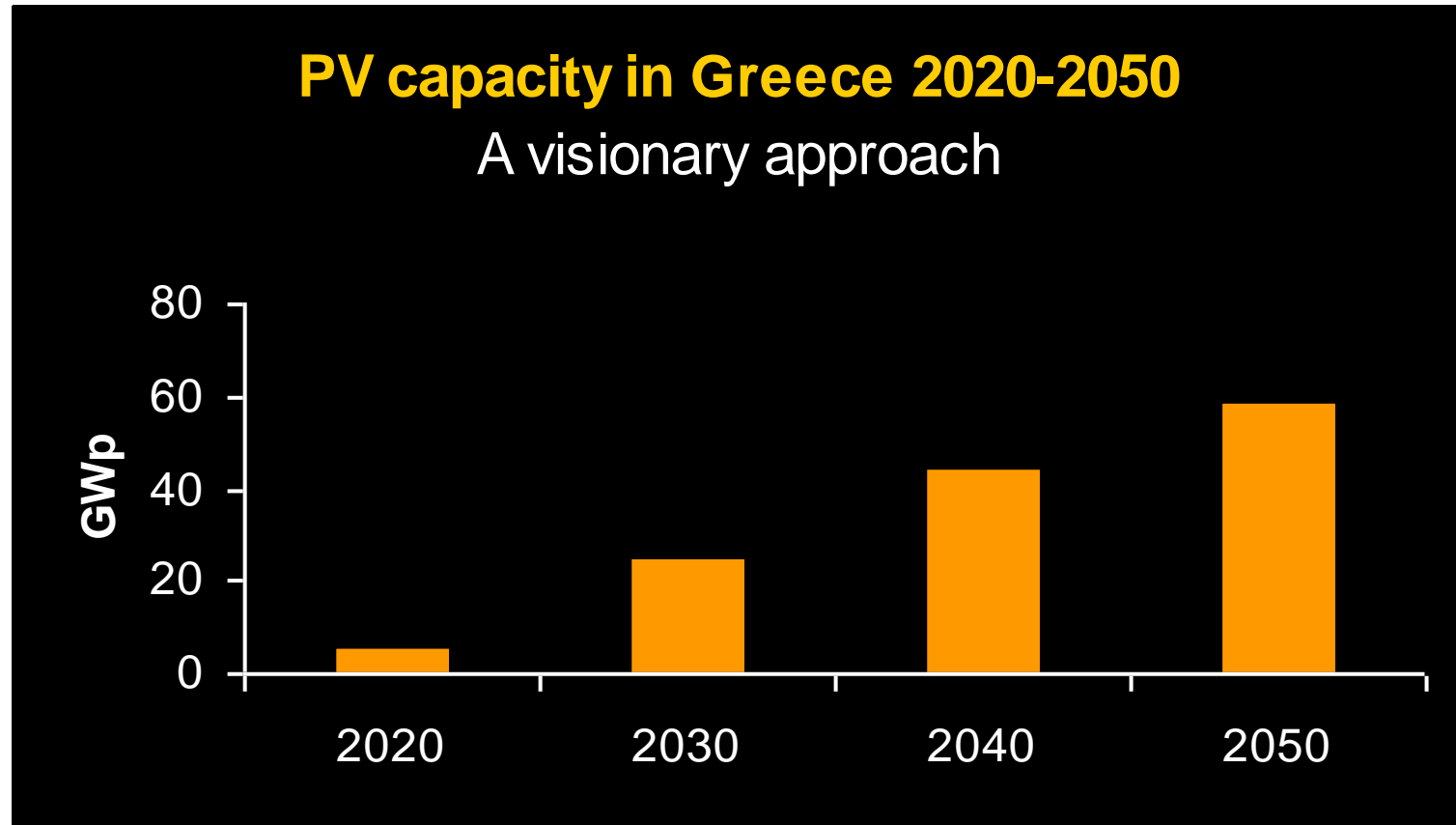
- HELIOS and national PV projects should develop independently
- There is still huge untapped potential for PV in the Greek electricity market

Revisiting the 2020 target for PV

Current **national** target for 2020
(excluding HELIOS) : **2.2 GWp**

HELAPCO's target for 2020
(excluding HELIOS) : **6 GWp**

A PV Roadmap for 2050



A PV Roadmap for 2050

In its “Battle of the Grids” report, **Greenpeace** foresees up to **59 GWp** of PV in Greece in 2050, covering most of the local needs and exporting the rest of energy to Central Europe.

There is nothing more powerful
than an idea whose time has come

Victor Hugo





Thank you