



**European PV
manufacturing –
loosing opportunities
in every hour or
closing missing gaps
for the investments?**



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European PV manufacturing – to be or not to be?

Does the EU response to PV manufacturing challenges is adequate?

Challenges

Import scale vs. European PV production

- **95-97%** import dependency – **€ 12 billion** annual trade deficit
- **41 GW** of PV deployment vs. **0.5 – 9 GW** domestic production
- PV manufacturing target for 2025 – **30 GW** along entire value chain – investment decisions should be taken this year (2023)

Global dynamics:

- Booming of PV deployment
- Extensive support of US IRA

Domestic passiveness:

- EU financial support measures already established, but not yet empowered by the Member States
- EU Member States policy actions lagging from China, India, US extensive support and dedicated programs

Limited scaling possibilities:

- Innovations vs. scaling of PV manufacturing
- PV manufacturing roadmaps not yet delivered
- Magic trio: CAPEX support – OPEX support – sustainability policies/criteria
- Non-synchronized permitting procedures for the sites

European response

Potential for single voice:

- European Solar PV Industry Alliance (ESIA) established – 9th December 2022

Financing support – theoretical, not yet practical:

- Temporary Crisis and Transition Framework (TCTF) adopted – 9th March 2023
- REPowerEU Regulation for financing adopted (€ 20 billion potential) – 27th February 2023
- European Commissions recommendation to include PV manufacturing in RRP's through REPowerEU chapters – 1st February 2023
- Net-Zero Industry Act proposed – recommendation to include PV manufacturing in revised RRP's – 16th March 2023
- Several EU Member States already considering REPowerEU support: Italy, Romania, Netherlands, Spain, Portugal
- ESIA proposals and deliverables – Q2 – Q3 2023

Towards manufacturers friendly ecosystem:

- Net-Zero Industry Act
- ESIA proposals and deliverables

Unlocked financial support possibilities – but not financing itself

2023 – TCTF,
REPowerEU

legislative and financial
support – CAPEX should
be secured



30 GW target

2025 – TCTF,
REPowerEU

legislative and financial
support – OPEX should
be secured and
sustainability policies
applied



30 GW capacities
secured

2030 – TCTF, Member
States and EU legislative
and financial support –
OPEX support and
sustainability policies
maintained



40% PV manufacturing
of total deployed
capacities

Support possibilities under section 2.8 of the Temporary Crisis and Transition Framework (TCTF)

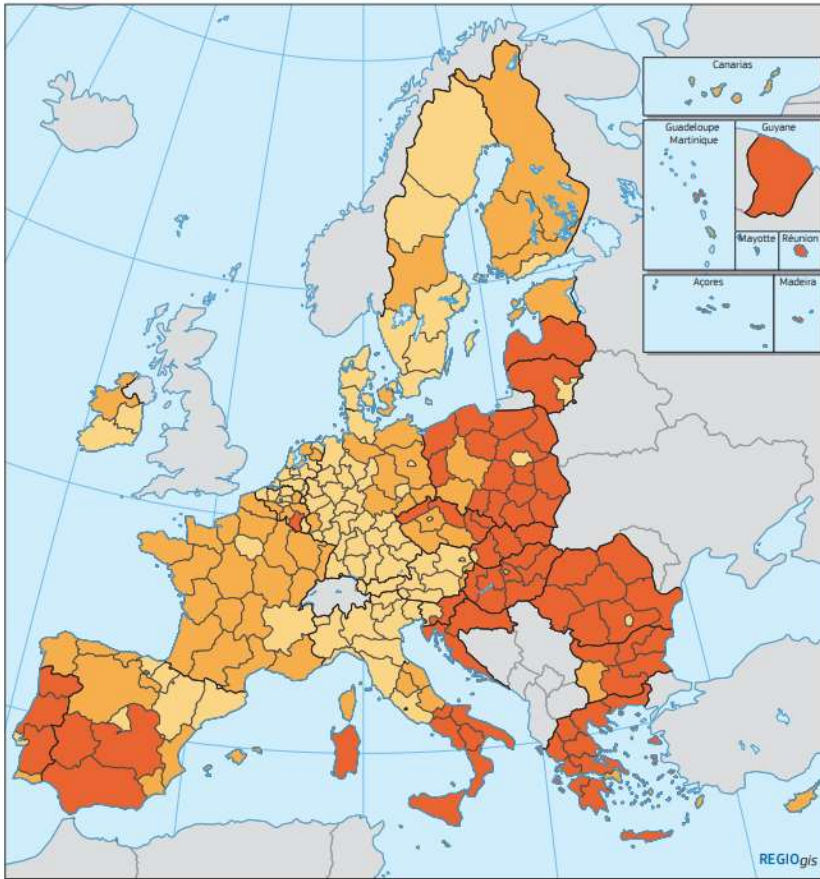
- 15% – 55% CAPEX support depending on the size of the company and region development;
- 20% – 60% tax advantages, loans and guarantees support depending on the size of the company and region development;
- Match checking procedure – level-playing field with other global entities.

Maximum aid limits:

Max. aid amount per undertaking per MS		Location of the investment ¹			
		Non-assisted areas	c-Regions	a-Regions	
		EUR 150 Million	EUR 200 Million	EUR 350 Million	
Max. aid intensities ²	For direct grants	Large enterprises	15%	20%	35%
		Medium sized enterprises ³	25%	30%	45%
		Small enterprises ²	35%	40%	55%
	For tax advantages, loans or guarantees	Large enterprises	20%	25%	40%
		Medium sized enterprises ²	30%	35%	50%
		Small enterprises ²	40%	45%	60%

Source: European Commission.

Spain maintains competitive advantage – will it be utilized by 10-15 GW PV manufacturing capacities?



- Regional aid maps defines eligible financing depending on the development of the particular EU region.
- Spain encompasses **12.93%** REPowerEU grants funding & **biggest support eligibility**

“A” areas in Spain:

- Castilla-La Mancha
- Cuenca
- Extremadura
- Andalucía
- Ciudad de Ceuta
- Ciudad de Melilla
- Canarias

“C” areas in Spain:

- Región de Murcia
- Teruel
- Soria

Conceptual example:

- € 2.59 billion equals **€ 350 million each for 7 large companies**
- Support eligible **without time limits!**
- 35% grant means € 1 billion total CAPEX potential per company
- Theoretical: 1 GW CAPEX – € 30 million: **33 GW actual capacities**
- Realistically Spain could deliver **10-15 GW PV manufacturing capacities (1/3 – 1/2 of the EU target)**

**THANK YOU FOR YOUR
ATTENTION!**