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 RRPs through REPowerEU chapters – 1st February 2023
- Net-Zero Industry Act proposed – recommendation to include PV manufacturing in revised RRPs – 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

2025 – TCTF, REPowerEU legislative and financial support – OPEX should be secured and sustainability policies applied

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

30 GW target

30 GW capacities secured

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:

<table>
<thead>
<tr>
<th>Max. aid amount per undertaking per MS</th>
<th>Location of the investment¹</th>
<th>Non-assisted areas</th>
<th>c-Regions</th>
<th>a-Regions</th>
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<tbody>
<tr>
<td>EUR 150 Million</td>
<td>EUR 200 Million</td>
<td>EUR 350 Million</td>
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<td><strong>For direct grants</strong></td>
<td>15%</td>
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<td>Large enterprises</td>
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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

**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)

**“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
THANK YOU FOR YOUR ATTENTION!