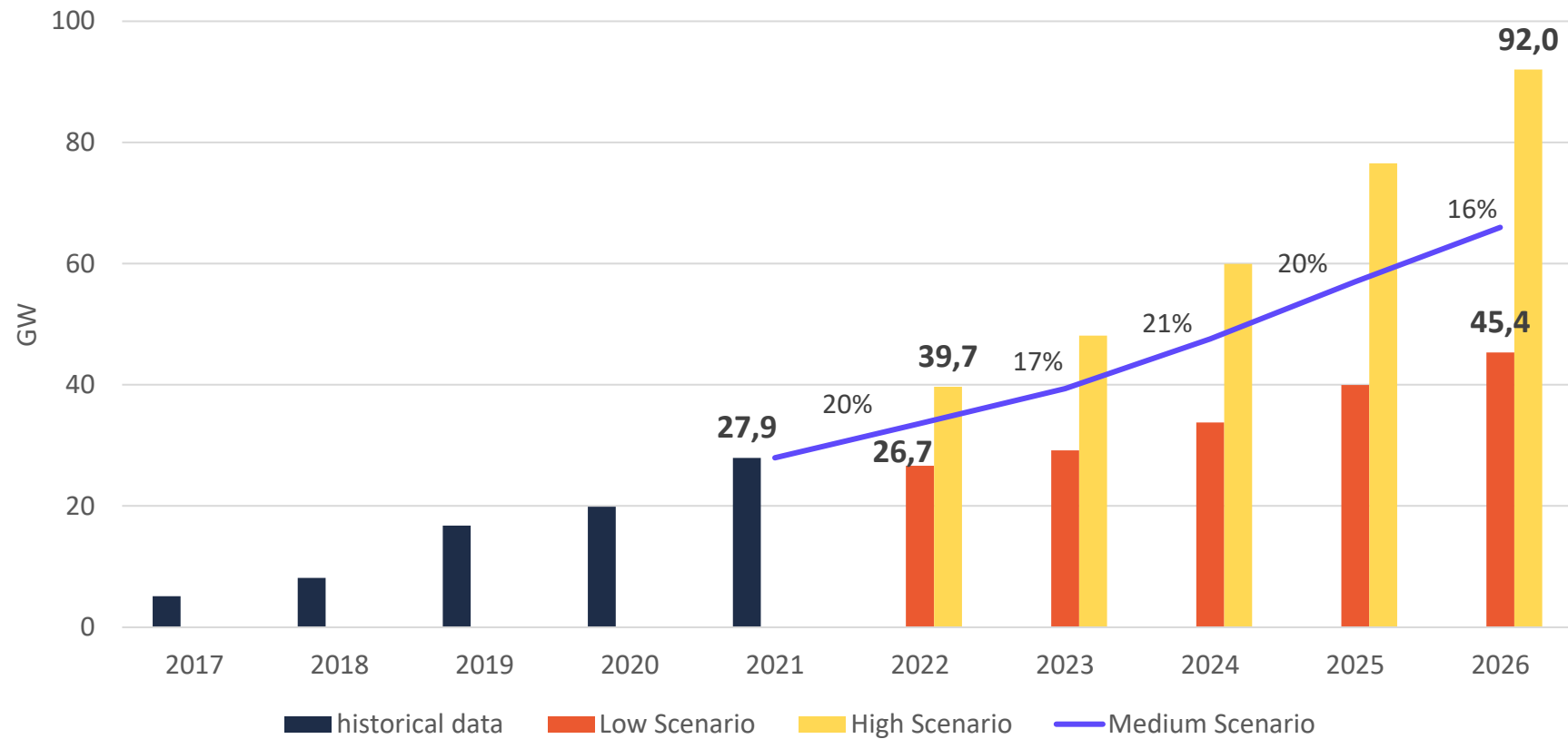


# REPowering our EU - How to speed up the Shift to Renewable Energy in Europe

**Walburga Hemetsberger**  
CEO, SolarPower Europe

# Versatile Solar PV can support EU energy independence - fast

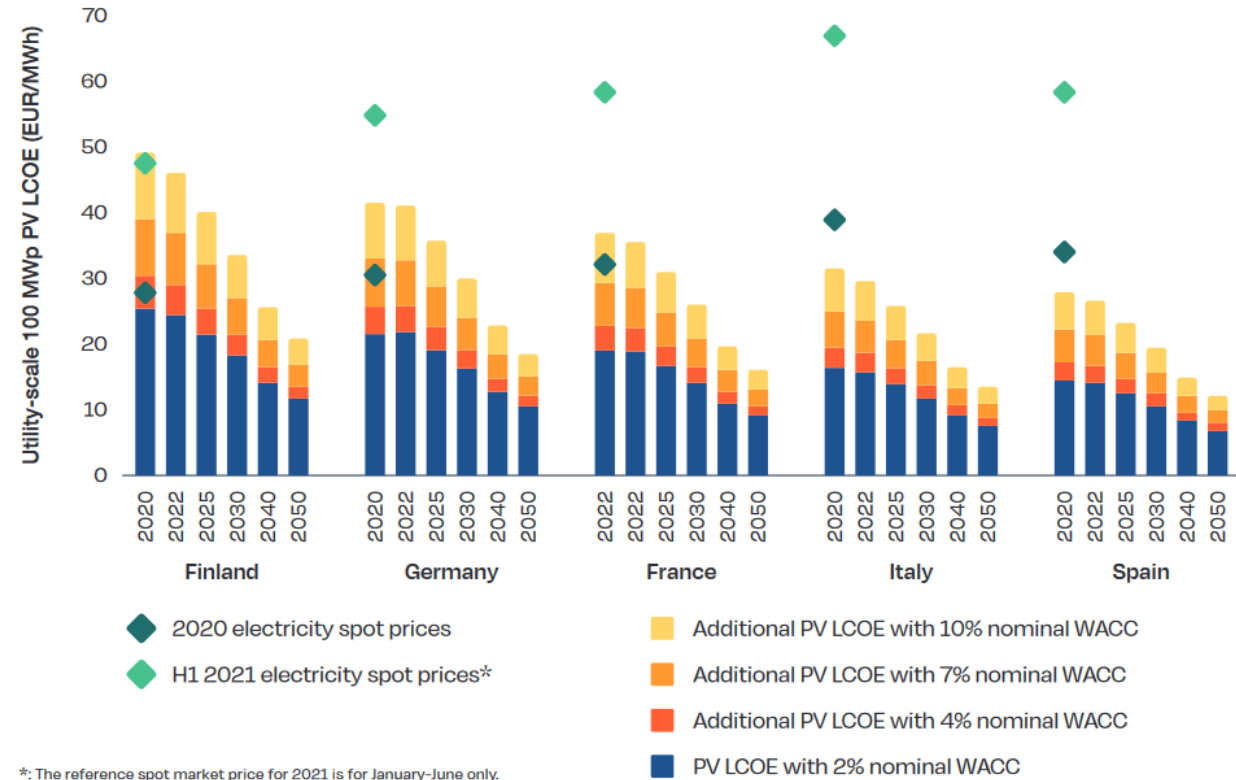


Our May forecast sees EU solar market to add in High Scenario 40 GW in 2022, a 60 GW market as soon as 2024 and 92 GW new capacity in 2026. That's already way too conservative

Also, because it makes economic sense from Finland to Spain

Even more so today with the high energy prices and the development of regulatory frameworks for prosumers.

FIGURE 1 PV LEVELISED COST OF ELECTRICITY (LCOE) IN FIVE EU LOCATIONS, 2020-2050



\*: The reference spot market price for 2021 is for January-June only. Whole year 2021 average will be considerably higher.  
SOURCE: Vartiainen et al. (2021).

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# Solar, Biodiversity, Land Use

Best Practice Guidelines



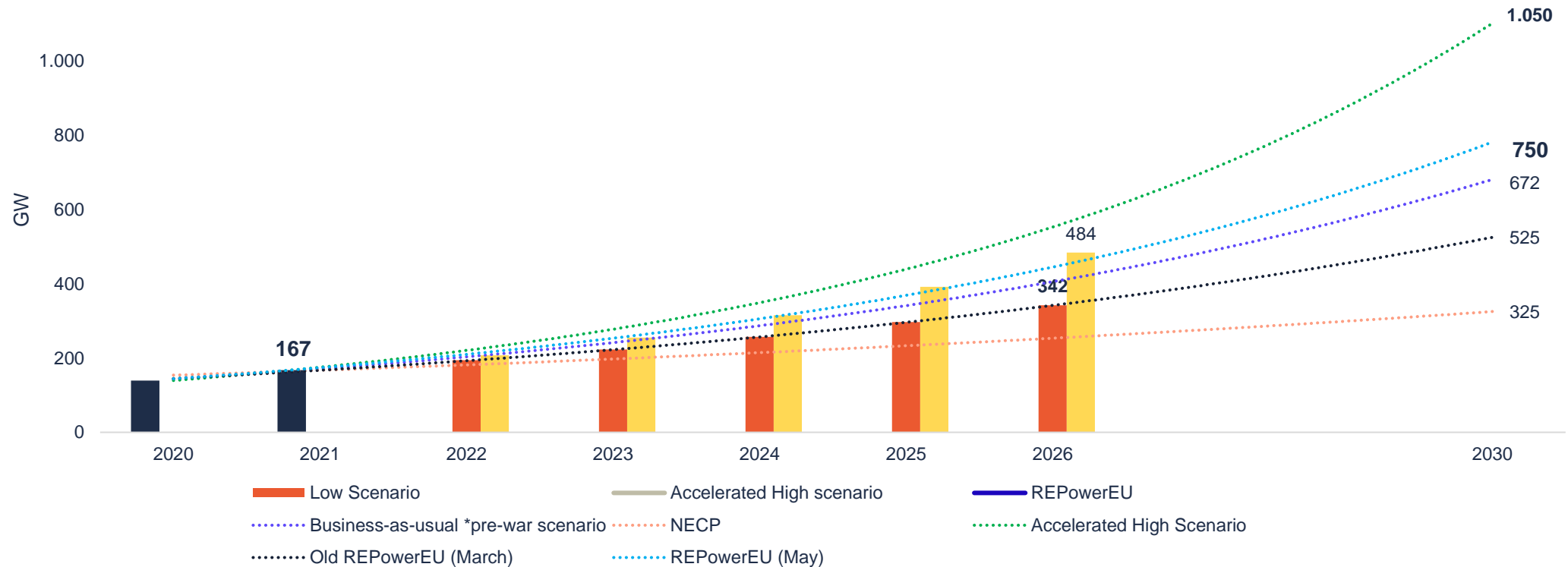
SolarPower  
Europe



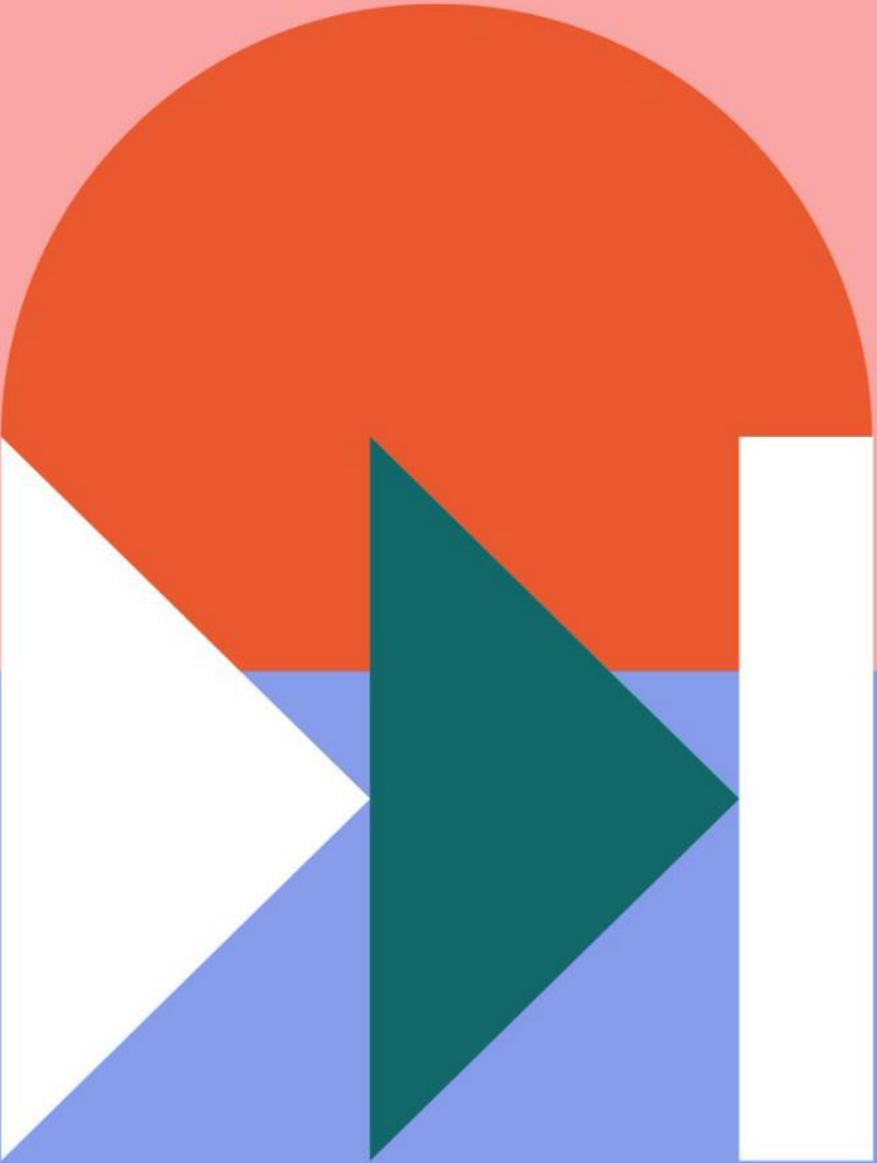
well-designed solar PV can provide environmental benefits, not only by protecting and enhancing local flora and fauna, but also by restoring vulnerable ecosystems



# EU Solar Strategy revises Europe's ambition: 400 GW by 2025 and 750 GW by 2030



With the right policy framework and a **Renewable target of at least 45%**, our Accelerated High Scenario anticipates the EU to reach the **TW level (1,050 GW)** by 2030



**Only Renewables “fast forward” will get us out of the crisis, securing Europe’s energy needs**

**What does it need?**

## REPowerEU: accelerating permitting

- New go-to areas for renewables
- Shorter deadlines for permits(1 yr in go-to areas)
- Silence procedure in go-to areas
- Overriding public interest

→ **Emergency Measures to fast-track Renewables**

## Further acceleration

- **“Priority areas”** to be defined at local level in **six months** to mobilise land available for efficient energy generation – fields, rooftops, carports, noise barriers, etc. – to reach 2025 objectives
- **Repowering**
- Generally: Simplifying and accelerating permit-granting procedures through digital solutions, streamlining of processes and mobilisation of the administrative staff



## REPower EU: Solar Rooftop Initiative

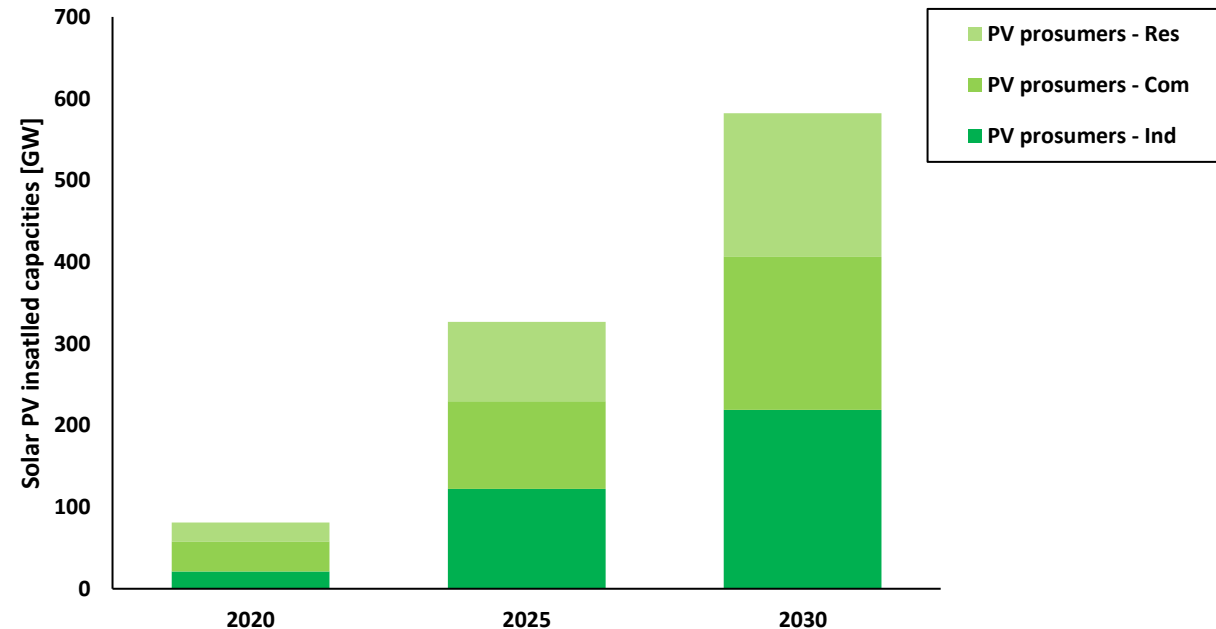
- Solar mandate on all public and commercial buildings by 2027 and all new residential buildings by 2029
- > 1 RES community in every municipality > 10,000 people by 2025

→ Support of ambitious EU Rooftop mandate by Member States and EU Parliament

**SOLAR ON ALL  
NEW BUILDINGS**

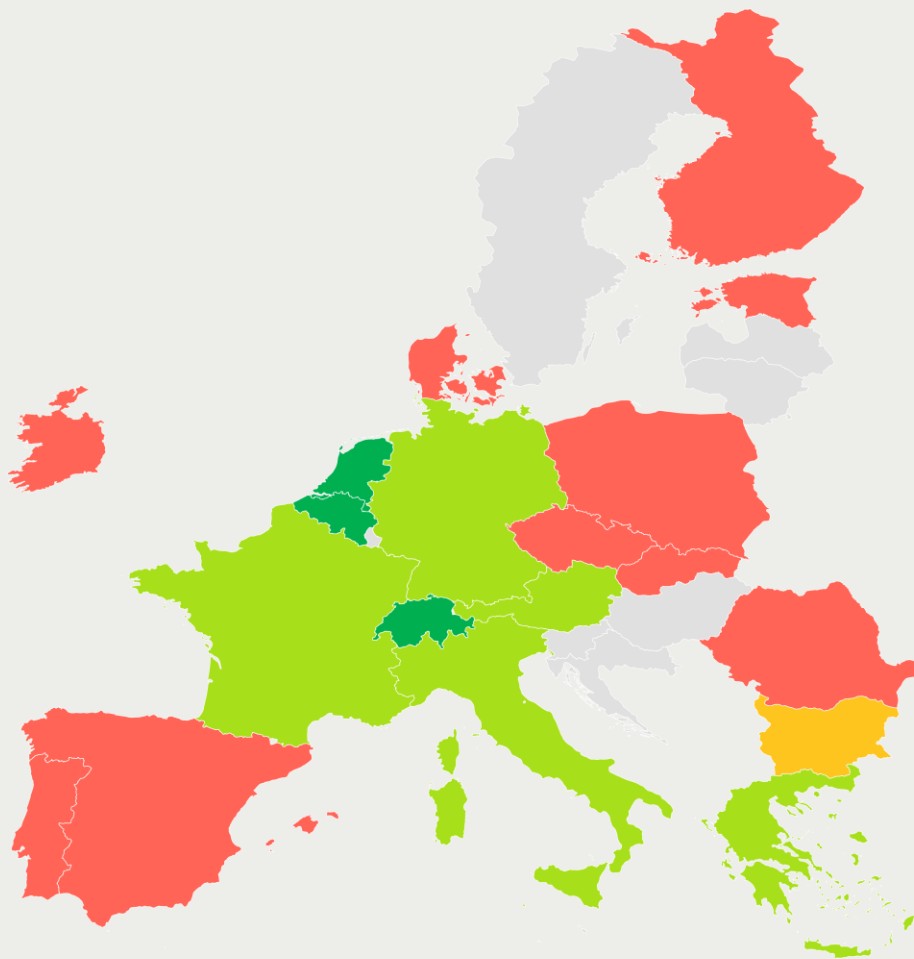
# Solar Rooftops are more than ever key for EU energy security and their potential significantly under-estimated

Rooftops could power  $\frac{1}{4}$  of the EU electricity consumption (JRC)



2/3 of the rooftop potential is commercial and industrial solar (10 kW – 1 MW) – **potential of +400 GW by 2030**

# Solar mandates in Europe



Austria	All federal states have mandates in place or planned, covering new and renovated buildings.
Belgium	A solar mandate on new and existing buildings has been adopted in 2022.
Bulgaria	Energy Performance Classes can be improved by RES technology but it's rarely the option of choice.
France	A solar mandate on newly built and renovated C&I buildings is in place.
Germany	9 / 16 federal states have building solar mandates, mostly on new and renovated buildings, partially already in effect.
Greece	As of 2023, new non-residential buildings must be equipped with solar installations.
Italy	As of 2022 / 2023, new and renovated buildings must be equipped with on-site renewables.
Holland	A solar mandate on all new buildings is planned, with the option to including existing buildings.
Switzerland	All Swiss Cantons have solar mandates and the Canton Basel-Stadt obliges all buildings to carry solar PV by 2035.
Remaining countries	No solar mandates are planned to our knowledge

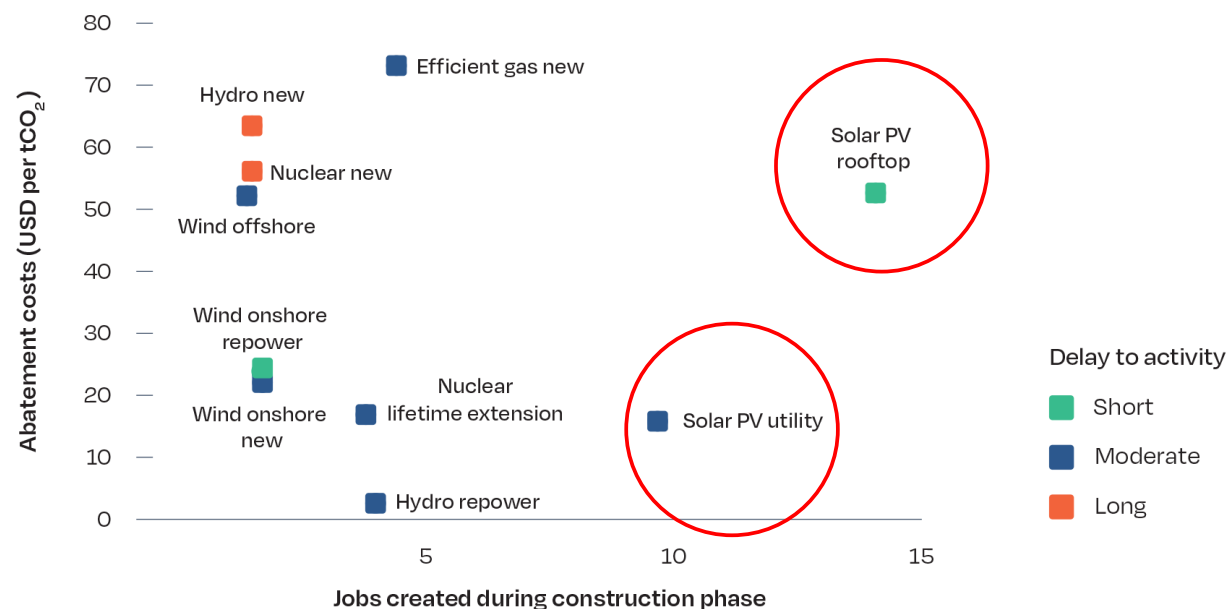
## REPower EU: EU Solar Skills Partnership

- Set to foster cooperation between key stakeholders
- Skills partnership for onshore renewables
- Will unlock EU funding

→ Member States need to analyze their solar skills gaps and provide remedies

# Solar job intensity

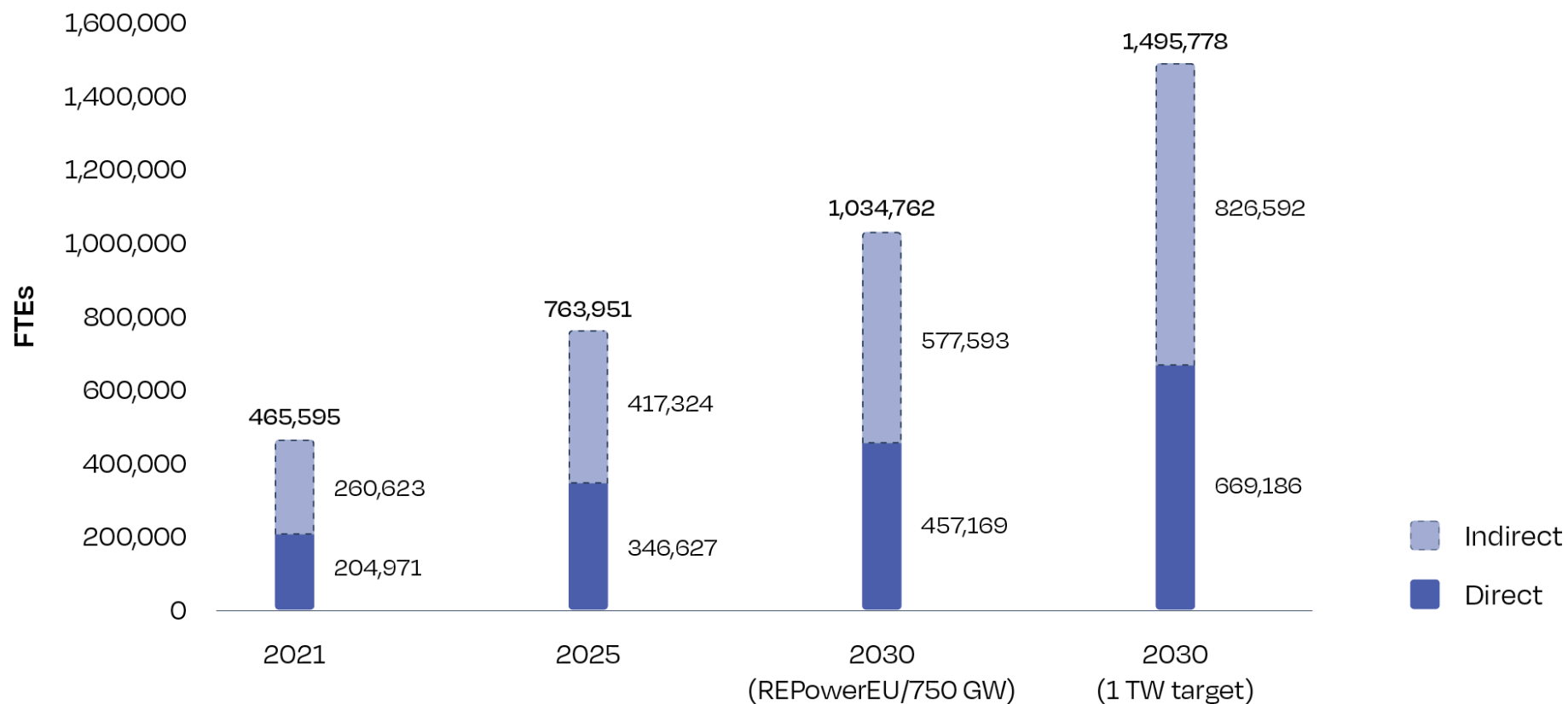
JOB CREATION PER MILLION DOLLARS OF CAPITAL INVESTMENT IN POWER GENERATION TECHNOLOGIES AND AVERAGE CO<sub>2</sub> ABATEMENT COSTS



NOTE: Avoided CO<sub>2</sub> emissions calculated based on displacing coal-fired generation, global averages shown. Delay to activity refers to the time required for capital to be invested into power generation technologies.  
SOURCE: IEA.

Solar is the most job-intensive technology among low carbon and renewable energy solutions.

# Solar Jobs Outlook to 2030



Under the REPowerEU scenario, solar jobs more than double compared to 2021, reaching 1 millions FTEs in 2030. However, with a 1 TW target solar jobs would further increase to 1.5 millions FTEs by the same year.

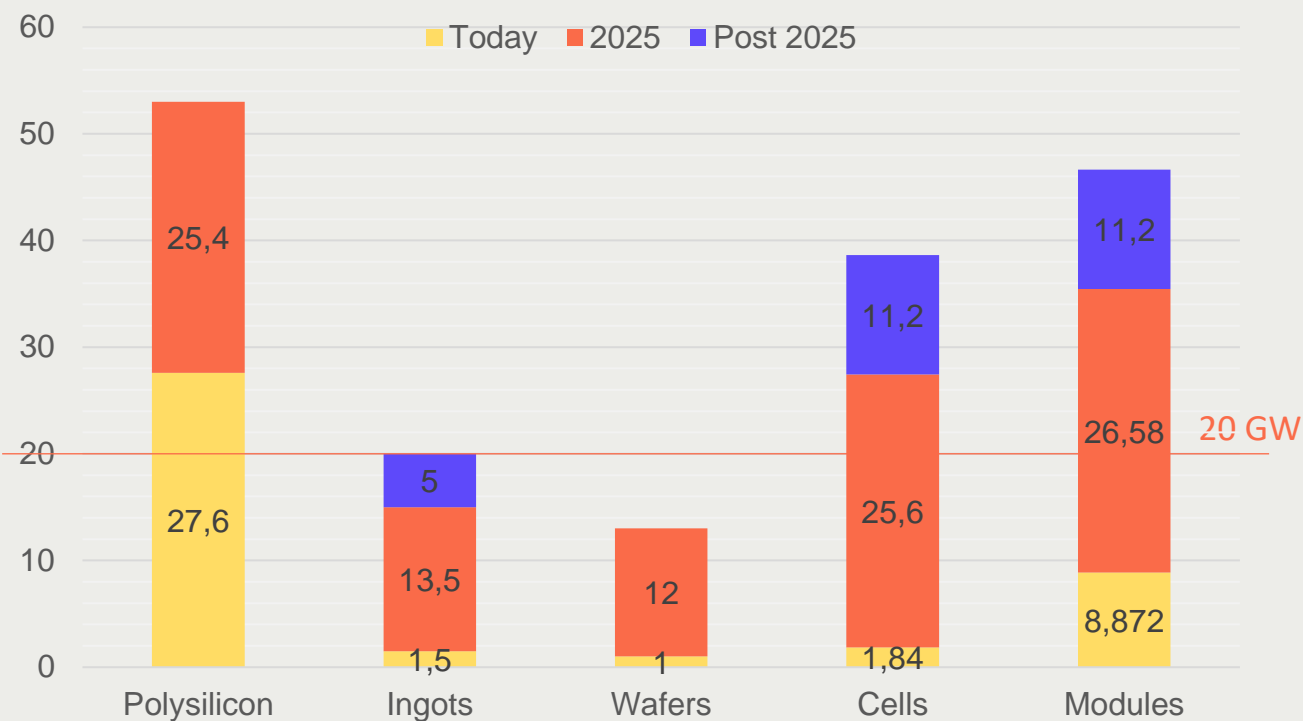
## REPower EU: EU Solar PV Industry Alliance

- Endorses European Solar Initiative target of 30 GW domestic manufacturing by 2025
- Will map & co-ordinate EU funding potential and Supports efforts to establish IPCEI for Solar

→ More efforts needed to re-shore European Manufacturing (similar to US / India)

**A NEW EU SOLAR PV  
INDUSTRY ALLIANCE**

# Europe needs a strong PV Industry – Investment needs are limited



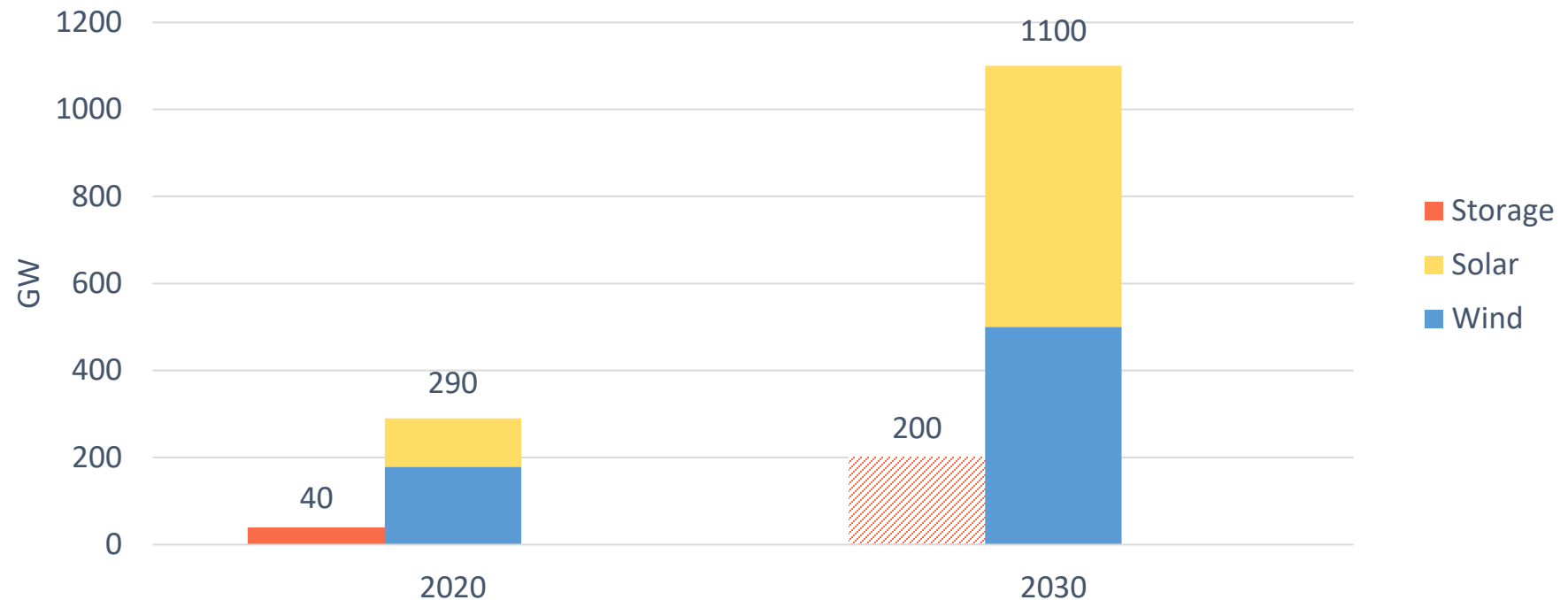
## Estimated total investment needs

PV component	€/GW	Total needs for 20 GW
Polysilicon	100 120 Mn€	2.4 Bn€
Ingots & Bricks		~1 Bn €
Wafers	50 to 60Mn€	1.2 Bn€
Cells & Modules	160-175 Mn€	3.5 Bn€
<b>Total</b>		<b>8.1 Bn€</b>

# Needs beyond REPower EU

# Renewables 24/7 requires a strategy on storage

Installed capacity in 2020 and REPowerEU VRES targets 2030



EU storage capacity needs to grow in order to achieve variable renewables deployment as set out in REPowerEU targets: 500 GW<sub>AC</sub> Wind + 600 GW<sub>AC</sub> Solar (750 GW<sub>DC</sub>) by 2030

**Europe has to make sure that Renewable ambitions are not cannibalised by energy market interventions**



# Thank you!

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