

Joint Research Centre

the European Commission's in-house science service

*Serving society
Stimulating innovation
Supporting legislation*

REPowering our EU?

- The role of PV

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REPowering our EU?

**How to speed up the Shift to Renewable
Energy in Europe**

04/11/2022, EP

www.ec.europa.eu/jrc

JRC's Mission and Role

Vision:

"To play a central role in creating, managing and making sense of the collective scientific knowledge for better EU policy."

"As the science and knowledge service of the Commission our mission is to support EU policies with independent evidence throughout the whole policy cycle."

Serving society, stimulating innovation, supporting legislation

Content

- **EU Policy Framework**
- **Status of PV in the EU**
- **Which scenario**
- **Conclusions**

EU Policy Framework

- **European Green Deal (12/2020)**
- **Proposal of European Climate Law (03/2020)**
- **The Recovery and Resilience Facility (01/2021)**
- **Recast of RES Directive [2018/2001/EU](#)**
- **Solar Strategy (05/2022)**



Ongoing Recast of Directive 2018/2001/EU

- **40 to 45 % RES share in the EU by 2030**
- **No binding targets at Member State level**
- **Transparency regarding RES electricity integration**
- **European wide certification scheme for installers**
- **Governance Regulation stipulates: MS must submit updated NECPs by 2023**

Solar Strategy

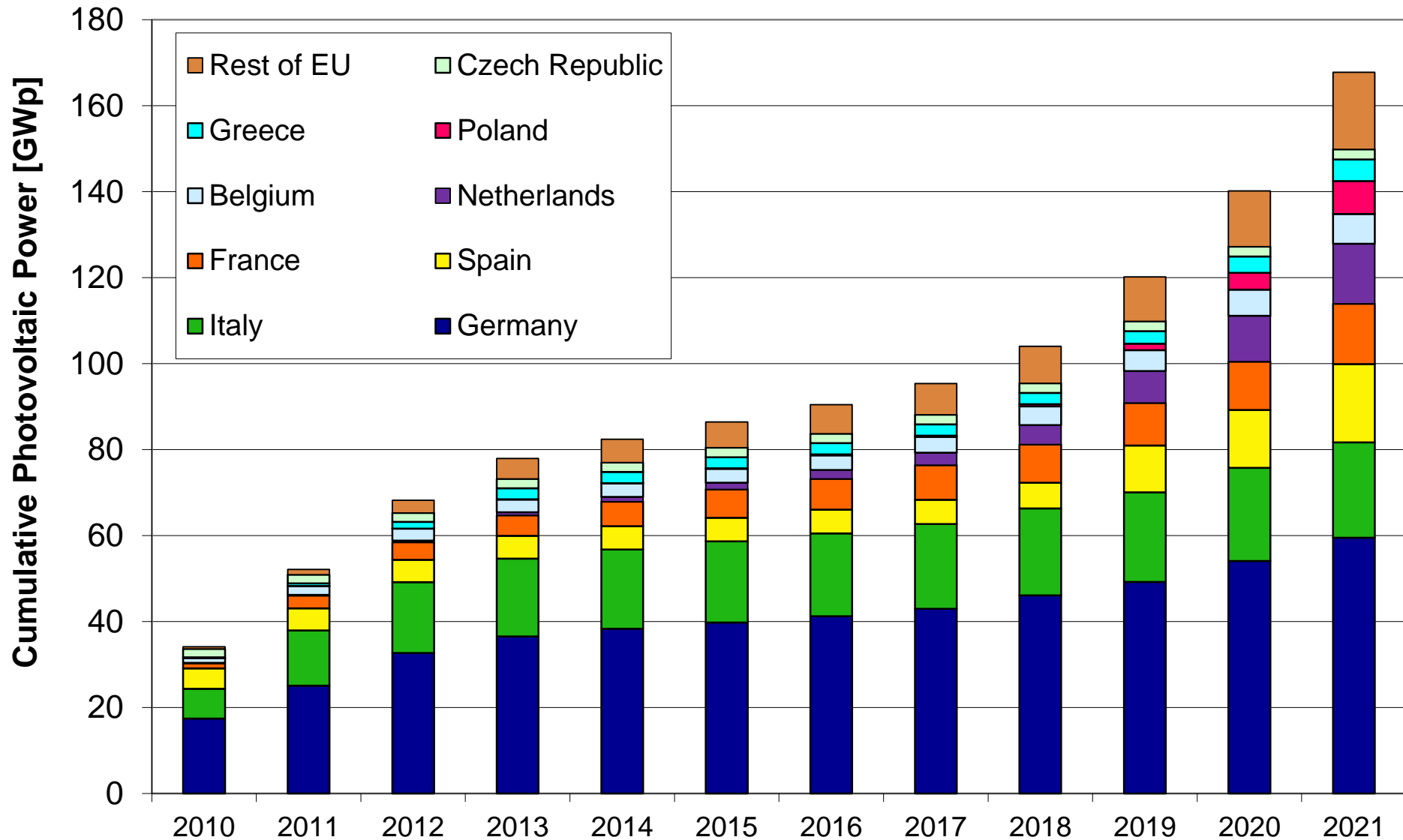
- **European Solar Rooftops Initiative**
- **Utility scale deployment**
- **Solar value for buildings, districts and cities**
- **Preparing the energy network for the efficient distribution of solar energy**
- **Establishment of a resilient supply chain**
- **Supporting investments regarding EU PV manufacturing (de-risking, funding)**

Status of PV in the EU

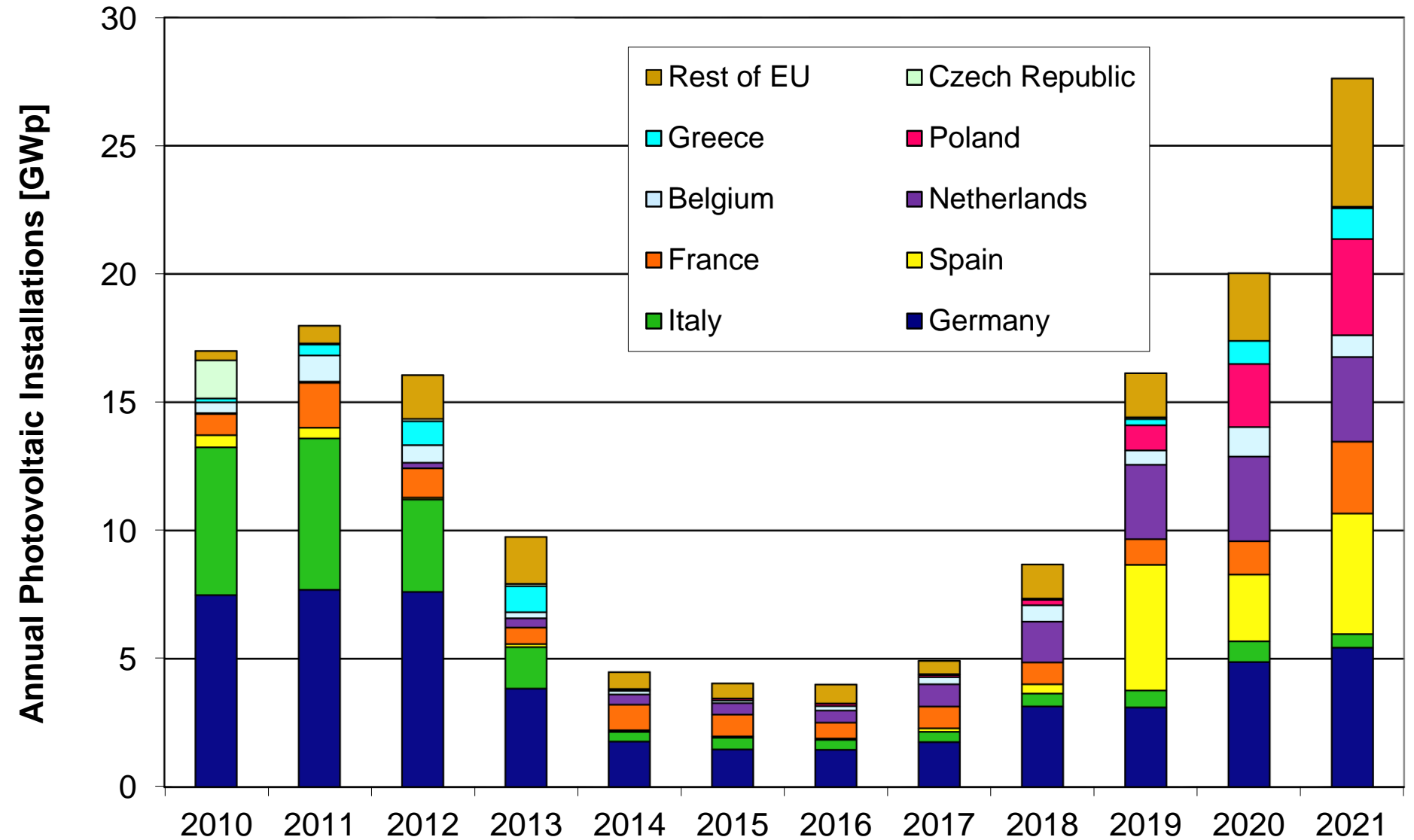


Picture: © Valentin Jäger-Waldau (pixabay #4518970)

Grid Connected PV in the EU



Annual EU PV Installations



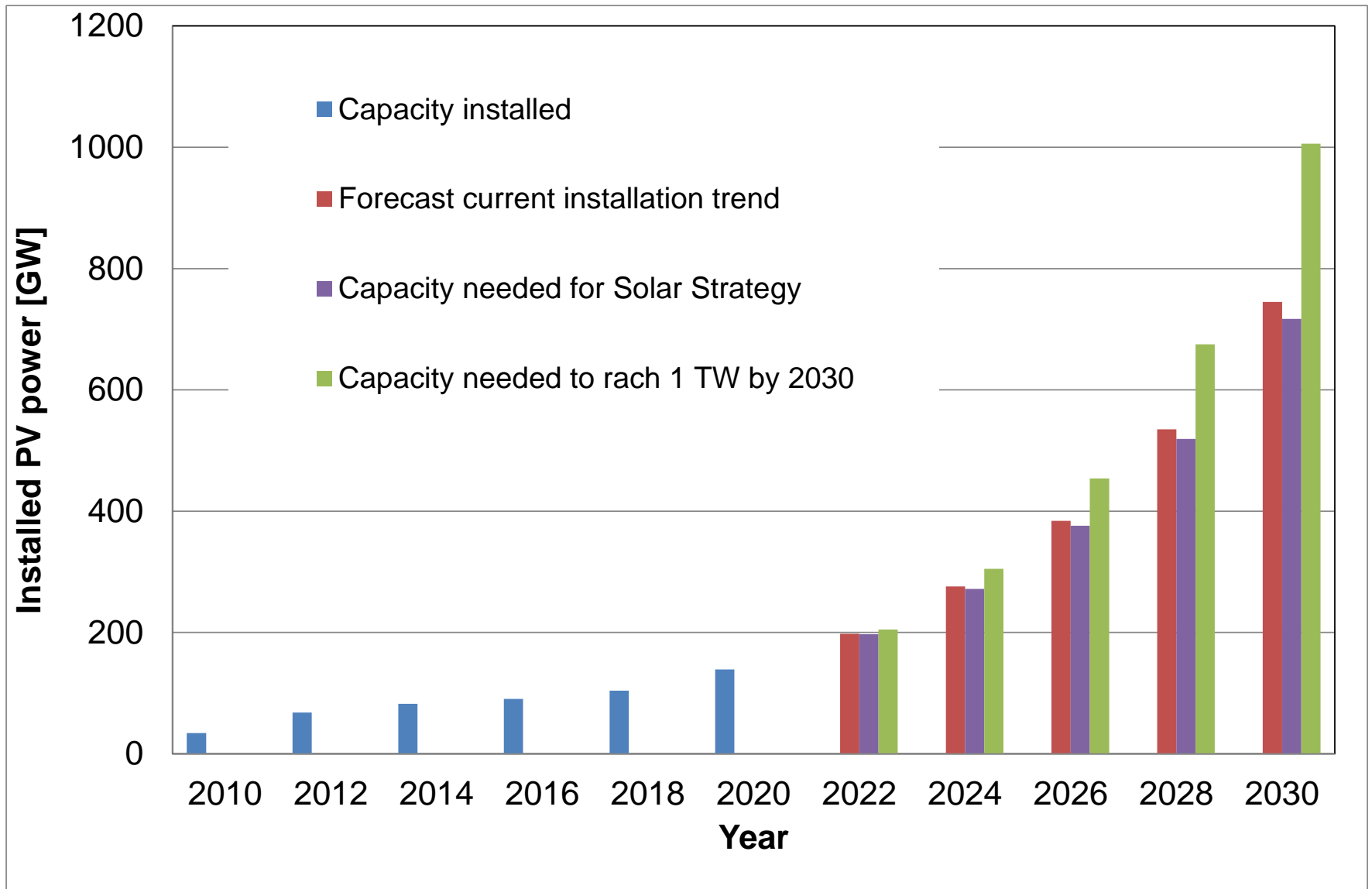
EU PV capacity scenarios 2021

	Market Trend	NECP High	55% GHG red.	55% + H₂
PV capacity [GW_p]	614	314	468	563
Δ PV capacity from 2020 [GW_p]	475	175	329	424
Compound Annual Growth Rate 2020-2030	16%	8.5%	13%	15%

EU PV capacity scenarios 2022

	Market Trend	Solar Strategy	1 TW
PV capacity [GW_p]	745	720	1 000
Δ PV capacity from 2021 [GW_p]	577	552	832
Compound Annual Growth Rate 2020-2030	18%	17.5%	22%

Necessary EU PV Installations

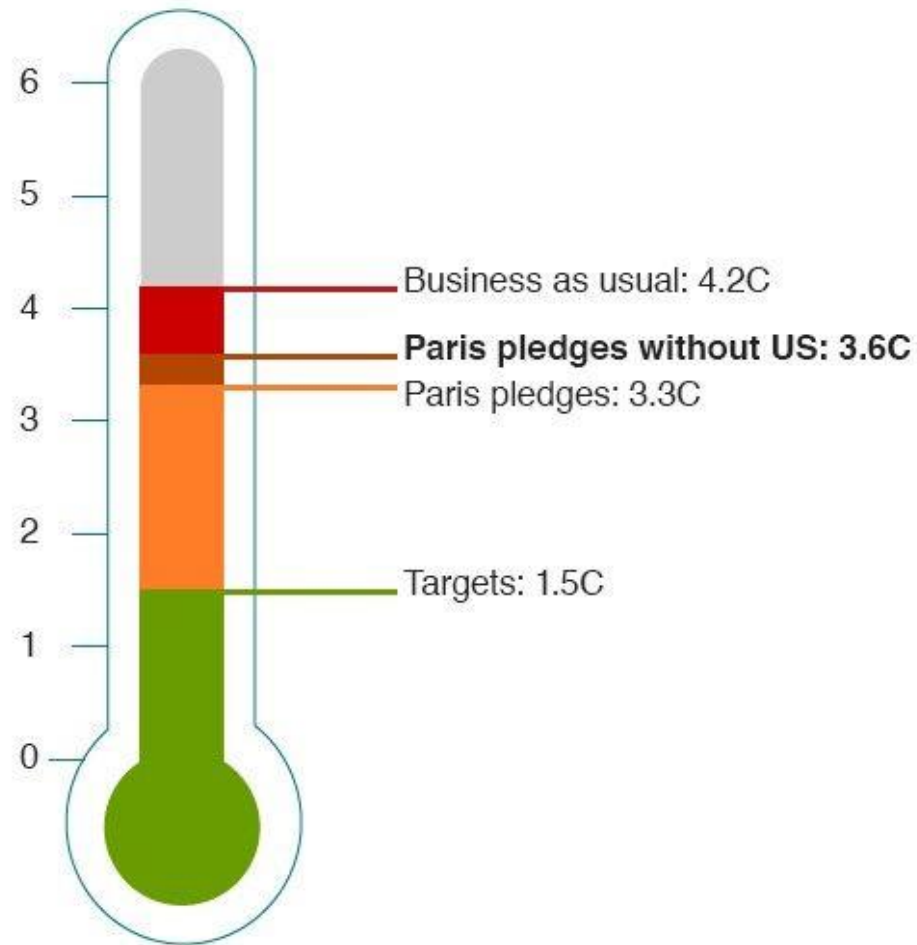


Conclusions

- The European Green Deal calls for an accelerated GHG reduction by 2030 (min 55%)
- Solar photovoltaics is one of the pillars to achieve this GHG reduction
- The 2022 Solar Strategy calls for more deployment of PV in the EU
- The European Recovery Plan + Solar Strategy could make a European solar value chain possible
- More efforts needed to accelerate the transition to a net zero CO₂ energy sector

Increase in global temperature by 2100

C°



Uncertainty range on US prediction is 2.1C to 4.7C

Source: Climate interactive

BBC

Thank you for your attention!