

Switching gas off: the role of solar under the REPowerEU

PV Magazine Roundtables Europe

29 June 2022



The REPowerEU plan details key measures to reduce Russian reliance and fast forward the clean transition

- The European Commission's REPowerEU plan was released on 18th May 2022, and follows the EU Green Deal framework
- It is about rapidly reducing dependence on Russian fossil fuels by fast forwarding the clean transition and joining forces between Member States to achieve a more resilient energy system

EU Green Deal framework



Key measures in the REPowerEU plan

1. Boost energy savings

- EU energy efficiency target raised from 9% to 13% by 2030
- *EU Save Energy and Energy Performance of Buildings Directive*

2. Diversify energy imports

- EU Energy Platform for the voluntary common purchase of gas, LNG and hydrogen

3. Reinforce preparedness

- Adoption of gas storage regulation
- Provisional agreement for Member States without storage facilities to have access to gas storage reserves in other MS

4. Smart investment

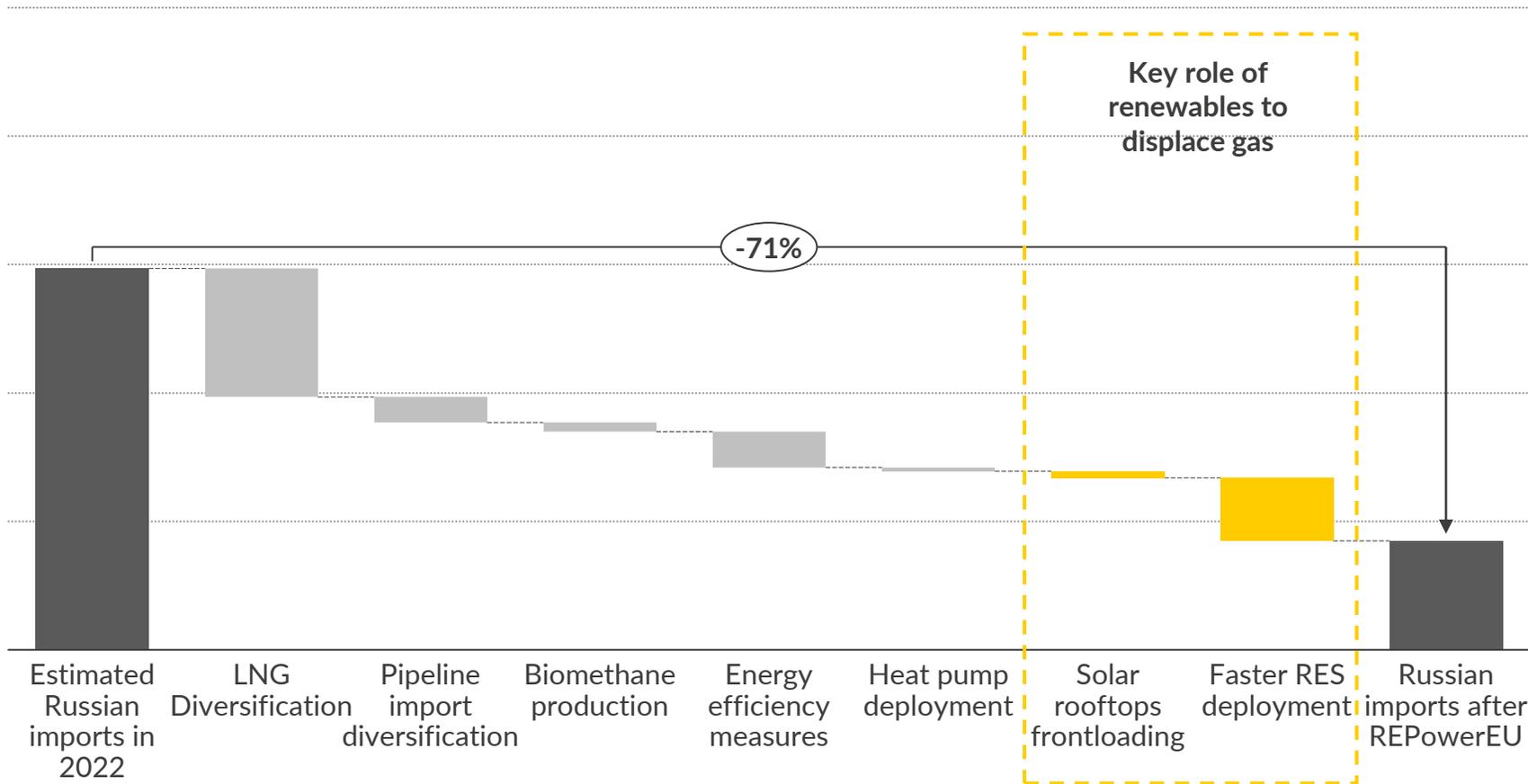
- EUR 210 billion investment until 2027 in addition to Fit for 55
- EUR 225 billion already available and proposal to increase it with EUR 20 billion in grants from the sale of EU ETS

5. Reduce fossil fuel use

- EU renewable energy target raised from 40% to 45% by 2030
- Renewables capacity target raised to 1236 GW by 2030, from 1067 GW in Fit for 55
- Solar PV target of 320 GW by 2025, and ~600 GW by 2030
- EU Solar Strategy
- Increase domestic production of green hydrogen and biomethane
- Increase rate of deployment of heat pumps

Based on the REPowerEU, Russian imports could fall by 71% with rapid RES deployment being the second key driver for this decrease

Estimated reduction in Russian imports from quantifiable policies announced in the REPowerEU plan¹
bcm equivalent²



- Aurora estimates pre-war Russian imports in 2022 could fall by 71% based on the REPowerEU measures
- Diversification of supply side will contribute the most to independence from Russian gas supplies
- On the demand side, a rapid deployment of renewables including rooftop solar results in higher displacement of gas demand, reducing it by 17%

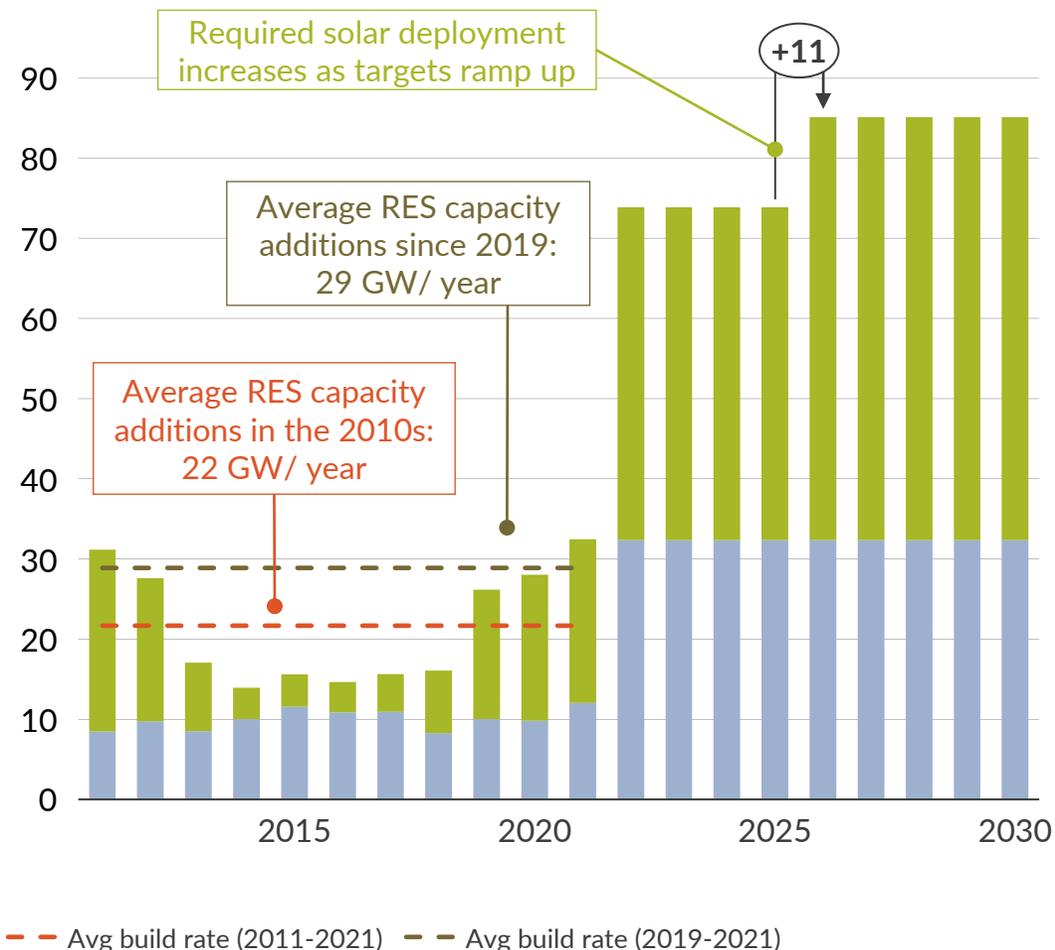
1) Imports and reduction measures shown for EU countries only. 2) Numbers redacted.

To achieve the solar target of 320 GW by 2025, 42 GW of solar would need to be deployed annually

Target installed RES capacities by 2030¹
GW



Wind and solar capacity commissioned per year¹
GW



- The REPowerEU plan adds 169 GW of solar PV to the Fit for 55 target, aiming for 320 GW by 2025 and almost 600 GW by 2030
- 42 GW of solar would need to be deployed annually until 2025, rising to 53 GW from 2026 onwards while 32 GW of wind would need to be deployed annually to 2030
- These represent a cumulative average of 80 GW required annually, 4x faster than average build rate over the last 10 years
- To support deployment of these capacities, the Commission also presents the *EU solar strategy* and *European Solar Rooftop Initiative* and plans to speed up permitting and innovation

1) Shown for EU-27 only. 2) As at the end of 2021. 3) Other RES includes hydro and biomass.

The EU Solar Energy Strategy outlines a comprehensive vision to rapidly deploy solar energy

The [EU Solar Energy Strategy](#) outlines a comprehensive vision to swiftly reap the benefits of solar energy, and presents four initiatives to overcome key challenges faced



European Solar Rooftops Initiative

- Solar generation potential of rooftops could provide almost 25% of the EU's electricity consumption
- Permitting limited to a maximum of 3 months
- Installation of rooftop PV made compulsory for:
 - All new public and commercial buildings by 2026
 - All existing public and commercial buildings by 2027
 - All new residential buildings by 2029



Faster and simpler permitting procedures

- Defined clear and short deadlines for all the permitting steps
- Establish maximum deadlines for all relevant stages of the environmental assessment procedure
- Create a single unified application process for the permitting process
- Allow applicants to update the technology specifications through the process to facilitate uptake of innovative technologies



Availability of skilled workforce

- Ensure availability of an abundant skilled workforce to face up the challenge of producing and deploying solar energy all across the EU
- Develop training programmes fit for purpose, taking into account the potential to increase women's participation
- Set up an EU large-scale skills partnership



European Solar PV Industry Alliance

- Secure diversity of supplies through more diverse imports
- Scale up solar manufacturing in the EU to mitigate supply risks
- Facilitate access to financing:
 - InvestEU can provide de-risked financing to private investments
 - Innovation Fund can channel funding towards innovative zero and low-carbon equipment
 - Recovery and resilience funds to support relevant projects

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