



Renewables 2019

Market analysis and forecasts to 2024

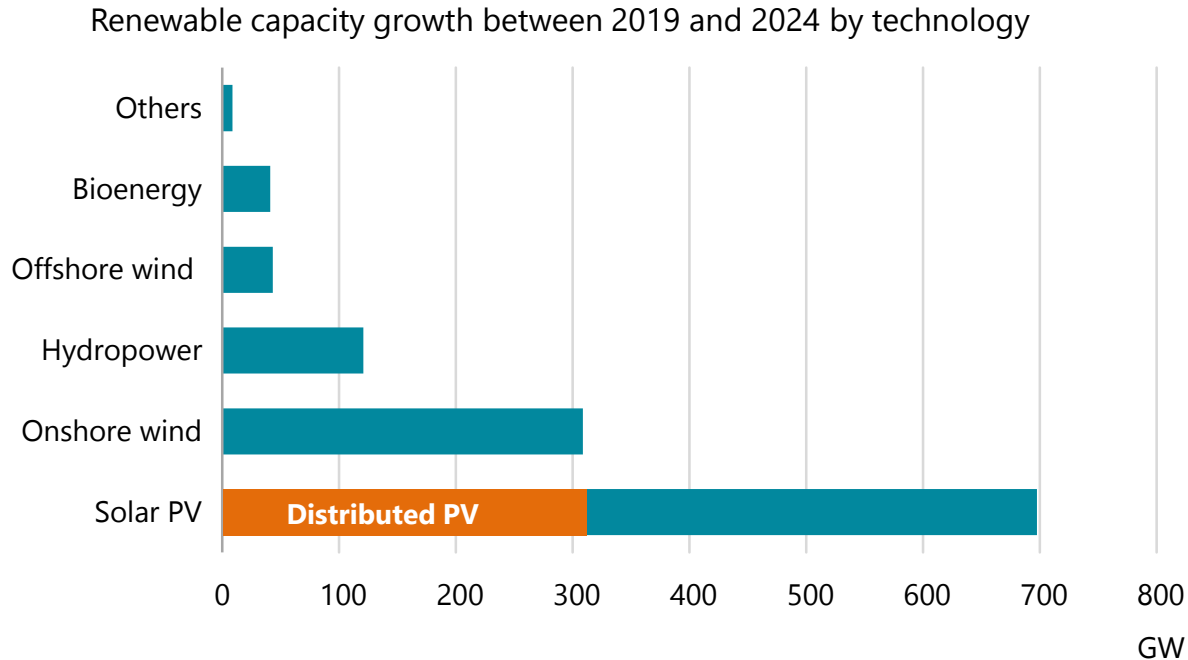
Under embargo press webinar

Paris – 17 October 2019

Context

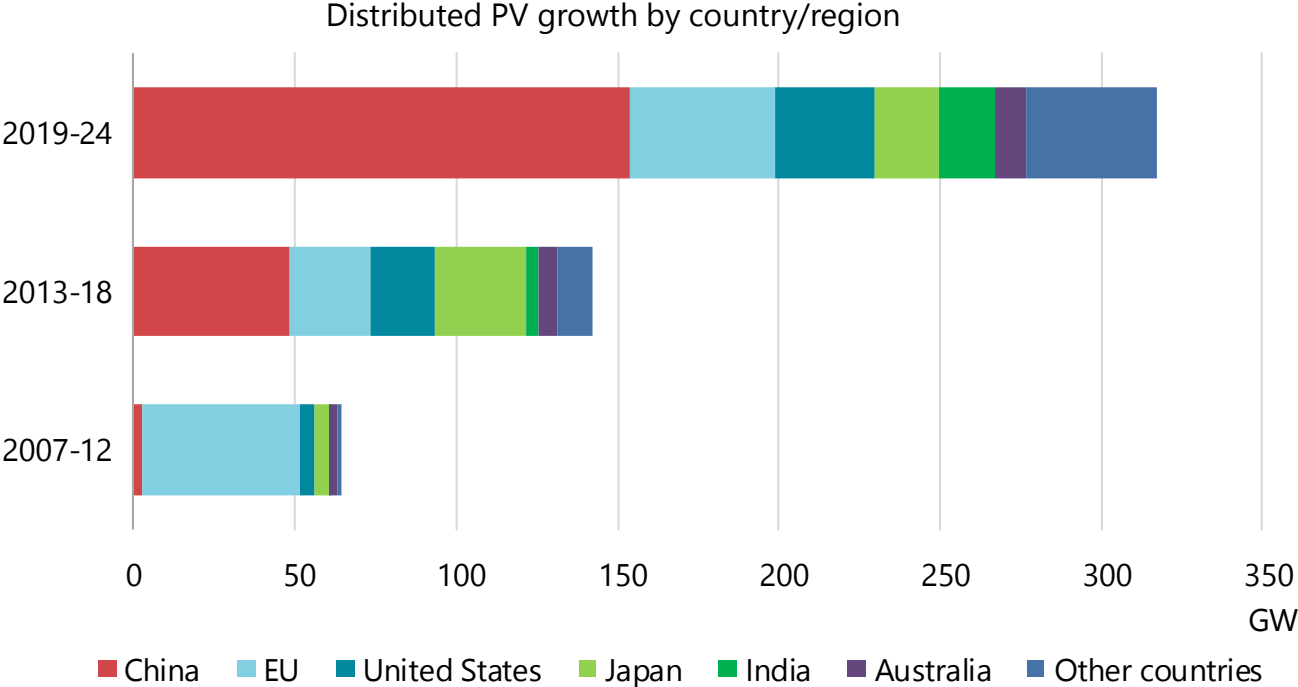
- Despite stalling in 2018, global renewable capacity additions are set to rebound in 2019 by 12%, with solar PV driving their strongest increase in four years.
- Wind and solar PV costs continue to decline rapidly, improving their cost competitiveness versus new coal and natural gas plants.
- Distributed PV systems in homes, commercial buildings and industry have almost tripled since 2014, transforming the way electricity is generated and consumed.
- The share of renewables in world electricity generation reached 25% last year while remaining at 10% in heat and below 4% in transport demand.
- Decarbonising electricity production is a key step, but there is also an urgent need to transform “hard to abate” sectors: transport, buildings and energy-intensive industries (iron & steel, cement etc.).

Solar PV drives strong rebound in renewable capacity expansion



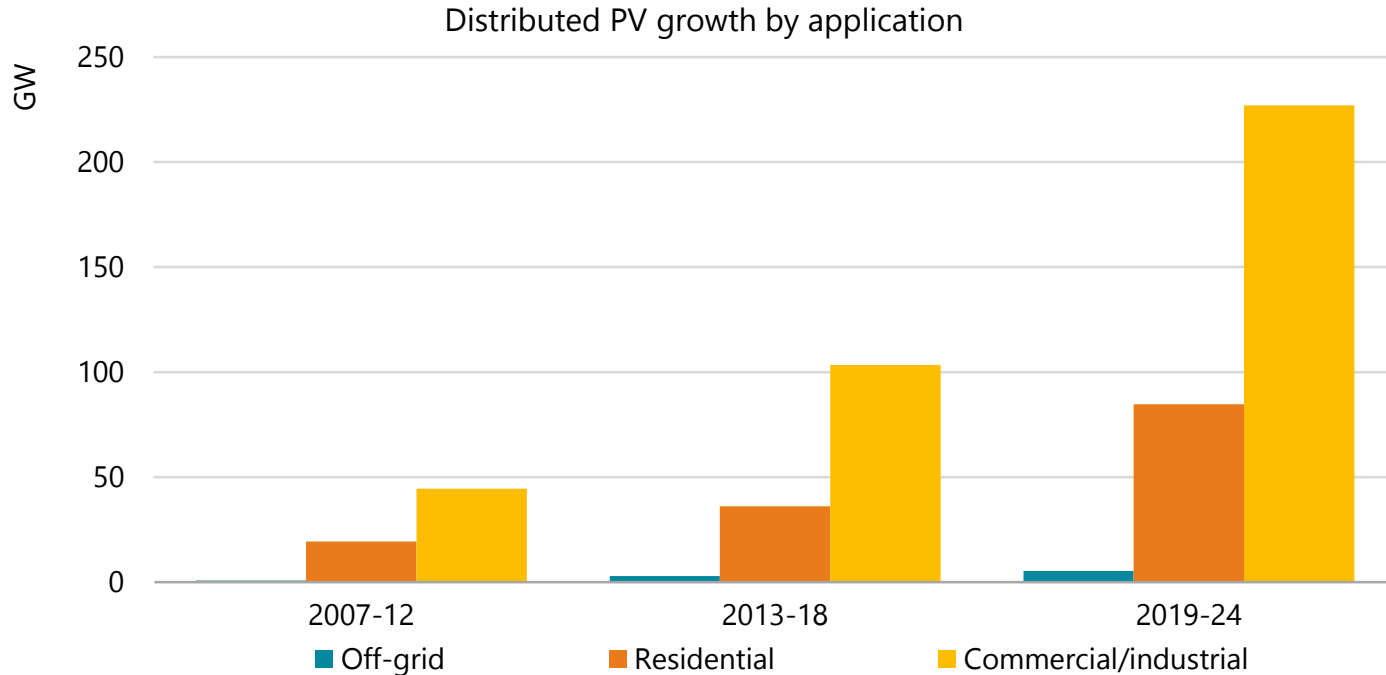
Renewables expand by 50% through 2024, with distributed PV alone growing as much as onshore wind. The IEA forecast is 14% higher than last year due to improved policies and increasing competitiveness

Distributed PV expansion more than doubles



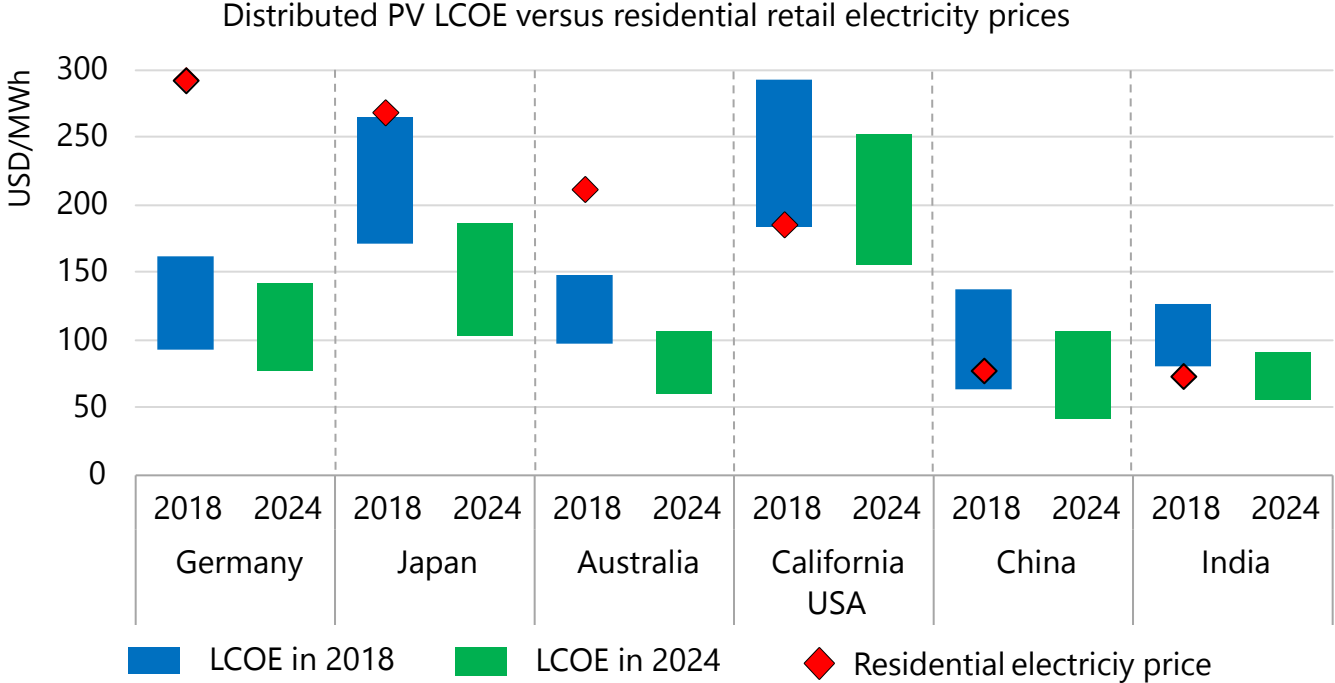
Over the next five years, China's distributed PV capacity becomes the world's biggest, growth in the EU resumes, and other countries such as India emerge as new markets

Commercial buildings and industry lead distributed PV growth



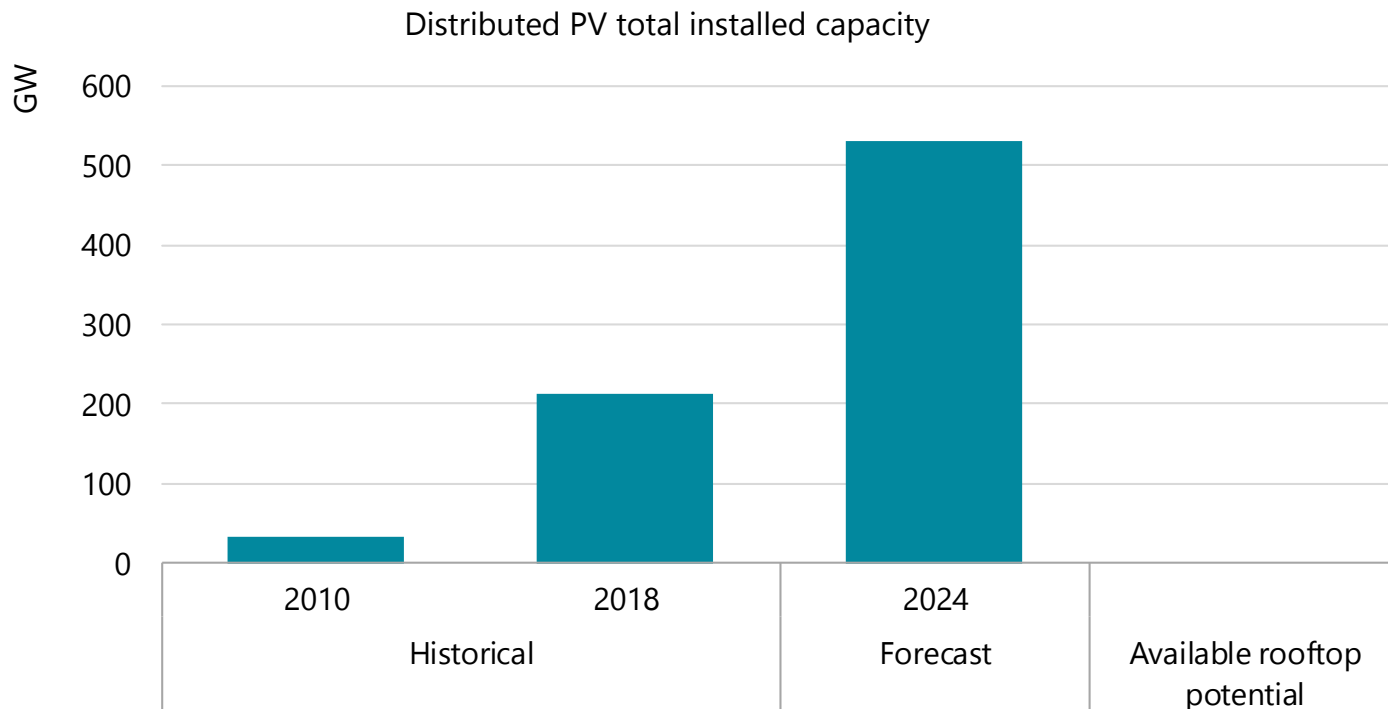
Economies of scale + better match between PV output and electricity demand in commercial/industrial applications enable higher self-consumption, saving more on electricity bills than in case of residential

Distributed PV increasingly cheaper than retail electricity prices



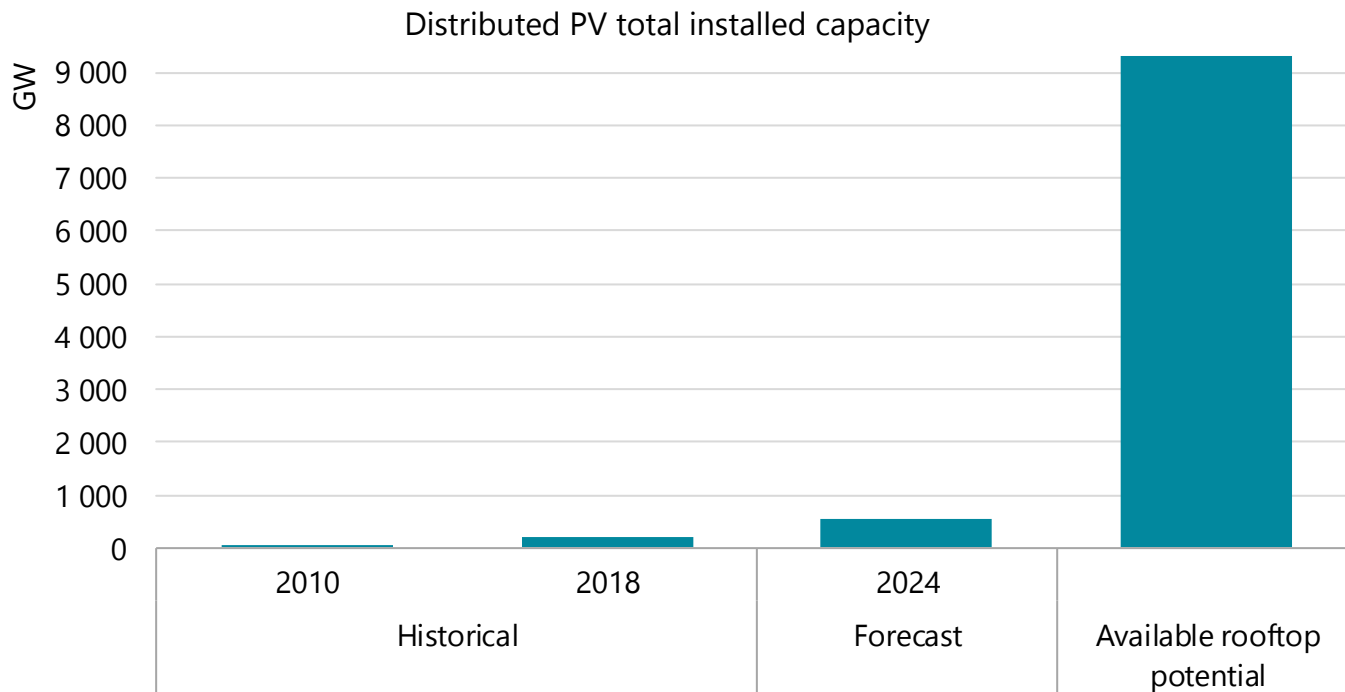
Continuing decline of solar PV costs widens the gap with retail electricity prices, increasing distributed PV's economic attractiveness for private investors

Towards a distributed solar PV boom?



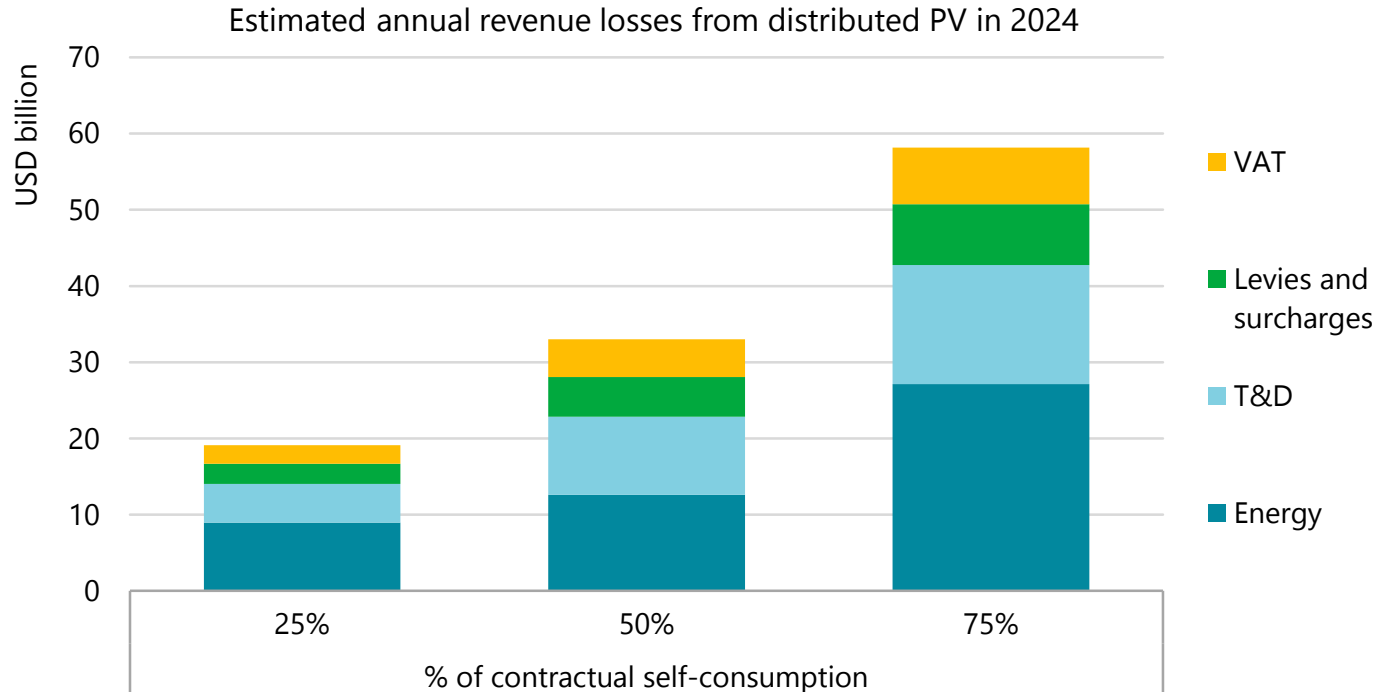
With improved policies, lower costs and rapid adoption, total distributed PV capacity more than doubles by 2024. However, this represents only 6% of the global technical potential.

Towards a distributed solar PV boom?



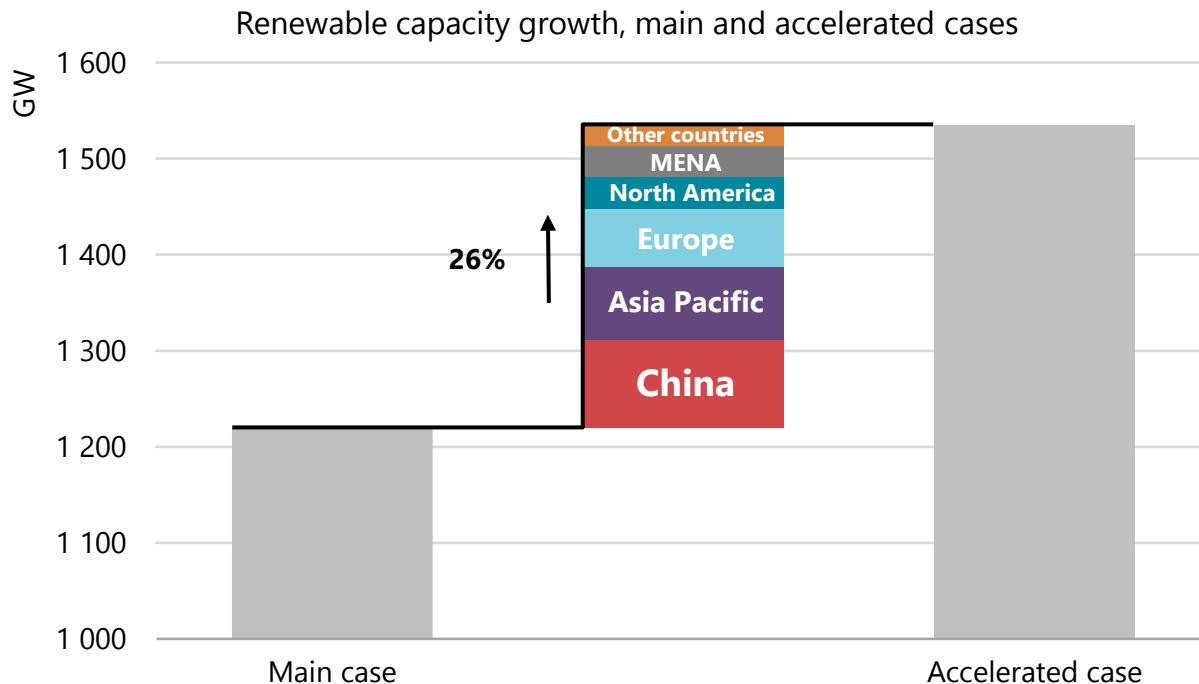
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Distributed PV's rapid growth must be managed



New policies and market reforms are needed to find a balance between the opposing interests of distributed PV owners, energy & distribution companies, and electricity consumers in general

Accelerated renewables growth is possible over the next five years



By addressing grid integration, policy uncertainty and financing challenges, governments can accelerate renewables growth by one-quarter, putting renewable electricity on track with sustainable energy goals

Conclusions

- Solar PV and wind account for 70% of global power capacity expansion over the next five years, calling for policies targeting their cost-effective and secure integration in power systems.
- Distributed solar PV is responsible for almost half of total solar PV growth, expanding as much as onshore wind through 2024.
- Commercial and industrial applications drive distributed PV expansion globally, as their supply and electricity demand are better matched than for residential, enabling larger savings on retail bills.
- Distributed PV growth requires policies that find the best compromise between attracting investment, securing enough revenues for grids and ensuring a fair allocation of grid costs for all consumers.
- Governments can put renewables on track with climate, air quality & energy access goals through stable policies addressing system integration & investment risk and focusing more on transport and heat.