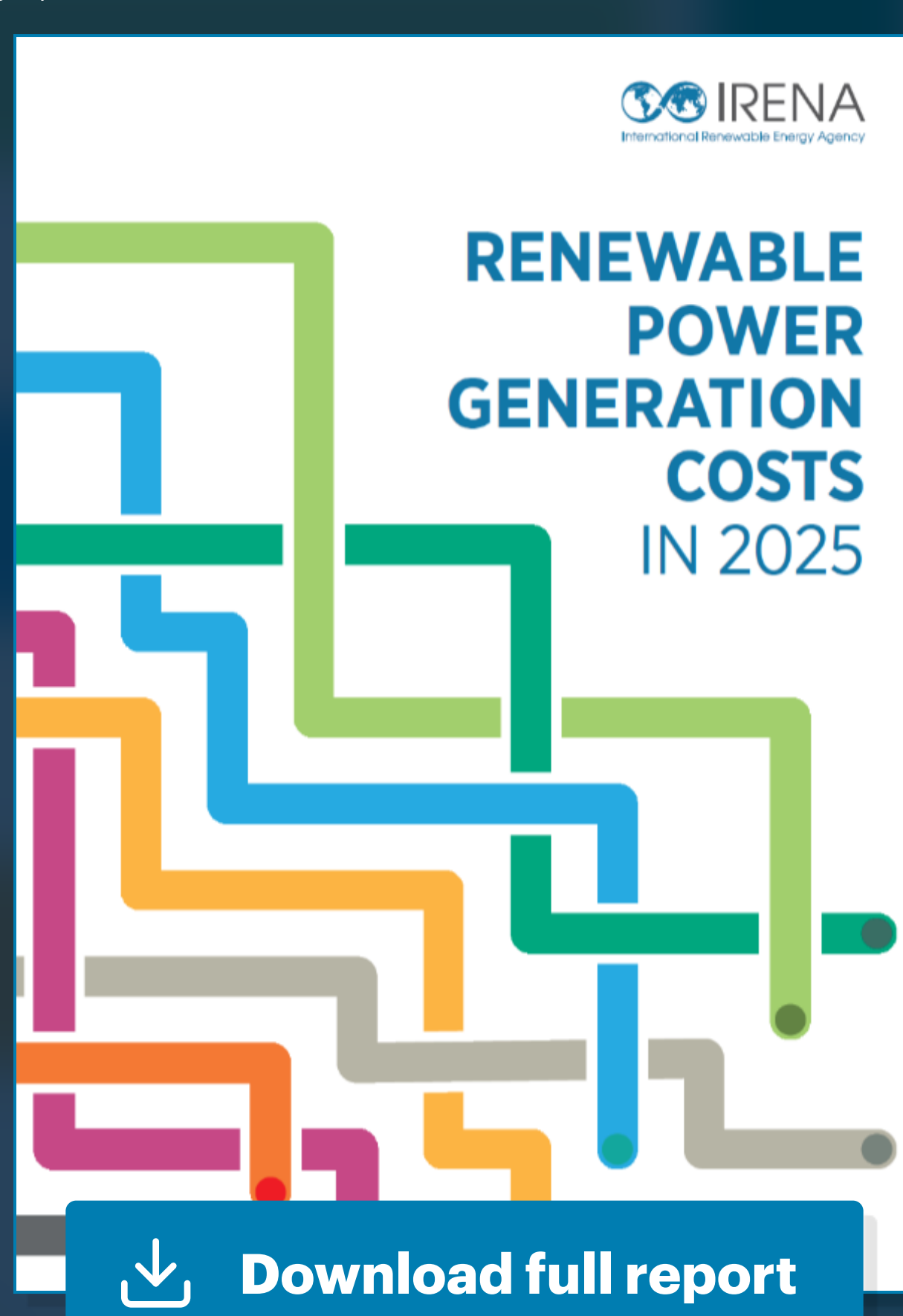


Renewable power generation costs in 2025

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Renewables remain the most cost-competitive source of new electricity generation. More than 90% of utility-scale renewable projects commissioned in 2025 delivered power below the cost of the cheapest new fossil-fuel plant built in their market.

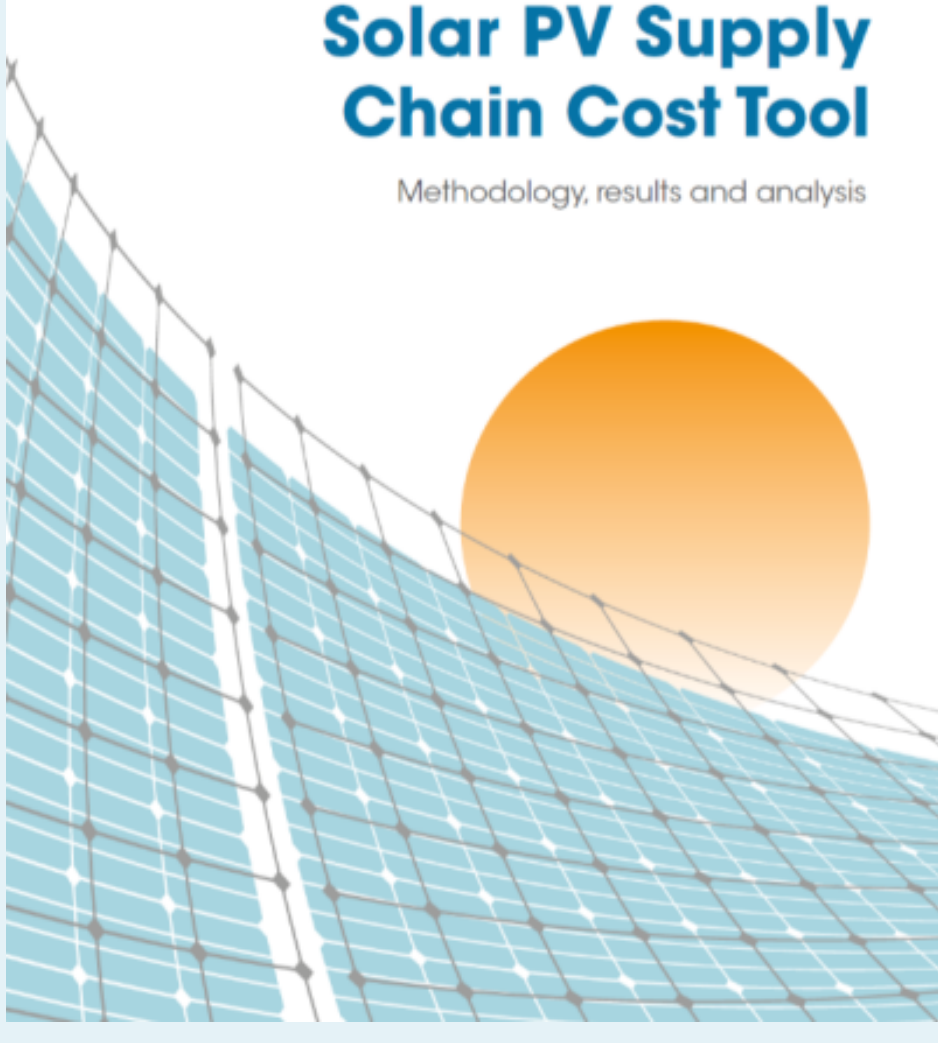
After more than a decade of steep declines, renewable power costs are stabilising. In 2025, Solar PV remained at its 2024 level of USD 44/MWh, while wind continued to improve, with onshore wind falling to USD 33/MWh and offshore wind to USD 78/MWh. In contrast, most dispatchable renewable technologies recorded higher costs, with hydropower, geothermal and concentrating solar power rising to USD 62/MWh, USD 89/MWh and USD 115/MWh, respectively. Bioenergy was the exception, declining to USD 86/MWh.

In 2025, renewables helped avoid an estimated USD 480 billion in fossil-fuel costs and about 8.4 gigatonnes of CO₂ emissions, confirming their role not only as the cheapest new power but as a pillar of energy security, economic stability and resilience.

The data sources, cost metrics and assumptions underpinning this report, including the IRENA renewable cost database and the methodology used to calculate the levelised cost of electricity (LCOE), are set out in full in the [Annex](#).

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