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## World Energy Transitions Outlook: 1.5°C Pathway

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To keep the global temperature increase below 1.5°C, the world needs to significantly increase renewable electricity capacity, rapidly scaling renewable energy share in electricity generation to 65% by 2030. Wind power together with solar PV are abundantly available and are already the lowest-cost electricity sources in most parts of the world. They create the opportunity to replace fossil fuels for power generation, reducing both emissions and the cost of electricity [1].

Between 2010 and 2021, wind energy installations expanded by more than fourfold. Despite this, the wind's exploitable potential significantly exceeds the current world electricity generation. Under IRENA's 1.5°C Scenario, wind will be one of the largest generation sources by 2030, supplying 24% of total electricity needs. The in-

stalled capacity of onshore wind will quadruple by 2030, after which it will grow even faster towards 2050 which involves 225 GW of annual additions. In addition, offshore wind capacity will need to grow 11-fold by 2030.

Airborne wind energy has the potential to play a key driver on wind power development, as it is a flexible and mobile technology that can be easily set up. Airborne wind energy systems are being researched on an international level and are attracting the attention of different countries and organisations, with European countries leading airborne wind energy demonstration projects [2].

### *References:*

[1] IRENA (2022), *World Energy Transitions Outlook 2022: 1.5°C Pathway*, International Renewable Energy Agency, Abu Dhabi.

[2] IRENA (2021), *Offshore renewables: An action agenda for deployment*, International Renewable Energy Agency, Abu Dhabi.