# Opportunities, Actionable Solutions and Technologies for Just Energy Transition – Renewable Energy

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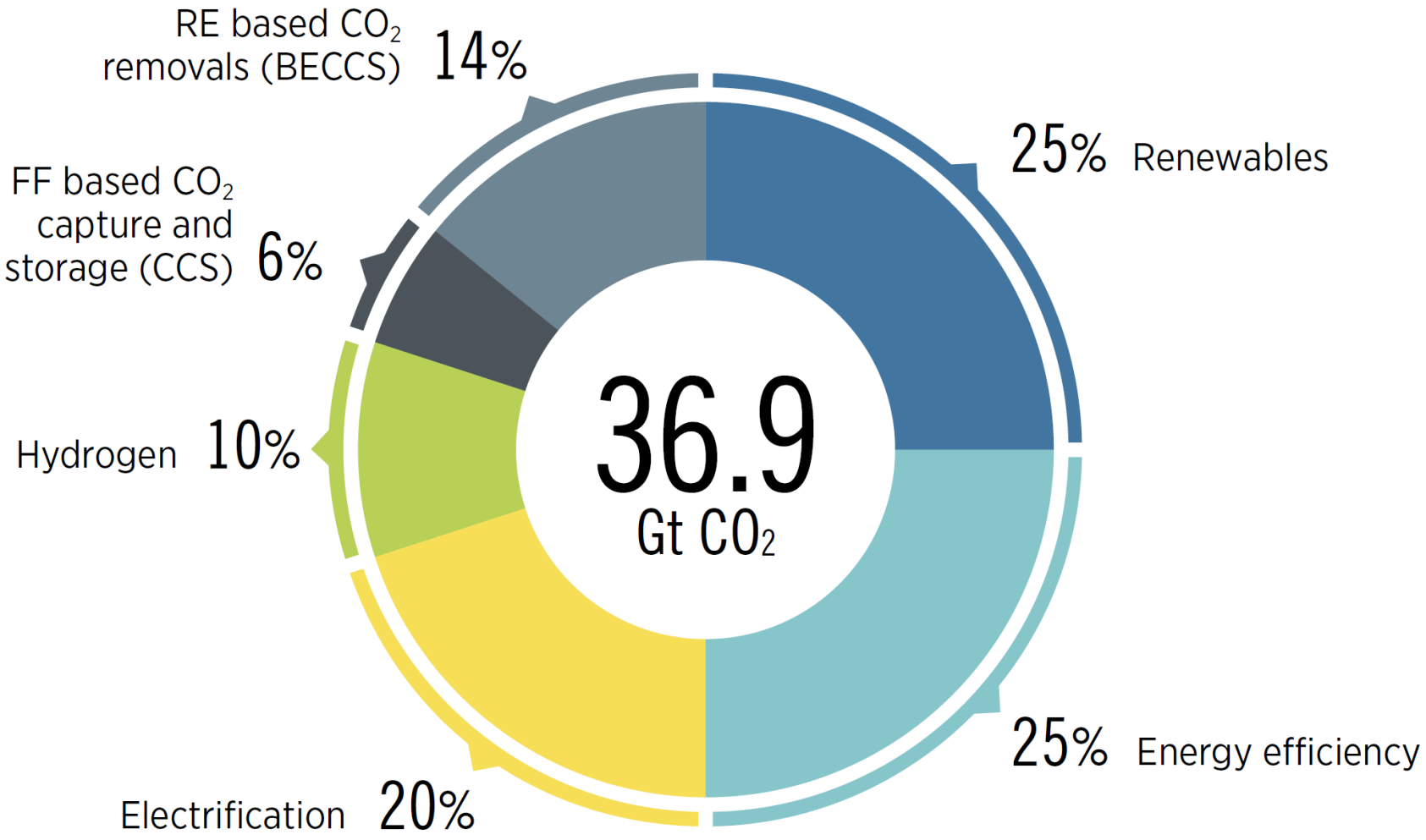
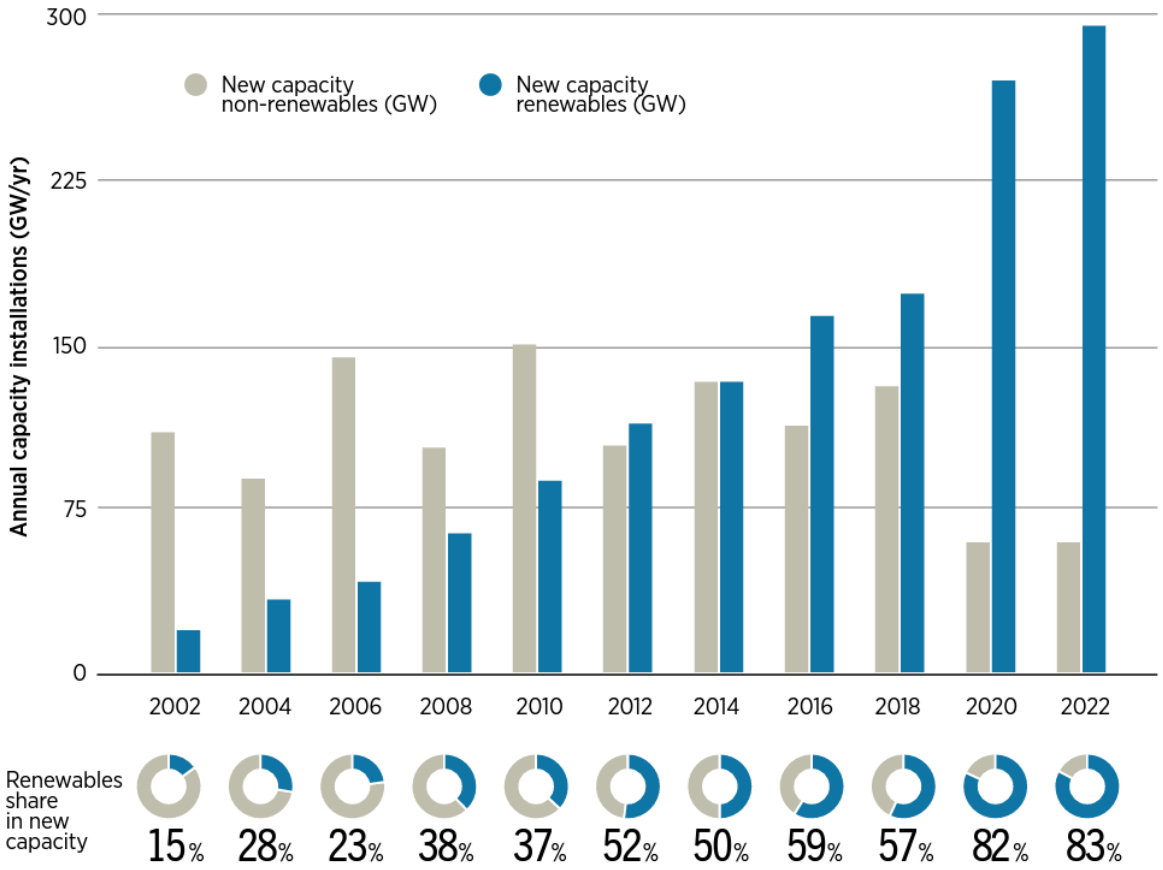
# Six avenues for the energy transition

**Based on IRENA renewable energy pathways**




*Source: IRENA, World Energy Transition Outlook 2022*

# Current Landscape – RE Generation Capacity




Overall increase of 295 GW, (+9.6%). Solar and wind were the dominant sources (90%). 83% of all power capacity added last year was from renewables.

Non-renewable capacity expansion was observed primarily in Asia and to a lesser extent in other regions.

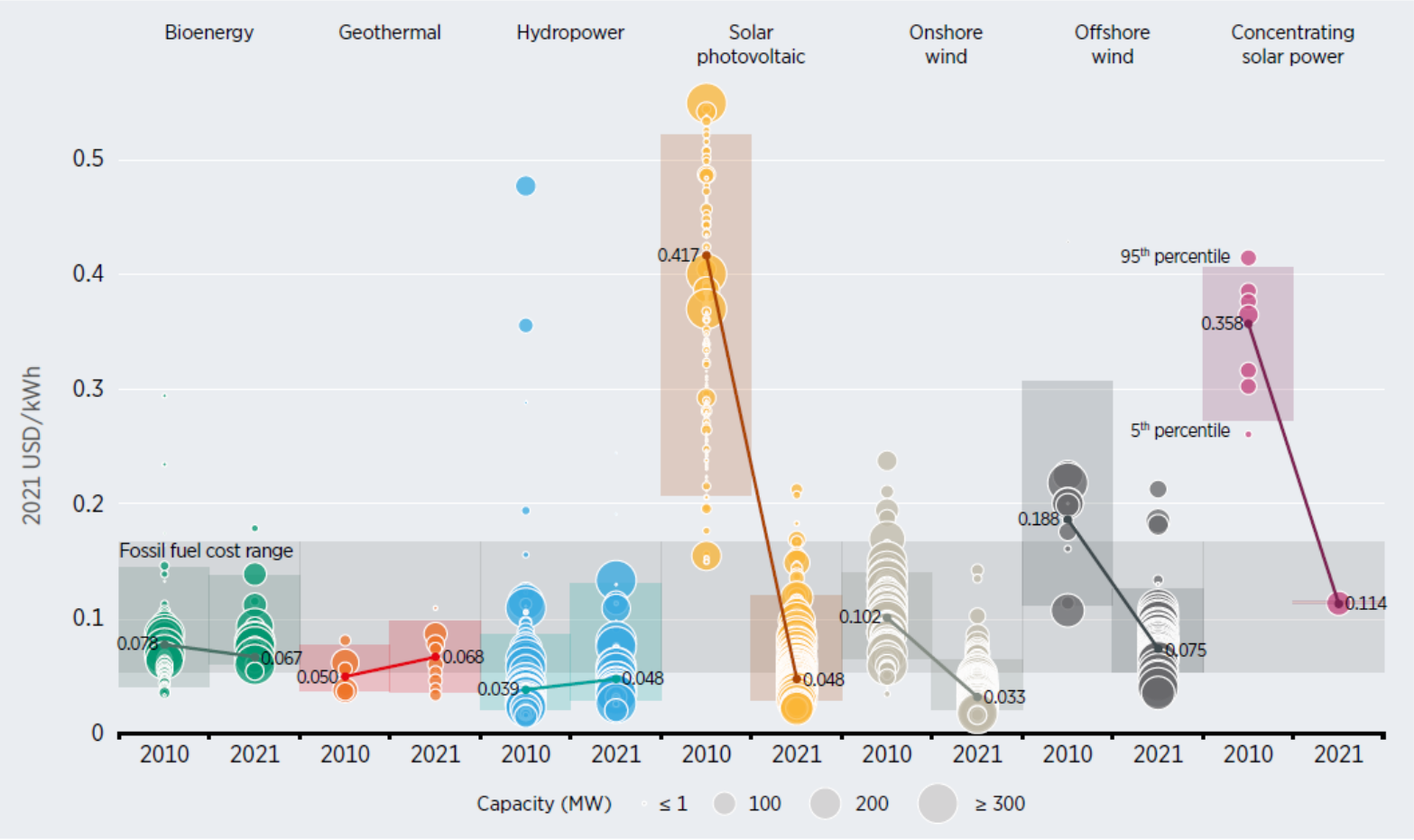
Annual **additions of RE power must grow significantly by 2030, if we want to stay on a pathway limiting global warming to 1.5° C.**



*Source: IRENA, Renewable capacity statistics 2023*

# Current Landscape – RE costs

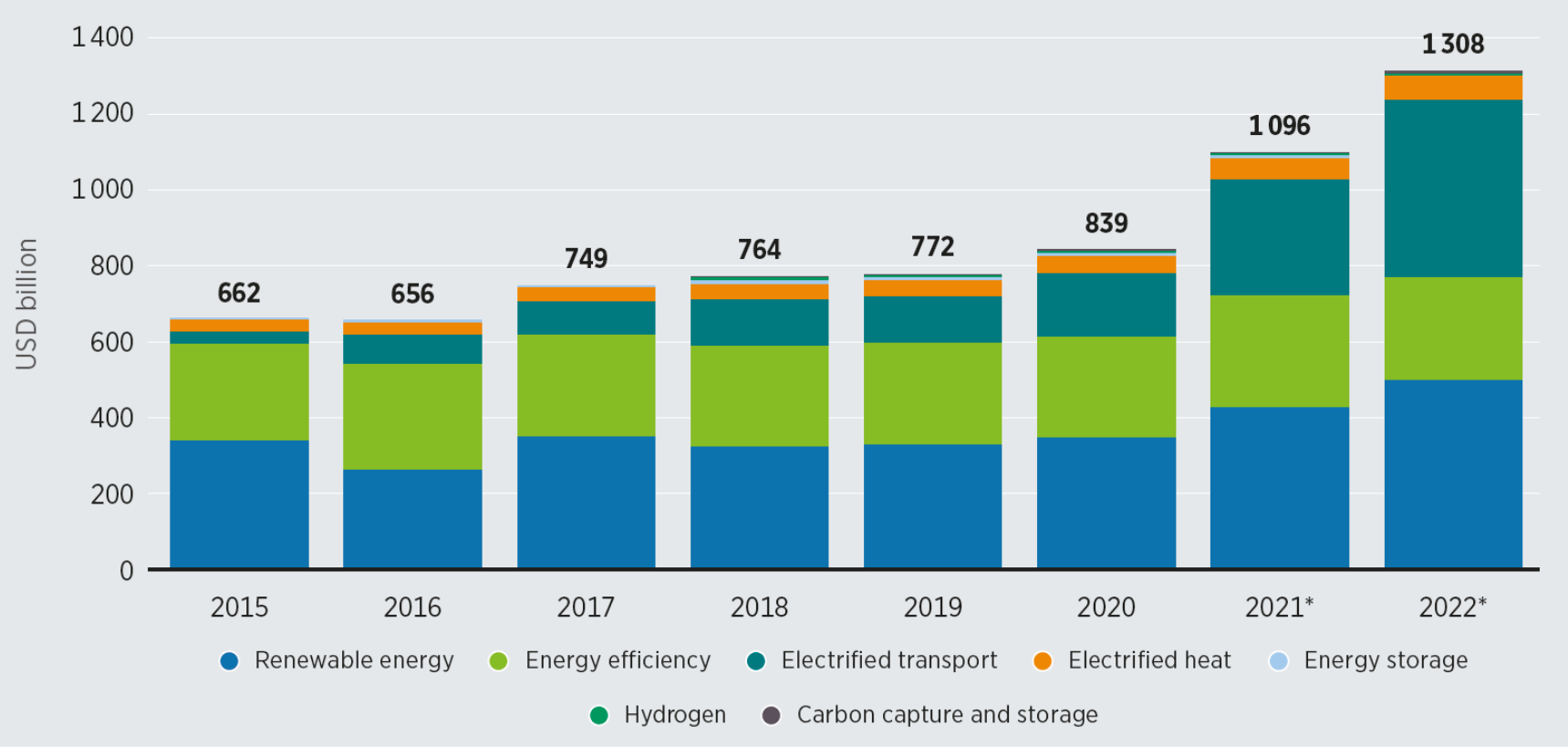
**Global weighted average LCOEs from newly commissioned, utility-scale renewable power generation technologies**

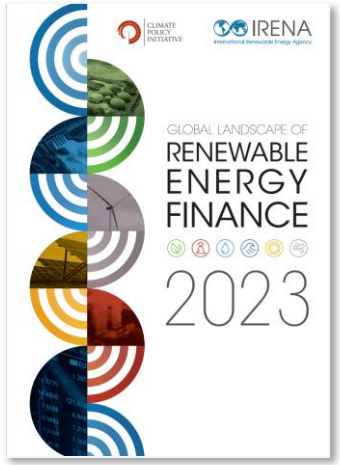


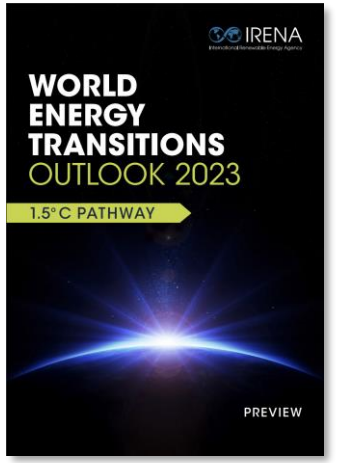

- The growing competitiveness of RE continues to provide the most compelling pathway for decarbonizing the global energy system.
- Renewables are increasingly becoming the default **source of least cost, new power generation.**
- When combined with the impact of the fossil fuel crisis and net-zero emissions ambitions, capacity additions are expected to continue to rise in the years ahead.

*Source: IRENA, Renewable Power Generation Costs 2021*

# Current Landscape – Global investment in energy transition technologies




- In 2022, global investment in the energy transition **grew 70%** from before the pandemic. **To achieve the 1.5º C target they need to increase significantly**

# Scaling up – Enablers for the transition

**PHYSICAL INFRASTRUCTURE:** forward-looking planning, modernisation and expansion of supporting infrastructure on land and sea to facilitate the development, storage, distribution and transmission, and consumption of renewables. It should facilitate national, regional and global strategies for new supply-demand dynamics and promote equity and inclusion.

**POLICY AND REGULATORY ENABLERS:** design of policy and regulatory frameworks that facilitate deployment, integration and trade of renewables-based energy, shape socio-economic outcomes and promote equality. These need to enable different levels of the energy transition, from local to global, and account for new supply-demand dynamics.

**WELL-SKILLED WORKFORCE:** capacity among institutions, communities and individuals to acquire the requisite skills, knowledge and expertise to drive and sustain the energy transition. An integral aspect of this will be ensuring that communities are well informed of, and able to exercise, their rights as critical transition stakeholders, and to harness its benefits.



*Source: IRENA, World Energy Transitions Outlook 2023, Preview.*

# THANK YOU!

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