

The role of nuclear power in the energy mix of tomorrow

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World Nuclear Exhibition

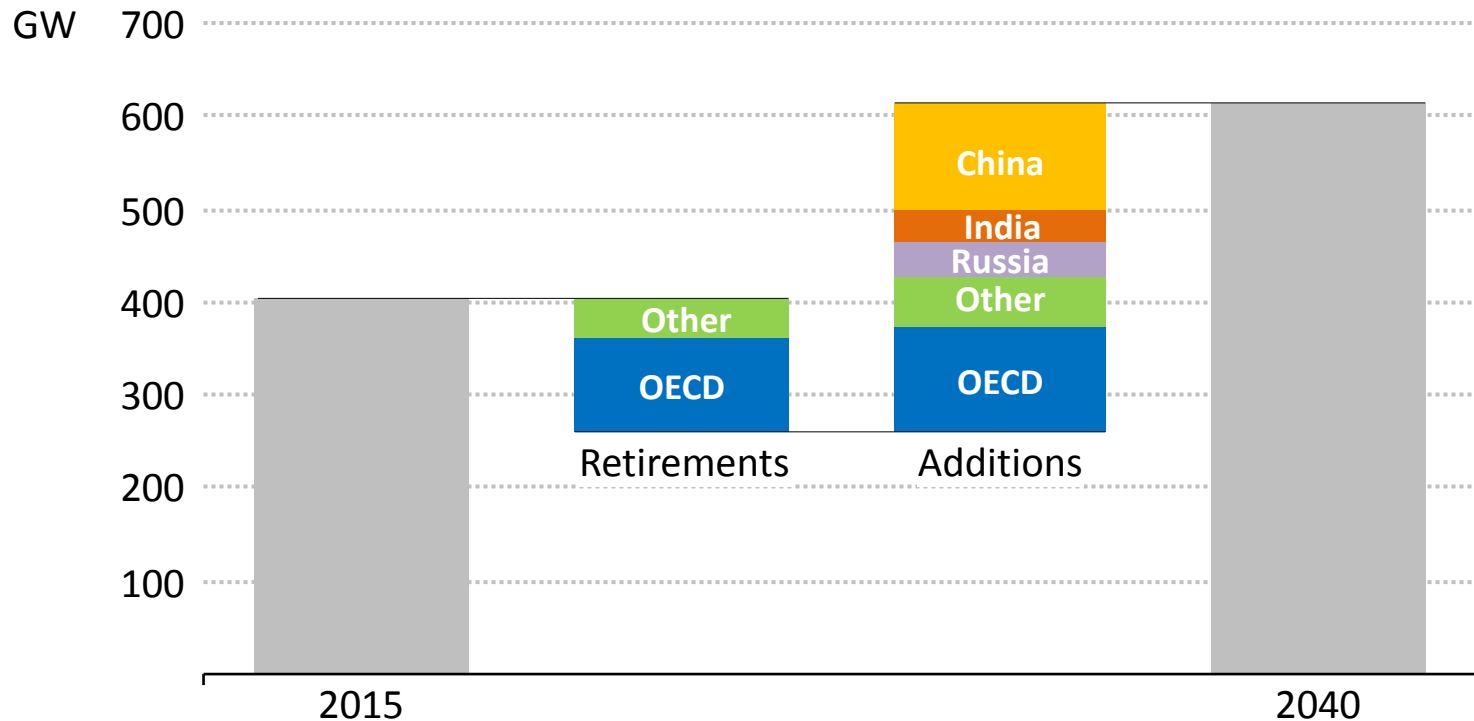
Paris,

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- Universal agreement from COP21 is an historic milestone that can stimulate energy sector innovation
- Nuclear generates 1/3 of low-carbon power, but capacity is ageing
- Low fossil fuel & electricity prices hamper low-carbon investments, including nuclear
- Public concern after the Fukushima accident & long-term liabilities
- While renewables are making progress, nuclear is at the crossroad

Nuclear capacity increases, but no nuclear renaissance in sight

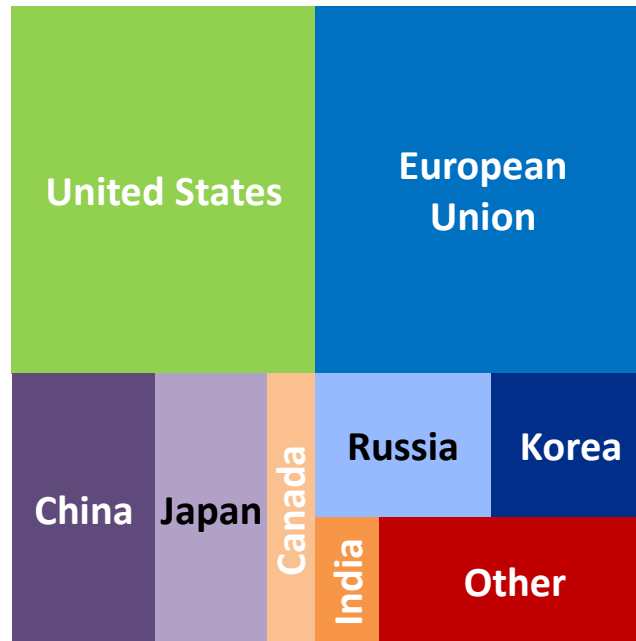
Nuclear capacity by selected region



Capacity grows 50% to over 610 GW in 2040, led by non-OECD, notably China & India; yet the share of nuclear in the global power mix remains well-below its historic peak

Nuclear power: public concerns must be heard and addressed

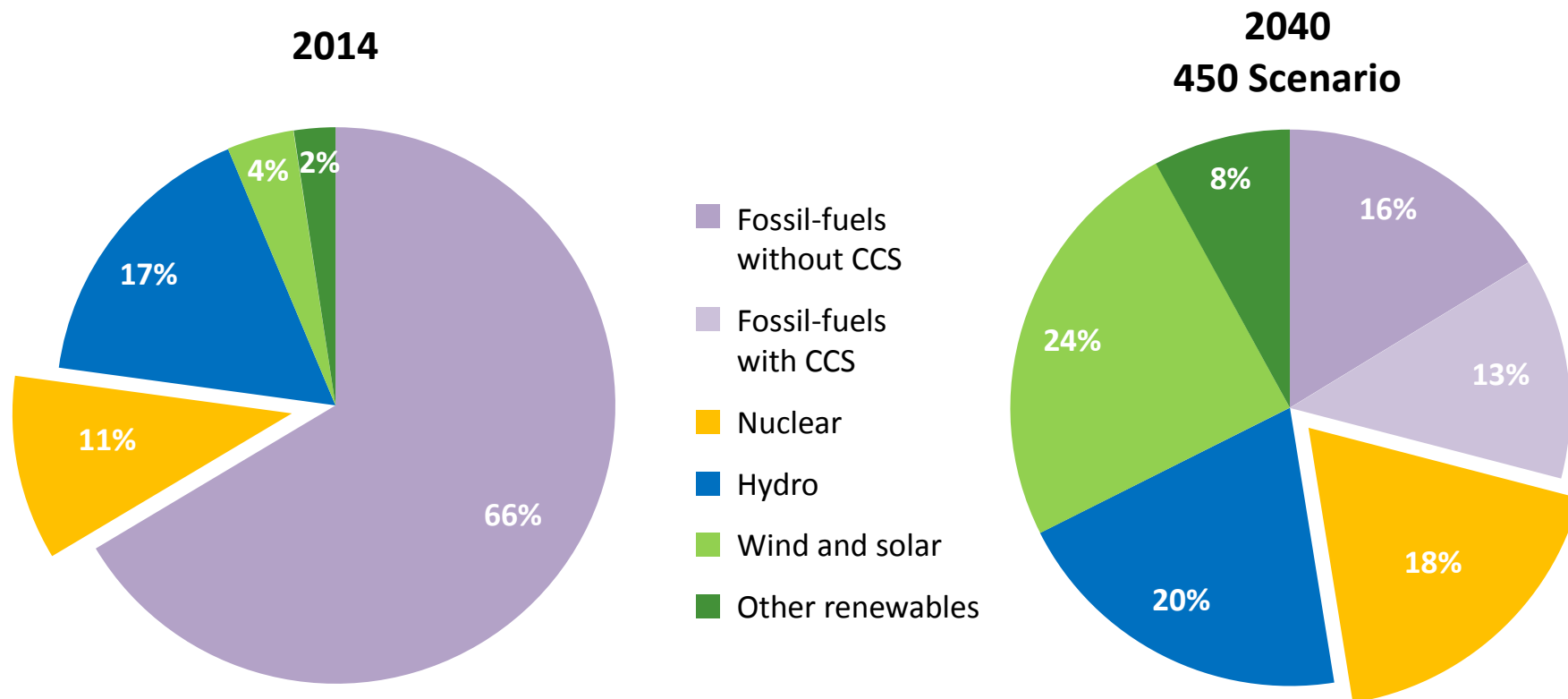
Spent nuclear fuel
1971-2040: 705 thousand tonnes



*Key public concerns include plant operation, decommissioning & waste management;
By 2040, almost 200 reactors are retired & the amount of spent fuel doubles*

Nuclear power can improve energy security and help to meet climate goals

Electricity generation by source



Massive additional investments in efficiency, renewables, nuclear power and other low carbon technologies are required to reach a 2 °C pathway

- COP21 was a catalyst for more innovation, research and investment in clean energy technologies
- Nuclear power can play a role in energy security, climate and air pollution – but financing & public concerns remain key issues
- Markets are currently not sending the necessary signals to invest in new low-carbon capacity, including nuclear plants
- As nuclear power inherently works on long timelines, the industry requires policy-makers to provide long-term guidance and stability
- With looming energy security & environmental challenges, international cooperation is more vital than ever