



Towards net-zero emissions in the EU energy system

Narratives and assumptions

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European Green Deal

“
...increase the EU’s greenhouse gas emission reductions target for **2030** to **at least 50% and towards 55%** compared with 1990 in a responsible way... ”

“
...supporting a cost-effective transition to **climate neutrality by 2050**... ”

COM(2019) 640

A Clean Planet for All – 8 narratives

Electrification



Hydrogen



E-fuels



Circular economy



Energy efficiency



Cost-efficient combination



Technology



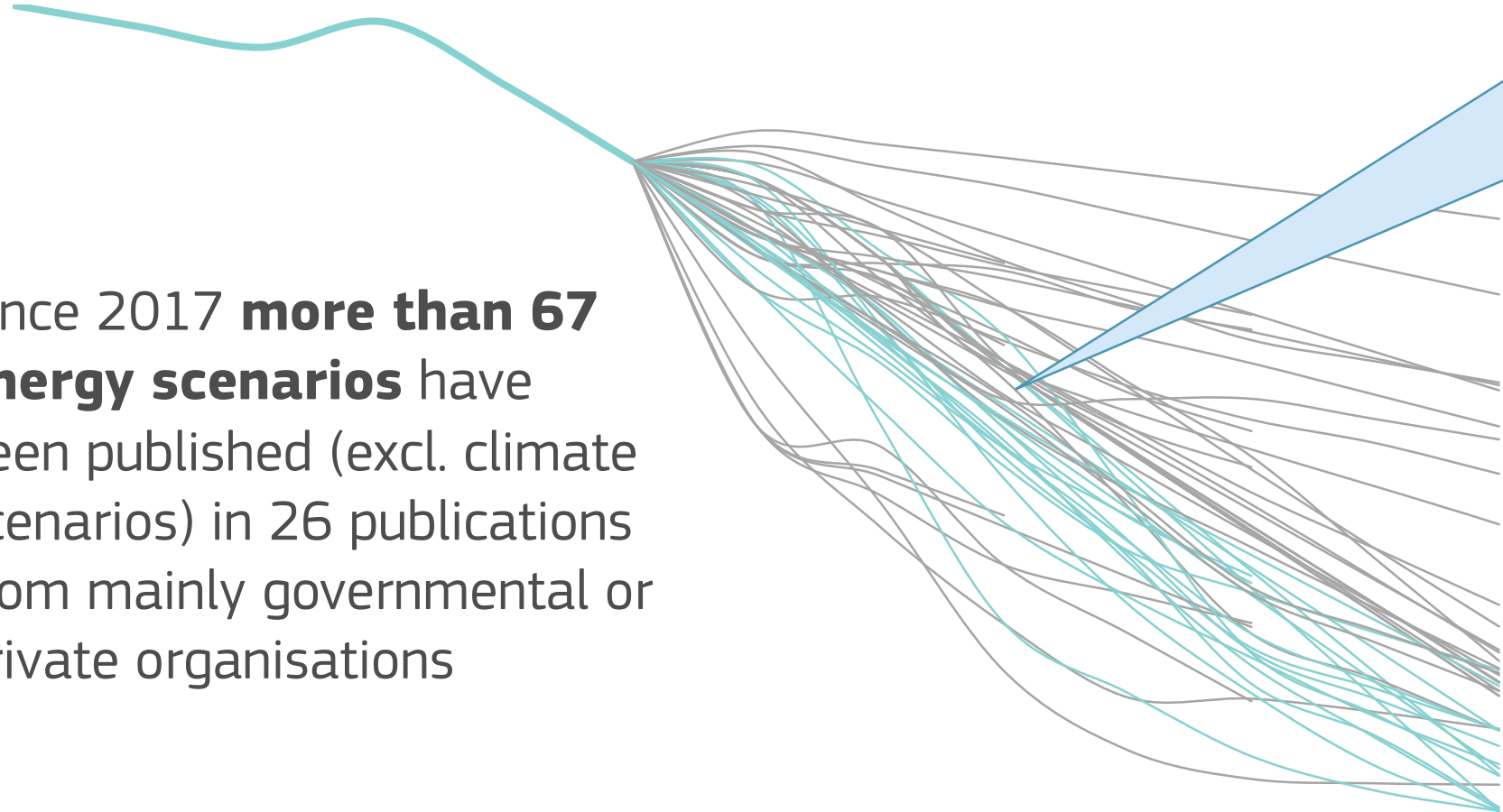
Lifestyles



COM(2018) 773

Energy scenario comparison on the European energy transition

Since 2017 **more than 67 energy scenarios** have been published (excl. climate scenarios) in 26 publications from mainly governmental or private organisations

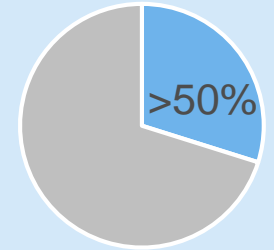


1990

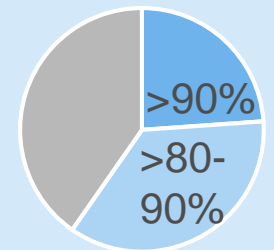
2030

2050

Emission trajectories based on energy-related and process CO₂; scenarios highlighted in blue have been reviewed by JRC.

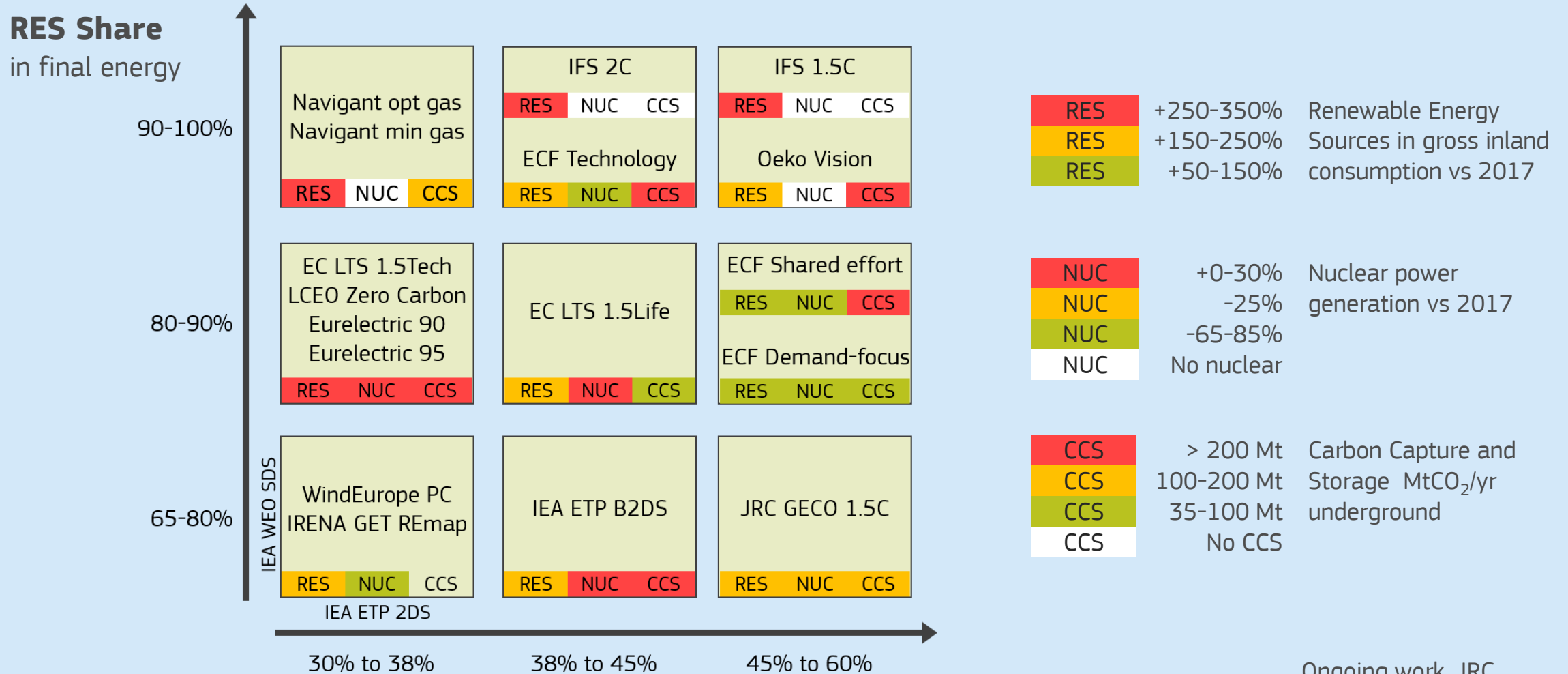


20 scenarios >50% of which 10 complete data for all sectors



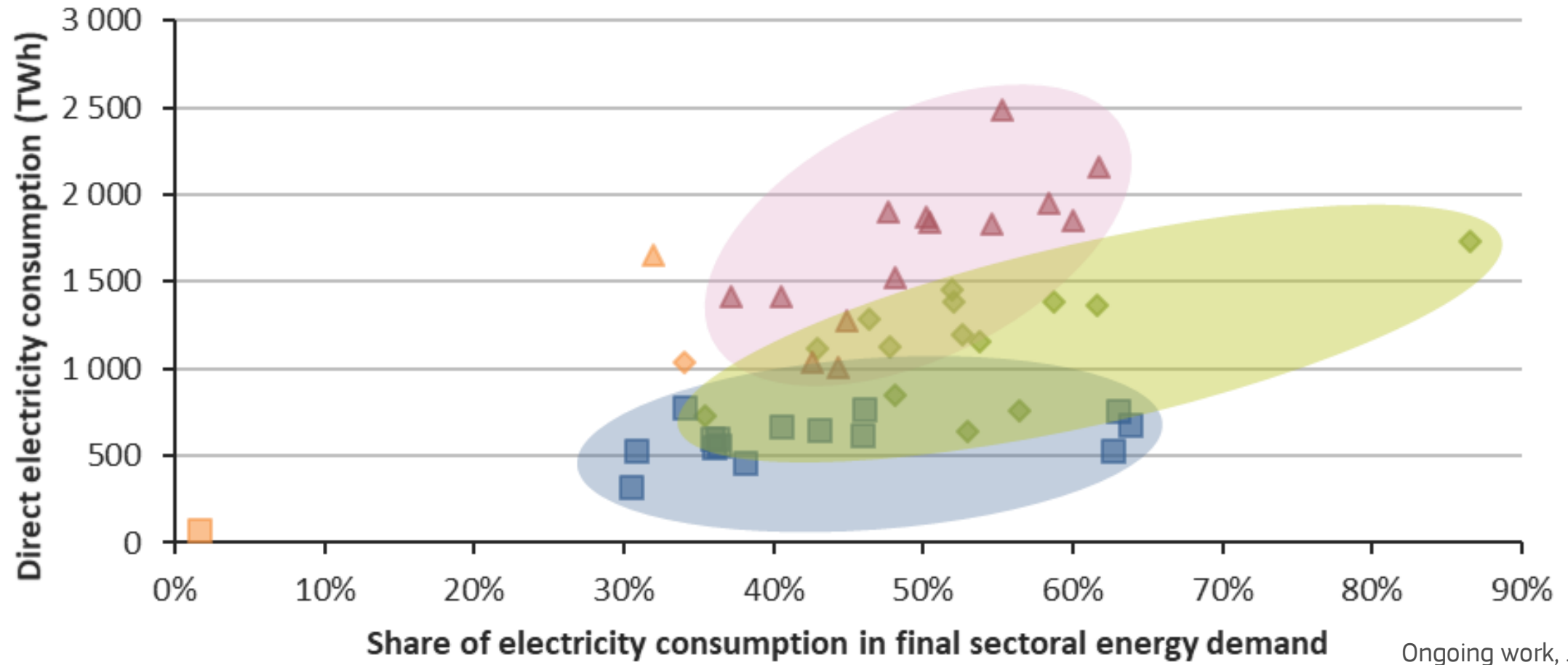
16 near zero scenarios (>90%)

Narratives/assumptions - 2050 scenario grouping



Ongoing work, JRC

Electricity in buildings and industry depend on the narrative; much less so for transport



Keep in touch



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Thank you



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