IEA Hydrogen Roadmap EU Workshop

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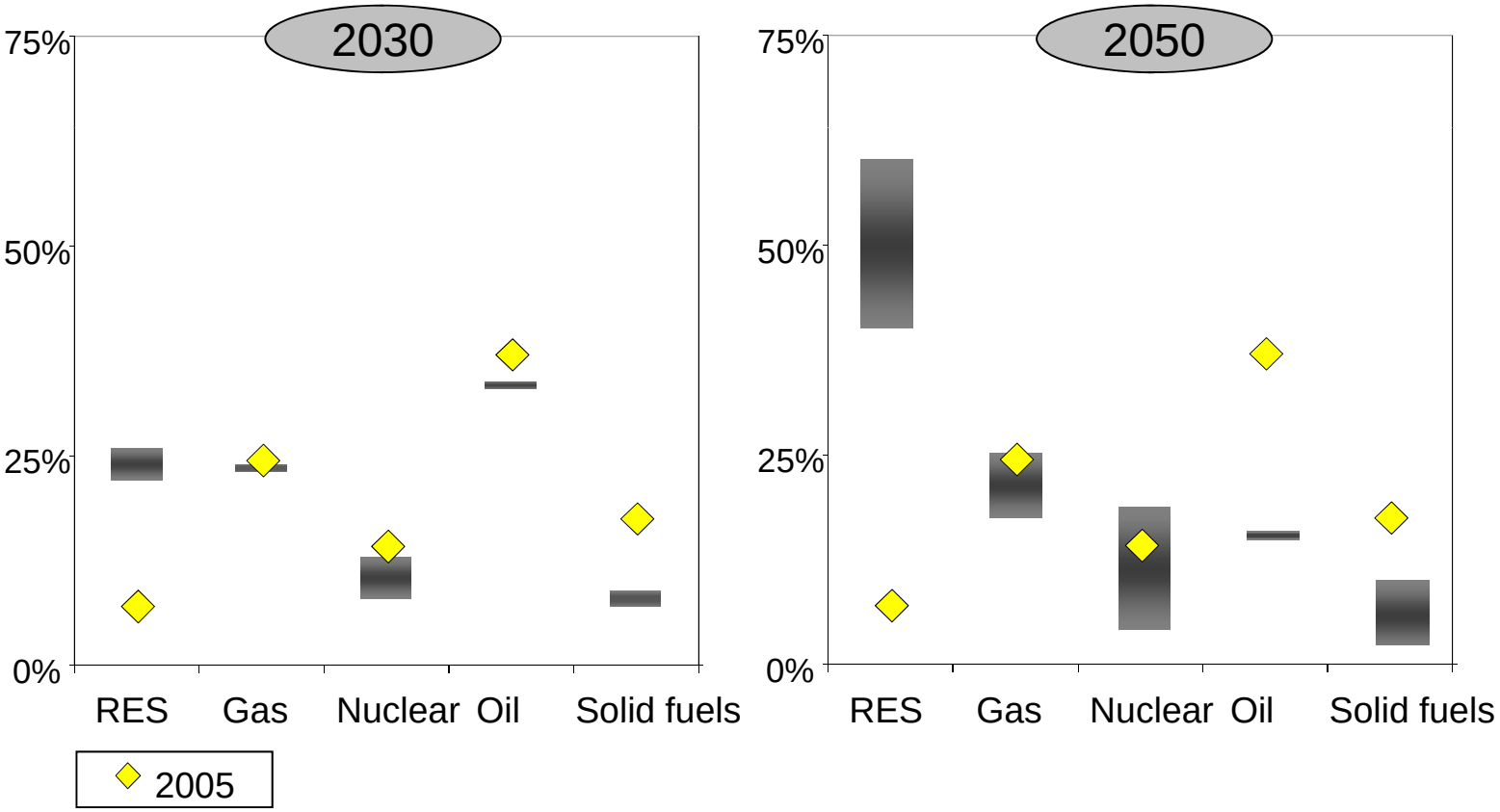
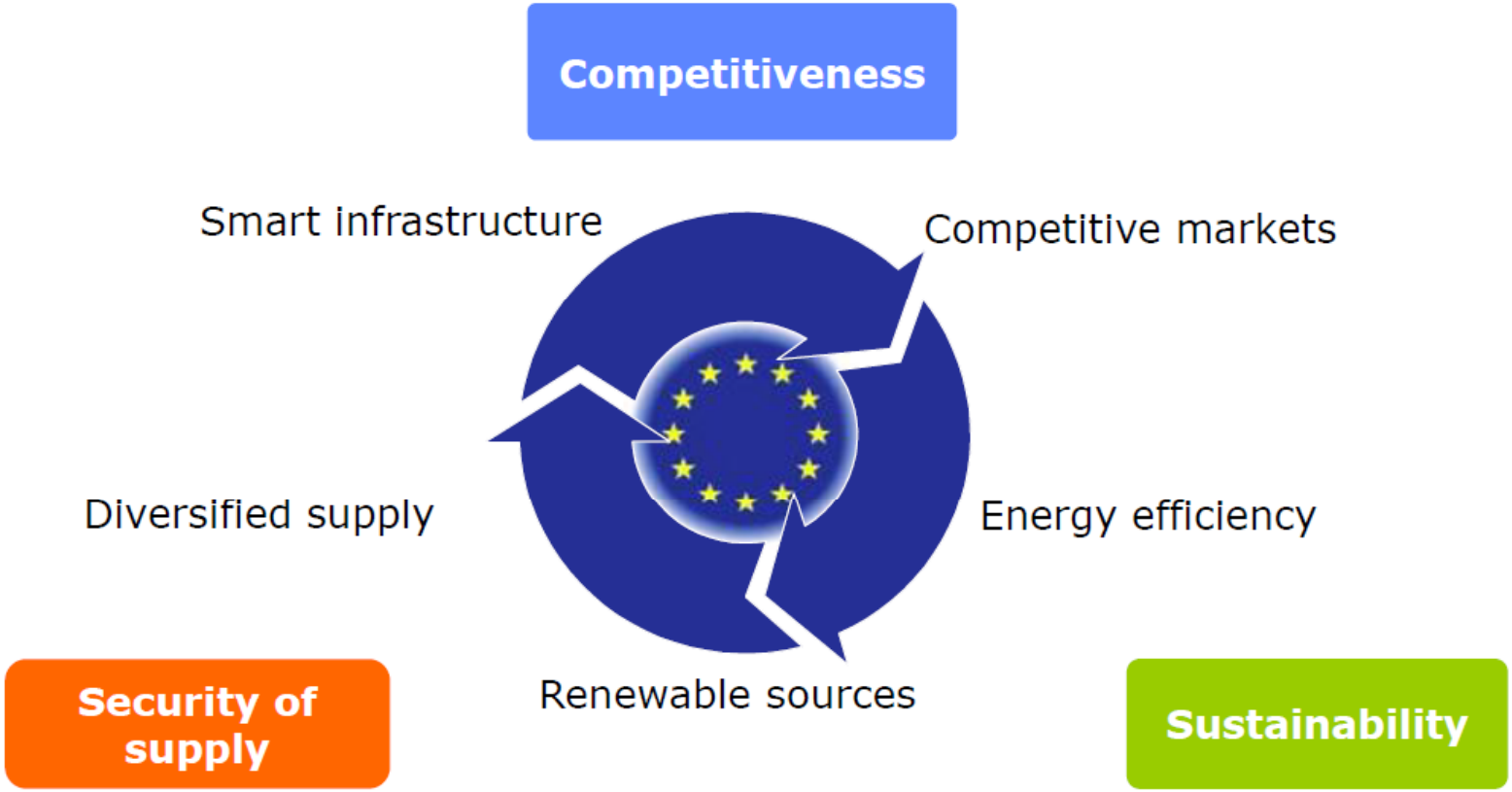
Energy

RM 2050 - Fuel Ranges

(primary energy consumption)



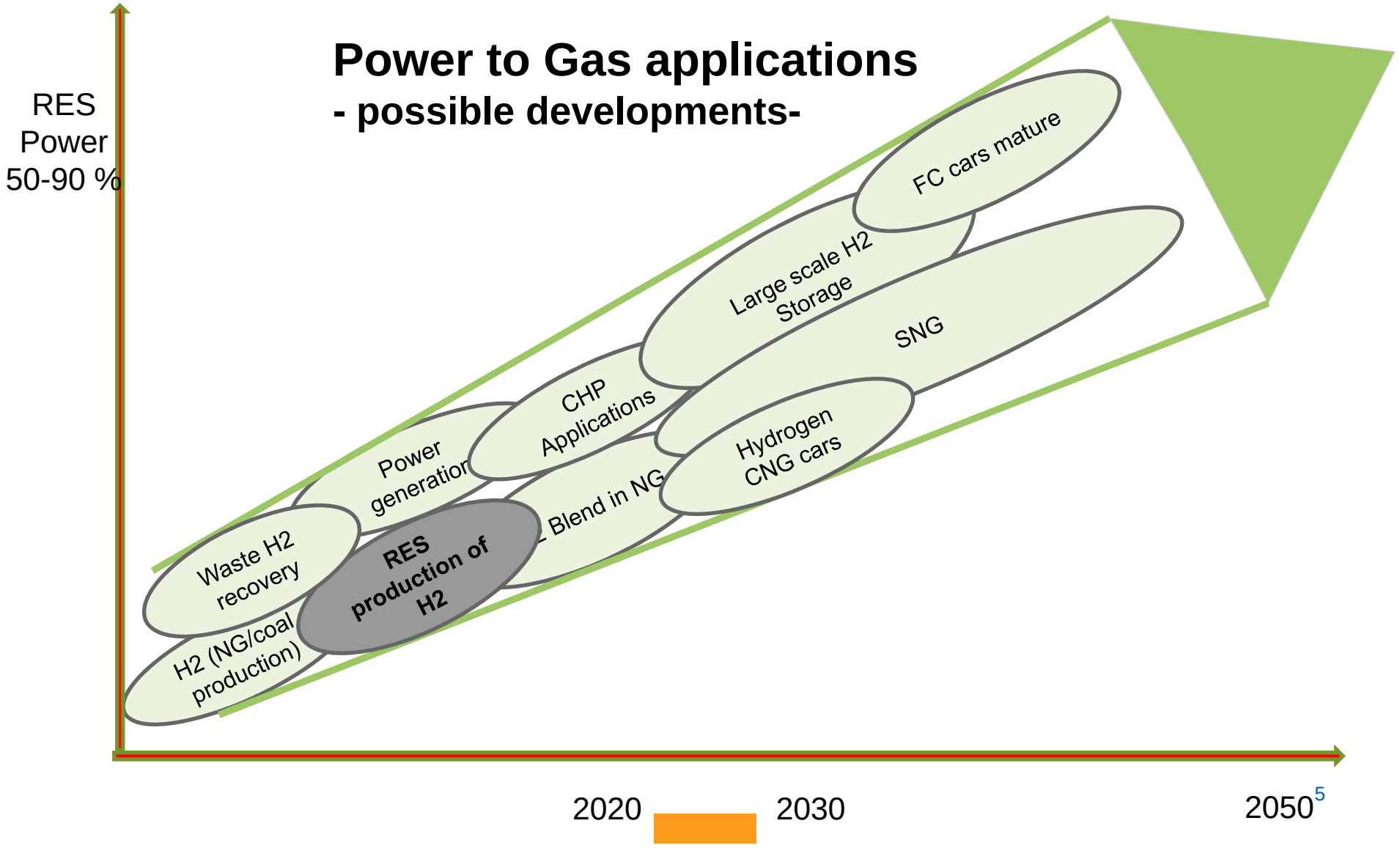
A "no regrets" scenario for Europe



A 2030 framework for climate and energy

- Targets for RES or not? If so, at what level: national, sectoral, etc.
- How to reflect the economic viability and the maturity of technologies in the 2030 framework?
- How to assess other aspects of EU energy policy, such as security of supply?
- How should specific measures at the EU and national level best be defined to optimise cost-efficiency of meeting climate and energy objectives?
- How can the internal energy market best encourage and mobilise investment?
- Which measures could be envisaged to make further energy savings most cost-effectively?
- How can EU R&I policies best support the achievement of the 2030 framework?
- How could carbon leakage be addressed in the 2030 framework?
- How to reflect the Member States different abilities to implement climate and energy measures?
- Are new financing instruments or arrangements required?

Power to Gas applications
- possible developments-



HYDROGEN AS RES POWER COMMODITY
STORAGE MEDIUM & END USE

Attention on the whole energy chain:

- Enabling a large-scale energy storage business case
- Regulations and Standards for H2 access to NG grid & storage
- Research on Materials and on Efficiency improvements
  - Electrolysers efficiency and cost, Increased power/heat ratio in CHP, Fuel Cells cost, etc
- Research and Demonstration on Storage
  - compression technologies, large scale storage solutions, etc.
- Shift towards gas and H2 directly in end-use
  - Micro-CHP, Fuel cell cars (H2) and ICE cars (NG and NG & H2 blends)
- Focus on the best solutions: affordability, industry, end-users, environment, etc.

Thank you!