

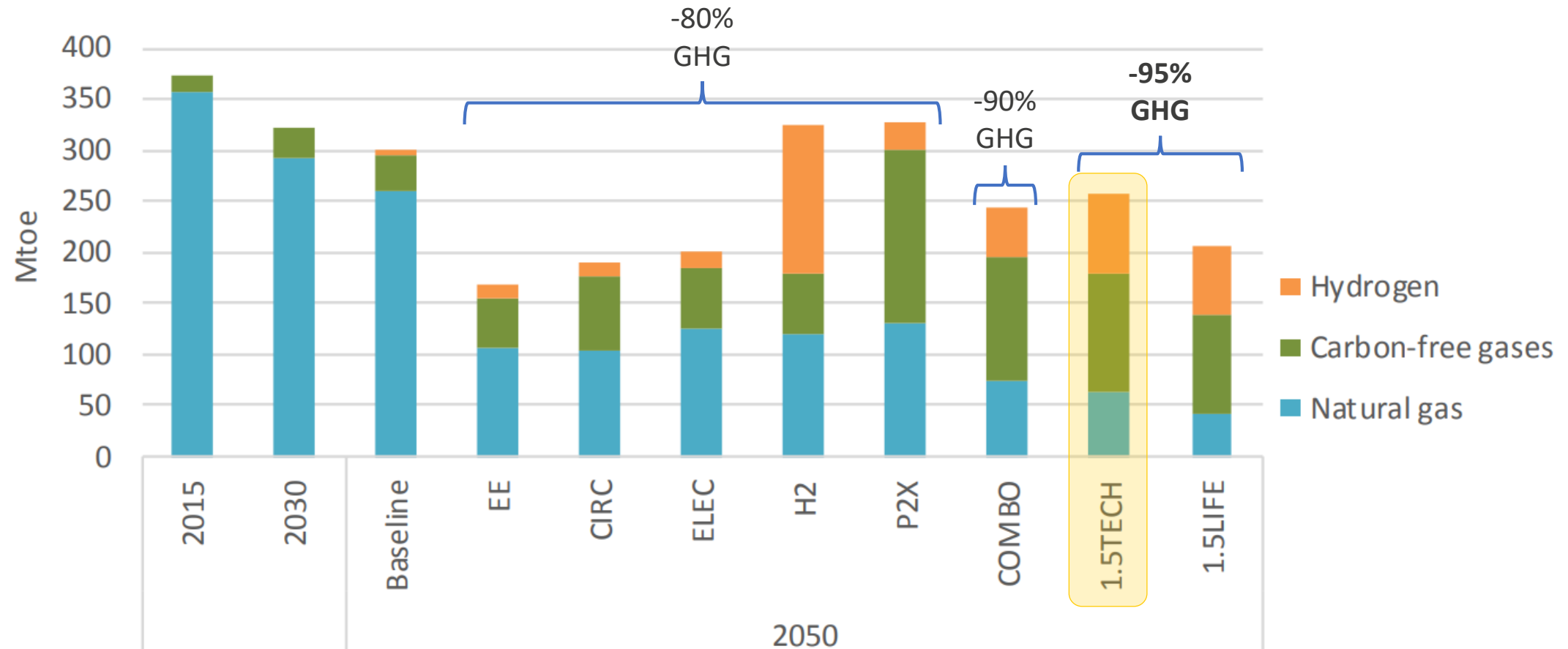


The role of gas towards a carbon-neutral EU

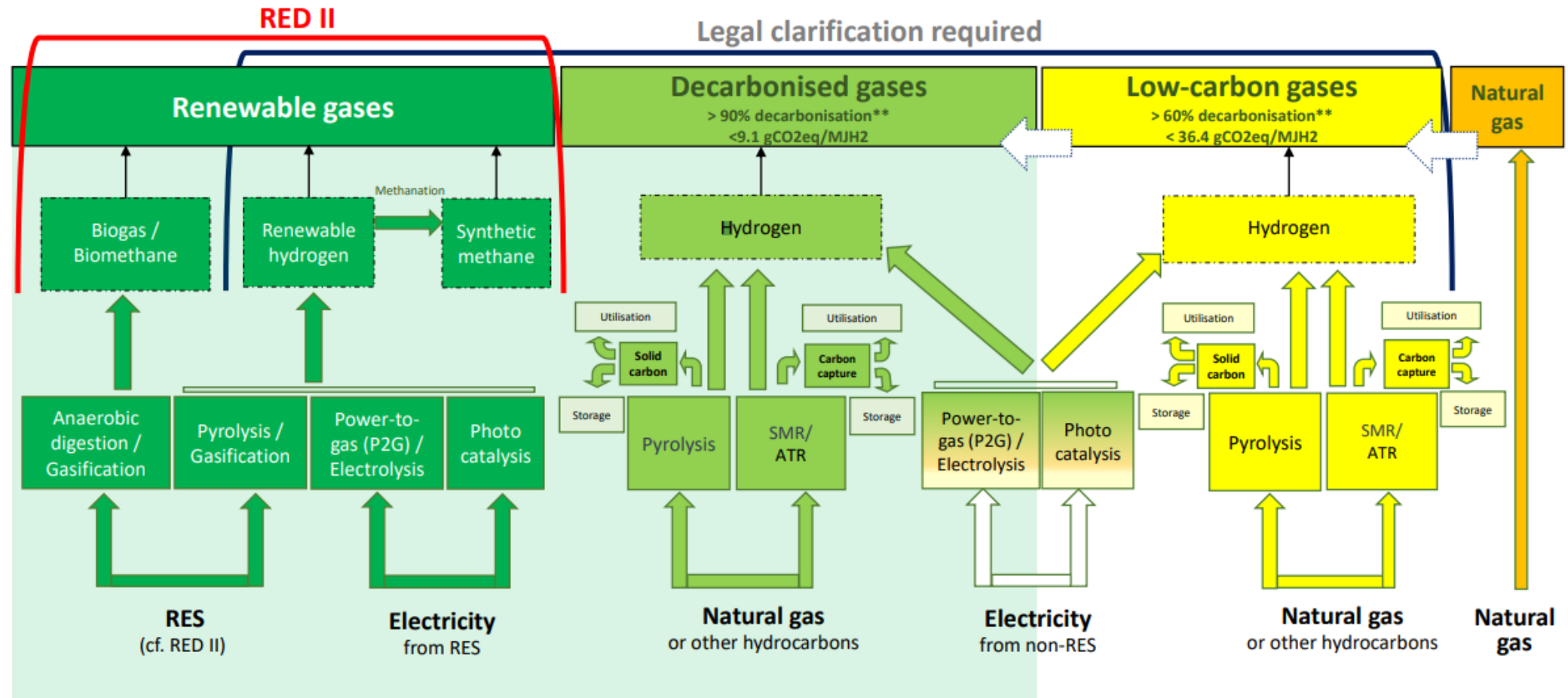
James Watson
Eurogas Secretary General
26 November 2019

Gas plays a key role in the energy transition towards carbon neutrality by 2050

European Commission Long Term Strategy Scenarios on the consumption of gaseous fuels by 2050



Gas terminology



Disclaimer:

* This overview is based on existing processes and known technologies and evidently does not preclude any other existing process or new technological developments.

** The GHG reduction is calculated on the BAT 91 gCO₂/MJH₂ derived from [CertifHy](#) and could be replaced by a comparable threshold pending confirmation of the methodological basis for CertifHy.



The role of gas for the decarbonisation of heat

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Heating in the EU



Buildings are responsible for approximately 40% of energy consumption and 36% of CO₂ emissions in the EU.



The heating sector accounts for 80% of households' final energy demand.



Buildings have contributed to half of the emission reductions in the non-ETS sectors since 1990 (EEA). The switch to gas has contributed to reducing emissions and improve air quality.



56% of the EU stock of heating appliances are inefficient

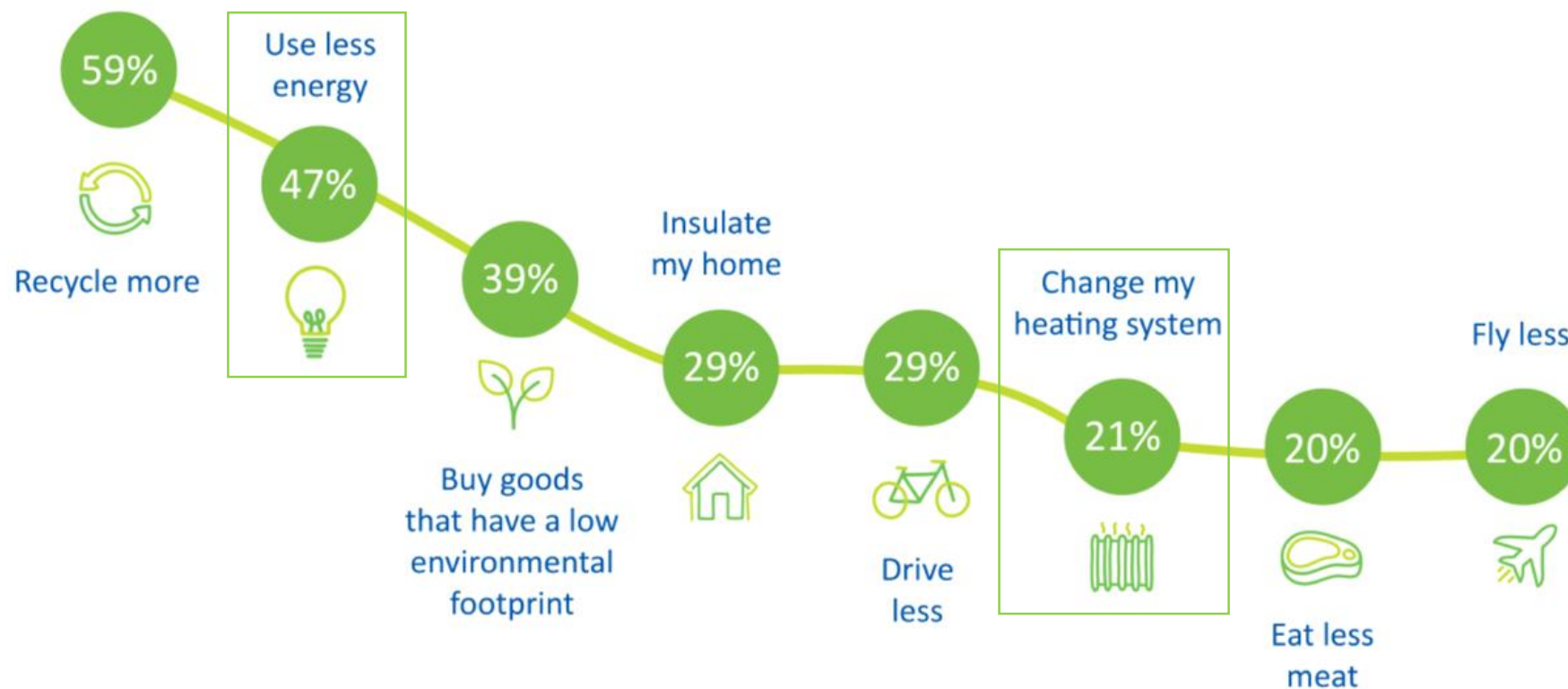
Europeans want to act on climate change

One in five

Europeans considers changing a heating system as a means to tackle climate change.

Half of EU citizens

are willing to recycle more or use less energy as a mean of making a personal contribution towards addressing climate change.



Gaseous solutions can contribute to meeting climate change objectives

Natural gas today, and renewable and decarbonised gases in the future, will play a key role in decarbonising the EU heating system.

Natural gas has the **lowest carbon intensity** amongst all fossil fuels (IPCC).

Biogas / biomethane is set to remain the **largest renewable heat source** globally (IEA).

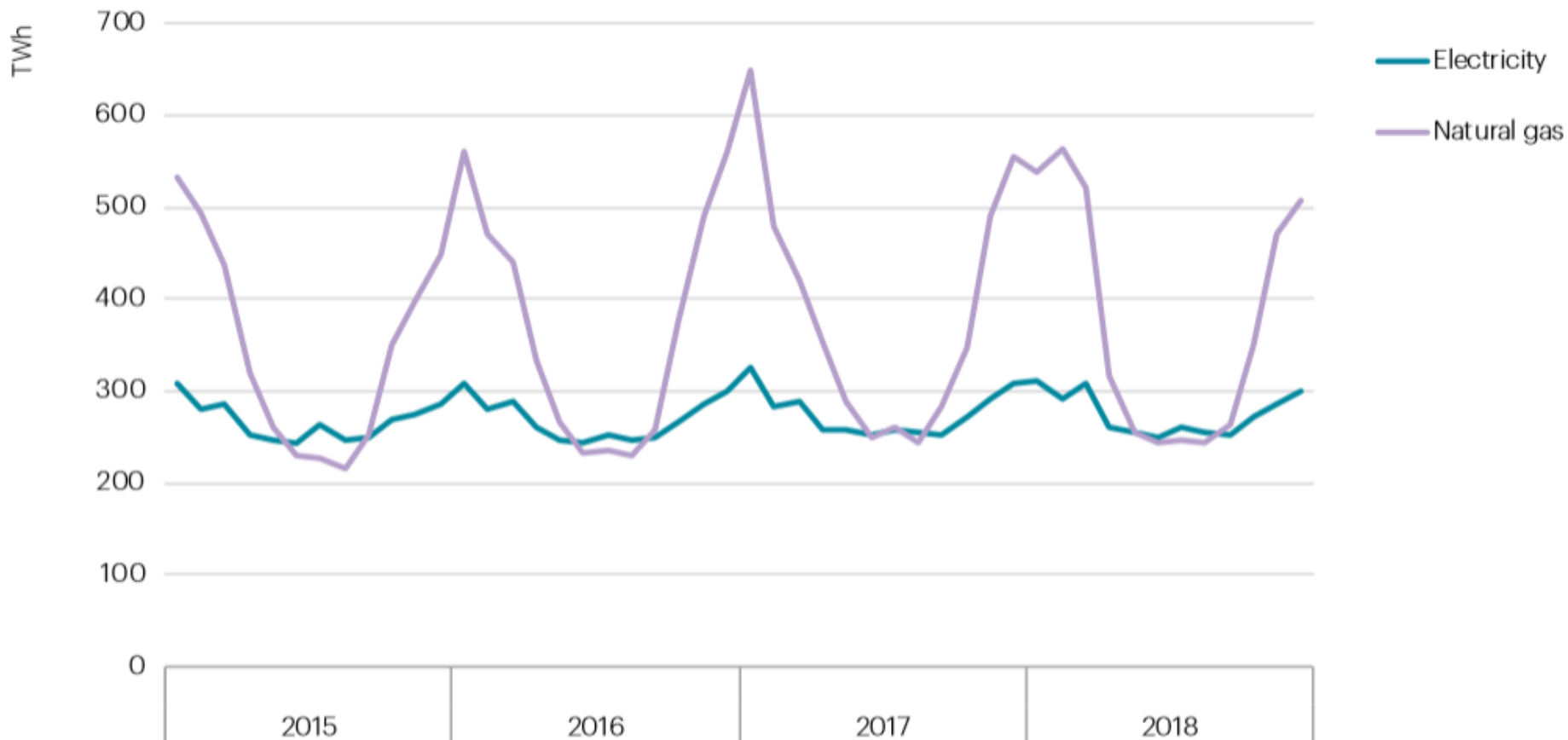


Switching from an oil boiler to a gas boiler:

- CO₂ & NO_x emissions: - **25%**
 - CO emissions: - **64%**
 - SO_x & particulate emissions: - **95%**
-

Gas infrastructure is sized to meet significant peaks in Europe's energy demand

Comparing the monthly consumption of electricity and gas in the European Union



“Significant demand for heating in buildings means that **gas plays a crucial seasonal balancing role** that is difficult to replicate using electricity.” (IEA)