

The technical and economic potential of renewable gas in Europe in 2050

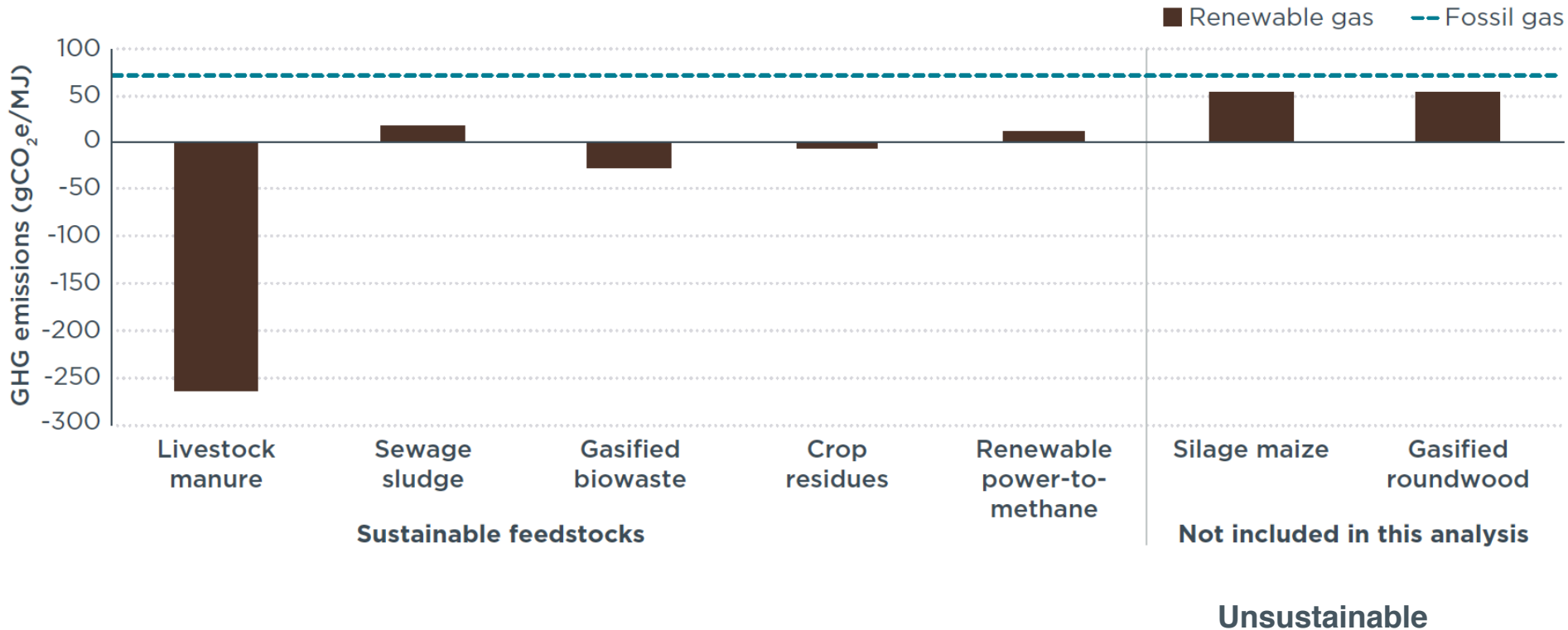
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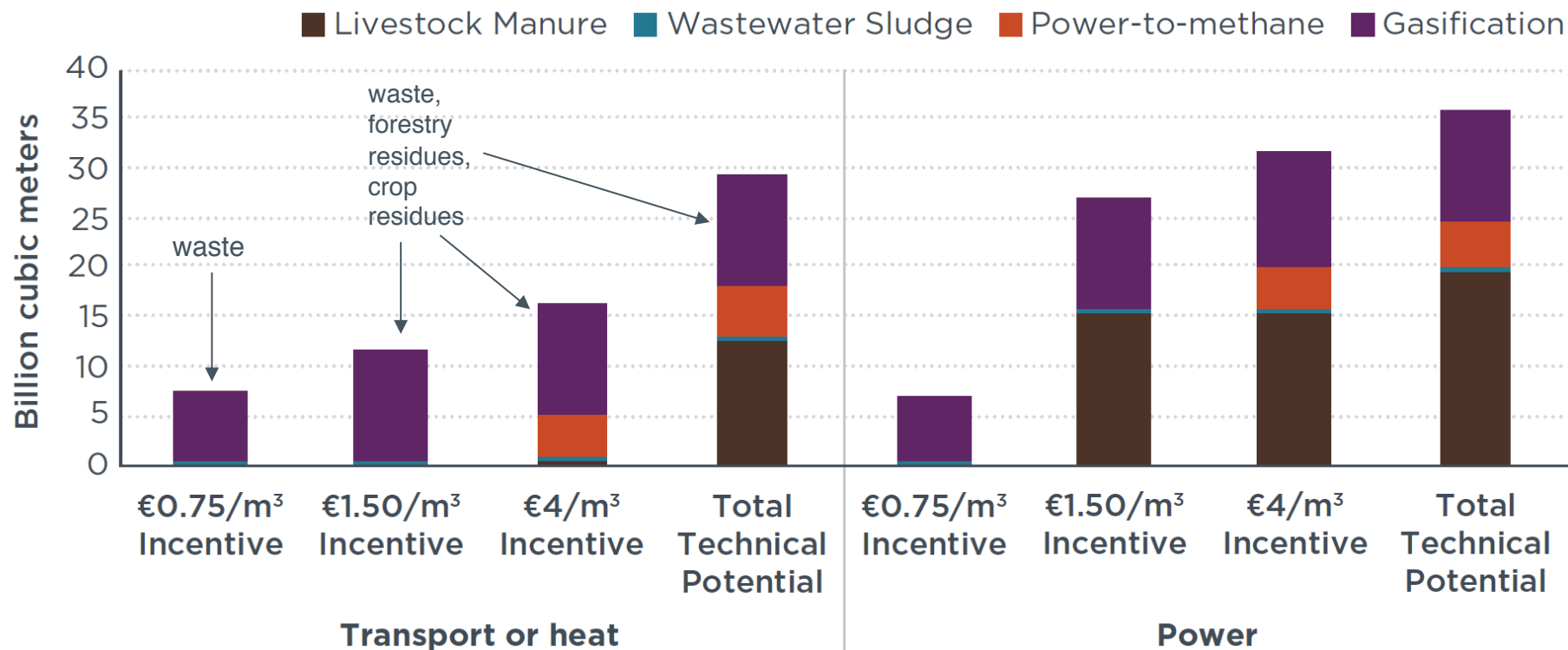
Some renewable gas pathways have strong climate benefits



Technologies:

- 1) Anaerobic Digestion
- 2) Gasification
- 3) Power-to-Gas

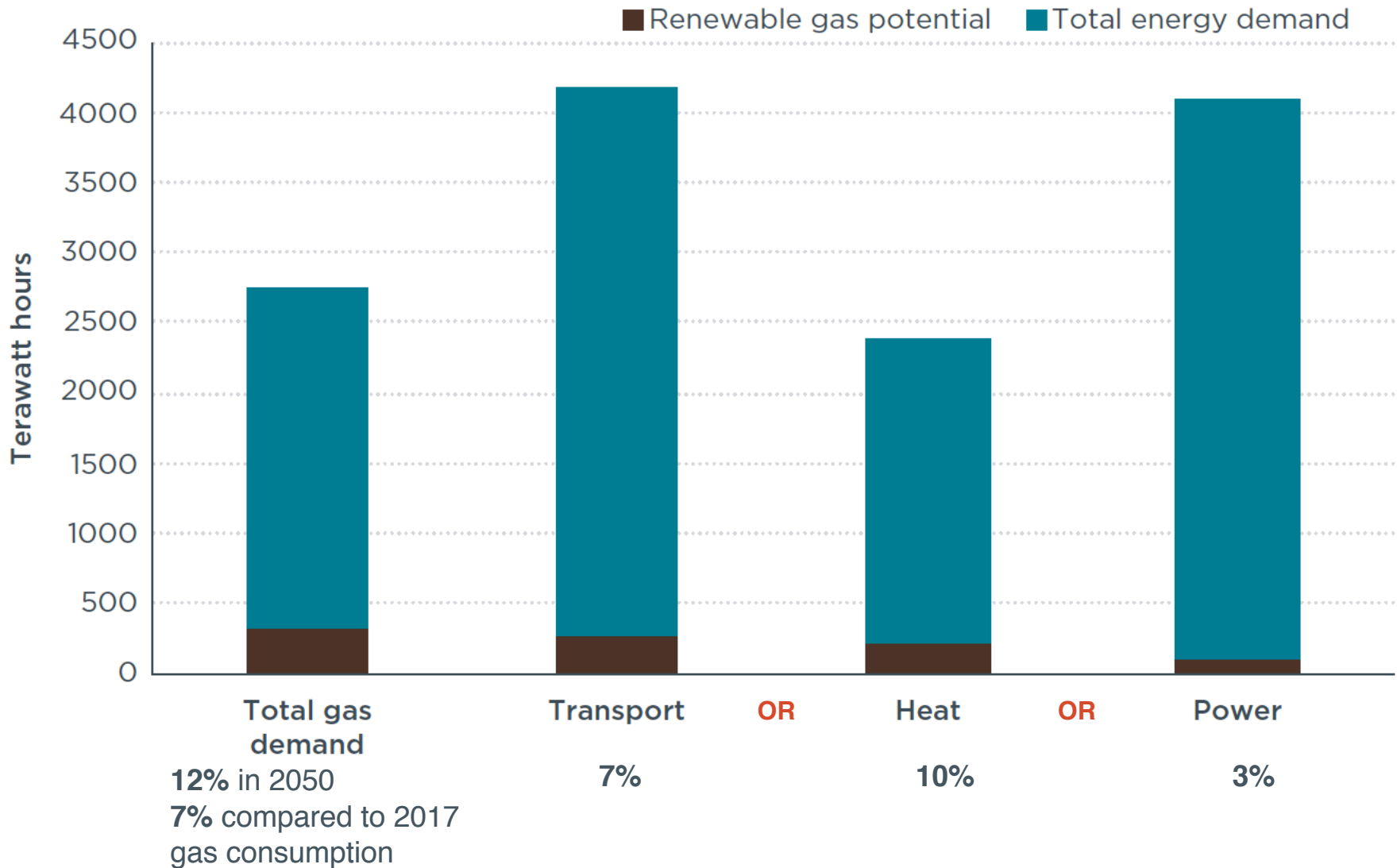
Renewable gas potential & economics in 2050



€1.50–€4/m³ is similar to...

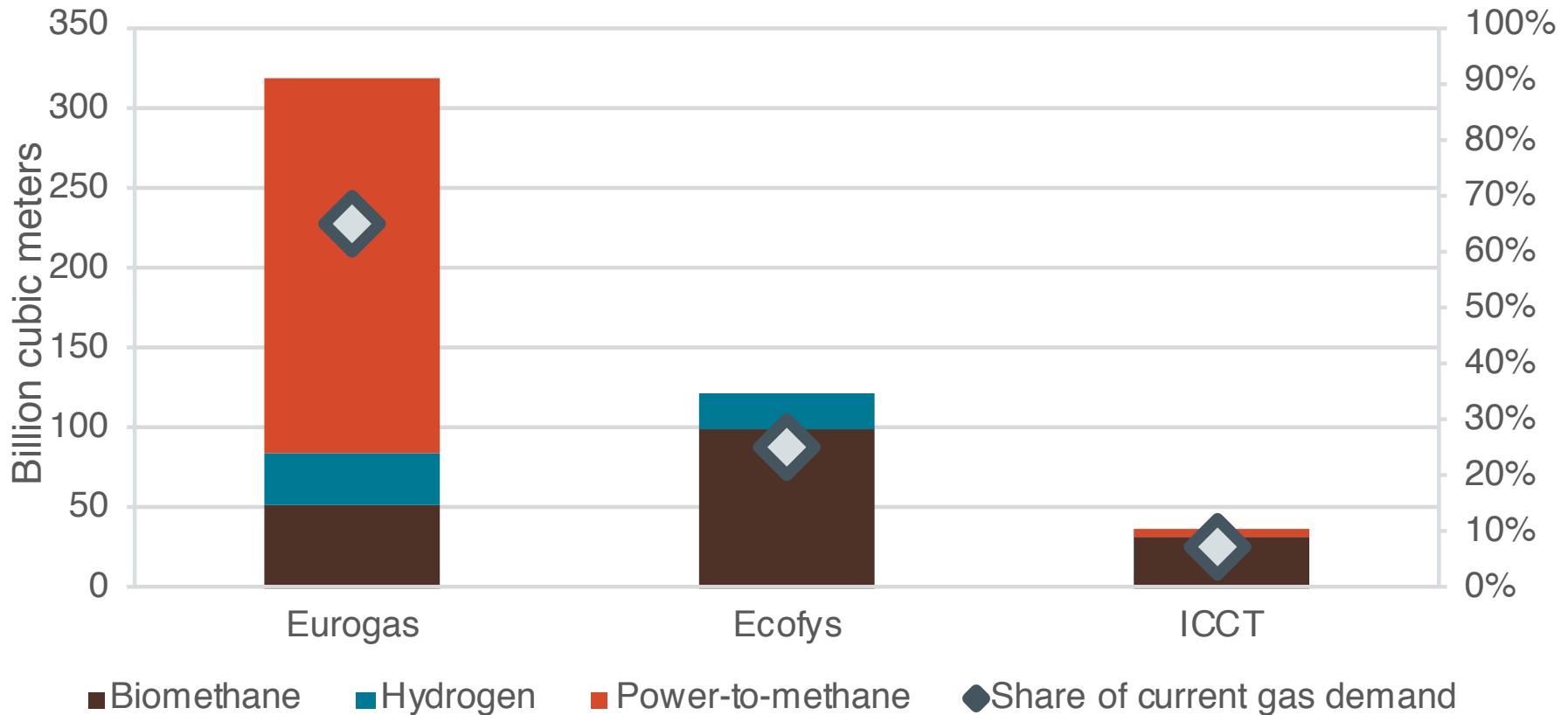
- €1.50–€4/L diesel equivalent
- €580-1,350/tCO₂ carbon abatement

Technical potential of renewable gas in 2050 compared to energy needs (current policy trajectory)

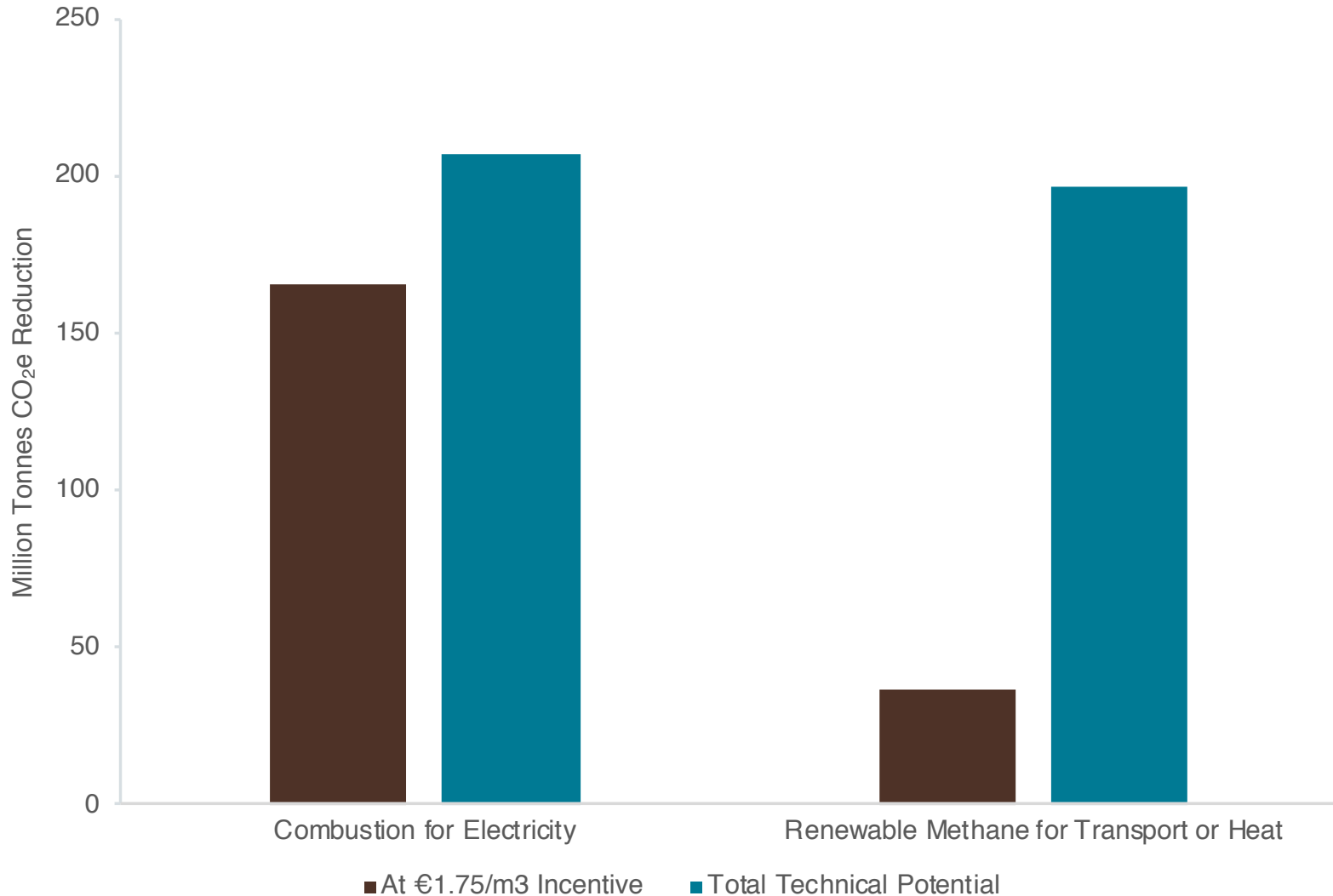


ICCT results compared to other studies

Comparison of EU 2050 renewable gas projections



GHG mitigation potential in 2050



What role can renewable methane play?

- Can we get climate benefits from renewable methane? **Yes from some pathways, no from others**
- Will renewable methane be cost effective? **Some renewable methane will make economic sense, but not all of it**
- Can renewable methane transform our gas supply into a fully low-carbon resource? **No, it can replace a small fraction of it**
- Can renewable methane make a large contribution to decarbonizing transport, heat, and power? **No, it can make a modest contribution to decarbonization**

Thanks!

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