European plastics system the state of play today

54Mt

of plastic demand in the European system today 80%

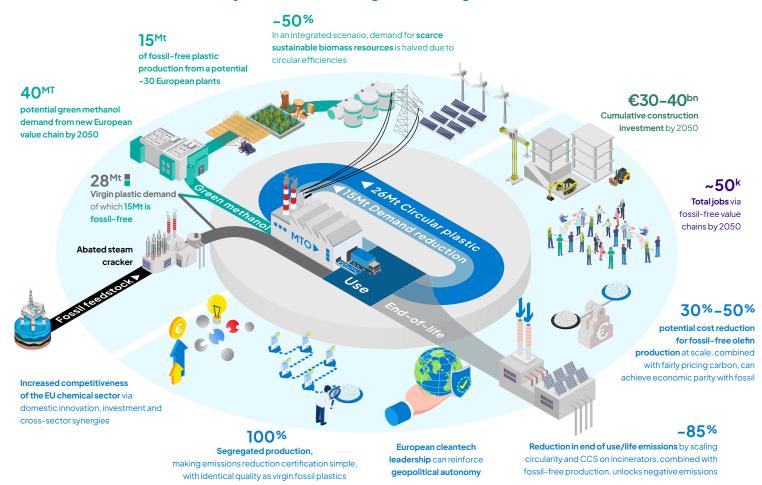
of plastic produced from virgin fossil feedstocks and only 1% from bio-based feedstocks, with the remainder from **recycling** +5^{tCO2eq}

GHG emissions per tonne of plastic produced, (if incinerated)

140MtCO2eq

GHG emissions per year, rising by 30% by 2050 in a Business-as-usual scenario

A 2050 Integrated Scenario combines fossil-free plastic production with circularity and carbon management along the value chain



Infographic is non exhaustive, and for illustrative use only. The assumptions and citation of numbers in this infographic can be found in the main body of the report to substantiate these values.

In an Integrated Scenario in 2050, the European plastics system can achieve net zero with the greatest resource efficiency and lowest transition risk

69Mt

of plastic utility is required by 2050. Circularity measures of elimination, reuse, and substitution reduce demand by 15Mt, leaving 54Mt of plastic needed to deliver the same utility ~50%

of virgin plastics produced from fossil-free feedstocks, equating to ~55% Up to ________ tCO2eq

sequestration per tonne of fossil-free plastic cradle to grave, driving 5–7 tonnes of emissions reduction vs fossil plastic today **Net zero**

emissions, with residual positive system emissions compensated for by fossil-free negative emissions

To make fossil-free plastics a reality in Europe, four stages to unlock scale are required:

Build first projects by mobilising pioneer customers

Announce bold industrial strategy to establish the relevance of fossil-free plastics in Europe's future

Establish clear market foundations to define and clearly account for the value of fossil-free plastic

Provide structural market support to stimulate demand, level the playing field with fossil and provide public support for early market development