

ReShaping Plastics in numbers

State of Play
Today

24.5 million tonnes
of plastic waste generated in 2020

14%
of plastic waste were recycled, providing 3.5 Mt of recyclates in 2020

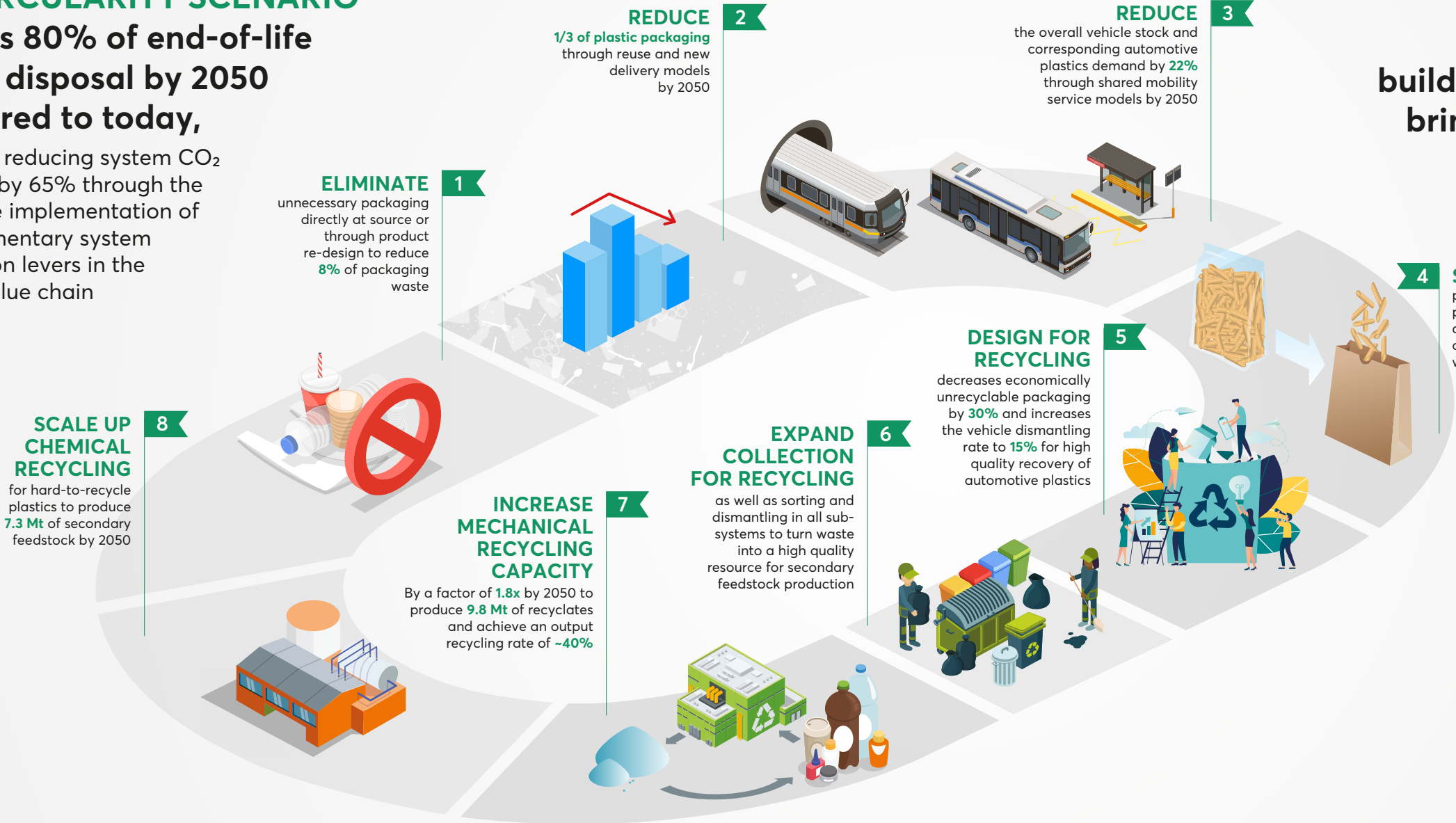
50%
of today's European plastic waste is incinerated for energy recovery

95 million tonnes
of CO₂e are emitted per year in 2020, one-third is caused by incineration

8-15 million tonnes
of unaccounted for plastic as a result of gaps in waste data

The **CIRCULARITY SCENARIO** reduces 80% of end-of-life plastic disposal by 2050 compared to today, effectively reducing system CO₂ emissions by 65% through the immediate implementation of 8 complementary system intervention levers in the plastics value chain

The **NET ZERO SYSTEMS CHANGE SCENARIO** builds on the Circularity Scenario and brings the European Plastics system on a net zero pathway through 4 methods of GHG reduction:



A
CHANGE THE FEEDSTOCK CARBON SOURCE
to provide 1/4 of feedstock by 2050 via sustainable bio-based materials or captured carbon and hydrogen

B
APPLY BLUE AND GREEN HYDROGEN
as fuel and feedstock to reduce production emissions

C
ELECTRIFY HEAT SOURCES
for steam crackers with cumulative production capacity of 1.5 million tonnes by 2050

D
CAPTURE PRODUCTION AND END-OF-LIFE EMISSIONS
through applying CCS to steam crackers or CCU/S to waste-to-energy plants

The **NET ZERO SYSTEMS CHANGE SCENARIO** achieves environmental and economic benefits

Target State
2050

-60%
(255 Mt) less waste incinerated between 2020-2050

>70%
less virgin plastic produced from fossil fuels

1.6 Gigatonnes
cumulative CO₂ emissions saved between 2020-2050

+160,000
jobs from circularity levers

1 in 4€
to be redeployed to innovative low carbon technologies and circular business models