CARBON RENEWAL: A **BIG STEP** TOWARD A **SMALLER FOOTPRINT**

By recycling waste plastic, carbon renewal technology improves the carbon footprint of a key building block used in the production of much-needed materials—while reducing waste.

At Eastman, we're dedicated to creating a circular economy that creates value from material waste. To do this, we leverage two Advanced Circular Recycling technologies: carbon renewal and polyester renewal.

Carbon renewal technology (CRT), a type of molecular recycling, gives new life to the most complex waste plastic, recycling many types of plastic that cannot be recycled with traditional mechanical recycling methods.

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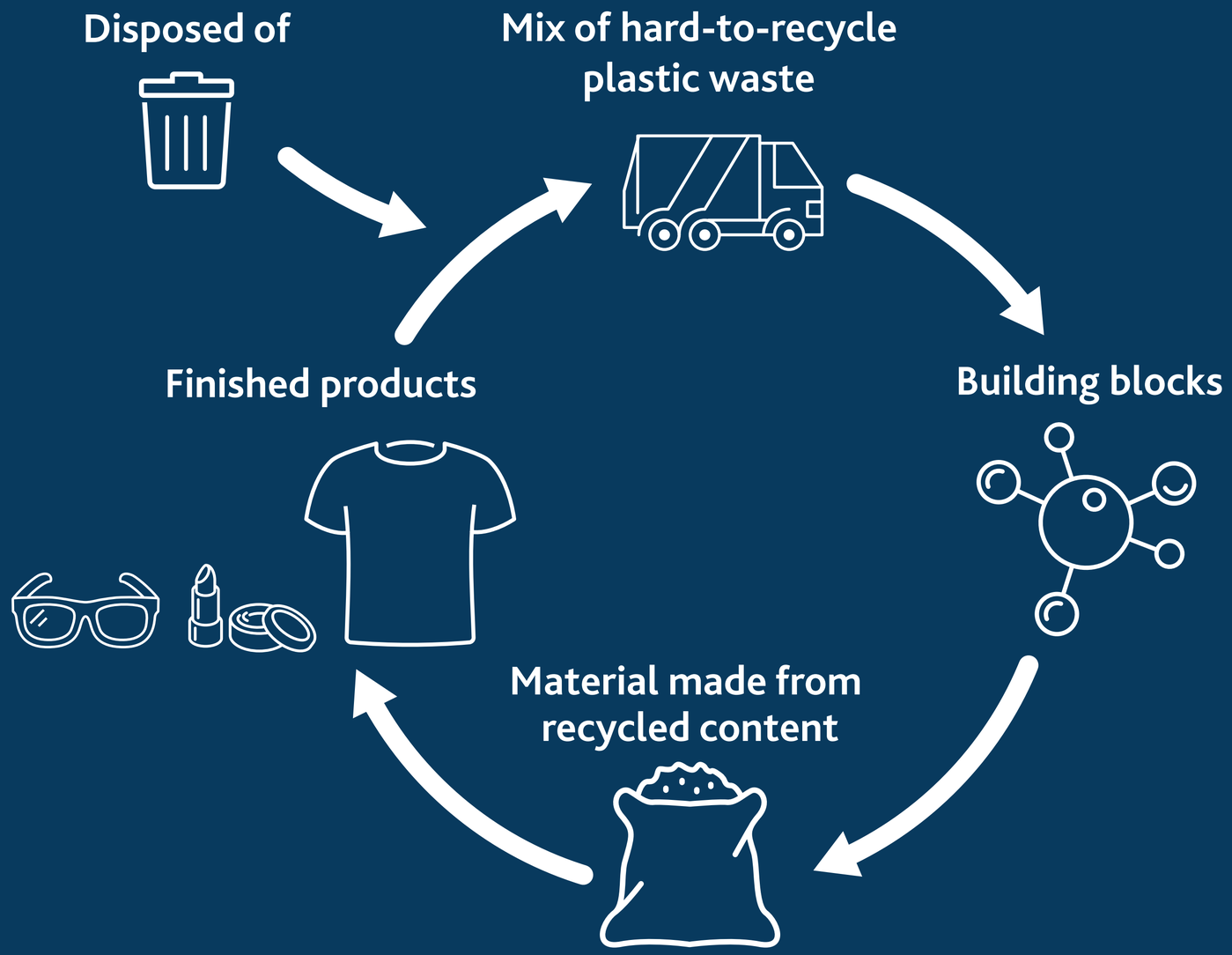
EASTMAN'S CARBON RENEWAL TECHNOLOGY:

The conversion of hard-to-recycle plastic waste into their original building blocks



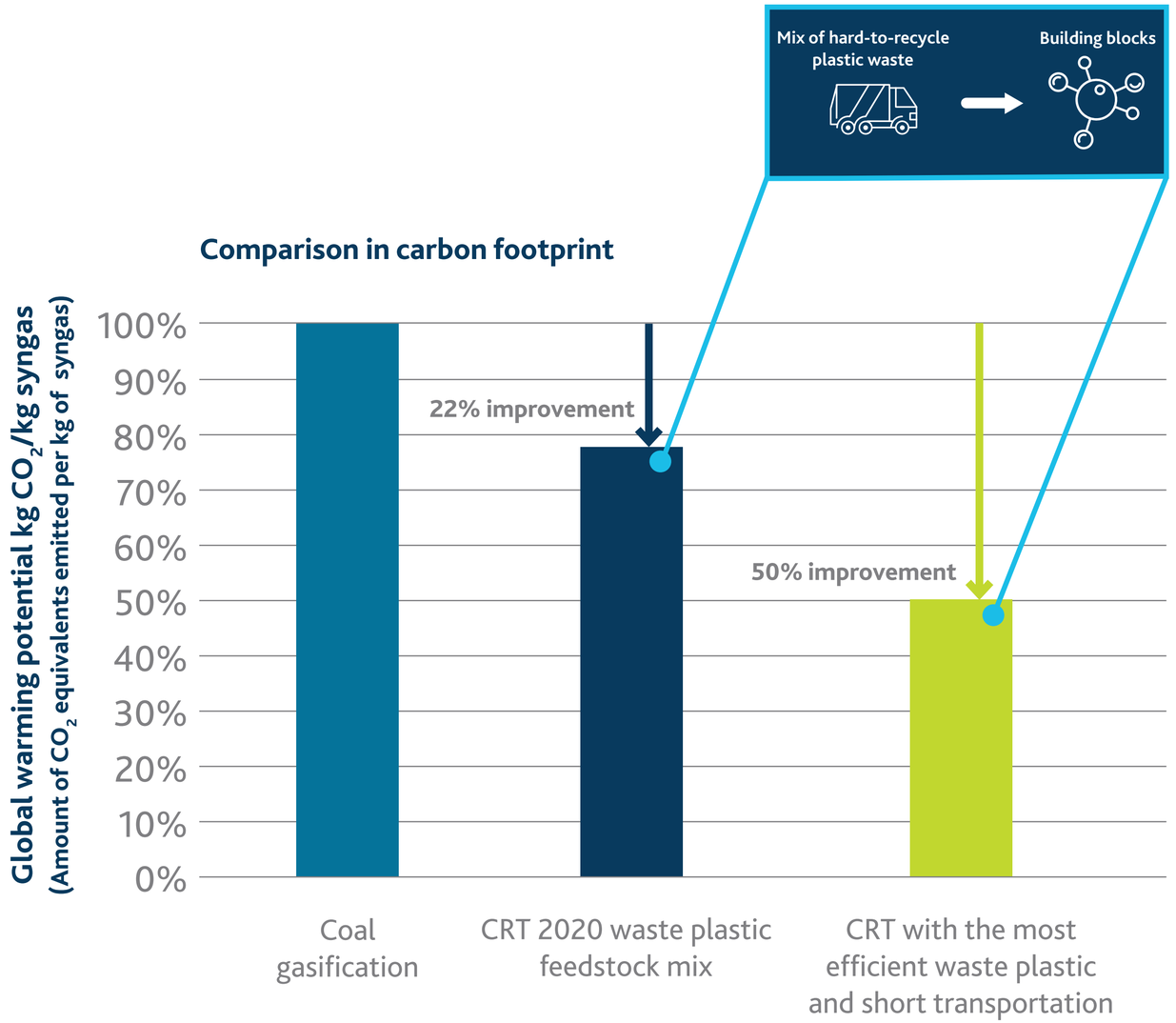
A **BIG STEP** TOWARD A **SMALLER FOOTPRINT**

REDUCING EMISSIONS

Not only does this technology help keep plastic waste out of landfills and incinerators, it also reduces greenhouse gas emissions.

Eastman completed a life cycle assessment (LCA) for CRT, which has been critically reviewed by CE Delft and verified to conform with the leading international LCA methodology standards **(ISO 14040 and 14044)**. The LCA shows that by using waste plastic as a raw material to **replace conventional fossil-based feedstocks**, CRT can reduce the GHG emissions for syngas production by **20% to 50%**.

The 20% to 50% range is due to the variation in carbon footprint resulting from process efficiencies associated with the reforming of different types of plastic. It also depends on the waste plastic's transportation mode and distance traveled. For example, waste plastic traveling to Eastman via truck has a different carbon footprint than that traveling via railway.



By using **waste plastic as a raw material** to replace conventional fossil-based feedstocks, CRT can reduce the GHG emissions for syngas production to **20%–50%**.

The world desperately needs a materials revolution that will help address the global waste crisis and climate change. Eastman's **Advanced Circular Recycling technologies** are a step in the right direction.

Explore more circular solutions at **eastman.com/LCA**.

CIR-12068 1/21

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