



**Welcome to Rethinking
the Waste Problem.**

We will begin shortly.

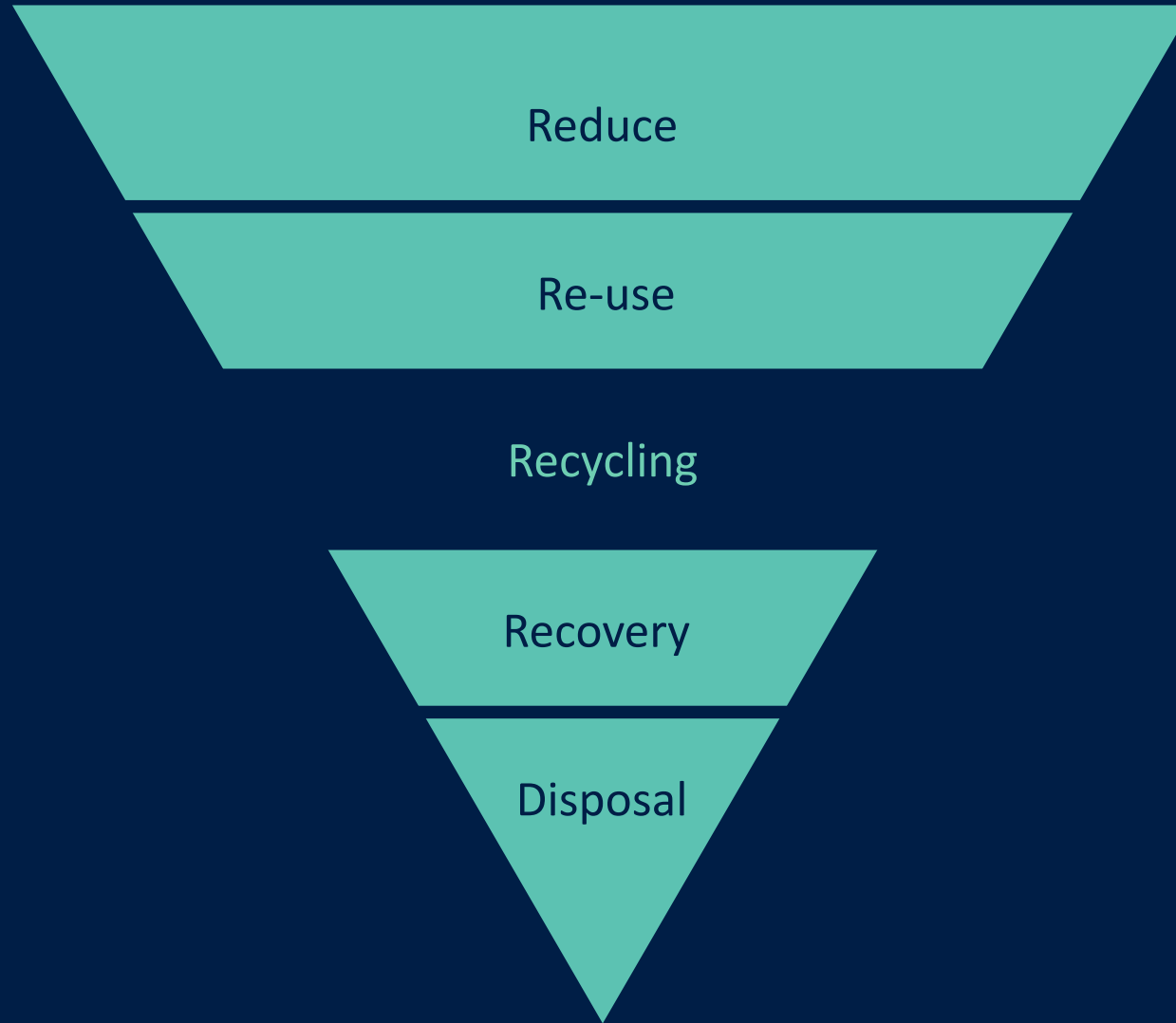


tomra.com

resociety.net



Waste Hierarchy



We commit to...

- striving for a world where, **by 2030**: 40% of post-consumer plastic packaging is collected for recycling.
- closed loop recycling of 30% of post-consumer plastic packaging is achieved.



re society





Global Impact of Holistic System Solutions

11 November 2020

**Dr Dominic Hogg, Chairman
Eunomia Research & Consulting Ltd.**



GLOBAL
MUNICIPAL
WASTE IN 2016:

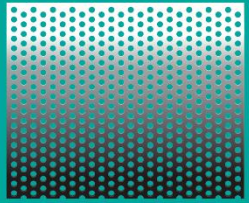
2.02 BILLION
TONNES
OF
WASTE

EQUIVALENT VOLUME TO 10,000
EMPIRE STATE BUILDINGS

Source: Silpa kaza, Lisa Yao, Perinaz Bhada-Tata, and Frank Van Woerden (2018) What a Waste 2.0: A Global Snapshot of Solid Waste Management to 2050. Urban Development Series, Washington, DC: World Bank

Sources of Global Emissions

Iron & steel, aluminium, and other metals



4.8 Gt

Cement, lime, plaster, and other non-metallic minerals



4.4 Gt

Plastics and rubber



1.5 Gt

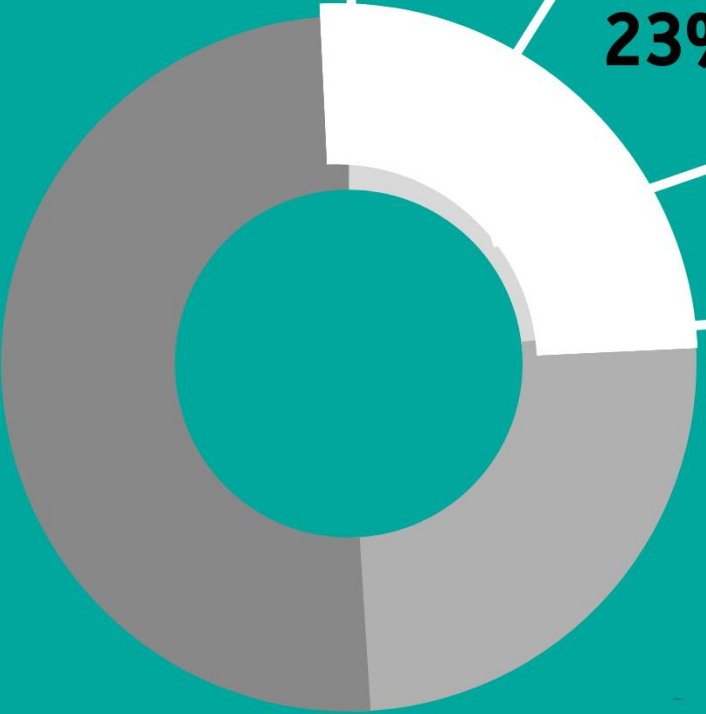
23%



0.9 Gt

Wood production

Other
51%



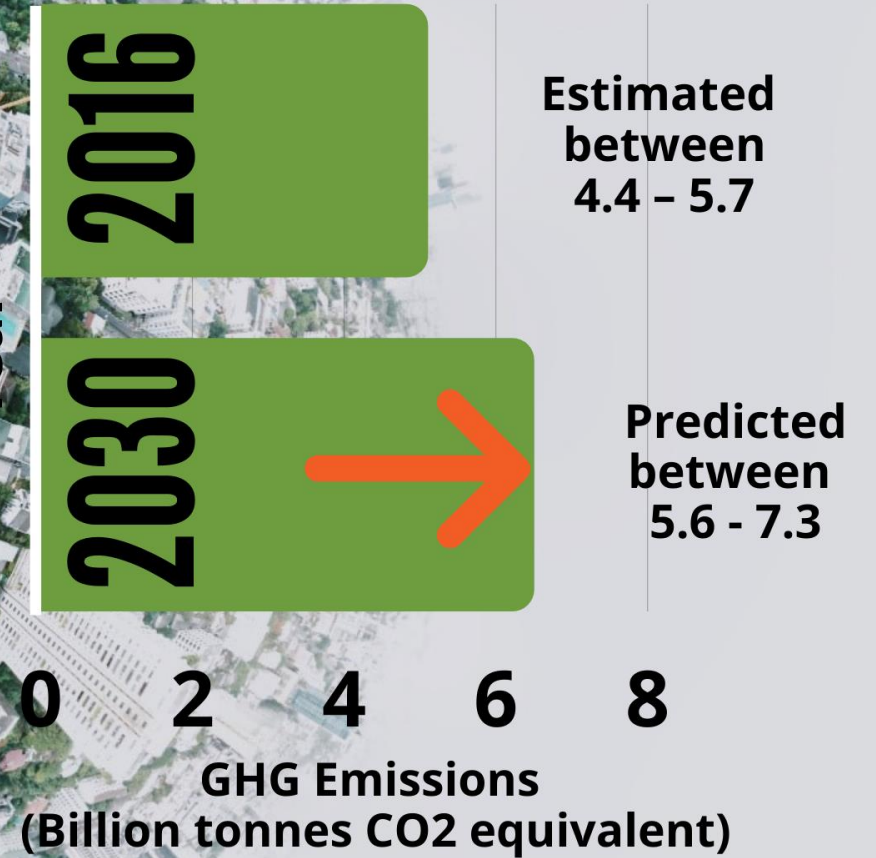
Food
26%

Sources: IRP (2020). Resource Efficiency and Climate Change: Material Efficiency Strategies for a Low-Carbon Future. Summary for Policymakers, A report of the International Resource Panel. United Nations Environment Programme, Nairobi, Kenya (lead authors: Edgar Hertwich, Reid Lifset, Stefan Pauliuk, and Niko Heeren).
Poore, J., & Nemecek, T. (2018). Reducing food's environmental impacts through producers and consumers. Science, 360(6392), 987-992

Reported emissions to UNFCCC under Waste Chapter

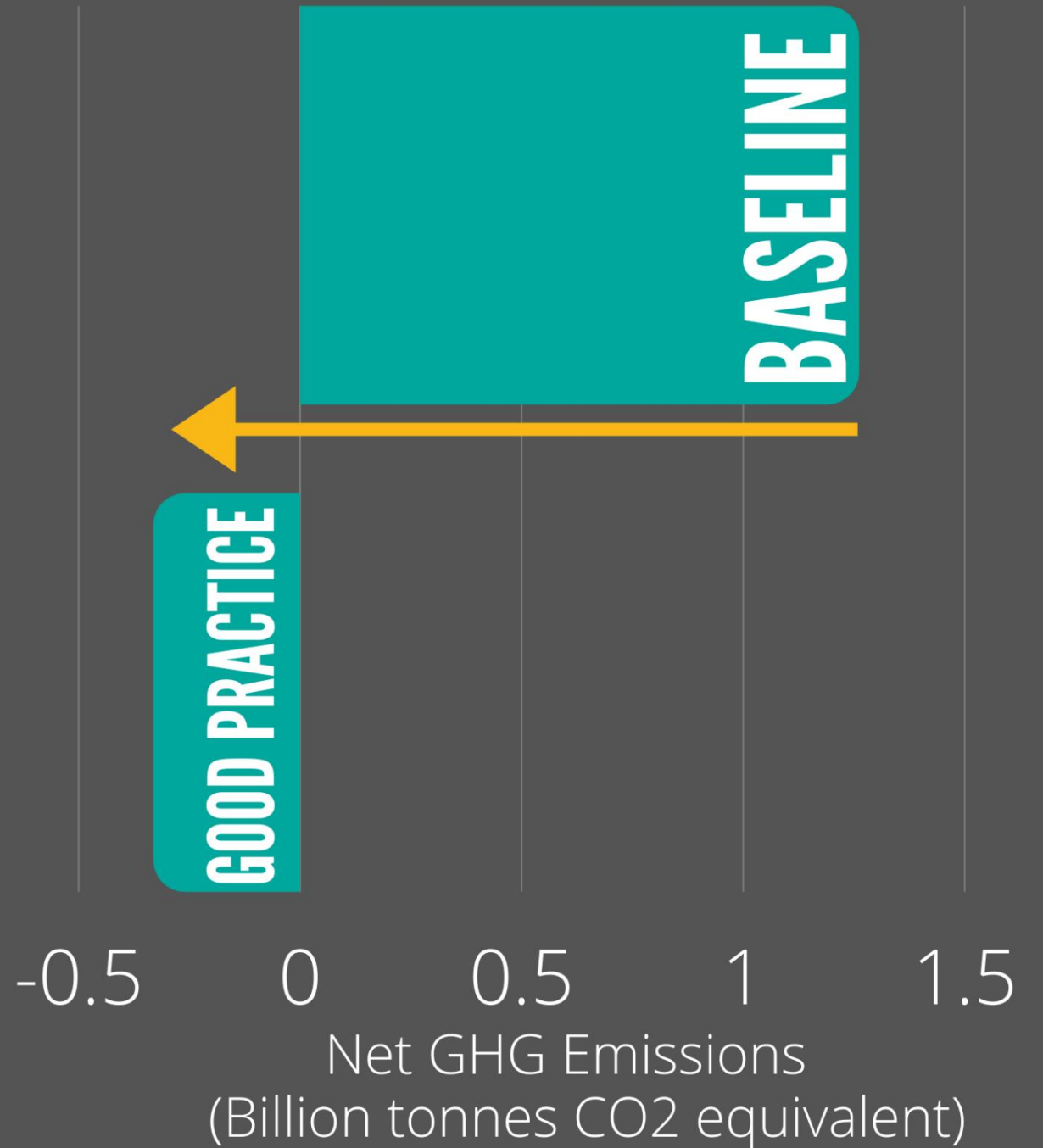
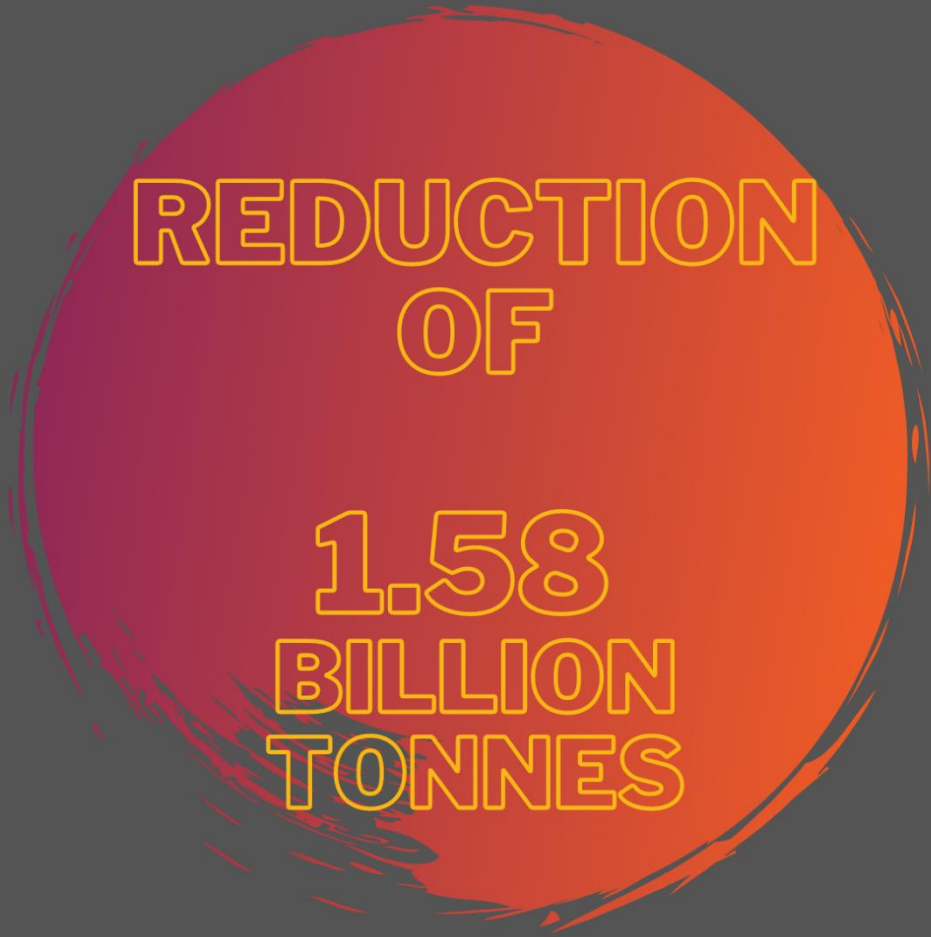
1.6 billion tonnes

Emissions from making materials that become municipal waste

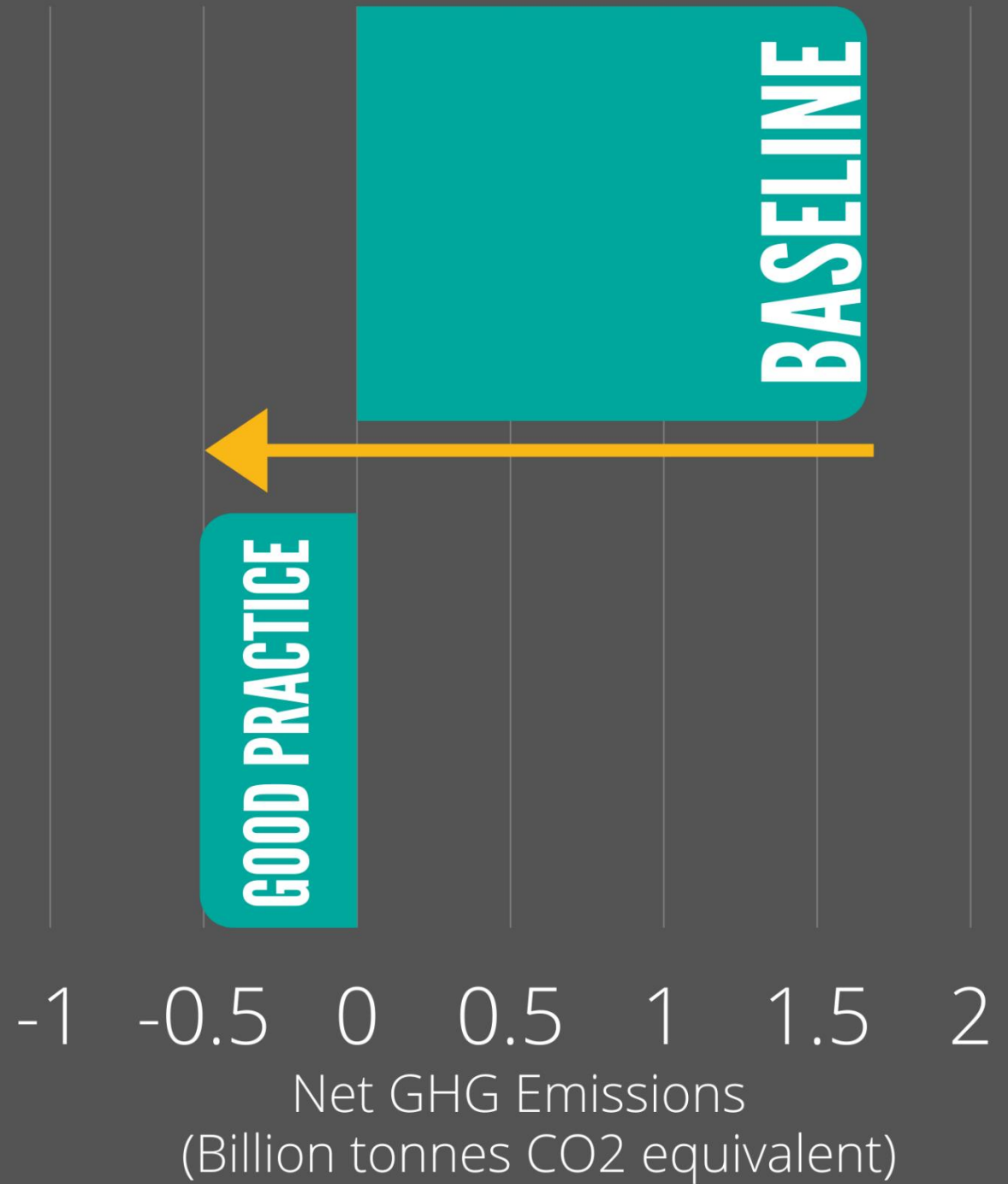
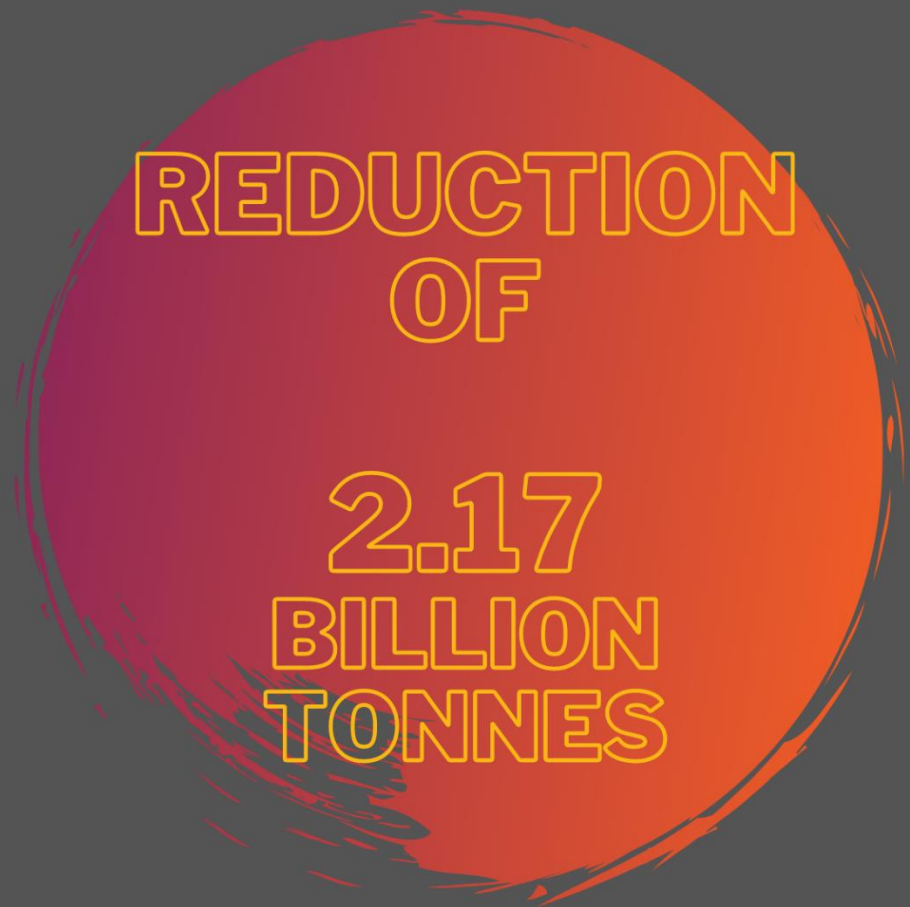


Source: CAIT; Countries/Regions: World; Sectors/Subsectors: Waste; Gases: All GHG; Calculation: Total; Show data by Regions

World Bank projections



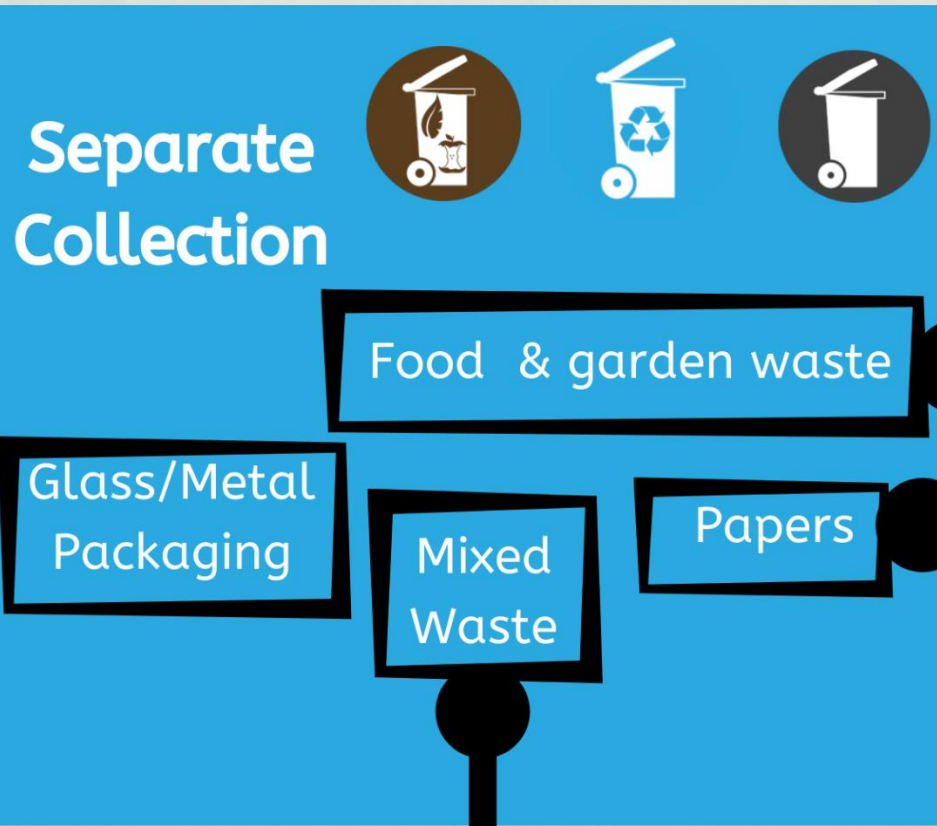
World Bank projections
+ 30% increase in
generation





Beverage
Container
**Deposit
Return
Scheme**
(excludes
glass)

**Container
Parks &
Re-use
Centre**



Anaerobic Digestion
- gas to grid



Paper sorting Facility
(same as MWS
facility)

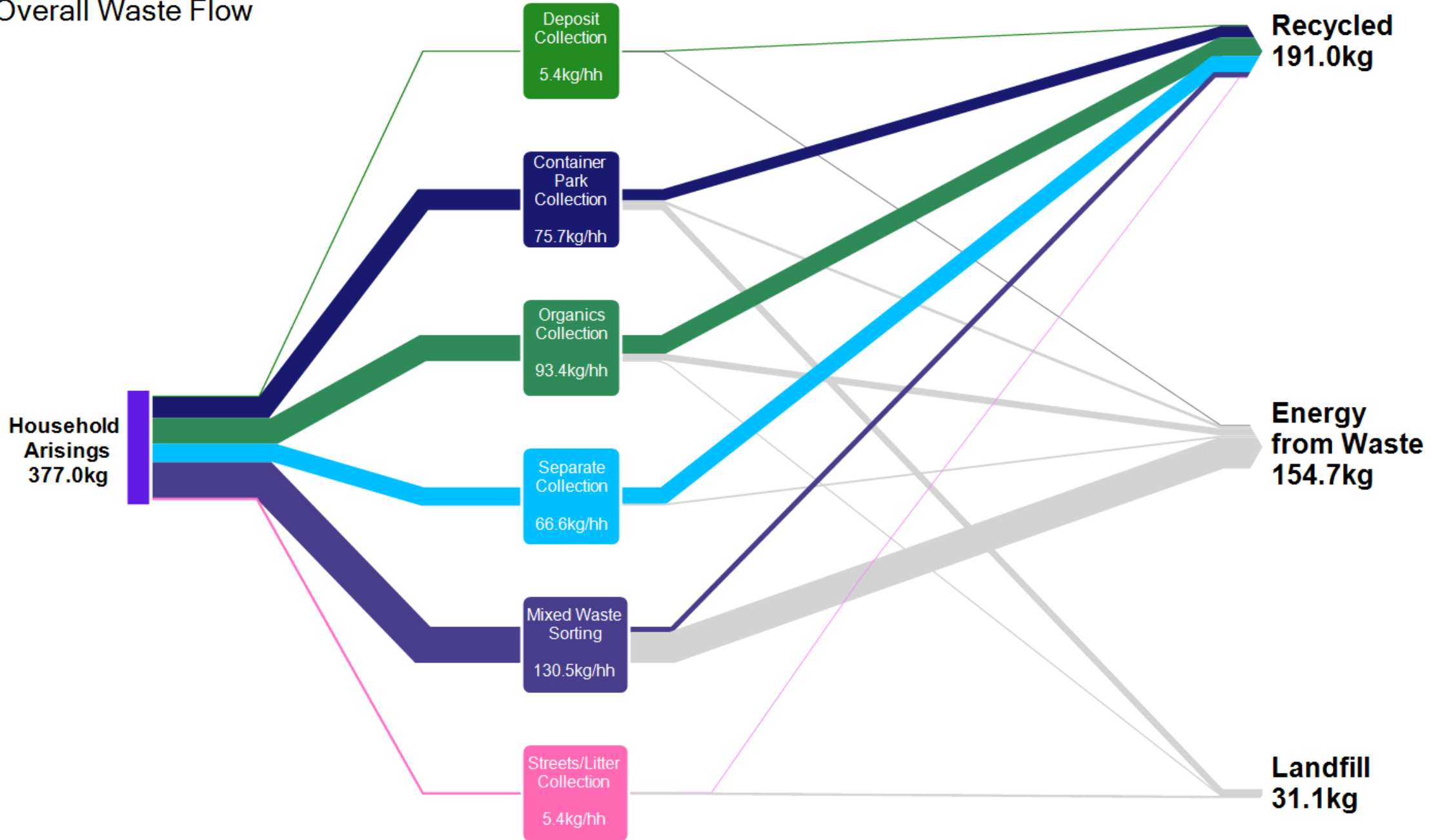
**Polyolefins to
Reprocessing Facility**
(same as MWS facility)

EfW -
Combined Heat &
Power - district heat

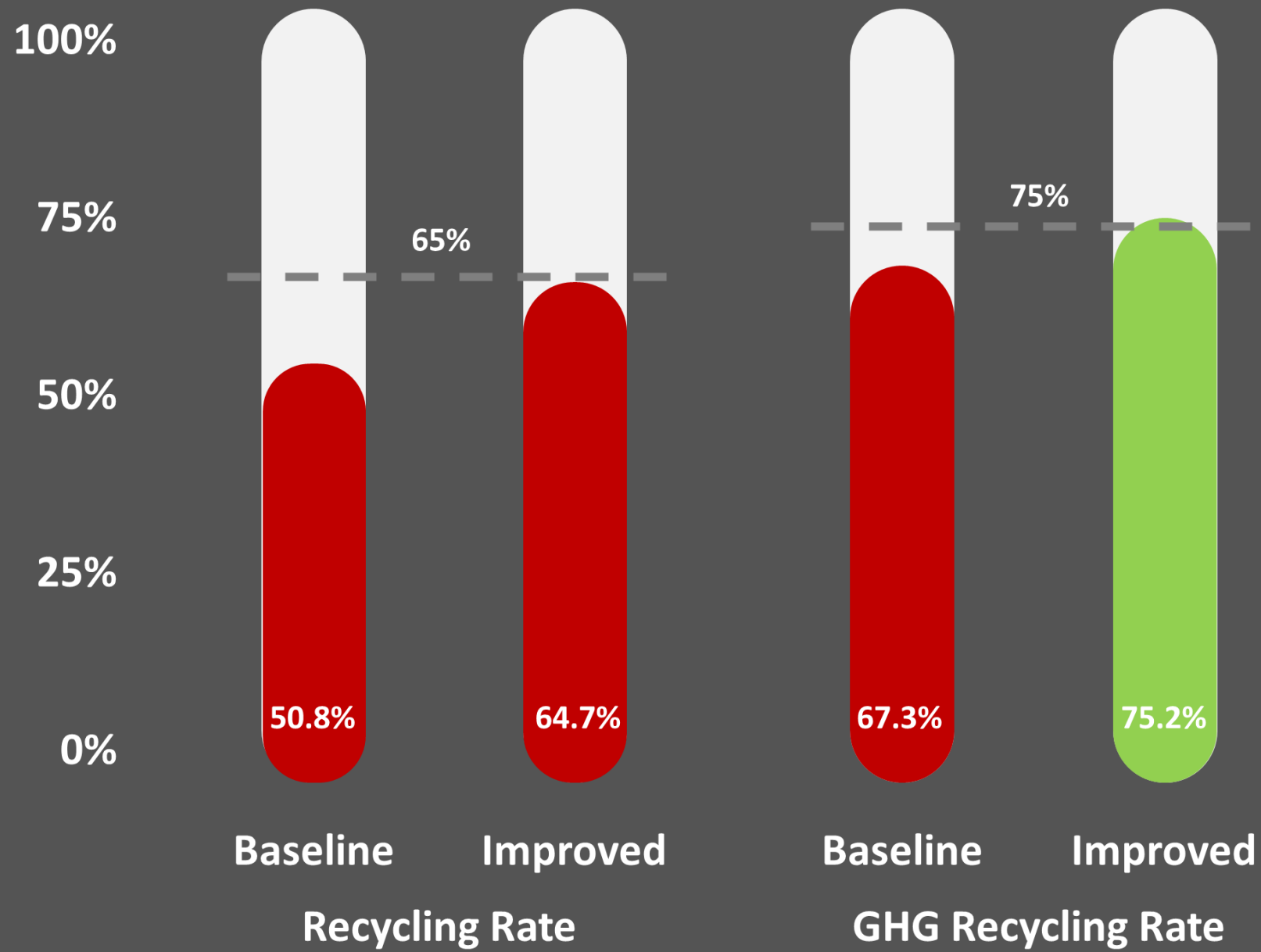


Stavanger

Overall Waste Flow

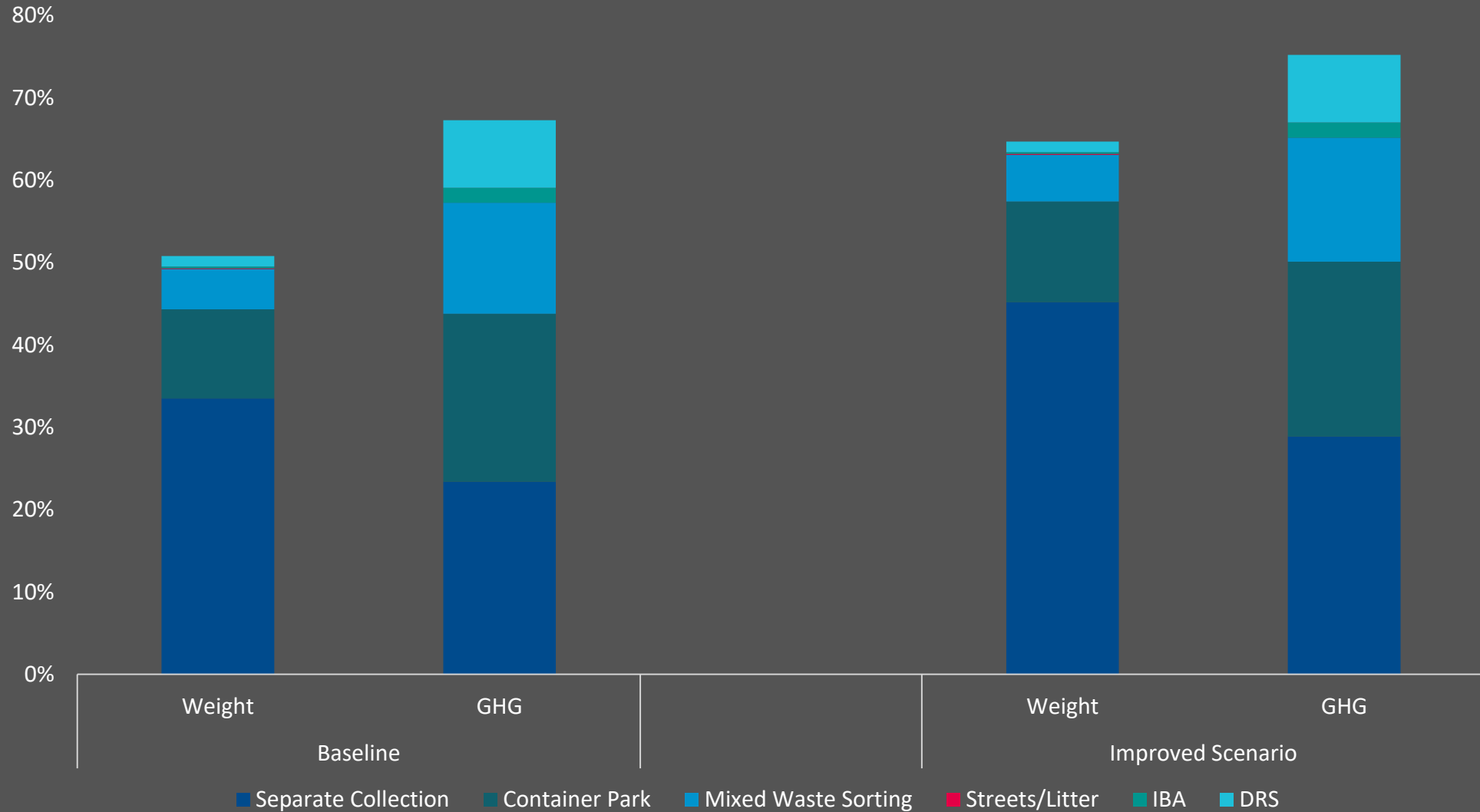


Municipalities using IVAR are able to meet the targets with practical system changes.



- **Recycling Rate:** the amount recycled as a proportion of total waste, for all municipal waste. This is based on the amount *actually* recycled, rather than the amount collected for recycling.
- **GHG Recycling Rate:** the greenhouse gas reductions associated with recycling relative to the situation where 100% recycling is achieved through the most beneficial routes.

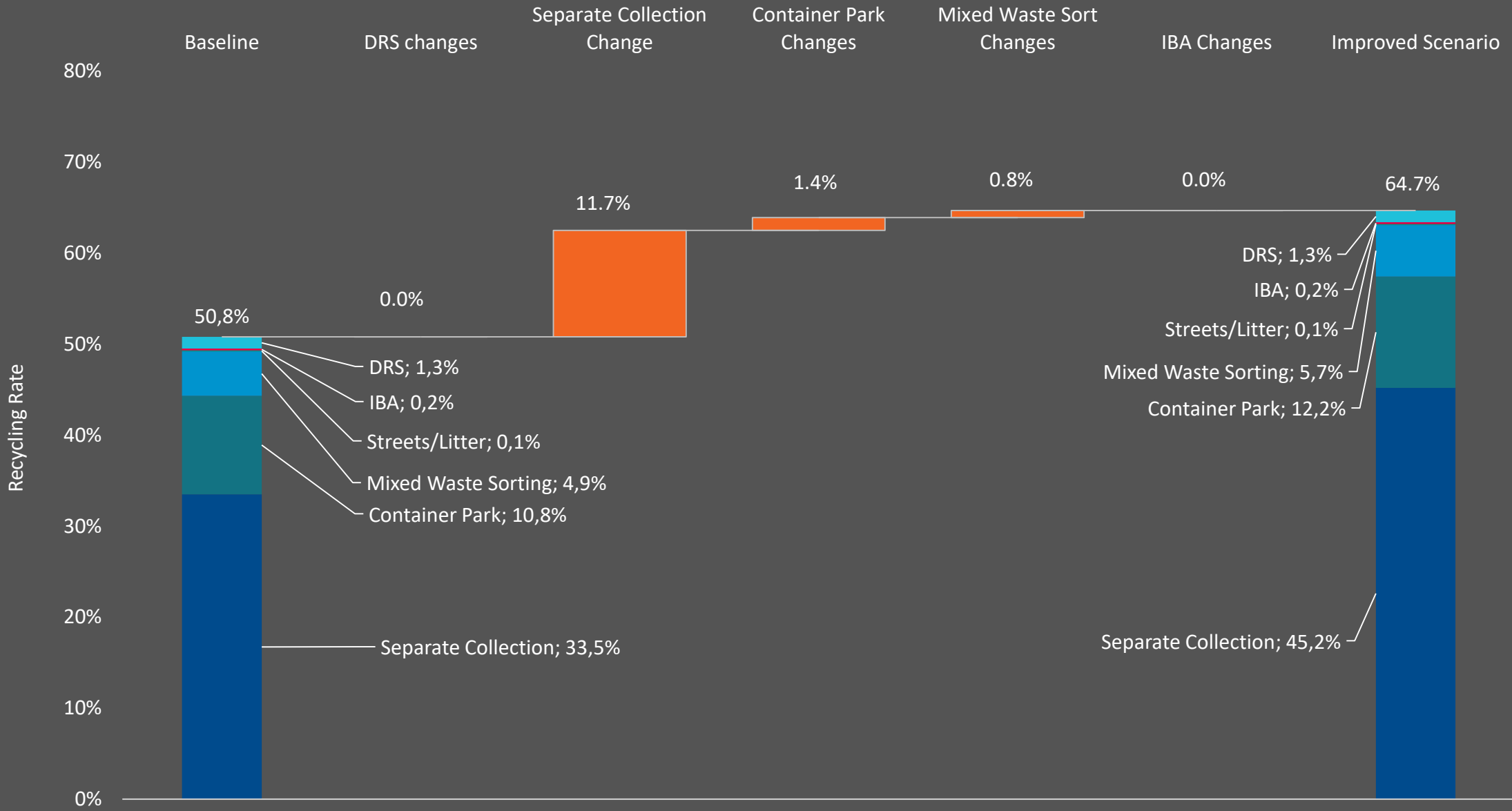
Comparison Between Recycling and GHG Recycling Performance



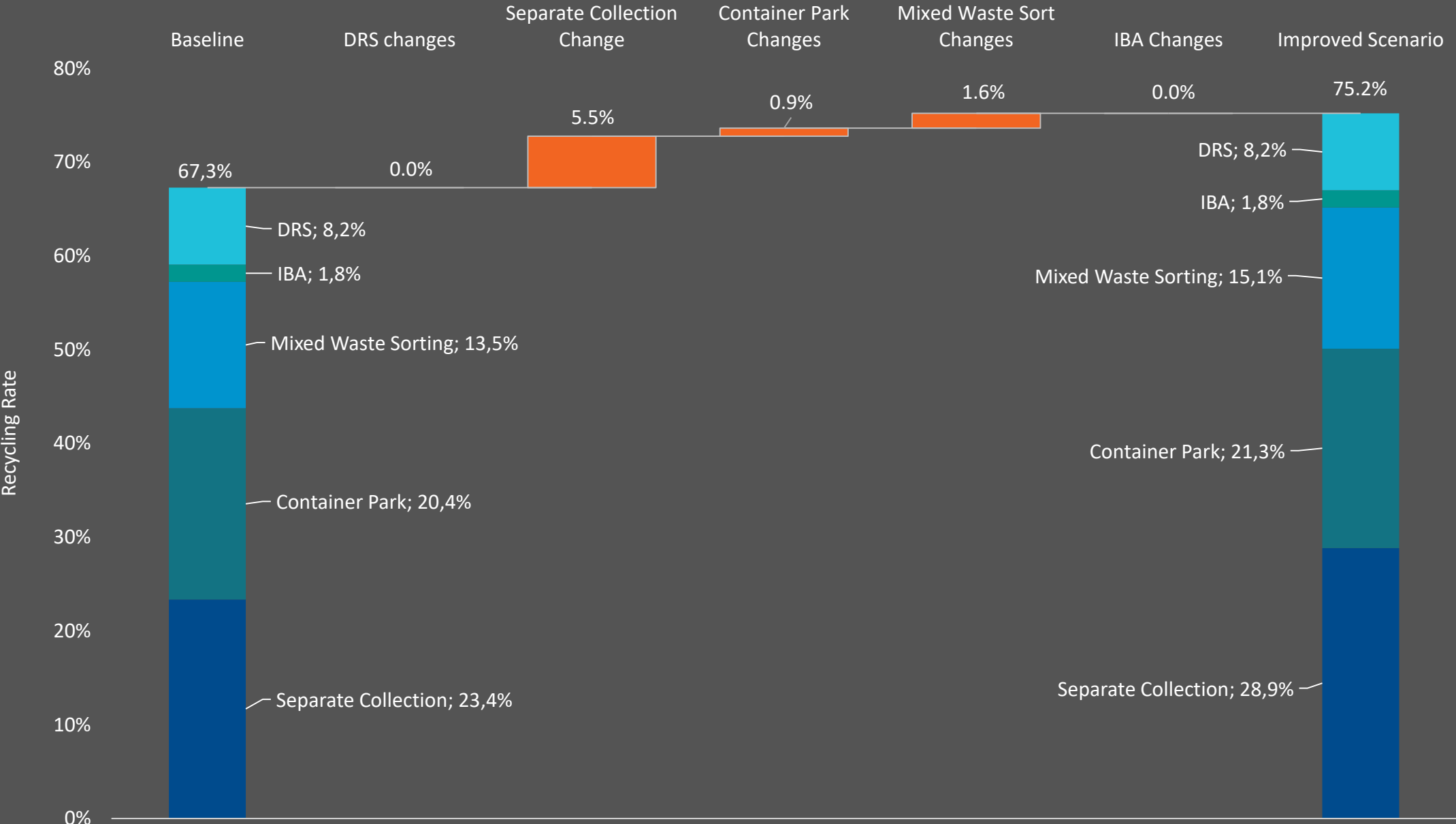


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Recycling Rate Changes by System



GHG Recycling Rate Changes by System



Thank you for joining us.
Together we can make a difference.

