

SEA of Solutions

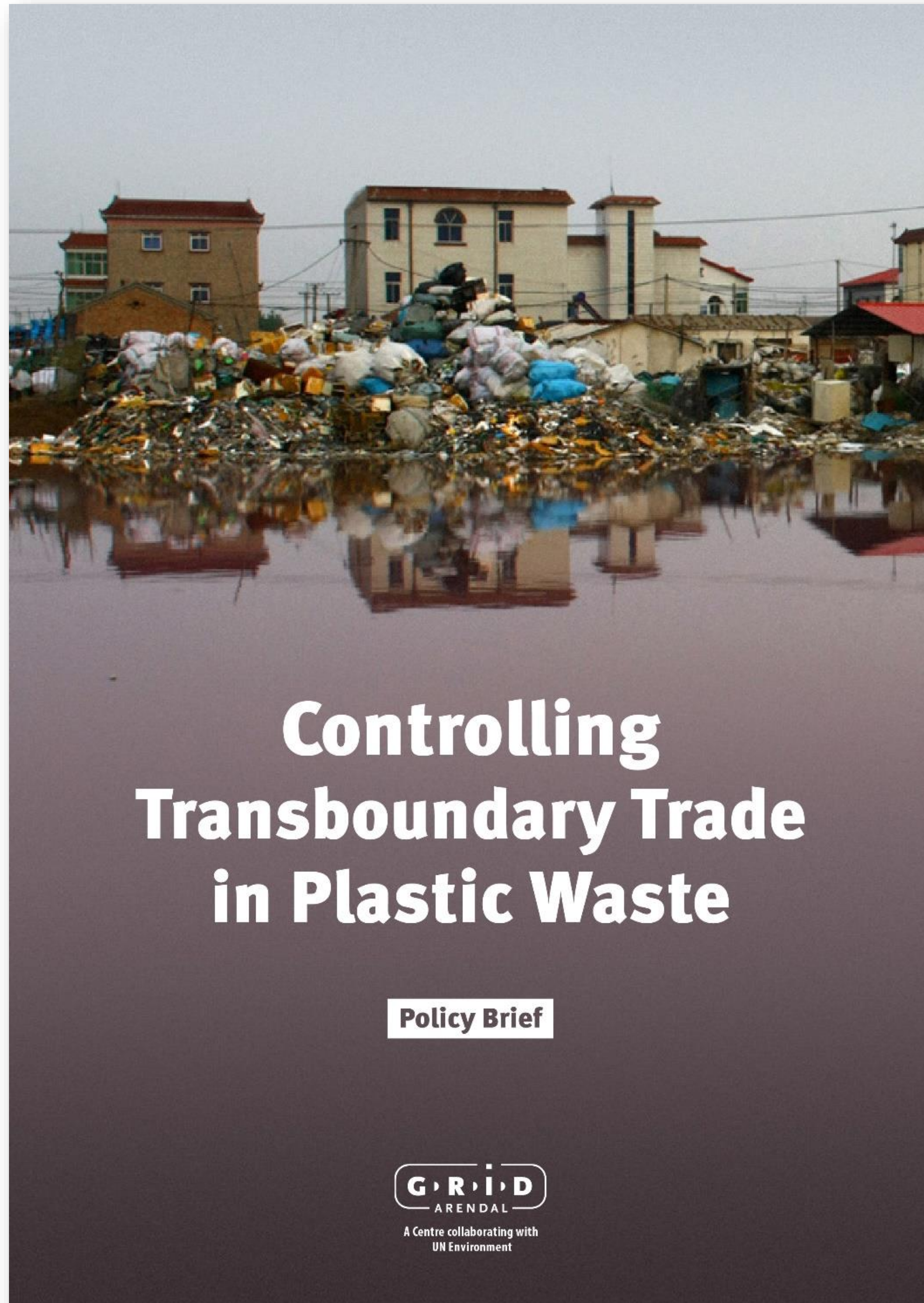
partnership week for marine plastic pollution prevention
11-14 november 2019

Controlling transboundary trade in plastic waste

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WASTE MANAGEMENT EXPERT

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1. Flaws in the current global recycling model
2. Impacts of plastic scrap transboundary movement
3. Recommendations

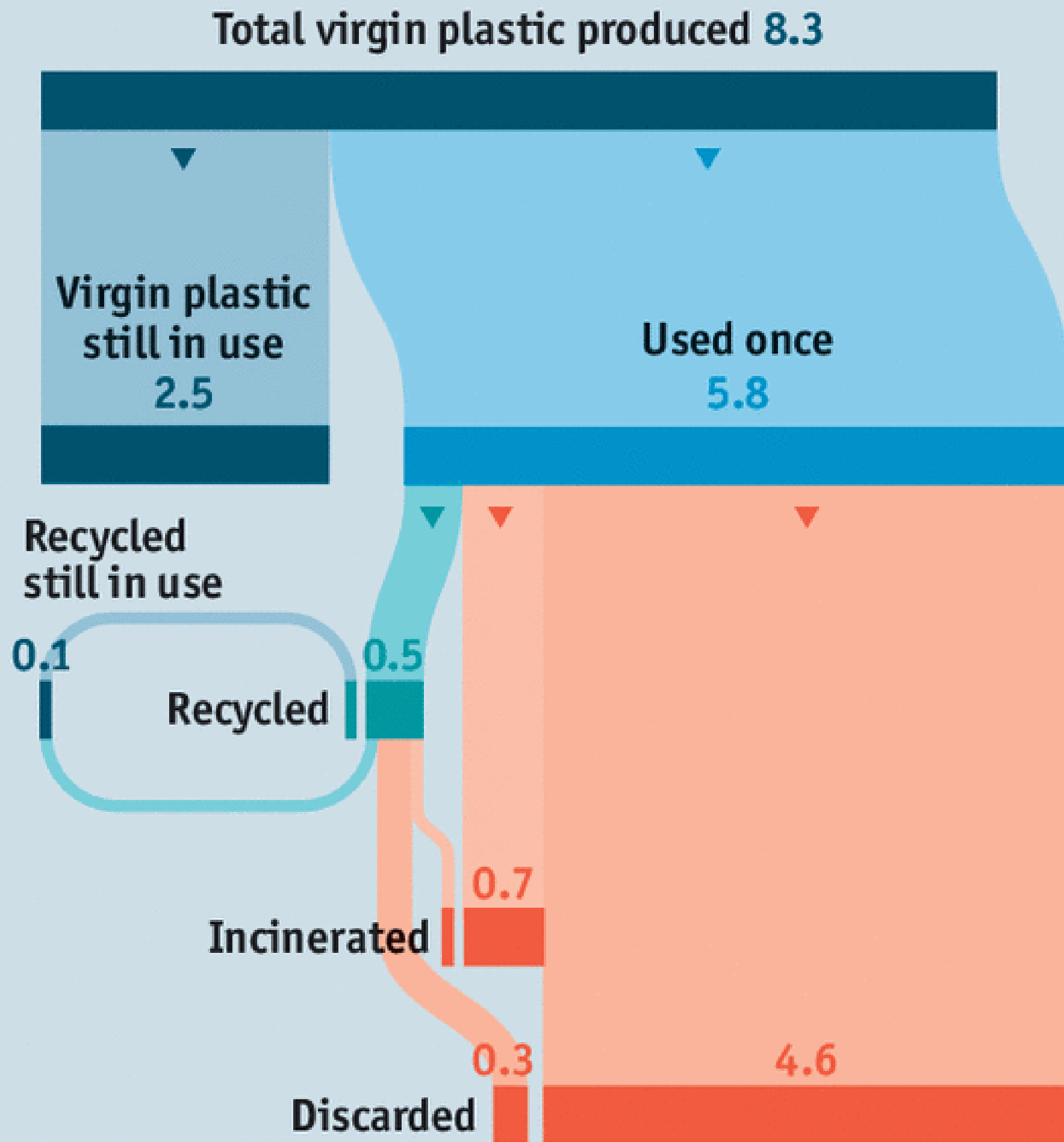
<http://www.grida.no/publications/443>



The end of all things

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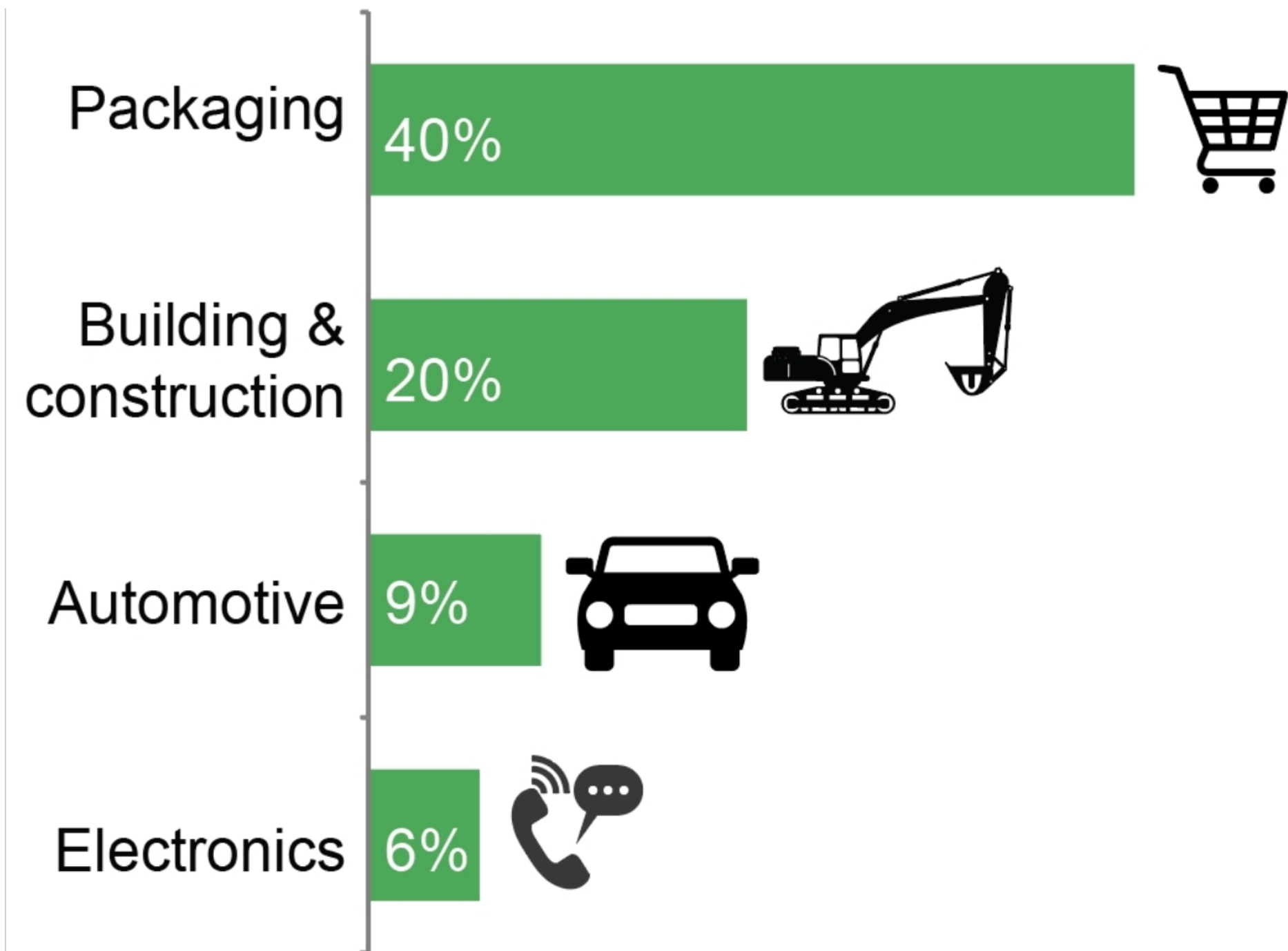
Global plastic production and use
1950-2015, tonnes, bn



Source: "Production, use, and fate of all plastics ever made" by R. Geyer et al., *Science Advances*



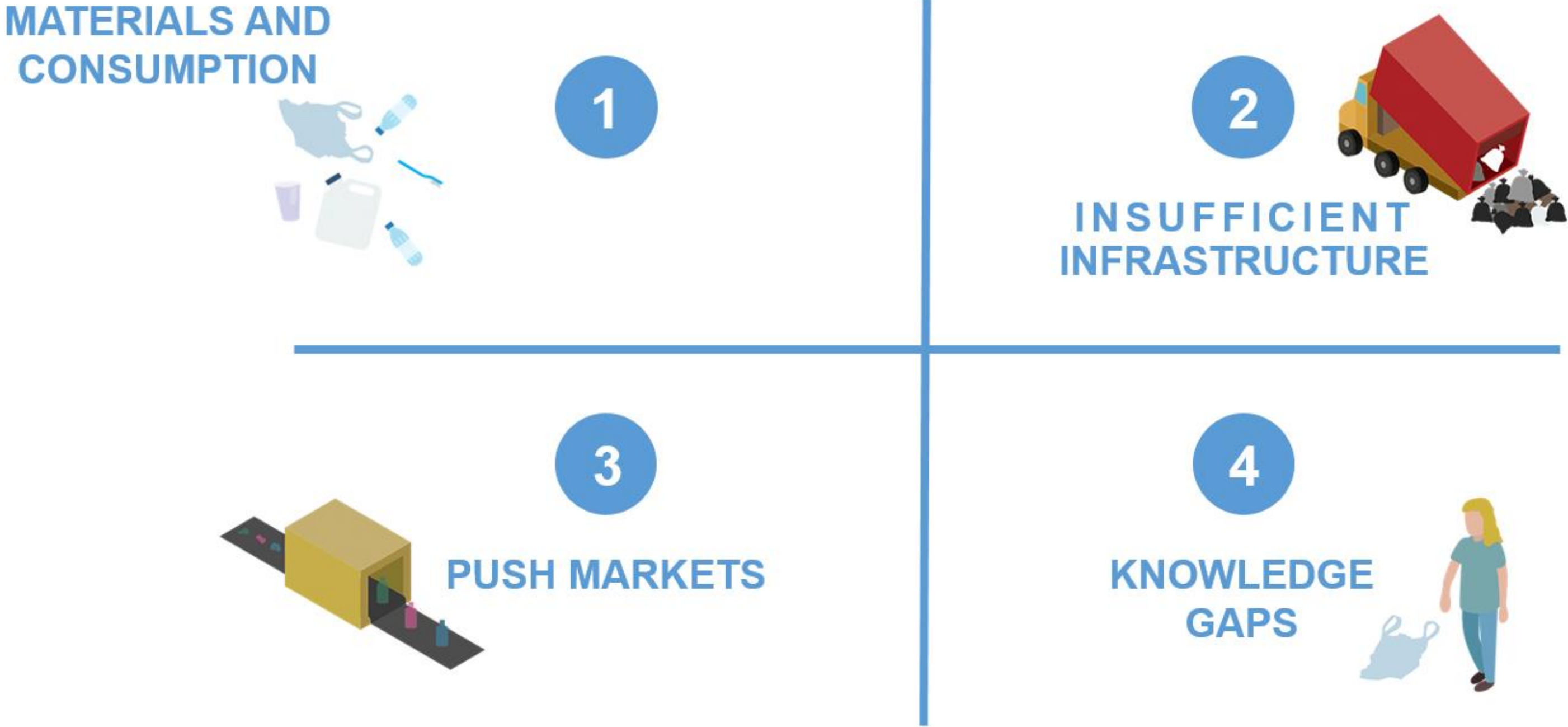
THE GLOBAL PLASTIC INDUSTRY



Source: IHS Markit.

GLOBAL PLASTIC RECYCLING ONLY 9%

GLOBAL SYSTEMIC FAILURES



Source: @ISWA MLTF



FLAWS IN THE CURRENT GLOBAL RECYCLING MODEL

Drivers of plastic leakages from collected waste

POLICY

- High recycling targets in developed countries that heavily rely on transboundary movement.
- Emerging trade restrictions in recipient countries starting with China and followed by other countries.
- Under current regulations, scrap plastic does not require control for the transboundary movement.
- Lack of traceability or obligation for exporters to demonstrate the environmental performance of exported waste recycling.

COMPLIANCE

- Existing international trade codes do not match control requirements. This promotes low accountability and transparency throughout the value chain.
- Weak enforcement of pollution control in recipient countries.
- Competent authorities in waste importing countries lack capacity to monitor the amount of waste entering their territories.

MARKET INDICATORS

- Low grade, mixed, unsorted and contaminated scrap plastics are costly to process and have little or no market value.
- Low oil and gas prices make virgin plastic cheap and undermine the market for secondary plastic feedstock.
- Global trade deficit with China lowers return shipping costs.
- Low demand for recycled feedstock and materials.
- Lower environmental controls, working standards and cheaper labour make it cost effective to export waste to emerging economies.



FLAWS IN THE CURRENT GLOBAL RECYCLING MODEL

Drivers of plastic leakages from collected waste

WASTE MANAGEMENT, TRANSPORTATION AND TECHNOLOGY

- Insufficient recycling and technological capacity along with high capital and operational costs in industrialized countries.
- Despite advancing methodologies to recycle plastic, there are still technological shortfalls that make sorting scrap plastic challenging
- Low-tech recycling at emerging economies
- Delays in transportation trade hubs e.g., over-supply at ports in emerging scrap plastic markets.

CULTURE

- Single-use plastic consumerism trends.
- While some plastic products such as building materials have long lifecycles, the majority of plastic products have a short lifetime lasting between one day and two years.



Chinese import restriction -2018

Asian countries drastically increased imports

Inadequate waste management systems



The 15 largest importer countries of G7 plastic waste

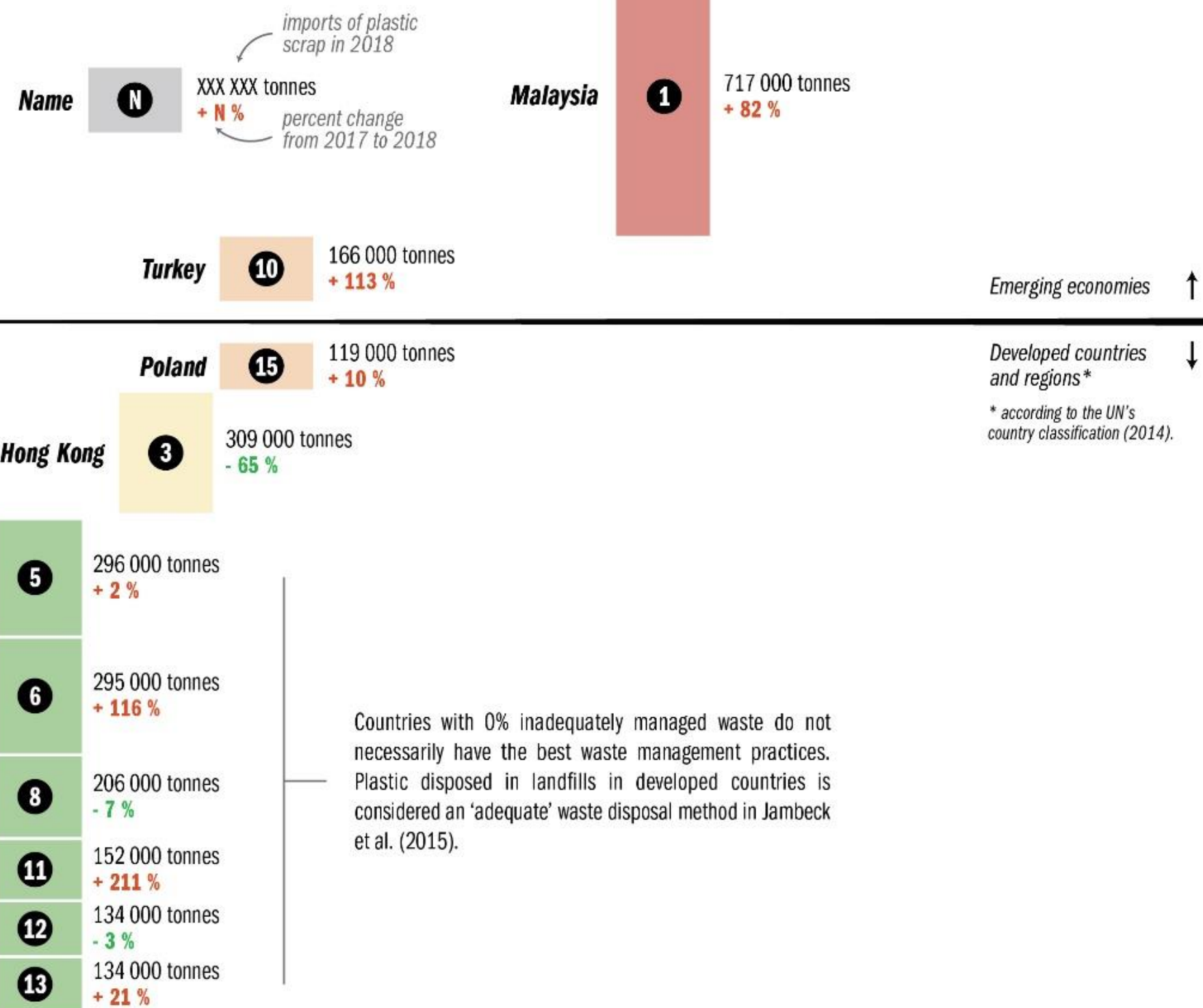
% of inadequately managed waste*



* % of inadequately waste management refers to waste that is not formally managed and includes disposal (or burning) in dumps or open, uncontrolled landfills, where it is not fully contained. The figure is modeled for each countries by Jambeck et al. (2015) using data on waste disposal methods, economic classification and geographic region (as defined by the World Bank).

G7 countries are the United States, Canada, Japan, France, the United Kingdom, Germany and Italy.

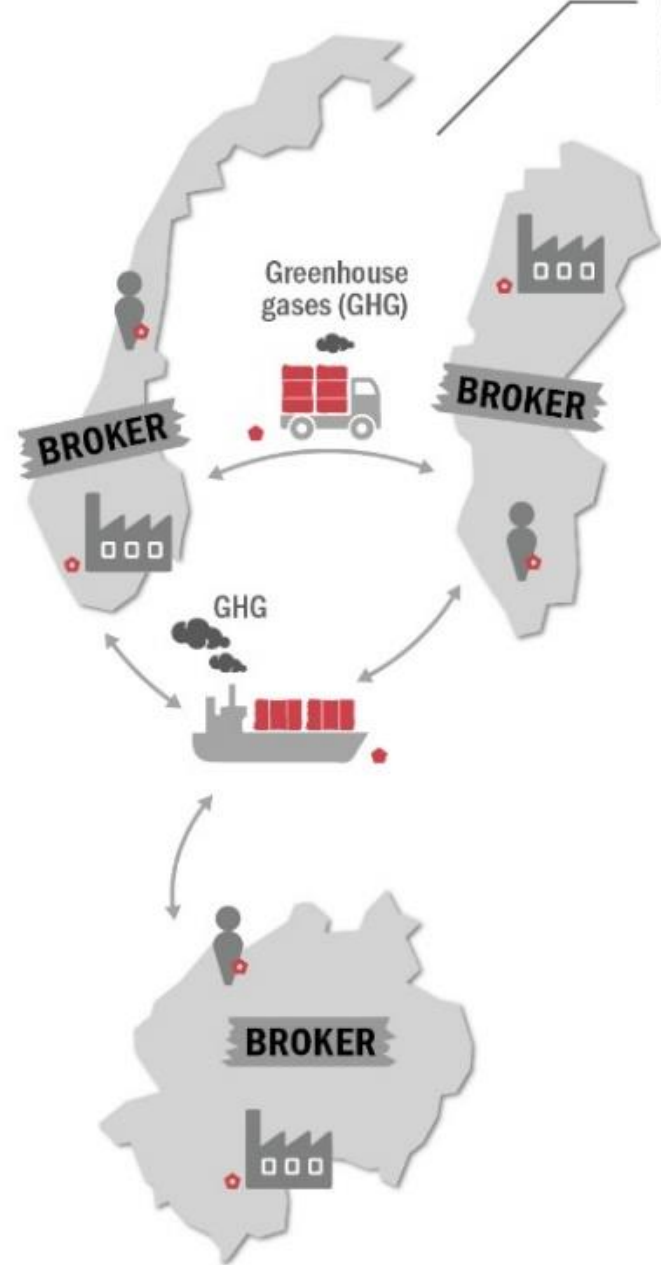
In 2018, because of China's significant decrease in imports of plastic scrap, other Asian countries drastically increased their imports, many of whom have inadequate waste management systems in place.



IMPACTS OF PLASTIC SCRAP TRANSBOUNDARY MOVEMENT

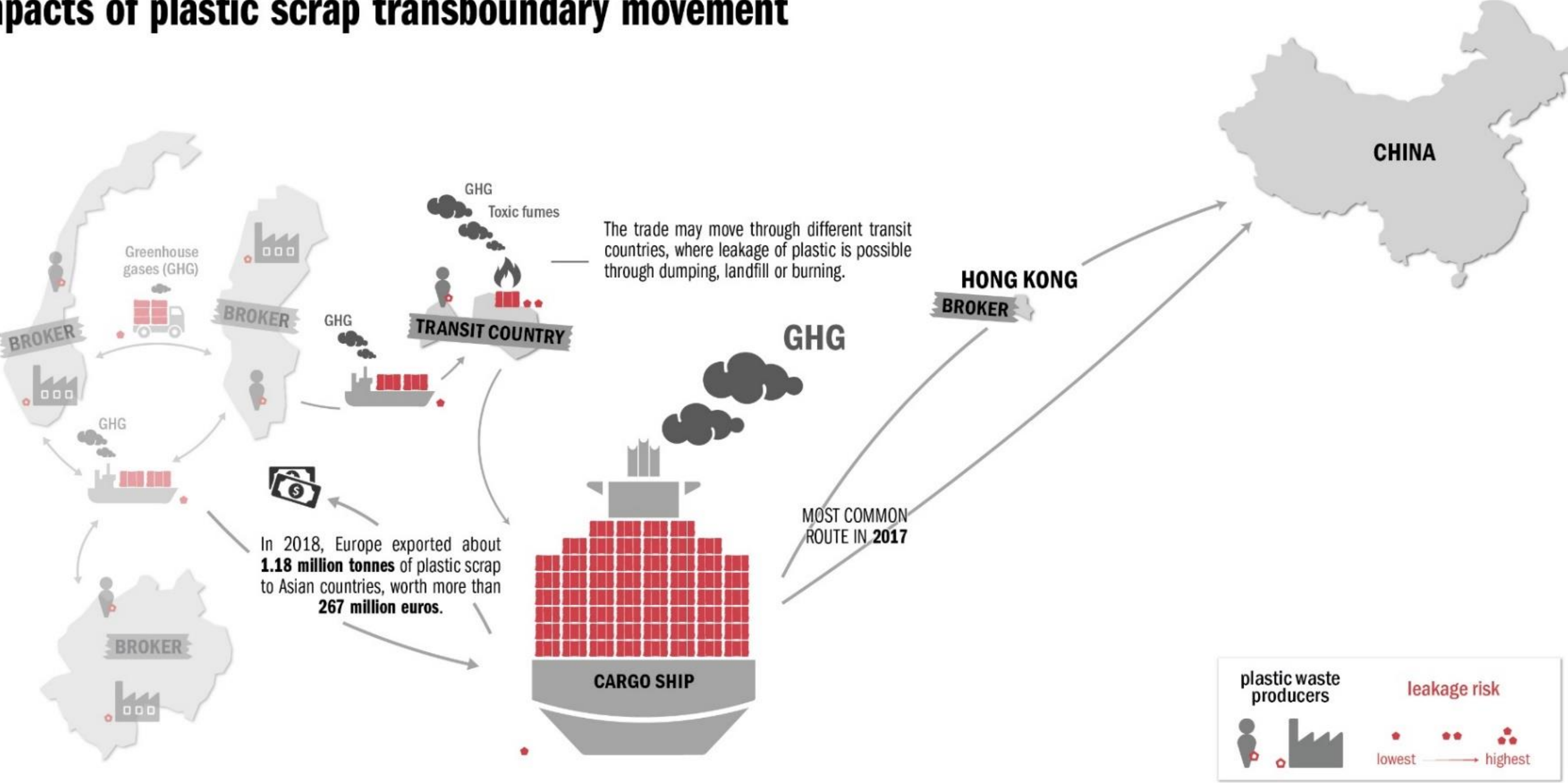
Impacts of plastic scrap transboundary movement

Plastic scraps are traded continuously between businesses across countries such as in the EU. This trade leads to GHG emissions in the air and escapes of macro and micro-plastics into the terrestrial and marine environments during transportation.



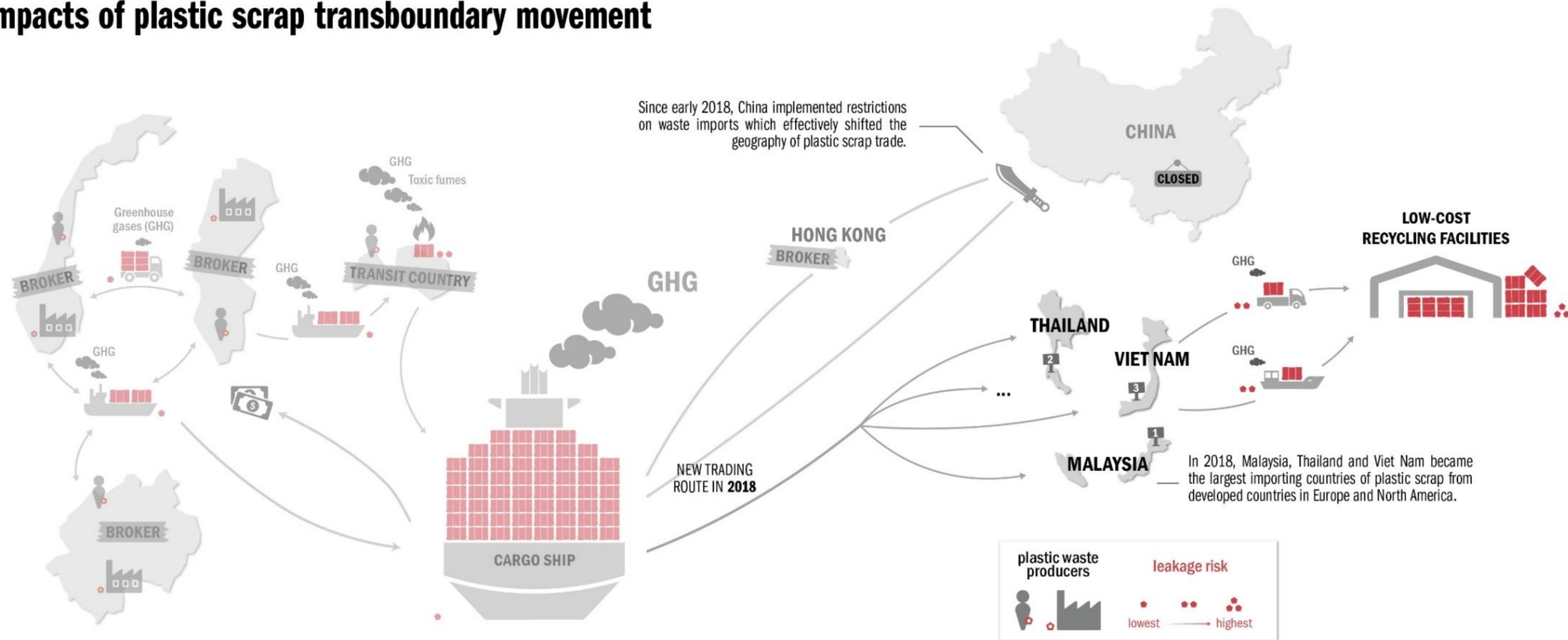
IMPACTS OF PLASTIC SCRAP TRANSBOUNDARY MOVEMENT

Impacts of plastic scrap transboundary movement



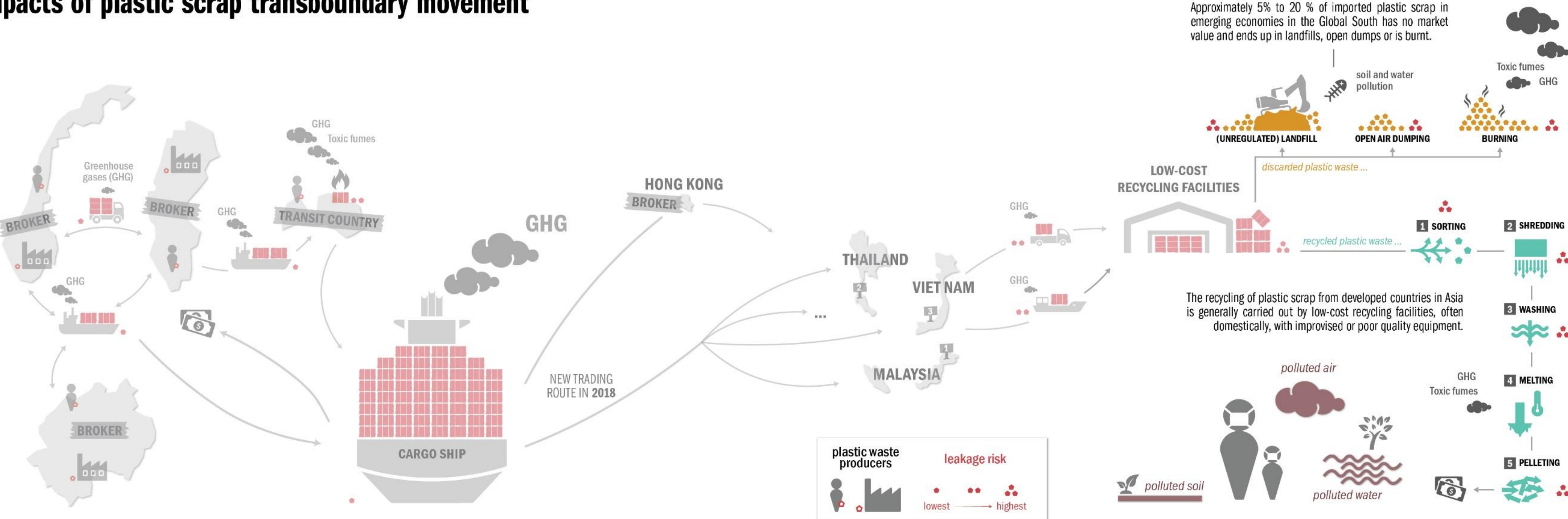
IMPACTS OF PLASTIC SCRAP TRANSBOUNDARY MOVEMENT

Impacts of plastic scrap transboundary movement



IMPACTS OF PLASTIC SCRAP TRANSBOUNDARY MOVEMENT

Impacts of plastic scrap transboundary movement



RECOMMENDATIONS



THANK YOU

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