

Design for Recycling Indaba

WWF approach to problematic plastics & design for circular economy

Lorren de Kock,
WWF- SA

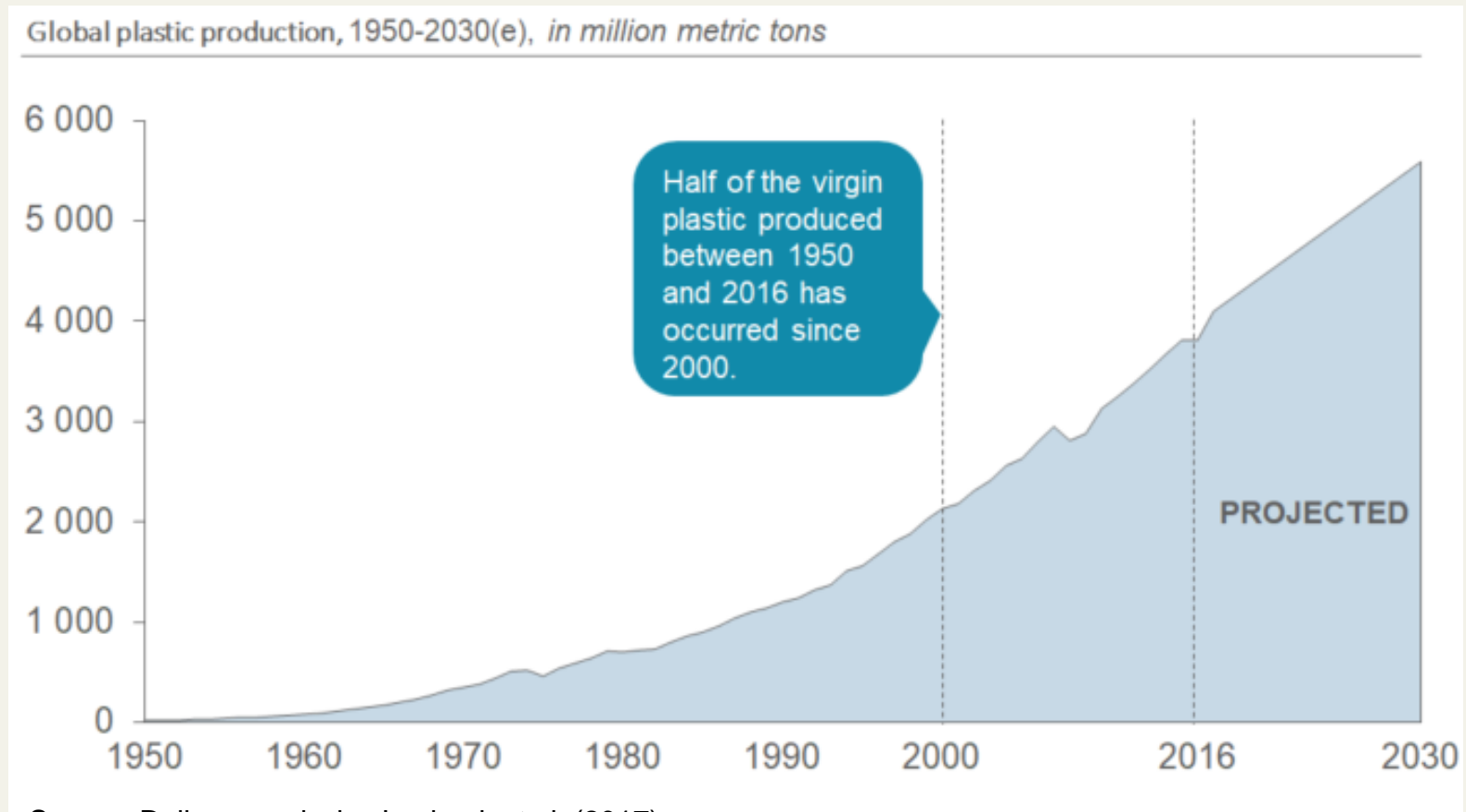
13 March 2019

Agenda

- Scale of plastic pollution and problematic plastics in South Africa
- Global and local approaches
- Design for circular economy

Scale and sources of plastic pollution

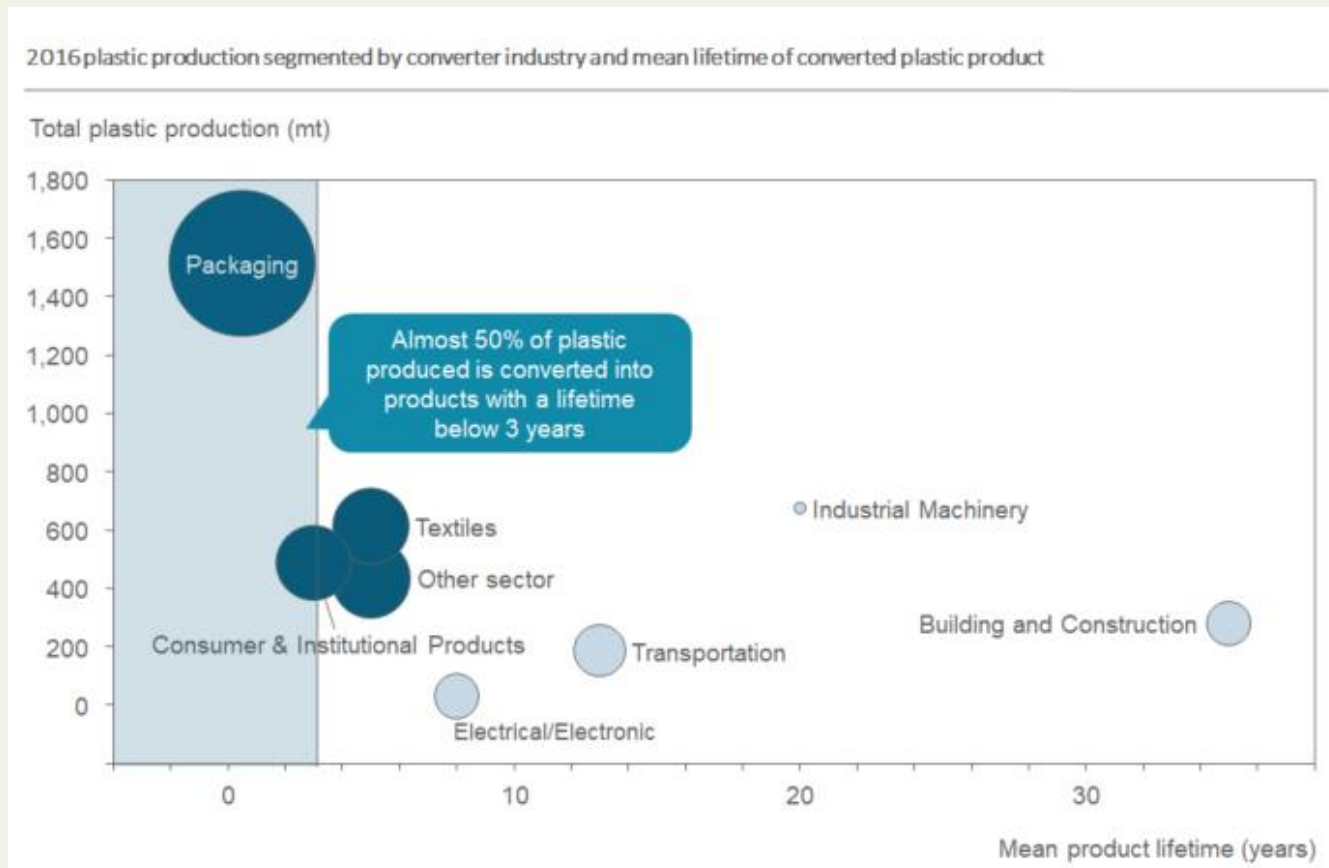
Global



Source: Dalberg analysis, Jambeck et al. (2017)

Scale and sources of plastic pollution

Global

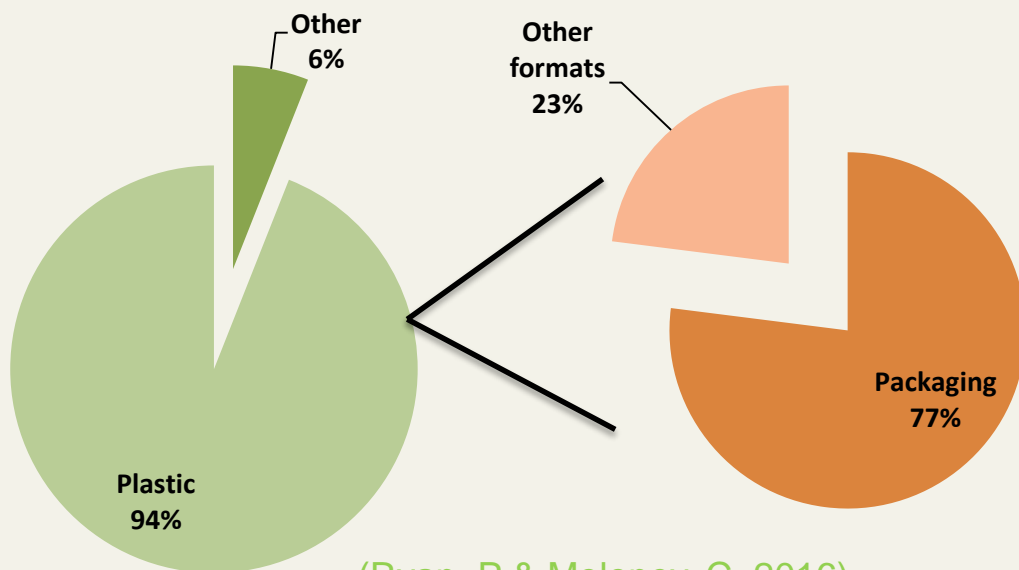


Source: Dalberg analysis, Jambeck et al. (2017)

Scale and sources of plastic pollution South Africa

- Ranked 11th globally for marine plastic pollution
 - High per capita plastic consumption (2 kg per day) & 56% of waste is mismanaged.

(Jambeck et al., 2015)

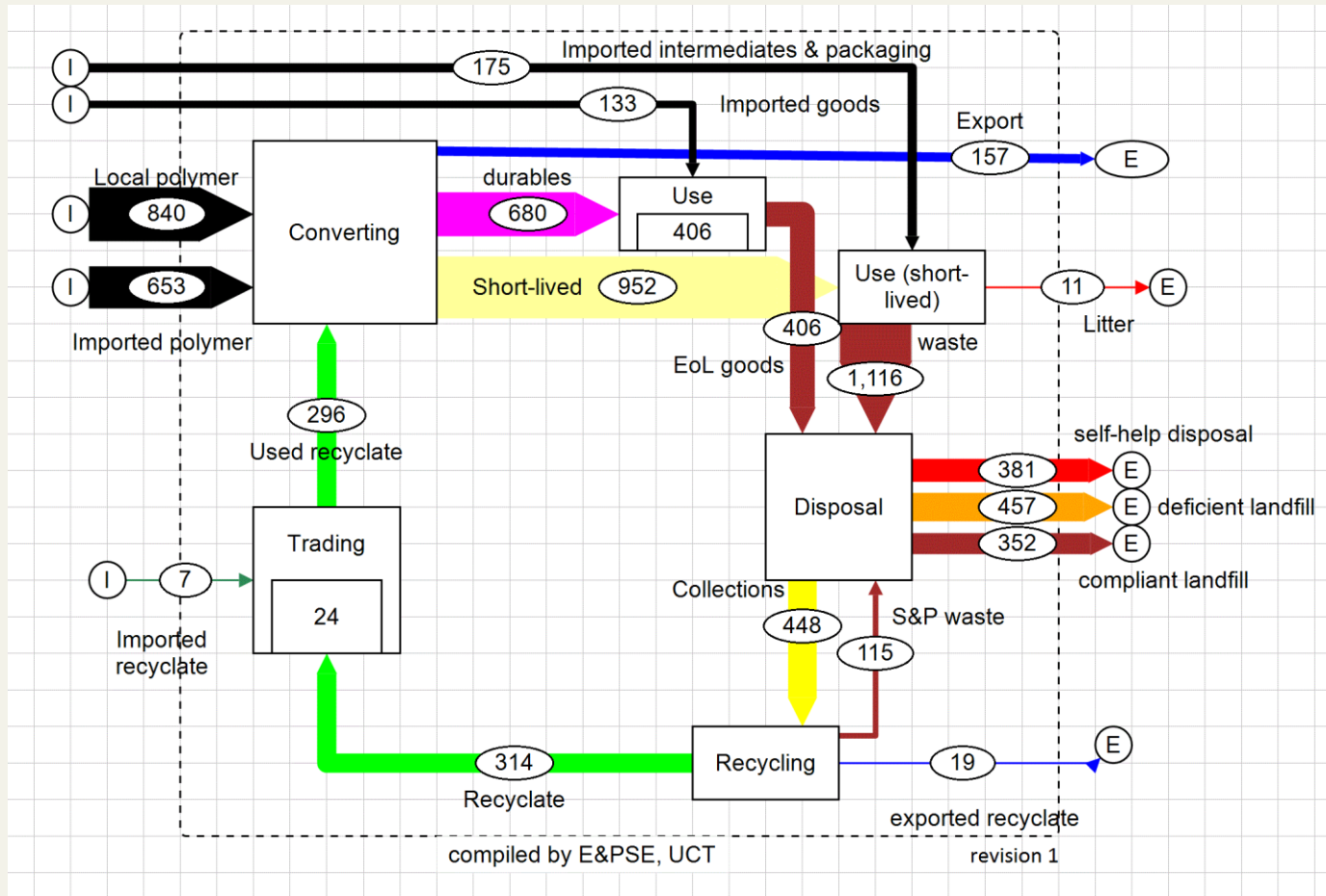


(Ryan. P & Moloney. C, 2016)

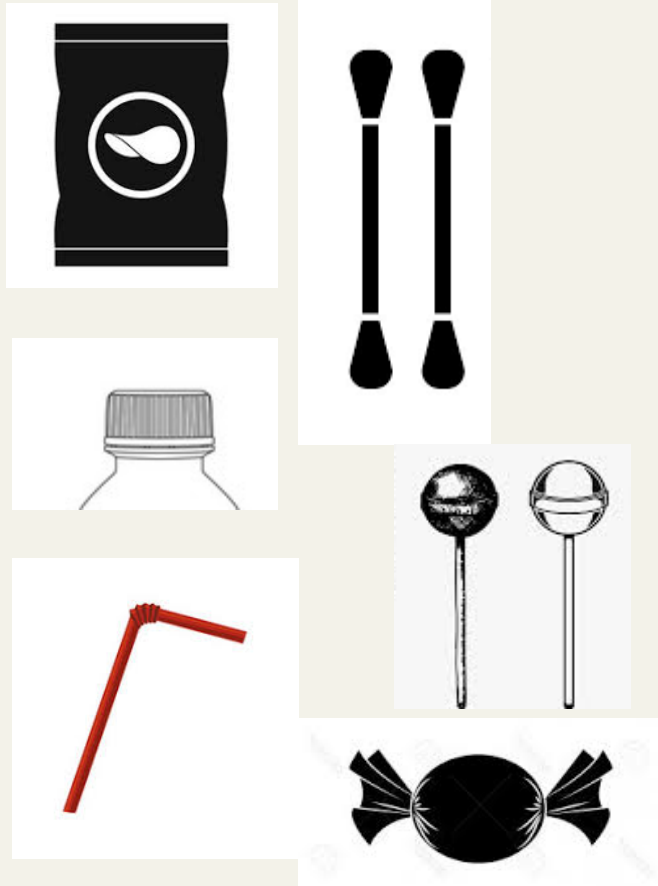
17%

Average recycled content in plastic products (von Blottnitz & Chitaka, 2018)

Materials Flow Analysis South Africa



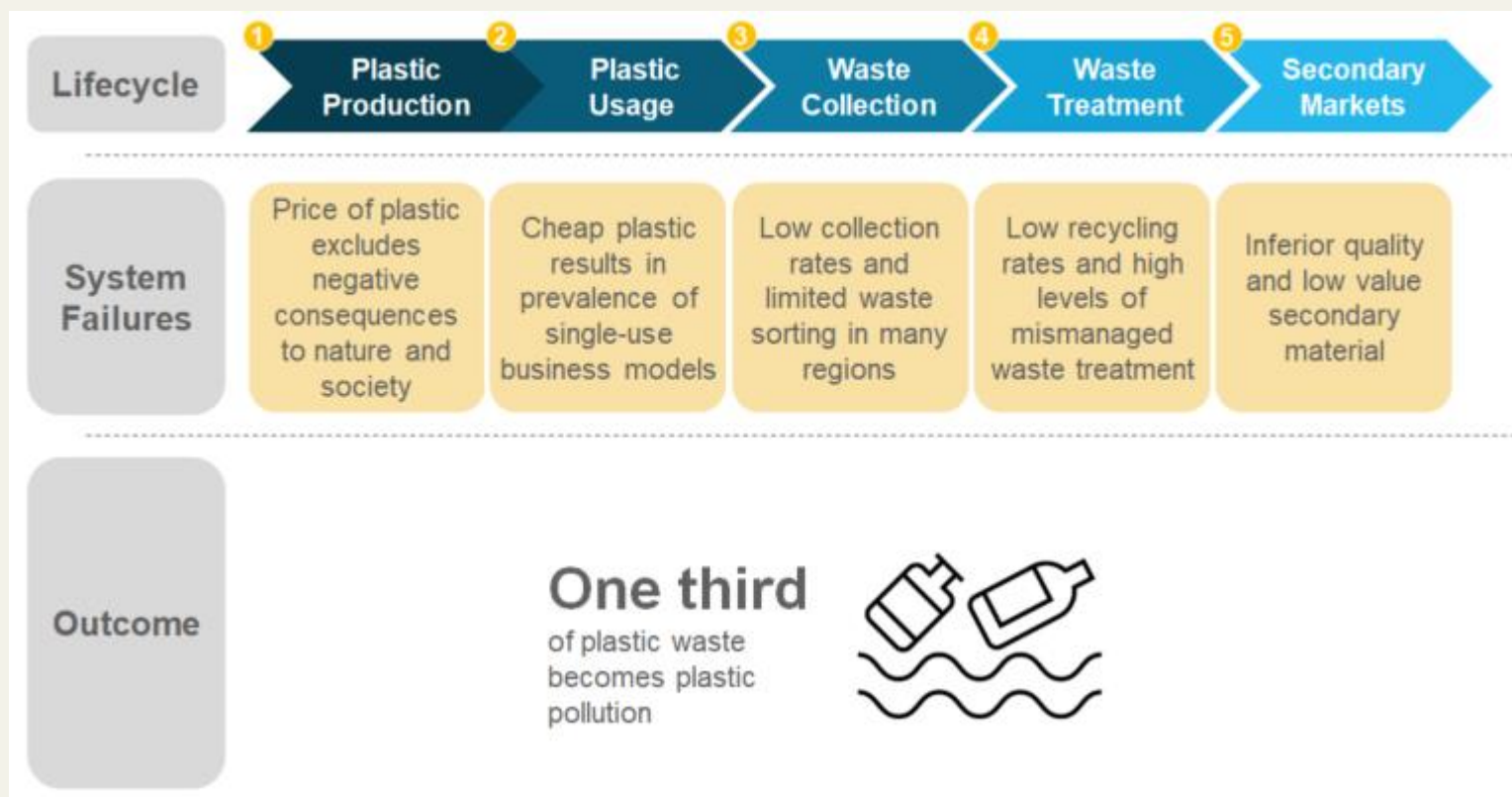
Problematic plastics South Africa



Source: Chitaka & von Blottnitz (2018)

Linear plastics economy

Summary of failures across plastic life cycle driving plastic pollution



Source: Dalberg analysis, Jambeck & al (2014), World Bank (2018), SITRA (2018)

Global and local approaches: Global initiatives

New Plastics Economy Global Commitment: guidelines and support for local initiatives/pacts (UK Plastics Pact)



Local and regional level



Global and local approaches: Global initiatives



Infrastructure



Innovation



Education



Clean Ups

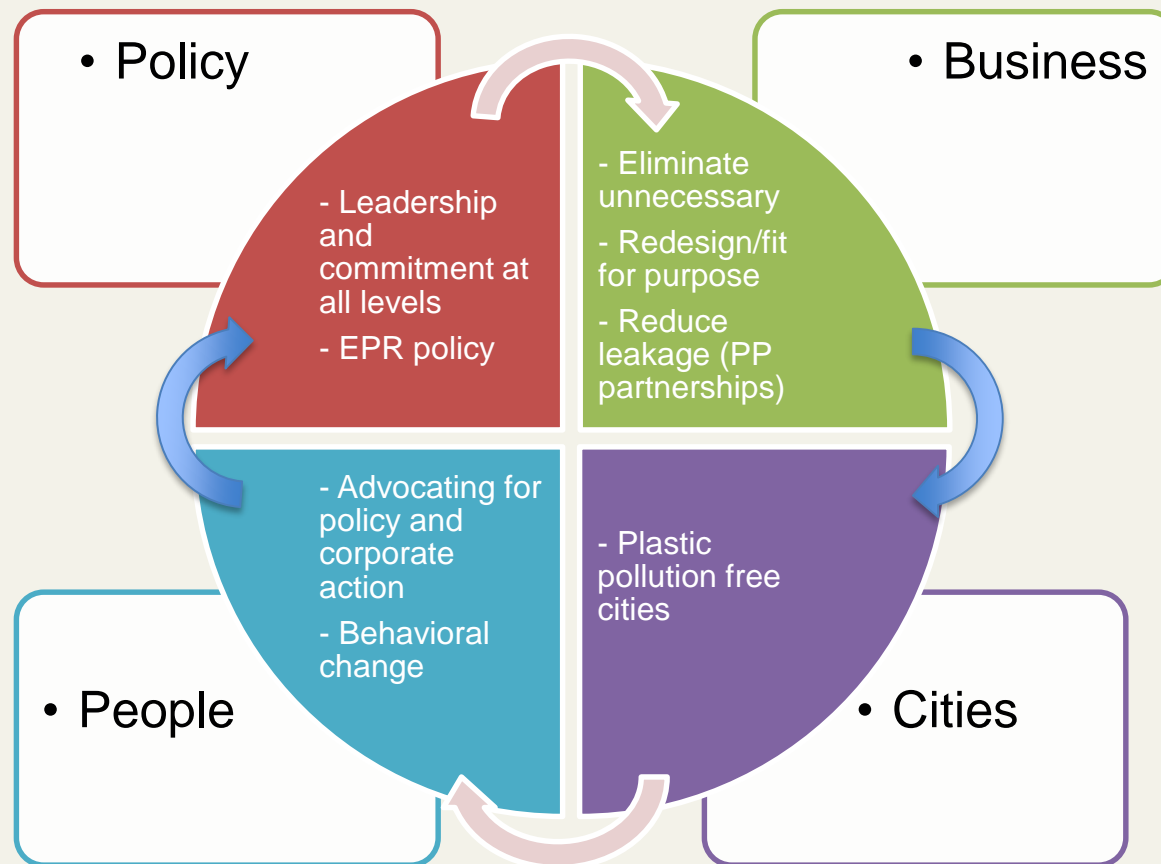
Stakeholders across the value chain: chemical and plastic manufacturers, consumer goods companies, retailers, converters, and waste management companies

Global and local approaches: Local initiatives

National	Industry
Ban and levy on plastic carrier bags	Voluntary support for current PROs
 <p>Waste Phakisa</p>	<p>Plastics SA:</p> <ul style="list-style-type: none"> - beach clean ups; - Sustainability council - Bioplastics forum.
Working on Waste	Initiatives proposed in IWMP



WWF Plastics strategy: multi stakeholder systems approach





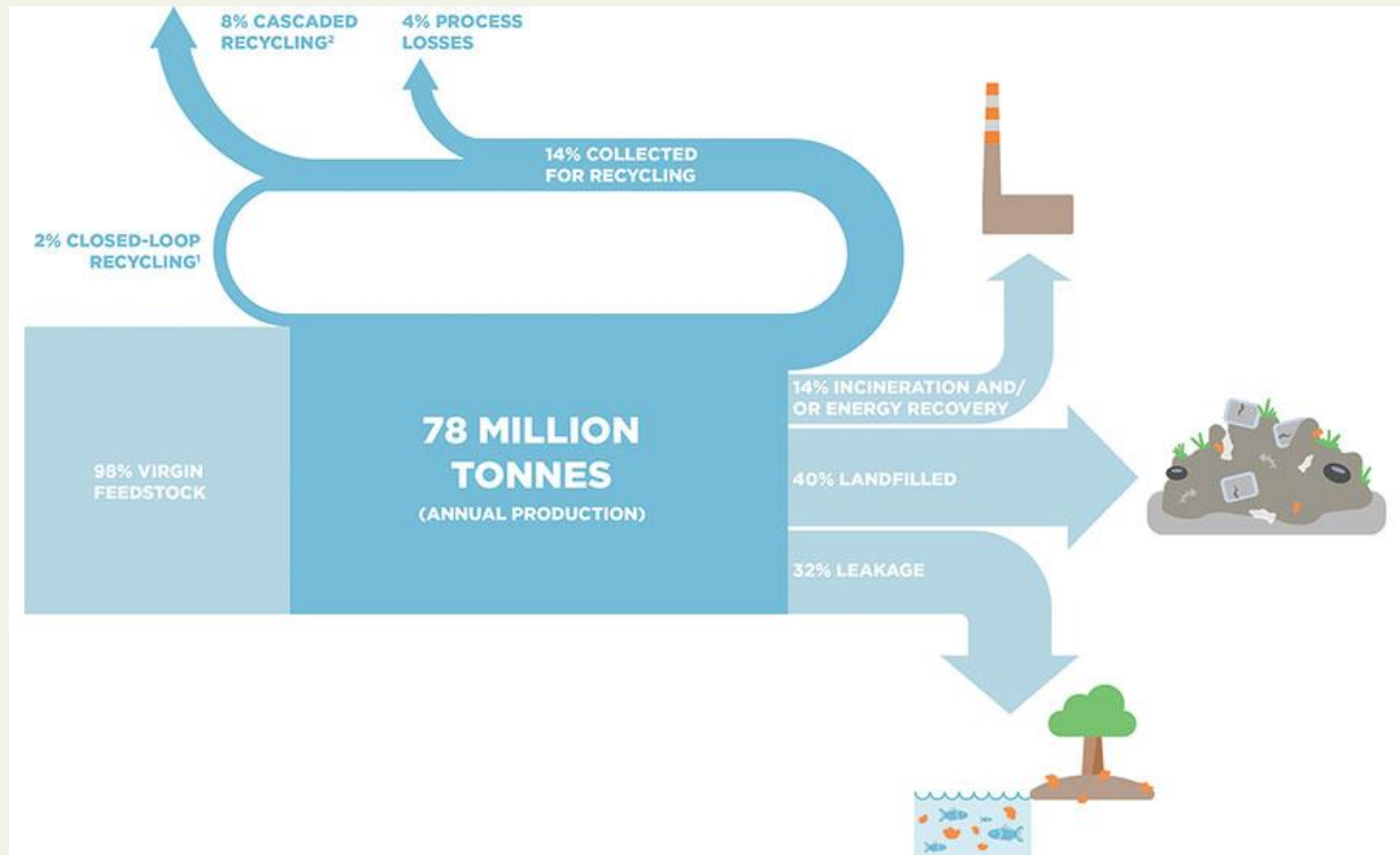
WWF Plastics strategy: multi stakeholder systems approach

WWF (global and local) approach:

- **Policy instruments:** regulatory and economic instruments (levies on suppliers, retailers and consumers);
- **Private-Public partnerships and voluntary agreements;**
- **Waste management improvement and circular thinking;**
- **Social awareness and public pressure;**
- **Investment and support for alternatives:** packaging redesign, recycled content.

Design for a circular economy?

© Ellen MacArthur Foundation: New Plastics Economy



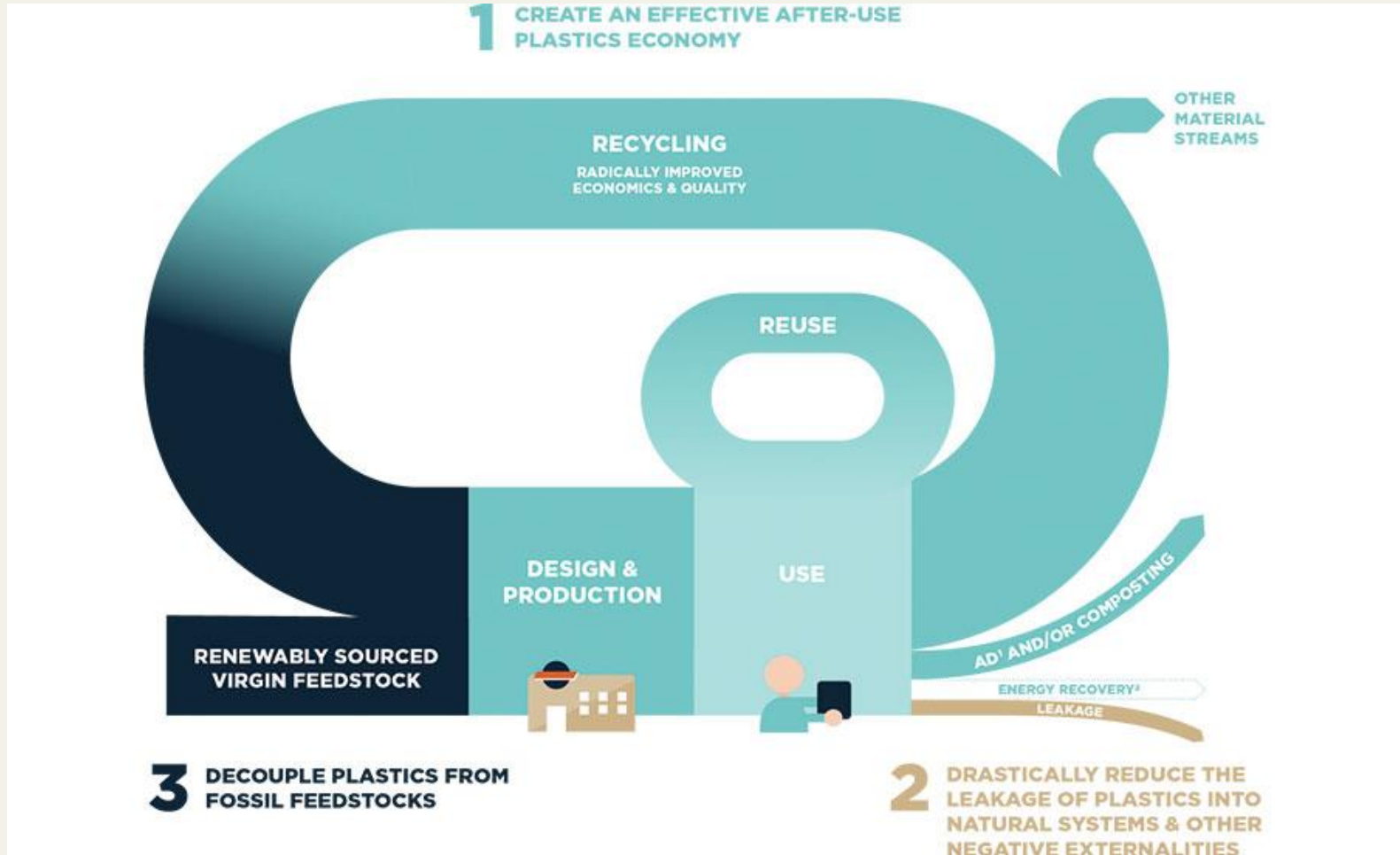
Design for a circular economy?




© Tatjana von Bormann



Design for a circular economy?



Conclusions

1. Solutions that embrace diversity, complexity, systems understanding & resilience.
2. Plastics waste exploded and driven by citizenry feeling powerless to bigger issues: climate change, poverty.
3. We can respond now. Intent  Action



Thank you

www.panda.org

