

A circular economy Restorative and regenerative by design















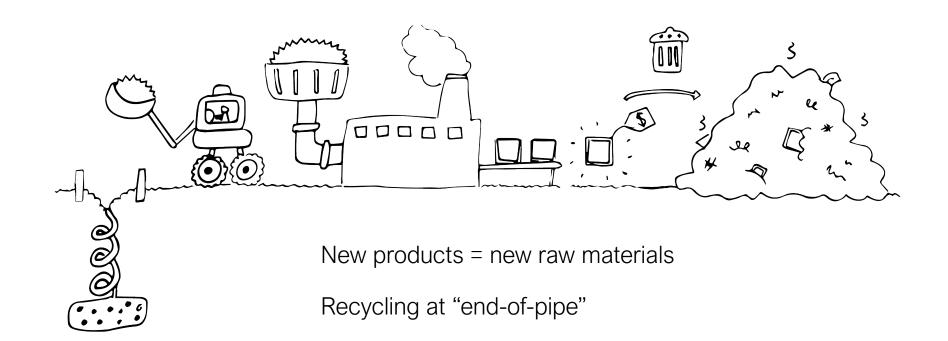








Today's linear economy



Waste is chronically high



Restorative and regenerative by design

Keeping products, components and materials at their highest utility and value, at all times

Eliminating the concept of waste, with materials ultimately re-entering the economy at end of use as defined, valuable technical or biological nutrients



Regenerate

Substitute materials

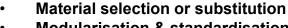
Virtualise

Restore

Renewables flow management Stock management Farming/collection¹ Parts manufacturer Biochemical feedstock Product manufacturer Recycle Regeneration Biosphere Service provider Refurbish/ Share remanufacture Reuse/redistribute Biogas Maintain/prolong Cascades Anaerobic Collection digestion Collection Extraction of biochemical feedstock² ELLEN MACARTHUR FOUNDATION Minimise systematic leakage and negative externalities



DESIGN FOR CIRCULARITY



- Modularisation & standardisation
- Designed for use period, to last, upgrade, repair, remanufacture ...
- Design for (and of) disassembly



NEW BUSINESS MODELS

- **Product service systems**
- Performance-based models
- **Collaborative consumption models**
- Recovery (lease/return) contracts



REVERSE CYCLES

- Collection
- Technical treatment & redeployment
- **Biological treatment & redeployment**



ENABLERS & FAVOURABLE SYSTEM **CONDITIONS**

- Cross value chain/Cross sector collaboration
- **Education**
- Investment and financing
- Regulatory change
- Digital technologies













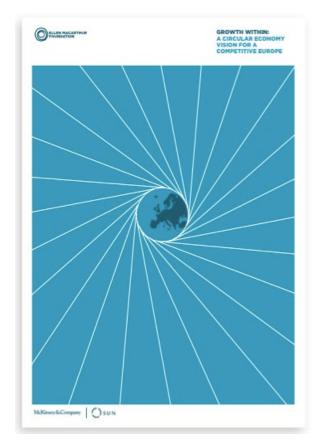


















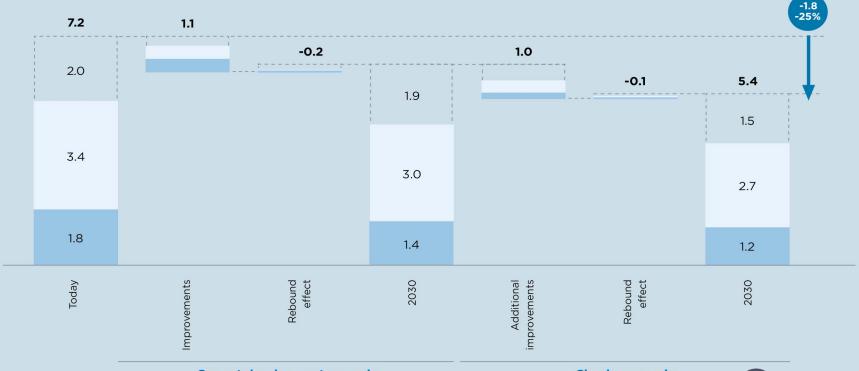
THE CIRCULAR ECONOMY OPPORTUNITY - 2030 SCENARIOS

Mobility, food and built environment, EU27, societal perspective 2030

Primary resource costs²
Other cash-cut costs³
Externalities⁴

Annual primary resource costs, other cash-out costs and negative externalities1

EU-27, 1000 billion EUR¹



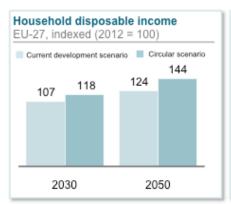
Current development scenario

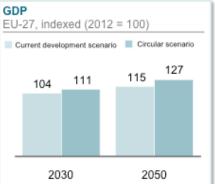
Circular scenario

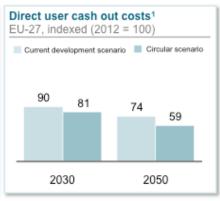


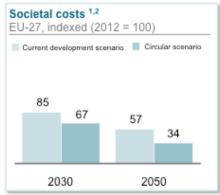
Comparison of potential development paths

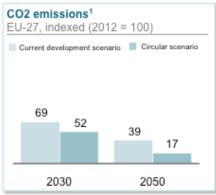
EU-27, indexed (2012 = 100)

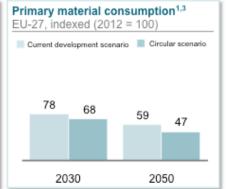
















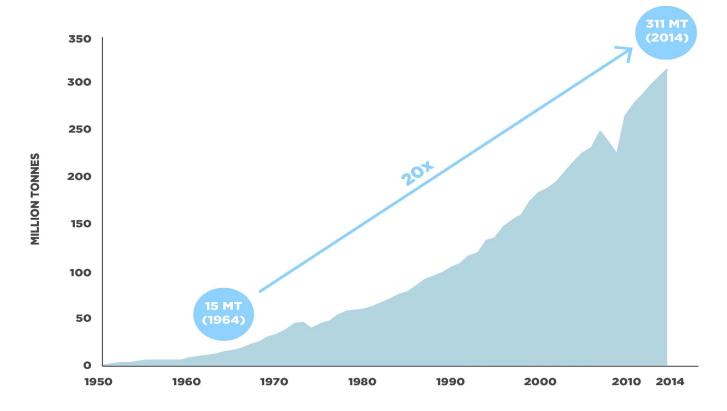


PROJECT MAINSTREAM:



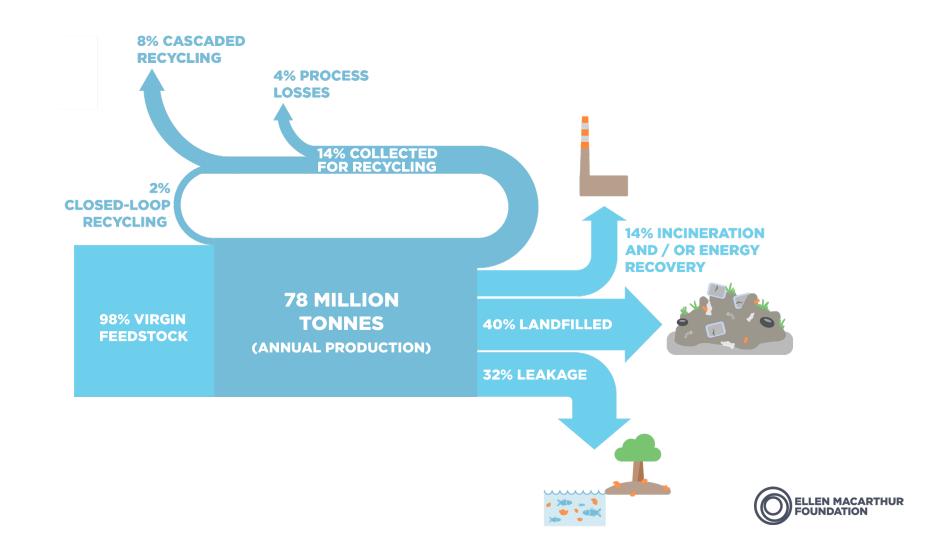






Note: Production from virgin fossil-based feedstock only (does not include bio-based, greenhouse gas-based or recycled feedstock). Source: PlasticsEurope, Plastics – the Facts 2013 (2013); PlasticsEurope, Plastics – the Facts 2015 (2015).





The New Plastics Economy demands a new approach





Cross-value chain platform and dialogue mechanism



Global Plastics Protocol, coordinated large-scale pilots and demonstration projects



Innovation 'Moon Shots" with the potential for scale impact



Tools and evidence base for material flows, socio-economic impact of leakage, leading practice benchmarks and supporting scientific research



Regulatory tool-kits to enable effective policy development



GLOBAL PARTNERS

















OTHER PARTNERS AND RELATIONSHIPS



















INTERNATIONAL AND LOCAL CE100 PLATFORMS













































































































































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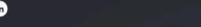












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OUR MISSION IS TO ACCELERATE THE TRANSITION TO A CIRCULAR ECONOMY

The Ellen MacArthur Foundation works with business, government and academia to build a framework for an economy that is restorative and regenerative by design.

See more





















