

A large, colorful pile of plastic waste, including bottles, containers, and toys, piled up on a beach or near water. The waste is piled high and is the central focus of the image. The background shows a body of water and a cloudy sky.

Towards a resource-efficient, circular and low-carbon economy

Dr Hans Bruyninckx | European Resources Forum | 3 November 2020

International challenges

**Increasing global material use
& globalised value chains**

**Changing demographics
& incomes**

**Distribution of social
impacts of material use**

**Distribution of supply
chain know-how**

**Virgin vs recycled
materials**

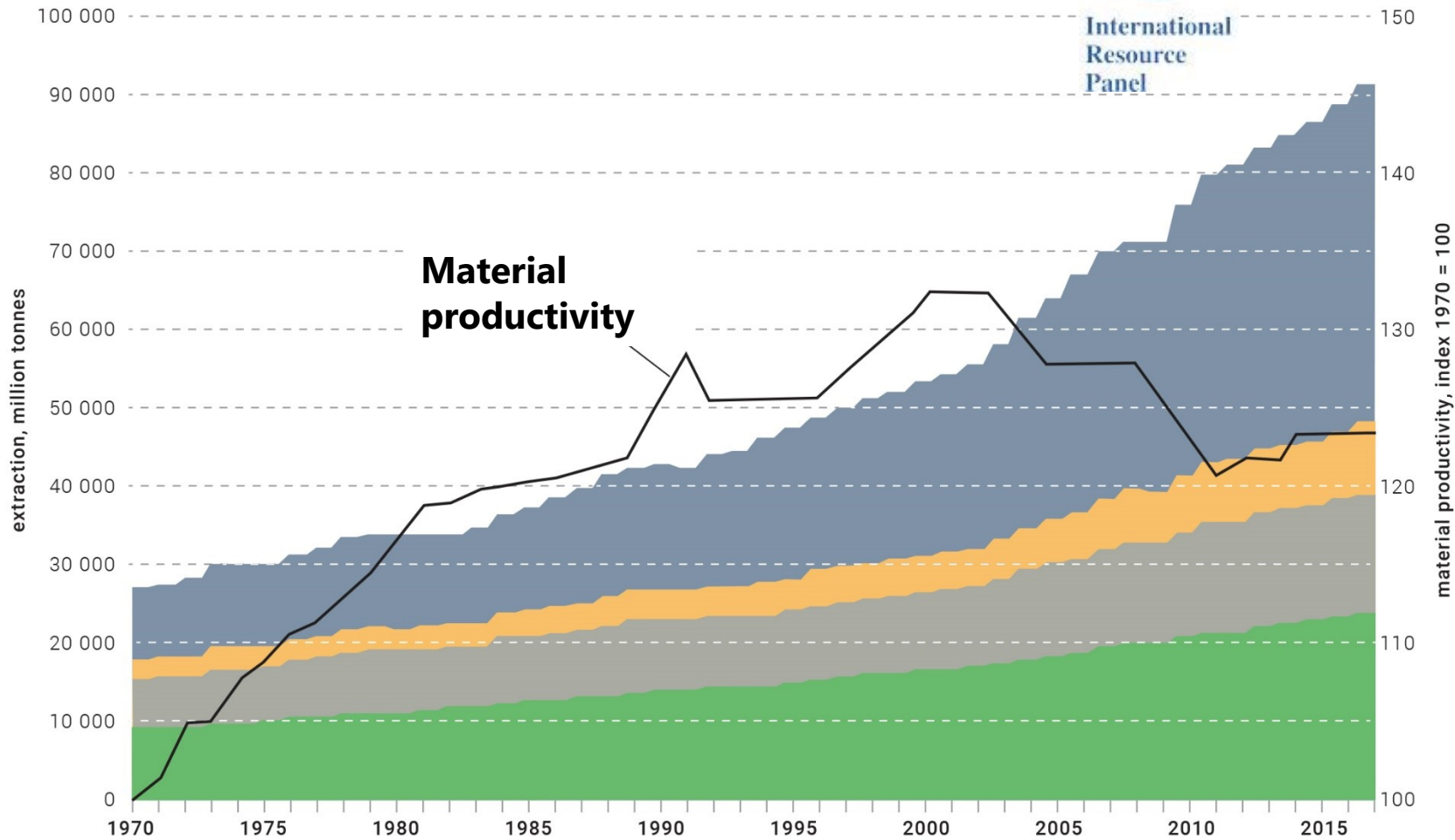


Resource use and its upward trend

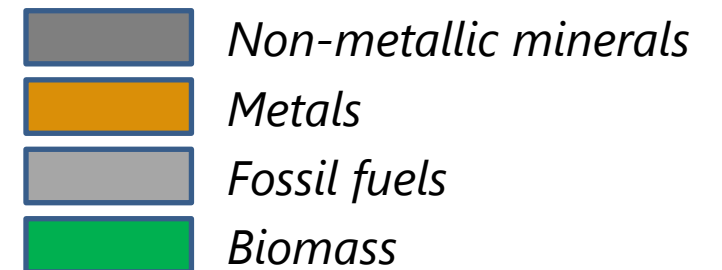


International
Resource
Panel

Global material extraction and material productivity, 1970 - 2017

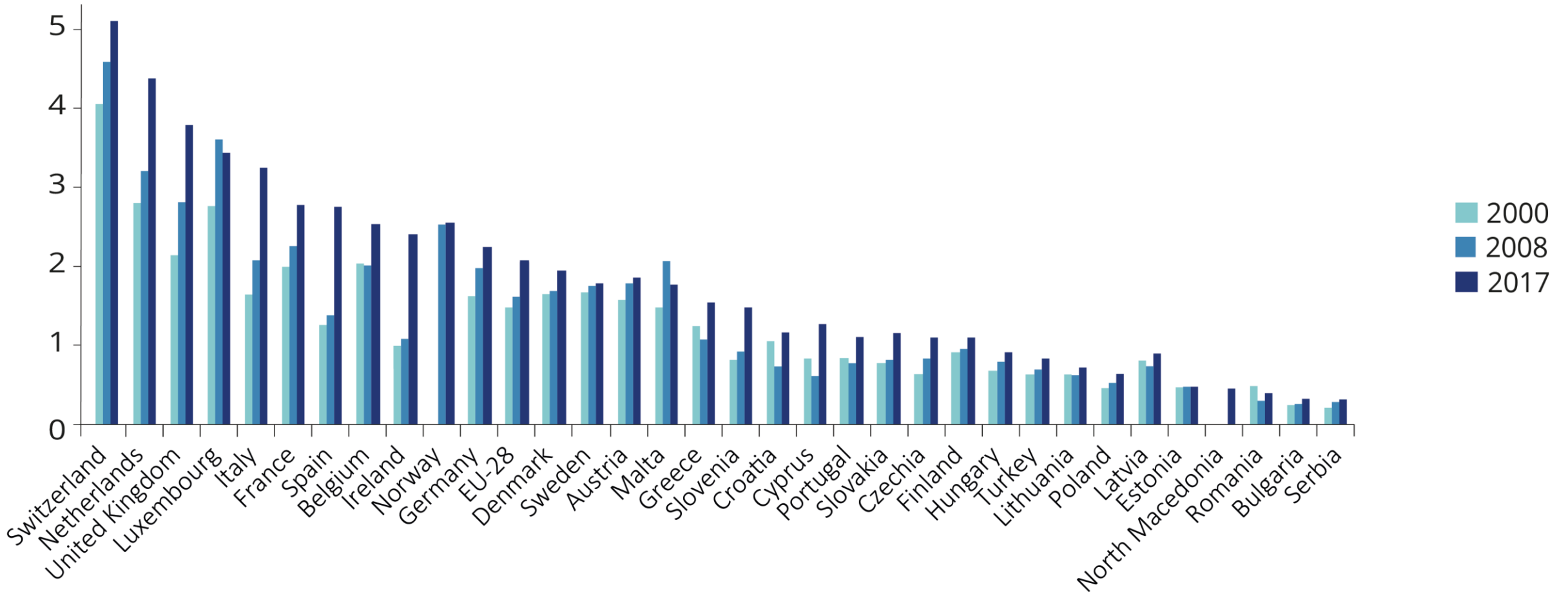


- **Global resource use:** more than tripled since 1970
- **Global material demand per capita:** 7.4 tonnes in 1970; 12.2 tonnes in 2017
- **Material productivity:** started to decline around 2000 and stagnated in recent years



Resource efficiency is improving in Europe

Euro (chain-linked volumes 2010)/kg DMC

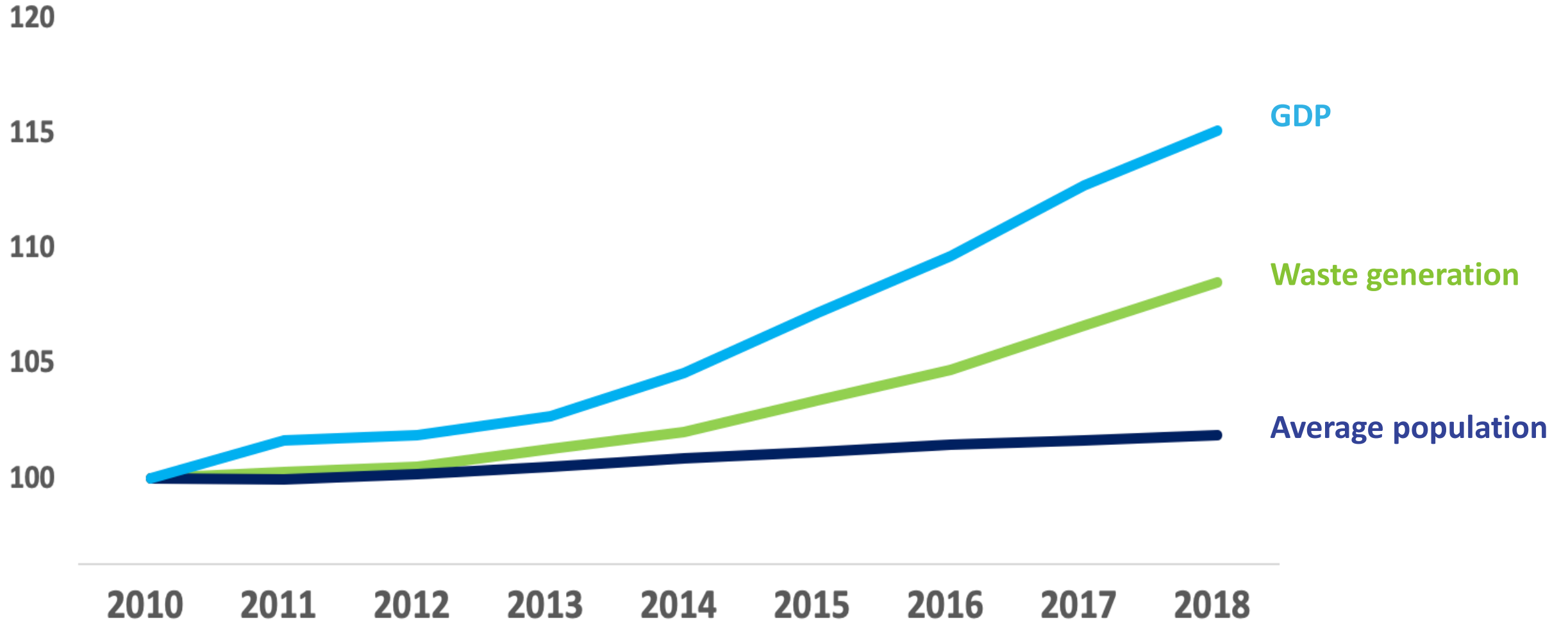


Europe: 40 % increase 2000-2017



Waste generation is still increasing

Trends in waste generation, economic development and population, EEA-33



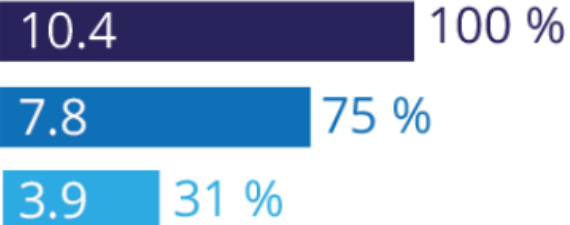
Potential for increased recycling



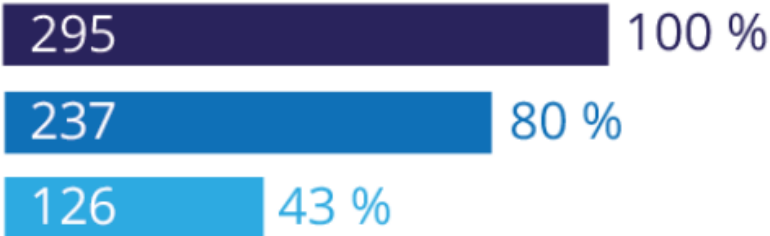
Construction and demolition waste in Mt (2016)



Electrical and electronic equipment waste in Mt (2017)



Municipal waste in Mt (2018)

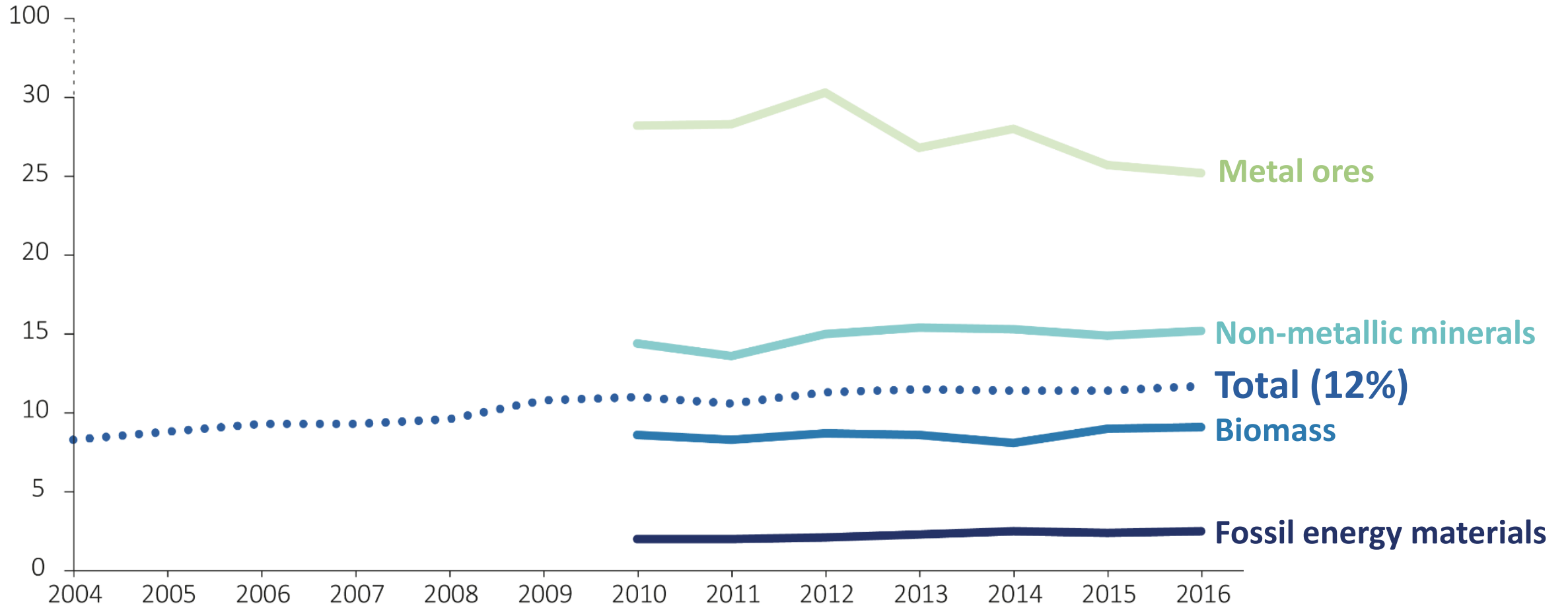


- Waste generated
- Maximum potential
- Currently recycled

Circular use of materials is still low

Trends in the circular material use rate, EU-28

Circular material use rate (%)



Bellagio process

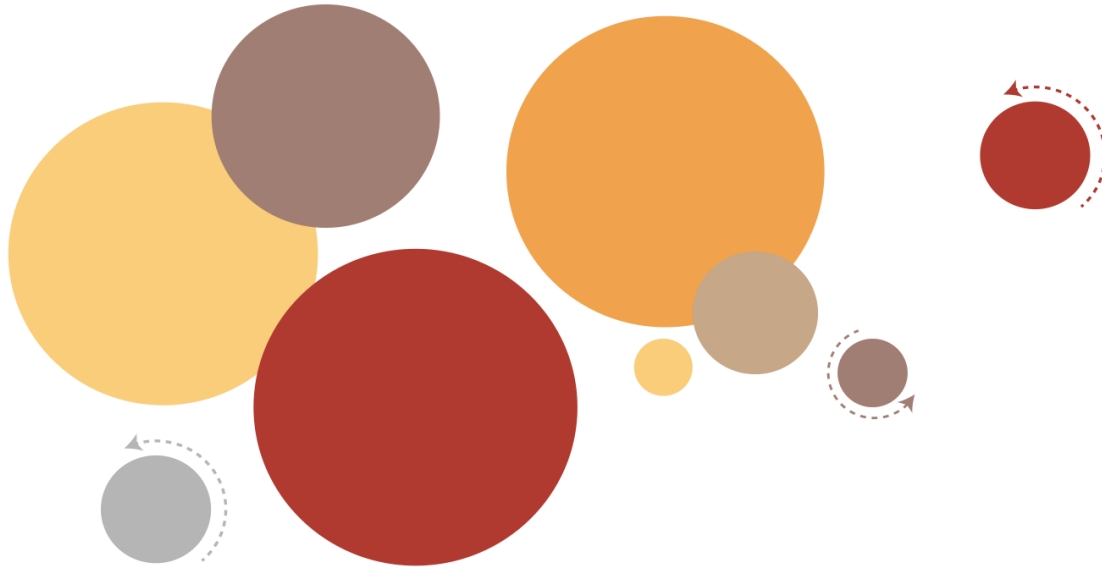


European
Environment
Agency



MONITORING PROGRESS IN EUROPE'S CIRCULAR ECONOMY

The Bellagio Process



- Expert dialogue involving private and public stakeholders across Europe
- Seven principles for the monitoring of Circular Economy
- Fostering innovation and collaboration
- Across the economy and jurisdictions
- Material flows, footprints, socio-economic aspects and policy



A new policy context: The European Green Deal



- Key supply chains
- Waste prevention
- Empowering consumers
- Secondary materials internal market
- Hazardous substances as a barrier to CE
- Science-based approach
- Interlinkages with energy transition, industrial transformation, etc.

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Thank you

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