Circular Economy workshop
Towards mitigating climate change

Circular Economy in Europe
Focus on product and waste policy

EEB
European
Environmental
Bureau

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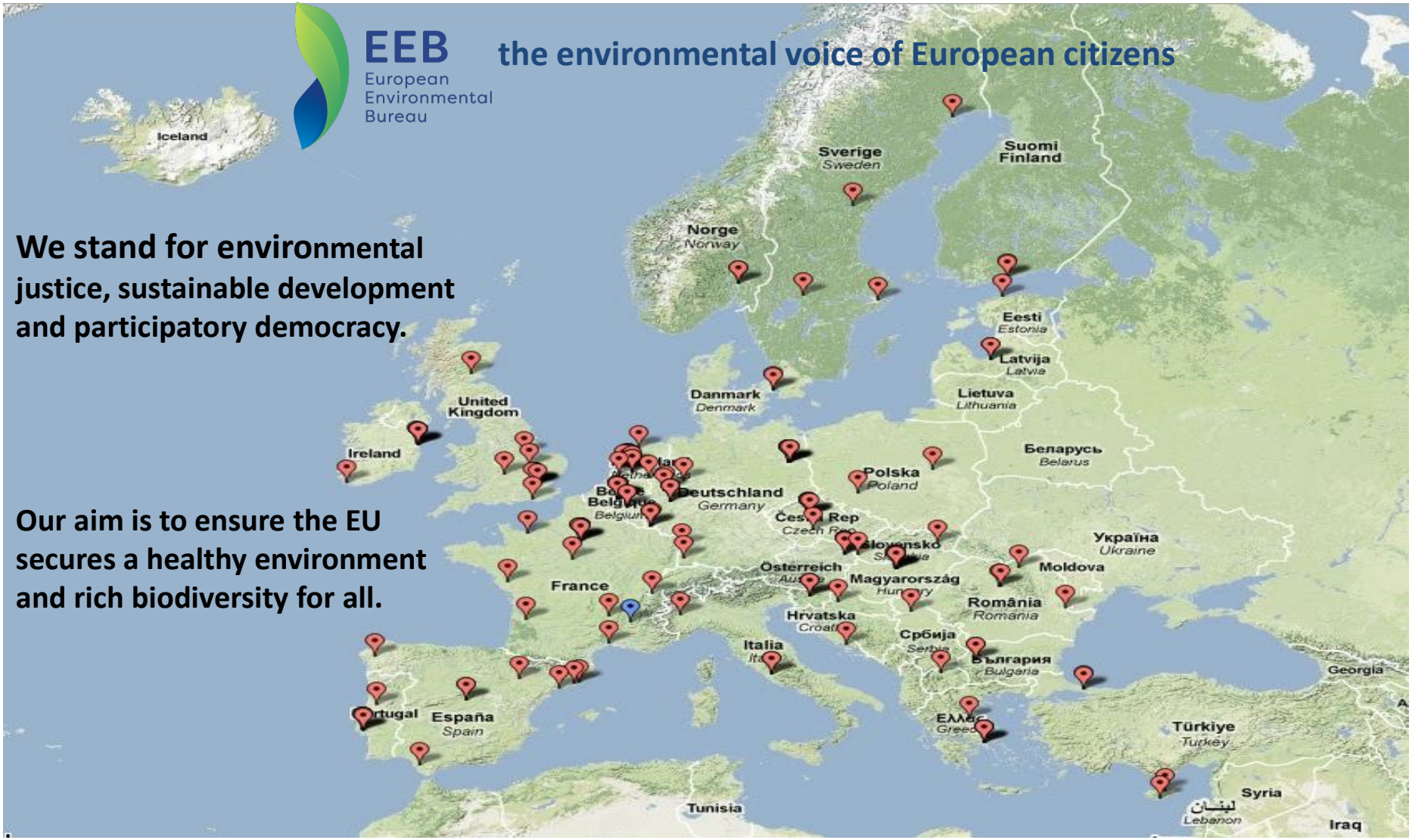
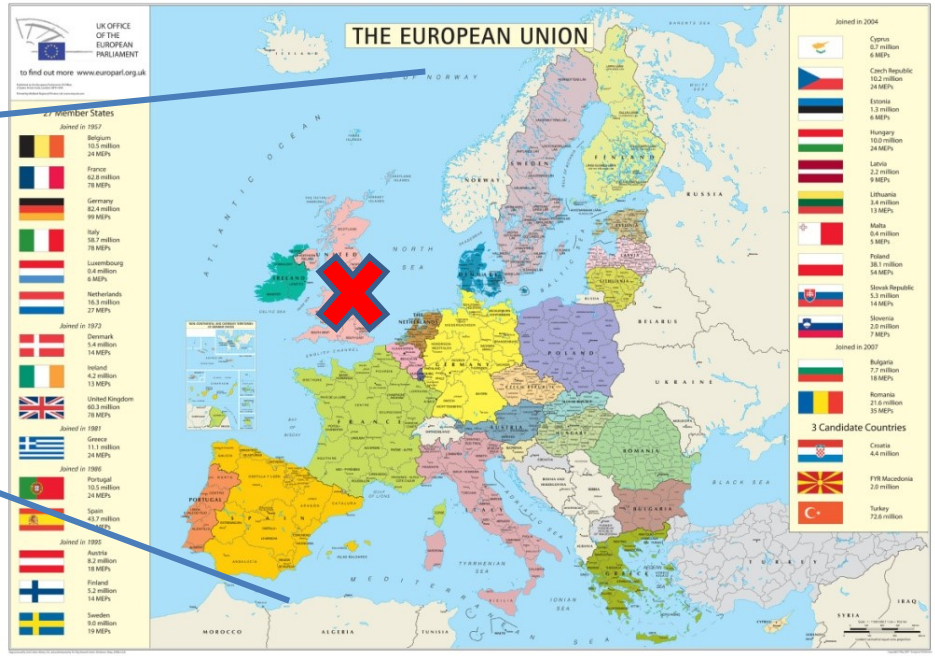
Guelph Canada May 5, 2017

University of Guelph
BDDC
Bioproducts Discovery
& Development Centre

Who we are?


EEB
European
Environmental
Bureau
the environmental voice of European citizens
We stand for environmental justice, sustainable development and participatory democracy.
Our aim is to ensure the EU secures a healthy environment and rich biodiversity for all.
Iceland
Sverige
Sweden
Suomi
Finland
Norge
Norway
Eesti
Estonia
Latvija
Latvia
Lietuva
Lithuania
Danmark
Denmark
United
Kingdom
Ireland
Беларусь
Belarus
Polska
Poland
Deutschland
Germany
Belgium
Česká Rep
Czech Rep
Slovensko
Україна
Ukraine
Moldova
Österreich
Magyarország
Hungary
România
Romania
France
Hrvatska
Croatia
Србија
Serbia
Italia
България
Bulgaria
Georgia
España
Spain
Ελλάς
Greece
Türkiye
Turkey
Syria
Tunisia
Lebanon
Iraq

Why CE is important for EU?



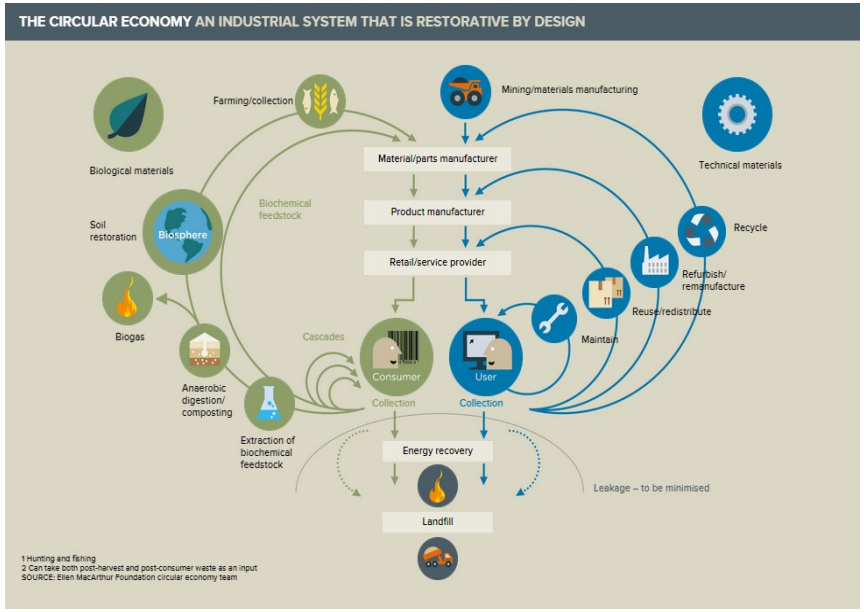
EU is densely populated, without natural resources, high labour cost, low growth economy …
EU has a history of environmental protection …
EU is committed to global agreement on climate change and Sustainable Development Goals…

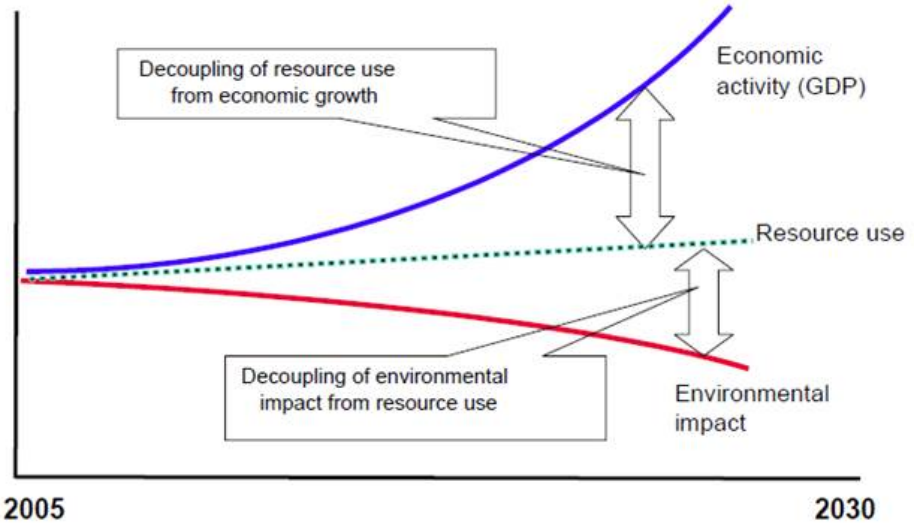
Circular Economy is the way to conciliate Economy and Environment

What is Circular Economy?

Multiple interpretation, but three core elements:
-Resources productivity
-Limiting Environmental Impacts
-Resilience

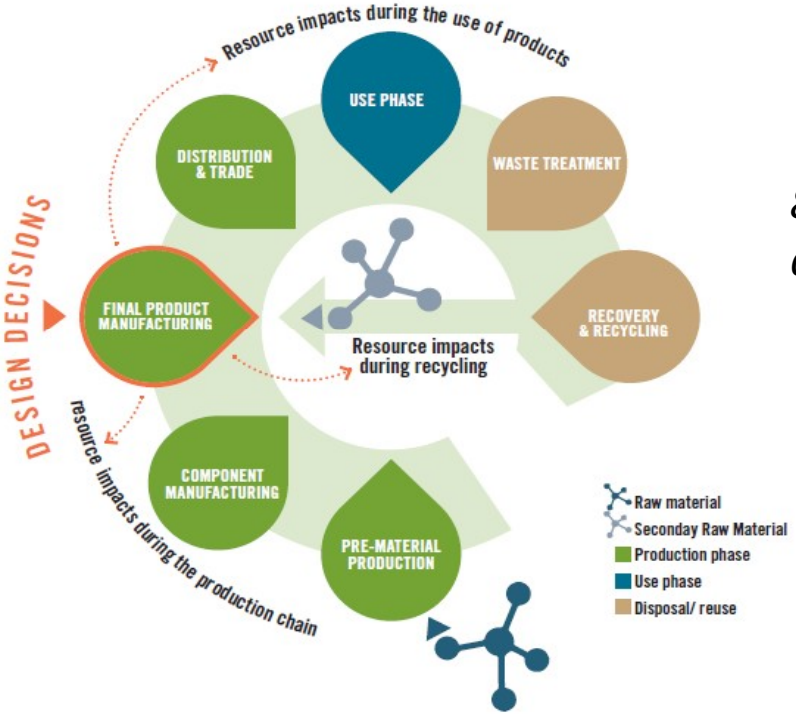
*A **circular economy** is a regenerative system in which resource input and waste, emission, and energy leakage are minimised by slowing, closing, and narrowing material and energy loops. This can be achieved through long-lasting design, maintenance, repair, reuse, remanufacturing, refurbishing, and recycling. This is contrast to a linear economy which is a 'take, make, dispose' model of production. (Wikipedia)*



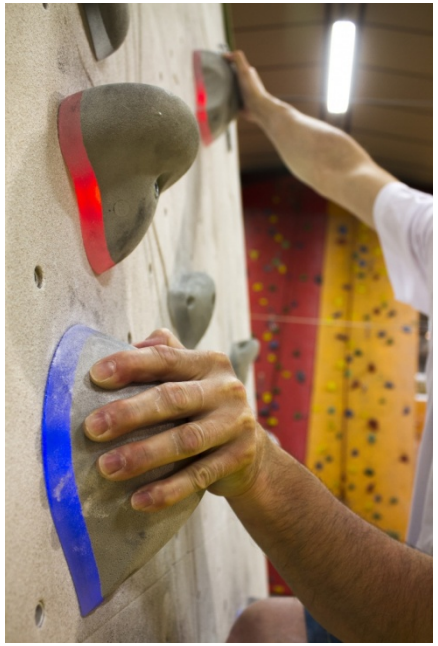


Why focus on product and waste?

Life cycle thinking considering the whole supply chain, but moving from ‘cradle to grave’ to ‘*cradle to cradle™’ (*from design to repurposing*),* including reverse logistics*.*



80% of environmental impacts are determined at design stage

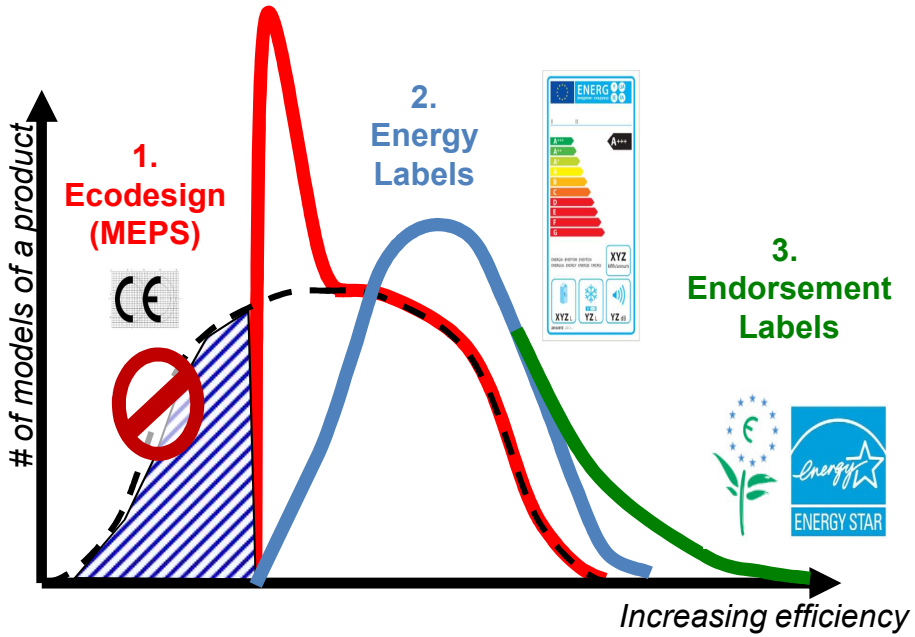


Source: lessor.fr - Volx

+ Products and waste are good hooks to design public policy

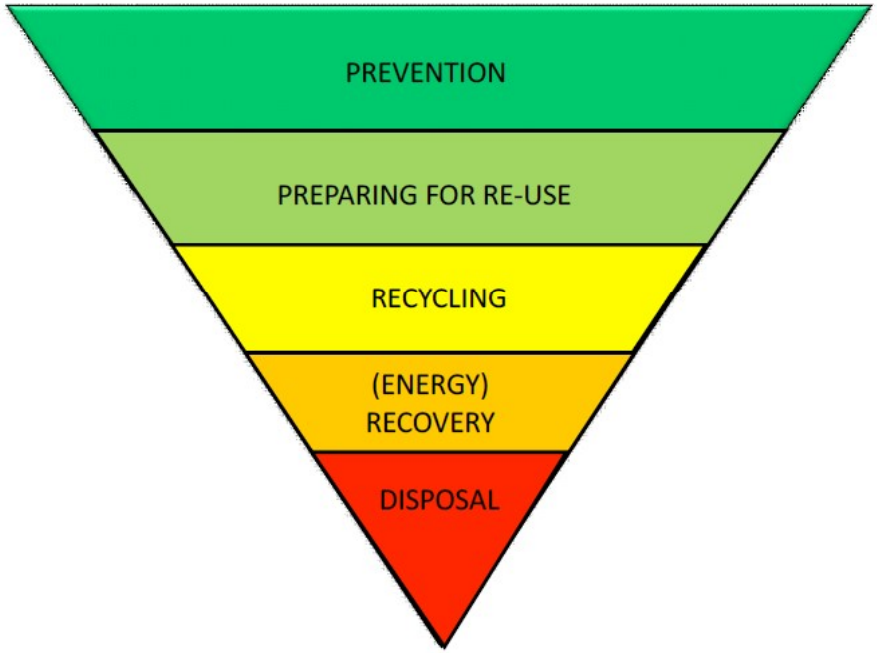
EU policy instruments on product and waste

Products: Push and Pull



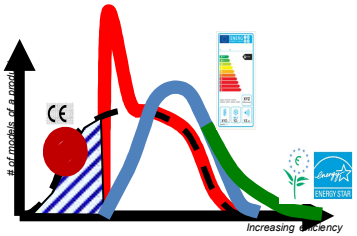
Source: CLASP

Waste: Hierarchy of treatment



Source: European Commission.

Product Policy 1



Eco-label (< 5%)

Voluntary

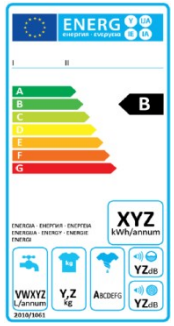
« Label of excellence »

Labelling

10
9
8
7
6
5
4
3
2
1

A
B
C
D
E
F
G

Incentives



Green public Procurement (GPP~ 15/20%)

Stimulate market for better products ensuring adequate competition

Ecodesign

Voluntary benchmarks

Compulsory minimum requirements

+
EPR (Waste)

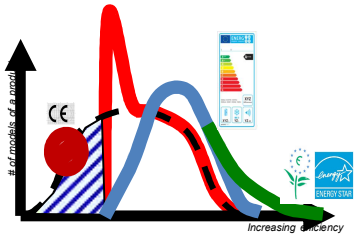
+
RoHS/REACH (chemicals)

EUROPEAN COMMISSION

Product Category

environment

Product Policy 2



Quantified benefits (Ecodesign and Energy labelling)

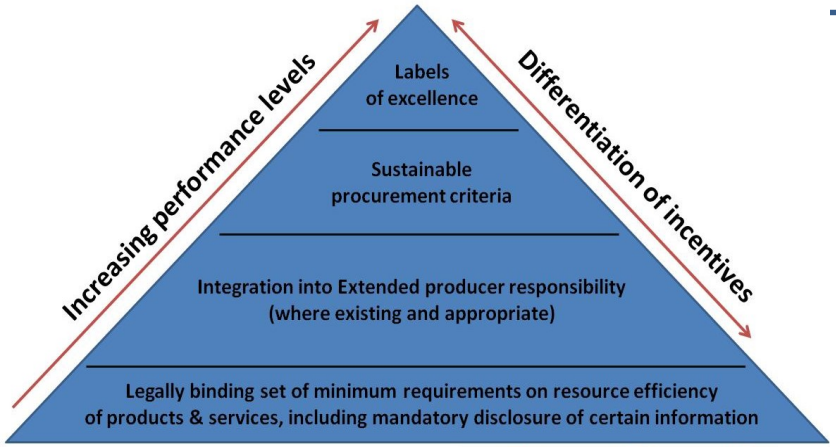
Close to 6900 PJ (165 mtoe, 1918 TWh) primary energy saving - 319 Mt CO2 equivalent (7% of 2010 EU-total) less greenhouse gas emissions, yearly by 2020;

+

- 336 million m³ drinking water and 0.4 Mt printer paper saving; avoided 144 kt SO2 equivalent direct NOx-emissions,
- 141 kt direct CO-emissions, 10 kt direct OGCemissions and 9 kt direct PM-emissions;
- € 112 bn net saving on consumer expenditure (€ 174 bn gross saving, € 62 bn extra acquisition);
- € 57 bn extra revenue for industry, wholesale, retail and installation sector;
- 0.8 million extra direct jobs for industry, wholesale, retail and installation sector.

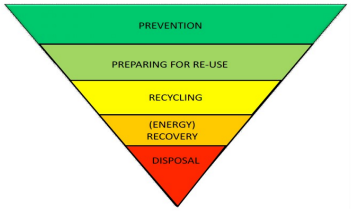
For 2030, these results increase by over 60% (if ambition pursued)

Challenge
towards more consistency



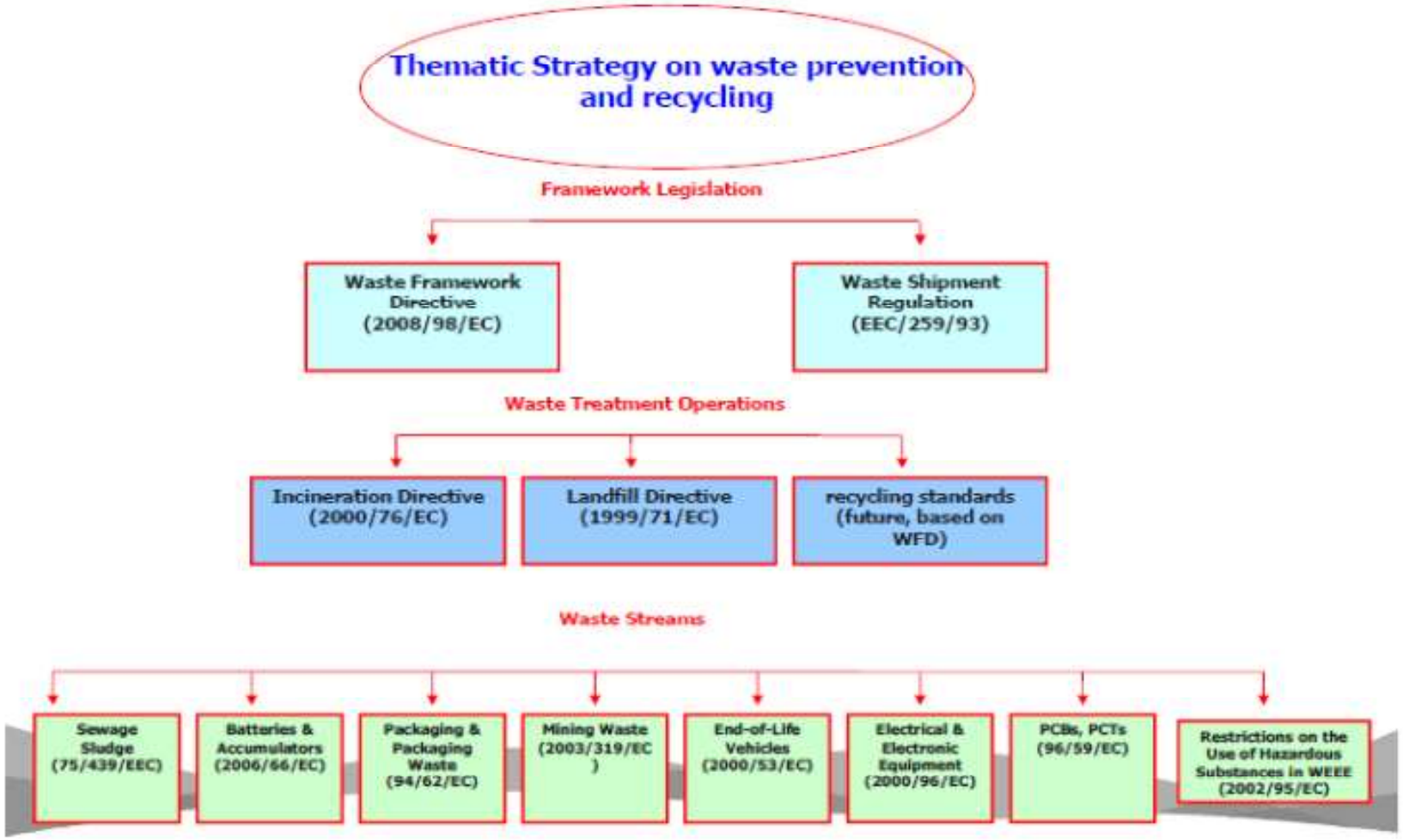
Based on a common set of metrics for a circular economy

Waste Policy 1

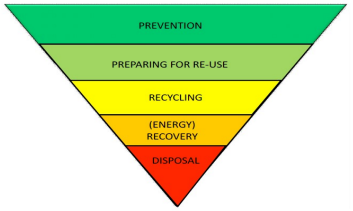


Source: European Commission.

A comprehensive architecture…



Waste Policy 2



Source: European Commission.

Quantified benefits (Municipal Solid Waste) if fully implemented

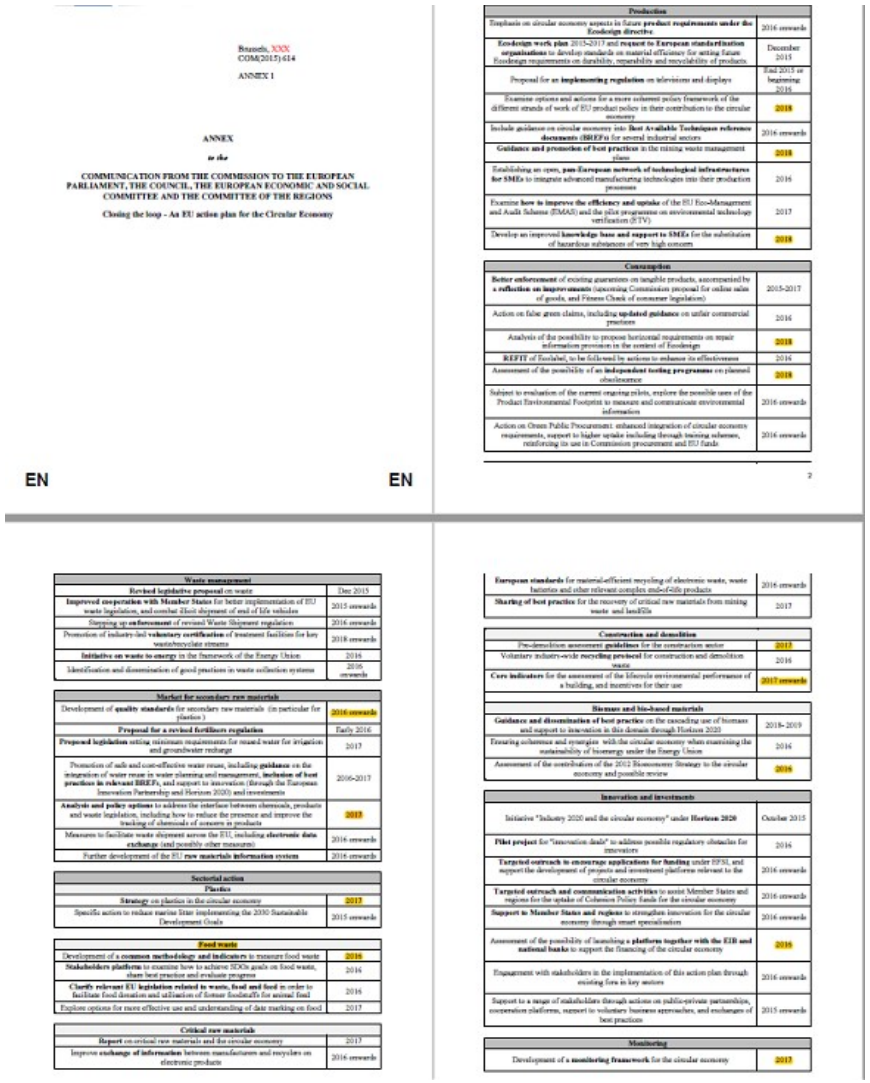
Between 477 and 692 **Mt CO2 equivalent less greenhouse gas emissions 2035 (cumulative)**;
+
- 96 € billion savings (with externalities),
- Above 500 000 jobs

Challenges for circular economy

Think cycling rather than end of pipe

Conditions & standards for recycling

Beyond Products and waste



Brussels, XXX
COM(2015) 614

ANNEX 1

ANNEX

to the

COMMUNICATION FROM THE COMMISSION TO THE EUROPEAN PARLIAMENT, THE COUNCIL, THE EUROPEAN ECONOMIC AND SOCIAL COMMITTEE AND THE COMMITTEE OF THE REGIONS

Closing the loop - An EU action plan for the Circular Economy

EN EN

Production	
Emphasis on circular economy aspects in future **product requirements under the Ecodesign directive**	2016 onwards
Ecodesign work plan 2015-2017 and **request to European standardisation organisations** to develop standards on material efficiency for setting future Ecodesign requirements on durability, reparability and recyclability of products	December 2015
Proposal for an **implementing regulation** on televisions and displays	End 2015 or beginning 2016
Examine options and actions for a more coherent policy framework of the different strands of work of EU product policy in their contribution to the circular economy	2018
Include guidance on circular economy role **Best Available Techniques reference documents (BREFs)** for several industrial sectors	2016 onwards
Guidance and promotion of best practices in the mining waste management plans	2018
Establishing an open, **pan-European network of technological infrastructures for SMEs** to integrate advanced manufacturing technologies into their production processes	2016
Examine **how to improve the efficiency and uptake** of the EU Eco-Management and Audit Scheme (EMAS) and the pilot programme on environmental technology verification (ETV)	2017
Develop an improved **knowledge base and support to SMEs** for the substitution of hazardous substances of very high concern	2018

Consumption	
Better enforcement of existing guarantees on tangible products, accompanied by **a reflection on improvements** (upcoming Commission proposal for online sales of goods, and Fitness Check of consumer legislation)	2015-2017
Action on false green claims, including **up-dated guidance** on unfair commercial practices	2016
Analysis of the possibility to propose horizontal requirements on repair information provision in the context of Ecodesign	2018
REFIT of Ecolabel, to be followed by actions to enhance its effectiveness	2016
Assessment of the possibility of an **independent testing programme** on planned obsolescence	2018
Subject to evaluation of the current ongoing pilots, explore the possible uses of the Product Environmental Footprint to measure and communicate environmental information	2016 onwards
Action on Green Public Procurement: enhanced integration of circular economy requirements, support to higher uptake including through training schemes, reinforcing its use in Commission procurement and EU funds	2016 onwards

Waste management	
Revised legislative proposal on waste	Dec 2015
Improved cooperation with Member States for better implementation of EU waste legislation, and combat illicit shipment of end of life vehicles	2015 onwards
Stepping up **enforcement** of revised Waste Shipment regulation	2016 onwards
Promotion of industry-led **voluntary certification** of treatment facilities for key waste/recyclate streams	2018 onwards
Initiative on waste to energy in the framework of the Energy Union	2016
Identification and dissemination of good practices in waste collection systems	2016 onwards

Market for secondary raw materials	
Development of **quality standards** for secondary raw materials (in particular for plastics)	2016 onwards
Proposal for a revised fertilisers regulation	Early 2016
Proposal legislation setting minimum requirements for treated water for irrigation and groundwater recharge	2017
Promotion of safe and cost-effective water reuse, including **guidance** on the integration of water reuse in water planning and management, **inclusion of best practices in relevant BREFs**, and support to innovation (through the European Innovation Partnership and Horizon 2020) and investments	2016-2017
Analysis and policy options to address the interface between chemicals, products and waste legislation, including how to enhance the presence and improve the tracking of chemicals of concern in products	2017
Measures to facilitate waste shipment across the EU, including **electronic data exchange** (and possibly other measures)	2016 onwards
Further development of the EU **raw materials information system**	2016 onwards

Sectorial action Plastics	
Strategy on plastics in the circular economy	2017
Specific action to reduce marine litter implementing the 2030 Sustainable Development Goals	2015 onwards

Food waste	
Development of a **common methodology and indicators** to measure food waste	2016
Stakeholders platform to examine how to achieve SDGs goals on food waste, share best practice and evaluate progress	2016
Clarify relevant EU legislation related to waste, food and feed in order to facilitate food donation and utilisation of former foodstuffs for animal feed	2016
Explore options for more effective use and understanding of date marking on food	2017

Critical raw materials	
Report on critical raw materials and the circular economy	2017
Improve **exchange of information** between manufacturers and recyclers on electronic products	2016 onwards

European standards for material-efficient recycling of electronic waste, waste batteries and other relevant complex multi-vFills products	2016 onwards
Sharing of best practice for the recovery of critical raw materials from mining waste and landfills	2017

Construction and demolition	
Pre-demolition assessment **guidelines** for the construction sector	2017
Voluntary industry-wide **recycling protocol** for construction and demolition waste	2016
Core indicators for the assessment of the lifecycle environmental performance of a building, and incentives for their use	2017 onwards

Biomass and bio-based materials	
Guidance and dissemination of best practice on the cascading use of biomass and support to innovation in this domain through Horizon 2020	2018- 2019
Ensuring coherence and synergies with the circular economy when examining the sustainability of bioenergy under the Energy Union	2016
Assessment of the contribution of the 2012 Bioeconomy Strategy to the circular economy and possible review	2016

Innovation and investments	
Initiative "Industry 2020 and the circular economy" under **Horizon 2020**	October 2015
Pilot project for "innovation deals" to address possible regulatory obstacles for innovators	2016
Targeted outreach to encourage applications for funding under EFSI, and support the development of projects and investment platforms relevant to the circular economy	2016 onwards
Targeted outreach and communication activities to assist Member States and regions for the uptake of Cohesion Policy funds for the circular economy	2016 onwards
Support to Member States and regions to strengthen innovation for the circular economy through smart specialisation	2016 onwards
Assessment of the possibility of launching a **platform together with the EIB and national banks** to support the financing of the circular economy	2016
Engagement with stakeholders in the implementation of this action plan through existing fora in key sectors	2016 onwards
Support to a range of stakeholders through actions on public-private partnerships, cooperation platforms, support to voluntary business approaches, and exchanges of best practices	2015 onwards

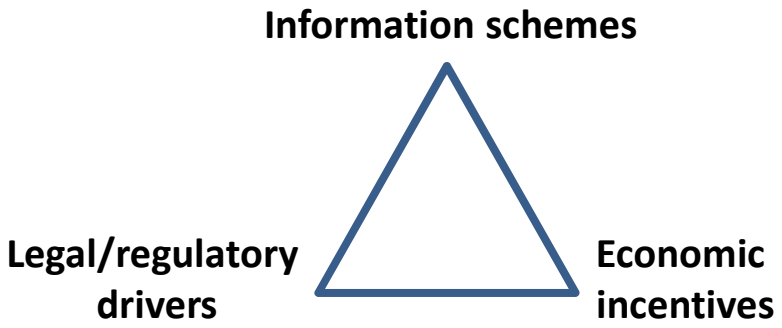
Monitoring	
Development of a **monitoring framework** for the circular economy	2017

The EU has set a [Circular economy action plan], with more than 50 actions, addressing notably:

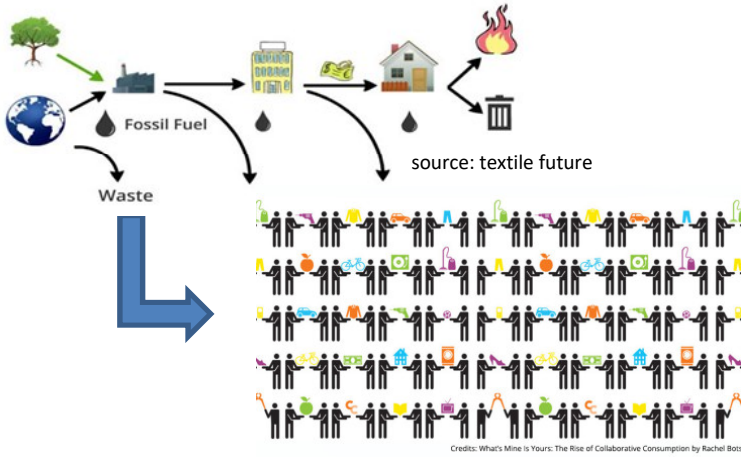
- The interfaces between product, waste and chemicals policy;
- The manufacturing standards (BATs)
- Plastics, Construction and Critical Raw materials
- The role of biomass and bio-based materials;
- A framework monitoring system

Global Challenges

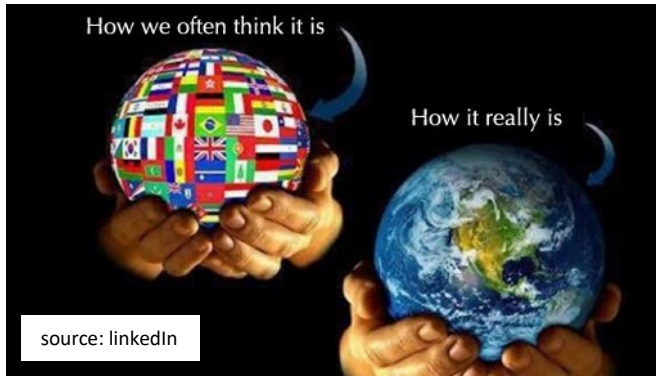
➢Combining & balancing policy tools to transform the market / change the competition field



➢Circular economy narratives: getting rid of *boring uniform* 'buy, use , bin' towards *experience and enjoy* sharing, leasing, repairing, re-selling



➢Cooperation on *no boundary* issues (climate, marine pollution, eco-system preservation…), business rules, market surveillance and enforcement



Thanks for your attention

Any questions?

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