



Environment and
resource efficiency



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Welcome by Interreg Europe Joint Secretariat and introduction to the Policy learning Platform

Seville, 18 October 2017

WIFI password: PLPSEVILLA

#PolicyLearning #ResourceEfficiency



Source: <http://www.stormministries.org/index.php/blog/350-first-thoughts-on-love>

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Policy Learning Platform

Sharing solutions for better regional policy

Policy Learning event on energy and resource efficiency

Seville, 17-18 October 2017, Fundación Tres Culturas Del Mediterráneo

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Spread good practices further
Boost programme results
Increase **impact** of policy learning



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3 + 1



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2

A person in a white shirt is writing on a notepad with a red pen. The notepad contains a diagram with various boxes and lines. In the background, there is a laptop and a tablet. The scene is set on a wooden desk.

**Access support
and expertise**

3

Exchange good practices

+ 1



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What is the Policy Learning Platform?

What, for whom, how and why? Read more about the Policy Learning Platform.



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for
your attention!**

17-18 October 2017 Seville



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Doing more with less – an overview of resource efficiency policies across Europe

Seville, 18 October 2017

WIFI password: PLPSEVILLA

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More from less – material resource efficiency in Europe

Overview of policies, instruments and targets in 32 countries

Theo Geerken,
European Topic Centre on Waste and Materials in a Green Economy

Policy learning event on energy and resource efficiency , Sevilla, 17-18
october 2017



About the European Environment Agency



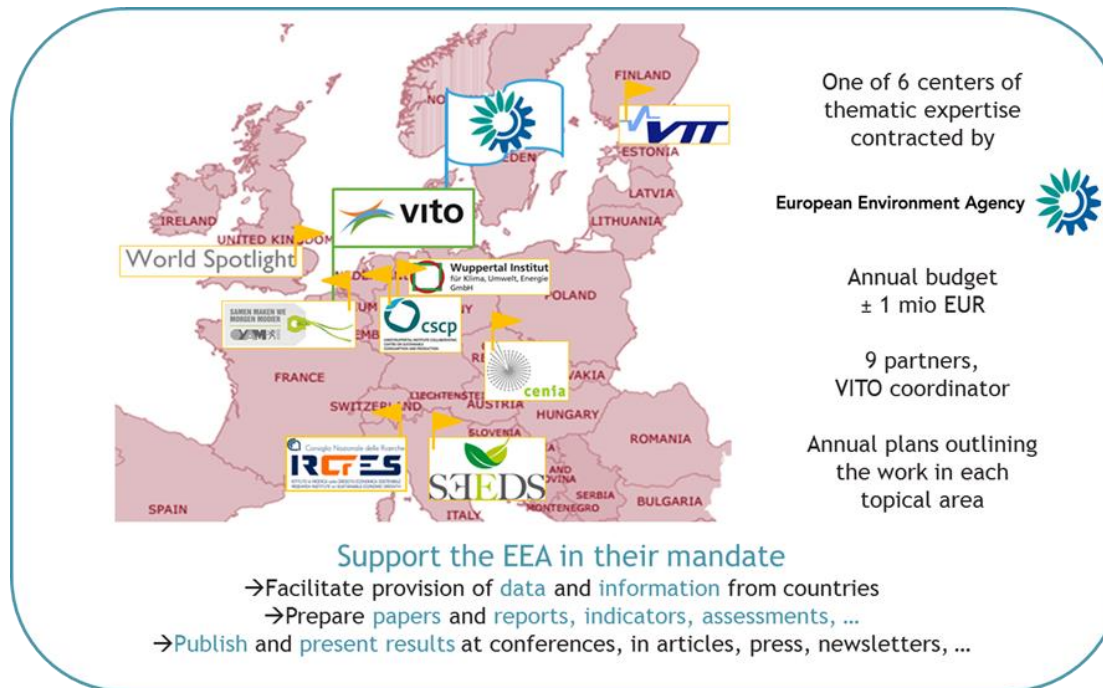
- Specialized agency of the European Union
- Located in Copenhagen
- About 220 staff
- 39 member and cooperating countries
- Eionet network in place in all those the countries

‘The EEA aims to support sustainable development and to help achieve significant and measurable improvement in Europe’s environment through the provision of timely, targeted, relevant and reliable information to policy makers and the public’

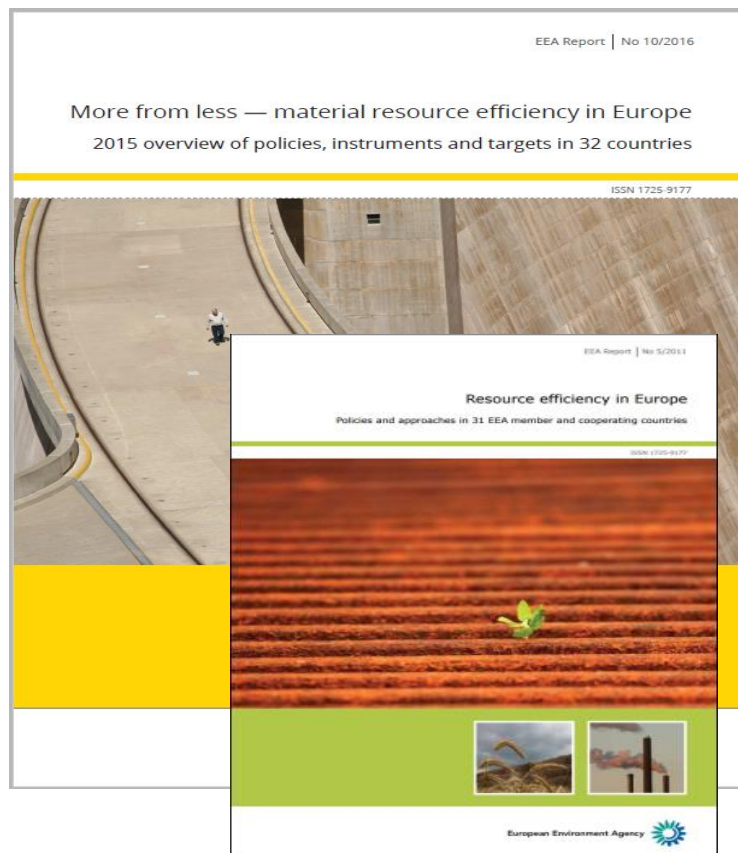
EEA does not make laws nor checks compliance



European Topic Centre on waste and materials in a green economy



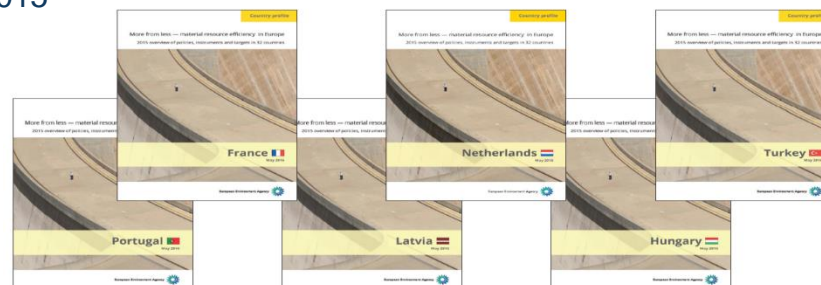
Context for the 2015 overview of resource efficiency policies



Main goal is to encourage **information sharing** and **capacity building** within EEA's Eionet network

Insights and knowledge to support the **implementation of EU policies**, e.g., Resource efficiency roadmap, Circular economy action plan

An integral part of the report are **32 country profiles**, self-assessments prepared by countries. Information is current as of end 2015



The analysis builds on the earlier EEA review “**Resource efficiency in Europe**” published in 2011



Coverage and scope



Focus on **material resources across the lifecycle**, corresponding to the scope of MFA

EU regulatory framework and trends in EU material use are discussed in the report, to provide context for national information

However, the exercise was **not intended** as a review of compliance

Showcasing **examples of good practice / innovative approaches** taken in the countries



Topics covered

PART I MATERIAL RESOURCE EFFICIENCY IN THE EUROPEAN UNION 20

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PART II MATERIAL RESOURCE EFFICIENCY POLICIES AT THE COUNTRY LEVEL..... 41

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PART III THE ROAD AHEAD 104

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Some noteworthy examples

- Albania**
 - National Energy Efficiency Action Plan, 2011-2018
 - Law on Integrated Waste Management
- Belgium**
 - Plan C, Transition Network for Sustainable Materials Management (Flanders)
 - Marshall Plan 4.0-circular economy (Wallonia)
- Croatia**
 - Act on Sustainable Waste Management (2013)
 - Act on Mining (2013)
- Denmark**
 - Circular economy policy toolkit
 - Indicators of resource efficiency at the sector level
- Finland**
 - National Material Efficiency Programme (2014)
 - By 2017, all new public buildings should be near-zero-energy
- France**
 - Law on Consumption (2014), addressing lifespan of products
 - National Council for Ecological Transition
- Hungary**
 - National Environmental Technology Innovation Strategy
 - Set of 2020 targets for resource management and efficiency
- Austria**
 - Resource Efficiency Action Plan (2012)
 - Food is Precious initiative
- Bulgaria**
 - National Development Programme Bulgaria 2020
 - Operational Programme on Innovation and Competitiveness 2014-2020
- Czech Republic**
 - Secondary Raw Materials Policy (2014) and Action Plan
 - Vision 2024 and a 'decatalogue' for a circular economy
- Estonia**
 - Estonia 2020 National Reform Programme
 - Good Practice of Involvement
- Former Yugoslav Republic of Macedonia**
 - Strategy for Sustainable Development (2010)
 - Ecolabel scheme for tourism facilities
- Germany**
 - ProGress Resource Efficiency Programme
 - Closed Cycle Management Act
- Iceland**
 - The Icelandic Recycling Fund
 - Waste Prevention Policy

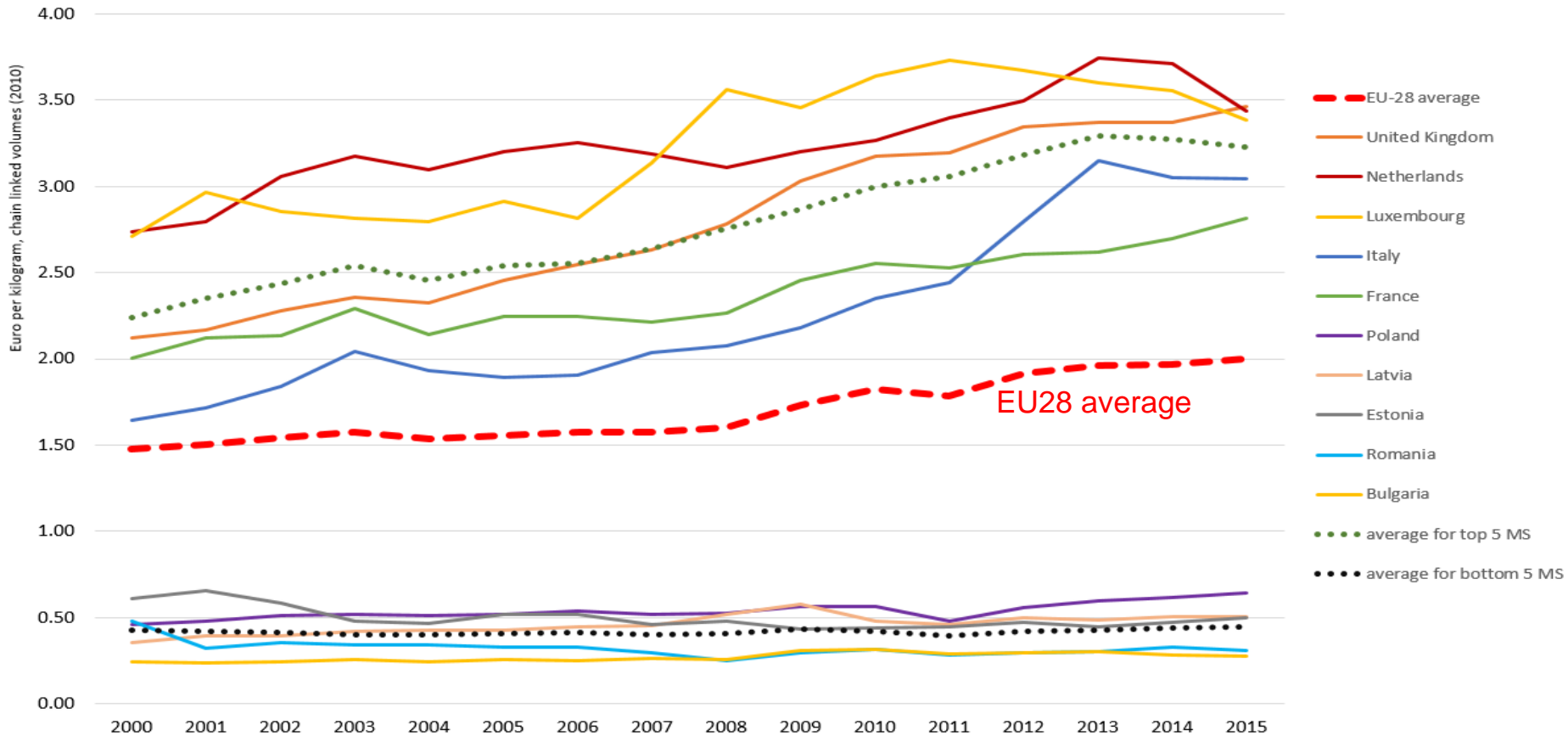


- Ireland**
 - Towards a Resource Efficient Ireland 2014-2020 strategy
 - Stop Food Waste Challenge
- Latvia**
 - Targets in the Sustainable Development Strategy Latvia 2030
 - Interim targets in mid-term sectoral strategies
- Netherlands**
 - Circular economy programme From Waste to Resource (2014)
 - Research studies on materials critical for the Dutch economy
- Portugal**
 - Green Growth Commitment
 - Set of targets for material use and resource efficiency
- Slovenia**
 - Operational programme for the EU Cohesion policy 2014-2020
 - Draft framework programme for green growth
- Italy**
 - National Plan to Prevent Food Waste (2014)
 - Green public procurement Action Plan to promote recycled materials
- Liechtenstein**
 - Action Plan for Use of Recycled Materials in Public Construction
- Norway**
 - By 2020, 67.5% of total energy use to come from renewables
 - Extended producer responsibility agreements on packaging waste
- Serbia**
 - National Strategy for Sustainable Use of Natural Resources and Goods (2012)
 - Network of Energy Managers
- Spain**
 - National Plan on Waste 2015-2020
 - National strategy 'More Food Less Waste'
- Turkey**
 - 10th Development Plan and its Priority Transformation Programs
 - Valuation of natural resources and ecosystem services
- Kosovo***
 - *Under the UN Security Council Resolution 1244/99
 - Mining Strategy of the Republic of Kosovo 2012-2025
 - Funds for environmental protection
- Lithuania**
 - National Environmental Protection Strategy 2015
 - National Forestry Sector Development Programme
- Poland**
 - Strategy for Innovation and Efficiency of the Economy
 - Action Plan for Security of Supply of non-energy raw materials
- Slovakia**
 - Raw Materials Policy
 - Methodological guide for green public procurement
- Sweden**
 - Generational goal and environmental quality objectives
 - Centre for Resource Efficiency CERISE
- Switzerland**
 - Green Economy Dialogue
 - LCA-based analysis to identify priority sectors (ReEFF report)
- United Kingdom**
 - Resource Security Action Plan and Pilot Resources Dashboard
 - Safeguarding Scotland's Resources 2013

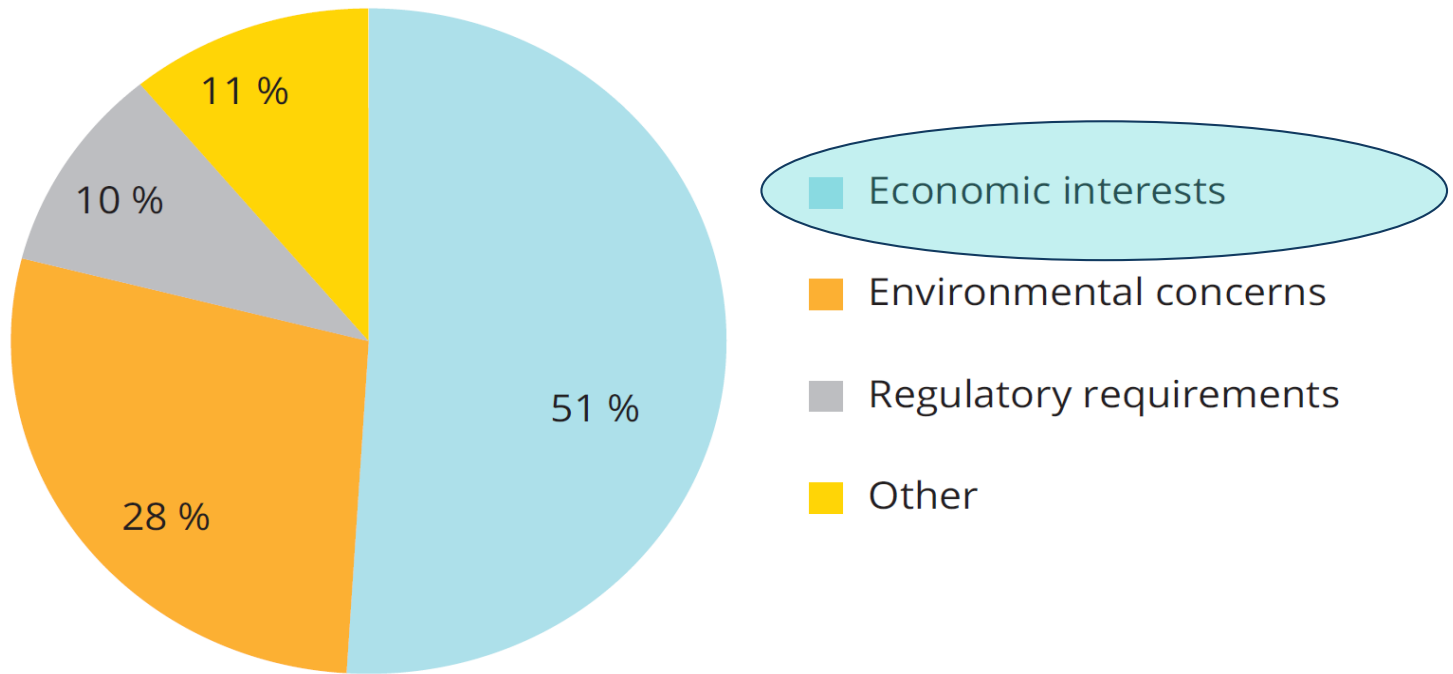


Resource productivity in Europe

Resource productivity 2000-2015, EU28 average and five highest and five lowest EU member states

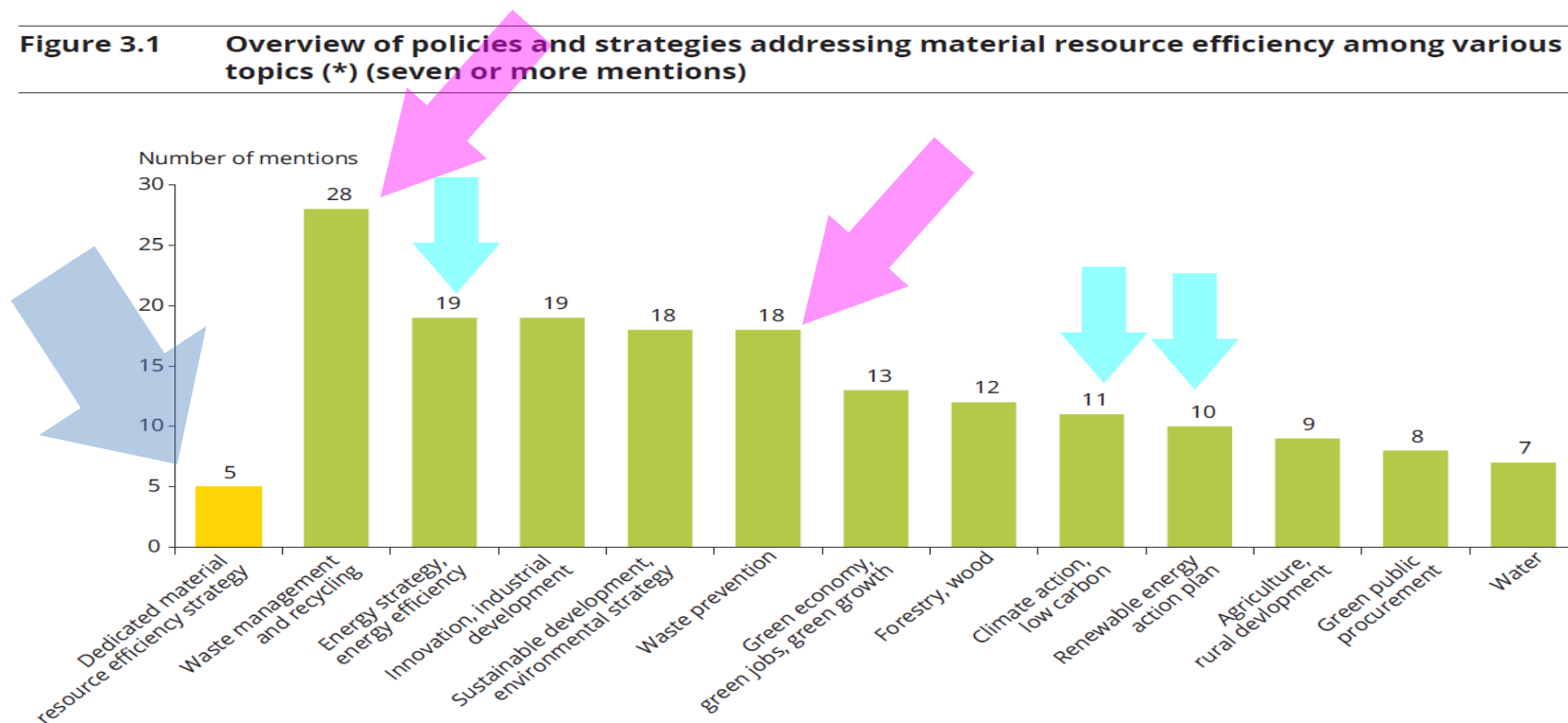


Driving forces



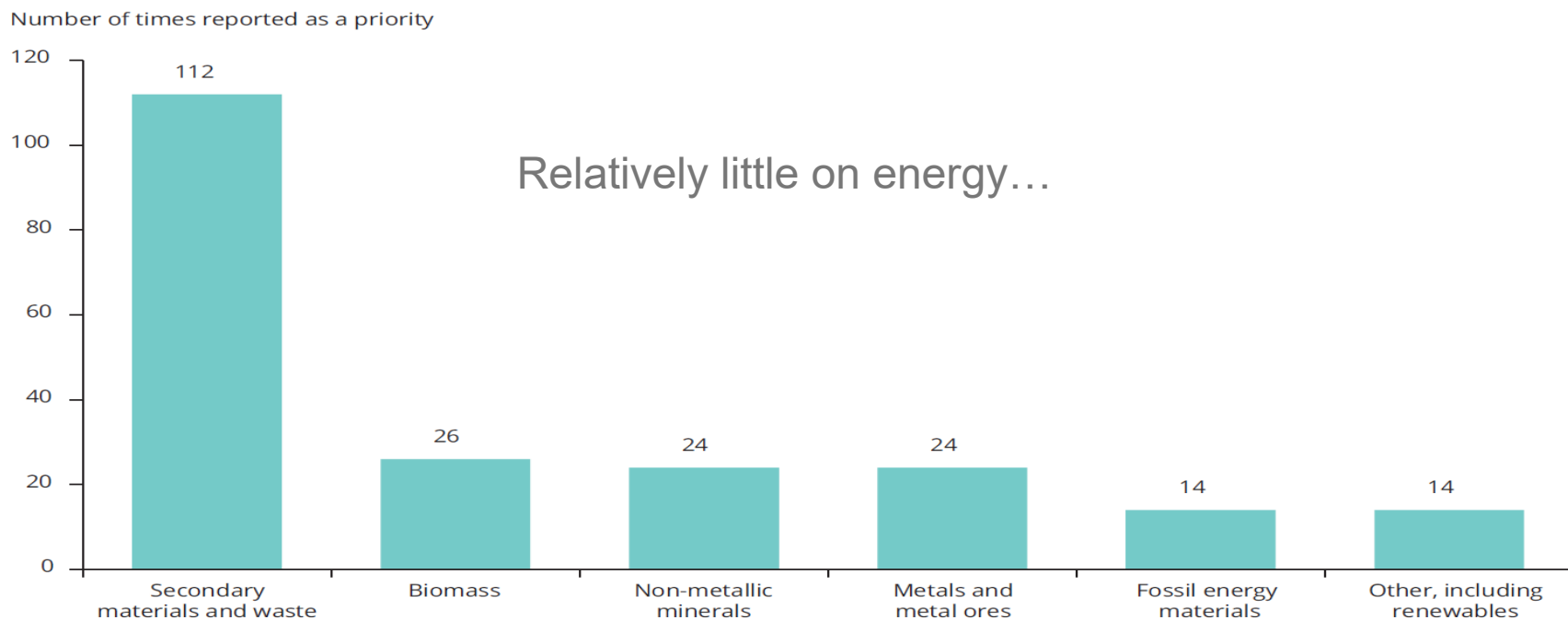
Policies and strategies which include resource efficiency

Figure 3.1 Overview of policies and strategies addressing material resource efficiency among various topics (*) (seven or more mentions)



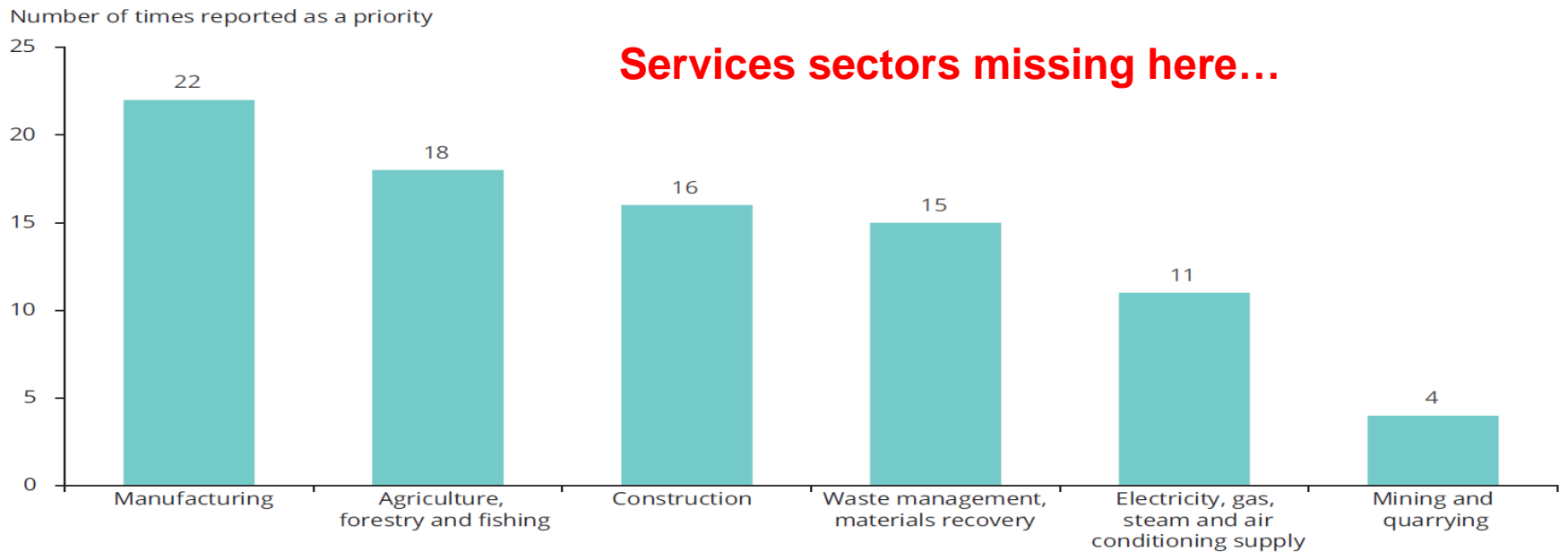
Priority materials by broad category

Figure 6.1 Priority materials by broad category and number of times reported as a priority



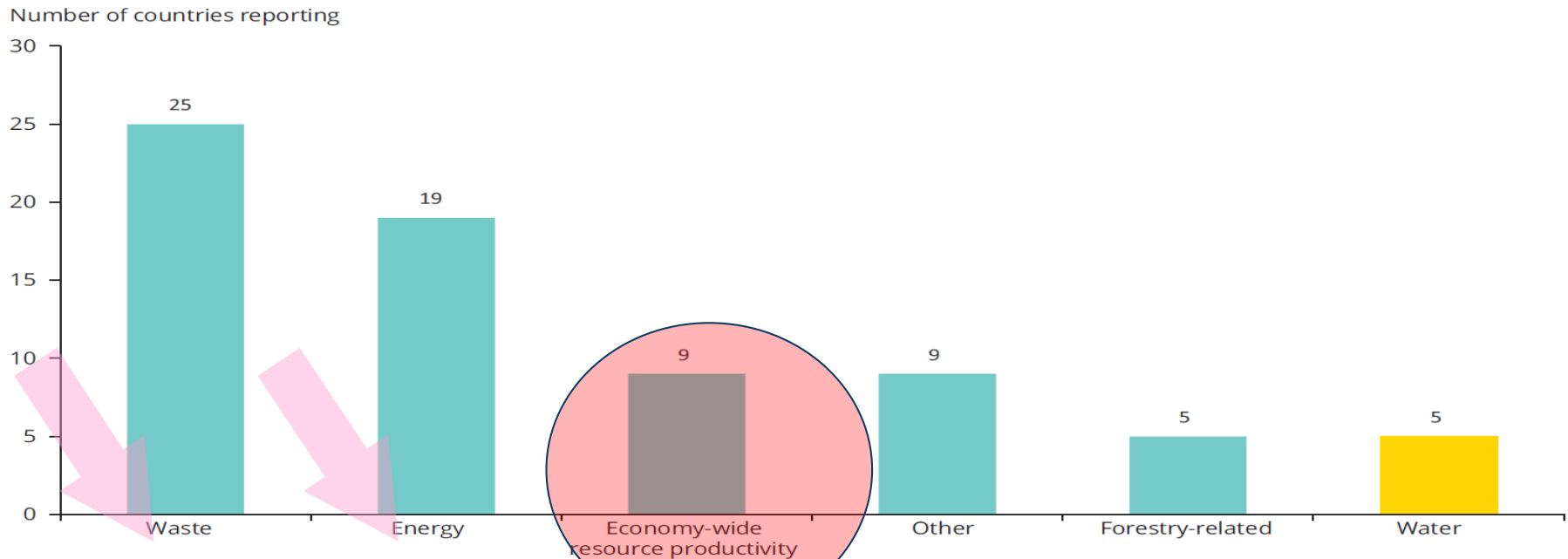
Priority sectors

Figure 6.2 Priority industries and economic sectors (reported by four or more countries), grouped by NACE (*) classification



Reported targets for resource efficiency

Figure 9.1 Number of countries reporting on targets, by type of target



Note: Water is outside the scope of this report, but is shown here because five countries reported targets related to water.

Targets for economy-wide resource productivity

Nine countries reported having adopted a measurable material resource efficiency / resource productivity target...

Austria

Estonia

France

Germany

Hungary

Latvia

Poland

Portugal

Slovenia

**Details of all the targets are available
in Annex 8
in the “More from less” report**



Countries' recommendations for future direction

- better definitions, scope and focus
- integration of material resource efficiency into other policies, and broader stakeholder involvement
- improvement of data availability
- a more systemic approach



Some key findings

- Economic factors have become the major driving force now, compared with 2011 – the logic of doing more with less seems widely embraced
- More than half of the countries presented initiatives on secondary raw materials and on waste management and prevention as the core of their work on resource efficiency
- “Waste” and “energy” are the most frequent priorities for resource efficiency. Reported examples of good policy practice are dominated by waste prevention and recycling
- In most countries, energy use / energy efficiency policies and resource efficiency policies appear to be largely disconnected.
- Tentative initiatives to explore other areas of synergy / co-benefits



Some key findings

- Measuring and monitoring is a challenge, but there are examples of pioneering work in economic sectors / industry
- Limited attention paid to changing the way we live and to making consumption patterns more sustainable
- The services sector accounts for more than 70% of most economies' GDP and yet, it seems to receive limited attention
- Few countries reported to already have a circular economy strategy or an action plan; more on the way.
- Increasingly, there are examples of resource efficiency oriented initiatives at a local or regional level (i.e. province) that go beyond green public procurement



Lessons learned from the process

- Inspiration is as important as information - showing how policy makers in other countries deal with similar problems
- Well-received short country examples (with detailed info available in the country profiles)
- Countries ready to participate and invest time and effort in initiatives supporting exchange of information and lessons learned
- Situation is changing quickly and many countries are taking new initiatives



Country examples presented in Follow-up Workshop october 2016 with EEA countries

- National dedicated material resource efficiency programmes
- Food Waste prevention programmes
- Products and materials
- Monitoring/indicators
- Synergies (f.e. Circular Economy and climate, Resource Efficiency and energy/climate)



Work in progress

- Next 2017/2018 overview of resource efficiency policies

More attention to :

- Circular economy
- Raw material strategies
- Best practices below national level
- Relation to SDG's
- Relations to other policies

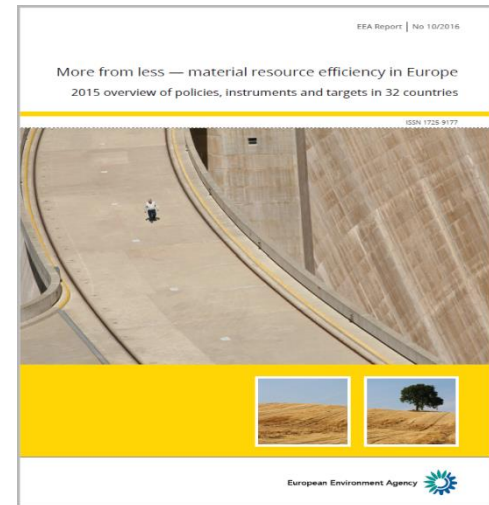


www.eea.europa.eu/resource-efficiency

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Resource Efficiency in the context of Smart Specialisation Platform

Seville, 18 October 2017

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Building resource efficiency community

Seville, 18 October 2017

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The European Commission's science and knowledge service

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Smart specialisation and resource efficiency

**Karel HAEGEMAN,
JRC.B3 Territorial Development**

Seville, 18th of October 2017

Support to S3 in JRC Seville

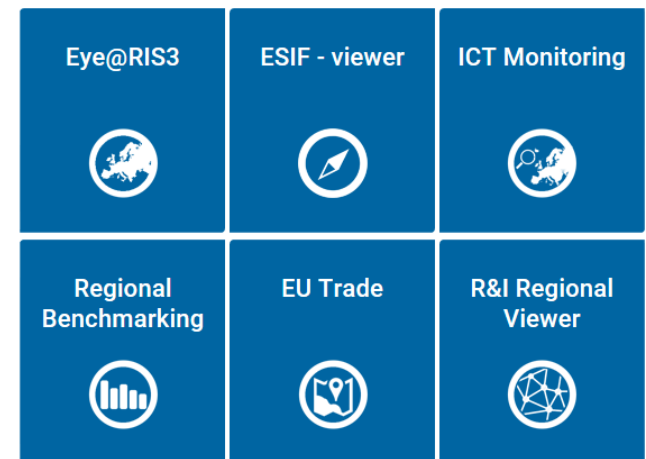


- EU Countries registered in S3P: 18
- EU Regions registered in S3P: 170
- Non-EU Countries registered in S3P: 3
- Non-EU Regions registered in S3P: 10
- S3P Peer-reviewed Countries: 15
- S3P Peer-reviewed Regions: 60

What we can do for you

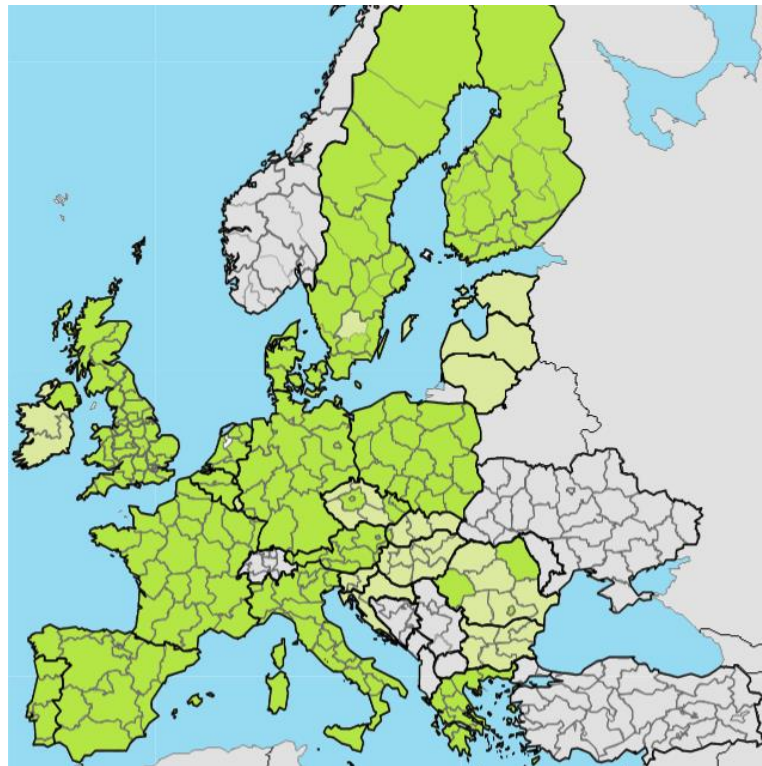


S3 Tools



Resource efficiency in RIS3 strategies

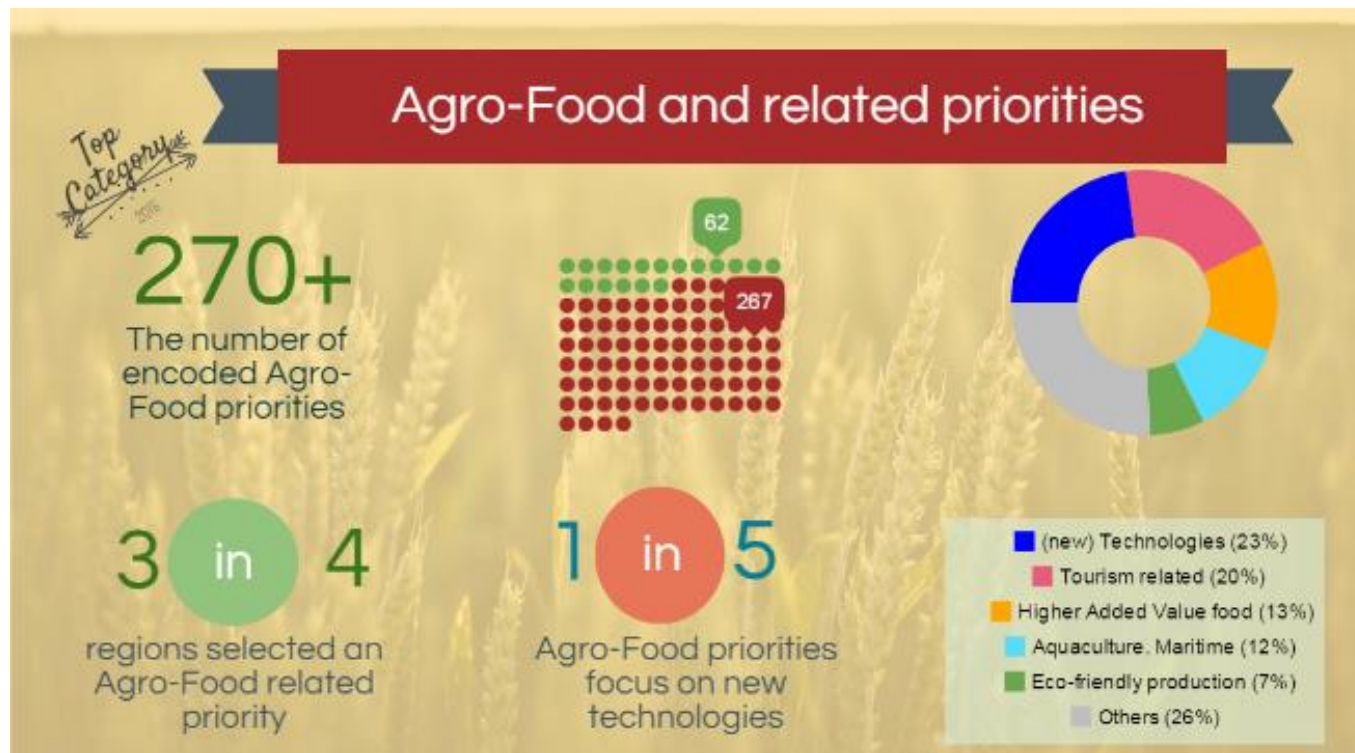
127 regions with a focus on resource efficiency



Few examples...

AT31	Oberösterreich	Industrial production processes (including resource efficiency)
BE1	Brussels-Capital Region	Environment (Incl. circular economy) ²
DEB	Rheinland-Pfalz	Energy, environmental technology and resource efficiency
DED	Sachsen	ICT and digital communication (including resource efficient computing systems)
DEE	Sachsen-Anhalt	Resource efficiency and circular economy.
DEG	Thüringen	Sustainable energy and resource use (including resource efficiency)
DE1	Baden-Württemberg	Environmental technologies, renewable energies and & resource efficiency. And ICT and ene
DE2	Bayern	Digital agriculture for resource efficiency and transparency, e-Environment and environment
DE3	Berlin	Clean technologies. Sustainable water management, circular economy, material and resource
DE4	Brandenburg	Food and nutrition industry. Food value chain and resource efficiency
DE4	Brandenburg	Clean technologies. Sustainable water management, circular economy, material and resource
DE7	Hessen	Environmental technology, energy technology and resource efficiency.
DE8	Mecklenburg-Vorpom	Mobility (including resource efficiency)
DE8	Mecklenburg-Vorpom	Energy and climate. Incl. resource efficiency (heat).
DK04	Midtjylland	Growth drivers. Circular economy aand resource scarcity
ES13	Cantabria	Maritime engineering. Incl. resource control and prediction of coastal phenomena.
ES21	País Vasco	Circular economy (connected with Ecosystem Opportunity Niche).
ES41	Castilla y León	Sustainable processing industry through resource and energy efficiency.
FR30	Nord - Pas-de-Calais	Resource efficiency and circular economy
ITH2	Provincia Autonoma d	Sustainable natural resource management
LU	Luxembourg	Sustainable Resource Management.
MT	Malta	Resource efficient buildings.
NL2	Eastern Netherlands	Resource efficiency in horticulture
SI	Slovenia	Smart use of resources

Thematic S3 platform on agro-food



Agro-food consortia of regions

Traceability and big data in agro (20 regions)

Bio-economy – Pilot of the Vanguard Initiative (14 regions in the pilot)

- Food & Feed from Agrofood Waste
- Food and Feed Ingredients from Algae

High-tech farming (22 regions)

- Tree nursery, Viticulture, Fruits (relatively more intensive)
- Livestock outdoor
- Livestock indoor
- Arable, Cereals, vegetables (outdoor)
- Protected cultivation (different types of greenhouses, highly intensive)

Smart sensor systems for agri-food (12 regions)

Thematic S3 platform on industrial modernisation



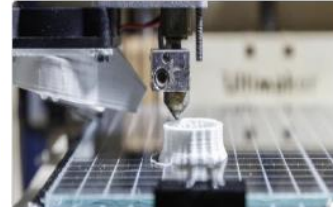
Advanced manufacturing



Non-food Biomass



Efficient and Sustainable Manufacturing



3D-Printing



New Nano-Enabled Products



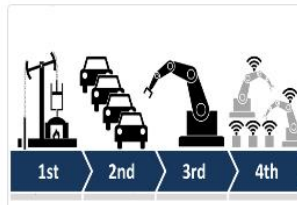
Textile Innovation



Medical technology



Photonics



SMEs to the Industry 4.0



Sport



Digitalisation and Safety for Tourism

Targeted support to S3 implementation

- Two Projects – Four Work Packages

Lagging Regions

Stairway to Excellence

RIS3 Support to
Lagging Regions

RIS3 Support to
Romania

Higher Education
in
Smart
Specialisation

Stairway to
Excellence

European Parliament
Preparatory Action
AA – DG REGIO

European Parliament
Preparatory Action
AA – DG REGIO

AA – DG EAC
(75%)

European Parliament
Preparatory Action
AA – DG REGIO

Stairway to Excellence: RIS3 and H2020

Collaboration between MSs, regions, and Joint Undertakings under H2020

- Memoranda of Understanding
- Increase participation in JU calls
- Seek alignment of agenda's and increase critical mass
- Variety of collaboration instruments: e.g. JU Seal of Excellence
- Use of structural funds to be better prepared for participation in JU calls



Focus of BBI JU: 3.7 bn euro to convert biological residues into products (Bio Based Industry)

- Feedstock:** foster a sustainable biomass supply with increased productivity and building new supply chains
- Biorefineries:** optimise efficient processing through R&D and demonstrate their efficiency and economic viability at large-scale demo/flagship biorefineries
- Markets, products and policies:** develop markets for bio-based products and optimise policy frameworks

Stairway to Excellence: RIS3 and H2020

Collaboration between regions and EIT Innovation Communities

- **EIT Climate-KIC** →
Climate change mitigation and adaptation
- **EIT Digital** →
Future Information and Communication Technologies
- **EIT Food** →
Sustainable Supply Chain from Resources to Consumers
- **EIT Health** →
Healthy living and active ageing
- **EIT Raw Materials** →
Sustainable exploration, extraction, processing, recycling and substitution
- **EIT InnoEnergy** →
Sustainable energy

- Widening participation through the RIS outreach scheme of EIT
- Seek alignment of agenda's and increase critical mass
- Support stakeholder participation
- KIC representatives and regional authorities as facilitators bringing together the knowledge triangle
- Also for neighbourhood countries
- MoU EIT-JRC



EIT Climate KIC

Four themes:

- Urban transitions
- Sustainable productions systems
- Decision metrics and finance
- Sustainable land use

JRC TECHNICAL REPORTS

Implementing RIS3 in the Region of Eastern Macedonia and Thrace: Towards a RIS3 tool box

JRC S3 Policy Brief Series
No. 20/2016

Mark Boden, Patrice dos Santos, Karel
Haegeman, Elisabetta Marinelli, Susana
Valero

2016



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RIS3 in the Region of Eastern Macedonia and Thrace

- EP – Preparatory Action
- AA - DG REGIO

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Research and innovation



SME competitiveness



Low-carbon economy



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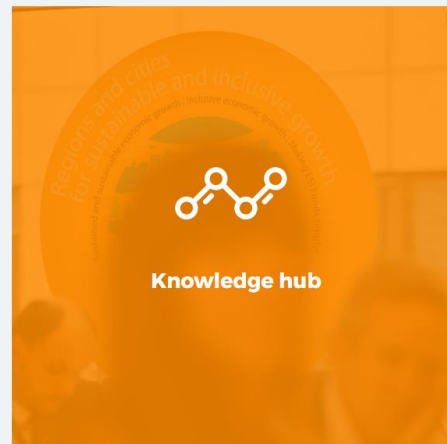
Expert support

Community

Knowledge hub

Good practices

What is policy learning platform?



Upcoming Events

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12	13	14	15	16	17	18
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26	27	28	29	30		

- Research and innovation
- SME competitiveness
- Low-carbon economy
- Environment and resource efficiency



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Knowledge hub

Good practices

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Research and innovation



SME competitiveness



Low-carbon economy



Environment and resource efficiency

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Expert support

Community

Knowledge hub

Good practices

What is policy learning platform?

Expertise

The platform is a space for continuous learning where you can tap into the knowhow of experts and experience of peers. The support will come from experts, as well as the community itself.

The platform needs you to make the expertise exchange a true win-win experience. [Join the community.](#)

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26	27	28	29	30		

Research and innovation

SME competitiveness

Low-carbon economy

Environment and resource efficiency



25/11/2016



25/11/2016



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Good practice: RECOSI – A leading social franchise in the reuse of ICT

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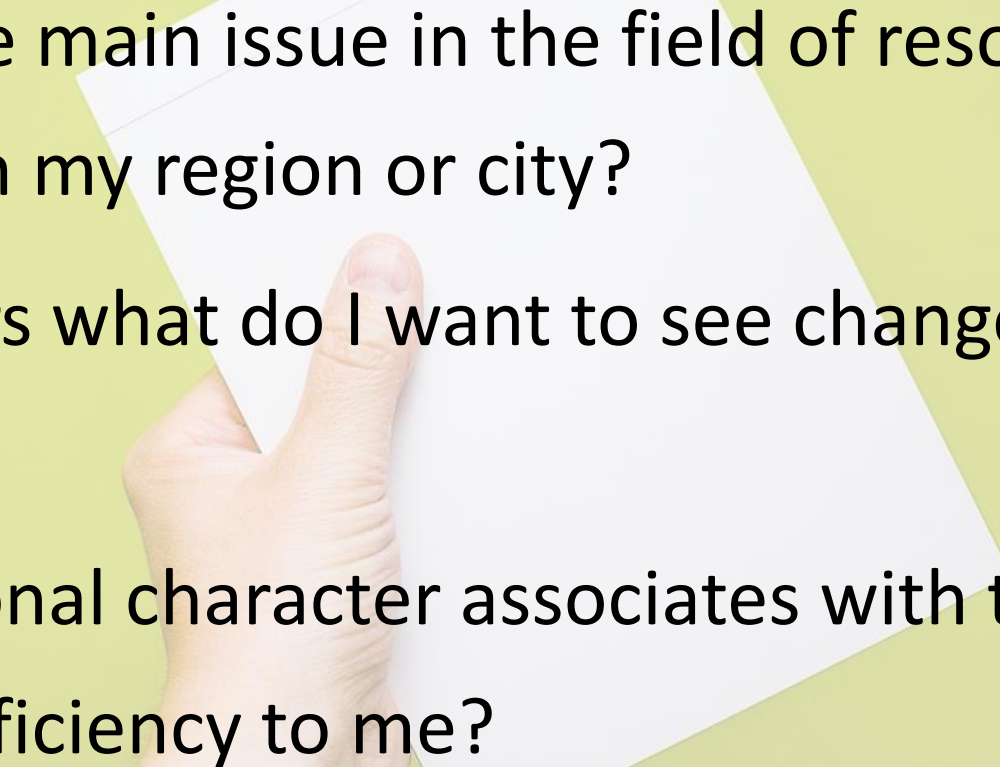
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Source: <http://www.stormministries.org/index.php/blog/350-first-thoughts-on-love>

- 
- A hand is shown holding a white envelope, which is tilted and serves as a background for the text. The background of the entire slide is a light green color.
- What is the main issue in the field of resource efficiency in my region or city?
 - In five years what do I want to see changed in this field?
 - What fictional character associates with the resource efficiency to me?



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Policy Learning Event on Energy and Resource Efficiency

Knowledge Hub: Interreg Europe projects on Resource Efficiency

Learning from good practices, interesting approaches and policies linked to
Interreg Europe projects on Resource Efficiency

17-18 October 2017, Seville

GLOBAL TRENDS



**Global middle class consumers
will increase by 2 billion by 2030.**

(OECD)

GLOBAL TRENDS



Compared to the levels in 2010
**global resource use will double
by 2030.**

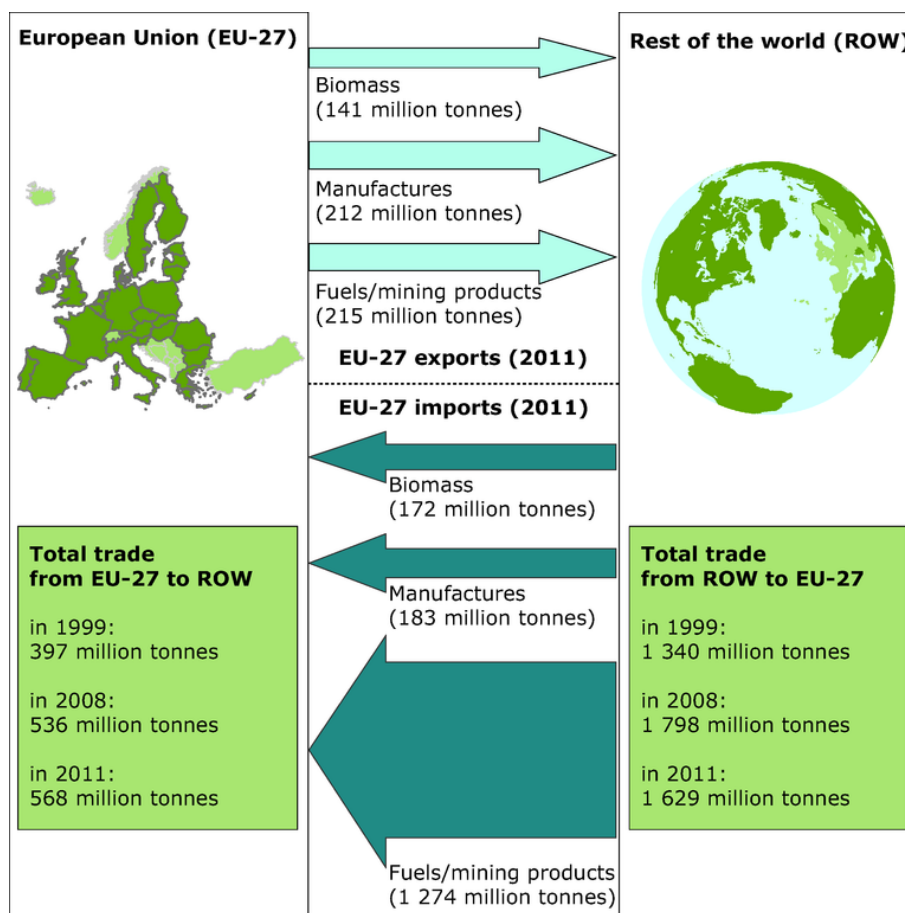
(SERI)

GLOBAL TRENDS



In line with the projections of the World Bank compared to the 2012 levels **global waste generation will double by 2025.**

EU-27 PHYSICAL TRADE BALANCE WITH THE REST OF THE WORLD, 2011



Source: European Environment Agency (EEA), ETC/SCP

INTERREG EUROPE PROJECTS & RESOURCE EFFICIENCY



First call:

- **CESME:** Circular Economy for SMEs (DK)
- **INTHERWASTE:** Interregional Environmental Integration of Waste Management of European Heritage (ES)
- **RETRACE:** A Systemic Approach for Regions Transitioning towards a Circular Economy (IT)
- **SYMBI:** Industrial Symbiosis for Regional Sustainable Growth and Resource Efficient Circular Economy (ES)
- **TRIS:** Transition Regions towards Industrial Symbiosis (UK)

Second call:

- **BIOREGIO:** Regional circular economy models and best available technologies for biological streams (FI)
- **CircE:** European regions toward circular economy (IT)
- **COCOON:** Consortium for a coherent European waste management strategy (BE)
- **ECOWASTE4FOOD:** Supporting eco-innovation to reduce food waste and promote a better resource efficient economy (FR)
- **ENHANCE:** EMAS as a nest to help and nurture circular Economy (ES)
- **GPP4GROWTH:** Green public procurement for resource efficient regional growth
- **TANIA:** Treating contamination through nanoremediation



Projects dealing with RESOURCE EFFICIENCY

1st Call:

CESME

INTHERWASTE

RETRACE

SYMBI

TRIS

2nd Call:

BIOREGIO

CircE

COCOON

ECOWASTE4FOOD

ENHANCE

GPP4GROWTH

PERFECT

TANIA



Projects on CIRCULAR ECONOMY

1st Call:

CESME

INTHERWASTE

RETRACE

SYMBI

TRIS

2nd Call:

BIOREGIO

CircE

COCOON

ECOWASTE4FOOD

ENHANCE

GPP4GROWTH

PERFECT

TANIA



Projects on INDUSTRIAL SYMBIOSIS

1st Call:

CESME

INTHERWASTE

RETRACE

SYMBI

TRIS

2nd Call:

BIOREGIO

CircE

COCOON

ECOWASTE4FOOD

ENHANCE

GPP4GROWTH

PERFECT

TANIA



Projects related to OTHER ASPECTS of RESOURCE EFFICIENCY

1st Call:

CESME

INTHERWASTE

RETRACE

SYMBI

TRIS

2nd Call:

BIOREGIO

CircE

COCOON

ECOWASTE4FOOD

ENHANCE

GPP4GROWTH

PERFECT

TANIA



Projects related to efficient use of LAND AND SOIL

1st Call:

CESME

INTHERWASTE

RETRACE

SYMBI

TRIS

2nd Call:

BIOREGIO

CircE

COCOON

ECOWASTE4FOOD

ENHANCE

GPP4GROWTH

PERFECT

TANIA



Projects related to efficient use of RAW MATERIALS

1st Call:

CESME

INTHERWASTE

RETRACE

SYMBI

TRIS

2nd Call:

BIOREGIO

CircE

COCOON

ECOWASTE4FOOD

ENHANCE

GPP4GROWTH

PERFECT

TANIA



Projects related to efficient use of WATER ?

1st Call:

CESME

INTHERWASTE

RETRACE

SYMBI

TRIS

2nd Call:

BIOREGIO

CircE

COCOON

ECOWASTE4FOOD

ENHANCE

GPP4GROWTH

PERFECT

TANIA



Projects focusing on ECO-INNOVATION

1st Call:

CESME

INTHERWASTE

RETRACE

SYMBI

TRIS

2nd Call:

BIOREGIO

CircE

COCOON

ECOWASTE4FOOD

ENHANCE

GPP4GROWTH

PERFECT

TANIA



Projects focusing on the ROLE OF BUSINESS

1st Call:

CESME

INTHERWASTE

RETRACE

SYMBI

TRIS

2nd Call:

BIOREGIO

CircE

COCOON

ECOWASTE4FOOD

ENHANCE

GPP4GROWTH

PERFECT

TANIA



- **policy briefs**
- **Good Practices Database**
- **overview of relevant platforms**
- **news articles**
- **thematic publications**





Policy briefs



Interreg Europe – Policy Learning Platform – Environment and Resource Efficiency

Policy brief
Sustainable management of bio-waste: Regional cooperation for improved bio-waste management

This policy brief highlights the approaches which have been taken to improve management of bio-waste. The focus is put on European Union waste policy developments and regional actions encouraging more sustainable management of bio-waste.

1. What is bio-waste?

The **Waste Framework Directive** defines bio-waste as “biodegradable garden and park waste, food and kitchen waste from households, restaurants, caterers and retail premises, and comparable waste from food processing plants and other waste with similar biodegradability and compostability properties”. It does not include forestry or agricultural residues, manure, sewage sludge, or other biodegradable waste such as natural textiles, paper or processed wood. It also excludes those by-products of food production that never become waste.¹

Major environmental risk that bio-waste is posing, is the methane produced from the landfilling of bio-waste. In addition, if not managed properly, bio-waste can contribute to eutrophication of water bodies and damage human health. Poor management of bio-waste results in a waste of resources as it can be used to produce energy and improve soil quality.

In the EU, between 116 and 138 million tonnes of bio-waste arise annually², of which currently only about 25% is effectively recycled into high-quality compost and digesterate. Although there is an increase in the recycling of materials in recent years, the improvements in the recycling of bio-waste remain very modest³, as illustrated in Figure 1. On the whole, organic waste is still landfilled within Europe, leading to the release of uncontrolled greenhouse gases.⁴ The reasons for a tendency as such, could have been attributed among others to the absence of the EU-wide obligation to recycle bio-waste, as well as the absence of quality standards or end-of-waste criteria for generated compost.

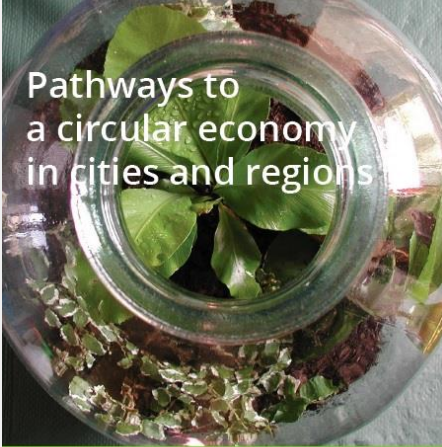
In line with the calculations of the European Topic Centre on Sustainable Consumption and Production bio-waste accounted for 37 % of the municipal waste in Europe in 2008–2010.⁵

2. Policy context

The EU has long recognized the risks and opportunities stemming from bio-waste. One of the priorities of EU waste legislation is to improve the management of bio-waste.


The Landfill Directive⁶ obliges Member States to reduce the amount of biodegradable municipal waste that they landfill to 35% of 1995 levels by 2016 (for some countries by 2020). In line with the EU Action Plan for the Circular Economy⁷ the Commission will promote efficient use of bio-based resources through a series of measures including guidance and support for


¹ Ellen MacArthur Foundation, *Towards the Circular Economy 1: Accelerated Transition*, January 2012, Cowi, like of Wight, 2012
² In line with the definition of Ekman and Ramassamy (2001)
³ Charlow, M., *Industrial symbiosis: The Encyclopedia of Earth*, 2
⁴ Charlow, M., *Industrial symbiosis: Literature and Taxonomy*, Aug 2000
⁵ Charlow, M., *Uncovering Industrial Symbiosis*, Journal of Indus 2000
⁶ Charlow, M., *Industrial symbiosis: Literature and Taxonomy*, Aug 2000





Pathways to a circular economy in cities and regions

A policy brief addressed to policy makers from European cities and regions


EUROPEAN OBSERVATORY OF TERRITORY AND POLICY

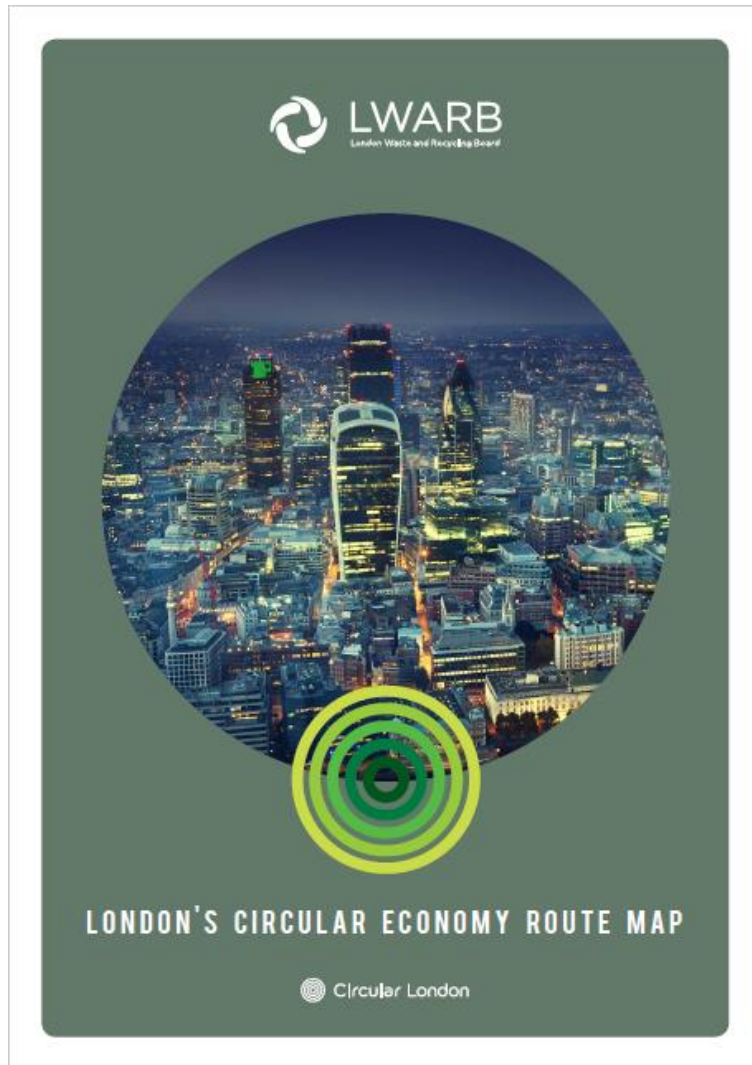

EUROPEAN REGIONAL DEVELOPMENT FUND


EUROPEAN COOPERATION TERRITORY NETWORK


Leading change to better cities



LONDON'S CIRCULAR ECONOMY ROUTE MAP



- Circular London
- London Waste and Recycling Board (LWARB) – partner of CirCE project



LONDON'S CIRCULAR ECONOMY ROUTE MAP



**BUILT
ENVIRONMENT**

FOOD

TEXTILES

ELECTRICALS

PLASTICS



Cross-cutting themes

1. Communications
2. Collaboration
3. Policy
4. Procurement and Market development
5. Finance
6. Business support
7. Demonstration
8. Innovation

LONDON'S CIRCULAR ECONOMY ROUTE MAP



Structure

2 PRODUCT LIFE EXTENSION

Actions (S/M/L)	Resources	Outputs	Outcomes	Impact
COMMUNICATIONS				
Pilot a campaign targeting residents and businesses to promote, reuse and recycling of electrical equipment. (e.g. Love Food Hate Waste approach). (M)	Partners interested – resource not identified. Partners interested: Restart Project, LWARB.	Residents and businesses are better informed about the ongoing value and environmental impact of their electrical equipment.	Fewer electrical products going to landfill and incineration. Increased re-use of electricals. Increased use of existing local re-use, repair and recycling establishments.	Reduced resource use, more efficient resource use. CO ₂ equivalent emissions saved.
Develop KPIs to enable effective collection of re-use data. (M)	Partners interested – resource not identified Interested partners are: Restart, DEFRA, LWARB.	Agreement on the appropriate system and method of collecting CE data.	Increased re-use backed up with real-time data. Better informed market.	
DEMONSTRATION				
Encourage local authorities/ companies' to track electrical assets to ensure best use of existing products and reduce need for procurement/use online platform to facilitate re-use. (S)	Partners interested – resources being sought Interested partners are: London Environment Directors Network.			
Encourage review of local authorities/ 'companies' corporate IT strategy (e.g. replacement cycles, procurement and disposal) with circular economy principles (e.g. extending product life, use of remanufactured product, re-use). (M)	Partners interested – resource not identified.	Identified areas to embed CE that make financial sense.	More sustainable use of IT.	
Explore the potential to collect, re-use and sell on office electrical equipment in London (linking London offices to London SMEs and communities for re-use). (S)	Partners interested – resources being sought. Partners interested: LWARB, WRAP, Inilecom.	Linked collection between office and communities.	More closed loop solution for office IT equipment in London.	

2 PRODUCT LIFE EXTENSION (CONTINUED)

Actions (S/M/L)	Resources	Outputs	Outcomes	Impact
BUSINESS SUPPORT				
Provide business support to electricals SMEs through Advance London to scale up or develop circular economy business models. (S)	Resource identified and plan in place led by LWARB (until January 2019).	More businesses in London using circular economy business models.		
Seek opportunities to invest in circular economy electricals innovations such as design for adaptability, disassembly, re-use and remanufacturing, new products and services. (S)	Resource identified and plan in place led by LWARB (until March 2020).			

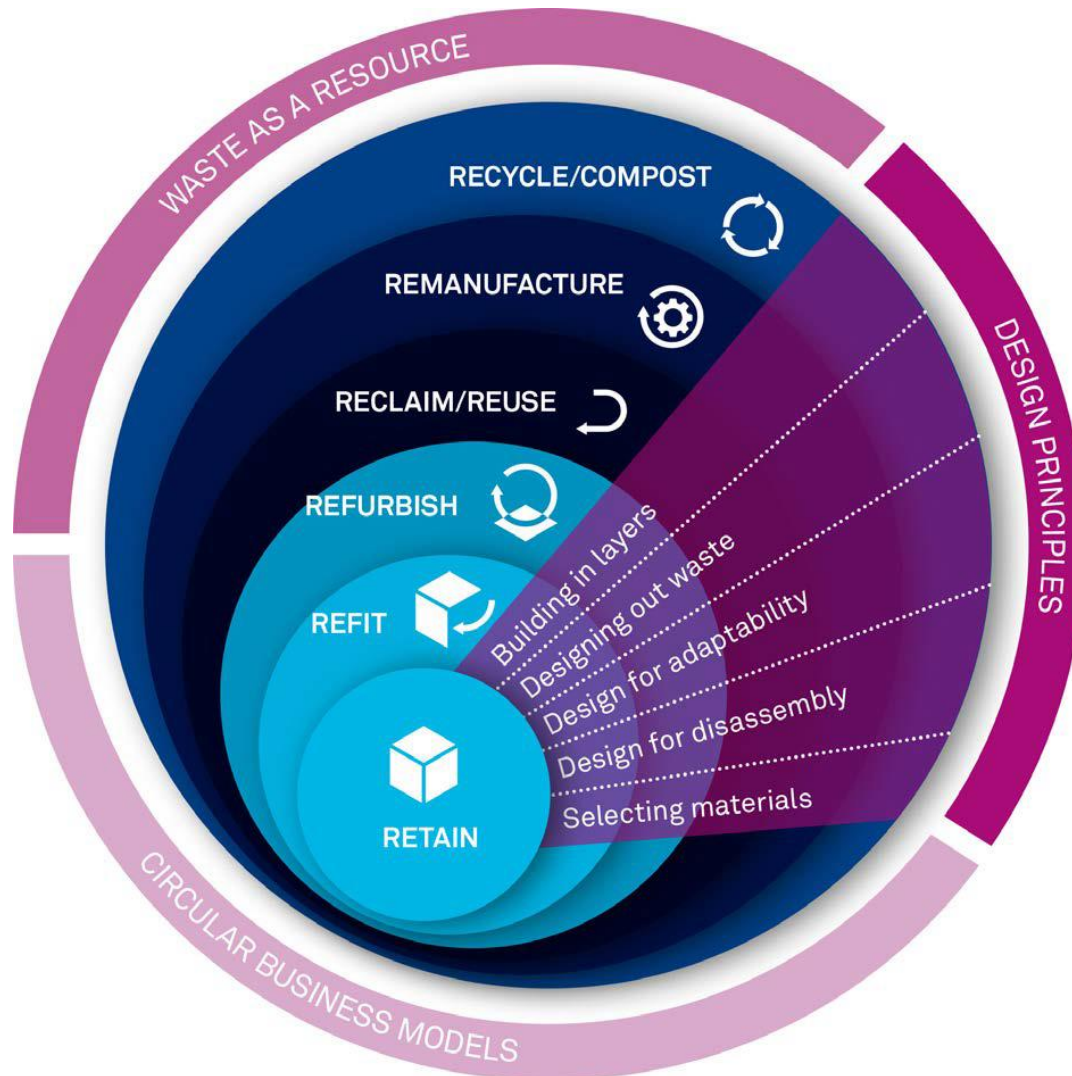
3 COLLECTIONS AND RECYCLING

Actions (S/M/L)	Resources	Outputs	Outcomes	Impact
COLLABORATION				
Bring together the PCSs (producer compliance schemes) to consider service packages to local authorities. (S)	Plan in place led by WRAP (until March 2018). Partners involved: DEFRA, LWARB, London Boroughs, compliance schemes.	A co-ordinated approach for effective collection and communications.	More sustainable collection of electricals.	CO ₂ equivalent emissions saved.
POLICY				
Encourage UK government to increase the target for producer responsibility scheme and oblige contractors to work with local authorities. (M)	Partners interested – resource not identified.	Close partnerships between contractors and local authorities.		
DEMONSTRATION				
Support innovative ideas on collection, recycling and WEEE treatment (e.g. dismantling, material extraction, etc.) by backing pilots and offering advice. (M)	Partners interested – resource not identified.	Testing and demonstration of innovative collection and recycling solutions.	An innovative, more efficient and effective collection and recycling system.	

LONDON'S CIRCULAR ECONOMY ROUTE MAP



Hierarchy for building approaches



Source: David Cheshire (AECOM), RIBA, 2016

LONDON'S CIRCULAR ECONOMY ROUTE MAP



Built Environment:

- *Circular economy design*
- *Building materials*
- *Operation of buildings*

Food:

- *Preventing food waste*
- *Valuing food waste*
- *Urban growing*

Textiles:

- *Design*
- *Embedding circular economy into textiles*
- *Re-use and recycling*

Electricals:

- *Design*
- *Product life extension*
- *Collection and recycling*

Plastics:

- *Reduce and recycle*

AQUITAINE CIRCULAR ECONOMY ROADMAP



Aquitaine Limousin Poitou-Charentes region has committed to being a **national 'pilot' in implementing a circular economy**

December 2014: the region adopted a **roadmap** towards a circular economy outlining 20 proposed actions:

- *a collaborative tool mobilising stakeholders;*
- *sharing data on material flows and waste;*
- *promoting the use of recyclable materials in public procurement;*
- *deploying operational tools aimed at businesses*

Aquitaine Regional Council is a partner of the **RETRACE** Interreg Europe project

AQUITAINE CIRCULAR ECONOMY ROADMAP



recita

RÉSEAU D'ÉCONOMIE CIRCULAIRE ET D'INNOVATION
DANS LES TERRITOIRES AQUITAINS

April 2016: RECITA launched, a regional platform dedicated to the circular economy and its deployment in the territory.

Collaborative platform: aims at identifying the actors, resources, initiatives and fostering their networking on the territory, in order to create a regional ecosystem of the circular economy.

GREEN INDUSTRIAL SYMBIOSIS, DENMARK



Programme initiated in 2013

Cooperation between the Danish government and the 5 regions in Denmark

Task Force services:

- *Advice to businesses*
- *Free resource check*
- *Individual matchmaking*
- *Matchmaking events*
- *Drafting of an action plan*
- *Assistance in applying for subsidy*
- *Industrial Symbiosis Database and Map*



Identified as a good practice by CESME
Interreg Europe project

GREEN INDUSTRIAL SYMBIOSIS, DENMARK



Industrial Symbiosis Database

&

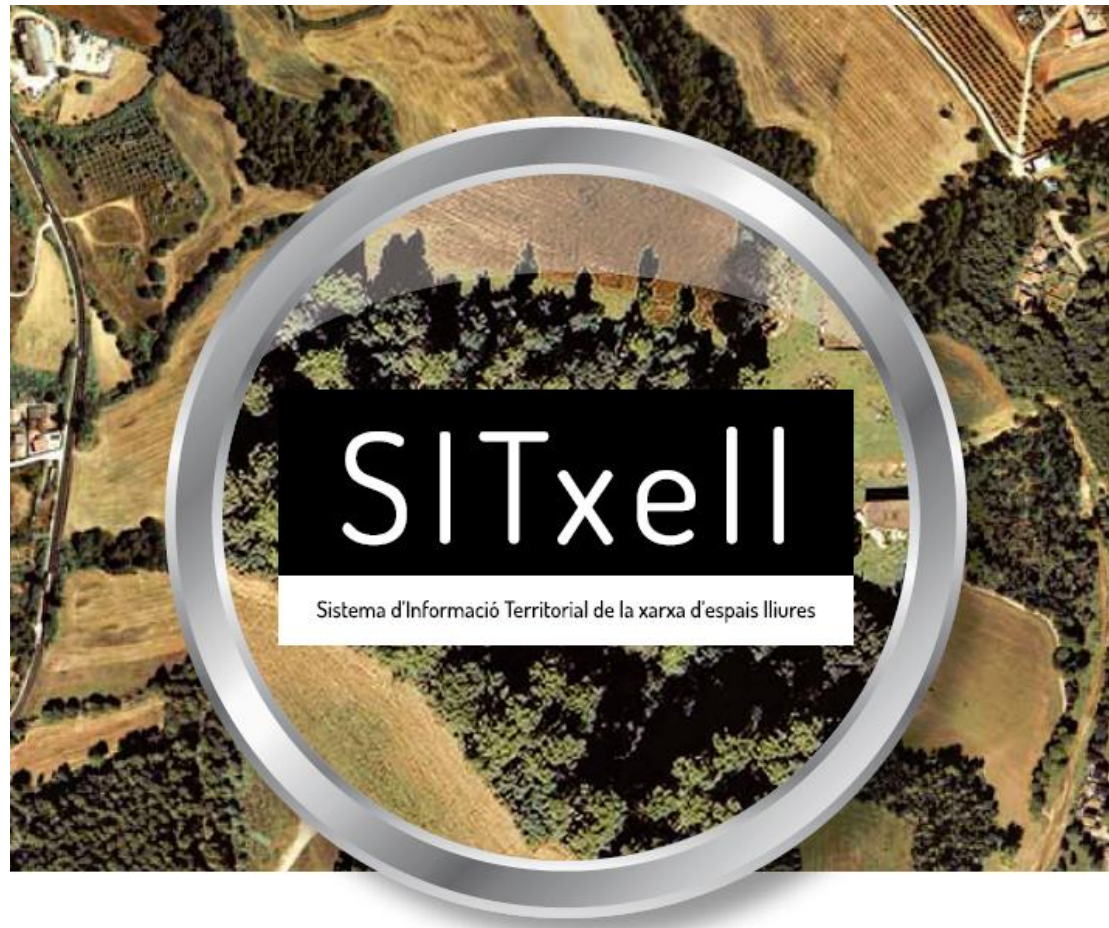
map on resource exchanges



SITxell, PROVINCE OF BARCELONA



Territorial Information System for the Network of Open Areas



SITxell, PROVINCE OF BARCELONA

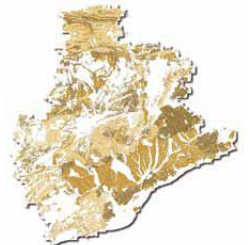


- supports **efficient use of land, soil and biotic resources**
- a **cartographic database**, which helps with the analysis and planning of the open areas in the province of Barcelona
- influences land planning processes on **local and regional levels**

Objectives:

- *to provide accurate knowledge about the ecological and socioeconomic values of natural areas to assist land use policies*
- *to create a balance between occupied and natural areas*

Identified as a good practice by
IMPACT Interreg Europe project





Structured through different layers of geographic information

- Gathers information about natural areas and farmland under different headings:
 - **Habitats and flora**
 - **Fauna**
 - **Hydrology and geology**
 - **Socioeconomics**
 - **Landscape ecology**
 - **Ecosystem services**





Fields of application:

- municipal planning
- planning associated with the network of nature parks
- regional planning

Nominated for European Public Sector Awards

Won United Nations Public Sector Awards



What are the main challenges?

MATERIAL EFFICIENCY



- lack of quality standards for secondary raw materials
- high labour costs
- lack of knowledge and skills
- lack of economic incentives
- unfavourable regulatory environment
- consumer preferences for newest products/models





Consumer preferences

WATER-USE EFFICIENCY



- water productivity issues
- water pricing
- ageing infrastructure
- over-exploitation of water resources



LAND-USE EFFICIENCY



- expansion of urban areas
- agricultural intensification
- farmland abandonment



Contact us

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18 October 2017 □ Seville



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European Union | European Regional Development Fund





Source: <http://www.stormministries.org/index.php/blog/350-first-thoughts-on-love>