



EUROPEAN PARLIAMENT

2014 - 2019

Committee on the Environment, Public Health and Food Safety

2014/2208(INI)

24.3.2015

DRAFT REPORT

on resource efficiency: moving towards a circular economy
(2014/2208(INI))

Committee on the Environment, Public Health and Food Safety

Rapporteur: Sirpa Pietikäinen

CONTENTS

	Page
MOTION FOR A EUROPEAN PARLIAMENT RESOLUTION	3
EXPLANATORY STATEMENT	8

MOTION FOR A EUROPEAN PARLIAMENT RESOLUTION

on resource efficiency: moving towards a circular economy (2014/2208(INI))

The European Parliament,

- having regard to the Commission communication ‘Towards a circular economy: A zero waste programme for Europe’ (COM(2014)0398),
- having regard to the Commission communication on ‘Resource efficiency opportunities in the building sector’ (COM(2014)0445),
- having regard to the Commission communication on ‘Building the Single Market for Green Products – Facilitating better information on the environmental performance of products and organisations’ (COM(2013)0196),
- having regard to the Commission communication on the ‘Roadmap to a Resource Efficient Europe’ (COM(2011)0571),
- having regard to the Commission communication on ‘A resource-efficient Europe – Flagship initiative under the Europe 2020 strategy’ (COM(2011)0021),
- having regard to the Commission communication on ‘Europe 2020 – A strategy for smart, sustainable and inclusive growth’ (COM(2010)2020),
- having regard to its resolution of 24 May 2012 on a resource-efficient Europe¹,
- having regard to its resolution of 13 September 2011 on an effective raw materials strategy for Europe²,
- having regard to the 7th Environment Action Programme (EAP),
- having regard to the Environment Council conclusions on ‘Greening the European semester and the Europe 2020 Strategy - Mid-term review’ of 28 October 2014,
- having regard to the Convention on Biological Diversity (CBD),
- having regard to the UNEP (United Nations Environment Programme) Inquiry into the Design of a Sustainable Financial System,
- having regard to the conclusions of the UNEP International Resource Panel on ‘Environmental Risks and Challenges of Anthropogenic Metals Flows and Cycles’ (2013),
- having regard to the conclusions of the UNEP International Resource Panel on ‘Decoupling natural resource use and environmental impacts from economic growth’

¹ Texts adopted, P7_TA (2012)0223.

² Texts adopted, P7_TA (2011)0364.

(2011),

- having regard to the opinion of the European Economic and Social Committee of 10 December 2014¹,
 - having regard to the opinion of the Committee of the Regions of 12 February 2015²,
 - having regard to Rule 52 of its Rules of Procedure,
 - having regard to the report of the Committee on the Environment, Public Health and Food Safety and the opinions of the Committee on Employment and Social Affairs and the Committee on Industry, Research and Energy (A8-0000/2015),
- A. whereas an excessive use of resources is the root cause of various environmental hazards, such as climate change, desertification, deforestation and loss of biodiversity; whereas the global economy uses the equivalent of 1.5 planets' worth of resources to produce global output and absorb waste and this figure is estimated to reach the equivalent of two planets' worth of resources by the 2030s;
- B. whereas Europe is more dependent on imported resources than any other region in the world and its competitiveness can be increased only by getting more added value out of resources in the economy;
1. Welcomes the Commission communication entitled 'Towards a circular economy: A zero waste programme for Europe' (COM(2014)0398); endorses the Commission's approach to designing and innovating for a circular economy, setting up a policy framework to support resource efficiency and setting a resource-efficiency target as outlined in the communication;
 2. Emphasises that resource scarcity requires an absolute decoupling of growth from the use of natural resources – a systemic change which requires backcasting the actions needed from a 2050 sustainability perspective;
 3. Is convinced that improving resource efficiency requires both legislative and economic incentives and further funding of research;
 4. Stresses that legal certainty and long-term predictability are needed to channel investments towards a sustainable economy;

Indicators and targets

5. Stresses that by 2050 the EU's use of resources needs to be sustainable; this includes fully implementing a cascading use of resources, sustainable sourcing, a waste hierarchy, creating a closed loop on non-renewable resources, using renewables within the limits of their renewability and phasing out toxic substances;
6. Urges the Commission to develop and introduce by 2019 a lead indicator and a number of sub-indicators on resource efficiency, including ecosystem services; these binding

¹ Not yet published in the Official Journal.

² Not yet published in the Official Journal.

indicators should measure resource consumption, including imports and exports, at EU, Member State and industry level and take account of the whole lifecycle of products and services;

7. Urges the Commission to set a binding target to increase resource efficiency at EU level by 30 % by 2030 and individual targets for each Member State;
8. Urges the Commission to promote the use of resource-efficiency indicators through international conventions;
9. Stresses that these indicators should be included in the European Semester and in all impact assessments;

Ecodesign

10. Points out that the amount of resources used by a product over its lifetime is largely determined during the design phase;
11. Urges the Commission to propose a review of the Ecodesign Directive by the end of 2016, incorporating the following important changes: broadening the scope to cover all main product lines; gradually including all relevant resource-efficiency features in the mandatory requirements for product design; introducing a mandatory product passport based on these requirements; implementing self-monitoring and third-party auditing to ensure that products comply with these standards; and defining horizontal requirements on, inter alia, reusability and recyclability;
12. Urges the Commission to take other relevant actions to ensure that products are easy to reuse, refit, repair, recycle and eventually dismantle for new resources;
13. Calls on the Commission to propose the extension of minimum guarantees for consumer durable goods;

Zero waste

14. Urges the Commission to submit the announced proposal on the review of waste legislation by the end of 2015 and to include the following points: setting extended producer responsibility requirements; endorsing the 'pay-as-you-throw-principle' prioritising separate collection schemes in order to facilitate the development of business based on the reuse of secondary raw materials; increasing recycling targets to at least 70 % of municipal solid waste, based on the output of recycling facilities, using the same harmonised method for all Member States with externally verified statistics; introducing a ban on landfilling recyclable and biodegradable waste by 2025 and a ban on all landfilling by 2030; introducing fees on landfilling and incineration;
15. Calls on the Commission to propose a regulatory framework for urban mining in existing landfills and to develop an environmental permit system for the recycling industry based on self-monitoring and external auditing;
16. Urges the Commission to address the specific waste challenges and to take action as outlined in the Commission communication on circular economy (COM(2014)0398);

Buildings

17. Calls on the Commission to propose the full implementation of the circular economy principles and requirements in the building sector and to further develop the policy framework on resource efficiency in buildings; this includes developing indicators, standards and methods as regards land use and urban planning, architecture, structural engineering, construction, maintenance, adaptability, energy efficiency, renovation and reuse and recycling; targets and indicators on sustainable buildings should also include green infrastructure, such as green roofs;
18. Urges the Commission to propose that BAT principles and standards be applied to all materials and parts of buildings and to develop a building passport based on the whole lifecycle of a building;
19. Considers that, as 90 % of the 2050 built environment already exists, special requirements should be set for the renovation sector in order to have mainly energy-positive buildings by 2050;

Other measures

20. Urges the Commission to propose compulsory green public procurement procedures; considers that reused, repaired, remanufactured, refurbished and other resource-efficient products and solutions are to be preferred in all public procurement, and if they are not preferred, the 'comply or explain' principle should apply;
21. Urges the Commission to develop a policy framework on nutrients in order to enhance recycling, foster innovation, improve market conditions and mainstream their sustainable use in EU legislation on fertilisers, food, water and waste;
22. Urges the Commission to present a communication on sustainable food by 2016;
23. Calls on the Commission to establish a permanent resource-efficiency platform to encourage and facilitate the application of the latest research findings, the exchange of best practices and the emergence of new industrial synthesis and industrial ecosystems;
24. Calls on the Commission to establish a cross-sectorial, inter-DG sustainable financing working group in order to include the resource-efficiency indicators in company-level integrated reporting and accounting; further calls on the Commission to examine how to incorporate resource-efficiency and environmental risks in, inter alia, credit ratings and capital requirements of banks, to develop a comprehensive insurance system for environmental hazards and to set out information requirements for investment products;
25. Stresses that all EU funding, including funding through EFSI, Horizon 2020, cohesion funds and the EIB, must be mobilised to promote resource efficiency and urges the Commission to abolish all environmentally harmful subsidies;
26. Urges the Commission to examine whether existing legislation is hindering the circular economy or the emergence of new business models, such as a lease economy;
27. Calls on the Commission to report back to Parliament about all the measures outlined

above and to propose next steps by 2018;

o

o o

28. Instructs its President to forward this resolution to the Council, the Commission and the national parliaments.

EXPLANATORY STATEMENT

Resource efficiency urgency

The unsustainable use of resources is both causing environmental damage and posing an economic risk. The global economy uses the equivalent of 1.5 planets worth of resources to produce global output and absorb waste. By the 2030's this figure is estimated to reach two planets.

The annual consumption of minerals, fossil fuels and biomass is projected to double by 2050, reaching 140 million tonnes. This is a result of a combination of population growth, more disposable income, more product diversity than before and shorter product lifespan.

To continue in this course would lead to an ecological and economic impasse.

Humanity is already exceeding a number of planetary boundaries that we need to stay within to avoid the tipping point of negative ecological changes. Ecological implications are multiple and in many cases irreversible: climate change, deforestation, desertification, degradation of soil, loss of biodiversity, diminishing genetic diversity and weakening of eco-system services.

To avoid these changes in our biosphere we need to use less resources. We can and we have to reach at least the same standard of living and well-being as now with one tenth of the resources now used. We can improve our competitiveness, reindustrialise Europe and enhance our standards of living only by decoupling economic growth from resource use.

Europe is more dependent on imported resources than any other region in the world. 40 percent of all material used in the EU is imported. For some strategic resources, such as metal ores and nutrients, the percentage is even higher. 92 percent phosphorus, which is crucial for European agriculture, is imported, most of it from Russia, Syria, Morocco and Tunisia.

Improving resource efficiency would benefit our economy and security. Using resources more efficiently would reduce resource dependency and bring savings in material costs. On top of that, it would create new business activity and jobs to Europe. Increasing resource productivity by 2 percent would create 2 million new jobs in the EU by 2030, according to the estimations of the European Commission.

This is a win-win scenario. Resource efficiency is a solution to the ecological dilemma we are faced with and to the economic challenges Europe is struggling with.

A paradigm shift

Increasing resource efficiency is based on six core concepts: circular economy, cascading use of resources, waste hierarchy, extended producer responsibility, industrial symbiosis and new business models.

1. Improving resource efficiency means shifting away from the current linear economy, characterised by a take-make-consume-dispose model of production and consumption. In a circular economy practically all unrenovable materials circulate in closed loops. Post-consumer waste is effectively collected, recycled and used to make new products. In a circular economy waste is ‘designed out’ of the system. Virgin raw materials – renewable or unrenovable – are used only where secondary raw materials are not available. Renewable resources are used within the boundaries of sustainability and the carrying capacity of ecosystems.
2. Cascading use of resources is a way of maximising resource efficiency. It entails a systematic effort to first exploit materials for higher added value products and to then use them multiple times as resources in other product categories.
3. Through waste hierarchy (prevention, re-use, recycling, recovery, disposal) maximum benefits are extracted from products by generating practically no waste and ultimately reaching a zero waste economy.
4. Extended producer responsibility means that producers are responsible for the end-of-life management of their products. Retailers could be considered to only sell the services provided by the products – the product remains in the producers’ ownership, and at the end of its life, it is their responsibility to manage the product in accordance with existing regulations.
5. In an industrial symbiosis, producers collaborate to use each other’s by-products.
6. New business models emerge to improve resource efficiency. One example of new resource- efficient business models is lease economy, which means selling and maintaining the service function of the product instead of selling the product itself. Leasing creates a stable income flow for the companies and incentivises both companies and clients to reduce the resource use and to keep the product in good quality.

Legislative and economic incentives create the needed leverage

Current policies do not sufficiently focus efforts towards this paradigm shift. Europe is locked in a system where valuable materials, many of which come at a high environmental and social cost, end up in landfill or incineration. There is not yet a functioning market for secondary raw materials.

To change this, both legislative and economic incentives are needed to create leverage, for example:

- Supporting innovation as regards resource-efficient products and services through various funding mechanisms.
- Supporting the demand for such products through public procurement and environmentally friendly taxation, and introducing fees that discourage the

consumption of products and services that are not resource-efficient.

- Imposing ecological design requirements on products, for example through a sound Ecodesign Directive. Making sure that imported goods equally comply with these requirements and substantially improving our currently lax market surveillance are prerequisites to ensuring the resource efficiency of products.
- Making sure that the existing legislation does not hinder the development of resource-efficient products or services or business models. Such hindrances can be found for example in legislation concerning safety and competition.
- Phasing out environmentally harmful subsidies (for example grants from cohesion funds for building new landfills or incineration plants).

Financial and economic legislation fails to incorporate the value of ecosystem services and biodiversity and to take ecological and social risks into account. Such risks are also an economic risk for long-term financial performance that is not reflected in conventional financial analysis. That leads to misallocation of capital.

Better accountability of the systemic risks caused by environmental degradation and resource overuse and inaction posed by the current short-term market trajectories should be integrated in financial statements, accounting regulation and integrated reporting. Resource scarcity and environmental risks should be incorporated in financial legislation inter alia concerning credit ratings, capital requirements, insurances, financial product information, accounting and auditing. Capital markets can be reoriented towards long-term sustainability through the integration of environmental, social and governance factors. High environmental risks should be reflected in higher capital requirements.

A clear new policy framework is also needed to enable private and institutional investors to change their investment paradigm towards long-term sustainable investments. Policy makers must deliver the necessary legal certainty for resource-efficient investments and business strategies to be created.

Instead of a contradiction, there are mutual interests and benefits between business and the environment. The tension in all industries is between companies that base their business on innovation and resource efficiency and those that are locked into policies and market conditions shaped for past conditions.

European reindustrialisation can be based only on resource-efficient and innovative businesses. The change has to start urgently to avoid getting locked into resource-inefficient structures.

Sustainable Buildings

Buildings represent 40 percent of the EU's final energy use, and 36 percent of the CO₂ emissions. That is why a special focus on the resource efficiency of the built environment and

buildings is needed.

‘Sustainable buildings’ is a concept sometimes reduced to cover only material choices or energy efficiency. However, the concept is much broader. For buildings to be sustainable, the whole lifecycle of buildings has to be addressed, from architectural planning, structural engineering and design to construction and material choices to operation, modification and renovation to the ultimate disposal. We also need intelligent and sustainable land use planning and green infrastructure to be incorporated into the framework for sustainable buildings. Urban planning and transportation solutions also have a key role when building a sustainable society.

When setting standards for sustainable buildings, a high level of ambition is needed. Renovations are carried out fairly rarely, so it is in the interest of the society and the owner of the building to ‘get it right’. All renovations that take place now should aim at the highest achievable level of resource efficiency.

As 90 percent of the resident dwelling stock of 2050 already exists, ambitious policies supporting renovations of existing buildings are decisive for a future high-performing resource-efficient built environment. Renovations would bring about multiple benefits on a wide array of issues such as indoor air quality and an increased demand for SME’s that form the majority of the European renovation sector, and which is a sector that cannot delocalise its jobs from Europe.

There is still great inconsistency across the sector as regards the definition of sustainable building and construction materials. The concept of sustainable buildings is weak due to the lack of harmonisation, which incurs high cost, lack of confidence, complex communication and almost impossible benchmarking for the whole sector.

Obstacles to tapping the potential of the resources contained in buildings are often economic: it is cheaper to landfill than to collect, sort and recycle. Furthermore, a recycling infrastructure is lacking in many Member States.

Incentives and obligations would lead to better planning of resource use and sustainable material choices along the whole lifecycle.

Measuring the progress

Effective resource management requires measurement, and measurement requires commonly agreed indicators and the participation of all parties.

The European Union must therefore develop a binding lead indicator on resource efficiency. However, a lead indicator is not sufficient to measure the progress. It needs to be complemented with sub-indicators on the different aspects of resource efficiency. Sub-indicators make it easier to see which trade-offs are the most cost-efficient and reasonable.

The importance of indicators is easy to understand when one thinks of accounting. Companies announce their accounted earnings periodically, as reported based on accounting standards. The number on accounted earnings shows the amount of money a company has earned during

a given period. Several financial sub-indicators make it possible to see what caused the deficits or created the profits of a company.

If each company reported their financial flows according to their own preferred systems and if this reporting was voluntary, none of that data would be comparable or meaningful. For similar reasons, indicators on resource efficiency are useful. The resource consumption of each Member State as well as resource consumption of public and private sectors should be measured in a uniform manner. The indicators should take into account also imports, not only domestically produced goods. At the level of companies, resource accounting means developing similar methods as in financial accounting.

Based on the indicators, the EU must set an ambitious lead target for resource efficiency and leave a broad range of options for innovative business models and policy choices.