

ROADMAP			
TITLE OF THE INITIATIVE	Circular Economy Strategy		
LEAD DG – RESPONSIBLE UNIT	ENV (A1, A2, A3, F1), GROW	DATE OF ROADMAP	04 / 2015
<p>This indicative roadmap is provided for information purposes only and is subject to change. It does not prejudice the final decision of the Commission on whether this initiative will be pursued or on its final content and structure.</p>			

A. Context and problem definition

- (1) What is the political context of the initiative?
- (2) How does it relate to past and possible future initiatives, and to other EU policies?
- (3) What ex-post analysis of existing policy has been carried out? What results are relevant for this initiative?

(1) This initiative is meant as a direct contribution to the objectives pursued to give a new boost for Jobs, Growth and Investment and placed within the wider context of the Commission's commitment towards sustainable development. Moreover, eco-industries and eco-innovation currently supply a third of the global market for green technologies, worth a trillion euro and expected to double by 2020. This initiative aims to reinforce this trend, thus contributing to green growth and to other EU priorities such as the work towards developing a Resilient Energy Union with a Forward-Looking Climate Change Policy.

In July 2014, the Commission adopted a Circular Economy Package, including a “chapeau” Communication "Towards a circular economy: a zero waste programme for Europe"¹, accompanied by communications on sustainable buildings², green employment³, SMEs⁴, and a legislative proposal for the review of waste legislation⁵. The latter specifically was in response to the legal obligation to review the targets of three Directives: the Waste Framework Directive (WFD), the Landfill Directive, and the Packaging and Packaging Waste Directive (PPWD)⁶. In its 2015 Work Programme, the Commission announced the intention to withdraw the 2014 proposal on Waste Review (the withdrawal was finalised on 25/02/2015) and to replace it with a new, more ambitious proposal by end 2015 to promote the circular economy. Two main reasons have motivated this withdrawal.

Firstly, the overall approach presented in July 2014 had a rather exclusive focus on waste management, without appropriately exploring synergies with other policies - clear examples of such policies are product policies or the development of well-functioning markets for secondary raw materials. It is therefore important to step up the ambition by looking more concretely at waste management on the one hand, and related key aspects of the value chain, which are essential in order to "close the loop" of the circular economy, on the other hand.

Secondly, as far as the waste proposal is concerned, the Commission will examine, in particular, how to make this proposal more country specific, and how to improve the implementation of waste policy on the ground. To that effect, the Commission will look more closely in particular into existing problems of non-compliance which is essential to ensure effective implementation.

The new initiative therefore aims to establish a framework to overcome shortcomings and create conditions for the development of a circular economy. This will require a clear and ambitious political vision combined with effective policy tools that can drive real change on the ground.

- (2) A number of existing policy initiatives are related to the circular economy. They include:

- The body of existing legislation on waste, including in particular the Waste Framework Directive (2008/98/EC), the Landfill Directive (99/31/EC) and the Packaging and Packaging Waste Directive

¹ COM (2014) 398 final

² “Resource efficiency opportunities in the building sector”, COM (2014) 445

³ “Green Employment Initiative: Tapping into the job creation potential of the green economy”, COM(2014) 446

⁴ “Green Action Plan for SMEs”, COM (2014) 440

⁵ For the 2014 proposal, see COM (2014) 397 final: <http://eur-lex.europa.eu/legal-content/EN/TXT/?uri=CELEX:52014PC0397>

⁶ Directive 2008/98/EC of 19 November 2008 on waste, OJ L 312, 22.11.2008, p. 3, Directive 99/31/EC of 26 April 1999 on the landfill of waste, OJ L 182, 16.07.1999, p. 1 and Directive 94/62/EC of 20 December 1994 on packaging and packaging waste, OJ L 365, 31.12.1994, p.10

(94/62/EC)

- Europe 2020 Strategy for smart, sustainable and inclusive growth, 2010-2011⁷ in particular the flagships Resource Efficient Europe, Industrial Policy for the Globalisation Era and Innovation Union.
- The Seventh Environment Action Programme, 2013⁸
- Horizon 2020: The Framework Programme for Research and Innovation
- Roadmap to a Resource-efficient Europe, 2011⁹
- The Bioeconomy Strategy¹⁰
- Raw Materials Initiative¹¹ and the European Innovation Partnership on Raw Materials¹²
- European Innovation Partnership on Water¹³
- European Innovation Partnership on Agricultural productivity and sustainability
- Blueprint for Forest-based Industries¹⁴
- Consultative Communication on the sustainable use of phosphorus, 2013¹⁵
- Commission's Communication on Resource Efficiency Opportunities in the Building Sector
- Sustainable Consumption and Production and Sustainable Industrial Policy (SCP/SIP) Action Plan, 2008¹⁶
- Eco-innovation Action Plan, 2011¹⁷
- Single Market for Green Products 2013 and Product/Organisational Environmental Footprint pilot 2013 - 2016
- Green Paper on a strategy on plastic waste in the environment, 2013¹⁸
- Communication "For a European Industrial Renaissance", 2014
- Communication "Social Business Initiative (SBI) - Creating a favourable climate for social enterprises, key stakeholders in the social economy and innovation", 2011¹⁹
- A European Consumer Agenda, 2012²⁰
- The revised Common Agricultural Policy

The Green Action Plan For SMEs: Enabling SMEs to turn environmental challenges into business opportunities²¹

(3) Available ex-post analysis of existing policy:

Product design and use phase:

- Ecodesign and Energy Labelling legislation (Technical report: Evaluation of the Energy Labelling Directive and specific aspects of the Ecodesign Directive, 2014)
- REFIT / Evaluation of EMAS and Ecolabel (Study supporting the evaluation of the implementation of the EU Ecolabel Regulation), 2015 (ongoing); Study supporting the evaluation of the implementation of the EU Eco-Management and Audit Scheme (EMAS), 2015 (ongoing)

Waste:

- Ex-post evaluation carried out by the EEA;
- Ex-post evaluation of five Waste Stream Directives (including the Packaging and Packaging Waste

⁷ COM(2010) 2020, COM(2011) 21

⁸ Decision No 1386/2013/EU of the European Parliament and of the Council of 20 November 2013 on a General Union Environment Action Programme to 2020 'Living well, within the limits of our planet', OJ L 354, 28.12.2013, p. 171–200.

⁹ COM(2011) 571

¹⁰ COM(2012) 60

¹¹ COM(2008)699 and COM(2011) 25

¹² COM(2012)82

¹³ COM(2012) 216 final

¹⁴ SWD(2013) 343

¹⁵ COM(2013) 517

¹⁶ COM(2008) 397

¹⁷ COM(2011) 899

¹⁸ COM(2013) 123

¹⁹ COM(2011) 682 final (<http://eur-lex.europa.eu/LexUriServ/LexUriServ.do?uri=COM:2011:0682:FIN:EN:PDF>)

²⁰ COM (2012) 225

²¹ COM/2014/0440 final

Directive and partly referring to the Waste Framework Directive), 2014²²

- European Court of Auditors 2012 report²³ on the use of Regional funds for municipal waste management, including several recommendations to improve the existing EU legislation as well as its effective implementation.

What are the main problems which this initiative will address?

Global competition for resources is increasing. Supply concentration of resources, particularly critical raw materials outside the EU, makes our industry and society dependent on imports and vulnerable to high prices, market volatility, and the political situation in supplying countries.

By maintaining the value of the materials and energy used in products in the value chain for the optimal duration and by minimising waste and resource use, the circular economy can promote competitiveness, innovation, a high level of protection for humans and the environment, and bring major economic benefits, thus contributing to growth and job creation. It can also provide consumers with more durable and innovative products that provide monetary savings and an increased quality of life.

The circular economy requires action at all stages of the life cycle of products: from the extraction of raw materials, through material and product design, production, distribution and consumption of goods, repair, remanufacturing and re-use schemes, to waste management and recycling. All these stages are linked (for example, use of certain hazardous substances in the production of products can affect their recycling potential, if the substances become subject to regulatory requirements at later stages, or the quality and value of recycled materials, if not addressed adequately), and improvements in terms of resource and energy efficiency can be made at all stages.

Promoting the circular economy also requires demand-side measures. The development of innovative solutions and new markets also need to be supported as a key element of the circular economy.

Important barriers to the circular economy arise from market failures (e. g . weak price signals due to lack of internalisation of externalities on some commodity markets , split incentives for actors across the value chain, lack of information for investors or consumers, etc.), but also governance and regulatory failures, some of which can be linked to EU legislation (e.g. some ineffective or insufficient policy tools, unaddressed implementation problems, lack of coherence between policy instruments, creation of administrative burden and barriers, lack of harmonised standards, etc.).

This initiative aims at tackling some of those barriers through a comprehensive and coherent approach that fully takes into account interactions and interdependence across the whole value chain, rather than focusing exclusively on one part of the economic cycle.

Who will be affected by it?

The circular economy will bring change for:

- EU citizens and consumers as users of products and services;
- All economic actors across the product value chains (resource extraction / mining sector, product designers, manufacturers, distributors, retailers, consumers, repair / reuse businesses, waste management sector)
- public administrations.

All these actors will also be affected as producers of waste.

Is EU action justified on grounds of subsidiarity? Why can Member States not achieve the objectives of the proposed action sufficiently by themselves? Can the EU achieve the objectives better?

EU added-value and subsidiarity will be key guiding principles to select measures to pursue. In this context, potential impacts on the internal market will be an important factor. Non-harmonised national measures on circular economy may threaten the functioning of the internal market thus potentially creating a strong rationale for action at EU level. At the same time, the internal market can provide scale and scope to the introduction and uptake of new solutions. In this context, the enhanced role of public procurement should be also examined. Moreover, some of the problems to be addressed might have direct links with EU product and substance legislation and might not be overcome without adequate action at EU level – for example through regulatory action or clarification of existing legislation. On the other hand, certain other issues don't need EU intervention and can be addressed by Member States.

Regarding waste management, an explicit mandate in EU waste legislation requires a review of existing targets. Moreover, effective design of recycling legislation with smart targets will provide signals and legal certainty to economic operators, allowing smooth functioning of the single market and a level-playing field in terms of environmental protection and resource efficiency. In addition, poor waste management can lead to

²² <http://eur-lex.europa.eu/legal-content/EN/TXT/?uri=CELEX:52014SC0209>

²³ http://www.eca.europa.eu/Lists/ECADocuments/SR12_20/SR12_20_EN.PDF

transnational harmful environmental impacts, such as additional emissions of greenhouse gases and air and water pollutants.

B. Objectives of the initiative

What are the main policy objectives?

The main policy objective is to create conditions for the development of a circular economy by addressing barriers and enabling the development of new markets and business models. This objective should be pursued in a more ambitious, concrete and effective way, in areas where the EU has a clear added value, thus bringing in economic, social, and environmental benefits resulting from optimised use of resources in the EU: in particular, the creation of jobs and economic value in the EU, an improved situation for consumers, increased access to raw materials, avoided pollution, and slower resource depletion.

This includes a more effective approach on waste, taking into account the discrepancies between Member States in terms of waste management and addressing the problems on the ground, and aiming in general at decreasing residual waste while increasing the use of secondary raw materials in the EU economy.

On the circular economy at large, an action plan will identify key measures across the value chain. Specific areas of intervention could include, but are not limited to: materials production and use, product design, distribution, use (consumption) phase, public procurement, labelling and product information, waste management, development of markets for secondary raw materials (e.g. organic fertilizers), improving framework conditions in priority sectors such as sustainable chemical production, bio-economy, extraction of secondary raw materials, food, construction, plastics, critical raw materials (including phosphorus), water use, and improving cross-sectoral cooperation, e.g. by the promotion of industrial symbiosis, repair and re use and enabling the development of new business models. Illegal flows of waste, including hazardous waste, are also a particular concern.

Research and innovation will need to be encouraged in order to effectively take these opportunities forward.

An effective financing and support framework for the circular economy will need to underpin these objectives.

Finally, the strategy should allow appropriate monitoring of progress.

Do the objectives imply developing EU policy in new areas?

In principle no, to be confirmed in the light of the options identified.

C. Options

(1) What are the policy options (including exemptions/adapted regimes e.g. for SMEs) being considered?

(2) What legislative or 'soft law' instruments could be considered?

(3) How do the options respect the proportionality principle?

The new approach to the circular economy will contain a number of elements with different level of maturity. It will consist of two main elements: (i) a revised proposal on the waste review, (ii) a Communication explaining the rationale behind the approach accompanied by an action plan addressing the full circle and including a list of actions in each pillar of intervention with precise deadlines to be followed-up by the Commission. A broad spectrum of policy options will be assessed with a view to identifying areas for priority action. Options analysed will include a mix of legislative, non-legislative, and financial instruments which are best suited to each pillar of intervention. Each option shall be assessed on the basis of effectiveness, subsidiarity, and proportionality with regard to the main policy objective in order to ensure that only those options that are likely to make a significant contribution to the objective are retained. Barriers to the circular economic model arising from EU legislation will be examined and addressed as a matter of priority.

D. Initial assessment of impacts

What are the benefits and costs of each of the policy options?

The precise costs and benefits of single options will be further assessed once preparatory work on the individual actions progresses.

Could any or all of the options have significant impacts on (i) simplification, (ii) administrative burden and (iii) on relations with other countries, (iv) implementation arrangements? And (v) could any be difficult to transpose for certain Member States?

(i) simplification: The proposed actions can have a positive effect through a better alignment and streamlining of the implementation and interpretation of EU waste legislation in particular, and possibly other EU legislation.

<p>(ii) administrative burden: The Waste Review can result in simplification of reporting requirements under EU waste legislation.</p> <p>(iii) relations with other countries: Resource, material and product value chains are increasingly global. The effect on such value chains will need to be assessed, both in terms of third country access to the EU market and of EU exports to their markets. This includes the need to avoid the establishment of non-tariff barriers.</p> <p>(iv) implementation: The proposed actions can support improved implementation through EU funding, better compliance promotion and simplified legislation. Challenges in implementation and new business opportunities can be linked to effective communication towards all stakeholders, availability of finance, availability of data and information, or to specific policy instruments.</p> <p>(v) transposition: Waste management legislation can be challenging to those EU Member States which lag behind in implementation (particularly where the implementation gap is created by administrative or political shortcomings or a discrepancy between reported data and actual performance, e.g. as regards recycling rates).</p>
<p>(1) Will an IA be carried out for this initiative and/or possible follow-up initiatives?</p> <p>(2) When will the IA work start?</p> <p>(3) When will you set up the IA Steering Group and how often will it meet?</p> <p>(4) What DGs will be invited?</p>
<p>(1) An existing IA will be used as a basis for the revised proposal on waste. Where necessary, this will be complemented with additional data and information. All additional measures presented in the context of the action plan will be impact-assessed, as appropriate and fully in line with better regulation principles, before their adoption.</p> <p>(2) An IA for the revised proposal on Waste Review was finalised in 2014. Any complementary analysis will be carried out in the course of 2015.</p> <p>(3) An Inter-service Steering Group was established in January 2015.</p> <p>(4) SG, ENV, GROW, RTD, ENER, SANTE, AGRI, JUST, ECFIN, CLIMA, REGIO, JRC, EMPL, ESTAT, TAXUD, TRADE, COMP.</p>
<p>(1) Is any option likely to have impacts on the EU budget above € 5m?</p> <p>(2) If so, will this IA serve also as an ex-ante evaluation, as required by the Financial Regulation? If not, provide information about the timing of the ex-ante evaluation.</p>
<p>(1) Yes, circular economy goals would most likely have to be promoted through various financing sources, including EU funding instruments.</p> <p>(2) For measures proposed in the action plan that have an impact on the EU budget, an ex-ante analysis will be carried out as appropriate before their adoption.</p>

E. Evidence base, planning of further work and consultation

<p>(1) What information and data are already available? Will existing IA and evaluation work be used?</p> <p>(2) What further information needs to be gathered, how will this be done (e.g. internally or by an external contractor), and by when?</p> <p>(3) What is the timing for the procurement process & the contract for any external contracts that you are planning (e.g. for analytical studies, information gathering, etc.)?</p> <p>(4) Is any particular communication or information activity foreseen? If so, what, and by when?</p>
<p>(1) An array of studies on circular economy (and specific priority areas) exists and can be readily used as a basis for analysis. Examples include:</p> <ul style="list-style-type: none"> • SOER 2015 and its sections on resource efficiency and global competition for resources. • Studies from the Ellen Macarthur Foundation • JRC foresight study "2035: Paths towards a sustainable EU economy - Sustainable transitions and the potential of eco-innovation for jobs and economic development in the EU eco-industries 2035" (soon to be published) • Scoping study to identify potential circular economy actions, priority sectors, material flows & value chains, coordinated by Institute for Environmental Studies Vrije Universiteit and Policy Studies Institute at the University of Westminster, 2014. • The EEA Environmental indicator Report, 2014. • Study on modelling of the economic and environmental impacts of raw material consumption (2014):

macroeconomic modelling of efforts to improve resource efficiency.

- "Economic Analysis of Resource Efficiency Policies" (2011): examining 120 resource efficiency policies were identified in 23 countries
- Cases of implementing resource efficient policies by the EU industry: 21 cases drawn from eight industrial sectors.
- Macroeconomic modelling of sustainable development and the links between the economy and the environment (2011): Marginal abatement cost curves are developed, showing that resource use can be reduced with benefits in terms of jobs and growth.
- Assessment of Scenarios and Options towards a Resource Efficient Europe (2014): This study identifies the potential for improving resource efficiency in the built environment. This includes assessing the economic, social and environmental effects of technical efficiency improvements from both single technical options and more system wide changes.
- Enhancing comparability of data on estimated budgetary support and tax expenditures for fossil fuels (2014): This report is developing a harmonized approach to the identification and quantification of government support to fossil fuels and applying this approach to all 28 EU Member States. It is building on previous studies, i.e. by the OECD.
- Steps towards greening in the EU: Member States' resource efficiency policies (2013): The study reviews environmental policy in the Member States during 2011-2012. It examines a number of areas of priority in the context of Resource Efficiency and the Europe 2020 Strategy.
- The Number of Jobs Dependent on the Environment and Resource Efficiency (2012): Study explores how 'greening the economy' can boost job creation in areas directly connected to the environment such as conservation, waste, water and air quality.
- Identification and mitigation of the negative impacts of EU demand for certain commodities on biodiversity in third countries: http://ec.europa.eu/environment/nature/pdf/study_third_countries.pdf.
- McKinsey, "The Growth Within – a shift towards a circular economy as a way forward for Europe's troubled economy", ongoing project (2014-2015).
- Issues of Financing for resource efficiency/promotion of a circular economy as a follow-up to the Resource Efficiency Roadmap Communication and the Resource Efficient Finance Roundtable:
 - Impact of accounting rules and practices on resource efficiency in the EU (2015, just finalised): The study analyses whether existing accounting rules can affect companies' decisions about investing in resource-efficient assets or selling more resource-efficient products.
 - Resource efficiency and fiduciary duty of investors (to be finalised Sept/Oct 2015): The study analyses how resource-related issues are currently included in the fiduciary duties of institutions investing on someone else's benefits, so as to more properly reflect investment risks, and will develop recommendations on whether and how this should be done in the future.
 - Potential of green bonds as a way to bridge the supply-demand gap between the debt capital markets and green investment projects: study planned for 2016.
 - Natural Capital Accounting pilot under the Mapping and Assessment of Ecosystems and their Services initiative (MAES report about to be finalised)
 - Corporate Natural Capital Accounting work under the EU Business and Biodiversity platform
 - Study on modelling of the economic and environmental impacts of raw material consumption (2014): This report provides a quantitative analysis of different resource productivity (RP) targets for the EU.
 - State-of-play of national consumption-based indicators (2013): Report on the state of the art in the development of footprint-type indicators for materials, water, land and carbon for use on the national level.
- The Strategic Implementation Plan of the European Innovation Partnership on Raw Materials
- The report on Critical Raw Materials for the EU
- The report of the European Rare Earth Competency Network (not yet published)
- The study on the competitiveness of the European non-energy extractive industries and recycling industries (not yet published)
- Study on waste as a resource
- Study on industrial symbiosis.
- Accelerating economic growth – delivery plan for 2014-15 (UK Innovation Agency): https://www.gov.uk/government/uploads/system/uploads/attachment_data/file/362263/Delivery_Plan_2014-15.pdf.
- All projects, studies and actions completed, on-going and recently started under the action plan of the

bioeconomy strategy Communication.

- Priority recommendations of the Ad-hoc Advisory Group of the Lead Market initiative and confirmed as well as currently being assessed for implementation by the Commission Expert Group on Bio-Based Products.
- The Thematic Document Publications of the Bioeconomy Panel and the Stating Committee on Agriculture.
- The current on-going mandated standardisation work for bio-based products that are scheduled for completion by 2016.
- Consumer market studies on environmental claims (to be published in Spring 2015) and legal guarantees (ongoing)
- Studies on food waste prevention (including costs):
 - Counting the Cost of Food Waste: EU Food Waste Prevention – UK House of Lords report
 - Strategies to achieve economic and environmental gains by reducing food waste (WRAP-NCE)
 - Summary report to MS Expert Group on Food Losses and Food Waste
 - Summary report of stakeholder WG on Food losses and food waste
 - Summary report of ad hoc meeting (28.10.2014) with stakeholders on the possible development of EU guidance to facilitate food donation
 - EU Economic and Social Committee: "Comparative Study on EU Member States legislation and practices on food donation"

In addition, building on the Innovation Union and Resource efficiency Flagship Initiatives, Eco-innovation and Resource Efficiency projects have been funded in the context of the 7th Framework Programme for Research and Technological Development (FP7). Resulting from 2012 and 2013 calls for proposals, about 15 projects are addressing processes, products and services that support resource efficiency and the circular economy.

Within the new framework programme for Research and Innovation, Horizon 2020, under the Societal Challenge "Climate Action, Environment, Resource Efficiency and Raw Materials", actions relevant to resource efficiency, eco-innovation, and circular economy are addressed. As a result of the Horizon 2020 Work Programme 2014, five projects, for a total EU contribution of 43 MEUR, are addressing the topic of 'Moving towards a circular economy through industrial symbiosis', while the issue of going 'Towards a near-zero waste at European and Global level' is addressed by two coordination and support actions.

On waste, existing work on the waste review proposal (including an IA) will be used. In addition, the following sources are important:

- Several Commission and EEA studies and reports on coherence of waste legislation, implementation, inspections, and waste shipments. At present DG ENV is focusing on implementation with several compliance promotion initiatives about to be launched: second phase of compliance promotion initiative on municipal waste (the 1st one covered 10 MS, now will cover 8 MS); compliance promotion initiative on hazardous waste (covering EU28); study on separate collection systems for municipal waste; a pilot project on construction and demolition waste; a study on landfilling of bio waste as a follow-up to a recent Court ruling on the Malagrotta landfill; a study on waste shipments and efficiency of waste markets.
- Studies on Green Growth in 2010, on coherence of waste legislation in 2011, and on plastic waste in the environment, all addressing aspects of circular economy.
- 2013 Green Paper on a strategy on plastic waste in the environment.
- The fitness check study of current waste stream Directives (2014).

In addition, a number of ongoing initiatives will provide specific information, e.g. Interservice work on the review of Ecodesign and Energy Labelling Directives and the fitness check on Ecolabel and EMAS. Also, the study "A framework for Member States to support business in improving its resource efficiency" is examining measures applied by Member States and the potential to more widely apply best practice.

(2) Depending on the selected pillars of intervention and priority areas, any necessary additional information can be gathered internally or by an external contractor. If additional information has to be gathered on the waste review proposal, this could be done through the existing framework contract with the consulting team that supported the preparation of the IA, with the support of the EEA and Eurostat.

(3) to be confirmed, see above

(4) to be confirmed

Which stakeholders & experts have been or will be consulted, how, and at what stage?

A number of stakeholders and experts consultations have already taken place, as listed below. In addition, appropriate stakeholder consultation will be carried out in the preparation for the new initiative, including an online consultation and a stakeholder meeting.

Previous consultations:

On the circular economy in general:

- European Resource Efficiency Platform (EREP), consisting of high-level politicians, business CEOs, academia and representatives of NGOs and civil society and their Sherpas. In the run-up to the circular economy package, four plenary meetings were held between 2012 and 2014; in parallel, meetings were held in three separate Working Groups dealing respectively with the circular economy / greening the economy (WG I), setting objectives and measuring progress (WG II) and framework conditions for investments in resource efficiency (WG III).
- Public Consultation on the Green Action Plan for SMEs, end 2013²⁴ and the ongoing Green Action Plan Task Force with representatives from business and environmental associations.

A Group of Experts on a 'Systemic approach to Eco-innovation to achieve a low-carbon, circular economy' has been set up within the Horizon 2020 Work Programme for 2014-2015, under the Societal Challenge 'Climate action, environment, resource efficiency and raw materials'. The Group includes experts from industry, research and public sectors, and delivered a report in March 2015 in the form of a roadmap for future actions and investments on systemic eco-innovation and the circular economy.

On waste:

- In-depth preliminary consultations of key stakeholders has been carried out to ensure a broad identification of challenges posed by the existing waste legislation and the options for addressing them
- Public stakeholder consultation on waste review, 2013²⁵
- Committee of the Regions Outlook Opinion on waste review, 2013²⁶
- Seminar focussing on SMEs, 2014
- Specific stakeholder consultation on Extended Producer Responsibility
- Green Paper on a strategy on plastic waste in the environment, 2013²⁷
- Stakeholder consultation within the context of the ex-post evaluation of five Waste Stream Directives, 2014²⁸
- Several stakeholders issued position papers.

On product design:

- Ecodesign Consultation Forum for eco-design related measures, recyclers

On markets for secondary raw materials:

- Meetings with Operational Groups of the Raw Materials Innovation Partnership
 - Meetings of the Raw Materials Supply Group and the Forest-Based Industries Expert Group
 - Stakeholders workshops within the study on the optimised cascading use of wood
 - Public stakeholder consultation on certification of waste treatment facilities (2014)
- Meetings of the Fertilisers Working Groups and ad-hoc meetings supporting the preparation of a proposal for revision of the Fertilisers Regulation N° 2003/2003 and its report on impact assessment (cleared by the IA board – July 2014).

On specific sectors:

- Public consultation on sustainable buildings (July - October 2013)²⁹
- REACH Review, 2013³⁰.
- Member States expert group on food waste ; with all stakeholders of the food chain in working group on food waste set up under the Advisory Group on the Food Chain and Animal and Plant Health:

²⁴ http://ec.europa.eu/enterprise/policies/sme/public-consultation-green-action-plan/index_en.htm#h2-2

²⁵ http://ec.europa.eu/environment/waste/target_review/consultation.htm

²⁶ <https://toad.cor.europa.eu/corwipdetail.aspx?folderpath=ENVE-V/035&id=22016>

²⁷ COM (2013) 123

²⁸ <http://eur-lex.europa.eu/legal-content/EN/TXT/?uri=CELEX:52014SC0209>

²⁹ Results of the consultation:

<http://ec.europa.eu/environment/archives/eussd/pdf/Outcome%20of%20Public%20Consultation%20on%20Sustainable%20Buildings.pdf>

³⁰ <http://eur-lex.europa.eu/legal-content/EN/TXT/PDF/?uri=CELEX:52013DC0049&from=EN>

- Summary report to MS Expert Group on Food Losses and Food Waste³¹
- Summary report of stakeholder WG on Food losses and food waste³²
- Summary report of ad hoc meeting (28.10.2014) with stakeholders on the possible development of EU guidance to facilitate food donation³³

- Public consultation on "the sustainability of the food system" (2013)³⁴
- Critical raw materials (European Innovation Partnership on Raw Materials, Raw Materials Supply Group, European Rare Earth Competency Network)
 - Plastics (see waste above).
 - Bio-based Industries.
 - Renewable Raw Materials Manufacturers/Suppliers.
 - Agriculture, forest-based and aquaculture as well as marine.
 - Energy and fuel.
 - Collection Systems, logistics and infrastructure management.
 - Cluster management including regional authorities.

³¹ http://ec.europa.eu/food/safety/food_waste/eu_actions/member_states/docs/20141107_sum_tor_en.pdf

³² http://ec.europa.eu/dgs/health_food-safety/dgs_consultations/docs/summary_20140508_en.pdf

³³ http://ec.europa.eu/dgs/health_food-safety/dgs_consultations/docs/20141028_summary_report_en.pdf

³⁴ Results of the consultation available at: http://ec.europa.eu/environment/archives/eussd/pdf/food_results.pdf