

September 2014

Resource efficiency and waste

European Commission's [package on circular economy](#), adopted on 2 July 2014

This briefing is one of a series of 'Implementation Appraisals' on the operation of existing EU legislation which the European Commission has announced, in its annual Work Programme (CWP) for 2014 will be subject to an amending proposal to update the current text. This 'Implementation Appraisal' aims to provide a succinct overview of material publicly available on the implementation, application and effectiveness of an EU law to date - drawing on available inputs from, inter alia, the EU institutions and advisory committees, national parliaments, and relevant external consultation and outreach exercises. It is provided to assist parliamentary committees in their consideration of the [new proposal](#)¹ which was tabled by the European Commission in a package led by a [Communication 'Towards a circular economy: A zero waste programme for Europe'](#)² on 2 July 2014.

EP committee responsible at the time of adoption of the main legislative act (Waste Framework Directive): Committee on Environment, Public Health and Food Safety (ENVI)

Date of adoption of the legislative act in plenary: [17 June 2008](#)

Deadline for transposition: 12 December 2010 (Article 40(1))

Reference dates for review and reporting: By 12 December 2014, the Commission shall review the implementation of this Directive [...] and will present a proposal for revision if appropriate. (Article 37(4))

Timeline for new amending legislation: [Legislative proposal amending existing legislation, 2 July 2014.](#) According to CWP 2014, the circular economy initiative "will build on progress in implementation of the Roadmap to Resource Efficient Europe and [...] include [...] the review of the key targets in EU waste legislation (in line with the review clauses in the Waste Framework Directive...)."

1. Background

Environmental and health concerns were the first reason for the European Community to address the problem of waste generated by various sectors of the economy and a significant number of legislative acts and non-legislative actions were adopted or taken in that area since 1975. In recent years, economic arguments have come to the fore in the waste-management debate, especially with the concept of circular economy³ as an alternative to the existing linear model (see the diagram shown [here](#)⁴). The transition to a circular economy could ensure sustainable growth in the context of growing pressure of production and consumption on the world's resources and environment, by shifting the focus to reusing, repairing, refurbishing and recycling existing materials and products, where what used to be regarded as 'waste' can be

¹ COM(2014) 397

² COM(2014) 398; the whole package is available at <http://ec.europa.eu/environment/circular-economy/>

³ A generic term for an industrial economy that is restorative and in which material flows are of two types: biological nutrients reentering the biosphere safely, and technical nutrients circulating at high quality without entering the biosphere.

⁴ "The circular economy. Connecting, creating and conserving value." - Available at <https://bookshop.europa.eu/en/home/>

turned into a resource and final residual waste is close to zero. The European Union's basic approach to such a transition was outlined in January 2011 by the European Commission's [Communication on a resource-efficient Europe](#)⁵ as one of the Europe 2020 flagship initiatives coordinating actions across many policy areas to secure sustainable growth and jobs through better use of resources.

Building upon that initiative, the European Commission presented a [Roadmap to a Resource Efficient Europe](#)⁶ in September 2011, which - inter alia - dealt with waste management and addressed the review of prevention, re-use, recycling and landfill of waste targets in 2014. The main ideas of the Roadmap were further developed in the [7th Environment Action Programme \(EAP\) "Living well, within the limits of our planet"](#), which has as a priority objective turning the EU into a resource-efficient, green and competitive low-carbon economy, and through which the Member States and the European Parliament decided to establish indicators and set targets for resource-efficiency, as well as to assess the appropriateness of the inclusion of a headline indicator and target in the European Semester process⁷.

In June 2012, a [European Resource Efficiency Platform](#) was created, in order to provide high-level guidance to the European Commission, Member States and private actors on the transition to a more resource-efficient economy. In addition to a **Manifesto for a Resource-Efficient Europe** which was published on 12 December 2012, the Platform issued (in June 2013 and March 2014) policy recommendations, including a suggestion that the European Commission should review the EU waste management and prevention targets, and encourage Member States to move to a circular economy with adequate collection and processing, high quality recycling, phasing out landfill and reducing residual waste to a minimum. The Platform's Members called on the incoming European Parliament and European Commission as well as the Council to use the opportunity of the Europe 2020 mid-term review next year (2015)⁸ to make resource-efficiency and the circular economy essential building blocks in the agenda to deliver smart, sustainable and inclusive growth.

Waste policy also became the subject of a recent ['Fitness Check'](#), through which the European Commission reviews EU legislation in selected areas in order to assess its effectiveness, efficiency, relevance and coherence. Five of the waste stream directives (listed below under point 2.2.) were covered by this exercise, which assessed their implementation and issues which still need to be addressed. The results of this ex-post evaluation⁹ drew attention to the consequences of different legal basis of these acts (where for example TFEU Article 114 on Internal Market allows Member States much less freedom to add legislation than Articles 192 and 193 on Environment), indicated their relative coherence with concepts such as the waste hierarchy (introduced formally by the Waste Framework Directive - see point 2.1. below) and circular economy, and indicated that insufficient transposition is only a marginal problem - with a small number of residual infringement cases open. Among the suggestions proposed for future action were: a coherent use of eco-design, a similar approach to targets and producer responsibility across all waste legislation, alignment of definitions, and improvement of reporting and calculation mechanisms.

The **package on circular economy** adopted by the European Commission on 2 July 2014 contains one [legislative proposal](#)¹⁰, which addresses mostly the review of specific waste-related targets (see below under point 2), and some of the other issues mentioned above - such as definitions and reporting requirements (inter alia abolishing the existing three-year cycle). It also introduces minimum operating conditions for extended producer responsibility (EPR). Elements of the package which remain beyond the scope of this Briefing are the additional initiatives on green [employment](#), [SMEs](#) and the [building sector](#), as well as the rationale for an EU target to increase resource productivity as measured by GDP relative to Raw Material Consumption.¹¹

⁵ COM(2011) 21

⁶ COM(2011) 571; its progress report (SWD(2014) 206) is part of the Circular Economy package adopted on 2 July 2014.

⁷ 7th EAP entered into force on 17/01/2014; see also http://ec.europa.eu/environment/integration/green_semester/index_en.htm

⁸ The related public consultation is open until 31 October 2014

⁹ SWD(2014) 209, also part of the Circular Economy package adopted on 2 July 2014.

¹⁰ COM(2014) 397 final

¹¹ SWD(2014) 211

2. Current EU legislation and its implementation status

There are currently two legal acts regulating the waste management in a horizontal way, and a number of acts on specific waste streams and on waste treatment and disposal. The monitoring of implementation of these acts is done in a regular manner: In addition to specific [statistics](#) and reporting on the achievement of various targets that the Member States send directly to [Eurostat](#), three-annual reports - covering the main aspects of implementation of waste legislation - are published by the European Commission, based on questionnaires established for each relevant act. The most recent such report available concerns the period 2007-2009¹², while the next - and possibly the last - one (for the period 2010-2012) might only be published in 2015 (due to the delay in reporting from some Member States, although they were requested to provide information by the end of September 2013). On the basis of the available figures, the European Commission calculated that the total waste production in the EU amounted to approximately 2.5 billion tons in 2011, where only a limited share (40%) of the municipal waste was recycled, with the rest being landfilled (37%) or incinerated (23%), of which around 500 million tons could have been recycled or re-used.

2.1. Framework waste legislation

The **Waste Framework Directive (WFD)** [2008/98](#) replaced a number of earlier acts to strengthen the measures taken with regard to waste prevention, introduced an approach that takes into account the whole life-cycle of products and materials, and focused on reducing the environmental impacts of waste generation and waste management, thereby strengthening the economic value of waste. More specifically, the WFD established a waste hierarchy (prevention, preparing for re-use, recycling, other recovery, and disposal - in that order of priority, while leaving Member States the possibility to depart from it for justified environmental reasons) and an optional extension of producer responsibility. Special provisions were included for hazardous waste and separate collection of waste oil.

With the aim of moving towards a recycling society with a high level of resource efficiency, the WFD established targets for re-use and recycling of waste (50% for household and similar waste¹³ and 70% for non-hazardous construction and demolition waste - including backfilling - by 2020), taking into account of the different collection systems in various Member States. Member States were obliged to inform the European Commission of the waste management plans and waste prevention programmes (the latter should have been established by the end of 2013¹⁴, while the European Commission adopted a Guidance document on their preparation in October 2012¹⁵), and of their substantial revisions. In accordance with Article 37, Member States are requested to inform the European Commission of the implementation of the WFD every three years, and the European Commission should publish the first review results by 12 December 2014.

In the new legislative proposal published on 2 July 2014, the European Commission proposed a target for reducing food waste generation in the manufacturing, retail/distribution, food service/hospitality and household sectors by at least 30% between 1 January 2017 and 31 December 2025, added another target for recycling and preparing for re-use of municipal waste (a minimum of 70% by weight by 1 January 2030), and proposed an Early Warning System for estimating whether the targets are likely to be met.

The **Waste Shipment Regulation (WSR)** [1013/2006](#) laid down rules for transboundary shipments of waste both within the EU and between the EU and third countries, with the specific aim of improving environmental protection. It covers practically all types of waste (with the exception of radioactive) transport, including road vehicles, trains, ships and planes. In particular, exports of hazardous waste to countries outside the OECD and exports of waste for disposal outside the EU/EFTA are prohibited¹⁶.

¹² <http://ec.europa.eu/environment/waste/reporting/index.htm>

¹³ Nota bene: 4 different calculation methods were allowed by the Commission in its [Decision 2011/753](#).

¹⁴ See <http://scp.eionet.europa.eu/facts/WPP>

¹⁵ <http://ec.europa.eu/environment/waste/prevention/pdf/Waste%20prevention%20guidelines.pdf>

¹⁶ The European Commission might soon propose an implementing Regulation amending [Regulation 1418/2007](#) concerning the export for recovery of certain waste to certain non-OECD countries.

However, illegal waste shipments remained a serious problem (with estimates of 25% non-compliance rate¹⁷) and an amending [Regulation 660/2014](#) was adopted to strengthen Member States' inspection systems (with a deadline for establishing plans in respect of their entire geographical territory by 1 January 2017), inter alia by conducting risk assessments in order to identify the minimum number of inspections required.

2.2. Specific waste stream legislation

The **EU Ship Recycling Regulation** [1257/2013](#) entered into force on 30 December 2013. Its main objective is to prevent, reduce and eliminate accidents, injuries and other adverse effects on human health and the environment caused by the recycling and treatment of EU ships, in particular to ensure that hazardous waste from such ship recycling is subject to environmentally sound management. The Regulation sets out a number of requirements for European ships, European ship owners, ship-recycling facilities willing to recycle European ships, and the relevant competent authorities or administrations. In order to ensure legal clarity and avoid administrative burdens, ships covered by the new legislation will be excluded from the scope of the above-mentioned Waste Shipment Regulation 1013/2006.

Directives [2012/19](#) and [2012/18](#) updated two acts dealing with **electrical and electronic equipment**: Directive 2002/96 which aimed to protect soil, water and air through better and reduced disposal of Waste Electrical and Electronic Equipment (**WEEE**), and Directive 2002/95 on the restriction of the use of certain Hazardous Substances (lead, mercury, cadmium, chromium and brominated flame retardants) in Electrical and Electronic Equipment (**RoHS**), respectively. The new directives (with the transposition deadlines of 14 February 2014 and 2 January 2013) obliged Member States to increase their collection of e-waste (up to multiple percentage targets spread over the coming years) and allow consumers to return appliances to any small electrical goods shop without having to purchase new goods.

[Directive 2006/66](#) on **batteries and accumulators**, which repealed an earlier act, established rules for their placing on the market (incl. limits for certain hazardous substances¹⁸) as well as collection, treatment, recycling and disposal. It is worth noting that unlike other waste stream directives, this one complements the Landfill Directive (see below) by incorporating a landfill ban for industrial and automotive batteries and accumulators. Whereas the European Commission's first implementation report is still due to be published (in 2014, but the new proposal aims to replace it with 2016), the results of the [Fitness Check](#) showed good progress made towards achieving the objectives of separate collection and recycling, consumer awareness and substance restrictions for heavy metals in batteries, and led to the conclusion that the environmental benefits outweigh the costs of the Directive's implementation. It is considered to be fully transposed into national law, with effectiveness depending on appropriate compliance monitoring by national authorities, in particular on limits for hazardous substances and capacity labelling for imported batteries. Specific problems were identified with regard to low collection rates for different types of portable batteries and with the collection of button cells, due to low consumer awareness.

End-of-life vehicles (ELVs) [Directive 2000/53](#) aimed at reducing waste from ELVs and their components by increasing the recovery rate to 95% and the recycling rate to at least 85% by 2015. It also encouraged manufacturers and importers to limit the use of hazardous substances as well as to develop the integration of recycled materials¹⁹. The last implementation report²⁰ showed that enforcing the ELV Directive has been problematic in many Member States, with gaps between the numbers of de-registered cars and ELVs, as well as illegal exports to developing countries²¹. The [Fitness Check](#) concluded that the tools in the ELV Directive do not provide for full transparency, while a high volume of ELVs is treated in non-legal or unauthorized treatment facilities in the EU. Otherwise, the Directive is considered to be highly effective, with hazardous

¹⁷ See for example the Explanatory Memorandum of the European Commission's proposal ([COM\(2013\)0516](#)).

¹⁸ Amending [Directive 2013/56](#) removed the exemption of button cells with a mercury content of no more than 2% by weight.

¹⁹ In addition, [Directive 2005/64](#) on the type-approval of motor vehicles with regard to their reusability, recyclability and recoverability, made it mandatory to take recycling and dismantling issues into consideration at designing stage.

²⁰ COM(2009) 635, available at http://ec.europa.eu/environment/waste/elv_index.htm

²¹ A number of legislative and non-legislative recommendations were made in a [Study on the ELV Directive](#) requested by Parliament.

substances almost completely removed from vehicles (with the exception of lead) and with most Member States on track towards reaching the 2015 targets for re-use, recycling and recovery. Car manufacturers were reported to acknowledge that the Directive contributed to making car manufacturing in the EU (and beyond) a more efficient, innovative and more sustainable industry. Among suggestions for the future, eco-design was suggested to be more consequently integrated into the ELV Directive, in order for example to ban plastic that cannot be fully recycled. The new legislative proposal of 2 July 2014 only addressed the ELV Directive as regards reporting requirements (introducing obligatory verification by independent third parties), as a necessary exception to the otherwise simplified monitoring mechanism concerning waste.

[Directive 86/278](#) on **sewage sludge in agriculture (SSD)** aimed to protect the environment (including animals and plants) and human health from heavy metals and other contaminants, and to promote the correct use of sewage sludge²² on agricultural land. As indicated in the results of the [Fitness Check](#), the SSD is fully implemented in all Member States, with most of them setting stricter limits for contaminants in sludge and some which have banned the use of sewage sludge in agriculture altogether (the differences in approach partly explain the fact that SSD was not updated since its adoption, with a 2010 proposal later withdrawn). The European Commission also indicated that the impact of nano-materials and micro-plastic on sludge quality might be considered as new challenges, and that the SSD may still have its justification as an instrument of soil protection. More specifically, any future decision about the SSD would need to take into account new technologies developed to recover phosphorous from sewage sludge, through mono incineration²³.

[Directive 94/62](#) on **packaging and packaging waste (PPWD)** harmonized national measures dealing with packaging placed on the market as well as packaging waste at any level. It did so inter alia through setting essential requirements on the composition of packaging, its re-usability and recoverability that all packaging put on the EU market has to fulfil. It also required Member States to take measures to prevent the formation of packaging waste and to develop packaging reuse systems²⁴. The [Fitness Check](#) showed that considerable progress in recovery and recycling was achieved between 2005 and 2011, with recycling targets being quite effective in spurring Member States' efforts; however - some of the reporting was not clear with regard to how much of the packaging waste collected and/or exported was actually recycled. Moreover, the implementation of extended producer responsibility (EPR) schemes (although varied among Member States), coupled with the use of economic instruments (landfill taxes, bans, 'pay as you throw' schemes) was identified as a particularly effective approach to meeting the recycling and recovery targets, provide also a strong economic incentive increasing the Directive's cost efficiency. Among the conclusions, it is stressed that packaging waste prevention could be achieved more effectively if it was not only described in general and non-binding terms but if it was made obligatory and measurable. In the new legislative proposal (adopted on 2 July 2014) the European Commission proposes to add targets of all packaging waste to be prepared for re-use and recycled: 60% (by weight) by the end of 2020, 70% by 2025 and 80% by 2030, as well as various targets for specific materials contained in packaging waste: from 45 to 85%, 60 to 90% and 80 to 90%, respectively. Similarly to the WFD (see above), an Early Warning System is also proposed.

[Directive 96/59](#) on the disposal of **polychlorinated biphenyls and polychlorinated terphenyls (PCB/PCT)** approximated the Member States' laws on the controlled disposal of jointly named PCBs (highly toxic - carcinogenic and mutagenic - persistent organic pollutants, which were globally used as dielectric and coolant fluids, for example in electrical apparatus, until 1970s) in order to eliminate them completely²⁵, replacing an old and inefficient Directive 76/403. As indicated by the European Commission in the results of the [Fitness Check](#), the 31 December 2010 deadline for the complete decontamination or disposal of PCBs has not been met, with many Member States invoking 'legally irrelevant practical arguments' to explain the

²² Its increasing quantities requiring disposal follow the implementation of the Urban Waste Water Treatment [Directive 91/271](#).

²³ See http://www.cedelft.eu/publicatie/the_environmental_footprint_of_mono-incineration_of_sewage_plant_sludge/1395 (NL)

²⁴ In addition to amending [Directive 2004/12](#), which clarified the definition of packaging, a recent proposal to reduce the consumption of lightweight [plastic bags](#) in the EU was adopted by the Parliament on 16 April 2014, as its first-reading position.

²⁵ PCB is also covered by [Regulation 850/2004](#) on persistent organic pollutants.

implementation gap. The European Commission concluded that the Directive had a tangible effect on awareness and developing expertise, but that infringement proceedings may need to be initiated to ensure its proper application. With regard to efficiency, the high operative costs of eliminating PCBs (through high temperature incineration) are outweighed by the environmental and health benefits.

2.3. Legislation on waste management operations (treatment and disposal)

The **Landfill Directive 99/31** was intended to prevent or reduce the adverse effects of the landfill of waste on the environment, in particular on surface water, groundwater, soil and air, as well as on human health, inter alia via a system of operating permits. Its implementation still remains unsatisfactory, with provisions not having been transposed in all Member States (the last target for the diversion of biodegradable municipal waste from landfills should be met by 16 July 2016, with some derogations) and a large number of illegal landfills still existing. In 2011, six Member States landfilled less than 3% of their municipal waste, while 18 of them lost resources by landfilling over 50%, with some exceeding 90% of landfilling. In the new proposal adopted on 2 July 2014, the European Commission aligned certain definitions to the WFD and - among other targets - set a total ban for placing recyclable waste (including plastics, metals, glass, paper and cardboard, and other biodegradable waste) on landfills for non-hazardous waste by 1 January 2025.

[Directive 2010/75](#) on industrial emissions repealed, inter alia, [Directive 2000/76](#) on **incineration of waste**, aiming to prevent or reduce the pollution of air, water and soil, and [Directive 2008/1](#) concerning integrated pollution prevention and control. Its substance is not directly affected by the presently discussed package.²⁶

3. EU-level reports and evaluations to date

[Screening report of waste management performance of EU Member States](#), prepared by BiPRO for the European Commission, July 2012

The screening results confirmed an assumption that large differences within the EU-27 (Croatia was not yet a Member State) subsist with regard to the treatment of municipal waste, compliance with the Water Framework and Landfill Directives and the application of legal or economic instruments as well as planning quality²⁷. As a result, the authors proposed to help 10 Member States (BG, CZ, GR, EE, IT, LT, LV, PL, RO and SK) with particular support (assessment of problems and reasons, preparing roadmaps, seminars with competent authorities), and 5 others (IT, CY, MT, IE and HU) by other measures (e.g. pilot projects).

[Report on Implementing EU Waste Legislation for Green Growth](#), prepared by BIO Intelligence Service for the European Commission, November 2011

The report contained an in-depth analysis of the effects of proper implementation and enforcement of EU waste legislation, both in terms of the economic, social and environmental benefits of implementing EU waste legislation, as well as through a number of specific case studies in Cyprus, Germany, Ireland, Italy and the Netherlands. It also described the necessary tasks to be carried out in order to overcome implementation barriers and included a number of options on how to deal with these tasks, including a suggestion to grant the European Environmental Agency (EEA) additional competences in order to improve the implementation of EU waste legislation.

[Service Study on coherence of waste legislation](#), prepared by BIO Intelligence Service for the European Commission, August 2011

The study presented a critical analysis of the adequacy of the waste stream directives in contributing to resource efficiency and moving towards a 'recycling society', covering in particular the potential gaps, inconsistencies and overlaps between those directives and other main elements of EU waste legislation. The

²⁶ Another specific legal act that should only be mentioned for the coherence of the waste-related picture is the Directive on the management of waste from extractive industries ([Mining Waste Directive 2006/21](#)) which seeks to tackle the significant environmental and health risks associated with mining waste (current and historical) as a result of its volume and pollution potential.

²⁷ Cf. in particular the comprehensive table shown on page 6 of the Screening.

conclusion of this study was that the waste streams directives provided significant environmental benefits to date at reasonable costs. Future challenges for the EU waste legislation were said to be mainly related to the full implementation and enforcement of existing legislation as well as the integration of new concepts such as waste hierarchy, life-cycle thinking, resource efficiency, and eco-design.

Other studies are also available on the [European Commission website](#)²⁸.

Studies related to waste prepared on request of the Parliament are available on the [EP website](#)²⁹.

The European Parliament's Ex-Ante Impact Assessment Unit will evaluate **the European Commission's Impact Assessment**³⁰.

4. European Parliament position

The Parliament adopted, on 24 May 2012, a non-legislative [resolution on Resource-efficient Europe](#)³¹ based on an ENVI report which outlined priority actions to address: the three key areas of food, housing, and mobility; a functioning European market in recycling and reuse; boosting research and technological innovation; agreeing on indicators and targets; extension of eco-design; and integration of resource efficiency in other areas. The resolution included a number of ideas on future growth, transforming the economy, natural capital and ecosystem services, governance and monitoring. With regard to waste, it called on the Member States to ensure full implementation of the EU acquis (including minimum targets) through their national waste prevention and management strategies and plans. It reiterated that the existing targets regarding collection and separation need to be further elaborated and set for the highest and qualitatively best recovery of materials. The European Commission was called upon to make proposals by 2014 with a view to gradually introducing a general ban on waste landfill at European level and for the phasing-out of incineration of recyclable and compostable waste. Parliament considered that a landfill tax – as introduced by some Member States already – could also help move towards these aims. Moreover, the resolution also called on the European Commission and the Member States to take more effective action to combat illegal shipments of waste, especially hazardous waste, to non-EU countries. It called for a ‘European external waste policy’ to be established with a view to spreading the best waste-treatment standards globally.

Specific problems related to the implementation of EU legislation concerning waste management facilities were dealt with extensively in a separate resolution adopted on the basis of [Iturzaiz Report](#) (prepared by the Committee on Petitions) on 2 February 2012³².

5. European Economic and Social Committee and Committee of the Regions

The European Economic and Social Committee (EESC) issued on 23 May 2013 an [own-initiative opinion](#) on the transition to an inclusive green economy, which should strike a balance between economic prosperity, greater social cohesion and the conservation and rational use of natural resources. The EESC specifically supported decoupling economic growth from the use of natural resources and the generation of pollution and waste.

The Committee of the Regions (CoR) adopted on 4 July 2013 an [Outlook Opinion](#) on the review of the European Union's waste targets, in which it called inter alia for the introduction of ambitious, binding targets based on the best results obtained to date. It also urged that the EU policy on waste management and treatment should be underpinned by the general principle of proximity. The CoR considered that the move to a more circular economy should be expressed in realistic timescales to allow for infrastructure and planning arrangements to develop.

²⁸ <http://ec.europa.eu/environment/waste/studies/index.htm>

²⁹ <http://www.europarl.europa.eu/committees/en/studies.html>

³⁰ SWD (2014) 207 and SWD (2012) 208 (summary)

³¹ P7_TA(2012)0223

³² P7_TA(2012)0026

6. European Commission consultations (selection)

- [Consultation on some exemptions from Annex II of the ELV Directive](#) - Consultation period: 9 September 2013 to 4 November 2013;
- [Consultation on the review of the European waste management targets](#) - Consultation period: 4 June 2013 to 10 September 2013;
- [Consultation on plastic waste](#)³³ - Consultation period: 7 March 2013 - 7 June 2013;
- [Consultation on options for resource efficiency indicators](#) - Consultation period: 26 July 2012 to 22 October 2012;
- [Consultation on sewage sludge](#) - Second round closed on 29 January 2010 (first in August 2009).
- In a recent [Eurobarometer survey](#)³⁴ European citizens showed that they are convinced of a strong positive link between growth, jobs and resource efficiency, with substantial majorities thinking that more efficient use of resources would have a positive effect on the quality of life in their country (86%), on economic growth (80%), and on employment opportunities (78%).

7. Other sources for reference

Policy Department A: Economic and Scientific Policy

[Factsheet: Resource efficiency and waste](#), April 2014

European Environmental Agency - June 2014:

<http://www.eea.europa.eu/publications/signals-2014>

Study on the feasibility of a waste implementation agency:

<http://ec.europa.eu/environment/waste/studies/index.htm>

Raw Materials Initiative (COM(2012) 082 final); see also:

http://ec.europa.eu/enterprise/policies/raw-materials/index_en.htm

[Resource Efficiency Scoreboard](#) - published by Eurostat

[Waste Management Scoreboard](#) - published by the European Commission in August 2012.

Green Week 2014: <http://ec.europa.eu/environment/greenweek/>

London Conference: <http://www.resource-event.com/home>

The Ellen MacArthur Foundation: <http://www.ellenmacarthurfoundation.org/circular-economy>

8. Conclusion

The EU law on waste constitutes an important part of the general effort to increase resource-efficiency, and there is substantial information concerning its implementation. Although specific targets set for 2015 and later remain to be reached, the big variations between Member States and their regions are a reason for concern. The new legislative proposal presented by the European Commission aims to set more ambitious targets - with several years allowed for these to be met - while improving the monitoring mechanism, and thus responds to requests made by the European Parliament.

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To contact the Policy Performance Appraisal Unit, please e-mail: popa-secretariat@ep.europa.eu

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³³ Following the publication of a [Green Paper on a European Strategy on Plastic Waste in the Environment](#) (COM(2013) 123).

³⁴ Flash Eurobarometer 388: Attitudes of Europeans towards Waste management and Resource Efficiency; complete information (including summary) available here: http://ec.europa.eu/public_opinion/archives/flash_arch_390_375_en.htm#388