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## COMMISSION STAFF WORKING DOCUMENT Accompanying the document

## REPORT FROM THE COMMISSION TO THE EUROPEAN PARLIAMENT, THE COUNCIL, THE EUROPEAN ECONOMIC AND SOCIAL COMMITTEE AND THE COMMITTEE OF THE REGIONS on the implementation of the Circular Economy Action Plan

[...]

{COM(2019) 190 final}

In December 2015, the Commission adopted a Circular Economy Action Plan<sup>1</sup> with the aim to set the European Union on the course of the transition towards a more sustainable model for economic development.

The action plan looks at the whole lifecycle of products and adopts a systemic approach that promotes partnerships along the entire value chain and across different sectors. The action plan includes a balanced mix of voluntary initiatives and regulatory actions along production, consumption, waste management and secondary raw materials. It also identifies five priority sectors: plastics, food waste, biomass and bio-based products, critical raw materials and construction and demolition.

Four years after its adoption, the action plan can be considered fully completed. Its 54 actions have been delivered or are being implemented, even if the work on some will continue beyond 2019. This Staff Working Document accompanying the Report on the Implementation of the Action Plan<sup>2</sup> provides details and references for each of the actions in the action plan. It follows the structure of the Annex to the Circular Economy Action Plan.

<sup>&</sup>lt;sup>1</sup> COM(2015) 614 final

<sup>&</sup>lt;sup>2</sup> COM(2019) 190

Actions	What has been delivered Links to individual documents are in the footnotes	
	Production	
Emphasis on circular economy aspects in future product requirements under the Eco-design directive.	The aim of this action is to explore in a more systematic way mandatory product requirements on durability, recyclability, reusability, reparability and declaration of Critical Raw Materials, as part of the implementation of the ecodesign policy framework. Product requirements related to circular economy have been included in most ecodesign regulations foreseen for adoption in 2019 in accordance with to the Ecodesign work plan, such as on enterprise servers, welding equipment, electronic displays, washing machines, dishwashers and refrigerators.	
Ecodesign Working Plan 2016-2019 and request to European standardisation organisations to develop standards on material efficiency for setting future Ecodesign requirements on durability, reparability and recyclability of products.	As part of the implementation of the Ecodesign Directive through product specific regulations, the Commission adopted the Ecodesign Working Plan 2016-2019 <sup>3</sup> , which proposes a list of new product groups (building automation and control systems, electric kettles, hand dryers, lifts, solar panels and inverters, refrigerated containers, high- pressure cleaner) and provides an overview of which Ecodesign regulations are due for review. A set of revised Ecodesign and Energy labelling measures will be adopted in the first half of 2019. Following the Commission's request, the 3 European Standardisation Organisations have submitted a joint working plan, aiming at the development of standards on material efficiency aspects such as durability, reparability and recyclability, which in future could facilitate requirements related to such material efficiency aspects in Ecodesign implementing measures.	
Proposal for an implementing regulation on televisions and displays	The implementing regulation on electronic displays (including TVs) is part of the package of revised ecodesign and energy labelling measures proposed by the Commission in 2018 and was voted positively by Member States in December 2018. The package of measures will be adopted in the first half 2019. The new measure on electronic displays builds on the existing Ecodesign measure for TVs and introduces new ecodesign requirements for televisions. It sets the same requirements for other displays (e.g. computer monitors), thus widening the scope of the measure. The new measure further contains material efficiency requirements aimed at inter alia improving reparability (spare parts and repair information) and recyclability (easier dismantling and marking of components with hazardous or critical materials).	
Examine options and actions for a more coherent policy framework of the different strands of work of	The Staff Working Document on Sustainable Products in a Circular Economy <sup>4</sup> examines the EU product policy framework. It identifies high priority product for circularity and analyses to what extent the relevant EU policies are mutually reinforcing and supporting circular	

<sup>&</sup>lt;sup>3</sup> <u>https://ec.europa.eu/energy/sites/ener/files/documents/com\_2016\_773.en\_.pdf</u> <sup>4</sup> SWD(2019) 91

EU product policy in their contribution to the circular economy	economy. It finds that ensuring consistent implementation of existing EU product policies is therefore key, especially where multiple tools apply to the same product.
Include guidance on circular economy into Best Available Techniques reference documents (BREFs) for several industrial sectors	The Commission has identified key environmental issues to be addressed when revising BREFs. These include aspects on circular economy, issues concerning water use and reuse in the relevant BREFs and the overall contribution of the Industrial Emissions Directive to the circular economy.
	Since 2015, Best Available Techniques reference documents including guidance on circular economy have been adopted for:
	<ul> <li>-Non-ferrous metals<sup>5</sup></li> <li>-Common Waste Water and waste Gas Treatment / Management Systems in the Chemical Sector<sup>6</sup></li> <li>-Intensive Rearing of Poultry and Pigs<sup>7</sup></li> <li>-Large Volume Organic Chemicals<sup>8</sup></li> <li>-Large Combustion Plants<sup>9</sup></li> </ul>
Guidance and promotion of best practices in the mining waste management plans	With a view to increase the energy efficiency of mineral extraction, thus reducing its carbon footprint, and the recovery of extractive waste by recycling and reusing, the Commission services have prepared guidance based on the best practices in the mining waste management plans <sup>10</sup> .
Establishing an open, pan- European network of technological infrastructures for SMEs to integrate advanced manufacturing technologies into their production processes	The EU funded project Ket4CleanProduction has established a platform <sup>11</sup> that gathers technology infrastructures, SME users and suppliers of innovative advanced manufacturing technologies to upgrade their production processes towards resource and energy efficiency and sustainability. The platform grants access to a network of experts that can provide support for the transition to a Factory of the Future.
Examine how to improve the efficiency and uptake of the EU Eco-Management and Audit Scheme (EMAS) and the pilot programme on environmental technology verification (ETV)	The EMAS fitness check report was adopted on 30 June 2017 <sup>12</sup> . It evaluates the performance of EMAS, in particular its relevance, effectiveness, efficiency, coherence and EU added value. It confirms that EMAS is a useful tool at organisational level, and that EMAS registered organisations continuously improve their environmental performance on all core indicators (energy and material efficiency, water consumption, waste generation, biodiversity and emissions). The Commission has obtained the commitment of Member States to work for increasing the uptake of the scheme <sup>13</sup> .

<sup>&</sup>lt;sup>5</sup> <u>https://ec.europa.eu/energy/sites/ener/files/documents/com\_2016\_773.en\_.pdf</u>
<sup>6</sup> <u>http://eippcb.irc.ec.europa.eu/reference/BREF/CWW\_Bref\_2016\_published.pdf</u>
<sup>7</sup> <u>http://eippcb.irc.ec.europa.eu/reference/BREF/IRPP/JRC107189\_IRPP\_Bref\_2017\_published.pdf</u>

<sup>8</sup> http://eippcb.jrc.ec.europa.eu/reference/BREF/LVO/LVOC\_Final\_Draft\_February\_2017\_website.pdf
9 http://eippcb.jrc.ec.europa.eu/reference/BREF/LVO/LVOC\_Final\_Draft\_February\_2017\_website.pdf
10 http://eippcb.jrc.ec.europa.eu/reference/BREF/LCP/JRC107769\_LCP\_bref2017.pdf
10 http://ec.europa.eu/environment/waste/mining/pdf/guidance\_extractive\_waste.pdf

http://ec.europa.eu/environment/ecolabel/documents/Report\_from\_the\_Commission.pdf
 http://ec.europa.eu/environment/ecolabel/documents/Report\_from\_the\_Commission.pdf
 https://eur-lex.europa.eu/legal-content/EN/TXT/HTML/?uri=CELEX:52017DC0355&from=EN

	The results of the evaluation of the ETV pilot programme and the
	conclusions on the way forward are scheduled to be presented in the second quarter of 2019.
Develop an improved knowledge base and	Two actions have been put forward to facilitate the substitution of substances of potential concern used in industrial processes and access to innovative technologies by SMEs:
support to SMEs for the substitution of hazardous substances of very high concern	<ul> <li>the project to facilitate and disseminate best practices on the substitution of certain chemicals substances in specific areas funded through COSME<sup>14</sup>;</li> </ul>
	-Support of the European Resource Efficiency Excellence Centre.
	Consumption
Better enforcement of existing guarantees on tangible products, accompanied by a reflection on improvements (upcoming Commission proposal for online sales of goods, and Fitness Check of consumer legislation)	The proposal for a Directive on the online sales of goods <sup>15</sup> , presented in December 2015 was amended in 2017 to extend its scope to also cover sales of goods offline <sup>16</sup> . It includes provisions, such as on the extension of the reversal of the burden of the proof period which will help consumers to apply their legal guarantee rights. A provisional agreement was reached by the co-legislators on 29 January 2019. The Fitness Check of the Consumer and Marketing Law <sup>17</sup> was finalised in May 2017. The Consumer Protection Cooperation (CPC) Regulation, which enables consumer protection authorities to cooperate in case of trans-border infringements and to fight against widespread infringements was revised in December 2017 and will be applicable from 17 January 2020 <sup>18</sup> . As a follow-up to the Fitness Check, the 'New Deal for Consumers' package <sup>19</sup> was adopted by the Commission on 11 April 2018. The "New Deal" and the revised CPC Regulation aim to strengthen EU consumer rights and their enforcement. This will help to deter unfair commercial practices such as misleading and unfounded environmental claims ('greenwashing'), undisclosed planned obsolescence practices.
Action on false green claims, including updated guidance on unfair commercial practices	The Commission has been working with stakeholders to make green claims more trustworthy and transparent and to ensure better enforcement of the rules in place through updated guidance on the Unfair Commercial Practices Directive <sup>20</sup> , which was published in May 2016. The revised guidance incorporates key principles, developed by a multi-stakeholder group, on the content, presentation and documentation of environmental claims <sup>21</sup> . It also clarifies the application of the Directive on unfair obsolescence practices – which will allow a better enforcement by market surveillance authorities in

<sup>14</sup> Contract "Substitution of Chemical Substances of Potential Concern (Phase II)", EASME/COSME/2017/025

- 15 COM(2015)0635 final

 <sup>&</sup>lt;sup>16</sup> COM(2017)0637 final
 <sup>17</sup> https://ec.europa.eu/newsroom/just/item-detail.cfm?item\_id=59332
 <sup>18</sup> https://eur-lex.europa.eu/legal-content/EN/TXT/?uri=celex%3A32017R2394

 <sup>&</sup>lt;sup>19</sup> <u>https://ec.europa.eu/info/sites/info/files/communication\_11.4.2018.pdf</u>
 <sup>20</sup> <u>https://ec.europa.eu/info/sites/info/files/ucp-guidance-en.pdf</u>
 <sup>21</sup> <u>https://ec.europa.eu/info/live-work-travel-eu/consumers/unfair-treatment/unfair-treatment-policy-information\_en#environmental-claims</u>

	this area.
Analysis of the possibility to propose horizontal requirements on repair information provision in the context of Ecodesign	A reparability scoring system is being developed by the Joint Research Center (JRC) <sup>22</sup> .
	The JRC study will be followed up by a consumer behavioural study to better understand how consumers assess and appreciate information on reparability of devices, building upon the behavioural study on consumer's engagement in the circular economy, finalised in 2018. <sup>23</sup> On the basis of these studies, and building on the positive experience acquired under the Energy Labelling regulation, the Commission is developing a scoring system on product reparability.
Fitness check of Ecolabel, to be followed by actions to enhance its effectiveness	The EU Ecolabel guides consumers to the best environmentally- performing products on the market, including on public procurement. Following the conclusion of the EU Ecolabel fitness check <sup>24</sup> in June 2017, the Commission is strengthening its strategic approach to focus on product categories with significant uptake rate, and its monitoring and communication activities. The EU Ecolabel catalogue <sup>25</sup> has been improved. Since December 2018, 72 227 products and services available on the market have been awarded with the EU Ecolabel, 27 514 more than in 2015. Current activities on the EU Ecolabel include the development of criteria for financial products.
Assessment of the possibility of an independent testing programme on premature obsolescence	In October 2017, the Commission launched a call for an independent testing programme under H2020 <sup>26</sup> to identify factors that cause premature obsolescence practices and way to address them. With a budget of EUR 5 million, the project is expected to start in June 2019 with a duration of four years. Therefore, the testing programme is expected to be delivered in 2023.
Subject to evaluation of the current ongoing pilots, explore the possible uses of the Product Environmental Footprint to measure and communicate environmental information	The objective of the Product/Organisation Environmental Footprint is to enhance the reliability of environmental claims both in a business- to-consumer and in a business-to-business context, and thereby to boost the market of green and circular products. Between 2013 and 2018, the Commission tested the application of the Product and Organisation Environmental Footprint methods on specific product groups and sectors. Furthermore, it tested approaches to verifying and communicating the resulting information. About 300 companies and more than 2 000 stakeholders (including NGOs, public administrations, academia) worked for 5 years to test the methods. The results of the pilot phase are now available <sup>27</sup> and a summary is presented in the Staff Working Document on Sustainable Products in a Circular Economy.

<sup>22</sup> http://susproc.jrc.ec.europa.eu/ScoringSystemOnReparability/index.html

 <sup>&</sup>lt;sup>22</sup> http://susproc.jrc.ec.europa.eu/ScoringSystemOnceparability/index.num
 <sup>23</sup> https://ec.europa.eu/info/live-work-travel-eu/consumers/sustainable-consumption\_en#behaviouralstudyonconsumersengagementinthecirculareconomy
 <sup>24</sup> http://ec.europa.eu/environment/ecolabel/documents/Report\_from\_the\_Commission.pdf
 <sup>25</sup> http://ec.europa.eu/ecat/
 <sup>26</sup> http://ec.europa.eu/environment/eussd/smgp/PEFCR\_OEFSR\_en.htm

Action on Green Public Procurement: enhanced integration of circular economy requirements, support to higher uptake including through training schemes, reinforcing its use in Commission procurement and EU funds	New/revised EU green public procurement criteria integrating circular economy requirements published since December 2015 includes computers and monitors, textiles, furniture, indoor cleaning services, paints and varnishes, road design, construction and maintenance, office building design, construction and maintenance To support the uptake of green public procurement, the Commission published the 3 <sup>rd</sup> edition of the "Buying green" handbook <sup>28</sup> and the brochure "Public Procurement for a Circular Economy <sup>29</sup> ".In addition, the training toolkits are being revised and training schemes with national public authorities will take place in 2019. Finally, a mapping exercise was initiated to identify how the uptake of green public procurement and in the spending of EU Funds. The Monitoring framework for circular economy adopted in 2018 include an indicator
	on Green Public Procurement. Waste management
Revised legislative proposal on waste	<ul> <li>The revised legislation<sup>30</sup> was adopted by the co-legislators on 30 May 2018 and entered into force on 4 July 2018. The outcome of the review added further ambition, in particular to ensure the application of circular economy principles to waste management:</li> <li>The legislative framework includes:</li> <li>long-term recycling targets for municipal waste and packaging waste, and provisions reduce landfilling,</li> <li>promotion of economic instruments,</li> <li>general requirements for extended producer responsibility schemes,</li> <li>simplification and harmonisation of definitions and calculation methods,</li> <li>strengthened separate collection provisions for plastic, glass, metal and paper and new obligations for Member States to separately collect bio-waste, hazardous waste produced by households and textile waste,</li> <li>new measures requiring Member States to reduce food waste generation at each stage of the food supply chain, monitor and report annually on food waste levels,</li> <li>requirement for the Commission to draw up guidelines to assist and facilitate Member States in the separate collection of hazardous waste fractions produced by households.</li> </ul>

 <sup>&</sup>lt;sup>28</sup> <u>http://ec.europa.eu/environment/gpp/pdf/Buying-Green-Handbook-3rd-Edition.pdf</u>
 <sup>29</sup> <u>http://ec.europa.eu/environment/gpp/pdf/cp\_european\_commission\_brochure\_en.pdf</u>
 <sup>30</sup> <u>https://eur-lex.europa.eu/legal-content/EN/TXT/PDF/?uri=OJ:L:2018:150:FULL</u>

Improved cooperation with Member States for better implementation of EU waste legislation, and combat illicit shipment of end of life vehicles (ELV)	The Commission has improved the cooperation with measures such as:
	<ul> <li>-support to Member States authorities trough networks such as IMPEL,</li> <li>-exchange of good practices on Member States campaigns for inspection of ELV treatment facilities,</li> <li>-reinforced exchange of information regarding certificates of destructions (CoDs).</li> </ul>
	The on-going review of the End-of-Life Vehicles Directive must consider, according to the Directive, the feasibility of setting targets for specific materials contained in the end-of-life vehicles, to the shipment of used vehicles suspected to be End-of Life Vehicles and the application of the correspondents' guidelines on shipments of waste vehicles.
Stepping up enforcement of revised Waste Shipment regulation	An Implementing act adopted 28 July 2016 sets out a preliminary correlation table between customs and waste codes <sup>31</sup> , which will help customs officials to identify more easily potential waste streams.
	In addition, the Commission is fostering the exchange of information with Member States and is exploring the preparation of a set of guidelines to facilitate the interchange of electronic data. Furthermore, an evaluation of the inspection requirements is being carried out and is expected to be finalised in May 2019.
Promotion of industry-led voluntary certification of treatment facilities for key waste/recyclate streams	The promotion of voluntary schemes has been supported with targeted funding from Horizon 2020, in particular for developing verification of treatment facilities for key types of recyclates/waste containing significant amounts of critical raw materials. The CEWASTE H2020 project <sup>32</sup> aims at understanding existing recovery practices, standards and verification schemes; developing sustainability and traceability requirements and assurance system and related verification procedures. The project started in December 2018 and will last two years, thereby by 2020 the new voluntary scheme will be validated and its long-term sustainability be ensured.
Initiative on waste to energy in the framework of the Energy Union	The Communication "The role of waste-to-energy in the circular economy" <sup>33</sup> was adopted on 26 January 2017 with the aim to get more energy from less waste. It also clarifies the position of different waste-to-energy processes in the waste hierarchy; provides guidance to Member States on how to make better use of economic instruments and capacity planning; and identifies the technology and processes which currently hold the greatest potential to optimise energy and material outputs, taking into account expected changes in the feedstock for waste-to-energy processes.

 <sup>&</sup>lt;sup>31</sup> https://publications.europa.eu/en/publication-detail/-/publication/b5a3c820-5546-11e6-89bd-01aa75ed71a1/language-en
 <sup>32</sup> https://cordis.europa.eu/project/rcn/218283/factsheet/en
 <sup>33</sup> http://ec.europa.eu/environment/waste/waste-to-energy.pdf

Identification and dissemination of good practices in waste collection systems	Separate collection is a pre-condition for fostering high quality recycling and high recycling rates. In 2015, a study <sup>34</sup> assessed the separate collection schemes for municipal waste in the capital cities of all EU Member States. Furthermore, the Horizon 2020 project ImpactPapeRec on good practices in paper collection systems was completed in March 2018 <sup>35</sup> . Guidelines on the implementation of separate collection obligations and best practices, in particular focusing on key waste streams, such as plastics, bio-waste and textiles are to be adopted by the end of 2019.
	Market for secondary raw materials
Development of quality standards for secondary raw materials (in particular for plastics)	In order to identify standardisation needs, the Commission has requested the European Committee for Standardisation (CEN) to perform a comprehensive mapping exercise of existing or ongoing standardisation work related to the treatment of waste and the quality of secondary raw materials, in particular for plastics. This includes work by industry and other organisations in this area at national, European and international level. The report of the European Committee for Standardisation (CEN) was delivered in June 2018. Specific studies are currently focusing on the development of standards for sustainable chemicals and for secondary raw materials.
Proposal for a revised fertilisers regulation	The European Parliament and the Council reached on 12 December 2018 a political agreement on a new Regulation on fertilisers <sup>36</sup> . The new Regulation, among others, grants a level playing field to organic fertilising products that would now have the CE marking. As such, the Fertilising Products Regulation boosts the European market for innovative organic fertilisers manufactured from by-products and recovered bio-waste. It therefore makes European farming much less dependent on imported mined and fossil raw materials, like natural gas and phosphate rock.
Proposed legislation setting minimum requirements for reused water for irrigation and groundwater recharge	Current reuse of water in the EU is far below its significant potential. The Commission estimates that water reuse can yield environmental, economic and social benefits even though it has a lower environmental impact than water transfers or desalination. A proposal for a Regulation on minimum requirements for water reuse was adopted on 28 May 2018 <sup>37</sup> . The proposed legislation sets minimum requirements for reused water for agricultural irrigation. It aims at encouraging the safe, efficient and cost-effective reuse of treated urban wastewater, thus turning a wasted resource into a valuable one for further use and addressing water scarcity.

 <sup>&</sup>lt;sup>34</sup> http://ec.europa.eu/environment/waste/studies/pdf/Separate%20collection\_Final%20Report.pdf
 <sup>35</sup> http://impactpaperec.eu/en/home/
 <sup>36</sup> COM(2016) 157, 2016/0084 (COD) political agreement reached on 12 December 2018, <a href="http://europa.eu/rapid/press-release\_IP-18-6161\_en.htm">http://europa.eu/rapid/press-release\_IP-18-6161\_en.htm</a>
 <sup>37</sup> https://eur-lex.europa.eu/legal-content/EN/TXT/?uri=CELEX:52018PC0337

Promotion of safe and cost- effective water reuse, including guidance on the integration of water reuse in water planning and management, inclusion of best practices in relevant BREFs, and support to innovation (through the European Innovation Partnership and Horizon 2020) and investments	In July 2016, the Commission issued Guidelines on Integrating Water Reuse and Water Planning and Management <sup>38</sup> in the context of the Water Framework Directive. These guidelines encourage Member States to systematically consider water reuse when implementing the EU water legislation. Water saving, reuse and recycling is also considered in the development and review of BREFs <sup>39</sup> for relevant (agro)industrial sectors under the scope of the Industrial Emissions Directive. Water reuse was made a top priority area in the European Innovation Partnership (EIP) on Water. Dedicated funding is available in European Regional Development Fund (ERDF), H2020, and LIFE. Support for water reuse infrastructure is made available by the ERDF, the Cohesion Fund and European Agricultural Fund for Rural Development (EARDF).
Analysis and policy options to address the interface between chemicals, products and waste legislation, including how to reduce the presence and improve the tracking of chemicals of concern in products	The Commission Communication on options to address the interface between chemicals, product and waste legislations was adopted on 16 January 2018 <sup>40</sup> , together with its accompanying staff-working document <sup>41</sup> . The Communication explores the four most critical issues identified in the way the legislation on chemicals, products and waste work together and how these are hampering a circular economy development, namely:
	<ul> <li>-information on presence of substances of concern is not readily available to those who handle waste and prepare it for recovery,</li> <li>-waste may contain substances that are no longer allowed in new products,</li> <li>-EU's rules on end-of-waste are not fully harmonised, making it uncertain how waste becomes a new material and product,</li> <li>-rules to decide which wastes and chemicals are hazardous are not well aligned and this affects the uptake of secondary raw materials.</li> </ul>
	The ultimate aim is promoting the uptake of secondary raw materials from waste while at the same time ensuring that substances of concern are substituted and, when this is not possible, their presence is reduced and their tracking is improved. A 12-week public consultation closed on 29 October 2018. The Commission Services are now preparing a summary report of the results of the public consultation that should be published in first quarter of 2019.
Measures to facilitate waste shipment across the EU, including electronic data exchange	In 2020 the Commission will review the Waste Shipment Regulation to assess whether the regulation meets its objectives and is coherent with the general objectives of EU environmental policy, CE and the internal market. Preparatory work for the review includes consultations and workshops with stakeholders. In view to prepare guidelines, a working group of Member States and stakeholders representatives is addressing issues related to electronic data interchange.

 <sup>&</sup>lt;sup>38</sup> <u>http://ec.europa.eu/environment/water/pdf/Guidelines\_on\_water\_reuse.pdf</u>
 <sup>39</sup> "Common Waste Water and Waste Gas Treatment / Management Systems in the Chemical Sector", "Intensive Rearing of Poultry or Pigs" and "Food, Drink and Milk"
 <sup>40</sup> <u>https://www.eumonitor.eu/9353000/1/j4nvke1fm2yd1u0\_j9vvik7m1c3gyxp/vkl2na5lcqz6/v=s7z/f=/com(2018)32\_en.pdf</u>
 <sup>41</sup> <u>https://eur-lex.europa.eu/legal-content/EN/TXT/PDF/?uri=CELEX:52018SC0020&from=EN</u>

Further development of the EU raw materials information system	A series of actions have been started to improve information on raw materials: the Raw Materials Information System <sup>42</sup> (RMIS) launched by JRC in November 2017, the Raw Materials Scoreboard <sup>43</sup> of indicators, and several Horizon 2020 projects. The new RMIS was presented in November 2017 and it includes 12 thematic blocks covering the most relevant aspects/topics related to the raw materials sectors, including critical raw materials; raw materials monitoring frameworks; circular economy and secondary raw materials; environmental and social sustainability; economics & trade; industry & innovation; country & raw material profiles.
	Sectorial action
	Plastics
Strategy on plastics in the circular economy	The EU Strategy for Plastics in a Circular Economy <sup>44</sup> and a Staff Working Document <sup>45</sup> were published on 16 January 2018 in the context of the Circular Economy Package, along with a report on oxo- degradable plastics. <sup>46</sup> The EU Strategy for Plastics builds upon 4 pillars: improving the economics and quality of plastics recycling, with actions related to improving product design, boosting recycled content and improving separate collection of plastic waste, curbing plastic waste and littering, with actions to reduce single-use plastics, tackle sea-based sources of marine litter, monitor and curb marine litter more effectively, actions on compostable and biodegradable plastics and actions to curb microplastics pollution, driving investment and innovation towards circular solutions, with actions to promote investment and innovation in the value chain, harnessing global action, with actions at bilateral and multilateral level as well as actions related to international trade.
	As part of the implementation of the actions to address marine litter, the Commission proposed in May 2018 new EU-wide rules to target the 10 single-use plastic items most often found on Europe's beaches and seas, as well as lost and abandoned fishing gear. Co-legislators found an agreement on this proposal on 19 December 2018. Agreement was also found in December 2018 on the proposed new rules on port reception facilities for the delivery of waste from ships, which should ensure that the waste is delivered to adequate facilities on shore, instead of being discharged at sea. The proposal, which covers different types of waste from ships, has a particular focus on reducing marine (plastic) litter, and includes waste from fishing vessels and passively fished waste.

 <sup>&</sup>lt;sup>42</sup> <u>http://rmis.jrc.ec.europa.eu</u>
 <sup>43</sup> <u>https://publications.europa.eu/en/publication-detail/-/publication/117c8d9b-e3d3-11e8-b690-01aa75ed71a1</u>
 <sup>44</sup> <u>http://ec.europa.eu/environment/circular-economy/pdf/plastics-strategy.pdf</u>
 <sup>45</sup> <u>https://ec.europa.eu/environment/circular-economy/pdf/vastics.pdf</u>
 <sup>46</sup> <u>http://ec.europa.eu/environment/circular-economy/pdf/vastics.pdf</u>
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	The Commission also organised a pledging campaign, calling industrial stakeholders to make voluntary pledges to boost the uptake of recycled plastics in products put on the EU market. 70 pledges were received. While pledges received from suppliers of recycled plastics, if delivered as expected, are sufficient to meet the target set out in the Strategy, namely to ensure that 10 million tonnes of recycled plastics find their way into new products by 2025, the demand for recycled plastics based on the industry's pledges amounts to approximately 6.2 million tonnes per year by 2025 <sup>47</sup> . The recently established Circular Plastics Alliance will facilitate next steps by businesses to bridge this mismatch between the pledges received from the supply and the demand side, and help achieve the above-mentioned target in line with the objective of the Strategy to improve the quality and economics of plastics recycling in Europe.
	The Commission has also submitted a file to ECHA <sup>48</sup> in order to seek restrictions for microplastics intentionally added to products.
Specific action to reduce marine litter implementing the 2030 Sustainable Development Goals	On 20 June 2018, the Commission and UN Environment agreed to the 2018 Oceans Roadmap 2 addressing in particular threats of pollution and marine litter <sup>49</sup> , in line with international commitments and the implementation of ocean related SDGs.
	Programmes of measures under the Marine Strategy Framework Directive (MSFD) were submitted in 2016 by MS for reaching good environmental status by 2020 (e.g. beach cleaning and awareness raising campaigns). A series of projects and initiatives under FP7 and H2020 address marine litter, the ecological aspects of microplastics and bio-based solutions. Follow-up actions under the EU Strategy for Plastics in a Circular Economy, notably on single use plastic items, microplastics and coordinated implementation of EU waste management and marine environment legislation are also expected to contribute to reaching good environmental status.
	14 Member States committed resources for the collection of lost fishing gear and marine litter in their respective Operational Programmes for the European Maritime and Fisheries Fund (EMFF) The target number of operations in the OPs is 108 with planned public and EU contributions of EUR 31 million and EUR 22 million respectively. Such support is expected to continue. The Commission's new MFF proposal includes the possibility of financial support for compensation to fishers for the collection of lost fishing gears and marine litter from the sea, and investments in ports to provide adequate reception facilities for such recovered material.
Food waste	
Development of a common methodology and indicators	The revised Waste Framework Directive requires Member States to reduce food waste generation at each stage in the food chain. In order

 <sup>&</sup>lt;sup>47</sup> SWD(2019) 92
 <sup>48</sup> <u>https://echa.europa.eu/registry-of-restriction-intentions/-/dislist/details/0b0236e18244cd73</u>
 <sup>49</sup> <u>http://ec.europa.eu/environment/marine/international-cooperation/pdf/2018\_UNEP\_EU\_roadmap.pdf</u>

to measure food waste	to support food waste prevention and monitoring towards the global Sustainable Development Goal food waste target (SDG 12.3), the Commission is elaborating a harmonised methodology to measure food waste at each stage of the food supply chain. The EU Platform on Food Losses and Food Waste <sup>50</sup> contributed to key concepts underlying the methodology for measuring and monitoring food waste. The definition of food waste is now included in the revised waste framework directive, while the methodology is transposed in a delegated act on food waste is also included in the Monitoring Framework of indicators.
Stakeholders platform to examine how to achieve SDGs goals on food waste, share best practice and evaluate progress	The EU Platform on Food Losses and Food Waste, bringing together international organisations, Member States and stakeholders, was launched in August 2016 to help accelerate the EU's progress towards the SDG 12.3 target of halving food waste by 2030. The Platform supports all key players in taking effective measures to prevent and reduce food loss and waste, facilitate inter-sector cooperation, define good practice and share results achieved.
	A digital network was also set up in 2017 to improve collaboration and exchange amongst Platform members. The Platform has partnered with Horizon 2020 project REFRESH <sup>51</sup> to establish a community of experts on food waste prevention allowing engagement with a broader stakeholder network.
Clarify relevant EU legislation related to waste, food and feed in order to facilitate food donation and utilisation of former foodstuffs for animal feed	Clarifying EU legislation related to waste, food and feed is one the areas where EU action can contribute to reduce food waste. Therefore, the Commission published EU Guidelines for the feed use of food no longer intended for human consumption <sup>52</sup> .
	Facilitating food donation is also crucial to fight food poverty and prevent food waste. With support of the EU Platform on Food Losses and Food Waste, the Commission adopted EU guidelines on food donation <sup>53</sup> in October 2017, and the Platform is expected to adopt, early 2019, a document illustrating Member States food donation practices. This document will help key players to learn from each other to facilitate food donation at national level, in line with the EU regulatory framework.
	An ongoing EU pilot project on food redistribution (2018-2020) will further explore the policy, regulatory and operational frameworks existing in the Member States as well as promote dissemination of the EU food donation guidelines and stakeholder engagement in this regard.

<sup>&</sup>lt;sup>50</sup>https://ec.europa.eu/food/safety/food\_waste/eu\_actions/eu-platform\_en <sup>51</sup> <u>https://eu-refresh.org/</u> <sup>52</sup> Commission Notice — Guidelines for the feed use of food no longer intended for human consumption, C/2018/2035 <sup>53</sup> Commission Notice — EU guidelines on food donation, C(2017) 6872 final

Explore options for more effective use and understanding of date marking on food	In February 2018, the European Commission published a market study on date marking practices <sup>54</sup> in the EU, thus increasing the understanding of date marking and its effects on food waste generation. The study found that up to 10% of the 88 million tonnes of food waste generated annually in the EU are linked to date marking (i.e. "use by" and "best before" dates). In regard to the role of date marking in food waste prevention, the differentiation between the concepts of "use by" and "best before" will be improved so as to facilitate common understanding and use of date marking. Technical guidance is currently under preparation, with support of the EU Platform on Food Losses and Food Waste, in order to promote more consistent date marking practices in line with EU date marking rules.
	Critical raw materials
Report on critical raw materials and the circular economy	The report on critical raw materials <sup>55</sup> was published on 16 January 2018. The report provides key data sources and, looking at eight sectors (e.g. mining, electric and electronic equipment, batteries, renewable energy), promotes best practices and identifies actions to improve recycling. These include: facilitating extraction at end-of-life of key components, improve data management on mining waste, mobilising funding to ensure an efficient use of critical raw materials and technologies for materials not recycled in Europe.
Improve exchange of information between manufacturers and recyclers on electronic products	In order to facilitate the preparation for re-use and the correct and environmentally sound treatment of electronic waste, the Directive on waste electrical and electronic equipment (WEEE Directive) requires that producers of such equipment provide information free of charge about preparation for re-use and treatment in respect of new equipment placed for the first time on the Union market. The Commission facilitated this process by initiating a joint dialogue with the different actors of the value chain (representatives of EEE producers, recyclers, reuse operators). Furthermore, the "i4R" platform <sup>56</sup> was launched to allow the exchange of information between producers of electrical and electronic equipment and recyclers of WEEE.
European standards for material-efficient recycling of electronic waste, waste batteries and other relevant complex end-of-life products	A first series of standards for the treatment of WEEE has been developed by CENELEC <sup>57</sup> . The Commission requested the European Standardisation Organisations to further develop European standards for material-efficient recycling of electronic waste and waste batteries with the objective of increasing high-quality recycling of Critical Raw Materials.

 <sup>&</sup>lt;sup>54</sup> https://publications.europa.eu/en/publication-detail/-/publication/e7be006f-0d55-11e8-966a-01aa75ed71a1/language-en
 <sup>55</sup> https://ec.europa.eu/commission/publications/report-critical-raw-materials-and-circular-economy\_en
 <sup>56</sup> http://www.i4r-platform.eu
 <sup>57</sup> https://www.cencenelec.eu/news/publications/publications/weee-brochure.pdf

Sharing of best practice for the recovery of critical raw materials from mining waste and landfills	With regard to mining waste, the review of the state of implementation of the Extractive Waste Directive <sup>58</sup> by Member States was published in 2017. In addition, the Commission's Joint Research Centre is finalizing (due in April 2019) a report gathering best practices on non-critical and critical raw material recovery from mining waste and landfills, as a supporting action for Extractive Waste Management Plans. Furthermore, two Horizon 2020 projects <sup>59</sup> are completing a secondary raw materials inventory as regards mining waste and landfills.	
	Construction and demolition	
Pre-demolition assessment guidelines for the construction sector	The outcomes of the study on Pre-demolition & Renovation Waste Audits were released as Guidelines for Assessment of Construction and Demolition Waste Streams prior to the Demolition or Renovation of Buildings and Infrastructures <sup>60</sup> (known as Waste Audit Guidelines). A waste audit is a specific task necessary to understand the type and amount of elements and materials that will be deconstructed/ demolished and to issue recommendations on their further handling.	
Voluntary industry-wide recycling protocol for construction and demolition waste	The EU Construction and Demolition waste management protocol <sup>61</sup> was published in October 2016. Dissemination and communication actions on the protocol have been implemented in order to assist Member States, regional, local authorities and private practitioners in adopting it in their construction market. In 2017, in parallel to the Predemolition assessment guidelines a communication campaign was performed with participation to several conferences and congresses and roadshow events in 6 EU capitals.	
Core indicators for the assessment of the lifecycle environmental performance of a building, and incentives for their use	Level(s) <sup>62</sup> , the European reporting framework for sustainable buildings with its indicators and life cycle tools, has been developed via a major stakeholder exercise. It includes both resource use indicators and indicators linked to the quality and the value of buildings. Together they provide a common language for communicating on environmental performance to the mainstream market. The test phase, dedicated to test the usefulness and robustness of the different parts of the framework, is now ongoing and will last until summer 2019. A public consultation is foreseen early 2020.	
Biomass and bio-based materials		
Guidance and dissemination of best practice on the cascading use of biomass and support	Guidance on cascading use of biomass was published on 16 November 2018 <sup>63</sup> to promote efficient use of bio-based resources through dissemination of best practices and support for innovation in the bio-economy'. The guidance explains cascading and provides	

 <sup>&</sup>lt;sup>58</sup> <u>http://ec.europa.eu/environment/waste/studies/pdf/KH-01-17-904-EN-N.pdf</u>
 <sup>59</sup> Horizon 2020 topic ref: WASTE-4c-2014 — 2 projects, 32 teams, EU funding 5.5 mio €.
 <sup>60</sup> <u>https://ec.europa.eu/growth/content/eu-construction-and-demolition-waste-protocol-0 en</u>
 <sup>61</sup> <u>https://ec.europa.eu/growth/content/commission-introduces-eu-construction-and-demolition-waste-protocol-1 en</u>
 <sup>62</sup> <u>http://ec.europa.eu/environment/eussd/buildings.htm</u>
 <sup>63</sup> <u>https://publications.europa.eu/en/publication-detail/-/publication/9b823034-ebad-11e8-b690-01aa75ed71a1/language-en/format-PDE/cource\_80148703</u> PDF/source-80148793

to innovation in this domain through Horizon 2020	some principles and practices to inspire stakeholders when applying it.	
Ensuring coherence and synergies with the circular economy when examining the sustainability of bioenergy under the Energy Union	The new Renewable Energy Directive <sup>64</sup> contains provisions referring to circular economy and waste hierarchy. These address the risk of conflicting use of biomass resources between energy and non-energy sectors and of creating financial incentives that would undermine the separate collection obligations set out in the Waste Framework Directive.	
	The updated Bioeconomy Strategy <sup>65</sup> and Action plan propose 14 concrete actions along three priority areas:	
Assessment of the contribution of the 2012 Bio- economy Strategy to the circular economy and possible review	<ul> <li>strengthen and scale-up the bio-based sectors, unlock investments and markets,</li> <li>deploy rapidly bioeconomies across the whole of Europe,</li> <li>understand the ecological boundaries of the bioeconomy.</li> <li>The promotion of bio-based materials and products, whenever possible and relevant, will be ensured during the development of EU Ecolabel and GPP criteria for new or existing product groups, according to Environmental Footprint results, and in line with available EU standards and technical reports, as well as with the strategic approach for EU Ecolabel and GPP.</li> </ul>	
Innovation and Investments		
Initiative "Industry 2020 and the circular economy" under Horizon 2020	Two "focus areas" have been dedicated to the circular economy in the Work Programmes 2016-17 and 2018-20 of Horizon 2020, covering call topics specifically developed to address the needs related to a circular economy in a systematic and comprehensive way. The total investment is 900 M€ in 2016-17, in focus area "Industry 2020 and the circular economy", of which 320M€ is exclusively for the circular economy; and around 950M€ are expected for the period 2018-20, in focus area "Connecting economic and environmental gains - the Circular Economy (CE)". In particular, a 200M€ crosscutting call on "competitive, low-carbon and circular industries" has been designed for the 2020 Work Programme. The Commission has published an inventory of the projects relevant to the circular economy funded under H2020 between 2016 and 2018 <sup>66</sup> .	

 <sup>&</sup>lt;sup>64</sup> <u>https://eur-lex.europa.eu/legal-content/EN/TXT/PDF/?uri=OJ:L:2018:328:FULL&from=EN</u>
 <u>https://ec.europa.eu/research/bioeconomy/pdf/ec\_bioeconomy\_strategy\_2018.pdf#view=fit&pagemode=none</u>
 <u>https://ec.europa.eu/research/environment/index.cfm?pg=output&pubs=thematic</u>
 <u>https://ec.europa.eu/info/research-and-innovation/law-and-regulations/innovation-friendly-legislation/identifying-barriers\_en</u>

Targeted outreach to encourage applications for funding under EFSI, and support the development of projects and investment platforms relevant to the circular economy	Awareness raising and thematic workshops started in 2016 and continue in 2019 to increase the use of funds for the circular economy through EFSI with a focus on green investments for environment and resource efficiency projects (including energy efficiency and renewable energy projects). To provide advice on funding opportunities the European Investment Advisory Hub (EIAH) was launched, while EUR 100 million are made available via the Circular Bioeconomy Thematic Investment Platform.
Targeted outreach and communication activities to assist Member States and regions for the uptake of Cohesion Policy funds for the circular economy	From 2014 to 2020, cohesion policy allocates around EUR 150 billion to objectives with a direct relevance to the circular economy, such as research and innovation, SMEs, low-carbon economy, resource efficiency and waste management. The implementation of the national and regional programmes is now fully underway and projects are being selected by the Member States. The Commission offers various mechanisms to help Member States implement the programmes and carry out projects in order to use the available resources in an optimal way (including Jaspers for Major Projects, focused state aid seminars, fi-compass for financial instruments, the REGIO-TAIEX PEER2PEER tool). There are several programmes fostering interregional cooperation on circular economy activities. The allocations and expected results are visualised in the new Open Data Platform <sup>68</sup> . Circular economy was chosen as one of the categories for the RegioStars Awards in 2016, which exemplify outstanding EU funded regional development projects.
Support to Member States and regions to strengthen innovation for the circular economy through smart specialisation	About EUR 41 billion are available to implement the so-called smart specialisation strategies of regions and Member States. In these strategies, several regions have selected priorities related to the circular economy such as the bio-economy, composite material technology or innovative production processes. The Smart Specialisation Platform <sup>69</sup> and the thematic platforms on energy, agrifood, and industrial modernisation hosted by the JRC help the implementation of those strategies, including on circular economy. In 2018, pilot actions have been launched to further support innovation projects proposed by interregional partnerships to strengthen commercialisation and scale-up activities and foster investments. Several of those actions are pertinent to circular economy, such as de-& re-manufacturing for circular economy, 3D printing and bio-economy.
Assessment of the possibility of launching a platform together with the EIB and national banks to support the financing of the	The Circular Economy Finance Support Platform was launched on 26 January 2017. The Platform aims to increase awareness of the circular economy business logic and improve the uptake of circular economy projects by investors. A Commission expert group <sup>70</sup> was set-up to coordinate activities

 <sup>&</sup>lt;sup>68</sup> <u>https://cohesiondata.ec.europa.eu/</u>
 <sup>69</sup> <u>http://s3platform.jrc.ec.europa.eu/</u>
 <sup>70</sup> <u>http://ec.europa.eu/transparency/regexpert/index.cfm?do=groupDetail.groupDetail&groupID=3517</u>

circular economy	regarding the financing of the circular economy and to develop general recommendations <sup>71</sup> on structuring and improving the bankability of circular economy projects.
Engagement with stakeholders in the implementation of this action plan through existing fora in key sectors	The European Circular Economy Stakeholder Platform <sup>72</sup> was launched in March 2017 to foster policy dialogue, to exchange expertise among stakeholders and to identify barriers in relation to the circular economy. Its website includes good practices, national, regional, local strategies, studies and report and voluntary commitments, etc. A Coordination Group composed of representative from existing networks working on circular economy was set up to multiply the impact of the platform. The platform's website provides a comprehensive overview of the activities of the platform and beyond. The implementation of the action plan has also been supported with specific communication activities carried out in all Member States.
Support to a range of stakeholders through actions on public-private partnerships, cooperation platforms, support to voluntary business approaches, and exchanges of best practices	A Smart Specialisation Platform on Industrial Modernisation has been launched in June 2016 to facilitate cross-regional cooperation towards industrial modernisation projects, e.g. on resource efficiency, remanufacturing/sustainable manufacturing.
	In 2018 the Pilot Project 'Boosting the circular economy amongst SMEs in Europe' provided online training to SME support organisations and policy advice to regional authorities. It also helped companies which offer highly promising green solutions for a circular economy to scale-up their solutions across Europe <sup>73</sup> . In addition, the European Resource Efficiency Knowledge Centre was also set up <sup>74</sup> .
	In 2017, a partnership on Circular Economy within the Urban Agenda for the EU <sup>75</sup> was launched, to identify innovative, feasible solutions for making European cities transition to a circular economy. In support of the partnership, the Commission awarded projects for Urban Innovative Actions on circular economy to 8 cities in October 2017. This initiative aims to provide urban areas throughout Europe with new resources to test new and unproven solutions to address the challenges of the circular economy.
	The transition towards a circular economy has also been promoted either through events organised by the Commission's Representations, through corporate communication campaigns, or through Citizens' Dialogues <sup>76</sup> .
Monitoring	
Development of a	A Monitoring Framework of Indicators for the Circular Economy <sup>77</sup> was published on 16 January 2018. The framework helps to measure

 <sup>&</sup>lt;sup>71</sup> https://ec.europa.eu/info/publications/accelerating-transition-circular-economy\_en
 <sup>72</sup> https://circulareconomy.europa.eu/platform/
 <sup>73</sup> http://ec.europa.eu/environment/sme/circular\_economy\_boost\_en.htm
 <sup>74</sup> https://www.resourceefficient.eu
 <sup>75</sup> https://ec.europa.eu/futurium/en/circular-economy\_
 <sup>76</sup> A series of 63 Citizens' Dialogues, including six Facebook live broadcasts, reaching out to all regions in the EU.
 <sup>77</sup> http://ec.europa.eu/environment/circular-economy/pdf/monitoring-framework.pdf

monitoring framework for the circular economy	progress towards a circular economy at EU and national level. It is composed of a set of ten key indicators which cover each phase – i.e. production, consumption, waste management and secondary raw materials – as well as economic aspects i.e. investments, jobs, gross value added and innovation. Consistency with the monitoring of other measureable trends such as the progress on the implementation of 2030 Agenda is ensured by establishing common indicators .The indicators and underlying data are publicly available on a dedicated EUROSTAT website <sup>78</sup> .
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<sup>78</sup> https://ec.europa.eu/eurostat/web/circular-economy/indicators/monitoring-framework