CIRCULAR ECONOMY
A SUSTAINABLE EUROPE
Leading the fight against climate change

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INTRODUCTION

“If we carry on with business as usual, by 2050 we will need three times more resources than we currently use” – Karmenu VELLA European Commissioner for Environment, Maritime Affairs and Fisheries.

Today’s economy and consumption patterns are based on a linear ‘take, make, dispose’ model with a ‘fast turnover’ principle. Many gadgets, especially mobile phones or tablet computers, are designed to be replaced - and thus not used anymore and often littered - after only two or three years, well ahead of their anticipated lifetime. This leads to some critical resources becoming scarce and more expensive, while increasing volumes of waste and pollution are likely to pose a threat to welfare and wellbeing.

There is no doubt that the European economy and traditional consumption patterns cannot continue like this. Currently, it takes the Earth one and a half years to regenerate the resources we extract and use within a year. And the global competition for rare strategically important raw materials that are difficult to excavate or not available in Europe is increasing. To ensure our own well-being and grant citizens in developing countries as well as future generations the possibility to enjoy the same benefits as we do, we need to start operating within our planet’s boundaries and decoupling economic growth from resource use. The solution is a circular economy, where products are designed to last and can be repaired, reused, recycled, dismantled and remanufactured, and where harmful, fossil-based or synthetic components are substituted by bio-based alternatives. Making Europe more resilient towards the growing global demand for natural resources is an imperative of the 21st century.

An industrial transition towards a well-functioning economic system where materials are sustainably sourced, reused and recycled in order to limit the amount of virgin raw materials ‘entering’ the cycle, as well as the end of life waste ‘leaving’ the cycle is essential. At the European level, already a 30% improvement in resource productivity by 2030 would deliver an increase in GDP of almost 1% by 2030, create more than 2 million additional jobs and put us on track to a more resource efficient Europe profiting from related ecological, economic and social benefits. Reducing the extraction of raw materials will ease the burden on the environment. It has become increasingly evident that there is a limit to growth in terms of availability of natural resources. This means that companies have to respond to an increasing scarcity of
natural resources. Reuse, recycling and remanufacturing thus reduce the pressure, from a business point of view, on competitiveness, profits and business stability and continuity.

Society as a whole and individuals will benefit from a circular economy. It will offer new opportunities to buy services instead of products (thus changing the traditional concept of ownership), create advanced leasing and rental arrangements and put consumers in a position to take informed and responsible consumption-related decisions.

Therefore the EU needs to start the transition to a circular economy without delay to ensure sustainable growth, resilience, climate and biodiversity protection, competitiveness and job creation and to contribute to the 20% reindustrialisation goal in the EU.

1 WHY EUROPE SHOULD TAKE THE LEAD

1. The EU needs an ambitious circular economy policy in order to achieve the goals set in the 7th Environment Action Programme.
2. Economic and consumption patterns in the EU are currently based on a model which is not environmentally sustainable. The EU is dependent on imports of strategically important raw materials such as oil and rare earth elements.
3. The EU is the biggest market in the world economy: it can be a global standard setter.
4. The EU’s well developed market for consumer goods creates its own major natural resource: the high potential of the “urban mine” constituted by waste collected separately that can be exploited by the EU’s efficient recycling industry.
5. The EU is one of the most prosperous regions in the world. This entails both a moral obligation and an economic opportunity: developing products and processes tailor-made to implement a circular economy that can be reproduced and copied in other regions of the world. The EU is also a creative innovation and research hub, and circular economy could be a generator of sustainable jobs, industry and growth. We can harness the resources and talent we foster through Horizon 2020 and other programmes to achieve big advances in redesign, reuse and recycling of products.
6. A sustainable materials policy is a necessary complement to European waste, energy and climate policy. Thus it is vital
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a. to limit inefficient use of biomass resources in increasing the share of renewables in our economy;

b. to strengthen repair, re-use and recycling to contribute to energy saving and CO2-reduction;

c. to re-introduce organic materials in the biosphere safely and to restore and maintain our natural capital.

In order to limit the negative environmental impact of material use and to conserve natural resources, it is necessary to focus on the whole lifecycle of products, including sustainable materials extraction, ecological product design, eco-efficient production, sustainable consumption, and waste management practices suitable to close the loop. Moreover, product policy measures to enhance durability and reparability are needed.

In general, the waste management hierarchy (prevention > reuse > material recycling > energy recovery > landfill) should be complemented by a resource management hierarchy, indicating how materials should be integrated in design and production (prevention > repair > reuse > recycled/secondary raw materials > renewable primary raw materials > non-renewable primary raw materials). This will create a demand for secondary raw materials and renewable resources (within the limits of their renewability). Consequently, exports of secondary raw materials outside Europe could be limited by closing material loops within the EU.

Promoting the development of a shared service economy, where collective access to shared goods and services becomes more important than individual ownership, could foster the decrease of resource use in the EU economy.

2 WHAT THE S&D GROUP IS AIMING AT

The S&D group aspires to achieve a sustainable level of resource use in the EU by 2050. In order to reach this objective we need to reduce the consumption of resources by continuously improving resource efficiency, thus decoupling growth from the use of primary resources. To measure progress and to develop and implement the necessary actions we need:
1. binding targets on resource efficiency increase at EU and sectorial level, underpinned by a lead indicator and a number of sub-indicators on resource efficiency, including ecosystem services; these indicators should measure resource consumption and the water, carbon, material and land use footprint, including imports and exports, and take account of the whole lifecycle of products and services;
2. suitable instruments and measures to address current policy gaps and market failures hampering the achievement of sustainable resource production and consumption, including:
   a. implementation of a cascading use of resources, taking into consideration regional and local circumstances as well as technological factors, and of full application of the prevention layer of the waste management hierarchy;
   b. substitution of environmentally harmful or energy-intensive raw materials by ecologically sustainable and climate-friendly alternatives;
   c. creation of a closed loop for non-renewable resources;
   d. use of renewables within the limits of their renewability;
   e. phasing out of toxic substances and a legal instrument to regulate endocrine disruptors;
   f. suitable measures to ensure active participation of local and regional authorities, SMEs and social economy enterprises.

The S&D group expects the Commission to come forward with an ambitious proposal on the circular economy by the end of 2015 in order to limit the environmental impact of extraction, processing, production, use and disposal of raw materials/materials/products to such an extent that the carrying capacity of ecosystems is not exceeded. We call on the Commission to propose a coherent legal framework covering the complete life cycle of products, encompassing sourcing, design, production, consumption and recovery/recycling at the end of life of products.

3 PRODUCT POLICY

The amount of resources used by a product over its lifetime is largely determined during the design phase. This is the reason why we urge the Commission to propose a
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comprehensive review of the Eco-design Directive and other relevant product policy legislation by the end of 2016, incorporating the following essential elements:

1. broadening the scope to cover all main product lines, including non-energy related product groups, such as construction materials, bio based chemicals, textiles and furnishings;
2. gradually including all relevant resource-efficiency features in the mandatory requirements for product design and adapting eco-labelling provisions;
3. introducing a mandatory product passport based on these requirements which would also include information related to the supply chain of product components; implementing internal monitoring schemes at company level and third-party auditing to ensure that products comply with these standards;
4. defining horizontal requirements on, inter alia, durability, reparability, reusability and recyclability, thereby preventing the "poisoning" of material loops (by eliminating or identifying and separating parts containing hazardous substances that would disrupt recycling); extending the minimum guarantees for consumer durable goods;
5. assessing, on the basis of a comprehensive societal cost-benefit analysis, the possibility of establishing minimum recycled material content, considering also the recyclability of such content, or a minimum share of renewables in new products or parts thereof; exploring new instruments such as tradable recycling certificates or guarantees of origin for secondary and renewable raw materials to incentivise producers to comply with the requirements on recycled or renewable content. Manufacturers exceeding their legal obligations would be able to sell their surplus certificates to others who mainly use primary raw materials;
6. providing reliable and comparative information to retailers and consumers via a standardised labelling framework for consumer goods; moreover, developing a harmonised EU labelling scheme on recyclability to ensure consistent recycling practices both in the recycling industry and the public sector;
7. introducing measures against planned obsolescence at European level;

Moreover, we propose full implementation of the circular economy principles and requirements in the building sector and to further develop the policy framework on resource efficiency in buildings, focusing not only on energy performance but also on material performance. To achieve this, an appropriate infrastructure for selective
collection of construction and demolition waste is needed to improve recycling in the construction industry.

We call on the Commission to develop an ambitious vision on Europe’s building stock, including a long-term strategy for the renovation of existing buildings, and to upgrade the role of national renovation strategies introduced by Directive 2012/27/EU on energy efficiency. Sustainable and “circular” cities are instrumental for an effective circular economy, and the opportunities introduced in this respect in the 2014-2020 ESI Funds should be fully implemented.

4 WASTE POLICY

Continuously advancing waste management remains one of the main priorities in our vision of a sustainable economy, while the primary principle of waste prevention should prevail, wherever possible.

A European recycling legislation that does not include clear and unambiguous definitions and binding targets may generate uncertainty on the part of investors and public authorities. Therefore minimum requirements for national waste prevention programmes and a set of targets and indicators capable of rendering the performance of the various Member States comparable are needed.

We call on the Commission to define new recycling targets for municipal waste, construction waste and packaging waste. In particular, we expect the Commission to include in the waste package to be submitted by the end of 2015 a European target of at least 70% for recycling and preparation for reuse of municipal solid waste and 80% recycling of packaging waste by 2030. This target should be based on a common European definition, calculation and reporting method, preventing the reporting of discarded waste (landfilled or incinerated) as recycled waste. The setting of quantitative targets should go hand in hand with qualitative targets (including quality standards for the collection and sorting of waste streams) to prevent the “down cycling” of materials. CEN standards or end-of-life criteria for secondary raw materials (for instance for plastics) together with product standards on recycled content for some materials in new products entering the EU market might stimulate demand and help to create an EU wide market for high end recycling.
The review of waste legislation should also include the following points:

1. a more comprehensive and detailed application of take back obligations and extended producer responsibilities in EU waste policy, by:
2. covering more product categories and establishing collection-, reuse-, recycle- and recovery targets (for instance for floor covering materials, furniture, textiles or building materials);
3. setting collection targets per sub group (for instance mobile phones) in order to prevent the collection of large appliances/products from taking precedence over that of smaller appliances;
4. establishing more material or component specific recycling targets (plastics or rechargeable batteries in WEEE, ELV,…); 
   a. introducing deposit schemes/traceability mechanisms for appliances with valuable material content but low collection yields;
   b. enabling change of behaviour on reverse vending and deposits on recyclable products.
5. applying the ‘polluter pays’ and ‘pay-as-you-throw-principle’ for residual waste, combined with mandatory separate collection schemes in order to achieve high quality of recycling materials and facilitate the development of business models based on the reuse of secondary raw materials;
6. setting binding waste reduction targets for municipal, commercial and industrial waste to be achieved by 2025;
7. introducing mandatory separate collection of bio waste by 2020;
8. introducing a ban on landfilling recyclable and biodegradable waste by 2025 and a ban on all landfilling by 2030, except for certain hazardous waste and for residual waste, for instance waste from recovery operations, including recycling, that cannot be recovered further and therefore has to be disposed of;
9. strictly limiting incineration, with or without energy recovery, by 2020, to non-recyclable and non-biodegradable waste, with due regard to EU air quality legislation;
10. introducing fees on landfilling and incineration;
11. setting a binding target to reduce marine litter by 50% by 2025 compared with 2014 levels.
4.1 Tackling food waste

The S&D group is very sensitive to the issue of food waste. According to the Commission nearly 100 million tons of food is wasted annually in the EU (estimate for 2012). If nothing is done, food waste could rise to over 120 million tons by 2020.

We therefore urge the Commission to present a communication on sustainable food by 2016 and to submit, by 2015, a binding target to reduce food wastage by at least 30% by 2025. This target is to be part of the minimum requirements to be included in national waste prevention programmes in all Member States. Moreover, we call on the Commission to assess whether and how the current regulatory framework could be improved to stimulate the reduction of food waste and facilitate food donation.

4.2 Preventing the illegal leakage of waste streams outside Europe

Today many discarded products do not end up in regular recycling channels. This means that valuable secondary raw materials are often irrevocably lost. There are indications that a significant percentage of all EU waste shipments does not comply with existing regulations, although the situation varies considerably in the Member States. A targeted examination of these shipments in 2006 revealed that more than 50% of all EU waste shipments did not comply with regulations and that there were irregularities for 43% of all shipments. This mainly applies to the export of discarded vehicles and electronic equipment, which leave Europe as reusable products but end up being dismantled abroad. Moreover, the Member States interpret the classification of waste for shipment in different ways which results in obstacles for the internal scrap market and thus in trade distortions. This is all the more regrettable as the physical transport of exported waste products and imported secondary raw materials (having been recycled outside the EU under less stringent conditions) result in considerable environmental leakage.

Europe needs to thoroughly tackle the illegal export of waste by:

1. more rigorous enforcement of EU Waste Shipment Legislation (article 49 obliges shippers to ensure environmentally sound management of the waste);
2. the development of a(n) (international) certification scheme applied to recycling processes covering inter alia social aspects, environmental aspects, and process efficiency;
3. strengthening and expanding the EU Network for the Implementation and Enforcement of Environmental Law (IMPEL) and related activities;
4. tackling waste streams falsely declared as second-hand goods by drawing up clear guidelines to distinguish second hand from end-of-life goods;
5. differentiating between new and second hand goods in customs classification/declaration to allow targeted controls on export shipments.

5  STIMULATION OF ECO LEASE AND RENTAL SERVICES

The S&D Group is committed to a new, ambitious and sustainable European industrial policy, where public policy is to play a dynamic role in driving innovation, and which should be coordinated with and take into account the connections between manufacturing and services. The EU needs a strategy that secures a strong European presence in emerging technologies, and which also reinforces its position in established production sectors. A re-industrialisation strategy should offer a comprehensive vision combining policies on innovation and investment, infrastructure and energy, education and training, as well as a clear and supportive regulatory framework.

In this regard, specialised service systems are to ensure that products can be used several times by multiple users without them being the owners of the products in question. In a targeted service economy (e.g. copying services, car sharing, gardening, laundry and ironing services etc.) consumers would no longer be obliged to buy expensive equipment which they only use for a limited time. Owing to lease and rental services, manufacturers could remain the owners of their products which would constitute an incentive to develop more durable products that are easy to repair, dismantle and recycle. This would also result in a more efficient use of raw materials, products and energy. The reduction of VAT on repair, lease or rental services at EU level would incentivise the transition to such a model.

In a B2B environment leasing formulae (e.g. chemical leasing, floor covering etc.) could also give rise to win-win situations. On the one hand, a manufacturer would gain
a competitive advantage vis-à-vis his competitors by offering more advanced services to his customers, thus generating higher margins than from mere product sales. On the other hand, the primary objective of manufacturers would no longer be to sell as many products as possible, but rather to supply the best possible service with the fewest possible products, or with products that are easy to repair, reuse or recycle, given that the manufacturer continues to be the owner and would have to bear any potential costs for the product’s end-of-life processing.

We urge the Commission to examine whether existing legislation is supportive to the emergence of new business models such as leasing formulas.

6 ENCOURAGING A SUSTAINABLE PURCHASING POLICY

The European Commission should come forward with compulsory green public procurement procedures, based where possible on Life Cycle Assessment (LCA), to encourage public authorities to purchase products and services that tie in with sustainable materials management and a circular economy. Reused, repaired, remanufactured, refurbished and other resource-efficient products and solutions are to be preferred and if they are not chosen, the "comply or explain" principle should apply.

7 KNOWLEDGE BUILDING, RESEARCH AND HIGH QUALITY JOB CREATION

Research into technologies and processes which fully close the loop in turning waste into raw materials for new production is essential to support the transition towards a circular economy in Europe. SMEs play a key role in this respect and should have access to appropriate funding. It is necessary to contribute, within Horizon 2020, to projects aiming at developing, testing and demonstrating in practice the economic and environmental sustainability of undertakings based on a circular economy concept. At the same time, such projects would assist the drafting of regulatory measures to boost innovation and facilitate subsequent implementation, by identifying possible legal uncertainties, barriers and/or gaps that could hamper the development of business models based on resource efficiency.

The transition to and establishment of a circular economy also presents Europe with an opportunity to create thousands of high quality, well paid jobs. Education, vocational
training and requalification of workers are key instruments in this transition process. It is therefore necessary to remind Member States to ensure that the necessary funding is made available, not least by using EU funds, to prepare and adapt their training and education systems to meet the challenges of this economic change. The EU and Member States must also ensure that stringent Occupational Health and Safety regulations are put in place, in accordance with the specific risks faced by workers in some sectors of the circular economy.