

CHALLENGE EUROPE

Yes, we should!

EU priorities for 2019-2024



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Prioritising circular economy to boost European competitiveness

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MAIN RECOMMENDATION ▶ The EU can foster the benefits of the circular economy through clear priorities, continuous action and expanding current policies and objectives.

WHAT TO DO:

- ▶ Immediately start developing the next circular economy package to signal leadership.
 - ▶ EU Council presidencies should make circular economy a top priority.
 - ▶ Develop an active approach on all levels of governance.
 - ▶ Establish a multi-stakeholder group to develop a vision of a decoupled European economy.
 - ▶ Assume leadership to improve global governance of resource use and circular economy.
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Natural resources have fuelled the great economic growth stories of the last century, including in the European Union (EU), the United States and Japan.¹ This growth, in turn, has improved living standards around the world and enabled many of the most successful European industries. But this model has reached its limits. To further increase prosperity in Europe and beyond, we need to create a new kind of economy according to the principles of a new paradigm that decouples growth from resource use and impacts. The rationale is there: the transition to circular economy carries enormous, underdeveloped, possibilities. It can significantly boost economic growth while reducing environmental and health impacts. This piece sets out why and how circular economy should be made a priority in the next EU's politico-institutional cycle of 2019-24.

Implementing the principles of a circular economy is crucial for innovation, growth, the mitigation of the risks of climate change, and the achievement of environmental and climate commitments.

Decouple growth from resource use

Europe is uniquely positioned to exploit the benefits of the circular economy and establish itself as a frontrunner in a new circular global system.

The recently published EU 2050 Climate Strategy envisions a climate neutral Europe by 2050, which is in line with the 2015 Paris Agreement. Although the strategy considers a circular economy as one of the main tools to decarbonise European industry, it is still not explicit enough about its overarching systemic importance – and its implementation.

The circular economy is an opportunity for true innovation and leadership that is collaborative by definition – a promising European project.

There is a strong rationale for this decoupling, including the pressing negative environmental and health impacts of our current resource use, material scarcities, and the increasing risks of resource trade dependencies and price volatilities. The world currently consumes 92 billion tonnes of materials per year, and is expected to consume up to 190 billion tonnes by 2060 if current consumption trends continue. This is fundamentally unsustainable and will endanger human well-being.

Already today, resource extraction and processing are responsible for about half of global GHG (greenhouse gas) emissions and more than 90% of biodiversity loss and water stress. At the same time, high-income countries are becoming more and more dependent on resource imports: the average person in high-income countries uses 9.8 tons of primary materials produced and processed elsewhere in the world. This reliance has been increasing at a rate of 1.6% per year since 2000.

Global decoupling measures can boost innovation and new growth, and save costs and reduce negative environmental and health impacts at the same time. A recent International Resource Panel (IRP) report found that concerted resource management and efficiency measures can boost economic growth by 8% globally by 2060.² This estimate does not yet even fully consider the opportunities that a transition to a circular economy would bring.

Transition to a circular economy

A circular economy is a key tool in achieving decoupling while boosting growth and rethinking socioeconomic dynamics and cooperation. Moving towards a circular economy will mean to reduce, maintain, reuse, remanufacture and recycle products, components and technical materials, as well as reuse biochemical feedstock and maintain or restore regenerative biospheres, such as agricultural land.

A circular economy must operate on four levels: products and services, companies, networks and policies (adapted from Geng et al.³):

- ▶ First, products (components) need to be recyclable and reusable, sustainably sourced and manufactured using clean methods. Where possible, tangible products must be replaced by services that provide the needed function for the customer using less or no materials – such as mobility as a service or lighting as a service (for example selling hours of light as a service instead of light bulbs).
- ▶ Second, to make decoupled products and services profitable, companies need new business models that de-link the revenue base from material use, through rethinking the design and use of products and value chain interactions.

- ▶ Third, companies need to build networks to enable new, decoupled value creation, for example by encouraging reverse logistics (moving goods from the user back to the producer, or the remanufacturer respectively), industrial symbiosis (direct or indirect reuse of waste or surplus resources across companies) or public-private partnerships.

- ▶ Fourth, policies are needed to support circular markets, especially through fiscal policies, regulations, research and vision building. Circular principles are applicable in the majority of sectors, including manufacturing, retail, agriculture, mobility, energy, and digital intelligence.

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The EU's role – Tackling challenges jointly and exploiting synergies

Europe is uniquely positioned to exploit the benefits of the circular economy and establish itself as a frontrunner in a new circular global system. The EU has a unique combination of market power, production and logistical know-how, integrated markets and political and economic institutions that can facilitate the transition.

In addition to this potential, Europe is also in great need of new areas of innovation and growth. It failed to establish itself as a leader in recent tech-innovation waves and still needs to develop a strategy for the fourth industrial revolution that encompasses the physical and digital economy.^{4,5} Moreover, the EU is among those economies most advised to reassess its material import dependencies.

WE CAN TACKLE THESE CHALLENGES TOGETHER AND EXPLOIT SYNERGIES WITHIN A CIRCULAR ECONOMY PARADIGM

An Ellen McArthur and SYSTEMIQ report found a €320 billion circular economy investment opportunity available to Europe until 2025⁶. The main areas of interest for profitable circular economy investments are mobility (including manufacturing), our food system and the built environment. Although companies are beginning to see the benefits of circular practices, its potential is still massively underused. Only strong political leadership, in collaboration with strategic industry actions will enable the fundamental transition that is needed to reap the full benefits.⁷

Embracing decoupling through a circular economy is also an effective and cost-efficient strategy to fulfil Europe's environmental commitments, in particular its commitment to halt biodiversity loss under the United Nations Convention on Biological Diversity (CBD) and its agreement to keep global warming well under 2°C under the Paris Agreement.

A recent report by the Energy Transitions Commission has shown that material efficiency and circularity in industry, specifically in plastics and metals supply chains, could reduce the global GHG emissions of heavy industry and heavy-duty transport – which are commonly considered “harder-to-abate” sectors – by 55% by 2050 and would reduce the cost of decarbonising these sectors by 45%.⁸ In the case of plastics, for example, circular production could result in products that are 80% cheaper than products made of new

materials (if the costs of collecting, sorting and processing are kept low).⁹

It is important to note that a circular economy not only reduces direct GHG emissions through material savings (and limits other negative impacts), it is also an enabling factor in the sustainable scaling of renewable energy sources. Renewable technologies are likely to increase material demand, but the materials used in the production process, such as metal for example, lend themselves well to reuse.^{10,11}

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No time to waste

The task is now to link the circular economy with and beyond the environmental agenda, including industrial and digital agendas as well as climate, energy and agricultural policy, and develop strategic implementation plans.

Apart from the tangible benefits, a circular economy could become the EU's new common mission. Surely it is no silver bullet to solve the current lack of social and political cohesion and must be accompanied by the right social policies to ensure fair access to the benefits and the mitigation of transition costs. However, the circular economy is an opportunity for true innovation and leadership that is collaborative by definition – a promising European project.

Moreover, sustainable resource management provides significant opportunities in foreign policy, development cooperation as well as migration policy. Natural resources are closely linked to economic development and are important factors in conflict and peacebuilding. Studies suggest that over the past sixty years at least 40% of all intra-state conflicts were at least partly linked to natural resources.¹³ The drivers of the European and global migration challenge can therefore not be seriously addressed without a deep understanding and strategic management of the global resource dynamics.

Overall, the question is not whether there is a need to prioritise the circular economy as a European strategy but rather how we can start as soon as possible and how we can

ensure that all parts of society benefit from the gains.

If Europe acts too late, it will be overtaken by more innovative economies such as China, which is already taking important steps in the direction of more circularity.

Although a circular economy requires collaboration across borders, and other

countries should be encouraged to join the transition, shaping the system and leading the way for others to follow could bring the EU enormous benefits. The risk of failing to do so will impede on the Union's ability to anticipate change and surprising disruptions. We can end up with large, stranded assets: machinery and factories that are very costly to adapt to circular value chains.

Setting clear priorities

THE EUROPEAN UNION CAN FOSTER THE BENEFITS OF THE CIRCULAR ECONOMY THROUGH CLEAR PRIORITIES AND CONTINUOUS ACTION

Europe is headed in the right direction, but it needs to pick up the pace and become more strategic to unlock the full potential of the transition to a circular economy. The EU has introduced important policies in the past few years. The current circular economy package, presented in 2015 and adopted in 2018, for example, puts forward a recycling and reuse target of 65% for 2030 (the package proposed by the previous Commission in 2014 had proposed a 70% target for 2030). The package addresses recycling, and proposes to limit landfill dumping, reduce food waste and the reuse of wastewater and has a strong overall focus on plastics and waste management.^{14,15} The Commission also introduced an eco-design directive that deals with appliances' energy efficiency.

While these and other measures have been crucial to initiate the transition, they must be seen precisely as that: a starting point to continuously improve and enhance our efforts.

Circular economy policies and objectives must not only be updated and expanded upon, they must become a shared ambition

across directorates, EU commissioners, the EU institutions and member states. The benefits of this transition must be strategically exploited for the purpose of growth, competition, labour, international relations, health and the environment. Immediate improvements must be combined with mid- and long-term strategies to create the right conditions in Europe and along global value chains for a more circular system to emerge – and the EU's efforts must go beyond what the Commission can do, to provide the economy and society with the long-term ambition and support needed for fundamental innovations.

The list of actions to be decided on and implemented in the coming political-institutional cycle should include the following:

In terms of next concrete steps, the current Commission should establish where increased efforts are needed now, paving the way for and sending a clear message to the next Commission to immediately start developing the next circular economy package to signal continuity and leadership. It must include more product groups than the last package and emphasise extended producer responsibility as aligned with more stringent eco-design guidelines for value retention in the different circular

processes (reuse, repair, refurbishment, remanufacturing and recycling). It should also focus on economic signals and policy drivers, such as taxes, subsidies and public procurement procedures. Besides the greening of the Union's finances, the new package should also highlight the importance of the social aspects of the transition (employment, inclusiveness, local benefits).

Member states also have an important role to play. The upcoming EU Council presidencies (Finland, Croatia, Germany, Portugal, Slovenia, France, Czech Republic, and Sweden) should make circular economy one of their top priorities. Those countries that are willing to commit need to build a coalition of 'circular economy champions' to promote circular economy among their peers, as well as to mainstream the development of national circular economy roadmaps. These member state champions should be encouraged to drive leadership and creativity, becoming a designated 'vision group' (see below). By setting up a European policy fragmentation can be avoided.

An active approach on all levels of governance is needed. Cities should take an active role in supporting the transition to a circular economy. They are in a privileged position due to their relative autonomy and due to the fact that many circular economy opportunities are related to the cities. For example, the city of Amsterdam developed an explicit strategy that aims to redesign its core product- or material chains.

The Commission should establish a multi-stakeholder group to develop (and promote) a vision of a decoupled European economy, and the different pathways to get there. This group should span across directorates, include industry and civil society representatives, and also interact with global initiatives. The group should include a technical expert committee that can advise directorates and assess the potential of relevant policies to unleash the untapped

potential of the circular economy. Policies in the areas of research and innovation, taxation, trade, agriculture, labour, climate, and digitalisation are all crucial to enable a circular economy that is in turn beneficial for these areas;

The long-term strategies, as well as the more immediate steps, must be based on a deep understanding of Europe's resource dynamics. The analysis of specific implications in terms of risks, responsibilities and opportunities must be supported by a user-friendly database of Europe's material flows that is embedded within a respective global data base (as material flows are increasingly global). The existing Global Material Flows Database hosted by UN Environment provides a good starting point, as do the global assessment reports such as the Global Resource Outlook by the International Resource Panel (IRP). However, information on data flows must be more specific about societal and economic use dynamics, specific risks and opportunities, and must become more practical for different stakeholder groups. An institution like the EU should offer its member states methodologies on how to assess national resource use implications and specific circular economy opportunities. Most multilateral research organisations do not have programmes specifically devoted to the circular economy, yet¹⁶ – the EU must strive to change this.

Last but not least, the EU as an institution and its 'champion' member states must assume the leadership in the pursuit of improving the global governance of resource use and the circular economy. There is currently no multilateral institution to monitor and let alone manage global resource use, its impacts and the circular economy's huge global potential. A proposal for a 'UN Convention for Natural Resource Management' should be considered. The Sustainable Development Goals (SDGs) recognise the importance of resource use, particularly goal 12 "Sustainable

Consumption and Production”. However, indicators are vague and the universal importance of resource use for all the other goals is not made explicit enough. Only through global cooperation can global resource flows be managed in such a way that they support global prosperity. The EU must make a concerted effort to promote the discussion of suitable solutions.

If we want to accomplish the SDGs, we need to make sustainable resource management a priority among governments, businesses and civil society. If we want to advance a competitive Europe and become a global leader, it is high time to start the circular economy transition.

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