

Better use of resources is the means to growth, prosperity and welfare – but will the EU jump on the opportunity?

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As the new European Commission steps in and looks for ways to promote growth and competitiveness, its success will depend on what emphasis will be given to creating a more sustainable European economy. What will determine the EU's competitiveness and comparative advantage on a global scene is how well we will respond to the ongoing economic and ecological crises – which are intertwined and reinforce each other. The big question is what emphasis will the new Commission and the EU as a whole give to promoting sustainable and greener growth, based on good management of natural resources and biodiversity, smarter use of resources and mitigating climate change?¹

While this commentary will pay special attention to the impacts of the global resource challenge on Europe and needed actions, such as better and more efficient use of our resources, it is important to note that this is just one element in creating a more sustainable economy. Another important area of action, which could bring significant economic, social and environmental benefits for Europe, would build on a forward-looking energy and climate policy.²

The story is well-known, also in Europe - although often ignored. World population growth, increasing demand for resources and our traditional production and consumptions patterns are putting enormous pressure on global resources, including energy sources, water, land, food and minerals, and at the same time on the environment. As a result of biodiversity losses, ecosystems have become so vulnerable that their capacity to provide goods and services – vital for our well-being and economy – has become limited. We can no longer count on ecosystems to respond to shocks such as the effects of climate change. The negative economic and social consequences of increasing competition over resources and rising prices, such as low growth and energy poverty, are affecting Europe. At the same time, as man-made greenhouse gas emissions continue to rise, climatic changes and extreme weather events are likely to increase, thereby affecting the availability of fertile land and fresh water and consequently, food and energy production.

Europe is extremely vulnerable in the face of the global resource challenge. Europeans outsource the largest share of resource extraction in the world. Raw materials, including energy imports, account for approximately 30% of EU imports, which in 2010 were worth €528 billion. The EU is dependent on energy imports such as oil and gas from just a few suppliers – and indeed Russia's dominant position and fears that it may use energy as a political tool have recently lead to stronger push to promote EU's energy security.³ It relies on outside sources of raw materials for chemical, construction and other industrial sectors. For example, it needs rare earths from China to feed its high-tech and environmental industries. However, as global competition for resources continues to increase, world commodity prices rise and become more volatile, and at the same time resource supplies become less secure.

It is in the EU's interest to reduce this vulnerability. It is a great contradiction that while Europeans acknowledge their resource-dependency, at the same time, waste keeps on accumulating, not enough materials are recycled and valuable materials are continually lost or shipped outside the EU. Every year, the EU produces around three billion tonnes of waste. As only 40% of solid waste is recycled, for a resource-dependent Europe this accounts for a significant loss of resources in the form of materials and energy. For example, recovering 10 kilograms of aluminium via recycling uses less than 10% of the energy needed for primary production. As another example, it has been estimated that a ton of electronic scrap from personal computers contains more gold than what can be recovered from 17 tons of gold ore. 6,000 used mobile phones contain about 3.5 kilograms of silver, 340 grams of gold and 130 kilograms of copper. Makes one think: where are our old computers and mobile phones now?

The evidence exists: the economic, societal and environmental benefits related to changing our current production and consumption patterns would be significant. Most businesses acknowledge that better use of resources helps to cut costs and thus improve competitiveness. Better use of resources also benefits the public sector – a large consumer of resources like energy and water – and thus the public purse. The Commission Communication *Towards a circular economy: A zero waste programme for Europe*, highlights some of the possibilities and the benefits. It has been estimated that increasing resource efficiency could help to

¹ For more information on benefits and actions, see A. Ahtonen and S. Chiorean-Sime, EPC Issue Paper *Green revolution: making eco-efficiency a driver for growth* (2012)

² For an overview of the possibilities, challenges and needed actions , see A. Ahtonen *The 2030 framework on climate and energy - Getting Europe on the right track?* (2014)

³ For more information on needed actions, see A. Ahtonen, EPC Commentary *Russian belligerence and Europe's energy security* (2014)

reduce material input needs along the value chains by 17%-24% by 2030, and that more efficient use of resources could help European industry to save annually €630 billion. At the same time, developing a circular economy, which would create new markets, new products and value for business, could boost EU GDP by up to 3.9%.

So, what can the EU do to build on this potential? First, it should recognise and give value to the economic, societal and environmental benefits that Europe could enjoy if it made a better use of its resources. Then, it should create the basis for a circular economy, where resources and materials are productively used over again, and where amount of waste is limited. This requires 1) improving resource efficiency: using and reusing resources more efficiently throughout our economy, and 2) eco-innovation: developing and using products, processes and other solutions that contribute to environmental/climate protection and/or efficient use of resources.

While not strongly enough reflected in President Juncker's mission letters to the Vice-Presidents and Commissioners, transition to a more sustainable and more circular economy should become one of the main pillars of action for the new Commission. The Europe 2020 Strategy defined resource-efficient Europe as one of the key objectives for the decade, and building on the ongoing work would have long-lasting positive impacts on economy and society as a whole.

Transition to a more sustainable, circular economy requires a systemic change and action across economy and society. Encouraging new business and market models, changing the design of production processes, products and services, altering consumer behaviour, and improving resource productivity requires the support of both market instruments and a coherent policy framework.

As action is needed across policy areas, from industrial to environment policy, agricultural to transport policy, there must be a coherent institutional approach to better use and management of resources. In the new structure, the Vice-President for Jobs, Growth, Investment and Competitiveness, should be responsible for pushing a transition to a more sustainable, circular economy, which can help to increase Europe's competitiveness, while promoting growth and welfare. This would also help to overcome the criticism that the new Commission is planning to promote a growth agenda at the expense of environmental, climate and health concerns.

The EU's internal market is Europe's main driver of competitiveness, security of supply and sustainability. However, currently it is cheaper to send used plastics to China than recycle them in Europe, because of bureaucratic and technical problems between EU member states. The EU must help to remove these barriers and build an internal market for products and services that contribute to creating a more sustainable economy. Effective use and reuse of resources requires creating a market for secondary materials. There must be a pull, not just a push for eco-efficient products and services: framework conditions such as taxation and competition policies should provide a favourable environment for greener growth, and minimum performance standards would help to remove the least resource-efficient products from the market. Harmonised implementation and better enforcement of pan-European legislation such as the Waste Framework Directive, the Eco-design Directive or the Water Framework Directive are needed to create a level playing field.

Europe also needs to build a knowledge-base on resource efficiency. While good practices already exist, learning from each other, filling information gaps, and encouraging common understanding on needed actions is needed. The EU needs a comprehensive statistical framework on resource efficiency, which it can use for strategic planning. Member states must apply comparable methodologies, measurement systems and indicators for resource efficiency. Information for consumers must become more transparent, and smart metering or labelling of products could play an important role in this regard. Empowering consumers requires not only giving them better access to information but also providing them with opportunities and the ability to act on their knowledge.

Using EU's dependence on foreign resources as a springboard to improve its own competence in recycling and re-using resources could make it a global expert and world leader in resource-efficiency and eco-innovation. At the same time, leading by example would provide a model for others. By demonstrating and providing evidence that a more sustainable circular economy, where resources and materials are productively used again and again, and where amount of waste is limited, leads to enormous savings in materials, contributes to growth and job creation, would undoubtedly provide an attractive story also for others to follow.

Creating a more sustainable economy, based on a smarter use of our resources, provides a great possibility for Europe. It has the potential to become a true European success story: providing for new sources of growth and jobs, increasing competitiveness, reducing costs, ensuring security of supply, and promoting prosperity and welfare in Europe.

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