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Reindustrialització i sostenibilitat. Horitzons per a un nou desenvolupament econòmic

Jornada "Economia circular i ocupació per a una revolució industrial sostenible"

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Ponència de JOANNA DRAKE

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Ladies and Gentlemen, good morning and thank you for inviting me to be here with you today as Keynote speaker for today's conference. I am very pleased to be able to share some thoughts on the subject of 'circular economy and employment for a sustainable industrial revolution'.

Industry is central to the European economy. It represents 68% of the EU's exports and accounts for 32 million jobs. Moreover, approximately 17% of total value added in the EU comes from manufacturing, and for every manufacturing job created, two and a half more are created along the value chain.

Since 2014, manufacturing employment has steadily grown and since 2013 over 1.5 million net jobs have been created in European industry.

While these numbers are encouraging, they do not necessarily reflect the profound transformation that industry is currently undergoing. Industry is being particularly impacted by the emergence of new technologies and business models, the need for greater resource efficiency, and consumer demand for bundling manufacturing activities with services.

These changes are clear when looking at the Member State level, where the levels of manufacturing employment vary significantly. In 2016, five Member States – the Czech Republic, Germany, Estonia, Poland, and Slovakia – had rates of employment in manufacturing that were higher than 2010. On the other hand, Greece, Spain, Cyprus, Latvia, and Finland have manufacturing rate 20% below pre-crisis levels.

All Europeans should be able to benefit from the industrial transformation. That is why in order to adapt to these changes and promote the continued health of the European industrial

sector, the Commission has developed a renewed and comprehensive Industrial Policy that integrates the principle of a circular economy.

A Renewed Industrial Policy

The renewed EU industrial policy strategy aims at facilitating the transformation towards a smart, innovative, and sustainable industry. European industry should be the world leader in embracing innovation, digitalisation, and decarbonisation.

The renewed strategy focuses on what is achievable in the next one and a half years. To develop a vision that goes longer term towards 2030, the Commission will work together with Member States and stakeholders in an open, inclusive, and collaborative dialogue to monitor progress of our industrial strategy and identify further action at all levels.

In particular the Commission will establish an open and inclusive dialogue around the annual Industry Day and a High-Level Industrial Roundtable to ensure our policies remain fit for the future of industry.

So what does this renewed strategy cover?

There are six dimensions, each with several underlying actions, some of which I will share with you.

These dimensions address:

- **'Empowering industry with opportunities and skills to thrive in the single market'.** Key sectors include construction, steel, paper, green technologies and renewable energies, manufacturing and maritime shipping. Actions under this area range from initiatives to tackle the basic skills gap, which affects more than 70 million adults in Europe, to measures which will support the development and anticipation of high level skills in emerging fields.
- **'Upgrading industry for the digital age'.** The future of industry will be digital. Yet only one fifth of European companies are highly digitised and 37% of the EU labour force has an insufficient level of digital skills. Therefore enabling the uptake of smart technologies throughout industrial value chains and helping workers to develop skills are critical. As part of its Digital Single Market Strategy, the Commission is facilitating the development of autonomous vehicles, the Internet of Things and countless other applications through actions such as high-speed connectivity (including 5G).
- **'Investing in the industry of the future'.** Whether it is 3D printing, bio-based plastics for packaging or new systems to cut water use in the chemical industry, the EU funds and invests in pioneering innovation and European industry. The "Juncker Plan" – the Investment Plan for Europe – has already triggered investment worth €225 billion and leveraged significant private investment into digital infrastructure, energy, transport, research and innovation projects. In the Nord Pas de Calais region in France, it has helped finance the region's move to a low-carbon economy. In Poland, steel wholesalers were able to introduce new services and jobs. And in Finland, a new bio-product mill was constructed. These are just a few examples.

- **'Supporting industrial innovation on the ground'.** A new Venture Capital Fund of Funds will facilitate access to finance for riskier projects. In addition, tax simplification measures will be a further incentive for business to expand.
- **'Reaping the benefits of open and rules-based trade and upholding fair competition'.** Open trade must be fair and sustainable. The Commission is continuing to act decisively on this front, taking measures against unfair trade practices, including imposing anti-dumping duties. In particular, EU rules need to address concerns that in some cases foreign investors might seek to acquire strategic assets. Such assets could allow them to control or influence European firms whose activities are critical for security and public order. That is why in September 2017, the Commission proposed a European framework for screening foreign direct investments that may pose such a threat.

Industry and the Circular Economy

Last, but not least, the sixth dimension brings me to the heart of today's discussions: 'Europe's leadership in a low-carbon and circular economy'.

The links between reindustrialisation and the circular economy are clear, but before delving deeper, let me quickly review what the circular economy is and why it is both a necessity and an opportunity for Europe.

As you all know, the current linear economic model has limits. Resource scarcity, price volatility, waste, environmental degradation, and climate change to name a few.

An alternative to this unsustainable, 'take-make-waste' economic model is one that is restorative and regenerative, in which the value of resources and materials is maintained for as long as possible. This is the circular economy.

With Europe's commitments taken at the global level to address climate change and, the need to seek out new areas of competitive advantage, transitioning to a circular economy has become a necessity. It is also an opportunity to create new business opportunities and innovative products and services, and, crucially, jobs.

To make the transition to a circular economy a success we need to act on a variety of fronts. That is why, just yesterday [16 January] the Commission adopted a new Circular Economy mini-package which includes:

- **A European Strategy for Plastics** that looks at the whole lifecycle of plastics in order to increase recycling of plastics and to prevent their leakage into the environment.
- **An Analysis at the Interface between chemicals, products and waste legislation** to ensure that materials go back into the economic cycle in a safe manner.
- **A Monitoring Framework of Indicators** to measure the progress of the circular economy in the EU and its Member States. The Monitoring Framework is comprised of a complete set of indicators to measure the progress of the EU and its Member States on the transition to a circular economy. As a result, it will improve our ability to keep track of progress and provide a clear signal to economic actors, including business and consumers, on ongoing trends.

- **The Report on Critical Raw Materials**, whose major aims is to ensure a coherent and effective EU approach to critical raw materials in the transition to a circular and low-carbon economy.

And this is not all. Beyond these initiatives, and under the overall circular economy umbrella, other policies are taking shape to support the transition. The Clean Energy for all Europeans Initiative of November 2016 includes legislative proposals on energy efficiency, renewable energy, the design of the electricity market, security of electricity supply and governance rules for the Energy Union.

In the context of the Capital Markets Union, the Commission is developing a strategy to better orient private capital flows to more sustainable investments.

Moreover, building on past measures to help the transport sector remain competitive in a socially fair transition towards clean energy and digitisation, the Commission will propose to further tighten CO2 emissions standards for cars and vans. An Alternative Fuels Infrastructure Action Plan will support the deployment of charging infrastructure.

Also, at the end of last year, almost two years after the Commission tabled its revised Circular Economy Package, the co-legislators reached a preliminary agreement on an ambitious long-term waste management policy.

The agreed new rules are ambitious yet realistic and will help accelerate the EU's transition towards a circular economy. Among others, key elements of the agreement include: increased [from existing] recycling targets for municipal waste, new landfill reduction targets for municipal waste, increased [from existing] recycling targets for packaging waste in total and for specific material streams, calculation rules are strengthened and harmonised.

Some technical work is still needed to formalize the text, but we expect that the new legislation can be finally adopted in the next couple of months.

These efforts are just the enabling framework. To make the move towards a circular economy a reality, industry will have to move from a sector-based to a value-chain approach, from product to life-cycle analysis, and from manufacturing or services to manufacturing and services.

In general, industries that provide the knowledge and technology for increased material efficiency will benefit from the circular economy.

Example of the Automotive Industry

It is time now to look at concrete example demonstrating the effect a transition toward the Circular Economy can have on industrial sectors.

What would the circular economy look like in terms of a key industrial sector? Let's look at the automotive industry.

A modern and competitive automotive industry is key for the EU economy, which increasingly relies on automation, digitisation, and the highest levels of environmental performance.

The Commission's work for a clean, sustainable and competitive car industry encompasses a wide range of policy areas and initiatives. These include ensuring that emissions legislation is respected and introducing more robust and accurate emissions tests.

It also includes promoting a shift to zero-emission vehicles, and fostering connected mobility solutions, equipment and vehicles, as well as the modern infrastructure that supports them.

The goal is to ensure that the best low-emission and connected mobility solutions, equipment and vehicles are developed, offered and manufactured in Europe.

Just two examples of this are the rolling out of electric charging stations all over Europe and public authorities and the private sector joining forces to upgrade Europe's capacities in battery technologies.

Europe's car industry must take an active role in responding to this challenge by accelerating the transition to electric and other low emission technologies. If Europe seizes this opportunity, this will mean sustainable jobs and better livelihoods for its regions and communities. At the opposite, missing this transition toward the mobility of tomorrow could put the whole sector under pressure. This is why the European Commission takes this priority very seriously.

Circular Economy – Development and Infrastructure

For industries to become more circular, they will need the right infrastructure. This is why investments in infrastructure, as well as research and innovation, will be key to closing knowledge gaps and developing circular solutions. Plastic has been identified as one of the key areas where innovation is needed to facilitate the transition.

Therefore, in 2018, the Commission will develop a Strategic Research Innovation Agenda for Plastics and, from now to 2020, the research program Horizon 2020 will invest more than 200 million euros in plastics innovation.

In addition, Horizon2020 is supporting the transition to a circular economy more broadly. One of the focus areas of its 2018 to 2020 work programme is 'Connecting economic and environmental gains, for which the Circular Economy', for which around one billion euros have been allocated. The LIFE programme is also a source for investment.

Moreover, the European Fund for Strategic Investments (EFSI), which has been extended until 2020, focuses on investments to meet the Paris Agreement targets and help the transition to a circular and zero carbon economy.

One project in Spain on recycling paper provides an example of this fund mobilising private investment.

Example of Spanish Recycled Paper Project

The project will upgrade two production lines at the promoter’s containerboard production facility at El Burgo de Ebro, Spain.

The project promotes higher local utilisation of waste paper (in particular, package material for liquids). It also favours the utilisation of fibre-based, renewable packaging materials. At the same time paper recycling reduces the pressure and dependence of the paper industry on wood resources, which are valuable and renewable carbon stocks.

As a result of the project the plant will be able to produce new low-weight "liner" containerboard products with superior mechanical and printing qualities. This is possible because the project provided upgrades that enable the plant to use alternative recovered paper materials, which, prior to the upgrades, the plant was not able to use.

Containerboard production plants use recycled fibre as raw material, improving the management of natural resources and following the principle of circular economy.

The Circular Economy and Jobs – Theory and Examples

These investments in the circular economy will help Europe meet its international goals on environment and climate protection and boost the competitive advantage of European industry.

But for the circular economy to truly live up to its promise, it must also create employment at all skill levels.

Both high and low-skilled jobs will be essential to its success. For example, high skilled-workers will be needed in the fields of design and technology, whereas low-skilled workers will be needed for increased recovery and reuse of waste.

High-skilled workers, in particular, will be needed for the development of smart solutions to efficiently organise reverse logistics and for reuse and remanufacturing. In particular, the 'internet of things' could facilitate more efficient logistics, repair and replacements of products.

Since the aim of the circular economy is to ensure that materials stay in circulation for as long as possible, there will be a shift from primary to secondary and tertiary economic sectors, which may positively impact job creation. For example, the Ellen MacArthur Foundation has noted that labour intensity per unit of GDP is higher in manufacturing and services sectors than in sectors related to agriculture and resource extraction.

Skills for the Circular Economy – Retraining within Sectors

In order for European workers to make the transition to the circular economy, they must have the right skills.

Today many people remain without the skills needed for the industry of the future and the circular economy. One example is that just 37% of the EU labour force has an insufficient level of digital skills.

The transition to a circular economy will require new skills. These skills will be needed for newly emerging jobs and for adjusting or "greening" existing jobs to circular principles. This

will require adjustments to the current training and qualification frameworks for some occupations.

Skills gaps and shortages are already recognised as a major bottleneck in a number of sectors, in particular SMEs. Some sectors where these shortages exist include renewable energy, energy and resource efficiency, electric engineering of hybrid cars, manipulation of light materials, and product design.

Skills gaps also exist for specific occupations such as energy auditors, photovoltaic installers, insulation workers, environmental engineers, and sheet metal workers.

These gaps are a challenge, but also an opportunity for new and useful occupations. Adaptation of education and training systems is therefore an essential element in enabling a successful transition towards a circular economy.

For existing sectors, it may be possible to retrain workers for the transition to circularity. For example, in the construction sector, workers who are skilled at building new buildings could be trained how to renovate existing ones.

Two other areas where training programmes are particularly important are repair of electronic equipment and design of durable goods.

Examples of Sector-Based Jobs

The transition to a circular economy will lead to structural changes both within and between economic sectors, which will have varying impacts on the types of jobs created. For example, it may be easier to introduce circularity within more vertically-integrated economic sectors like food and construction, than other, less-integrated sectors.

A central component of job creation in the circular economy is that jobs are created across the product lifecycle, which is one of the reasons why the circular economy will require a complex mix of skills.

On such example is in the food and green waste recycling sector with anaerobic digestion where a variety of jobs are needed, including design, construction, operation and maintenance of plants, purchasing of feedstock and product sales and marketing positions.

Another example is the remanufacturing sector, which is expected to lead to high levels of job creation. Remanufacturing in particular requires a mix of high and low-skilled jobs which include refurbishment, disassembly, maintenance and redistribution.

According to a 2015 report from Ellen MacArthur foundation the recycling sector will also see a big boost in jobs. This is encouraging since for every thousand tonnes, 0.1 jobs are generated in waste disposal, whereas for the recycling processing, two jobs are created.

Waste management and recycling will also lead to a mix of low and high-skilled jobs, in particular related to product and process design.

Other key areas are the food products and beverages sector where sustainable farming practices, like organic farming and agroecology will play an important role.

Voluntary Agreements and Circular Economy Stakeholder Platform

Before closing, I'd like to take this opportunity to share with you, as circular economy stakeholders, a new initiative on sharing best practices and developing voluntary commitments.

The Commission along with the European Social and Economic Committee recently launched the Circular Economy Stakeholder Platform.

The platform provides a framework for showcasing best practices, policy strategies and voluntary agreements that lead by example and go beyond business as usual in the transition to a circular economy.

I encourage all of you to visit the website, share your best practices and learn from the experiences of others who are part of this transition.

Conclusion

All of these efforts demonstrate that the success of industry, the creation of jobs and the move towards a circular economy are interdependent.

The ability of European industry to continuously adapt and innovate by facilitating investment in new technologies and embrace changes brought on by increased digitisation and the transition to a low-carbon and more circular economy must be supported and strengthened.

We have a shared responsibility for ensuring that these efforts continue. While the transition to a circular economy has only just begun, I'd like to thank you for your dedication to making it a reality and look forward to continuing our common efforts in the future.