

TOWARD CIRCULAR ECONOMY IN THE E.U.

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Abstract:

The passage to a circular economy is the main subject of the European Commission agenda, defining the Europe 2020 strategy for the “intelligent, sustainable and favourable increase to inclusion”. The environment and social global tendencies represent some serious challenges to the economic development, health and stability of the entire world. A transformation to the inclusive circular economy would be essential for future sustainability.

Key words: environment, circular economy.

JEL classification codes: H23, Q28.

Introduction

Aiming to solve the fundamental problems which the current society is fighting with, Europe should develop on inclusive and “circular” economy which offers significant jobs and intelligent use of natural resources. Such economic system needs business models with intensive labour force, including repair services, remanufacturing, renewal, spare parts collection, new conception of services and products. It replaces the “life end” concept (of a product) by restoring, using the renewable energy sources, eliminating the toxic chemical substances use affecting the reuse and generating the elimination of the high quality waste, materials, products, systems, creating therefore some circular business models. A taxation amendment by moving the fiscal tax from work to natural resources use and consumption is creating incentives in saving the natural resources and bringing materials in a closed circle, reinforcing the circular economy. Lower taxes on labour would allow the maximum element in human capital, stimulating services, innovation and education.

What are the main trends in the current fiscal systems to encourage circular economy?

Internalization of the external costs. The governments worldwide avoided, for long periods, to internalize the external costs, and even now they are hesitant to change the enterprise legislation. An external cost occurs when the production or consumption of a good or service requires costs incurred by a third party. These costs are born by the society or by the natural persons, rather than by the polluter. Internalization of the external costs means that the total economic, social, health and environment costs are covered by the price of a product or service, application of the “polluter pays” principle.

However, “polluter pays” taxation gained support in time. The carbon emissions are the focus of attention, important institutions arguing in favour of setting a price for the carbon. The landscape of the green taxes changes rapidly worldwide due to the trend of internalizing the external costs. Fiscal instruments, such as the carbon tax, or similar, are the most efficient policies which reflect the environmental costs within the price of energy and which promote the development of clean technologies, while providing a valuable source of incomes. The fiscal policies also play an important role in approaching other major environmental challenges, such as air quality and urban crowding. The carbon taxes might bring significant revenues to the public budgets.

Low environmental taxes. The environmental taxes have a high growth potential, still unused, and are less denatured than the taxes on labour and incomes. The administrative costs and the transaction costs for green taxes are lower than in other taxes (particularly the income taxes). Nevertheless, in the EU, the environmental taxes have been at the lowest level for more than a decade. The environmental taxes, in agreement with the definition used by the European Commission, include the taxes on energy, transportation, pollution and extraction of resources. The energy taxes are levied on the energy products used both for transportation and for stationary purposes, gas and diesel oil included, fuel oils, natural gas, coal and electric power. The fuel taxes for transportation are levied for the use of energy products/fuels for transportation. The transportation taxes (except the fuel) are linked to the property right and to the cars. The pollution

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taxes are dues on the emissions in air and water, on solid wastes and noise management. The resources taxes include taxes pertaining to the extraction or use of the natural resource. The CO₂ taxes are included in the energy taxes rather than in the pollution taxes, and many times it is not possible to be identified separately. The environmental taxes are generally considered to be favourable to the growth, because they are less denaturing than the taxes on labour and incomes. The administrative costs and the transaction costs for green taxes are lower than in other taxes. Furthermore, the loss of efficiency due to the green taxes is much lower than for the labour taxes.

The European Commission says that the economic distortions caused by the labour taxation are significantly higher than the environmental taxes. However, the environmental fiscal revenues are a rather small part from the overall fiscal revenues in the EU. The environmental taxes remain underdeveloped in many member states and their revenues, in terms of GDP percentage, decreased despite the efforts of passing to a more ecological society.

Environmentally-deleterious subsidies. Almost all the countries use direct and indirect subsidies (tax exemptions and lower taxation rates) for environmentally-deleterious activities. Environmentally-deleterious subsidies are still increasing, even though the international institutions plead for the reduction of these subsidies because they hinder the enterprises to invest in ecological technologies. These subsidies encourage the excessive consumption of energy and accelerate the exhaustion of the natural resources. The total pollution costs, such as ecological damages, healthcare costs and economic impact, are not included in the pollution cost. These costs are born by the society or by the natural persons, rather than by the polluter. Almost all the countries use direct and indirect subsidies (tax exemptions and lower taxation rates) for specific environmentally-deleterious activities. These include tax exemptions and lower taxation rates for burning fossil fuels, which pollute, are hazardous to human health, cause premature death and climate changes. The subsidies with potentially negative environmental effects, particularly in the field of fossil fuels, transportation and water, are estimated to more than 1,000 billion euro per year. They cause high levels of wastes, emissions, extraction of resources and have adverse impact in biodiversity. They may block the enterprises in inefficient practices and prevent them from investing in ecological technologies. These subsidies take various forms, such as tax exemptions and lower taxation rates. The expenditure with subsidies worsens the fiscal balances and affects the priority public expenditure and the private investments, in the energy sector included. The subsidized energy distorts the allocation of resources by encouraging the excessive consumption of energy, promoting the high capital-consuming industries, reduces the incentives for investments in renewable energy, accelerates the exhaustion of the natural resources.

Value added tax. It plays a special role as factor within the consumption patterns. After the beginning of the financial crisis, the standard VAT rates have shown an increasing trend in most member states. The implicit taxation rate on consumption, as measure of the fiscal burden on consumption, didn't evolve significantly. The main legislative change, was the introduction of the lower VAT rates for a limited number of services based on intensive labour, in an effort of promoting labour force employment in these sectors. Generally, the modern European taxation systems apply high rates on labour force employment, while leaving the use of natural resources with low taxation rates, or even with subsidies.

Change of incentives. The increase of the taxation rates for the use of natural resources (such as water, toxic emissions, metals and minerals), brings both challenges and opportunities for the enterprises. On the one hand, this will be a challenge to reduce the water consumption and the carbon footprint. On the other hand, when the costs with natural resources increase, the business with efficient technologies thrives. This creates activities which "close the loop", or use renewable materials. When the labour taxation rates decrease, the human resources become more available. This creates major business opportunities. The business patterns can shift towards labour-intensive activities, including services of urban mining, repairs and maintenance, product remanufacture, research-development services. Lower fiscal burden on the labour force is also available to sectors such as healthcare, education and scientific research.

EU policies and initiatives. According to the European Union, the transition towards a circular economy, essential for the accomplishment of the resource efficiency targets set by Europe 2020 Strategy for smart sustainable and inclusive growth, implies:

- Stimulate recycling and prevent the loss of valuable materials;

- Job creation and economic growth;
- New business patterns, eco-design and industrial symbiosis, which can turn towards “zero wastes”;
- Lower greenhouse gases emissions and lower environmental impact.

There are many European policies, initiatives and measures that support specific aspects of the transition towards a circular economy, among which: implementation of Europe 2020 Strategy and greening the European Semester; implementation of the Roadmap to a Resource Efficient Europe, the 7th Environment Action Programme, which will guide the European environmental policy until 2020; EU contribution to the development of the world sustainable development goals for the post-2015 development agenda.

In 2015 the European Commission adopted a consistent package of measures on circular economy to help businesses and European consumers' transition to a stronger economy and circular resources are used in a more sustainable way.

The circular economy has the potential of creating many jobs throughout Europe, while preserving the precious and depleting reserves, reducing the environmental effects and making good use of wastes by transforming them into products. Sectorial measures have also been stipulated, such as quality standards for the secondary raw materials. Among the main actions that have already been adopted, or which are to be undertaken during the mandate of the current Commission, are: Development of quality standards for the secondary raw materials with the view of increasing the trust of the single market operators; Measures plan for ecological design, with the purpose of product recycling, additional to the energy efficiency; Review of the Fertilizers Regulation, with the purpose of facilitating the recognition of organic fertilizers and waste-based fertilizers on the single market, and of supporting the role of bio nutrients; A strategy regarding the plastic materials within the circular economy, approaching aspects such as the recycling potential, biodegradability, presence of harmful substances in the plastic materials, reduction of marine wastes, as stated in the Sustainable Development Goals; Actions for water reuse, including a draft of regulation regarding the minimal requirements for reusing the waste water.

The following elements are among the main issues of the reviewed regulation:

- A common EU objective of recycling 65% of the urban wastes, and 75% of the packaging wastes, by 2030;
- Promotion of economic instruments deterring the storage in garbage dumps;
- Concrete measures to improve reusing and to stimulate the industrial symbiosis – transformation of a by-product on an industry into the raw material for another industry;
- Economic incentives for the producers to introduce more ecological products in the market and to support the recovery and recycling schemes (for instance, for packages, batteries, electric and electronic appliances, vehicles).

All these programs are funded with over 650 million euro financing within Horizon 2020 Program and 5.5 billion Euro from structural funds;

Bibliography

- Gabriela Piciu coord. (2013) - "Finanțarea mediului-Politici și instrumente, evaluări ale implicațiilor asupra economiei în ansamblu", CCFM "Victor Slăvescu", 2013;
- Gabriela Piciu, Gheorghe Manolescu, (2011) - "Economics and Environment - A Strategic, Integrative and Convergent Approach of Financial Flows for an Industrial Regenerative Economics", Financial Studies No. 1/2011 Research Centre of Financial and Monetary Related Problems, Bucharest, ftp://www.ipe.ro/RePEc/vls/vls_pdf/vol15i1p210-241.pdf;
- *** European Commission(2014)- "Scoping study to identify potential circular economy actions, priority sectors, material flows and value chains" Funded under DG Environment's Framework contract for economic analysis ENV.F.1/FRA/2010/0044,2014
http://www.ieep.eu/assets/1410/Circular_economy_scoping_study_-_Final_report.pdf;
- *** European Commission(2015)-"Roadmap: Circular Economy Strategy";
- *** European Commission (2013) Europe , 2020 Targets: Research and development