

# **European Employment Observatory**

## **EEO Review: The Employment Dimension of Economy Greening**

### **Estonia**

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## **1. Introduction<sup>1</sup>**

Estonian energy intensity, measured as gross inland consumption of energy divided by GDP, is very high: in 2007 it was 581 kg of oil equivalent per EUR 1 000, exceeding the EU-25 figure (165 kg) by more than three times. This is mainly caused by the energy sector, which is the biggest user of natural resources and polluter in Estonia. Estonian electricity production is based on oil shale and is interwoven with the issue of energy security. Regardless, the necessity of reducing energy intensity has been recognised. The Estonian government has initiated an ecological tax reform (ETR) in 2005, which foresaw new environmental taxes (electricity excise from 2008) and increase of existing environmental taxes from 2006 (including pollution and resource extraction charges and fuel excises). In addition, it was decided that the personal income tax would be reduced from 26 % to 18 % by 2011, but this was frozen at 21 % in 2009 due to the economic recession. However, the ex-ante assessment of the ETR was done only for environmental effects, competition of enterprises in general and household incomes, and has not been carried out in relation to employment effects. Also, results from the ex-post monitoring of ETR have not been published so far.

There is some public discussion on climate and energy policy, especially regarding the building of nuclear power plants, the use of renewable energy sources and raising taxes to mitigate climate change. At the same time, there has been no public discussion about impacts on the labour market. The Estonian Development Fund (2009) has proposed green manufacturing as one of the key areas of high growth potential for the Estonian manufacturing sector. In this light, a discussion about potential labour market impacts and strategies to anticipate and manage these impacts would be needed.

## **2. Labour market outcomes**

The issue of ‘green economic growth’ was included for the first time in the Strategy for Competitiveness 2008-2011, which among other things, aims at ‘ensuring the security of the energy supply and the development of a competitive and environmentally-friendly energy sector’.

An important part of the strategy is improving innovation in the field of environmental technology and higher value-added activities in the use of renewable natural resources. However, the Estonian government has not yet developed a separate National Roadmap for Environmental Technologies, as per the EU initiative since 2005. The Ministry of Environment has commissioned some studies to map the market situation and innovation potential of environmental technologies in Estonia. The main areas are energy, bio-energy and energy efficiency, waste technologies also construction sector, monitoring equipments. The studies have revealed that, until recently, there were no coordinated actions and financing schemes to exclusively develop and acquire eco-innovative

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<sup>1</sup> This article was written with the help of Helen Poltimäe, Tea Nõmmann at the Stockholm Environment Institute Tallinn Centre.

technologies and the general awareness has been low, even though developments have been made in some areas. During 2009, using environmentally efficient technologies give extra points to enterprises applying for structural fund support for new technologies. The potential of public green procurements and investments has not been tapped yet and some very slow progress is being made in this field.

There exist several national development plans in energy policy. For example, the Ministry of Economic Affairs and Communications has guided the Transport Development Plan 2013, the Development Plan of the Energy Sector until 2020, the Development Plan of the Estonian Electricity Sector until 2018, and the Energy Saving Program 2013. Out of these, only the Development Plan of the Estonian Electricity Sector analyses effects on the labour market. According to the development plan, there will be no big changes in employment in the energy sector of Estonia. About 1 000 jobs are predicted to be lost in the energy sector in the near future. However, the reason for this is not climate policy, but rather, the increasing efficiency of the energy sector. The biggest employment effects are caused by changes in oil shale energy, where about 200 jobs will be lost, but this is in accordance with the usual outflow (retirement and other reasons). There will be a significant decrease in oil shale energy production by 2016, which will cause the loss of 400-900 jobs. New wind and gas production units do not use much labour force. The issues of more efficient energy production, smaller CO<sub>2</sub> emissions and energy security, have initiated the discussion on a nuclear power plant in Estonia. It is estimated that building the nuclear power plant would create about 260 highly qualified new jobs, but only around the year 2025.

The Programme for Saving Energy 2007-2013 shows that the changes in the economy have increased the demand for specialists in modernising energy technologies. There is a lack of such experts due to improved opportunities for labour mobility and low interest in vocational training and engineering. On the other side, new technologies decrease labour intensity, having a negative impact on employment.

In addition to raising taxes to reduce energy intensity and mitigate climate change, another sphere that has been discussed, is supporting the insulation of houses. This topic has been raised by the green party and supported by the government at the end of 2009. In the short-term, this will support employment in the construction sector. However, considering the current economic recession and the rapid decline of the construction sector in terms of employment, this will most probably help retain employment in the sector rather than create new jobs.

The impact of measures to mitigate climate change on different economic indicators has been assessed by Kiuila and Markandya (2009) using the computable general equilibrium model. They simulate the impact of carbon tax reform on the Estonian economy, building different scenarios of tax reform. The model has been calibrated for the base year 1997, providing results for the year 2012. Different scenarios use different CO<sub>2</sub> tax rates and different ways for refunding. Based on the outcome, the authors state that the long-term results of the proposed tax reform should not hamper economic development. The sectors

which are directly bearing the burden of tax reform will not break down even if carbon taxes at levels similar to other EU countries are introduced. The best scenarios from an economic perspective are those where the revenues from a carbon tax are recycled to enterprises in the form of subsidies for environmental protection facilities.

Kiula and Markandya refer to European surveys that state that the employment impacts and carbon reduction impacts depend on a number of critical assumptions, including those relating to the degree of substitution between capital and labour, and between energy and capital in production, the mobility of capital and the extent to which the tax can be shifted to non-workers. According to the study of Kiula and Markandya, the employment effects are neutral or positive for all the scenarios used, ranging from 0 % compared to the business-as-usual scenario up to 1 %, i.e. an additional 7 000 employed persons.

Other areas affected by the greening policies, but where the impact on employment has not been discussed, include waste management and the transport sector. The Ministry of the Environment is administrating the implementation of the National Waste Management Plan 2008-2013, which includes the aim to develop the waste management infrastructure. According to the plan, several waste treatment facilities are planned to be opened while some old facilities not corresponding to standards are to be closed down. At the national level, the employment effect of these activities is insignificant, while at the local level, the number of jobs created or lost has more impact. Most probably, the employment effect will mainly be experienced as regional employment reallocation rather than as increased or reduced employment levels.

In the transport sector, one of the aims set for 2013 is to minimise the negative environmental effects of the sector. The employment impact of the plans outlined in the Transport Development Plan 2013 seems to be rather indirect and limited to the skills need in the sector. For instance, supporting implementation of environmentally friendly technologies and development of electric transport might induce the need for new skills in the sector.

### **3. Review of labour market policy developments**

The European Commission (2009) has defined three broad labour market policy areas, which are relevant in terms of the greening economy: supporting transitions, investing in human capital and skills anticipation, and promoting partnerships and information sharing.

#### ***3.1. Supporting transitions***

In terms of the expected structural changes in the economy, it will be important to support transitions between sectors, as well as regions, to avoid the deepening of structural unemployment. In this respect, implementing flexicurity in the national labour market is of special relevance. In recent years, considerable efforts have been made towards flexicurity, resulting in the adoption of the labour law reform in July 2009. The

focus has been on raising flexibility in the labour market and improving access to and provision of active labour market policies. Attention to the inclusion of adults in lifelong learning has increased as well. At the same time, the increase in social protection that was also supposed to come with the adoption of the new labour law was postponed due to budgetary constraints. According to Võrk (2009), the most plausible result of the reforms is that flows into unemployment will increase, since it is now cheaper for firms to fire employees. The reduction in redundancy benefits reduces the income of the unemployed which may increase the incentive to search for a job. However, any positive effect on the labour supply is modest in the current economic crisis, because of lack of labour demand.

Active labour market policies (ALMPs) also have an important role in supporting transitions in the labour market. However, there are no special active labour market measures implemented in Estonia, to support going green. Also, the expenditures on ALMPs in Estonia have been the lowest in the EU, amounting only to 0.054 % of GDP in 2007 according to Eurostat data<sup>2</sup> (compared to 0.663 % for the EU-27). As a result of the current economic crisis, the Government has decided to increase ALMP expenditures up to 0.42 % of GDP. This will be achieved mainly with the support of EU financing (Strategy for Competitiveness 2009-2011).

Low expenditure on ALMPs has been accompanied by a low level of participants in these policies. In the third quarter of 2009, only 9 % of the registered unemployed participated in active measures (Unemployment Insurance Fund). The goal of the Estonian Government is to reach 35 % by 2011 (Estonian Action Plan for Growth and Jobs 2008-2011).

The Unemployment Insurance Fund also implements the ESF programme “Increasing the Supply of Qualified Labour 2007-2013”. Measures contributing to supporting transfers in the labour market include a reaction service to collective redundancies; providing information on career prospects and training opportunities, career counselling and labour market training to the unemployed and those who have received notice of redundancy; as well as mediation of labour to employers.

Although these policy measures support transitions in the labour market, there is no specific attention or strategy in place for sectors hit by greening policies (such as energy intensive production, oil shale industry etc.). Thus, it will be important to analyse existing labour market policies in light of the greening policies and their impact on the labour market. Also, with the ESF measures described above, cooperation between employers and the Unemployment Insurance Fund will be of great relevance (especially in labour mediation services).

### ***3.2. Investing in human capital and skills anticipation***

The shift towards green technologies will increase demand for workers with the corresponding specific skills in developing and applying these technologies (European

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<sup>2</sup> Eurostat database, expenditures on services and measures (categories 1-7)

Commission 2009). In the Estonian energy sector, the lack of experts has already been pointed out due to improved opportunities of labour movement and low interest in vocational training and engineering (Program of Saving Energy 2007-2013).

In this context, two policy aspects are of special importance. First, considerable attention has been placed in raising the quality and popularity of vocational training among students in the Development Plan for the Estonian Vocational Education and Training System 2009-2013. The aim is to raise the share of vocational secondary education students among all secondary education students to 40 % by 2013 from 32.9 % in 2008. Secondly, the government aims to increase the popularity of studies in natural and exact sciences mainly through a considerable increase in the number of study places in the field in higher education. In primary and secondary schools, the importance of science subjects and freedom of choice over subjects has been increased. In non-formal education institutions, curricula in technology and natural science are being developed (Estonian Strategy for Competitiveness 2009-2011).

One precondition for the successful adaptation of education and training systems to a greening economy is to identify and anticipate future labour market needs for green skills. This will require the development of viable tools for skills monitoring and anticipation (European Commission 2009). Despite the fact that there are several instruments in place, the overall system for forecasting labour market needs and matching them with training provision is still in an early development phase in Estonia. Improving the current tools is a challenging task mostly due to the lack of data (Leetmaa 2008). The improvement of forecasting tools has been planned by the Ministry of Education and Research for 2010-2013. (Adult Education Development Plan 2009-2013). The aim is to introduce skills components, instead of the occupational groups currently used (Adult Education Development Plan 2009-2013). This would also improve the possibilities to forecast the need for "green skills" in the economy.

### ***3.3. Promoting partnership and information sharing***

From an employment policy perspective, the fight against climate change and the implementation of energy policies might be coupled with some information failures: workers may not be fully aware of the impact of economic developments on new job prospects; business investment decisions may be biased by the uncertainty of policy development; training and educational entities might lack the information about new skills needs, etc. Measures to improve the flow of information on the policies in place and green job opportunities will be needed, and a major challenge will be to ensure that this leads to timely anticipation of possible restructuring processes. (European Commission 2009).

According to the European Commission, this can be partly assured through effective social dialogue and the involvement of all stakeholders. In Estonia, the issues of the green economy have not been high on the agenda of the social partners and a discussion on these issues between employer organizations and trade unions has not developed yet.

Furthermore, the capability of the social partners in affecting these issues through collective bargaining are limited. This is due to the low levels of collective agreement coverage and trade union membership in Estonia – 25 %<sup>3</sup> and 7.6 %<sup>4</sup> respectively (EIRO).

The European Commission has also stressed the need to steer structural fund spending towards more effective information systems and to use public employment services in spreading information about careers and skills needs in this area. In Estonia, the availability of career counseling and information sharing has been widened from the unemployed to also cover those in employment, through ESF funding in the framework of the Programme “Increasing the Supply of Qualified Labour 2007-2013”. However, there is no specific attention turned to the greening of the economy in implementing these measures. The skills forecasting tools should be the basis for providing labour market information and career counselling. For this purpose, the development of these tools is essential (see also 3.2 above).

#### **4. Conclusions**

To conclude, the employment impact has not been evaluated extensively in the development plans of greening the economy. However, the significance on this exercise should not be undervalued. According to the European Commission (2009), the systematic evaluation of the effects of climate policies in terms of their full range of potential impacts – environmental, economic and labour market – should be an important step in the process of improving policy design as a way of securing better overall outcomes, viewed from an economic, social and environmental perspective.

There have been no labour market policies or tools introduced specifically to support going green or the creation of green jobs. However, several labour market policies have the potential of supporting these developments in the labour market.

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<sup>3</sup> Percentage of employees covered by collective agreements (Working Life Barometer, 2005)

<sup>4</sup> Union members as percentage of all employees in dependent employment (Labour Force Survey, 2007)

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