European Employment Observatory

EEO Review: The Employment Dimension of Economy Greening

Croatia

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1. Introduction

Addressing climate change as an issue raises many questions and concerns about the capacity of societies to respond to the current and future change in a thoughtful and ethical manner. One of many questions put forward is: Should we focus on slowing future climate warming by reducing emissions through mitigation measures or focus on adapting to future climate warming, or both? This is a particularly complex issue for a small country like Croatia which is in transition and post-war recovery.

The Croatian government is actively working to reduce emissions, while the Croatian Parliament has been proactive in adopting laws that deal with climate change, ratifying the Kyoto Protocol and passing the Air Protection Act and the Environmental Protection Act.

According to the first comprehensive national public survey on public attitudes towards climate change in Croatia (Landau et al, 2008), Croatians are concerned about climate change and supportive of the changes that may be necessary to address it. The public opinion survey of 1 000 Croatians indicated a high degree of concern about climate change and a willingness to act. The majority (96 %) of Croatians surveyed believe that climate change is a 'serious' problem. Over two thirds of respondents indicated they would be willing to pay more money for heat and electricity to ensure that their energy sources were renewable. Furthermore, many Croatians are already taking action – such as reducing energy use – to reduce their carbon footprint.

In Croatia, in spite of the growing awareness of the significance of climate change and climate and energy polices as well as environment problems and the existence of a number of strategic documents, there is still not enough knowledge or application of the concept of sustainable development in the design and implementation of economic and social development policy. Thus, activities on the labour market related to the *greening* economy are almost negligible.

2. Labour market outcomes

In general, Croatians are very supportive of countrywide policies to reduce emissions and believe that more should be done. Almost half of the respondents to the survey referred to above think Croatia is currently doing less to reduce emissions than EU Member States and other developed countries. A large number of respondents feel that in the future Croatia should do more than or the same as other EU Member States. However, when asked who *should be most responsible* for actually reducing emissions, most Croatians believe that the government should be primarily responsible.

In October 2005, the European Council decided that the EU accession negotiations with Croatia should begin. Only six months later, Croatia started the first part of the negotiations related to the environment. The screening phase for *Chapter 27 Environment* of the negotiation process, it was claimed, was likely to last longer than that for other chapters. The explanatory phase of the screening was used to prepare the national review and evaluation of actions already undertaken, and actions crucial for the further transposition. This task requires a revision of the legislation that is in force in Croatia at the moment, but also entails a full

evaluation of what can possibly be achieved in a realistic timeframe, in which ways and with which financial sources. Despite the recently prepared Sustainable Development Strategy at the central level and various Regional Development Strategies at local level, the lack of necessary knowledge about the sustainable management of development resources at various levels of government is disturbing (Kordej-De Villa, 2005).

Croatia mostly finished adopting its legal framework as the first step of the EU accession process, but the implementation and enforcement of the legal acts are crucial matters that require careful financial planning. At the moment, Croatia is faced with this costly task of achieving full compliance with the environmental *acquis*. The crucial component of the implementation plan is an investment or financial strategy for the implementation of the concrete requirements prescribed by the specific directives. Those investment strategies should be reflected in the overall national financial strategy for all the requirements in the environment sector. Substantial investment is required for sewage systems, wastewater treatment, municipal waste management and drinking water supply.

Both the Government and citizens are concerned and interested in climate change issues. Croatia is not a major emitter of greenhouse gases (GHGs); with approximately 5 tonnes GHGs per person in 2004 (after including land use changes), compared to an average of 11.5 tonnes per person in 2004 amongst all Organisation for Economic Co-operation and Development (OECD) countries. As Croatia has committed itself to keep GHGs at the 1990 level, the government is already pursuing several strategies to reduce them. Once the Kyoto Protocol comes into force, Croatia - as a signatory - will have to reduce its greenhouse gas emission to 95 % below the 1990 level by the year 2012. Obligations taken under the Kyoto Protocol might be difficult to meet, particularly in the circumstances of current economic crises and increased public expenditures on social welfare and unemployment benefits.

Environmental regulations offer a useful instrument for raising revenue, primarily through 'green' taxes. Governments tax activities that generate environmental damage. Regarding the actual experience of applying green taxes in Croatia, almost nothing has been done. Taxes in Croatia are the most important source of public revenues, but in the field of environmental protection financing activities are in an embryonic phase. Situation is better with carbon fees as the government had introduced a carbon and other air pollutant fee of 14 HRK (EUR 2) per tonne, rising to 18 HRK (EUR 2.50) in 2009.

The preparation of the labour force for green jobs is particularly unfavourable. In addition to the relatively low level of general knowledge about the issues, problems are also caused by insufficient links between the education system, the economy and employers. Thus, not enough attention is given to the estimation of the future trends and needs of the labour force, which causes problems in providing education and skills programmes required for the skills and occupations sought by the labour market.

Labour market requirements stemming from the environmental protection agenda present serious problems and their solving must be taken seriously to achieve and maintain the quality of life for future generations. Environmental policy represents a change in the way of everyday life, and needs to be included in the public development policy. In Croatia, due to present economic structure and geographical position, the most important sectors identified as

those that have the strongest influence on the environment (and will be influenced by climate change in the future) are tourism, coastal resources (especially related to the sea level rise), agriculture, fisheries and mariculture.

The impacts of climate change on specific sectors can have wider effects on the economy as a whole. For example, the loss of income by farmers and the higher cost of food would affect the larger economy. The same is true for tourism, which is an important sector in the Croatian economy and contributes (directly and indirectly) around 20 % of total GDP and generates almost 29 % of total employment. If foreign and domestic tourists do not visit the Adriatic coast because the climate is too hot, hotels, restaurants, supermarkets and vacation apartment owners will initially be hardest hit by the resulting drop in tourist expenditures. By the end of the 21st century, because of climate change, hotter day-time temperatures along the Adriatic coast will cause many beach tourists to avoid these destinations in favour of cooler locations in the north. This could have serious adverse consequences on many local communities and, given the important role of beach tourism, on the national economy. Hotter, drier summers with more extreme weather events and a rising sea level, may put human and economic development gains at risk. While a tremendous number of jobs are created by the tourism sector, currently there are structural employment problems within it which make the workers quite vulnerable. Currently employment possibilities in tourism industry are mostly characterised by the seasonal nature of the employment, and the fixed and short-term contracts common, which provide no job security. Furthermore, there is inadequate professional (vocational) education and a lack of programmes for lifelong learning and skills improvement. Finally, there are inadequate public-private partnerships, such as privately-funded scholarships for students of higher education (businesses paying for education for their future employees). Such problems can increase in the situation of unfavourable climate changes.

Due to climate changes, coastal erosion may speed up and a number of beaches may be destroyed or become submerged. Sea level rise can negatively affect many of the plants and animals of the coastal ecosystems, including forests. Thus, the tourism and recreational businesses that depend upon coastal areas may be severely affected. Since the tourism industry is predominantly seaside-oriented, sea-level rise can also have various unfavourable impacts on this sector. Income and job losses in local tourism-centred communities have the potential to spread throughout the economy as the flow of goods and services between the tourist sector, and other parts of the economy would be affected.

There are some other labour market outcomes, particularly in agriculture sector, fisheries, mariculture and industry. However, employment in these sectors is constantly diminishing, regardless of climate change. For example, in the period 1991-2001, the agricultural labour force decreased by 37 %. Thus, although the impact of climate change on these sectors will be significant, it will influence a relatively small part of the total employment. No doubt, that the development of Input-Output table or Computable General Equilibrium (CGE) model could be used to translate changes in local spending caused by climate changes into their effects on national income and employment.

3. Review of labour market policy developments

As mentioned above, in Croatia there are almost no labour market policy developments specifically focused on the greening of economy. Thus, it is necessary to give attention to various documents, strategies, programmes and projects *related* to this issue.

Croatia started the elaboration, drafting and implementation of the various documents and strategies for full participation in the Open Method of Co-ordination in fighting climate change and environmental degradation. Regardless of significant improvements in the legal framework and environmental policy in Croatia (for example, the National Environmental Action Plan states a reference to EU regulation for each measure), there is insufficient co-ordination and co-operation of stakeholders at the various levels. Environmental protection authorities are divided between central governmental bodies and local and regional self-governmental bodies, but there are the cases of insufficiently clear division of authority and responsibility. Furthermore, since authorities are (at least in theory) strictly divided, there is no integral approach to environmental protection. As a consequence, a sectoral approach to the environmental protection dominates. This primarily refers to water, nature and physical planning. Ministries and administrative organisations have executive powers in environmental protection. Country and city offices for physical planning, housing and public utility services, construction and environmental protection perform tasks at the local level. The local level ensures the implementation of the environmental protection programmes; prepares and implements the rehabilitation programmes, monitors the state of the environment and measures the emissions.

The National Environmental Strategy, adopted by the Parliament in 2002, is based on the principles of sustainable development and deals with the state of the environment, international obligations, key objectives and priorities. It also includes the review of the state of affairs and trends as well as actions to be undertaken in priority areas. The National Environmental Action Plan attached to the Strategy comprises detailed action plans for individual thematic environmental protection areas and economy sectors. The plan includes objectives, measures to achieve objectives, the level of actions, authorised implementing bodies, time schedules and possible sources of finance. The document sets out preliminary implementation assessments of the targeted measures indicating the need for significant investment increases in these sectors. Even so, one can argue that neither the strategy nor the plan has been an implementable document, lacking specific steps to implementation, without efficient monitoring in place and guidance on the management of the possible financial sources (Vlašić and Vlašić Feketija, 2006).

An important body in the field of environment protection is the Croatian Environment Agency (CEA). It is an independent public institution established in 2002 to collect, integrate and process environmental data. In the seven years since its founding, the Agency made significant progress, particularly in carrying out its major task of strengthening and extending the Environmental Information System (EIS). By the end of 2008, thirty databases have been created on different environmental themes that are available to the public in an integrated network on the Agency's web site (http://www.aso.hr). Databases on 11 sub-systems were developed, including Air Quality Information System; Inland Waters Information System; Marine Information System; Soil Information System; Biodiversity Information System;

Waste Management Information System; Agriculture and Forestry Information System; Industry and Energy Information System; Transport and Tourism Information; Health and Safety Information System and General Environmental Themes Information System. In addition to the databases, intense activities have been carried out to establish a network with the databases of other institutions. Another important activity was the development of the Croatian EIS Management Programme for the 2009-2012 period.

Due to the efforts of various stakeholders, primarily the CEA, Croatia has introduced a 'feed-in tariff' to encourage the renewable energy measures by allowing small producers to sell electricity from renewable sources to the grid. This tariff has been in place since 2007, and projects that take advantage of this initiative are beginning to commence. Interest in this programme is significant. Already more applications for installing wind capacity and receiving compensation for it have been received than can be supported. While the feed-in tariff is a major step forward, its duration is limited and the new producers selling electricity to the grid can only receive payment for the next 12 years. There are also rules designed to improve the energy efficiency of new buildings and an ordinance on labelling passenger cars.

On the path to the EU membership Croatia will have to develop a coherent development policy framework, in which environmental policy will be an important counterpart to sectoral policies. Croatia has been improving its environmental protection system and needs to integrate environmental issues into development plans. There is a need for a better communication among various ministries, administration and governmental bodies, but also between decision makers and public in general. Public involvement is critical to an effective response to climate change. A public that is well-informed and educated about climate-related threats and measures to address them is crucial because the process of mitigation and adaptation cannot happen without changes in individual behaviour and sufficient public support for political decisions.

Having in mind the importance of tourism industry for the Croatian economy and climate change, it is necessary to focus on 'climate-proofed' tourism in Croatia – including extending the tourism season and enhancing the service capacities and products offered within the industry. Furthermore, there is a need to encourage measures to increase the energy efficiency of hotels and other buildings, including improving the ability to keep buildings cool in hot weather. This will also have impacts on emissions reductions.

There are some quite positive examples, like the project 'Conservation and Sustainable Use of Biodiversity in the Dalmatian Coast', supported through the Greening Coastal Development scheme (COAST). It has been developed with the support of the United Nations Development Programme (UNDP) and in co-operation with the Ministry for Environmental Protection, Physical Planning and Construction and other line ministries, four Dalmatian counties and numerous local NGOs, firms and individuals. The project is supported by the Global Environment Facility (GEF). Area covered by the COAST project is the Dalmatian coast, within which four demonstration locations have been recognised and selected due to their exceptional biological and landscape value. The aim of the project is to systematically and continuously influence economic activities and practices in tourism, agriculture, fisheries and mariculture with the aim of promoting sustainable development.

To build and develop adaptive capacity, key Croatian stakeholders should be made aware of current and potential future climate-related impacts on the economy, particular sectors, and labour market, and the level of vulnerability. Accordingly, programmes for the adjustment of the labour force and adaptation measures can be taken. This has not been happening.

4. Conclusions

Croatia's government has sent a strong signal to businesses and the citizens that reduction of emissions is important. Croatia as an EU candidate county must, in the relatively short period of time, comply with a large number of requirements in the area of environmental protection. Labour market adjustment is necessary for the implementation of various strategies and policies. As a result of the overall process of harmonising national legislation with the environmental *acquis communautaire*, better environmental quality is expected. Currently, Croatia faces a serious problem of inefficient public administration. The institutional structure and activities of individual sectors are still not co-ordinated, and the ministries responsible for environmental as well as labour market issues do not integrate administrative and legislative functions in the area of environment and labour force development.

The extremely complex requirements to prepare the skills and education of the labour force for green jobs in the current socio-political context in Croatia require a more cooperative and efficient inter agency system. As a precondition of successful preparation for the greening of the economy, the education system should be changed from supply to demand-driven, i.e. the system should provide learning alternatives that students (of all ages) can choose from, with increasing responsibility to students as they get older. Curricula and syllabi at all levels should be reformulated to bring them into closer correspondence with economic needs, particularly regarding knowledge and skills linked with the environment protection and energy efficiency.

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