

European Employment Observatory

EEO Review: The Employment Dimension of Economy Greening

Hungary

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1 Introduction

Governmental greening policy in Hungary is widely supported through the National Climate Change Strategy for Hungary (*Nemzeti Éghajlatváltozási Stratégia, NÉS*), based on the comprehensive research project VAHAVA, started in 2003 and adopted by the government in 2007. The strategy is for the 2008-2025 period, which implies the need for relatively fast-paced policy action.

Implementing the NÉS, the government has already designed the Operational Programmes and their measures for the 2007-2010 period with the NÉS in mind. It adopted the National Climate Change Programme for 2009-2010 (*Nemzeti Éghajlatváltozási Program, NÉP*) at the end of 2009, as a first in a series of biannual programmes. Similar to the NÉS, the NÉP interprets the reaction to climate change in a narrow way, not including the labour market aspects or laying out a plan for a large-scale reform of the tax system. Adopted one year since the outbreak of the economic crisis, the government did not attempt to re-work the NÉP to put greening at the forefront of its recovery policy.

According to the results of opinion polls, individuals in Hungary appear to be concerned about climate change (Mosoniné – Pálinkó – Stefán, 2006; EC, 2008, Cognative, 2008 and TÁRKI – Image Factory, 2007). Also, a number of NGOs are active in the area (Hungarian Greenpeace, WWF and many local-only organisations, such as the Energy Club [Energia Klub]). Despite all the efforts, public debate is not only weak on greening in general, but is also non-existent in the case of critical questions, such as the unanimous vote of representatives for the planning of a new nuclear power plant in Paks – not discussed in the NÉS or the NÉP. Companies in particular are in general rather passive with regard to economy greening – the discussion forum within the strategic environmental investigation of the NÉP had contributing delegates from many environment protection organisations, but none representing the private sector (KvVM, 2009a). This is noteworthy as large Hungarian firms are potentially affected by a strict climate policy.

2 Labour market implications of green measures

Although the importance of supporting horizontal policies is stressed, the NÉS is funded and formulated as a conservative greening programme, touching upon mostly the core of the environmental policy. The NÉS discusses other related areas and the means of implementation in passing. The first such set of concrete programmes is given in the NÉP, which defines concrete actions in the areas of:

- Energy efficiency (insulation, remote heating modernisation) for the private and public sector,
- Development of transportation, including public transport (no systemic change though),
- Measures in sustainable forest management and agriculture,

- Development of waste management and sewage services (larger scale),
- Environment and biodiversity protection measures,
- Health protection (against excessive UV and heat radiation),
- Water management and flood protection,
- Information and education on climate change,
- Research and Development.

Most of these actions are developmental efforts and thus have a temporary effect. They are financed through the Operational Programmes of the New Hungary Development Plan from EU funds. Although such details are not given explicitly, it is expected that forest, waste and water management can have longer-term effects, including through the need to operate the facilities put in place. The NÉP does not include many of the potential greening tools (enumerated in UNEP/ILO/OIE/ITUC, 2008, for example) and this is in part pointed out in the document itself, indicating the areas to be considered in future. Such areas include R&D on renewable energy use, on regional sensitivity to climate change, and on agriculture tolerant to water shortages. Being left out from the current NÉP, these areas are part of the NÉS and are expected to appear in later programmes.

Because Hungary is a relatively small country, many of the effects of climate change are the same over its whole area. Nevertheless, there are important exceptions, such as areas relying on agriculture and being affected by water shortages and floods, such as the area of the Great Plain. In the case of sectors, we also find little imbalance, partly because the political and economic transformation in the first part of the 1990s has already destroyed most of the jobs in heavy industries and mining. Because of this, negative gross effects of a green structural change – through lost and transformed jobs – will probably affect the energy, transport, construction and parts of the manufacturing¹ sector, if their firms cannot adapt to the new situation. It is impossible to estimate at present how deep and quick such a restructuring might be.

Despite being thorough in the areas of the expected impacts and direct development efforts, the NÉS and also the first NÉP is completely silent on the labour market effects of climate change and the potential effects of related policies. National research on this topic is almost nonexistent in Hungary, as the two related documents to be found are a recent summary of international documents (Varga –

¹ A recent example of this is the closure of GE manufacturing facilities in Hungary in reaction of the EU ban on traditional 100W light bulbs, resulting in the destruction of 2 570 jobs during 2010 and 2011 without creating new jobs locally.

Homonnai, 2009) and the attempt on proposing a fiscal stimulus package drafted by LMP, a start-up green party and a think-tank (LMP-Compass Institute, 2009). Being informative for the general public, these documents do not contain original and scientifically funded research respectively; hence a thorough analysis has to be substituted by calculations based on results that are dated and were not produced with this particular application in mind. Also, because of the potentially many ways a greening policy can develop, its employment effects can be assessed safely only on the basis of the NÉS and the NÉP and in the short term.

Relying on Operational Programmes which are delivered from public budgets, the organisations targeted can prepare for the extra future demand. This means that the need for labour can be known years ahead, thus well-informed players can expect to supply the skills required. Perhaps because of this, the government has not identified skills shortages either during the implementation of its greening policies or through its measures to meet the local 20-20-20 targets. Although shortages are difficult to identify and there is no in-depth analysis available, the government has decided to increase state-funded places in higher education in science, business and health courses at the expense of humanities (Budai, 2009).²

For further analysis, there is a need to identify the targeted sectors, and to have an estimate on the elasticity of their labour demand with respect to output and consider other intervening policies, such as those affecting wages. Having identified the direct effects, one might want to look at indirect ones in the spirit of the calculations already performed elsewhere (GHK, 2008). At the moment, such calculations are not available in Hungary. The sectors receiving the stimulus of government support are mostly construction and engineering, followed by agriculture and services, to a smaller extent. Individual projects supported within the framework of the NÉP amount to tens or – in a few cases – hundreds of billions of forints (a summarised budget for the NÉP or a breakdown by labour/capital/other expenses is not available, see the description of various OPs).

In the absence of systemic changes, interventions appear mostly as an increase in demand (in the case of no crowding-out) with a size calculable on the basis of

² An ex-post and very short-term measure of shortage in an occupation is its (lower than average) unemployment rate or (higher than average) wage growth. As there is no fine and recent enough data available on the latter, I have calculated unemployment rates from the Hungarian Labour Force Survey micro-data from the fourth quarter of 2008. People with education in energy, electronics, agriculture and environment protection had unemployment rate below the average (3.6, 3.8, 3.8 and 2.6 %, respectively), while those with education in forestry and construction had above-average unemployment rates (with 9 and 6.8 %, respectively). Although these numbers are rough estimates only, they show that the situation of skills shortages is not clear cut.

sector-specific output-elasticities of labour demand. There exist estimates of these elasticities (Kőrösi, 2008), but because the exact size of the interventions is not known, the calculations of the absolute numbers are not possible. Manufacturing had the highest, and construction the lowest elasticity (0.2) in 2002.³ It is important to note that current greening measures appear to be concentrated on sectors with lower output-elasticity of labour demand, while some of the interventions can have effects in sectors with higher-elasticity. At the same time, results show that labour demand in construction has one of the highest elasticity of wage costs, suggesting that a greening policy might want to carefully select the optimal policy instrument – if possible – on a sectoral basis. Considering the technology applied in the respective projects, officials within the National Development Agency estimate that 30 to 60 (with an average of 40) % of the spending on insulation and energy efficiency projects goes towards paying labour costs (personal communication).

Some of the government interventions aim at changing the production technology and inducing the more efficient use of energy. This has two main effects on labour demand. If costs are not modified by other policy, this means that energy will be cheaper to use, hence it will be used more by a competitive producer, but used typically less by a consumer targeting a relatively fixed amount of usage (although the so-called ‘roundabout-effects’ can appear here too; see Cseres-Gergely – Molnár, 2008, on the price elasticity of energy consumption). Although energy saving technology needs labour to be put in place, which is estimated to generate substantial labour demand, substitution towards energy generated by the improved technology can induce a decline in the use of labour in the longer term. However, keeping every other policy unchanged is not realistic: because the price of energy does not reflect the full environmental impact of its use at present, perhaps the most important task of governments is to make this cost more apparent by making energy more expensive through appropriate taxes as part of a comprehensive greening agenda. If such a step is taken, the price of energy rises, energy use drops as a result of substitution away from it. This second effect can at least eliminate the first negative effect.

Producing an actual assessment of greening does not necessarily require new methods. Firstly, a detailed analysis of the government spending is required, broken down by labour and capital costs, as well as by sector. As in the case of employment projections, a comprehensive approach attempting to look at the employment effect of any type of greening policy should be based on micro-econometric modelling of

3 These elasticities are short-term from a dynamic labour demand equation, which the author found sufficient to characterise firms' behaviour. Note that despite these results are produced with up to date econometric techniques, they rely on data that are several years old by now and on assumptions, such as that of homogeneous labour, that might not be appropriate in relation to the question at hand. Still, they are the latest published results available.

labour demand on a sectoral basis, so that the demand for heterogeneous labour can be taken into account. Research on labour demand has been conducted in Hungary; this only needs to be adapted to a sectoral/occupational breakdown most useful to analyse greening. If the spread of presently unknown technologies is foreseen, technology experts should determine the path of parameters characterising the production technology for the sectors affected, preferably reflecting the international experience. Spill-over and general equilibrium effects can be quantified by input-output tables, even if this approach is not compatible with the realistic labour demand estimates – such tables are available in the case of Hungary in 2000. A major forecasting project is to start in Hungary in 2010, but it has no greening dimension so far.

Restructuring does not only produce employment effects, but is also affected by the availability and condition of the workforce itself, as well as existing labour market policy instruments in place. At the moment, the employment level in Hungary is low, and is so mostly because of the low employment of the lower educated people. Employment opportunities for this group in appropriate green jobs could be a godsend for Hungarian labour market policy. Quick and positive reaction to structural change has no great tradition in Hungary either. Helping and letting market forces work will be a considerable challenge too, because there is little evidence on the local effectiveness of ALMPs, which might motivate policymakers to employ direct measures such as public works, instead of more active ALMPs. In addition, greening policies should either take into account or help fighting the very low mobility of the Hungarian population, in particular, the causes of the low willingness to commute and migrate.

3 Review of labour market policy developments

Because greening and labour market policy has no direct connection in Hungary, the latter do not have a deliberate, but only a potential positive effect on the efforts of going green. In 2009, the core spending on labour market policy from the budget of the Labour Market Fund, amounting to a total of HUF 260 billion (around EUR 1 billion, MPA budget document, 2009)⁴ was spread across four main areas:

- complex programmes (wage and contribution subsidies with or without training programmes), 34 %,
- training programmes, 10 %,
- passive support to the unemployed, 43 % and

⁴ This does not include the small rehabilitation-oriented job-creation expenses, social security contributions and expenses outside the Labour Market Fund, such as budget of the Pathway to Work programme.

- operational costs, 12 %.

In addition to this, the government has spend around HUF 97 billion (around EUR 366 million) in 2009 on the Pathway to Work programme, aimed at public employment of the long-term unemployed. Neither of existing labour market programmes currently support going green, but potentially all of them could, if a bias towards green jobs is added.

In addition to the cost of the provision of passive support, complex active programmes and the Pathway to Work programme have the largest share in the Hungarian labour market programme budget. It is the former that has the greatest potential in greening: training and wage/contribution subsidy can be targeted relative easily on green employment and the fact that the impact of such programmes is positive is well-known (see Kluve, 2006 and Card-Kluve-Weber, 2009). Public works is often a synonym for 'green' jobs in the most direct and crudest meaning of the word, involving cleaning of parks and public spaces. Despite being classified as green, this should not make the impression that the potential negative effects of such employment is non-existent and stresses the importance of developing a flexible indicator for 'green and decent' jobs. An interesting recent extension to the programme (called "Pathway to the world of work", started in the beginning of 2010) provides a means of directing participants towards the open labour market, but has no known greening bias.

Although not at the core of labour market policy, auxiliary government services can be expected to have the most significant positive impact on greening. Two of such promising instruments are a career guidance and a labour demand forecasting system which are being developed and planned, funded largely by the European Social Fund (under the schemes 2.2.2 and 2.3.2 of the Social Renewal Operational Programme). If implemented well, such systems can aid decision-makers of the economy, firms and potential employees alike to form expectations of changes in labour demand in the short and medium run and prepare accordingly.

Even if greening policies are in place (shifting prices to realistic levels or giving subsidy for efficiency improvements, for example), labour market policy goals have to change fundamentally. Economic growth in Hungary has been jobless so far, increasing only by one percentage point during the 2000s (see Bálint, Cseres-Gergely, Fazekas, 2009). As there is no reason for this to change automatically, policy needs a shift to change this tendency and give preference to labour-intensive technologies. The resulting jobs might offer lower wages than expected, but more secure and more decent employment opportunities. In addition, policy has to target the low-educated and those regions which have the worst unemployment rates (such as northern Hungary and south Transdanubia) or those expected to be hit hardest by climate change (the Great Plain). Greening measures might also want to concentrate on continuous operation rather than on initial development measures, to induce sustained employment effects.

The actual policy instruments of a green employment policy can be diverse. Instruments to reduce labour costs and offer better employment security would have the greatest employment effect. To achieve this, methods outside the run-of-the-mill toolbox of labour market policy have to be used, such as lowering the minimum wage or introducing regional differentiation of it (see Scharle-Váradi, 2009), introducing tighter requirements for occupational health and stressing the labour market integration of all types of disadvantaged workers at the same time. Also, because prices of important products (such as food and energy) will probably rise, at least in the short term, social policy will play an important role to support the change. Such an integrated policy is clearly difficult, but perhaps not impossible to launch. The first big obstacle is the lack of clear political will to formulate an employment-oriented greening policy as such.

If the decision for a green employment campaign is made, labour market policy has to improve its operations in general (efficient, well monitored and targeted active programmes, sufficient passive support, efficient matching of information on openings) and introduce a 'green bias' in the programmes, and put new measures in place. The most important of these novel instruments is perhaps an information system that is flexible and adaptive enough to circumvent false categorisation, but clear enough to allow the easy identification of green jobs. The forecasting system and the career orientation system, in preparation, could take this classification into account and signal the need and the availability of green jobs accordingly.

Climate change will have negative effects on regions and the country as such, while green restructuring will affect firms and perhaps also smaller regions. Because people in Hungary are, on average, not mobile (see Cseres-Gergely, 2004 for example), labour market policy will probably have to target regions and sub-regions. The Hungarian system of the PES is well suited for this task, as its offices are available in small regions, while co-ordination is delegated to the regional, NUTS II, level. Acting regionally also allows labour market policy to be integrated into complex development efforts, very much needed in underdeveloped regions of the country.

If and when a green labour market policy is launched, supplementary policies will play an increasingly important role. One such policy is the modification of the tax system, with a possible shift of taxes from labour to consumption of products and

services⁵. The immediate effect of such a change would be a relief of labour costs, hence increased employment on the one hand, and more expensive consumption on the other hand. The Hungarian labour market would certainly benefit from such a change as a budget-neutral operation would allow for lower contribution and tax rates than would be possible otherwise. Although this measure alone would require considerable flexibility, if the system of social security is not changed radically, sustaining or improving health services for example would require the redesign of the state budget, so that all incomes, including contributions, are pooled explicitly and all state-provided services are paid from this single resource. Although the de-facto situation is not very different now and the change would probably only ease administration, putting an end to the earmarking of contributions would probably be difficult to sell politically.

The difficulties only increase if we consider effects outside the labour market. According to the report of Ecostat (2008), the first Hungarian company in terms of its contribution to the GDP was the oil-company MOL, with an estimated contribution of HUF 600 billion, having around 16 000 employees. There are also other, albeit smaller, enterprises on the top 100 list of contributors, including firms active in the chemical, pharmaceutical and energy industry. Although demand for energy has a low price-elasticity, a simultaneous drop in the price of renewable energy and a simultaneous increase in the price of carbon-based energy can shift relative prices, resulting in a significant drop in the demand for the latter. If such a change becomes realistic and these firms do not develop production of renewable energy as a major part of their business, either a significant negative employment effect or strong lobbying against the changes can be expected.

4 Conclusions

The Hungarian greening policy is a detailed, thoroughly researched concept, which nevertheless does not address issues further from the hard core of climate change. Employment effects are one of the neglected areas. At the same time, a strong greening policy would benefit the local labour market. Showing signs of shortage recently, Hungarian science education has great origins and practices, making greening-related research and development a feasible development path. On the other hand, many of the green investments require the contribution of many not highly educated individuals, who are to be found in Hungary in a relatively large

⁵ A first step has actually already been taken. From 1 January 2010, tax on fuels has been increased by 5-10 %, the social security contribution rate has been lowered by 5 percentage points (from 32 %) and VAT has been increased from 20 % to 25 %. These steps were presented as recovery measures from the current depression, but are a part of the overall structural adjustment in Hungary and can be interpreted as a step towards greening the economy.

number. Labour market policies have to be tuned in general and related to greening in particular, but the infrastructure to support a comprehensive greening policy is in place.

Still, a master plan of greening, including for horizontal co-operation, is missing. The greening action plan is very cautious, including only the most necessary measures to respond to climate change. If greening is to become a priority and international co-operation is expected to be achieved in this area, the government has to focus on labour market aspects too, analyse and predict both the chances and the expected outcomes.

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