



# The Employment Dimension of tackling Climate Change

## Overview of the *state-of-play* in Member States

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## BACKGROUND

EMCO's mandate to the Ad Hoc Group asked for a deepening of the analytical background and an input to an EMCO discussion paper on the employment dimension of tackling climate change<sup>1</sup>.

This paper summarises the information on data, forecasts, policy responses and the role of the EU in terms of labour market *greening*, gathered through the questionnaire on the impact of climate change and employment policies on the labour market<sup>2</sup>. It also brings together the inputs provided by Member States through written consultations; it draws on inputs provided by the Commission<sup>3</sup> and fits in complementary information from exchanges of views held within different formations of Employment Committee.

### 1. INTRODUCTION

#### Context

The *Political guidelines for the next Commission* of Jose Manuel Barroso<sup>4</sup> indicate that climate change and energy security are likely to be driving forces of the EU agenda within the new Commission. If faced with the ambitious challenge of 'going green', i.e. centring the EU growth foundations on meeting the climate change goals, EU economies will be confronted with the process of economic transformation that could well be compared to the ICT revolution.

June 2009 Council Conclusions stress that: 'successfully combating climate change will also contribute to moving to a sustainable economy and create new jobs'<sup>5</sup>. The successor of the Lisbon Strategy will need to be shaped in a way that will ensure it happens. This is why building a solid knowledge base on the employment implications of 'going green' is crucial. In the coming years, the European Employment Strategy will require a twofold focus that: i) provides guidance whether and how labour market policies would need to be adapted in order to respond adequately to labour market changes induced by climate change and relevant policies; and ii) how labour market policies could promote greening the economy and gaining more impact in terms of the carbon footprints.

#### Green jobs concept: approach taken

Following the previous discussions held within EMCO, it has been suggested by a number of MS that the extent of the discussion on *green jobs* should be broader than the analysis of the employment potential of one particular sector (eg. renewables). The move towards a *green* economy will have a much broader aftermath and induce considerable restructuring. The EU legislation sets standards in a number of areas (eg. buildings, cars, eco-design, etc). The labour market implications will depend on the shape and phasing of national measures designed for transposition of the EU policy framework.

The rationale of *greening* the economy (and therefore labour markets) could be taken as a point of departure. It might be achieved through different means, like the use of new technology, or the use of new working methods and practices. It may also be achieved - as modestly demonstrated in some

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<sup>1</sup> EMCO/02/090109/EN; doc. item 3, Ad Hoc Group meeting on 3/4 March 2009.

<sup>2</sup> 22 Member States (AT, BE, CZ, CY, DE, EE, EL, ES, FI, FR, HU, IE, IT, LT, LV, MT, PL, PT, RO, SE, SI, and SK) have provided responses to the questionnaire.

<sup>3</sup> ADHOC/10/110609/EN; EMCO/33/091008/EN; EMCO/21/250608/EN.

<sup>4</sup> Available at: [http://ec.europa.eu/commission\\_barroso/president/pdf/press\\_20090903\\_EN.pdf](http://ec.europa.eu/commission_barroso/president/pdf/press_20090903_EN.pdf).

<sup>5</sup> 11225/09.

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recovery packages - through facilitating the involvement of the labour force in the restructuring process (eg. through better coordination of ALMPs with *green* economy investments). The employment measures facilitating the process of economic transformation should be at the centre of a *green* employment discussion.

### Research underpinnings

For the sake of this exercise, providing precise numbers in terms of employment impacts is a complicated task, since 'going green' entails a long process of economic transformation. Nevertheless, there is a growing number of EU-wide studies that seek to quantify employment effects of climate change itself and relevant policies<sup>6</sup>. Overall, it is expected that these policies will be likely to cause unequal distributive effects<sup>7</sup>, and will affect primarily the composition of employment (occupational and regional) and to a lesser extent the overall employment level within the EU<sup>8</sup>. The variety of approaches taken and their underlying assumptions make the comparison of the results problematical, but eventually four main sectors are expected to drive the *green* economy and create direct jobs: clean energy, environmental resource managements, energy and material efficiency and environmental services. In addition, further indirect effects may occur *via* price, wage and income effects and affect employment in the rest of the economy.<sup>9</sup> Available research focuses to a large extent on estimating gross or net employment gains<sup>10</sup>. While its relevance to employment policy is currently limited, such research is useful in a number of ways, enhancing our understanding of the issues at stake and providing some indications of where policy might need to intervene or on which groups it should focus. Some research shows that part of the employment gains is likely to be temporary and is not likely to be sustained over a 10-15 year time horizon when the initial phase of infrastructure investments is over and the new technologies mature<sup>11</sup>.

The current evidence suggests that monitoring the labour market bottlenecks in different sectors (eg. in terms of skills shortages) as well as job losses (that would create potential risks in terms of long-term unemployment) will be crucial in order to support the adequate responses in terms of employment policy. This is well illustrated by the recent experience in implementing legislation on energy efficient buildings in the EU. Knowledge gaps (mainly among building professionals, but also among other actors involved in the supply chain) are considered to be responsible for the slow progress in this area.<sup>12</sup>

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<sup>6</sup> For more details see: European Commission (2009), *Climate Change and Labour Market Outcomes*, 2009 Employment in Europe (forthcoming).

<sup>7</sup> For instance: some 316 000 jobs in renewables sector and 564 000 jobs in energy efficiency are expected to be created in France, compared to 138 000 jobs in the conventional energy sector and 107 000 in the car industry to be lost. Source: WWF (2009), *Low Carbon Jobs for Europe. Current Opportunities and Future Prospects*.

<sup>8</sup> See also: ETUC (2007), *Climate Change and employment. Impact on employment in the European Union-25 of climate change and CO2 emission reduction measures by 2030*.

<sup>9</sup> For more details see: European Commission (2009), *Climate Change and Labour Market Outcomes*, 2009 Employment in Europe (forthcoming).

<sup>10</sup> See for instance: GHK (2007), *Links between the environment, economy and jobs*.

<sup>11</sup> Currently renewables installations require frequent replacement (25 years versus 40 years for fuel and gas) and installation of much bigger capacity (they operate 20% of time compared with 80% of the fossil fuel plant). See: Fankhauser S., Sehlleier F., Stern N. (2008), *Climate change, innovation and jobs*, Climate Policy 8, issue4.

<sup>12</sup> See: WBCSD (2008), *Our vision: A world in which buildings consume zero net energy*, Energy Efficiency in Buildings Executive Brief 2; also: Impact Assessment: Proposal for a recast of the Energy Performance of Buildings Directive (2002/91/EC).

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### Scope

The present overview draws from inputs provided by Member States in reply to the Employment Committee *Questionnaire on the impact of climate change and employment policies on the labour market*<sup>13</sup>. The information gathered through the questionnaires constitutes EMCO contribution to the joint EMCO-COM efforts to deepen the current understanding of the impacts of climate change and energy policies on employment; to explore how existing employment policy instruments can be adapted to better address the new challenges; and how these instruments can sustain and promote the process of *greening-up* of the EU economy.

The questionnaire focused mostly on mitigation measures and their different aspects, leaving the effects of adaptation for further work. The questions limited themselves to: i) Member States' national forecasts and anticipation of labour market changes due to implementation of environmental and energy policies; ii) employment policy responses in terms of improving labour market matching and easing restructuring; and iii) the potential role of EU involvement. The information collected shows that important knowledge gaps exist when it comes to the anticipation of the scale and nature of the employment implications of economy *greening*. Not much debate on the labour market effects of *green* investments and other measures has been observed. A limited number of targeted measures has been recorded in the Member States. However, keeping in mind the importance of structural changes ahead, countries called for different actions to be envisaged at EU level.

The sections below, summarise the main insights from Member States responses, and are organised around the above mentioned components of the questionnaire.

## 2. DATA AND FORECASTS

### *Member States estimations*

The availability of research in terms of labour market impacts that could be used to support policy making is rather limited but still growing. While there is general agreement that the *greening* of the EU economy is focused on boosting energy efficiency and reducing emissions and will have significant implications for EU labour markets, currently no common approach to assess its employment dimension exists among EU Member States. Only a few countries make reference to a national impact assessment of the 2008 climate package (BE, FI, PT) that estimates the employment effects on a macro scale. It suggests the existence of a substantial knowledge gap in that area.

Illustrating in a quantitative manner how the economy could be *greened* through the labour market is not an easy task. One reason is the fact that *green* jobs are not a well defined part of the labour market and are not linked to specific sectors of economic activity; furthermore, *green* skills are not necessarily distinct. No comprehensive information, in terms of numbers, was put forward to illustrate the employment dimension of tackling the climate change within the EU economy. A number of MS hold no estimation at all (AT, CZ, CY, EE, HU, LT, LV, RO, SE, SI and SK). Therefore, it is not surprising that no national objectives or comprehensive indicators<sup>14</sup> for the employment dimension of energy and climate policy measures have been developed so far.

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<sup>13</sup> See: The employment dimension of climate change. Mandate to the Ad Hoc Group (EMCO/02/090109/EN).

<sup>14</sup> The exception being 2 countries (AT, FI) collection of employment data on Environmental Goods and Services Sector.

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Table 1. Climate package: national targets and policies in place\*

	Target	Policy	Economic result	Change of employment
<b>EU Emission Trading Scheme (ETS)</b>	CY, PL	allowances: CY, DE, PL	quantified: FI; descriptif: CY, DE, PL	quantified: FI; descriptif: CY, PL
<b>Renewable Energy Sources (RES)</b>	AT, CY, DE, FI, HU, IE, LV, PL, SK	under development: AT, SK; green certificates: PL; tax incentives: PL; purchase obligation: DE, PL, LV; subsidies: CY, DE, FI, HU, IE, PL	quantified: AT, DE, FI, IE, SK; descriptif: CY, HU, PL	quantified: AT, DE, FI, IE; descriptif: CY, HU, PL
<b>Biofuels</b>	AT, CY, EE, FI, HU, IE, LV, PL, RO, SK	tax incentives: HU, IE, LV, PL, RO, SK; subsidies: CY, FI, LV, PL; legal framework: FI, PL, RO, SK	descriptif: CY, HU, IE, PL, RO	descriptif: CY, FI, HU, IE, PL, RO
<b>Buildings</b>	AT, CY, FI, HU, PL, SK	subsidies: AT, CY; legal framework: CY, IE, PL, SK; derogation in implementation: HU (3y)	quantified: AT, HU; descriptif: CY, IE	quantified: AT, IE; descriptif: CY, PL
<b>Eco-design (energy-related products)</b>	DE	legal framework: DE, PT, SK; energy auditing scheme energy efficiency agreements, subsidies FI	quantified: DE descriptif: PT	quantified: PT
<b>Eco-labeling</b>	x	under development: PL; public procurement: HU; legal framework: DE, PT, SK; awareness rising: IE	descriptif: HU, IE	x
<b>Automotive</b>	DE, FI	under development: HU; consumer grants: CY; taxation: DE, FI	descriptif: CY, DE, HU	descriptif: CY, HU

\* 13 MS filled out the table: AT, CY, DE, EE, FI, HU, IE, LV, MT, PL, PT, RO, SI, and SK.

Some countries provide (anecdotal) data on current employment levels, or on the magnitude of job creation/destruction in selected sectors that are likely to be affected by economy *greening* (BE, DE, ES, FI, FR, IT, PT). This is mostly the case of renewables sector. Overall, very little information was given on the scope of implementation of national policy measures in view to reach the EU climate change and energy commitments (see table 1 below - the summary of excel sheets attached to the questionnaire).

A few MS announce initial attempts to define and quantify *green* occupations (ES, MT). Others (BE, CY, EL, FR, and PT) inform about ongoing studies aimed at estimating the employment potential of new *green* sectors, or refer to plans to launch new research. Overall, the information provided in terms of numbers is to a large extent fragmented and not comparable across MS. In order to build up a comprehensive estimation of labour market changes linked to the implementation of climate change and energy policies more evidence needs to be gathered in respect of both the estimations of labour market impacts, and the state of play in terms of implementation of energy efficiency measures.

### Transmission channels

Since no comprehensive estimation exists, the overview that follows is mostly based on qualitative, expert assessment and anticipation of labour market changes arising from the implementation of strategies aimed

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at tackling climate change. It draws together the Member States' responses to the questionnaire. The information gathered at the national level proves to be to a large extent in line with the labour market outcomes described in the literature.

In the short- to medium term, important changes are expected in several tangible sectors as explained hereafter. This is primarily the case in the energy sector, where the expected surge of investment activity is seen to constitute a remarkable transmission channel of employment effects. Such investment is targeted at sector modernisation and greater energy efficiency, and should have spin-off effects, particularly in construction and manufacturing (eg. the building materials industry). The power generation and heating industry will experience a number of changes linked to modernisation of power capacities and energy grids, development of combined heat and power systems, and diffusion of new technologies. Moreover, energy efficiency investments taking place in the building and transport sectors will boost demand in construction, while higher demand for new products and materials will boost the manufacturing sector, as referred to above. Manufacturing (energy-intensive industries, like cement and lime, paper and glass, iron and steel, chemical industry) will be affected more directly by the EU ETS and/or energy efficiency measures (automotive industry). Among clearly affected sectors, Member States list also mining, forestry, agriculture and tourism.

Overall, this early assessment made by MS suggests that employment potential is particularly pronounced in: production, instalment and operation of renewables (wind energy, photovoltaic systems, biomass, biogas), in the building sector and production of insulating materials for that industry, and in eco-industries such as water or waste treatment. The export potential of particular sectors (manufacturing and deployment of new technologies) stimulating economic growth could also affect the employment potential. Some calculations made for DE shows that increase in energy efficiency and in use of materials can be a lever of productivity growth in industrial production.

Negative employment implications in terms of job destruction are expected to arise, mostly in energy intensive industries, some manufacturing (eg. cars, fossil based heating systems), and in energy generation. Industries affected by carbon leakage have been mentioned as being at potential risk of experiencing negative employment consequences (HU, PT, and SK). In the agriculture sector, the adverse weather trends are expected to seriously influence farmers' remuneration and employment. Less directly, potential increases in energy prices and accordingly in energy costs might also bring negative economic and employment implications.

Also changes in the demand for skills in many sectors can take place. It is suggested that new skills will be required for the services sector (sale, use, and instalment of new technologies). Implementation of energy efficiency regulations will boost demand for some new professions, like energy auditors, where skills certification might be a need (BE, PT). Skills bottlenecks and shortages will be likely in both developing and high-technology sectors. Some Member States point out that further improvements in innovation and R&D investments in clean technologies would stimulate demand for graduates and result in job creation in terms of high-skilled positions, while the labour market alone is not likely to supply these skills (FI, PL, and PT). Such a situation could in turn hinder the transfer of knowledge and technology. Estimations of the employment dimension of greening the economy are hindered by two principal factors: the uncertainty of technological change in green sectors, but also by the fact that permanent forecasting /anticipation systems as such are not always established yet (see section below).

MS point to the fact that implementation of climate change and energy policies, or even climate change as such, will have a regional dimension (EL, ES, FI, HU, IT, PL, SE, and SI). Regions experiencing relocation and restructuring might prove to show more vulnerability and regional differences might increase. Potential labour market risks linked to regional characteristics that could persist over the long term comprise mainly structural unemployment or labour /skills shortages. This question would require further investigation, especially that it might substantially affect the effectiveness of measures taken and give insight for policy orientation. Moreover, regions that are usually more depressed and which are subject to investments in renewable energy (eg. wind or solar), may expect positive changes in their socioeconomic development (PT).

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### Biggest concerns

Providing employees with adequate skills in rising occupations, i.e. avoiding skills mismatch and labour shortages, and the *greening* of occupations is considered a major future challenge (AT, DE, EL, ES, FI, FR, IE, LT, LV, and PT). Therefore, some MS (AT, SI, SK, and RO) call for awareness raising about the structural changes, higher occupational and geographical mobility (FI), or development of certification systems (LT) linked to greening. In times of economic crisis and rising unemployment levels, prompt anticipation of growing sectors becomes an important factor in the avoidance of long-term unemployment (LV, SK). At the same time, limited budgetary resources pose the difficulty to choose between adequate short-term and longer-term measures (CZ, SI).

### 3. POLICY RESPONSE

Numerous labour market instruments that can be used to deal with the employment dimension of tackling climate change already exist (identification of labour shortages, anticipation of occupational demand, different ALMPs, social dialogue, etc...). However, they might need more streamlining in terms of coherence between different policies (employment, environmental, industry, R&D, etc). So far, a limited number of policy responses in terms of labour market measures has been reported as targeted explicitly on issues linked to tackling climate change<sup>15</sup> - partly because the topic in concern has neither been well explored nor well defined as yet.

#### Examples of practices in MS

➡ **Klima:aktiv (AT)** - trainings for climate relevant additional qualifications; in cooperation with stakeholders

[<http://www.klimaaktiv.at/>]

➡ **Eco-cheque (BE)** - based on the same logic as food-vouchers; purchase of enumerative list of environmental products and/or services; max. 250 EUR *per* employee.

[<http://www.cnt.be/CCT/cct-98.pdf>]

➡ **Environment Creates Perspectives (DE)** - training initiative of the Federal Ministry for Environment; provision of training places in new growing *green* technologies sectors (1/3 applicants till now operate in renewables sector).

[<http://www.bmu.bund.de/english/aktuell/4152.php>]

➡ **Trainings in construction sector (IE)** - trainings by National Employment and Training Agency for installation and maintenance of sustainable technologies in construction sector (eg. Domestic Solar Hot Water Systems Installation; Domestic Thermal Insulation; Installation of Domestic Photo Voltaic Systems)

[<http://www.fas.ie/en/Training/Employee+Training/Environment/default.htm>]

### Anticipation and labour market matching

Anticipation of skills and occupational demand in sectors affected by climate change and energy policies is currently (if at all) a part of the more general system of anticipation of labour shortages (AT, BE, CY, DE, EE, EL, ES, FI, IE, IT, LV, MT, PT, and SE). I.e. no targeted approach has been taken so far. In addition, in

<sup>15</sup> See Annex 1.

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some MS the systematic approach to skills and occupational demand anticipation is still being set up (CZ, HU, LT, PL, RO, and SI).

However, some examples of attempts by national authorities to raise awareness among different market players can be identified (AT, BE, CZ, EL, IE, MT and PT), especially at sectoral level. Those include reinforcement of partnership with stakeholders with a view to design relevant training offers. Taking into account the current *state of play* in terms of skills anticipation, even one-off efforts might improve the employment relevance of ALMPs, especially training content. As has been reported (AT, DE), not all new jobs arising on the labour market are statistically registered yet.

Monitoring of labour market needs in Member States usually falls under the competence of employment services. Therefore, public employment services (PES) modernisation are well placed to focus especially on improvement of skills anticipation and monitoring, aimed at better labour market matching, and the proper use of available information. Rising PES efficiency, together with the modernisation of VET systems, remains crucial policy response, and in some cases also a substantial challenge (also in terms of financing), for number of MS (EE, EL, ES, FI, FR, HU, LT, LV, PL, and SE). Countries are taking steps in this direction, but it is still not always clear to what extent the employment dimension of *green* economy is taken into account in these efforts.

### Education and training

Better targeting and better content and structure of education and training systems (achieved *inter alia* through improved partnership between business and training providers, and coupled with professional guidance) is the determinant of more efficient labour market functioning and should be enhanced in view to accommodate all changes linked to economy *greening* (CZ, CY, ES, FI, HU, IE, LT, MT, PL, PT and SI).

There are examples of MS that have already taken steps towards establishing a better link between education, training and employment systems (DE, FI, and FR). Specific *green*-focused training coupled with labour insertion schemes has been introduced by EL, ES. More exchange of practice between MS might be of use in view to improve effectiveness of those measures.

To better respond to the current economic crisis, MS stress the need to adopt (EE, PL) retraining measures and assistance in finding a new job for the workers made redundant, though some countries already implement such measures (DE, IE). IE points to the fact that the downturn in construction sector provides an opportunity to train/retrain workers in terms of the design, building and operation of more energy efficient systems.

BE is planning to launch a programme focused on reduction of energy consumption in housing sector and is establishing an up-skilling program for construction workers for this purpose. SI also stresses the need for skills to be developed in this sector, but no measure has been implemented so far.

### Social dialogue

MS involve social partners in the identification of skills requirements and anticipation of bottlenecks and any skills gaps companies may be facing (CY, DE, and FI), but overall, no specific discussion is taking place. The employment implications of climate change and energy policy do not form a separated part of social dialogue, with a very few exceptions of countries that report it has been initiated (BE, MT, and PL).

### Promotion of environmental friendly behaviour

At the same time, efforts to encourage employees and employers to more efficient use of resources in operational and production processes are still rare among MS (BE, DE).

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### *Non-labour market measures with employment dimension*

Finally, it should be pointed out, that substantial investment efforts announced by countries under the recovery programmes will have labour market implications. However, apart for DE (subsidies to growing sectors, infrastructure investments, vehicle tax reform), no other MS reported measures taken in that direction. FI mention the government investments plans to encourage environment and energy innovation and calls to consider business start-up grants and investment and development subsidies for SMEs.

## 4. COMMUNITY ACTION

The EU should play an important role when it comes to awareness raising on the employment implications of tackling climate change (AT, CY, EE, EL, ES, FI, IE, IT, MT, PL, PT, RO, SE, and SI). Setting the context of policy development and promoting an integrated and coordinated approach at EU level is crucial for defining the direction of structural reforms and EU development strategy. Various campaigns and actions targeted at different groups and stakeholders will be needed (eg. taking the issue to the Tripartite Social Summit; social dialogue at sectoral level in particular MS in order to diffuse best practices; organise European Year of Green Employment, etc). The European Employment Strategy should support but also promote the *greening* of the EU economy. Member States stress the need to define and clarify the concepts and issues at stake, foster the work on monitoring and information dissemination, as well as development of relevant indicators (CY, CZ, and EL).

*Green* employment cannot be regarded as a matter of one sector, i.e. use and penetration of renewable technology, but it should concern the whole economy. All work places should become *greener* (BE, MT, SI).

The fundamental value added of EU engagement will come up through sharing good practices and encouraging mutual learning (CZ, DE, EL, FI, FR, MT, PT, RO, SE, and SK). However, EU funds should also be used as leverage for widening the application of *green* measures throughout Member States<sup>16</sup> and encourage European companies, especially SMEs, to promote *green* products and working methods (BE, CZ, PL, SK).

In replies to the questionnaire, Member States expressed the wish for wide-ranging policy guidance by the European Employment Strategy. Numerous MS opted for development of tools that would: i) reward employers which take actions focused on *greening* workplaces, and ii) motivate employees to introduce improvements and innovations at the work place that would contribute to tackling climate change (BE, FR, IT, LV, PL, PT, RO, SE, and SI). Community actions contributing to *greening* of the EU work places might involve rewarding best *green* practices in terms of Corporate Social Responsibility or providing financial support and/or guidance (toolkit) for SMEs companies that might lack sufficient knowledge and resources to implement policy directions and take advantage of regulatory development. The renewal of enterprises to become *greener* should incorporate the training of their workers. Fiscal policies and modernisation aid (focused on companies' adaptation to new standards) might stimulate investments leading to *greening* of the labour markets. However, in the long term perspective making jobs cost-effective and sustainable (eg. through investment in R&D and innovation) should have a primacy over subsidising them. The degree of labour market mobility will be also a decisive factor for economy' modernisation. EU should be also ready to provide instruments that would help reducing potential adverse effects (PL).

Important scope for improvement remains when it comes to defining general job profiles linked to tackling climate change and shaping accordingly the training programmes for workers. Therefore MS underline the supportive role of European Social Fund (ESF) in that domain, eg. improving skills anticipation, modernising VET systems (HU, IE) and supporting ample curricula development (CY, CZ, EL, and PT). Training for new rising sectors and occupations is the most often cited as possible ESF initiatives (AT, BE, CY, DE, EE, EL, ES, IT, MT, PT, SE, SI, and RO), while it was stressed that the current provisions allow already for a wide range of interventions. Developing wider education and awareness rising strategies, including those coupled with (undergraduate and graduate) internship should be also considered (BE, MT).

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<sup>16</sup> Renewables sector is given as an example of a source of development and jobs creation for rural areas.

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Regular CEDEFOP forecast of labour market supply and demand in terms of qualifications needed to tackle climate change would help in directing training programs towards future skills requirements (PL)<sup>17</sup>.

A few MS (BE, FI, IE, IT, PT, RO, and SE) articulate their views on a *Green Job Act* as a benchmark for further development of policy instruments, with one opposing such a possibility and others stressing the need for having the 'effectiveness check' before building further on it.

### 5. FOLLOW UP

The summary of replies to the questionnaire, as presented in the current note, leads to the conclusion that further work will be required when it comes to:

- ❖ ensure better monitoring of reforms and exchange of best practices

EMCO should continue to gather information on the direction of reforms and envisaged actions by Member States. It should develop the database containing relevant employment policy measures to ensure better monitoring of policies being in place. An exchange of good practices should be also organised.

- ❖ reinforce the evaluation of labour market outcomes

Knowing the labour market outcomes of climate change itself and relevant policies will be needed in order to support the design of different employment policy actions. Further development of monitoring (especially in terms of labour market bottlenecks and failures) will be crucial in that respect. Therefore, further work should include quantitative /measurement aspects and focus on strengthening the capacities by Member States and the Commission in terms of quantitative background for a policy debate and decisions.

- ❖ design policies to address the employment effects of climate change

Once EU political agenda is droved by climate change and energy security goals, the adequate employment policy response will be also warranted.

- ❖ assess the design of measures

Currently, a number of Member States have announced substantial financial support for the *green* economy development under their recovery plans. Those measures are likely to influence local labour market developments, either directly either indirectly. Since there are likely to be differences in their overall effectiveness in terms of value for money, economy *greening* and labour market leverage, further analysis of these aspects will be warranted.

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<sup>17</sup> That issue might be of importance especially taking into account that skills anticipation /forecasting systems only develop in many MS.