



Council of the
European Union

Brussels, 4 July 2014
(OR. en)

11572/14

EMPL 93
SOC 553
ENV 653
ECOFIN 725
EDUC 261

COVER NOTE

From:	Secretary-General of the European Commission, signed by Mr Jordi AYET PUIGARNAU, Director
date of receipt:	3 July 2014
To:	Mr Uwe CORSEPIUS, Secretary-General of the Council of the European Union

No. Cion doc.:	COM(2014) 446 final
Subject:	COMMUNICATION FROM THE COMMISSION TO THE EUROPEAN PARLIAMENT, THE COUNCIL, THE EUROPEAN ECONOMIC AND SOCIAL COMMITTEE AND THE COMMITTEE OF THE REGIONS Green Employment Initiative: Tapping into the job creation potential of the green economy

Delegations will find attached document COM(2014) 446 final.

Encl.: COM(2014) 446 final



EUROPEAN
COMMISSION

Brussels, 2.7.2014
COM(2014) 446 final

**COMMUNICATION FROM THE COMMISSION TO THE EUROPEAN
PARLIAMENT, THE COUNCIL, THE EUROPEAN ECONOMIC AND SOCIAL
COMMITTEE AND THE COMMITTEE OF THE REGIONS**

**Green Employment Initiative:
Tapping into the job creation potential of the green economy**

1. Introduction

The Europe 2020 Strategy recognises the central role of the transition towards a green, low carbon and resource efficient economy in achieving smart, sustainable and inclusive growth. The inefficient use of resources, the unsustainable pressure on the environment, and climate change, as well as social exclusion and inequalities pose challenges to long-term economic growth and an alternative growth model going "beyond GDP" has been on the agenda for many years¹.

A model for *green growth* – leading to low carbon, climate resilient and resource efficient economy - is used to depict a structural economic change which is mainly driven by scarcity of resources, technological change and innovation, new markets, and changes in industrial and consumer demand patterns². Resources, raw material and energy³ prices is already impacting the cost structure of companies, as global demand for those resources will continue to rise due to increasing consumption in emerging economies. Today's linear model - where one "takes-makes-consumes and disposes" – will progressively shift towards a circular model where one gets more value added and more benefit from each ton of material, each joule of energy and each hectare of land, by saving, re-using and recycling materials, and where resource productivity will define future competitiveness⁴.

Green growth is both a challenge *and* an opportunity for the labour market and skills which, in turn, are key factors for enabling green growth. The transition will bring about fundamental transformations across the entire economy and across a wide range of sectors: additional employment will be created, some jobs will be replaced and others redefined⁵. In this context, better targeting and coordination of labour market measures and tools are essential to create the necessary conditions to support green employment, bridge skill gaps and labour shortages, and anticipate change in human capital needs.

The 2012 Commission Employment Package puts forward a framework for a job-rich recovery putting emphasis on the need to further develop labour market tools and identify skills needs in order to support the transition to a green economy and progress towards the Europe 2020 employment objectives⁶.

The 2013 and 2014 Annual Growth Surveys stressed the job creation potential of the green economy and the need to develop strategic frameworks in which labour market and skills policies play an active role in supporting job creation⁷. Nevertheless, integrated policy frameworks linking green growth and employment exist in only a small number of Member States, with the majority having a disjointed and fragmented approach⁸.

¹ COM(2009) 433 final; see also COM SWD(2013)303 final, *Progress on "GDP and beyond" actions*.

² See i.a. OECD (2011), *Towards green growth*; UNEP (2011), *Towards a green economy*.

³ See also COM(2014) 015 final, *Communication on a Policy framework for climate and energy in the period from 2020 to 2030*; and COM(2014) 021 final, *Communication on the Energy prices and costs in Europe*.

⁴ COM(2014)...., *Towards a circular economy: A zero waste programme for Europe*.

⁵ OECD (2012), *The jobs potential of a shift towards a low carbon economy*; OECD (2012), *OECD Employment Outlook 2012*, see chapter 4 "What green growth means for workers and labour market policies: an initial assessment"; ILO (2011), *Skills for green jobs, a global view*.

⁶ Employment Guideline 7 stresses that Member States should promote job creation in all areas, *including green employment*.

⁷ COM(2013) 800 final.

⁸ Joint Employment Report, COM(2013) 801 final. See also EC (2013), *Promoting green jobs throughout the crisis: a handbook of best practices in Europe*, EEO Review. The Handbook identifies national and/or regional strategies or single policy measures for the promotion of employment in green sectors.

In addition, as stated in the 7th Environment Action Programme, tapping the full growth and jobs potential of the green economy depends on improving environmental integration and policy coherence so that sectoral policies at Union and Member State levels are developed and implemented⁹. In 2014 the European Resource Efficiency Platform (EREP) also highlighted the need to develop a broad strategy for greening jobs, skills and education, and called upon the EU to integrate sustainability objectives, identify labour market instruments to accompany the transition, mobilise EU funding, support exchange of good practice, promote awareness raising and engagement, and ensure follow up in the European Semester of economic policy coordination¹⁰.

This Communication aims at defining strategic framework conditions to allow labour market and skills policies to play an active role in supporting employment and job creation in the green economy. It puts forward targeted policy responses and tools to ensure that the employment and environmental agendas converge and to contribute to reaching the Europe 2020 objectives.

2. Towards a green economy – opportunities and challenges for the labour market

The greening of the economy is mainly driven by a long-term global trend of increasing resource scarcity and rising energy and raw material prices which is exacerbated by Europe's growing dependence on imports of these resources. In order to address these challenges, the EU has implemented a number of policies and strategies aimed at supporting the shift towards a resource efficient and low carbon economy, while strengthening EU's competitiveness. One of the most significant is the 2020 Climate and Energy Package which sets targets to be reached by 2020 for greenhouse gas emission reductions, renewable energy sources and improved energy efficiency. It is widely acknowledged that a successful transition towards a green and resource and energy efficient economy will reshape labour markets. Understanding the labour market implications is therefore necessary to better anticipate and manage structural adjustments¹¹.

There has been considerable job creation in the environmental goods and services sector (EGSS) – often labelled as "green jobs" – even during the economic crisis. Employment in the EU increased from 3 to 4.2 million between 2002 and 2011, including by 20% during the recession years¹².

The potential of employment creation linked to the production of energy from renewable sources, energy efficiency, waste and water management, air quality, restoring and preserving biodiversity and developing green infrastructure is significant and is resilient to changes in the business cycle.

⁹ OJ L 354, 28/12/2013.
¹⁰

http://ec.europa.eu/environment/resource_efficiency/documents/erep_manifesto_and_policy_recommendations_31-03-2014.pdf.

¹¹ Cambridge Econometrics, GHK and the Warwick Institute for Employment Research (2011), *Studies on sustainability issues — Green jobs; trade and labour* (Study undertaken for DG EMPL).

¹² Eurostat data on the environmental goods and services sector.

For instance, a 1% increase of the rate of growth of the water industry in Europe can create between 10,000 and 20,000 new jobs¹³. Tourism and recreation in Natura 2000 sites are estimated to directly support around 8 million jobs corresponding to 6% of the total employment in the EU¹⁴. Implementing existing legislation on waste prevention and management could create more than 400 000 new jobs¹⁵ and the review of the waste legislation now proposed by the Commission could create an estimated further 180 000 jobs¹⁶, while opening up new markets, making better use of resources, reducing dependence on imports of raw materials, and lowering pressure on the environment¹⁷.

Internal transformation and redefinition of jobs will affect sectors with a high share of emissions (energy power, transport, agriculture, building which are responsible for respectively 33%, 20%, 12% and 12% of EU greenhouse gas emissions)¹⁸. Increased investment in insulation and energy efficiency is likely to have a positive impact on job creation in the construction sector where more than four million workers will need up-skilling¹⁹. Jobs should also be created in the biomass and biofuels sectors²⁰. In the agricultural and forestry sectors, newly introduced greening components enhance the delivery of public services from agriculture and forestry while ensuring green growth in these sectors. There are opportunities for job creation in the agricultural sector, in particular through quality production, organic farming, landscape management, green farm/eco-tourism, green (environmental) services and/or infrastructure in rural areas.

For energy intensive industries (e.g. chemicals or iron and steel), the picture is more complex, as they face both challenges and opportunities resulting from the need to mitigate emissions and the development of new sectors and goods. In order to address the competitiveness of the industries which are at risk of relocation due to the impact of climate policies, the Commission has put in place measures to prevent “carbon leakage”²¹. In the chemical sector, a greener chemical industry is estimated to create more jobs than in the petroleum industry and the current chemical industry²². In the steel industry, use of recyclates, such as scrap steel, results in major energy savings and therefore has a positive impact on the competitiveness of the sector.

As for the wider economy, by increasing the efficiency of production processes, adopting innovative solutions to save resources, developing new business models, or offering more sustainable products and services, companies can expand their markets and create new jobs, while transforming existing ones. Resource productivity in the EU grew by 20% in the period

¹³ Ecorys, Acteon (2014), *Potential for sustainable growth in the water industry sector in the EU and the marine sector – Input to the European Semester*.

¹⁴ Bio Intelligence Service (2011), *Estimating the economic value of the benefits provided by the tourism/recreation and employment supported by Natura 2000*.

¹⁵ Bio Intelligence Service (2012), *Implementing EU waste legislation for green growth*.

¹⁶ Impact Assessment for 2014 Waste Review – Staff Working Document

¹⁷ Bio Intelligence Service (2012), *Implementing EU waste legislation for green growth*.

¹⁸ See Cambridge Econometrics, and al. (2013), *Employment effects of selected scenarios from the Energy roadmap 2050*, Final report for the EC (DG Energy), http://ec.europa.eu/energy/observatory/studies/doc/2013_report_employment_effects_roadmap_2050.pdf

¹⁹ COM, BUILD UP Skills (2013), *Preliminary findings from Member States Roadmaps*.

²⁰ http://www.energies-renouvelables.org/observ-er/stat_baro/barobilan/barobilan13-gb.pdf

²¹ See http://ec.europa.eu/clima/policies/ets/cap/leakage/index_en.htm

²² http://www.ilo.org/wcmsp5/groups/public/---ed_dialogue/---sector/documents/publication/wcms_226385.pdf

2000-2011. Maintaining this rate would lead to a further increase by 30% by 2030, and could boost GDP by nearly 1%, while creating more than 2 million jobs.

3. Policy responses

Dynamic and well-functioning labour markets have a key role to play in facilitating the transition to a green and resource efficient economy. EU-level action should focus on the following:

- Bridging the skills gaps;
- Anticipating change, securing transitions and promoting mobility;
- Supporting job creation;
- Increasing data quality.

3.1 Bridging the skills gaps

While a green economy will create new jobs and open new markets, Europe's competitiveness, innovative capacity and productivity will strongly depend on the availability of skilled workers. This means fostering skills developments (3.1.1); and better forecasting skills needs across sectors and industries to allow the relevant authorities and stakeholders to adapt to change (3.1.2).

3.1.1 Fostering skills development

While Member States are developing "green" skills²³ classifications, it is now established that the transition to a greener economy will have a significant impact on the skills needs, with increased demand for skilled workforce in growing eco-industries, up-skilling of workers across all sectors, and re-skilling of workers in sectors vulnerable to restructuring²⁴. The intensity of eco-innovation will variably impact job-skill requirements across sectors and industries.

Where correlated with strong innovation, new occupations will require generic skills as well as science, technology and mathematics skills (STEM) as part of compulsory and tertiary education. Up-skilling across all sectors and occupations will be necessary to acquire new skills and knowledge, such as knowledge of new insulation materials, new approaches to building materials, design, engineering, knowledge of regulations, etc. Skills associated with the green economy are not always entirely new or "unique" skills. They combine transversal competences and "specific" skill sets. In some cases, certain tasks and responsibilities, that require specific combinations of skills and knowledge, will form new occupational profiles.

Facilitating the adaptation of the workforce and of education and training systems requires targeted intervention by public authorities to avoid skills bottlenecks, support occupational transitions and enhance the responsiveness of the education and training systems to emerging

²³ See e. g. Ecorys (2010), *Programmes to promote environmental skills*.

²⁴ OECD (2012); ILO (2012); Cambridge Econometrics, and al. (2011), *Studies on sustainability issues — Green jobs; trade and labour*.

skill and qualification demands. This requires reviewing and updating of qualifications and corresponding education and training curricula²⁵.

Sectoral training quality standards, supported by quality assurance mechanisms and accreditation systems in Vocational Education and Training (VET), should be developed to better align VET provision to labour market needs. The certification of green skills acquired informally, supported by flexible training leading to qualifications, can also support transitions for workers affected by restructuring. Governance mechanisms for VET make better use of skills forecasts. Sectoral social partners should be better involved in the design and review of training programmes, qualifications and accreditation systems.

3.1.2 Better forecasting skills needs

As structural changes in the economy will lead to new skill requirements and emerging occupations, it is necessary to better assess job and skill developments with a view to facilitating the transition towards the *green economy*. Classification systems such as 'European classification of Skills, Competences, Qualifications and Occupations' (ESCO) can be used to identify skills gaps. The EU Skills Panorama, launched by the Commission in 2012, provides an overview of European, national and sectoral findings on the short to medium-term prospects for jobs and skills needs.

Public employment services (PES) provide valuable information about skills requirements on the labour market. In some Member States, PES have developed tools to monitor demand for green skills in various sectors of the economy, including in green sectors²⁶. In this context, the challenge is to use existing data to change or adapt the training offer, availability, and format, as well as training paths.

It is therefore vital to develop strategies on information gathering, focusing on projected recruitments needs and identification of skills required. Close collaboration between government, industry, social partners and research is essential in this regard. The Commission has been promoting the Sectoral Skills Councils and Sector Skills Alliances, notably the in automotive, construction and chemicals sectors.

As noted in the Commission Green Action Plan for SMEs²⁷, workforce development is a particular challenge for SMEs as they have fewer resources available to respond to transformation needs. Therefore, SMEs should receive support and guidance to better anticipate skills needs and bridge green skills gaps. Tools, such as distance learning schemes, consultancy and advisory services, should be developed to help SMEs become more energy and resource efficient and to facilitate uptake of environmental management standards²⁸.

To help bridge existing skills gaps, the Commission will:

- work with stakeholders at sectoral level (notably the **Sector Skills Councils** and **Sector Skills Alliances**) to encourage the development of green skills intelligence, and strengthen links with **ESCO** and the **EU Skills Panorama**;

²⁵ CEDEFOP (2012), *Green skills and environmental awareness in vocational education and training*.

²⁶ DG EMPL (2013), PES to PES Dialogue, *Public employment services and green jobs*.

²⁷ COM(2014)... Communication from the Commission on "a Green Action Plan for SMEs".

²⁸ e.g. EU Eco-Management and Audit Scheme (EMAS) or ISO 14001.

- promote exchange of good practice on skills-based strategies under the **Mutual Learning Programme of the European Employment Strategy** and in cooperation with Cedefop;
- promote exchange of good practice among the **European PES Network** on using labour market intelligence and forecasts and on fostering partnerships with all relevant stakeholders with a view to better anticipating companies' needs for green skills;
- cooperate with the **InnoEnergy and Climate Knowledge and Innovation Communities** of the European Institute of Innovation and Technology to deliver innovative sustainable energy and climate-focused education models at graduate and post-graduate levels and further develop its new business creation instruments to foster climate-related entrepreneurship;
- promote best practices within the European Network for Rural Development and the European Innovation Partnership (EIP) network for agricultural productivity and sustainability, under the **Common Agricultural Policy**.

Member States are invited to review and update qualifications and corresponding education and training curricula so as to respond to new market demands.

3.2 Anticipating change, securing transitions and promoting mobility

Transformation processes, in particular from declining to emerging activities, require timely anticipation and management. Restructuring should be handled in a socially responsible way, in particular to preserve human capital (3.2.1); labour market institutions must contribute to easing and securing transitions (3.2.2); and occupational and geographical mobility should be further enhanced (3.2.3).

3.2.1 *Anticipating change and managing restructuring*

The EU has a comprehensive legal framework for regulating the way in which social dialogue should address anticipation of change and restructuring. In addition, the EU Quality Framework for anticipation of change and restructuring²⁹ (QFR) contains certain principles and good practices of anticipation of change and management of restructuring; as such it is also relevant for the successful management of the green transition from a socio-economic perspective. Timely anticipation of change and of skills needs contributes to companies' competitiveness, and workers' employability. Anticipating change should include continuous up-skilling programmes for workers on the job. Work-based learning can also support green innovation, in particular when supported by adequate validation systems.

It is essential to develop specific guidance for sectors where significant increase, decrease or transformation of employment is expected. Some sectoral initiatives (such as CARS 2020, Construction 2020) have been developed to support energy and resource efficiency goals, while taking employment and skills aspects into account.

In order to ensure that the green transition leads to better jobs, the health and safety aspects also need to be considered, in particular emerging risk linked to the development of green technologies. While more sustainable technologies, products and processes are likely to decrease the risk of harmful exposure for workers, potential new hazards need to be carefully

²⁹ COM(2013) 882 final.

assessed and integrated in prevention strategies to anticipate, identify, evaluate and control emerging hazards and risks³⁰.

3.2.2 *Adapting labour market institutions in order to ease and secure transitions*

PES are increasingly involved in green employment strategies and programmes³¹. They bring together employers and training institutions in local or regional programmes targeting unemployed people and vulnerable groups, and develop incentives to promote geographical and occupational mobility by establishing skills certification and transferability systems and databases on employers' needs.

PES also play an increasing role by providing career guidance and counselling services, as well as qualifications plans and validation of non-formal and informal learning.

3.2.3 *Promoting mobility*

Promoting workers' mobility, both between regions and between Member States, can go some way towards meeting immediate labour market demands. While some sectors, such as construction, have above average mobility, others, such as utilities (water supply, sewerage and electricity) do not. The Commission facilitates intra-EU mobility through EURES, the European Jobs Network. It will also promote targeted mobility schemes to help fill bottleneck and niche vacancies in sectors and occupations, notably in the green economy³². Enhancing mobility will also require investment in competence-based matching at EU level through ESCO and working further towards the European Area of Skills and Qualifications. In addition, occupational profiles should be continuously updated to take account of the skills needs of the greening economy.

With a view to anticipating change, securing transitions and promoting mobility, the Commission will:

- build on lessons learned from the ongoing **sectoral initiatives on anticipation and managing restructuring** and assess the possibility of extending them to other sectors with greening potential;
- work with PES in the context of the **European PES network** to support occupational mobility to meet specific labour market needs, notably occupations requiring green skills;
- support, in the framework of the European Employment Strategy, **mutual learning and peer reviews** on adequate labour market policies;
- make use of the **Targeted Labour Mobility schemes** under the Programme for Employment and Social Innovation (EaSI) to promote labour mobility for jobseekers;
- through **ESCO**, support competence-based job matching and analysis of trends in green skills demand and supply based on the pool of job vacancies and CVs available in **EURES**.

Member States and social partners are invited to promote wide use of the European Quality Framework for anticipation of change and restructuring in relation of the greening of the economy.

³⁰ COM(2014) 332 final, Communication on an EU Strategic Framework on Health and Safety at Work 2014-2020; see also European Agency for Safety and Health at Work (2013), *Green jobs and occupational safety and health*.

³¹ DG EMPL (2013), PES to PES Dialogue, *Public employment services and green jobs*.

³² Regulation (EU) No 1296/2013 of 11 December 2013.

3.3. Supporting job creation

EU funding should be used to support the green transition (3.3.1). In addition, shifting taxation away from the labour towards environment taxation (3.3.2), green procurement (3.3.3) and green entrepreneurship (3.3.4) are equally important areas to support green job creation.

3.3.1 Making efficient use of EU funding

European Structural and Investment Funds (ESIF) are key sources of investment to promote sustainable growth and job creation. The key EU financial instruments to support skills provision, job creation and transitions in the greening of the economy include:

- The European Social Fund (ESF) co-finances labour market activation measures, measures to smooth the transition into work and the upgrading of knowledge and skills. The ESF can support labour force transitions towards greener jobs, help address skills shortages and improve VET systems (including through the adaptation of curricula).
- The European Regional Development Fund (ERDF) supports investments in energy and resource efficiency, renewable energy, waste and water management, green infrastructure, biodiversity conservation and protection, eco-innovation, education infrastructure and research, development and innovation in low-carbon technologies. Regions will have to invest a minimum share of ERDF resources in measures related to a low-carbon economy (20% for more developed regions, 15 % for transition regions and 12 % for less developed regions).
- The European Agricultural Fund for Rural Development (EAFRD) supports investments in agriculture, forestry, the environment, rural business and infrastructure including investments in renewable energy and energy efficiency, resource management (water, waste, land, etc.), and innovation. Member States will have to invest a minimum share of 30% of the total contribution from the EAFRD on climate change mitigation and environmental issues.
- The programme for the 'Competitiveness of Enterprises and SMEs' (COSME) and 'Horizon 2020' aim to contribute to economic growth and employment by supporting projects dealing with innovation, including renewable energies, energy efficiency ecosystem restoration and re-naturing cities.
- The LIFE programme supports a number of targeted innovative environmental and climate-related projects with an impact on jobs and skills, including through the Natural Capital Financing Facility and the Private Finance for Energy Efficiency instruments.

The Commission encourages and supports the setting-up and implementation of financial instruments co-financed by the European Structural and Investment Funds through the Financial Instruments – Technical Advisory Platform (FI-TAP) and other joint instruments with the EIB Group. These instruments can leverage additional private investment in the greening of the economy and can help realise the related jobs potential.

Synergies between programmes at national and at EU levels should be further developed.

3.3.2 Shifting taxes from labour to environmental taxation

A tax shift away from labour towards taxation less detrimental to growth such as consumption, property and environmental taxation (and removal of harmful subsidies) can result in both higher employment and lower emissions and pollution. This effect will be most visible in Member States with a high tax wedge. One third of the Member States have space for such a tax shift while another third have scope to improve the design of existing environmentally-related taxation³³.

Such reforms should consider the employment effects of targeted labour cost reductions, such as for low-skilled workers, in comparison to overall cuts, as well as the distributional impact of the shift to green taxes. A number of Member States have received country-specific recommendations in this field under the European Semester. In addition, Member States could use some of the auctioning revenues from emission allowances under the EU ETS to lower labour costs, which can have an overall positive impact on employment.

3.3.3 Enhancing administrative capacity and promoting green public procurement

Several Member States have gaps in their administrative capacity to design more integrated solutions addressing economic, social and environmental challenges and taking into account broader costs and benefits to society. In particular, public procurement can be used to promote growth in the green economy. The new EU public procurement Directives facilitate the use of labels, explicitly allow for taking into account the production process and introduce a life-cycle costing concept. These have the potential to increase the uptake of green public procurement and could thus foster green growth and jobs.

3.3.4 Promoting entrepreneurship

Access to finance is a problem for any start-up and those active in the green economy are no exception. The Commission, together with the European Investment Bank, established a Natural Capital Financing Facility to support, amongst other things, natural capital-related projects and small and innovative pro-biodiversity and climate adaptation enterprises. The recent rise in microfinance activities in Europe has led to more than 30% of microcredit providers providing green microcredits and an additional 10% currently developing such credits³⁴.

The social economy and social enterprises have a significant potential for providing high quality employment in areas such as energy efficiency and renewable energies, organic farming and ecotourism, or the circular economy with activities related to reuse, repair or recycling. The identification of effective up-scaling strategies for green social enterprises and raising awareness about opportunities could inspire others to be entrepreneurs.

According to recent estimates, 42% of SMEs have at least one full or part-time green employee – a 5% increase since in 2012 – amounting to more than 20 million jobs across the EU. The Green action plan for SMEs includes actions to support green entrepreneurship for innovative and circular business models in the companies of the future.

<i>In order to boost job creation , the Commission will:</i>

³³ EC (2013), Tax reforms in EU Member States 2013. Tax policy challenges for economic growth and fiscal sustainability.

³⁴ European Microfinance Network (EMN) (2013), *European Green Microfinance. A first look*.

- support the development of **methodologies for skills and employment impact assessments** of investments, in particular through technical assistance, exchange of best practice, pilot projects, and awareness raising actions in 2014 and 2015;
- continue to follow up **environmental tax reform** in the Member States in the framework of the European Semester;
- support **capacity building in the area of Green Public Procurement** through guidance on how to make best use of it under the recently adopted public procurement reform and facilitate the creation of networks of public authorities on Green Public Procurement;
- **facilitate access to finance** for social enterprises, including those active in the green economy, and to green microfinance under the EaSI Programme;
- encourage European-level organisations to **promote the exchange of experience** between microfinance providers in the area of green microfinance;
- strengthen targeted support under the **Green Action Plan for SMEs** through EU-level funding and SME support networks (e.g. the Enterprise Europe Network), notably to upgrade the green skills of their workforce.

Member States and regions are invited to reinforce the employment and skills dimension of their financial support programmes for green investments and technologies, and to help green social enterprises get "ready to scale" and "ready to replicate and adapt". Member States are also invited to ensure efficient use of ESIF resources to facilitate the green transition in line with the 20% target on climate-related measures.

3.4. Increasing data quality

Green economy, green growth and green jobs have been subject to various definitions supported by diverse of statistical data³⁵. The regular collection of harmonised statistics would facilitate more evidence-based policy making and monitoring, as well as better anticipation of transitional effects on the labour market and identification of skills needs.

The Commission, together with the Member States, has been developing indicators to monitor progress towards green growth in the context of the European Semester³⁶. Moreover, data on EGSS are collected at EU level to provide harmonised European information on employment related activities with environmental purposes³⁷. In addition, an econometrical model (FIDELIO)³⁸ is being developed by the Commission to assess the economic, environmental and employment impacts of environmental and other policies.

At international level, *"guidelines concerning a statistical definition of employment in the environmental sector"* were adopted at the 19th International Conference of Labour Statisticians to help countries develop statistical standards and methods for green jobs, the

³⁵ See Green growth knowledge platform (GGGI, OECD, UNEP, World Bank) (2013), *Moving towards a common approach on green growth indicators*.

³⁶ See also Employment Committee (2010), *Towards a greener labour market - The employment dimension of tackling environmental challenges* (final report), identifying indicators in six areas: green jobs, green skills, green workplaces, green transition, green labour markets and green growth.

³⁷ Regulation (EU) No 538/2014 of 16 April 2014, amending Regulation (EU) No 691/2011 on European environmental economic accounts.

³⁸ FIDELIO 1: Fully Interregional Dynamic Econometric Long-term Input-Output Model for the EU27 JRC 2013.

green economy and employment in the environmental sector and improve international comparability³⁹.

In order to increase data quality, the Commission will:

- provide support to national statistical offices for data collection and development of environmental accounting in the European Statistical System through existing financial and training support;
- reinforce the use of quantitative modelling tools allowing for a more detailed analysis of the labour market impacts at EU, Member State and regional levels;
- building on the framework of employment and environment indicators developed by the Employment Committee, support monitoring of policies in the context of the Europe 2020 Strategy.

Member States are invited to minimise transitional periods in implementing the module for EGSS accounts and time needed for transmission of data.

4. Promoting social dialogue

The involvement of social partners at all levels is a pre-requisite to facilitate the greening of the economy.

Through joint or separate initiatives, social partners at EU level have already contributed to the EU debate on the greening of the jobs by focusing on the principle of a just transition, on the synergies between the 2030 climate and energy package and the EU industrial policy, and on skills needs for green jobs⁴⁰. Since the transition to the green and resource efficient economy has a strong impact at sectoral level, social partners have a direct interest in being involved through their work in the EU sectoral social dialogue committees.

The Commission will encourage European social partners to develop further joint initiatives in the context of the European social dialogue, at both cross-industry and sectoral levels, and to take into account the EREP recommendations in order to further ensure close workers' involvement in matters related to environmental management, energy and resource use and emerging risks at the work place, enhance workers' rights to information and consultation, and develop sector-wide resource efficiency roadmaps.

5. Strengthening international cooperation

In line with the conclusions of the Rio +20 UN Conference on Sustainable Development, the EU is committed to pursuing a just global transition to an inclusive green economy in collaboration with other international partners. This requires taking into account the social dimension of environment and climate change policies and their inter-linkages in the context of the Post 2015 Development Framework and the sustainable development goals.

The EU cooperates closely with the ILO on green employment related challenges including: ensuring that green jobs are decent jobs; application of labour standards, in particular labour inspection and occupational safety and health in green employment; combatting informal

³⁹ http://www.ilo.org/global/statistics-and-databases/standards-and-guidelines/guidelines-adopted-by-international-conferences-of-labour-statisticians/WCMS_230736/lang--en/index.htm.

⁴⁰ See for ex. ETUC, BusinessEurope, CEEP, UEAPME (2014), *Skills needs in greening economies*.

economy in green sectors, such as waste management; anticipation of future skills needs and adopting training policies facilitating meeting green skills demand.

The transition towards an inclusive green economy has also been addressed in bilateral dialogues with the EU's strategic partners such as the US, Canada and China and will continue to be discussed, also with other partner countries, in the future. In the framework of its development cooperation policy, and through the range of programmes and instruments it finances, the EU will also encourage partner countries in adopting the integrated approach for greening their economies.

The Commission will engage in the Green Growth Knowledge Platform, a global network of researchers and development experts that identifies and addresses major knowledge gaps in green growth theory and practice, launched in 2012 by the Global Green Growth Institute, OECD, UNEP and World Bank.

6. Conclusion

The shift to a green and resource efficient economy is above all an opportunity to increase European global competitiveness, to secure the well-being of future generations, and to support sustainable and high quality employment, while contributing to the recovery from the recent economic crisis.

Employment and labour markets policies at large need to play a more active role in supporting job creation and in matching labour and skills demands related to the transition to the green and resource efficient economy. To this end, the following priorities should be pursued:

- Improving integration and coordination of existing European and national level policies and initiatives;
- Further developing governance structures and methodological tools to facilitate the transition towards a green and resource efficient economy, to better coordinate policies and to ensure consistent monitoring of reform measures; and establishing a closer working relationship and dialogue with social partners on the employment challenges for greening the economy;
- Further strengthening the existing Commission skills intelligence tools and networks to better anticipate and monitor developments in sectors and occupations linked to green growth, resource efficient and circular economy;
- Ensuring that EU and Member States funding programs and policies support the job creation in the green economy;
- Monitoring progress related to green employment in the context of the Joint Employment Report;
- Working towards an international playing field in promoting green and inclusive growth;
- Building on the recommendations of EREP to develop a broad strategy for greening jobs, skills and education.

The Commission invites the Council, the European Parliament, the European Economic and Social Committee and the Committee of the Regions to endorse this green employment initiative and contribute to the further development of actions to achieve an integrated approach to sustainable growth and jobs in the EU.