

E U R O P E A N E C O N O M I C A R E A
C O N S U L T A T I V E C O M M I T T E E

Ref. 1089891
26 May 2009
Brussels

RESOLUTION AND REPORT

on

**GREEN JOBS; THE IMPORTANCE OF AMBITIOUS ENERGY AND
CLIMATE POLICIES FOR ECONOMIC RECOVERY AND RENEWED
GROWTH**

Rapporteurs:

Ms Anne-Beth SKREDE (EFTA Consultative Committee, Trade Unions - Norway)

Mr Leif E. NIELSEN (European Economic and Social Committee, Various Interests
Group - Denmark)

RESOLUTION ON

GREEN JOBS; THE IMPORTANCE OF AMBITIOUS ENERGY AND CLIMATE POLICIES FOR ECONOMIC RECOVERY AND RENEWED GROWTH

The Consultative Committee of the European Economic Area (EEA CC):

- A. Having regard to the Climate and Energy Package which was agreed by the European Parliament in December 2008 and formally adopted by the European Council in April 2009, and of which the EEA EFTA States are currently considering the EEA relevance,
- B. Having regard to the European Recovery Plan which was approved by the EU Heads of State and Government in December 2008 in response to the economic crisis, and its follow-up at the Spring European Council in March 2009,
- C. Having regard to the European Commission Communication of 4 March 2009 on “Driving European recovery” (COM(2009) 114 final) and the national stimulus packages developed in the EEA Member States in response to the economic crisis,
- D. Having regard to the recent joint study by the United Nations Environment Programme (UNEP), the International Labour Organization (ILO), the International Organisation of Employers (OIE), and the International Trade Union Confederation (ITUC) on “Green Jobs: Towards decent work in a sustainable, low-carbon world”,
- E. Noting previous European Economic and Social Committee, EFTA Consultative Committee, and EEA Consultative Committee opinions and resolutions on climate and energy policies, the Lisbon Strategy, and the importance of sustainable growth,
 1. reiterates that climate change is one of the serious challenges facing the world today and thus calls for urgent measures to mitigate, and also adapt to the detrimental impact of increased greenhouse gas emission concentrations in the atmosphere;
 2. welcomes the Energy and Climate Package of the European Union and underlines that the key challenge now is to implement the legislative agenda effectively and ensure that an equally ambitious global agreement is concluded in Copenhagen in December 2009;
 3. notes the devastating impact that the financial crisis has had on the world economy and the specific challenge posed by the current economic crisis for ambitious climate and energy policies;

4. underlines the importance of governments now being able to fight two crises (climate and economy) at the same time, and to sustain and further develop ambitious climate and energy policies in the face of the current economic downturn. New climate and energy policies can and should serve as a positive contribution and driver for renewed growth, job creation, and hence economic recovery;
5. underlines, in light of the dire impact of the economic crisis on labour markets, the necessity to create sustainable jobs and for short-term stimulus plans to focus on keeping people in the labour market;
6. highlights, referring to the recent UNEP/ILO/OIE/ITUC study, the importance of greening the economy and creating green jobs;
7. underlines the potential of green jobs simultaneously meeting two defining challenges of the 21st century: how to avert and adapt to the effects of climate change (environmental agenda); and how to provide decent work for all and integrate underprivileged groups and long-term unemployed into the labour market (social and employment agenda);
8. echoes the views of the UNEP, ILO, OIE, and ITUC that there is an enormous potential for creating green jobs and greening existing jobs throughout the economy, especially in sectors such as renewable energy, energy efficiency, transport, agriculture, and forestry;
9. warns at the same time of the potential pitfalls and challenges linked to green jobs: 1) that they might not always prove to be decent jobs; 2) that the size of the green labour market is still relatively modest compared to the size of the global labour force; and 3) the fact that an increase in green jobs does not necessarily represent a net gain in jobs. The inequality between sectors and regions gaining or losing from the greening of the economy needs to be addressed for the latter to be successful;
10. adds that the greening of labour markets is potentially too slow to contribute sufficiently to the reduction of unemployment, a discrepancy potentially accentuated by the current economic crisis. There is also a risk that new green jobs will not be available for those who really need them and that those targeted for green jobs do not necessarily have the skills to take them on;
11. underlines therefore the key challenge of closing existing skills gaps, of assessing the needs of the future economy, and of educating, training and retraining people thereafter. In times of crisis, when more money is possibly and paradoxically available for training as part of short-term stimulus plans, the EEA CC recommends that more emphasis is put on developing new skills for future green jobs, and on educating and training for the transition into green jobs;
12. warns against empty rhetoric and political inaction when it comes to stimulating green growth. Ambitious recovery plans and climate policies

are themselves not enough unless governments make the necessary efforts to ensure actual growth and economic turnaround. The EEA CC especially recommends:

- a. that short-term stimulus plans are better targeted towards green growth, including specific investments in innovation and research, infrastructure, energy efficiency, and skills and training/re-training,
- b. that a key focus is maintained on longer-term reforms despite the economic crisis,
- c. that the relevant authorities consider the possible inclusion of “green jobs” as a priority area in the future EEA Financial Mechanisms,
- d. increased R&D in new green technologies and infrastructure,
- e. more effective use of the EU programmes 2007-2013, and a possible revision of the programmes to see how they can better address both the economic crisis and climate change more efficiently;

13. welcomes that more research is undertaken on the social dimension of climate change, on the social-environmental agenda, and on the challenges of simultaneously developing a green, social and competitive Europe;
14. urges relevant authorities to strengthen their dialogue with social partners and civil society and to make this a priority when developing and implementing new policies. Social dialogue and tripartite relations need to be recognised as vital to tackling the economic and social impact of the current crisis and to dealing with the social and economic impact of climate change. No progress will be made in successfully greening the economy without social partners and civil society organisations being considered essential partners in the policy-making process;
15. welcomes specifically the recent meeting between the European social partners and the entire College of the European Commission, and recommends that this type of meeting be introduced on a regular basis in addition to the existing Tripartite Social Summit. This is especially important during times of crisis and during the implementation of wide-reaching policies such as the Climate and Energy Package;
16. notes that the greening of the economy and labour markets is not only dependent on governments providing coherent policies and relevant legislative frameworks for business and industry, but also on consumers and customers making increasingly conscientious choices with regards to green products and services and companies seeing the competitive advantage of adapting to these;
17. asks the EEA Council to discuss and consider the recommendations in this report and resolution.

REPORT ON

GREEN JOBS; THE IMPORTANCE OF AMBITIOUS ENERGY AND CLIMATE POLICIES FOR ECONOMIC RECOVERY AND RENEWED GROWTH

I INTRODUCTION

1.1 The EEA Consultative Committee (EEA CC) serves as the voice for social partners and civil society in the EEA countries and forms part of the EEA institutional set-up. Climate and energy policies, and their impact on economic growth and employment, are key priorities for the EEA social partners, who, either jointly or individually through the respective EFTA and EU committees have regularly presented reports and opinions on these subjects.

1.2 In its resolution on “An Energy Policy for Europe”¹, adopted in May 2007, the EEA CC took a broad approach and looked at the specific proposals of the then newly published European Commission Communication with the same title² and the “20-20-20” targets agreed by the European Council³. The Committee underlined that new climate and energy policies should be seen as an investment in the future to generate new growth, rather than a burden on the economy. At the same time, it asked policy makers to take the social dimension of climate change into account as well as the impact of new policies on labour markets and employment. The Committee underlined the importance of increased involvement of social partners and civil society in the development of new policies.

1.3 Since 2007, both the EFTA Consultative Committee (EFTA CC) and the European Economic and Social Committee (EESC) have adopted opinions on specific climate and energy policy issues, such as emission trading in the EEA and the relationship between trade and climate⁴. Keeping in mind that the EEA social partners commented on the entire policy process leading up to the adoption of the Climate and Energy Package in December 2008, the EEA CC will not use this report to repeat its earlier comments on specific proposals. Rather, the EEA CC welcomes the Package and its importance as a mandate for EU’s contributions to the global climate negotiations.

¹ EEA CC resolution on “An Energy Policy for Europe” (Ref. 1074125)

² European Commission Communication: “An Energy Policy for Europe” (COM(2007) 1 final)

³ Council of the European Union: Presidency Conclusions, 8-9 March 2007 (7224/1/07) – the “20-20-20” targets refer to a 20% reduction in greenhouse gas emissions, a 20% energy efficiency saving, and a 20% renewable energy share of overall EU energy consumption by 2020

⁴ EFTA CC statement on “The importance of equal conditions for emission trading in the EEA” (12 October 2007, Ref. 1078286); EFTA CC opinion on “Energy, climate, and trade – time for increased cooperation” (12 November 2008, Ref. 1085765); EESC opinion on “Energy and climate change as an integral part of the renewed Lisbon strategy” (3 March 2009, ECO/248); EESC opinion on “Climate change and the Mediterranean” (18 February 2009, REX/254); EESC opinion on “The use of energy from renewable sources” (17 September 2008, TEN/338); EESC opinion on “Energy efficiency – Assessment of national action plans” (17 September 2008, TEN/341); EESC opinion on “The link between climate change and agriculture at European level” (9 July 2008, NAT/384); EESC opinion “Effort-sharing-GHG emissions up to 2020” (9 July 2008, NAT/400); EESC opinion on “GHG emission allowance trading system” (17 June and 9 July 2008, NAT/399); EESC opinion on “Adapting to climate change – Options for EU action” (12 December 2007); and EESC opinion on “Climate Change and the Lisbon Strategy” (24 October 2007, NAT/362).

The challenge is now to implement the legislative agenda as effectively as possible and to ensure that an equally ambitious global agreement is concluded in Copenhagen in December 2009.

1.4 For the EEA EFTA States the main challenge remains to ensure timely incorporation of relevant EU legislation into the EEA Agreement in order to guarantee a well-functioning internal market and continued EEA EFTA participation in new EU policy initiatives. Establishing the EEA relevance of increasingly complex EU legislation poses challenges as the EU increasingly bases its climate legislation on a *common* policy while the EEA EFTA States maintain national competences in this area. However, this subject could be part of a wider debate on the future of the EEA and will not be addressed in this report.

1.5 This report focuses on the specific challenges posed by the current financial and economic crisis for ambitious climate and energy policies. The crisis may affect the momentum towards, and outcome of, the global climate negotiations that are scheduled to be finalised at the end of 2009. A key question is whether the world will be able to fight *two* crises (climate and economy) at the same time and to what extent it will be possible to sustain and further develop ambitious climate and energy policies in the face of a serious economic downturn. It has been said “never waste a good crisis”, and this quote may serve as a point of departure for this report which looks at how new climate and energy policies can and should serve as a positive contribution and driver for renewed growth, job creation, and hence economic recovery.

1.6 A key element in this context is the creation of “green jobs”. The report highlights several recent studies on this subject, in particular the recent joint study by the United Nations Environment Programme (UNEP), the International Labour Organization (ILO), the International Organisation of Employers (OIE), and the International Trade Union Confederation (ITUC), which highlights both the opportunities and challenges linked to job creation in new green sectors. The creation of new green employment is discussed in the context of the long-term reforms projected under the EU’s Lisbon Strategy, as well as other, more short-term actions and stimulus plans that have been or may be introduced in response to the current economic crisis.

II IN TIMES OF CRISIS: AMBITIOUS CLIMATE AND ENERGY POLICIES AS A VEHICLE FOR RENEWED GROWTH

2.1 An urgent and immediate challenge to the climate agenda is the financial crisis that has engulfed the world economy over the last six months and rapidly developed into a global economic crisis. The world economy is expected to contract by 1.5% in 2009 - the first outright contraction of global GDP since the Second World War.

2.2 The International Labour Organization (ILO) recently predicted that the global crisis would push 18-30 million people out of the labour market, and, should the situation deteriorate, that up to 50 million people could lose their jobs in 2009⁵. Economic growth forecasts are repeatedly being revised downwards and it seems

⁵ ILO press release of 28 January 2009 (Reference: ILO/09/2):
http://www.ilo.org/global/About_the_ILO/Media_and_public_information/Press_releases/lang--en/WCMS_101462/index.htm

unlikely that the EU economy will start to recover before late 2009 at the earliest. Unemployment levels in the EU27 started growing in May 2008 and labour markets across the Union are now experiencing worsening conditions.

2.3 The Organisation for Economic Co-operation and Development (OCED) has warned that as the economy continues to shrink, massive unemployment could spur social and political unrest and turn into a serious social crisis⁶. Growing unemployment has already pushed workers into the streets and produced outbreaks of social unrest in several European countries.

2.4 With the economic crisis as a backdrop, the G-20 Summit in London on 2 April 2009 was crucial and stakeholders understandably expected real and ambitious delivery from world leaders on new stimulus for the world economy, tighter regulation of financial markets, and increased reserves for the International Monetary Fund (IMF).

2.5 The G-20 Summit agreed on measures worth 1 trillion USD, including a trebling of the resources available to the IMF to 750 billion USD and a 250 billion USD boost to global trade. World leaders also agreed on sanctions against secretive tax havens, stricter control on bankers' pay, greater regulation of hedge funds and credit rating agencies, as well as measures to clean up banks' toxic assets.

2.6 A key question now, especially in the months leading up to the global climate negotiations in Copenhagen, is not only whether these measures will have the intended impact on the world economy, but also whether governments will be able to maintain a high level of ambition with regard to necessary climate and energy policy reforms despite the current economic downturn and increased pressure on public finances and national labour markets.

2.7 Some environmental groups reacted sceptically to the outcome of the G-20 Summit, questioning whether it had had enough focus on climate change and the need for a structural and green reform of the world economy. Others were more positive saying that the official communiqué did include a commitment to the UN climate change negotiations and to using fiscal stimulus to green the world economy⁷. The communiqué did not include specific targets with regards to the proposed "green" stimulus, and, as some environmental groups would claim, focused too much on building new roads rather than a climate-friendly infrastructure.

2.8 Within the EU one could argue that there has been a real attempt to create synergies between economic recovery and climate policies, with the simultaneous adoption in December 2008 of the European Economic Recovery Plan and the Climate and Energy Package⁸. With the former (200 billion euro/1.5% of GDP stimulus) the EU leaders brought climate and energy policies straight to the heart of economic recovery by underlining, through short-term stimulus, the need to reinforce long-term "smart, green growth" and to invest in the right skills for tomorrow's green jobs (Lisbon Strategy).

⁶ See OCED press releases from 30 March 2009 - http://www.oecd.org/document/37/0,3343,en_2649_201185_42459813_1_1_1_1,00.html - and 31 March 2009 - http://www.oecd.org/document/51/0,3343,en_2649_34487_42464883_1_1_1_1,00.html

⁷ Official communiqué of the G-20 Summit in London on 2 April 2009, paragraph 27 and 28

⁸ Presidency Conclusions, European Council, 11-12 December 2008 (17271/1/08)

2.9 At the Spring Summit on 19-20 March 2009, the European Recovery Plan was assessed and further extended⁹. The Council concluded that progress had been made and that the size of the fiscal effort (by March 2009 around 3.3% of EU GDP or over 400 billion euro) would, with time, help create new jobs and move Europe towards a low-carbon economy. The challenge, as will be pointed out below, is now to implement the Recovery Plan as quickly as possible and to ensure that new jobs and growth are actually created. Real recovery requires governments to meet their commitments and devote enough resources and investments to implement their short-term stimulus and longer-term reform programmes in a way that ensures sustainable growth.

2.10 At the spring Summit in March 2009, the Council further emphasised that the Single Market was central to making the recession in Europe shorter and less severe, which is of specific importance to a well-functioning EEA. This echoed the European Commission's own sentiment in the preparatory Communication to the Council¹⁰ in which it rejected protectionism and a retreat towards national markets. Instead, the Commission promoted increased cooperation and the extension of single market values and standards beyond Europe as a "launch pad for the return to growth". Of specific importance for recovery in the EEA is the flexibility under existing Community rules to develop support measures for the EEA Member States and their stakeholders. One example would be the temporary state aid measures that were recently adopted by the Commission and the EFTA Surveillance Authority to help governments and companies face extraordinarily tough times.

2.11 The EEA EFTA States have not been spared from the impact of the financial and economy crisis. Iceland has been hardest hit following the collapse of its banking sector and currency. The forecast for 2009 shows a 10% contraction of the economy and a sharp increase in unemployment to about 9-10% (up from about 2%). Iceland became the first developed country in 30 years to request the assistance of IMF from which it has received 2.1 billion USD under the Fund's fast track emergency financing mechanisms. In addition Iceland has obtained support from other partner States totalling 5.2 billion USD. The short-term forecast for the Icelandic economy predicts widespread bankruptcies, structural unemployment and emigration. However, the hope is that Iceland's well-educated work force and its strong and competitive green energy sector will help create renewed and long-term growth¹¹.

2.12 Norway has also been hit by the economic downturn with the most recent forecast showing 100.000 unemployed by the end of 2009. The government has responded with measures to boost the confidence in the banking sector, reduce interest rates, and maintain a high level of employment through increased investments in public sector infrastructure. Among the green initiatives in this package is an extra NOK 1.2 billion for energy efficiency measures, a strengthening of the financial initiatives to increase the use of trains and collective transport, measures to ease the transfer to the electrification of cars, and measures to speed up research and development of offshore wind power, carbon capture and storage (CCS) technology, and agricultural bio-energy.

⁹ Council of the European Union: Presidency Conclusions, 19-20 March 2009 (7880/09)

¹⁰ European Commission Communication: "Driving European recovery" (COM(2009) 114 final)

¹¹ For more information, please see a Working Paper by the Joint EEA Parliamentary Committee on "The EEA and the Global Financial Crisis: The Case of Iceland" (Ref. 1090375)

2.13 Liechtenstein has not been as hard hit as many of its EEA partners. Although the banks have experienced a certain depreciation of assets, the financial system still works and the government has not seen the need to present stimulus packages to boost the overall economy.

III GREEN JOBS; OPPORTUNITIES AND CHALLENGES

3.1 In light of the dire predictions of the ILO and the OECD, creating jobs and employment that are sustainable is a priority both in terms of economic growth and social progress and not least, in order to combat climate change.

3.2 Short-term stimulus is meant to stem unemployment. In an EEA context it is important that increased state intervention to keep people in jobs and/or develop their skills is allowed under single market rules (e.g. temporary state aid rules). Eurofound (European Foundation for the Improvement of Living and Working Conditions) has reported that EU governments and companies are increasingly opting for employment-maintaining initiatives as opposed to redundancies and lay-offs to ride out the current economic crisis¹². Alternatives to lay-offs include short-term work and paid or unpaid sabbaticals. Negotiated reductions of working time are balanced by increased training opportunities, and some Member States temporarily assist employers by topping up wages for reduced hours. The Commission has also encouraged the use of EU structural funds to support training during periods of reduced working hours, something which in normal times would be considered incompatible with state aid rules.

3.3 It is important that such short-term action and temporary measures go hand in hand with longer-term reform programmes aimed at creating sustainable growth and transforming the economy to one much less dependent on fossil fuels. Against this backdrop, the recent report by UNEP/ILO/OIE/ITUC on green jobs makes for interesting reading¹³ pointing both to the opportunities and some of the potential pitfalls of creating new green jobs and greening existing jobs.

3.4 As a point of departure, the report highlights what it sees as the two most defining challenges of the 21st century: how to avert and adapt to the disastrous effects of climate change (environmental agenda); and how to provide decent work for all and integrate underprivileged groups and long-term unemployed into the labour market (social and employment agenda). The report presents green jobs as key to meeting both challenges at the same time. This also responds well to previous calls by the EEA CC to look at climate change not only as an environmental challenge, but to take into account its impact on society, the economy, and labour markets, and to the greatest extent possible find synergies between the climate/energy, competitiveness, and social/employment agendas.

3.5 The UNEP/ILO/OIE/ITUC report defines green jobs as work in agriculture, industry, services, and administration that contributes to preserving or restoring the quality of the environment. Green jobs are found in many sectors of the economy such

¹² Eurofund Report: "Europe in recession: Employment initiatives at company and Member States level", 24 February 2009

¹³ UNEP, ILO, IOE, ITUC Report: "Green Jobs: Towards decent work in a sustainable, low-carbon world"

as energy efficiency, renewable energy, mobility, recycling and waste management, sustainable agriculture and forestry, and environmental services. The aim is for green jobs to help cut the consumption of energy, raw materials and water; to de-carbonise the economy and reduce emissions; to minimise waste and pollution; and to protect and restore ecosystems. It should be noted that some jobs are greener than others, and could become more or less green over time. The notion of a green job is therefore not absolute.

3.6 The potential for more and better green jobs is considerable. According to the UNEP/ILO/OIE/ITUC report, the number of jobs in the renewable energy sector alone is forecasted to increase from 2.3 million in 2006 to more than 20 million jobs in 2030. This data covers seven countries (Brazil, China, Denmark, Germany, India, Spain, and the United States), with more than half of the jobs in 2006 reported in the three emerging economies (Brazil, China and India). Bioenergy has significantly high potential within the renewable sector and is expected to grow from filling half of the reported renewable jobs today to an estimated 59% of renewable energy employment in 2030. The UNEP/ILO/OIE/ITUC report underlines the importance of ambitious and active policies for job creation in new green sectors, with countries like Germany having almost quadrupled the number of jobs in the renewable sector through more active policies from 1998 to 2006 (increasing from 66,600 to 259,100 jobs). Ambitious policies need to also facilitate a more attractive and stable environment for accruing investments. According to the UNEP/ILO/OIE/ITUC report, the investment picture in renewable energy is relatively positive, having increased from 10 billion USD in 1998 to at least 66 billion USD in 2007, with the latter representing 18% of all energy investments. And looking ahead, investments are expected to further increase to 343 billion USD in 2020 and to 630 billion USD in 2030.

3.7 The UNEP/ILO/OIE/ITUC report further underlines energy efficiency as one of the sectors with the highest potential to reduce emissions and create green jobs. According to the report, today, some 4 million direct green jobs based on improving energy efficiency already exist across the United States economy and in certain European countries. Making buildings more energy efficient is seen as an area with strong potential for growth, with 30-40% of all energy use, but only 25% of existing energy efficiency jobs today linked to the building sector. Investments in improving energy efficiency in buildings could potentially generate an additional 2-3.5 million green jobs in Europe and the United States alone, with an even bigger potential in the developing world. The UNEP/ILO/OIE/ITUC report further underlines that construction and renovation of buildings represents the sector with the highest technical and economic potential for reducing emissions, a conclusion also supported by the Intergovernmental Panel on Climate Change (IPCC). Jobs in this sector could to a great extent be performed by workers already in the building sector who could relatively easily upgrade and adapt their skills to new requirements.

3.8 The EEA CC report/resolution adopted at the EEA CC meeting in May 2008 also pointed to transport as another sector with huge potential for new green jobs and for greening existing jobs¹⁴. While efforts are undertaken to reduce the footprint of cars and planes and increase the number of green jobs in these sectors, public transport systems still offer lower emissions and more green jobs. According to the

¹⁴ EEA CC Report and Resolution on “An ambitious transport policy for Europe” (Ref. 1082625)

UNEP/ILO/OIE/ITUC report, only 250.000 jobs in the manufacture of fuel-efficient, low-emissions cars can be considered green, although this number might increase in the long-term with the implementation of new EU legislation¹⁵. At the same time, over 5 million people work in the railways in China, India and the EU alone, and millions more in public transport worldwide. While railways are regarded an important source for green jobs, investments have regrettably moved away from this mode of transport in many countries. In order to take full advantage of the low-carbon economy, it will be important to strengthen this sector again, together with the public transport sector more generally. With the right, integrated transport and climate policies, member states in the EEA and beyond should be able to provide a unique *win-win-win* situation for the *environment* (lower emissions and reduced congestion), the *economy* (creation of more green jobs), and *consumers* (improved, convenient and greener services).

3.9 The UNEP/ILO/OIE/ITUC report also points to agriculture as a sector with great potential for greening the economy. Agriculture experiences climate change effects all over the world but has at the same time a potential in providing solutions to mitigating and adapting to climate change consequences. The production of bioenergy on the basis of agricultural biomass and waste can reduce greenhouse gas emissions and promote rural development. The production of energy crops, straw and manure is already increasingly used for biogas, biofuels, heat and power without a negative impact on the food production when the raw materials are from areas or biomass not used for feed and food. This has a great potential of creating new jobs and of greening existing jobs. It should for example be realistic in several European countries to use half of the total amount of manure for biogas production by 2020, and 100% in the long-term, combined with organic waste from households and industry. Research, development and advisory services are needed for the development of new technology in the agricultural sector and for making existing technologies cheaper and more efficient. The development and adaptation of such technology offer possibilities for creation of green jobs in related industries.

3.10 Forestry is another area of major importance highlighted in the UNEP/ILO/OIE/ITUC report. Bearing in mind the current emphasis on forests as carbon sinks and providers of renewable raw material and environmental services, green jobs in forestry are increasingly important. The production of heat and electricity and combined production of heat and electricity from forest biomass have seen a rapid increase in Europe over recent years¹⁶. Heat and electricity are produced for individual houses or heating and electricity plants of various sizes for schools, public operators, hospitals, village communities or cities. These technologies are still in the trial and development stage and further investment is required¹⁷. Bearing in mind that deforestation globally is one of the major problems and causes of CO₂ emissions and climate change, there is scope in several EEA-countries for a considerable expansion in the use of forest bio-energy from the current level. Preliminary estimates put the forest

¹⁵ As part of the Climate and Energy Package, the European Parliament and Council have adopted a regulation setting emission performance standards for new passenger cars.

¹⁶ EESC opinion NAT/412 of 25 March 2009 “The role of forests and the forest-based sector in meeting the EU's climate commitments”

¹⁷ In 2006 the EU-25 produced energy from renewable energy resources amounting to 110 Mtoe, which is about 14% of total energy use (Eurostat 2008). The major part (65%) of renewable energy was produced from biomass, mainly (60%) forest energy. The share of forest energy in total energy use varies very widely across EU-27 countries.

biomass harvesting potential of Europe at 100-200 million cubic meters a year, with the provision that harvesting does not pose a threat to the environment, forest biodiversity and conservation areas.

3.11 In conclusion, the UNEP/ILO/OIE/ITUC report states that the opportunities for green jobs are many, with the global market for environmental products and services projected to double from 1,370 billion USD per year at present to 2,740 billion USD by 2020. So the number of green jobs is expected to rise considerably and to spread across regions, sectors, occupations and skills levels.

3.12 The concept of green jobs, however, is not without pitfalls and presents several challenges. First, a green job is not necessarily always a decent job. As an example, a recycling plant may, while recovering raw material and thus reducing the pressure on natural resources, apply dirty and dangerous processes which are harmful to the environment and to the people working at the plant. In order for green jobs to efficiently and simultaneously address both the environmental and social challenge, they will also need to be decent jobs.

3.13 Second, while the number of existing and estimated new green jobs is impressive, it is still relatively modest compared to the size of the global labour force of over 3 billion. Also, the increase in green jobs does not necessarily represent a net gain in jobs since the transformation to a low-carbon economy will also cause some traditional manufacturing industries to shut or scale down their operations. While focusing on green jobs thus it is important not to overlook, and to also address the possibly negative effects of some climate policies on certain industries and sectors. The inequality between sectors and regions gaining or losing from the greening of the economy needs to be addressed for the latter to be a success.

3.14 Third, the greening of the economy and labour market is potentially too slow to contribute sufficiently to the reduction of unemployment, a discrepancy potentially accentuated by the current economic crisis. Another problem is that too few green jobs are available for those who really need them such as young people, women, the poor and those suffering from climate change (the latter two more often in developing countries). One reason could be that green jobs tend to attract people who are already in employment rather than those excluded from the labour market. Second, the latter might not always have the necessary skills to take on new green jobs.

3.15 A key challenge is therefore to close existing skills gaps. It does not help with huge investment in innovation, R&D, or infrastructure in new green sectors, if there are no workers to fill the new jobs. More efforts are therefore needed to assess the needs of the future economy, and to educate, train and retrain people thereafter. In times of crisis, when more money is possibly and paradoxically available for training as part of short-term action and stimulus, more emphasis should be put on developing new skills for future green jobs, and to educate and train for the transition into green jobs.

3.16 The challenges of reforming the economy and greening the labour market is perhaps made more difficult for countries whose economies have thus far been heavily carbon-based. While new carbon capture and storage (CCS) technology has the potential to further reduce emissions and create jobs in economies much less, but still dependent on fossil fuels, it is important that these countries at the same time are

prepared to invest more funding into renewable energy and energy efficiency for a sustainable longer-term restructuring of the economy. This will require especially clear policies, planning and state intervention (within single market rules in the EEA) with regards to training, education and development of new skills.

3.17 On balance, the UNEP/ILO/IOE/ITUC report concludes on a positive note and underlines that there is a great potential for net gains in green jobs as a result of active climate and environmental policies, especially in developing and emerging economies, and that greening the labour market is effective as economic stimulus. On this basis, the report concludes that inaction would be disastrous in terms of job creation and growing incomes. The report properly identifies that there is no need to choose between climate protection and social justice. Coherent policies and increased synergies are needed now in order to inspire and prepare societies for present and future changes by anticipating and mapping skills (e.g. closing skills gap); and that a specific focus should be put on pro-poor, decent jobs and fair transitions to sustainable economies.

Case study from an emerging market: China's clean revolution

While China may be perceived by many as ignoring the likely and potential dangers of climate change in favour of quick economic gains, a 2008 Climate Group report paints a rather different picture in which the Chinese Government and business leaders are acutely aware of both the dangers and opportunities that climate change presents. Accordingly significant actions are already underway to improve energy efficiency in residential, business and industrial sectors¹⁸. Not only is China poised to become a leader in low-carbon development; it is already showing some of the strongest growth rates in low-carbon industries, making green jobs and growth indeed a realistic prospect, and consistent with development and energy security objectives. While a lot of work naturally remains to ensure a balance between Chinese emission reductions and economic growth, as well as to involve China more actively in the global climate negotiations, the Climate Group report shows that:

- China plans to almost double the proportion of renewable energy from 8% in 2006 to 15% in 2020 and is ranked second for the absolute USD amount invested in renewable energy in 2007 (after Germany).
- China is or will soon be the top worldwide manufacturer of various low-carbon technologies (e.g. solar photovoltaic technology, wind turbines, solar water heaters).
- China is a leader in low-carbon transport, introducing fuel efficiency standards for cars 40% higher than those in the United States.¹⁹
- China is successfully reducing its carbon intensity (which is high with 80% of Chinese power still provided by fossil fuels), with the aim of a 20% reduction between 2006 and 2010.
- China has developed a strong and comprehensive low-carbon policy framework.

¹⁸ The Climate Group: "China's Clean Revolution"

¹⁹ A direct comparison between China and the EU has been more difficult since their fuel requirements refer to different years. Based on the following sources -

http://www.treehugger.com/files/2005/07/chinese_fuel_ec.php and

http://www.brookings.edu/papers/2009/0225_cafe_nivola.aspx#_ftn3 - the 2012 EU target is 47 mpg (miles per gallon) for automobiles with gasoline engines; for China, the 2008 target was 43 mpg; and for the US the 2007 and 2020 targets were and are 27 mpg and 35 mpg respectively. It can be said that in 2012 the EU requirement will be greater than the current requirement in China, which is not the case in the US.

These efforts send an important signal that more focus can be put on the positive economics of producing clean products and technology, and that a low-carbon economy is not only a niche market for rich countries but can be equally beneficial for emerging markets and developing countries. In terms of reframing consumer thinking, the potential for a much greener China as a key exporter of environmentally friendly goods and services is also important. In addition to economics, however, it should be underlined that good policies and solid legal frameworks are also important for new green initiatives to work.

3.18 While supporting the main conclusions in the UNEP/ILO/OIE/ITUC report and especially the notion that the economic crisis can and should contribute to a positive transformation of the economy, the EEA CC at the same time warns against empty rhetoric and political inaction when it comes to stimulating green growth.

3.19 The European Policy Centre (EPC), a Brussels-based think-tank, on 17 March 2009 published a paper looking critically at the progress made so far with regard to the European Recovery Plan and especially with regard to the much proclaimed “smart, green growth”²⁰. According to the authors, smart investments in green growth were sadly lacking, and despite political rhetoric relatively little had been done across Europe to target funds at the green/knowledge transition of the economy.

3.20 An explanation for this lack of focus could be that political attention has thus far focused on the struggle to maintain employment in the more traditional large-scale manufacturing industries which have come under specific pressure from both the economic crisis, but also new climate and energy ambitions and policy targets. At the same time some green sectors were either relatively healthy, making it hard for politicians to justify state support, or relatively risky, making politicians more reluctant to provide funding. In both cases, Europe would seem to miss a significant opportunity for future growth and job creation in new climate-friendly sectors.

3.21 The EEA CC shares many of the concerns of the EPC and believes a lot more can and should be done to better match political rhetoric with actual sustainable growth and economic turnaround, including the following:

- 1) Shorter-term stimulus plans need to be better targeted towards green growth and jobs, including specific investments in innovation and research, infrastructure (e.g. renewable energy), energy efficiency, and skills and training/re-training. The aim is to ensure that short-term action goes hand in hand with long-term growth. There needs to be a continuous evaluation, in close dialogue with social partners and civil society, of the effectiveness of existing stimulus plans and the potential need for new stimulus.
- 2) A continued focus on longer-term national reforms under the Lisbon Strategy is needed despite the economic downturn, with continued emphasis placed on sustainable growth and labour market reforms. More focus should also be put on specific country recommendations and national follow-up to avoid previous under-achievements.

²⁰ European Policy Centre (EPC) Commentary: The recovery plan revisited, by Fabian Zuleeg and Hans Martens, 17 March 2009

- 3) Increased immediate efforts also are required due to the current economic crisis in order to implement ambitious climate and energy policies and to work with partners outside of Europe to reach an ambitious global climate deal in Copenhagen in December 2009.
- 4) The EU and EEA EFTA States should consider introducing new emphasis on green jobs in the renewed EEA and Norwegian Financial Mechanisms that are currently under negotiation, in addition to the priority areas already proposed for social dialogue and decent work, as well as a more targeted approach to the work already undertaken in the field of environment under the existing mechanisms. As an example, Norway has proposed to set aside funding under the renewed Mechanisms for CCS projects in the recipient countries.
- 5) The EEA Member States need to continue in their efforts to strengthen innovation and research and development (R&D) in new green technologies and infrastructure. Investments need to be seen as a key contributor to future growth rather than a burden on already strained public finances.
- 6) The European Year of Creativity and Innovation 2009, in which the EEA EFTA States participate, should be seen as a unique window of opportunity to further strengthen innovation and R&D activities in new green sectors.
- 7) The current generation of EU programmes (2007-2013), in which the EEA EFTA States participate to a great extent, should be used to their fullest to promote green jobs and growth. The question also arises whether they should be completely revisited in light of the current economic crisis in order to see how they can help address both the economic crisis and climate change more efficiently.

Example of opportunity taken – and to be used efficiently:

The Work Programme of the Intelligent Energy-Europe (IEE) Programme has for the first time allocated financial support for technical assistance helping cities develop projects or investment programmes in the field of urban sustainable energy. 15 of the 96 million euro IEE budget for 2009 are foreseen for developing the potential of municipalities and regions to accelerate local investments, notably in buildings and urban transport. If promoted and efficiently used, this should have a potential to create a considerable number of new green jobs at the local level.

The social dimension of climate change

3.22 Following up on some of the topics in the UNEP/ILO/IOE/ITUC report, a European Commission conference in Brussels on 24 February 2009 discussed whether and how Europe can possibly be green, social and competitive at the same time, with an emphasis on the relationship between social fairness and sustainable development²¹.

²¹ Overview of conference material at <http://ec.europa.eu/social/main.jsp?catId=88&langId=en&eventsId=145>

While the cost of climate change (e.g. The Stern Report) has received more attention and the economic case for sustainable development has frequently been made (as highlighted above), the conference concluded that research on the links between social policy goals and sustainable development, by contract, has been much less developed, except possibly for the social impact of green jobs. The aim of the conference was thus to look more closely at some of these elements, including research on who causes, and who suffers most from climate change, and to what extent social policy and sustainable development goals are in conflict or whether synergies between the two can be found.

3.23 Research concluded that higher income groups create more environmental damage through their consumption of goods and services while socially-disadvantaged groups are more likely to suffer from environmental problems and risks²². While this may not be too surprising, the challenge now is whether and how policies can be designed and implemented in ways that avoid or address these inequitable outcomes. The authors of the research proposed among others to introduce the “environmental justice” as a horizontal concept across all EU policies, and for the European Commission to ensure that existing structural indicators under the Lisbon Strategy better capture the interaction between social and environmental policies than is the case today. The adoption of “environmental justice” as a guiding policy principle should according to the authors provide a framework within which all groups, including the most disadvantaged ones, participate in the design and implementation of new environmental policies. It should also provide adequate protection to groups who are exposed to bad environmental quality and ensure that the financial burden of environmental policy would not disproportionately impact lower income groups.

3.24 After having requested more focus on the social dimensions of climate change, as well as the impact of climate change policies on employment, the EEA CC is pleased that more research is now being undertaken on the social-environmental agenda and the challenges of simultaneously developing a green, social and competitive Europe. More research and continued focus is needed to ensure increased synergies between these policy areas.

IV THE ROLE OF SOCIAL PARTNERS AND CIVIL SOCIETY

4.1 The social partners and civil society organisations in the EEA have been active in providing input, advice and recommendations to their respective governments on what should be done to turn the current economic downturn around and on how to best develop policies that can ensure long-term growth, and greener economies and labour markets.

4.2 Currently, two of Europe’s greatest challenges are economic recovery and fighting climate change. The EESC realises that tremendous synergies exist between the two. The EESC has stated that it is integral that economic recovery not be taken to mean “that everything goes back to the way it was before the crisis”. The EESC firmly believes that a “main thread of the recovery plan is the green economy” and therefore it is “vital that programmes of public investment and financial stimulus brought forward

²² For more information see a study and policy briefing commissioned by the European Commission and completed by AEA Energy and Environment in July 2008: “Addressing the social dimensions of environmental policy”

to assist economic recovery should also play their part in assisting the transition to a low carbon economy that is needed for the future"²³. Consistently, the EESC is making itself heard through opinion pieces and work programmes urging European institutions and Member States to shape their recovery plans and programmes in a manner that will utilise EU funding to meet EU objectives of a low-carbon economy that is complemented by a highly skilled workforce to work in these fields²⁴.

4.3 The EFTA CC has since the onset of the financial and economic crisis held a close dialogue with EFTA Ministers and the EFTA Ambassadors to the EU, discussing in depth the national responses to the crisis both in the context of EEA compliance and their impact on labour markets, financial regulation, and climate and energy policies. Members' key recommendations have included the importance for governments to maintain a high level of employment and low interest rates, and to turn the current crisis into something positive and a window of opportunity for positive change, e.g. to use stimulus measures and longer-term reform programmes more targeted towards a greening of the economy.

4.4 The umbrella organisations for European employers and employees - BUSINESSEUROPE and the European Trade Union Confederation (ETUC) - both provided input to world leaders on the eve of the G-20 Summit in London 2 April 2009. ETUC called upon the European leaders to take decisive action in the field of fiscal and monetary policy and warned against the complacency of European finance ministers and central bankers. It also urged the European leaders attending the summit to stop the policy of "laissez faire, laissez passer" and to take expansionary action to prevent a return to mass unemployment. BUSINESSEUROPE warned against failure at the summit, saying this would be detrimental to world institutions, the credibility of leaders and for the recovery of the economy. It asked to see an increase in companies' access to credit, concrete results on trade finance, a revival of the Doha round, and a boost in funding for the IMF.

4.5 It is the public, workers, and companies (often small and medium-sized companies) who are sadly bearing the brunt of the global economic crisis, and who will also be most affected by short-term action and longer-term policies to transform and green the economy. It is thus essential that the relevant authorities strengthen their dialogue with the social partners and civil society organisations at all levels and make this a priority when developing and implementing new policies. For this to happen, social dialogue and industrial relations need to be recognized as vital to tackling the economic and social impact of the current crisis and to dealing with the social and economic dimension of climate change. With unemployment figures expected to rise, the economy likely to continue contracting, and warning signs of the recession turning into a social crisis, no progress will be made, growth achieved, or greening of the economy take place without the social partners and civil society organisations being considered essential partners in policy-making.

4.6 At the European level, the EEA CC welcomes the recognition in the Treaty of Lisbon (still to be ratified by all 27 EU Member States) of the special role of the social

²³ EESC opinion on the "European Economic Recovery Plan", Rapporteur Mr Delapina (24 March 2009, ECO/246)

²⁴ EESC: "A programme for Europe: proposals of civil society" (CESE 593/2009)

partners, as well as the Social Dialogue and the Tripartite Social Summit²⁵. In addition, especially during times of crisis and during the development and implementation of wide-reaching policies such as the Climate and Energy Package, it will be important to also repeat on a regular basis the meeting between the European social partners and the entire College of the European Commission which first took place on 25 February 2009 in preparation for the 1 March 2009 European Summit (the Summit looked at how to counter protectionism in the wake of the financial and economic crisis).

V THE ROLE OF CONSUMERS

5.1 The EEA CC has repeatedly underlined that fighting climate change should be seen as an opportunity rather than a burden on renewed growth. This is supported by consumer data in a study by The Climate Group/Sky/Lippincott which show increased interest among consumers in what companies are doing to tackle climate change, and consumers more eager for companies to do even more in terms of green products and services²⁶. The greening of the economy and labour markets is not only dependent on governments providing coherent policies and relevant legislative frameworks for business and industry, but also on consumers and customers making increasingly conscientious choices with regard to green products and services and companies seeing the competitive advantage of adapting to these.

5.2 A majority of those asked in the Climate Group/Sky/Lippincott study from 2008 think that combating climate change will benefit the economy (53% in the UK, 63% in the US, 46% in China), while only a minority (22%, 23% and 26% respectively) believe it will have a negative impact. The research, which was based on the responses from 1,000 people in each of the UK, U.S. and China, appears to indicate an increasingly receptive consumer base interested in what companies are doing to tackle climate change. The study also shows that the commitment among consumers to personally doing something about climate change is up 9% pts to 24% from 2007 to 2008 in the UK and up 8% pts to 21% in the same period in the U.S., despite a majority saying they are financially worse off than the year before. The challenge identified in the report is for companies to respond more proactively to this commitment and willingness among consumers to choose green products and services.

5.3 While research like this shows positive trends in terms of consumer attitudes, there is still a great deal of potential left for more targeted communication with regards to the options that each and every person and company have in order to save energy and gain easier access to green products and services. More money and efforts should be spent by Member States in the EEA on targeted and effective information campaigns to increase awareness and help with practical advice on new, but maybe also well-established but possibly not yet fully utilised services. An example of the latter could be recycling, which in many countries has been available for years but could still be further

²⁵ The Tripartite Social Summit, which was established by Council Decision 2003/174/EC, meets at least once a year, before the spring European Council, and institutionalises the informal summits held since December 2000. It consists of the Council Presidency and the two subsequent Presidencies, the Commission, and the social partners represented at the highest level. Its objective is to ensure the effective participation of the social partners in implementing the EU's economic and social policies.

²⁶ Joint report by The Climate Group, Sky, and Lippincott: "Consumers, Brands and Climate Change – helping businesses to focus" (2008)

promoted. The EEA CC underlines that there is a tremendous potential for recycling both in developed, emerging and developing markets. However, for this potential to be fully utilised governments must develop policies promoting “circular” economies and sustainable consumption habits so that citizens are encouraged and incentivised to purchase products that are both recyclable and affordable. It is important that the national responsibility to facilitate recycling goes hand in hand with the consumers’ responsibility to recycle.

5.4 Information about how to make it easier to be energy efficient also needs to be matched with financial support and incentives to help persons and companies implement their commitments to a greener economy, be it through tax benefits on more efficient vehicles (e.g. hybrid, electric) as well as other modes of transportation, expensive energy efficiency installations, or other green products and services. Awareness, commitment and the actual ability to invest must run hand in hand. Young people, often in the phase of buying their first property or/and establishing a family, are often well aware of and committed to protecting the planet’s climate, but many lack the necessary finances to invest in environmental goods and services. Incentives must be specifically targeted towards such groups.