

Joint study of the European Social Partners:
**“The employment impact of climate
change policies”**

Seminar in Brussels 29 June 2010

Background document

European social partners integrated programme
of the EU Social Dialogue

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Introduction

European labour markets are faced with many challenges, such as technological change, globalisation and demographic ageing. Adding to that, it is expected that climate change adjustment policies will imply a process of job creation, job destruction and job adaptation across the EU. Overall, however, relatively little is known about the impact of moving towards a low-carbon economy on employment and future skills needs.

Accordingly, European social partners have decided to undertake an exploratory joint study entitled "**The employment impact of climate change policies**" to better understand the impact of climate change adjustment policies on labour markets and to assess what is and can be the role of social partners at national level in this respect.

This follows on from the commitment of the European Social Partners in their Social Dialogue Work Programme 2009-2010 to: *"develop a joint approach to the social and employment aspects and consequences of climate change policies with a view to maximising opportunities and minimising negative effects and to identify possible joint actions."*

It is intended to help European social partners to:

- Assess the impact of climate change adjustment policies (e.g. environmental sustainability, energy efficiency, reducing emissions) on labour market policies in Europe;
- Assess the impact on future skills needs;
- Identify and discuss any present or future actions and / or ways in which social partners can work, separately or jointly, to better address climate change adjustment policies and their impact on employment, in qualitative as well as in quantitative terms.

Although climate change themes are prompting an increasing number of studies (especially since the Poznań Conference in December 2008), available information and references to social dialogue at national and European level on these issues is still limited.

In order to better understand how different social dialogue systems operate and the extent to which they address climate change and employment issues, a survey addressed to national social partners was launched in 2010, the results of which will complement the wider literature review which is also underway.

This document serves as the background for the seminar held in the context of this project on 29 June 2010 in Brussels. It presents the preliminary findings of a series of studies on the issue of climate change policies, their impact on employment and skills and the actions undertaken by social partners to address them.

A large part of the rationale of this European Social Partners' project is to capture positive examples of how companies and / or social partners are approaching the issue across a range of industries, sectors, and / or territories. The main objective of the seminar of 29 June 2010 is therefore to present a number of country cases of how the above issues are perceived and addressed by the different actors, including by public authorities, at national regional and local level, focusing on the role of social partners,

Review of studies undertaken

A number of recent studies have been dedicated to the analysis and assessment of the impacts of policies designed to address climate change on employment and skills, or/and to the role of the dialogue between the actors (public authorities and social partners). Five such studies, which are considered as among the leading references in this field, are outlined below.

This draft report is presented as an “expert report”. It represents the views of the individuals involved in its preparation and does not purport to represent the views, either individually or collectively, of the European level social partner organisations that were responsible for its commissioning.

1. GHK (2009), “The impacts of Climate Change on European Employment and Skills in the Short- to Medium term”

GHK Consulting was commissioned to produce a study as support for the Restructuring Forum organised by DG EMPLOYMENT of the European Commission in Brussels (22 and 23 June 2009) on « The impacts of climate change on EU employment in the medium term (to 2020) ».

The main findings of this study

– Climate Change Policies and Restructuring

It is becoming clear that the significance of the risks of climate change is becoming such that climate change policies have now become, after a long gestation period, a high priority for governments around the world. This is despite the global economic recession and the constraints on finance to invest in the move to allow carbon economy. Rather, the move to a low carbon economy is seen as a means of stimulating economic demand and employment (new ‘Green Deals’) as announced in the US and in the EU.

Climate change policies comprise a mix of traditional regulation (such as efficiency and emission standards) and support for new technologies, with carbon pricing an increasingly important element in the policy mix. These policies are, in some industries at least, supported by initiatives aimed at safeguarding industries through the recession (such as the vehicle manufacturing sector), where the initiatives are in part designed to stimulate new lower carbon technologies and products.

The industry and business changes needed to respond to climate change policies provide a clear example of a restructuring process. There are likely to be many opportunities - for example through the early adoption of innovative new technology - to place European companies ahead of global competitors that are slower to anticipate change. Conversely, a failure to anticipate by European firms may lead to hasty, reactive and forced later

adjustment, which could damage companies and, leave their employees inadequately prepared, or trained, for alternative employment. Climate change policies will act as a key driver of evolution for the economic actors involved.

- **Economic and Sectoral Impacts**

The global macro-economic impact of the climate change policies has been estimated to be in the region of 1% of annual GDP, but rising with delays in implementing policies and where more inefficient policy responses are made. The impact is arguably less about the overall economic impact but the differential impact the policies have on sectors of the economy. Some sectors (such as coal mining for example) are likely to be adversely affected (unless clean coal technologies develop rapidly). Other sectors are likely to see demand increase (such as renewables), whilst others have to transform products to maintain competitiveness (such as vehicles).

The impact on different groups of sectors depends on the extent to which they are exposed to higher energy costs, international competition and the scope to transform. In some cases the driver for change will be the need for cost reduction, in others it will be the need to respond to different market preferences. In either case significant changes in processes and products are likely to be required. Moreover, the impacts at sectoral and business level are, as with the economy as a whole, likely to increase, the later industry responses are developed and implemented.

- **Labour Market Impacts**

The employment impacts mirror the economic and sectoral impacts, with perhaps only modest effects on total employment, but significant changes in employment by sector, partly influenced by supply chains as well as direct impacts. In terms of the labour market there is not a significant correlation between sectors that have a high carbon intensity (use of energy per unit of output) and those with a high employment intensity (jobs per unit of output). However, sectors with large workforces (such as retailing and construction) will be affected, for example through changes in consumer preferences, or the need to adapt distribution systems.

The effects of climate change policies on skills is less well defined. However, the move to a low carbon economy will place a premium on creativity and innovation and will echo the general economic pressure for better management and higher level skills. At the present time, there is already some concern that the lack of managerial awareness and of skills is inhibiting the shifts in production methods and products required for a low carbon economy, requiring bespoke training programmes and related initiatives.

- **Business Responses**

At the level of the business, there are two main issues to consider: the degree of risk that the business is potentially exposed to because of its markets and production methods; and the degree of preparedness that the business has developed.

The risks are largely a function of the sector in which the business is located. The level of business response is clearly determined on a business by business basis, although some

measure of collective response through social dialogue may assist businesses to identify and secure appropriate responses.

A starting point for businesses is the assessment of risk and the identification of feasible commercial responses based on strategic management choices as to the level of compliance and advantage sought from the responses developed.

The case studies of business responses have explored with individual businesses the nature of risks, the need for change and the types of responses being developed to these challenges.

Overview of the main Findings of these case studies

- Climate change and related policy drivers

The main drivers to-date relate to policies rather than the physical effects of climate change or immediate competitive pressures. Regulation has been more important than corporate CSR policies (except for airlines).

- The actions taken so far by businesses in response to drivers

Internally, the major measures taken to-date are those to improve energy efficiency.

Measures to substitute goods and services that have high energy intensity have also been widespread, having immediate effects on suppliers. Externally, companies have built partnerships to lobby and to manage responses.

- The impacts of climate change policies especially on employment and skills

Impacts have tended to be in relation to skills rather than on the actual levels of employment. There is a widespread need for new skills and a general need for up-skilling, met by substantial activity in the introduction of new training programmes, especially in technical competencies

- The potential implications for the company of continuing climate change

Companies see themselves as anticipating and positioning themselves to be ahead of any future climate change policy drivers. No major changes are expected in corporate strategy itself except in cement and airlines where major consequences of the EU ETS are expected.

- The immediate lessons for business more generally

The main common lesson is the benefit of engaging with climate change policy drivers from a place of leadership with a clear strategic direction. Other common lessons include: the need to engage early with policy processes in order to influence them; the need to engage with staff and raise their awareness, and to build the capacity of staff through acquisition of skills and training; and the need to engage with the supply chain by

monitoring their environmental impact, raising their awareness and helping them to adopt energy saving production models.

2. Syndex-S.Partner-WMP (2009), “Climate disturbances, the new industrial policies and ways out of the crisis”

This study in 2009 commissioned by ETUC with the support of DG EMPLOYMENT of the European Commission, took account the crisis in 2008 and 2009 and the possibility of grasping its effects and consequences to accelerate the transition towards a low-carbon economy, with or without growth.

Main findings of the study

How to control the risks of rapid de-industrialisation through carbon leakage?

Policies to combat climate change come within a general context of a relative weakening of European industries. To cope with this threat, new industrial policies must therefore simultaneously include a defensive dimension aimed at combating carbon leakage and an offensive dimension aimed at organising the widespread use of clean and low-carbon technologies. Exposure to carbon leakage is thus the fate of any energy-intensive industry that is globalised by virtue of its trade.

On the contrary, border compensation measures would place importers and European producers on the same footing in terms of their carbon situation, in conformity with WTO recommendations.

This would nevertheless require three conditions: the definition of carbon standards by sector so as to determine the best available technology mixes; the creation of a European standardisation agency that is above the parties, charged with enforcing these standards; and the promotion and organisation of carbon traceability for all goods traded worldwide.

Under these circumstances, comparisons of technologies or of production modes, known as benchmarks, may be the subject of economic, social and environmental definitions that combine competitiveness, energy efficiency and decent work.

The stakes of low-carbon R&D

Initially, the emissions rights market was supposed to finance investments by operators to reduce their CO₂ emissions. Neither the first nor the second period achieved this result for a number of reasons, the most important being the over-allocation of quotas, but also because the mechanism simply does not work.

Developed under a public-private partnership, Uicos R&D programm (Ultra-Low CO₂

Steelmaking) in the steel sector gives industrial firms in the sector a base from which they can embark on the first stages of low-carbon technology transitions needed in the coming years.

An initiative similar to Ulcos was launched recently in low-carbon coal

technologies with development of the ZEP platform. Taken as a whole, the situation is still far from sufficient, however.

The solution of linking the allocation of emissions allowances to R&D expenditures on low-carbon technologies could prove effective in a competitive framework.

Carbon Capture and storage (CCS): a multisectoral and territorial transition technology

The capture, transport and storage of CO₂ have emerged today as essential technologies for many sectors with a view to achieving CO₂ emissions reduction targets in the coming years. This is the case for chemicals, refining, steel and cement production, as well as electricity generated from fossil fuel.

As transitional technologies preceding the introduction of green technologies, they imply the construction of new regional infrastructures shared by different industries.

These strategic technologies for carbon capture, transport and storage are complementary to the development of renewable energy sources.

The essential requirement of developing renewable energy

All forecasts show growth in jobs related to renewable energy in the coming decades. The corollary of the high level of investments needed to increase renewable energy capacities will be more jobs in engineering, machinery and equipment, and other sectors.

Managing transitions for an industrial Europe

Low-carbon policy has not to date been the cause of restructuring measures that eliminated jobs in 2009 or in earlier years. On the other hand, in the future, the prospect of a low-carbon economy will without a doubt contribute to the destabilisation of the workforce employed in carbon-intensive sectors.

By the same token, low-carbon investment policies will influence future employment and will result in losses of existing jobs.

The employment issue must be studied from a dual point of view:

The first is the transition from existing jobs and their characteristics to future jobs; the second is the creation of jobs related to cross-cutting policies in the fields of energy, energy efficiency, industrial processes, or transport and smart grids.

According to the study, a just transition is at once indispensable to maintaining a competitive industry in Europe, possible through anticipation of the occupational conversion of the many workers concerned, and manageable if the framework in which it

occurs:

- examines the questions of quality and location of the jobs concerned;
- defines the frameworks for essential social and societal dialogue.

Attaining this goal will require the creation of new institutions that allow debate and enable the different players to express their views and interests so as to build consensus where activity and industrial employment are integrated into regional life;

- defines the place of the public authorities, the State and cities and regions in financing the transitions in terms of employment and infrastructures.

3. UNEP, ILO, IOE, ITUC (2008), “Green Jobs: Towards Decent work in a Sustainable, Low-Carbon World”

In 2008, the study entitled « Green Jobs: Towards Decent work in a Sustainable, Low-Carbon World » was carried out by the Worldwatch Institute (with technical assistance from Cornell University Global Labor Institute) and commissioned in the framework of the joint UNEP, ILO, IOE, ITUC initiative.

The main findings of the study

Changing patterns of employment and investment resulting from efforts to reduce climate change and its effects are already generating new jobs in many sectors and economies, and could create millions more in both developed and developing countries.

However, the study also finds that the process of climate change, already underway, will continue to have negative effects on enterprises, workers and their families, especially those whose livelihoods depend on agriculture and tourism. Action to tackle climate change as well as to cope with its effects is therefore urgent and should be designed to generate decent jobs.

Though the study is generally optimistic about the creation of new jobs to address climate change, it also warns that many of these new jobs can be “dirty, dangerous and difficult”. Sectors of concern, especially but not exclusively in developing economies, include agriculture and recycling where all too often low pay, insecure employment contracts and exposure to health hazardous materials needs to change fast.

Green jobs reduce the environmental impact of companies and economic sectors, ultimately to levels that are sustainable. The study focuses on “green jobs” in agriculture, industry, services and administration

The study estimates that climate change itself, adaptation to it and efforts to arrest it by reducing emissions have far-reaching implications for economic and social development, for production and consumption patterns and thus for employment, incomes and poverty reduction. These implications harbour both major risks and opportunities for working people in all countries, but particularly for the most vulnerable in the least developed

countries and in small island States. But, according to the study, just as there are risks and opportunities for workers, the same is true of many employers, so that Government support and assistance for employers should be provided where needed.

The study calls for “just transitions” for those affected by transformation to a green economy and for those who must also adapt to climate change with access to alternative economic and employment opportunities for enterprises and workers. According to the study, meaningful social dialogue between government, workers and employers will be essential not only to ease tensions and support better informed and more coherent environmental, economic and social policies, but for all social partners to be involved in the development of such policies.

The study recommends a number of pathways to a more sustainable future directing investment to low-cost measures that should be taken immediately including: assessing the potential for green jobs and monitoring progress to provide a framework for policy and investment; addressing the current skills bottleneck by meeting skill requirements because available technology and resources for investments can only be deployed effectively with qualified entrepreneurs and skilled workers; and ensuring individual enterprises’ and economic sectors’ contribution to reducing emissions of greenhouse gases with labour-management initiatives to green workplaces.

4. Syndex-Istas-Wuppertal Institute (2007), “Impact on employment in the European Union-25 of climate change and CO₂ emission reduction measures by 2030”

In 2007, the study « Climate change and employment » (full title: « Impact on employment in the European Union-25 of climate change and CO₂ emission reduction measures by 2030 ») was carried out by a consortium (Syndex-Istas-Wuppertal Institute) and was commissioned jointly by DG Environment of the European Commission and ETUC, as a contribution to improve current understanding of the relationship between climate change and employment.

The main findings of the study

According to the study, even moderate climate change will affect economic activity and employment in Europe. Some regions and economic sectors are particularly vulnerable. Increased warming will be likely to have damaging consequences.

The first part of the study, which looks at the impact of climate change on employment, focuses on three regions in Europe, the Iberian peninsula, Germany and Scandinavia. Even taking the optimistic assumption of gradual, moderate climate change (of the order of 2°C), economic activity and employment in these countries will be significantly affected. All the sectors examined in the study, namely agriculture, forestry, fisheries, tourism, finance and insurance, health, infrastructures, and energy, will need to cope, to varying degrees, with the effects of global warming. The consequences of this have already begun to be seen, particularly in agriculture and tourism. However, more severe

warming would be detrimental overall, with an increased risk of non-linear responses and abrupt changes.

The choice between these options can depend on the results of social dialogue which, by identifying opportunities and encouraging vocational transitions, can strengthen the positive aspects of the necessary changes.

The study looks at the potential repercussions on employment of a reduction of CO₂ emissions in 4 key sectors: energy production (electricity production, oil), energy-intensive industries (steel, cement), transport and building/construction.

Employment in the energy production sector is sensitive to energy-saving policies. Globally, however, the net effect of energy savings on employment would be positive.

A well-designed climate policy can make a contribution towards the maintenance of employment in the energy-intensive industries in Europe.

However, this demands a redefinition of the European Union's existing climate policy.

Transport: huge potential for job creation in transport by alternative means to road vehicles (lorries, cars, motorbikes), with risks for the automobile sector and road freight.

The building/construction sector represents a very important source of employment, but it has to tackle the challenges of training in 'sustainable building' and innovation.

Two conclusions of a general nature can be drawn:

First, there will be a limited positive impact on employment from climate change, provided appropriate economic policies are put in place.

Second, the large-scale redistribution of jobs that will result from the implementation of climate policies will occur within rather than between sectors. At first sight, that seems to be a positive element, because it is considered to be easier for workers to change companies within the same sector than to find work in a different sector. Job changes within a sector can, for example, mean lower retraining costs for workers and shorter search periods. On the other hand, job movements are likely to take place in all sectors. Jobs will be created in companies that can take advantage of opportunities created by climate policies and jobs will be lost in companies that cannot adapt. That should make it harder for policy-makers and the social partners to identify threatened jobs and new jobs.

Of course, the changes brought on by climate policies are closely interwoven with those resulting from other dynamics at work in the different sectors, in particular globalisation and technical progress. This suggests that climate change must be integrated into all European Union policies, in particular industrial, trade and employment policy.

Over and above the quantitative aspects, climate policies should contribute to rising demand for increasingly educated and qualified workers, not only in terms of technological developments, but also in innovation. This is a general evolution of the economy and is also valid for the process of combating climate change. The integration of new low-carbon information and communication technologies (design and

management of control systems in building and transport) and research into new products and services (new composite materials in wind energy) will require high-level qualifications.

Social dialogue, by identifying opportunities and encouraging vocational transitions, can strengthen the positive aspects of the necessary changes.

5 European Foundation for the Improvement of Living and Working Conditions (2009) “Greening the European economy: Responses and initiatives by Member States and social partners”

This study (Andrea Broughton 2009) of the Eurofound has mapped what responses and initiatives have been carried out by national social partners and governments with respect to the greening and low-carbon European economy. Beside the identification of innovative practices carried out by social partners, the report included national differences in the existence of Bi- and Tripartite structures dealing with and debating on issues on sustainable development and green economy.

- Main findings of the Eurofound study :

Both governments and social partners in most countries in this study are active in trying to promote the ‘green agenda’. The scope of such initiatives includes renewable energy production (including tidal, solar and wind power), energy efficiency, sustainable transport, water supply, waste management and sustainable agriculture. The report also aims to identify particularly interesting and successful initiatives that can be shared and disseminated as good practice examples.

The evidence presented in this report by Eurofound’s national centres shows that the green agenda and green policies are more advanced in some countries than others. For example in the Scandinavian countries and Germany, policymakers and the social partners have been active with regard to green issues for a significant length of time, whereas in some of the newer EU Member States, green issues are relatively new on the policy agenda.

The types of actions and initiatives undertaken also depend on the nature of a particular country’s economy. Also, green actions will tend to focus on the sectors as automotive industry, agriculture or tourism in countries where they play an important role in the economy.

Actions and initiatives of social partners often include the issuing of policy statements, the organisation of conferences and workshops to discuss green issues, and the creation

of training programmes to ensure that members acquire the necessary skills. As with the actions of national governments, the social partners' actions vary between the countries. Some social partners, often in the newer EU Member States, have not had as much experience in dealing with these issues as their counterparts in the 'older' 15 EU Member States (EU15). In some countries, where the social partners are less active, initiatives are often led by NGOs.

Differences are evident in the approaches of employer and employee representatives, with the employers more focused on ensuring that they remain competitive in the green economy. By contrast, trade union organisations often tend to carry out lobbying and campaigning initiatives, targeted at governments and the business community.

The skills shortage is an issue that has been highlighted at European level, and also in certain countries, with the social partners in the UK fearing that the lack of appropriate skills may hamper the growth of newer green industries. As a result, the UK social partners-according to the study, particularly on the employer side-, are actively engaging in the promotion of strategies to increase the levels of skills required in the green economy. Also, the study focused on difficulties that may arise concerning the international comparability of new skills and qualifications.

Overall, greening the economy requires long-term investment of time and resources and a solid policy framework that ensures that the changeover to green technology and green industries is as smooth as possible.

In terms of institutional arrangements, it is possible that there will be some reconfiguration of the main actors and social dialogue processes. For instance, new social partner organisations or subsections of existing organisations may start to play a role in the social dialogue process. At the same time, new processes and structures may be created in order to debate the emerging employment issues related to the growing green economy.