



Integrated programme of the European social partners

Joint study

Initiatives involving social partners in Europe on climate change policies and employment

Summary report for the conference on 1 and 2 March 2011, in Brussels

Report drawn up by Syndex

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Foreword

This document reflects the points of view of its authors. It lays no claim to reflect the individual or collective opinions of the European social partners at whose request it has been drawn up, the national social partners or the enterprises responsible for the case studies which have participated in this project, or the European Commission, which has given this project its financial backing.

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Introduction

It is with pleasure that we present you with this final version of the study on *The impact of climate change policies on employment*.

This study, the result of a joint initiative by the European social partners as part of their 2009-2011 Integrated Programme, has been conducted by a team of European experts between January 2010 and February 2011. They were closely monitored by a steering committee made up of representatives from the European Trade Union Confederation (ETUC), BUSINESSEUROPE, the European Association of Craft, Small and Medium-sized Enterprises (UEAPME) and the European Centre of Employers and Enterprises providing Public Services (CEEP). Two experts from Syndex, Alain Mestre and Philippe Morvannou, assisted by Sabrina Marquant, coordinated the work on the study proper. They worked with WMP for Germany, Montserrat Sagarra for Spain and Andrzej Jakubowski and Marcel Spatari, from S.Partner, for the countries of Eastern Europe. This study will underpin the final conference being staged by the European social partners on 1 and 2 March 2011 in Brussels.

The driving force behind this initiative has been the desire to give the social partners a way to identify the common actions that exist or may be envisaged at European level to maximise the opportunities and minimise the negative effects on employment of the national strategies to combat climate change, and more specifically the policies and measures to reduce greenhouse gas (GHG) emissions. The existing experiences – ‘good practices’ – offer many lessons in this connection.

We have structured our report by country and by origin of the initiatives taken by the social partners, depending on whether they stem from a common approach by the social partners (‘bipartite initiative’), or the social partners in tandem with the public authorities (‘tripartite initiative’), or these three stakeholders in combination sometimes with other civil society players such as NGOs, research centres or qualified figures (‘tripartite+initiative’), not forgetting partnership initiatives (‘public-private’) between one social partner and the public authorities, and finally unilateral initiatives taken by a single social partner.

Methodology

To gain a better understanding of how the social dialogue systems work, and how much of a bearing they have on the questions around climate change and employment, we have used a multi-stage data collection and interpretation method. First, the existing literature on the subject was identified. This was then supplemented by the responses to a questionnaire devised jointly by the experts and the steering committee members and sent out to their national members in the 27 EU Member States plus the applicant countries Croatia and Turkey. This initial work formed the basis for the seminar on 29 June 2010 at which the following were presented:

- five European-scale reference studies, on which the European social partners could base themselves (see below);
- four cases of good national practices (Germany, Belgium, Spain and the United Kingdom).

Finally, interviews were conducted with employers' organisations and member national trade union organisations in a sample of ten EU countries (Germany, Belgium, Bulgaria, Denmark, Spain, France, Portugal, Romania, the United Kingdom and Sweden), considered to be cases of good practices and for that reason selected by the steering committee (incorporating the four initial cases). They will be presented at the final conference on 1 and 2 March 2011.

However, to preserve the full richness of our research and the responses to the questionnaire, the number of countries presented in this report has been increased to eighteen. Austria, Finland, Ireland, Italy, Lithuania, the Netherlands, Poland and the Czech Republic have been added to the sample of the ten countries analysed in depth.

The experts first looked at the European level, analysing the studies into the interrelations between climate policies (specifically policies and measures to reduce greenhouse gas emissions) and the impact on employment, qualifications and the labour market. They also looked at the role, in that area, of systems of labour relations and dialogue between the social partners themselves and/or with the various stakeholders. Five studies have been logged and referenced¹.

On the other hand, there are few national studies into the impact of climate policies and measures on employment and the labour market (in quantitative and qualitative terms), aside from a few exceptions which, in addition, do not cover all the economic sectors (Germany, Austria, Spain, Finland and France).

For a number of reasons, the study took a country-by-country approach. This made it possible:

- to highlight the political/institutional framework within which the social dialogue is conducted in EU-27 and to identify the type of strategy that is being implemented in each Member State to combat climate change, and in particular to reduce greenhouse gas emissions, specifically in the framework of the objectives in the European Climate-Energy package (by 2020);
- to determine the role of the social partners and the public authorities in the definition and implementation of those policies in each country, but equally to analyse how the management of the impact of such measures on jobs and skills is tackled;
- to analyse how climate change policies affect the labour market, jobs (in terms of both numbers and quality), and skills;
- to record initiatives forming good practices by the social partners in a single country.

Before this overview, you will find the major lessons summarised and analysed in the synthesis.

We trust you will enjoy reading our report.

Syndex

¹cf 1st part and bibliography.

I. Synthesis

Climate change: choices of a society where dialogue and social consultation are indispensable

The five studies whose main conclusions are presented in this report put into perspective the many initiatives taken by the European social partners over recent years. Framed by the objectives of the European Climate-Energy package², which set each country in the European Union some objectives in terms of the reduction of greenhouse gases by 2020, these policies and initiatives have achieved varying levels of success in the different countries.

Be that as it may, the climate change policies today have, after a lengthy gestation, developed into one of the major planks in economic and social policies in both industrialised countries and emerging countries alike. These policies, a mix of standards, taxation and markets, link national and regional levels, urban and global dimensions, the business economy, the sectoral economy and the macro economy. The low-carbon prospect has thus become systemic in the early 21st century.

Climate change is an issue with many facets, while equally being timeless, blending an essential forward-looking dimension which speeds up the arrival of the future (the objectives for the next ten or forty years) and systems of labour relations rooted in generational realities, where progress is necessarily slow.

New technologies which are a way of resolving these contradictions cannot be envisaged without their counterpart, the economic dynamism and the social and societal relationships which allow them to be generated and to evolve. Social dialogue and social consultation have a pivotal role here as an integral and key part of a choice of society: hence the imperative for the economic and political players to anticipate the effects of this sea change in terms of jobs, qualifications, investments and restructuring operations in order to smooth this transition towards what we are in the habit of describing as the ‘green economy’ or the ‘low-carbon economy’.

All sectors of activity, all businesses and employees are affected

The impact will thus vary widely between sectors: some will be restructured and destroy jobs, some will bring development and new jobs, while a third category will have to transform its existing jobs, as is the case with transport and some areas of industry (metalworking and chemicals).

The point is that even if there is no strict match between the energy-intensive sectors – the first to be hit by low-carbon policies – and the labour-intensive sectors, the fact still remains that in addition to the direct impacts, there will also be indirect impacts across the whole economy. This will be the case in downstream areas such as after-sales or distribution, because of the evolution in consumers’ preferences.

In the same way, while the need for employees trained in the new techniques and new methods of management will increase, human resources management will likewise be transformed.

² See details on the site: http://ec.europa.eu/clima/policies/package/index_en.htm .

The transformation vectors for a new industrial policy: energy efficiency, renewables and carbon capture and storage.

What are the main transformation vectors?

On the one hand, the first is made up of energy efficiency policies. This is the first lesson to be drawn from this study: the social partners and the public authorities alike, whether together or autonomously, have committed themselves to a string of initiatives making for energy efficiency savings across most European countries.

Most of the time, these initiatives come from tripartite social and societal consultation institutions which link energy efficiency, employment and new skills. Building and public works is the first of the sectors making it possible to combine these two objectives, as in the case of the Employment-Environment alliance, which already goes back a long way in Germany, but is also more recent in Belgium and Romania, at the initiative of the social partners alone.

However, certain initiatives show that this approach can be applied to other sectors (resource efficiency network in Germany, for example), can be trans-sectoral and focused primarily on training, such as the Vocational Education Council in Denmark, or perhaps based upon the workplace (green workplaces in the United Kingdom). Particular mention needs to be made of the Energy Efficiency Programme in Sweden, which incorporates energy efficiency for highly energy-intensive industrial sectors and staff training.

Beyond vocational training, energy efficiency can also be the way to increase companies' competitiveness and finance less widespread measures which support purchasing power ('eco-cheques' and the Fund to reduce global energy costs, in Belgium) or focus on improving occupational health (the Wittenberg initiative in the German chemical industry).

A second analysis stresses the macroeconomic dimension (industrial policy). Three countries, Portugal, the United Kingdom and Denmark, are running centralised industrial policy initiatives, supported by the social partners in terms of renewable energies and low-carbon technologies such as carbon capture and storage, which is proving its value as a transitional technology with multi-sectoral and territorial dimensions. We must cite the conversion of the Copenhagen shipyards into an offshore wind farm (the Lindoe centre).

The focus on renewable energies makes it possible to get job creation and job transformations to give concrete shape to the new energy deal in many countries, with the issue being jobs, in terms of both numbers and quality, in the framework of a developed social and societal dialogue.

In parallel, the local communities are running decentralised industrial policies in close association with the social partners as in the examples of the Fora for growth in Denmark, the 1,000 projects run by local and regional communities, the cities of Evora or Viseo in Portugal or the city of Berlin, which are developing local new energy technology programmes.

On the other hand, it is necessary to run a low-carbon industrial policy and avoid carbon leaks which would affect the globalised industries based in Europe. This policy also needs to give time for pre-competitive R&D projects underway to reach their industrial low-carbon developments, like the Ulcos project (ultra-low carbon steel production) in the steel sector, funded via a European public-private partnership, governed by the social partners and the European Commission and designed to halve the sector's carbon emissions (per tonne of steel produced) in the next twenty years. The point is that while low-carbon policies are not yet behind restructuring operations bringing job losses, there is no doubt that the prospects in the area are destabilising the industries concerned in the first instance and are already having markedly negative impacts in terms of the location of investments and jobs in Europe.

The impact of the crisis

In the first place, tripartite consultation is quite well developed on the basis of the realisation shared by the employers, the public authorities and the workers' unions that a return to economic growth can be accelerated with the green economy, which can create jobs.

In the early days of the crisis, therefore, particularly in the new Member States of the European Union, we witnessed the development of tripartite consultation on green jobs coming out of the fight against pollution and climate change – the two being frequently confused – as a response to the crisis.

It very rapidly became clear that the impact of the economic crisis and the bail-out of the financial system by the States had drained the bulk of the resources, and that as a result, the funding required to support the economy was extremely restricted. The revision varied from country to country, with the financial situations being more or less tense, or even desperate in some cases. The result was a period of great disappointments for some social partners and questioning for others, in line with their expectations.

Yet social consultations had taken on concrete shape through some unprecedented proposals, whose originality is stressed by the social partners, who had given it their all. Such is the case in Bulgaria, Romania and – to a lesser extent – France, even though the stop put to the Grenelle Environment Forum is less brutal.

Consultation and social dialogue on the low-carbon society and economy

This negative experience is liable to hang over the future, unless work can be resumed shortly, because it will have demonstrated in many European countries that the low-carbon transformation entails wide social consultation dynamics, bringing together many private and public players, governmental and non-governmental, working in specific or pre-existing institutions.

Moreover, it has demonstrated the value and strength of the work on raising awareness and providing information undertaken by the social partners vis-à-vis their members. This work, which we term unilateral – for it is undertaken at the initiative of each organisation – is continuing today in manifold forms, and must not be underestimated as a foundation for future discussions on these measures, once the immediate financial constraints have been able to be lifted.

Finally, it is quite unusual for the social partners such as NGOs to be invited to discuss and propose economic recovery and job creation measures in a macroeconomic framework, with the low-carbon economy here showing its potential for social creativity.

From that point of view, the bipartite social dialogues, still falling within national medium- and long-term policies, share that original feature, where economic democracy delivers its contribution in terms of industrial policy, energy efficiency, vocational training, jobs and working conditions, in the form of initiatives.

Depending on the country, situations vary very widely in terms of the intensity of initiatives, with countries like Germany and Belgium positively teeming, compared to the vast majority of the cases studied.

However, the question of the social transition still remains largely open

The focus on policies to combat climate change as an anti-crisis policy has allowed social consultations and social dialogues to emerge in numerous countries across Europe, specifically when it has been a matter of distributing rights to produce greenhouse gas emissions between sectors, but also in order to achieve the objectives set.

On the other hand, the ‘adaptation to climate change’ aspect has a very low profile in the discussions between social partners or with the public authorities.

Yet studies show the prospect of the loss of many jobs in certain sectors such as tourism and farming as a result of climate change. The challenge of constant investment to improve health, safety and working conditions remains intact, even if such investment would also have the advantage of attracting skilled workers into these sectors where health, safety and working conditions can be difficult, as has been stressed by the UNEP-ILO study (2009).

So the risks and opportunities of the low-carbon transition that workers and business leaders will face will need to be managed in such a way that they do not exacerbate the situation of the weakest. The initiative of the Employment-Towns alliance in France is pursuing this objective.

The transition to a low-carbon economy means not just finding alternative green jobs for workers affected by the low-carbon transformation, but also training skilled workers, fostering a constructive social dialogue, raising awareness and training entrepreneurs on these issues.

To reach this objective, some vocational training initiatives, beyond energy efficiency, need to form a powerful instrument for the creation of new low-carbon jobs, the retraining of jobless people affected by the transition and the transformation of existing jobs. The new skills must be identified, as we can see from the Romanian skills mapping initiative, Portugal’s experience with the New Skills Agency or the anticipation efforts being made in Spain. Some countries have already embarked on structured actions in the field of vocational training, like Denmark and Germany, which have included low-carbon programmes in their system.

However, we can see that there is a desperate shortage of tools to help anticipate the low-carbon socioeconomic transition, right across Europe. All we can do is urge the social partners to discuss these new tools, which are already proving themselves to be indispensable.

II. Review of studies undertaken which assess the impacts of policies designed to address climate change on employment and skills

A number of recent studies have been dedicated to the analysis and assessment of these impacts, and/or to the role of the dialogue between the actors (public authorities and social partners). Five such studies covering these issues are outlined below.

1. GHK (2009), 'The impacts of climate change on EU employment in the medium term (to 2020)'

GHK Consulting was commissioned to produce a study as support for the Restructuring Forum organised by DG EMPLOYMENT at 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 a low-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 macroeconomic 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 than 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 are 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 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 actual levels of employment. There is a widespread need for new skills and a general need for upskilling, met by substantial activity in the introduction of new training programmes, especially in technical competences.

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 are expected from the EU ETS.

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 the 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 at the European Commission, took into 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 deindustrialisation 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, the 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.

Among other things, the study presents three recommendations: 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; 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, the Ulcos R&D programme (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 expenditure on low-carbon technologies could prove effective in a competitive framework.

Carbon capture and storage (CCS): a multi-sectoral 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 model employment of the future 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 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 materials hazardous to health need 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 the 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 aimed at 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 at the European Commission and ETUC, as a contribution to improve current understanding of the relationship between climate change and employment. The study was also supported financially by DG Environment and six European governments (Belgium, Spain, Finland, Italy, United Kingdom).

The study first examines the potential consequences for employment of global warming in Europe, which has already begun and will continue. The second half of the study considers the impact on employment of the transition towards a lower-CO₂ European economy by 2030, in four key economic sectors: energy production, transport, the steel and cement industries, and construction/housing.

The study adopts a sectoral perspective with the building of sectoral models. It is mainly at the level of the economic sectors that we may see the emergence of imbalances between supply and demand for jobs and qualifications which will result from the implementation of the adaptation and mitigation measures. Such imbalances may be short-lived, or they may last longer.

The global benefit of preventing global warming in terms of employment may thus mask employment trends which are significant at the sectoral or regional levels.

Climate change represents an unprecedented challenge for employment policies and for the social partners: the anticipated job gains and losses are sizeable, and no sector can afford to ignore the consequences of climate change, whether they be directly impacted by global warming or whether they have to deal with the consequences – either positive or negative – of the measures taken to combat global warming.

If the questions of employment and human resources are not more closely integrated into climate policies, we may expect them to become a major barrier to the economic, technological and societal transformations demanded in order to manage the transition to a more carbon-lean economy and in order to ensure that societies can adapt to the effects of climate change which are henceforth unavoidable.

This consequently shows that robust action on climate change, made up of both mitigation and adaptation measures, should be based upon two crucial elements: the immediate setting in place of the political options which are most effective in delivering the double dividend of the fight against climate change and the creation of quality jobs, on the one hand; and on the other hand, the introduction of instruments to anticipate and provide socially responsible support for the economic and social changes demanded.

The main findings of 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 measures to enable the European Union to reduce its CO₂ emissions by some 40% by 2030 do not globally destroy jobs, but they do substantially change the supply and demand of jobs and qualifications within and between sectors.

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.

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.

5. European Foundation for the Improvement of Living and Working Conditions, Andrea Broughton (2009), 'Greening the European economy: Responses and initiatives by Member States and social partners'

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

This report examines the responses, initiatives and activities undertaken by national governments and the social partners in the EU Member States plus Norway in working towards a greener economy and maximising the job creation potential of this new area. The report looks specifically at various measures undertaken by governments with a view to stimulating the economy in the current context of the global economic crisis.

- *Tripartite dialogue structures dealing with green issues*

A mixed picture emerges regarding the existence of tripartite social dialogue structures and processes on green issues. In some countries, there is a lot of activity, whereas in others no such activity is recorded, sometimes even where there is an established tripartite social dialogue.

The study focused on national cases (Denmark, Finland, Spain, France, Belgium, the Czech Republic, Austria) where tripartite initiatives aim to stimulate the economy and to promote a green agenda.

Governments, trade unions, employers and other stakeholders around Europe are largely in agreement that the green economy has the potential to create a significant number of jobs in the future. One of the main issues, therefore, is how to harness the potential of this area and to use it to revive economies that are suffering from the recent economic crisis. In some countries, governments are working with the social partners and other stakeholders to help build strategies for the development of a green economy (the cases of Austria, Slovakia, the UK, Romania, Lithuania, Belgium and Italy).

- *Social partners' responses, initiatives and tools*

The social partners at national level in the majority of countries in this study are active in varying ways in the area of green policy and the green economy. Some of the social partners are working in conjunction with the government on a tripartite basis. Others are developing their own initiatives, either on a bilateral or unilateral basis.

- *Social partners' positions and approaches on the green agenda*

The green agenda is taken seriously by the social partners in all of the European countries.

Employers and trade unions have undertaken a range of activities in this area over recent years, including the publishing of position papers and the setting up of bodies to look specifically at green issues. General issues covered include housing, energy efficiency and the use of renewable energy, transport and public procurement.

- *Unilateral and joint strategies and actions by the social partners*

Such measures take the form of awareness-raising activities, bilateral dialogue, capacity-building initiatives and training for members. There are a number of examples of bilateral dialogue on green issues between employer and employee representatives, and of initiatives that have been carried out in specific sectors (Denmark, Norway and Italy).

Main findings of this study

- Showing that 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. In the Scandinavian countries and Germany, policy-makers 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 sectors such as the automotive industry, agriculture or tourism in countries where they play an important role in the economy.
- These actions and initiatives by social partners 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 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 (EU-15). 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 fearing that the lack of appropriate skills may hamper the growth of newer green industries. The UK social partners 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, greening the economy is likely to require some reconfiguration of the main actors and social dialogue processes. For instance, new social partner organisations or sub-sections 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.

III. Review by country

1. Austria

Under the Kyoto Protocol, Austria undertook to reduce its CO₂ emissions by 13% in 2012 compared to 1990. In reaching its objectives, the Austrian government adopted the KlimaAktiv strategy in 2007, covering all sectors of activity in the country³ over the period 2008-2012. However, CO₂ emissions continued to climb, reaching a level of 86.6 million tonnes by 2008, an increase of 10.8% compared to 1990. Austria recently set up a strategy to complement KlimaAktiv: the *Austrian Energy and Climate strategy*.

The role of the public sector in achieving Austria's climate objectives as defined by VÖWG⁴, affiliated to CEEP:

In Austria, the public sector plays an important role. The point is that it has long been intervening in favour of saving resources and energy efficiency. The public sector is not based solely on green jobs, but also on a social law and an efficient economy.

However, the actions by the public sector in achieving the climate objectives need to be reinforced. The point is that the public sector economy needs to get more closely involved in the process of organising a green economy. The reason is obvious: green jobs already exist in many areas of the public sector economy in Austria and are constantly evolving (public transport of passengers from the suburbs, efficient energy supply, heating grid, building renovation, etc.).

From now on, the fight against climate change is closely linked to energy policy and initiatives designed to improve energy efficiency. The objective of reducing emissions by 16% between 2005 and 2020 was defined in the European Climate-Energy package.

The tourism sector looks like a priority sector, in terms of both the reduction of CO₂ emissions and adaptation. There are two priorities to cut carbon footprints:

- *priority 1: **transport**, with the spread of public transport and the introduction of e-mobility. According to the employers' organisations, management jobs could be created both in the leisure industries and in the transport sector. Examples of projects set up include 'the Alpine Pearls', or how to holiday while respecting the environment;*
- *priority 2: **energy efficiency**, in the hotel industry. Information brochures have been published and special training courses put in place.*

Traditionally, the social partners are very active in Austria, so it is perfectly natural for their participation to have been provided for in the framework of this strategy.

³The sectors covered by the ETS and those not covered.

⁴Austrian association of public enterprises: <http://www.voewg.at/>

1.1. Partnerships: between tripartite and bipartite approaches

Consultation in Austria on questions about climate and energy occurs mainly via partnerships getting the government involved in the framework of their discussions⁵. At federal level, for example, the government, and more particularly the *Lebensministerium*⁶, participates in discussions with the social partners via the setting up of numerous partnerships. Chief among these are the CO₂ partnership, the partnership in sustainable management of beverage packaging including climate protection aspects, and the partnership on e-mobility. These partnerships produce studies on specific topics. They likewise have the capacity to set in place preventive measures and political initiatives, since any consensus achieved during the discussions is directly applicable. This is because in Austria, the four associations – the Austrian Trade Union Confederation (ÖGB⁷), the Austrian Federal Economic Chamber (WKÖ⁸), the Federal Labour Chamber (BAK⁹) and the Austrian Chamber of Agriculture (LK¹⁰) – bring together virtually all the representatives of the stakeholders in the Austrian economy.

In terms of training, the social partners play an important role. Discussions are staged at federal level, but also at the level of the *Länder*. Here, too, the pattern remains the same, since social consultations are organised via the social partnership. At federal level, the social partners hold discussions within the Federal Vocational Training Council¹¹ on questions relating to learning, including in connection with the needs defined in the framework of the partnerships defined above in terms of sustainable development and climate-energy. At regional level, the social partners likewise discuss vocational training. This is done within the Vocational Training Council¹².

1.2. Unilateral initiatives

However, the social partners also conduct unilateral initiatives. Alongside their traditional actions¹³, they set up specific training-related initiatives.

Employers' initiatives

On the part of the employers' organisations, the WKÖ has recently created an institute, the *Economic Energy Institute*, which has as its essential aim to help small and medium-sized enterprises in the field of energy efficiency by giving them advice on the subsidies set up by the government. The employers' organisations are also very active in terms of training. In that sense, the WKÖ has set up another institute, for economic promotion (WIFI¹⁴), which delivers training on jobs, specifically those associated with green growth.

⁵ However, the Austrian government has no more than a coordinating role within these partnerships.

⁶ *Ministry of Agriculture, Forestry, Environment and Water Management.*

⁷ Österreichischer Gewerkschaftsbund

(http://www.oegb.at/servlet/ContentServer?pagename=OEGBZ/Page/OEGBZ_Index&n=OEGBZ_0)

⁸ *Wirtschaftskammer Österreich* (<http://portal.wko.at/wk/startseite.wk>)

⁹ <http://www.arbeiterkammer.at/beratung.htm>

¹⁰ <http://www.pklwk.at/>

¹¹ Bundesberufsausbildungsbeirat.

¹² Landesberufsausbildungsbeirat.

¹³ By way of example, the social partnerships conduct lobbying actions at federal level, but also at European level.

¹⁴ http://wko.at/awo/wkoat_english/download/WKSELBST_awo_EN.pdf

2. Belgium

By 2012, Belgium will in all likelihood have reached the level of reduction that it set itself under the Kyoto Protocol¹⁵. The Belgian federal government set itself the ambitious target for 2050 of reducing CO₂ emissions by 80 to 90%. The objective of reducing emissions by 15% between 2005 and 2020 was defined in the European Climate-Energy package.

The social partners are unanimously aware that this objective will have repercussions on the economy in Belgium. In terms of employment impact, the Federal Planning Bureau¹⁶ has analysed the consequences on the Belgian economy of the application of the Energy-Climate package: while the transition to a low-carbon economy will make some 16,000 jobs redundant, it will also allow the emergence of over 25,000 jobs; so the question of green jobs seems to be crucial. In the short to medium term, the impact will be significant but gradual, whereas in the long term, by contrast, it will be structural and profound. The challenges facing the social partners relate specifically to the fact of seizing with both hands all the opportunities offered by the transition to a low-carbon economy, as well as the impact of policies on jobs in traditional sectors and in the eco-industries.

2.1. Tripartite and tripartite+initiatives

Questions linked to climate change (adaptation and mitigation) have been cropping up in the field of social consultation for the past ten years or so. These questions are first and foremost addressed in the Federal Council for Sustainable Development (FCSD)¹⁷, which is a formal tripartite + discussion forum at federal level. The main remit of this Council is to issue opinions on policy in terms of sustainable development. In parallel with that task, it raises awareness and educates the public about sustainable development.

At federal level, Belgium has set up the ‘Springtime of the Environment’¹⁸. This initiative, officially unveiled on 15 April 2008 by the government, is considered to be an innovative process, since it brings round the table the federal government, the regional governments, the social partners and civil society. Several workshops have been set up on topics with the objective of framing opinions on a collegiate basis. These opinions have made it possible, in the second stage, to define a roadmap of concrete actions to be conducted on the ground. The outcome has been some concrete results, since 159 measures have been defined.

At regional level, tripartite socioeconomic consultation committees have been set up. Thanks to these consultation committees, the social partners are participating in the definition of regional policy. This is the case, for example, with the Flemish Socioeconomic Consultation Committee (VESOC¹⁹). In 2009, thanks to the consensus achieved by the social partners, the Flemish government set up a plan (an incentive) on employment and investments (Employment and Investment Plan, 2009) favourable to sectors in the green economy.

¹⁵ Belgium, under Kyoto, pledged to reduce its emissions by 7.5% in 2012 compared to 1990. By 2008, the country had already achieved a reduction of 7.1% compared to 1990 (European Environment Agency).

¹⁶ <http://www.plan.be/index.php?lang=fr&TM=30&IS=61>

¹⁷ Since its creation by the law of 5 May 1997, it replaces the National Sustainable Development Council. Broadly speaking, it brings together organisations of workers and employers, environmental associations, development cooperation organisations, consumers’ associations, energy producers and a panel of scientists.

¹⁸ http://www.printempsdelenvironnement.be/FR/le_printemps

¹⁹ VESOC: Flemish Socioeconomic Consultation Committee. Ce type de comité existe également en région Wallonne. Il s’agit du CESRW (le Conseil Economique et Social de la Région Wallonne) et à Bruxelles le CESRBC (le Conseil Economique et Social de la Région de Bruxelles-Capitale)

This plan suggests, *inter alia*, that the training system and the labour market should operate in tandem so as to promote the green skills and competences necessary. In addition, this plan stresses that investment is a suitable response to the issues of tomorrow and supports the idea of creating a green investment fund.

Alongside these committees, some initiatives on training have been set in place. These initiatives introduce participation and social dialogue with the social partners. By way of example, in the Brussels-Capital region, reference centres have been set up²⁰. The Flemish Region has developed some training modules; these are conventional training modules, new training modules or modules providing training specific to green jobs. In the Walloon Region, the Marshall Plan 2 ‘Green’²¹ has been set up and has helped to improve training courses.

At sectoral level, many projects have been conducted, picked up by all the social stakeholders and the public authorities. This is the case, for example, with housing: when it was recognised that the housing stock was getting alarmingly old and run-down, the social partners quickly moved to set up proposals for the renovation of Belgian houses. To carry out these renovations, the Belgian social partners’ proposals drew on the German initiative ‘Employment-Environment’, implemented in the framework of sustainable construction.

Marshall Plan 2 ‘Green’

After the success of the first Marshall Plan, the Walloon government was anxious to pursue this initiative, adopting the Marshall Plan 2 ‘Green’ in 2009. This new plan retains the thrusts in the previous one – creating competitiveness hubs, stimulating the creation of activities, easing the tax burden on business, boosting research and innovation in connection with business, upskilling for employment – by giving them a ‘sustainable’ dimension. A budget of €3 billion over four years (2010-2014) is planned. This Plan provides for workshops in the sustainable construction sector, with a tripartite structure (social partners and public stakeholders). To do this, skills centres have been built (24 centres + 1 centre concentrating exclusively on environmental training), devoting some 15% of the programmes to green training.

The Marshall Plan 2 ‘Green’ intends to set up employment-environment alliances drawing on the German model. These alliances are first rolled out via the launch of a pilot alliance: the ‘Energy-saving and sustainable construction alliance’. The objective of this alliance is ambitious: to conclude, by 2011, a ‘multi-sectoral’ contract with the social partners in the building sectors, the research centres, the universities, the region, the FOREM, and IFAPME with the purpose on the one hand of training workers in new competences in that sector so as to improve the energy efficiency of the Walloon housing stock and on the other, to create quality jobs.

This contract is to drive the energy policy to be pursued in building. According to an analyses by the social partners, the priority needs to shift towards insulation and energy efficiency in the rented and urban homes which are the least well insulated and in particular, for the trade unions, rented housing occupied by a vulnerable population. According to the Walloon Region’s forecasts, over 128,000 new homes should be built by 2020. Finally, as from 2014, the low-energy standard should be applied and from 2017, the passive house standard should become compulsory in its turn.

²⁰These reference centres have been set up in order to meet needs in two sectors: eco-construction and eco-industry.

²¹<http://planmarshall2vert.wallonie.be/?q=node/58> This Marshall Plan provides for workshops made up of public stakeholders, the sector, the social partners etc., focusing on categories of needs for this type of activity: the social economy in the sustainable construction sector, education in construction, training, business support, access to funding for businesses, research and innovation, excellence (certification, labels, charters) and technical references about the methods used in this field.

To achieve this, the plan provides for workshops with tripartite representation (social partners and public stakeholders), focusing on the precise needs in that sector (notably social economy in the sustainable construction sector, support for enterprises, technical tools such as specifications, labelling, etc.).

With a view to consolidating the Marshall Plan 2 ‘Green’ objectives, the Industry Action Plan was adopted in September 2010. Its aim is to set up sectoral round tables (public procurements, environment, town planning, energy, climate, training, R&D, innovation) bringing together members of the government, employers and the trade unions, to do a better job of identifying the tools necessary to develop eco-industrial activities.

Under the low-carbon North/South development projects (between developed and developing countries), a tripartite initiative is being run, namely the clean development mechanism projects (CDM)²² planned under the Kyoto Protocol. Thanks to social consultation, Belgium has set up a technical committee on the allocation of CDM, which supports the CDM project throughout the whole process and ensures compliance with the social and environmental dimension of the projects. This committee is a model for Europe and the world.

2.2. Bipartite initiatives

Questions linked to climate change (adaptation and mitigation) have been cropping up in the field of social consultation for the past ten years or so. These questions are first and foremost addressed in the Central Council for the Economy (CCE)²³ and the National Labour Council (CNT)²⁴, two formal bodies for bipartite discussion at federal level²⁵. Their main remit is to issue opinions on economic/social questions.

The two bodies above work in close collaboration on environmental questions, and that being so, a joint ‘Green Jobs’ sub-committee has been created to facilitate the drafting of opinions on these questions. For example, this sub-committee has produced two reports on green jobs (*Opinion on the topic of green jobs, 2009* and *A successful transition to a low-emission economy – Second opinion on the topic of green jobs, 2010*). According to the social partners, in the 2009 opinion, if the definition and crystallisation of the measures are to be more effective, Belgium needs to have a detailed employment register with a sectoral breakdown²⁶, plus an analysis of the impact of climate-energy policies on those jobs²⁷. In the second opinion in 2010 (called for by the federal government holding the Belgian Presidency of the EU), an integrated industrial policy approach focusing on the green economy and green jobs is promoted by incorporating the dimensions of R&D, competitiveness, markets and education-training.

²²These mechanisms are provided under the Kyoto Protocol.

²³According to the law of 20 September 1948 which set it up, its objective is to address subjects relating to the Belgian national economy. It is made up on a joint basis of fifty or so members and an equal number of alternates.

²⁴According to the law of 29 May 1952 which set it up, its objective is to address subjects relating to Belgian social problems. It is made up on a joint basis of a maximum of 26 members (13 are employers’ representatives and 13 are trade union representatives).

²⁵ These two bodies break down at the regional level: the Economic and Social Council of the Brussels-Capital Region (http://www.bruxelles.irisnet.be/fr/region/region_de_bruxelles-capitale/organismes_regionaux/cesrbc.shtml), the Economic and Social Council of Flanders (SERV - <http://www.serv.be/serv>), and the Economic and Social Council of the Walloon Region (CESRW-www.cesrw.be).

²⁶According to the opinion, this register is important because at present there is no ‘complete and up-to-date quantitative summary for the job-creating areas with added environmental value and preserving regional competitiveness’.

²⁷This analysis is currently being completed by the Bureau Fédéral du Plan. It is a SWOT analysis and will deliver a detailed snapshot of the impact of climate policies on the sectors.

In addition, some bodies go further in terms of initiatives. Such is the case with the National Labour Council, which concludes collective labour agreements on an inter-industry level²⁸ and has set up an unusual initiative, ‘eco-cheques’: also known as ‘green cheques’²⁹, they were launched officially in Belgium in July 2009. This initiative is driven by two objectives: to improve workers’ purchasing power, and to promote the purchase of ecological products and services³⁰. These two objectives will have the indirect consequence of stimulating employment³¹.

Eco-cheques

The eco-cheques mechanism is an original initiative being run jointly by the social partners. The public authorities are only partially involved in the project.

This initiative was designed and implemented in a context of economic crisis as a way of improving the purchasing power of workers, without affecting the wage standards. It was applied pursuant to the inter-industry agreement of 22 December 2008 covering the period 2009-2010. It was detailed in Collective Labour Agreement n° 98 of 20 February 2009, adopted by the National Labour Council (CNT).

The mechanism today is ‘evolving’ within the CNT. It is implemented within businesses and remains dependent upon sectoral collective bargaining agreements negotiated within the Joint and Sub-Joint Committees. To improve the mechanism, evaluations have been carried out under the CNT. They were used to back the process of framing the opinion on 21 December 2010³² in which the social partners agreed on two questions: the need for clarity in the list of environmental products and services and the need to set in place a control.

In another area, the renovation of buildings, the social partners have also played an important role by encouraging the creation of a fund to combat energy vulnerability.

Fund for the Reduction of the Overall Cost of Energy (FCRE) for the building sector³³

This fund was created in March 2006 by the Belgian federal government, following a consensual opinion by the social partners on ‘the energy efficiency of housing in Belgium’ issued to the Central Council for the Economy in 2005 (and an additional opinion in 2006).

The objective is threefold and refers to the 3 pillars of sustainable development: 1) acting to combat energy insecurity, allowing people on modest incomes to benefit from low-interest loans to carry out energy-saving works and those on low incomes to benefit from the third-party investor system; 2) reducing the country’s energy intensity and greenhouse gas emissions via the residential sector; 3) developing activity and employment in the sustainable building sector.

The governance system for this fund is regulated (pursuant to a royal decree) by a board accompanied by a ‘Council of Wise Men’ with representation from the social partners, whose role is to issue opinions on the way the fund operates (the services furnished by the fund and the objectives it pursues).

²⁸The National Labour Council has had this competence since 1968.

²⁹Eco-cheque Ticket, if it is issued by EDENRED (Accor Services) and Eco-Pass, if it is issued by SODEXO.

³⁰http://www.mescoursespourlaplanete.com/Actualites/Sodexo_et_Accor_Services_lancent_les_aeco_chaques_en_Belgique_578.html

³¹At the moment, no study into the impacts of this mechanism on employment has been conducted. Only a request from the trade unions has been tabled.

³²CNT opinion 1.758 of 21 December 2010.

³³<http://www.frce.be/>

2.3. Unilateral initiatives

Trade union initiatives

The unions³⁴ are very active on the question of the impact of climate policies on employment and training. They run initiatives designed to inform and raise awareness among their membership and delegates on climate issues, write articles³⁵, organise conferences, fora³⁶ and symposia, and carry out lobbying activities. In addition, the main actions conducted by the Belgian trade unions relate to raising awareness and training their membership and their delegates.

RISE in the Walloon Region, BRISE in the Brussels Region and ASLB Arbeid & Milieu (Labour and Environment) (A&M) in the Flemish Region are unilateral initiatives run by the trade unions, involving programmes delivering training and awareness-raising intended for trade union delegates about environmental and climate change questions connected to businesses.

RISE³⁷ (Inter-union Network of Environment Awareness)

It was created in Wallonia in October 1996, and its main objectives are to offer support to trade union delegates on environmental questions and stimulate social consultation on environmental issues in business, to reinforce delegates' capacity for intervention on environmental questions, and to raise awareness among workers and their representatives about the environment. Various tools have been set up in the framework of technical support to delegates: training courses, awareness-raising sessions, games, TV broadcasts, inter-union forum, actions on the ground in the form of pilot experiments in various businesses or in sub-sectors, various thematic brochures, practical guide on the environment for trade union delegates, internet site, aid service, electronic information letter, etc.

BRISE (BRUSSELS)

Inspired by the Walloon RISE experiment and tailored to the specific features of the socioeconomic landscape in the Brussels-Capital Region, BRISE (Brussels Region Inter-union Network of Environment Awareness) was created in 2006 at the initiative of the unions (FGTB, CSC and CGSLB) with the support of Bruxelles Environnement and the Brussels-Capital Region.

ASBL Arbeid & Milieu (Labour and Environment) is a partnership founded in Flanders between an environmental protection association (Bond Beter Leefmilieu) and the unions (FGTB, CGSLB and CSC) which seeks to contribute towards an economy and a society that are socially and environmentally responsible. With that in mind, A&M :

- regularly organises debates, study days and round tables on social and environmental topics;
- disseminates information via the magazine *A&Mon* socio-environmental issues;
- carries out research projects delivering added value to trade union operation in businesses.

³⁴ Fédération générale du travail de Belgique/Algemeen Belgisch Vakverbond (FGTB: <http://www.fgtb.be/web/guest/home-fr>) , Confédération des syndicats chrétiens/Algemeen Christelijk Vakverbond (CSC:<http://www.acv-csc.be/>), Centrale générale des syndicats libéraux de Belgique (CGSLB:<http://www.aclvb.be/>)

³⁵ 'Syndicat rime avec climat, la politique climatique de la FGTB', 2nd edition, 2007. 'Changement climatique: l'urgence d'agir' – bimonthly, published by CSC, available at http://www.csc-en-ligne.be/Images/synd_693_climat_tcm22-190787.pdf

³⁶ 'Changements climatiques, relevons le défi!' Inter-Union Forum, 25 November 2008 in Charleroi.

³⁷ <http://www.rise.be>

Employers' initiatives

The Fédération des entreprises de Belgique (FEB-VBO³⁸) sets up one-off events allowing attendees, *inter alia*, to discuss good practices set up by enterprises themselves in the country. By way of example, the FEB-VBO, driven by the conviction that energy efficiency is an essential plank in the response to climate challenges, set up a forum devoted to that topic in April 2009. The objective is to provide better information and awareness for the members of the FEB-VBO, Belgian enterprises and potential Belgian investors on the eco-project market. This forum drew on the conclusions of a study into possible improvements in Belgium in terms of energy efficiency in major areas such as transport, buildings, industry and consumer goods. It provided a picture of the experiences thanks to first-hand reports from Belgian enterprises and national and international experts. Since then, the Federation has had a website³⁹ and brochures on issues around energy efficiency and on good practices being used by Belgian enterprises.

Energy policy in industry is mainly geared to the conclusion of voluntary agreements, known as branch agreements, benchmarking or audit covenants between the regional authorities and the industrial sectors. These agreements together represent a very important proportion (80 to 90%) of energy consumption in Belgian industry. Under the terms of these agreements, the industrial sectors or enterprises commit directly to an objective of improving their energy efficiency and effectiveness in terms of greenhouse gas emissions by a given deadline (currently 2012 for the main industrial sectors). In return, the regional public authorities pledge not to use regulations to impose additional requirements in terms of energy and greenhouse gas emissions upon the contracting enterprises, whether it be at regional and/or federal level (fiscal aspects).

According to the FEB-VBO, these agreements have made it possible to achieve significant reductions in greenhouse gas emissions in Belgium, and to put most Belgian industrial sectors at the top of the table in European or even global terms. The Union des classes moyennes (UCM⁴⁰), in general, conducts awareness-raising⁴¹ and lobbying actions⁴². More tangibly, this organisation runs and participates in symposia and drafts reports. It has also set up two units (Environment and Energy) whose major tasks are information, awareness and support for the self-employed and bosses of SMEs/very small enterprises on all environmental and energy questions relating to the life of their enterprise. For example, the Energy unit works on energy efficiency in enterprises in terms of products and processes.

The Union of Independent Entrepreneurs (UNIZO⁴³) in the Flemish Region set up an initiative in 2007 designed to encourage enterprises to reduce their CO₂ emissions. This is the action plan called 'KMO voor Kyoto' ('SMEs for Kyoto'). This action plan includes a number of concrete actions that SMEs must implement in order to achieve the objectives set by Kyoto.

In November 2010, under the Belgian EU Presidency, the UNIZO and UCM teamed up with UEAPME to organise the 1st summit of SMEs relating to the green economy⁴⁴. During this summit, entitled '*How Green Makes Money*', there were presentations of enterprises which had made a success of their 'green gamble'. The objective of the summit was to demonstrate to the politicians what SMEs are capable of, but also to persuade entrepreneurs that investing in the green economy today is profitable.

³⁸Verbond van Belgische Ondernemingen (<http://www.vbo-feb.be/index.html?page=0/>)

³⁹www.energyefficiency.be/fr/

⁴⁰The UCM defends the interests of the self-employed and bosses of SMEs. <http://www.ucm.be/>

⁴¹The aim is to raise awareness among SMEs of the adoption of a proactive attitude to the challenges ahead.

⁴²Lobbying activities are conducted with the public decision-makers and administrations to ensure that legislation is brought in that is suited to the issues ahead and favourable to SMEs (avoiding social and environmental dumping, securing the clarification of the standards in place, so that SMEs adapt more smoothly).

⁴³<http://www.unizo.be/>

⁴⁴<http://www.howgreenmakesmoney.eu/>

3. Bulgaria

Under the Kyoto Protocol, Bulgaria undertook to achieve a lower objective of CO₂ emission reduction: by 2012, the country pledged to reduce its emissions by 8% compared to 1990. This objective was secured very quickly, and by 2008, the emission reductions were substantial (of the order of 37.4% compared to 1990⁴⁵). The objective between 2005 and 2020 was defined in the sense of an increase in emissions limited to +20% in the European Climate-Energy package.

Yet Bulgaria is a country where industry is very highly energy-intensive, and all the partners recognise its need to move towards a less energy-hungry economy. The economic crisis which has afflicted the country since 2009 does nothing to facilitate this low-carbon transition, particularly through the downward revision of the economic growth rate, limited to 3% per year according to the forecasts.

Moreover, the binding character of the directives on sulphur and nitrogen dioxide emissions (the IPPC, which became the EID) applicable to electricity generating stations gives a feeling of a double environmental constraint, with SO_x and NO_x on the one hand and CO₂ on the other.

In environmental terms, cooperation between an employers' organisation and the government is both long-established and structural. The point is that the BIA is directly represented on the intergovernmental working group on the transposition of the European directives on the environment in Bulgaria, a consultative body set up by the Council of Ministers⁴⁶. The intergovernmental working group, where all the sectors are represented, participates directly in the public authorities' decision-making process, because it has to approve certain decisions by the Ministry for the Environment.

3.1. Tripartite initiatives

The example that can really be cited in terms of common initiatives by the social partners with specific regard to the transition to a low-carbon or green economy relates to the meetings of employers' associations (BICA, BIA, BCCI) and trade unions (CITUB, Podkrepa) seeking to frame proposals to combat the effects of the economic crisis⁴⁷.

Nevertheless, it often happens that these subjects are addressed in discussions organised under the aegis of the government and/or the administration in the framework of tripartite or multipartite dialogue structures. We can identify six particular typical cases:

- the participation of the social partners (accompanied by fifteen or so NGOs, public agencies, universities and the ministries concerned) in the evaluation and drafting of the strategic programmes and operational programmes cofinanced by the EU's cohesion funds and structural funds, via a committee set up by decree⁴⁸. This committee's role is to define the priorities and the way they can be implemented, and to evaluate the measures put in place.

⁴⁵According to the European Environment Agency.

⁴⁶There are 31 such working groups in Bulgaria, each responsible for a major thrust in the European legislation.

⁴⁷<http://www.podkrepa.org/content/news.php?id=181>

⁴⁸<http://www.eufunds.bg/docs/CMD%20182-2006%20EN%20FINAL.pdf>

- The operational programmes containing references to the green economy are more particularly those relating to the environment⁴⁹, competitiveness and regional development⁵⁰. By way of example, the major objectives of the operational programme ‘Environment 2007-2013’ were as follows: the protection and improvement of the state of water; the improvement of waste management and soil protection; biodiversity conservation and nature protection;
- the discussions organised in the framework of the Anti-Crisis Committee, set up and chaired by the Prime Minister, whose role is to frame proposals designed to combat the effects of the economic crisis. This body has thus allowed the employers’ representatives (BIA and BCCI) and the union CITUB to frame proposals designed *inter alia* to promote investments in alternative energy sources⁵¹;
- the trade unions and employers’ associations likewise cooperate in the framework of sectoral tripartite consultation structures. For example, the trade union Podkrepa has published an account of the discussions held in the framework of the Tripartite Agriculture and Forestry Cooperation Council⁵²;
- we might equally cite the pact on economic and social development signed in 2006 by the government and the social partners, which contains provisions relating to the environment in the chapter given over to economic competitiveness (arrangements for the financing of investments in green technologies, pollution, ‘polluter pays’ principle, etc.);
- the Bulgarian social partners were invited in December 2010 by the government to the discussions on a new law on renewable energies. This involved financial procedures for the installation of solar panels and wind farms and standards for the new hydroelectric plants, as well as guarantees to buy the green energy;
- the trade union confederations are represented on the Labour Ministry’s Employment Council, but the discussions in the framework of that body relate to climate change only indirectly. The Labour Ministry offers a financial package of 3 million levas (about 1.53 M€) to maintain green jobs. Approximately 2,100 unemployed people will be able to be employed in green jobs with salaries of 240 levas (120 €) subsidised by the government for periods of 6 months.

3.2. Bipartite initiatives

A project by the Bulgarian Industrial Association (BIA), with money from the European Social Fund and in partnership with the trade union confederations CITUB and Podkrepa, has concerned the evaluation of workforce skills⁵³. Almost 2,000 companies were questioned under this project. One of the objectives was to evaluate green jobs at sectoral and regional levels. However, BIA sees the need for an extra effort at European level for the proper definition of green jobs, including those created by climate change policies. BIA believes that it is a priority to set up sectoral committees for the adoption of the job evaluation criteria, including those for green jobs, in cooperation with the trade union organisations.

⁴⁹http://www.moew.government.bg/eu_funds/op_okolna_sreda.html

⁵⁰<http://www.europe.bg/htmls/page.php?category=264&id=2231&page=1>

⁵¹ 30 to 40% of Bulgaria’s energy comes from the ageing Kozloduy nuclear plant, while the bulk of the other production facilities are obsolete and do not meet the new environmental standards.

⁵²<http://immobulgarie.fr/news/la-bulgarie-confrontee-un-boom-des-projets-denergi.html>

⁵³<http://www.podkrepa.org/content/index.php>

⁵⁴www.competencemap.bg

3.3. Unilateral initiatives

Employers' initiatives

Bulgarian employers' representatives are more active in the environmental arena than the trade unions. Their major concern relates to the rise in electricity prices following the adoption of the European measures on greenhouse gases (GHG). So the employers' associations BIA and BICA regularly publish opinions and analyses relating to the activities of their members and the green economy⁵⁴. These two associations likewise organise seminars on this issue, such as the one staged by BICA on energy efficiency in September 2009⁵⁵. For its part, BIA runs training courses for its members and advisory services on certification or management systems (Corporate Low-carbon Management Systems, ISO 14 001...). The organisation has also set in place a network for the exchange of information and skills between those of its members with the heaviest CO₂ emissions.

BIA is very involved in the social dialogue on climate change policies. Its concern about climate change revolves around the national, global and sectoral levels, in areas such as energy, metalworking, chemicals, ceramics, paper and so on. Over recent years, BIA has published a score of documents and positions on climate change, including:

- a position on the decisions coming out of the Copenhagen conference;
- distribution variables for CO₂ quotas in Bulgaria;
- positions on the national plan for quota distribution for the phase 2008-2012;
- a position on the Energy-Climate 2013-2020 package discussed by the European Parliament.

(BIA) has been involved in the organisation of twenty or so training courses on carbon markets, but also in the drafting of guides for industries participating in the ETS (energy, cement, ceramics, paper, etc.). BIA has also participated in working out carbon footprints (CO₂ content) for various member companies.

(BIA) has produced one of the first energy efficiency guides in Bulgaria, the Energy Conservation Handbook, in cooperation with the US Chemical Association.

(BIA) has supplied a consultancy service for the government with regard to the absorption of the CO₂ emission quota allocations. Today, Bulgaria has approximately 250 million tonnes of CO₂ quotas that it could sell, but the market is very difficult.

As part of a study into corporate social responsibility in enterprises in Bulgaria, BICA has conducted a members' survey, which included some questions on enterprises' environmental policy. This study revealed that only 16% of those questioned had an idea of the environmental impact of their enterprise. Yet 66% of respondents recognised the importance of using clean technologies. Finally, it was shown that 66% of enterprises on the panel had a person with responsibility for environmental issues⁵⁶.

On matters relating to the green economy, the employers' associations are also present at political level. Five of the biggest national employers' associations (BIA, BCCI, BICA, UPEE and UPBE) have published a joint declaration calling for the inclusion of renewable energies on the agenda for the discussions on the future social agreement, an agreement on a national scale negotiated periodically by the social partners.

⁵⁴<http://www.bia-bg.com>

⁵⁵http://bica-bg.org/uploads/Agenda_01.10.2009doc.doc

⁵⁶<http://www.bica-bg.org/uploads/Analiz.pdf>

Finally, some sectoral associations have also participated in the framing of strategies linked to their sectors:

- Association of Bulgarian Hotels and Restaurants and Bulgarian Tourism Chamber with regard to the strategy for sustainable development in the tourism sector;
- BTC with regard to the strategy for the development of ecotourism.

3.4. Trade union initiatives

While the unions' participation in the tripartite sectoral committees means that they are aware of environmental issues⁵⁷, there are still few examples of initiatives concerning them – aside, perhaps, from the proposals on the anti-crisis measures. For example, there was a communication on 23 March 2010 about proposed measures to restore the country's economic health and get employment back up, in which the CITUB union stressed the need to inventory the sectors and enterprises jeopardised by the European environmental protection measures⁵⁸.

Some sectoral unions, such as in metalworking, are also militating for their sector to develop in line with the principles of sustainable development⁵⁹.

⁵⁷The Podkrepa trade union also publishes on its internet site the ITUC statements on the climate negotiations.

⁵⁸http://84.242.167.9/knsb/index.php?option=com_content&task=view&id=1080&Itemid=171

⁵⁹<http://www.bcm-bg.com/index.php?MhObg5KvQ9KHMheLMtezUFSXQ9Wzg5OzEZ>

4. Czech Republic

Under the Kyoto Protocol, the Czech Republic was assigned a lesser objective of reducing its CO₂ emissions. By 2012, the country is committed to reducing its emissions by 8% compared to 1990. This objective was secured very quickly, and since 2008, the reductions have been substantial (of the order of 27.5% compared to 1990, according to the European Environment Agency). The objective between 2005 and 2020 is to limit the rise in emissions to +9% under the European Climate-Energy package.

4.1. Tripartite initiatives

In environmental terms, the Czech social partners are collaborating within two bodies: the Governmental Council for Sustainable Development (*Rada vlády pro udržitelný rozvoj*)⁶⁰, which defines the country's sustainable development strategy, and the Council for Economic and Social Cooperation (*Rada hospodářské a sociální dohody České republiky*, RHSD CR).

Among other points, the Governmental Council for Sustainable Development has devised the strategic framework for the Czech Republic's sustainable development⁶¹, adopted by the government on 11 January 2010. This document provides, *inter alia*, that public policies must give priority to local and regional planning that respects the environment, protecting nature, ecosystems and biodiversity, as well as increasing energy efficiency.

Ahead of the definition of the strategic framework in terms of sustainable development, the council had conducted many information campaigns and organised round tables in the regions on the evaluation and updating of the government strategy on sustainable development⁶².

The Council for Economic and Social Cooperation, which is made up of representatives from government, the two main trade unions (CMKOS and ASO) and the two biggest employers' organisations (SP⁶³ and KZPS⁶⁴), is the key tripartite body in terms of social dialogue. Green economy issues have already appeared on its agenda in the past.

Negotiated internally in 2009, the national anti-crisis plan, adopted on 16 February, provides, inter alia, for the setting in place of a large-scale funding programme designed to promote energy efficiency in buildings both new (the green investment scheme, approximately 250,000 homes) and old, and the use of ecological heat sources (biomass, photovoltaic, etc.). This Council has calculated that this plan would contribute towards the creation or retention of over 30,000 jobs in SMEs.

Also within this body, the social partners participated in February 2009 in the work on designing the State's energy strategy, on the basis of the independent report from the Paces Commission.

⁶⁰<http://www2.nszm.cz/ur/>

⁶¹<http://www.mzp.cz/cz/sur>

⁶²<http://www2.nszm.cz/ur/cat.php?id=18>

⁶³<http://www.spcr.cz/en>

⁶⁴<http://www.kzps.cz/>

5. Denmark

Under the Kyoto Protocol, Denmark undertook to reduce its CO₂ emissions by 21% by 2012 compared to 1990. In 2008, Denmark reduced its emissions by 7.1% compared to 1990⁶⁵. The objective of reducing emissions by 20% between 2005 and 2020 was defined in the European Climate-Energy package.

Pursuing this objective, and in the face of recurrent tensions around oil prices, the Danish Prime Minister took the decision in October 2010 to 'rid his country of fossil fuels by 2050 by making greatly increased use of renewables⁶⁶'. However, aware of the difficulties in such a strategic reorientation, he explained that this shift would have to be navigated without harming the competitiveness of businesses or having negative effects on jobs.

5.1. Tripartite and tripartite+initiatives

Denmark's national mitigation policies are debated within various bodies. For example, the Environmental and Economic Committee is a forum where the social partners, with the representatives from the government and NGOs, discuss issues relating to environmental questions. This tripartite+body was set up by the government in 2007, but it is purely consultative.

Since the 2007 reform, every regional council has had a forum on growth; these are called the 'Growth Fora⁶⁷' and they bring together all the local stakeholders (affiliated members of Dansk Regions⁶⁸), including the social partners. The objective of these fora is to organise and finance the sustainable development actions being run by enterprises at local and regional levels. They have allowed the emergence of a number of projects⁶⁹ (such as the pilot project entitled 'Greenhouse Harvesting Energy⁷⁰' and the 'Large Scale Solar Heating' and 'Copenhagen Cleantech Cluster' projects, and some projects designed to 'green the workplace').

The 'Greenhouse Harvesting Energy' project, being finalised, is supported by the South Denmark Region via its Growth Forum, and consists of making a highly energy-intensive 7-hectare nursery greenhouse operation, located in Bogense and producing flowers, plants, fruit and vegetables, completely self-sufficient in terms of energy through the introduction of advanced energy-efficiency technologies, geothermal heat pumps and thermal solar panels, with any surplus energy being used to supply an urban heat grid.

The 'Large Scale Solar Heating' project consists of the construction (underway) of the world's biggest thermal solar energy production unit, in the town of Dronninglund (35,000 m² of solar cells on the ground + 60,000 M³ of hot water storage space), to satisfy half of the town's heating grid needs.

⁶⁵European Environment Agency.

⁶⁶<http://www.goodplanet.info/eng/Contenu/News/Le-Danemark-veut-se-debarrasser-des-energies-fossiles-d-ici-2050/%28theme%29/1412>

⁶⁷There are six. They are located in the regions of North Jutland, Central Denmark, South Denmark, Zealand, Copenhagen Capital and the islands of Bornholm.

⁶⁸<http://www.regioner.dk/>

⁶⁹<http://epaper.mediegruppen.net/mdg/dr/1/1/>

⁷⁰The Greenhouse Harvesting project is a pilot project set up in one of the five biggest greenhouse nurseries in Denmark, Hjortebjerg, north-east of Funen (for more information: - <http://epaper.mediegruppen.net/mdg/dr/1/1/>)

The ‘Copenhagen Cleantech Cluster’ project has been launched, funded and coordinated by two Region Growth Fora (Capital Region Growth Forum and Growth Forum Zealand) and is backed by the ERDF. It brings together private enterprises, the Confederation of Danish Industries (DI)⁷¹, universities and public R&D centres. Its objective is to develop a fabric of enterprises producing clean technologies and to bolster the international performance of Danish industry in this area. The project has created 1,000 new jobs (source: Danish Regions).

These initiatives seek to ensure more sustainable growth and also to create jobs by concentrating financial support into the renewable energy sector.

To this end, the ‘Growth Fora’ are a voluntary industrial policy instrument dedicated to renewable energies and seeking to make Denmark into a world leader along the entire value chain in renewables, especially the offshore wind industry, but also marine energies and smart grid technologies to optimise the use of renewables.

Against this background, a programme has been funded and implemented on retraining for staff from several shipyards to work in the offshore wind industry. Major funding has been ploughed into the creation of the Lindoe Offshore Renewable Centre and its reskilling programmes, in cooperation with the social partners.

The creation of the Lindoe Offshore Renewable Centre⁷² was driven by the regional communities and professional organisations concerned, in cooperation with the social partners. The LORC council includes representatives of the Metal Workers Union and the United Federation of Danish workers (3F).

LORC is a research and development centre in which the technologies associated with offshore wind energy can be tested and produced. LORC also organises courses, seminars and conferences. This is the background against which the current employees of the shipyard can drive forward their skills and transform their current jobs.

The social partners participate in the Council of Vocational Education at national level, which devises the various vocational training programmes and approves the various types of certification, including for the new so-called ‘green’ or ‘low-carbon’ industries where the social partners monitor the various climate-energy standards and legislative instruments. It also adapts the certification arrangements for vocational training in a way that is appropriate to these issues.

5.2. Bipartite initiatives

Alongside these fora, the ‘Energy Camp’ initiative is a discussion forum where the participants (including the social partners) are invited to suggest solutions for the development of concrete shared initiatives on problems associated with climate change, future economic growth and future jobs associated with the development of the new low-carbon energy industries, smart grids and green ITCs.

There is little in the way of bipartite social dialogue in Denmark. Social consultation exists primarily within the formal dialogue structures at national level and regional level, with the exception of the ‘Energy Camp’ initiative. However, as the organisation of Danish regions stresses, the introduction of greater bilateral social consultation would be an excellent idea and would make it possible to discuss some questions such as the conditions for the creation of jobs or worker training courses.

⁷¹<http://di.dk/Pages/Forsiden.aspx>

⁷²<http://www.investindk.com/visNyhed.asp?artikelID=23352>

5.3. Partnership initiatives (public-private)

A public-private partnership between the government and employers was set up in June 2008, the *Climate Consortium Denmark*⁷³. This serves as an official focal point for all activities associated with renewable energies and energy efficiency.

Initiatives are likewise being conducted to improve workers' skills and competences. For example, a study conducted in the field of wind energy by Union 3F⁷⁴ has stressed the importance of setting up training programmes in that sector.

As part of lifelong learning, programmes have been set up thanks to close cooperation between the social partners. As to training programmes more specific to green skills, the initiatives tend most commonly to be run by public-private partnerships. This is particularly true for questions of new skills in the framework of renewable energies. For new skills, the partnership is run by Siemens and the Danish enterprises IWAL, DTU and CELF.

As to the analysis of the skills needing to be upgraded, the interministerial committee set up a working group in 2009 uniting employers' organisations, training centres and public authorities.

5.4. Unilateral initiatives

In parallel with these discussion fora, the social partners conduct unilateral initiatives.

Trade union initiatives

In January 2009, for example, the Danish trade union confederation LO-DK¹ published an open letter to the government, in which it stressed the need to invest more in sustainable transport and energies. The letter was entitled '*An offensive plan of investments*'. Moreover, the trade unions run more specific training courses for certain sectors (such as the Union of Danish Metalworkers⁷⁵).

LO-DK runs unilateral initiatives in favour of climate change mitigation plans: a campaign to raise its membership's awareness entitled *LO and the Challenge of Climate Change*, with priorities focused on sustainable energy, carbon capture and storage in coal-fired plants, combined heat and power, low-carbon research, sustainable transport and high energy-efficiency building. The LO headquarters will achieve 'zero CO₂ emission' status in 2011 thanks to the use of advanced technologies (thermal solar and photovoltaic, ventilation, energy windows, heat pumps, etc.).

Employers' initiatives

The Confederation of Danish Industries is actively involved in the Climate Consortium Denmark and the Energy Camp, relying on information and awareness-raising campaigns aimed at its membership.

⁷³<http://www.climateconsortium.dk/Home.aspx>

⁷⁴United Federation of Danish Workers.

⁷⁵<http://www.danskmatal.dk/>

6. Finland

The pledge made by Finland under the Kyoto Protocol was to stabilise its greenhouse gas emissions in 2012 compared to 1990. Finland has achieved that objective, since it has slightly reduced its emissions by 0.3%⁷⁶ compared to 1990. The objective of reducing emissions by 16% between 2005 and 2020 was defined in the European Climate-Energy package.

The actions conducted in Finland relate exclusively to mitigation. According to the government's conclusions and analyses, set out in the Finnish climate and energy strategy in 2008⁷⁷, the creation of concrete measures (designed to achieve a significant increase in the share of renewables in final energy consumption⁷⁸, to improve energy efficiency and to reduce CO₂ emissions), will have a (direct) impact on (the creation of) jobs⁷⁹.

6.1. Tripartite and tripartite+initiatives

The social partners are working on the management of mitigation policies and their impact on employment.

Nationally, there are spaces for debate for the social partners, primarily around informal bodies such as the national Task Forces on climate change and the fora⁸⁰. For example, the Forum on the Environment is made up of the social partners and NGO representatives. It was set up by the Ministry of the Environment and is a space for dialogue and exchanges of points of view on Finnish, European and international climate policies.

In addition, under the umbrella of these informal bodies, in the spring of 2010, the government and the main organisations on the labour market jointly prepared a programme entitled 'The programme on sustainable economic growth and employment', which was designed to strengthen taxation by improving the prior conditions for sustainable development, economic growth and high employment.

The Economic Council of Finland⁸¹ (*Talousneuvosto – Ekonomiska rådet*)

This Council is a social consultation body between the government, the National Bank of Finland and the main interest groups in Finnish society. Over recent years, it has widened its remit to include environmental questions. In 2000, a report was published on these questions: '*Energy and environmental taxation in Finland; Preparation for the challenge of Kyoto*'. The Council equally organises meetings: a gathering about climate policies (in 2009) and a conference entitled '*Global warming and the Finnish position on economic geography*' (June 2010).

The Finnish National Commission on Sustainable Development⁸²

This commission is also a tripartite+discussion forum, bringing together as it does all the stakeholders in Finnish society. Since its creation in 1993, its major mission has been to promote and coordinate sustainable development in Finland.

⁷⁶European Environment Agency.

⁷⁷http://www.tem.fi/files/20587/Climate_Change_and_Energy_Strategy_2008_summary.pdf

⁷⁸By 2020, renewables should account for 38% of final energy consumption.

⁷⁹If the labour market adapts quickly to the new conditions, then the net effects of these policies on employment will be reduced.

⁸⁰http://www.akava.fi/files/1471/Akavas_Energy_and_Climate_Policy.pdf

⁸¹<http://www.vnk.fi/hankkeet/talousneuvosto/en.jsp>

⁸²<http://www.ymparisto.fi/default.asp?node=4412&lan=en>

The Finnish National Partnership Programme on Sustainable Development

This body was set up in 2001 by the National Commission on Sustainable Development and two of the parliamentary committees (Environment and Future). The programme seeks to develop fresh approaches and methods of action in terms of sustainable development in Finland.

Locally, a commission for public employers has been set up. This tripartite body for the social partners in the public arena set up a programme in 1999 for sustainable development, the objective of which is to define a sustainable development profile for municipalities and to allow them to include this question in their own regional plans.

On training, some measures have been adopted, such as the option for unemployed people to gain training on sustainable development. Diplomas now include this question. These measures have been adopted by the government in close collaboration with the social partners.

6.2. Partnerships

The Finnish Ministry of Employment and the Economy and the Confederation of Finnish Industrialists (EK⁸³) have signed voluntary agreements on energy efficiency for the period 2008-2016⁸⁴. The initial results of this programme are quite promising, given the savings achieved in energy thanks to investments in energy efficiency.

6.3. Unilateral initiatives

Trade union initiatives

The trade unions are jointly running awareness-raising campaigns. Over the past two years, they have organised media events on decent work, including, in 2010, the campaign entitled *Potkut huonolle duunille* ('Farewell to bad jobs')⁸⁵, from the site of the social network Facebook.

In parallel, they are conducting awareness-raising actions via the drafting of reports. For example, the Finnish Confederation of Professionals (STTK⁸⁶) has published a position paper on the application of the Europe 2020 strategy in Finland⁸⁷. The Confederation of unions for Professional and Managerial Staff in Finland (AKAVA⁸⁸) likewise produces position papers on climate issues in Finland and the answers furnished at national, European and international levels.

The Central Organisation of Finnish Trade Unions (SAK) has likewise drafted a position document on Finland's energy future. It was published in December 2009. In this document, SAK supports the government's determination to make Finland independent in energy terms. According to this confederation, this would make it possible on the one hand to resolve the problem of excessively high energy prices (due *inter alia* to the country's serious energy dependence), and on the other to achieve the objectives set by Brussels in terms of reduction, but also in terms of the production of electricity via clean sources.

Becoming autonomous in energy terms suggests angling investments towards carbon-lean solutions. In parallel, it is essential for national or European financial support to be put in place for enterprises and their employees opting for environmentally responsible solutions. The installation of new technologies would, according to SAK, help to create new jobs.

⁸³ <http://www.ek.fi/www/fi/index.php>

⁸⁴ <http://www.leonardo-energy.org/part-08-voluntary-energy-efficiency-agreements-2008-%E2%80%932016>

⁸⁵ http://www.akava.fi/en/publications/world_day_for_decent_work_2010_in_finland_a_facebook_campaign.html

⁸⁶ Toimihenkilökeskusjärjestöry (<http://www.sttk.fi/fi-FI/>)

⁸⁷ <http://www.sttk.fi/en-GB/what-we-do/europe-2020-strategy/>

⁸⁸ <http://www.akava.fi/>

However, these responses need to fit better within a more international framework. Moreover, on that score, SAK suggests that international cooperation be set up on the theme of the battle against climate change.

Employers' initiatives

For their part, the Confederation of Finnish Industries (EK) and the Federation of Finnish Enterprises (SY⁸⁹) are running lobbying actions at national and European levels and organising working groups. For example, the topics of labour and research for the Federation of Finnish Enterprises focus on Finland's climate policy until 2050, on international climate policy, on the question of policies to support renewables and on measures needing to be put in place in Finland to save energy. Recently, EK published a paper on how to encourage and stimulate green business⁹⁰. They are equally starting to work on the questions around adaptation to climate change. However, this still remains general, as can be seen from the EK works. Finally, this employers' organisation has also set up a clean technologies forum, CFBF – Cleantech Finland Business Forum.

⁸⁹ Suomen Yrittäjät (<http://www.yrittajat.fi/>)

⁹⁰ EK (2010) Business in the forefront of the green economy.

7. France

The objective to which France made a commitment under the Kyoto Protocol is to stabilise greenhouse gas emissions in 2012 compared to 1990. In 2008, France exceeded its initial objective, reducing its CO₂ emissions by 6.4%⁹¹ compared to 1990. The objective of reducing emissions by 14% between 2005 and 2020 was defined in the European Climate-Energy package.

France, whose firm commitment to the process of fighting climate change goes back several years, has set up a unique consultation process bringing all the stakeholders together round the same table, known as the Grenelle Environment (GE) Forum. The Grenelle Environment has set itself the objective of a 20% reduction in emissions in line with the European Union's objective.

7.1. Tripartite and tripartite+initiatives

The Grenelle Environment

On 6 July 2007, under pressure from the environmental organisations⁹², the French government set up the Grenelle Environment. This is an original, innovative discussion forum which is made up of five colleges of players⁹³. It was set up to participate in devising a new sustainable development strategy for France. The approach is a three-pronged one: the first phase sees dialogue and proposals being drafted, then there is the phase of consultation of the public via the internet and in the regions, and then an action plan is devised. During the first phase, six working groups were set up⁹⁴. They are made up of 40 people from the five colleges, and met regularly during the summer of 2007. The conclusions from these working groups were published in the form of a dossier pledging 268 commitments; these were then opened for public consultation before being promulgated first in the form of a programme law⁹⁵ (Law I) setting the 'major objectives and commitments of the State and the main measures to be set in place, and giving legal status to the Grenelle process'⁹⁶. A law⁹⁷ implementing the major projects in the Grenelle then rounded off the programme law (Law II).

This first phase drove the continuation of a system of dialogue between the government and the players representing civil society (tripartite+dialogue). This system of dialogue, unprecedented in France, has really caught on with the representatives from the five colleges, which until then had no system of exchanges, consultation and negotiation between them on subjects of common interest.

⁹¹European Environment Agency.

⁹²Notably the Nicolas Hulot Foundation.

⁹³The representatives of the State, the territorial communities, the employers' organisations and the trade unions and non-governmental ecological and environmental organisations.

⁹⁴The six working groups are: 'Combating climate change and controlling energy demand', 'Preserving biodiversity and natural resources', 'Creating a healthy environment', 'Adopting sustainable modes of production and consumption', 'Building an ecological democracy', and 'Promoting ecological modes of development favourable to employment and competitiveness'.

⁹⁵Planning Law n° 2009-967 of 3 August 2009 relating to the implementation of the Grenelle Environment. See: <http://www.legifrance.gouv.fr/affichTexte.do?cidTexte=JORFTEXT000020949548#LEGISCTA000020950463>

⁹⁶<http://www.fondation-nicolas-hulot.org/actions/les-grands-rendez-vous/grenelle/les-etapes-du-grenelle>

⁹⁷Law n° 2010-788 of 12 July 2010 enshrining a national commitment for the environment.

See: <http://www.legifrance.gouv.fr/affichTexte.do?cidTexte=JORFTEXT000022470434>

The government set up a Grenelle monitoring committee, at the request of the stakeholders: the ‘Comité national du développement durable et du Grenelle de l’Environnement – CNDDGE’ (‘National Committee for Sustainable Development and the Grenelle Environment’), whose prime objective is to ensure compliance with the government’s commitments in terms of sustainable development.

During the transposition of the commitments into legislative terms, the government launched thirty or so operational projects (Comop⁹⁸ or Operational Committees). They bring together the social partners, and depending on the topics under discussion, these committees can call on legitimate outside contributors. Their major remit is to give the government and parliament a toolkit coupled with some practical arrangements for the concrete implementation of the Grenelle commitments.

To improve coordination with the Grenelle Environment, a General Commission on Sustainable Development⁹⁹ and an Economic Council for Sustainable Development¹⁰⁰ have been set up.

Finally, regarding training, the Grenelle Environment has carried out a number of concrete initiatives, specifically under the National Plan for Mobilisation for Jobs and Careers in the Green Economy:

- a national observatory on jobs and careers linked to green growth¹⁰¹: this has as its main aim to identify and define the jobs provided by this new growth¹⁰²;
- industry committees¹⁰³: these bring together the five colleges which are the backbone of the Grenelle, the main objective being to determine the needs in terms of skills and to define the programmes dedicated to vocational training.

There have likewise been some initiatives under the Grenelle Environment and the National Plan for Mobilisation for Jobs and Careers in the Green Economy, by the “Maisons de l’emploi” at the local level. .

In the building and renewable energies sector, the ‘Employment and sustainable development house’ programme supported at national level by the Alliance Villes-Emploi and Ademe, seeks to speed up the development, in 33 employment pools (7.5 million inhabitants) of the markets, jobs and skills necessary to achieve the objectives of the Environment Grenelle. These projects are currently being run locally by 33 ‘maisons de l’emploi’, after an initial trial in 2008 and 2009 by the Employment-Towns Alliance and Ademe with three ‘maisons de l’emploi’ (Lille, Nancy and Bayonne).

⁹⁸<http://www.legrenelle-environnement.gouv.fr/grenelle-environnement/spip.php?rubrique129>

⁹⁹ Its major aim is to ‘promote sustainable development both within all public policies and in the actions of all the socio-economic players’. For more information: <http://www.developpement-durable.gouv.fr/Commissariat-general-au.html>

¹⁰⁰ For more information: http://www.legifrance.gouv.fr/jopdf/common/jo_pdf.jsp?numJO=0&dateJO=20081203&numTexte=2&pageDebut=&pageFin=

¹⁰¹ This observatory operates at regional and sectoral levels. These units carry out a range of studies and analyses of the employment situation within their area and bring together the representatives of the public bodies concerned.

¹⁰² See <http://www.developpement-durable.gouv.fr/L-observatoire-national-des.18551.html> and http://www.developpement-durable.gouv.fr/IMG/pdf/observatoire_presentation-2.pdf

¹⁰³ This national mobilisation plan is based on eleven industries considered to be giving concern, because they are the most affected by job creation and transformations. These are transport, automotive, renewable energies, water/purification/waste/air, the building trade, farming and forestry, eco-electric systems, refinery/fuel/green chemistry, tourism, marine industries, and finally biodiversity and ecological services.

In each employment pool (infra-regional level), the project consists of mobilising the infra-regional and regional stakeholders on the basis of an interactive presentation (study) of their economic situation and expectations. The result of this participatory process is local design and the implementation of an action plan scheduled to run for three years.

Among the 33 'maisons de l'emploi' involved in the programme, nine (9) are starting a test of the same nature for an additional sector other than building (sustainable farming, seafaring jobs, forestry, tourism, mobility, transport, waste/recycling, etc.).

The steering committees and participatory workshops of the 'maisons de l'emploi' mobilise 1,200 people and 1,000 local bodies. The social partners participate on the national programme steering committee run by Alliance Villes-Emploi with the technical expertise and financial support of Ademe¹⁰⁴.

Under the Grenelle, Ademe has set up a carbon calculator, intended for any company employing over 500 people and any public structure employing a minimum of 250 people. Territorial communities with more than 50,000 inhabitants are likewise required to calculate their emissions and must implement a Territorial Climate-Energy Plan (PCET). Finally, product labelling has been expanded (household appliances, housing).

Although it has been criticised by the civil society stakeholders in terms of the results entered in Laws I and II, the Grenelle Environment seems to be an interesting process and an original approach to dialogue. If the content of the Grenelle has been slimmed down, the spirit is still very much present, and has inspired the creation of new fora devoted to these questions, the likes of the 'Etats généraux de l'industrie' and the 'Conférence nationale de l'Industrie' and the 'Conférence sur les métiers de la croissance verte'.

The social partners have been actively involved in these fora, but they seem to be frustrated, disappointed or thrown off the scent by the snail's pace or the U-turns in the process for the implementation of the measures decided under Laws I and II in the Grenelle Environment, in a context of the negotiation of the application orders for Law II and the uncertainty around the public aid to stimulate the associated action plans, because of the public deficit reduction plan.

According to the social partners, the sector with the greatest potential for jobs created by the actions plans in the Grenelle Environment is so-called 'sustainable' building, with high energy efficiency (BBC standards), in terms of both new build and renovation, provided that the public support measures for this market can be implemented. The social partners are very active in that area, but they do stress the scale of the constraints to be overcome, particularly in the implementation of new vocational training paths appropriate to all players. A Building Sector Committee and a Grenelle Environnement Building Plan have been set up, with the active participation of the social partners in the sector, but the process is having some teething troubles because of the funding shortfall. So the programmes on learning run by the Chambers of Trades and Crafts are still waiting for public funding.

Finally, according to the Grenelle recommendations, the French Economic and Social Council has become the 'Economic, Social and Environmental Council', taking in representatives from environmental NGOs and experts on environmental issues. It has also expanded its remit of advising the government and drafting opinions to include environmental problems. (cf. two opinions: *'The national sustainable development strategy 2009-2013'* and *'Draftprogramme law on the implementation of the Grenelle Environment'*¹⁰⁵)

¹⁰⁴<http://www.ville-emploi.asso.fr/developpement-durable/presentation/>

¹⁰⁵http://www.conseil-economique-et-social.fr/ces_dat2/2-3based/base.htm

7.2. Unilateral initiatives

Employers' initiatives

The initiatives by the Mouvement des entreprises de France (MEDEF¹⁰⁶) mainly focus on awareness-raising and information. This organisation operates a sustainable development committee which carries out extensive research work and conferences on this question. For example, it has produced a series of guides (in May 2010, *New energies, new technologies, Energy efficiency: one of the keys to sustainable growth, Enterprises and biodiversity, Examples of good practices* or *Enterprise and sustainable development*¹⁰⁷).

The Confédération générale des petites et moyennes entreprises (CGPME¹⁰⁸) has been active since 2007 on questions around the environment and sustainable development. Within its organisation, it has set up an Environment and Sustainable Development committee, which is tasked primarily with conducting actions with an influence on sustainable development issues.

Trade union initiatives

The initiatives run by the trade union organisations relate primarily to awareness-raising and information. These organisations write reports and studies on the subject (for example, the Confédération générale du travail, CGT¹⁰⁹, has written a guide on sustainable development and the CFDT a 'trade union guide to climate change'). They also produce position papers and press releases¹¹⁰ on various topical subjects connected with environmental problems. The CGT commissioned a study from the Centre national de la recherche scientifique (CNRS) in 2009 on 'the issue of skills in the face of the energy and environmental challenge in the building sector'.

The CGT and the CFDT joined forces in 2010 to ask the State for a study '*to evaluate the impact on employment of the measures in the Grenelle Environment and the European carbon trading system in the energy and industrial sector and the issues of forward management of jobs and skills*'¹¹¹, which was used to feed debates between public authorities, employers' organisations and trade union organisations.

The CFDT offset the carbon emissions caused by its latest congress, seeking to reduce the attendees' carbon footprint. The trade union organisation CGT-FO is concentrating on the participation of its federations in the Building sector committee, representing a major employment potential, but also vocational training needs that are going unmet. It focuses its initiatives on climate-energy via the Economic, Social and Environmental Council and the regional ESECs.

¹⁰⁶ <http://www.medef.com/>

¹⁰⁷ <http://publications.medef.com/guide/Entreprises-et-DD.pdf>

¹⁰⁸ <http://www.cgpme.fr/>

¹⁰⁹ <http://www.cgt.fr/>

¹¹⁰ Press releases are often written jointly. For example, on world day for decent work: <http://www.cfdt.fr/rewrite/article/14519/salle-de-presse/archives-salle-de-presse-2008/communiqu-cfdt---cgt---fo---unsa---cftc.htm?idRubrique=8325>, <http://www.cfdt.fr/rewrite/article/14518/salle-de-presse/archives-salle-de-presse-2008/communiqu-commun-cfdt--cfe-cgc--cgt--fsu--solidaires--unsa.htm>, or [http://www.cfdt.fr/rewrite/article/10075/salle-de-presse/archives-salle-de-presse-2008/communiqu-n %C2 %B04-du-25-janvier-2008.htm?idRubrique=8325](http://www.cfdt.fr/rewrite/article/10075/salle-de-presse/archives-salle-de-presse-2008/communiqu-n%C2%B04-du-25-janvier-2008.htm?idRubrique=8325)

¹¹¹ Meeddm study (Syndex-Alpha), see: <http://www.developpement-durable.gouv.fr/IMG/pdf/synthese-2.pdf> and http://www.developpement-durable.gouv.fr/IMG/pdf/Etude_Syndex_Alpha.pdf

8. Germany

By 2008, Germany had already achieved the objectives laid down in the framework of the Kyoto Protocol¹¹². Since then, it has committed itself to some greatly more ambitious new objectives on the reduction of greenhouse gas emissions: by 2020, it aims to achieve a reduction in emissions of 40% (– 14% was defined in the European Climate-Energy package) and, by 2050, a reduction of 80%.

Social consultation relates more to questions of mitigation than to adaptation to climate change.

Germany has no tradition of tripartite consultation between the State-trade unions-employers¹¹³, but a fundamental right to social dialogue and collective bargaining between employers' organisations and trade unions, guaranteed in the Constitution (Article 9 GG). However, for initiatives on the fight against climate change or in favour of a transition towards a so-called 'green economy', the government and/or the public authorities at regional and local levels are often brought on board or are behind the initiative.

Germany has a long tradition of consultation between social partners at sectoral and regional levels; managing the impact of climate change mitigation policies on employment and skills is no exception.

At federal level, a Sustainable Development Council was set up in 2001, for the sake of consultation on the green economy and jobs. It is made up of 15 representatives. The Federal Parliament (*Bundestag*) set up a 'Commission of enquiry into sustainable growth' (the *Enquete-Kommission Wachstum, Wohlstand, Lebensqualität*) in January 2011, with the participation of organisations representing the employers and trade unions.

8.1. Tripartite and tripartite+initiative

Network Resource Efficiency

This initiative was launched in March 2007 by the German trade union confederation DGB and its member organisations (IG Metall and IG BCE), and is currently run by a college of players bringing together the Federal Ministry for the Environment, Protection of Nature and Nuclear Safety (BMU), the social partners, the industrial sector involving metalworking and chemicals, associations, and researchers. The purpose of this network is to put in place action plans to develop resource efficiency in the industrial sector (energy and raw materials) and thereby to contribute towards the greening of industry. They include the aspects linked to the needs for skills and vocational education/training.

Under this initiative, the DGB and its member organisations, in cooperation with the Environment Ministry (BMU), launched and carried out some programmes to train members of works councils and employees about resource efficiency, primarily in the aluminium industry, involving the trade union organisation IG Metall and the German association of aluminium producers GDA. The Environment Ministry (BMU) participates in the debates, whose main aim is to swap experiences of good practices for the sake of improving energy efficiency in the aluminium industry, from production to recycling.

¹¹²According to the European Environment Agency. Objective set for 2012: -21% compared to 1990, objective achieved in 2008: - 22.2% compared to 1990 at 958 million tonnes CO₂equivalent.

¹¹³Social dialogue in Germany is enshrined by the law. This stipulates that the dialogue is exclusively bilateral (between the social partners only).

Other sectors have also launched such an initiative more recently as part of a sectoral dialogue, machine tools and trans-sectoral technologies.

In another area, a similar experiment was likewise initiated by the HBS (Hans-Böckler-Stiftung/Foundation) and rolled out across the plastics industry jointly by the trade union organisation IG BCE and the association of employers in that industry (GKV).

The Alliance for Employment and the Environment

The Alliance for Employment and the Environment is a project conducted from the start by the German Confederation of Trade Unions (DGB¹¹⁴) accompanied by its members.

In 1998, the DGB and its members launched a huge programme to renovate the existing housing stock. The prime objective of the programme was to drive down energy consumption in the building sector (and thus to make for a reduction in CO₂ emissions) by improving the insulation of buildings, developing and installing more modern heat diffusion devices, and finally installing technologies to supply energy from renewable sources. In parallel, the programme was to permit the creation of some 100,000 jobs per year in the fields targeted.

One year later, this programme was adopted in the framework of an alliance bringing together a wider panel of stakeholders: government, social partners and non-governmental environmental organisations. The objectives of this Alliance for Employment and the Environment copy those laid down by the DGB's programme. This initiative has turned out to be a genuine success, in the sense that its results have surpassed the objectives set.

The objectives of this initiative:

- *to renovate 300,000 apartments/year;*
- *to create and/or preserve 200,000 jobs;*
- *to reduce CO₂ emissions by 2 million tonnes per year;*
- *to drive down energy bills for tenants and landlords;*
- *to reduce the State debt by a minimum of 4 billion dollars, by reducing the costs of unemployment and increasing tax revenue;*
- *to reduce the country's dependence on fossil fuel imports.¹¹⁵*

The project mechanism: 'landlords, tenants or housing associations submit renovation projects to the Alliance, including information on the reduction in energy consumption that would be associated with them. The priority criterion taken into account when choosing projects is the improvement of energy efficiency (thermal insulation, advanced heating technologies, the use of renewable energies, ventilation systems, etc.). If a project is accepted, the applicant benefits from a credit at a preferential rate for its investment'.

The federal government put 1.48 billion euros into funding this action plan between 2001 and 2005, and 6 billion euros per year between 2006 and 2009.

In addition, given all the loans made, the total made available over the period 2001-2008 to get this action plan running to the tune of 36 billion euro is over 21 billion euro. The action plan has led to the investment of 71 billion euro in 10 years. The packages of anti-crisis measures for the period 2009-2010 have intended to bolster this plan.

¹¹⁴ *Deutscher Gewerkschaftsbund Bundesvorstand* (<http://www.dgb.de/>)

¹¹⁵ Dr Werner Schneider (DGB), Presentation to Cornell University ILR School New-York, May 7-8, 2007

The results of the project: *this project has had positive effects. First of all, the development of new technologies has allowed the emergence of new markets. Then the positive effects have been felt in towns where the neighbourhoods appear more dynamic, better organised and more sustainable. Finally, this initiative has allowed the creation of many green jobs, mainly in the craft sector and construction (...) but also in the production of many products (insulating glass, thermal insulation materials, etc.) and finally, green jobs have appeared in certain activities such as architecture, consultancy and engineering.*

This programme resulted in the renovation of over 2.4 million apartments, delivering a reduction in CO₂ emissions of 1 million tonnes in 2006 and 1.5 million tonnes in 2009. It also created 221,000 jobs in 2008 and 340,000 jobs in 2010.

Sources: DGB and BMU (Federal Environment Ministry)

The Berlin Climate Alliance

The Berlin municipal public water enterprise ('Berliner Wasserbetriebe'¹¹⁶) is a member of this Alliance, a signatory to the Berlin Climate Protection Treaty¹¹⁷. This is a network of 13 public enterprises and the Senate of the City of Berlin. At company level, a Climate working group coordinates activities to produce renewable energies and energy efficiency services around climate issues. With the social partners and the public authorities, this municipal public enterprise also carries out actions around adaptation to climate change. It participates in the works of the national working group on climate change organised by the water federations such as DWA (*German Association for Water, Wastewater and Waste*) and BDEW.

8.2. Bipartite initiatives

In two industrial sectors, chemicals and cement, the sectoral social dialogue has been implemented across a number of areas relating to energy efficiency and environmental protection: the *Wittenberg Process*¹¹⁸ initiative brings together the social partners from the chemical industry (the employers' organisation BAVC and the trade union organisation IGBCE) to improve working conditions in the workplace. The social dialogue here relates to environmental protection and health and safety, for workers and for consumers. An ethical codex in 2008 was produced jointly to promote help in the process of dialogue in the enterprise on this topic and on training programmes for managers and works councils.

'The Initiative for Sustainability in the Cement Sector' is a joint project by the social partners in that sector in Germany, and its aim is to achieve the following objectives: to improve the 'sustainable development' approach as the principle guiding the strategy of enterprises in the cement sector, defining and developing projects for better practices, helping in the social dialogue and producing and disseminating information on sustainable development practices in this sector.

The initiative of the **Urban Climate Treaty Project** (Stadtvertrag Klimaschutz)(bipartite+) is an example of an initiative at local level in Berlin on the development of heating technologies for individuals, run jointly by the regional trade union organisation of the DGB, the Chamber of crafts and the Chamber of commerce and industry in Berlin, and an NGO (BUND Berlin). The project has also set up a website where the city's citizens can discuss their individual energy-saving projects.

¹¹⁶<http://www.bwb.de/content/language1/html/index.php>

¹¹⁷*Berliner Klimaschutzvereinbarung.*

¹¹⁸http://www.un.org/esa/dsd/dsd_aofw_mg/mg_worcktradunio_specday/casestud10.shtml

8.3. Partnerships (public-private)

In the construction sector, the German Crafts Confederation (ZDH¹¹⁹) and the National Construction Federation (ZDB) cooperate closely with the federal government, the federal environmental agencies and the banking institutions (KfW) on issues around climate change and energy efficiency under the ‘Climate Seeks Protection’ initiative (*Klima sucht Schutz*). The main focus of their joint actions is on methods and procedures for the award of subsidies for landlords and bosses of SMEs.

The purpose of these subsidies is to introduce new methods to make it possible to improve energy efficiency and develop applications of renewable energies in buildings. This initiative includes a programme of vocational training for roofers, painters and varnishers. The initiative likewise covers the creation by ZDH of a website (cofinanced by the Environment Ministry) supplying information on climate protection, ways of coping with it (energy efficiency councils) and motivating individuals and traders to make an active commitment to these issues, which also generate savings.

In addition, ZDH, in partnership with the Federal Environmental Foundation, launched a project in 2009 called ‘Energy-saving homes – profits for all’, with the objective of training employees of SMEs in the sector in energy efficiency in individual homes.

ZDH equally promotes the more active participation of the craft sector in the ‘e-mobility’ project.

The ‘Climate Protection Partnership’ initiative, launched in 2009 by the Federal State (Ministry of the Environment and Ministry of the Economy and Technology) in partnership with the German assembly of chambers of commerce and industry (DIHK), seeks to train staff at 3,300 enterprises as energy managers.

In the electricity sector, at local level, the gas, electricity and heating utility companies, together with the German association of municipal enterprises (VKU¹²⁰): 1,400 member enterprises, running capacities of 13,300 MW and employing 220,000 staff, have joined forces to improve infrastructures by developing combined heat and power (CHP) projects with 90% energy efficiency, projects for investments in renewable energies and help for house owners with energy audits. The objective of the projects being funded is to increase decentralised, innovative production of sustainable energy as a better way of guaranteeing the territory’s energy independence.

The HEAG initiative *Südhessische Energie AG* (HSE) for the development of biogas production units is emblematic of this approach, as well as SWM (public municipal service enterprise in Munich), whose objective is to produce green electricity by 2025 to meet the entire demand from the city’s residential sector. In Munich, SWM¹²¹ is running actions at local, regional and European levels. It invests in other European countries: for example, it is developing offshore wind power because capacities in Munich are limited.

The public institute for vocational training (BIBB) and the German assembly of chambers of commerce and industry (DIHK) have teamed up to launch a survey into the sustainable development dimension of future apprenticeship programmes (incorporating the needs in terms of energy efficiency).

¹¹⁹Zentralverband des Deutschen Handwerks (<http://www.zdh.de/>)

¹²⁰Verband Kommunalen Unternehmen (<http://www.vku.de/>)

¹²¹Stadtwerke München (<http://www.swm.de/>)

Cooperation began in 2010 and is still underway between DGB and the two ministries (Ministry of the Economy and Technology and Ministry of the Environment) in the framework of the draft law defining the development conditions for pilot carbon capture and storage (CCS) projects in Germany.

8.4. Unilateral initiatives

Trade union initiatives

The German trade union confederation DGB, as part of the training centre, offers working groups and sessions on a range of environmental topics, including energy and climate policies, and those relating to energy efficiency. DGB has adopted its position and strategy in terms of climate policies in a national executive resolution entitled *'Energy Policy DGB Hypotheses, Sustainable energy against the background of climate policy requirements'*, adopted in March 2009 and confirmed by its congress in 2010.

Employers' initiatives

The 'Economy and climate protection' initiative was launched in 2009 by BDI (Federation of German Industries). In this way, 40 major enterprises and federations have promoted various energy-saving measures.

The employers' organisation BDA (Confederation of German employers' associations), which represents 1 million enterprises and 70% of workers in Germany, has teamed up with BDI to set up a website dedicated to information on CSR and the spread of good environmental practices.

In 2009, BDA published a document entitled *Towards a new understanding of green jobs*, which seeks to define the position and the strategy of the organisation in terms of the economy and green jobs. It provides a broad-brush definition of green jobs, interpreted as being an approach to a national employment policy in the framework of the debates and policies on protection against climate change and needing to respect the three pillars of sustainable development. Green jobs, combined with climate policies, cannot be developed without public aid for the greening of the economy and the development of exports of green German products.

ECOSENSE is the national CSR forum in Germany. It was set up in 2000 and enables German businesses, as well as the societal partners, to exchange their experiences on this matter, including environmental and climate problems.

9. Ireland

Ireland set itself the objective of limiting the growth in its CO₂ emissions to 13% compared to 1990 over the period 2008-2012. To achieve that objective, it constructed a Climate Plan¹²² for 2007-2012, laying down a certain number of measures for the energy-intensive sectors. The main measures adopted in Ireland thus relate to questions of limiting and mitigating CO₂ emissions. However, Ireland is having trouble controlling the rise in its emissions, because in 2008, it reached + 23% over the 1990 level¹²³. The objective of reducing emissions by 16% between 2005 and 2020 was defined in the European Climate-Energy package.

9.1. Tripartite and tripartite+initiatives

Since the end of the 1980s, the social partners have been participating in the framing of government policy and have been involved in the decision-making process in the framework of the strategies designed to make the Irish economy less carbon-hungry. Since the entry into force of the Partnership 2000 agreement a fourth group of stakeholders has appeared as a fully-fledged societal partner: the representatives from the community and association sector. Social consultations in Ireland are now organised around tripartite+type fora.

Since 2010, with the amalgamation of the National Economic and Social Forum (NESF) and the National Centre for Partnership and Performance, the Irish National Economic and Social Council (NESC) remains the only formal and institutional arena for consultation in Ireland. Alongside this body, fora are looking into problems in specific sectors: the Public Transport Partnership, the Housing Forum and the Construction Industry Forum, etc. Most of their initiatives relate to the definition of political directions.

9.2. Unilateral initiatives

Trade union initiatives

Those run by the trade union organisations relate more to the impact of such policies on employment and skills. They run awareness-raising and information activities: the Irish Confederation of Trade Unions (ICTU¹²⁴), for example, has produced various reports on decent work (trade unions and cooperation) and on green jobs (green targets, maximising job creation in the green economy, November 2009). They stage seminars on the employment opportunities offered by the green economy¹²⁵ and run national employment summits¹²⁶. They have also set up summer schools to explore questions around sustainable development. Recently, ICTU, in collaboration with the Irish National Training and Employment Authority (FAS), set up the *ICTU / FAS Union Learning Initiative – Union Skills Network Project*, whose aim is ultimately to set up a national training network¹²⁷.

¹²²National Climate Change Strategy .

(<http://www.environ.ie/en/Environment/Atmosphere/ClimateChange/NationalClimateChangeStrategy/PublicationsDocuments/FileDownload.1861.en.pdf>)

¹²³European Environment Agency.

¹²⁴<http://www.ictu.ie/>

¹²⁵ Example of seminar organised: *The Potential for Green Economy Jobs – New Employment Opportunities in the Environment Goods and Services Sector*.

¹²⁶ Example: the *National Jobs Summit*.

¹²⁷<http://www.ictu.ie/learning/>

Employers' initiatives

In parallel with these dialogue bodies, the unilateral initiatives launched by the employers' organisations relate mainly to analyses of the impact of climate policies on businesses' economic activity¹²⁸. To do this, the Irish Business and Employers Confederation (IBEC)¹²⁹ has a committee whose prime aim is to analyse the trend in environmental policies and measures at national, European and international levels. This organisation recently carried out a study into future training needs¹³⁰.

¹²⁸The employers' organisations carry out activities around awareness-raising and information: on 7 May 2009, the employers' organisation IBEC, in collaboration with the Ministry of Transport, staged a national conference called Sustainable Transport Future. Alongside this collaboration, and on a more individual basis, it runs fora on climate change. Every year, it stages the Annual IBEC Carbon Footprinting Conference. IBEC likewise runs a Foundation Course in Environmental Management. Finally, IBEC has also published a series of guides on best practice and runs lobbying activities.

¹²⁹<http://www.ibec.ie/>

¹³⁰IBEC Education and Skills Survey 2010.

10. Italy

Under the Kyoto Protocol, Italy set itself the objective of a 6.5% reduction in its CO₂ emissions compared to 1990. However, CO₂ emissions actually rose by 4.7% in 2008 compared to 1990¹³¹, reaching 541.5 million tonnes. The objective of a 16% reduction in emissions between 2005 and 2020 was defined in the European Climate-Energy package.

Italian policy on combating climate change rests upon five pillars:

- reforming the energy production system: reorganising the energy mix around sources that create less carbon. To accompany this reorientation, incentives for renewables have been beefed up;
- developing sustainable urban mobility thanks to improved efficiency in the transport sector;
- improving the energy efficiency of the public and private housing stock;
- bringing in new requirements on minimum energy performance for domestic, professional and industrial appliances;
- raising awareness and providing education on environmental protection and biodiversity.

10.1. Tripartite initiatives

At national level, an Economic and Social Council of Environmental Policies (CESPA) was set up in 2006. It is chaired by the Ministry of the Environment and Territorial Protection. This body runs the social dialogue on the measures needing to be put in place in the framework of Italy's climate change strategy.

In parallel, the government has created a fund to finance research projects looking at energy efficiency and the use of renewable energies in urban areas.

On a decentralised, autonomous basis, each region has to draw up an Energy Plan (PEAR¹³²), viewed as the main instrument in the fight against climate change and in support of green energy. They can also achieve major results in terms of environmental sustainability, in particular through the 21 local agendas¹³³.

At sectoral level, the social partners are involved in improving training programmes. For example, in 2003, the joint inter-industry vocational training funds were set up. They are run by the social partners and their purpose is to finance or cofinance (with the State and the regions) training actions in the regions, sectors or enterprises. These funds can thereby encourage the dialogue between business and academia, thanks to business-university collaborations, consortia and foundations.

Also, the social partners play a not inconsiderable role in the restructuring of enterprises. In 2008, for example, an agreement was signed with Electrolux, when it was sold. The latter imposes the retraining of employees in renewable energies. Finally, the social partners are involved in the definition of certain agreements covering the three dimensions of sustainable development.

¹³¹ European Environment Agency.

¹³² Piano Energetico Ambientale Regionale.

¹³³ http://www.observateurocde.org/news/fullstory.php/aid/2065/Table_ronde.html#Italie

In 2000, a consensus between the social partners, certain ministries¹³⁴, associations¹³⁵ and NGOs¹³⁶ on the question of maritime transport of hazardous substances led to the modification of transit routes for shipping away from coastal areas. A training programme on industrial waste management and the transport of hazardous substances has also been arranged for seafarers. In the chemical sector, a collective agreement was signed in 2006 for the on-going improvement of health and safety in the workplace, incorporating the setting up of a systemic structure to prevent and manage risk factors, designed to protect the environment.

10.2. Unilateral initiatives

Employers' initiatives

The Confindustria¹³⁷ working group produced a study in 2010 entitled *Confindustria Proposals for the Extraordinary Energy Efficiency Plan 2010*¹³⁸. For its part, CISL¹³⁹ put forward its proposals¹⁴⁰ in a work entitled *Sustainable development and the social dialogue*¹⁴¹. Alongside these initiatives, the Association of Renewable Energy Producers organises training courses for businesses on Europe and the national legislations in the field of energy and the environment.

Trade union initiatives

The trade union organisations also run initiatives on environmental matters. Firstly, the Italian General Confederation of Labour (CGIL¹⁴²) and the environmental organisation Legambiente have teamed up to produce a document pressing the Italian government to take action in the green sectors, to boost the economy and employment¹⁴³.

In 2004, the three trade union confederations – CGIL, Italian Confederation of Workers' Unions (CISL) and Italian Labour Confederation (UIL¹⁴⁴) – put forward a collegial proposal for the introduction of 'transport cheques'. The mechanism and the objective behind these cheques are simple: an employer pays towards its workers' transport. Workers thus have the option of travelling to work by public transport (taxis are also an option) using these 'transport cheques'. This therefore makes it possible *'to increase funding and demand for public transport, while being inexpensive thanks to the exemption of the sums concerned for businesses and employees'*.

Finally, at company level, a new trade union figure has emerged: the workers' representative for health, safety and the environment¹⁴⁵. The main remit is to ensure that workers' health and safety are taken into account and respected by employers during working hours. These representatives may call upon employers to improve the preservation of workers' health and environment.

¹³⁴The Ministry of the Environment and the Ministry of Transport.

¹³⁵In particular, Assoport.

¹³⁶WWF, Amici della Terra, Mare Vivo, Legambiente, Greenpeace.

¹³⁷Confindustria is the organisation representing Italian businesses.

¹³⁸<http://www.uil.it/energia/circ38-10.pdf>

¹³⁹The Italian Confederation of Workers' Unions (Confederazione Italiana Sindacati Lavoratori - <http://www.cisl.it/>)

¹⁴⁰For example, this trade union organisation wants to see the introduction of a partial 'green' unemployment allowance, for the sake of *'protecting workers' incomes in cases where businesses are experiencing difficulties for environmental reasons'*.

¹⁴¹Giuseppe D'Ercole, *Le cas national italien*, 2008.

¹⁴²Confederazione generale Italiana del lavoro (<http://www.cgil.it/>)

¹⁴³Eurofound (2009).

¹⁴⁴Unione Italiana del Lavoro (<http://www.uil.it/>)

¹⁴⁵('Rappresentante dei Lavoratori per la Salute, la Sicurezza e l'Ambiente').

11. Lithuania

Under the Kyoto Protocol, Lithuania pledged to reduce its CO₂ emissions by 8% compared to 1990. This objective was secured very quickly, and by 2008, the reductions were substantial (of the order of 51.1% compared to 1990¹⁴⁶). The objective between 2005 and 2020 is to limit the rise in emissions to +15% in the framework of the European Climate-Energy package.

However, Lithuania saw its GDP go into free-fall, coupled with the highest rise in the level of unemployment of all the countries in Europe, because of the economic crisis at the end of 2008. This pushed environmental issues on to the political back burner, and they are now discussed only rarely in the Tripartite Council of the Republic of Lithuania¹⁴⁷. But initiatives by the social partners on the transition to a ‘green’ economy do still exist, essentially from the employers’ associations.

11.1. Partnership (public-private)

Initiatives by the employers’ organisations, public institutions and local communities in terms of agro-environmental training

The Chamber of Agriculture (the organisation representing Lithuania’s farmers)¹⁴⁸, in cooperation with the Ministry of Agriculture, has conducted a training project for professionals in the sector entitled ‘Agro-environmental skills’¹⁴⁹. The aims of the project, part-funded by the European funds for rural development, were:

- to implement the European regulations on the farming environment;
- to improve living standards in rural zones;
- to improve agricultural production and the development of organic farming;
- to develop farmers’ skills to ensure the sustainable management of natural resources.

The training modules were divided into two categories: organic farming (two levels: starters and established players), and agro-environmental topics (soil fertilisation, nutrition, soil management). Training sessions were conducted in 837 municipalities, from December 2008 to September 2009. In all, 12,734 professionals were trained (15% more than initially expected) by 42 experts, and five publications were produced (mostly handbooks and training guides). The project also allowed amendments to be made to Lithuania’s rural development plan for 2007-2013. The project results were presented in December 2009 at a conference at which the main topic of debate was the difficulties besetting the sector.

¹⁴⁶ European Environment Agency.

¹⁴⁷ <http://www.lrtt.lt/lt/apie-taryba/tarybos-nariai.html>

¹⁴⁸ <http://www.zur.lt>

¹⁴⁹ <http://www.zur.lt/index.php?-1578624146#>

12. The Netherlands

Under the Kyoto Protocol, the Netherlands undertook to reduce its CO₂ emissions by 6% by 2012 compared to 1990. In 2008, the level of reduction in emissions reached 2.4% compared to 1990¹⁵⁰. This reduction is part of a more global strategy pursued by the Dutch government, which has set ambitious objectives in terms of climate and energy in its political programme for the period 2007-2011: a saving of 2% of energy per year, an increase in the share of sustainable energy to 20% by 2020, and a reduction in the volume of greenhouse gas emissions of 30% compared to 1990.

An objective of a reduction in emissions of 16% between 2005 and 2020 was defined in the European Climate-Energy package.

12.1. Bipartite initiatives

Dutch social consultation on questions around climate change adaptation and mitigation is organised on a formal basis, within the traditional social dialogue bodies: the SER and the Labour Foundation.

The Dutch Economic and Social Council (Sociaal-Economische Raad – SER)¹⁵¹

This bipartite+consultation body brings together enterprises¹⁵² and workers' representatives¹⁵³. Independent experts¹⁵⁴ are likewise present.

Despite being set up by a law, this body is not part of the public administration: in financial terms, it does not rely on the public purse. The social partners are very active in this council on climate change mitigation and adaptation issues.

Several reports/opinions show the commitments of all the parties (employers, trade unions, NGOs and the State) to the adoption of measures to green the economy. The SER model is based upon 'green social dialogue'. One recent initiative is a working conference in April on an organic economy and a quality agenda for the social aspects (employment, transition, lifelong learning, chain cooperation and sustainability).

The Labour Foundation¹⁵⁵

The Labour Foundation is the country's second social dialogue body. It is a private-law structure run on a strictly joint basis, whose prime aim is to devise recommendations likely to go on later to be worked up into 'decentralised' agreements (that is, branch or company agreements). It tends to be under its auspices that agreements are negotiated between the social partners. As part of these collective negotiations, questions to do with sustainable development are aired.

¹⁵⁰European Environment Agency.

¹⁵¹<http://www.ser.nl>

¹⁵² Employers are represented on the SER by the Union of the Federation of Dutch Enterprises (VNO), the Dutch Federation of Christian Employers (NCW), the Royal Union of Small and Medium-Sized Enterprises (MKB Nederland) and the Federation of Agricultural and Horticultural Organisations (LTO Nederland).

¹⁵³ Employees are represented on the SER by the Federation of the Dutch Trade Union Movement (FNV), the National Confederation of Christian Unions (CNV) and the Federation of Managerial and Professional Staff Unions (MHP).

¹⁵⁴ They are appointed by the Crown. They are economic, financial, legal or labour specialists who are not accountable to the government.

¹⁵⁵<http://www.istravail.com/article318.html>

12.2. Public-private partnerships

As part of the energy transition policy, six platforms have been set up¹⁵⁶. They are public-private partnerships where the central authority acts as a major driver, even though it is not the only player. The objective of these platforms is to improve cooperation between the various players on specific topics such as ecological raw materials, sustainable mobility or the effectiveness of the energy supply chain in the built environment, so as to work together to find the resources to enable Dutch businesses to make a successful transition towards a greener economy.

12.3. Unilateral initiatives

These relate mainly to the question of energy efficiency (see below), but also to climate/jobs; climate/sustainable growth; climate/international agreements; green innovations at sectoral level, etc.

Employers' initiatives

The drafting of an inventory per sector is an initiative conducted by the employers' organisations. Since 2007, they have been inventorying many proposals and options for innovation strategies per sector.

A Common Plan has been devised between the energy enterprises, housing cooperatives and building and equipment companies. The objective of this plan is to save 30% of energy in homes.

Trade union initiatives

Like their opposite numbers in the UK, the Dutch trade unions have set in place a workplace greening project, to raise awareness among their membership and other economic stakeholders. It is funded by the Trade Union Confederation of the Netherlands (FNV) and the national trade unions FNV, FNV Bondgenoten and AbvaKabo FNV. A digital toolkit was presented in December 2010¹⁵⁷.

Also, like their opposite numbers in Germany, they are actively participating in the debates within the CSR platforms.

The Green4Sure project is a joint initiative between the Trade Union Confederation of the Netherlands¹⁵⁸ and environmental organisations¹⁵⁹. It seeks to encourage the public authorities, enterprises and citizens to make more sustainable choices, to be in keeping with the government's ambitions. The project was published in 2007, since when certain recommendations have been incorporated into Dutch energy policy in favour of a 'green new deal' as an anti-crisis measure.

¹⁵⁶ www.senternovem.nl/EnergyTransition/Index.asp.

¹⁵⁷ www.duurzaamhetwerk.nl

¹⁵⁸ <http://www.fnv.nl/publiek/>

¹⁵⁹ Greenpeace, WWF, les Amis de la Terre Pays-Bas and Stichting Natuur en Milieu.

13. Poland

Under the Kyoto Protocol, Poland was assigned a lesser objective of reducing its CO₂ emissions by 2012, by 6% compared to 1990. This objective was secured very quickly, and since 2008, the reductions have been sizeable (of the order of 12.7% compared to 1990, according to the European Environment Agency). The objective between 2005 and 2020 is to limit the rise in emissions to +14% under the European Climate-Energy package.

The main angle from which environmental issues are viewed in Poland today is from the point of view of the energy question. In a country that produces over 90% of its electricity from coal, the constraints associated with setting in place the European legislation on reducing greenhouse gas emissions are raising concerns among both industry and trade unions, because of the negative effects that it might have on the competitiveness of Polish businesses.

13.1. Tripartite initiatives

As in most other countries in Eastern Europe, there are few examples of cooperation between the State, the employers and the trade union organisations on environmental questions. The only ones that can be cited are:

- the discussions held in the framework of the national tripartite social dialogue commission (Komisja trójstronna), made up of the government, trade unions and employers' organisations, whose remit includes important subjects in terms of economic and social policy. The social partners have had the opportunity, for example, to be consulted on matters such as the Polish position in the negotiations at the United Nations Climate Conference in Copenhagen¹⁶⁰, or the adoption of the European Commission's Climate-Energy package¹⁶¹. In addition, when Mr Nowicki was Environment Minister (2008-2009), informal meetings were held with the representatives of the social partners before every major international deadline;
- on 22 February 2007, the members of the regional tripartite dialogue commission in the Podlasie region published a common statement supporting the decision by the General Directorate of National Roads and Motorways to build a ring road around the city of Augustów, passing via the protected Rospuda¹⁶² valley. The plans for the construction of this section of road had been blocked by environmental associations, who were subsequently vindicated by a European Commission decision.

13.2. Bipartite initiatives

On 21 July 2004, the employers' union Polskie Szkło (Polish glass industry)¹⁶³, the Federation of Trade Unions in Chemicals, Ceramics and Glass, and the Secretariat of the Glass Industry NSZZ Solidarność signed a framework agreement on autonomous dialogue in the glass sector¹⁶⁴. The agreement provides for two annual meetings between representatives of the employers and employees at which the major problems affecting the glass sector are aired.

¹⁶⁰http://opzz.org.pl/assets/obj/kronikazwiazkowa/d/kz_023_1752.pdf

¹⁶¹http://www.podatki.biz/artykuly/16_9813.htm

¹⁶²<http://www.bialystok.uw.gov.pl/NR/rdonlyres/5E4CAB8B-E8AC-4D1D-89D6-7857BD2ED4C0/0/Stanowiskaiopinie07r.pdf>

¹⁶³<http://www.zpps.pl/?menubok=glowna&page=glowna>

¹⁶⁴[http://www.zpps.pl/pliki/porozumienie %20o %20dialogu.pdf](http://www.zpps.pl/pliki/porozumienie%20o%20dialogu.pdf)

This agreement thus enabled common positions to be found on environmental legislation and the CO₂ quotas allocated to the sector. Above all, thanks to money from the European Social Fund, the social partners have created a Glass Industry Social Dialogue Centre¹⁶⁵. The remit of the centre is fourfold: to constantly improve the social dialogue in the glass industry; to carry out economic and technical analyses on the basis of the work by the social partners and experts called in as required; to develop e-dialogue technologies; and finally to prepare training courses for employers and employees on topics relating to the glass industry (essentially, environmental issues and social dialogue)¹⁶⁶.

In May 2006, at Krynica Górska, the Polish Chemical Industry Chamber (PIPC)¹⁶⁷ and the Association of engineers and technicians in the chemical industry at Tarnów staged their 10th national conference, entitled ‘Major environmental development trends in the chemical industry’.

Another initiative by the chemical industry employers, the ecological forum of the chemical branch¹⁶⁸, is in fact an annual meeting, organised by the PIPC, executives from chemical-sector enterprises, distribution and recycling, scientific staff, representatives from the public administration and experts on the environment. At this forum, the enterprises in the sector must present their achievements in the framework of the international Responsible Care programme¹⁶⁹, a voluntary project pursuing initiatives on:

- limiting impacts on the environment and on safety and working conditions;
- obligations arising from environmental legislation.

Under this programme, PIPC member enterprises organise information seminars about their activities and about the environment, aimed at National Education employees in towns where they have production facilities¹⁷⁰.

¹⁶⁵ http://www.zpps.pl/?menubok=dzialania&page=dzialania_dialog

¹⁶⁶ http://www.centrum-dialogu.pl/pl/aktualnosci_glowna

¹⁶⁷ <http://www.pipc.org.pl/>

¹⁶⁸ <http://www.pipc.org.pl/ida/211>

¹⁶⁹ <http://www.rc.com.pl/index.php>

¹⁷⁰ <http://www.rc.com.pl/eau.php>

14. Portugal

Under the Kyoto Protocol, Portugal undertook to limit the increase in its CO₂ emissions to +27% compared to 1990. However, according to estimates from the European Environment Agency, Portugal is having trouble controlling the growth in its emissions, since by 2008 that growth reached + 32.2% compared to 1990. The objective of limiting the rise in its emissions to 1% between 2005 and 2020 was defined in the European Climate-Energy package.

Since the beginning of the economic crisis in 2008, exacerbated by the crisis in Portuguese sovereign debt in the spring of 2010, the question of climate change and its impact on employment has not been among the priorities in the social dialogue.

The previous initiatives by the public authorities to drive down emissions were called into question by the sovereign debt crisis. So the cancellation of investments was followed by a rise in fares for public transport, cuts to the credits allocated to the national urban renovation plan and an energy policy with less and less of a focus on reducing CO₂ emissions.

On the other hand, the voluntary industrial policy being pursued since 2007 in favour of setting up an industry to produce equipment and services for the production of electricity from renewable sources is not being eroded. This policy is linked to a policy in support of employment in the sector, backed by the trade union organisations. With the creation of the New Energies programme (ENE), Portugal has adopted a strategic vision to gain independence in energy terms. In the new technologies sector, training programmes and clusters¹⁷¹ have been set up. However, this has not come without a price to be paid, which has been an increase in electricity prices decided unilaterally. While the social partners do recognise the success of this programme, the lack of an economic and social evaluation is stressed, particularly by the employers' organisations. The tripartite institutions have continued to operate.

14.1. Tripartite initiatives

The National Council for the Sustainable Environment¹⁷², set up twelve years ago following the Rio Conference, has between 34 and 37 representatives, including the government, the bosses, the trade unions, the tourism sector, the town halls, consumers, non-governmental environmental organisations and universities. The working groups meet six times a year at plenary level and at sectoral and regional levels. The council plays a consultative role: it issues opinions, notably on the national sustainable development strategy¹⁷³. It is a tripartite structure, whose opinions are drafted by consensus and are respected.

The question of climate change and its impacts on employment has become part of the agenda for the traditional tripartite consultation bodies. For example, the national standing council for social consultation, a tripartite structure, which explores macroeconomic questions, has expanded its remit to cover questions relating to sustainable development, in particular with regard to training. It is chaired by the Prime Minister, and made up of four representatives per party, making it the country's reference body for tripartite consultation.

¹⁷¹ According to the employers' organisations, clusters in the photovoltaic and wind power sectors have existed for five years and are now capable of importing the technology.

¹⁷² www.cnads.pt. Prominent figures, elected internally by the Council, also sit on it. It operates pretty well, according to the social partners. It is linked to the Economic and Social Council, a tripartite body. The ESC works on general questions around development, while nevertheless including questions to do with sustainable development.

¹⁷³ The only examples in 2009 of the standing national social dialogue council to combat the crisis (CNADS), investments in renewable energies were put in place to stimulate employment. Recently, the CNADS has handed down an opinion on the green economy.

On training-related questions, two consultation bodies have been set up: the Vocational Training Council and the National Skills Agency. Each complements the other's actions. The Council is tasked with evaluating and establishing the broad objectives and major directions in the field of training; the Skills Agency, created in 2007 by a tripartite agreement on the vocational training system, is more pragmatic and brings together the sectoral commissions whose role is to keep a permanent watching brief, anticipating labour market demand. This agency has a tripartite governance structure. This representation of the social partners must enable the emerging vocational profiles to be identified: new skills, jobs that are disappearing, jobs that are being created and developed, lower-cost transition for workers.

The social partners are aware that the introduction of a more active social dialogue on employment issues would make it possible to gain a better assessment of the supply in terms of training and the development of the requisite skills, but equally to define the financial compensations for the jobs lost due to the transition to the low-carbon economy. Finally, the level of information and awareness among the active and non-active population could be improved.

14.2. Public-private partnerships

The employers' organisations were consulted and involved in the decision to distribute greenhouse gas emission rights in 2004, but less so in 2007.

Similarly, the proposals by the employers' organisations were incorporated into the national action plan in favour of energy efficiency in 2007, setting sectoral objectives for the period 2008-2015.

14.3. Unilateral initiatives

At local level, initiatives are taken by the territorial public authorities: the smart city project at Evora¹⁷⁴, the business incubators in the north of the country and the restoration of countless schools with more sustainable materials, etc.

Employers' initiatives

In the middle of the country, in the town of Viseo, the Portuguese Industrial Association (AIP) has decided to set up an entirely privately-funded equipment programme to put the country in the forefront in terms of energy efficiency, in cooperation with two universities to set up incubator programmes for businesses which have developed the first products and services.

The employers' organisation Transtejo is promoting eco-driving, for which it has set in place training modules. It is also promoting the concept of individual ecological footprints, thus allowing people to calculate their energy consumption when they travel. At sectoral level, it has set up an environmental management system, principally for boats and ferries. The objective of this system is to bring about a reduction in fuel consumption, mainly by changing on-board crew behaviour. In Lisbon, a sort of partnership is seeking to reduce the number of individual transports¹⁷⁵.

At sectoral level, the paper and pulp sector has invested heavily in improving its energy efficiency.

¹⁷⁴The objective of this project is to make the town smarter: to rationalise public lighting, reorganise road traffic or set up energy-efficient equipment in homes. This example is a regional public initiative.

¹⁷⁵ Transtejo.

The Portuguese post office (CTT) has improved its logistics¹⁷⁶, its vehicles¹⁷⁷, its buildings¹⁷⁸ and the services and products that it offers¹⁷⁹. In some businesses, social dialogue between bosses and staff representatives is underway regarding health and safety issues.

Trade union initiatives

The trade union organisations have a mixed view on these initiatives. According to them, major headway has certainly been made, but much still remains to be done. Among other things, it is important for these good practices to be spread to SME type enterprises, which account for 90% of Portugal's economic fabric. As things stand, only large enterprises have set up such initiatives. In addition, the trade union organisations are noting inadequacies in the efforts made in the area of training.

Awareness-raising campaigns are in train. The bulk of the work of the General Confederation of Portuguese Workers (CGTP-IN¹⁸⁰) in fact consists of raising its membership's awareness, through meetings and debates. Educating the wider public - and consumers in particular - is tackled mainly through its internet site, which gives information on smart green purchasing behaviour¹⁸¹. Alongside these awareness-raising actions, the CGTP-IN works on issues to do with health and safety at work. One thrust is to ensure that these questions are included in the general debate about sustainable development. This trade union organisation also carries out annual surveys into environmental protection practices in trade union organisations. The General Confederation of Workers (UGT-P¹⁸²) offers a standard contract in which businesses undertake to integrate social and environmental concerns into their economic activities.

¹⁷⁶ Environmental education, the setting up of an environmental management system and a waste management strategy. It is also involved in reforestation projects with environmental NGOs.

¹⁷⁷ Optimising journeys, using electric cars, setting up eco-driving training courses.

¹⁷⁸ Setting up low-consumption lighting and heating systems.

¹⁷⁹ They have become more neutral in terms of their carbon emissions.

¹⁸⁰ Confederação Geral dos Trabalhadores Portugueses (<http://www.cgtp.pt/index.php>)

¹⁸¹ http://cgtp.pt/index.php?option=com_content&task=blogsection&id=23&Itemid=246

¹⁸² União Geral de Trabalhadores (<http://www.ugt.pt/site/index.php>)

15. Romania

Under the Kyoto Protocol, Romania was assigned a lesser objective of reducing its CO₂ emissions. By 2012, the country has pledged to reduce its emissions by 8% compared to 1990. This objective was secured very quickly, and since 2008, the reductions have been substantial (of the order of 39.7% compared to 1990, according to the European Environment Agency). The objective between 2005 and 2020 is to limit the rise in emissions to +19% under the European Climate-Energy package.

15.1. Tripartite initiatives

The Romanian social partners have apparently been cooperating for a long time on green economy matters. This cooperation goes back to the turn of the 21st century, with the definition of a national strategy for sustainable development. This cooperation has continued in the framework of the tripartite dialogue structures (likewise at regional level) and was reaffirmed once again when the government's anti-crisis plan containing measures on environmental technologies was adopted.

In 2003, the Romanian government set up a Standing National Commission tasked with devising the country's sustainable development strategy by 2030¹⁸³. The Commission was made up of many working groups set up by decree by the Romanian President and Prime Minister, bringing together a wide panel of civil society representatives (NGOs, scientists, political parties, religious groups), including representatives from the employers' associations and the trade unions. In 2008, the National Economic Research Institute¹⁸⁴, a public research body, was tasked with producing and publishing the report setting out that strategy. It includes one part devoted to human capital, in which the authors notably express regret at the mismatch between university courses and vocational training and the needs of sustainable development. The paper also explains that target investments in human capital are one of the objectives of the sustainable development strategy and that they should make it possible to increase the productivity of labour for the sake of improving economic competitiveness and raising living standards.

The trade unions and employers' associations also hold regular discussions in the framework of the national and regional tripartite dialogue structures. One example is the discussions in the framework of the social dialogue commission of the Ministry of Regional Development and Housing¹⁸⁵ (on which 5 unions and no fewer than 15 organisations representing the employers sit), on the adoption of energy-efficiency technologies in the public construction sector¹⁸⁶.

The economic crisis at the end of 2008 also provided the social partners with the opportunity to embark on fresh cooperation on green economy issues. After the elections in December 2008, the new government invited the social partners to table some proposals in the framework of the promulgation of a package of anti-crisis measures. The unions (Cartel Alfa¹⁸⁷ and the National Union of Unions¹⁸⁸) and the employers' representatives (the Romanian Industry Confederation of Employers¹⁸⁹ and the ACPR) delivered 270 proposals, of which 140 were of particular

¹⁸³ http://www.mmediu.ro/protectia_mediului/dezvoltare_durabila/sndd.htm

¹⁸⁴ <http://www.ince.ro/>

¹⁸⁵ <http://www.mdpl.ro/index.php?p=1173>

¹⁸⁶ http://www.mdpl.ro/documente/transparenta/ordine_zi_21.pdf

¹⁸⁷ <http://www.cartel-alfa.ro/>

¹⁸⁸ <http://www.bns.ro/>

¹⁸⁹ <http://www.conpirom.ro/>

relevance to the economic recovery. The table below sums up the proposals from each organisation with a connection to the green economy.

Organisation	Proposed measures
Romanian Industry Confederation of Employers (CONPIROM)	<ul style="list-style-type: none"> • Reduction in imports of polluting second-hand vehicles • Extending the incentive on the purchase of new vehicles to businesses • Subsidised loans for investments in renewable energies • Allocation of a specific NACE code for the renewable energies sector • Promotion of investments in hydraulic and nuclear energies • State subsidies for the renewal of natural resources so that they can be used sustainably in production processes
General Union of Romanian Industry (UGIR)	<ul style="list-style-type: none"> • Decentralisation of the national environment fund • Creation of a private aid fund for 'green' investments • Creation of a department specially dedicated to renewable energies within the Ministry of the Economy • Restoring the debate about sustainable development • Setting up 'eco' certification for certain products, particularly foodstuffs
Romanian Association of Construction Enterprises (ARACO)	<ul style="list-style-type: none"> • Temporary drop in VAT on appliances used in the production of energy from alternative energy sources and on products used in thermal insulation of buildings
National Council of private-sector SMEs (CNIPMMR)	<ul style="list-style-type: none"> • Application of green purchasing procedures to SMEs
Cartel Alfa	<ul style="list-style-type: none"> • Limitation on the use of heavily energy-intensive technologies and strong incentives for the development of skills in energy efficiency
National Trade Union Bloc (BNS) and national trade union confederation Meridian (CSN Meridian)	<ul style="list-style-type: none"> • Incentive for green investments creating jobs allowing for medium- and long-term development • Aid to the development of farming and the rural world • Surcharge on polluting vehicles when they are registered

Ultimately, the government put forward a recovery plan worth 13 billion euros, involving 23 measures, some of which relate to the environment and to questions linked to energy efficiency and renewables:

- public investment in energy efficiency and an obligation on owners of buildings to install systems to allow energy savings;
- gradual replacement of coal-fired central heating systems;
- specific measures targeting the automobile sector, to promote the purchase of 'clean' vehicles;
- investments in the energy sector (construction of a nuclear plant, gradual replacement of old coal-fired plants and development of renewable energies);
- promulgation by the Ministry of the Environment of an eco-tax on non-biodegradable plastic bags.

A total of two measures (energy certificates for buildings and scrappage payments on vehicles over 12 years old) have been applied, according to the employers' organisations we met.

Moreover, the government's policy is not facing up to the consequences of climate change because of lack of funds. This makes the social partners in Romania say that the social dialogue is difficult, because the government never takes their opinions on board.

15.2. Bipartite initiatives

In 2004, the Casa Socială a Constructorilor (a private social security operator, a joint structure run by the employers and trade unions in the building and construction materials sector) and the representatives from the employers and trade unions in the building sector created the CMC Foundation (Fondatia Casa de Meserii a Constructorilor)¹⁹⁰, a non-governmental, non-profit organisation. It is considered to be the secretariat on technical questions for the Sectoral Committee on training in the construction sector (a discussion forum bringing together three representatives of the Association of Construction Employers ARACO¹⁹¹ and three representatives from the branch union Anghel Saligny¹⁹²). Its role is to define the national training policy in the sector, to create and organise training programmes (for employees, but also trainers) and to make the best use of the funding possibilities offered by the European Union institutions. The foundation takes part, among other involvements, in the Euroneff¹⁹³ project.

The Euroneff project involves a number of European partners (Romanian BCC sector employers' association, German, Danish, Spanish and Dutch partners) and its aim is to define the needs in terms of training on energy-efficiency technologies (legislative frameworks, technical elements, etc.) of enterprises in the sector and the publication of a guide on energy efficiency and the renovation of old buildings (intended for trainers and teachers in vocational colleges and based mainly on experiences in Germany and Denmark)¹⁹⁴, which should then be adopted in light of the specific features of each country. The project is scheduled to run for two years (2008 to 2010).

In addition, it may be interesting to note the activity of the National Centre for Sustainable Development¹⁹⁵. This non-governmental organisation, which was set up in 1997 by the Romanian Academy and subsequently became independent, identifies priorities in terms of sustainable development, particularly at local level¹⁹⁶, and implements them. They include capacity-building in terms of human resources and the promotion of sustainable development priorities at sectoral level. The Centre notably provides training, organises information campaigns and sets up strategies. The Centre's target populations include the employers' organisations and the trade unions¹⁹⁷.

¹⁹⁰ http://www.cmc.org.ro/index.php?option=com_content&view=article&id=62&Itemid=96

¹⁹¹ <http://www.araco.org/index.htm>

¹⁹² http://www.cmc.org.ro/index.php?option=com_content&view=article&id=115&Itemid=221

¹⁹³ <http://www.euroneff.eu/>

¹⁹⁴ http://www.cmc.org.ro/index.php?option=com_content&view=category&layout=blog&id=52&Itemid=202

¹⁹⁵ <http://www.ncsd.ro/organization.html>

¹⁹⁶ <http://www.ncsd.ro/expertise.html>

¹⁹⁷ http://www.ncsd.ro/target_groups.html

15.3. Public-private partnerships

The ‘Adaptation of energy sector staff to new technologies and working conditions’¹⁹⁸ project, cofinanced by the European Union as part of the operational sectoral programme for human capital development, was officially launched on 30 June 2009. Steered by the Ministry of Labour and Social Protection and the Ministry of the Economy, and in cooperation with private enterprises (Transelectrica) and the association of energy sector employers, this initiative seeks to increase flexibility and adaptation capacities among energy sector employees.

Part of the project is to provide training programmes and theoretical courses on environmental matters, safety at work and new technologies, the organisation of seminars for the exchange of good practices, information and promotional campaigns. A symposium called ‘Increasing workers’ capacities to adapt to technological and organisational innovations’ is likewise planned. The training programme should ultimately be of benefit to a score of enterprises and over 4,500 staff.

15.4. Unilateral initiatives

Trade union initiatives

The ‘Institutional consolidation through the development of human resources’ project by the national federation of trade unions in the electrical sector, financed out of the European Social Fund (operational programme for the development of human resources), is an example of a trade union initiative. It aims to train and retrain staff in this energy sector where climate change policies are bringing about more profound changes in the nature of jobs. It is run at national level and broken down across the eight major regions (Bucharest-Ilfov, Centre, North-East, North-West, South-East, South-Muntenia, South-West Oltenia, West) for a duration of 36 months (June 2010 to May 2013). The broad objective of the project is the development of the institutional capacity of the national federation of trade unions in the electrical sector, Unions, through its members’ skilling.

The project’s specific objectives are:

- training 1,000 representatives at local level on trade union skills, in line with the professional standard of the national trade union delegate;
- training 200 regional and national representatives in lobbying techniques, trends and prospects for European energy policies;
- drafting a trade union lobbying guide.

The project plans to organise 40 training sessions at the level of each territorial unit (the ‘judets’ or counties), except for Bucharest and Ilfov. Each training course will be attended by 25 members from the local Unions structures and will be run in line with the procedures for the professional standard of national trade union delegates formulated by the National Council for Adult Vocational Training.

¹⁹⁸http://www.comunicatedepresa.ro/Formenerg_S.A._a_lansat_proiectul_%E2%80%9CAadaptarea_personalului_din_sectorul_energetic_la_noile_tehnologii_si_conditii_de_munca%E2%80%9D~NTM4NjA=

16. Spain

Under the Kyoto Protocol, Spain set itself the objective of limiting the growth in its CO₂ emissions by 15% by 2012 compared to 1990. To attain this objective, social consultation is organised through formal tripartite and tripartite+dialogue bodies. Yet Spain is finding it hard to control the growth in its emissions, since in 2008 that growth had reached + 42.3% compared to the 1990 level¹⁹⁹. The objective of reducing emissions by 10% between 2005 and 2020 was defined in the European Climate-Energy package.

16.1. Tripartite and tripartite+initiatives

Traditionally, social consultation on climate questions is organised around two tripartite+type bodies, the National Climate Council²⁰⁰ (*Consejo Nacional del Clima, CNC*²⁰¹) and the Environmental Assistance Council (*Consejo Asesor del Medio Ambiente, CAMA*²⁰²).

The Environmental Assistance Council plays a more important role: as the government's advisor on climate questions, it is in fact consulted on the thrusts, the policies and the laws promoted by the government. Regional councils have likewise been set up.

In a more original way, Spanish social consultation is also organised around two types of round tables, national and sectoral:

- in the framework of the national social dialogue round tables, the discussions revolve around mitigation strategies in the short, medium and long terms to determine the operation and scope of the sectoral tables;
- in the framework of the sectoral social dialogue tables, the discussions revolve around mitigation strategies in the short, medium and long terms. They bring together representatives from the Ministries for the Environment and for Social Affairs and Labour, plus the employers' and trade union organisations.

These two types of round tables pursue a clearly defined objective: they are intended to improve the way in which the effects of policies against climate change on employment are anticipated.

So they are essentially seeking to anticipate *'the potentially negative effects, so as to prevent them and limit them'*, *'the options allowing the demands in the Kyoto Protocol to be met and presenting the best cost/effectiveness ratio, in terms of competitiveness, employment and social cohesion'* and *'the development opportunities for the Spanish economy and for the sectors affected'*²⁰³.

¹⁹⁹European Environment Agency.

²⁰⁰ It was created in November 2001. Its discussions cover the mitigation strategies in the short and medium terms, but are less important when it comes to discussing adaptation strategies. It brings together the representatives of the government with responsibility for the subject, representatives from the autonomous communities, the Spanish federations of cities and provinces, the social partners (trade union and employers' organisations) and NGOs.

²⁰¹<http://www.bcnclimatechange.org/en/politiques-espanyoles.html>

²⁰²The Council is made up of the Ministries of the Environment, the Rural Environment and the Sea, and five NGOs: the main employers' organisation (CEOE), the two main trade unions, CCOO and UGT, the consumers' associations and the farming and fisheries organisations.

²⁰³Sustainlabour, *Climate Change Effects on Employment. Managing Change through Social Dialogue. Case Study on Spanish Sectoral Dialogue Tables for Advancing Kyoto*, 2007.

Nine sectoral round tables have now been set up. Each one relates to a sector affected by the European directive on emissions trading and the national allocation plan²⁰⁴: energy, refining, steel, glass and ceramics, cement, paper pulp, transport and construction. Since 2007, a round table of varied sectors which, while not affected by the Kyoto Protocol, are experiencing the same problems.

Many initiatives have been implemented thanks to these round tables. However, they are general in character: annual evaluation of the achievement of the emissions objectives, development of criteria for the allocation of emission quotas for every industrial installation, development of specific indicators for every sector and sub-sector, evaluation of the application of policies and measures in the Spanish strategy on energy efficiency in each sector, or the decision to allocate loans and aid as part of that strategy. However, they have a regional impact, as is the case with the setting in place of proactive assistance in the Castilla y León region, which is designed to allow the creation of alternative jobs and reskilling to enable the transition to new industries.

Although the Spanish round tables are an original example of social consultation exploited as a good practice by the social partners, they are being criticised today by the trade union organisations, which are denouncing a number of failings and weaknesses in the process, exacerbated by the financial crisis as from 2009. The lack of specific commitments by the government, reinforced by the lack of studies which would give the social partners some way of measuring the likely employment effects of the policies implemented, is currently restricting the scope of these round tables.

Initiatives relating to training

In 2009, in response to the crisis, the Spanish government adopted the Spanish plan to stimulate employment and the economy – Plan E. This strategy is accompanied by a multitude of measures to improve Spain's performances in terms of sustainable development. However, aside from this plan, there is no national strategy targeting priority needs in terms of the skills required to achieve a greener economy. There are simply a few initiatives on the subject.

The National Skills Institute identifies the new skills, the new professions and the 'acquis' necessary to develop the new industrial activities (not necessarily linked to climate change, but more to industrial policies). It reports to the Ministry of Labour and Education with the participation of the social partners.

The bulk of the initiatives, then, are at regional level. This allows for the national thrusts to be matched better to each region's needs and priorities. The private sector and civil society complete the actions conducted by the regions. For example, the social partners can intervene in the definition of training courses and their content.

Sometimes, public-private partnerships are set up, and these relate to the programmes to develop skills, the initiative tending to originate in the private sector. This training programme is then funded by public bodies.

²⁰⁴UNEP / ILO / IOE / ITUC, *Green Jobs, Towards Decent Work in a Sustainable, Low-carbon World*, 2008.

16.2. Unilateral initiatives

Most of the initiatives conducted unilaterally relate to the organisation of seminars and workshops, but documents are also produced and published.

Employers' initiatives

The employers' confederation CEOE has written an internal paper on green jobs which has not been issued; it challenges the notion of green jobs because of the difficulty of establishing which jobs are green and which are not. The employers' organisation makes no particular link between climate change and employment, preferring to talk about trends in employment caused by an industrial policy that takes new energy situations on board.

Trade union initiatives

The Spanish General Confederation of Workers (UGT²⁰⁵) has conducted studies into sustainable mobility and renewable energies. The Trade Union Confederation of Workers' Committees (CCOO²⁰⁶) likewise runs studies with the Iistas institute on the question of employment in renewable energies and transport.

²⁰⁵ Union General de Trabajadores (<http://www.ugt.es/>)

²⁰⁶ Confederación Sindical de Comisiones Obreras (<http://www.ccoo.es/cscceo/menu.do>)

17. Sweden

In the framework of the Kyoto Protocol, Sweden

In the framework of the Kyoto Protocol, Sweden was assigned the objective of stabilising its emissions by + 4%. In fact, the country managed to do far better than the objectives which it had set itself (reducing its emissions by 4%).

In 2008, according to the European Environment Agency, its CO₂ emissions had decreased by 11.7% from 1990 levels. Sweden has committed to a new, markedly more ambitious target, a 40% reduction of emissions by 2020, even though only a 17% reduction target between 2005 and 2020 is set in the context of the European Climate-Energy package.

To achieve this new objective, Sweden is conducting an ambitious energy policy based on three pillars:

- the total replacement of fossil fuels with renewable sources of energy;
- a secure energy supply;
- improved energy efficiency.

Sweden's strategy is based on a more sustainable energy future that takes account of the climate challenges of mitigation and adaptation. The initiatives implemented by the social partners form part of this process.

17.1. Tripartite and tripartite+ bodies

Social dialogue in Sweden forms part of a more integrated process than in the rest of Europe. Traditionally, social dialogue in Sweden has existed within a framework established by law.²⁰⁷ Sweden has a long tradition of co-determination and cooperation between the social partners that establishes the terms and conditions of collective bargaining. Any change or restructuring process, regardless of the level, must involve social consultation. This is the framework for the functioning of the system of social relations on the social-employment component of climate-energy policies and measures.

At national level, the social partners are active on questions related to improved energy efficiency, as seen in their participation in the follow-up and implementation of the 'Energy Efficiency Programme'²⁰⁸ (PFE).

The PFE Programme,²⁰⁹ an initiative launched by the Swedish Energy Agency in January 2005

The context: this programme was put in place in response to two essential requirements: the first concerns the reduction of CO₂ emissions and the second relates to rising electricity prices²¹⁰. The initiative is being conducted by the State in coordination with the Swedish Energy Agency.

²⁰⁷ The Employment Codetermination in the Workplace Act (MBL), the Work Environment Act and many laws on cooperation organise social dialogue in Sweden.

²⁰⁸ <http://www.energimyndigheten.se/en/Energy-efficiency/Companies-and-businesses/Programme-for-improving-energy-efficiency-in-energy-intensive-industries-PFE/>

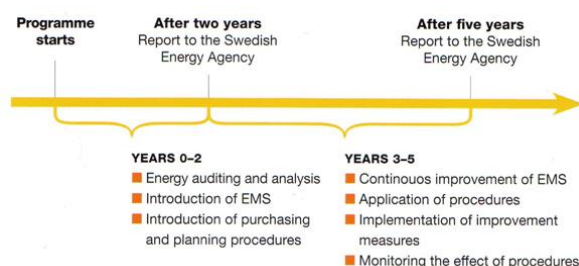
²⁰⁹ The programme for improving energy efficiency in industry.

²¹⁰ Electricity prices have been rising for years, after previously being the world's lowest.

The objective: *to encourage energy-intensive industries to improve their energy efficiency through the use of incentives*²¹¹. The incentive measures offered as part of this programme are reductions in the level of energy taxes.²¹² Although industry was fairly reluctant at the outset, it quickly took up the project since it offers an attractive return.

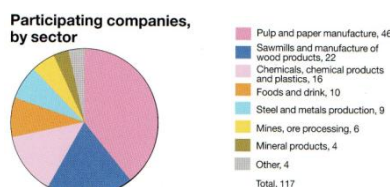
Functioning of the programme: *it is based on a long-term agreement that involves the Swedish government, energy-intensive industries and trade union organisations. The programme has been implemented over a period of five years. The experimentation period has ended but the second phase has not begun yet.*

The following diagram presents what enterprises were obliged to accomplish during the five years of the programme. See details (²¹³).



Prerequisite conditions for participating in the programme: *the PFE is a voluntary programme to improve energy efficiency. To participate, industrial undertakings must use electricity in the manufacturing process. They must also be energy-intensive*²¹⁴ *and must satisfy the economic conditions required for being part of the programme. In practice, participants in the programme are limited to large energy-intensive industries in the paper and pulp sectors, sawmills, chemicals, agri-food, steel and mining industries.*

Number of companies: *at the outset, 98. Another 19 undertakings joined the project during the first phase, bringing the total number of participating industries to 117 (i.e. 250 plants).* See details (²¹⁵).



Project monitoring and follow-up

The Swedish Energy Agency is responsible for programme monitoring and follow-up. It also provides advisory services to help participating companies with implementation.

The Programme Board, set up in April 2005, is made up of representatives of the State, enterprises, trade union and employers' organisations and research centres. The board is both a consultative and control body and it meets four times a year.

The Swedish Taxation Board, attached to the Ministry of Finance, has the authority to allocate or annul tax reductions offered to companies that participate in the programme.

²¹¹ Through improvements to existing equipment and planning the installation of new equipment.

²¹² This reduction compensates for the existing electricity tax of 0.5 M/Wh.

²¹³ <http://ies.lbl.gov/iespubs/PFE.2007.pdf> – Two years with PFE.

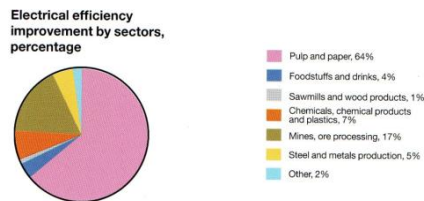
²¹⁴ The industry's energy costs must account for at least 3% of turnover and/or at least 0.5% of its added value must be covered by a tax on CO₂ and/or on SO₂.

²¹⁵ www.energimyndigheten.se – Two years with PFE.

The programme's track record

The first reports were drawn up in autumn 2006 and the initial results are very promising.

After only two years of existence, more than 900 improvement measures had already been put in place or were being organised. For now, these measures have cost the companies a total of 110 million euro. Most of these measures have also presented a very fast return on investment (an average of two years). They have also resulted in electricity savings of around 1 TWh/year²¹⁶, for a total of 55 million euro. In addition to these direct savings, the companies have received a tax reduction in the average amount of 17 million euro per year and per company for their participation in the project. In 2010, the objectives were met at the 200% level.



The energy audit and the energy management system help to put energy savings issues at the heart of the concerns of both employers and employees, in particular through training programmes.

This programme is considered a success not only by the social partners, but also by the public powers and NGOs. However, its continuation depends on two factors. First, in the absence of State support, companies will not invest. Second, the programme depends on what happens in Brussels, particularly in connection with the project for revision and harmonisation of State aid for environmental protection, governed by the EU guidelines of April 2008 (2008/C82/01).

At the local level, laws on co-determination and cooperation between the social partners are implemented through *ad hoc* structures, dedicated in this case to collective bargaining. These structures bring together local public employers, namely the local authorities (municipal and county executive boards) and trade union organisations.

The social partners are also active at the local level on the climate-energy package. More than 1,000 projects related to the national energy guidelines have been implemented by local and regional authorities and the Swedish Association of Local Authorities and Regions (SALAR²¹⁷) with the participation of the social partners. Most of these initiatives are matched with training and information programmes. This large number of measures stems first from the fact that local authorities have a certain autonomy in terms of decision-making, but also from their wide powers, established by law, in the field of the environment, such as energy procurement, distribution and use. Since the 1990s, local and regional authorities have been encouraged to adopt, in the context of Agenda 21, ambitious strategies aimed at both improving the state of the environment and creating jobs.

Among these 1,000 projects, certain initiatives can be considered to qualify as best practice.

²¹⁶ According to the Agency's calculations, this is equivalent to an emissions reduction of 0.5 to 1 million tonnes of CO₂ per year.

²¹⁷ www.skl.se

Two examples of best practice**1,200 biogas vehicles in Linköping²¹⁸**

To deal with the problem of the thick cloud that hung over the town of Linköping at the end of the 1980s, the local authorities decided to implement an innovative solution: to use waste generated by meat-packing industries and manure from surrounding farms to develop a less polluting and lower-carbon fuel: biogas.

Positive results were observed as soon as the first vehicles started circulating. Widespread use of this type of fuel in different types of vehicles led to a significant reduction in pollution in the town. Today, more than 1,200 vehicles are fuelled by biogas (taxis, buses, passenger cars, trains). This fleet represents one of the world's largest. Biogas now accounts for 5% of the town's total fuel consumption and the remainder is sold to non-local buyers.

Jobs were also created as a result of this programme because the town opened a green technology centre. The centre focuses its work in particular on improving biogas technology. Employment management as well as vocational training and lifelong learning projects were put in place in the companies involved with the biogas programme with the active participation of the social partners, in the framework of co-determination and cooperation between the social partners.

The Environmental Consultants & Climate Entrepreneurs project

This original initiative was launched in the 1990s as part of Agenda 21 in response to rising unemployment (especially among young people). Resulting from cooperation between the social partners and the government, it took the form of a training programme designed to give fresh impetus to the labour market by offering new employment opportunities in a sector that appeared to be booming. The project cost SEK 10 million over three years.

The training programme included a theoretical component and a more practical component during which trainees were invited to work on local projects. Two conditions had to be met to guarantee the programme's effectiveness and relevance: local companies had to be involved in the project and the participants could not be in direct competition with professional consultants. After completion of the training, the participants became environmental consultants.

17.2. Bipartite initiatives

In 1997, the social partners worked out an agreement on industrial development and wage formation²¹⁹ to promote conditions conducive to the development of a dynamic labour market that in time will lead to competitiveness gains.

This agreement also establishes a discussion forum in which the social partners jointly address subjects related to environmental protection and climate change. In parallel, an industrial committee brings together the social partners twice a year to promote the agreement and monitor application. It also has the task of advising employers and their employees on the best way to implement this agreement.

"One important initiative between the social partners is the ambition to increase the use of wood in the building trade. Although Sweden is a genuine country of forests, a long experience of burning wooden towns created a tradition of building apartment blocks in stone and later on in concrete.

²¹⁸ SALAR (2009), 'Local action on climate change – Swedish experiences'.

²¹⁹ [www.industrikommitten.se/home/IK2/res.nsf/vRes/ik_1281698172484_avtalet_eng_pdf/\\$File/avtalet_eng.pdf](http://www.industrikommitten.se/home/IK2/res.nsf/vRes/ik_1281698172484_avtalet_eng_pdf/$File/avtalet_eng.pdf)

As the today's technology offers safe building constructions in wood also for apartment blocks and public buildings the social partners within the forest industry initiated this wood building project with several information activities in order to raise awareness of wooden constructions and their advantages regarding both costs and climate within the whole building sector.

Today a certain office is established and the activities are supported by both industry and the government. The project has contributed to raise the use of wood in buildings from 5% to 15% in a few years."

17.3. Partnerships

Cooperation is organised between the Swedish Confederation of Professional Associations (SACO²²⁰, a member of the European Trade Union Confederation) and different public research institutes, particularly on technologies that could help bring about a reduction in CO₂ emissions.

There is also a partnership between the SME employers' organisation (Företagarna²²¹) and the Swedish Environmental Protection Agency. Its objective is to help undertakings to adapt to the effects of climate change. This partnership therefore strives to give prestige to the companies it considers a model in terms of respect for the ecosystem and biodiversity²²².

The Swedish Trade Union Confederation (LO)²²³ is also in permanent contact (informally) with associations and NGOs. It maintains good collaboration with the public authorities (Energy Agency, Environmental Protection Agency and Environment Ministry).

17.4. Unilateral initiatives

Unilateral initiatives primarily concern awareness-building and information. In parallel, the social partners draw up unilateral position papers on Swedish energy policy and on actions undertaken by stakeholders.

Along with these examples in the area of awareness and information, the social partners also conduct more tangible actions. The SALAR, for instance, finances adaptation measures and develops incentives for energy efficiency. It also takes part in a number of projects²²⁴. In 2009, it conducted a survey²²⁵ to analyse how action plans were being implemented at the local level in response to the climate challenge.

Employers' initiatives

The document published in 2008 by the Confederation of Swedish Enterprise (SN) – 'Advantage Environment: The environmental benefits of new products' – is not an inventory of actions to be organised. It is critical of the means used by businesses to respond to climate and environmental challenges.

²²⁰ Sveriges Akademikers Centralorganisation (<http://www.saco.se/>).

²²¹ <http://www.foretagarna.se/>

²²² <http://www.teebweb.org>

²²³ Landsorganisationen i Sverige (<http://www.lo.se/>).

²²⁴ www.skl.se or www.salar.eu. SALAR participates in different reference groups and similar, for example National Platform for dealing with natural disasters: <http://www.msb.se/nationalplatform>. SALAR supports and contributes to the UN 'Resilient Cities' project: http://www.skl.se/web/Building_Resilient_Cities.aspx (information in Swedish) or <http://www.unisdr.org/english/campaigns/campaign2010-2011/about/> (information in English). SALAR also contributes as a referee etc. to the research group Climatools: http://www.foi.se/FOI/templates/Page_8604.aspx. www.skl.se/klimat (with a report in English), www.swedishepa.se/bestpractice (also in English), and www.energimyndigheten.se/uthalligkommun"

²²⁵ www.skl.se/web/laget-i-landet.aspx

In 2010, in one of its position papers, the SN stated that the climate challenge was being addressed too much at the local level and not enough at the national level. SALAR (2009), ‘Local Action on Climate Change – Swedish Experiences’. According to the SACO and an association of scientists, the government should improve the economy's energy efficiency.

The Confederation of Swedish Enterprise (SN²²⁶), in collaboration with the Confederation of Danish Enterprise, has drawn up the Climate Compass, a tool SMEs can use to calculate their ecological footprint. The tool is meant to create awareness of the need to put in place strategies to reduce CO₂ emissions. This employers’ organisation has also set up a dedicated portal for this tool²²⁷. Companies can refer to it to consult experiences with best practice that have given a positive result in terms of CO₂ emissions reduction.

Företagarna (the Federation of Entrepreneurs and Small and Medium-sized Enterprises) conducts information and awareness campaigns among small and medium-sized companies to alert them to climate stakes and challenges. The Swedish Association of Local Authorities and Regions (SALAR²²⁸) publishes a number of reports. These include ‘Local Action on Climate Change – Swedish Experience’ (2009), which presents examples of best practice and measures implemented at regional level, such as CHP plans. Företagarna also organises events, such as the conference on ‘Climate and Jobs: local solutions’²²⁹, prepared with the collaboration of Swedish regions.

Trade union initiatives

LO publishes position papers on different subjects, including Swedish energy policy, nuclear energy, renewable sources of energy, sustainable transport and the concept of more sustainable forests. In its position paper entitled ‘Counter the Climate Crisis with Investment and Technological Innovation’ (2009), LO proposes a number of actions concerning the necessity of investing more to improve energy efficiency in transport, construction and the electricity sector. Investments should also focus on the development of low-carbon energy sources. It also recommends the development of closer cooperation by all stakeholders. LO has also published several studies on the question of employment, and in particular on the difficulty of assessing the ‘Green Job’ concept.

²²⁶ <http://www.svensktnaringsliv.se/>

²²⁷ www.klimatkompassen.se

²²⁸ www.skl.se

²²⁹ www.skl.se/klimat

18. United Kingdom

The United Kingdom's climate change targets are set in law through the "Climate Change Act 2008", binding the UK to a 34% cut in CO₂ emissions by 2020, and 80% by 2050. The UK has already achieved the target it agreed to in the framework of the Kyoto Protocol²³⁰. The country has embarked on a new 16% emissions reduction target between 2005 and 2020 as part of the European Climate-Energy package. It has also set a very ambitious target of an 80% emissions reduction by 2050. To achieve that objective, the previous Labour administration set its sights on a low-carbon energy future that will feature a balanced energy mix with renewable sources, nuclear, and clean coal and gas. This strategy has been taken up by the new Coalition government elected in May 2010.

On social dialogue, the United Kingdom presents a particularity: trade unions and employers' organisations are not legally recognised as social partners. There is consequently no social dialogue within the European meaning of the term. However, trade union and employers' organisations are active on issues related to the transition to a low-carbon economy and a number of bipartite and tripartite fora debate energy and climate issues.

18.1. Tripartite initiatives

Their discussions come within the framework of fora for dialogue with the government.

The Green Economy Council

The Government set up a new joint body, the Green Economy Council (GEC), to give first hand advice on the transition to a green, low carbon economy, and on ways to minimise the costs for business while maximising the opportunities for green growth.

The GEC, a joint business/TUC/ Government body, held its first meeting on 16 February 2011, chaired by Business Secretary. For immediate purposes, in the context of rising unemployment and faltering growth, the Council will advise government on its Green Economy Roadmap, due to be published in the Spring 2011. In the longer term, it is hoped that the body will provide an overview of strands of energy and industry policy related to climate change and sustainable growth.

The GEC is unique in bringing together Ministers from three key departments (BIS²³¹, DECC²³² and DEFRA²³³). with the first meeting chaired by the Business Secretary. The council is supported by a working group comprising policy advisers of Council members.

The GEC will focus on advising government on green and green growth policies, but will also consider the downside of industrial change - "ways to minimise the costs for business" of the low carbon transition. In this respect, the Council has assumed one of the roles of the former *Forum for a Just Transition*, scrapped by the Coalition in summer 2010. The Forum, which met twice under the previous administration, was designed to ensure that, for example, the interests of the energy intensive industries were not overlooked in the transition to a low carbon future. These industries employ 250,000 in sectors such as steel, chemicals and ceramics, often located in areas of otherwise high unemployment.

²³⁰ Target for 2012: - 12.5% compared with the 1990 level, target achieved in 2008: - 18.6% compared with the 1990 level.

²³¹ BIS: The Department for Business, Innovation and Skills.

²³² DECC: The Department for Energy and Climate Change.

²³³ DEFRA: The Department for Environment, Food and Rural Affairs.

The first GEC meeting (16 February 2011) focussed on the *Green Economy Roadmap*. An early draft of the Government's longer term strategy on climate change and the environment reflects the market-led stance of the Coalition government's approach to industry policy.

The CCS Development Forum²³⁴

Set up in November 2010 by the Coalition government, the CCS Development Forum aims, on the one hand, to facilitate the organisation of carbon capture and storage (CCS) demonstration programmes, and on the other, to prepare the deployment of these technologies before 2020. The idea is therefore to promote CCS technology²³⁵ in order both to decarbonise fossil fuel power generation (from coal and gas) and to help support coal production in the United Kingdom²³⁶ using cleaner means that emit less CO₂.

Chaired by the State Secretary for Energy and Climate Change, this forum brings together several times a year the social partners, potential investors, NGOs, academics, industry and the government. These meetings initially take stock of actions carried out by the government and then draw up recommendations to submit to the Office of Carbon Capture and Storage (OCCS) of the Department for Energy and Climate Change.

The Nuclear Development Forum²³⁷

Based on the same concept as the CCS Development Forum, this body is a tripartite+ discussion forum. Its objective is to promote the development of an appropriate policy and skills framework for new nuclear energy as a source of electricity in the United Kingdom and to make this country the world's most attractive market for foreign investment (the government has announced that it does not intend to subsidise new nuclear facilities). Chaired by the State Secretary for Energy and Climate Change, it also has the task of providing support and advice to the Office of Nuclear Development of the Department for Energy and Climate Change. It meets three times a year.

Coal Forum²³⁸

This forum was established by the former administration and has been maintained by the current government. Unlike the above two, this forum is an independently-chaired advisory group. It was put in place in 2006, following representations from the TUC, industry representatives and others as part of follow-up to the government report entitled 'The Energy Challenge'²³⁹. According to that report, coal can be seen as the solution to the depletion of oil deposits and can provide a response to growing energy needs. However, if coal is to have a future in the energy mix, it has to become clean. This forum consequently has the objective of developing a long-term strategy for the use of this energy source (optimisation of coal reserves – estimated today at 400 million tonnes – and stimulation of investments in new technologies).

This strategy would also make it possible to increase the security of energy demand by using local coal while reducing CO₂ emissions. This forum is divided into a number of working groups that bring together the social partners and government representatives.

²³⁴ <http://www.carboncapturejournal.com/displaynews.php?NewsID=616>

²³⁵ Carbon capture and storage.

²³⁶ CCS is considered to be a technology that can help to mitigate CO₂ emissions. According to IEA experts, in the absence of this technology, it could prove very difficult to prevent global warming.

²³⁷ http://www.decc.gov.uk/en/content/cms/what_we_do/uk_supply/energy_mix/nuclear/forums/develop_forum/develop_forum.aspx

²³⁸ http://www.decc.gov.uk/en/content/cms/what_we_do/uk_supply/energy_mix/coal/uk_forum/uk_forum.aspx

²³⁹ This report considered it useful to establish a dialogue instrument on the question of coal.

UKCES

The different organisations mentioned also work with the government in the framework of the UK Commission for Employment and Skills (UKCES)²⁴⁰. Launched by the government in 2008, this commission's main task is to advise the government on policies, strategies and measures needed to achieve the ambitious objective of being in the top eight countries in terms of skills, employment and productivity. The commission has set up the Sector Skills Councils²⁴¹ as meeting points for the exchange of ideas and training sessions to improve understanding of skills needs in the industrial sector. There are currently 25 Sector Skills Councils that cover more than 90% of the economy. They are independent and employer-led. Working in close collaboration with trainers and education professionals, they develop training modules in order to shrink the gap between current skills and future needs. Trade unions and employers' organisations are also involved in the work of these councils. The TUC nevertheless has concerns about the lack of clarity of the initiatives being implemented by the government to improve skills as a means of ensuring the transition to a low-carbon and resource-efficient economy.

18.2. Bipartite initiatives

Following the decision approved at its annual Congress 2006, the TUC also created the Clean Coal Task Group (CCTG). This working group brings together employer representatives of energy industries, together with representatives from the TUC and trade unions from the energy and mining sectors. It is chaired by an industry representative.

The working group's objective is to promote new technologies for carbon capture and storage and to help secure a long-term future for the UK mining industry, both deep mined and surface coal production. . With that aim in mind, discussions with stakeholders²⁴² are expected to lead in time to the definition of a political and legal framework as well as the economic instruments that will encourage the development of CO₂ capture and storage technologies.

Recently, the TUC and the energy intensive industries prepared a report on the cumulative impact of climate change policies and concerns over carbon leakage facing industries such as steel, ceramics, paper, glass and cement making in the UK.

The TUC's Green Workplaces project²⁴³ are workplace-based initiatives that bring together the practical engagement of both workers and management to secure energy savings and reduce the environmental impact of the workplace. This can be achieved through awareness-raising events, staff surveys and training workshops. They were initiated by the trade unions as a means of engaging union members in the challenges of climate change and sustainable development. Workplaces burn energy, consume resources, generate waste and travel, and are an ideal place to tackle climate change.

More than 20% of CO₂ emitted in the United Kingdom comes from workplaces. The experimentation/pilot phase launched in 2006 was followed by a two-year project aimed at developing good practices for the greening of workplaces. This project has essentially been led by unions and was then taken up jointly by employers and union members to secure energy and resource savings in the workplace.

²⁴⁰ <http://www.ukces.org.uk/>

²⁴¹ <http://www.ukces.org.uk/sector-skills-councils/about-sscs/>

²⁴² Created in the wake of an initiative by the TUSDAC, it was conceived as a body for tripartite consultation. Based on invitations, this working group can bring together employers' organisations, trade union organisations and the government.

²⁴³ www.sustainableworkplace.co.uk

Today, the initiative has moved out of the experimental phase and is coming into widespread use: more than 1,300²⁴⁴ sites have now joined in the project. Furthermore, this initiative is not being led exclusively by trade unions, since employers' organisations and companies themselves are closely involved in it.

- Objectives: to develop good environmental practices in workplaces via the organisation of green training for employees and their representatives and to improve dialogue relations between employees and their employers through these challenges.
- Pilot projects put in place: the Tata Steel facilities in Birmingham, the four large offices of Friends' Provident, the head office of Scottish Power in Edinburgh, the British Museum, DEFRA offices in York and the TUC head and regional offices.
- Main activities conducted: development of tailor-made training sessions, the organisation of events and open-door days at companies, and the establishment of environmental committees. These committees help to improve communication and social relations in companies.
- Results obtained: a real enthusiasm for the development of 'green workplace' projects among both employees and management, 'a real reduction in energy consumption thanks to behavioural changes', 'confirmation through internal surveys that employees are familiar with the areas where CO₂ reductions are possible'. The most significant result is that 'this has demonstrated the trade unions' effectiveness when they embark on common projects with employers'.

The TUC has now launched a national Greenworkplaces network, which can be accessed at: www.tuc.org.uk – go to greenworkplaces. According to the TUC, the following elements can be drawn from the projects:

- Employers need to see unions as part of the solution. Union involvement can lead to business benefits through improved environmental performance.
- Involving reps and members from a wide range of occupations expands the wealth of worker expertise.
- There is no one-size-fits-all approach for engaging in greening the workplace projects. Different employers will have different environmental strategies in place, if at all, different networks for communications and varied mechanisms for staff consultation can exist across different sectors and unions. Projects involve a great deal of work, effort and commitment to generate success.

Best practice identified: Joint union approach. By approaching management jointly, unions were able to encourage good industrial relations.

18.3. Partnerships

Among employers' organisations, these discussions remain quite informal and can be likened more to lobbying. To give an example, the Confederation of British Industry (CBI²⁴⁵) aims to

²⁴⁴ For example, the Green Workplaces project has been put in place in the following sites: Bristol City Council, British Telecom, Adastral Park, Ipswich BT, Bury St Edmunds Fire Station in Suffolk, HM Prison Guys Marsh in Shaftesbury, Great Ormond Street Hospital for Children, NHS Trust in London, HMRC Benton Park View in Newcastle, HMRC Lillyhall in Workington, the national museums in Liverpool, the Scottish National Library in Edinburgh, Western Power distribution, Worcestershire County Council, A&P Marine in Falmouth and BECTU.

²⁴⁵ Confederation of British Industry:

<http://www.cbi.org.uk/ndbs/staticpages.nsf/StaticPages/home.html/?OpenDocument>)

serve as an intermediary between the government and enterprises. Among trade unions, discussions with the government are more formal. They tend to take place in the framework of dialogue bodies such as the Trade Unions Sustainable Development Advisory Committee (TUSDAC).

This initiative is being conducted and chaired jointly by the Trades Union Congress (TUC²⁴⁶) and DEFRA. Put in place in 1998 by the British government, the TUSDAC organises high-level meetings with stakeholders, as illustrated for instance by the TUSDAC/NGOs liaison. At these meetings, the different parties exchange views on climate issues and on matters related to sustainable development and employees' adaptation in terms of the skills needed to ensure a successful transition to a low-carbon economy.

They also discuss their experiences and initiatives they have organised. For example, the agenda of the meeting in March 2011 included discussions on the Green economy, union concerns over the future funding and support for public bodies established to care for the environment and climate change, and statutory responsibility for tackling flooding in the UK.

In parallel with the TUSDAC forum, the TUC also engages directly with Government on energy policy and provides advice and conducts research in order to transmit information and to provide better input to discussions at meetings with the Energy Secretary.

18.4. Unilateral initiatives

In parallel with these dialogue structures dedicated to questions related to the country's energy future, trade union and employers' organisations also take initiatives in connection with management of the energy transition.

The actions of these organisations are more pragmatic and more concrete. They concern awareness-raising, training and information in the areas of adaptation as well as mitigation of climate change.

Concerning social initiatives²⁴⁷, the role of the social partners has not been made clear. First, employers' and trade union organisations draw up numerous reports on environmental challenges²⁴⁸, and in particular on questions related to adaptation²⁴⁹ and mitigation²⁵⁰. Some of these reports synthesize their experiences with best practice. They also organise fora,

²⁴⁶ Trades Union Congress (<http://www.tuc.org.uk/>)

²⁴⁷ For example, Leicester City Council has set up an action plan for adaptation to climate change; the Kent Climate Change Network aims to help enterprises to adapt more effectively to climate change; etc.

²⁴⁸ The TUC has published a guide for trade union representatives and for its members, which provides a number of responses to environmental challenges. This guide also includes assistance in negotiations with employers. For employers' organisations, the CBI has drawn up several reports on these questions ('*Future proof: preparing your business for a changing climate*' [2009], '*Getting involved: a guide to switching your employees on to sustainability*' [2009], *CBI Wales 'Blueprint of a green economy'* [2010]). In 2009, the CBI also published a report on green innovation in the United Kingdom.

²⁴⁹ CBI (2010), '*Whatever the weather, managing the risks from a changing climate*'. This report presents six case studies that highlight experiences with best practice in terms of adaptation. LGA Research (2010), '*What do the latest climate projections mean for you? Be aware, be prepared, take action II*'. This report also highlights experiences with best practice. TUC (2008), '*Employment implications of Climate Change adaptation*'. This report analyses the potential impacts of climate change on employment. It draws up recommendations on the changes that need to be made in companies in order to prevent the consequences of climate change.

²⁵⁰ First, trade union and employers' organisations teamed up to draw up a study entitled 'The Energy Intensive Industries study'. Then, on a more individual basis, the CBI released a report in July 2009 on energy policy entitled 'Decision Time' (http://climatechange.cbi.org.uk/uploaded/CBI_DecisionTime_WEB.pdf). This report outlines a scenario for 2030 and estimates the necessary investments, concluding with a set of recommendations to stimulate investment by the private sector.

conferences²⁵¹, events²⁵² and meetings²⁵³ to disseminate best practice more widely. The government has set up the Adaptation Sub-Committee of the Climate Change Committee to address the issue of adaptation. Over the longer term it will draw up a national adaptation plan for the United Kingdom.

Trade union initiatives

The TUC's has sustained its focus on greenworkplace activities as a key way to build support and understanding of the challenges of climate change²⁵⁴. At a policy level, it takes an interest, like the CBI, in the need for a national skills strategy for a low carbon economy. The TUC's "unionlearn" service encourages workplace learning and its learning reps help identify skills needs and employment opportunities²⁵⁵. The TUC provides a wide range of training programmes via unionlearn²⁵⁶.

Employers' initiatives

On the employers' side, the CBI set up a Climate Change Task Force in 2007 that was composed of the directors of 16 companies. These businesses have the double characteristic of belonging to the FTSE 100 Index and working in transverse sectors. This task force supervised the drafting of the report entitled 'Climate change: Everyone's Business' (November 2007). This report recognises that the government, enterprises and consumers have an important role to play in transforming the economy. In the wake of this publication, the task force was transformed into the CBI Climate Change Board in 2008. The objective of this new structure is to supervise around 30 work programmes on climate policies²⁵⁷.

At the local level, the Local Government Association (LGA²⁵⁸) has set up the Environment and Housing Programme Board²⁵⁹. It is charged with analysing climate events and the responses to be implemented locally. The board also reviews government energy policies and their consequences at the local level. In the field of education and training, trade union and employers' organisations carry out unilateral initiatives. For the CBI, the subject of the greatest concern is the need for skills in a number of areas: sciences, technologies, engineering, mathematics and technical domains. New business skills are also needed.

The CBI makes a number of recommendations in this respect: on closer ties between education and training and the needs of enterprises. It urges universities to cooperate with undertakings to address this issue.

²⁵¹ LGA sponsored a conference on 1 February 2011 on adaptation, entitled 'Can we afford not to adapt to climate change?'.

²⁵² Recently, with its German opposite number, the CBI adopted a declaration: 'The Joint BDI-CBI statement on principles of climate action (30/4/2010) – common priorities for international cooperation on climate change in 2010 and beyond'.

²⁵³ The CBI organises low-carbon business industries breakfasts (2010) and summit meetings, like the one held on 17 November 2010 in London: the CBI climate change summit 2010 (<http://climatechange.cbi.org.uk/events/00387/>).

²⁵⁴ In 2009, for example, the TUC drew up a study entitled 'Changing work in a changing climate, adaptation to climate change in the UK (new research on implications for employment)'. This study states that climate change will affect all sectors differently.

²⁵⁵ Francis Green, 'Unions and skills utilisation', Research paper 11, November 2010.

²⁵⁶ <http://www.unionlearn.org.uk/index.cfm/raot/>

²⁵⁷ For example, the CBI Climate Change Unit, which is supervised by this structure, has the task of implementing a project on the government's ambitions in the area of reducing CO₂ emissions between 2020 and 2050.

²⁵⁸ <http://www.lga.gov.uk/lga/core/page.do?pageId=1>

²⁵⁹ <http://www.lga.gov.uk/lga/core/page.do?pageId=20664>

IV. Interviews

Belgium

FEB-VBO (BUSINESSEUROPE member): Ms Bettens, Ms Defourny, Ms Vermeersch,

CSC (ETUC member): Mr De Wel

CGSLB (ETUC member): Ms Van Oudenhoven

FGTB (ETUC member): Mr Storme

UCM (UEAPME member): Mr Krenc, Mr Deplae

Bulgaria

BIA (BUSINESSEUROPE member): Mr Brankov, Ms Pavlova

BICA (CEEP member): Mr Zikatanov, Mr Keleshev

CITUB (ETUC member): Ms Todorova, Ms Dimitrova

Podkrepa (ETUC member): Ms Koynakova, Mr Mitov

Denmark

CEEP, Danish Section: Mr Schilder

Danske Regioner (CEEP member): Mr Sørensen

DA (Confederation of Danish Employers, BUSINESSEUROPE member): Mr Trampe

DI (Confederation of Danish Industry, BUSINESSEUROPE member): Mr Jensen

LO (ETUC member): Ms Ronne Møller

France

CFDT (ETUC member): Mr Pierron, Mr Olivier, Mr Catz

Chambre des Métiers et de l'Artisanat (APCMA, UEAPME member): Mr Farrugia

CGT (ETUC member): Mr Sotura

FO (ETUC member): Mr Dupuch, Mr Pavageau

MEDEF (BUSINESSEUROPE member): Mr Capmas

Germany

BDA (BUSINESSEUROPE member): Mr Thorns

BVÖD (CEEP member): Ms Reichert, Mr Hellriegel

DGB (ETUC member): Ms Kauls

ZDH (UEAPME member): Mr Dannenbring, Ms Schubert

Portugal

AIP (UEAPME member): Mr Neto

CGTP-IN (ETUC member): Mr Lourenço, Mr Casula

CIP (BUSINESSEUROPE member): Mr Henrique, Mr Braga, Mr Vergueiro

UGT-P (ETUC member): Mr Cordeiro, Mr Oliveira, Ms Bernardo

Romania

BNS (ETUC member): Mr Jurca, Mr Muresan (Univers)

CARTEL ALFA (ETUC member): Messrs Popa and Feurdean

CoNPR (BUSINESSEUROPE member): Mr Ceacalopol

UNPCPR (BUSINESSEUROPE member): Mr Olteanu

Spain

CEOE (BUSINESSEUROPE member): Mr Suàrez, Ms Lòpez

CCOO (ETUC member): Mr Serrano i Giménez (Confederal Secretary for the Environment)

UGT (ETUC member): Environment Department: Ms Hernando

ELA-STV (ETUC member): Mr Noval

Sweden

Företagarna (UEAPME member): Mr Fogelberg, Ms Källström

LO (ETUC member): Mr Nyberg

Salar (CEEP member): Ms Grenfors, Mr Hagnell, Mr Lindberg, Mr Wenster

SN (BUSINESSEUROPE member): Ms Suner Fleming, Mr Rudeberg

United Kingdom

CBI (BUSINESSEUROPE member): Mr Bailey

LGE (CEEP member): Mr Cooper

TUC (ETUC member): Mr Pearson

V. Bibliography

Studies

CEDEFOP, Skills for Green Jobs, European Synthesis Report, 2010

<http://www.cedefop.europa.eu/EN/publications/16439.aspx>

ETUC, Syndex, S.Partner, WMP, 'Climate disruptions, new industrial policies and ways out of the crisis', study carried out on behalf of the ETUC, in partnership with EMF and EMCEF, financed by the European Commission, 2009. <http://www.etuc.org/a/7586>

ETUC, Syndex, Wuppertal Institut, Istas, 'Climate change and employment: Impact on employment in the European Union-25 of climate change and CO₂ emissions reduction measures by 2030', financed by the European Commission, 2007 <http://www.etuc.org/a/3676>

Eurofound (A.Broughton), 'Greening the European Economy: Responses and Initiatives by Members States and Social Partners', 2009 http://www.eurofound.europa.eu/eiro/studies/tn0908019s/tn0908019s_4.htm

GHK, 'The Impacts of Climate Change on European Employment and Skills in the Short to Medium-term: a Review of the Literature'. Final Report, vol.2, 2009 <http://ec.europa.eu/social/main.jsp?catId=88&langId=et&eventId=172>

UNEP, ILO, OIE, CSI: 'Green Jobs: towards decent work in a sustainable, low-carbon world', 2008

http://www.unep.org/labour_environment/PDFs/Greenjobs/UNEP-Green-Jobs-Towards-Sustainable-Summary.pdf

UNEP, Labour and the Environment: a Natural Synergy, 2007

Official documents

European Commission, 'Europe 2020: A strategy for smart, sustainable and inclusive growth', Communication of 3 March 2010 <http://eur-lex.europa.eu/LexUriServ/LexUriServ.do?uri=COM:2010:2020:FIN:EN:PDF>

European Commission, DG Climate Action, website: http://ec.europa.eu/clima/policies/package/index_en.htm

European Commission, 'Adapting to Climate Change in Europe – Options for EU Action', Green Paper, 354 final, June 2007, available at: <http://eur-lex.europa.eu/LexUriServ/LexUriServ.do?uri=CELEX:52007DC0354:EN:NOT>

European Commission, 'Adapting to Climate Change: towards a European Framework for Action', White Paper 147 final, April 2009, available at: <http://eur-lex.europa.eu/LexUriSer/LexUriSer.do?uri=CELEX:52009DC0147:EN:NOT>

ILO, Key Features of National Social Dialogue: a Social Dialogue Resource Book, 2003, available at:

<http://www.ilo.org/public/english/dialogue/ifpdial/downloads/papers/key.pdf>

UNEP, Climate change, its consequences on employment and trade union action. Training manual for workers and trade unions, 2008

Website of the European Environment Agency: <http://www.eea.europa.eu/>

Germany

Information on the Wittenberg Process is available at:

http://www.un.org/esa/dsd/dsd_aofw_mg/mg_worktradunio_specday/casestud10.shtml

Information on the Network Resource Efficiency project is available at: http://www.netzwerk-ressourceneffizienz.de/uploads/sbs_dl_list/NeRess_FL_U_e_13.pdf

Information on the Alliance for Work and Environment is available at:

http://www.unep.org/labour_environment/TUAssembly/case_studies/case_study_Schneider-DGB.pdf

Information on the 'Klima sucht Schutz' (Climate seeks protection) initiative is available at: <http://www.klima-sucht-schutz.de/>

Website of the German Association of Municipal Enterprises, Verband Kommunalen Unternehmen, (VKU):

<http://www.vku.de/>

Website of the German Trade Union Confederation, Deutscher Gewerkschaftsbund Bundesvorstand, (DGB):

<http://www.dgb.de/>

Website of the German Craft Enterprises Confederation, Zentralverband Des Deutschen Handwerks (ZDH):

<http://www.zdh.de/>

Website of the German Confederation of Employers' Associations, Bundesvereinigung der Deutschen

Arbeitgeberverbände e.V. (BDA): <http://www.arbeitgeber.de>

Website of the Berlin Municipal Water Company, Berliner Wasserbetriebe:

<http://www.bwb.de/content/language1/html/index.php>

Website of the Munich Municipal Services Company, Stadtwerke München (SWM): <http://www.swm.de/>

Website of the Federation of German Industry, Bundesverband der Deutschen Industrie e.V. (BDI): <http://www.bdi.eu>

Website of IG Bergbau, Chemie, Energie (IGBCE): <http://www.igbce.de/portal/site/igbce/>

Website of IG Metall, Industriegewerkschaft Metall: <http://www.igmetall.de/cps/rde/xchg/internet>

BDA, Towards a new understanding of green jobs, 2009

DGB, Energy Policy DGB Hypothesis, Sustainable Energy against the Background of Climate Policy Requirements, 2009

Website of the Federal Ministry for the Environment, Nature Conservation and Nuclear Safety (BMU):

http://www.bmu.de/english/climate_energy/doc/41327.php

Dr. Werner Schneider (DGB), «-German Alliance for Work and Environment-», presentation to Cornell University ILR School, ~North American Labor Assembly on Climate Crisis, May 7-8, 2007, New-York, USA

Austria

Information on the Austrian climate and energy strategy is available at:

<http://www.klimaaktiv.at/article/archive/7783/>

Website of the Austrian Energy Agency: <http://www.energyagency.at/>

Website of the Austrian Trade Union Confederation, Österreichischer Gewerkschaftsbund (ÖGB):

http://www.oegb.at/servlet/ContentServer?pagename=OEGBZ/Page/OEGBZ_Index&n=OEGBZ_0

Website of the Austrian Federal Economic Chamber, Wirtschaftskammer Österreich (WKÖ):

<http://portal.wko.at/wk/startseite.wk>

Website of the Federal Chamber of Labour (BAK): <http://www.arbeiterkammer.at/beratung.htm>

Website of the Austrian Chamber of Agriculture (LK): <http://www.pklwk.at/>

Website of the Institute for Economic Promotion (WIFI):

http://wko.at/awo/wkoat_english/download/WKSELBST_awo_EN.pdf

Belgium

Federal Planning Bureau, Impact of the EU Energy and Climate Package on the Belgian Energy System and Economy, communiqué of 9 January 2010

Opinion No 1 693 of the CCE/CNT Joint Committee, Avis concernant la thématique des emplois verts (*Opinion on green jobs*), 2010, available at: <http://www.cnt-nar.be/AVIS/avis-1693.pdf>

Opinion No 1 727 of the CCE/CNT Joint Committee, Réussir la transition vers une économie à basse émission de carbone, second avis concernant la thématique des emplois verts (*Making a successful transition to a low-carbon economy, Second opinion on green jobs*), 2010, available at: <http://www.cnt-nar.be/AVIS/avis-1727.pdf>

Information on eco-cheques is available at: <http://www.ecocheque.be/> and <http://www.cnt-nar.be/FII.htm>

Information on the Alliance for Work and Environment is available at:

<http://www.senate.be/www/?MIval=/publications/viewPubDoc&TID=67109459&LANG=fr>

Information on the Fund for the Reduction of the Overall Cost of Energy (FCRE) for construction is available at: <http://www.frce.be/>

Information on the Springtime of the Environment is available at:

http://www.printempsdelenvironnement.be/FR/le_printemps

Information on the Marshall Plan 2 Green is available at: <http://planmarshall2vert.wallonie.be/?q=node/58>

Website of the Central Economic Council (CCE): <http://www.ccecrb.fgov.be/>

Website of the Federal Council for Sustainable Development (CFDD): <http://www.frdo-cfdd.be/FR/bienvenue.html>

Website of the Flanders Economic and Social Council (SERV): www.serv.be

Website of the Brussels-Capital Region Economic and Social Council:

http://www.bruxelles.irisnet.be/fr/region/region_de_bruxelles-capitale/organismes_regionaux/cesrbc.shtml

Website of the Walloon Region Economic and Social Council (CESRW): www.cesrw.be

Website of the National Labour Council: <http://www.cnt-nar.be/FII.htm>

Website of the Walloon Public Employment and Training Service (FOREM): <http://www.leforem.be/>

Website of the Liberal General Workers' Union of Belgium (CGSLB): <http://www.aclvb.be/>

Website of the Confederation of Christian Trade Unions (CSC): <http://www.acv-csc.be/>

Website of the Belgian Federation of Enterprises (FEB-VBO): <http://www.vbo-feb.be/index.html?page=0/>

Website of the General Labour Federation of Belgium (FGTB): <http://www.fgtb.be/web/guest/home-fr>

Website of the Union of Small and Medium-sized Businesses (UCM): <http://www.ucm.be/>

Website of the Union of Self-employed Entrepreneurs (UNIZO): <http://www.unizo.be/>

Website of the Inter-union Network of Environment Awareness (RISE): <http://www.rise.be>

Website of the Brussels Inter-union Network of Environment Awareness (BRISE): <http://www.brise-milieu.be/contact>

FGTB, Syndicat rime avec climat. Le climat, c'est aussi notre affaire! (*The climate is our business too!*), 2005
<http://www.fgtb.be/web/guest/climat>

CSC, Changement climatique: l'urgence d'agir (*Climate Change: the urgency of taking action*), fortnightly, available at: http://www.csc-en-ligne.be/Images/synd_693_climat_tcm22-190787.pdf

'How Green Makes Money?', 1st SME Summit on the Green Economy, organised by UNIZO and UCM, November 2010, information is available at: <http://www.howgreenmakesmoney.eu/>

Information on the work of the FEB-VBO on energy efficiency experiences is available at: www.energyefficiency.be/fr/

Bulgaria

Information on joint meetings of employers' and trade union organisations on the transition to a low-carbon economy is available at: <http://www.podkrepa.org/content/news.php?id=181>

Information on the joint initiative by employers' and trade union organisation on the evaluation of workforce skills is available at: www.competencemap.bg

Website of the Tripartite Council of Cooperation for Agriculture and Forests:
<http://www.podkrepa.org/content/index.php>

Website of the Association of Bulgarian Industry (BIA): <http://www.bia-bg.com/?lang=en>

Website of the Confederation of Independent Trade Unions of Bulgaria (CITUB): <http://www.knsb-bg.org/>

Website of KNSB (CITUB trade union)

http://84.242.167.9/knsb/index.php?option=com_content&task=view&id=1080&Itemid=171

Website of the Labour Confederation (Podkrepa): <http://www.podkrepa.org/>

Website of the Bulgarian Metallurgy Industry Association:

<http://www.bcm-bg.com/index.php?MhObg5KvQ9KHMheLMtezUFSXQ9Wzg5OzEZ>

Website of the Bulgarian Industrial Capital Association (BICA):

<http://www.bica-bg.org/english/index.php>

Bulgarian Environment Ministry:

<http://www.moew.government.bg>

Bulgarian information web portal on EU Structural Funds:

<http://www.eufunds.bg/en>

Information portal expert.bg:

<http://www.expert.bg>

Bulgarian real estate portal:

<http://immobulgarie.fr/news/la-bulgarie-confrontee-un-boom-des-projets-denergi.html>

Bulgarian Environment Ministry (2005), National Regional Development Strategy of the Republic of Bulgaria for the Period 2005-2015.

Bulgarian Environment Ministry (2007), Operational Programme Environment 2007-2013.

Denmark

Website of the Danish Climate and Energy Ministry: <http://kemin.dk/en-US/Sider/frontpage.aspx>

Information on the Growth Fora is available at: <http://epaper.mediegrupper.net/mdg/dr/1/1/>

Information on the DI Energy Map project is available at: www.energymap.dk

Information on the EnergyCamp project is available at: <http://www.energycamp.dk/>

Website of the Lindoe Offshore Renewable (LORC): www.lorc.dk/Home

Website of the Climate Consortium Denmark: <http://www.climateconsortium.dk/Home.aspx>

Website of the Organisation of Danish Regions (Dansk Regions): www.regioner.dk

Website of the Danish Confederation of Employers (DA): www.da.dk

Website of the Danish Confederation of Industry (DI): <http://di.dk/Pages/Forsiden.aspx>

Website of the Danish Trade Union Confederation, Landesorganisationen i Danmark (LO-DK): <http://www.lo.dk/>

Website of the Confederation of Employees and Civil Servants, Funktionærernes og Tjenestemændenes Fællesråd (FTF): <http://www.ftf.dk/>

Website of the Danish Metalworkers Union: <http://www.danskmatal.dk/>

LO, 'An Offensive Plan of Investments', 2009

LO, 'Employee-driven Innovation. Improving Economic Performance and Job Satisfaction', 2008

LO, 'LO and the Challenge of Climate Change. We can do it, but we must be determined to succeed', 2009

LO, The New Climate Agenda. LO's Climate and Energy Strategy, 2008

United Federation of Danish workers, 'Green Jobs, Examples of Energy and Climate Initiatives that Generate Employment', 2009

Spain

Information on Spanish climate policy and the relevant bodies put in place is available at:

<http://www.bcnclimatchange.org/en/politiques-espanyoles.html>

Website of the Confederation of Spanish Employers and Industry (CEOE):

<http://www.ceoe.es/ceoe/contenidos.item.action?id=2092953&menuId=3598011&type=3598011>

Website of the Spanish General Workers' Confederation, Union General de Trabajadores (UGT): <http://www.ugt.es/>

Website of the Trade Union Confederation of Workers' Committees (CCOO): <http://www.ccoo.es/cscceo/menu.do>

Sustain labour, 'Climate Change Effects on Employment. Managing Change through Social Dialogue. Case Study on Spanish Sectoral Dialogue Tables for Advancing Kyoto', 2008

<http://www.sustainlabour.org/dmdocuments/EN158-2008.pdf>

Finland

Long-term Climate and Energy strategy, Government report to Parliament, 2008, available at:

http://www.tem.fi/files/20587/Climate_Change_and_Energy_Strategy_2008_summary.pdf

Website of the Economic Council of Finland, Talousneuvosto - Ekonomiska rådet:

<http://www.vnk.fi/hankkeet/talousneuvosto/en.jsp>

Website of the National Commission on Sustainable Development:

<http://www.ymparisto.fi/default.asp?node=4412&lan=en>

Website of the Finnish Environment Institute: <http://www.environment.fi/default.asp?node=25132&lan=EN>

Website of the Central organisation of Finnish Trade Unions (SAK): www.sak.fi

Website of the Finnish Confederation of Professionals, Toimihenkilökeskusjärjestö (STTK): <http://www.sttk.fi/fi-FI/>

Website of the Confederation of Finnish Industrial Enterprises (EK): <http://www.ek.fi/www/fi/index.php>

Website of the Confederation of unions for Professional and Managerial Staff in Finland (Akava):

<http://www.akava.fi/>

Website of the Federation of Finnish Enterprises, Suomen Yrittäjät (SY): <http://www.yrittajat.fi/>

EK, 'Business in the Forefront of the Green Economy', 2010

Information on voluntary energy efficiency agreements for the period 2008-2016 signed by the Employment and Economy Ministry and EK is available at: <http://www.leonardo-energy.org/part-08-voluntary-energy-efficiency-agreements-2008-%E2%80%932016>

Information on media events sponsored by Finnish trade unions is available at:

http://www.akava.fi/en/publications/world_day_for_decent_work_2010_in_finland_a_facebook_campaign.html

Environment Ministry, Finnish National Commission on Sustainable Development, 'Towards a globally and nationally sustainable Finland', 2008.

Publications of the Prime Minister's Office, 'Government Foresight Report on Long-term Climate and Energy Policy: Towards a Low-carbon Finland', 2009.

France

Documentation on the Grenelle Environment is available at: <http://www.legrenelle-environnement.fr/> and

<http://www.developpement-durable.gouv.fr/>

Documentation on the Employment-Towns Alliance is available at: <http://www.ville-emploi.asso.fr/developpement-durable/presentation/>

Law 2009-967 of 3 August 2009 programming implementation of the Environment Agreement is available at: <http://www.legifrance.gouv.fr/affichTexte.do?cidTexte=JORFTEXT000020949548#LEGISCTA000020950463>

Law 2010-788 of 12 July 2010 establishing a national environment commitment is available at: <http://www.legifrance.gouv.fr/affichTexte.do?cidTexte=JORFTEXT00002470434>

Website of the French Democratic Labour Confederation (CFDT): <http://www.cfdt.fr/rewrite/site/3926/site-de-la-confederation.htm?idRubrique=4599>

CFDT, 'Guide syndical Changement climatique' (*Trade Union Guide to Climate Change*), 2009
<http://www.cfdt.fr/rewrite/article/19718/qui-sommes-nous/nos-publications/les-etudes/guide-syndical--changement-climatique.htm?idRubrique=8174>

Website of the General Confederation of Small and Medium-sized Enterprises (CGPME): www.cgpme.fr

Website of the General Labour Confederation (CGT): www.cgt.fr

Website of the General Labour Confederation – Force ouvrière (FO): <http://www.force-ouvriere.fr/>

Website of the Movement of French Enterprises (Medef): www.medef.com

CGT, 'Déclaration de la CGT sur la conférence de Cancun sur le climat: des avancées mais le chemin est encore long' (*CGT Declaration on the Cancun Climate Conference: Progress but still a long road ahead*), 2010: <http://www-v3.cgt.fr/Des-avancees-mais-le-chemin-est.html>

Commissariat général au Développement durable, 'Deuxième rapport annuel au Parlement sur la mise en œuvre des engagements du Grenelle' (*Second annual report by the Sustainable Development Directorate to Parliament on implementation of the Grenelle Commitments*), 2010

CNRS/CGT, 'L'enjeu des qualifications face au défi énergétique et environnemental dans le secteur de la construction' (*The challenge of qualifications to meet the energy and environment challenge in the construction sector*), 2009

Meeddm (Syndex-Alpha) study: 'GPEC dans les secteurs de l'industrie et de l'énergie impactés par le Grenelle de l'environnement et l'évolution du système européen ETS d'échange des droits d'émission des gaz à effet de serre' (*Forward Management of Jobs and Skills in the industry and energy sectors impacted by the Environment Agreement and evolution of the European emissions trading scheme*), 2010: <http://www.developpement-durable.gouv.fr/IMG/pdf/synthese-2.pdf> and

http://www.developpement-durable.gouv.fr/IMG/pdf/Etude_Syndex_Alpha.pdf

McKinsey, 'Rapport d'évaluation du Grenelle de l'Environnement' (*Assessment of the Environment Agreement*), 2010

MEDDM, 'Croissance verte, Zoom sur 50 métiers' (*Green Growth, A close-up look at 50 occupations*), La Documentation française, 2010

MEDDM, 'Plan Climat de la France, mise en œuvre du Grenelle de l'Environnement' (*French Climate Plan, implementation of the Environment Agreement*), 2010

MEDEF, 'Efficacité énergétique: l'une des clés de la croissance durable' (*Energy efficiency: a key to sustainable growth*), 2009, available at: <http://publications.medef.com/ebook/plaquette/EECD/show.html>

MEDEF, 'Grenelle de l'Environnement, cahier de propositions' (*Environment Agreement: proposals*), 2007

MEDEF, 'Analyse sur les négociations en matière de changement climatique dans le contexte de la 16^e Conférence des Parties à la CCNUCC à Cancun' (*Analysis of the climate negotiations in the context of the 16th Conference of Parties to the UNFCCC in Cancun*), 2010

ADEME : Markets, Employment and Energy issues in activities relating to renewable energy and energy efficiency : 2008-2009 situation – 2010 perspective 2010

Ireland

National Climate Change Strategy:

<http://www.environ.ie/en/Environment/Atmosphere/ClimateChange/NationalClimateChangeStrategy/PublicationsDocuments/FileDownload,1861.en.pdf>

Website of the National Economic and Social Council (NESC): <http://www.nesc.ie/>

Website of the Irish Business and Employers' Confederation (IBEC): <http://www.ibec.ie/>

Website of the Irish Congress of Trade Unions (ICTU): <http://www.ictu.ie/>

IBEC, Education and Skills Survey, 2010, results available at:
http://www.ibec.ie/IBEC/DFB.nsf/vPages/Education_and_training~Resources~ibec-education-and-skills-survey-2010-15-11-2010?OpenDocument

ICTU, 'Green Shoots, Maximising Job Creation in the Green Economy', 2009, available at:
http://www.ictu.ie/download/pdf/congress_green_shoots.pdf

Documentation on the ICTU/FAS Union Learning Initiative - Union Skills Network Project is available at:
<http://www.ictu.ie/learning>

Italy

Website of the General Confederation of Italian Industry (Confindustria):
<http://www.confindustria.it/Conf2004/hp.nsf/hp?Readform>

Website of the Italian Confederation of Workers' Unions, Confederazione Italiana Sindacati Lavoratori (CISL):
<http://www.cisl.it/>

Website of the Italian Labour Confederation, Unione Italiana del Lavoro (UIL): <http://www.uil.it/>

Confindustria, 'Proposte di Confindustria per il Piano Straordinario di efficienza energetica', 2010, available at:
<http://www.uil.it/energia/circ38-10.pdf>

CISL, 'Sustainable development and social dialogue', Lavoro, 2008

Lithuania

Information on the Agri-environmental Skills Project is available at: <http://www.zur.lt/index.php?-1578624146#>

Website of the Tripartite Council of the Republic of Lithuania: <http://www.lrtt.lt/lt/apie-taryba/tarybos-nariai.html>
<http://www.lrtt.lt/en/about.html>

Website of the Chamber of Agriculture (Lithuanian farmers' representative organisation): <http://www.zur.lt>
<http://www.zur.lt/index.php?2017732947>

Website of the Lithuanian Confederation of Industry: <http://www.lpk.lt/default.asp?DL=E>

Lithuanian Trade Union Confederation (LPSK): <http://www.lpsk.lt/?lang=lt&mID=1>

Lithuanian 'Solidarity' Union of Commerce: <http://www.lps.lt/index.php?m=txt&table=1>

Netherlands

Information on the Green4sure project is available at: <http://www.fnv.nl/publiek/themas/duurzaamheid/standpunt-fnv/>

Website of the Netherlands Social and Economic Council, Sociaal-Economische Raad (SER): <http://www.ser.nl>

Website of the Labour Foundation: <http://www.istravail.com/article318.html>

Information on six platforms put in place as part of the energy transition policy is available at:
www.senternovem.nl/EnergyTransition/Index.asp.

Website of the Netherlands Trade Union Confederation, Federatie Nederlandse Vakbeweging (FNV):
<http://www.fnv.nl/publiek/>

Website of the Netherlands Federation of Enterprise (VNO): <http://www.vno-ncw.nl/Pages/Default.aspx>

Website of the Netherlands Federation of Christian Trade Unions, Christelijk Nationaal Vakverbond (CNV):
<http://www.cnv.nl/>

Website of the Trade Union Federation for Self-employed and High-level Employees, Vakcentrale voor middengroepen en hoger personeel (UNIE-MHP): <http://www.vakcentralemhp.nl/>

Website of the Royal Association of Small and Medium-sized Enterprises (MKB Nederland): <http://www.mkb.nl>
 Delft, 'Green4sure, a green energy plan', 2007

Poland

Information on the chemical sector's Ecology Forum is available at: <http://www.pipc.org.pl/ida/211>

Website of the Polish Chemical Industry Chamber (PIPC): <http://www.pipc.org.pl/>

Website of the Polish Employers' Confederation (KPP): <http://www.kpp.org.pl/index.html?id=62&m=1>

Website of the Polish Confederation of Private Employers (Lewiatan): <http://www.pkpplewiatan.pl/>

Business Centre Club (BCC): <http://www.bcc.org.pl/>

Website of the Paper Industry Association: http://www.spp.pl/wersja_angielska.php

Website of the Polish Glass Industry Federation: <http://www.zpps.pl/english.php>

Website of the Social Dialogue Centre for the glass industry: <http://www.centrum-dialogu.pl/eng/node/38>

Website of the trade union Solidarnosc: <http://www.solidarnosc.org.pl>

Website of the trade union OPZZ: <http://opzz.org.pl>

Forum Odbiorców Energii Elektrycznej i Gazu (Gas and Electricity Forum):

http://www.odbiorcyenergii.pl/3e/component/option.com_frontpage/Itemid.1/

Silesian innovation cluster for clean coal technologies: <http://coal.silesia.pl/>

FAVEO foundation: <http://www.fundacja-faveo.pl/index.php?p=fundacja>

Portugal

Website of the National Council for the Sustainable Environment: www.cnads.pt

Website of the Portuguese Confederation of Industry (CIP): <http://www.cip.org.pt/>

Website of the General Confederation of Portuguese Workers, Confederação Geral dos Trabalhadores Portugueses (CGTP-IN): <http://www.cgtp.pt/index.php>

Website of the General Confederation of Workers, União Geral de Trabalhadores (UGT-P):

<http://www.ugt.pt/site/index.php>

Website of Transtejo: <http://www.transtejo.pt/pt/homepage/index.html>

ICS, 'Ambiente e emprego: situação actual e perspectivas', 1999

UGT-P, 'Propostas de: Resolução Programática. Programa de acção, XI Congresso, Emprego e solidariedade', 2009

5th European Transport Forum on Sustainable Development and Corporate Social Responsibility of Urban Public Transport Enterprises, Report on the round table of urban road transport unions in Portugal on developments in Portugal, Paris, 3-5 February 2010

Information on sustainable development is available on the website of the CGTP-IN:

http://cgtp.pt/index.php?option=com_content&task=blogsection&id=23&Itemid=246

CGTP-IN website on consumption: <http://interconsumidores.cgtp.pt/>

Czech Republic

Website of the Government Council for Sustainable Development: <http://www2.nszm.cz/ur/>

Website of the Confederation of Czech Industry (SP): <http://www.spcr.cz/en>

Website of KZPS (Confederation of Czech Employers): <http://www.kzps.cz/>

Website of the Environment Ministry of the Czech Republic: <http://www.mzp.cz/cz/ministerstvo>

Environment Ministry of the Czech Republic, 'Sustainable development strategy of the Czech Republic', 2010

Association of Construction Entrepreneurs of the Czech Republic:

http://www.sps.cz/jm_english/index_eng.asp?lokalizace=ang

Association of Cement Producers:

http://www.svcement.cz/dokumenty/publikace#cementarny_a_udrzitelny_rozvoj

Association of the Paper and Pulp Industry:

<http://www.acpp.cz/>

Czech Trade Union Confederation:

<http://www.cmkos.cz/homepage>

Romania

Information on the Romanian strategy for sustainable development to 2030 is available at

http://www.mmediu.ro/protectia_mediului/dezvoltare_durabila/sndd.htm

Information on the Social Dialogue Commission of the Regional Development and Habitat Ministry is available at:

<http://www.mdlpl.ro/index.php?p=1173>

Information on the project, 'Adaptation of energy sector staff to new technologies and working conditions', is available at:

http://www.comunicatedepresa.ro/Formenerg_S.A._a_lansat_proiectul_%E2%80%9CAadaptarea_personalului_din_sectorul_energetic_la_noile_tehnologii_si_conditii_de_munca%E2%80%9D~NTM4NjA=

Information on the Euroneff project is available at: <http://www.euroneff.eu/http://www.euroneff.eu/welcome.php>

Website of the National Centre for Sustainable Development: <http://www.ncsd.ro/organization.html>

Website of CMC Foundation, Fondatia Casa de Meserii a Constructorilor:

<http://www.cmc.org.ro>

http://www.cmc.org.ro/index.php?option=com_content&view=article&id=62&Itemid=96

Website of the Association of Construction Employers (Araco): <http://www.araco.org/index.htm>

Website of Cartel Alfa: <http://www.cartel-alfa.ro/>

Website of the Confederation of Romanian Industrial Employers: <http://www.conpirom.ro/>

Website of the National Trade Union Association (Syndicat Blocul National Sindical): <http://www.bns.ro/>

Website of the Association of Renewable Energy Sector Employers (SunE):

<http://www.sune.ro/index.php>

Website of the National Institute for Economic Research: <http://www.ince.ro>

United Kingdom

Information on the CCS Development Forum is available at:

<http://www.carboncapturejournal.com/displaynews.php?NewsID=616>

Information on the Nuclear Development Forum (NDF) is available at:

http://www.decc.gov.uk/en/content/cms/what_we_do/uk_supply/energy_mix/nuclear/forums/develop_forum/develop_forum.aspx

Information on TUSDAC is available at: <http://www.defra.gov.uk/sustainable/defra/tusdac/index.htm>

Information on the UK Coal Forum is available at:

<http://webarchive.nationalarchives.gov.uk/+http://www.berr.gov.uk/files/file48027.pdf> and

http://www.decc.gov.uk/en/content/cms/what_we_do/uk_supply/energy_mix/coal/uk_forum/uk_forum.aspx

Information on the UK Commission for Employment and Skills (UKCES) is available at: <http://www.ukces.org.uk/>

Information on the Sectors Skills Councils is available at: <http://www.ukces.org.uk/sector-skills-councils/about-sscs/>

Information on the Green Workplace project is available at: www.sustainableworkplace.co.uk

Website of the Confederation of British Industry

(CBI): <http://www.cbi.org.uk/ndbs/staticpages.nsf/StaticPages/home.html/?OpenDocument>

Website of the Trades Union Congress (TUC): www.tuc.org.uk/

Website of the Local Government Association (LGA): <http://www.lga.gov.uk/lga/core/page.do?pageId=1>

Website of Local Government Employers (LGE): <http://www.lge.gov.uk/lge/core/page.do?pageId=1>

Website of Learn with TUC: www.unionlearn.org.uk

CBI Wales, Blueprint of a Green Economy, 2001

CBI, Decision Time, 2009, available at: http://climatechange.cbi.org.uk/uploaded/CBI_DecisionTime_WEB.pdf

CBI, Future Proof: Preparing your Business for a Changing Climate, 2009

CBI, Getting Involved: a Guide to Switching your Employees on to Sustainability, 2009

CBI, Going the Distance: the Low-carbon Industry Roadmap, 2009

CBI, Whatever the Weather. Managing the Risks from a Changing Climate, 2009

Francis Green, 'Unions and Skills Utilization', TUC/UnionLearn, Research paper 11, 2010

HM Government, The UK Low-carbon Industrial Strategy, 2009

LGA Research, Be Aware, Be Prepared, Take Action II, What Do the Latest Climate Projections Mean for You?, 2004

TUC, A Green and Fair Future For a Transition to a Low-carbon Economy, 2008

TUC, Changing Work in a Changing Climate, Adaptation to Climate Change in the UK, 2009

TUC, Employment Implications of Climate Change Adaptation. Final report, 2008

TUC, GreenWorks, TUC GreenWorkplaces Project Report 2008-10, 2010

TUSDAC, Greening the Workplace, 2005.

Sweden

Information on the Energy Efficiency Programme (PFE) is available at: <http://www.energimyndigheten.se/en/Energy-efficiency/Companies-and-businesses/Programme-for-improving-energy-efficiency-in-energy-intensive-industries-PFE/> et sur <http://ies.lbl.gov/iespubs/PFE.2007.pdf>

Information on the partnership between Företagarna and the Swedish Agency for Environmental Protection on respect for the ecosystem and biodiversity is available at: <http://www.teebweb.org>

Information on the Climate Compass tool is available at: www.klimatkompassen.se

Website of the Swedish Environment Agency: <http://www.naturvardsverket.se/en/In-English/Menu/Climate-change/Swedish-EPA--national-focal-point/>

Website of the Swedish Energy Agency: <http://www.energimyndigheten.se/en/>

Website of the Swedish Association of Local Authorities and Regions (SALAR): www.skl.se

Website of the Confederation of Swedish Enterprise (SN): <http://www.svensktnaringsliv.se/>

Website of the Swedish Confederation of Professional Associations (SACO): <http://www.saco.se/>

Website of the Swedish Trade Union Confederation (LO): <http://www.lo.se/>

Website of Företagarna : <http://www.foretagarna.se/>

LO, Counter the Climate Crisis with Investment and Technological Innovation, 2009

SALAR, Employer perspectives on local authorities and county councils. Facts and analysis 2010, 2010

SALAR, Local action on climate change – Swedish experiences, 2009

SALAR, My Employment Benefits in Sweden, 2009

SN, Advantage Environment – The Environmental Benefits of New Products, 2008