



Sustainability and transformation in European Social Policy

Valencia 8-10 September 2011

9th Annual ESPAnet Conference **Sustainability and transformation in European Social Policy**

Valencia, 8-10 September 2011

Stream 7: Climate change and sustainability of European social policy: towards a research agenda

Stream convenors: Sabina Stiller (Wageningen University) and Ian Gough
(London School of Economics and Political Science)

Universitat de València - ERI POLIBIENESTAR.
Edificio Institutos-Campus de Tarongers. Calle Serpis, 29. 46022. Valencia.
Phone: (+34) 96.162.54.12- C.I.F. Q4618001-D
Email: espanet2011@uv.es



« SOCIAL PARTNERS AND CLIMATE CHANGE »

Coordinator: Bruno Estrada (Fundacion 1 mayo, Spain)

Researchers: Begoña María-Tomé, Sara Pérez, Manuel Colomer, Manuel Garí (ISTAS-Spain); Alexander Gallas (International Center for Development and Decent Work. Kassel Univ., Germany); Bo Johansson (SAL TSA. Uppsala Univ., Sweden); Serena Ruggiero (IRES-Italy); Benoit Robin (IRES-France).

PREFACE

There is a broad international consensus that the financial, economic and social crisis should be turned into an opportunity to change today's growth model.

Our planet's third energy and industrial revolution involves many changes in production in which a key aspect will be transition to a low-carbon economy. This is needed because of the damage being caused to the climate by high concentrations of carbon in the atmosphere generated by human activity.

The agenda of many international organisations now includes the call for 'green economies' which can generate new 'green jobs', combining decent employment with a sustainable world.

Universitat de València - ERI POLIBIENESTAR.
Edificio Institutos-Campus de Tarongers. Calle Serpis, 29. 46022. Valencia.
Phone: (+34) 96.162.54.12– C.I.F. Q4618001-D
Email: espanet2011@uv.es

The most recent manifestation of this can be found in the Europe 2020 Strategy presented in March 2010 by the European Commission in its review of the future of the Lisbon Strategy. One of its three priorities is precisely to promote an economy that uses resources more efficiently, is greener and more competitive. That is, an economy that no longer ties economic growth with increased use of natural resources, but steps up the use of renewable energies and promotes energy efficiency while also improving social and territorial cohesion. The Commission states in its document that, with appropriate policies to foster renewable energies and energy efficiency, it should be possible to create over one million jobs in the EU.

The link between the labour market and climate change was also covered in depth by the European Commission in its latest report entitled “Employment in Europe 2009”, in which one of the main chapters (Chapter III) covers the challenges of creating green jobs and promoting environment-friendly industries.

Another organisation, the G-20, at its recent Summit in Pittsburg, focused on new environmentally-sustainable methods of production. And efforts are being made in the public sector in many countries to set up plans to encourage the green economy, as shown by OECD data.

Weight of plans to promote the green economy in OECD countries

Country	% GDP
Korea	1.47
Germany	1
China	0.76
Australia	0.7
USA	0.65
Japan	0.37
Canada	0.33
France	0.26

Spain	0.13
Italy	0.09
UK	0.03

Source: Drawn up by the author based on OECD data

This process of change will affect different sectors to a different extent, depending on the carbon content of their inputs (mainly raw materials, energy and transport). Each country will have different sectorial effects in line with the degree of their technological development.

This profound change is leading to the appearance of new sectors of production (e.g. renewable energies) and increased added value and employment in existing low-carbon sectors (e.g., ship and railway construction and repair), as well as a thorough restructuring of technology and production in basic high-carbon sectors (e.g. automobiles, construction, energy, transport).

The international trade union movement is participating in this consensus. In 2008, the International Trade Union Confederation (ITUC) took part in the presentation of the report entitled “Green jobs: towards decent work in a sustainable, low-carbon world”, alongside the United Nations Environment Programme (UNEP), the International Labour Organisation and the International Organisation of Employers. This report stressed how difficult it is to achieve positive results in the fight against climate change unless employment changes.

The ITUC and the Global Unions group expressed their support for a sustainable economy at the Summits and meetings of the G-20 (lately in the declaration to the Ministers of Labour at their meeting in April 2010) and to the international financial institutions: also the TUAC to the OECD Ministerial Summits, and the European Trade Union Confederation, mostly recently in the Memorandum it presented to Spain in its capacity as current President of the Council of the European Union.

The ITUC also spoke of the need to strengthen social protection networks for workers affected by sector transformations aiming to reduce carbon emissions, as these will have important implications for employment and for the living conditions of millions of workers. The process needs to be seen as a “fair transition”, in which there will be both important public policies in sectors in which employment is at most risk, and frameworks for negotiation amongst the

main social agents (trade unions and employers) to prevent restructuring processes from damaging the volume or quality of employment or living and working conditions.

The purpose of this study is to analyse to what extent social partners are aware of these changes and what tools they are using to promote their positive aspects and minimise the negative ones.

The research will therefore cover, firstly, general aspects as to how these matters are included in Social Pacts in the different countries of the EU-27 and, secondly, five case studies of EU countries having a different industrial structure, degree of technological development and efforts to promote the Green Economy: Germany, France, Italy, Spain, Sweden.

1.- What are we talking about? Defining and counting green jobs.

The first problem is that there are several definitions for “green job” in EU-27 and many countries, nineteen, don’t have an official definition. For example, in Belgium the government does not seem to favour a specific definition of “green jobs” but it has given significant attention to the issue, expressed largely in the 2010 report¹ of the Superior Employment Council. The report reviews several definitions of green jobs used in different studies and states that there is no clear definition of green jobs because they are new and complex. This explains why green jobs cannot be observed and need to be estimated, and accounts for the variety of results from the different studies.

The report gives the OCDE/Eurostat definition of 1999: *“The environmental goods and services industry consists of activities which produce goods and services to measure, prevent, limit, minimise or correct environmental damage to water, air and soil, as well as problems related to waste, noise and eco-systems. This includes cleaner technologies, products and services that reduce environmental risk and minimize pollution and resource use.”*(...) *“Goods and products come essentially from management of pollution (usually treatment of waste and used water) and the management of natural resources (for example, the production of renewable energy, management of water and forests). Tasks performed in such activities are considered green jobs.”*²

The Council outlines “green job” as a relative and dynamic concept since a fine line separates green and non-green jobs and depends on technological progress. Difficulties in

¹ Conseil Supérieur de l'Emploi (2010), “Emploi Vert” page 135

² Conseil Supérieur de l'Emploi (2010), cap. 5 “Emploi Vert” , pag. 135

measuring green jobs arise from the complexity of their definition, but also from the processes involved. The estimation of green jobs might involve direct and indirect jobs and intermediate input by the providing sectors which are not necessarily green.

Only eight countries in EU-27 have an official definition for “green jobs” adopted by their governments: Germany, Austria, Portugal, Bulgaria, France, Ireland, United Kingdom, and Denmark. And only one, Portugal, has an official definition in its National Statistics Agency:

“Definition of green job in Portugal

The multiple interpretations of the concept of green job were acknowledged by Angela Lobo³, who argued that the real facts behind companies involved in the production of environmental goods or services *are not adequately registered by the conventional classifications of activities and products. It was in this context that the INE (National Statistics Agency) carried out a survey among environmental companies. Defining environmental enterprises as economic units that produce consumer goods and/or equipment and provide services for the protection of the environment and whose business volume is, for the most part, equal or bigger than 50% of sales of those “green products” or environmental services (...). They cover an array of activities, classified in a group of sectors in the Index of Economic Activities, that are considered central to the environmental industry.*⁴”

	Official definition for “green jobs”	Green jobs
Germany	Yes	1.800.000
United Kingdom	Yes	881.000
France	Yes	404.900
Austria	Yes	185.145
Portugal	Yes (National Statistics Agency)	81.653
Denmark	Yes	49.300
Ireland	Yes	19.160
Bulgaria	Yes	¿?

³ Lobo, A et altri, “Ambiente, inovação e competitividade da economia” Dpto. de Prospectiva e Planeamento e Relações Internacionais, Ministério do Ambiente, do Ordenamento do Território e do Desenvolvimento Regional. Lisboa, 2007, page 97 and 98. http://www.dpp.pt/pages/files/ambiente_inovacao.pdf

⁴ Reciclaje; Comercio al por mayor de desperdicios y chatarra; Saneamiento, Higiene y actividades similares; Recauchutado de neumáticos; Captación de Agua; Actividades de Ensayo y Análisis; Actividades de limpieza industrial.

Spain	No	530.947
Italy	No	297.000-336.000
Poland	No	221.280
Belgium	No	126.000
Finland	No	11.275
Cyprus	No	¿?
Slovakia	No	¿?
Slovenia	No	¿?
Estonia	No	¿?
Greece	No	¿?
Holland	No	¿?
Hungary	No	¿?
Latvia	No	¿?
Lithuania	No	¿?
Luxembourg	No	¿?
Malta	No	¿?
Czech republic	No	¿?
Romania	No	¿?
Sweden	No	¿?

Data arrangement, registers and statistical information in each Member State do not always comply with the Eurostat⁵ guidelines on classification and perimeter of statistical control of products and activities. This hinders studies, since it impedes the identification of activities related to green economy, which also prevents direct access to information on green jobs through official registry and becomes an impediment to comparing and homogenizing information from different EU countries. There are also differences in the number and quality of studies carried out by public and private institutions, academic and consultant agencies, research centres and foundations on existing

⁵ “The environmental goods and services sector” Eurostat 2009.

http://epp.eurostat.ec.europa.eu/cache/ITY_OFFPUB/KS-RA-09-012/EN/KS-RA-09-012-EN.PDF

green jobs in 2009 – or previous years- and on their projection and future perspective, particularly by 2020.

All the eight countries that have an official definition for green jobs have estimations of the number of green jobs except Bulgaria, and five others that don't have an official definition do have several studies: Belgium, Spain, Finland, Italy and Poland (all except Poland belong to EU-15).

The total number of the green jobs estimated in these thirteen countries is nearly 4.700.000. The fifteen remaining countries have a smaller population, so we can probably estimate the total number of green jobs in the EU-27 to be close to five million employees.

2.- EU-27 political framework for green economy.

The EU's declared political objective is to lead the struggle against climate change by promoting a more sustainable and less carbon dependent economy. From 105 billion euros allocated by the European Commission to Cohesion Funds in the period 2007-2013 to create green jobs and economic growth, 23 billion will go to railway systems, 6 billion to public transport, 4.8 billion to renewable energies and 4.2 billion to energy efficiency. A substantial part of these funds will be invested in Eastern European countries.

If we connect the Commission objectives and the foreseen investment and compare them to similar programmes in other countries, the EU is still a long way from leading the movement for a new economy. China's stimulus package includes the world's biggest investment programme with 230 billion dollars against the 80 billion package of the United States and the nearly 25 billion euros (31.7 billion dollars) of the EU.

In spite of these limitations, the stimulus policies, along with other programmes aimed at promoting sustainability and mitigating climate change, have generated an important number of green jobs and will render those already existing even "greener", if a change in the productive model is achieved. Job losses in traditional sectors do not occur because of the climate change mitigation policies, but due to well known factors such as automation, increase of productivity, changes in industrial sectors and as a consequence of international distribution of labour. In any case, the new green jobs compensate for the losses in more polluting sectors.

The frameworks of programmes, policies and measures that have a significant effect on EU Member States orientations about climate change are:

Universitat de València - ERI POLIBIENESTAR.
Edificio Institutos-Campus de Tarongers. Calle Serpis, 29. 46022. Valencia.
Phone: (+34) 96.162.54.12– C.I.F. Q4618001-D
Email: espanet2011@uv.es

2.1 The Lisbon Strategy

The Lisbon strategy was approved by the European Council in March 2000 with the strategic goal of “*making Europe by 2010, become the most competitive and dynamic knowledge-based economy in the world, capable of sustainable economic growth with more and better jobs and greater social cohesion*”⁶. The strategy did not make any explicit mention of the promotion of green economy. The first modification of the strategy came a year after its approval when the European Council of Gothenburg added an environmental dimension to the goals, emphasizing the need to review the relationship between economic growth and the management of natural resources.

The Lisbon strategy was then renewed and reorganized on the basis of these conceptions in 3-year cycles (2005-2008 and 2008-2010) to ensure a more efficient implementation. Those cycles are the basis for the implementation of the Lisbon programme and the national reform programmes. The new guidelines will be implemented in four new spheres of activity in which the issue of energy is pivotal, a basic element in the economic shift towards environmental sustainability.

- 1) Research and innovation: major investments in knowledge and innovation
- 2) Companies: promote business potential, especially in SME's
- 3) Citizens: Increasing employment opportunity in prioritized areas
- 4) Infrastructure and energy: promotion of new energy policies

One of the basic approaches includes the promotion of innovation and knowledge through the cooperation of different powers and players, promoting environmental initiatives especially in fields like resources, climate change and energy efficiency⁷.

2.2 The EU Cohesion policy.

Since its planning (2000-2006) the EU cohesion policy expected a more or less direct implementation of Lisbon goals to promote growth, competitiveness and employment, mostly through structural funds. This approach becomes even more evident in the planning of the next

⁶Conclusions of the presidency. European Council, Lisbon, March 23-24 2000. http://www.europarl.europa.eu/summits/lis1_en.htm

⁷ Grande, Elisa. *International Training Centre of the ILO (ITC/ILLO). “Territorial Strategies for Innovative Applications More Green. Latin American and European initiatives to seek greater social cohesion”*. 2010.

period. In the 2007-2013 programme aid funds for environmental projects have tripled. 105 billion euros will be invested in green economy which represents more than 30% of the regional policy budget⁸. The following spheres of activity were identified according to information collected about investment of cohesion funds in environmental projects and jobs

- eco-innovation in SMEs,
- railway systems,
- promotion of clean urban transport,
- renewable energies
- energy efficiency
- co-generation
- energy management
- waste disposal
- water management
- promotion of biodiversity and environmental protection
- integrated projects for urban and rural renovation
- rehabilitation of industrial premises and polluted soils
- risk prevention

A substantial part of this endowment (54 billion €) will be allocated to help Member States comply with EU environmental legislation. Furthermore, almost half of the Member States (Austria, Bulgaria, Czech Republic, France, Germany, Hungary, Italy, Poland, Portugal, Romania, Slovakia, Slovenia and the UK) have introduced indicators related to the reduction of greenhouse gases in their cohesion policy programmes.

2.3 The European Climate Change and Energy Package.

The EU approved in December 2008 the *Climate Change and Energy Package*, consisting of six proposals to reach the so called 20-20-20 goal by the year 2020 (A 20% reduction in primary energy use compared with projected levels, to be achieved by improving energy efficiency; a reduction in EU greenhouse gas emissions of at least 20% below 1990 levels; 20% of EU energy consumption to come from renewable sources). The EU leaders also offered to increase the EU's emissions reduction to 30%, on condition that other major emitting countries in the developed and developing worlds commit to do their fair share under a global climate agreement.

According to the position of the European Trade Unions Confederation (ETUC), "*The Commission's legislative proposals presented in the Energy and Climate Change package are a major step because they tackle greenhouse gas emissions in a greater number of sectors, they provide a credible framework for the development of*

⁸Press Release IP/09/369, "Cohesion Policy backs "green economy" for growth and long-term jobs in Europe". Brussels, March 9 2009.

<http://europa.eu/rapid/pressReleasesAction.do?reference=IP/09/369&format=HTML&aged=0&language=ES&guiLanguage=en>

renewable energy sources and aim to put in place a more effective emissions trading scheme, particularly by setting an EU-wide emissions ceiling.”

The European Commission recently published the results of its “*Analysis of options to move beyond 20% greenhouse gas emission reductions and assessing the risk of carbon leakage*” as a political commitment by the EU to reach a global agreement on climate (*Communication from the Commission to the European Parliament, the Council, The European Economic and Social Committee and the Committee Of The Regions. COM (2010) 265 final*). The report indicates that: “*The required expenditures result in a redirection of employment and activity as part of a process of structural change to limit climate change. The net effect consists of the creation of jobs (directly and indirectly) in certain sectors and the reduction of jobs in other sectors. For the EU a reduction of GHG emissions from 20% to 30% is expected to create, in particular but not only, a further stimulus for employment in the renewable sector and in energy efficiency sectors.*”⁹

2.4 The European Economic Recovery Plan.

In November 2008 the European Council adopted the European Economic Recovery Plan. The objective is to drive a coordinated EU response to the economic crisis. The Lisbon strategy plays a crucial role in this plan for economic growth and employment generation, by promoting the development of a green economy based on energy efficiency, environmental sustainability, innovation and clean technologies. The plan seeks to establish a direct connection between tax stimulus and the four priority areas of the Lisbon strategy: citizens, companies, infrastructure and energy, research and innovation.

With regard to green economy, the plan includes a series of short and long term measures in its intervention line “*Infrastructure and energy*”, such as to improve the energy efficiency of housing stock and public buildings and to promote the rapid adoption of green products (item 6); and in its “*Research and Innovation*” chapter: Developing clean technologies for cars and construction (item 9).¹⁰ “*In order to produce maximum benefits and achieve the Recovery Plan's aims of protecting people and preventing the crisis from deflecting attention from the EU's longer-term interests and the need to invest in its future*” the Economic Stimulus Plan clearly mentions among its strategic goals the significance of shifting to an economy with low greenhouse gases emissions and creating green jobs: “*Speed up the shift towards a low carbon economy. This will leave Europe well placed to apply its strategy for limiting climate change and promoting energy security: a strategy which will encourage new technologies, create new 'green-collar' jobs and open up*

⁹ COM(2010) 265 final. Brussels, 26.5.2010. COMMISSION STAFF WORKING DOCUMENT *accompanying the COMMUNICATION FROM THE COMMISSION TO THE EUROPEAN PARLIAMENT, THE COUNCIL, THE EUROPEAN ECONOMIC AND SOCIAL COMMITTEE AND THE COMMITTEE OF THE REGIONS. Analysis of options to move beyond 20% greenhouse gas emission reductions and assessing the risk of carbon leakage. Background information and analysis. Part II.* http://ec.europa.eu/environment/climat/pdf/26-05-2010working_doc2.pdf

¹⁰ Eurocan and CEOE Tenerife. The Economic Recovery Plan: Summary of EU measures in view of the current financial and economic crisis. <http://www.ccaje.org/imagenes/6/Resumen%20Plan%20Europeo%20Recuperaci%C3%B3n.pdf>

new opportunities in fast growing world markets, will keep energy bills for citizens and businesses in check, and will reduce Europe's dependence on foreign energy."¹¹ The plan had an immediate budgetary impulse amounting to € 200 bn (1.5% of EU GDP), made up of a budgetary expansion by Member States of € 170 bn (around 1.2% of EU GDP), and EU funding in support of immediate actions of the order of € 30 bn (around 0.3 % of EU GDP). 5 billion euros will be allocated to the "European green cars initiative" and 1 billion to the "European energy-efficient buildings initiative". The president of the European Commission José Manuel Durao Barroso announced later that the economic recovery plan would have a fiscal support of 400 billion euros (around 3.3 %of European GDP)¹².

The financial institution estimated in May 2009 that the EU's economic support to face the crisis would be of approximately 30 billion euros for the period 2009-2010, of which 17-19 billion could be considered green. Comparing estimates by the same institution for other economic powers, the share of green measures in stimulus packages varies considerably. The EU lags behind South Korea, the United States and China in terms of the total amount allocated to green measures, but the proportion of effort in anti-crisis packages is bigger than in the U.S. or China.¹³

3.- National policies against climate change in EU-27

In the opinion of the social partners – the representatives of the main unions as much as those of the employers' organisations who were interviewed – the implementation of efficacious policies for the mitigation of the effects of climatic change and the adaptation of the national economy to these effects are in jeopardy after the inconclusive results of Copenhagen, the current inter-governmental level of decision about climate policies in the world, as indeed are the very perspectives of social dialogue on climate change. Which difficulties obstruct the adoption of efficacious climate policies, and to what extent, has been apparent in the past when the United States and China failed to ratify the Kyoto Protocol, and today this can be measured in the gap between the hoped-for effects and the end results obtained in terms of reducing CO₂ emissions.

In spite of this European framework, the development of policies that favour sustainable development in Member States is as variable as the information provided by their governments.

¹¹ Communication from the Commission to the European Council. COM(2008) 800 final. A European Economic Recovery Plan. Brussels, 26.11.2008.

<http://eur-lex.europa.eu/LexUriServ/LexUriServ.do?uri=COM:2008:0800:FIN:EN:PDF>

¹²The Lisbon strategy- and the CER Lisbon scorecard. Speech by President Barroso, 13 March 2009. http://www.cer.org.uk/articles/speech_barroso_13march09.html

¹³ Wuppertal Institute for Climate, Environment and Energy. Green European Foundation, 2009.

The main sustainable development policies against climate change are:

- 1.- Changes in the energy model in order to promote renewable energies.
- 2.- Promoting energy efficiency at enterprises.
- 3.- Promoting housing renovation to improve energy efficiency in the residential sector.
- 4.- Change in transport and mobility to promote public or collective transport and the renovation of car fleets with hybrid/electric cars.
- 5.- Promoting the production of biomass in the agricultural sector.

Many of these policies are seen as an opportunity to create green jobs.

More or less all the EU-27 countries have some of these policies. The Austrian and Swedish governments have a special interest in eco-innovation, the United Kingdom in the capture of CO₂, and Finland in workers' training and green taxes.

	Sustainable Mobility	Energy Efficiency Enterprises	Renewables Energies	Agricultural: Biomass or Biofuel	Housing renovation
Germany	X	X	X	X	X
Holland	X	X	X	X	X
Spain	X	X	X	X	X
Estonia	X	X	X	X	X
Denmark	X	X	X	¿?	X
Sweden	X	X	X	X	
United Kingdom	X	X	X		X
Austria	X		X	¿?	X
Greece	X	X	X	¿?	

Finland		X	X	X	
Belgium	X	X			X
Luxembourg	X	X			X
Lithuania	X		X		X
Portugal	X	X	X		
Italy	X			X	X
Czech Rep.	X		X		X
Ireland	X		X		X
Poland		X	X	X	
Cyprus	X			X	X
France	¿?	X			X
Bulgaria	X	X			
Slovakia				X	X
Slovenia			X	X	
Hungary		X			X
Malta		X	X		
Romania		X			X
Latvia					

All the EU-27 countries have sustainable development policies against climate change. In Bulgaria, Lithuania, Cyprus and Latvia these policies are financed principally by the structural funds of the EU Cohesion policy. In another two countries policies are very limited; in Slovakia just in agriculture and building, and in Slovenia in energy.

In Italy the real practice of these policies falls very short. A study commissioned by the European Industrial Relations Observatory (EIRO)¹⁴ on the greening of the Italian economy reveals that the measures announced in the budget law for 2008 have not yet been implemented.

¹⁴ Manuela Galetto 2009.

4. Social dialogue at national level against climate change in EU-27.

The main references of social dialogue concerning these policies are from Germany, Belgium, Spain, France, Netherlands, and also from Denmark, although without unions in this country.

	Social dialogue on green jobs
Germany	Yes
Belgium	Yes
Spain	Yes (Climate Boards)
France	Yes (Grenelle)
Holland	Social and Economic Council
Italy	CESPA, not useful
Denmark	Without unions
Sweden	Not at national level
Romania	No
Austria	No
Bulgaria	No
Cyprus	No
Slovakia	No
Slovenia	No
Estonia	No
Finland	No
Greece	¿?
Hungary	¿?
Ireland	¿?
Latvia	¿?

Lithuania	¿?
Luxembourg	¿?
Malta	¿?
Poland	¿?
Portugal	¿?
United Kingdom	¿?
Czech Republic	¿?

The very interesting Grenelle Environment Round Table, launched in 2007 by the French government, brought together social partners; firms, elected representatives, NGOs and representatives of the State in *ad hoc* working groups on different topics in a framework of 5 colleges.

In Belgium there is a very interesting Collective Agreement between unions and employers' organizations in the National Labour Council: The "*Ecocheque Initiative*"¹⁵. This Collective Agreement, n°98, was signed on February 20th 2009 to define and set the framework for eurocheques (green cheques).

There is no social dialogue about these matters in Austria, Bulgaria, Cyprus, Finland, Slovakia, Slovenia, Sweden and Estonia. There is no information for the remaining countries.

5.- National Reports: Germany, Sweden, Spain, Italy, France.

5.1 Debates on climate protection and green jobs.

There are two competing conceptions at work in the debates around the issues at stake: One can be called *incremental technological modernisation*, that is, the step-by-step adaptation of the given socio-economic order to the demands of a low carbon economy through (a) the development and implementation of innovative technologies and (b) political interventions facilitating it.

¹⁵ The agreement signed by unions, employers and government for the Ecocheque initiative is available at [http://www.cnt-nar.be/CCT-ORIG/cct-098%20\(20.02.2009\).pdf](http://www.cnt-nar.be/CCT-ORIG/cct-098%20(20.02.2009).pdf)

The other can be termed *politically-induced rupture and replacement*, i.e. the complete overhaul of the given socio-economic order through far-reaching political interventions that trigger abrupt changes to patterns of production and consumption.

The second one used to be supported by the unions and social democratic governments. The main example in the past was the Green New Deal proposed by the SPD government of Schroeder and, today, the Spanish government's proposals of the "Sustainable Economy Act".

The main idea is to reform the production model in order to achieve long term economic, social and environmental sustainability. This requires a big public effort. In Spain the "*Strategy for Sustainable Development*" has operated on a budget of 25 billion euros. However, the crisis has brought down many of these projects and the budget has been reduced.

These policies should be developed in the context of social dialogue between employers, employees and government, with a high level of institutionalization.

The first conception is linked more to employers and has some support from right wing governments. This is the case of Sweden, Italy and, at present, Germany. The main idea is that public policies have to develop eco-innovation, within a close relationship between employers and government, without unions.

Private enterprise should research solutions to environmental and climate challenges, by continually developing better technology with lower environmental impact and improvements in material and energy efficiency. In this case social dialogue is not necessary, except in the field of training workers in new skills.

It is true that the effects of the crisis on national budgets and the poor results of the Copenhagen summit have pushed the positions towards the second conception. It is clear that since Copenhagen employers are shifting towards the position that the reduction of climate change in each country has to consider the median of the EU-27, with no unilateral obligations, so as not to reduce the competitiveness of industry and destroy jobs.

These two different conceptions are the extremes of the debates. Intermediate positions regarding concrete situations can be found at national or sectorial level.

5.1.1 Germany.

In the area of climate protection, there is a broad if shallow consensus between the federal government and both sides of industry in Germany. They all agree that the current economic crisis affords political and economic decision-makers with the chance to kick-start the transition to a low carbon economy, which in their view will help to expand the green sectors of the German economy, provide German corporations with new business opportunities, increase economic growth, and create new jobs.

Yet this consensus rarely goes beyond declarations of intent made in “grandiloquent speeches”. When it comes to questions of political strategy and policy-making, there are profound disagreements:

In the area of ‘green jobs’, both the three partner groups and the individual representatives of each side disagree on the definitions of terms such as the ‘green economy’ and ‘green jobs’.

At government level, the shift in power following the 2009 elections is responsible for many modifications in these policies. Before this date, important members of Cabinet strongly advocated a Green New Deal.

In contrast, the current government appears to reject or at least ignore the idea of a Green New Deal. The coalition agreement (CDU-CSU/FDP) does not mention the terms ‘New Deal’ or ‘green jobs’, and it contains no explicit endorsement of job creation through ecological industrial restructuring, which suggests that green jobs creation is no longer being viewed as the result of a comprehensive, state-led strategy of industrial transformation. Rather, it is presented as a by-product of processes of incremental technological modernisation that are happening anyway.

5.1.2 Sweden.

The effects of climate change is on the agenda of all political parties, social partners and many NGOs in Sweden, but the issue has lost considerable intensity since the Copenhagen summit in 2009, and now most often remains on the rhetoric level.

The present framework of the Swedish national climate policy was established by the parliament in 2009, and the following main targets were agreed upon:

- half of Sweden's energy consumption will come from renewable resources by 2020
- Sweden will have a car fleet independent of fossil energy by 2030
- Sweden's net emissions of greenhouse gases will be zero by the middle of this century
- 20 percent more efficient energy use in 2020
- 10 percent renewable energy by 2020.

The intensity of the climate change debate decreased considerably after the emergence of the financial crisis and the disappointment of the Copenhagen summit at the end of 2009. The priorities of the voters valued climate change as the tenth most important issue.

5.1.3 Spain.

On March 19th 2010, after two years of economic and social crisis that led to unemployment figures reaching 20% of the working population, the Spanish parliament passed the Sustainable Economy Bill (LES) aimed at transforming the production model to make it more economically, socially and environmentally sustainable.

The bill also aims to lay the foundations for environmental innovation and stable employment. The goals of the bill include the creation of quality green jobs with high added value.

This bill is part of the "*Sustainable Economy Strategy*" presented in December 2009, which contains energy and environmental initiatives, among them the Energy Efficiency and Renewable Energies Act. The most significant proposals still included in this project are:

- promotion of energy services companies (ESCs)
- bringing forward 20 % energy saving goals to 2016 (instead of 2020)
- introduction of income tax exempted transport vouchers (up to 1,500 euros) similar to luncheon vouchers to promote public and collective transport
- VAT reduction for building renovation businesses
- Green purchase plans
- Renovation of government car fleets with hybrid/electric cars.

This bill includes the creation of a € 25 billion Sustainable Economy Fund as a financial tool for its development, although funding sources, procedures, beneficiaries, sector scope and execution deadlines remain unspecified. But due to the crisis the government has made many cuts in the public budget and this is no longer a realistic amount.

The bill was submitted to the Spanish parliament for approval with a 16-month delay in September 2010. The intention of the government is to pass the bill before the end of 2010.

5.1.4 Italy

In the opinion of the social partners, the implementation of efficacious policies for the mitigation of the effects of climatic change and the adaptation of the national economy to these effects are in jeopardy after the inconclusive results of Copenhagen, as indeed are the very perspectives of social dialogue on climate change.

A union representative has defined the mood derived from this as: “*a sense of failure shared at all institutional and socio-economic levels*”, in a country like Italy where the normative frame of reference in the struggle against climate change is almost entirely derived from the EU.

Confindustria criticises the government for having relied almost exclusively up until now on constraints to be applied to the industrial world in order to meet the EU’s objectives, running the risk of endangering the health of a number of productive realities or of encouraging businesses to relocate.

Renewable energy sources may seem to represent the fulcrum of a new paradigm of growth that is capable of combining instances of environmental protection (*environmental sustainability*), with those of economic growth (*economic sustainability*), making the most of the social, human and labour capital (*social sustainability*). These represent the means to achieve the environment-work partnership that has long been at the centre of a heated debate and that appears to offer the possibility of fruitful integration through the promotion of renewables. The birth of new green professions can be traced back principally to the development of renewable energies and energy efficiency.

In fact, it should be noted that the majority of jobs created by the development of renewable sources are actually traditional jobs. At the same time, it can be observed how, in different companies in various other traditional sectors, employees can be renamed “green workers”.

Various studies state that the final sum of green jobs has to result from the calculation of the following jobs:

i) **additional**: such as in innovative sectors (wind, photovoltaic, etc...); ii) **substitutive**: in the case of reconversion (e.g. from traditional to renewable production); iii) **transformed**: in which the

eventual “green work” is generated by the type of goods/service requested by the purchaser (as in the case of ecological building and biodiesel cars); *iv*) **eliminated**: when the production of something becomes illegal (e.g. plastic shopping bags from 2011, because of “leakage effects” or because of bans on the extraction and refining of oil).

Confindustria: “Rather than green jobs we prefer to speak of the “greening of jobs”, trying to develop a new greener approach, but starting from the more traditional sectors and then bringing it to all activities. What we expect is a notable change in the profiles of all the professions. In relation to the past these profiles will be more characterised by the contents, skills and competences suitable to face up to the requirements of sustainable development and this will occur for all jobs, whether they are in traditional or innovative sectors, in industry or in services”.

5.1.5 France.

During the French presidential campaign which led to the election of Nicolas Sarkozy as head of the French State in spring 2007, environmental and sustainable development issues were at the heart of political debates, with undertakings being made by the main candidates. After the election of Nicolas Sarkozy, the Ministry of Ecology, Energy, Sustainable Development and the Sea was created and placed in second position in the institutional hierarchy and authority within the French government (until the government reshuffle in November 2010).

Before the economic crisis of 2008, dimensions of sustainable development had become omnipresent in almost all economic and social topics. The crisis did not put a stop to this process, but has tended to reduce the extent to which environmental issues are taken into account, although they are not missing from government projects that have been adopted in the framework of the big national loan.

Thus, the Employment Policy Council (Conseil d’orientation pour l’emploi, COE) that was created in 2005, is a pluralist structure composed of fifty one members including representatives of the social partners, MPs, representatives of local authorities, directors of government administrations and bodies concerned, as well as experts in labour and employment issues. In January 2010, it published a report on ‘green growth and employment’.

This document (www.coe.gouv.fr/spip.php?page=publication_detail&id_article=603) indicates that ‘sustainable development cannot be the only strategy for achieving full employment’, but states that green growth represents significant potential for job creation in the coming decade. It then indicates that the main studies in the field assess that about 600,000 jobs will be created.

During the latest discussions, which were strongly affected by current factors inherent in the economic crisis, emphasis was put especially on ‘green growth’. It is seen as the growth of new technology and new services, which contributes to adopting ways of life, consumption and

production that use fewer natural resources and produce less carbon dioxide and greenhouse gas with a main impact on the following three kinds of sectors:

- Sectors that make it possible to save energy: energy efficiency in building and transport, etc.
- Sectors that make it possible to preserve natural resources both quantitatively and qualitatively: regarding water, recycling waste, biomass for chemicals and building etc.
- Sectors that make it possible to reduce greenhouse gas emissions: capturing and stocking CO₂, and using renewable energy, etc.

5.2 Social Dialogue on “Green Jobs” Initiatives.

5.2.1 Germany.

Building renovation programme

The most significant instance of cooperation between the German social partners in the area of green jobs creation took place in the course of designing a publicly funded building renovation programme, which was implemented by the red-green federal government led by Gerhard Schröder in 2000.

The dialogue centred on negotiating the conditions of a comprehensive building renovation scheme, whose aim was to reduce carbon emissions by increasing the energy efficiency of residential buildings. This was to be achieved by improving the insulation and the energy efficiency of heating systems, and installing devices that serve as sources of renewable energy, for example photovoltaic and solar-thermal systems. The alliance at the national level was the inspiration for corresponding regional initiatives in Hamburg and in Berlin-Brandenburg.

The KfW CO₂ building renovation programme created 200.000 works each year during three years, 2006-2008.

In this programme all the partners involved are winners: the ailing building industry profits from extra investment; the unions benefit from jobs being secured or created; the ecological effects are positive; and house-owners gain through the reduced cost of investing in their property. It seems

obvious that effective climate protection is harder to bring about in areas where ecological restructuring is bound to produce losers – be it workers who are being made redundant because certain types of production are phased out or investors who have to put up with diminished returns due to the costs of modernisation.

Other sectorial agreements.

A new network founded by the Federal Environment Ministry, the Federal Ministry for Business (BMWi), the DGB, and numerous science and engineering networks, established three dialogues, which provided forums for representatives of trade unions, business, government and the state bureaucracy as well as scientist and engineers to engage in discussions on how to increase resource efficiency:

- 1.- A dialogue for the aluminium-producing industry, which involved the government, IG Metall and the Integrated Association of the Aluminium-producing Industry.
- 2.- A dialogue specifically dedicated to developing strategies for works councillors.
- 3.- A dialogue aimed at producing roadmaps that (a) identify leading markets with a great potential for resource efficiency and (b) describe the characteristics, speed and direction of potential technological development.
- 4.- The National Development Plan for Electric Mobility, which is supposed to promote research and development, market preparation and the market introduction of battery-powered vehicles in Germany. The aim is to ensure that by 2020, there are one million electric cars in Germany.

This platform involves representatives of the federal government and of the branches of industry affected, as well as some scientists and a few members of IG Metall.

Agreements without unions

With the new right-wing government the new initiatives are more linked to the representatives of German business:

- 1) The climate protection dialogue between political leaders and corporations, Allianz (insurance), Metro (groceries and retail), Siemens (engineering conglomerate) and Viessmann (heating systems).
- 2) The Partnership for Climate Protection, Energy Efficiency and Innovation, a joint initiative involving BMU, BMWi and the German Chamber of Industry and Trade (DIHK). The aim of the partnership is to encourage investment in energy efficiency for small and medium enterprises.

5.2.2 Sweden.

On the horizon of the central organizations there is no formalized social dialogue on climate, environmental or green jobs issues between the trade union confederations or between them and the employers' confederation. That is not to say that social dialogue is nonexistent, but that it exists on other levels, i.e. in and between sector organization and companies.

One possible reason for the lack of dialogue between the social partners is that the perception of these issues has only recently related them to the realms of labour market and employment policy.

The Industry Committee

The Committee consists equally of representatives of employers and employees. It defines four programme areas, of which “Energy and climate” is one, and its position is formulated in the Agreement as follows:

“An ample supply of energy at a reasonable price is of great importance for industrial activities in Sweden... The Swedish economy is highly dependent on electricity on account of the industrial structure, climate and challenging environmental goals... It is of the utmost importance that we safeguard the supply of competitive and eco-friendly electricity, for both employment and environmental reasons. The premature phase-out of nuclear power, as well as specific Swedish electricity taxes that distort competition, conflicts with these conditions. A strategy to reduce CO₂ emissions must be arranged in such a way as to promote industrial development, competitiveness and employment in Sweden”.

TCO promotes the idea of including climate issues in the collective bargaining agenda in order to achieve an equitable distribution of the costs for a green transition between different sectors. One association, SKTF (The Swedish Union of Local Government Officers) has recently successfully reached an agreement stating that climate friendly improvements by employees shall be rewarded.

5.2.3 Spain.

The Social Dialogue Boards Initiative

Universitat de València - ERI POLIBIENESTAR.
Edificio Institutos-Campus de Tarongers. Calle Serpis, 29. 46022. Valencia.
Phone: (+34) 96.162.54.12– C.I.F. Q4618001-D
Email: espanet2011@uv.es

The Social Dialogue Boards are a clear example of tripartite exchange on environmental issues. These meetings deal periodically with climate change mitigation measures.

Compliance with European and international agreements for climate change mitigation and for the transformation of the production model has a significant social and economic impact. In 2004 government and social partners reached a “*Social Agreement for dialogue on the compliance with the Kyoto Protocol*”.

Later the Law 1/2005 on the regulation of trading in greenhouse gas emissions specifies that: “*social dialogue tables shall be created to grant the participation of trade unions and employers’ organizations in the drafting and follow-up of the National Allocation Plan regarding its effects on competitiveness, employment stability and social cohesion*”. The creation of such bodies would have to be completed at the latest within six months of the adoption of the law. Their composition and functioning would be developed by the government and based on a report of the *Commission for the Coordination of Climate Change Policies*. The National Allocation Plan on emission rights 2005-2007 also mentioned the necessity of creating social dialogue boards.

The creation of these boards was developed by a decree (*Real Decreto 202/200*), which lists their functions, composition and operation. Eight social dialogue boards were created, one central and seven representing the sectors with the most intensive emissions, those which should reduce them according to European regulation: electricity, refineries, iron and steel industry, coke stoves, cement plants, ceramics and paste, paper and cardboard. One more board was added in 2007 for diffuse emissions. Although the sector is not included in the emission trade goals, it is listed in the Kyoto protocol as responsible for 55% of Spanish emissions (transport, households, commercial and institutional activity).

The proposals developed in these meetings are submitted to the government (ministries and relevant agencies) for consideration. There is no binding link between the boards and climate change policies decision makers.

Trade unions consider that these boards should be upgraded into decision-making bodies, while employers’ organizations prefer to maintain them as an exchange and reflection tool, not as a space for developing measures. The government insists on the lack of resources to take on an additional workload and subsequently carry out comprehensive studies on employment.

Other sectorial initiatives.

The wind sector has developed a bilateral initiative for cooperation between trade unions and employers to promote green jobs.

In March 2010 CCOO’s industrial federation, UGT’s associated industries federation and the Wind Employers’ Association drafted a declaration for employment in the wind sector to request from the government certain modifications of Royal Decree 6/2009 which sets the maximum power installation limits for the wind industry and which has eventually paralyzed the sector.

5.2.4 Italy.

In Italy we cannot talk of social dialogue in the strict sense in terms of green jobs, but this does not mean that the precursors or practices that precede it, such as government and private initiatives, voluntary agreements, audited reporting and institutional capacities are absent.

The organ specifically dedicated to environmental policies is the CESPAs, the Consiglio Economico e Sociale delle politiche ambientali (the Economic and Social Council for Environmental Policies). This is headed by the Minister for the Environment and is composed of the country's economic and social forces. It was established in 2004 and reconfirmed over the course of the years by both governments of the centre-left and centre-right.

Three plenary meetings have been planned, on the basis of the most important political deadlines for the economic programming of the state budget and the annual European summit in spring.

Despite the potential for CESPAs to determine a system of organised, structured and continuous relations between the minister and the economic and social partners, after the first four years of its existence, during the course of which various discussions were launched, consultation with the social partners was no longer requested, and thus it remained a "dead letter".

According to the union, which has always sought an active role in social dialogue, the motives for this stalling can be attributed to the fact that:

“the Government finds it hard to attribute the right consideration to the role of intermediary forces, establishing relationships with the social partners only when it considers it useful and without considering it as a model of modern governance. This is the real problem: that participation and involvement are activated only with the aim of an immediate usefulness and do not represent the fundamental axis for the policies of development”.

In the opinion of businesses, too, the opening of single thematic tables, while important, is not considered very useful for the construction of a serious culture and policy of working in concert and sharing that necessarily has to be achieved through a structured confrontation with the institutions, and not through leaving the relationship of exchange to the bilateral willingness of the partners.

Building Renovation.

Universitat de València - ERI POLIBIENESTAR.
Edificio Institutos-Campus de Tarongers. Calle Serpis, 29. 46022. Valencia.
Phone: (+34) 96.162.54.12– C.I.F. Q4618001-D
Email: espanet2011@uv.es

On the issue of the Tax deduction of 55% for the energy renovation of buildings, the union and business groups have firmly stood their ground in the face of governmental uncertainty, strongly supporting the importance of not moving backwards on this. The provision could in fact be strengthened, given the positive outcomes achieved by this intervention. In the current economic crisis, which also involves the building sector, it is more than ever a central necessity.

The evaluation of the costs and benefits of the interventions with the 55% deduction, according to the union, has in fact had demonstrable positive effects at a productive and employment level, in terms of stimulus to technological innovation and incentives to the emergence of the black market.

Other unsuccessful union initiatives

The CGIL, along with the environmental group Legambiente, identified lines of intervention which would contribute to the struggle against the recession and environmental degradation, based on: the energy restructuring of housing stock, the development of renewables, energy saving and efficiency, eliminating illegal dumps from the territory and the reclaiming of polluted industrial sites.

The Chemical and Energy Workers Union (Filctem) of CGIL proposed opening a phase of negotiation on the interventions of energy efficiency in companies, through the negotiation of interventions of continuous improvement of technologies and the organisation of work. Confindustria has recently published an *ad hoc* study on the positive spin-offs on the level of productivity and employment deriving from the development of energy efficiency.

5.2.5 France.

All trade unions and employers' organisations are involved in the various processes of consultations and drawing up proposals within the national framework, as described above, with most recently:

- Environment Grenelle (Environment Round Table) (Grenelle de l'environnement)
- National Sustainable Development Strategy (Stratégie nationale de développement durable, SNDD)
- Employment Policy Council (Conseil d'orientation de l'emploi).

The most important of these is the Environment Grenelle, launched in 2007, which brought together *ad hoc* working groups addressing different topics in a framework of 5 colleges (social partners, firms, elected representatives, NGOs, representatives of the State).

After the initial conclusions of this Grenelle, in summer 2008, the national Economic and Social Council (Conseil économique et social, CES) was renamed the Economic, Social and Environmental Council (Conseil économique, social et environnemental, CESE). Following the renewal of its members in the second half of 2010, it is now composed of representatives of associations, as well as of employers' organisations and trade unions.

Green growth jobs occur by definition in sectors that provide green growth. In the discussions, the concept broadens to include not only direct green jobs, but also jobs whose development or practices are affected by the implementation of the measures of the Environment and Sea Grenelle. This plan does not only concern occupations that are most directly affected by green growth, but also other occupations, such as administrative jobs in firms involved in the environment and also environment-related occupations in firms that are not part of the environment sector, occupations that contribute directly or indirectly to the reduction of greenhouse gases.

Most occupations concerned with green growth correspond to existing occupations, which need to be adapted, especially via training. The plan focuses on 11 sectors that are most affected by the creation or transformation of jobs: transport, car industry, renewable energy, water-sanitation-waste-air, building, agriculture and forestry, eco-electric systems, refineries-fuel-green chemicals, tourism, maritime, biodiversity-ecological services.

Eleven sector committees were thus created in October-November 2009, in order to anticipate change and adapt qualifications.

The mobilisation plan is part of the dynamics of the Environment Grenelle with the participation of all the actors of civil society. The development of occupations related to green growth depends on three levels of complementary mobilisation: the State, the sectors and the regions.

The committees of this plan are organised along the same principles as the Environment Grenelle with 5 colleges (social partners, firms, elected representatives, NGOs, representatives of the State), in line with the form of governance that led to the Grenelle being a success.

All the participants contributed to producing recommendations that are most suitable for serving the ambition of enabling our country to succeed in changing its growth model. They also seized the opportunity of extending it to include occupational integration for all French people - regardless of whether they already have a job, are in occupational transition or are jobseekers – and especially young people.

The conclusions are that almost all economic activities would benefit, in the long term, from society's determined reorientation towards sustainable development, via the impact of the dissemination of innovations, development of demand, and changes in standards.

Although all the trade unions and employers' organisations are involved in these various ongoing processes, most of them deplore the slow way in which they are being translated into concrete actions, and all are convinced of the pressing need to take action.

5.3 Position of the social partners.

5.3.1 Answers to the questions:

What is the position of social players on climate change and the environmental crisis?

And on the EU commitment to emission reduction?

What is the assessment of the efforts to adapt the national economy to climate change and the mitigation policies?

5.3.1.1 Germany.

At first sight, there appears to be some common ground between the German social partners regarding the politics of climate protection, in terms of the physical reality of climate change, and the necessity to adopt and achieve the 20-20-20 targets of the EU.

The bone of contention is the post-Kyoto period after 2012. The current federal government – a coalition between Christian Democrats (CDU/CSU) and Liberals (FDP) led by Angela Merkel – aims to achieve a reduction of 40% by 2020. Whereas the Confederation of German Trade Unions agrees to this target, the Federation of German Industry (BDI) rejects it – at least as long as it remains a self-imposed, unilateral obligation. According to Hans-Peter Keitel, the president of the BDI, it “reduces the competitiveness of German industry, deprives Germany of jobs, and is of no use to the climate”.

Another instance of open dissent is the question of whether nuclear power should contribute to the move towards low-carbon energy production. On this front, the federal government and the BDI agree, while the DGB and, if recent polls are to be believed, the majority of the population are opposed to it.

The main dividing line between the social partners is how to conceptualise this socio-economic transformation. The Business point of view, the *incremental technological modernisation*, versus the Union point of view, the *politically-induced rupture and replacement*.

5.3.1.2 Sweden.

The three trade union confederations have cooperated to produce a document, published by the Council of Nordic Trade Unions as a contribution to the Copenhagen conference 2009. The document is summarized in ten points. The main points are:

- The Nordic trade union movement is united in the support of the ambitious climate goals of the Nordic countries.
- The emissions must be decreased considerably, while at the same time the Nordic energy sector shall deliver energy on competitive terms.
- The Nordic model of tripartite cooperation and collective bargaining, where the trade unions will contribute to an energy efficient and green working life, shall be further developed.

The main political mitigating measures – the introduction of CO₂ tax in 1991, the emission trade system (now including 700 companies) and the electricity certificates for energy companies (meaning that a certain amount should be renewable energy) are all supported by LO. The recent proposal of a kilometre tax for transport is however opposed, since it would distort competitive conditions if it were introduced unilaterally. SACO and TCO agree with these measures, including taxes on transport in the main cities.

The Confederation of Swedish Enterprise presented their position. The policy document states that environmental and climate issues are high on the corporate agenda, and that environmental issues today are characterized by their international causes and impacts. To take emissions as an example; air and water can have effects beyond national borders and the effects of the use of products and services are felt where they fulfil their function and use. Therefore, the international perspective is of great importance to the industry. In order to manage exposure to competition, it is important that the same rules and regulations apply in the EU, but preferably also globally. One country cannot change the global climate situation. Sweden can, however, play a significant role in developing cost-effective climate and energy technologies that can be applied in other countries, thereby creating conditions for the export of Swedish solutions and utilizing the business opportunities, which in turn create jobs.

It also points out that some of the goals relating to the transport, energy and chemical sector are set with an unrealistic time limit. A more recent report (April 2010) which analyzes the national debate on the climate goals is far more critical. It claims that the political agenda is too provincial, and that the rivalling political blocks are merely competing over levels of emission reduction and other targets, both ending up in unrealistic prognoses.

The Confederation of Swedish Enterprise acknowledges the importance and approves of the main political means, the tax instruments, especially the CO₂ tax, and the emission trade rights, but advocates that either one or the other should apply to the main industry companies, not both of them.

SACO would encourage a discussion on all levels, from the parliament to local work places, about the organization of work in order to fully benefit from the possibilities that the new communication technology offers, since working life is still organized mainly on the premises of classic industrial production. The social partners would have a crucial role in promoting such a visionary discussion.

5.3.1.3 Spain.

We could say that both trade unions and employers' organizations interviewed for this report accept the premise of the environmental crisis and particularly the problem of climate change.

However, the Spanish Employers Confederation (**CEOE**) does consider climate change one of the most disputed scientific issues in modern history. **CCOO's industrial federation (FI)** noted that environmental factors (not only humans) are the cause of climate change.

CEOE would much prefer an international agreement for a 30% EU reduction level to a unilateral 20% reduction. If these conditions are not met, CEOE will not support pressures from the EU to reach unilateral reduction goals while more polluting economies like China and the US do not make similar efforts, since this will not help stabilize the world's climate.

Both UGT and CCOO defend the setting of an unconditional goal by the EU of a 30% reduction of emissions with respect to 1990, in order to take a leading role in climate change mitigation and accept the historic responsibility of Europe in global warming. Trade unions also defend the adoption of a long term strategy for the reduction of emissions with lower costs and the leadership in new technologies to reduce energy dependence and create jobs.

For UGT climate change policies have more relevance in Spain since the signing of the Kyoto protocol, both in central government agencies and regional / local governments' actions, and they have become a significant pillar to support sector policies. UGT values the efforts made so far as positive although not always necessary.

CCOO considers that there is no comprehensive vision of climate policies and their relation with industrial and economic policies.

There is however an almost unanimous agreement of all social partners on the poor development of adaptation policies compared to mitigation policies. This has been clearly expressed by CEOE when it stated that national climate change policies are mostly focused on mitigation and that the National Plan for Adaptation to Climate Change adopted 4 years ago has not produced any specific measures so far. CEOE believes that promoting R+D+i is one of the basic pillars of adaptation. Considering the current economic situation and the recently approved government general budget, CEOE does not believe the plan can be developed as it was originally formulated.

UGT values the efforts of sectors regulated by emission trade, although it is fairly difficult to assess the effectiveness of reduction policies in the context of low production indicators. CEOE warns that the latest reduction in greenhouse emissions is not the result of the change in the production model or in technology, but the consequence of the current economic crisis. Therefore, the reduction of greenhouse emissions is not consolidated. CEOE believes that if Spain complies with the Kyoto protocol it will be due to the dramatic fall in production during the economic crisis and the purchase of more emission rights. Even in the current context of low production, Spain is 28% above the levels of emissions for the base year 1990, although our commitment was 15%.

Regarding the electricity sector UNESA considers that the introduction of mitigation policies in the current context of low energy demand due to the economic crisis and the changes in industry (introduction of renewable energy and natural gas) has affected greenhouse emissions considerably. UNESA uses as an example the significant fall of CO₂ emissions per KWh in the last 10 and 5 years.

25.000 MW of combined gas cycles, some 20.000 MW of wind power and 3000 MW of photovoltaic energy were installed in the last decade.

CCOO highlighted the growing wind and photovoltaic generation and ascribes the success to the bonus policies for the production of renewable energies (feed-in tariff).

Trade unions and the employers' organization share the same view on mitigation policies when they recognize that emission reduction policies are being implemented with more intensity in the industry than in other diffuse emission sectors like transport and households.

FI noted that efforts must not be focused exclusively on those sectors that are easier to control because of their production processes, as in the case of the energy sector, but that it is also necessary to address diffuse sectors due to their contribution to emissions. By doing so we will achieve a more equitable share between social players facing climate change.

5.3.1.4 Italy.

Universitat de València - ERI POLIBIENESTAR.
Edificio Institutos-Campus de Tarongers. Calle Serpis, 29. 46022. Valencia.
Phone: (+34) 96.162.54.12– C.I.F. Q4618001-D
Email: espanet2011@uv.es

Despite the “good intentions” of the Italian social partners to construct a dialogue on these themes, there is an awareness that there is still a long road ahead. There is no national framework of support for the growth of social dialogue in environmental matters and there was a delay before Italy started to move to oppose the effects of climate change. According to many of the interviewees it is not in fact possible to speak of effective “policies of mitigation” and “policies of adaptation” at national level.

As underlined by the unions, Italy moved too slowly on this front and hence made efforts that today are still considered insufficient on the institutional and socio-economic side, being guilty of having underestimated the mechanisms triggered by the Kyoto Protocol. In the same way, it showed itself to be barely ready to take up the challenges inherent in the *20-20-20 Climate-Energy Package*.

Given the substantial levels of efficiency that have already been achieved, the current problem is that in some sectors it is difficult to reduce emissions any further, where these are prevalently a result of the production process, insofar as the margins for intervention are limited.

Therefore, the criticism of the government by Confindustria is that to achieve the EU’s objectives it has so far relied almost exclusively on constraints applied to the industrial world, risking the health of a number of productive realities or encouraging processes of relocation on the part of businesses.

More precisely, given that the industrial sector contributes one-third of greenhouse gas emissions (about 30% of emissions in Italy), and considering that the productive world will continue to take action to reduce its climate-altering emissions, it is also necessary to pay equal attention to those responsible for the remaining two-thirds of the country’s overall emissions. These are the residential sector, the service sector and the transport sector: sectors where, as observed both by the union and entrepreneurial side, there is no policy for the achievement of the objectives signed up to at European level. In this regard a substantial “immobility” on the part of the government can be detected.

5.3.1.5 France.

The CFDT agrees with the conclusions of the COE’s report and shares most of the positions that have resulted from a series of meetings, which enjoyed the contribution and involvement of the

technical group and in which the social partners participated. Proposals were included after hearing a number of experts.

The CFDT considers that the multiplication of places and bodies raises the issue of the coordination of the different scopes of agreements: is it possible to have a multi-industry framework agreement to anticipate all these changes? Each sector could then embark on bargaining to implement the agreement in their sector.

According to the CGT, which takes on board the statements of the International Trade Union Confederation (ITUC) and the European Trade Union Confederation (ETUC) on climate issues, one of the main concerns is that of developing 'low carbon' activities, industries and their associated jobs in France, as well as in Europe and throughout the world. Green jobs are only part of the problem. Fair and effective transition towards a 'low carbon economy' concerns all sectors. The problem of employment must therefore be treated as a whole.

During the Environment Grenelle, the CGT intended to be fully involved and promote its ambition for a profound transformation of the models of production and consumption so as to make a new type of growth possible in the framework of sustainable development, reconciling social progress, respect for the environment and economic efficiency.

In the CGT's view, such measures must combine compulsory public rules, taxation and financial incentives, as well as regulatory tools. They must take into account the European framework and existing international agreements without States being deprived of their sovereign power to organise conditions of access of their population to essential public goods, such as education, culture, health, supply of drinking water, energy - and the way in which they are provided.

In the CGT-FO's view the government's fad in autumn 2009 about so-called sustainable development seems to have disappeared. The failure of the Copenhagen summit, the inability of the authorities to define what a green job is, and accumulated delays in translating into law the measures resulting from the Environment Grenelle, etc., all show very well that the passage from speeches to action in the area of sustainable development is not so simple, but, on the contrary, creates many problems, and firstly for employment and workers.

The CGT-FO defended taking better account of social indicators, especially regarding the quality of employment and occupational integration, health, health and safety at work, and the battle against insecurity and poverty.

Sustainable development is a concern of firms, in the MEDEF's view, and these have already made great efforts in this area. They are at the heart of sustainable development, because they are the most powerful and quickest force for change today.

In the CGPME's view, protection of the environment is a major issue for the well-being of future generations. SMEs – like all of society's actors – are gradually developing this approach in their development strategy and, more generally, in company life.

The CGPME advocates that measures adopted should be based more on incentives than on penalties and retain the principle of tax neutrality, in which any new charges should be counterbalanced elsewhere, in order not to harm firms' competitiveness. The CGPME is especially vigilant concerning any inflation of environmental rules.

5.3.2 Answers to the question:

What are the main initiatives for research on green technologies in your country?

5.3.2.1 Germany.

The trade unionists expect some branches to expand and others to struggle. According to Thomas, renewables, engineering and electronics will profit from the changes. She is reluctant to point out 'losers', but she indicates that the car industry and energy-intensive industries (such as steel and aluminium) could potentially face problems. As a result, she calls for an industrial policy protecting existing value chains. According to Kauls, energy is a sector that will be hit hardest by changes. She expects jobs losses in nuclear and coal-fired energy, and new jobs in the areas of renewables and green technology. Wötzel believes that the service sector will profit. He expects to see an increasing importance of eco-efficient services which sustain the infrastructure of everyday life in a climate-friendly way. His examples are improving and extending public transport systems, car-sharing schemes and consultancy firms advising on energy use. Bartels believes that the building sector will profit thanks to building renovation schemes. He also sees potentials for expansion in the agricultural sector, especially in the area of production of energy from biomass. According to him, this will however require addressing the problem of the "competition (...) between food plate and fuel tank".

5.3.2.2 Sweden.

The Industry Committee states that strategic R & D programs, supported and controlled jointly by government and industry, are crucial for a strong research and innovation policy.

Environmental technology and climate-friendly industry is such a strategic area. Climate effective techniques include both technologies developed directly for climate change mitigation, and resource-efficient products and processes whose primary purpose is to meet demand for other products, such as transport. Therefore, a strategic research initiative on climate should be based on a broad view of the technical areas that are critical to achieving the objectives of climate and

competitiveness. Within the energy, industry, transportation and housing sectors there is a great potential for technological development and use of new technologies to reduce emissions of CO₂. Within these sectors, Sweden has a world leading competence in many technologies that are essential for achieving the climate target. Example in areas where we already can conclude that there is a need for **research and development** are:

- Energy: Transmission, distribution, renewable energy sources
- Automotive: Hybrid concept, increased fuel efficiency, electric, second-generation bio-fuels
- Fields of technology with application in several sectors: information technology, energy storage...

Forest industry

The forest industry is part of the solution to climate change. Since the forest and its products bind and store carbon dioxide the forest industry has particularly good potential to reduce and prevent negative climate effects. Energy conservation and efficient use of their fuels leads to reduced use of fossil fuels in the process. The bark and chips, which replace fossil fuels, are also supplied to external users.

Mining industry

The largest source of greenhouse emissions from the Swedish mining industry comes from fossil fuels for production of iron ore pellets at LKAB's facilities.

LKAB is involved in several projects to reduce climate change, for example ULCOS, which is a major EU project, seeking opportunities to reduce carbon dioxide emissions from iron, and a collaboration with the forestry company Sveaskog, in a project aiming to develop technology to increase the absorption of carbon dioxide from the air and bind it in the growing trees.

Steel industry

Other processes that generate carbon dioxide emissions are primarily heating and heat treatment at high temperatures through the use of high-grade fuels such as oil or gas. Even here, there are relatively few opportunities for reducing emissions. Replacement of oil by natural gas would bring a reduction but it requires large investments. Residual energies from the processes are anyhow used both as fuel in secondary processes, for electricity generation and distant heating of houses.

Automotive industry

Examples of future technologies which will further reduce emissions are new generations of direct injection, recovery of braking energy, electric power and the development of hybrid concepts.

Wind power and transmission

The new Swedish technology, "HVDC Light" (High Voltage, Direct Current) considerably improves the conditions for transmission over long distances.

Research on climate issues and the development of green technology is regarded as a strategic area by the Swedish government and authorities. Such research initiatives are plentiful, spanning nano- and hydrogen research into combustion, and generators, and especially interesting is the development in research on solar cell efficiency and competitiveness. Sweden has a leading position on the development of bio-fuels.

5.3.2.3 Spain.

All social partners regard as most significant the initiatives that improve technology, renewable energies, especially wind, and the captures and storage of carbon dioxide. CCOO also mentioned research in environmental and less intensive agriculture and research on new construction materials.

FI highlighted the development of solar, photovoltaic and geothermal energy and in the field of capture, transport and storage of CO₂, the CUIDEN projects in Ponferrada, ELCOGÁS, INCAR and new sustainable uses of CO₂ in industry (CENIT SOST- CO₂).

UNESA also mentioned ENDESA's pilot project in Compostilla de León. Capture and storage technology and technology for geological storage are still in the investigation phase and commercial use of these industrial procedures will not begin within the next ten years.

CEOE on the other hand stated that if green technologies address the development and implementation of systems to improve environmental conditions, the list of such technologies would be quite extended. CEOE considers that the ultimate goal is to achieve fully fledged technologies and remembered that expenses of environmental protection in industrial sectors rose to 3.1 billion euros in 2008.

5.3.3 Answers to the questions:

Are there “winning” and “losing” sectors? Which ones?

What is the cost for employees in the sectors affected?

What are the measures to reduce the negative effects in those sectors?

How do you value such measures?

Measures to promote the most favoured sectors

5.3.3.1 Germany.

Expectations regarding sectorial change differ widely, too. This reflects (a) the variety of conceptions of the socio-economic transformation in question, and (b) the fact that the specific remit of each organisation interviewed leads them to focus on distinct developments. BDI mainly locates the changes within different branches of industry, which in turn implies that relations between branches will not become more unstable than they generally are thanks to industrial development. This is in line with its emphasis on incremental technological change.

In contrast, the trade unionists expect some branches to expand and others to struggle. According to IG Metall, renewables, engineering and electronics will profit from the changes. It is reluctant to point out 'losers', but indicates that the car industry and energy-intensive industries (such as steel and aluminium) could potentially face problems. As a result, it calls for an "industrial policy" protecting existing value chains. According to DGB, energy is a sector that will be hit hardest by changes. It expects jobs losses in nuclear and coal-fired energy, and new jobs in the areas of renewables and green technology. Ver.di believes that the service sector will profit. It expects an increase in the importance of "eco-efficient services", which sustain the infrastructure of everyday life in a climate-friendly way. Examples of this are improving and extending public transport systems, car-sharing schemes and consultancy firms advising on energy use. IG BAU believes that the building sector will profit thanks to building renovation schemes and also sees potential for expansion in the agricultural sector, especially in the area of production of energy from biomass. According to IG BAU, this will however require addressing the problem of the "competition (...) between food plate and fuel tank".

When it comes to actively facilitating sectorial change and triggering processes of industrial conversion, there appears to be a certain reluctance – especially on the side of those who do not embrace the idea of a politically-induced rupture. Von Kempis again points to incremental technological modernisation: "You throw out the old machines, and bring in new ones. (...) And yes, I believe that renewal and certain processes of restructuring are taking place wherever there is need, a need for reinvestment. (...) I'll say it again – for me this is a continuous, constantly evolving process. It's (...) not that something is thrown out in its entirety, and then there is something completely new." Similarly, Thomas voices doubts that there will be deep ruptures: "(...) if we assume that we reduce emissions by 80% in the entire value chain, including the industrial value chain, then all branches [of industry] are affected, not just the car industry. (...) Then it will be a challenge for all other industrial branches to contribute. And surely (...) there will be branches where structural change will hit harder in the sense of new, different products. (...) For the car

[industry] this partly happens via electric mobility, but there will still be a car. This simply isn't such (...) a fundamental change.”

5.3.3.2 Sweden.

LO and TCO agree with the governmental report on climate and vulnerability, published in 2007. The scenarios of the report indicate that forestry, agriculture, and energy production will be profiting sectors.

Unless proper political decisions are taken on national, but also EU and global level, the energy intensive basic industries (steel, paper and automobile industry) can suffer hard blows if they don't manage to transform their energy consumption. But there are no studies indicating the potential size of the effects for hypothetical winners or losers.

SACO envisages the IT-sector as potentially a winner in the transformation towards a green economy. The improved communication technology has already proved to contribute a lot through, for example, advanced logistic systems for transport, increased possibilities for remote working and studies, video conferences etc.

Another potential winner is the energy industry, not only the nuclear plants, but also water, wind and wave power, which all produce clean energy. The efficiency of its use can be developed further through improvements of the transmission systems.

A potentially threatened sector is basic industry, especially the steel and paper industries, since they are huge consumers of energy. Their international competitiveness is therefore highly dependent on the secure supply and price of electricity.

The Confederation of Swedish Enterprise says that the potential winners of the “green” transformation will be companies implementing the development of renewable energy sources, such as the research on wave power and solar cells, conducted at the Ångström laboratory at Uppsala University.

Potential losers will by definition be companies and sectors which lag behind in the adaptation process. Naturally the petroleum and carbon industries are at great risk. So will also all energy-intensive industries be, such as the steel, forestry and paper industries, unless the political

instruments are well adjusted. Another branch that will face a sort of paradoxical problem, unless they manage to re-direct their production, is the district heating industry, since they have so successfully increased the efficiency of transmitting the heating, 1-2% annually in recent years. They will soon reach the economic limit for production, due to successful development.

5.3.3.3 Spain.

A transition to a low carbon economy will inevitably affect some sectors negatively and favour others, and social partners must identify those sectors. Employers' organizations do not necessarily share that view, do not use the same terms and consider this approach to be fairly reductionist.

UNESA particularly considers this differentiation rather unreasonable since there is neither an ideal solution nor a perfect sector and there are too many variables to take into account. The process cannot be simplified to "winning" or "losing" a game, it is rather focused on adapting to a low emission economy and doing it in reasonable terms of jobs, costs, etc.

CEOE does not approve of the fact that the government or an expert committee will determine which sectors have a future, so employers strongly disagree with selective support to specific sectors since all sectors will be necessary to satisfy the needs of society. Actions must be directed to influence all sectors, to minimize their environmental impact and to preserve their viability in our economy.

FI pointed out that, as in previous economic transitions, those sectors capable of adapting to technological challenges will benefit the most, but this new reality should not exclude important sectors for the economy and society.

UGT did identify the renewable sector, within the energy industry, as a potential job source, especially the wind sector. In the construction sector, housing renovation is a possible solution to unemployment and an opportunity for the overhaul of houses built without energy efficiency standards. CCOO identifies as most favoured sectors: energy management, sustainable mobility, public transport, active tourism and non-intensive agriculture.

As for the "losing" sectors, CCOO considers inevitable that some sectors will be affected by technological change which implies a negative impact on employment activities like coal mining, electricity generation based on fossil fuels, the automobile industry and agricultural activity with high intensity of resources deployed in extended areas. We could call these sectors "losing sectors", although perhaps the term "more vulnerable" is preferable, but in any case, measures should be taken to protect them.

UGT understands that there will be no losing sectors, but sectors that will have to adapt themselves to new needs and become "green". Those are energy generation based on fossil fuels and the "most polluting" industries like mining, gas, cement, iron and steel.

FI noted an important issue; the social costs for workers does not only imply the variable of employment volume but also the loss of job quality, especially in the electricity sector whose workers have already experienced the worsening of working conditions. FI recommends the identification of sectors and facilities with risk of job loss to avoid de-industrialization and delocalization.

UGT observed that any change generates vulnerability and workers can be exposed to negative consequences. That is why trade unions insist on the “Just Transition” concept. Just transition means social protection against industrial changes, but it also means that there are benefits from creating new, green, quality jobs. It means “greening” the existing jobs without neglecting any economic activity.

CCOO and UGT mentioned that transition policies exist based on early retirement, attracting alternative economic activities and on non-replacement, but there are no programmes for green investments, nor policies to facilitate new professional profiles oriented towards green activities. The reduction strategy is based on “freezing” jobs in sectors supported by different subsidy policies, like the coal sector, or by stimulating demand.

UGT and CCOO remark that Spain is a leading country in renewable energies because there are measures to promote them, and that it is necessary to continue supporting that line of development.

5.3.3.4 Italy.

The opinion of the social partners relating to the impact that climate change has and might have on the economy is that *all* sectors will be touched by the transformation of the economic system in an eco-sustainable key. Mechanisms of substitution and in part of renewal will lead to a reconfiguration of the professions as well, both in terms of the *requalification* of professional figures and, therefore, of the creation of new competences, and in terms of the *reconversion* of professional figures and hence the creation of new profiles. In the opinion of the businesses and unions it is on technological innovation that the possibility for each sector to have a solid future in the field of the struggle against climate change will rest, in particular through the processes of improving energy efficiency, which, by their nature, are pervasive and intersectorial.

Naturally, the fact of greatly stimulating the growth of renewables will have repercussions on the traditional energy sectors, leading to, for example, a progressive reduction in the use of fossil fuels in favour of biodiesel and consequently the reduction in the centrality of the refining plants, a substantial presence in Italy. With the arrival of the crisis, the issue of their closure and/or relocation started to be raised.

In the opinion of Confindustria, the sectors that are at greatest risk of being weakened in this process are those most exposed to international competition with the large groups, as is the case with steel.

According to the data supplied by the European Commission, from ENEA and the groups in the sector, it is estimated that in Italy “green” employment, between those employed directly and indirectly, currently amounts to just over 100,000 people. In Italy, the most important sectors in renewables are wind, with about 10,000 employees overall (4,400 directly employed), solar photovoltaic, with about 5,700 employees overall, and that of biomasses, with about 25,000 employed directly; while the rest of the employment is distributed between geothermal, solar thermal, the mini hydro and other minor forms of energy production from renewable sources that employ, directly and indirectly, about 50,000 people.

From the estimates it turns out that photovoltaic, wind and biomass are the renewable technologies with the greatest potential for growth, independently of the imagined scenarios. In any case, the weight of biomass is by far the most substantial in the context of RES, since more than 50% of the potential theoretical mass is linked to this.

5.3.3.5 France.

As for green jobs, the CFDT considers that only a small number of jobs can be innovative and described as innovative green or sustainable development jobs.

Most jobs created should result from a ‘tinge’ of green. The prospects of sustainable development are mainly to be found in jobs in industry, agriculture and the tertiary services sector. However, this is not negligible, especially as, on the one hand, it would be useful to enrich the quality of jobs and on the other hand, there are synergies with the new contributing jobs, such as for example in the wind-energy sector, the manufacture of wind turbine blades and pylons, ... and especially in all the new fields of renewable energy.

In the CFDT’s view, existing occupations are likely to be reoriented in a major way - such as in education and research – as a result of taking into consideration sustainable development.

In the CFDT’s view there is important potential, especially in the consulting sector, which presupposes upward developments that should lead to the recruitment of more highly skilled people with higher-level diplomas... and will involve collective bargaining recognising all of that.

The CGT is cautious regarding the expected impact of jobs linked to green growth quantified at 600,000 over the next decade. This calculation is in line with an accounting rationale and does not take into account job cuts that will occur at the same time. In any

case, it can be stated with certainty that this is not how unemployment will be reduced: at best, the number of expected jobs would only correspond to a fifth of current official unemployment figures. The SNCF's reduction of 250 freight trains contradicts the displayed desire for green growth.

In the CGT-FO's view, the real issue is that of identifying whether new occupations in new sectors really do exist (linked to the emergence of recent public policies, for example) or in existing sectors (building, energy, agriculture and industry, etc) – without damaging or destroying other traditional occupations.

Following on from elements provided by the Centre for Strategic Analysis (Centre d'analyse stratégique), a study by the Trésor which was published in December questions the preliminary estimations provided by the Ministry of Ecology. The study can confirm certain reservations expressed by the CGT-FO, especially regarding the extent of job creations that can result from the Grenelle and the carrying out of public investment necessary for implementing the Grenelle, because of a lack of sufficient funding.

In the MEDEF's view, although there are major pools of jobs to be created in new occupations and new sectors related to sustainable development, other sectors will lose jobs. The important thing is that the number of jobs created is greater than those that are lost. It should be remembered that, given the current insufficient competitiveness of French firms, any additional taxation or constraints imposed on firms will lead to job losses in France.

The MEDEF thinks it would be very useful to embark on a social statement concerning modernising the labour market. In such a statement, very useful topics could figure in order to deal with the current situation, especially topics related to organisation, optimising functioning especially via mobility and redeployment leave, the ways employer groups function, seconding employees, as well as revitalising local job markets.

The CGPME considers that, in order to remove obstacles to recruitment, it is essential to reduce administrative and financial constraints linked to thresholds above which employers are obliged to establish employee representative structures.