



Eurofound

Industrial relations and sustainability: the role of social partners in the transition towards a green economy

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Introduction

There is a growing public debate in EU Member States on the consequences of climate change. At the same time, the visible evidence of this change and knowledge of the scarcity of natural resources is contributing to a change in the public's awareness. A growing number of politicians and business leaders appreciate that the current path of the economy is too resource-intensive and in the long run environmentally destructive, requiring a shift to a more sustainable economy and a step-by-step process of greening the economy.

During the EU ministerial conference on 28–29 September 2010 on 'Promoting green employment: a major and indispensable driver behind a successful transition towards a low-carbon economy', the European Commissioner for Employment, Social Affairs and Inclusion, László Andor, launched the first European plan for the creation of jobs in 'green sectors' and for the 'greening' of the economy and the labour market.

The process of greening the economy will bring all kinds of changes to labour markets and the economy. New jobs will be created and others will disappear. Governments will have a vital role to play in this process, being in a position to provide an incentive. However, because jobs and working conditions will be affected by the transition towards a green economy, social dialogue will be essential as it influences the perception of both employees and employers. At the same time, the restructuring that will accompany the greening of the economy will be easier to handle with a strategy that anticipates the need for reconversion.

In addition, almost all experts agree that employees' adaptability will be a key element in the transformation of the European economies. But what kind of training for employees is needed to facilitate this? The communication on the European plan issued at the end of the ministerial conference in September 2010 states (Belgian Presidency, 2010):

The transition must take place in an equitable fashion. The jobs created must be high-quality jobs. The Member States must ensure this. A good representation of employees and employers within the new sectors is important for ensuring good employment conditions. In its decisions, the Presidency will invite the European Commission to integrate in its multiyear strategy for health and safety at work the identification of risks associated with the new professions connected with 'green' growth.

The communication broadens this approach by assuming that:

All jobs have to become greener. The workplace, working conditions, the use of new materials that need energy efficiency standards, work planning and commuting must all be thoroughly revised.

It also argues that:

In order to achieve this, the social dialogue, the employees and employers will all have to play a crucial role.

The European Commission considers social dialogue to be a crucial factor in developing support for a transition to more sustainable and environmentally friendly industrial process. The political idea of a 'Green New Deal'¹ for Europe has to include the social partners if it is to be successful. It is in the interests of social partners, particularly the trade unions, that

¹ The 'Green New Deal' mirrors the 'New Deal' economic policies in the US in the 1930s. It seeks to use public funds to boost employment in environmentally sustainable technologies and occupations. The conceptual design of a 'Green New Deal' stems from the United Nations Environmental Programme (UNEP), which in October 2008 under the framework of the Green Economy Initiative, called for the global economy to be brought back onto a sustainable track through green investment (UNEP, 2008).

employment be maintained in the transition towards a green economy. An interviewee interviewed for this study in Germany underlined that ‘cost savings can save jobs and cutting back on resources is better than cutting back on people’.²

Study objective

Social partners have an important role to play in greening the economy. This study examined best practice examples of social partner involvement in greening the economy in different Member States. It analysed the role of the trade unions and employers’ associations as well as employees, their direct representatives and company management in selected projects at national or local level. The report demonstrates what a successful contribution of the social partners to greening the economy can look like and identifies factors that need to be taken into consideration.

The European Foundation for the Improvement of Living and Working Conditions (Eurofound) stated that the main objective of the research was to:

provide Eurofound’s tripartite stakeholders with in-depth case study examples in which social partners have successfully contributed and accompanied the transition to more energy efficient, low carbon-emitting ways of production or more environmentally friendly ways of workplace organisation.

The study, which focused on social and environmental innovation, sought to find answers to the following broad research questions.

- How can social dialogue contribute to environmental innovation or environmentally sustainable ways of work organisation in companies?
- How can unions and employer organisations contribute to ensuring the quality of greener ways of production and working?
- How can companies remain competitive with environmental innovation and at the same time maintain employment?
- Is there evidence that social partners had to resort to new instruments and/or engage in other than the traditional structures in their efforts to green industry?

To answer these questions, the research team selected and analysed five cases from different European countries where companies/Member States sought to achieve greater resource efficiency and create green jobs. The selection was based on existing studies on greening the economy, as well as additional research on projects in all EU countries.³ The main selection criterion was that social dialogue play an active role in the implementation of the measure.

Definition of ‘greening the economy’

The research was guided by a broad definition of greening the economy, which builds on the European Union’s 20–20–20 targets for mitigating climate change and adapting to its effects, set out in its climate and energy package of 2009 (European Commission, 2010). By 2020, the EU wants its Member States to have achieved the following results (compared with a 1990 baseline):

- save 20% of their energy consumption;
- jointly source 20% of energy produced from renewable sources;
- cut their emissions of greenhouse gases by 20%.

² Interview with the academic project leader of the German initiative, Network Resource Efficiency; see Chapter 2.

³ See, for example, Broughton (2009).

For this report, ‘greening the economy’ is taken to mean the process of producing products and services with less energy, less material input and reduced emissions, including all direct and indirect ‘inputs’ in regard to both material and labour. This definition is dynamic: it does not focus on levels but on changes, and has a strong process orientation. In this regard it applies to all economic activities in all sectors and extends to workers and consumers.

The research has a particular focus on the role and activities of social partners. It therefore goes beyond a focus on green jobs in the traditional sense, which by the narrowest definition are only in the renewable energy sector, or according to a somewhat wider definition comprise those jobs in agriculture, industry, services and administration that contribute to preserving or restoring the quality of the environment – such as those on the UNEP’s ‘positive’ list.⁴

Greening the economy is a process including a variety of activities carried out by a variety of actors, and does not prioritise or privilege any sectors or activities. At the same time it assumes that all companies and employees can make a contribution to this transition.⁵

Structure of the report

This overview report summarises the main findings of the case study research. It starts with a general introduction to the potential role of social dialogue in greening the economy and provides an overview on the recent debate among European researchers and policy stakeholders on this topic. Short summaries of each case study are then presented using the same format for ready comparison.⁶ These summaries outline the industry and policy background of the country and its environmental policies and industrial relations system, describe the initiative and consider the role of social partners in the project. Each summary closes with a short evaluation of the characteristics, strength and weaknesses of the case study. The final part of the report draws general conclusions. The Annex presents a table of good practice measures based on the experiences of the five case studies and other projects identified during the study.

Research design and methodology

As the case studies come from five countries with very different traditions of industrial relations and state industrial policies, the study cannot claim to present a representative analysis of projects that seek to green the economy in the EU. The intention of the study was to:

- illustrate the variety of ways in which social partners were involved and the solutions developed in greening the economy on a national, sectoral, plant or individual level;
- highlight the framework conditions leading to these initiatives, the measures applied and the instruments used to monitor the processes.

In-depth case studies are presented in which social partners have successfully contributed and accompanied the transition to more energy-efficient, low carbon-emitting ways of production or more environmentally friendly ways of workplace organisation. The five projects described are good practice examples of social partner initiatives, providing positive evidence for such projects and initiatives on a micro- and macroeconomic level. The study offers an insight into these

⁴ For the complete definition of green jobs see UNEP (2008, p. 5).

⁵ Practical examples of activities towards greening the economy by employees or individuals may be changing one’s consumer behaviour in regard to energy-efficient house hold items, effective recycling or increased use of public transport to work. Similar activities may be implemented by companies – for example, energy-efficient production processes or a long-term strategy to use renewable energy.

⁶ The full case study reports are available on request from Eurofound.

examples and demonstrates how social partners can actively address the transition towards a green economy. The main focus of the case studies is to draw conclusions on how social dialogue helps to:

- initiate projects on greening the economy;
- contribute to environmental innovation and environmentally sustainable ways of work organisation in companies.

Each case study is presented using the same set of analytical questions. A description of the regulatory framework in the country for fostering the transition to a green economy is followed by information on the nature and key characteristics of the initiative, stakeholders, its duration and potential impact. To give an indication of the extent to which the case study represents a good example for ‘going green’, the case studies give details of the public framework (policy agreements, national and regional laws and regulations, public–private agreements, national and regional social impact factors) and the motivations and incentives of social partners. Finally, the case studies consider the innovative character of the project and the social dialogue. To what extent and how are the different stakeholders involved? What are the key success factors in the process of implementation?

Where possible, the authors asked if the initiative had had any impact on the level and quality of employment and working conditions. However, an assessment on the actual impact on the quality of employment was difficult due to the different scope, outreach and level of implementation of the projects featured in the case studies.

Another question was to what extent the project has contributed towards the overall goal of going green (that is, cleaner production processes, mitigation of unnecessary commuting, or energy saving due to new forms of work organisation).

However, the main focus of the case studies was to evaluate the extent to which social partners worked jointly on topics outside their core fields for a policy of greening the economy. The key question was: ‘To what extent did social partners open their “traditional” ways of interaction to include other interest groups, such as environmental actors?’

The research was based on qualitative empirical instruments – in particular, on interviews with the main stakeholders, which sought to analyse the background and implementation of the projects. In general, interviews were carried out with representatives of the trade union and employers’ association. However, the precise selection depended on the project’s structure, the role and involvement of the actors, and their availability. Fieldwork was carried out between late June and October 2010.

Case study selection

An initial list with almost 50 projects and social partner initiatives in the EU addressing the transition toward a green economy was produced. Final selection of the five case studies was based on the following criteria:

- relevance according to the project’s targets and research questions;
- active involvement of social partners in implementing or coordinating the project;
- the project’s being identified as an example of good practice;
- geographical spread within the EU as well as political diversity in the social partner initiatives;
- recency of the project’s implementation;
- the extent of innovativeness.

The final selection was agreed following intensive discussion and consultation with Eurofound (Table 1). A positive characteristic of all the selected case studies was their recent and ongoing implementation. Some are still in their pilot phase.

Table 1: *Selected case studies*

Country	Project	Initiator - Social partners	Start date
UK	GreenWorkplaces	Trades Union Congress (TUC)	Mid-2006
Germany	Network Resource Efficiency	IG Metall ¹	March 2007
France	Joint approved training fund collection agency (OPCA) for the construction industry	Construction industry OPCA ² – joint organisation	2008
Belgium	Eco-voucher initiative	National Labour Council (CNT) ³ – joint body	July 2009
Romania	Euroeneff project	CMC ⁴ – joint organisation in the construction industry	October 2008

- Notes:
- ¹ German Metalworkers' Union
 - ² Organisme Paritaire Collecteur Agréé (an approved joint employer/union body for the collection and management of training contributions from employers)
 - ³ National Labour Council (Conseil national du travail)
 - ⁴ Vocational Institute of Builders (Casa de Meserii a Constructorilor)

The initial analysis found that both employers' associations and trade unions at national levels in the EU are active in addressing green economy and policy issues, and that the green agenda is generally taken seriously (Broughton, 2009, p. 11). However their role and activities vary. Other initial observations included the following:⁷

- a few countries in mainly northern and western Europe have a wealth of interesting projects with a strong social partner involvement (for example Germany, Sweden and the UK);
- southern Europe had only a small number of projects from which case studies could be selected;
- there were very few projects in the New Member States (NMS).

⁷ See for example Broughton (2009). The author refers to the active role of trade unions in many countries promoting the green agenda and states that 'trade unions in the Nordic countries are usually well-informed' (p. 13).

1 Context of political debate and social dialogue

A new concept – social dialogue in greening the economy

Many European countries currently find themselves at a critical confluence of crises in the environment and the economy. Against this background, many researchers and politicians have argued that the solution to both these crises lies in a long-term structural change to fuse the two goals of transitioning towards a low-carbon and competitive economy into one. In addition, there is strong pressure at an international level to change behaviour. Significantly, the European Union has set targets to cut carbon dioxide (CO₂) emissions by 20% below 1990 emission levels and to increase its proportion of renewable energy in all primary energy consumed by 20% by 2020 (European Commission, 2007, p. 2). Many of the recovery plans implemented in 2008 and 2009 to deal with the economic crisis included sustainability as an integral part and an environmental dimension in dealing with the crisis.⁸ It is clear that, if these goals are to be achieved, a broad approach must be emphasised that does not exempt any industries, workplaces and activities from aiming towards the goal of sustainability.

It is not yet clear how the entire economy can be greened – that is, how governance should be organised and the necessary financial and educational instruments designed and introduced (EESC, 2010). However, in a democratic framework it is crucial to include stakeholders in order to arbitrate between interests. The social partners are the most important stakeholders with regard to the economy and especially labour relations.

This study contributes to the discussion on shaping this transformation by describing and analysing actions that, with the assistance of the social partners, allow workplaces to develop a green dimension and thus contribute to greening the economy as a whole. In addition to binding European and national legislation, the social dialogue in the countries studied here plays a crucial role in successfully managing change.

Social dialogue takes place in various forms and on various levels, and is largely determined by the context of national policies and industrial relations. For this study, social dialogue is defined as:

all types of formal dialogue, involving discussions, consultations, negotiations and joint actions undertaken by employer representatives and workers' representatives on working conditions in the workplace.

(Broughton, 2008, p. 2)

This definition covers multiple levels of interactions – national, sectoral, regional and company level.

There are significant differences between European countries in terms of:

- traditions, structures and the institutional practice of social dialogue;
- the role of social partners in different aspects of economic, social and political life.

Table 2 gives an overview of the major characteristics of the systems of industrial relations in the countries researched. The differences in terms of environmental issues are often less pronounced: for example, only a few environmental topics are covered by co-determination, which is more focused on social issues but still represents a traditional core area of social dialogue.

⁸ It is estimated that about 15% of the measures in economic stimulus packages globally can be called 'green' (UNEP, 2008, p. 1).

One example of co-determination in environmental issues is the German Works Constitution Act which, in its 2001 revision, for the first time stipulated certain environmental measures as the rights and responsibilities of works councils.⁹ The act's provisions include annual employee assemblies at which environmental protection measures at the plant level must be reported. Moreover, work councils are supposed to promote measures for health, occupational safety and environmental protection and to observe that the rules on plant-level environmental protection are implemented. The employer has to consult the works council on issues related to environmental protection and to inform it immediately about decrees on plant-level environment protection. An interesting aspect of the act is that plant-level agreements may address measures on environmental performance. Based on this provision, employee representatives at the company level in Germany have already negotiated plant and company agreements on environmental protection.

Another significant example of institutionalising a say in environmental matters by the social partners are the 'green' representatives (so-called 'green reps') in the UK, where a number of companies have elected staff who are mandated to help reduce emissions. All union branches usually appoint an environmental or green representative who plays a key role in raising awareness and ensuring that environmental issues are included in the bargaining agenda with employers. The Trades Union Congress (TUC) is currently demanding a statutory right for trade union environmental representatives to take a reasonable amount of time off during working hours to promote environmentally sustainable workplace initiatives and practices.¹⁰

The social partners in the countries investigated are involved on a national tripartite level or on a bilateral level – mostly in sector-level dialogues. Cooperation is either state-initiated (as in the German example, where the Federal Ministry for the Environment co-initiated the network) or established by the social partners alone (as with the training initiatives in France and Romania, and in the collective agreement in Belgium).

The initiatives all represent good practice examples of cooperation between social partners on the greening of the economy. However, they are organised quite differently and focus in different ways on the issues of green policy and the green economy. In all the case studies, the approaches towards greening the economy show innovative features and have opened new paths for social dialogue.

⁹ At the plant level, works councils are the main body representing employees and have a number of rights of co-determination, information and consultation defined in the Works Constitution Act (see <http://www.eurofound.europa.eu/emire/GERMANY/WORKSCONSTITUTION-DE.htm>). Works councils generally see their main responsibility as being in the area of social and employment policy, though the ecological dimension is gaining in importance.

¹⁰ A complete list of activities of the social partners in greening the economy is given in Table 2 and the Annex.

Summary: Two examples of social dialogue structures covering environmental issues

German Works Constitution Act (*Betriebsverfassungsgesetz, BetrVG*)

- Since its revision in 2001, works councils have certain responsibilities and rights in environmentally relevant issues.
- The act provides for information and consultation of works council on environmental protection related issues by employer.
- Plant-level agreements may address measures on environmental performance.
- Positive examples exist of company agreements in Germany on environmental protection.

Green representatives ('green reps') in the UK

- Employee representatives have an institutionalised say in environmental matters.
- Green reps are elected staff at the company level.
- Reps are given the responsibility of helping to reduce emissions and raising awareness of environmental matters.
- Trade unions are currently demanding a statutory right.

Existing research on social dialogue and greening the economy

An increasing number of researchers are investigating the topic of greening the economy. Several recent studies have analysed and assessed the impacts on employment of economic strategies to green the economy. These are discussed below.

Eurofound report, 1994

This report, *Environmental protection in Europe. The effects of cooperation between the social partners* (Eurofound, 1994), concluded that social partners (with a few exceptions) did not feel responsible for environmental concerns (Eurofound, 1994). The report, which summarised 10 country studies undertaken in the EU15, also stated that social partners even joined together to block state-imposed conditions applying to the environment, fearing additional financial burdens. A number of trends and potentials were identified in regard to the role of social partners in environmental concerns. Generally, environmental protection was considered as a new topic for employer–employee relations. The study was based on the assumption that social partners can take action to protect the environment without state intervention if they bring the process of social dialogue to bear on this matter. Considerable potential for cooperation between social partners was seen in environmental concerns, which was unexplored at that time. A further observation was that there were only unilateral activities on the part of employers and employees, rather than any bilateral ones. Employers were reluctant to cooperate with trade unions on environmental management and employee representatives tended to focus on health and safety issues at work.

GHK report, 2009

Among its research of the last two years, GHK prepared a report to support the Restructuring Forum organised by the European Commission on the impact of climate change on employment, in June 2009, which included 15 company cases studies across a range of sectors examining how businesses are being influenced by and responding to climate change and related policies (GHK, 2009a). The report's main findings show that climate change policies have become, after a long gestation period, a high priority for governments around the world. Despite the global economic recession and financial constraints, the move to a low-carbon economy is seen as a means of stimulating economic demand and employment, as indicated in the phrase 'New Green Deals' as announced in the USA and in the EU.

However, climate change policies consist of a mix of traditional regulation (such as efficiency and emission standards) and support for new technologies. These policies are, in some industries at least, supported by initiatives aimed at safeguarding industries (such as the vehicle manufacturing sector) through the recession.

The study draws several general conclusions arising from analyses of practical cases.

- Such cases highlight the importance of policy drivers for the debate on ‘greening the economy’. The main drivers relate to policy decisions rather than to the physical effects of climate change or immediate competitive pressures. Regulation has been more important than corporate social responsibility (CSR) policies.
- Most of the activities undertaken so far by businesses in response to the political and economic needs are steps to improve energy efficiency.
- Climate change policies will have an impact on employment and skills. However, discussions have so far concentrated on skills rather than on actual levels of employment. There is a widespread need for new skills and a general need for upskilling.
- In most cases, companies see themselves as having anticipated and positioned themselves to be ahead of any future climate change policy drivers. No major rapid changes are so far expected in corporate strategy (apart from sectors such as cement manufacture and aviation).
- Social dialogue can play an important role. One common lesson is the benefit of engaging in climate change policy from a place of leadership with a clear strategic direction. This includes the need to engage early with policy processes to influence them and to engage with staff in order to raise their awareness. Acquisition of skills and training is another significant factor for employees.

The industry and business changes needed to respond to climate change policies provide a clear example of a restructuring process. There are likely to be many opportunities to place European companies ahead of global competitors that are slower to anticipate change – for example, through the early adoption of innovative new technology.

UNEP report, 2008

A study by the Worldwatch Institute, commissioned by UNEP, the International Labour Organization (ILO), the International Organisation of Employers (IOE) and the International Trade Union Confederation (ITUC), came to similar conclusions in regard to the role of social dialogue (UNEP, 2008). The study calls for ‘just transitions’ for those affected by the transition to a green economy and for those who must also adapt to climate change, with access to alternative economic and employment opportunities for enterprises and workers. The study found that:

- meaningful social dialogue between government, workers and employers will be essential for coherent environmental, economic and social policies;
- all social partners need to be involved in developing such policies.

The study presents a number of recommendations and outlines pathways to a more sustainable future that direct investment to low-cost measures that seek to:

- assess the potential for green jobs and monitor progress to provide a framework for policy and investment;
- address the current skills bottleneck by meeting skills requirements;
- ensure contributions from individual enterprises and economic sectors to reduce emissions of greenhouse gases with labour management initiatives to green workplaces.

Eurofound report, 2009

A much more recent study published by Eurofound provides an overview on the responses and initiatives carried out by Member States and national social partners with respect to greening the European economy and making it a low carbon economy (Broughton, 2009). As well as identifying innovative practices carried out by social partners, the report analysed national differences in the existence of bi- and tripartite social dialogue structures dealing with issues of sustainable development and greening the economy. The study highlighted the following aspects in terms of the practice and the relevance of social dialogue.

- Member States present a mixed picture regarding the existence of tripartite social initiatives, structures and processes on green issues. In some countries there is a lot of activity whereas, in others, no such activity is recorded – sometimes even where there is an established tripartite social dialogue. Some countries have tripartite social dialogue bodies dealing with the topic of sustainable development and environmental protection.
- Governments, trade unions, employers and other stakeholders around Europe are largely in agreement that the green economy has the potential to create a significant number of jobs in the future. One of the main issues, therefore, is how to exploit the potential of this area and to use it to revive economies that have suffered from the recent economic crisis. In some countries, governments are working with the social partners and other stakeholders to build strategies for developing a green economy.
- The social partners at national level in the majority of European countries have at least begun their first activities in the field of green policy and the greening of the economy. This development shows that the green agenda is taken seriously by the social partners in almost all European countries.
- The examples put forward by Eurofound's national correspondents indicate that the green agenda and green policies are more advanced in some countries than others.
- The types of actions and initiatives undertaken depend strongly on the state of a country's economy and particularly if the sector in question plays an important role in the national economy.
- In terms of institutional arrangements, the discussion on greening the economy in several countries has created new panels for social dialogue. At the same time, new processes and structures may be created in order to debate the emerging employment issues related to the growing green economy.
- Training and potential skill shortages are seen as important topics. The skills shortage is an issue that has been highlighted at European level and in certain countries, with the social partners fearing that the lack of appropriate skills may hamper the growth of newer green industries.

Conclusions of research review

The research summarised here shows that the task of greening industry is taken seriously by the social partners in many of the countries studied – albeit to various degrees. Employers and trade unions have undertaken a range of activities in this area recently to promote a green agenda. This development and particularly the shift in the areas of activities and the role of social partners to consider green issues began mainly in the mid-1990s.

A comparison of the Eurofound report from 1994 and the three recent publications highlights various examples of the involvement of social partners in this process. The new initiatives, as well as the five case studies in this report, have a much broader scope and go well beyond health and safety matters at the company level (compared with only one example given in the 1994 study).

The next section provides a brief analysis of the positions of the trade unions and employer organisations, describing how these positions have developed over the past years.

Positions and initiatives on greening the economy

Trade unions

The involvement of trade unions in environmental issues and climate change has increased noticeably in recent years. In all the countries examined here, unions have focused their objectives and capacities more strongly on environmental issues. They are demanding a voice as political actors and see themselves as fully fledged partners in the greening process, in which they follow clear environmental objectives.

There are no visible clashes between social and ecological interests among the trade unions. This can be attributed to the concept of greening the entire economy, which does not play workplaces against each other or threaten core trade union membership (mainly concentrated in older, traditional industrial sectors).

All major international trade union organisations have issued opinions on climate policy, particularly for the UN Climate Conference held in Copenhagen in December 2009. These policies for the most part support climate-friendly changes and in particular the creation of environmentally friendly activities and jobs (see Sustainlabour, 2008; ETUC, 2009; ITUC, 2009).

At the European level, the European Trade Union Confederation (ETUC) has published position papers on climate change (see ETUC, 2009) and is actively engaged in a European social partner project with *BUSINESSEUROPE* to develop a joint approach to the social and employment aspects and consequences of climate change policies.¹¹

However, in the cases examined for this study it was noticeable that trade unions did not always connect the greening of the economy with requests to improve working conditions. Traditionally, trade unions have focused on improving working conditions and quality of work, but greening of the economy was for the most part seen to be independent of other actions relevant for employment conditions. The demand for green jobs that will reduce pollution, improve the environment and help build a new green economy was not often coupled with the demand for decent, well-paying jobs with safe working conditions, job security, reasonable career prospects or extensive workplace involvement (empowerment). Few of the cases analysed for this study specifically aimed to improve working conditions. Only in the example of the UK was a demand for a right for participation made (that is, to grant relevant workers time off for their environmental engagement and the need to be consulted by management in some environmental matters).

The link between maintaining workplaces and greening the economy is more direct. The examples show that cost savings from energy and resource savings have certainly had an effect on the preservation of jobs. This connection is shown clearly in the UK case study, for example, but also in relation to qualifications, whereas the French and Romanian case studies suggest that the satisfaction of skills requirements also may result in maintaining employment.

¹¹ For more information on the Work Programme of the European Social Partners 2009–2010, see <http://www.etuc.org/r/656>

The union activities analysed in the case studies are carried out at a national, sectoral, plant or individual level and are set within very different systems of industrial relations and legal frameworks. In their practical implementation, they include a broad range of instruments and dialogue forms; these include:

- involvement in political debates on green topics in multi-stakeholder forums (in all countries and especially to establish a national sustainable development strategy) or on a bilateral level with the state (for example, the Trade Union Sustainable Development Advisory Committee (TUSDAC) in the UK), or with employers and employers' associations (for example, the eco-voucher initiative resulting from collective bargaining agreements in Belgium);
- publishing of position papers or demands (in all countries);
- publications that specifically address green issues (for example, several studies and guides by the TUC in the UK on adapting workplaces and union actions to deal with the impacts of climate change);
- courses for green skills run by unions for employees or employee representatives (in Germany and the UK);
- actions for individual employees/workplaces (for example, the TUC GreenWorkplaces projects to design environmentally friendly workplaces and to improve workers' involvement in and commitment to green topics).

Trade unions frequently also exert influence over employee representatives within companies. The employee representatives are themselves quite active in company environmental issues. In Germany they play a role because of legal requirements for involvement defined in co-determination law in the environmental area. Other examples highlight the importance of plant-level employee representatives who push for the introduction of specific initiatives or tools.

Despite all this activity, trade unions should not be thought of as being akin to environmental non-governmental organisations (NGOs). The argument of Snell and Fairbrother (2010) that unions have constructed an environmental role for themselves, one that can help to shape a new sense of union purpose, cannot generally be supported. Instead, the interviews conducted for this study show that, in general, the direct interests of employees are largely restricted to such issues as maintaining jobs and social security. Environmental action is something additional to these interests and, until now, has been less pronounced.

Employer associations

The approaches of trade unions and employer associations towards greening the economy are somewhat different. While union and other employee representatives focus mostly on the impact on employees and workplaces, employers are more concerned with ensuring that companies remain competitive in the process of greening the economy.

From the employers' perspective, climate change poses challenges as well as opportunities. The problem is particularly seen in statutory regulation. Employer organisations at EU level such as BUSINESSEUROPE and the European Association of Craft, Small and Medium-Sized Enterprises (UEAPME) fear that European companies might have a competitive disadvantage in the world market because of the EU target of a 20% reduction in CO₂ emissions (see Eurofound, 2009).

Employer organisations try to be involved in political processes on environmental policy and to influence legislation and state regulation in their interests; this includes:

- engaging in political debates on green topics in multi-stakeholder forums and in bilateral dialogues;
- publishing position papers or demands;

- issuing publications on specific green issues such as environmental legislation, reducing emissions, remaining competitive in a green economy and employer involvement; for example, the Confederation of British Industry (CBI) does this in the UK;
- organising events and information dissemination to raise members' awareness (for example, announcements of best-practice examples in the Belgian and UK case studies);
- promoting green skills for employees and preventing skill deficits (as in the French and Romanian case studies).

Employers do not shy away from cooperation where they see opportunities or benefits in it. Motives for cooperation include avoiding skill deficits and reducing costs through material or energy savings (as in the cases in Germany and the UK). In general, employers also expect benefits from the development of new industries in the environmental area.

2 Good practice in greening the economy

This section presents the main findings of the five case study reports covering projects from five European countries. The selected case studies represent good practice examples of very different initiatives whose aim is greening the economy and that involve cooperation by social partners. The projects are very different in terms of approach, outreach, financing, duration and legal framework.

In addition, the countries differ significantly in their national framework and the tradition of industrial relations and social dialogue. This makes any comparison complicated. The German project is jointly funded by the Ministry for the Environment and the trade union IG Metall and has proved to be a very positive framework project resulting, for example, in a sectoral partnership in the aluminium industry. By contrast, the GreenWorkplaces project in the UK is based on a solely voluntary partnership between trade unions and employers with only very limited financial means. The eco-vouchers project in Belgium is based on a completely different system, their legal base being officially stipulated in a collective agreement negotiated by an institutionalised social dialogue body.

It is important to emphasise that all the projects are currently in a pilot phase and hence have not yet been completed or extensively evaluated.

Another important aspect is the differences between the countries' industrial relations systems and the status of the initiatives in their respective national debate. In addition, the level of implementation varies significantly from case to case, ranging from the individual level (as in Belgium), to the sectoral level (France and Romania), to the national level (Germany).

The overview in Table 2 summarises the national systems of industrial relations in the context of green structures of social dialogue in the five countries.

Table 2: *Industrial relations systems and social dialogue structures*

Country	System of industrial relations/social dialogue structure
UK	<ul style="list-style-type: none"> • Mainly conflictual relation between social partners; industrial relations are characterised by little regulation. • Union movement is characterised by a multitude of individual unions with diverse origins and structures, leading to difficulty in implementing joint actions. • In March 2002, the Labour government adopted the European Directive on information and consultation (Council Directive 2002/14/EC); this resulted in the introduction of a general framework for information and consultation of employees. <hr/> <ul style="list-style-type: none"> • Discussion characterised by neo-liberal context focusing on voluntarism. • UK appointed world's first Minister for Corporate Social Responsibility (CSR), to provide guidance and support best practice. • Government created a Trade Union Sustainable Development Advisory Committee (TUSDAC) in 1998; it holds three annual meetings, composed of the general-secretaries of the TUC-affiliated unions and the environment ministry; it gives input on the government policy process on sustainable development. • Government initiated 'Forum for a Just Transition' in July 2009 (involving the social partners) to advise and provide oversight on the economic and social transition to a low carbon future. The Forum was closed in autumn 2010, but after consultation with stakeholders the Coalition Government has announced the creation of a replacement tripartite body, the Green Economy Council. • Green representatives (so-called 'green reps'): elected staff in companies entrusted with the responsibility of helping to reduce emissions

Country	System of industrial relations/social dialogue structure
Germany	<ul style="list-style-type: none"> • Established structures of co-determination and social dialogue: government traditionally ascribes considerable importance to the participation of economic interest groups in the political process, leading to social partners' involvement in many decision-making processes. • Works Constitution Act and Co-determination Act provide a legal framework for plant-level and board-level co-determination. • Social partners negotiate branch level or company-level collective bargaining agreements (Collective Agreement Act). • Employers and employees also interact bilaterally. • Green New Deal: new political concept for the ecological modernising of industrial production, with a focus on climate change and resource efficiency, to make Germany the most resource-efficient country in the world. • Revision of the Works Constitution Act in 2001, which expands works councils' responsibilities to include environmental concerns. • Several environmental forums include participation by social partners and state: Alliance for Work and the Environment, Council on Sustainable Development and National CSR Forum.
Belgium	<ul style="list-style-type: none"> • Country with a strong tradition of social dialogue, often labelled as a benchmark for social dialogue in the EU • Negotiations on intersectoral collective agreements at the national level take place every two years. • Social relations institutions responsible for specific sustainable development and green economy/jobs issues are essentially intermeshed; federal bodies have regional, sector and inter-professional chapters. • Institutionalised bodies for sustainability and environmental questions, environmental consultation organs: Federal Council for Sustainable Development (CFDD), economic and social consultation bodies, Central Council of the Economy and National Labour Council (CNT). • Ad hoc social consultation initiatives on sustainable development and green growth issues. • Various initiatives with social partner participation; for example, in the building industry, project for the reduction of greenhouse gas emissions 'Clean Developments Mechanism'.
France	<ul style="list-style-type: none"> • Established system of industrial relations: negotiation between social partners at the inter-professional level, at branch-level of all companies with union representatives or elected employee representatives. • Tripartite negotiations: systematic consultation of social partners, as stipulated in the law on modernising social dialogue 2007, is required before government can pass any reforms on individual and collective industrial relations, employment or vocational training. • Institutionalised system of parity principle (paritarisme) in social security agencies, industrial tribunals, social welfare boards. • Government created the Grenelle de l'Environnement (Environment Round Table) in July 2007; for the first time political, social and civil spheres were brought together on the environmental issue in a multipartite discussion process. • Result of the Grenelle process is a new sustainable development strategy for 2010–2013 adopted in July 2010, by the National Committee on Sustainable Development and Environment Grenelle, and new Ministry of Ecology, Energy, Sustainable Development and Housing.
Romania	<ul style="list-style-type: none"> • Fragmented social partner representation on the employer and trade union side. • Advanced bipartite cooperation at sectoral level. • Government set up a Standing National Commission in 2003 to draw up the Romanian sustainable development strategy through to 2030. • Tripartite dialogue arrangements – for example, for drafting the economic stimulus package in 2009 with various environmental aspects. • Social Dialogue Commission of the Ministry of Regional Development and Habitat; this led to the adoption of energy efficiency technologies in the construction industry. • Active social partner involvement on sustainable development issues in recent years, at a bilateral level. • Strong bipartite trend in the building and building material sector and cooperation on environmental issues

Note: This tabular overview does not claim to be complete; it instead serves as general background information on the state of each initiative in its national industrial relations context.

TUC's GreenWorkplaces – UK

What is the GreenWorkplaces project?

The UK has introduced a number of instruments in the environmental area to curb industrial emissions of CO₂, including energy taxes, emissions trading, sector-level climate change agreements, awareness-raising initiatives and training programmes for employees. The UK government has also set a legal binding target for reducing CO₂ emissions by 34% by 2020 and by 80% by 2050 (compared with a 1990 baseline), along with a progressive increasing quota for renewable energy in the energy mix.

Unions and employer associations interact much less in the UK's system of industrial relations than in other EU countries. The system is characterised by conflictual relations between unions and employer associations, and a general neo-liberal context focusing on voluntarism. Given the national background, the good practice case described here deserves even more attention.

GreenWorkplaces is the largest union-led initiative in designing environmental friendly workplaces in the UK. The projects are not limited to certain plants: every workplace can contribute to protecting or improving the environment. The projects aim to build capacity to tackle climate change issues at work; they cover workplace-based initiatives that bring together workers and management in securing energy savings and reducing the environmental impact of the workplace.

The projects are seen positively both in the UK and internationally. For example, the United Nations Environment Programme (UNEP) sees the projects as a best practice example for institutionalising the promotion of a green economy on a broad basis through the permanent and active involvement of trade unions; worldwide, this initiative is among the furthest in developing such work (UNEP, 2007, p. 9).

The first GreenWorkplaces projects were launched in summer 2006, following a number of pilot projects by the TUC and an extensive report by the Trade Union Sustainable Development Advisory Committee (TUSDAC) about changes in energy, transport, recycling and what unions can do at the workplace (TUSDAC, 2005). The initiative has since attracted support from many UK unions and the government. The trade unions involved include:

- Chartered Society of Physiotherapy (CSP);
- Communication Workers Union (CWU);
- GMB;
- National Union of Teachers (NUT);
- Public and Commercial Services Union (PCS);
- Prospect;
- UNISON;
- Unite.

The TUC also established an internal management team to advise on implementation.

Today there are over 1,300 GreenWorkplaces projects in the UK. The aims of the projects are usually to:

- develop good practice in workplace environmental activities;
- provide environmental training for workplace green representatives (or ‘green reps’, as they are known);¹²
- raise awareness within the trade union movement, business and the wider population of the union role in environmental issues.

Most GreenWorkplaces projects include a range of activities such as:

- staff opinion surveys and quizzes;
- union ‘green’ events;
- environment days and ‘green’ fairs;
- courses;
- publications;¹³
- pilot projects supporting implementation.

All the projects focus on how trade union members can champion environmental issues at the workplace and how green reps can form the link between staff and management to encourage change (Sustainlabour, 2008, p. 119).

The pilot projects are selected every two years. So far there have been two project terms (2006–2007 and 2008–2010). The pilot projects enable a range of initiatives on the topics of resource saving and energy reduction to take place and are based on the principle of cooperation between management and unions.

TUC courses about GreenWorkplaces have been offered all over the UK as part of the training programme ‘Trade Unions and the Environment’ for trade union representatives as well as classes in environmental issues by member unions (together with e-learning programmes). The courses are designed to help the representatives to actively promote sustainable policies at work and the TUC estimates that close to 1,000 people have so far attended these courses. Regular evaluation of the courses has offered observations, guidance and further support for the progress of the pilot projects; the results were distributed to all unions, training participants and management.

Other elements of the pilot projects included setting up joint management–union environmental committees with framework agreements that embed workforce participation – for example, on carbon reduction or how to introduce environmental sustainability into the way organisations do their work (TUC GreenWorkplaces, 2010a).

¹² In some UK companies, union ‘green reps’ are elected by staff at all levels of the organisations and given the responsibility of helping to reduce carbon emissions. All union branches usually appoint an environmental or green rep. They play a key role in raising awareness and ensuring that environmental issues are included in the bargaining agenda with employers.

¹³ The TUC guide, *How to green your workplace* (TUC Green Workplaces, 2007) is based on examples of companies during the first round of the project. A similar guide is the handbook, *Go green at work*, for trade union representatives and members who are interested in becoming involved in green issues at the workplace (TUC Green Workplaces, 2008a). One of the newest publications, *Green Works*, introduces the pilot projects from the second round (TUC Green Workplaces, 2010a). Since 2009 there have also been regular updates on Green Workplaces projects in the form of monthly or bi-monthly newsletters.

Finance for GreenWorkplaces comes from fundraising. In the first term, pilot projects were funded jointly through a grant from the Carbon Trust¹⁴ and matching contributions from trade union affiliates, including the TUC's UnionLearn environmental education programmes. The second term was financed by the Union Modernisation Fund (UMF).¹⁵

First round of pilot projects (2006–2007)

- Corus' steel park (Birmingham)
- Friends Provident offices
- Scottish Power head office in Edinburgh
- The British Museum
- York office of the Department for Environment, Food and Rural Affairs (Defra)
- TUC's HQ and regional offices.

For summaries of these projects see TUC GreenWorkplaces (2008b).

Second round of pilot projects (2008–2010)

- British Telecom, Adastral Park, Ipswich
- Great Ormond Street Hospital for Children, London
- Leicester City Council
- National Library of Scotland, Edinburgh
- National Museums Liverpool
- National Union of Teachers (NUT)
- United Utilities.

All the projects included awareness-raising events and training workshops.

Some of the successful bids were multi-site initiatives, the largest being United Utilities, which covered union representatives from several hundred installations.

For summaries of these projects see TUC GreenWorkplaces (2010a).

¹⁴ The Carbon Trust is an independent, non-profit company with the mission of accelerating the move to a low-carbon economy. It helps businesses and the public sector to cut carbon emissions, save energy and commercialise low-carbon technologies. The Trust is financed by the government and directors include both government officials and industry representatives.

¹⁵ This government grant scheme provides financial assistance to independent trade unions and their federations. It is designed to support innovative modernisation projects that contribute to transforming the organisational effectiveness of a trade union. The fund is intended to enhance the ability of trade unions to meet the needs of their members and to make an effective contribution to constructive employment relations and the economy as a whole. The pilot GreenWorkplaces projects are to show 'transformational change' through enhancing union understanding of energy efficiency and cutting carbon emissions as a key business practice, expanding union experience of partnership working with management on a key business goal, and increasing the capacity of union officials to extend the consultation agenda to include new and emerging issues relating to the environment (TUC GreenWorkplaces, 2010a, p. 8).

The role of social dialogue in GreenWorkplaces project

Because the GreenWorkplaces project in the UK is a union-led project, the following aspects have to be taken into account when evaluating the impact and role of social dialogue in greening the economy.

In the absence of stable structures of joint dialogue between social partners in the UK at the association level, the project established a relationship between employees and employers at the plant level in order to green workplaces. The project therefore fitted into the general industrial relations framework of the UK while also finding room to innovate with a new concept of successful exchange between workers and management.

In general it is noteworthy that, in the UK, there is an extensive and broad approach to environmental policy, especially for reducing carbon emissions, aimed both at companies and at workers and their representatives. The UK government recognises the importance of political groups and actively involves them in environmental policymaking bodies. UK unions pay a lot of attention to environmental topics and have found an important role in transferring information and involving workers (see also Pearce, 2009).

Within the GreenWorkplaces framework, trade unions and management work together in projects initiated by trade unions that give employees the opportunity to transform their organisation into a green workplace. The projects have a practical approach and have so far indicated that both employees and employers are enthusiastic about greening their workplaces. This enthusiasm has led to learning effects and suggestions for improvements, particularly for energy savings.

It also has to some extent been possible to establish joint employee–management committees, which act together and ensure the influence of trade unions. The result is a ‘win–win’ situation results for all groups, where the involvement of employees can lead to substantial savings (for example, in energy consumption).

Role and opinion of social partners

Employers’ associations in the UK are not involved in the projects and do not see a need to be involved. The reason for their lack of participation is that the project is seen as a trade union matter and the relationship between trade unions and employers in the British system of industrial relations is generally conflictual rather than cooperative. However, the employers’ associations see the projects as a good idea since one of the aims of the projects is to help reduce costs. With no direct link to the associations but also no opposition from them, the TUC-led project has resulted in a direct involvement of employers. The management of those organisations committed to a GreenWorkplaces project also participate directly in the project.

On the union side, the TUC’s GreenWorkplaces projects are seen to actively engage unions in the challenge of climate change by promoting sustainable practices and policies at work. Trade unions have a strongly positive view of the GreenWorkplaces projects. The pilot projects have demonstrated that trade unions could play a key role in mobilising workplace concerns about the challenge of climate change. All projects were union-led and were effective in building capacity to extend the trade union consultation agenda to include environmental issues (TUC GreenWorkplaces, 2010a).

Examples of GreenWorkplaces

Great Ormond Street Hospital for Children

The Great Ormond Street Hospital for Children National Health Service Trust (GOSH) is a national centre of excellence in the provision of specialist children’s healthcare. The hospital employs approximately 3,600 people and emits 14,160 tonnes of CO₂ per year, including energy, water, waste, transport and staff commuting (2005–2006 baseline). It has set

an initial target of a 15% reduction in its carbon emissions between 2008 and 2012 (equivalent to 2,124 tonnes of carbon)¹⁶ and has set up a GreenWorkplaces project to help it reach this goal.

The GreenWorkplaces project at the hospital was initiated at the request of the public service union UNISON branch at GOSH, where a union member identified the potential for a more systematic approach to energy saving and cutting resource use in the workplace. This was also seen as a way to get employees more interested in union tasks and the project presented an opportunity to ensure workforce involvement in the hospital's sustainability strategy. Management saw the initiative as a good way to reach the carbon reduction target and to get staff more involved in the hospital's environmental goals.

Joint consultations with the environmental services manager took place and the unions carried out a staff survey in April of 2009 on workplace environmental issues to find out which issues employees thought should be prioritised. The survey revealed that 90% of respondents showed an interest in becoming environmentally active through attending training or conducting energy walk-rounds of their departments. A green fair was organised by union representatives where employees could sign up for the two-day training sessions provided by the TUC's national GreenWorkplaces team; demand was very high, with 100 people applying for 40 places.

Building on recommendations from the training sessions and ongoing workplace consultations in the staff involvement forum (SIF), a new joint environment committee (JEC), including senior management and union representatives, was established. The 30-member committee is chaired by the UNISON branch secretary and includes people from a range of occupations. It meets every six to eight weeks. Its remit is agreed by the Trust's management board and all members are granted reasonable time off to conduct official committee business during work hours and to carry out environmental audits.

The main focus of its work is a rolling programme of environmental audits of every department, which uses environmental checklists designed by the committee. Every department is visited for a walk-round and its green strategy checked. The green strategy includes tasks such as recycling, reducing heating costs and switching off energy-using products such as lights when not needed. The committee then makes suggestions to management on how to improve each department's performance and provides best practice examples. It is planned to have a check-up later next year to see if the departments have implemented these suggestions and initiate management follow-up where there are no changes.

Leicester City Council

Leicester became the UK's first 'Environment City' in 1990 and was one of 12 cities worldwide invited to attend the Earth Summit in Rio de Janeiro in 1992. The city's environmental policy supports the goals of:

- reducing its CO₂ emissions and energy use by half by 2025 compared with 1990 levels;
- creating a better local environment;
- using natural resources wisely.

¹⁶ This is in addition to a 62% reduction in emissions resulting from the installation of two combined heat and power (CHP) units (TUC GreenWorkplaces, 2010a, p. 13).

The policy emphasises the need to include all actors in the process. Since 2008, the city has had an Environment Network of volunteer staff from across the council to help promote environmental messages within the workplace and to deliver campaigns such as:

- ‘The Big Switch Off’ (energy saving);
- ‘The Big Paper Cut’ (to save paper);
- ‘Breathing Space’ (to encourage car commuters to use alternatives).¹⁷

These measures provided an ideal setting for developing a GreenWorkplaces pilot project and UNISON representatives held preliminary meetings in October 2008 with management. Two other unions, GMB and Unite, joined later, putting the project on a very broad basis. For the unions, the project offered an opportunity to work with the council to improve environmental performance, with resource efficiency providing an alternative to service and budget cuts.

There was immediate interest among employees in the project, in part since they had been involved for many years in environmental topics. Management also had a strong interest in reducing the carbon footprint and welcomed the support from the unions. There were financial incentives for management to achieve specific carbon-reduction goals as well as an awareness that financial savings could be achieved through environmental improvements.

A UNISON branch member at Leicester City Council further explains the importance of a mediator between employer and employees when summarising the motivation:

The two parties have common interests: The city council was the first environmental city in the UK; the workers are quite keen on energy saving and saving the environment. [...] The union also feels strongly about this and provides resources to help spread the word across the workforce. But the management side has trouble in fully engaging the workforce and so the union got involved to help promote the green agenda across its entire membership and to encourage new members to join. It benefited everybody in the end.

Following a programme of training courses and joint workshops, management asked the unions to put together a proposal for regular union involvement in the council’s environmental management activities. The unions set up a network of green reps across council services to engage in negotiations with the employer for facility time for green reps, though it was concluded that the green reps could only commit as much time to these activities as their supervisors voluntarily granted them.

All participants see considerable potential in widening the scope of the project to cover all aspects of the council’s service delivery and to provide an opportunity for further union involvement. However, the council has recently been forced to make massive savings in the budget, which might threaten staffing levels, thereby forcing a switch in priorities to saving jobs.

¹⁷ See Leicester City Council (2009).

Green Workplaces – evaluation and recommendations

The GreenWorkplaces project is a good practice example of a joint project implemented by both trade unions and management. The two stakeholders work together in projects initiated by trade unions, which give employees the opportunity to transform their workplace into a ‘green’ workplace. The results of the practically oriented projects indicate that both employees and employers are enthusiastic about greening their workplaces. In a few cases such as the pilot project at GOSH, a joint employee–management committee (JEC) has been established, which acts together and ensures the influence of trade unions. This example is a noteworthy outcome of social dialogue practices in the field of greening the economy, especially given that JEC members are granted time off during working hours for environmental activities.

As a future goal, the trade unions want to institutionalise and extend the involvement of employees that already exists in the pilot projects. A key demand by the TUC is for a statutory right for trade union environmental representatives to take a reasonable amount of time off during working hours to promote environmentally sustainable workplace initiatives and practices, to receive appropriate training¹⁸ and to be consulted on workplace environmental policies, practices and management systems; union representatives should also have the right to inspect their organisation for energy efficiency. The TUC is clearly trying to strengthen the common rights of employees – a move which, if successful, would have an effects on the system of industrial relations.

Another union goal is to introduce a network on greening the workplace (see Pearson, 2010). This network could be in the form of a single online database listing all GreenWorkplaces projects, publicising their idea not only nationally but also on an international basis.

The initiative has been positively perceived by its project partners. Moreover, GreenWorkplaces has the capacity to green every workplace throughout the UK economy. The projects encourage the involvement of employees, trade unions and managers in greening the economy in a country marked by a weak tradition of social dialogue. A main success factor lies in the benefits from the participation in the project for each actor. While employees are mostly helping to save energy costs or to reach company targets, they are also empowered to participate in the workplace. Trade unions on the other hand can foster their environmental role.

However, there is a problem with a union-led project when the collective actor representing employees is missing in organisations because they are not unionised. In such organisations, the prerequisite for interaction is missing and hence projects are unlikely to be implemented. Another limitation of GreenWorkplaces is that many workplaces can only be ‘greened’ to a limited extent. Major changes, such as fundamental alterations in production processes, or reviewing a company product that might be harmful to the environment, are difficult to change.

Network Resource Efficiency – Germany

This is an example of an initiative based on social dialogue structures and reflects the targets announced in Germany’s Green New Deal. This is a new political concept for the ecological modernisation of industrial production, focusing on climate change and resource efficiency in order to make Germany the most resource-efficient country in the world.

¹⁸ The TUC is calling for a minimum 10 days of accredited training for green reps in the 12 months immediately following their election or appointment.

The concept of Network Resource Efficiency (*Netzwerk Ressourceneffizienz*) was originally drawn up by the trade union, IG Metall, and the German Federal Ministry for the Environment, Nature Conservation and Nuclear Safety (BMU) with the aim of increasing efficiency and reducing the demand for raw materials in support of the Green New Deal. BMU had realised that, according to the then environmental minister Sigmar Gabriel, ‘for quite some time identical goals have been shared by trade unions and environmental policy’ (Gabriel, 2009).

The 2001 revision of the Works Constitution Act gave works councils the opportunity to play a special role in the debate and implementation of resource efficiency (‘Innovation for the Environment and Jobs’). With this in mind, Network Resource Efficiency was founded in March 2007 by BMU, IG Metall, the Federal Environment Agency (UBA)¹⁹ and the Confederation of German Trade Unions (DGB). In addition, a number of research institutes, consultants and associations belong to the core group of Network Resource Efficiency. The federal government, unions, industry, various associations and researchers are working together to develop a concept for more efficient resource usage and to generate suggestions for a framework that creates incentives for and removes barriers to energy efficiency.

Network Resource Efficiency offers an open and educative structure, which helps to include employees in resource efficiency processes – particularly in small and medium enterprises (SMEs). One of its main objectives is to provide information on the relationship between resource conservation, innovation and employment. It does this by means of a number of approaches:

- providing a permanent base for fostering resource-efficient use of products and services in production, retail and consumption;
- spreading a greater understanding of the importance of resource conservation;
- bundling the ecologically-oriented industrial and innovation policies of different actors including political parties, business, associations, trade unions and society;
- co-ordinating the activities of different actors, by – for instance – initiating the exchange of experience on successful applications for efficient resource use and developing proposals for the design of framework requirements that provide incentives and reduce barriers.

In order to achieve these goals, Network Resource Efficiency organises regular network conferences to provide information and help to SMEs, offer support in implementing efficiency measures,²⁰ provide information about funding options for innovative technologies, create links within regions and sectors and present successful examples of companies. It also organises expert meetings on special topics and information campaigns aimed at the public. In addition, it has developed an internet platform for resource efficiency.

¹⁹ The Federal Environment Agency is Germany’s central federal authority on environmental matters. Its key statutory mandates are to provide scientific support to the federal government, implementation of environmental laws and information to the public about environmental protection.

²⁰ Efficiency measures are concerned with the efficient employment of materials, water and energy as well as the economical use of space. Different measures are available depending on the industry, product or production stage. Starting points for resource efficiency may include a better product design, development concepts for reducing material use, or criteria for raw material selection. An ecological product design aims, for example, to incorporate parameters such as: recycling-friendly product design; low material input and low energy and water consumption during the utilisation phase of a product; and long product life.

In addition, under the initiative ‘Material Efficiency and Resource Protection’ (MaRes),²¹ the network supports more than 30 scientific research projects on resource efficiency through the conceptualisation and financing of studies dealing with specific questions. Financing is allocated by BMU through the framework of Network Resource Efficiency. The network itself does not provide financial support for individual companies to implement resource efficiency measures.

The role of social dialogue

In the context of environmental protection, the German approach has been extended to several environmental dialogues.

Network on Resource Efficiency is an example of an initiative based on social dialogue structures and can be considered as part of a Green New Deal in Germany. The network involves the social partners in the multi-stakeholder network (for the most part successfully) and is therefore seen as a good practice example for introducing and diffusing environmental innovations.

The trade unions joined the network with the goal of making workers and the public aware of the value and scarcity of resources. The potential for savings was seen above all in the use of resources in the metalworking, electronics and textile industries as well as in the artisanal sector. Here, works councils can play a key role. Working with management and technical experts, work councils are urged to:

- determine the potential for savings in the use of resources;
- discuss how improvements in resource efficiency can be permanently integrated into production processes.

Although none of the umbrella associations of employers was represented in the network, some of the sectoral associations are included. Since the network is open to all interested parties, there are no formal barriers to membership. Many companies have participated, either to present measures they have taken, or as observers.

Participation is voluntary; the network depends on the willingness and interest of management and works councils, and therefore will not reach the standard of legally secured co-determination.

Role and opinion of social partners

Works councils play a key role in the initiative since they have in-depth knowledge through practical experience with managerial and production processes, and can therefore suggest new sources of efficiency within the company. A target was therefore to develop involvement mechanisms – for example, in the context of employee suggestion programmes or working groups. A particular goal of works councils is to encourage regular discussions between management and the works council on resource usage. This should help ensure that short-term profit goals do not dominate and that long-term competitiveness and job security receive greater weight.

Trade unions consider the project as an important way to establish social partnership and stakeholder dialogue on various sectoral levels and within single companies. The academic project leader of the network concluded in an interview for this study on the role of the unions that ‘the ecological industrial policy was driven very strongly by the unions – especially in light of the recognition that cost savings can save jobs and cutting back on resources is better than cutting back on people.’

²¹ The aim of MaRes is to achieve substantial scientific progress in four areas central to increasing material efficiency and resource conservation: measuring the potential for increasing resource efficiency; developing policies for target group-specific resource efficiency; improving knowledge about the impact of measures at organisational and economic levels; and scientific observation of implementation and agenda-setting as well as of communication of results to target groups.

The employer associations also view the initiative positively, as seen in the example below of sectoral dialogue in the aluminium industry.

Examples of Network Resource Efficiency projects

Social partnership-based sectoral dialogue in aluminium industry

In the German aluminium industry, the trade union IG Metall and the aluminium trade association, GDA (*Gesamtverband der Aluminiumindustrie*), in cooperation with BMU, have initiated a series of dialogues on increasing resource efficiency in the context of producing, processing, using and recycling aluminium.²²

The goal of the sectoral dialogues, which have been taking place since 2008 in the aluminium and machine-tool industries and in the area of cross-cutting technologies, is to explore options for joint action by the social partners and to develop a programme for providing practical information and innovative approaches to resource efficiency (IG Metall et al, 2007a). Through expert dialogue, works councils and managers can raise awareness of the topic of resource efficiency; on the basis of the results of these dialogues, strategies for works councillors can be developed and joint activities with management suggested.

The organisation of the sectoral dialogue in the aluminium industry is by far the most corporatist of all the network's projects. It is distinguished by the high degree of interest on both sides in the dialogue. Both groups understand the dialogue as a partnership.

As set out in 2009, IG Metall had two key reasons for joining the dialogue (International Aluminium Journal, 2009):

- to encourage innovative approaches to resource efficiency in aluminium by means of a joint dialogue process in the industry;
- to reduce the relocation and employment reduction problems that result from increasing costs.

The metalworkers' union also believed that more cost efficiency in the use of resources could yield the following results:

- reduce the increasing pressure on labour costs;
- improve knowledge on sustainability;
- encourage life-cycle thinking among works councils and employees.

GDA noted that the dialogue could increase the acceptance of aluminium and influence the behaviour of consumers, thereby safeguarding employment and production sites. In addition, the employer side believes that employees influence resource efficiency both through their behaviour at the workplace and as consumers, and that dialogue could improve their involvement.

²² Information on the social partnership-based sectoral dialogue in the aluminium industry can be found at <http://www.aluminium-ressourceneffizienz.de/download.htm>.

There was another reason for social partners in the aluminium industry to participate in the resource efficiency network – to safeguard the very existence of the aluminium industry in Germany, given that some of the positions taken in debates on energy policy at times seem to suggest the need for very heavy restrictions on sectors with high rates of CO₂ emissions.

There were a number of topics of the work packages of the social dialogue sector partnership:

- preparing information on the production and use of aluminium products and recycling;
- exchanging experiences of employees and decision-makers (at dialogue events on the sustainability of aluminium products) and on the building of networks and partnerships within the industry (including its social partners);
- developing and implementing innovative tools for a better understanding of the overall material flow of aluminium (for example, through employee suggestion systems and other incentive schemes);
- producing educational materials for internal environmental education or training, and qualifications on ecological impacts;
- presenting and discussing results with external actors, also with regard to potential synergies and product-oriented environmental policy measures.

There is an emphasis on using the raw material aluminium optimally, closing material cycles, avoiding loss of material along the value chain from raw material extraction to finished product, and most of all, factoring in the utilisation phase of products into the environmental analysis. Such an analysis may lead to the following measures being implemented:

- scrap management along the whole value chain (in-house recycling as well as correctly sorted recirculation of scrap);
- heat recovery;
- improved burner/furnace technology;
- load-dependent operation of power plant;
- optimum use of operating materials (rolling oil, cooling water).

Two dialogue workshops, a detailed questionnaire survey of employees in 10 companies with more than 15 locations, and expert interviews have been conducted.

Results of the first dialogue workshop

- Presentation of best-practice examples by works councils and management representatives; employee suggestion schemes and a training module on resource efficiency
- Agreement to systematically include the topic of idea management and continuous improvement process in companies
- Better access to information on resource efficiency
- Better and clear explanation of complex concepts

Results of the second dialogue workshop

- Emphasis on value-added chains and the product life cycle in everyday activity
- Enhanced learning among workers and between workers and the company
- Implementation of bottom-up processes for making use of workforce competencies (technical improvements)
- Social and organisational innovations for improving resource efficiency
- Develop a political framework for proactive communication of the needs of the aluminium industry

It is not possible to give an exact indication of the participation rate of companies, but all the information and services are offered to the more than 100 members of GDA. Presentations and posters for use within companies are being prepared and tried out in a test phase in some companies. The resulting materials will also be available for use for initial and further training within companies. It is also hoped to make the results available on the internet.

Training project: 'Resource efficiency at the company'

To further educate trainees, a working group was established to deal with the topic of resource efficiency in training. The Cooperation Project on Resource Efficiency for Works Councillors and Employees (*Kooperationsprojekt Ressourceneffizienz für Betriebsräte und Beschäftigte*, KoReBB) deals with the need to involve works councils and employees in the resource- and energy-efficient design of work and production processes.

The project started in May 2008 and will run until April 2011. It was initiated by the trade unions through DGB Bildungswerk (DGB's educational institution), which applied for funding from BMU under the framework of the Network Resource Efficiency. The cooperation between the rest of the network and this project is loose, and work on it takes place mainly within DGB Bildungswerk.

The main goals are the clear involvement of workers and their representatives in resource efficiency and the definition of participation as a driver for resource efficiency. According to DGB executive council member, Dietmar Hexel, the topic offers works councils a new field for political activity and influence (Hexel, 2008, p. 30). The employers' associations are not involved in this project – only the managers of the companies.

The ultimate goal of KoReBB is to train employees and members of works councils to identify and implement ways to improve energy efficiency. A multiple-phase project flow has been developed to achieve this. The first step is to offer cross-sectoral informational events, frequently in cooperation with local trade unions, within an area of roughly 100 km of a project. As well as giving details of the projects, these cross-sectoral workshops help to determine action and training priorities as well as training needs for works councillors. The second step is to hold regional or sector-specific events focusing on the needs and interests of a region or sector. Such events also often showcase best-practice examples.

About 1,000 participant days have been organised since Network Resource Efficiency was set up. The exact numbers of participants in an event are not recorded but, depending on the topic and type, 10–150 people generally participate. The small group events are workshops lasting several days, which also cover other topics.

There is also direct cooperation with companies. In this training phase, the focus is on the identification of specific training needs in resource efficiency and implementation of this training not only for works councillors and employees, but also for managers. A crucial requirement for the training project is that management agrees with and finances the training measures. Another requirement is interest by the works council in implementing resource-efficient restructuring.

It has not proved easy to find companies that meet these two criteria. The company-specific training materials for resource-saving are developed and provided by DGB Bildungswerk, sometimes in cooperation with a technology consultant. Training in the pilot companies in the past has concerned, for example, operational projects such as influencing the design of construction projects, installation of grey water use in refurbishment projects, preventative maintenance as a feature of efficiency planning, thermal aspects/photovoltaic cells and green information technology (IT).

The training modules to these areas are classified according to the education level and position of the employees in the company. Currently nine pilot projects in three sectors are being tested.

Network Resource Efficiency – evaluation and recommendations

This case study demonstrates how social dialogue can contribute to environmental innovation and environmentally sustainable methods of work organisation in companies. The primary goals of the multi-stakeholder network are to establish resource efficiency as an important topic and to support its implementation at the levels of production, products, business processes and consumption – also with regard to the political framework. Activities to achieve these goals include:

- providing information;
- networking and exchange of experiences;
- identifying of areas for action;
- pilot projects;
- transfer and diffusion of resource-efficient solutions;
- agenda setting for the public;
- interacting with other networks in Germany.

Network Resource Efficiency highlights the potential of social partnership in the area of ecological sustainability to involve employees in developing new, ecologically more friendly production concepts.

On the issue of improving resource efficiency there is a far-reaching consensus between the social partners. Here, a classic win-win situation has emerged for the compatibility of economy and ecology, from which not only the environment and workers but also companies profit.

Success factors and limitations in regard to the impact of social dialogue

Network Resource Efficiency is a good-practice example of the contribution of social dialogue to environmental innovation and environmentally sustainable methods of work organisation in companies. The case study incorporates numerous approaches used by social partners to achieve their common goal of increasing resource efficiency and hence the greening of workplaces.

Some of the critical success factors and problems faced by Network Resource Efficiency in its implementation phase are highly interesting in answering the question as to whether, and in what way, social dialogue can have an impact on greening the economy.

The social dialogue in the aluminium industry was particularly successful because both social partners saw potential for a win–win situation and generally felt they were acting in concert to sustain the aluminium industry in Germany. Another success factor was the keen interest of workers in environmental issues and the fact that the employer took their input very seriously. A lack of competencies in technical and organisational implementation is cited as a reason why workers and their representatives have limited involvement in ecological questions; the approach of the network – with its various training, learning and exchange concepts – directly addressed this issue. The network highlights the possibility of successful forms of cooperation between various actors in the field of the ‘greening’ of jobs through resource efficiency on a national and sectoral level. It extends this approach to the environment (a rather new topic) and hence creates innovative political governance structures in the form of a stable network.

However, an open voluntary network will not reach the standard of legally secured co-determination. Participation depends on the cooperation and openness of works councils and management, and financial support from the latter. The training project ‘Resource efficiency at the company’ has found that not all companies and works councils felt the need to introduce training for employees on ecological issues; a company will not necessarily volunteer to green its workplaces if there is no compulsion.

Another issue is the degree of interest by works councils in environmental protection. Their interest will depend mainly on whether environmental protection plays an important role in the company and whether employees personally see environmental protection as an important issue. Many work councils still see their chief priority as representing social interests. However, it was detected that many employees are interested in getting involved and are willing to make valuable suggestions regarding resource usage in companies with an employee suggestion scheme.

Joint training fund collection agency (OPCA) – French construction industry

What is OPCA?

The Environment Round Table (*Grenelle de l’Environnement*) is an important example of the green initiatives implemented in France as it brought together in 2007, for the first time on this issue, political, social and civil spheres that were once separated. Another example is the national sustainable development strategy for 2010–2013 adopted in July 2010 (Ministry of Ecology, Sustainable Development, Transport and Housing, 2010), which was drawn up by the government after discussions between all civil society stakeholders. After consultation set up by the Environment Round Table at the request of its participants, the government created a follow-up committee, the National Committee on Sustainable Development and Environment.

Within the system of industrial relations in France, negotiations between social partners take place at the interprofessional level, and at branch level in companies with union representatives or elected employee representatives. There are also tripartite negotiations, such as the procedure involving the systematic consultation of social partners by the government.

The composition of many institutions in France (for example industrial arbitration courts or executive job associations) is based on the parity principle. This also applies to the bodies responsible for continuing vocational training such as the Certified Joint Collecting Body (OPCA) for the construction sector, which was created in 1995. Like other OPCAs, it is the result of the law of 16 July 1971, which established the mandatory financing of continuing training by companies. The construction sector, which had already adopted the joint management of apprenticeship under the auspices of the Central Committee for the Coordination of Apprenticeships (CCCA) in the building and public works sector, chose to apply the parity principle to the training association created following the national interprofessional agreement of 1970 and the law of 16 July 1971. The training associations were transformed into OPCAs during the reforms of 1993–1995.

OPCAs collect taxes from companies and use this money to fund training programmes for workers. Pooling of resources between companies of different sizes is possible. Funds are allocated according to priorities set by the OPCA's board and not according to each company's contribution. For companies with more than 20 employees, this tax is 1.6% of the payroll broken down as follows:²³

- 0.2% for the individual study leave system (managed by a separate dedicated employer/union organisation);
- 0.5% for contracts and periods to professionalise an occupation (managed by OPCA),
- 0.9% under the training plan (may or may not be managed by the OPCA, as the company can choose).

The construction OPCA covers companies with more than 10 employees.

OPCAs at the company level

Companies choose training for their workers from a list established by their AREF (the regional antenna of the OPCA). The company is either refunded by the AREF or the AREF pays the training provider directly.

The role of unions at company level in the field of training is complex. The law encourages management and unions to sign agreements on training, and works councils must be informed of and express their view on the company's training plan. But, in general, the management is not tied by the wishes and demands of the unions and workers' representatives.

Framework within which construction OPCA operates

The OPCA for the construction industry is at the heart of the joint employer–union system and is made up of several bodies:

- the national joint employment commission (*Commission Paritaire Nationale pour l'Emploi*, CPNE);
- the regional joint employment and training commission (*Commission Paritaire Régionale de l'Emploi et de la Formation*, CPREF);
- the regional joint association for the development of training in the construction industry (*Association Régionale paritaire pour le développement de la Formation continue dans le Bâtiment et les Travaux Publics*, AREF-BTP);
- professional group for continuing education in the construction industry (*Groupement professionnel paritaire pour la Formation Continue dans les industries du Bâtiment et des Travaux Publics*, GFC-BTP), which is the technical arm of the OPCA.

National joint employment commissions (CPNEs) take decisions and define priorities, while OPCAs take decisions concerning the use of funds for their sector. Regional joint associations (AREFs) advise companies and provide funding for training courses, while regional joint employment and training commissions (CPREFs) bring together national orientations and regional policies. CPNEs, CPREFs and AREFs are all joint employer–union bodies.

²³ It is 0.9% for companies with fewer than 10 employees (funds intended for the training fund for employees in the building trade – *Fonds d'Assurance Formation des Salariés de l'Artisanat du Bâtiment*, FAF-SAB) and 1.05% for companies with 10–19 employees.

How joint labour management bodies function

The construction OPCA is run by a board of 20 members (10 representatives of employers' organisations and 10 representatives of trade unions) composed according to parity representation. Each AREF board has the same joint representation.

As pointed out by Frémeaux (1999), 'the emergence of a controlling majority in any co-management body necessarily presupposes an alliance between employer representatives and one or more unions.' For a long time Force Ouvrière (FO) was the trade union partner that allowed co-management institutions to function effectively. According to Jean-Marie Luttringer:

The five organisations are (to a greater or lesser degree) reformist today, following the example set by FO right from the outset, influenced by German trade unionism. In any case, all five of them are involved in collective bargaining and the joint management of vocational training policy.

(Luttringer, 2008)

The interview partners questioned for this case study referred to this consensus-seeking tendency and the fruitful nature of debates in joint bodies. In terms of green training, this seems logical: it is in the interest of companies to seize new markets and in the interest of unions to defend jobs by encouraging workers to continuously adapt their skills to changing demands.

OPCA actions for 'green growth'

For several years, the adaptation to new techniques, new technologies, new building systems and changes in behaviour linked to the environment have been an integral part of the priorities set by the construction CPNE. This is reflected in the priority given to the funding of training courses of this type by OPCAs, particularly in the construction OPCA, as well as improved funding.

In the construction industry, the greater focus on the environment has led to the creation of very few new professions.²⁴ It is the traditional professions that have developed, without any changes to the conventional classification of employees who receive training.

Green training courses should not be the only indicator of the shift that has occurred in terms of the content of OPRA-funded courses. It is also not possible to quantify accurately the addition of environmental protection content to traditional training courses.

Examples of some of OPCA's innovative measures are given below.

²⁴ The new functions linked to the environment are positions such as quality, safety and environment (QSE) coordinator, for which companies recruit qualified applicants (holding a minimum of a two-year diploma), and thermal renovator.

Examples of OPCA in action

Funding the R&D Concerto project in Lyon

The OPCA-GFC-AREF group's research and development (R&D) programme explores innovative construction and training methods to identify best practice and to pass this on to the entire OPCA network.

Concerto is a European Commission programme, divided into 18 projects, which aims to promote energy savings, the development of renewable energies and energy storage in 45 communities across the EU. It produces a documented analysis of each trial to generate energy and manage demand, and is particularly interested in high-quality environmental buildings with a local energy management system.

In the case of the Lyon community, the role of AREF-BTP Rhône-Alpes has been to prepare training courses for the companies involved, in consultation with the local energy agency (ALE) and the Rhône department's construction industry employers' federation.

An original learning approach was used to motivate building workers. The transfer of skills was fostered by mixing employees from different trades and encouraging them to learn from the personal experiences of others and by identifying problem situations in order to trigger learning. The main training themes were:

- insulating buildings from the outside;
- removing thermal bridges;²⁵
- the air-tightness of building façades.

Besides the skills aspect, the training aimed to develop the 'professional identity' of trainees by making them aware of the impact of their individual task on the characteristics of the whole building. The idea behind this is that professional identity fosters workers' involvement in their job and therefore improves the company's overall skill base. About 25 companies were involved in the project in Lyon.

Successful training through FEE Bat

Training on energy-saving for companies and artisans in the building trade (*Formation aux économies d'énergies des entreprises et artisans du bâtiment*, FEE Bat) is a nationwide state-backed plan to train building companies and workers in the different trades involved in achieving energy savings. It was launched at the end of 2006 by the employers' association the French Builders' Association (*Fédération Française du Bâtiment*, FFB) and Electricité de France (EDF, the main electricity provider in France) and has been operational since the end of 2007.

²⁵ Thermal bridges are created when materials that are poor insulators come into contact, allowing heat to escape at a higher rate to the surrounding area.

FEE Bat consists of three modules.

- Module 1 explains the key factors of a comprehensive approach to improve the energy performance in buildings.
- Module 2 describes the tools to be used for this comprehensive approach and the measurement of energy performance.
- Module 3 considers the knowledge, mastery and use of efficient technologies to improve energy performance in buildings.

Modules 1 and 2 are designed for company directors, trade workers, project managers and general supervisors. Module 3 is intended for those personnel carrying out the work.

The initial objective was to train 50,000 people; 22,000 were trained in 2008 and 2009. The 2012 target is to train 120,000 people.

Funding was initially provided by energy-saving certificates (in partnership with EDF). For 2011 it is planned that the OPCA will help to fund 98,000 new trainees.

The large numbers of employees receiving training is the main reason why FEE Bat is mentioned as a good-practice example. The organisation's readiness to join an employer-funded initiative is a clear sign of the good climate of industrial relations in the construction industry.

Role and opinion of management and unions

In an interview for this study, the FFB training director stated that 'the building trade is taking up the challenge of environmental protection just as it has taken up many other challenges in the past.' OPCA's environment-related initiatives are therefore assessed like any adaptation to market changes. Accordingly, there was no need to change the market analysis or decision-making structure for training funding. He also felt that, with the exception of FEE Bat, there is no need to create new systems as there are already a lot of them. No-one interviewed identified any noteworthy impact by green training on working conditions in the sector.

Although the entire training course system has not yet been assessed, general opinion is positive, given that it meets its broad objectives. The FFB training director commented:

The organisation that construction industry professionals have developed in the field of vocational training is generally regarded as original and efficient by the authorities.

(Luttringer, 2010. p. 56)

Philippe Dole from the state body, the General Inspectorate of Social Affairs (IGAS), fully agrees:

The tradition and vitality of co-management is also underscored by all the members of the building trade OPCA [...] interviewed by the mission, and presented as assets both in the internal plan and in its dealings with institutional partners.

(Luttringer, 2010)

Evaluation and recommendations on OPCA

Impact on branch competitiveness and initiative's success factors

In the construction industry, a company's level of competitiveness is not likely to be hampered by investment in green skills. If the owner or a potential client demands ecological characteristics (that is, more than legal standards), competitiveness stems from the company's capacity to implement environmentally friendly building methods. If such demands are not made, its capacity to implement these building methods has no impact on its competitiveness.

In France, the minimum expenditure on training is defined by law. If companies wish to spend more, it is their choice. Such a choice is unlikely to impair their competitiveness. The risk would be that only the major players would acquire green skills and thus be competitive in 'green' tenders since they can invest in training more easily than SMEs. The OPCA initiative can therefore be seen as helping to improve the sector's competitiveness – provided of course there is substantial 'green' demand.

The initiative's success factors are as follows.

- Tax incentives to renovate existing buildings complement green training.
- Tax incentives for final consumers and more stringent energy consumption standards are themselves incentives for companies to 'green train' their workers.
- The procedure by which training sessions are selected ensures that training matches each company's particular needs, and at the same time, the demands of social partners.
- The AREF network ensures closeness between SMEs and training organisation resources.

Success factors and limitations in regard to the impact of social dialogue

The traditional joint structures were efficient and able to adapt training in new green techniques. Some new systems were created, the most significant of which is FEE Bat. Initially, FEE Bat was not carried out by social partners; instead OPCA with its traditional joint structure joined the initiative and then adopted the green dimension.

The training orientation scheme has successfully anticipated the clear shift towards 'green skills'. The co-managed construction industry training system has given employer and union representatives the opportunity to prove their ability to construct more environmentally friendly buildings. This is the most obvious element making the building OPCA case study a good practice example of the involvement of social partners in the transition towards a green economy.

The OPCA case study demonstrates that unions can contribute to ensuring the quality of greener ways of production and work by being part of decisions on training. This is usually not the case at the company level in France. The unions have been able to participate in decision-making because industrial relations at (national) branch level established a joint decision process before it was required by law.

In France, unions have hardly any influence on decisions made at company level. Social dialogue can only contribute to environmentally sustainable ways of working when employers are willing to take unions' proposals into account. This is more likely to happen when unions have developed expertise on the issue in question.

Eco-vouchers – Belgium

What is an eco-voucher?

Belgium has a strong tradition of social dialogue and indeed can be considered a model for social dialogue, providing a benchmark for other European countries. Specific institutions have been set up, exclusively devoted to environmental questions, and other bodies have areas of responsibility covering sustainability concerns.

The formal institutions set up in Belgium as environmental consultation organs, or which play a role in the policy field, include:

- Federal Council for Sustainable Development (CFDD) and its regional offices;
- economic and social consultation bodies;
- Central Council of the Economy;
- National Labour Council (CNT).²⁶

In addition, a number of initiatives have been established with social partner participation in the building industry.

Among the various initiatives, eco-vouchers are one of the most recent and interesting developed by social partners in Belgium. Eco-vouchers (also known as ‘ecocheques’ or ‘green vouchers’)²⁷ were officially launched in July 2009 as purchasing vouchers for environmentally friendly and sustainable consumer products. The eco-voucher is based on an incentive system with the aim of transferring social benefits to workers. The voucher system is well-established in Belgium, where employees often receive non-wage benefits like ‘restaurant vouchers’²⁸ or ‘gift vouchers’ for cultural or sports activities.

In practice, employers distribute eco-vouchers to their employees who can then purchase certain products listed as ‘green products’. Eco-vouchers were issued by employers up to a limit of €125 net per employee in 2009 and €250 per employee in 2010. Each eco-voucher has a maximum value of €10. Combinable and valid for two years, they can be used to make sizeable investments.

²⁶ CNT is a formal bilateral dialogue body between the union organisations and employer federations. It is formed on the basis of equal labour/management representation with a maximum of 26 members. Its main role is to provide opinions and make proposals on social issues for the attention of the Belgian government and/or Parliament. It also provides opinions on conflicts of jurisdiction that may arise between the joint committees. Under the Act of 5 December 1968, CNT has the power to conclude collective bargaining agreements for all sectors of economic activity, or for one of these sectors.

²⁷ ‘EcoCheque®’ if the voucher is issued by Edenred (Accor Services) and ‘Eco Pass®’ if it is issued by Sodexo.

²⁸ Lunch pass (Sodexo), ‘Ticket Restaurant’ (Edenred).

An open-ended list specifying their use was defined by Collective Bargaining Agreement No. 98. Products and services that can be purchased with eco-vouchers can be divided in six main categories:

- products bearing the EU Ecolabel;
- products and/or services relating to energy savings;
- products and/or services relating to water savings;
- products and/or services relating to sustainable mobility;
- products that limit waste generation;
- environmentally friendly and sustainable products.

In general, eco-vouchers have the following direct and indirect objectives.

- The eco-voucher will improve the purchasing power of employees while simultaneously promoting the purchase of ecological products and services (Graines de Changement, 2009).
- This development will have a stimulating long-term impact on employment.

Eco-vouchers defined in collective bargaining agreement

The idea of eco-vouchers emerged during negotiations in preparation for the general multi-industry agreement (GMIA) of 22 December 2008 for the period 2009–2010. The concept was stipulated in Collective Bargaining Agreement No. 98 of 20 February 2009 concluded at the National Labour Council and made compulsory by the Royal Decrees of 14 April 2009 and 28 June 2009.²⁹ The agreement sets out the extra-fiscal framework for the eco-vouchers and the conditions determining how the eco-vouchers can be used. The vouchers are not a source of remuneration and are deducted from employer contributions and employee taxes.

Conditions for eco-voucher use

The following conditions have to be met if eco-vouchers are to serve as a tax relief.

- Eco-vouchers may not be exchanged for cash and must be used solely to purchase goods and services on the list appended to the collective bargaining agreement.
- Eco-vouchers can only be granted through a collective bargaining agreement concluded at sector or company level (if necessary, the collective bargaining agreement may be replaced by an individual agreement in writing).
- Eco-vouchers must contain certain information, such as the name of the voucher holder, the year the voucher was issued, the amount, the 24-month period of validity, etc. If none of these elements is indicated on the voucher, it cannot be considered an eco-voucher.

²⁹ Preceded by National Labour Council Opinion No. 1.675.

The system of eco-vouchers appeared in a crisis context, as a pragmatic response to worker demands for wage rises and an improvement in their purchasing power. The system was also considered a method of avoiding the wage norm, that is, to provide a net wage rise for Belgian workers without harming the country's competitiveness and ultimately entailing any changes in employment terms.

The social partners – main actors behind eco-vouchers

Because the system of eco-vouchers is not a public initiative, public authorities do not play a determining role and their impact on any final decisions remains limited or even irrelevant. Public authorities play a purely advisory role, as all decisions are taken at the National Labour Council level.

The entire system of eco-vouchers is regulated by social dialogue and requires prior negotiations on a collective bargaining agreement at sector or company level. More specifically, eco-vouchers can only be distributed by the employers after a collective agreement or an individual agreement comes into force.³⁰ The agreements are signed by joint committees (currently there are 172) and must specify the total number of eco-vouchers, the value of each eco-voucher and the frequency at which they are distributed during the year.

Under Collective Bargaining Agreement No. 98, eco-vouchers were created for an unspecified and open-ended period. Article 4 of the Agreement provides for a certain number of assessments of their form and substance. These assessments are carried out collectively by the social partners in the National Labour Council.

Assessment of the initiative

In May 2010, the Federal Public Service Employment, Labour and Social Dialogue and the issuing companies took stock of the situation nearly one year after the eco-voucher system was introduced. All the actors share a mixed record on the initiative.

Positive aspects

According to the assessment, 49 out of the 172 joint committees had concluded a collective bargaining agreement that provides for the granting of eco-vouchers.

Examples of sectors with collective bargaining agreements on eco-vouchers

The sectors listed below are ones where collective bargaining agreements were signed in 2009 and made compulsory by Royal Decree in 2010.

- international trade, transport and logistics;
- tobacco industry;
- department stores;
- coachwork;
- clerical employees;
- large retail corporations;
- transport and logistics – garage employees;
- furnishing and wood processing industry;
- concrete industry.

³⁰ The preconditions of an individual agreement in writing are as follows – if there is no trade union representation in the company, or if the individual belongs to a category of workers for whom there usually is no collective bargaining agreement.

Another positive aspect of the first year of implementation of the eco-vouchers is the number of users. The Federal Public Service concluded that 148,972 employers and 1,490,814 employees (out of 2,470,000 employees in the private sector) were covered by the eco-voucher system. (However, the issuing companies produced significantly different figures: according to Sodexo and Edenred, only 60,000 employers ordered eco-vouchers and 850,000 employees received them.)

A further positive indicator is the size of the distribution network accepting eco-vouchers in Belgium. The number of shops accepting eco-vouchers is constantly growing; 7,000 shops are affiliated to Edenred and 6,000 outlets accept Sodexo's Eco-Pass.

In the case of Edenred, the amount spent through the eco-vouchers breaks down as follows (Observatoire Bruxellois, 2010):

- 35% of the vouchers were used at DIY and garden centres;
- 33% were used on household appliances;
- 9% were used in retail outlets.

According to Edenred, 11,000 bicycles were purchased and train tickets worth more than €260,000 were sold, although the SNCB (Belgian Rail) had only been accepting them for five months.

According to Sodexo, one person in three spent their eco-voucher according to the following distribution:

- 40% on household appliances or high-tech products;
- 24% on basic necessities;
- 20% on garden tools and plants;
- 10% on bicycles or accessories;
- 6% on wooden furniture.

Main positive aspects of eco-vouchers

- Number of sector collective bargaining agreements signed
- Number of eco-voucher users
- Distribution of networks accepting eco-vouchers

Criticisms of the scheme

However, the eco-voucher system has a number of shortcomings. Even before the initiative was launched two main points of criticism had been raised.

First, the absence of a general agreement between the distribution sector and the two issuing companies was criticised. The main criticism was presented by the Employers Federation of Distribution Companies (FEDIS) about the 'percentage taken by the two companies from the nominal value of each voucher' (La Libre Belgique, 2009). Moreover, SMEs felt disadvantaged compared with large companies and referred to the high cost charged by the issuing companies.

Secondly, there was a preference for a simple wage increase, which was particularly demanded by the metalworkers belonging to the Belgian General Federation of Labour (FGTB) in Wallonia and Brussels. In their view, the circumstances of the current crisis and particularly rising unemployment would mean that an increasing number of workers would not receive the green benefits.

In addition, consumer associations and trade unions are concerned about the list of products and services that can be purchased with the eco-vouchers and specifically criticise the absence of an exhaustive list of purchases applicable to eco-vouchers.

The trade unions and the federal government regret that a lack of control has enabled shopkeepers to accept eco-vouchers for products whose credentials are far from the objectives of the green vouchers.

There are also criticisms about the lack of information and the absence of optimal identification of products in shops, which has led to a loss of interest among many employees receiving the eco-vouchers.

Another obstacle in the current system of eco-vouchers is the mandatory approval procedure for each company. A company has to 'give the green light' before the benefit reaches their employees' wallet. This procedure remains problematic and is far from being automated.

The collective agreements introducing eco-vouchers have also led to uncertainty. Thirty-five out of the total of 47 agreements authorise employers to grant benefits of equivalent value. Consequently, many agreements offer companies the option of turning the green benefit into other benefits.

Main problems that have emerged since the introduction of eco-vouchers

- A lack of clarity in the list of products
- Inadequate information
- Lack of supervisory staff and effective monitoring

Examples of eco-vouchers

Among others, eco-vouchers can be used at IKEA or at the Belgian railway company.

Eco-vouchers have been accepted at IKEA since November 2009 for the following items:

- dishwashers;
- energy-saving light bulbs;
- LED light fixtures;
- the LADDA model of rechargeable batteries and charger;
- solar-powered reading lamp (SUNNAN);
- all fittings for the kitchen (OXSKAR) and the bathroom (except ENSEN, ANN and APELSKAR);

- FRAMTID FC323/78 refrigerator/freezer, which falls under the energy-efficiency category A+;
- outdoor plants;
- KVARNO, a garden unit bearing the Forest Stewardship Council (FSC) logo.

Eco-vouchers became a means of payment for rail tickets (except passes) on 1 February 2010.

Eco-vouchers – evaluation and recommendations

At the time of writing, no formal evaluation of the eco-voucher system had been undertaken, with an assessment by the social partners and the National Labour Council due for completion in October/November 2010.

Other stakeholders have presented recommendations for its revision. The Belgian committee on the EU Ecolabel sent an opinion to the social partners on 21 June 2010 in which it pointed out that eco-vouchers were a good way to promote environmentally friendly products:³¹

*The eco-voucher system is an instrument of choice for promoting and enhancing the visibility of more ecological products, and therefore products bearing the ecolabel as well.*³²

However, the committee also stressed the system's flaws; in particular, it noted that:

- the list of products was not objective;
- there was insufficient information about the products;
- the products were not identified properly for consumers.

It therefore suggested that the social partners should:

- review the eco-voucher system;
- introduce clear selection criteria for eligible products;
- provide examples of these criteria with recognised labels and superior energy categories for household appliances;
- ensure the information provided to consumers is clear, precise and neutral.

On the employers' side, the Federation of Enterprises in Belgium (FEB-VBO) is satisfied with the parafiscal regime of the eco-vouchers. According to its website, the FEB-VBO has demanded that:

... the eco-vouchers to be deductible as business expenses and thus be accorded favourable tax treatment, as the social partners had indicated in the general multi-industry agreement.

³¹ This committee has been monitoring developments in eco-vouchers in Belgium in recent months (as the list includes products bearing the Ecolabel.) It is composed of representatives from federal and regional public authorities in charge of environmental issues as well as the Federal Public Service Economy, environmental NGOs, consumer associations, trade unions and employers.

³² *Opinions and recommendations of the European ecological label attribution ('Ecolabel') committee on the eco-voucher system, 21 June 2010.*

Trade unions have emphasised the need for a framework for the eco-vouchers. FGTB cited the importance of inspections, analysing the scheme's real impact on the promotion of sustainable products, and the impact on social security (FGTB, 2010).

These criticisms could lead to a 'recasting' of the eco-voucher system, which – according to Collective Bargaining Agreement No. 98 – is to be reviewed after a year of its application. Potential improvements to the system could also be discussed at meetings held to prepare the new general multi-industry agreement (a meeting and negotiation are planned for November and December 2010).

This case study from Belgium is an interesting and innovative approach based on collective agreements negotiated by an institutionalised social dialogue body. The system, still in its initial pilot phase, has some teething troubles to overcome (for example, lack of effective monitoring, clear information and a clearly defined list of products to be purchased using the eco-vouchers). A revision and improvements to the system are expected after the evaluation at the end of 2010. There are also questions as to what extent the purchase of consumer products actually contributes to a greener economy.

However, this initiative has clearly demonstrated the potential, strong role of social dialogue. Social partners without intervention from public authorities have implemented a very interesting initiative within their own playing field of wage negotiations and have developed an instrument for the benefits of employees with a focus on environmental greening.

The following recommendations result from the eco-voucher initiative.

- There is even more potential for the success of social partners' initiatives on greening the economy compared with those where social partners merely react to government initiatives. This good-practice case has made visible the potential of a proactive approach by social partners.
- Eco-vouchers may have a multiplier effect for such initiatives given that many countries have legal extension mechanisms.

Euroeff project – Romania

What is the Euroeff project?

Romania is one country among the NMS where social partners have been actively working together on sustainable development issues over the past few years. Although the country's industrial relations system is not very favourable to trade union action and has a fragmented representation on the employers' side, it turns out to be a 'good student' compared with other NMS in this field. For example, the Romanian government adopted an anti-crisis package at the end of 2009 involving the social partners and promotes measures on environmental protection such as energy efficiency, the promotion of clean vehicles and investment in the energy sector.

Dealing with the economic crisis also provided other tripartite opportunities for the social partners to initiate a new period of cooperation on matters relating to the green economy. There is also a dialogue dealing with these matters at bilateral level where employer representatives are the most active. Initiatives are mainly on a sectoral level; they include, for example:

- the launch of a project in 2009 to develop human capital in the energy sector entitled 'Adaptation of energy sector staff to the new technologies and working conditions' (Formenerg, 2009);

- a seminar in the same year by the Energy Sector Employers' Organisation (FPEN) entitled 'Energy and environment: new forms of sustainable development';
- the funding of a 'CO₂ club' (*Clubul Co2*), a lobby group that aims to promote CO₂ capture and storage technologies by organising conferences, seminars, workshops, information campaigns, cooperation with the representatives of civil society, etc.

The Euroeff project, which was launched in October 2008, is a transnational initiative dedicated to training the construction industry workforce in energy-efficiency techniques. The project was due to end in December 2010. Euroeff is a European project led by the Bulgarian Construction Chamber and includes partners from the Netherlands, Romania and Spain. Its objective is to develop a multimedia guide to energy efficiency in building renovation for the trainers and teaching staff of vocational schools in these countries.

The founder of the project on the Romanian side was the Vocational Institute of Builders (CMC), a non-governmental and non-profit organisation established in 2004 by the Romanian Association of Construction Employers (ARACO) and the National Trade Union Federation in Construction and Erection Works, Anghel Saligny. CMC is directly dependent on the Builders' Social Fund (CSC), a private social security operator organised in a parity structure led by the building employers' association and trade unions.

Partners in the transnational Euroeff project

- Bulgarian Construction Chamber
- AIDICO, the Technological Institute of the Spanish Construction Industry, which aims to help SMEs and spread innovation in the construction industry.
- GOA Infra group, a foundation active in the (multisectoral) human resources field and which is financed by the enterprises in the northern Netherlands (Groningen region).
- Glavbolgarstroy, a leading Bulgarian construction company.
- MGM, a Bulgarian company specialising in developing IT programmes.
- The German–Bulgarian Vocational Training Centre Pleven.
- On the Romanian side, the project is led by CSC.

The aim of the multimedia guide is to train professionals on the energy efficiency of buildings and develop their knowledge in this area. It will help fulfil the objectives of Directive 2002/91/EC on the Energy Performance of Buildings, which requires setting minimum standards in terms of energy efficiency and makes the certification of new-build and renovated buildings mandatory.³³

According to the Euroeff website, the project has a budget of €2 million, of which CSC will receive €26,000. It is financed entirely by the EU's education and training programme, the Leonardo da Vinci programme, which – as the European Commission's website makes clear – has the aim of 'driving training and vocational education systems in

³³ According to the Directive, it is up to each Member State to define national standards according to existing circumstances and their carbon emissions reduction targets.

Europe'. The programme supports transnational sectoral cooperation by facilitating the exchange of best practice in vocational training and by supporting the development of innovative training methods.

The Euroeneff project will adapt a learning and teaching tool called FAINLAB, developed by the Vocational Training Centre of the Building Industry of North Rhineland–Westphalia and the German Centre of Aviation and Astronautics. FAINLAB covers some 15 professions in the construction industry, and with its multitude of aids, animations and video material, is a compilation of current knowledge. It also includes access to a large number of online information databases. Unlike the German version of FAINLAB, which focuses on apprentices, the English guide designed for Euroeneff has a broader target group and will focus on those already practising their trade (especially in SMEs), with an essential focus on energy efficiency issues in new-build and building renovation.

The role of social dialogue

CMC has a parity structure with both the employers and trade unions in the building industry in Romania (ARACO and Anghel Saligny). An interesting feature of CMC is its function as a training provider and a sectoral committee on vocational training in construction. It proposes national policy for vocational training in the construction industry and approves the strategy for training at branch level and vocational training policies in the entire sector.

In Romania, the well-institutionalised social dialogue structures will facilitate achievement and cooperation in the Euroeneff project and the general quality of the partners' actions. However, the Euroeneff project is the first CMC project dealing with the transition towards a green economy.

Role and opinion of social partners

The Euroeneff project constitutes a good example of the work done by CMC in the field of professional training for the Romanian construction industry. In addition to its function as a training institution, CMC contributes to the definition of the official training policy in the country. The fact that both employee representatives and employers act together in CMC in a structured way in order to improve their professional competencies will contribute to improving both the competitiveness of Romanian companies and the general level of social dialogue. According to the social partners, the project will contribute to help develop human resources in the sector as the project aim is to adapt the competences of the workers to company needs.

Multimedia training guide

The Euroeneff project is currently in its development phase and will be completed by the end of 2010. At the time of writing, the multimedia guide was not complete; once finalised, it will undergo testing in a pilot phase. About 50 people in each country participating in the experiment will be invited to use it and present any remarks and comments. Their criticisms and suggestions will be taken into account according to their relevance and the final version of the guide will then be published.

According to the project managers, the guide will be made available:

- on the internet free of charge;
- in vocational schools in the building and building materials sectors;
- in some companies.

A hundred vocational trainers will to be trained how to use it.

Content of the Euroeff interactive multimedia training guide

The guidance on renovation techniques used to reduce the energy consumption of old buildings is presented through the virtual renovation of a typical block of flats/collective housing unit and is made up of five separate modules covering:

- foundations;
- external walls;
- doors and windows;
- heating and cooling installations;
- alternative energy sources.

Evaluation and recommendations

The Euroeff project is remarkable for several reasons, although its scope has to be placed into perspective. The fact that Euroeff is one of the rare initiatives among the social partners of central and eastern Europe that focuses on the transition towards the green economy makes it a special and noteworthy initiative. Romania is one of the few countries among eastern European EU states where anti-crisis measures were implemented that included a focus on greening the economy.³⁴

Euroeff also serves as an example for international cooperation between the social partners and the dissemination of European best practice in regard to the use of environmentally friendly technologies.

As part of a project carried out by the Romanian project partner CMC, Euroeff is a best-practice example for an initiative based on social dialogue. Another interesting feature is that the project is the first project of CMC involving environmental protection. CMC has stated that further green economy projects are planned.

Positive impact on single employees, single companies and construction industry

The project will contribute to helping develop human resources in the sector, since its aim is to adapt workers' competencies to companies' needs. For the social partners in the construction industry, the question of workers' qualifications appears especially important given the importance of the construction industry for the Romanian economy.

The sector represented a turnover of €19.8 billion in 2007, more than double that in 2005 (€8.8 billion). Since the accession of Romania to the European Union, the sector has developed very rapidly, with a growth rate reaching 37% in 2007 and 28% in 2008. The 46,000 companies in the sector employ more than 500,000 people, which represents almost 4% of the total working population. During the crisis, the Romanian construction sector has been one of the few to still have a positive growth rate (4.7% in 2009).

³⁴ Another example of cushioning the impact of the economic crisis is located in the Czech Republic, where the building workers trade union asked the prime minister to introduce state support for the construction and construction materials sector.

Although the Euroeneff budget is limited, it could have a far-reaching impact on the qualifications of a significant proportion of employees in Romania. Employees will have evidence of their high-level skills, which will help them to remain competitive and secure their professional career. Moreover, adopting best available European practices in energy efficient construction constitutes a step forward in terms of facilitating the recognition of Romanian workers' qualifications within the European Union.

Euroeneff is also a project with far-reaching potential. Disseminating the latest energy-efficiency techniques and technologies will have a positive impact on the competitiveness of the enterprises and consequently on the entire construction industry of the countries involved in the project. A higher level of qualifications will increase the ability of Romanian companies to compete in their internal market as well as in the western European market with companies that already provide services in the field of energy efficiency. Furthermore, the enterprises concerned will benefit from having a high-quality labour force trained by this innovative vocational training tool. The involvement of teachers from vocational schools and the University of Bucharest will enable a broader and long-lasting dissemination of the guide's content.

Success factors and limitations in regard to impact of social dialogue

The initiative has to be considered in the context of social dialogue in Romania. Social dialogue and social partner activity is generally at a low level in the NMS in eastern Europe compared with western Europe.

Another factor is the generally low level, or lack, of involvement of the social partners in environmental issues. However, the Euroeneff project highlights a comprehensive engagement by social partners and especially of employers' associations. The fact that social partners institutionalised in CMC are undertaking a greening-the-economy project represents a key success factor in itself.

However, the assignment of responsibilities between the parties involved and the communication of the contents of the project and its results could be improved. For example, the fieldwork conducted for this case study faced several problems; in particular, representatives of the social partners were largely unavailable for interviews.

Common characteristics and differences in five case studies

The case study summaries describe the main achievements of good practice cases in Belgium, France, Germany, Romania and the UK. Each case study includes a description of the embeddedness of the action, the role of the social partners, the contents of the initiative as well as an evaluation and points for improvements.

The projects are a heterogeneous mixture of various approaches for greening the economy. They differ in actors, motives, structure, level of implementation and financing. Table 3 provides an overview of the five good practice case studies.

Table 3: Overview of the five good practice cases

Initiative	Type of initiative and objective	Instruments	Examples of outcomes	Main initiator/ other actors	Funding
<p>UK</p> <p>GreenWorkplaces</p> <p>National level, implemented at the workplace</p> <p>Launched mid-2006</p>	<p>The underlying principle of this project is that every workplace can be turned into a green workplace and contribute to protecting or improving the environment.</p> <p>Objectives are to:</p> <ul style="list-style-type: none"> • build capacity to tackle climate change issues at work; • ensure good practice in workplace environmental activities; • implement environmental training for workplace green representatives; • raise awareness; • boost workforce participation. 	<p>Based in the workplace: workers and management cooperate to secure energy savings and reduce the workplace's environmental impact.</p>	<p>Joint management–union environmental committees with framework agreements that embed practical goals to secure energy savings and reduce the environmental impact of the workplace.</p>	<p>Trades Union Congress (TUC)</p> <p>Companies, unions, and employee representatives</p>	<p>Fundraising, including from trade union affiliates, or Union Modernisation Fund</p>
<p>Germany</p> <p>Network Resource Efficiency</p> <p>Cross-sectoral, implementation at sectoral and at workplace level</p> <p>Launched March 2007</p>	<p>This project seeks to link the ecological aim of boosting resource efficiency in resource-intensive sectors with the social objective of preserving jobs.</p>	<p>Workplace-based training initiatives, conferences and workshops, sectoral social dialogue</p>	<p>A key outcome is social partnership-based dialogue in the aluminium industry and the launch of the training project 'Resource efficiency at the company', which seeks to train employees and members of works councils to identify and implement ways to improve energy efficiency.</p>	<p>IG Metall (trade union) and Federal Ministry of the Environment</p> <p>Sectoral employer associations, researchers, companies and works councils</p>	<p>Ministry for the Environment (BMU) and participating companies</p>
<p>France</p> <p>Agency for collection of training contributions in the construction industry (OPCA)</p> <p>Implementation at sectoral level</p> <p>Launched 2008</p>	<p>The project seeks to ensure a level of skills in new green technologies among employees in the construction industry.</p>	<p>Within the system of OPCAs, the French social partners at sectoral level jointly manage sectoral training needs. OPCAs collect money from companies to fund green training programmes for workers (a mandatory levy in France), with the OPCA deciding on the use of funds.</p> <p>A construction industry training system jointly managed by social partners.</p>	<p>A key outcome is the large number of trained workers of building companies and skilled trades on energy saving, funded by OPCA.</p> <p>The FEE Bat programme trained 20,000 workers between 2008 and 2009.</p>	<p>The jointly approved training fund collection agency for the construction industry</p> <p>Joint organisation of social partners</p>	<p>The financing of training by companies is mandatory in France.</p>

Initiative	Type of initiative and objective	Instruments	Examples of outcomes	Main initiator/ other actors	Funding
Belgium Eco-vouchers National level bargaining – implementation at employee level Launched July 2009	The initiative aims to boost the purchasing power of employees while promoting the purchase of ecological products and, indirectly, stimulate employment in the longer term. Eco-vouchers are part of a system to incentivise the transferring of social benefits to workers as part of the remunerations and wage policy.	Eco-vouchers are purchasing vouchers for certain environmentally friendly and sustainable consumer products (listed as ‘green’), given to employees by their employers and exempt from social security contributions. Eco-vouchers are stipulated in Collective Agreement No. 98 of 20 February 2009 concluded by the National Labour Council (CNT).	A key outcome is the large number of eco-voucher users during the first year of implementation – an estimated 1,490,814 employees. Purchasing vouchers were introduced worth €125 per employee in 2009 and €250 in 2010.	National Labour Council (CNT) – joint body Actors for further implementation: companies and employees	Tax deductions, and a net rise in wages for Belgian workers; an annual wage increase
Romania Euroeneff Implementation at sectoral level Launched October 2008	Euroeneff is a transnational initiative dedicated to training workers in the construction industry in energy-efficient technologies. It aims to develop a multimedia guide to energy efficiency in building renovation for trainers and teaching staff at vocational schools and to improve the professional skills of the workforce, so making the sector more competitive.	Development and implementation of multimedia guide available online on energy efficiency of buildings.	Dissemination of European best practice in regard to the use of environmentally friendly technologies (for renovating buildings, using materials, boosting insulation, and health and safety requirements for workers).	CMC – joint organisation of social partners in the Romanian construction industry European project led by the Bulgarian Construction Chamber, together with Romanian, Spanish and Dutch partners.	Through the EU’s Leonardo da Vinci programme

The projects can be viewed from a number of perspectives.

Duration Some initiatives have a limited project duration (for example, Euroeneff), while others are permanent – like GreenWorkplaces and the eco-vouchers in Belgium. Some cases have been launched specifically for the ‘green’ purpose, whereas others have been extended to cover a green dimension (for example the French case).

Nature of industrial relations system The good-practice examples were from very different industrial relations systems and the existing system of industrial relations had only a limited influence on the introduction of the initiatives. While there was a positive bias in case selection due to the study’s focus on cooperation, nevertheless cooperation could be found in countries with very different industrial relations traditions. In both cooperative systems (Belgium and Germany) as well as adversarial systems (the UK), stable and routinised institutions for interaction on the topics of sustainable development and greening the economy could be established. While it is useful to build on the basis of existing and past partnerships, it is also possible – as the UK example shows – to initiate new partnerships without an existing base of experience.

Level of implementation This varies from case to case. It addresses, for example, the individual consumer's purchasing habits in Belgium, activities of employees in their green workplace in the UK carried out on a company level, and qualifications of workers at sectoral level, as in the construction sector in Romania.

Actors and goals The main actors and the goals of the projects differ significantly. While some are joint projects of the social partners (employers and employees), others are union based or state initiated. Goals range from greening a workplace to greening a sector or parts of the economy as a whole.

Means of representation The degree of green structures of representation varies from country to country. Closely related to this, the level of industrial relations and specific instruments used by the social partners for an adaptation of each project are different. In some cases, trade unions exert influence over employee representatives within the companies and the employee representatives are themselves quite active in company environmental issues. This, for example, is the case in Germany, where employee representatives play a major role due to legal requirements for involvement defined in the co-determination law in the environmental area. Other examples also highlight the importance of plant-level employee representatives who push for the introduction of specific initiatives or tools.

National backgrounds It is generally assumed that in eastern European countries, and especially in the NMS, social partners are less involved and have less of a role to play in green topics (ETUC et al, 2007, p. 18). This needs to be put into perspective. On the basis of the case studies, it is interesting to see that this thesis may not apply generally to all of eastern Europe. In Romania, social partners at national and sectoral level show a great deal of interest in the topic and the employers' associations in particular are very active in cross-national comparison and discussions on greening the economy.

Sources of funding The examples are based on different funding systems, ranging from funding by the European Union (Euroeff), to funding by the national environment ministry (Network Resource Efficiency) to financial resources allocated by the individual participating companies (GreenWorkplaces).

A strong common element in all the case studies is that the chance of a win-win situation for all sides improves the chance of project realisation and success. The extent to which benefits accrued to both sides determined the success of the projects. It is the identification of win-win situations and common interests that link the two social partners together in an area like greening the economy, one characterised by mainly voluntary action.

Overall, the projects presented here feature a wide variety of possibilities for involving social partners in greening the economy (Table 4). Modules are resembled to custom-fit the specialties and needs of the system of industrial relations in each country. The measures presented in the Annex provide an extensive overview of the different levels of intervention, actors, initiatives and goals to enhance the role of social dialogue in greening the economy.

Table 4: *Examples of social partners' activities and instruments in case studies*

Trade unions	Employer associations
<ul style="list-style-type: none"> • Involvement in political debates on green topics in multi-stakeholder forums or on a bilateral level with the state • Drafting and approval of national training policies • Publication of position papers/demands/reports addressing green issues • Training courses on green skills by unions for employees or employee representatives • Actions for employees/individual workplaces (for example, to design environmentally friendly workplaces and improve workers' involvement in and commitment to green topics) 	<ul style="list-style-type: none"> • Engagement in political debates on green topics in multi-stakeholder forums and in bilateral dialogues • Publication of position papers/demands on specific green issues such as environmental legislation, reducing carbon emissions, remaining competitive in a green economy and employer involvement • Organisation of events and information dissemination for awareness raising among members • Promotion of green skills for employees and prevention of skill deficits

Lessons to be learned

Good social dialogue structures can help ensure success

The case study sample shows that a successful project depends on many factors. Above all, well-developed social dialogue structures and good social partnership facilitate projects that seek to green the economy. The sectoral dialogue in the aluminium industry in Germany is one example of such successful social partnership. Here, both stakeholders shared the same objectives and both saw the urgency of boosting resource efficiency. A similar positive example is the well-established joint dialogue structure of the joint registered collection agencies (OPCAs) in France.

Existing social dialogue platforms should actively include environmental protection in their agenda. At the same time, the social partners should agree on a policy and practical steps to boost the number of initiatives. A first step in this regard would be to provide incentives to social partners for cooperation in areas where there is potential for introducing green initiatives. One way to do this is to highlight the benefits to both sides of such cooperation.

Social partners at company level can help green the workplace

The initiative in the UK by the Trades Union Congress (TUC) on GreenWorkplaces has been positively perceived, with many companies and employers taking part. In particular, the scheme shows how social partners can successfully initiate projects for greening workplaces in all sectors. The same applies in the case of Euroneff in Romania. Here, a joint initiative between the sectoral trade union in the construction industry and the employer association has led to the creation of an innovative training guide on energy efficiency, from which the entire workforce will eventually benefit.

Trade unions can adopt 'green economy' in strategy and action plans

Since the 1990s, trade unions have become much more involved in environmental issues and debates regarding climate change. All trade unions at the European and international level have published policy papers on climate change – for example, for the UN Climate Change Conferences in Copenhagen in 2009 and Cancún, Mexico, in 2010. They are also active in regard to green issues. At the European level, the European Trade Union Conference (ETUC) adopted a resolution on combating climate change for the conference in Cancún and is involved in the EU social partners' project to develop a joint approach to the social and employment aspects and consequences of climate change policies. It is important for trade unions to remain committed in terms of climate change mitigation and to maintain environmental protection as a priority.

Employee representatives can use their position to foster sustainability

The case studies indicate that innovative instruments for greening the economy can successfully be adapted at the plant level. Here, employee representatives play a crucial role in all forms of green initiatives and social dialogue structures, as the examples in the UK and Germany show. The good practice case from the UK shows that a growing number of employee representatives use their influence to demand improvements in health and safety, serving as positive examples of the potential of the employee representatives. In Germany, employee representatives are playing a role in regard to the use of energy efficient materials; the German Works Council Act even gives an environmental say to works councils on the shopfloor.

Sustainable consumer incentives can be integrated into remuneration policy

Patterns of consumption play a key role (both directly and indirectly) in environmental problems. The Belgium example of the eco-voucher shows how, through collective bargaining, consumer incentives can be integrated into remuneration and wage policy on top of basic wages. Wage setting is a key domain for social partners and is the one where, depending in the system of wage bargaining, they have the biggest impact on consumers and workers (if the wage agreement is extended beyond the social partner membership, a multiplier effect is set in motion).

The voucher initiative has the potential to be transferred to other situations – for instance, to the level of the individual company. Works councils or trade unions, and company management could include the concept of green vouchers in their negotiations or even company agreements, particularly in those cases where bargaining over non-monetary benefits is already common practice.

Social dialogue can facilitate ‘green’ upskilling

In France, many trainees have received or will receive training in environmentally friendly building methods in the construction sector from the OPCA, with a positive impact on both employment and resource efficiency. It is in the interests of both employers and trade unions to have an appropriately skilled workforce, which can carry out work matching companies’ needs. Similarly, in the case of Euroneff in Romania, the advantages of having well-qualified workers trained to apply the latest European energy-efficiency standards were recognised by both trade unions and employers. Many Member States have included retrofitting measures for both company premises and private homes in their current recovery packages, an approach that also falls into line with EU national policies on energy-efficient housing. Social partners can support the implementation of such measures and extend them through, for instance, funding training.

Awareness building is an important precondition

The review of the five case studies illustrates that shared concerns, a joint understanding, shared awareness of environmental issues and a willingness to contribute to environmental protection are important preconditions for the successful implementation of such projects. In all the cases described, trade unions and employers shared a common view on the need to adapt green policies in their workplace, company, sector or country. Raising awareness among social partners (as well as among all employees) is therefore vital if projects are to succeed. Social partners can further this by developing training and creating awareness building programmes on environmental matters.

National and international political contexts can create a good foundation

The political context is an important driver for initiatives leading to a more sustainable economy. Social dialogue and projects initiated by the social partners often complement national or international policies. A comparison of the five case studies shows that the level of environmentally related activity varies markedly between countries and a very different state of discussion and realisation of actual projects can be observed. A number of countries located in northern and western Europe (in particular Germany and the UK) already have advanced and well-established environmental policies. Examples include the appointment of a Minister for Corporate Social Responsibility in the UK and the official governmental policy in Germany of reducing greenhouse gas emissions and shifting its energy supply towards renewable energies.

The case studies also reflect the level of commitment of the government to promoting environmental issues. In particular, the Euroneff project in Romania demonstrates the importance of the role of the government as initiator and financier; here, the European Commission offered to facilitate the first steps of this project, which may over time contribute to standardising the recognition of qualifications at the European level.

Ecological and social impact assessments are needed

It is difficult to gauge the success of the initiatives described here in terms of their environmental and social impact. Effective monitoring is required of projects that seek to green the economy in order to:

- gauge their contribution to such goals as the EU 20–20–20 targets and improving working conditions;
- gauge their impact on competitiveness.

Monitoring also enables the early detection of, for instance, potential conflicts between environmental and social goals, allowing changes to be made to ensure a more successful outcome for all.

Outlook

In contrast to the earlier Eurofound study (Eurofound, 1994), which made plain the limited role for social partners in environmental matters, a remarkably positive development has taken place during the past decade concerning the role of social partners in environmental protection. Whereas, with a few exceptions, social partners did not feel responsible for environmental concerns during the early 1990s (Eurofound, 1994), social partners in most of the EU countries are now actively involved in addressing green issues and promoting green policies. During the 1990s, the issue of environmental protection was mainly addressed via health and safety issues at the company level and both stakeholders showed an unprecedented harmony in a joint opposition against state policies.

The picture has certainly changed and is now characterised by a greater awareness of green issues. The protection of the environment and every individual's contribution towards combating climate change is promoted by most trade unions and employers in the EU. However, the extent of this varies among companies and employees, as does its success in terms of environmental impact.

At this point, it needs to be said that the actual impact of the projects aiming to green the economy, implemented by social partners, is barely measurable. All the projects described in this study are still very recent initiatives and lack a final evaluation. It is important to emphasise that there is still some way to go and that social partners have just started to jointly enter this green playing field.

The study shows that both bilateral and trilateral dialogues can contribute to the greening of the economy. The social partners act on a national, sector and plant-level basis as employers' associations, trade unions, management or employees. The projects offer a variety of options in terms of motives, structure and financing.

For a comprehensive understanding of social dialogue in greening the economy, the motives of the social partners in agreeing to participate are crucial, since environmental matters are still to a great extent voluntary. Common ground for the participation of each partner is the protection of interests. Environmental measures should not contradict the logic of action of the social partners. The logic of action for trade unions mainly follows the interests of their members. This leads to the conclusion that environmental goals cannot come at the expense of social goals. When dealing with environmental improvements, trade union representatives therefore need to make sure that these do not threaten members' interests (job retention, for example). The same goes for the employers where ecological goals cannot come at the expense of economic goals (resulting in a rise in costs, for example). As long as the greening of the economy is not legally enforced, therefore, the actions taken must benefit both partners.

The five case studies did not all necessarily have a measurable impact on working conditions or the quality of employment. The target of better working conditions was not a prime concern of the trade unions; where it was, this was only in an indirect way. It remains questionable at this point if the ILO decent work agenda has effectively trickled down to the lower level at which the projects are carried out.³⁵ It may also be important for trade unions to ensure that the principles of improved working conditions are actually addressed in the ongoing implementation of projects and adhered to in the future.

³⁵ <http://www.ilo.org/global/about-the-ilo/decent-work-agenda/lang--en/index.htm>

In some of the projects researched, the state played a major role. The state can draw benefits from the cooperation of social partners when they perform tasks that would otherwise remain the state's responsibility, such as the implementation of certain environmental measures. Social dialogue allows the state to hand over some of the pressure for action to the social partners. Moreover, the participation of the social partners can also contribute to the legitimisation of the state's environmental policy. Although the role and influence of the state is great and determines the scope of environmental policies to a large extent, the social partners and civil society actors are therefore indispensable to the state in the process of greening the economy. Only with their outreach to their members, experience, know-how and activities can effective transition towards greening the economy be achieved.

It is not yet clear, however, if the approach of the social partners, which mainly centres on power and interests, is recognised by political leaders. The political debate seems rather stuck on issues surrounding 'green jobs' instead of the greening of the economy as a whole and the role of social partners within this. For example the recent ministerial conference – 'Promoting green employment: a major and indispensable driver behind a successful transition towards a low-carbon economy' – organised by the Belgium Presidency of the EU in September 2010 highlighted again that there is still no commonly agreed definition of green jobs. Dealing with green jobs creation within a green growth process is even more complicated, as there are no exact figures on the actual number of green jobs in each country or in the entire EU (Fazio, 2010). It is also becoming clear that the number of 'green' jobs may not serve as an adequate indicator to measure the degree of transition towards a green economy.

The cases researched have outlined interesting initiatives addressing environmental protection and may serve as good-practice examples for other stakeholders and comparable projects in the future. Overall, the case studies include a user-friendly modular system of tools (actors, structures, contests, financing, etc.) that seems relatively easy to adjust to various contexts and countries (see the table of measures in the Annex). However, until now there has been no systematic procedure among social partners to address environmental issues – not even within one country. Moreover, in none of the countries were the projects extended to cover areas other than their initial focus – for example, by including other sectors or another aspect of greening the economy.

The next step should therefore be to provide incentives to social partners for cooperation in potential areas, by making clear the benefits that can flow to both sides. In this regard, the state can play an essential role. In general, for the future, it may be advisable to enhance the flow of information and the exchange of experience among social partners resulting from comparable projects – if possible, in an institutionalised body bringing the stakeholders together.

Bibliography

- BDA (2009), *Towards a new understanding of 'green jobs'* (discussion paper from German employers), Bundesvereinigung Deutscher Arbeitgeberverbände, Berlin, 2009.
- Belgian Presidency (2010), *A first European plan for the creation of 'green' jobs and for the 'greening' of the economy: the conclusions of the ministerial conference*, news release, Belgian Presidency of the Council of the European Union, 29 September 2010, available online at <http://www.eutrio.be/sites/default/temp/13487.pdf>
- BMU (2007), *Der ökologische New Deal: Gründung des Netzwerks Ressourceneffizienz*, Bundesministerium für Umwelt, Naturschutz und Reaktorsicherheit, Berlin.
- Broughton, A. (2008), *Working conditions and social dialogue*, Eurofound, Dublin.
- Broughton, A. (2009), *Greening the European economy: responses and initiatives by Member States and social partners*, Eurofound, Dublin.
- Cedefop (2010), *Skills for green jobs*, briefing note, European Centre for the Development of Vocational Training, Thessaloniki.
- DECC (Department of Energy and Climate Change) (2009), *The UK low carbon transition plan: national strategy for climate and energy*, The Stationery Office, London.
- Deckwirth, C. (2010), *Ein 'Green New Deal' im Interesse der Beschäftigten? Die Rolle von Arbeitnehmerinteressen in den aktuellen Debatten und Initiativen zur Überwindung der Wirtschafts- und Klimakrise*, Hans-Böckler-Stiftung, Düsseldorf.
- DGB (Deutscher Gewerkschaftsbund) (2009) *German 'Alliance for Work and Environment'*, presentation to ILO/MOHRSS conference 'China Green Jobs Experience Sharing Meeting', Peking, 30–31 May 2009.
- EESC (2010), 'Promoting sustainable green jobs for the EU energy and climate change package', report of public hearing 23 March 2010, Brussels, European Economic and Social Committee.
- European Commission (2007), *A European strategic energy technology plan (set-plan): Towards a low carbon future*, COM (2007) 723 final, Brussels.
- European Commission (2010), *The EU climate and energy package* (online web page), last updated 2010, available online at http://ec.europa.eu/clima/policies/package/index_en.htm
- Eurofound (1994), *Environmental protection in Europe – The effects of cooperation between the social partners*, European Foundation for the Improvement of Living and Working Conditions, Dublin, 1994.
- Eurofound, EIRO, *Social partners look at impact of climate change on employment*, 23 December 2009.
- Carley, M., Eurofound (2008), *Industrial relations developments in Europe 2007*, Dublin, 2008.

ETUC (2009), *Resolution on the climate change, the new industrial policies and the ways out of the crisis adopted by the Executive Committee on 21 October 2009*, Brussels, European Trade Union Confederation, available online via web page <http://www.etuc.org/a/6594>

ETUC (European Trade Union Confederation), SDA (Social Development Agency), Syndex, ISTAS and Wuppertal Institute (2007), *Climate change and employment: impact on employment of climate change and CO2 emission reduction measures in the EU-25 to 2030: Synthesis*, Brussels.

European Employment Observatory (2009), *The employment dimension of economy greening*, *EEO Review – Autumn 2009*, available online through <http://www.eu-employment-observatory.net/en/reviews/index.aspx>

Fazio, F. (2010), ‘How many “green jobs”? Nobody knows’, in *Special Bulletin: Promoting green employment*.

Ferns, S. (2009), ‘Green Jobs and vocational training: an overview of the situation in the United Kingdom’, in *Green jobs in Germany and the UK*, conference report of the British–German Trade Union Forum, Frankfurt (Oder), 2–3 July 2009, Anglo–German Foundation, London, pp. 17–23.

FGTB (2010), ‘Des écochèques réellement durables?’, *ECHO FGTB* (newsletter), February 2010.

Formenerg, *Formenerg S.A. a lansat proiectul ‘Adaptarea personalului din sectorul energetic la noile tehnologii si conditii de munca’* (press release), 30 June 2009.

Frémeaux, P. (1999), ‘Le paritarisme, une histoire complexe’, *Alternatives économiques* no. 176, December 1999.

Gabriel, S. (2009), ‘Die Weichen richtig stellen – Ressourcenschutz und Innovation’, in *Ressourceneffizienz – Innovation für Umwelt und Arbeit Wuppertal*, Wuppertal Institute.

GHK (2009a), *The impacts of climate change on European employment and skills in the short to medium-term: a review of the literature*, London.

GHK (2009b), *Thematic expert work on green jobs for DG EMPL/D1*, European Employment Observatory (EEO) Thematic Paper, London.

Hexel, D. (2008), ‘Ressourceneffizienz im Betrieb – ein neues Aufgabenfeld für Betriebsräte’, in *Ressourceneffizient handeln in der Arbeitswelt*, DGB Bildungswerk, Berlin, pp. 24–33.

Hoffmann, J. (2008), ‘Vorstellung des Kooperationsprojektes Ressourceneffizienz für Beschäftigte und Betriebsräte – Ablauf, Ziele und Maßnahmen’, in *Ressourceneffizienz handeln in der Arbeitswelt*, DGB Bildungswerk, Berlin, pp. 58–63.

IG Metall, BMU and GDA (2007a), *Sozialpartnerschaftlicher Branchendialog zur Ressourceneffizienz von Aluminiumprodukten – Kurzdarstellung des Gemeinschaftsprojektes von Bundesministerium für Umwelt, Naturschutz und Reaktorsicherheit (BMU), Gesamtverband der Aluminiumindustrie e. V. (GDA), Industriegewerkschaft Metall (IG Metall)*, available online at <http://www.aluminium-ressourceneffizienz.de/media/Kurzdarstellung.pdf>

IG Metall, BMU and GDA (2007b), 'Sozialpartnerschaftlicher Branchendialog zur Ressourceneffizienz von Aluminiumprodukten', PowerPoint presentation, available online at http://www.aluminium-ressourceneffizienz.de/media/Praesentation_Branchendialog.pdf

International Aluminium Journal (2009), 'GDA und IG Metall führen sozialpartnerschaftlichen Branchendialog', *International Aluminium Journal*, Volume 85, May 2009, pp. 12–14.

ITUC (2009), *Trade unions and climate change: equity, justice & solidarity in the fight against climate change*, Trade union statement to COP14, United Nations Framework Convention on Climate Change, Poznan, Poland, 1–12 December 2008, International Trade Union Confederation, Brussels.

Jänicke, M. (2009), 'Green New Deal and green jobs: an overview of the situation in Germany, in *Green jobs in Germany and the UK*, conference report of the British–German Trade Union Forum, Frankfurt (Oder), 2–3 July 2009, London, Anglo–German Foundation, London, pp. 13–16.

Kauls, H. and Hoffmann, J. (2008), *Projektvorstellung: Ressourceneffizienz im Betrieb – ein innovatives Aufgabenfeld für Betriebsräte und Beschäftigte*, presentation, Berlin, 17 June 2008, DGB Bildungswerk, Berlin.

Kristof, K. and Hennicke, P. (2010), *Das MaRess Projekt: Hintergrund, Projektdesign und Ergebnisse. Sitzung der MaRess-Steuerungsgruppe* [The MaRess project: background, project design and results. Meeting of MaRess Steering Group], 17 February 2010, Berlin, Wuppertal Institut für Klima, Umwelt and Netzwerk Ressourceneffizienz, 2010.

La Libre Belgique (2009), *Le vrai départ des éco-chèques* (online news article), 18 December 2009.

Leicester City Council (2009), *Leicester City Council's Environmental Statement – April 2008–March 2009*.

Luttringer, J.M. (2008), 'Réflexions sur les spécificités du "paritarisme de gestion" dans le domaine de la formation professionnelle', *Droit social no. 12*, December 2008.

Luttringer, J.-M. (2010), 'Sens et valeur ajoutée du paritarisme dans la formation professionnelle', file coordinated by Jean-Marie Luttringer, *Semaine sociale Lamy*, Supplement no. 1434, 22 February 2010.

Mearman, A. (2009), *Green jobs proposals: some thoughts*, presentation to ESEE 2009, Ljubljana, Slovenia, 29 June–2nd July 2009, Vienna, European Society for Ecological Economics, 2009.

Graines de Changement, (2009), *Sodexo et Accor Services lancent les éco-chèques en Belgique* (online news article), available through <http://mescoursespourlaplanete.com>

Observatoire Bruxellois (2010), *Eco-chèques : ça roule !*, Observatoire Bruxellois de la consommation durable [Brussels observatory of sustainable consumption] (online information service), 25 June 2010.

O'Sullivan, M., Edler, D., Ottmüller, M. and Lehr, U. (2010), *Bruttobeschäftigung durch erneuerbare Energien in Deutschland im Jahr 2009 – eine erste Abschätzung* [Gross employment from renewable energy in Germany in 2009 – a first estimate], BMU, Berlin.

Ministry of Ecology, Sustainable Development, Transport and Housing (2010), *Stratégie nationale de développement durable 2010–2013*, Paris, 2010.

Parissaki, M. and Vega Vega, S. (2008), *Capacity building for social dialogue at sectoral and company level in the new Member States, Croatia and Turkey*, Eurofound, Dublin.

Pearce, S. (2009), 'Trade unions: greening the workplace', presentation to EU Restructuring Forum on the Impacts of Climate Change on Employment, Brussels, 22–23 June 2009.

Pearson, P. (2010), *Employment impacts of climate change policies*, TUC, London.

Snell, D. and Fairbrother, P. (2010), 'Unions as environmental actors', *Transfer*, Vol. 16, No. 3, 2010, pp. 411–424.

Steinmeier, F.-W. and Gabriel, S. (2009), *Eine Wachstumsstrategie für Deutschland: Neue Arbeit durch Investitionen in Energie und Umwelt*, strategy paper presented at the 4th innovation conference, 22 June 2009, Berlin.

Sustain Consult (2009), 'Kurzfassung: Auswertung von Interviews in der Aluminiumindustrie zu Ressourceneffizienz von Aluminiumprodukten: Ergebnisse eines Gemeinschaftsprojektes des Gesamtverbandes der Aluminiumindustrie, der IG Metall und des Bundesministeriums für Umwelt, Naturschutz und Reaktorsicherheit', Dortmund.

Sustainlabour, *Climate change, its consequences on employment and trade union action: a training manual for workers and trade unions*, United Nations Environment Programme, Nairobi.

TUC (2006), *First steps to a greener workplace: a TUC guide*, London, Trades Union Congress and Carbon Trust, London.

TUC (2008), *A green and fair future for a transition to a low carbon economy*, London.

TUC (2009), *Changing work in a changing climate. Adaptation to climate change in the UK – new research on implications for employment*, London.

TUC (2010), *Forum for a Just Transition: TUC briefing*, London.

TUC GreenWorkplaces (2007), *How to 'green' your workplace – a TUC guide. Lessons from the Carbon Trust/TUC GreenWorkplaces Project 06/07*, TUC and Carbon Trust, London.

TUC GreenWorkplaces (2008a), *Go green at work: a handbook for union green representatives*, TUC and Carbon Trust, London.

TUC GreenWorkplaces (2008b), *TUC GreenWorkplaces Project 2006–7: Objectives and outcome report*, TUC and Carbon Trust London.

TUC GreenWorkplaces (2010a), *GreenWorks: TUC GreenWorkplaces Project Report 2008–10*, TUC, London.

TUC GreenWorkplaces (2010b), *Greener deals: negotiating on environmental issues at work*, TUC, London.

TUSDAC (2005), *Greening the workplace: a report by the TUSDAC unions*, Trade Union Sustainable Development Advisory Committee.

UNEP (2007), *Labour and the environment: a natural synergy*, United Nations Environment Programme, Nairobi.

UNEP (2008), *Green jobs: towards decent work in a sustainable, low-carbon world*, United Nations Environment Programme, Nairobi.

UNEP (2009), *Global Green New Deal: an update for the G20 Pittsburgh Summit*, United Nations Environment Programme, Nairobi.

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Annex

Selected instruments and tools for a social dialogue on ‘greening the economy’

Level of intervention	Actors	Description of initiative	Tool/instrument	Intention
International/ European Union	Trade unions, employers, interest groups	European Union: European Economic and Social Committee hearing on ‘Promoting sustainable green jobs for the EU energy and climate change package’ on 23 March 2010 to support the elaboration of an own initiative opinion on this topic.	Conference	Awareness raising, political dialogue
		Euroeneff: transnational initiative by sectoral social partners for training of construction workers in the field of energy efficiency techniques. Project partners in Bulgaria, Germany, the Netherlands, Romania and Spain.	Initiation of practical projects in the construction industry, training of workers	Start-up of new projects
National Sector level	Trade unions, employer associations, government, NGOs, employers	Germany: Network Resource Efficiency between the environmental ministry, unions, industry, various associations and researchers to develop a concept for more efficient resource usage and to generate suggestions for a framework which creates incentives for and removes barriers to energy efficiency.	Network of companies and social partners, conferences, support for model projects	Awareness raising, improving resource use at company level
		Germany: Alliance for Work and the Environment between trade unions, employer associations and government aiming at promoting energy-efficient renovation of buildings.	Platform for exchange	Resource efficiency, reduction of greenhouse gas emission
		Germany: Council on Sustainable Development to consult on green objectives.	Conferences, publications, promotion of sustainability as an issue for public discussion, support of German government in all matters of sustainability	Awareness raising, promoting of sustainability discussion and policy
		Germany: National CSR Forum offers a platform for dialogue on sustainability for employers, unions, NGOs, etc.	Publications and research on CSR strategy, policy recommendation to German government	Drafting of national CSR policies
		UK: Trade Union Sustainable Development Advisory Committee (TUSDAC) of the Minister for the Environment and all major unions to give input to the government policy process on sustainable development and to develop practical measures that unions can adopt to address sustainable development issues.	Exchange of information, policy recommendation	Advising and consulting for governmental policies

Level of intervention	Actors	Description of initiative	Tool/instrument	Intention
National Sector level	Unions, employer associations, employers, regional bodies	Germany: Sectoral dialogue in the aluminium industry in the Network Resource Efficiency between the metalworkers' union (IG Metall) and the aluminium trade association (GDA) in cooperation with the environmental ministry to initiate a series of dialogues on increasing resource efficiency in the context of the producing, processing, usage and recycling of aluminium.	Sector dialogue, exchange of experiences and know-how	Social dialogue, awareness raising, resource efficiency
		Belgium: 'Group of Ten'. Social partners meet to define a new inter-professional agreement.	Social dialogue, exchange of information	Binding inter-professional agreements, guidelines for collective agreements in the National Labour Council
		Germany: Wittenberg Process between social partners in the chemical sector to improve sustainability and the environment among others things for employees and consumers	Social dialogue	Resource efficiency
		Germany: Initiative for Sustainability in the Cement Industry between social partners to pursue four goals: the deeper anchoring of sustainable development as a guiding principle for companies; the implementation of best practice projects; the support of the social dialogue between the social partners; and the provision and diffusion of information on sustainable development.	Sector dialogue	Implementation of best practice projects, social dialogue, awareness raising
		Romania: Euroeff – transnational initiative by sectoral social partners for training of construction workers in the field of energy efficiency techniques.	Training of workers in the sector	Definition of sectoral training policy, qualification of workers, resource efficiency and environmental protection, improvement of working conditions
Company level	Unions, work councils, management, employees	Germany: Works Constitution Act including ecological questions as fields of action for work councils	National law	Environmental protection as fields of action for works councils
		Germany: Cooperation Project on Resource Efficiency for Works Councillors and Employees of DGB Bildungswerk (the educational institution of the German Trade Union Federation) to focus on involving works councils and employees in the resource- and energy-efficient design of work and production processes.	Workshops, training of works councils, employees and management	Awareness raising, energy efficiency at companies
		UK: GreenWorkplaces projects by TUC that aim at building capacity to tackle climate change issues at work. They cover workplace-based initiatives that bring together both workers and management to mainly secure energy savings and reduce the environmental impact of the workplace.	Initiatives at company level, joint implementation of project by management and employees	Awareness raising, green workplaces
		France: Building OPCA – training of construction workers in the field of energy efficiency techniques.	Joint employer/ union organisation for pooling resources and funding trainings	Lowering of energy consumption of buildings

Level of intervention	Actors	Description of initiative	Tool/instrument	Intention
Other /consumers	NGOs, trade unions (collective bargaining partners, regional bodies)	International: quality labels – Forest Stewardship Council (FSC), Flower Label Programme (FLP), Clean Clothing Campaign (CCC).	Information on products, introduction of labels	Dissemination of information, monitoring mechanism, awareness raising, public discussion of environmental protection
		Belgium: Eco-vouchers as purchasing vouchers (up to €125 net per employee in 2009, €250 in 2010) for environmentally friendly and sustainable consumer products. System is based on a certain incentive system to transfer social benefits to workers by their employers, defined in collective bargaining agreements.	Purchasing vouchers	Awareness raising, greener consumer habits

Notes: The table of measures is a selection of good practice examples, partially taken from the five case studies and from the general research conducted for this study.

Legend: green = present as good practice case studies in the report; white = not present in report.