



Greening the European economy: Responses and initiatives by Member States and social partners

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This report is available in electronic format only.

This report examines the responses, initiatives and activities undertaken by national governments and the social partners in the EU Member States plus Norway in working towards a greener economy and maximising the job creation potential of this new area. The report looks specifically at various measures undertaken by governments with a view to stimulating the economy in the current context of the global economic crisis. It also charts the growing awareness of the importance of reducing carbon dioxide emissions and developing alternative energy sources, showing that both governments and social partners in most countries in this study are active in trying to promote the 'green agenda'. The scope of such initiatives includes renewable energy production (including tidal, solar and wind power), energy efficiency, sustainable transport, water supply, waste management and sustainable agriculture. The report also aims to identify particularly interesting and successful initiatives that can be shared and disseminated as good practice examples.

EU policy context

The institutions of the [European Union](#) have been active in recent years in putting in place a policy framework for the green economy within which individual Member States can operate. For instance, the EU has made a commitment to reduce carbon dioxide (CO₂) emissions to 20% below the 1990 levels by 2020. The [European Commission](#)'s latest position is set out in a White Paper issued in April 2009 – entitled [Adapting to climate change: Towards a European Framework for Action](#) (European Commission, 2009). This follows a [Green Paper](#) on adapting to climate change in Europe, which was issued in 2007 (European Commission, 2007). In the 2009 White Paper, the [European Commission](#) notes that a rapid response is needed in Europe to address the demands of climate change. In particular, some sectors are more likely to bear the burden of climate change. These include the agriculture, forestry and fisheries sector, the energy sector and tourism. Furthermore, the Commission notes that although most climate change adaptation measures will be taken at national, regional or local level, 'these measures can be supported and strengthened by an integrated and coordinated approach at EU level'. It has therefore developed an EU Adaptation Framework to support the EU's resilience to deal with climate change. Phase 1 of the framework (2009–2012) will lay the foundation for preparing a comprehensive EU adaptation strategy to be implemented during Phase 2, commencing in 2013. This first phase will focus on four pillars of action, namely:

- building a solid knowledge base regarding the impact and consequences of climate change for the EU;
- integrating adaptation into key EU policy areas;
- employing a combination of policy instruments – such as market-based instruments, guidelines and public-private partnerships – to ensure the effective delivery of adaptation;
- stepping up international cooperation on adaptation.

In terms of social policy, the European Commission states that in the social domain, there is mounting evidence that those with fewer resources are more vulnerable to climate change effects. Thus, it is vital for the success of adaptation policies that they distribute the burdens equitably and that impacts on jobs and on the quality of life of low-income groups are taken into account. The social dimension of adaptation policies needs to be pursued within existing EU processes in the social and employment fields, and all of the social partners need to be involved. One of the action points highlighted by the Commission, therefore, is for the EU and its Member States to

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assess the impacts of climate change and adaptation policies on employment and on the well-being of vulnerable social groups.

Linking green policies directly to the current economic crisis, the Commission published in November 2008 a [European Economic Recovery Plan](#), in which it recommends investment in green measures – for example, alternative and sustainable energy sources, increased energy efficiency in buildings, and low CO₂ emission cars and public transport networks. It is estimated that EU investment in green policies will amount to about 64% of its total economic stimulus budget – that is, €18 billion out of €30 billion. However, the level of investment in green policies by the EU and by the Member States has been criticised by the [European Trade Union Institute \(ETUI\)](#). In its most recent policy briefing, examining national green economic stimulus packages, the ETUI states that Europe is investing significantly less than countries such as Australia, China, Japan, South Korea and the United States (US) (Nikolova, 2009). It concludes that:

Altogether the message is quite blurred – on the one hand, policymakers tend to agree on the need to include green measures in the anti-crisis packages but, on the other hand, the share of these measures which are supposed to create opportunities for low-carbon economic development is significantly lower than is widely considered necessary. In addition, not all measures which are claimed to be green will effectively contribute to a more sustainable economy, while the effects of positive measures are frequently offset by carbon-intensive policies.

Issues relating to the green economy and skills policies are discussed in a European Commission report on [Environment and labour force skills \(1Mb PDF\)](#) issued in December 2008 (European Commission, 2008). This report notes that up to 21 million jobs in the EU are currently linked to the environment – that is, jobs in the environment sector or those that require environment-related skills. Specific skills that are likely to be needed for the green economy include knowledge of sustainable materials, ‘carbon footprinting’ skills and environmental impact assessment skills. Moreover, the report notes that green jobs cover all sorts of skill needs, including low and high skilled work.

The green sector is changing rapidly and the Commission’s report makes the following forecast for the labour market:

- additional jobs will be created in several areas, such as in the manufacturing of pollution control devices that are added to existing production equipment;
- substitution of employment will take place, for example due to the shift from fossil fuels to renewable energy sources, from truck manufacturing to rail car manufacturing, or from land filling and waste incineration to recycling;
- particular jobs may be eliminated without direct substitution – for example, when the use of certain packaging materials is discouraged or forbidden and their production ceased;
- many existing jobs – for instance, those of plumbers, electricians, metalworkers and construction workers – may be altered due to the ‘greening’ of day-to-day skill sets, work methods and profiles.

The report makes a number of conclusions, highlighting that:

- better skills forecasting needs to be encouraged in the EU;

- skills policies need to be developed in order to ensure that the growth of the green economy is not hampered by a lack of appropriate skills and that the new jobs created in the green economy are of high quality, with good terms and conditions;
- there is value in linking the development of green skills to local sustainable development strategies.

Member State responses, initiatives and tools

This section examines the green policy responses, initiatives and tools that national Member States have put in place – both as a way of helping to revive the economy and, more widely, in the context of trying to mitigate climate change and its effects. The findings are based on evidence provided by the [EIRO national centres](#) of the [European Foundation for the Improvement of Living and Working Conditions \(Eurofound\)](#).

Economic recovery programmes

Over the past year, the governments of many of the EU Member States have launched a range of economic recovery programmes to help tackle the current financial crisis. However, only a few of these programmes have a specific green policy content. Such programmes focus on issues including the modernisation of buildings, better insulation, car scrappage and the use of alternative energy. Car scrappage schemes are proving to be particularly popular across the EU. Under these schemes, consumers are offered financial incentives to hand over cars above a certain age for scrappage if they make a commitment to buy a new car. However, some debate has arisen over whether this measure promotes the green economy by encouraging the use of newer and more energy-efficient, cleaner cars, or whether it merely supports traditional jobs in the automotive sector.

Many of these schemes are linked to countries' overall plans to increase competitiveness in the current difficult economic climate, although there is an acknowledgement that the green economy is a potential growth sector and a likely source of new jobs. Nevertheless, estimates on how many new jobs will be created are usually not precise.

A range of initiatives and the countries that provide some examples of these initiatives are outlined in Table 1 below.

Table 1: Main green recovery initiatives of governments, by country and type of initiative

Initiative	Countries
Subsidies for the insulation and heating refurbishment of domestic and commercial premises	Austria, Ireland, Lithuania, Hungary
Tax credits for households investing in alternative energy and insulation	Belgium
Car scrappage schemes	Austria, the Czech Republic, Germany, Italy, Luxembourg, Slovakia, Spain, the UK
Using taxation and financial support to encourage energy efficiency and promoting the use of alternative energy such as solar and	Cyprus, Finland, Malta, the Netherlands, Portugal, Romania, Slovakia, Spain, the UK

wind power	
Support for specific industries	Italy – encouraging consumers to choose environmentally-friendly consumer goods Lithuania, the Netherlands and the UK – supporting the construction sector in the building of more energy-efficient houses and public buildings
Support for the agriculture sector or the organic farming industry by means of financial incentives	Cyprus, Denmark, Ireland
Encouraging the development of green transport systems	Germany – hybrid cars and battery-powered trains Ireland – lower car use, improvements in public transport and cycling provision Luxembourg – cars with low CO ₂ emissions Norway – electric cars, walking and cycle paths
Investment in new technology such as carbon capture*	Norway, the UK
Sustainable tourism	Bulgaria, Ireland, Malta

*Note: * ‘Carbon capture’ refers to a technological process to capture CO₂ emissions generated by power plants and other industrial processes and then store the CO₂ securely away from the atmosphere.*

Source: EIRO national centres, 2009

In some countries, the Green Party is influencing the debate on the green economy at national level. For example, in Ireland, the [Green Party](#), which is a coalition partner of the ruling government, has published an extensive policy document – entitled the [Green New Deal](#). Key objectives of this policy document are job creation, the reduction of CO₂ emissions and the use of alternative energy sources. Overall, the [Green Party](#) hopes that more than 10,000 jobs will be created through a range of green initiatives.

Regional initiatives

In addition to national initiatives, a number of regional plans to boost the green economy are in place in Belgium, in the context of regional elections. These include research and training in green technologies. In Wallonia, for instance, measures launched in 2005 are currently being evaluated. Elsewhere, in Spain, a local investment fund for sustainability projects is being created.

In Italy, regional-level initiatives have gained a relatively high profile, as each region must draw up an energy plan (*Piano Energetico Ambientale Regionale*, PEAR). This plan is seen as the principal instrument of energy and environment planning in Italy. At present, 16 out of 20 regions have drawn up a PEAR. In Finland, the Commission for Local Authority Employers ([Kunnallinen Työmarkkinalaitos](#), [KT](#)) adopted an action programme for sustainable development in 1999. The programme aims to raise the profile of sustainable development in municipal strategies – more specifically, through integrating it into municipal planning, developing support to engage local

people in sustainable development work and improving cooperation between different areas of development.

In Hungary, EU support for environmental technology development is available through regional operational programmes, among other things. Furthermore, government employment policy includes provisions for the setting up of regional crisis-management funds to help in cases of company restructuring and to support vulnerable enterprises by providing exemptions from payroll taxes to enable companies to maintain their workforce.

Ministries with green responsibilities

Recognising the fact that green issues are growing in importance, many Member States have created new ministries to deal with these issues. This is the case in the Czech Republic, Denmark, Estonia, Finland, France, Ireland, Italy, Latvia, Norway, Poland, Spain and the United Kingdom (UK).

In other countries, green issues come under the remit of other ministries, such as the Ministry of Agriculture, Forestry, Environment and Water Management ([Lebensministerium](#)) in Austria, and Bulgaria's [Ministry of the Environment and Water](#) and the [Ministry of Economy, Energy and Tourism](#). Germany, Hungary and Malta also split environmental responsibility between ministries.

The Netherlands has taken a novel approach to responsibility for the green economy: in this country, no one ministry has sole responsibility for green issues, as it is believed that this should be of concern to all ministries.

Other governmental bodies

In addition to ministries, in some countries specific government bodies have been set up and given responsibility for green issues. These include the following examples:

- Denmark – the Environmental Economic Council ([Det Miljøøkonomiske Råd](#)) is an economic advisory body, which was established by law in 2007. The council has 24 members representing [trade unions](#), employers, non-governmental organisations (NGOs), independent experts and the Danish government;
- Hungary – the Parliamentary Commissioner for Future Generations (*Jövő Nemzedékek Országgyűlési Biztosa*) was established in 2007. The Commissioner investigates complaints relating to a broad range of environmental issues and acts as a policy advocate for sustainability issues across all relevant fields of national or local legislation and public policy;
- Italy – a permanent parliamentary commission deals with ‘territory, environment and environmental goods’, and debates issues such as the possible introduction of nuclear energy;
- Lithuania – a taskforce led by the Ministry of Finance ([Finansų Ministerija](#)) is identifying a financing mechanism to modernise multi-apartment houses;
- Malta – the [Malta Resource Authority \(MRA\)](#) is a public corporate body with regulatory responsibility for water, energy and mineral resources. It also administers schemes to promote energy efficiency and renewable energy;
- Romania – an Environmental Fund was established in 2000, under the management of the Environmental Fund Management Unit ([Administrația Fondului pentru Mediu, AFM](#)), to help organisations move to ‘clean technology’;

- Slovakia – a range of government bodies deal with environment-related and green issues, such as the Government Council for Sustainable Development ([Rada vlády pre trvalo udržateľný rozvoj, TUR](#)), which acts as an advisory body on the environment;
- Sweden – a [Commission on Sustainable Development](#) was recently set up to examine climate change and sustainable development and make recommendations to the government.

Tripartite social dialogue structures

A mixed picture emerges regarding the existence of tripartite [social dialogue](#) structures and processes on green issues. In some countries, there is a lot of activity, whereas in others no such activity is recorded, sometimes even where there is an established tripartite social dialogue. In other countries, tripartite social dialogue has not been established in relation to any issues.

Tripartite structures dealing with green issues

Some countries have tripartite bodies that deal with environmental issues, such as the Environmental Economic Council in Denmark (see above), although no formal social dialogue is yet in place that deals specifically and only with green issues in Denmark. In Finland, the National Commission on Sustainable Development ([Suomen kestävän kehityksen toimikunta](#)) has been established, while the Economic Council of Finland ([Talousneuvosto](#)) facilitates cooperation between the Finnish government, the [Bank of Finland](#) and major interest groups. In Romania, a [National Standing Committee on Sustainable Development](#) has been founded, which is a tripartite body that deals with a range of issues concerning sustainable development.

In Slovenia, there are two tripartite social dialogue structures that are relevant to green issues: the Council for Sustainable Development ([Svet za trajnostni razvoj](#)) and the Inter-service Group on Climate Change ([Medresorska skupina za podnebne spremembe](#)). Both of these bodies debate matters relating to green issues. Finally, in Spain, social dialogue on green issues is carried out within the framework of the country's standard tripartite social dialogue structures and is linked to the debate on the modernisation of the economy. In addition, the [State Council for Corporate Social Responsibility](#) was set up in February 2008 in Spain and deals with green issues as part of its remit (see [Royal Decree 221/2008 \(38Kb PDF\)](#)). In France, a recent national environment initiative has created a range of ad hoc working groups that involve representatives of the government, trade unions, employers and NGOs involved in environmental issues. Furthermore, France's Economic and Social Council ([Conseil économique et social](#)) has now become the Economic, Social and Environmental Council ([Conseil économique, social et environnemental](#)). When its members are renewed in the summer of 2010, they should include representatives from environmental associations.

Tripartite structures debating some green issues

In some countries, tripartite social dialogue structures are in place, although none of them deals primarily or exclusively with green issues. Nevertheless, there is evidence of a significant amount of dialogue and activity on green issues within the framework of tripartite structures set up to deal with wider issues, such as employment in general. This is the case in Austria, for example, where the main tripartite structures deal with the labour market and try to pursue a range of macroeconomic and social goals; as part of these debates, they also consider green themes. In addition, a range of ad hoc climate summits have taken place in Austria over the past couple of years. A similar situation is evident in the Czech Republic, where the Czech Council for Economic and Social Agreement ([Rada hospodářské a sociální dohody České republiky, RHSD](#))

[CR](#)) deals with issues related to government environmental policy and specific aspects of green economic policy.

In Finland, the aforementioned Finnish National Commission on Sustainable Development acts as an important tripartite forum where different stakeholders can present their ideas, goals and programmes, as well as engage in a broad debate about ecological sustainability. Since its establishment in 1993, the commission's task has been to promote and coordinate the implementation of sustainable development in Finland. The commission also prepares Finland's national reports to the [United Nations Commission on Sustainable Development \(CSD\)](#).

In Hungary, the National Interest Reconciliation Council ([Országos Érdekegyeztető Tanács, OÉT](#)) discusses green issues occasionally, while the National Council for Sustainable Development ([Nemzeti Fenntartható Fejlődési Tanács, NFFT](#)) and various committees of the recently established Economic Conciliation Forum ([Gazdasági Egyeztető Fórum, GEF](#)) ([HU0810029I](#)) discuss green issues with more frequency. In Malta, green issues are discussed as part of a wider agenda at both the [Malta Council for Economic and Social Development \(MCESD\)](#) and the [Malta-EU Steering and Action Committee \(MEUSAC\)](#). In Slovakia, the tripartite Economic and Social Council ([Hospodárska a sociálna rada, HSR](#)) deals with all relevant economic and social issues, including green issues.

Elsewhere, national social dialogue structures in Belgium – namely, the National Labour Council ([Conseil National du Travail/Nationale Arbeidsraad, CNT/NAR](#)) and the Central Economic Council ([Conseil Central de l'Économie/Centrale Raad voor het Bedrijfsleven, CCE/CRB](#)) – are currently active in relation to environmental issues and are preparing a joint statement on green jobs. Belgium also has a range of other tripartite structures at federal level that are dealing with green issues. In Luxembourg, a national sustainable development plan is being launched. In Ireland, although national tripartite social dialogue structures do not deal exclusively with green issues, reference to environmental sustainability is made in the current national agreement.

Main initiatives and actions

Awareness raising

Awareness raising and public discussion of green issues is becoming more prominent in most of the European countries. Actions from policymakers include:

- organising conferences on green issues. For example, in Denmark, two conferences were hosted in 2009 to discuss green technology and how to reduce CO₂ emissions. The conferences sought to increase awareness of the green economy among the international business community. In Luxembourg, a conference to debate climate protection and economic and employment prospects was organised by government ministries and the [Chamber of Employees \(LU0809019I\)](#) in February 2009;
- publishing information leaflets on issues related to environmental sustainability. In Hungary, the relevant ministries and NGOs publish information on green issues. In the Netherlands, a corporate social responsibility (CSR) centre was set up in 2004 for small and medium-sized enterprises (SMEs) whose remit includes awareness raising on green issues;
- the development of web-based information for the public and for business. The internet is a major source of information provision in many countries. As a result, news and information on green issues is disseminated through the internet in most countries, either through dedicated websites or on websites linked to the relevant government bodies or other types of relevant bodies;

- the holding of targeted ‘green day’ events, seminars and general debate in the political area. In Estonia, for example, much effort has been invested in raising public and consumer awareness of green issues through a variety of means – including the development of a network of local environmental education centres, the provision of training days and seminars, and the holding of national and international conferences. Similarly, in Finland, a number awareness raising programmes on green issues are in place.

In addition to the above initiatives, many countries hold special events on [Earth Day](#), which took place on 22 April in 2009. In Poland, for instance, the celebration of this day included information campaigns, educational initiatives and workshops. In Romania, a Green Day was held in 2009 to help raise awareness of environmental issues and actions.

In some countries, such as Italy, awareness raising on green issues is more common at regional rather than national level. For example, in Piedmont in northwestern Italy, a large-scale awareness-raising campaign on the need to reduce CO₂ emissions has been organised, as part of an initiative to make this region the first in Italy with very low levels of CO₂ emissions.

Sector-specific actions

In addition to actions and initiatives at national level, there are a range of sector-specific initiatives in place in countries around Europe. These include a focus on increasing investment and employment in particular sectors. Economic sectors that feature significantly include the energy sector, transport and various industries related to the construction sector. Furthermore, in some of the former Communist countries, efforts are being made to clean up former industry sites. For example, in the Czech Republic, an initiative is underway to chemically decontaminate around 600 locations.

Table 2 below gives a summary of the main examples given by the national centres in this study.

Table 2: Examples of sector-specific initiatives, by country

Sector	Country examples
Environmental technology industry	In Austria, national and local governments have launched a joint initiative, known as Masterplan Environmental Technology (Masterplan Umwelttechnologie , MUT). The aim of the initiative is to set up a joint strategy for policymakers, business and relevant research institutions to improve the competitiveness of the Austrian environmental technology industry.
Renewable energy	In Hungary, a range of government initiatives been introduced to promote the use of alternative, renewable energy sources. The production of biofuels has received the most support, although this has generated debate and criticism from green NGOs. In Portugal, the government has made efforts to create green clusters in industry and services, particularly in the area of renewable energy.
Tidal, wind and nuclear power	The UK has made a commitment to source 15% of its energy from renewable sources by 2020, principally from wind, tidal power and nuclear power. Future

	<p>plans include a large wind farm off the southeast coast of the country.</p> <p>In Germany, the government is giving support to wind energy projects.</p> <p>In Sweden, the government is committed to expanding nuclear energy.</p>
Waste management	<p>In Ireland, a variety of initiatives has recently been launched in the waste collection sector, including new recycling initiatives.</p>
Construction	<p>In Slovakia, state support is available in the construction sector for insulation in private homes.</p> <p>In the Czech Republic, the government is also supporting energy-saving measures in construction.</p> <p>In France, the government is promoting the insulation of homes as well as the construction of energy-efficient buildings and the energy-efficient refurbishment of existing buildings.</p>
Transport	<p>In Denmark, the government has developed a green transport policy – among other things, this policy seeks to promote access to public transport and to improve the infrastructure for use of bicycles.</p> <p>In Italy, the government is offering financial support for the purchase of bicycles and mopeds.</p> <p>In Sweden, the government aims to create a fleet of vehicles that are independent of fossil fuels by 2030.</p>
Agriculture	<p>In Estonia, the government is supporting environmentally-friendly production.</p> <p>In Bulgaria, the agriculture sector is one of the sectors that is being supported by the government, as it is deemed to be important in terms of its economic, environmental and employment impact.</p> <p>In France, government strategy is creating additional areas of protected land and promoting organic agriculture.</p>
Tourism	<p>Tourism is an important sector in many countries in Europe. Specific initiatives designed to promote ecologically sustainable tourism have been set up in a range of countries.</p> <p>In Malta, for instance, the Malta Tourism Authority has set up an Eco-Certification scheme – under this scheme, hotels must comply with several criteria designed to improve their environmental performance and increase environmental awareness among staff.</p>

Automotive sector	<p>As mentioned earlier, car scrappage schemes are popular in many EU countries. In countries where automotive production forms an important part of the economy, targeted initiatives are in place.</p> <p>This is the case in Sweden, for instance, where the government has developed a clear greening strategy for the country's automotive sector, focusing on the development of more energy-efficient vehicles.</p>
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Source: EIRO national centres, 2009

Green procurement

Green procurement is an issue of growing importance in the majority of European countries. In some countries, schemes are already in place, requiring service suppliers to fulfil certain green criteria before being awarded public contracts. In other countries, green procurement schemes are under discussion. For example, debate has arisen over green procurement in Hungary, where some argue that green products and procedures are expensive and complicated. At present, however, green procurement is sporadic in Hungary. In Estonia, it is planned that green procurement will be introduced by 2013. Current green procurement schemes in place are summarised in the Table 3 below.

Table 3: Examples of green procurement schemes, by country

Country	Scheme
Czech Republic	The government offers support for low-emission heating sources and investment in energy-saving measures in construction projects and new builds.
Denmark	All public institutions are, in principle, obliged to mainstream green issues in all procurement activities.
Finland	Proposals have been drafted for a new government policy on public sector procurement, which will encourage suppliers to adopt environmental policies and procedures.
Malta	The government launched a Green Office Label in 2006 for its departments: in order to obtain this label, departments need to show adherence to environmental best practices in areas such as environmental planning, waste reduction, energy and water conservation, transport and green public procurement.
Norway	There are a range of green procurement initiatives in place in areas such as hotel services, information and communication technologies (ICT) equipment, construction, furniture and textiles.
Poland	Public procurement legislation was amended in 2006 to include the application of environmental criteria in the public procurement process.

Portugal	Portugal aims to ensure that half of public tenders will include environmental criteria by 2010.
Romania	In 2008, the government devised a National Plan for Environmental-friendly Public Procurement 2008–2013, due to take effect in 2009. Under this plan, public administration authorities have a target of 7% concerning green procurement.
Sweden	In 2007, the government launched a green public procurement policy, which includes help and advice on green procurement for local authorities.

Source: EIRO national centres, 2009

Eco-innovation and green start-ups

A range of government support schemes are in place to boost ‘eco-innovation’ and business start-ups with a green focus. These schemes usually focus on issues such as alternative energy sources, energy efficiency, waste management and organic farming. Some of the main examples are described below.

- In Austria, the government set up, in early 2009, a promotional scheme to boost eco-innovation in the environmental technology sector, providing financial support to schemes that aim to develop alternative energy sources.
- In Denmark, measures are in place to support the development of organic farming.
- One of the most high-profile actions undertaken in Ireland in recent years has been a campaign to reduce plastic bag usage by imposing a plastic bag tax. Ireland has also been active in developing environmental waste initiatives.
- In Italy, the government has set up a fund to finance research projects on energy efficiency and the use of renewable energy sources in urban areas.
- In Malta, the government is supporting innovation in the areas of wind and solar energy and biofuels, covering up to 60% of eligible costs.

Some countries have dedicated resources to try to encourage green start-ups. In Estonia, for example, five centres have been established to support technology development in a range of areas, including biotechnology. In Norway, support is available for SMEs that want to develop renewable energy sources such as wind, wave or tidal energy.

In Poland, support is available for start-ups and entrepreneurial schemes in the areas of waste management and resource rationalisation, the use of renewable energy, and recycling. Elsewhere, in Slovakia, the government is making financial support available for home insulation schemes. It is thought that this will create about 8,000 jobs in the construction industry.

Training programmes

Training to support the workforce in the transition to a green economy is an area of important debate in many countries (see also next section on social partner responses). The green economy will require new skills in a range of technical areas as new technology develops. Governments in most countries are aware of this and are trying to overhaul training and skills policies in order to meet the likely demand for new skills in the future. In Austria, for instance, the government is looking at reforming the country’s **vocational training** scheme in order to meet increasing

business demand for skilled workers in the environmental technology sector. Likewise, in Estonia, efforts are being focused on creating the skills needed for the sustainable energy industry. Some examples of individual innovative training programmes and schemes are given below.

- An innovative scheme exists in Belgium, whereby long-term jobseekers are trained to carry out energy assessments and help advise on energy-saving measures. These people are called ‘energy trimmers’ (*Energiesnoeiers/tuteurs d’énergie*) and help to implement energy-saving measures in buildings through ‘energy trimming companies’, which are not-for-profit organisations. The schemes exist in all regions of the country.
- Another innovative scheme exists in Italy, where the trade fair [SolarExpo](#) and the employment agency [Adecco](#) have developed training and retraining courses for technicians in the solar panel and wind farm industry. Under this scheme, skills that are particularly relevant to these industries are taught.
- In Portugal, government training courses are offered in order to train technicians in environmental management, as well as in health, safety and environment at the workplace.
- In Sweden, trade unions offer career coaching to prepare members for the shift to the green economy.

Investment in emerging products and services

There are a range of emerging green products and services – in industries such as alternative energy sources and products designed to save energy, and in sectors such as construction. Government investment in many of these areas has already been mentioned in the previous sections, which deal with government support and aid to specific sectors and schemes. However, some additional government investment schemes should also be noted. For example, in Estonia, the government is investing in future green job-creating industries, including a scheme that allows for an exemption from excise duty for biofuels. This has led to the creation of a number of enterprises that create biofuels. Production of biofuels has also been a focus of investment in Hungary and Sweden. In addition, an innovative scheme exists in Poland, whereby loans are provided to farmers, self-employed people, companies and rural communities to set up or develop agro-tourism enterprises.

Social partner responses, initiatives and tools

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

Social partner positions on the green agenda

The green agenda is taken seriously by the social partners in all of the European countries. Employers and trade unions have undertaken a range of activities in this area over the recent year, including the publishing of position papers and the setting up of bodies to look specifically at green issues. General issues covered include housing, energy efficiency and the use of renewable energy, transport and public procurement.

While the green agenda is generally not a particularly contentious issue between the social partners, some differences in viewpoints have arisen between the trade unions and employers in a number of countries. For example, in Portugal, the employers are more sceptical of the green agenda, fearing that it will increase costs and therefore reduce competitiveness. Trade union concerns linked to the green agenda, on the other hand, are usually more related to employment levels and [working conditions](#). Moreover, trade unions are often preoccupied with membership issues: on the one hand, trade unions in the UK see the emergence of new green industries as a recruitment opportunity; however, in other countries, trade unions fear the decline of more traditional industries with strong trade union membership and recognise that it may be harder to recruit members in new green industries.

Another difference in the social partners' position is that the trade unions are more likely to favour regulation over the voluntary commitment usually championed by the employers. In some countries, such as Spain, the trade unions also believe that the employers should be doing more to help the move towards the green economy and are wary of employers using 'greenwash' – that is, allegedly paying lip service to environmental issues while not changing their actual activities.

By contrast, in other countries, trade unions and employers maintain a united stance. In Italy, for instance, both the trade unions and employers are calling on the government to legislate clearly and rapidly on environmental issues. In France, negotiations between the social partners are due to start on increasing the competences of the [Workplace Health and Safety Committees](#) (*Comités de hygiène, de sécurité et des conditions de travail*, CHSCT), potentially to include some environmental competencies for these bodies.

Further examples of the specific stance of the employers and trade unions are given in the following sections.

Employers

One of the main issues of concern for employers in many countries is the potential for skills deficits in the green economy, also mentioned in the previous section describing government skills and training programmes. In the UK, the employer organisation the [Confederation of British Industry \(CBI\)](#) highlights that skills are needed in areas such as science, technology, engineering and maths, technical competencies and a range of new business skills. CBI makes a range of recommendations on how to increase the number of workers with these skills: these include encouraging a greater focus on such skills in schools and proposing ways to encourage education providers to work with business to meet the demand for these types of skills.

Many employers have issued positions detailing their particular stance on green issues. For example, in Germany, the Federation of German Industries ([Bundesverband der Deutschen Industrie, BDI](#)) entered into a dialogue with the Federal Ministry for the Environment, Nature Conservation and Nuclear Safety ([Bundesministerium für Umwelt, Naturschutz und Reaktorsicherheit](#)) in 2008 over the ministry's draft plan on ecological industrial restructuring. BDI believes that the ministry's approach is too prescriptive, focused on ecology and sceptical of the market forces; the federation argues that it ignores the reality of employers, which are the parties that take investment decisions. According to BDI, the primary objective of ecological industrial policy has to be the strengthening of national competitiveness, whereas climate protection has to be dealt with at a global level. BDI issued its own [Manifesto for growth and employment](#) in 2008, in which it states that the greening of the economy should be undertaken within the context of the main target of increasing competitiveness. In France, while employers are committed to tackling issues related to climate change, the Movement of French Enterprises ([Mouvement des entreprises de France, MEDEF](#)) is opposed to the creation of any additional taxation in this respect.

In Luxembourg, the Union of Luxembourg Companies ([Union des Entreprises Luxembourgeoises, UEL](#)) published a document entitled [Safeguarding economic, social and ecological interests sustainably \(in French, 303Kb PDF\)](#) in 2007. Among other things, the document advocates the encouragement of production methods and consumption patterns that are clean and efficient. Elsewhere, in Sweden, the Confederation of Swedish Enterprise ([Svenskt Näringsliv](#)) published a report in 2007 on how Swedish companies are implementing national environmental objectives, based on in-depth interviews with 29 companies.

Employers in Slovakia that are affiliated to the National Union of Employers ([Republiková únia zamestnávateľov, RÚZ SR](#)) published two position papers on green issues in 2008, both dealing with carbon emissions trading. For instance, the employers asked the prime minister not to agree to unilateral measures on carbon trading, which would potentially weaken the position of EU Member States in global competition.

Employers in some countries have formulated policy proposals on specific issues, such as automotive policy, buildings insulation and renewable energy. This is the case in Romania, where the Employer Confederation of Romanian Industry ([Confederația Patronatelor din Industria României, CONPIROM](#)) has issued proposals seeking to deter imports of second-hand vehicles that are polluting, granting subsidised interest loans for renewable energy investments, and allocating a special Statistical Classification of Economic Activities in the European Community (*Nomenclature statistique des activités économiques dans la Communauté européenne*, NACE) code to the renewable energy sector. It has also proposed greater investment in the hydropower and nuclear power industries. In addition, the Romanian Association of Construction Entrepreneurs ([Asociația Română a Antreprenorilor de Construcții, ARACO](#)) has proposed that, for a limited period, the thermal insulation of buildings and the switch to alternative energy devices should be subject to lower rates of value-added tax (VAT).

Trade unions

Trade unions have been active in many countries in promoting the green agenda and explaining their position. The stance of trade unions often includes proposals to government and employers to act on green issues. This is the case in the UK, where in April 2009 the [Trades Union Congress \(TUC\)](#) launched a new publication, entitled [Changing work in a changing climate \(460Kb PDF\)](#), which documents the results of research in which organisations were asked what efforts they are taking to tackle climate change. The publication also contains a series of recommendations for trade unions, government and employers on issues such as adapting workplaces to deal with the impacts of climate change.

In Slovenia, all eight trade union confederations signed in December 2008 a position paper on employment, social security, the labour market, and economic and fiscal measures, which also contains elements relating to investment in renewable energy projects.

Trade unions in the Nordic countries are usually well-informed on green issues. In Sweden, for example, the trade unions generally have well-developed policy positions on the green agenda. For instance, large confederations such as the Swedish Trade Union Confederation ([Landsorganisationen, LO](#)) and the Swedish Confederation of Professional Employees ([Tjänstemännens Centralorganisation, TCO](#)), as well as specialist organisations such as the Swedish Association of Scientists ([Naturvetarna](#)), formulate specific policies and positions on green issues, based on matters such as how to create jobs in the new green economy and how to ensure that the green economy can help Sweden to emerge from the current economic crisis. Norwegian trade unions have also been engaging intensely with the green agenda – all of the main Norwegian confederations have published climate strategies in which they set out their positions.

Like their Swedish counterparts, the trade unions in Belgium are also well informed on green issues and have been campaigning on environmental matters since the 1980s. For instance, the Confederation of Christian Trade Unions ([Algemeen Christelijk Vakverbond/Confédération des Syndicats Chrétiens, ACV/CSC](#)) has been focusing some of its campaigning efforts on the issue of jobs, noting that the green economy has significant potential for job creation, but warning that new jobs should be of good quality rather than precarious. The confederation also highlights that social dialogue will be crucial in shaping the green agenda.

Some trade unions have been voicing their views through the hosting of dedicated seminars and conferences, or the setting up of special working groups to deal with environmental issues. In Germany, for example, the Confederation of German Trade Unions ([Deutscher Gewerkschaftsbund, DGB](#)) and affiliates participate in two working groups – one on energy and the other on the environment – within the country's tripartite 'Alliance for jobs, training and competitiveness' (*Bündnis für Arbeit, Ausbildung und Wettbewerbsfähigkeit*) initiative ([DE0001232F](#)). In Malta, the Union of United Workers ([Union Haddiema Maghqudin, UHM](#)) organised in November 2008 an extraordinary general conference on climate change and employment, at which the implications of the green economy on the labour market were discussed.

Social partner approaches to the green agenda

The general attitudes and approaches of the social partners to the green agenda have been largely covered by the initiatives outlined in the previous section. However, some additional actions and approaches can be reported – usually in the form of engaging in political debate. Trade unions in some countries have been engaged in lobbying the government and/or the business community to act on environmental issues and to focus on the job creation potential of new green industries. Employers have also been lobbying to promote their interests, which are usually connected to ensuring that business is allowed to remain competitive in a green economy. Some examples of the main social partner approaches are outlined in Table 4 below.

Table 4: Examples of social partner approaches to the green agenda, by country

Country	Attitude/approach
Employers	
Belgium	At sectoral level, the Multisector Federation for the Technology Industry (Fédération belge multisectorielle de l'industrie technologique/Multisectorfederatie van de technologische industrie, Agoria) – one of the country's largest sectoral employer organisations and representing the technology industry – has set up a campaign on green companies , highlighting the job potential of the industry specialising in 'green' technology.
Ireland	The Irish Business and Employers' Confederation (IBEC) has compiled an environmental policy to 'ensure that the Irish economy moves towards the goal of balanced and sustainable development and that environmental objectives are met in the most efficient and cost-effective manner'. On behalf of members, IBEC also has an input into Irish climate policy to ensure that the traded sector (production activities in which industries are exposed to international competition) obtains a fair allocation and that economic considerations are given appropriate weighting when framing policy.
Poland	Both the Confederation of Polish Employers (Konfederacja Pracodawców Polskich, KPP) and the Polish Confederation of Private Employers Leviathan (Polska Konfederacja Pracodawców Prywatnych Lewiatan, PKPP Lewiatan) have underlined the need for a more intensive focus at national level in order to achieve better coordination of actions relating to environmental protection.
UK	The UK employer organisation CBI has set up a Climate Change Taskforce involving senior figures in UK industry and businesses. The taskforce has most recently issued a report on the development and deployment of low-carbon technologies, entitled Low carbon innovation: Developing technology for the future (182Kb PDF) . In this document, CBI argues that specific technologies can contribute significantly to a low-carbon future and that investment should be encouraged in these technologies. These include offshore wind, biofuels, building lighting and cooling systems, and increased efficiency vehicles.
Trade unions	
Czech Republic	In April 2009, the Building Workers' Trade Union of the Czech Republic (Odborový svaz Stavba ČR, OS Stavba) asked the Czech prime minister in an open letter for a rapid adoption of measures to cushion the impact of the economic crisis in the construction and production of construction materials sectors, where huge job losses are imminent. Requests included granting

	state support for the building of transport infrastructure, support for housing construction, reconstruction of existing housing stock, and development of the Temelín nuclear power plant in the southwest of the country.
Denmark	In January 2009, the Danish Confederation of Trade Unions (Landsorganisationen i Danmark, LO) published a letter to the government calling for ‘an offensive plan of investments’. In order to create 20,000 new jobs, LO suggests that DKK 17 billion (about €2.29 billion as at 24 August 2009) should be set aside for new investments. Of this amount, LO proposes that around DKK 3 billion (about €403 million) should be earmarked for green growth, including investments in new technology and solar energy, along with subsidies for energy-saving insulation in public buildings.
Germany	Trade unions in Germany are in a dialogue with the government on environmental issues. In a statement issued in March 2009, the trade union federation DGB called for an integrated approach of climate, energy, mobility and industrial policy to push for ecological industrial restructuring. Furthermore, in March 2007, the German Metalworkers’ Union (Industriegewerkschaft Metall, IG Metall) and the German environment ministry issued a joint statement, which claimed that the European automotive industry is not achieving its corporate responsibility to reduce CO ₂ emissions voluntarily, and that rules and regulations need to be developed to ensure sustainable development and employment growth.
Ireland/UK	Irish and UK trade unions agreed in November 2008 on a 10-point action plan that unions want the respective governments to implement in order to minimise the damage caused by the recession to working people and their families. The plan includes an insistence that governments work with the social partners and local and regional authorities to identify business sectors of strategic interest, such as green jobs, and ways in which they might be supported.
Italy	The General Confederation of Italian Workers (Confederazione Generale Italiana del Lavoro, Cgil) and the environmental organisation Legambiente have issued a joint document, which urges the Italian government to take action in the green sector, given its potential for growth as regards both the economy and employment.
Norway	For trade unions as well as employer organisations in the manufacturing sector and the oil and gas industry, climate issues related to greenhouse gas emissions have been challenging; this is due to the need to balance green considerations with the interests and employment situation of the organisations’ members working in the private sector. One example concerns Industry–Energy (Industri og Energi, IE), affiliated to the Norwegian Confederation of Trade Unions (Landsorganisasjonen i Norge,

	<p>LO), which in June 2009 organised a political strike protesting against what it viewed as the government's failure to provide cheap power to the manufacturing sector, as large parts of energy-intensive industries depend on access to power at low and stable prices.</p>
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Source: EIRO national centres, 2009

Unilateral and joint strategies and actions

In this section, the various unilateral and bilateral strategies and actions of the social partners are examined. Such measures take the form of awareness-raising activities, bilateral dialogue, capacity-building initiatives and training for members.

Awareness raising among members

Trade unions

Trade unions in many countries have in place awareness-raising campaigns for members on environmental issues. Actions related to these campaigns take the form of leaflets, regular publications, dedicated website pages and targeted seminars.

In Germany, for example, trade unions have been raising awareness about energy-efficient buildings refurbishment and wind power. The trade union federation DGB is providing experts to give information and assistance to local authorities wishing to carry out energy-efficient refurbishment of buildings.

Aware that the green economy brings new challenges for trade union negotiators, the TUC in the UK has issued a guide for trade union representatives and members who are interested in becoming involved in green issues at the workplace. It includes guidance on the role of a trade union 'green representative' and information on issues such as carbon offsetting, lighting, water and recycling. The guide also includes assistance on negotiating with management representatives and working with colleagues to achieve 'quick wins' and longer-term improvements at work. The TUC also launched a monthly [online newsletter \(148Kb PDF\)](#) on green issues in April 2009.

Trade unions in Belgium have created an innovative inter-union network, which seeks to raise awareness about the environment. The network is a joint trade union initiative and is supported by the Walloon regional authorities. The aim of the network is to encourage social dialogue and negotiation within companies or public organisations on the subject of the environment, as well as to promote the use of renewable energy.

Targeted seminars organised by trade unions include an awareness-raising seminar held in 2007 by the Independent and Self-Governing Trade Union 'Solidarity' ([Niezależny Samorządny Związek Zawodowy 'Solidarność'](#), [NSZZ Solidarność](#)) in Poland. The seminar was entitled 'Towards green workplaces' and was devoted to the promotion of balanced development.

In Italy, the Association of Energy Producers from Renewable Sources ([Associazione Produttori Energia da fonti Rinnovabili](#), [APER](#)), organises company training and information courses on European and national regulations in the energy and environment sector.

Employers

Employer organisations are also aware that the green economy poses a range of challenges. As a result, many organisations have been active in raising awareness of the main issues in this field among their members. Activities tend to focus on issues such as compliance with environmental legislation, reducing emissions, remaining competitive in a green economy, and making the most of the business opportunities presented by the new green economy.

Dissemination and explanation of the green agenda objectives among the employer community has been one of the objectives of employers in Malta. For instance, the [Malta Chamber of Small and Medium-sized Enterprises \(GRTU\)](#) has organised a number of public meetings to explain the obligations and opportunities arising from the [EU Directive on waste management](#) and the [Directive on waste collection of packaging](#) to its members.

In the UK, CBI has been running regular events on issues related to climate change for its members. For example, in 2009, it is running a series of three breakfast seminars on the subject of environmental legislation for people involved in property management and leasing.

In some countries, green issues are linked to corporate social responsibility. This is the case in Finland, where the working group of the Confederation of Finnish Industries ([Elinkeinoelämän keskusliitto, EK](#)) that deals with corporate social responsibility arranges workshops and think-tank meetings on a range of issues related to the green economy.

Slovenian employers have also been running conferences for their members, and on an international basis. A conference partly organised in June 2008 by the Slovenian Employers' Association ([Združenje delodajalcev Slovenije, ZDS](#)) gave delegates a chance to debate the challenges posed by climate change.

An innovative competition organised by the Association of Building Entrepreneurs of the Czech Republic ([Svaz podnikatelů ve stavebnictví v ČR, SPS ČR](#)) aims to inform the Czech public about construction projects that are environmentally friendly, but which are also modern and affordable.

Bilateral dialogue and sectoral initiatives

There are a number of examples of bilateral dialogue on green issues between employer and employee representatives, and of initiatives that have been carried out in specific sectors.

In Denmark, a bilateral initiative called the 'Energy Camp' brings together the social partners and business interest associations to develop concrete initiatives and find common goals on environmental and climate change issues.

In Norway, the trade union confederation LO and the Confederation of Norwegian Enterprise ([Næringslivets Hovedorganisasjon, NHO](#)) have published a [joint statement \(in Norwegian\)](#), encouraging their members to join campaign initiatives on green issues and highlighting the importance of challenges related to climate change. The leaders of the two organisations also took the opportunity to emphasise the longstanding tradition of social dialogue between them, underlining the importance of cooperating in the area of climate change issues.

Textbox 1 below describes one example of local-level dialogue on restructuring and green issues that has taken place in Italy.

Textbox 1: Local-level social dialogue on restructuring and green issues – Italy

The following case is an interesting example of social dialogue on restructuring, which resulted in the conversion of production at a plant manufacturing white goods to the manufacture of alternative and sustainable technology.

In February 2008, the Swedish-owned [Electrolux Group](#) announced that, due to the decline in sales of electrical appliances – particularly refrigerators – it had to close its plant at Scandicci in the northwest Italian province of Florence, resulting in 450 redundancies. Furthermore, the company was forced to downsize its plant at Susegana in the northeastern province of Treviso, reducing the number of workers by 330 persons. On 20 September 2008, an agreement was signed between the management of [Electrolux Italia](#), the national coordination of the [unitary workplace union structure](#) (*rappresentanza sindacale unitaria*, RSU) of the group’s plants, the three national metalworking trade union federations and their corresponding provincial structures.

The agreement, concluded in September 2008 ([IT0810039I](#)), provides for the sale of the factory at Scandicci to the company [Energia Futura](#), controlled by the Anglo-American investment fund, [Mercatech](#). By 2010, the plant will change from the production of small refrigerators to the production of solar panels and wind vanes, and will hire at least 370 of the 450 employees currently working at the plant. The hiring arrangements and dates for these workers will be defined in an agreement, which Mercatech has confirmed will be reached with trade unions in the metalworking sector.

The Electrolux agreement also anticipates the relaunch of production at the Susegana plant, by aiming to manufacture medium-high quality products.

Examples of sector-level initiatives – both unilateral and bilateral – are outlined in Table 5 below.

Table 5: Selected sector-level initiatives on green issues, by country

Country	Sector	Nature of initiative	Initiative
Belgium	Technology	Unilateral (employer)	The employer organisation Agoria has set up a campaign called ‘green companies’, which stresses the job creation potential of the green technology sector.
Germany	Automotive	Bilateral	A joint letter was sent to the German chancellor calling for car tax reductions for passenger cars with low CO ₂ emissions.
Germany	Chemicals	Bilateral	A joint body has been established to provide information and training to works councils on environmental protection issues.

Norway	Local municipality	Bilateral	A joint social partner campaign has been launched to reduce CO ₂ emissions through measures in selected companies in the municipality of Østfold in southeastern Norway. A total of eight companies are participating in the initiative, which runs from 1 January 2009 to 31 December 2010.
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Source: EIRO national centres, 2009

Capacity-building initiatives

The social partners are aware that the expansion of the green economy will change the context in which they operate. For both the trade unions and employers, the type of knowledge that they will require to operate and to provide services to their members will be different in the future.

For the trade unions, their negotiators will need to be trained in environmental issues, and some trade unions are already addressing this aspect. For example, in Portugal, the General Workers' Union ([União Geral de Trabalhadores, UGT](#)) is preparing to introduce environmental issues into its training activities for collective agreement negotiators. In Norway, the Norwegian Association of Local and Regional Authorities ([Kommunenes Sentralforbund, KS](#)), along with the [Confederation of Unions for Professionals \(Hovedorganisasjonen for universitets- og høyskoleutdannede, Unio\)](#) and the Norwegian Union of Municipal and General Employees ([Fagforbundet](#)) have organised a conference for safety representatives and trade union representatives, in order to develop their knowledge and expertise in relation to green issues.

Employer efforts to increase knowledge have mainly been targeting their members, as part of initiatives to help them to cope with new regulatory requirements. For instance, a range of employer initiatives have taken place in Norway to try to increase environmental awareness and reduce emissions among member companies. Similarly, in Slovenia, seminars have been held for business representatives to help them prepare for legislative changes related to the green economy. In the UK, CBI has launched a [series of roadmaps](#) that outline the steps to be taken between now and 2020 in the energy, transport, construction and industry sectors to reduce CO₂ emissions and to open up business opportunities.

In Finland, the employer organisation EK has published a guide on corporate responsibility, which contains tools for self-evaluation and development for companies. The construction industry branch and the biotechnology industry association Finnish Bioindustries ([Suomen Bioteollisuus, FIB](#)) have also published their own principles on corporate social responsibility, business ethics and sustainable development.

Training programmes for members

The green economy will undoubtedly require new and additional skills and expertise on the part of both workers and employers. Aware of this, many employer and trade union organisations have put in place training programmes for their members on green issues, although it should be

noted that many trade unions state that they do not have sufficient resources to fund training programmes. Some of these initiatives are described below.

Employers

On the employer side, courses are run by the Austrian Federal Economic Chamber ([Wirtschaftskammer Österreich, WKO](#)) to help members reduce energy consumption. In Finland, corporate social responsibility guidance for employers also covers environmental issues. In Ireland, the employers' confederation IBEC provides environmental training for members; this includes a [Foundation Course in Environmental Management](#) for managers wishing to get up to speed on current environmental performance trends, standards legislation and solutions.

Trade unions

On the trade union side, many unions run courses on green issues for members. For example, in the UK, the TUC operates a range of courses for trade union representatives, helping them to address the following issues: identify environmental changes that affect the workplace; research and identify appropriate environmental legislation, policies and information; and identify environmental problems and opportunities for trade union action. Elsewhere, in Norway, the trade union confederation LO and its member unions have set up courses on climate change for shop stewards.

In Germany, the trade union confederation DGB, in cooperation with the educational institution [DGB Bildungswerk](#) and the German Ministry for the Environment, Nature Conservation and Nuclear Safety, runs a [project \(in German\)](#) entitled 'Resource efficiency in firms'. The project trains works council members and employees in detecting and implementing ways to improve energy efficiency. The training is part of a programme that leads to a certified degree as an 'efficiency expert'. The metalworking trade union IG Metall cooperates with the employer association of the aluminium industry in implementing this project at workplace level.

Other trade unions, while not offering specific courses, are aware that new skills need to be developed in particular industries. In Denmark, for instance, the Danish Metalworkers' Union ([Dansk Metal](#)) believes that green skills will be needed in areas such as the installation and servicing of solar energy systems and the use of other alternative types of technology.

Initiatives to stimulate the economy and promote a green agenda

Governments, trade unions, employers and other stakeholders around Europe are largely in agreement that the green economy has the potential to create a significant number of jobs in the future. One of the main issues, therefore, is how to harness the potential of this area and to use it to revive economies that are suffering from the recent economic crisis, many of which are officially in a recession at present.

In many countries, governments are working with the social partners to help build strategies for the future. In Austria, for example, the social partners are working with the government on drafting programmes to boost the economy and on developing environmental policy. This is in keeping with the tradition of high social partner involvement in social initiatives in Austria. In Slovakia, where joint initiatives between the government and the social partners are less common, a joint 'Memorandum on cooperation in solving the impact of the financial and economic crises on Slovak society' ([SK0904019I](#)) is an example of cooperation between the government and the social partners, and relates in part to green issues. In the UK, the government is developing a low-

carbon industrial strategy and is consulting with the social partners, environmental experts and other stakeholders on the details of the strategy.

In other countries, trade unions and employer organisations are taking an active stance in efforts to formulate strategies to use the green agenda to help revive the country's economy. In Romania, for instance, the leader of the National Trade Union Confederation Cartel Alfa ([Confederația Națională Sindicală Cartel Alfa](#), [Cartel Alfa](#)) sent an open letter to Romania's president and prime minister in March 2009. The letter comprises a five-point plan of action, including an internationally coordinated programme of economic relaunch and sustainable development, with measures designed to tackle climate change. The plan makes reference to the 'green economy', 'green jobs' and 'fair transition opportunities' for the industries that are to be affected by the switch to environmentally-friendly technologies, in an effort to pull the world economy out of the current recession.

Similarly, in the Netherlands, in the spring of 2009, trade union federations published a Social and Green Investment Plan (*Social en Groen Investeringsplan – Samen de crisis te lijf*) designed to help deal with the economic crisis (see [press release](#), 23 February 2009). The plan contains proposals to invest up to €7 billion in areas such as: the labour market; measures to stimulate the economy – including greener production, reduction of energy use, an increase in wind energy, green VAT rates, and the replacement of outdated central heating systems; and short-term and medium-term changes to the operation of the financial sector.

In Finland, the Finnish Ethical Forum ([Eettinen Foorumi](#)) – which was established in 2001 and comprises representatives of companies, trade unions and the church – discusses business ethics and corporate social responsibility, including green issues.

In some countries, former industrial sites are being converted to enable the production of alternative energy sources, giving a clear illustration of how new technology is replacing old technology. This is the case in Italy, as outlined earlier. Elsewhere, in Bulgaria, the Confederation of Independent Trade Unions ([Конфедерация на независимите синдикати в България](#), [CITUB](#)) proposed in April 2009 the construction of a solar park, which would in the foreseeable future provide employment for 2,000 workers who have lost their jobs as a result of the insolvency of Bulgaria's largest steel mill, [Kremikovtzi](#) in Bulgaria's capital Sofia.

The overall nature of the economy plays a role in the type of social partner response to the current crisis and the emphasis that is given to green issues. In certain countries – particularly some of the new EU Member States – the economy is dominated by agriculture. This is the case in Lithuania, where agriculture plays an important, albeit diminishing, role in the country's economy. In this country, efforts are underway to promote ecological farming practices and farmers' markets. It is hoped that the sustainable farming industry will create significant numbers of new jobs in Lithuania.

In Belgium, one innovative initiative has sought to promote the consumption of green goods and services, at the same time creating employment in these areas and boosting the Belgian economy (see Textbox 2 below).

Textbox 2: Introduction of ‘ecocheques’ – Belgium

On 20 February 2009, the Belgian National Labour Council concluded a collective agreement introducing ‘ecocheques’ ([BE0904029I](#)). An ecocheque is a wage premium, granted under certain conditions with social tax exemptions, focusing on environmentally-friendly and sustainable – so-called ‘green’ – consumer goods. This new initiative, combined with an increase in the value of employees’ lunch vouchers, is part of a broader plan to relaunch the country’s economy and maintain workers’ purchasing power. The basis for the collective agreement on ecocheques is the 2009–2010 intersectoral agreement, which the social partners concluded on 22 December 2008 in the context of the current global economic crisis ([BE0901019I](#)).

The purpose of the ecocheques is to actively contribute to raising awareness of and accessibility to ecological products, as well as to grant an additional ‘net benefit’ to employees. Other wage premiums that can also be considered as a ‘net benefit’ for employees include voucher systems for lunches, sports activities and cultural events.

The [collective agreement on ecocheques \(in French, 85Kb PDF\)](#) outlines, on the basis of a restricted list, which type of ecological products and services can be purchased with these vouchers. The list is based on the following five ecological objectives and includes a large number of products achieving these goals:

- energy saving – insulation products for buildings, electricity-saving light bulbs, as well as products for solar energy or manually produced energy;
- water saving – water-saving shower heads, recuperation tanks for rainwater and accessories for water saving in taps;
- sustainable mobility – the installation of soot filters in diesel passenger cars manufactured before 2005, eco-driving lessons, as well as travel tickets for public transport (with the exception of subscriptions);
- waste management – paper that is 100% recycled and not bleached, or paper bleached using a totally chlorine-free (TFC) bleaching process, synthetic products completely manufactured from compostable materials meeting the national standard NBN EN 13432;
- environment – the purchase of sustainably cultivated wood, trees and outside plants, and non-motorised garden tools.

The agreement also regulates the dissemination of information to employees and the method for calculating the number of ecocheques that may be granted to each employee.

On 6 March 2009, the federal government adopted a Royal Decree to fully implement the system. The ecocheques system will be exempted under certain conditions, by virtue of a Royal Decree, from social security contributions. Moreover, ecocheques can, from a financial point of view, be considered as a social advantage since, in principle, they will be exempt from tax.

These ecocheques are considered as a bonus from the employer. In practice, however, the wage premiums are used in the [collective bargaining](#) process to counter trade union wage demands in an indirect way by allowing these ‘soft’ wage increases. They are considered to be ‘soft’ increases because they cost the employer less than a straightforward gross wage increase, since employers do not have to pay tax on these vouchers as they have to do on labour costs.

Relevant studies and research

There is a wide range of studies and research on green issues and on how to harness the employment creation potential of the green economy. These range from academic studies, to government policy studies and research, and studies published by the social partners or other relevant experts. Table 6 below gives selected examples of relevant studies and/or research in the individual countries.

Table 6: Examples of research on green issues, by country

Country	Details of research
Austria	<p>The Austrian Institute of Economic Research (Österreichisches Institut für Wirtschaftsforschung, WIFO) carried out a study on the development of the country's environmental technology industry from 1993 to 2007. The study (Österreichische Umwelttechnikindustrie. Entwicklung – Schwerpunkte – Innovation), which was published in 2009, reveals that the number of environmental technology enterprises increased from 248 to 375 enterprises between 1993 and 2007. Turnover of this industry grew from €1.5 billion to €6 billion, while employment doubled from 11,000 to about 22,000 workers.</p> <p>The trend towards internationalisation is manifested in a continuous increase in the export share. The authors also found outstandingly high research and development (R&D) activities in the environmental technology industry, compared with most other industries.</p>
Bulgaria	<p>Research carried out by the Bulgarian Industrial Capital Association (BICA) in 80 member companies included a series of questions on corporate eco-policy. The survey findings show a lack of awareness regarding the environment activities of the companies (16%). However, 66% of companies have appointed a dedicated person to deal with environmental issues; moreover, 25% of interviewees stated that the company has in place an eco-policy and measures as part of its CSR strategy. In addition, 66% believed that it was important to develop measures to encourage the introduction of environmentally-friendly technologies.</p>
Estonia	<p>In 2007, Estonia's Ministry of Environment (Keskkonnaministeerium) published a study on the Demand for graduates specialised in environmental areas in the labour market (in Estonian, 242 Kb PDF). A total of 166 companies or public sector institutions were questioned on environmentally-related issues through telephone interviews during the research. The results indicated that 19% of all companies in the target group have allocated an environment specialist position in their company. The share is higher in public sector institutions than private sector companies (38% and 5% respectively). It was concluded that in a two to three-year perspective, the need for environment specialists will increase, but not extensively.</p> <p>It is forecast that about one third of companies will need such specialists (59% of public sector institutions and 17% of private sector companies). Demand is mainly for workers with a higher education, but it is expected that workers with professional higher education and vocational</p>

	training will also be required.
Finland	The Research Programme for Ecological Construction in Finland aims to develop the theoretical basis and concrete solution models for ecological and sustainable development in the construction sector. In particular, it advances Finnish research on ecological construction, both domestically and internationally.
Germany	In 2007 and 2008, the German Environment Ministry commissioned a network of four research institutes to conduct annual studies on the gross employment effects of renewable energies. The latest report by O’Sullivan (inter alia) on the short and long-term effects of the promotion of renewable energies on the German labour market was published in March 2009.
Greece	The Greek General Confederation of Labour (Γενική Συνομοσπονδία Εργατών Ελλάδας, GSEE) has commissioned a special study from the Institute of Labour (Ινστιτούτο Εργασίας ΓΣΕΕ, ΙΝΕ) on the ‘Green economy, social cohesion and employment’.
Hungary	The environmental NGO the Clean Air Action Group (Levegő Munkacsoport) has published an extensive report on the ‘Eco-social reform of the state budget’ (<i>Az államháztartás ökoszociális reformja</i>). The report summarises the organisation’s previous studies conducted in the past years. It takes a general, ecological approach to the government’s reform proposals, in which the green agenda plays an important part.
Ireland	Ireland’s environmental enforcement body, the Environmental Protection Agency (EPA) , funds and supports research on the environment. Since 1994, the EPA research programme has supported R&D activities in a range of environmental areas. This work has been carried out by researchers in third-level institutions, state agencies, government departments, local and regional authorities, the private sector and individuals. The EPA also has an Environmental Research Centre (ERC) , comprising researchers who work closely with the EPA to facilitate a more structured approach to environmental research. The centre aims to provide easy access to information, along with integrated environmental assessment tools and systems. Details of the various research activities and findings are available on the EPA website.
Italy	Data outlined in a report prepared by the organisation Nomisma Energia (NE) for the weekly magazine <i>Panorama</i> show that Italian companies operating in the wind, photovoltaic and biomass sector recorded a 44% increase in sales volume in 2007. The report also provides estimates on employment in the sector: direct and indirect jobs in renewable energies amount to 20,000 jobs, compared with 10,000 jobs in 2005. If mature renewable sources such as hydroelectric, geothermic and solar energy are also considered, employment rises to around 60,000 jobs. Finally, the sectoral associations predict the creation of 100,000 new jobs over a 10-year period.

Malta	Malta's public employment services, the Employment and Training Corporation (ETC) , commissioned a study entitled 'Green jobs – What prospects?', which focused on job creation and training in the environmental sector. The study found that the Maltese green industry employs about 3% of the national labour force and contributes to around 2% of gross domestic product (GDP). The current rate of employment growth in the green industry is about 6% a year, with the main growth industries being liquid and solid waste management and water supply.
Portugal	In 2000, the Portuguese Ministry of Labour and Social Solidarity (Ministério do Trabalho e da Solidariedade Social, MTSS) published a 'Guide for the creation of green jobs at local level'. In 2006, the Institute for Quality in Training (Instituto para a Qualidade na Formação, IQF) produced an extensive study on 'The environment sector in Portugal'. One year later, the Ministry for Environment, Spatial Planning and Regional Development (Ministério do Ambiente, do Ordenamento do Território e Desenvolvimento Regional) published a major report on Environment, innovation and economic competitiveness " (in Portuguese, 8.7Mb PDF). The MTSS also recently commissioned a consultancy company to produce a report on green jobs in Portugal.
Romania	The National Institute of Research and Technological Upgrading in the Energy Sector (Institutul Național de Cercetări și Modernizări Energetice, ICEMENERG) published, in April 2009, a study on the 'Green reindustrialisation of Romania'. The study states that at least 20,000 new jobs could be created in the next three years by implementing renewable energy projects alone. Among the proposals is the replacement of energy-intensive heating facilities by solar batteries, wind turbines and generators or heat pumps, along with other related activities.
Slovenia	The Chamber of Commerce and Industry of Slovenia (Gospodarska zbornica Slovenije, GZS), together with the Slovenian Research Agency (Javna agencija za raziskovalno dejavnost RS, ARRS) and the company Chemeco , co-funded a research project on the 'Systemisation and evaluation of the eco-activities market in Slovenia'. The study was carried out in June 2005 by the Institute for Economic Research (Inštitut za ekonomska raziskovanja, IER). The main aim of the research project was to define areas of eco-activities and their developmental potential. The results showed that Slovenia has implemented few eco-activities, but has great potential to strengthen its economy by investing in eco-activities and the green agenda.
Sweden	Relevant reports and research in Sweden include the following: <ul style="list-style-type: none"> • a report by the Confederation of Swedish Enterprise on Enterprises' environmental work and Sweden's environmental objectives (in Swedish, 2Mb PDF), published in 2007; • a 2008 report, also by the Confederation of Swedish Enterprise, on Environmental benefit (in Swedish, 6.7Mb PDF); • a report published in 2008 by TCO, entitled TCO inspects the

	<p>financial crisis... and what should be done about it? (in Swedish, 237Kb PDF);</p> <ul style="list-style-type: none"> • a report published in 2007 by LO, entitled the ‘Energy policy programme’; • a report published in 2009 by Naturvetarna, entitled The Swedish Association of Scientists on climate and energy (in Swedish).
United Kingdom	<p>In the UK, the TUC has issued a guide on How to ‘green’ your workplace (665Kb PDF). The guide summarises some of the issues arising from a joint initiative by Carbon Trust and the TUC Green Workplaces Project carried out in 2006–2007. It also outlines some of the workplace issues in relation to environmental improvements that may be needed, as well as summarising some of the key actions that trade union members can take to address these issues.</p> <p>Meanwhile, the Institute for Public Policy Research (IPPR) has recently issued a publication entitled Green jobs: Prospects for creating jobs from offshore wind in the UK. The report is based on a series of interviews with industry experts and seeks to identify ways in which job creation in the offshore wind sector can be maximised. The report also contains a series of recommendations to the UK government, including on how to maximise job creation in the offshore wind sector. The recommendations include offering training subsidies to companies in the sector and developing a strategy – based on partnership between employers, education providers and skills policy bodies – to encourage workers to move into the sector.</p>

Source: EIRO national centres, 2009

Commentary

From this preliminary mapping exercise, it is clear that the green agenda is gaining importance in most European countries. At the same time, governments and the social partners appear to be increasingly serious about engaging in this issue. Accordingly, there are many examples of activities and initiatives undertaken by national governments and the social partners.

The evidence presented in this report by Eurofound's national centres shows that the green agenda and green policies are more advanced in some countries than others. In the Scandinavian countries and Germany, policymakers and the social partners have been active with regard to green issues for a significant length of time, whereas in some of the newer EU Member States, green issues are relatively new on the policy agenda. For the newer EU Member States, the EU framework designed to help Member States move towards a greener economy will be of significant assistance. The types of actions and initiatives undertaken also depend on the nature of a particular country's economy. For example, where the automotive industry, agriculture or tourism play an important role in the economy, green actions will tend to focus on these sectors.

Actions by national governments are focused on trying to promote the green economy and on harnessing its job creation potential by various means, including financial incentives and tax breaks. However, it is difficult to accurately predict the exact numbers of jobs that are likely to be created by the new green economy. It is also hard to classify the new occupations that will emerge from the green economy. This, in turn, means that data collection on the number of jobs in existence and the comparability of data will be difficult. Furthermore, it raises difficulties related to the recognition of formal qualifications across borders in a range of green technology areas, as countries may differ in their approach to the types of qualifications needed to perform some technical jobs.

The green economy is seen by many governments as a tool in the revitalisation of the economy in light of the current global economic crisis, and possibly as an important means of job creation. However, in some countries, the crisis has knocked green issues off the top of the agenda for the time being. Moreover, not all actions on the green agenda are targeted as a way of recovering from the current recession – rather, some are stand-alone green actions as part of a general or pre-existing commitment to move away from carbon-based energy sources. Often, actions form part of general policies and can be the responsibility of a range of ministries, making it difficult to obtain a clear view of a country's specific green strategy. One of the major initiatives introduced by many national governments in recent years is the scheme whereby people are given financial incentives to scrap older cars. However, considerable debate has been generated regarding the environmental merits of these schemes, and over whether they do more to support the car industry than to promote the green agenda.

The social partners are engaged in a variety of actions – including the issuing of policy statements, the organisation of conferences and workshops to discuss green issues, and the creation of training programmes to ensure that members acquire the necessary skills. As with the actions of national governments, the social partners' actions vary between the countries. Some social partners, often in the newer EU Member States, have not had as much experience in dealing with these issues as their counterparts in the 'older' 15 EU Member States (EU15). In some countries, where the social partners are less active, initiatives are often led by NGOs.

Differences are evident in the approaches of employer and employee representatives, with the employers more focused on ensuring that they remain competitive in the green economy. Employer actions are also often driven by compliance issues, particularly with environmental legislation. Furthermore, employer initiatives in the environmental area are often embedded in general corporate social responsibility strategies. By contrast, trade union organisations often tend

to carry out lobbying and campaigning initiatives, targeted at governments and the business community.

The skills shortage is an issue that has been highlighted at European level, and also in certain countries, with the social partners in the UK fearing that the lack of appropriate skills may hamper the growth of newer green industries. As a result, the UK social partners, particularly on the employer side, are actively engaging in the promotion of strategies to increase the levels of skills required in the green economy. Countries such as Italy are aware of the skills shortage problems; in response, universities and private training providers are developing courses to develop the skills that will be needed by workers in the future green economy. However, as already noted, difficulties may arise concerning the international comparability of new skills and qualifications.

Alternative and renewable energy sources are a focus in all countries, as governments try to reduce CO₂ emissions. These types of energy include wind power, tidal power and solar power. Nuclear power, also part of many governments' future energy strategies, is a controversial issue in some countries. While it is seen as a renewable and clean source of energy, a considerable amount of opposition has arisen in many countries, on account of its potentially dangerous nature and the problem of the safe disposal of nuclear waste.

Overall, greening the economy requires long-term investment of time and resources and a solid policy framework that ensures that the changeover to green technology and green industries is as smooth as possible. While many see the green economy as a solution to the current problems arising from the economic crisis, it is important to emphasise that the green economy is not a quick-fix solution that will help countries in the short term. Changing to alternative energy sources and limiting CO₂ emissions, while ensuring that economies remain competitive and that workers' skills remain up to date, will require careful and long-term planning. Nevertheless, given the development of a strong policy framework supported by EU policy, it is clear that progress will be made and that the EU's economy will look very different a decade from now.

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

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