Green Jobs in Germany and the UK

Conference Report
The Anglo-German Foundation for the Study of Industrial Society

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Summary by the rapporteur

In the light of the looming climate change and increasing scarcity of resources, a radical shift in awareness is currently taking place in public debate. More and more people are recognising that clinging to resource-intensive industrialism will destroy the basis for human life in the longer term. This insight is accompanied by a growing acceptance of the need for a swift changeover to sustainable and environmentally-friendly manufacturing. The rapid growth of renewable energy sources in Germany shows that this changeover does not only make sense in ecological terms; with the right political management, the economy and the labour market can also benefit hugely from this ‘Green New Deal’. A programme of ecological modernisation will create millions of new jobs. The German and British trade unions have long recognised the potential of ‘green jobs’ - every reason therefore to make this the theme of the 8th German-British Trade Union Forum.

The conference at the beginning of July in Frankfurt (Oder) showed how differently the environmental industry has evolved in Germany and the United Kingdom. Prof. Martin Jänicke presented figures on the current situation in Germany; more than 1.8 million people work in this area, and around 8% of German GDP is now generated here. There is particularly strong growth in the field of renewable energies, which already provide work for over 300,000 people. Forecasts suggest that the number of people employed in the environmental industry could double by 2020.

In the UK, there are currently 880,000 people working in the environmental sector, with only 7,000 involved in renewable energy. However, the forecasts indicate a substantial rise in the number of jobs in the UK also, with a further 400,000 to be created by 2015. It is striking that in Germany and in the UK, the growth in green jobs is predominantly in existing industries, with many companies entering new segments in the environmental field in parallel with their current range of products.

In his presentation, Martin Jänicke used the example of Germany to show how an ambitious environmental policy can stimulate the process of ecological change. The introduction of a mandatory feed-in tariff in Germany not only
triggered a wave of patent applications in sustainable and environmentally-friendly technologies; it also enabled young and innovative companies to make their products competitive in the long term and to establish them in the marketplace.

This modern environmental policy has a number of positive effects. For example, because resource efficiency increases and raw material costs decrease in proportion, the productivity of the whole economy increases. An increase in productivity therefore does not have to come through cost pressure on the labour element. In Germany, labour costs make up only 18% of total production costs, while raw materials account for over 40%. This finding has a twofold bearing on the work of the trade unions. At least in the short and medium term, employers can no longer argue for a reduction in wages and salaries; and trade unions urgently need to expand their existing role as mentors at work to encompass a broader long-term concept of production.

An ambitious environmental policy also needs to define a broader view of sustainability. Sustainability must not be understood only in purely ecological terms; it covers other dimensions too. In Jänicke’s view, these include economic, social and governance issues. The policy concept takes in new forms of social, economic and political regulation, and its coordination and management within complex institutional structures.

In the UK there is still no rigorous long-term climate protection policy, although the government has made some effort recently to develop a sustainable strategy. In her talk, Sue Ferns described how the TUC and the individual unions had been putting forward the position of the trade unions on climate protection and sustainable production since 1998 in a joint committee with the government (the Trade Union Sustainable Development Advisory Committee, or TUSDAC). The TUC is now campaigning to have this platform extended to include the employers.

In Germany, there are differing views on whether an extended consultative framework on the British model would be transferable and sensible. Angelika Thomas from the IG Metall union called for a different approach. IG Metall is pursuing a strategy of industry-specific advisory boards, in which
policymakers, employers and trade unions draw up joint solutions for the industries concerned. IG Metall proposes to set up an advisory board in the automotive industry this year, and has made a request to this effect to the German government.

From the very start of the conference, it was clear how difficult it is to come up with an unambiguous definition of the term ‘green job’. When does a product become a green product, Martin Jänicke asked in his presentation, pointing to those resource-intensive sectors of German industry that still manufacture traditional products but are increasingly going over to more environmentally-friendly production. Because this trend cannot be clearly expressed statistically, these processes do not appear in any assessment of green jobs.

Conversely, the popular perception that green jobs are mainly those in the renewable energy sector only tells half the story. A visit by the conference delegates to the wind power generator Repower in Trampe showed why. There, employees assemble pre-fabricated components into wind power plants; the product is green and sustainable, but the activity is quite traditional industrial work.

British delegates to the conference, like Jane McCann of the GMB union, therefore warned against making an ideological issue of the term ‘green job’ in the debate about an ecological renewal of manufacturing industry. The trade unions should not get into a debate that set bad old jobs against good new ones. ‘A job is a job’, said McCann, calling for a definition based not on the nature of the work but on the principle of sustainability.

The urgent need to increase trade union commitment to renewable energies was shown by the picture painted by DGB regional chairman Olaf Himmel and some works council members of working conditions in the solar power industry in Brandenburg. Low hourly wages of 7.50 euros, temporary part-time contracts and state-funded wage supplements are the order of the day. Conergy representative Harald Frick even described the situation of some temporary workers in the solar energy industry in East Brandenburg as ‘degrading’. There are also huge barriers to the establishment of trade union structures. British employees have had similar experiences.
The rapid quantitative growth in jobs in the environmental sector should therefore not mask the reality of working conditions in the new industries. A key message of the conference was then: green jobs must also be good jobs. Only a high quality of employment can underpin any kind of sustainable development. A socially and environmentally ‘just transition’ to sustainable production is therefore a crucial challenge to be addressed by the trade unions.

Whether this ecological changeover will really be as successful as has been forecast also depends, as all the delegates agreed, on whether we can train employees in the existing traditional industries and satisfy the need for highly qualified staff in the innovative new green businesses. The trade unions on both sides of the North Sea correctly recognised that this must be a core element of their involvement and that they must persuade the political and economic decision-makers of the need to plan quickly, effectively and with foresight. Only training and good qualifications can secure jobs against global competition, and this is perhaps particularly true of the new environmental industry.

In the United Kingdom, specific aspects of the education system make the situation with regard to vocational training and qualification more difficult than it is in Germany. As Sue Ferns explained, the growth of the British environmental industry is jeopardised by a reluctance to invest in qualifications, a lack of transferrable educational standards, and employers who still see no need for forward-looking training. The TUC is therefore putting pressure on the government to come up with a comprehensive long-term strategy for staff training and qualifications.

But the European trade unions also have to find urgent answers to completely new questions. As the conference clearly showed, any discussion on creating sustainable jobs can no longer take place in isolation. Nikolaus Simon from the Hans Böckler Foundation warned of the dangers of the current financial crisis. This could put a brake on the whole project for a ‘Green New Deal’ if the supply of risk capital to young and innovative companies in the environmental sector should dry up. Other aspects, such as the issue of future regulation of
the financial markets, and the debate about ‘good jobs’ also need to be considered. These complex interactions compel the trade unions to bring these previously separate debates together and view these matters as a whole. Green jobs are just one element of this.

The real challenge still faces the trade unions, as Kevin Rowan from the TUC’s Northern branch correctly concluded: this is to develop their own vision of a good and sustainable labour society, and to introduce this vision into the political debate all over Europe.
Environmental protection creates jobs

Green jobs – a key issue for the trade unions

Michael Sommer, Chairman of the Confederation of German Trade Unions (DGB)

In his welcome to the conference delegates, DGB Chairman Michael Sommer stressed the great importance of the issue of ‘green jobs’ to the European trade unions. They were a ‘crucial issue’ which had become more topical than ever in light of the debate on the risks and opportunities of climate change and the economic and financial crisis, he said.

Sommer referred to the Paris Declaration of the European Trade Union Confederation (ETUC) of May 2009. In this Declaration, the ETUC called for a pan-European economic programme to focus on employment and the environment. Over a three-year period, this should involve investing a certain percentage of European gross domestic product (GDP) each year in better jobs, the promotion of research and development, new environmentally-friendly and sustainable technologies, and in safeguarding high-quality services. According to Sommer, however, the key factors in the long-term success of this programme and in the desired rapid transition to a resource-efficient industrial model were intensive education and training of employees.

In Germany, the DGB and its member unions have had great success with an initiative of their own to promote the energy-efficient refurbishment of buildings. This initiative resulted in an aid programme supported by the German government to the tune of 7.5 billion euros. 200,000 jobs have been created and 300,000 homes made more energy-efficient, producing an annual reduction of 2 million tons in CO₂ emissions.

At the suggestion of the DGB and its members, the energy-efficient refurbishment programme has also been incorporated into the current economic stimulus packages (I and II) approved by the German parliament to counter the effects of the financial crisis. The amount of aid has now been topped up by a further nine billion euros. On the assumption that these funds are drawn in full, forecasts from the DGB suggest that the number of new jobs
could treble to 600,000. Sommer concluded by saying that the trade unions could take ‘pride and confidence’ in this immense contribution to safeguarding the climate and reducing unemployment.
Session 1

Innovative and clean – but is it fair?

The situation in the environmental industry in Brandenburg

Olaf Himmel, Chairman of the DGB, East Brandenburg region

At the start of the conference, Himmel gave an introductory overview of the development of the environmental industry in East Brandenburg. This region between Berlin and the Polish border is marked by de-industrialisation following German unification and by a sharp divide in employment rates between the areas close to Berlin and the predominantly agricultural districts along the Oder.

Because the hoped-for relocation of classical manufacturing companies following unification did not happen (with a few exceptions), the region started to invest in renewable energy sources from the late 1990s, with the emphasis on wind and solar energy production.

A number of local industrial centres for renewable energies have since sprung up. In Frankfurt (Oder) and Prenzlau there are companies producing solar modules, and in the Uckermark area and around Cottbus there are manufacturers of wind power generators. Many of these companies have increased their workforce rapidly in just a few years; for example, aleo solar AG, established in Prenzlau in 2001, has grown from 70 to 700 employees and now has other production facilities in Spain and China.

However, this steady growth in jobs in the innovative industries is all too often accompanied by poor working conditions, according to Himmel. A lot of companies exploited the fears of their employees, many of whom were previously unemployed for long periods, he said. Low hourly wages between 7.50 and 8.50 euros, excessive working hours and obstacles to trade unions establishing works councils (as at aleo and First Solar) dampen the joy at the new green jobs.

Himmel also criticised the clear disproportion between the large amounts of aid invested in renewable energy sources by the Federal and State
governments in Germany and by the EU, and the share of this that ultimately found its way into employee’s wage packets.
The Green New Deal and green jobs

An overview of the current situation in Germany

Prof. Martin Jänicke, Environmental Policy Research Centre, Freie Universität Berlin

Since the then red-green coalition government in Germany made the ecological reform of the German economy into a key policy issue eleven years ago, the country has seen the rapid growth of a new environmental sector. In his survey, Martin Jänicke not only presented the current state of ecological modernisation in Germany but also used the example of the Federal Republic to illustrate the positive effects of an ambitious climate protection policy.

He believed that the economic success story of the 20th century, with resource-intensive industrialism based on cheap raw materials, had long since ended. The constantly growing demand for energy and raw materials was increasingly threatening living conditions for mankind and pushing production costs up, he went on. Mankind could no longer afford this economic model in either sense.

This is not a new realisation: 37 years ago, the ‘Club of Rome’ produced a similar diagnosis in its famous report on ‘The Limits to Growth’ (1972). In the same year, the ‘Quality of Life’ congress organised by IG Metall was also devoted to this issue. This period also saw the first concrete proposals to address the problem. In 1974, the Japanese industry ministry MITI drew up a strategic plan for its domestic industry, recognising that Japanese industry had to move towards more knowledge-intensive, resource-efficient and environmentally-friendly production. It took another 35 years for this paradigm shift on the need for sustainable production to make itself felt. According to Jänicke, this was down to resistance in industry and to a neo-classical theory that led people astray.

Ecologically efficient manufacturing – the Green New Deal

With a nod to the famous ‘New Deal’ initiated by Franklin D. Roosevelt in the 1930s, the term ‘Green New Deal’ has been used in Germany for a number of
years to refer to the ecological renewal of industrial society, following on from the concept of ‘ecological modernisation’ developed in 1982. The terminology has changed, but the political message is the same. In Jänicke’s view, the German environment minister Sigmar Gabriel (SPD) coined the term in 2006, summarising the need for a far-reaching climate protection policy as follows: ‘We need a Green New Deal in economic policy, environmental policy and employment policy. The core of this New Deal is innovation.’

The Green New Deal describes a new political philosophy aimed at ecologically efficient modernisation of manufacturing, with a shift from a traditional economic model based on reducing labour costs to an approach aimed at increasing productivity by reducing resource consumption while also having a more positive effect on the environment. Labour costs have not been a dominant factor in German manufacturing for some time, although employers still like to claim that they are. According to figures from the Federal Statistical Office, raw material costs accounted for 45% of total production costs in Germany in 2006, while labour costs fell to just 18%. The potential for increasing productivity by safeguarding resources is shown by another figure: 95% of the raw materials used in production do not even find their way into the product.

**Market volumes and future projections**

The market volume of the environmental industries has grown rapidly all over the world in the last few years. Jänicke cited various studies on this, including a survey by the management consultants Roland Berger, which valued the global market for the new industries at 1.4 billion euros. A more recent study by Innovas actually estimates the volume at 4.4 billion dollars (just under 3.1 billion euros at current rates).

In Germany, the contribution of the environmental industries to GDP had already reached 8% by 2007; estimates from the German Federal Environment Ministry put the number of employees at 1.8 million. Annual growth rates in the years 2005-2007 were high: 29% in the whole field of renewable energies, 20% in energy efficiency and 18% in recycling, to cite just a few examples. The growth in solar heating plants is particularly dramatic, at
110%. In the field of renewable energies alone, the number of employees has doubled since 2004 to more than 300,000.

Still, there are major problems in coming up with a consistent definition of ‘green jobs’. When does a product become a green product? That is why the figures given do not include any traditional industries which are manufacturing in an increasing environmentally responsible way, such as companies with a high impact on resources and the environment. Their contribution to German GDP runs to 44%.

Despite the current crisis, projections for the future development of the environmental industries in Germany remain optimistic. By 2010, the renewable energy sector alone is expected to grow by 35%. Roland Berger believes that the number of jobs in the ecological sector could well double by 2020, and the latest calculations suggest that the number of employees working in renewable energies could grow to up to a million.

A 14% contribution to GDP in 2020 is quite possible, but this will only happen if German employees receive the necessary training, Jänicke stressed.

**Economic effects of an up-to-date climate policy**

Jänicke is convinced that an ambitious climate policy creates positive economic and political effects. These include:

- Increased efficiency, as political demands for sustainable production force technological and organisational improvements.

- Stimulation of innovation: the German government’s introduction of targeted feed-in payments with the Renewable Energy Act (EEG) facilitated market access for renewable energies. As a result, the number of patent applications in this field has risen dramatically.

- An accelerated process of innovation driven by a growing eco-sector.

- A faster political process, as the acceleration of the innovation process and the increase in efficiency feed back into policy provisions in the area of climate protection. A typical example of a
chain of cause and effect in ecological house-building is the progression from energy saving through thermal insulation (the low energy house) through the ‘passive energy house’ to the ‘energy-plus house’ (in Freiburg), which does not merely save energy but actually produces a surplus.

- A twofold growth effect: climate protection industries are not only growing fast; they are also increasing productivity in the wider economy. Production costs can be reduced across other industries, as their resource and energy consumption goes down.

- A demonstration effect: a successful climate protection policy encourages imitation, both politically and economically, and the example of the German Renewable Energy Act (EEG) with its mandatory feed-in tariff has been followed by another 45 countries.

In concluding his presentation, Jänicke reminded delegates that an ambitious climate protection policy does not operate in a competition-free zone. Emerging economies like China and India were creating great political and economic pressure that climate policy needed to respond to quickly, but it would be wrong to believe that the market alone could drive technological progress in climate protection, he said.
Green Jobs and vocational training

An overview of the situation in the United Kingdom

Sue Ferns, member of the TUC General Council and Head of Research for the Prospect union

In her talk, Sue Ferns outlined the way in which the individual British trade unions and their umbrella organisation the Trades Union Congress (TUC) were positioning themselves on the issue of ecological modernisation - and how the unions were trying to turn theoretical discussion into practical policy and economic reform. The cornerstones of the activities of the trade unions are the political concept of a just and socially responsible transition to environmentally-friendly manufacturing, and a long-term strategy to improve employee training and qualifications.

Trade unions advising the government on climate protection policy

Since 1998, the British trade unions have been involved in the Trade Union Sustainable Development Advisory Committee (TUSDAC), a consultative body between the unions and the government addressing issues of sustainable development and climate protection. Ferns believes that the committee not only provides an opportunity to make the unions’ views heard in the political process, but also opens the way for joint initiatives, such as implementing environmental improvements in the workplace.

Radical structural change is forcing the British unions, whose members still come mainly from the traditional industries, to come up with answers to completely new questions: What actually is a green job? How can we stop an ideological divide between employees in the old traditional industries and those in the new environmental sectors? In its recent publication ‘Green workplaces - Unions and Climate Change’ the TUC picks up the definition proposed by the United Nations Environment Programme (UNEP). This considers a green job to be any ‘work in agricultural, manufacturing, research and development, administrative, and service activities that contribute substantially to preserving or restoring environmental quality’.
Ferns expects an ecological reform of the UK economy to have four fundamental effects on employees:

- additional jobs will be created, in environmental protection industries, for example;
- existing jobs will be replaced, perhaps by the switch from fossil fuels to renewable energies;
- some jobs will be lost and not replaced;
- existing jobs will change to meet the requirements of ecological reform.

**A fair and socially responsible path to the green future**

Based on these assumptions, the TUC has defined the key ways in which this structural change should be practically supported in social and environmental policy terms. These include securing sufficient investment in green jobs and the development of low-carbon technologies, defining a long-term strategy for employee education and training, and ensuring regular communication between industry, the unions and the government. According to Ferns, this communication is not yet taking place.

The TUC used its publication ‘A green and fairer future’ to present in detail how it believes employees, companies and communities should be helped through this structural change. Apart from the emphasis on training mentioned above, this would include:

- providing ‘transition packages’ for employees who need to retrain or relocate to take up a new job.
- help for communities affected by structural change.
- strategies for an environmentally-friendly redesign of the workplace.
- preventing welfare cuts and wage dumping in the new environmental industries. The quality of employment is just as
important as the number of new jobs.

**Green jobs in the UK: depressing present, good prospects**

According to figures from the British government, there are 880,000 people currently working in the environmental sector. This includes the areas of renewable energies, environmental protection, biofuels and new low-carbon industries, such as CCS (carbon capture and sequestration) technology, which is being heavily promoted in the UK and involves capturing carbon dioxide from the combustion of coal and storing it in underground rock beds. Ferns said it was hard to judge the current situation very accurately because there was no institution at the national level charged with monitoring this process.

The most recent examples of a positive trend are the production of fuel cells in a Rolls-Royce plant in Bristol and the recent launch of turbine production for tidal power plants in Scotland. Employment is also growing in wind energy. However, in contrast to Germany, the area of renewable energy has seen very little development in the UK to date. According to the TUC, there are only 7,000 people employed in this sector, 4,800 of them in wind energy.

The forecasts are promising, and Ferns presented findings from various studies, including one by the Aldersgate Group, which forecasts an additional 400,000 jobs in the environmental sector by 2015. The Carbon Trust expects 250,000 new jobs to be created by 2050 in offshore wind farms and wave power plants.

The British government is striving to support this development through various aid programmes. As of now, 1.4 billion pounds have been set aside for environmental programmes, including support for offshore wind farms.

However, Ferns criticised the aid as far too little. The TUC had called for a comprehensive ‘green’ stimulus package worth 16.8 billion pounds, she said, to promote things like renewable energies, environmentally-friendly production methods, fuel-efficient cars and CCS technology.

However, the TUC had no better response from the government than it had for its call for the rapid introduction of a feed-in tariff, which expert estimates suggest could create up to 100,000 new jobs by 2020. The trade unions are
still awaiting a political strategy for low-emission environmentally-friendly manufacturing. This is due to be published sometime this year.

Lack of training impedes growth in the environmental sector

In the view of the British trade unions, the eventual success of any ecological modernisation is crucially dependent on the level of training and qualification of the employees. But this leaves a lot to be desired, as Ferns explained.

In a white paper on the situation in the energy sector published in 2007, the TUC listed poor qualifications and gaps in training, and the resulting problems. These include a lack of highly qualified specialists, as strong global demand means that they are now employed all over the world, an aging workforce, a lack of investment in training associated with the privatisation of the British energy sector, and a lack of generally accepted and transferrable education standards.

The situation regarding qualifications in the new environmental industries is even more difficult. Although there are clear indications of a latent shortage of qualified staff, employers were not expressing any need, according to a study by the UK Ministry of the Environment. Even now, there is insufficient training capacity, to say nothing of the need to retrain the existing workforce to meet the needs of sustainable and environmentally-friendly production.

At the same time, vocational training today is very much concentrated on providing low-level basic qualifications, whereas modern sustainable manufacturers are looking for highly qualified specialists. The government must take some of the blame for this situation, Ferns said. Although the government announced greater support for education and training in the new environmental markets in its strategy paper ‘New industry, new jobs’, published in March, there was still no long-term policy in this area, she went on. Organisations in the training field found it difficult to plan ahead.

Ferns gave a mixed assessment of the current status of ecological renewal in the UK; while the government was saying the right things and encouraging some positive developments, the process was moving far too slowly. As Head of Research for the Prospect union, she echoed the criticism levelled by the
Aldersgate Group at the British government’s economic stimulus package. Because the environmental element only accounted for 10.6% of this package, Ferns felt the UK was missing a great opportunity to change direction.

The British trade unions are therefore demanding a clear plan of action from the UK government, to provide stronger support to the embryonic new green industries. There had to be a clear political and economic framework not focussed simply on reducing costs but also promoting targeted investment in training and jobs, Ferns urged.
Discussion

This section summarises the main points raised in the discussion. The points are ordered thematically, and do not reflect the chronological sequence of the debate.

- Particularly for the British unions, it makes little sense to discuss the development opportunities from a Green New Deal without a clear definition of the term ‘green job’. This definition should be based on the principle of sustainability, which means that green jobs are any jobs that bring a lasting improvement to the environment by way of new working methods and techniques.

- In Germany, the discussion is no longer about the supposed conflict between new green technology and old bad technology. The focus is rather on how sustainable production can be integrated into traditional industries, and how the structural change should be supported by the trade unions in a spirit of ‘just transition’.

- This also means identifying what new requirements need to be defined for the education and training of employees, and how the trade unions should influence this process with a view to the longer term. As the capacity for innovation is dependent on the organisation of labour and industrial relations, trade unions must place greater stress on the importance of employee skills and training.

- There must be no divide between traditional labour organisation on the one hand and green jobs on the other. This is the only way the unions can convince employees in the traditional sectors of the case for a green modernisation of industrial society.

- Trade unions are in an ideal position to encourage employees to change their behaviour, not only at work but also in the private sphere, and interest them in ecological issues. In the UK, the example of the so-called ‘green representatives’ shows how effective this strategy can be.
• The conversion of traditional industrial society to a sustainable approach to production must not be viewed only from an ecological standpoint. Sustainability must encompass four dimensions: economics, ecology, social welfare and governance.

• Green jobs must also be good jobs. It is not sufficient to consider the environmental aspects alone. The task of the trade unions is to oppose wage dumping and the erosion of employee rights in green jobs also.

• The current collapse of economic orthodoxy and the global crisis in finance-driven, consumer growth-based economies force the trade unions to think much more broadly about alternatives. It is no longer enough to consider only the transition to an environmentally-friendly economic system and green jobs. This paradigm shift has long been about more than just an ecological revolution; the question is, what is a ‘good society’ and how can it be achieved.

• The faith in economic growth as the driver for economic and social development must be much more strongly challenged. This also means considering how the limited available resources can be redistributed more fairly. Rich countries like the UK and Germany should not exploit the crisis to extend the classical concept of growth to incorporate a philosophy of ‘green growth’.
Session 2

Regional players and promoters of green jobs

The second part of the conference was run as a panel discussion with four speakers on the podium. With a mixture of longer statements by the speakers and more detailed debate from the floor, this addressed the question of what unused potential there might be for creating green jobs in the green technologies and where the delegates saw scope for action. The panel discussion was moderated by Heike Kauls, head of the energy and environmental policy group within the national committee of the DGB. For the sake of clarity, the rapporteur has broken the longer podium speeches and the subsequent discussion into two sections.

Session 2a

Kevin Rowan, Regional Secretary, TUC Northern

In Rowan’s view, the Northeast of England currently offers many development opportunities to create new jobs in the green technologies. The key areas of development are:

- CCS technology: the government recently announced that it plans to construct a pilot plant for a clean coal-fired power station. The TUC hopes that this will be built in the North of the region. A second, still more innovative plant is currently under discussion for the South of the region. The plan is to pipe separated carbon dioxide into dormant natural gas fields in the North Sea. A by-product of CCS is hydrogen, which can then be used as a raw material for the emerging hydrogen industry in the South of the region.

- Wind energy: the government is supporting large offshore wind farms in the North Sea and the Irish Sea. The Crown Estates (which own the coastline around the UK) are leasing the seabed for this. This autumn will also see the next round of
licences awarded for the production of 5-megawatt wind turbines. Companies like Siemens, Vestas, Mitsubishi and GEC have expressed an interest. Rowan is hopeful that there will soon be perceptible growth in this area.

- Electric cars: Nissan plans to develop more electric cars in its existing plant in Washington and has concluded an agreement with the local business development agency. The TUC is hopeful that this will give a fresh impetus to the financially strapped automotive industry. In parallel with this, Nissan needs a new plant for the production of batteries, which could create 600 new jobs. The electric milkfloat technology developed in the region is also being marketed more aggressively. A major step forward is the agreement from public bodies in the region to promote the development of electric cars.

It is striking that the growth in green jobs is mainly in existing industries (such as the glass industry, which is moving into photo-voltaic technology, or offshore suppliers who are now constructing wind turbines). A change of strategy can now be observed not only at the boardroom level but also in the regional business development agencies, which play a major role in the UK in the absence of regional governments (as in Germany). According to Rowan, the vision exists to turn the Northeast into the leading region for green technologies.

The maximum potential number of jobs in the green technologies in the Northeast of England is currently estimated at 50,000, out of a total of 1.1 million people in employment. However, this potential can only be realised if a regional supply industry for the environmental sector can be established.

Rowan sees four main areas for action here:

- Turning the potential into real jobs: here, the trade unions have a particular responsibility to drive the process forward.
• Improving vocational training: there have been some initial positive steps, with two training centres for sustainable technologies being built.

• Supporting local authorities: the TUC is trying to help local authorities to obtain more flexible support from investors with the aid of ‘assisted development areas’. There is already such an area for low-carbon manufacturing, although this was rejected by central government. Rowan did not quote the reasons for this refusal.

• Advantages of strong trade unions: it is essential to persuade companies and public bodies of the benefits of a strong trade union on the ground.

Angelika Thomas, member of the board of the IG Metall union and head of the technology and environment group in the Finance department

Thomas outlined how IG Metall is responding to the structural change in German energy production. She explained that the union is expanding its cooperation with works councils, well-proven in classical plant construction, to cover the renewable energy sector. Together with the works councils, she is discussing issues like changed training requirements with staff, along with market and product changes, and adopting a forward looking position with management on the introduction of new technologies and on how the unions can instigate a positive change in the political conditions.

According to Thomas, the trade unions need to take a long-term view of structural change if they are not to be surprised by a sudden reduction in the workforce. These economic changes have long affected the supply industry also, where structural change is now under way, as she illustrated from the example of the medium-sized mining equipment supplier Eickhoff. Eickhoff has successfully established itself as a supplier to manufacturers of wind power plants, and 50% of its product range now goes into building these plants.
This development of a new green production model in companies in traditional manufacturing industry no longer allows the unions to make a distinction between ‘old’ and ‘new’ industries. For IG Metall, the real task was therefore to consider and develop this process as a whole, said Thomas.

An essential condition for sustained market success for renewable energies is a legislative policy supporting the launch of new technologies onto the market. Thomas felt that it had taken the Renewable Energy Act to enable young companies in Germany to make their green products viable and to develop a market for them.

**Harald Frick, works council representative, Conergy, Frankfurt (Oder)**

In contrast to the euphoric public debate on the rapid growth of renewable energy sources in Germany, the economic situation of solar module manufacturers in the Frankfurt (Oder) is currently quite tough, as evidenced by Conergy. As Frick explained, production at Conergy was currently running at one sixth of possible capacity, and the company was surviving on direct and indirect subsidies.

He saw the lack of suitable sites for solar power stations as the main reason for the lack of demand. Many investors are looking for sites in Germany, but are not finding enough of them. German policy makers need to find new solutions to this problem, possibly by providing space on the roofs of public buildings.

Frick also saw a need for action to address work situations of temporary workers in the solar energy industry. Given hourly wages of six euros and part-time contracts, many temporary workers are dependent on additional state benefits.

**Martin Jänicke, Environmental Policy Research Centre, Freie Universität Berlin**

For this academic, the key issue was to step up the pace of ecological change. A vital aspect of this was stronger support for the market penetration of sustainable products, and a better organisation of so-called lead markets at the global level. By this, Jänicke means rich countries driving technological development by way of state aid, and assuming the costs of this development.
Another area for action is a thoroughgoing reform of the tax system. Any ecological fiscal reform must break away from the current practice of taxing wages rather than resource consumption. Another component of such a fiscal reform might be the introduction of a climate tax along the lines of the UK’s Climate Change Levy. This was introduced in 2001 to increase energy efficiency in companies and reduce emissions of greenhouse gases. Jänicke thinks this is a brilliant way of speeding things up.

Other suggestions from Jänicke were:

- Leasing of alternative energies: power plants in the renewable energy sector are still significantly more expensive than conventional plants, which deters potential buyers. Why not offset the cost of the plant against the cost of the electricity?

- Targeted support for ‘energy-plus’ houses.

- Green corridors in the construction industry: in the past, a lot of money has gone into concreting over the natural environment. Now the money is going into reclamation, to improve the quality of life in our cities.
Session 2b
Discussion

- A joint, institutionalised consultation process between politicians, trade unions and employers offers an opportunity to speed up ecological renewal. In the UK, the TUC is urging the government to set up such a forum with the employers. In Germany, the idea has gained partial acceptance. IG Metall finds industry-specific advisory boards more helpful, in which trade unions can discuss the impact of structural change with employers and come up with actions. IG Metall has asked the German government to set up such an advisory board specifically for the automotive industry.

- The discussion on creating sustainable jobs cannot be conducted in isolation, but must be part of a wider context. For example, the current financial crisis is jeopardising the supply of risk capital to innovative companies in the environmental sector. The discussions on the regulation of the financial markets and on ‘good jobs’ also have a bearing on this development. All these debates therefore need to be consolidated and assessed as one.

- In the new green markets, there is an urgent need to set up trade union structures, as working conditions do not fundamentally differ from the situation in the traditional industries. In the environmental sphere too, there is immense pressure on wages and constantly growing demands for efficiency and productivity. Policy-makers need to support the organisation of trade unions, not sabotage it. Freedom from trade unions must not be used as an argument for establishing new green industries.

- A high quality of employment is a prerequisite for any kind of sustainable development. The trade unions must explain to political decision-makers and employers the relationship between poor working conditions and economic development. Talented young people move away, and communities do not have the money for sustainable development. The provision of aid to companies in the new environmental industries should
therefore be tied to the maintenance of good working conditions.

• The trade unions must express their vision of a sustainable labour society in clearer terms than before, and introduce it into the political debate, particularly at the European level. In view of the growing divide between falling wage costs and rising resource costs, trade unions must not only act as advocates for employment and good working conditions; they must also commit themselves to a sustainable use of resources.