Grasping for air

In March, leaders from the EU's 27 member states pledged to cut carbon emissions by 20% of their 1990 level by 2020. Many believe that such an ambitious target is unlikely to be reached without an EU-wide carbon tax. But Claire Jones finds out rules on taxation and political opposition present difficulties

October 30 2006 was a strange day in European politics. The UK government, often regarded as the most obstructive, divisive and downright stubborn of the member states, did something that it does not manage very often. It made Angela Merkel, the German chancellor, smile.

Sir Nicholas Stern, an economic adviser to the UK government, released his review on climate change, where he labelled the phenomenon the biggest market failure of all time. Stern predicted that missing the chance to invest 1% of global GDP in halting climate change, may lead to global GDP being 20% lower than it could be.

"It was unexpected that the UK would release something like the Stern Review," said Norbert Walter, Deutsche Bank's chief economist. "I'm pretty sure Angela Merkel would've invented the Review if possible. It fits in perfectly with her thinking and with her timetable."

The Stern Review and the March pledge from government leaders to cut carbon emissions by 20% by 2020, are two indicators of the momentum that is building across the EU to address the climate change problem.

And László Kovács, the commissioner for taxation and customs union, has wasted little time in seizing on this momentum to rekindle the debate on an EU-wide carbon tax.

Tax forum

The first EU tax forum, which took place in Brussels in mid-March, discussed economic instruments for sustainable development such as a carbon tax, and a cap-and-trade system.

Paul Ekins, head of the environment group at the Policy Studies Institute in London, said: "It was very interesting that the Commission chose to start the EU tax forum with taxation for sustainable development and focus very much on energy and carbon taxation. This to me is a definite signal that the Commission is flexing its muscles with regards to tax and is trying to get member states to think more positively about taxation at an EU level."

Kovács followed the forum with a green paper aimed at generating debate on EU-wide environmental taxes and improving existing initiatives.

"The paper will be a step on the way to revising the energy tax directive," Kovács said.

Paul Metz, director of INTEGeR consult, a lobbying group for businesses supporting sustainable development, considers Kovács's timing strong.

"There is a very strong movement at the moment to implement stronger economic policy. There is consensus at the European level, and they're all looking separately for level-playing-field implementation," said Metz. "So if there is a moment to reconsider a carbon tax across Europe, it's now."

Rae Kwon Chung, director of the environment and sustainable development division of the UN Economic and Social Commission for Asia and the Pacific, said: "I think that an EU-wide carbon tax is a lot more likely than in other regions because EU countries are more concerned about climate change and environmental issues."

A national issue

But some debate on whether a continent-wide tax is necessary, given the efforts of individual member states in introducing a carbon charge.

Sweden, Finland, the Netherlands and Norway all enacted carbon taxes in the 1990s.

David Gee, coordinator emerging issues and scientific liaison at the European Environment Agency, said: "If jurisdictions are making good progress themselves then what's the point in having an EU-wide carbon tax? Some countries would want to introduce tougher ones than others, so even if they did all agree, it's likely the tax would be set at a low level, perhaps lower than those existing at member state level."

Jim Robertson, vice president for tax at oil company Shell agrees that national governments are better placed to introduce incentives for sustainable development.

"We have to look to governments to put the appropriate mechanisms in place. Governments can think about better, more consistent, incentives for low carbon technologies including renewables," he said.

Vested interests

But pressure from voters could hinder national governments' ability to act.

"We have had stronger EU Commissions than this one, but the national authorities are so much worse," said Walter. "They're a lot closer to vested interests, to expect something big from them can be ruled out. This has to come from the superstructure."

An EU-imposed system would divert pressure from the member states.

"I would expect the EU Commission to set up a framework with bands and for the member states to decide what the bands are. And I'd not be surprised if some smart European national leaders would invite the Commission to do that," said Walter. "I would expect Merkel would be very happy to get some plans from the EU in order to make political life easier for her back home."

Convergence

A harmonised tax rate across the EU would have some significant advantages to charges imposed nationally.

Michael Keen, head of the tax policy division at the IMF, said: "A number of countries have taxes that are related in a fairly ad-hoc way to carbon emissions. But there's a case for having tax systems that more systematically and cleanly relate to emissions."

"You can argue that the tax doesn't have to be completely uniform across different countries, even on theoretical grounds because of the way in which it interacts with other aspects of a country's tax system. The appropriate level for a carbon tax might be different in different countries," added Keen.

Ekins said: "I think there's a real nervousness within the Commission that if member states try to achieve the 20% reduction in carbon emissions by 2020 by themselves then there will be market distortions across the Union. And the aim of the EU is to have an integrated single market that is not distorted."

But Europe has already tried and failed to introduce a carbon tax (*see box out*).

Jos Delbeke, director, DG environment, at the European Commission, who wrote the proposal for the first EU-wide carbon tax, the European carbon energy tax, in the mid nineties, is sceptical that such a charge could be enacted.

Unanimity

"We now have 27 member states and the degree of diversity within the EU has increased, in terms of tax philosophy," said Delbeke. "Unanimity becomes a theoretical construction. So you'd have to go through either a change in the constitution, for matters of taxation, or environmental taxation, but we would have to see, or at least I would have to be convinced of the UK coming around."

But the Stern Review would suggest that the UK is willing consider a harder line on climate change. And the influence of the UK's line goes beyond the English Channel.

The first EU-wide carbon tax proposal

Jos Delbeke, director, DG environment at the European Commission, who was behind the first EU-wide carbon levy, the European carbon energy tax, is painfully aware of the power of the press.

"I remember on the morning of the final meeting of the Ecofin council, where they had to decide on the tax, on the front page of the *Financial Times* (A UK business daily newspaper) were four words: No tax from Brussels," said Delbeke. "And since that date, taxation has moved away from the agenda of EU discussions."

But it was not just the UK's stance that led to the European carbon energy tax being shelved. Spain also voted against the charge, citing concerns about distortions of competition.

The high rate made the tax a big revenue raiser, which Delbeke said led to disputes about who would get the revenue and how it would be spent.

Delbeke said: "The level of the tax was quite significant. And that was part of the problem".

The EU Commission had wanted to charge the tax on barrels of oil. The levy was set at $10 per barrel. Oil at this point was selling for between $30 and $35 per barrel.

The Commission's thinking was that because the price elasticity of energy use is relatively low, it would take a big price hike to change consumer behaviour.

"It's very difficult to discuss a tax measure. It's even more difficult to agree on what to do with the revenues," Delbeke said. "There were people in the environmental camp who said we should earmark it to finance the new technologies that we are going to need. There were others who said that it has to go to the State coffers."

The Commission decided revenue would go to the member states, which would also be responsible for collecting it. The majority favoured some form of ecological tax reform, where the high revenue raised from environmental costs, is used to cut levies on labour. But this was not put forward in the proposal, leaving member states free to spend as they chose.

"I believe that the Stern report has really changed the tone of the debate," said Walter. "With the UK showing that it thinks the issue is important, countries who were unconvinced so far now have a very prominent country giving a clear warning that not to deal with this issue might be inappropriate."

Diversity, however, is still an issue.

Walter said: "The French want to protect their nuclear power. The Germans understand that at the moment, a lot of their economic momentum comes from the automotive industry, and they have vested interests in much of the coal power plants."

But *Verband der Automobilindustrie*, a lobby group for Germany's car makers, did say that it would support a national carbon tax superseding the hotchpotch of environmental taxes Germany now has. This suggests an EU-wide carbon tax, if it was not charged on top of a national carbon tax, would be encouraged.

Still no one would doubt that a wide range of opinions will be voiced in the carbon tax debate.

"There are no easy coalitions, they are all quite wobbly. And it takes quite a lot of government talent to get such a discussion organised and effective," said Walter.

However, member states did agree on the energy taxation directive, signed in 2004, so the need for unanimity is no reason to consider the enactment of a carbon tax impossible.

Global appeal

One solution to divergence within the EU could be to appeal to jurisdictions backing action on climate change from outside the EU. Possible examples are the US states of Massachusetts and California.

"EU members may have the same issue that they had with the savings directive and wish to have assurances of action by other countries," said Keen.

Norbert Walter: **Environmental taxes might act as guidance to entrepreneurs, giving an advantage over their competitors elsewhere**

The savings directive enables EU members, with the exception of Belgium, Luxembourg, and Austria, to share banking information. The directive was ratified in part because several notable tax havens such as Aruba, Montserrat, Anguilla, and the Cayman Islands, made conditional agreements to comply with it.

Walter said: "When Europeans move into something like leadership, then they should be able to form coalitions with US and Asian partners, otherwise it might be difficult to win over the doubters here."

Coalitions with partners outside the EU would increase momentum for a global carbon tax, which business has suggested it would prefer to a national or regional charge.

Exxon Mobil's recent about-turn in supporting a carbon tax was with the proviso that the tax was introduced globally. Jim Robertson from Shell complained that an EU-only tax would give companies based outside the Union a competitive advantage.

"It doesn't do anything for the planet if you impose a carbon tax in one country and industry moves next door. Carbon taxes tend to be country of origin specific, and even if an EU-wide tax was imposed there are countries outside the EU," said Robertson.

Competition

But COMETR, a study by the Department of Policy Analysis in the Environmental Research Institute at the University of Aarhus in Denmark that looked at environmental taxes implemented by six member states, found that the charges had no negative impact on competition.

Some environmental researchers have, however, criticised the study.

Gee said: "I have a bit of a problem with the study because the energy taxes that were brought in and were being studied gave lots of exemptions to the energy intensive sectors and so, in a way, they were designed not to produce any uncompetitiveness."

Sweden's carbon tax, enacted in 1991, exempts industries such as mining, manufacturing, commercial horticulture and the paper industry.

If not now when?

Robertson said that the introduction of a carbon tax could affect Shell's investment decisions.

"I guess there's a hypothetical case where an investment will be made where there's exactly the same economics in one country as with another, if one country has a high tax system, whether that's a carbon tax or any other tax, the country with the lower tax would be likely to get the investment," said Robertson.

Many companies are likely to agree with Shell. But business could find this stance counterproductive in hindsight.

"I'm pretty sure Japanese car companies and French car companies have benefited from regulation on the energy intensity of engines in cars," said Walter. "The Detroit car companies [*General Motors, Ford, and Daimler-Chrysler*], by always being opposed to environmental taxes, were digging their own grave rather than helping themselves."

"You could be too far ahead, but if you're behind, it's even worse. Global trends will emerge in the direction of energy conservation. Environmental taxes might act as guidance to entrepreneurs, giving them an advantage over their competitors in other countries," added Walter.

"If a carbon tax was introduced and companies did move elsewhere then it would be self defeating because in 20 years time they'd have to do the same thing elsewhere because there's going to be a trend towards people using renewable energy," said Walter.

Emissions trading

Robertson said that he would prefer the use of a cap-and-trade scheme, such as the EU's emissions trading scheme to a carbon tax.

Robertson added: "We were one of the first companies to propose and emissions trading scheme. A cap-and-trade mechanism that is applied globally stands a better chance of making a contribution to global warming in terms of encouraging the right behaviours."

Richard Lambert, director general of the CBI, a UK business lobby, has also supported a cap-and-trade scheme, telling the BBC that a global system of carbon trading is "urgently needed".

The EU emissions trading scheme, introduced in the then-25 EU member states in January 2005, caps the amount of carbon dioxide emitted by companies.

An emissions trading scheme would appear to be more politically feasible, and it has the strength of being able to limit the quantity of emissions, which a carbon tax cannot.

Dick Morgenstern, a senior fellow at Resources for the Future, a Washington DC-based environmental policy research institute, said: "It's not very popular to be in favour of increasing taxes, especially for something as direct and visible as energy taxes. A carbon trading system doesn't draw the same amount of political fire."

Janet Milne, director of the Environmental Tax Policy Institute at Vermont Royal School, said: "It is relatively easy for voters to see and understand the cost of a tax, whereas it is more difficult for them to react to the more amorphous costs and the technical details of a permit trading regime".

Voters could be more easily convinced if a carbon tax is introduced as part of ecological tax reform, where the revenue collected from environmental taxes is used to decrease taxes that hamper economic growth, such as those on profits, and VAT.

But, as the emissions trading scheme is already in place it would appear more practical to expand it, than to try and get 27 member states to agree on a carbon tax.

Second best solution

From an economic viewpoint, however, a carbon tax is preferable.

Milne said: "I think two factors weigh in favour of a carbon tax. The price will be known rather than fluctuating. A tax may be simpler to administer, particularly if it is imposed close to the point where the fossil fuels enter the economy where fewer taxpayers are involved."

Ekins said: "At the moment investors don't know if they'll be paying €2 per tonne or €30 per tonne. It's been at both those levels over the last 18 months."

Ken Cohen, vice president for public affairs at oil company Exxon Mobil, said in an interview with the Planet 2025 news network: "The thing that makes it very difficult for us when we make

Up in smoke

Al Gore and Arnold Schwarzenegger, two of the biggest political stars of the climate change debate are from the US but the country lags behind the rest of the OECD in implementing environmental taxes. Claire Jones investigates how soon this could change.

When the US was ranked 30th out of 30 OECD nations in its use of environmental taxes in 2003, few people were surprised. The world's largest economy has a reputation as a gas-guzzler. And George W Bush's close relationship with oil companies and his failure to ratify the Kyoto protocol has done little to counter this view.

But, a decade earlier, in 1993, the US looked as if it could to lead the global debate on carbon taxation.

Janet Milne, director of the Environmental Tax Policy Institute at the Vermont Law School, said: "The US had the potential to be in the EU's position in leading the debate on controlling climate change when President Clinton proposed the BTU (British thermal unit, which measures the heat content when fuels are burned) tax in 1993".

The tax was not passed (*see BTU tax box out*).

And though people such as the nation's most prominent economist, former Federal Reserve chief Alan Greenspan, and Paul Anderson, CEO and chairman of US energy company Duke Energy, have called for the introduction of a carbon tax, the idea has not been well received politically since then.

Republicans taunted Al Gore about his fanaticism after he proposed a carbon tax when he ran for the presidency in 2000.

But recently the idea has made a revival.

Carbon proposals

Chris Dodd, a Democratic senator for Connecticut who is campaigning to be his party's candidate for the presidency in 2008, has advocated a corporate carbon tax. He said that the tax would accrue more than $50 billion a year, which would be placed in a fund for R&D into renewable energy sources and energy efficient technologies. The senator has said that he wants greenhouse gas emissions cut by 80% by 2050.

And Pete Stark, a California Democrat from the House of Representatives, is trying to introduce a proposal for a carbon tax.

Businesses are undoubtedly becoming more environmentally conscious, too.

"The attitudes of the American public are clearly shifting. There's a growing recognition that the voluntary approaches haven't really got the job done. There's recognition that the problem is more serious than we thought and that voluntary approaches are inadequate for controlling emissions," said Dick Morgenstern, a senior fellow at Resource for the Future, a Washington DC-based environmental policy research institute. "There's a momentum building for change in policy".

But Milne is unsure whether industry will prove more receptive to a carbon tax than it was in 1993.

"I think it's harder for business to be anti-environmental. But it's a slightly different question that you're asking of whether industry would be more receptive to a carbon tax than they were in the past," Milne said.

Cap and trade

Morgenstern thinks that the introduction of an emissions trading scheme is more likely.

"Although it runs the risk of creating windfall gains, free permit allocation can be used to compensate industries that may be damaged by a mandatory programme," said Morgenstern.

Morgenstern added: "Although a carbon tax remains a possibility, I think it is more likely that the US would adopt a cap and trade approach. Of course, the timing for either a tax or a cap and trade is highly uncertain. While some observers still believe a political consensus could emerge prior to the next presidential election, it seems more likely that a mandatory program would gain approval in 2009 or shortly thereafter".

The BTU tax

Bill Clinton's BTU (British thermal unit) tax would have charged a basic rate of 25.7% per million BTUs. For oil, a supplemental levy of 34.2 cents per million BTUs was proposed.

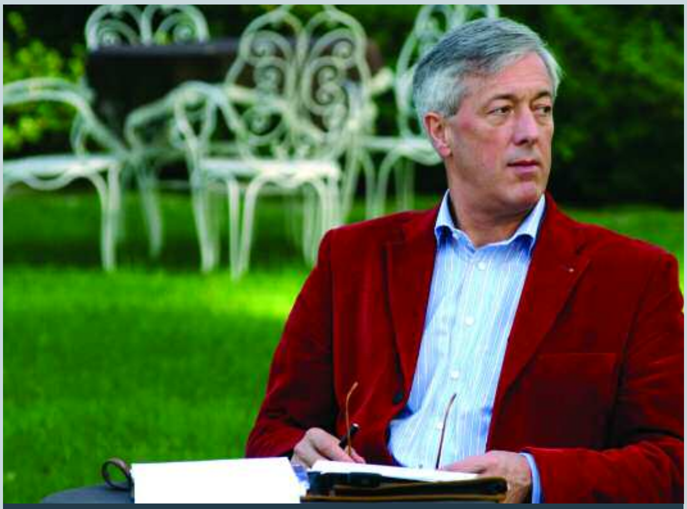
The levy would raise production costs by an average of a tenth of 1%. For energy intensive industry the average was 4%.

The tax was considered by the US legislature at about the same time as EU members were discussing the European carbon energy tax.

The tax package containing the BTU just got through the House of Representatives, but it fared badly in the Senate. The Senate Finance Committee, which writes US tax legislation, was headed by Lloyd Bentsen, a Texas senator. Given the rich energy resources of the state he represented, the senator could not support the BTU tax.

A justification of carbon taxes

Companies have failed to control climate change, but politicians can if they pick the right policy tools says Paul Metz, director at INTEGeR consult, a lobbying group for businesses supporting sustainable development, and a board member on the European Business Council for Sustainable Energy



Paul Metz: "Enactment of a carbon tax can reduce pollution and replace taxes that slow economic growth"

Free market conditions have not prevented serious climate disruptions. Since the 1992 Rio Summit, corporates have tried and failed to halt climate change by promising voluntary solutions.

Now, a growing number of CEOs, some from the US, are calling for political leadership. These chiefs are like the sorcerer's apprentices, handing back the broomstick that they stole, and could not control, to politicians.

Regrettably, most politicians are unprepared for this. Because they are unprepared, politicians are susceptible to lobbying efforts by energy intensive companies, a point the former US president Bill Clinton made earlier this spring.

"Special interest groups and corporations sabotage the necessary and possible energy transition. Governments should listen to innovative companies, not to the fossils of the past," Clinton said.

Something better required

It is simple and politically attractive to solve problems by handing out subsidies. However, a more effective, structural approach is needed.

The OECD in 1974 adopted the polluter pays principle, which offers much better ways than taxpayer-paid subsidies.

In addition to the current, often too soft, regulations for energy efficiency standards for consumer products, governments can implement polluter pays instruments. These instruments directly increase prices, reducing the use of polluting resources by both companies and citizens.

In 1997 the Kyoto Protocol was agreed and its idea to cap and trade emissions was embraced by EU politicians and business.

This stalled the further development of the older market-improving instrument of environmental taxation. But many experts now realise how slowly the emission trade is developing and recognise the need to use both trading and a carbon tax to sufficiently green the invisible hand of the free market.

Some benefits of an EU-wide carbon tax are:

- Enactment can reduce pollution and replace taxes that slow economic growth, producing the so-called double dividend effect. This reform can be made revenue neutral by reducing tariffs on incomes, profits and VAT. By this, the impact of higher fuel prices on low income citizens and companies can be compensated.
- An EU-wide charge contributes to a convergence of national levels of taxation across the EU.
- Existing taxes on oil protect EU consumers to fluctuations in world oil prices as the percentage of oil in the gasoline price is much lower than in US and other trade partners and competitors. Carbon tax will increase this protection.
- The tax would create a level playing field which would make it easier to comply with WTO rules when implementing import duties on energy-intensive products from countries that did not ratify the Kyoto protocol such as the US and Australia.
- Though the EU emissions trading scheme introduces a challenge to the US and other countries to engage in Kyoto and create a global emissions cap and trade system, allocation of permits is still largely free. The scheme also produces undesired windfall profits and political uncertainty post-2012, when the first stage ends and conditions for developing countries have to be agreed and made attractive for them.
- Taxing carbon gives a good example for precautionary policy and good governance worldwide. In developing countries the introduction of taxation on natural resources is much easier than on incomes and can help reduce social inequities.

The EU wants to lead the world on energy innovation and climate protection. Commissioners Kovács, Dimas and Piebalgs (the EU commissioners for taxation, the environment and energy) have in March 2007 expressed their willingness for this at the Brussels Tax Forum for Sustainable Development. The infrastructure for energy and carbon taxation is in place. The Commission could, and should, act today.

investments under the European system is that the cost on a forward basis is far from predictable, and the cost even on a near-term basis is volatile."

The tempering of opposition from energy intensive industry through the allocation of free permits has also attracted criticism.

"If we have special rules for the guys who are polluting the environment more than anyone else, as is the case in Germany, where we give the largest amounts of emissions certificates without costs to the lignite coal electricity producers, then we destroy the instrument," said Walter.

Metz agrees.

"A lot of people have been complaining about the huge windfall profits made by companies who have received too many allowances," Metz said.

In the second phase of the carbon trading scheme, which runs between 2008 and 2011, governments can auction up to 10% of the permits. The UK has announced that it will sell 7%. A rise in the amount of permits auctioned will reduce the free permit problem. But many feel the 10% figure is too low to adequately reduce emissions.

Metz said: "The emissions trading scheme is developing too slowly to bite in time to prevent the worst effects of climate change".

Tax and trade

Ekins has said that introducing a carbon tax at a price below that of permits will mimic the increases in the amounts being auctioned.

If the permits were trading at $20 per tonne, and a tax of $5 per tonne was introduced, then the permits would trade at $15 per tonne. Rather than increasing the amount of permits auctioned, the tax could be increased instead until the permits were trading without a cost.

Such a system would maintain the advantage that the emissions trading scheme has in limiting the quantity of emissions, while removing the fluctuations in price. And because the tax could be introduced at a low level, member states reluctant to adopt an EU-wide carbon tax could be more easily convinced to do so.

Ekins's idea appears a sensible solution, but even such a pragmatic approach will be hard pushed to be backed by 27 different countries. The Commission is hard for a carbon tax, but the unanimity requirement may mean that its reach exceeds its grasp fighting.