Many European businesses are questioning why the EU is prepared to increase costs unilaterally when the benefits of the Kyoto approach to combating climate change appear so limited. **Alasdair Murray** reports

COUNTING THE COST OF CLIMATE CHANGE

'While United Nations' members continue to argue about the best way to make Kyoto operative, carbon dioxide emissions have continued to rise'

Seven years after global leaders agreed in principle to take the first faltering steps towards tackling climate change, the fate of the Kyoto protocol still hangs in the balance.

More than 100 countries have now signed the agreement, which seeks to curb carbon emissions from developed countries by 5.2% from 1990 levels. However, the existing signatories do not account for the 55% or more of global emissions necessary to ensure that the agreement comes into force.

The Bush administration has flatly refused to ratify the treaty. Meanwhile Russia, responsible for 17% of global emissions, continues to tease the signatories, and the EU in particular, about whether it will ratify the treaty or not.

As recently as April, senior advisers to the Russian government were suggesting that the country would never sign a treaty it regards as economically ruinous. However, President Vladimir Putin subsequently told the EU-Russia summit in May that he intended to speed up ratification – although he again failed to provide a firm date.

Russia's prevarication has little to do with the economic or environmental merits of the Kyoto plan. The treaty offers little immediate threat to the Russian economy: Russian emissions are now some 30% below Kyoto's base year of 1990 due to the collapse of its heavy industry. Moscow is simply seeking to use its now pivotal role in the Kyoto negotiations to extract trade concessions out of the EU. But its behaviour has helped once again highlight the glaring inadequacies of the Kyoto accord.

Even the strongest supporters of the agreement accept that it is not meant to be an end point. It is riddled with flaws which undermine its effectiveness.

It fails to include larger developing countries, such as China and India, which are likely to become major sources of greenhouse gas in the medium term. It only operates for the period 2008-2012 although climate change is a long-term problem. The proposed emissions curbs are far too modest to reverse the climate change process. And the US, which is responsible for around a quarter of all greenhouse gas emissions, is implacably opposed to the agreement.

While United Nations' members continue to argue about the best way to make Kyoto operative, carbon dioxide emissions have continued to rise. In the decade since the ratification of UN's framework

convention on climate change – the precursor to Kyoto – greenhouse gas emissions have risen by 11%.

Despite these problems, the EU publicly remains committed to meeting its Kyoto target – an 8% reduction in emissions from 1990 levels – whether the treaty is ratified or not. The Union's most ambitious plan to curb greenhouse gases – an emissions trading scheme – will come into operation in January 2005.

However, the EU is struggling to meet its own climate change targets. The European Commissions has warned that member states are not doing enough to fulfil their Kyoto commitments – and some, such as Ireland and Austria, are moving further away from their emissions targets.

Moreover, many EU businesses are questioning why the Union is prepared to increase costs unilaterally when the benefits of the Kyoto approach are so apparently limited. The electricity industry, for example, is warning that the EU's emissions trading plans will increase electricity costs by up to 40%, hurting businesses and consumers alike.

But this does not mean European businesses are opposed to any measures to tackle climate change. Many are urging the Union to end its sole focus on Kyoto and begin a far-reaching dialogue about what the longer-term response to climate change both at an EU and global level should be.

EU businesses are also becoming increasingly sensitive to the threat which climate changes poses to their long-term financial success.

In particular, the insurance industry has been startled by a sudden rise in claims related to weather extremes – such as the heavy flooding across Europe in the summer of 2002 or the very hot summer of 2003. Global reinsurance company Swiss Re recently estimated that the costs of global warming are likely to double to £150 billion a year by 2014. As a result, insurers will face annual payouts some $30 to $40 billion higher than now.

Swiss Re is among a small, but high-profile, group of companies which recently helped set up the Climate Group, a forum for private companies and public sector authorities which want to find new ways of dealing with global change.

The group, which also includes oil giants such as BP and Shell and building materials group Lafarge, wants to pool knowledge about cutting emissions to help spread best practice. BP, for example, says that it has cut emissions levels by 10% from 1990 at no extra cost to its business.

The firms involved believe not just that climate change poses a threat to their business, but that they could reap first-mover advantage by taking the threat seriously. However, discussions on what should follow – or replace – the Kyoto agreement are still in their infancy.

Green groups are pushing an ambitious strategy dubbed 'contraction and convergence'. This would involve a three-stage procedure for coping with climate change. First, UN members would seek to reach agreement on how much carbon dioxide levels could 'safely' rise over the next 50 years. Then they would calculate how quickly global emissions need to be cut to meet these targets ('contraction'). Finally, the agreement would allocate fossil fuel emissions on an equitable global basis ('convergence').

The long timeframe would provide rich states with time to adjust, while poorer countries could raise badly needed development funds by selling their emissions rights.

This plan has many attractive features, not least its simplicity. However, Kyoto demonstrates the difficulties of reaching agreement on even modest targets.

And there is little scientific agreement about what constitutes safe levels of greenhouse gases in the atmosphere. The US is likely to continue to object that such economy-wide solutions will impose an excessively high cost on American businesses.

Equally, the larger developing countries such as China and India may still be reluctant to commit to any agreement which might constrict their ability to maintain a fast pace of economic growth – even if that threat is far in the future.

Cartoon: Martyn Turner/Irish Times

To win US support – and that of the developing countries – any post-Kyoto agreement is likely to require a "variable geometry". Rather than simply trying to reach agreement on one comprehensive protocol, UN members might need to introduce several protocols which countries could meet at different times.

One part of such an agreement should include commitments to introduce new clean technology. The Bush administration has repeatedly stressed that it sees technology as the long-term solution to the climate change problem and Washington is spending $4 billion a year on incentives for research and development.

Elliott Diringer, director of the Pew Centre on global climate change in the US capital, has suggested that an agreement could target the replacement of gasoline engines with hydrogen by 2050. Or it could include a target for developing effective carbon sequestration – the process of capturing and storing excess carbon dioxide – by 2020.

The US argues that this process holds the key to the success of climate control measures since many developing countries are likely to continue to use coal-fired power stations for the foreseeable future.

However, the EU will need to stress that such technology-focused agreements can only form part of a broader strategy. Greenhouse gas emissions will continue to rise over the coming decade unless there is agreement on curbs that go beyond Kyoto.

A sectoral approach – and long time-frames – might help forge an agreement. For instance, UN members could agree to move towards zero net emissions in the energy sector by 2050.

Signatories should also be able to choose a wide range of methods to achieve this goal. The EU's experience of carbon trading should prove invaluable in demonstrating that market-based mechanisms can help minimise the cost of curbing emission. In this sense, the Union's efforts to support Kyoto might not prove entirely in vain.

The EU's emissions trading scheme

Whatever the ultimate fate of the Kyoto agreement, the EU remains committed to meeting its target of an 8% reduction in emissions from 1990 levels by 2010.

The main mechanism it has chosen to try to achieve this goal is the world's first comprehensive multinational emissions trading scheme, due to come into operation in January 2005.

On paper, the idea is simple: each EU member state issues carbon dioxide credits to larger polluting industries, such as electricity generators, metal producers and paper manufacturers. Firms will then be able to trade these credits. Those which successfully reduce emissions can profit by selling on excess credits to high-emitting rivals. The scheme is expected to cover some 12,000 factories and power stations responsible for 46% of all carbon dioxide emissions in the EU. The Commission argues the scheme will reduce the estimated €37 billion cost of meeting the Kyoto targets by more than a third.

However, the EU is finding putting the plan into practice much more difficult. All member states were required to submit a national allocation plan by the end of March 2004, detailing exactly how they would distribute the carbon credits. In the event, only nine out of 25 met this target.

At the heart of the problem is the difficulty in allocating the carbon credits in a fair and consistent manner in all 25 EU member states. The Commission is concerned that many are being too generous in their allocation of credits. If the EU allocates too many credits, the trading price will fall, reducing the incentive for high-emitting firms to change their behaviour. The price of the few carbon credits already trading fell from around €13 a tonne in January 2004 to €7 in May. Some economists argue that the price will need to reach €20 tonne before companies have a strong economic incentive to curb emissions.

On the other hand, businesses have warned those member states which have taken a more restrictive approach to credit allocation that economic competitiveness might suffer. The UK, for example, amended its plans to cut emissions to 15.2% from an earlier target of 16.3% after an outcry from British companies – although the target is still higher than required by the UK's Kyoto commitments.

The UK is now worried that other countries might be bending the EU's rules and handing out carbon credits in too generous a fashion. In June 2004, Environment Minister Margaret Beckett took the unusual step of issuing a joint statement with Confederation of British Industry calling on the Commission to scrutinise properly all the national action plans to ensure a level playing field. If the Commission fails to amend these allocations now, it is likely to face a flood of complaints about state aid from disgruntled businesses once trading starts next year.

The EU has too much political capital invested in the scheme to allow it to fail. But the Commission looks to have its work cut out to make it work smoothly.