

# Trade implications of the Kyoto Protocol

Aaron Cosby and James Cameron

**The Kyoto Protocol is the most significant economic agreement since the World Trade Organization (WTO) was created in Marrakech in 1994, and is arguably the most complex international agreement ever adopted.**

Parties to the Protocol, if it is ratified, may find themselves confronting the principles and rules of the multilateral trading regime administered by the WTO in their attempts to fulfil their Kyoto obligations. This paper sketches out how those conflicts might arise, in an effort to find ways in which they might be avoided.

## The Protocol

The United Nations Framework Convention on Climate Change (FCCC) is a framework for action to limit or reduce emissions of greenhouse gases (GHGs), such as carbon dioxide whose concentrations have risen significantly as a result of human activities. It was signed by over 150 states at the June 1992 "Rio" Summit (the United Nations Conference on Environment and Development). It entered into force in March 1994 and has been ratified by 176 countries. Parties included in Annex I to the Convention (developed countries and those in transition to a market economy) undertook a non-binding commitment to reduce their anthropogenic GHG emissions to 1990 levels by the year 2000.

The third Conference of the Parties to the Convention was held in December 1997 in Kyoto, Japan, and resulted in the adoption of the Kyoto Protocol to the FCCC. Annex I Parties committed to legally binding targets to limit or reduce emissions of six major GHGs, with an aggregate goal of a 5 per cent reduction from 1990 levels by 2008-2012. As of February 1999, 76 countries have signed the Protocol and three have ratified it.

The fourth Conference of the Parties was held in November 1998 in Buenos Aires. Parties adopted the Buenos Aires Plan of Action, a work plan with firm deadlines to address issues raised in Kyoto and to further the implementation of the Protocol, which will enter into force when a majority of Parties representing 55 percent of total Annex I emissions have ratified it. (Note that this arrangement gives the United States an effective veto.)

The Kyoto Protocol established three "flexibility mechanisms" to assist Parties in meeting their targets: emissions trading (Article 17), joint implementation between Annex I countries

(Article 6), and the Clean Development Mechanism (CDM) (Article 12). None of these has yet been precisely described by the negotiations, but most of the basic ideas are clear.

Emissions trading allows Annex I Parties to trade emissions reductions among themselves, buying or selling credit toward their commitments. Joint implementation involves collaborations among developed countries and countries in transition, on projects that will reduce carbon emissions from the baseline scenario. Such projects will earn emissions reduction credits. The CDM will provide incentives to firms investing in emissions-reducing projects in developing countries, with credits being divided between the host country and the investing firm.

## The issues

Kyoto raises a number of trade and environment issues, most of which will come to the fore as Parties seek to fulfil their obligations to reduce emissions. It is highly likely that governments with differentiated legal and political commitments will implement these obligations in ways that favour their domestic industries. Policies and measures with potential conflict for the multilateral trading system include:

**Carbon tax with border adjustment** The idea of a tax on the carbon emitted in the process of producing a good, whether a unit of energy or a tonne of steel, has been around for some time. Both the U.S. and the E.U. have tried in recent years to implement such taxes, and both failed. But countries' obligations under the Kyoto Protocol are bound to give greater impetus to such schemes. The main obstacle to implementation is the penalty that such schemes assess domestic producers, who must face imports that may not have paid such a tax, and who must compete with similarly untaxed goods on the international market.

Both the U.S. and the E.U. responded to this competitiveness asymmetry by considering a

"border tax adjustment" scheme. Such a scheme might remit carbon or energy taxes on exports, so that domestic manufacturers would be competitive abroad, and would assess a tax on imports equal to the amount the good would have been taxed had it been manufactured domestically. The former is GATT-legal. The adjustment for imports is controversial (not to mention methodologically challenging), and the spectre of a GATT/WTO challenge visited the debates in both the U.S. and the E.U.

The problem is that while the GATT rules allow for border tax adjustment, the traditional interpretation is that the only taxes eligible for adjustment are those levied directly on products, such as sales or value-added taxes. A GATT Working Party on the subject ruled that "taxes not directly levied on products were not eligible for adjustment, such as social security charges ... and payroll taxes". By this interpretation, the import adjustment described above would be GATT-illegal, since the taxes for which it adjusts are not levied directly on the products being traded, but are levied indirectly, on the energy that was used in the manufacture of those products. In this sense, the carbon/energy tax is much like a social security charge or payroll tax.

**Subsidies, tax incentives** Governments may offer incentives to firms, such as subsidies and tax incentives, to become more energy efficient, in an effort to reduce national carbon emissions. The temptation for governments will be to craft these such that only domestic firms will qualify, in a desire to foster industrial development at the same time as protecting the environ-

ment. Discriminatory subsidies and tax incentives are potentially GATT-illegal.

A number of criteria collaborate to qualify a subsidy as GATT-illegal. The subsidy must first be granted specifically to a particular industry or sector within a country (any conceivable subsidy aimed at reducing GHGs would be specific in this sense). It must then be either linked to exports of the subsidised good, contingent on the use of domestic inputs, or found to cause “adverse effects” to foreign competitors. Defining adverse effects is rather complex, but it boils down to calculating whether the subsidy impairs the market share of a competing producer.

There is a particular type of environmental subsidy that is GATT-legal, and which will probably be used to help domestic industry adjust to the shock of Kyoto compliance. It covers a one-time cost of firms adjusting to new environmental regulations, up to 20% of costs incurred.

**Government procurement** Another way to foster greater energy efficiency is to decree that the purchases by government departments, which in OECD countries typically amount to 10 - 25% of GDP, will have to meet certain green standards. The greening of government procurement is proceeding apace in OECD countries, in pursuit of a range of environmental goals. In the context of climate change the criteria might apply not only to the GHG emissions in the use and disposal of the purchased products, but also in their manufacture.

Such schemes would enter grey legal territory under the GATT. Under GATT rules, it has traditionally been seen as illegal to discriminate at the border on the basis of how a good is produced. (From an environmental perspective this is madness, but the trade community fears that the criteria could too easily be set up in such a way as to unfairly advantage domestic producers.) However government procurement does not fall under the GATT, but under the WTO's Agreement on Government Procurement (AGP). Unlike the GATT, this agreement seems to allow discrimination based on process and production methods (PPMs).

The more serious obstacle in the AGP is the requirement that no procurement criteria be set up in a way so as to create unnecessary barriers to trade. The key here is in the untested definition of “necessary”. If the history of the GATT is any-

thing to go by, it will be defined as “least-trade-restrictive”, meaning governments will have to justify their procurement schemes as the least-trade-restrictive way to achieve the environmental goal in question. This would be a high hurdle to clear.

The AGP at this point has only been signed by a dozen or so countries, but they include the EC, Japan and the United States.

**Ecolabels** Governments might also want to develop ecolabels to certify that particular goods involve exceptionally low GHG emissions, using consumer preference as a weapon in the battle to meet Kyoto obligations. Again, these standards might refer not just to GHGs emitted in use or disposal, but also in the production process.

One possible conflict with WTO rules is in using such PPM-based distinctions, which are suspect in the multilateral trade community. Ecolabels, as voluntary standards, are covered under the WTO's Code of Good Practice, which spells out the proper ways to create and implement such standards. But there is an ongoing controversy in the WTO as to whether the Code covers PPM-based systems or not, and therefore as to their ultimate legality. The more immediate potential problem is in the construction of the ecolabel. It is easy to set up categories and criteria such that they unfairly favour domestic producers. For this reason the Code of Good Practice mandates procedures such as consultation with interested foreign producers.

No ecolabel has ever been challenged by the WTO nor, because of their voluntary nature, is one likely to be. But if a programme of government procurement used an ecolabel as the criterion for purchase – a future possibility – then the situation might change. The label in that case would in some sense cease to be voluntary, meaning stricter rules would apply.

**Product efficiency standards**

Another way to increase energy efficiency is to set high product standards. Governments may, for example, decree that all refrigerators or automobiles sold in or imported into their countries must operate at a certain level of energy efficiency.

This is perfectly GATT-legal, but problems might arise if these regulations were designed in such a way as to effectively penalise certain foreign firms in favour of domestic ones. In December 1998, E.U. officials said they would challenge Japan in the WTO if it implements new emission standards proposed by the Ministry of Transport to control carbon dioxide (CO<sub>2</sub>) emissions. Because they are based on the weight of vehicles, the planned Japanese rules would affect imports of medium and luxury range cars, a European speciality. By contrast, Japanese cars – even those with higher fuel consumption rates – would escape lightly.

**Covenants, voluntary agreements**

Governments may enter into agreements with firms who “voluntarily” improve their performance in terms of greenhouse gas (GHG) emissions. Typically such agreements involve some incentive for the firms involved, whether a tax break or, more frequently, a promise of less onerous regulatory treatment. This incentive is the problem, from a trade perspective, if it constitutes an illegal subsidy according to the definition elaborated above.

**The Kyoto mechanisms** The flexible instruments under the Kyoto Protocol – the Clean Development Mechanism, Tradeable Emission Permits and Joint Implementation – all create trading

relationships in goods and services which are exclusive to FCCC signatories. For example, a party to the Protocol would not be allowed to trade FCCC emission permits with a non-Party. If both countries are WTO Members, this exclusivity may violate the WTO's Most Favoured Nation principle. This principle, expressed in GATT Article I, states that any trading privilege a Member extends to another Member must be extended to all Members. That is, all Members are most-favoured.

## Conclusions

The potential conflicts sketched out here are not so grave or intractable as to threaten the integrity of either the FCCC or the WTO. Even the simple analysis presented above, in discussing the relevant WTO rules, suggests some solutions. The aim of this paper is to highlight the potential for conflict, in the hope that changes in the existing trade law, or wisely administered environmental law, or both, will prevent it from materialising.

*Aaron Cosbey is Programme Manager and Interim Director of IISD's Trade and Sustainable Development Programme. James Cameron, Barrister, is Director at the Foundation for International Environmental Law and Development, London. This paper benefits from the comments of Chad Carpenter and Victoria Kellet of IISD.*

## Climate change and environmental security

(continued from page 21)

aggravated by destabilised weather patterns and climate systems. With continuing climate change, the situation is likely to grow considerably worse. In the end, would it not be better to invest in environmental management and mitigation of climate change – both positive actions that have multiple benefits – rather than paying a hefty bill later on in disaster relief and peacekeeping?

So the interesting link between climate change and environmental security is not the technical one but the political one. The security argument could help strengthen the political resolve necessary to advance on climate change, to implement some of the creative ideas that are floating around and – finally – to address the equity issues underlying climate change politics.

# New resources on climate change

Climate, Biodiversity and Forests: Issues and Opportunities emerging from the Kyoto Protocol

**WRI and IUCN; 1998, 40 pages, ISBN: 1-56973-285-X, \$20.00**

Over the past 150 years, deforestation has contributed an estimated 30 percent of the atmospheric build-up of CO<sub>2</sub>. It is also a significant driving force behind the loss of genes, species and critical ecosystem services. However, in the international policy arena, biodiversity loss and climate change have often moved in wholly unconnected domains.

While the 1997 Kyoto Protocol is a key step towards the mitigation of climate change, it leaves many questions unanswered, including the role of forests and land-use change in meeting obligations to slow global warming.

Climate, Biodiversity and Forests examines why, with so much at stake, the role of forests and land-use change under the Kyoto Protocol remains controversial. The report focuses on the need for strong international commitments and concerted action.

## Safe Climate, Sound Business: An action agenda

**WRI; ISBN 1-56973-286-8; \$15.00**

**1998 Building a Safe Climate, Sound Business Future (full report); 60 pages; ISBN: 1-56973-287-6; \$20**

<http://www.wri.org/wri/cpi/scsb>

A project undertaken by WRI, Monsanto and British Petroleum explored a variety of aspects of climate change to help understand the nature of the challenge and possible policy responses. They looked at scenarios to meet future world energy demand that showed increasing and stabilising greenhouse gas concentrations, explored new technologies and potential business opportunities and discussed government policies and how they could encourage businesses and consumers to respond. Three principle conclusions emerged from the discussions:

- Climate change is a cause for concern and precautionary action is justified now;
- Business can contribute to climate protection efforts in substantial, positive ways by helping to develop sound climate policies, by providing the research and technologies needed to address the challenge, and by taking actions to reduce and offset their own emissions;
- Flexible and market-orientated climate policies that implement national commitments can address the long-term need to stabilise the concentration of greenhouse gases. Such policies can facilitate a Safe Climate, Sound Business outcome by stimulating innovation, early action, and cost-effective reductions. These policies can produce multiple co-benefits and reduce the risk of climate change caused by human activities.

## Taking a Byte out of Carbon: Electronics Innovation for Climate Protection

**WRI, the Electronics Industries Alliance (EIA) and the International Cooperative for Environmental Leadership (ICEL)**

**1998, 60 pages, ISBN: 1-56973-265-5; \$20**

While the U.S. struggles to forge a climate change policy, largely unnoticed are those companies that see new business opportunities in products that reduce greenhouse gas emissions and increase energy efficiency. Taking a Byte out of Carbon profiles technology initiatives of electronics and communications companies to reduce greenhouse gas emissions while at the same time promoting economic growth and improved living standards. The report illustrates how "smart" technologies place the electronics industry in a prime position to provide practical solutions to climate change.

## Shades of Equity

**Article by Anju Sharma in Centre for Science and Environment (CSE) 'Down to Earth' Magazine, Vol 7, No 19, February 28 1999**

Negotiators from developing countries lack the strategy to put equity on the global climate change agenda. But the U.S. has already begun to define it for them. And that could easily become equity as defined by the world if developing countries do not watch out...

Centre for Science and Environment (CSE), 41 Tughlakabad Institutional Area, New Delhi 110 062; <http://www.cseindia.org>