

PAPER 11: TRADE

Outsourced emissions and global trade in the Green Economy

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ABOUT GLOBAL TRANSITION 2012

Global Transition 2012 is a collaborative initiative between Stakeholder Forum and **nef** (new economics foundation) that focusses on the Green and fair Economy theme towards the UN Conference on Sustainable Development in 2012 (UNCSD), also known as 'Rio+20' and 'Earth Summit 2012'.

GOAL

To achieve an outcome from the UNCSD 2012 that catalyses a 'Global Transition' to an economy that maximizes wellbeing, operates within environmental limits and is capable of coping and adapting to global environmental change.

PURPOSE

To build a global civil society and stakeholder movement to promote alternative models of economy that can deliver sustainable development to people, countries and generations that builds on the three pillars of sustainable development: social, environmental and economic.

THE INITIATIVE CONSISTS OF THE FOLLOWING ACTIVITIES:

- **Research and Thinking and Policy and Advocacy:** to **commission** and **publish** a series of research reports and think-pieces that will provide the evidence based analysis and address critical components of a Global Transition and translating research and thinking into key policy outputs towards Rio+20 and beyond and organising workshops with governments to discuss policy options; and **building capacity** and **developing tools** for countries to institute policies and systems that move towards a Global Transition;
- **Coalition Building and Dialogue:** **building a coalition** of actors and organisations from the global North and South committed to the principles and objectives of a Global Transition;
- **Submissions:** making **official submissions** to the Rio+20 process based on think pieces and dialogue;
- **Information and Resources:** publishing informative **guides** and **briefings** on aspects of the green economy; in particular developing a 'how to guide' for the green economy Roadmap work that is underway in a range of sectors and contexts.

ABOUT STAKEHOLDER FORUM

Stakeholder Forum is an international organisation working to advance sustainable development and promote stakeholder democracy at a global level. Our work aims to enhance open, accountable and participatory international decision-making on sustainable development. Stakeholder Forum works across four key areas: Global Policy and Advocacy; Stakeholder Engagement; Media and Communications; and Capacity Building. Our Global Transition 2012 initiative sits within our work on Global Policy and Advocacy.

ABOUT nef

nef (the new economics foundation) is an independent think-and-do tank that inspires and demonstrates real economic well-being. **nef** aims to improve quality of life by promoting innovative solutions that challenge mainstream thinking on economic, environment and social issues. We work in partnership and put people and the planet first.

MORE INFORMATION

If you would like to provide feedback on this paper, get involved in the Global Transition 2012 initiative, or put yourself forward to write a paper/blog, please contact Kirsty Schneeberger, Senior Project Officer at Stakeholder Forum: kirstys@stakeholderforum.org

ABSTRACT

Outsourced emissions are a major loophole in current efforts to tackle climate change and build a green economy. International flows of carbon embedded in trade have grown considerably since the original Rio summit, with developed northern nations benefiting unjustly from effectively outsourcing pollution to developing southern states.

Next year in Rio, the world needs to agree to the principle of Clean Trade Agreements. These arrangements, negotiated between states and regions, would come to replace Free Trade Areas and build mutually-agreed carbon constraints into the terms of trade.

Clean Trade Agreements would aim to halt the 'race to the bottom' witnessed as globalisation has unfolded – where industry invariably migrates to regions with the least stringent environmental regulations – and reverse the growth in outsourced emissions.

INTRODUCTION

A crucial part of the global transition to a green economy is managing international carbon flows, whereby emissions are increasingly outsourced from developed nations to developing countries. This challenge, left unattended, undermines existing efforts to arrest climate change, and has important implications for global justice.

The transition to a green economy needs to ensure *all* areas of the global economy decarbonise, rather than simply presiding over a shift in emissions from one region to another. As the UK Government recently accepted in its policy document *Enabling the Transition to a Green Economy*: "A green economy is not a sub-set of the economy at large – our whole economy needs to be green."² Globalisation has meant that each nation's 'whole economy' stretches far beyond its own territorial borders, leading to growing trans-national flows of labour, capital – and pollution.

The scale of this problem is considerable. Emissions embedded in trade have grown from 4.3 GtCO₂ in 1990 to 7.8 GtCO₂ in 2008.³ Moreover, the net emissions transfers via international trade from developing to developed countries increased from 0.4 GtCO₂ in 1990 to 1.6 GtCO₂ in 2008, exceeding emissions reductions under the Kyoto Protocol.⁴ In other words, the consumption patterns of developed nations have come to depend more and more on carbon-intensive production taking place in developing countries, effectively leading to the outsourcing of carbon pollution. To take one national example: measured on a territorial basis, the UK's emissions fell by 12% between 1990 and 2004, but once outsourced emissions are factored in they in fact rose by 19%.⁵

These figures are testimony to the downsides of a liberalised international trading system which so far fails to adequately protect the environment. If no action is taken to address this market failure, international efforts to tackle climate change will continue to operate in tension with the rules governing international trade. Developing nations can fairly object that existing arrangements results in a transfer of pollution from rich to poor; whilst developed countries claim to be deterred from strong action to cut emissions for fear of losing industries to lower-compliance regimes. Nations will continue to exploit – or succumb – to this loophole: the UK's outsourced emissions, for example, are projected to continue growing, so that by 2025 they could be equal to the UK's

² HM Government, *Enabling the Transition to a Green Economy: Government and business working together*, August 2011, p.4.

³ Peters, G. et al., 'Growth in emission transfers via international trade from 1990 to 2008', *Proceedings of the National Academy of Sciences*, vol. 108 no. 21, pp.8903-8908, March 2011.

⁴ Peters, G., 2011, *ibid*.

⁵ Stockholm Environment Institute, *Development of an Embedded Emissions Indicator*, report for Defra, July 2008.

territorial emissions.⁶ Should this transpire, the UK will have reduced emissions domestically, but still be contributing the same amount to global warming. Countries such as China, meanwhile –

23-34% of whose emissions result from her export industries⁷ – remain reluctant to raise production costs by pricing carbon into their activities unless they are confident that importer nations will pay the additional cost.

Careful intervention holds out the promise of tackling a crucial aspect of the climate dilemma; removing a key stumbling block in the United Nations Framework Convention on Climate Change (UNFCCC) negotiations; easing the long-standing conflict between World Trade Organisation law and environmental regulation; increasing investment in clean manufacturing technologies; enabling trade in low-carbon products; and improving global governance architecture for addressing market failures in general.

PROPOSITION

To tackle the challenge posed by outsourced emissions and transition to a truly green economy, the world needs a Clean Trade Agreement (CTA).

A Clean Trade Agreement could be a high-level multilateral commitment at Rio+20, obliging signatories to subsequently negotiate bilateral CTAs on a regional basis, which would over time augment and replace existing Free Trade Areas (FTAs). Where FTAs typically seek to remove all barriers to trade within a region, Clean Trade Agreements would enshrine climate protection at the heart of international trade, through mutually agreed carbon intensity standards, and a degree of burden-sharing between trading partners to cover the full ecological costs of production. A CTA would typically be between a developed nation and a developing nation; for example, the EU and China.

The overarching aim of a Clean Trade Agreement and subsequent negotiations is to reduce the carbon embedded in trade. It seeks to ensure that lower environmental regulation is not a factor in determining comparative advantage between nations; and that importer nations do not engage in free rider activity by avoiding paying exporter nations for the full ecological costs of their consumption habits. It would seek to halt the 'race to the bottom' witnessed as globalisation has unfolded, whereby industry invariably seeks to migrate to jurisdictions with the least stringent environmental regulations.

Following after the example of Fair Trade – which aims to ensure production is not at the expense of producers – a Clean Trade Agreement would aim to ensure production is not at the expense of the climate. It would also mirror similar efforts to improve global transparency and traceability in flows of capital, such as is currently underway to scrutinise the companies and nations involved in the offshore tax system.⁸

If COP-17 at Durban fails to deliver a fair, ambitious and legally binding post-Kyoto climate treaty, the Rio+20 summit should consider ancillary measures which would allow progress in cutting global emissions to occur anyway. As emissions embedded in trade have so far largely escaped attention under the UNFCCC process – partly because they have only emerged as a serious concern in the period since 1992 – they are an obvious area for attention outside the process.

A potentially major obstacle to progressing climate protection through the medium of trade negotiations is, of course, the existing WTO rules, which often construe environmental restraints on traded products as protectionist. These contentions are examined in more detail in the Discussion section. As Canadian academic Peter Dauvergne argues, "international institutions like the World Trade Organisation need to guide global trade with anticipatory strategies to prevent ecological [damages]... This requires stronger measures to ensure that trade and trade agreements don't serve to lower environmental standards. It also requires greater efforts to include the ecological and social costs in the prices of consumer goods."⁹ However, in brief, scope for progress

⁶ Carbon Trust, *International Carbon Flows*, May 2011, <http://www.carbontrust.co.uk/policy-legislation/international-carbon-flows/pages/default.aspx>

⁷ The 23% figure is from the Tyndall Centre Briefing Note No. 23, 'Who Owns China's Emissions?', October 2007, <http://www.tyndall.ac.uk/sites/default/files/bn23.pdf>. The estimate of 34% is from Steven J Davis and Ken Caldeira, Carnegie Institution for Science (Stanford University), 'Consumption-based accounting of CO2 emissions', *Proceedings of National Academy of Sciences*, vol. 107, no. 12, March 2010.

⁸ Such as the Financial Secrecy Index compiled by the Tax Justice Network. See <http://www.financialsecrecyindex.com/>

⁹ Peter Dauvergne, *The Shadows of Consumption: Consequences for the Global Environment*, MIT Press: Cambridge, 2008, p.226.

exists even within current rules, and conflict could be avoided through careful negotiation between trading partners.

In fact, the key to unlocking activity on outsourced emissions could come through a 'bottom-up' approach that circumvents the need for immediate sweeping changes in WTO rules or UNFCCC reporting guidelines, but rather builds agreement through a series of bilateral negotiations. As trade policy analyst Kateryna Holzer has pointed out, "The experience of the WTO shows that many sensitive trade-related issues were first negotiated bilaterally or at the regional level and only then were brought to the multilateral negotiations in the WTO."¹⁰ A clear endorsement of the Clean Trade Agreement concept at Rio+20 could give impetus to this.¹¹

Signatories to a Clean Trade Agreement would undertake the following measures:

- **Reporting of carbon flows between countries:** Current carbon accounting under the UNFCCC is based on the methodology of territorial reporting by each nation-state. Under Clean Trade Agreements, signatories would develop consumption-based emissions inventories, factoring in carbon embedded in trade and documenting the flows of carbon between signatory nations. Annual reporting of these emissions flows alongside territorial emissions would create accountability, provide perspective to domestic mitigation actions, and inform what additional action is required under the trade agreement.

Such reporting requirements would complement UNFCCC territorial reporting requirements rather than replace them. Consumption-based emissions accounts are already being developed by various countries: for example, Scotland reports emissions on a consumption basis under its Climate Change Act;¹² Sweden has developed a series of environmental indicators which all take into account a consumption perspective, including outsourced greenhouse gas emissions;¹³ and the UK Department for the Environment recently let a contract to researchers to report on UK emissions from consumption for 2010-2016.¹⁴ As yet, however, few of these initiatives have been used to inform policy.

Compilation of these accounts would be the responsibility of national governments; but governments could also oblige multinational companies based in their countries to report their worldwide emissions and give details of where emissions take place. It certainly isn't beyond the ability of large multinationals to take on such reporting requirements – many already do so on a voluntary basis, such as through the Carbon Disclosure Project,¹⁵ or product carbon labelling schemes, which now operate in countries from Switzerland to South Korea.¹⁶ The World Resources Institute and International Standards Organisation have developed a variety of standards to harmonize carbon accounting procedures, with more in planning.¹⁷ Over time, national policy could move to making such reporting mandatory.¹⁸

- **Carbon border adjustment measures and burden-sharing:** The central aim of Clean Trade Agreements would be the bilateral negotiation of mutually accepted constraints on carbon embedded in trade. Signatories would seek to ultimately harmonize carbon intensity of production and carbon prices,

¹⁰ Kateryna Holzer, 'Trade and Climate Policy Interaction: Dealing with WTO Law Inconsistencies of Carbon-related Border Adjustment Measures', Swiss National Centre of Competence in Research (NCCR), Climate Working Paper, September 2010. Available at http://stockholm.sgir.eu/uploads/Holzer_Working%20paper_23sept.pdf

¹¹ The concept of a Clean Trade Agreement also builds upon the proposed Sustainable Energy Free Trade Areas, which would be more limited in their scope – aiming to eliminate fossil fuel subsidies and barriers to clean energy products within their regional jurisdictions. See <http://www.weforum.org/videos/sustainable-energy-free-trade-areas>.

¹² Climate Change (Scotland) Act 2009, para 37, pp.21-22; see also <http://www.scotland.gov.uk/Topics/Environment/climatechange/scotlands-action/climatechangeact/reporting>

¹³ Swedish Environmental Protection Agency, *The Climate Impacts of Swedish Consumption*, January 2010; *Swedish Consumption and the Global Environment*, 2011.

¹⁴ Defra research project ET0101, 'Embedded Carbon Emissions Indicator', <http://bit.ly/nhvexA>

¹⁵ See <https://www.cdproject.net/en-US/Pages/HomePage.aspx>

¹⁶ The world's first carbon labelling scheme was piloted by the UK Carbon Trust in 2007: <http://www.carbon-label.com>. Since then, schemes have developed around the world.

¹⁷ The World Resources Institute's Greenhouse Gas Protocol is the most widely used tool for businesses to measure organisational emissions: <http://www.wri.org/project/ghg-protocol>. Two new WRI standards for the measurement of supply chain and product-level emissions were unveiled in October 2011: <http://www.wri.org/press/2011/10/press-release-new-greenhouse-gas-standards-unveiled-corporate-value-chain-and-products>

¹⁸ As is in the process of being deliberated in the UK currently, where the Climate Act makes this provision.

but accept that this transition will take time, and needs to take into account nationally-specific circumstances and the principle of Common But Differentiated Responsibility.¹⁹

Under the Agreement, measures would be taken to build a carbon price into imports where one isn't already reflected. Policies to achieve this would need to take into account whatever explicit or implicit carbon price is already reflected in the import – for example, an import to the UK from an EU country might already have a high carbon price built in, whereas a product imported from a country without a carbon cap or strong climate policies – such as the US, Canada or China – might not.²⁰ The 'border adjustment measures' that could be taken to correct this could vary: importing nations could simply surrender carbon allowances in their possession if they are part of an emissions trading system; a tariff could be levied; or domestic taxes on consumption, such as VAT or sales tax, could be turned into green taxes, with differential rates according to the carbon intensity of the product.²¹

Crucially, in order to win acceptance with developing country trading partners, a Clean Trade Agreement would likely need to involve some aspect of burden sharing. That is to say, at least some of the revenues levied through border adjustment measures by the importing country ought to be recycled back to the exporter country, with the criterion that they are invested in carbon abatement measures in the country of export.

As Lord Stern, author of the Stern Review, has said on this issue: "if you move to a different kind of division of labour where another country, in this case China, starts to make things that we might have made, and therefore has that production process in the emissions occurring there, rather than their own country, then we're jointly responsible for that and both parties gain from the division of labour. That's what trade is all about and that's why trade can help development. So my own view is that we probably need something like an average of the two, or a combination of the two."²² In other words, the ecological costs of production should be shared between producer and consumer.

- **Adoption of standards:** Countries participating in a Clean Trade Agreement might develop a Clean Trade Mark, going beyond existing carbon labelling systems to set product standards based on carbon intensity of production.
- **Investment in clean manufacturing techniques and technologies:** Clean Trade Agreements could lead to more investment in clean manufacturing technologies (somewhat neglected to date, as the focus of innovation in service industry-dominated developed economies has been the power sector). This could be part-funded by ringfenced monies raised under the border adjustment measures detailed above, and shared between importer and exporter nations. This would complement work on technology transfer under the UNFCCC process.
- **Policies to shift consumption patterns towards lower-carbon alternatives:** Importing nations should seek to shift their consumption patterns towards lower-carbon alternatives – not simply more energy-efficient goods, but also longer-lasting products, reducing the emissions in trade through discouraging throwaway culture.

DISCUSSION

Developed nations in the global north have benefited from a convenient falsehood in the current emissions reporting system, which excludes emissions embedded in imports and therefore underplays the full ecological impacts of global north consumption patterns. Deindustrialisation and the shift to service economies in most developed nations has meant that emissions-intensive industries have shifted south and east over the past twenty years.

¹⁹ As defined under the UNFCCC, 1992.

²⁰ For a good study of the implicit carbon prices already reflected in products from nations without binding carbon caps or emissions trading systems, see Vivid Economics, *The implicit price of carbon in the electricity sector of six major economies*, report prepared for the Climate Institute, October 2010.

²¹ As advocated by, for example, Green Alliance, in *Good Product, Bad Product? Making the Case for Product Levies*, February 2008, <http://www.green-alliance.org.uk/uploadedFiles/Publications/reports/good%20product%20bad%20product%20final.pdf>

²² Lord Nicholas Stern, quoted in George Monbiot, 'Stern breaks the east-west deadlock on who's responsible for CO2', *The Guardian*, 27th May 2009, <http://www.guardian.co.uk/environment/georgemonbiot/2009/may/27/monbiot-stern-east-west-deadlock-co2>

Global south nations, meanwhile – including in this definition the rapidly-developing nations of China and India – have unfairly shouldered too much of the blame for rising northern consumption patterns and the resultant carbon emissions. Production in developing countries remains very carbon intensive, and though China has set itself ambitious carbon intensity targets, it is deterred from tougher action in part by concerns that northern nations are not prepared to pay the extra costs for lower-carbon goods.

At the same time, the gradual strengthening of climate legislation in global north countries over that same period now means that the remaining carbon-intensive industries have started to feel the pinch, and have intensified their lobbying against tougher climate policies on grounds of international competitiveness. This is often exaggerated: in reality, the impact of climate policies on business relocation to date has been almost non-existent – lower overseas labour and capital costs have been far more important. Even under the tighter emissions trading regime proposed in the EU for 2013-2020, where all permits are to be auctioned, it is estimated just 2% of emissions could be driven abroad.²³ Yet inaction is likely to lead to such lobbying growing ever more intense, potentially threatening existing climate legislation.

The proposed Clean Trade Agreement model would seek to remedy these problems. Mutually agreed border adjustment measures would place climate protection at the centre of the terms of trade. Northern consumers would begin to pay the full ecological costs for their consumption – whether through a carbon tariff or green VAT mechanism. The burden-sharing measures contained in the Clean Trade Agreement would see part or all of the revenues raised recycled back to the exporter country for investment in carbon abatement activities. Two outcomes are to be anticipated: for countries in the global north to begin shifting their consumption patterns towards lower-carbon products, and for countries in the global south to invest more in clean manufacturing technologies.

Possible tensions between global north and south, and addressing these

Currently, developed countries remain reluctant to acknowledge that their emissions have continued to rise, and that their consumption patterns are not yet decarbonising (even though in many cases territorial emissions are stabilising or declining). The situation is beginning to change, however, as the evidence of this becomes too clear to deny.

Global south nations might justifiably fear that measures to tackle the carbon in trade could amount to 'green protectionism' by developed northern nations. If carbon tariffs were to be constructed crudely and unilaterally (as has been mooted in the recent past by France, amongst others),²⁴ this would indeed be the case. But Clean Trade Agreements would necessarily make provision for burden sharing and the recycling of revenues back to exporter nations for reinvestment in clean technologies. This framework would still of course allow for competition between trading partners on grounds of differential labour costs, cost of capital, and different skills bases – northern importers would not suddenly be able to gain competitive advantage in these areas unless they already possess one. But the new market conditions created by a CTA would create competition for cleaner technologies.

Recycling of revenues back to exporter nations would also go some way to redressing issues of equity and injustice, whereby northern nations currently blame southern countries for soaring emissions without acknowledging how far this is servicing northern consumption.

Barriers to change, and overcoming these

Existing WTO rules, of course, pose potentially the biggest obstacle to the implementation of Clean Trade Agreements. The relevant rules are sketched out briefly below.

Articles I and III of the General Agreement on Tariffs and Trade (GATT, 1994) prohibit trade restrictions which discriminate against products on grounds of how they have been produced, if this has no material impact on the end product. So an item of clothing may have been produced by child labour, using large quantities of environmentally-damaging chemicals; but if the finished product is the same as one produced under stricter labour and environmental standards, the GATT prohibits importing nations from discriminating on these grounds

²³ Carbon Trust, *Tackling carbon leakage: sector-specific solutions for a world of unequal carbon prices*, March 2010.

²⁴ See, for example, 'France takes carbon tariff campaign to Washington', EurActiv.com, 8th April 2010, <http://www.euractiv.com/climate-environment/france-takes-carbon-tariff-campaign-washington-news-425425>

(such as through import bans, tariffs etc). Such differences in production are referred to as non-product-related Process and Production Methods.

It is often suggested that taking measures to put a carbon price on imported goods would fall foul of this aspect of WTO rules.²⁵ However, Article XX of the GATT is an exception clause, under which it might be possible to justify carbon border adjustment measures on grounds of necessity “to protect human, animal or plant life or health”.²⁶ A precedent is provided by the case of *United States — Import Prohibition of Certain Shrimp and Shrimp Products* and follow-up rulings, where the Appellate Body ultimately ruled in favour of the US being able to ban shrimp imports that did not meet certain environmental criteria, providing it did not discriminate between how this was applied to different WTO members. As economist Joseph Stiglitz has argued: “if one can justify restricting importation of shrimp to protect turtles, certainly one can justify restricting importation of goods produced by technologies that unnecessarily pollute our atmosphere.”²⁷ Still, if this were to be tested and rejected, it might prove necessary to amend WTO rules; clearly a lengthy, complex and politically fraught process.

A Clean Trade Agreement would need to show it was not discriminating against imported goods in favour of domestic products – in other words, charging a higher carbon price on imported products than on domestic equivalents. This might be solved most easily through developing a green VAT or green sales tax which would be applied across all products, rather than a carbon tariff specifically for imports.

Institutional barriers to change might arise if Clean Trade Agreements became embroiled in the UNFCCC process and WTO talks. Given the current deadlock in both the climate talks and the Doha round, and given the urgency of taking rapid action to cut emissions, this is not desirable. But both gridlocked processes might be circumvented through Clean Trade Agreements operating as bottom-up bilateral negotiations between trading partners. In the words of trade analyst Kateryna Holzer, “Of all approaches to address the problem of WTO inconsistency of carbon-related BAMs [border adjustment measures]... the bilateral approach seems most feasible.”²⁸

Other practical barriers are more easily surmounted. The measurement of international carbon flows and construction of consumption emissions inventories are often claimed to be too challenging to do. In fact, as recent studies have shown,²⁹ there have been rapid advances in data-gathering and methodology development, and government auditing agencies are starting to catch up with academic research. But careful consideration would have to be given to the ways of raising revenue from border adjustment measures and recycling such revenues back to exporter nations. It might be possible to involve international bodies in this, such as the Global Environment Facility, or the Green Climate Fund currently under discussion at the UNFCCC.

Why not another way?

Some might think that the problem of outsourced emissions can simply be resolved through cutting emissions from international transportation, or by bringing about a reduction in international trade itself. Emissions from international aviation and shipping must certainly be cut severely over the next 40 years, but transport is a relatively small proportion of the carbon footprint of trade compared to the emissions from production itself. ‘Re-localising’ the global economy, meanwhile, could have detrimental impacts on the development of countries in the global south.

²⁵ See for example, Low, P., Marceau, G., Reinaud, J., ‘The Interface Between the Trade and Climate Change Regimes: Scoping the Issues’, WTO Economic Research and Statistics Division, Staff Working Paper ERSD-2011-1, January 2011.

²⁶ GATT (1994), Article XX. See

http://www.wto.org/english/res_e/booksp_e/analytic_index_e/gatt1994_07_e.htm#article20A. See also Matteoti, S., and Nartova, O., ‘Process and Production Methods: Implementation and Monitoring’, Swiss National Centre of Competence in Research, Working Paper No. 2011/19, June 2011: “PPMs adopted in the context of climate change mitigation are therefore not excluded under GATT.”

²⁷ Stiglitz, Joseph E. (2006), “New Agenda for Global Warming”, *Economists’ Voice*, July 2006, available at <http://www2.gsb.columbia.edu/faculty/jstiglitz/download/GlobalWarming.pdf>. The relevant WTO case referred to here is US – Shrimp: United States – Import Prohibition of Certain Shrimp and Shrimp Products, Panel Report, WT/DS58/R and Corr.1, 15 May 1998, modified by Appellate Body Report, 12 October 1998, WT/DS58/AB/R, adopted 6 November 1998.

²⁸ Holzer, K., 2010, *ibid*.

²⁹ Such as Peter, G., 2011, *ibid*, Carbon Trust, 2011, *ibid*, and Stockholm Environment Institute, 2008, *ibid*, amongst others.

Nor would it be sufficient to focus only on capping emissions for the most energy-intensive sectors. Global sectoral targets for the steel, cement and aluminium industries have been mooted in the past, and whilst these are to be encouraged, they alone would not solve the problem of outsourced emissions. As Peters et al. (2011) show, “non–energy-intensive manufacturing had a key role in the emission transfers” between countries, and grew in importance 1990-2008, “despite the policy focus on energy-intensive manufacturing”.³⁰

CONCLUSION

In June 1992, governments of the globe gathered at Rio to sign into law the United Nations Framework Convention on Climate Change, the world’s first treaty aiming to limit greenhouse gas emissions in order to “protect the climate system for present and future generations”.³¹ Three years later, a separate set of international negotiations resulted in the formation of the World Trade Organisation, a new body whose principal aim was the liberalisation of cross-border trade. By 2011, the fruits of these twin processes were fast becoming apparent: whilst developed countries had managed to cut emissions by 2% between 1990 and 2008, even these tiny gains were cancelled out several times over by the emissions outsourced to developing countries within a liberalised international trade regime.³²

Next year in Rio, governments have a chance to correct this divergence. A Clean Trade Agreement, signed up to in principle at Rio and followed up with further negotiation, would mark a turning point in addressing this crucial yet largely overlooked issue. At the heart of a Clean Trade Agreement is a compromise by developed nation trading partners that accepts the need to pay more for products in order to cover carbon abatement costs. In order to avoid this being simply protectionist, however, similar standards would have to be ensured for domestically-produced goods. Meanwhile, equity issues should be addressed through a burden-sharing mechanism, that would recycled revenues back to the exporter country, with the criterion that they are invested in carbon abatement measures in the country of export.

As with Fair Trade, Clean Trade would serve to protect vital interests – in this case, the Earth’s climate – from being undercut in the name of higher profit margins, without reverting to a protectionism that simply favours one country over another.

It is proposed that the details of Clean Trade Agreements be negotiated bilaterally, in order to reach mutual agreement speedily, and minimise chances of WTO disputes or risk being embroiled in the fraught UNFCCC process and WTO trade talks. Scope appears to exist for Clean Trade Agreements to be implemented under existing WTO rules; however, should this be challenged, revision of the WTO rules should be considered in the longer term.

World trade currently provides a convenient loophole for developed nations to maintain high-carbon consumption patterns without paying the full ecological costs. The global transition to a green economy needs to ensure all areas of the world economy decarbonise, rather than emissions simply shifting between regions. It is time to close the loophole, and opt for Clean Trade.

³⁰ Peters, G., 2011, *ibid.*

³¹ UNFCCC, preamble, p.4.

³² Peters, G., 2011, *ibid.*