

**ENERGY CHARTER  
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**DECISION OF THE ENERGY CHARTER CONFERENCE**

**Subject: Assessment of the ECT provisions with regard to low-carbon investment**

At the request of the Chairman, [the Energy Charter Conference at its 23<sup>rd</sup> Meeting held on 26<sup>th</sup>/27<sup>th</sup> November 2012] *took note* of the Assessment of the ECT provisions with regard to low-carbon investment (CC 439 - Annex).

**The Energy Charter Treaty Provisions  
On Low Carbon Investment**

**Final Report**

**An Assessment by  
Professor Peter Cameron  
20 October 2012**

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## Executive Summary

The Energy Charter Treaty (ECT) provides a legal framework to cover the protection of low-carbon investment. However, the ECT has limited instruments to actively promote low-carbon investment. The different ordering of priorities at the ECT's inception means that the text lacks the kind of cohesion and policy integration to effectively contribute to the promotion of low-carbon investment policies. The consultation process conducted as part of this assessment confirmed that low-carbon policies have a high potential to contribute to the economic growth and to increasing energy security of ECT countries. Discussions within the different subsidiary bodies of the Energy Charter have confirmed that there is a need to promote multilateral cooperation on low-carbon policies. To address this, the Assessment Report proposes specific legal instruments and activities to be undertaken within the Energy Charter Conference or its different subsidiary bodies.

In particular, this Report recommends that the Energy Charter Conference should request the Energy Charter Secretariat to further analyse two priorities that have emerged as result of the conducted assessment and the consultation process:

- (a) Conduct further analysis on benefits of a non-binding Declaration and/or interpretative notes on promoting low carbon investment within the framework of the ECT;
- (b) Conduct further analysis on benefits of adding new low carbon energy materials and products to Annex EM I of the ECT.

The preliminary analysis conducted within this assessment shows that a Declaration and/or interpretative notes could provide clarity on what scope there is within the existing text of the ECT for Contracting Parties to promote low carbon. It would add value by clarifying, harmonising and bringing together in a single place provisions which are already in the ECT. *Ideally, it would have two components:* a declaration, to provide a non-binding but authoritative statement about the kind of low carbon measures that would be compatible with the ECT (possible legal bases for this instrument are Articles 1 (13)(b), 33 and 34(3)(i) ECT); and a series of interpretative notes, which would allow for a brief explanation of the meaning and significance of key provisions of the ECT relevant to low carbon investment promotion. The preliminary analysis shows that a modification of Annex EM would be helpful in achieving the above measures. Such modification would enlarge the scope of ECT provisions over low carbon items. It would not be an amendment of the ECT. The above and other proposals are also explained in the below Table 1 and in the text of the Assessment.

In particular on activities, this Report recommends that the Energy Charter Conference should request the Energy Charter Secretariat to:

- (c) Initiate specific activities on low carbon (see Table 1 below) within the Annual Programme of Work of the Energy Charter Secretariat from 2013 and onwards. Priority activities should include 1) Establishment of a Transparency Forum; 2) Activities to reduce and eliminate subsidies for fossil fuels; 3) Assistance on capacity building for low carbon policies, technologies and its deployment.

The aim of (c) would be to extend the benefits of measures that some or all Contracting Parties are taking to promote low carbon by encouraging transparency. A transparency forum

would allow members to inform about and exchange policy experiences with respect to their national policies aimed at transition to a low-carbon economy. The benefits would include an enhanced sharing of knowledge and potentially capacity building.

Phasing out fossil-fuel subsidies would not only reduce emissions of GHG but would also enhance energy security. Eliminating fossil fuel subsidies of energy importing countries would reduce their dependence on imports. It would also encourage diversification of the energy mix and slow down the depletion of finite fossil-fuel resources. For energy exporting countries removal of subsidies would boost export capacity and earnings for energy related products.

Promoting enhanced capacity building in Energy Charter Members would be a natural way forward from In-Depth Energy Efficiency Policies and Programmes Reviews already being implemented within the constituency. The assessment of the effectiveness of the reviews could support further activities for the implementation of recommended measures. These might be in the form of provisions of further policy guidance, training and education, support for development of future energy efficiency and renewable energy projects, exchange of best practices or just information provision, and should be selected in close cooperation with targeted countries.

Each of the above measures would contribute to initiatives already being taken by ECT Contracting Parties to promote low carbon investment. Countries are impacted upon by the actions of their neighbours, both positive and negative, and are affected by the actions of multilateral institutions which have low carbon investment as one of their priorities.

This Assessment comprises two elements: an analysis of the relevant ECT provisions on this topic, building on earlier work done by the Secretariat; secondly, a presentation and analysis of the results of a Public Consultation Process on this subject which was initiated by the Secretariat in mid 2012.

## **Investment**

In analyzing the current ECT provisions that relate to investments, there is evidence that more synergies between investment and climate change regimes relating to low-carbon investments would prove useful to ECT Contracting Parties. The results of the public consultation provide further support for this general conclusion.

Three sets of measures could be taken to address the current shortcomings in the ECT in this area: (1) Annex EM could be modified to include new low carbon items, a measure that would be relatively easy to take, implying a Conference decision without a need for ratification; (2) interpretative notes and elements in a Declaration could be adopted by the Conference that identify where in the existing provisions of the ECT there is scope for action by Contracting Parties to promote low carbon policies and instruments, and which attempt to explain and harmonise the provisions. In themselves, such steps would also add a degree of positive support as well as legitimacy to the overall goal of low carbon investment promotion; (3) further measures could be taken such as enhancing investment protection to 'Charter Efficiency Projects' pursuant to ECT Art. 1(6) and others aimed at access to capital and technology transfer.

None of the above support measures to promote low carbon investment would impact upon the wider investment regime for energy in the ECT, and all of them could (and should) take into account the relevant actions taken or being planned by other multilateral institutions.

## **Trade**

The trade part of the assessment showed that a variety of trade-related measures aimed at promotion of low carbon economy could be designed in conformity with the basic requirements of the WTO/ECT trade regime. Moreover, the WTO/ECT foresees a possibility to enact measures that depart from the basic principles of the multilateral trade rules if these measures attain legitimate environmental policy objectives. If such measures were to be assessed or proposed, they should be devised in conformity with GATT Art. XX ensuring that they are covered by the general exceptions stated in that article. The list of objectives listed in that article includes human, animal or plant life or health as well as conservation of exhaustible natural resources and is not exclusive. Admittedly the capacity of the atmosphere to absorb CO<sub>2</sub> without damage to climate satisfies the definition of an exhaustible natural resource.

The trade-related instruments that are necessary to attain legitimate policy objectives may however not be applied in a manner which would constitute a means of arbitrary or unjustifiable discrimination between countries where the same conditions prevail, or a disguised restriction on international trade. The latter measures may come into conflict with the multilateral trade rules if they affect domestic and imported products differently or give an illegal advantage to exports.

The phasing out of subsidies on fossil fuels would be an important step for transition to a low carbon economy – indeed this objective was supported by G-20 leaders during their Pittsburgh summit in September 2009. The Energy Charter could play an important role considering that it has among its members some non-OECD countries that do not yet address the issue to the extent necessary according to the conclusions of IEA, OECD and World Bank. A special document was prepared by the Secretariat to outline the ways for future initiative of reducing inefficient fossil subsidies. This received support among the ECT delegations in the TTG.

Mandatory technical regulations and voluntary technical standards rank among the most effective tools to promote low carbon methods of production and consumption. Their use should be encouraged. Diverse rules or practices for certification and approval procedures in different countries might however act as restrictions to trade. Therefore, harmonization of technical regulations and standards is important to avoid introducing unnecessary restrictions to international trade. The exploration of ways to harmonise technical standards and regulations within the ECT forum must be further carried out.

The question whether countries pursuing climate/environmental objectives could discriminate among energy goods and materials on the sole basis of the technologies used in the production of such goods is not completely resolved by the WTO. The harmonized labeling of such products might be the least restrictive measure to solve this issue and would allow the consumer to choose which products to buy. It could be also envisaged to use a certification system to distinguish clean electricity for the purposes of taxation. Such system would be compatible with the WTO/ECT trade rules if applied on a transparent, non-discriminatory and open basis.

One issue that needs to be further analysed is whether and how ECT Annexes could be completed with energy products and materials as well as equipment that is necessary for the transition to a low carbon economy. The current Energy Materials and Products Annex EM I lacks hydrogen as a form of energy and CO<sub>2</sub> as a tradable product of the energy sector. As for the current EQ Annex, the assessment would allow to determine the extent to which it would have to be completed with additional equipment.

## Energy Efficiency

The public consultation revealed very considerable support for an upgrading of the Protocol to shift its focus to low carbon. The form of that shift appears to be more one of a reinterpretation of the existing provisions rather than a formal amendment of PEEREA. For many respondents, a mix of National Action Plans on Sustainable Energy, promotion of energy efficiency services and labelling appeared appropriate. Priority areas for action include: capacity building through training and education; the inclusion of low carbon aspects in the scope of in-depth reviews of energy efficiency policies prepared by the Energy Charter and the development of an ECT standard methodology on energy auditing, contracts and agreements, measurements and verification of energy efficiency gains. The instruments of interpretative notes, declaration and a transparency forum could all play a role in the achievement of the above goals.

## Choice of Instrument

Various instruments were considered by the consultation process to give effect to a policy of low carbon investment promotion. These included legally binding provisions, soft-law obligations, declarations and possible new legal instruments, variously aimed at complementing the effectiveness of the relevant ECT provisions. However, the diverse circumstances and policy priorities of individual countries would seem to argue in favour of voluntary instruments and activities. This Assessment argues for the use of instruments that build upon existing provisions of the ECT, give a clear signal of the ECT's overall commitment to the promotion and protection of low-carbon investments, and permit action on knowledge sharing, capacity building and transparency. These are principally: a series of interpretative notes, a declaration, modification of Annex EM and the establishment of a transparency forum.

**TABLE 1: List of Instruments and Activities <sup>1</sup>**

<b>Actions</b>	<b>Description</b>	<b>Relevant ECT and other provisions</b>
<b>Legal Instruments</b>		
Interpretative Notes	Non-binding in nature to provide brief explanation of the meaning and significance of key provisions of the ECT relevant to low carbon investment promotion.	Vienna Convention on the Law of Treaties; Rules of Procedure of the Charter Conference
Declaration	To provide a non-binding but authoritative statement about the kind of low carbon measures that	ECT Art 1(13)(b); 33 and 34(3)(i) ECT)

<sup>1</sup> This is not comprehensive but rather gives weight to proposals which attracted significant support from the public consultation process and which appeared to be feasible as a result of the general analysis in this Assessment Report.

would be compatible with the ECT. It will help to enhance coherence between the ECT and the climate regimes by clarifying that ECT does not constrain climate change measures enacted in good faith, such instrument could help ensure that the ECT framework is in line with multilaterally agreed global priorities.

Update Annex EM of the ECT

To add energy materials and products related to low-carbon.

Article 36(1) (d)

**Strategy Group**

Transparency Forum

To utilise already existing transparency forum and allow members to inform about and exchange policy experiences with respect to their national policies aimed at transition to a low-carbon economy. The benefits would include an enhanced sharing of knowledge and potentially capacity building

ECT Art 20 (1) and (2) and ECT Annex on illustrative and non-exhaustive list of possible areas of cooperation pursuant to article 9

**Investment Group**

Charter Efficiency Projects

In order to promote investment protection interested contracting parties shall notify “Charter efficiency projects” to the Secretariat.

ECT Art 1(6)

Undertake activities on removal of barriers/promoting technology transfer

In-depth investment reviews shall include analysis and recommendations aimed to eliminating existing barriers and promoting technology transfer on low -carbon

ECT Art.8

Contribute to creating a stable and predictable pre-investment and post-investment climate for low carbon investment

Exchange of experience on: investment promotion policies, incentives to promote low carbon and establishment of industrial zones for low carbon industries. Thorough assessment shall be carried out of the interaction between market-led and support-based approaches to low carbon investments.

ECT Art. 10 (1)

**Trade and Transit Group**

Action to reduce and eliminate subsidies for fossil fuels

Negotiation of a legally binding mechanism; standardized and regular reporting on subsidies; peer review and monitoring to assess

In accordance with ECT provisions

Promotion and harmonization of technical regulations and standards and electricity labels	compliance with commitments; sharing best practice and cooperation; offering capacity building (all above 50% support in the public consultation process) Identification of existing relevant ISO and IEC standards and electricity labels; promotion of their application in ECT constituency; identification of existing gaps	In accordance with ECT and PEEREA provisions
Promotion of transparency of technical regulations	Establish Transparency Forum	In accordance with ECT provisions
Completion of ECT Annexes with materials/equipment for low carbon projects	Identification of low carbon energy materials and products and energy equipment;	In accordance with ECT provisions

<b>PEEREA Working Group</b>
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National Action Plans on Sustainable Energy	Preparation of plans showing how to reach indicative sustainable energy targets, describing measures to be implemented, and the role of the different economic sectors.	ECT Art. 19 and PEEREA
Promotion of energy efficiency services	Exchange experiences on how to regulate energy supply utilities that should develop services to improve end-use energy efficiency. Targeted to energy distributors, distribution system operators and energy retail businesses that sell electricity, natural gas, heating oil and district heating (e.g. market based measures, energy audits, financial instruments, information, etc.)	ECT Art. 19 and PEEREA
Labeling of buildings	Exchange experiences on how to establish and apply minimum energy performance for new and existing buildings, ensure the certification of buildings energy performance and require the regular inspection of energy consuming systems in buildings (e.g. boilers and air conditioning).	ECT Art. 19 and PEEREA
Capacity building	Provision of further policy guidance, training and education, support for development of future energy efficiency and renewable energy	ECT Art. 19 and PEEREA

<p>Include low-carbon aspects in the scope of in-depth reviews of energy efficiency policies prepared by Energy Charter</p>	<p>projects, exchange of best practices and information provision.          Within the in-depth reviews address in detail low carbon policies, measures and programmes developed and provide recommendations for improvement of government performance in sustainable energy.</p>	<p>ECT Art. 19 and PEEREA</p>
<p>Development of standard methodology on energy auditing, contracts and agreements, measurement and verification</p>	<p>Provision of policy guidance on support to energy service companies, energy performance contractors, system operators, buildings and facilities managers in verifying savings, reporting, monitoring and maintenance of energy consuming equipment.</p>	<p>ECT Art. 19 and PEEREA</p>

## 1. Introduction

In November 2010, the Energy Charter Secretariat ('Secretariat') adopted the Road Map for the Modernisation of the Energy Charter Process (Road Map). Area D of the Road Map concerns investment protection and promotion provisions of the Energy Charter Treaty (ECT) and requires, *inter alia*, the preparation of an "Assessment of the ECT provisions with regard to low-carbon investment (Assessment)." The relevant section states: "the Investment Group should, in cooperation with the Trade and Transit Group elaborate an Assessment of the provisions of the ECT's investment regime with regard to the subject of climate change and promotion of low-carbon investments, taking into account relevant assessments available from other international organisations. Depending on the result of the Assessment, further steps should be envisaged."

This Assessment includes an analysis of the results of a consultation exercise carried out in mid 2012 (12 June to 10 July). A questionnaire was circulated to the ECT signatories, observer countries, Industry Advisory Panel of the Energy Charter and interested stakeholders to seek accurate and precise guidance about the scope for actions and measures that might be taken to promote low carbon investment, including trade and energy efficiency aspects.

The structure of this Assessment is in five parts following this Introduction. The first part contains an analysis of the ECT provisions on low-carbon investment, with particular focus upon the ECT articles that relate to investment. The second part addresses the ECT and Trade Related Aspects. The third addresses energy efficiency and the Protocol on Energy Efficiency and Related Environmental Aspects (PEEREA) provisions on trade and energy efficiency. The fourth part overviews some existing multilateral and bilateral approaches that can be found in the Energy Charter constituency. The final part provides a review of the various instruments available, following on the analysis in Parts 2 and 3, and includes recommendations of a voluntary nature. This approach reflects the interests of the Contracting Parties of the ECT expressed through the presentations of the interim reports at the offices of the Secretariat in the course of 2012 and through the Public Consultation procedure.

The overall purpose of the Assessment is to evaluate the instruments of the ECT in view of their continued ability to promote investments into all parts of the energy chain and to ensure non-discriminatory access to international energy markets. This Assessment is carried out in the understanding that any recommendations made to the Energy Charter Conference (Conference) on policy options for promoting low-carbon investments must have political support from the Contracting Parties and that in any case no legally binding provision can be foreseen by the Conference prior to the conclusion of a burden-sharing agreement on greenhouse gas (GHG) emission reductions under the United Nations Conference on Climate Change (UNFCCC). However, even if it is not politically feasible to amend the ECT itself to include new provisions on the promotion and protection of low-carbon investments, it may be possible to choose another option, such as the development of interpretative notes or memoranda of understanding that could incorporate shared understandings of the ECT in regard to low-carbon investment promotion and protection. These matters are considered in the final Part of this Assessment.

## The Context

The ECT is an international treaty that was adopted in 1994 and signed by 51 states. The ECT was drafted before greenhouse gas (GHG) emissions assumed a major place on the international energy agenda, and particularly before the legally binding Kyoto Protocol was finalised. For that reason, the ECT has a pre-Kyoto character and effect, even as low-carbon and climate change issues have since become entrenched in the international energy policy agenda. It is not alone in this respect. Similar remarks have been made about the North American Free Trade Agreement (NAFTA), which was concluded around the same time as the ECT.

In recent years, however, the relationship between low-carbon investment and climate change has changed in three notable respects. Firstly, there is acknowledged potential for low-carbon investments to stimulate economic regeneration at a time of global recession. This phenomenon has been noticed by public policy-makers advocating for the move towards a 'green economy,' and has led to significant (but varying degrees and forms of) support from governments around the world, especially in Europe. This relationship is probably now the key driver behind the expansion of national government interest in low-carbon investment: job creation, and adaptation of technology in this area as part of a wider 'growth' agenda. This economic growth driver is therefore likely to remain the principal one for some time for most countries<sup>2</sup>.

Secondly, there have been important developments in relation to the scope and structure of mechanisms for the funding of adaptation and mitigation programmes related to GHG reductions at a global level. The principal vehicle for this is the Green Climate Fund which was announced at the Copenhagen Summit in 2009, and which came into existence in 2010. Behind the introduction of this instrument is the institutional recognition that large-scale, long-term and sustained foreign direct investment will be crucial in the global mitigation and adaptation of climate change and in the transition to a low-carbon economy. That is to say, it will be crucial in both addressing the ongoing impacts of climate and other environmental impacts of previous 'unclean' investments, and in the promotion of clean energy investments. The protection and promotion of such investment by means of international investment treaties will be a key consideration.

Thirdly, there have been significant efforts made in market access reforms in the energy sector since the 1990s. These reforms aimed at liberalizing energy markets have introduced a number of new opportunities for the promotion of renewable and low-carbon energy investments. Vertically integrated utilities with ownership of transmission networks have been disaggregated and subjected to independent regulation as a result, creating new potential for energy generated from renewable sources to be linked to the grids. In the European Union (EU) context, this has been continued with the Third Energy Package in 2009. It creates a legal framework for an unbundled electricity sector which may facilitate trade in services, and generally promote competition in the electricity and gas sectors of the EU. The Third Energy Package, and its predecessors, has been coupled with a number of climate change-related instruments aimed at reducing GHG emissions from the EU block. One of the key developments in this regard is the EU Emission Trading Scheme (ETS), which creates a market-based mechanism for trading carbon credits. Combined with the endorsement of market-based and tradable credits under the Kyoto Protocol, these efforts to liberalize and

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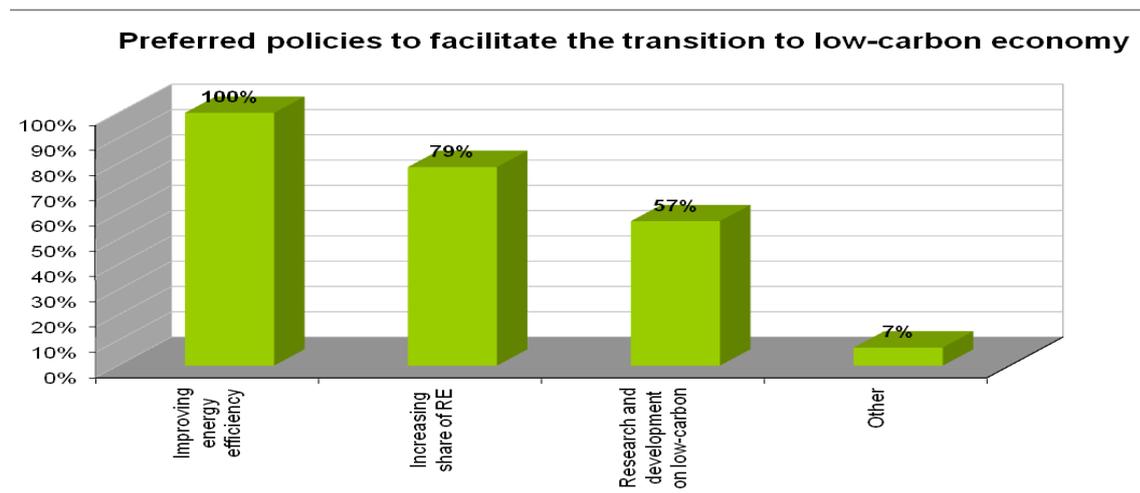
<sup>2</sup> These issues are discussed in an UNCTAD publication: 'World Investment Report 2010: Investing in a Low-Carbon Economy', especially at pp.146-148.

expand energy markets (especially from renewable sources) in ECT member countries will have significant impact on energy-related investment strategies going forward.

## The Public Consultation

The responses received from the public consultation came from a diversity of ECT Contracting Parties, including Armenia, Azerbaijan, Belarus, the Czech Republic (2), Greece, Italy, Liechtenstein, Macedonia, Portugal, Switzerland (2), Turkey and Ukraine, but also one response from general public. All of the respondents noted that their countries already had special policies on improving energy efficiency, while 79% of the respondents noted that their country had special policies on increasing the share of RE (for example, Armenia, the Czech Republic, Greece, Liechtenstein, Macedonia, Switzerland, Turkey, Ukraine). Fifty seven per cent of the respondents claimed their countries already had policies in place for research and development into low-carbon technologies (for example, the Czech Republic, Italy, Liechtenstein, Switzerland, Turkey). Seven per cent had other policies on facilitating the transition to a low-carbon economy (Figure 1).

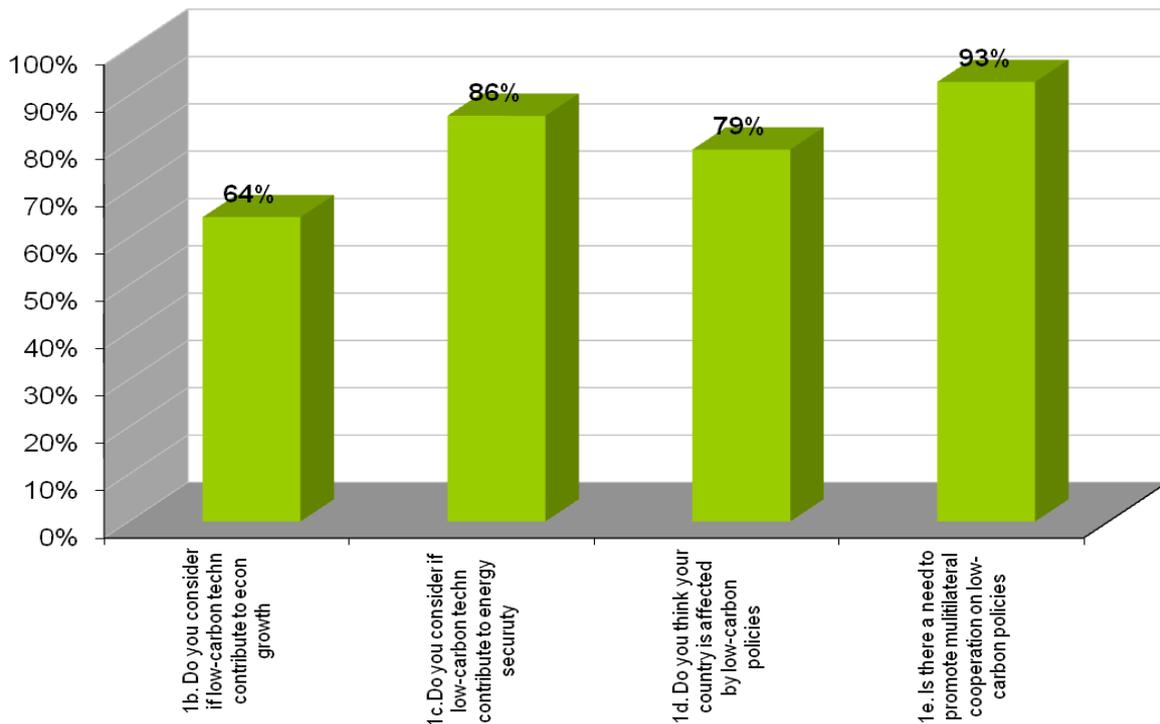
**Figure 1: Preferred Policies to facilitate the transition to a Low-Carbon Economy 1**



Below figure shows that more than half of the respondents thought that low-carbon policies contributed to economic growth in the countries concerned (64%), but almost all of them considered that such policies contributed to increasing energy security in their countries (86%). Most of them thought that the low-carbon policies of other countries impacted upon their own country (79%). One of the Czech respondents noted, for example, that the low carbon policy of Germany “which is increasing the number of renewable”; therefore, cooperation should be promoted, since currently the Czech Republic “focuses in its energy policy mainly on nuclear energy”. In the light of these responses, it is not surprising that the vast majority of countries saw a need to promote multilateral cooperation on low-carbon policies (93%). This support role for the ECT in the promotion of policies on RES and energy efficiency was viewed differently by the various respondents however (see Figure 2).

**Figure 2: Preferred Policies to Facilitate the Transition to a Low-Carbon Economy 2**

## Preferred policies to facilitate the transition to low-carbon economy



Clearly, any such support would be more effective at the international level if carried out together with the EU existing programmes that required some coordination included the SET Plan of the EU, the Euro Mediterranean Energy Cooperation but also the Energy Technology Perspectives to 2050 of the IEA, ‘Program 21’ of the UN ECE or IRENA. Duplication of such efforts would clearly make little sense, but in addition, these programmes could establish a constructive starting point for Charter initiatives.

Respondents noted that cooperation in developing low carbon policies can also be done at both national and international levels. Developments on market based mechanisms for carbon pricing at both national and international levels needed to be taken into account. Moreover, as the respondent from Italy noted, markets are becoming progressively more interconnected (demonstrated by the wide-ranging international impacts of shale gas development in the USA). This ongoing trend has impacts on prices when different policies are adopted for the promotion of low carbon technologies (e.g. those involving subsidies). Moreover, there is a regional dimension to all of this: as the Turkish respondent noted, “(m)ultilateral cooperation options could be enhanced to promote regional low carbon policies depending on the availability of regional low carbon resources”. Industry too should be closely involved in any initiatives. The Greek respondent suggested that the Industry Advisory Panel “could facilitate the exchange of policy experiences in the ECT constituency with respect to national policies aimed at the transition to a low carbon economy”.

## 2. Analysis of Existing ECT Provisions on Investment Promotion and Protection

A challenge for the ECT, and the purpose of the Assessment, is to determine how to promote investment in low-carbon and climate change related sectors, while at the same time providing a secure and predictable framework for protecting all types of energy sector investments covered under the ECT. As low-carbon and climate change-related investments (such as in renewable energy) often require incentives, there is a need to balance the promotion of these investments with the core provisions on investment protection in the ECT, such as non-discrimination. With that said, the text of the ECT includes a number of provisions with direct applicability to the promotion and protection of low-carbon and climate change-related programmes.

### The Preamble

The Preamble to the ECT expressly recalls the UNFCCC. This reference to the UNFCCC in that part of the ECT is significant since, according to Article 31 of the Vienna Convention on the Law of Treaties, the interpretation of provisions in the ECT should be read in the context of other international obligations. In relation to low-carbon investments covered under the ECT, the Preamble indicates that climate change-related commitments should not be read in isolation when analysing ECT commitments.

### Definition of Investment

In terms of the types of investments protected under the ECT, Article 1, paragraph 6, is illustrative. The ECT defines ‘Investments’ as investment associated with an ‘Economic Activity in the Energy Sector’ and that, in paragraph 5, is in turn defined as an “economic activity concerning the exploration, extraction, refining, production, storage, land transport, transmission, distribution, trade, marketing or sale of Energy Materials (or) Products.” These activities are set out in paragraph 4 as including the items listed in Annex EM. The latter covers nuclear energy, coal, natural gas, petroleum and petroleum products, and ‘electrical energy.’

The list of energy materials and products does not explicitly include fuels that might play a role in a low carbon economy, such as bio fuels, hydrogen or CO<sub>2</sub>. However, the provisions of Article 1 could be understood as being sufficiently broad to cover many of the current known GHG mitigation measures, including coal gasification and carbon capture and storage (CCS), as well as nuclear energy if that is deemed to fit this category. ‘Electrical energy’ can be interpreted to include forms of renewable energy such as solar power, wind energy, whether on-land or offshore, biomass, tidal or wave power, hydropower, geothermal and probably also electric vehicles, fuel cells, smart grids and smart metering. Since ‘electrical energy’ constitutes an ‘economic activity concerning’ energy items listed in Annex EM, it can also be read as including energy efficiency, sustainable building construction, and similar measures such as geothermal heat pumps and combined heat and power, which each serve to reduce the demand for energy. However, while there appears to be considerable evidence that low-carbon investments are protected under the ECT, there is no *de jure* definition of what constitutes a low-carbon investment under the ECT (or in any international agreement for that matter).

On the basis of the above provisions, the ECT can also be read broadly as encompassing technological improvements relating to improvements in energy efficiency. For example, improvements in cement production or aluminium manufacturing (both require energy intensive processes) can have the effect of reducing the ‘trade’ or ‘sale’ of GHG emissions through energy efficiency. They therefore constitute ‘economic activity concerning’ products specified in Annex EM.

Further, Article 1, paragraph 6, of the ECT expressly states that the term ‘Investment’ “refers to any investment associated with an Economic Activity in the Energy Sector and to investments or classes of investments designated by a Contracting Party in its Area as ‘Charter efficiency projects’ and so notified to the Secretariat.” However, while these provisions on investment protection for energy efficiency projects do exist, they have never been utilised by the Contracting Parties, and no notification to the Secretariat has taken place.

For the above reasons some guidance as to how contracting Parties might interpret the ECT provisions on low carbon would be timely. Even on the most favourable interpretation with respect to low carbon subjects, the list of energy materials and products is incomplete with respect to low carbon subjects, even if it can be interpreted to include some of them. By virtue of Article 36(1) (d) the Conference can modify Annex EM without having to produce a new Annex. This modification would allow low carbon energy materials and products to be added to the Annex. Such a step would constitute more than a technical change in the sense of Article 36(1) (e), but would also be different from an Amendment that would require ratification under Article 43. Technical changes are changes in wording and not substance. A modification implies some degree of change in substance, such as would be involved with the addition of new energy materials and products to Annex EM. This would be different from an Amendment which implies a deeper change in substance and would require ratification by the Contracting Parties.

### **Pre-Investment Market Access**

In addition to the definitional aspects of an investment under the ECT, there are also a number of pre-investment and post-investment considerations that impact low-carbon and climate change-related investment decisions. Most investment protection and promotion treaties, including the ECT, tend to focus on creating a stable and predictable post-investment climate for investors. However, the promotion of low-carbon investments may require a more robust pre-investment regime than is currently envisaged under the ECT. Accordingly, the ECT itself does not cover the protection of pre-investment; that is, rules on market access for investments. At the pre-investment stage, the ECT has proposed a Supplementary Treaty whereby Contracting Parties would be bound to provisions relating to pre-investment protection. This Supplementary Treaty has never been signed due to long-standing failures to agree. Currently, ECT countries can voluntarily agree to open specific energy-related sectors of their economy; but the provisions are non-binding.

While the Supplementary Treaty has been on the table for many years, its applicability to market access issues in low-carbon investments may provide opportunities for its revival. For example, the following statement from the *Methanex* arbitration is insightful: “while renewable-generated electricity can in many respects serve the same purposes or functions as non-renewable-generated electricity, there are differences that make the *market* for renewables different from the market for fossil-fuel generated energy, differences that include

the environmental preferences of consumers.”<sup>3</sup> This distinction in the difference between low-carbon markets and fossil-fuel markets could be an indication that additional protections at the pre-investment phase are critical to the promotion of low-carbon investments.

### **Non-Discrimination**

Non-discriminatory treatment of investments is a hallmark provision in any treaty aimed at the reciprocal promotion and protection of foreign direct investment. Under the ECT, derogation from this general principle is permitted in limited circumstances. Article 10, paragraph 6, permits a Contracting Party to “declare voluntarily to the Charter Conference, through the Secretariat, its intention not to introduce new exceptions to the Treatment described in paragraph (3).” This permission to derogate from the national treatment standard of non-discrimination is discouraged under the ECT, but has been used for a small number of exceptions in the so-called Blue Book<sup>4</sup>. The Blue Book publishes the derogations submitted by the Contracting Parties where discrimination between national and foreign investors will be permitted at the pre-investment phase. In relation to the promotion of low-carbon investments, these exceptions to the principle of non-discrimination could have significant relevance where protectionist policies are being promoted. However, the greater problem relating to non-discrimination is in cases where the promotion of low-carbon investments is seen as discriminating against fossil-fuel energy investments.

### **Environmental Aspects**

Article 19 of the ECT relates to environmental aspects and the pursuit of sustainable development objectives among Contracting Parties. The text of Article 19 that may be relevant in the assessment of opportunities for promoting and protecting low-carbon investment states that “in pursuit of sustainable development and taking into account its obligations under those international agreements concerning the environment to which it is a party, each Contracting Party shall strive to minimize in an economically efficient manner harmful environmental impacts occurring either within or outside its Area, taking proper account of safety.” Specifically, paragraph 1, subsection d, states that Contracting Parties shall “have particular regard to Improving Energy Efficiency, to developing and using renewable energy sources, to promoting the use of cleaner fuels and to employing technologies and technological means that reduce pollution.”

### **Technology Transfer**

Technology transfer is a crucial aspect relating to the development of low-carbon economies. The ECT includes an Article on the transfer of technology. The application of this article in relation to the dissemination of new technologies used in fostering the promotion of low-carbon technologies is important. Article 8, paragraph 2, provides specific obligations on member states to “eliminate existing and create no new obstacles to the transfer of technology in the field of Energy Materials and Products and related equipment and services.” However, while the provisions on technology transfer under the ECT are comprehensive in nature, they lack an implementation mechanism for removing barriers.

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<sup>3</sup> *Methanex Corp v United States of America*, <http://www.state.gov/s/l/c5818.htm>

<sup>4</sup> For details please see at [http://www.encharter.org/fileadmin/user\\_upload/document/Blue\\_Book\\_ENG.pdf](http://www.encharter.org/fileadmin/user_upload/document/Blue_Book_ENG.pdf)

## Access to Capital

Another area of potential relevance to low-carbon investments are the provisions under the ECT on access to capital. Article 9 of the ECT may be considered a ‘Sleeping Beauty’ provision in this regard, as delegations do not see it as an operational provision. Currently, most investors go to international finance institutions (IFIs) or to international commodity markets for capital. To make Article 9 operational, specifically in the context of low-carbon investments, would require that capital markets of the Contracting Parties are accessible to foreign investors in a non-discriminatory manner. Principally, general barriers relating to the control of access to capital could be loosened in areas where capital would be used for certain types of low-carbon investments (such as access to capital from domestic climate change mitigation and adaptation funds).

## Multilateral Initiatives

Any steps taken by the ECT should avoid duplication of the efforts of other international organisations. Indeed, the implications of a transition to a low carbon economy for investment have been explored by other international institutions and think-tank groups. For example, the World Bank Group commissioned a study in 2006 on “An Investment Framework for Clean Energy and Development”, which examined the variety of funding mechanisms available for channelling investment into developing countries.

In 2005 an external review of the investment provisions in NAFTA in relation to renewable energy drew attention to the National Treatment provision in Chapter 11. (Opportunities and Barriers in Renewable Energy in NAFTA, 2005 at 47-48). It allows a private right of damages against a NAFTA party through investor-state arbitration. The National Treatment (NT) provision requires that no less favourable treatment be accorded to investors and investments of other NAFTA parties than is given to domestic investors and investments (“with respect to the establishment, acquisition, expansion, management, conduct, operation, and sale or other disposition of investments”). ‘Like circumstances’ can be determined by means of an inquiry, but not along the lines of whether the investors or investments being compared are in the same economic sector or compete in the same market place. Electricity generated by means of renewable energy could serve the same purposes or functions as electricity generated by non-renewable energy, but there are differences that make the market for renewable energy different from the market for fossil-fuel generated energy, such as the environmental preferences of consumers. There are other differences in the environmental and economic characteristics of renewable energy and the generating processes, which make it difficult to conclude that renewable and non-renewable sources of energy are ‘alike’. There are parallels here with the challenge of interpreting NT in the Energy Charter Treaty in Art 10(2) and (3) with respect to renewable energy.

## The Policy Context: Summary

There are a number of policy considerations relevant to low carbon investment that have already come to the attention of policy- and law-makers. These are summarised below:

- The implementation of climate change-related initiatives, such as mitigation and adaptation measures, in the coming decades will require significant annual investments. These investments, many of which will come in the form of low-carbon energy projects,

require robust promotion and protection in order to flourish in energy markets dominated by fossil-fuel based energy;

- The transition to a global low-carbon economy requires policies and programmes for promoting growth in the renewable energy sectors. Many of these technologies require incentivisation to be competitive with fossil-fuel based technologies. This can create tensions between various energy markets as subsidies and state aid (even to promote low-carbon technologies) tend to be discriminatory, anti-competitive, market distorting, and antithetical to market liberalization;
- Most of the focus on the relationship between foreign direct investment promotion and protection, and climate change-related mitigation and adaptation objectives, has focused on the ‘chilling’ potential that investment protections can have on the implementation of climate change policies. However, given the importance of investment in climate change-related projects, the promotion and protection of these investments is integral to the achievement of climate change objectives. Synergies between investment regimes and climate change regimes should be encouraged;
- There is some fear that green growth policies in individual states may be captured by protectionist interests that could harm competition. Therefore, it is important that green growth policies aimed at transitioning to low-carbon economies should be based on open and competitive energy markets in accordance with the Energy Charter principles;
- Innovative companies are the key protagonists for reshaping the energy supply system and favourable investment climates need to be geared towards encouraging these kinds of companies to pursue investment in low-carbon projects;
- Renewable energy as well as energy efficiency services are key considerations in transitioning to a low-carbon economy. This requires energy efficiency services offered by energy supply companies to be given better political and policy support, and
- There is a need to shape stronger partnership between the state and the private sector in promoting low-carbon investments.

## Public Consultation

*A major theme in the responses to the public consultation was the need to encourage synergies between investment regimes and climate change regimes.* No less than 93% of the respondents identified this as a priority for their preferred instruments and policies (see below, Figure 3: Preferred Instruments/Policies related to Low Carbon Investments). However, there was less evidence of consensus among respondents about what such synergies would mean in practice. One respondent expressly asked for clarification of ‘synergies’ in this context. Another respondent suggested that “(i)nterpretation of related ECT provisions could be harmonised through political understandings/declarations with the involvement of ECT Contracting Parties”.

In practice, there are also issues about *how* to encourage synergies between investment regimes and climate change regimes. Some indications of a possible starting point can be gleaned from the United Nations Conference on Trade and Development (UNCTAD), which has reviewed this set of issues and made a recommendation<sup>5</sup> about procedure. Noting that modifications of the International Investment Agreement (IIA) regime would be a lengthy

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<sup>5</sup> World Investment Report 2010, “Investing in a low-carbon economy”, chapter on ‘Synergizing IIAs and climate change policies’, p.138.

and also time- and resource-intensive process, it suggested that “policy makers may wish to consider cross-cutting, interpretative approaches”. These might be non-binding in nature, but even so, the pursuit of “policy integration and coherence through interpretative means could provide ‘interpretative guidance’ to arbitral tribunals adjudicating climate change related ISDS (investor-state dispute settlement) claims and be a significant step, particular in scenarios where ISDS tribunals have a certain margin of discretion in the interpretation of the IIA provisions at issue”.

Declarations made on a multilateral basis had positive advantages, according to UNCTAD. Such a declaration “could help to enhance coherence between the IIA and the climate regimes. By clarifying that IIAs do not constrain climate change measures enacted in good faith, such instrument could help ensure that the IIA framework is in line with multilaterally agreed global priorities”. This might be a way forward for the Charter Conference.

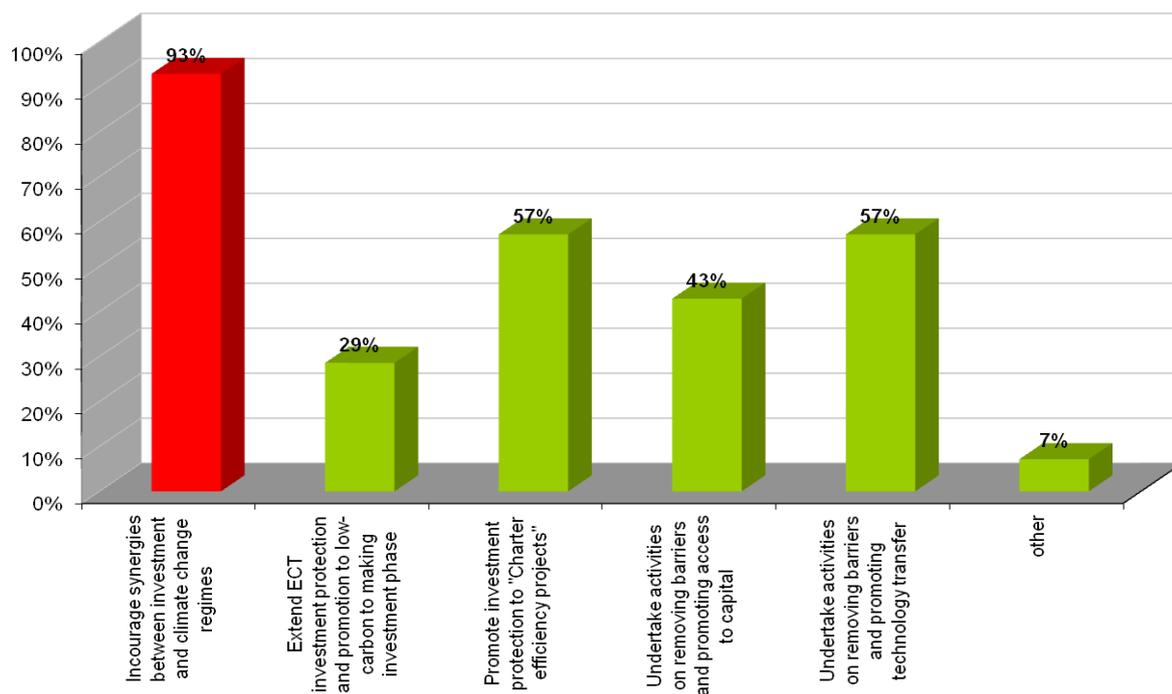
Clearly, a declaration would need to take into account the relevant provisions of the ECT and of any other international institutions. Government officials working on low carbon matters would need to be aware of these synergies and how to encourage them. One way forward might be to start by focussing upon the investment regime in the ECT and examine how this synergises with existing climate change regimes and whether the synergy is optimal or unsatisfactory in some respects. This might function as a pioneer or feasibility study for a wider engagement with this issue. It would also have a direct relevance to the Contracting Parties, who are familiar with the investment regime in the ECT.

Among the respondents’ comments on this subject, the remarks made by one of the Czech respondents were notable. “Climate policy should not be the goal itself but should be balanced with energy policy”, she noted. Key elements in such an energy policy would be investment protection which “is needed to attract new investors and increase the investments”. Another key synergy she identified is the facilitation of international trade by removing barriers and promoting not only access to capital but also technology transfer.

Another priority that attracted strong support from respondents was the promotion of investment protection in this area to ‘Charter Efficiency Projects’ in accordance with ECT Art. 1(6). This attracted a positive response from 57% of the respondents (see Figure 3). If action were to be taken as a response, the Energy Charter Secretariat could prepare a roster of ‘Charter Efficiency Projects’. This could be done in close collaboration with the interested member countries and could have a standardised description, formally notified to the Secretariat and thus qualified under the investment protection of the ECT. The Secretariat work could include an assessment of the interaction between market-led developments on low-carbon investments and support-based developments. In this sense, the focus could be upon *access to capital* which, as one respondent noted, “is a cross-cutting issue affecting investments at any level” (see ECT Art. 9). This would link up to another priority listed in the questionnaire: the undertaking of activities for removing barriers and promoting access to capital for low carbon investments (supported by 43% of the respondents). To take this forward, the Secretariat would need to work with the member countries that voluntarily notified “Charter Efficiency Projects” and donor countries that would be willing to facilitate access to capital for the notified projects. At present, there is clearly some support for the idea in its general form.

### **Figure 3: Preferred Instruments/Policies to promote low-carbon investments**

### Preferred instruments/policies related to promoting low-carbon investments



There was a substantial degree of support for the priority of undertaking activities on removing barriers and promoting technology transfer in accordance with ECT Art.8 (57%). This would need to be specified in detail however, and the level of support which was demonstrated for this idea in such general terms may need to be received with some caution since further analysis is required to assess whether concrete action is deemed to be a pressing matter for Charter Contracting Parties at the present time.

The idea of extending ECT investment protection and promotion on low-carbon to the 'making' investment phase (pre-investment) based on the draft supplementary treaty to the ECT attracted little support (29%). It would appear to be too ambitious at present or not relevant to the promotion of low carbon investment or deemed unlikely to gain sufficient support from Contracting Parties to be effective.

### Conclusions on Investment

The analysis provided in this Section is intended as a general overview of the most relevant provisions in the ECT that relate to the promotion and protection of low-carbon investments under the ECT. The public consultation process provides further support for this general conclusion.

In analyzing the current provisions under the ECT that relate to the promotion of low-carbon investments, there is evidence that making more synergies between investment and climate change regimes could prove useful for policy-makers among ECT Contracting Parties.

Three measures could be taken to address the current shortcomings in the ECT in this area: (1) Annex EM could be modified to include new low carbon subjects, a measure that would be relatively easy for the Conference to take; (2) an interpretative note or declaration could be adopted by the Conference that identifies where in the existing provisions of the ECT there is

scope for action by Contracting Parties to promote low carbon policies and instruments, and which attempts to harmonise these provisions. In itself, this step would also add a degree of positive support as well as legitimacy to such steps; (3) investment protection could be enhanced to ‘Charter Efficiency Projects’, and new measures could include ones aimed at access to capital and technology transfer.

None of the above support measures to promote low carbon investment would need impact negatively upon the wider investment regime for energy in the ECT, and all of them could readily take into account the relevant actions taken or being planned by other multilateral institutions.

### 3. Trade

This Section focuses on trade-related aspects of the ECT and how provisions in the ECT can be used to facilitate low-carbon investments. Four primary areas will be discussed: (1) a review of the ECT provisions on trade that address low-carbon subjects; (2) a review of PEEREA provisions that address low-carbon subjects; (3) a review of multilateral and bilateral initiatives in promoting low-carbon investments that relate to, or may positively interact with, ECT obligations; and (4) the development of proposals for specific policy options with a view of promoting low-carbon investments.

#### Background

The Secretariat prepared a document on trade-related aspects of promoting a low-carbon energy sector (TTG-95, ‘Low Carbon Paper’). This document provided a basis and starting point for discussion by the Trade and Transit Group in June 2011. The main conclusions of that Group discussion are summarized below:

- *WTO and the ECT permit action:* a variety of trade-related measures aimed at the promotion of low-carbon economy could be designed in conformity with the basic requirements of the World Trade Organization (WTO)/ECT trade regime. The WTO/ECT frameworks contain a carefully drafted toolbox that enables the respective constituencies to enact policies promoting a low-carbon economy;
- *Taxation is a key tool:* one of the main trade policy tools for promotion of a low-carbon economy is taxation. Some countries in the ECT constituency already have a framework for the taxation of energy products and electricity, which sets the minimum tax levels on fossil-fuels;
- *Subsidies must be addressed:* the phasing out of subsidies on fossil fuels is an important step for transition to a low-carbon economy. The ECT has among its members some non-OECD countries that do not yet address the issue to the extent necessary, according to the conclusions of the International Energy Agency (IEA), the Organisation for Economic Cooperation and Development (OECD), and the World Bank. The G-20 nations have called upon all nations to adopt policies that will phase out such subsidies, asking international organizations to analyse their scope and provide suggestions for implementation of such policies<sup>6</sup>. The Assessment Report includes an analysis of the role the ECT could play in the issue of fossil-fuel subsidies reduction and phase-out (see Annex 1);

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<sup>6</sup> World Bank, 2007; El Sobki, Wooders & Sherif, 2009.

- *Technical barriers to trade need to be reviewed*: technical regulations and standards rank among the most effective tools to promote low-carbon methods of production and consumption. Diverse rules or practices for certification and approval procedures in different countries may act as restrictions to trade in low-carbon technologies;
- *Scope of ECT is a key constraint*: effectiveness of the ECT in addressing the issue of promotion of low-carbon economy will depend on the coverage of respective products in the scope of the ECT and related instruments;
- *Knowledge exchange is complementary*: transparency and exchange of policy experiences as well as information about best practices with regard to the transition to a low-carbon economy are necessary complements of policy instruments.

### ***ECT Trade-Related Provisions***

The trade-related rules are laid out primarily in Part II of the ECT: Article 3 on access to international markets; Article 4 on the non-derogation from GATT rules, and Article 5 on trade-related investment measures, such as those that promote local content requirements. Article 21 on taxation should also be considered relevant to analysis of ECT trade-related issues. The ECT was amended in 1998 to take account of the changes made in the multilateral trade rules that resulted from the creation of the WTO. Therefore, the trade-related aspects of the ECT are two-fold and include the provisions included in the 1994 version of the ECT, and the Amendment to the Trade-Related Provisions (Trade Amendment) of the ECT that is based on the relevant WTO rules.

Both sets of provisions take the same approach. This approach is to incorporate by reference all of the WTO and GATT rules on trade in goods that are relevant to the energy sector. Annexes in the ECT list the WTO rules that are not applicable. Most notably, the General Agreement on Trade in Services (GATS) and the WTO Agreement on Trade-Related Intellectual Property Rights (TRIPS) are not covered under the ECT (although the WTO Agreement on Trade-Related Investment Measures (TRIMs) is included in the scope of the ECT trade rules). The trade provisions of the ECT apply to trade in energy materials and products – and after the adoption of the Trade Amendment, energy-related equipment as well. A discussion of the relevant trade-related aspects of the ECT that deal with low-carbon investment will mirror the relevant discussions under the WTO.

The Annexes to the ECT also play a role. The ECT's applicability to trade in specific products and materials depends on whether such goods are included in Annexes EM and EQ of the ECT. These are mostly general 4-digit product codes, sometimes specifying products up to 6-digit level. The idea was to include a variety of goods that could be adapted to evolving use in the sector without requiring a change in the ECT. Electricity included in Annex EM covers without discrimination all kinds of electricity, irrespective of how it has been generated. The coverage of renewable energy equipment is limited and incomplete.

Primarily, there appear to be a finite set of WTO rules that are applicable in the context of creating barriers to low-carbon investment. These will be introduced briefly below and include the following: (1) domestic taxes (generally), (2) border tax adjustments (BTAs), (3) subsidies, and (4) technical barriers to trade (TBTs). In addition to these specific trade-related disciplines, the ECT includes general principles of the GATT applicable to trade-related matters. These include (1) most-favoured nation treatment (MFN), (2) national treatment (NT), (3) prohibition on quantitative restrictions, (4), and Article XX exceptions.

Each of these provisions can have significant impact on programmes aimed at promoting low-carbon investments.

## Domestic Taxes

A principal tool of trade policy for the promotion of a low carbon economy is taxation. For both energy-producing countries and energy-importing countries, taxes aimed at promoting low-carbon investments and reducing GHG externalities have clear attractions. Taxation is a tool closely tied to a nation-state's sovereignty, and is not in principle limited by WTO or the ECT. Carbon dioxide and energy taxes may therefore be applied directly to fuels, to electricity and to downstream industries that use energy as an input. This area of discretion offers scope for positive intervention by a state in this area within the framework of the WTO/ECT law: a country could, for example, impose a lower tax on energy produced in an environmentally friendly manner.

Under the WTO/ECT trade regime, there are rules applicable to the compatibility of such tax measures with the overall regime. Two are noteworthy. Firstly, internal taxes for imported energy material and products may not be higher than for *like* energy materials and products of domestic origin. If considered 'like,' then different tax rates cannot be applied. Secondly, it is permitted to treat differently energy products that are not alike. However, doubts about the legality of measures can easily arise. If a country is pursuing a low carbon policy objective, does this mean it may discriminate among energy goods and materials on the sole basis of the technologies used in the production of such goods? It may seek to impose lower taxes on goods and materials that have been produced using clean energy technologies or give preferential access to the grid for electricity generated by renewable energy. Since WTO/ECT rules require non-discrimination of like products, the answer is not clear.

This is also a controversial area of WTO law because production and processing methods (PPMs) are not included in the 'likeness' determination of products. This means that if the end product is electricity, the WTO does not differentiate as to the manner in which the electricity is produced (i.e. from a wind farm or from a coal-fired power plant). Where electricity is 'labelled' however, this has a different effect under WTO rules (see 2.4). For this reason electricity labelling is one of the more important issues to be addressed.

## Border Tax Adjustments

In the context of low-carbon promotion policies, and particularly the use of carbon taxes, border tax adjustments (BTAs) address issues of competitiveness and carbon leakage. They are a type of domestic taxation that can be applied at the border, for example, to goods produced with environmentally unfriendly Process and Production Methods (PPMs). If a BTA involves a CO<sub>2</sub> tax on energy materials and products, its mode of operation is as follows. If a country has introduced a carbon tax and wishes to protect its producers from competition by untaxed imported goods, it may seek to tax the imported goods with the equivalent of what they would have had to pay if they had been produced in the importing country. Where the BTA concerns exports, the exporters would receive a refund of the domestic carbon tax. This approach is likely to be compatible with WTO rules: adjusting at the border taxes that are imposed on inputs physically incorporated in the final product. It is less clear where indirect taxes are applied to end products, and are imposed upon an environmentally unfriendly process. In such cases, the payment would be equal to the

additional production cost of goods that are produced domestically with more environmentally friendly processes.

The main policy objective of this is to reduce carbon leakage. Carbon leakage occurs when the price of production of a good in a country that internalizes its GHG emissions is higher than a country that does not internalize such an externality; and because of this, production moves to the country with the lowest production costs. To prevent such leakage, BTAs have been proposed. However, due to the lack of legal certainty about whether PPMs can be considered a component of 'like' product determination under WTO, the legality of BTAs remains unclear.

## Subsidies

The assessment with regards to subsidies is part of a separate document TTG 110. The subsidy regime under the WTO/ECT is of central concern to many policies aimed at incentivizing low-carbon investments. It affects direct support measures that aim at promoting low carbon development and deployment and indeed possibly also indirect support measures. Under the WTO Agreement on Subsidies and Countervailing Duties, subsidies are prohibited if they are contingent on export performance. They are actionable if they are found to be *de jure* or *de facto* specific. "Specific" means that a subsidy is specific to an enterprise or industry or group of enterprises or industries within the jurisdiction of the granting authority. Therefore, support schemes that are targeted specifically at renewable energy projects are susceptible to inconsistency with WTO rules. However, most incentives for renewable energy projects that are currently envisaged are ones that involve feed-in tariff programs with payments of a premium to renewable energy producers for their green energy production. While it remains unclear whether such programmes constitute an illegal WTO subsidy, feed-in tariff programmes are a very common tool in promoting renewable and low-carbon technologies throughout the world.

Under the heading of subsidies, there are two other issues worthy of note. The first issue is the problem of fossil-fuel subsidies. Fossil-fuel subsidies remain widespread throughout the world and are a major impediment to the promotion of low-carbon investments. In fact, many argue that if all fossil-fuel subsidies were removed, support schemes for renewable energy would be unnecessary.<sup>7</sup> Under this view, support schemes for renewable energy can be seen as merely offsetting the market distortions created by fossil-fuel subsidies. The second issue that is of particular relevance is the potential subsidy that is created by freely allocating carbon credits under the European Union (EU) Emission Trading Scheme (ETS). Such a practice in the EU may be creating perverse subsidies for certain energy producers.

## Technical Barriers to Trade

An integral part of the ECT trade regime is the Technical Barriers to Trade (TBT) Agreement. Any Contracting Party that adopts technical regulations (understood as mandatory) and standards (voluntary) has to do so in compliance with the rules in the TBT Agreement. Since regulations and standards are important instruments of low carbon policy, their role can be expected to increase in the future. Indeed, they may be seen as potentially effective tools for the promotion of low carbon methods of production and

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<sup>7</sup> On this subject, refer to the Annex 1 of this Assessment Report, which includes a detailed proposal on dealing with the issue of fossil fuel subsidies in the Energy Charter context.

consumption. *The adoption of such technical measures is permitted if they are designed to achieve legitimate policy objectives such as environmental protection*<sup>8</sup>.

The scope of the TBT rules extends from technical regulations to standards and conformity assessment procedures. Carbon regulations may fall into either category depending on whether they are mandatory or voluntary. The TBT prohibits discrimination on the basis of technical regulations. According to the TBT Agreement, technical regulations must not be less favourably applied to ‘like’ products produced domestically. In other words, they may not discriminate between domestic and imported products (national treatment) or between one country of origin of imports and another (MFN treatment). The measures should not be more trade restrictive than necessary to achieve the legitimate goal. A country may impose maximum carbon intensity standards for energy-intensive products sold on the domestic market irrespective of origin. However, a less trade-restrictive type of carbon regulation would be to label all the energy intensive products as ‘having climate adverse effect’. In electricity trading, labelling (and its harmonisation) is one of the least trade-restrictive measures for addressing low carbon issues. This means defining those types of power stations that are considered to be low carbon ones, and by virtue of this, to provide them with some form of special treatment on the electricity markets. In a multilateral context, it is important that internationally standardized electricity labels are created and applied. Within the Energy Charter framework the most suitable way to address this would be on a voluntary basis.

The TBT Agreement also gives preference to international standards applied in a transparent manner, as distinct from national standards. Where relevant international standards are available, they are to be used as a basis for technical regulations, according to Article 2.4 of the TBT Agreement. However, it adds that members may depart from an international standard even where one exists if “such international standards or relevant parts would be an ineffective or inappropriate means for the fulfilment of the legitimate objectives pursued, for instance because of fundamental climatic or geographical factors or fundamental technological problems”.

In the context of promoting low-carbon investments, these WTO/ECT rules on technical regulations can assist in reducing impediments to trade in low-carbon energy products. Essentially they encourage all WTO/ECT members to enact regulations based upon harmonized standards. Since technical regulations provide product characteristics relating to PPMs, an increased level of technical standardization of low-carbon energy products and low-carbon produced goods can potentially improve the possibilities for PPMs in ‘like’ product determinations – especially as they relate to subsidies and taxation. In this regard, the work of organizations such as the International Electrotechnical Commission (IEC) and the International Organization for Standardization (ISO) are particularly helpful, even essential, in developing technical standards for low-carbon technologies and goods. Currently, the IEC is developing common international standards and rules for renewable energy technologies, and the ISO is elaborating standards in other fields of technology.

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<sup>8</sup> A recent WTO publication reminds us that “members should ensure that measures are not more trade restrictive than necessary for the policy objective at hand, are proportionally restrictive to the risk of not meeting the policy objective, are based on scientific principles and not maintained without sufficient scientific evidence, and do not arbitrarily or unjustifiably discriminate between Contracting Parties where the same conditions prevail” (‘World Trade Report 2012’ (Geneva, 2012), at p. 176; cf. Art 2.2 of the TBT Agreement). An earlier WTO Report contains a more extensive discussion of global cooperation on standards and regulation: ‘World Trade Report 2005: Trade, Standards and the WTO’ (Geneva, 2005).

The importance of technical regulations and standards for low carbon policies is significant. They may be regarded as “among the most effective tools to promote low carbon methods of production and consumption”<sup>9</sup>. Not only can they promote renewable and similar equipment in the market but they can also support the effectiveness of other policy measures such as taxes and support schemes and also lead to building consumer confidence in new products.

Some ECT members have developed a leading industry in renewable energy equipment using quality certification and standardisation programmes (Denmark, Germany<sup>10</sup>). The range of standards for renewable energy is wide, including technology standards and certification, project siting and permitting standards, grid connection standards, and building codes. Standards also play an important role in relation to grid connection for the electricity generated from ‘green’ sources. This will normally require the creation of appropriate connection standards and charges, and also guaranteed access to the grid. If the standards are too burdensome, not harmonised and inconsistent, they can act as a disincentive for investment in renewable energy plants. This is important in the renewable energy sector where in some regions trade in hardware is often conducted on a small scale with equally small scale importers and exporters only marginally concerned with regulatory compliance<sup>11</sup>. Sub-national bodies may also be ‘relaxed’ in their approach to regulatory compliance with standards due to limited resources or lack of information, for example.

In the context of standards, it is worth noting that Article 12 of the ECT Draft Transit Protocol<sup>12</sup> contains provisional language on Standards. These are defined as “generally accepted international technical standards for the construction, expansion, extension, reconstruction, operation and maintenance of Energy Transport Facilities used for Transit”. Such standards include “relevant standards concerning the environment, health, safety and social aspects of such activities, and subsequently (the) use (of) such standards as the basis for their (that is, the Contracting Parties’) national regulations”.

Given the importance of harmonization of rules and standards and the extent of the ECT membership, it would appear that a dedicated effort to promote and harmonize standards among the members is highly relevant to low carbon investment<sup>13</sup>. There appears to be no barrier to action in the TBT Agreement, and the benefits of such coordination in line with international technical standards have been appreciated already in the different context of

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<sup>9</sup> TTG 95: May 2011 Note from Energy Charter Secretariat on Low Carbon, p.15. See generally the subject of Technical Regulations which is discussed at pp.15-17 of the Note.

<sup>10</sup> The Danish technology standards programme is credited with playing a major role in assisting Danish industry in developing a world-class capacity in turbine manufacturing. Germany used turbine standards and certification requirements to accompany its investment tax credit regime for wind energy and in this way it avoided the quality control issues that other countries experienced.

<sup>11</sup> RL Howse and P van Bork, Opportunities and Barriers for Renewable Energy in NAFTA (2005), Third North American Symposium on Assessing the Environmental Effects of Trade: Research Paper. Trade in renewable energy hardware has of course expanded since the time this statement was written, albeit not in a uniform manner.

<sup>12</sup> [http://www.encharter.org/fileadmin/user\\_upload/document/TTG\\_87\\_ENG.pdf](http://www.encharter.org/fileadmin/user_upload/document/TTG_87_ENG.pdf)

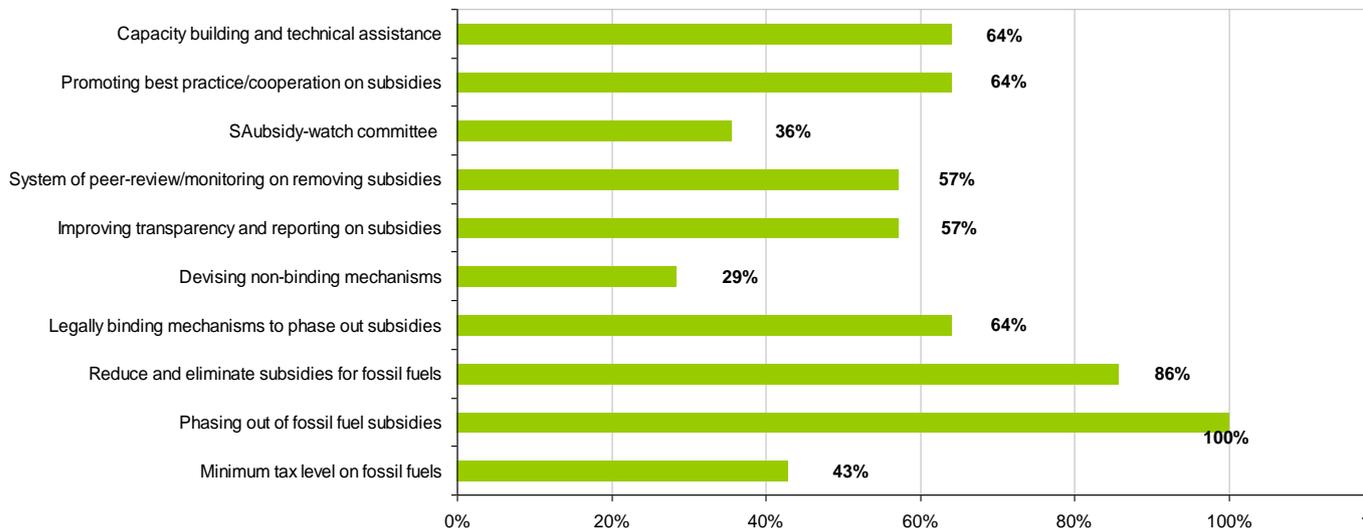
<sup>13</sup> It may be noted that with respect to green technologies, the Asia Pacific Economic Forum (APEC) members have recognized the need to conform to international standards, to promote mutual recognition of certification and to increase stakeholder participation in the standards-setting process. The resulting regulatory cooperation has been aimed at enhancing consistency in the use of terminology related to green buildings in order to increase transparency and enable producers to better meet requirements across different regional partners: WTO Report 2012, p.177-78.

the draft Transit Protocol. It may be premature to conclude that the Contracting Parties have an obligation to use appropriate measures to ensure observance of standards by national and sub-national entities<sup>14</sup> but it would be consistent with the overall trend of this Assessment if the Conference were to recognize its importance in at least one of the instruments proposed in this Report.

## Public consultation

*The single priority identified by respondents in the consultation process as overwhelmingly important was the phasing out of fossil fuel subsidies. This was deemed to be a key requirement for the transition to low carbon economies among all respondents (Figure 4). There was equally robust support for the idea that the Energy Charter should take action to support this process, ranging from 86% to 29% for the eight options which it was suggested that the Charter process might explore).*

**Figure 4: Preferred Instruments/Policies relating to Low Carbon Trade 1**



In particular, no less than 86% of respondents indicated that the Energy Charter Conference should explore the option of issuing an instrument such as a Declaration or Recommendation that recognized the need to reduce and eliminate subsidies for fossil fuels. This would probably need to have a ‘time dimension’ to it however, with recognition that many states are not going to be able to adopt its principles or requirements immediately, and would require a phasing out of subsidies over a period of time.

Some respondents favoured a more robust instrument than this however. Sixty four percent of respondents supported the option of negotiating legally binding mechanisms or commitments aimed at phasing out fossil fuel subsidies. It is far from clear how practical such a step would be, even if it were to gain support among a sufficient number of Contracting Parties. Even so, only a few respondents favoured the use of a non-binding

<sup>14</sup> NAFTA Article 902 (2) contains such an obligation in the Standards Chapter, and includes ‘non-governmental standardizing bodies operating in its territory’ among the bodies that a Party should seek to ensure observes the NAFTA provisions in this area.

instrument such as a Voluntary Agreement on subsidy reform or similar supporting measure (29%).

Indeed, there was much diversity implicit in the responses to this issue of fossil fuel subsidies and appropriate action. If the ECT Process were to seek an undertaking from all members to set a minimum tax level on fossil fuels, this would gain much support (if the responses to the public consultation are a guide. However, the establishment of a subsidy-watch committee as a subsidiary body to the Charter's Trade and Transit Group to monitor and discuss subsidy reform options and progress did not attract many expressions of support. It may have appeared too close in character to a regulatory body.

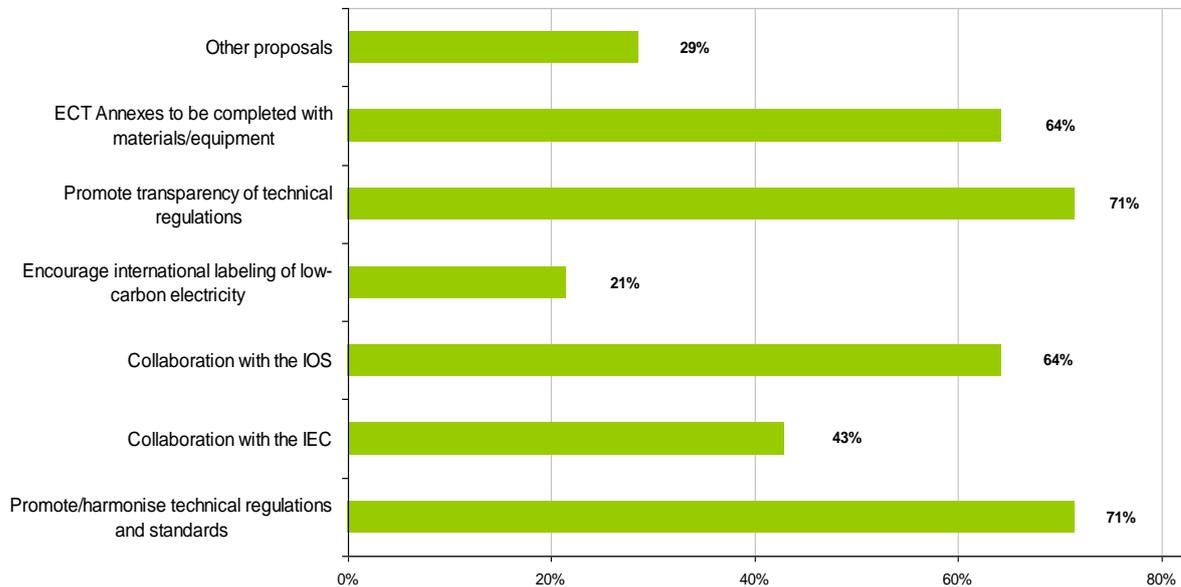
Yet, softer forms of monitoring appeared to be attractive. Both peer-review and monitoring were deemed to be satisfactory tools for measuring progress in removing fossil fuels subsidies and assessing compliance with respective commitments. Similarly, the establishment of standardized and regular reporting on fossil fuel subsidies was equally attractive to a number of respondents, not least because of the transparency improvements that would result.

The most attractive forms of instrument to respondents were those that emphasised knowledge sharing and capacity building. There was strong support for the sharing of best practice and cooperation in subsidy reform. If the Energy Charter were to offer capacity building and technical assistance among the ECT members, this would also be met with enthusiasm.

There was overwhelming support for the proposal that the ECT members promote and harmonize technical regulations and standards within a framework of international guidelines. No less than 71% of respondents agreed with the priority that ECT members should support these goals. One Czech respondent described this as “*the* important step to facilitate international trade and collaboration of the Treaty's member countries” (italics added). The only qualification to this was that it should be done with account taken of the relevant EU regulations, where that was appropriate. In considering how that should be done, there was a more mixed response.

The principal source of consensus lay behind collaboration with the International Organisation for Standardisation (ISO) with respect to development and promotion within the ECT constituency of standards for low-carbon technologies (Figure 5).

**Figure 5: Preferred Instruments/Policies relating to Low-Carbon Trade 2**



There was less support for collaboration with the International Electrotechnical Commission (IEC), with respect to development and promotion within the ECT constituency of international standards and rules for the renewable electricity technologies (43%). The idea that the ECT should encourage international labelling of low-carbon electricity, either with ISO or with IEC was also one that received little support, in spite of the benefits of this as mentioned earlier in this Report.

Transparency of technical regulations was regarded as a high priority item by 71% of the respondents. The Energy Charter should promote this with respect to Charter members. There was evident interest in this idea which leads to the question of how the Charter process would proceed to act in this area. A concern here is surely that such action may duplicate work that is being done by other international organisations in the field of fossil fuel subsidy reform. It should be developed within the framework of WTO projects and activities.

Finally, there was support for the priority that the ECT Annexes should be completed with energy products and materials as well as equipment necessary for low-carbon projects. No less than 64% of the respondents indicated their support for this. Further work on this proposal would be required however for it to be practicable. It would need to be established, for example, which items are to be included in EM1 and EQ1 and whether that list of additional items is comprehensive enough, since a single revision is likely to be ideal.

## Conclusions on Trade

In analyzing the current provisions under the ECT that relate to trade related policies and measures for the promotion of a low-carbon economy, there is some indication that a more robust and specific approach by ECT Contracting Parties is compatible with the WTO/ECT

trade regime. This is borne out by the results of the public consultation process which are discussed below. The foregoing analysis is intended as a general overview of the most relevant provisions in the ECT that relate to the promotion and protection of low-carbon investments under the ECT. It builds upon existing work by the Secretariat. Some conclusions from the above analysis may nonetheless be drawn:

*Taxation:* analysis in this Assessment suggests that there would be no express barrier to the introduction of an undertaking by all ECT members to enact requirements similar to the framework already existing in some countries for the taxation of energy products and electricity, which sets the minimum tax levels on fossil-fuels. This question should be further assessed in a more detailed study.

*Subsidies:* The importance of fossil fuel subsidies for this Assessment is beyond doubt. It therefore receives separate and extended treatment in Annex 1 to this Assessment Report (TTG 110).

*Technical barriers to trade:* results from the Assessment suggest that the use of technical regulations and standards may be harmonized among ECT Contracting Parties with respect to low-carbon technologies without contravening the WTO/ECT regime. Attention could be paid to how international guidelines and efforts are undertaken in this area. The ECT, in cooperation with the IEC, could in particular play an important role in standardizing electricity labels at an international level.

*Scope of ECT:* the effectiveness of the ECT in addressing the issue of promotion of low-carbon economy is constrained by its coverage of respective products in the ECT and related instruments. A further assessment should be carried out for determining which further items should be included in Annexes EM1 and EQ1.

*Knowledge exchange:* the exchange of policy experiences and best practices has been discussed above, and is further developed below.

*Form of instrument:* With respect to the formulation of specific policy options (legally binding provisions, soft-law obligations, voluntary agreements, declaration and possible new legal instruments aimed at complementing the effectiveness of the relevant ECT provisions), that may assist in promoting and protecting low-carbon investments, some considerations are set out below. Note that the distinction between binding and soft law measures is however not always clear-cut. The PEEREA, for example, contains only best efforts provisions but is nevertheless a binding instrument. On the other hand, a voluntary agreement is not mandatory, but may contain provisions in hard language form.

In summary, the key areas which have emerged from the Assessment, including the public consultation process, as priorities are: firstly, the need for support action by the Energy Charter Process for the phasing out of fossil fuel subsidies; and secondly, the promotion and harmonization of technical regulations and standards within a framework of international guidelines. With respect to the former, there is significant support for the negotiation of a legally binding mechanism to phase out fossil fuel subsidies. With respect to the latter, collaboration with ISO is an important way of taking this forward. Linked to this is the issue of transparency of technical regulations and the Secretariat was thought by participants in the public consultation process to have an opportunity there to contribute positively to such transparency.

## 4. PEEREA Provisions

### Brief Review of PEEREA

The provisions in the Energy Charter Protocol on Energy Efficiency and Related Environmental Aspects ('PEEREA') have seemed to some to provide a basis for a global governance mechanism, drawing upon EU experience, to support implementation of energy efficiency by setting some common, binding targets and rules<sup>15</sup>. It is a very different instrument from the Treaty itself, providing Contracting Parties with "a menu of good practices and a forum in which to share experiences and policy advice on energy efficiency issues"<sup>16</sup>. The overall goal is to improve energy efficiency and so to reduce the environmental impacts of energy in way that is appropriate to each Party's unique energy circumstances. A closer look at PEEREA reveals the basis for the idea of a global governance mechanism.

The Basic Principles of the Protocol set out to guide the Contracting Parties include, in Article 3 (1), a principle of cooperation and assistance "where appropriate" in the development and implementation of energy efficiency policies, laws and regulations. The Contracting Parties are also required to be guided by the principle that they "shall establish energy efficiency policies and appropriate legal and regulatory frameworks that promote ... reduction of barriers to energy efficiency" (which could include the removal of fossil fuel subsidies)<sup>17</sup>.

The cooperation requirement which appears so frequently in the text is also one that is stipulated broadly enough to include the private sector<sup>18</sup>. It is expressly defined in broad terms (Article 9 and related Annex).

Further, it is emphasised at Article 3(7) that cooperation has "to take into account the relevant principles adopted in international agreements, aimed at protection and improvement of the environment".

Article 5 on Strategies and Policy Aims requires Contracting Parties to "formulate strategies and policy aims for Improving Energy Efficiency and thereby reducing Environmental Impacts of the Energy Cycle as appropriate to their own specific energy conditions". These could be devised by drawing upon the experience of those countries that have implemented energy efficiency improvements to the greatest effect (to date). The ways in which general strategies and policies have been adapted to suit particular, local contexts may also constitute a source of guidance in developing new initiatives.

Article 6(3) also allows Contracting Parties to "provide fiscal or financial incentives to energy users in order to facilitate market penetration of energy efficiency technologies, products and services", and to promote energy efficient technology (Article 7).

At a general level, it may be noted that the drafters of PEEREA envisaged the possibility of amendments in ECT Art. 17. This could include amendments that support initiatives for low-carbon investment.

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<sup>15</sup> Dr. D Chello and M. B. Petkov (2010), 'Does Energy Efficiency Need Global Governance?'

<sup>16</sup> International Institute for Sustainable Development (IISD), 'Clean Energy Investment: Project synthesis report', 51

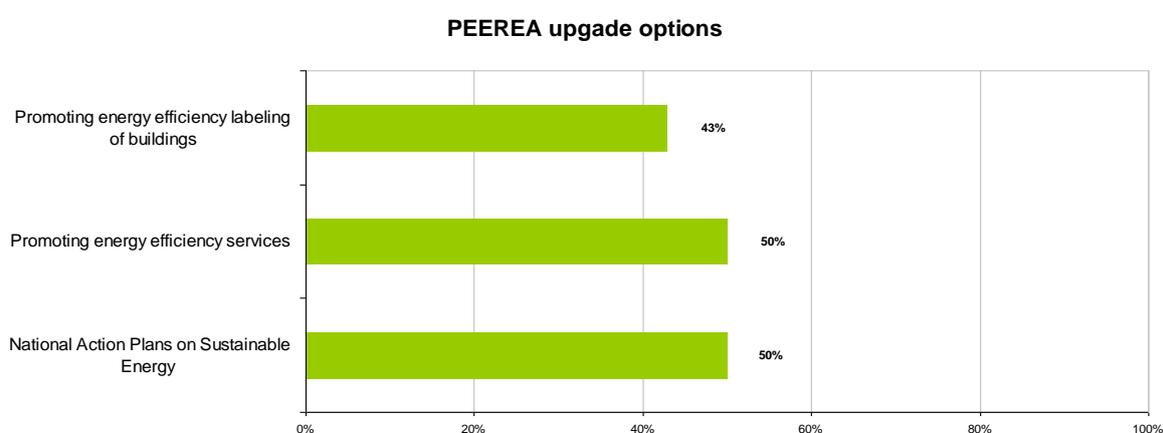
<sup>17</sup> Article 3(2)

<sup>18</sup> Article 3(6)

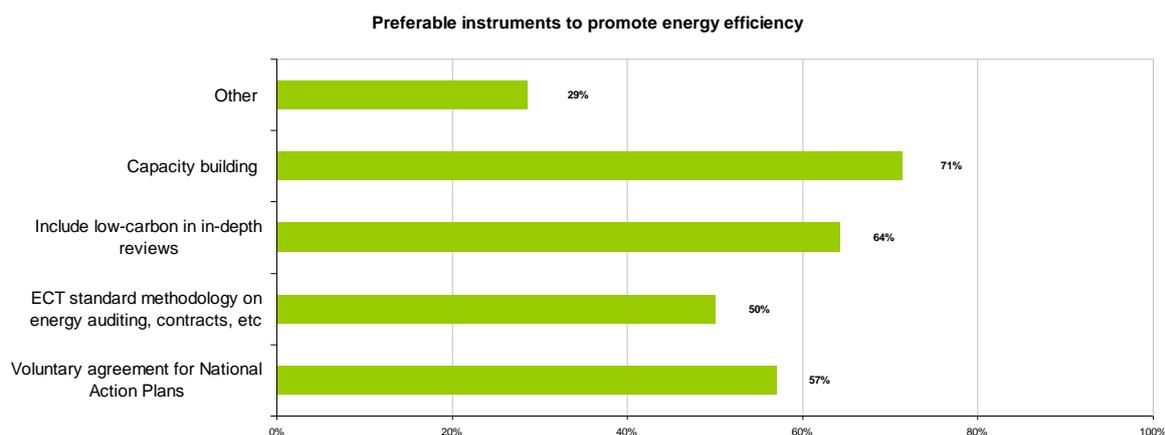
## Public consultation

The public consultation revealed very considerable support for an amendment of the Protocol to shift its focus to low carbon (Figure 6). The form of that amendment however revealed some differences of opinion. For some respondents a mix of National Action Plans on Sustainable Energy, promotion of energy efficiency services and labelling appeared appropriate (50%). For others, these choices appeared to have little or no interest, possibly reflecting national needs or pre-existing measures in place in these areas. Other options which attracted support from respondents included the promotion of energy efficiency services (50%), and the promotion of energy efficiency labelling of buildings (43%).

**Figure 6: Preferable options for “Upgrade” of PEEREA**



**Figure 7: Preferable Policies/Instruments related to Promoting Energy Efficiency**



The lack of any comment on the formal aspects of this amendment or upgrading of PEEREA itself may be interpreted as a sign that the respondents are aware of possible sources of difficulty in initiating such a change. However, the measures they favoured are ones that may well be compatible with a reinterpretation of the existing text.

The responses revealed a set of priorities in any ‘upgrading’ of the Protocol. Three specific actions or priorities secured strong support. Firstly, the establishment of distinct programmes for capacity building through training and education was favoured by a majority of

respondents (71%). In this activity the Charter Secretariat would have a coordinating role. It would allow Contracting Parties to exchange specialist staff or new staff in specialist departments to enhance their knowledge in low carbon promotion activities. Conferences, workshops and seminars are among the instruments that could be adopted to promote this educational objective. In doing so, it would be beneficial and highly appropriate to take into account, and perhaps even use as a starting point the various EU Directives and Regulations on Energy Efficiency and Renewable Energies. Clearly, if this proposal were to be adopted, it would be important to ensure cooperation with other institutions that already have such programmes in operation and it would be important to offer such programmes on a voluntary basis. For the Secretariat to take the lead would also require some review of its current organisational capacity with a view to enhancing it.

A second policy priority was the execution of in-depth reviews of low carbon issues in the energy efficiency policies prepared by the Energy Charter (64%). This priority received support from about half of the respondents. It would involve the Energy Charter Secretariat in an activity that has potential overlap with similar country reviews into energy policies carried out by the International Energy Agency and possibly other international agencies. If this proposal were to move forward it would be important to differentiate very clearly the merits of this initiative from those already being undertaken. It may be possible to link it to one of the previous initiatives to achieve such distinctiveness.

A third priority area that was identified in the public consultation is also one which would provide support to the Contracting Parties. In this case the priority is to develop a voluntary agreement to provide support to interested countries in preparing National Action Plans on Sustainable Energy (57%). This recognizes that some Contracting Parties may lack the capacity and expertise to develop such Plans without assistance. It has a potential downside in being a proposal that is not of general application. It would benefit only those countries that recognize that they have a need and act to remedy it.

There was also evident support for the development of an ECT standard methodology on energy auditing, contracts and agreements, measurement and verification of energy efficiency gains (50%). It may be inferred from the level of support that this is an activity that the Energy Charter still needs to demonstrate it has the capacity to provide and that there is scope for 'added value'.

## **Conclusions on Energy Efficiency**

The present Energy Charter provisions on energy efficiency as they relate to low carbon matters would seem to be in need of further development. Their roots in an earlier period and its limited preoccupations with these issues are evident to most observers. The present arrangements have not been deemed satisfactory by respondents who participated in the consultation process.

In this light, the next step would appear to be the design of supplementary measures that meet the concerns expressed above, in particular the capacity building and knowledge sharing elements.

Further research would seem necessary before action could be taken with respect to in-depth reviews of energy efficiency in relation to low carbon, taking into account actions being developed by other international or regional organisations.

## 5. Multilateral and Bilateral Initiatives

### Multilateral Initiatives

At the multilateral level, there are a number of recent initiatives that have potential for improving the possibilities for low-carbon investment promotion. The first is the EU's 'Roadmap for moving to a competitive low-carbon economy in 2050' (2011)<sup>19</sup>. The EU Roadmap states that "the EU should use this opportunity to strengthen its cooperation with its international partners, including to work towards a gradual development of global carbon markets to support efforts of developed and developing countries to implement low-emission development strategies, and ensure that all climate financing contributes to 'climate proof' development opportunities"<sup>20</sup>.

Another initiative is the Astana 'Green Bridge' Initiative which is aimed at the establishment of a Europe-Asia-Pacific Partnership for the implementation of 'Green Growth'.<sup>21</sup> The Green Bridge Initiative includes a thematic area devoted to "Low-Carbon Development and Adaptation to Climate Change." It is designed to complement existing multilateral initiatives and its Partnership Programme includes specific measures on financial and economic instruments, including greening procurement and taxes. In addition to these regional initiatives, the creation of the International Renewable Energy Agency (IRENA) in 2009 is of particular note<sup>22</sup>. It is one of the largest international agencies created in many years, with 92 states and the EU as members. Many more states are applicants or signatories. IRENA was founded to promote widespread and increased adoption and sustainable use of all forms of renewable energy. It encourages the flow of international investment in renewable energy.

### Bilateral Initiatives

At the bilateral level, there are two initiatives with particular relevance to the ECT in the context of the promotion of low-carbon investment. Each one represents an attempt by an ECT Contracting Party to develop a bilateral relationship with an important non-member country for the achievement of low carbon objectives. The first is the Memorandum of Understanding (MoU) signed between China and the United Kingdom (UK) concerning cooperation on low-carbon that was signed in January of 2011<sup>23</sup>. China is a significant emitter of CO<sub>2</sub> but is not committed to emissions reduction as part of a multilateral agreement. The MoU envisages three principal themes: low-carbon planning through the use of market mechanisms, including emissions accounting and trading, and wider low-carbon policy frameworks and analysis to encourage low-carbon development and energy efficiency; the achievement of low-carbon standards and low-carbon labelling; and procurement to bring about low-carbon consumption. An Action Plan has been agreed to implement the MOU. The focus of these arrangements is upon a limited number of carbon pilot schemes in China.

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<sup>19</sup> EU Roadmap, COM (2011) 112 Final: <http://eur-lex.europa.eu/LexUriServ/LexUriServ.do?uri=COM:2011:0539:FIN:EN:PDF>. See also in this context, the EU Energy Roadmap (2011): [http://ec.europa.eu/energy/energy2020/roadmap/doc/com\\_2011\\_8852\\_en.pdf](http://ec.europa.eu/energy/energy2020/roadmap/doc/com_2011_8852_en.pdf) P.13

<sup>21</sup> <http://www.greenbridgepartnership.net/eng/index.php/en/home/61>

<sup>22</sup> <http://www.irena.org/home/index.aspx?PriMenuID=12&mnu=Pri>

<sup>23</sup> Memorandum of Understanding, Department of Energy and Climate Change: [http://www.decc.gov.uk/en/content/cms/news/pn11\\_002/pn11\\_002.aspx](http://www.decc.gov.uk/en/content/cms/news/pn11_002/pn11_002.aspx)

Another initiative of note at the bilateral level is the establishment of the German-Russian Energy Agency (RuDEA), by the German Ministry of Economic Affairs and the Russian Energy Agency in 2009<sup>24</sup>. Its broad aim is to promote Russian energy efficiency and renewable energy sources. Institutionally, it is modelled on the German Energy Agency and cooperates closely with German and Russian companies in the field of project development and implementation. It has an advisory board of leading German companies. Its shareholders are the Energy Carbon Fund, created by the Russian energy supplier, RAO UES, the German Energy Agency, DENA, and Gazprombank. RuDEA will serve as a centre of excellence for energy efficiency projects. Its work is particularly centred on one geographical area, the Ural Federal District, where much of Russia's steel and iron industry is located. RuDEA is currently developing an energy efficiency strategy for the district. Among the techniques used to achieve this is 'contracting', a service that allows the owners of buildings to improve their energy efficiency with cheap access to external know-how.

## 6. Policy Proposals

### Choice of Instrument

The Assessment analysis has indicated that there are several options for having the growing importance of promoting low carbon investment be taken into account under the Energy Charter Treaty. By far the simplest and probably the most consensual approach is to adopt a combination of interpretative measures and a declaration.

The idea of issuing interpretative notes is not unfamiliar to many Contracting Parties. It was used extensively by the European Union when it introduced its various 'Common rules' or 'Single Market' Directives on Electricity and Gas<sup>25</sup>, covering for example Public Service Obligations and Unbundling. In a different context, the North American Free Trade Commission adopted 'Interpretative Notes' in 2011 addressing the International Minimum Standard of Treatment of the North American Free Trade Agreement. It included the words: "the Free Trade Commission hereby adopts the following interpretations of Chapter Eleven in order to clarify and reaffirm the meaning of certain of its provisions". Such an approach might be adopted by the Energy Charter Conference.

The wider legitimacy of this approach in international law may be appreciated by recalling the comments of the chairman of the Drafting Committee of the Vienna Law of Treaties, who wrote: "It is above all not necessary that an interpretative agreement be clothed with the same form as that of the treaty it concerns, however solemn and important that treaty may be. *The interpretative agreement may be in simplified form, may be realized by an exchange of notes or even by concordant oral declarations*"<sup>26</sup>.

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<sup>24</sup> <http://www.rudea-energy.com/>

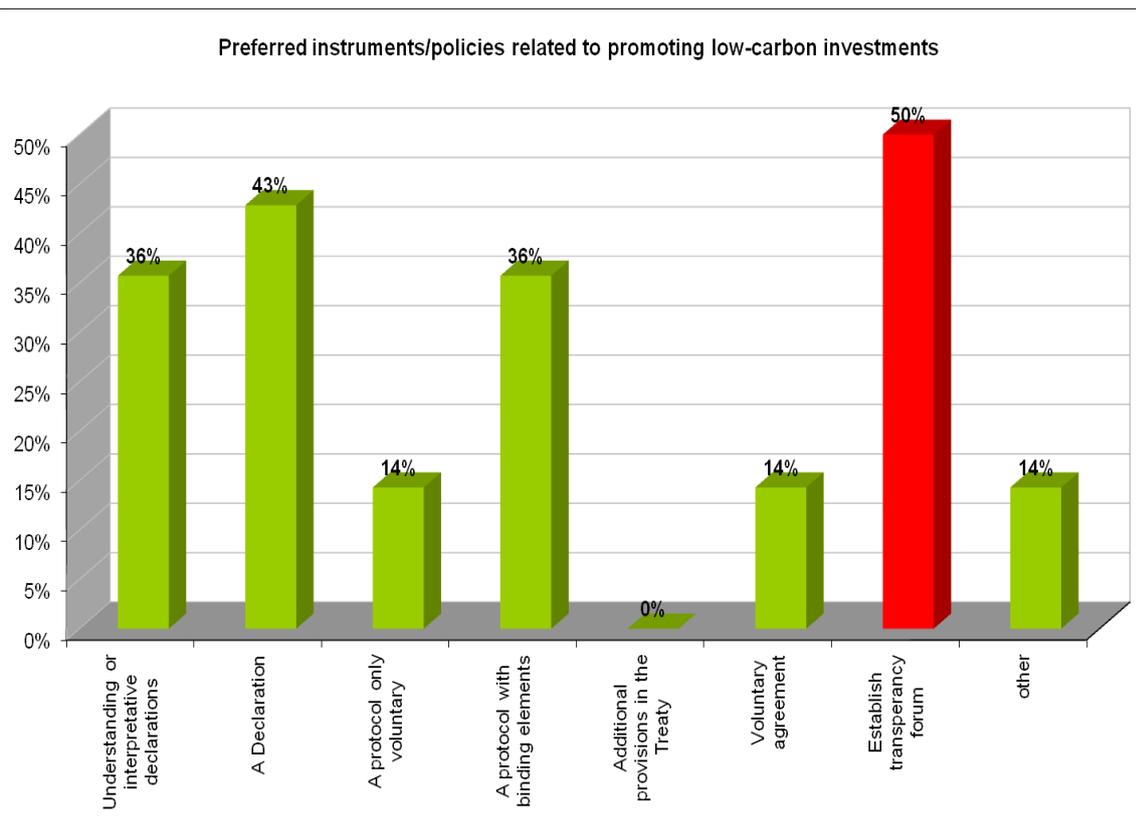
<sup>25</sup> More than a dozen of these were introduced at various times by the European Commission to provide clarification of key topics addressed in the legislation on electricity and gas market opening from 1998 onwards: see PD Cameron, *Competition in Energy Markets* (2<sup>nd</sup> edn, 2007) (Oxford University Press).

<sup>26</sup> Italics added. Mustafa Yasseen, *L'interprétation des traités d'après la Convention de Vienne*, 151 RECUEIL DES COURS 1, 45 (1976 III), trans. & quoted in United States, Post-Hearing Submission of Respondent 4 (July 20, 2001), *Methanex v United States of America*, Final Award.

A declaration would serve a different purpose, providing a non-binding but authoritative statement about the kind of low carbon measures that would be compatible with the ECT. A possible legal basis for this instrument is Article 1 (13)(b) ECT). It would add value by clarifying, harmonising and bringing together in a single place provisions which are already in the ECT.

This review of possible instruments benefited from the results of the public consultation process. Participants in the public consultation were asked to prioritise their preferred instruments for a Charter member to use for promoting low carbon investment. The overwhelming majority of respondents who considered that an instrument was necessary elected to choose either an understanding or interpretative declaration or a Declaration as provided for in ECT Art 1(13) (b)<sup>27</sup>. This amounted to 36% and 43% of the respondents respectively (see Table 6 and Figure 6). The former instrument would incorporate a shared interpretation of the ECT, as in the Final Act of the 1994 Energy Charter Conference, while the latter would underscore the ECT members’ commitment to low carbon measures though not in a legally binding form.

**Figure 8: Preferred Instruments/Policies (Possible Actions) related to Promoting Low-Carbon Investments**



None of the respondents appeared to consider that additional provisions were necessary in the ECT. Others appeared to be divided between those favouring a Protocol incorporating

<sup>27</sup> “Energy Charter Declaration” or “Declaration” means a non-binding instrument, the negotiation of which is authorized and the text of which is approved by the Charter Conference, which is entered into by two or more Contracting Parties to complement or supplement the provisions of this Treaty.

binding elements under ECT Article 1(13) (a) (36%) and those prepared to support a voluntary agreement (14%). The largest group was however the group of respondents who favoured a Declaration or interpretative instrument, which taken together attracted 79% of the respondents' support. One further advantage of such an instrument is that it could aim at a harmonised interpretation of the relevant ECT provisions.

The instrument of a transparency forum attracted significant support in the consultation process (50%). Such a forum would allow members to inform about and exchange policy experiences with respect to their national policies aimed at transition to a low-carbon economy. It attracted a significant number of supporters, although it was also noted that the Strategy Group is currently being used as a platform where policy experiences are being exchanged. It could be argued that a distinct entity charged with transparency responsibilities would raise the profile of such an activity in the promotion of low carbon investment, rather than treat it as one among several topics of general strategic importance.

With respect to scope, a number of respondents emphasised the need to ensure that the private sector was able to participate in the discussions with respect to any further steps. The work on low carbon should also include Non Governmental Organisations and the Public Sector. The Secretariat could develop a forum where NGOs and Public Sector's proposals are considered and evaluated by the Contracting Parties.

Overall, the above differences with respect to choice of instrument appear to confirm that any choice of instrument will have to respond to different needs of Contracting Parties. An initial step would appear to be further analytical work on an interpretative note or a Declaration and various promotion activities undertaken within subsidiary bodies of the Energy Charter Conference.

## Tables and Figures

Table 1: List of Actions and Instruments

Figure 1: Preferred Policies to Facilitate the Transition to a Low Carbon Economy 1

Figure 2: Preferred Policies to Facilitate the Transition to a Low Carbon Economy 2

Figure 3: Preferred Instruments/Policies to Promote Low-Carbon Investments

Figure 4: Preferred Policies/Instruments relating to Low-Carbon Trade 1

Figure 5: Preferred Policies/Instruments relating to Low-Carbon Trade 2

**Figure 6: Preferable options for “Upgrade” of PEEREA**

**Figure 7: Preferable Policies/Instruments related to Promoting Energy Efficiency**

Figure 8: Preferred Instruments/Policies (Possible Actions) related to Promoting Low-Carbon Investments

## Annex 1: Fossil Fuel Subsidies

Assessment of the ECT provisions with regard to low-carbon investment: Addressing fossil fuel subsidies in the Energy Charter (TTG 110)

**APPENDIX**

**Assessment of the ECT provisions with  
regard to low-carbon investment:  
Addressing fossil fuel subsidies in the  
Energy Charter**

**Report on intermediate results**

## Introduction

In accordance with the Road Map for the Modernisation of the Energy Charter Process, the Secretariat conducted in 2011 preparatory work (IG document IN 94 Rev. 1 and TTG document TTG 95) for the “Assessment of the ECT provisions with regard to low-carbon investment” which shall be completed in the course of 2012. The purpose of the Assessment is to analyse the ECT provisions relevant for promotion and protection of the low-carbon investments, trade provisions as well as PEEREA provisions and possibly propose new ways to enhance these provisions and strengthen the cooperation among the ECT members to that extent. The intermediate and final results of the assessment will be reported to the Investment and the Trade and Transit Groups. Depending on the result of this assessment, further steps may be envisaged.

The preparatory work has identified the elimination of fossil fuel subsidies to be an important area for consideration in the Assessment. The present paper elaborates on this issue and suggests possible approaches in the Energy Charter context. Subsidies to fossil fuels can be significant barriers to trade and investment in clean energy technologies.<sup>28</sup> Moreover, with diminishing optimism for a multilaterally negotiated agreement on climate change, more attention is being focused on efforts to address climate change at the domestic level, including increased recognition of the benefits of fossil-fuel subsidy reforms.<sup>29</sup> At the same time, numerous international efforts have been undertaken in order to ensure effective phase out of inefficient fossil fuel subsidies that impede the transition to low carbon economy and mitigation of climate change.

The most significant international effort has been undertaken by G-20. Its leaders launched in 2009 an initiative to phase out fossil fuel subsidies. They asked international financial institutions to offer support to countries for promoting the initiative. They also asked international organizations to provide an analysis on the scope of energy subsidies with suggestions for implementation. Lastly, G 20 Leaders called on all nations to adopt policies that will phase out inefficient fossil-fuel subsidies worldwide.<sup>30</sup>

The present paper provides the basis for the discussion of possible commitments by the ECT members to work on fossil fuel subsidies phase out. Part 2 of the paper discusses international initiatives related to phase-out of fossil fuel subsidies, including the work of other international organizations in this area. It also elaborates on the rationale for fossil fuel subsidies and their phase out. It further discusses the complex issues related to definition of inefficient fossil fuel subsidies. Part 3 discusses tackling fossil fuel subsidies in the Energy Charter forum.

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<sup>28</sup> *International Trade and Climate Change: Economic, Legal and Institutional Perspectives*, World Bank (2007). See also M. El Sobki, P. Wooders & Y. Sherif, *Clean Energy Investment in Developing Countries: Wind Power in Egypt*, IISD (2009).

<sup>29</sup> IISD, *Increasing the Momentum of Fossil-Fuel Subsidy Reform: A Roadmap for International Cooperation*, Kerry Lang, Peter Wooders, Kati Kulovesi, June 2010, at 19.

<sup>30</sup> *Id.* at 44.

## Elimination of fossil fuels subsidies – international initiatives

The review of literature, mainly contributions by the IEA, OECD and some other intergovernmental organizations, demonstrates that financial costs of subsidies to energy consumers alone amount to USD 400 billion per year.<sup>31</sup> The Global Subsidies Initiative estimates that producer subsidies may add at least another USD 100 billion per year.

Phasing out fossil fuel subsidies is crucial for transition to low carbon economy and tackling climate change. The Intergovernmental Panel on Climate Change identified the reform of fossil fuel subsidies and the energy sector reform generally as critical to sustainable energy development.<sup>32</sup> A study of the OECD found that removing consumption subsidies to energy in the 20 largest developing countries over the next decade would reduce global greenhouse gas emissions by at least 10 percent in 2050.<sup>33</sup> The IEA estimates that direct subsidies that encourage wasteful consumption by artificially lowering end-user prices for fossil fuels amounted to 312 USD in 2009. Moreover, in absence of reform, spending on fossil fuel subsidies is likely to reach almost 600 billion USD in 2015 or 0.6 % of global gross domestic product. At the same time, according to the IEA, global subsidies for renewable energy totaled \$57 billion in 2009, i.e. more than five times lower than for fossil fuels. It is quite clear that development of renewables is impeded by large scale support given to the fossil fuels. Also the subsidization of fossil fuels does not encourage investments into energy efficiency, one of the key areas where action is needed.

At the summit in Pittsburgh in 2009 the G-20 leaders agreed to “phase out and rationalize over the medium term inefficient fossil fuel subsidies while providing targeted support for the poorest. Inefficient fossil fuel subsidies encourage wasteful consumption, reduce our energy security, impede investment in clean energy sources and undermine efforts to deal with the threat of climate change.” G-20 acknowledged the challenges of populations suffering from energy poverty and the need to prevent adverse impacts on the poorest. It recognised “the importance of providing those in need with essential energy services, including through the use of targeted cash transfers and other appropriate mechanisms.” They also called on all countries to “adopt policies that will phase out such subsidies worldwide.”<sup>34</sup>

To take the initiative forward, Leaders made a number of requests. They asked their Energy and Finance Ministers to prepare implementation strategies and time frames, based on national circumstances, and report back to Leaders at the next Summit, scheduled for 26-27 June 2010 in Toronto, Canada. They asked international financial institutions (IFIs) to offer support to countries in progressing the initiative. And they

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<sup>31</sup> J. Ellis, *The Effects of Fossil-fuel Subsidy Reform: A Review of Modelling and Empirical Studies*, IISD (2010).

<sup>32</sup> B.Metz, O.R. Davidson, P.R. Bosch, R. Dave, , & L.A. Meyer (Eds.), *Contribution of Working Group III to the fourth assessment report of the Intergovernmental Panel on Climate Change*. Cambridge, U.K., and New York: Cambridge University Press (2007).

<sup>33</sup> J.-M. Burniaux, J. Chanteau, R. Dellink, R. Duval, S. Jamet, *The Economics of Climate Change Mitigation: How to build the Necessary Global Action in a Cos-effective Manner*, OECD Economics Department Working Paper No. 701 (2009).

<sup>34</sup> G-20 Leaders Statement, The Pittsburgh Summit, 24-25 September 2009.

asked international organizations, namely the IEA, OPEC, OECD and World Bank, to provide an analytical report on the scope of energy subsidies and with suggestions for implementation, to be reported to Leaders at the June 2010 Summit. Lastly, Leaders **called on all nations to adopt policies that will phase out inefficient fossil-fuel subsidies worldwide.**<sup>35</sup>

The communiqué does not specify the scope of subsidies to be included within the initiative. Terms such as ‘inefficient’ and ‘wasteful consumption’ and reference to the IEA and OECD studies that provided data and analysis on consumption subsidies, initially suggested that the commitment was focused on reducing consumption subsidies in developing countries. But in discussions between energy and finance experts, officials have since clarified that producer subsidies should be included. In the absence of an agreed definition of what constitutes a fossil-fuel subsidy, governments have quite a wide scope for excluding subsidies from their reform efforts. However G-20 Leaders explicitly excluded subsidies for clean energy, renewables, and technologies that dramatically reduce greenhouse gas emissions; the latter category relates to subsidy programs such as research into carbon capture and storage.<sup>36</sup>

The G-20 Leaders asked the OECD together with the IEA, OPEC and the World Bank to “provide an analysis of the scope of energy subsidies and suggestions for the implementation of this G20 country initiative. The IEA, World Bank and OECD joint report provides a road map for phasing out fossil fuel subsidies.”<sup>37</sup>

After a G-20 commitment has been taken, each G-20 member submitted implementation strategies and timetables to implement this phase-out. In addition to the implementation strategies planned by G-20 members in response to the agreement on phase out, many economies both within and outside G-20 have in recent years implemented or proposed reforms to bring their domestic energy prices into line with the levels that would prevail in an undistorted market or to rationalize support given to fossil-fuel producers.

Reforms in most of such countries were launched since the beginning of 2010, fiscal pressure on governmental budgets being one of the drivers to the reform. Other countries are examining options to reform support provided to fossil fuels, including to coal production, to oil and gas production, and the taxation of fossil-fuel consumption. The G-20 agreement was paralleled by Asia-Pacific Economic Cooperation (APEC) leaders in November 2009, with recognition that inefficient fossil-fuel subsidies distort markets,

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<sup>35</sup> IISD, *supra* note 29 at 44.

<sup>36</sup> *Id.*

<sup>37</sup> The work by the above-mentioned international organisations includes discussion of the scope of energy subsidies; preliminary estimates of energy subsidies, and identification of the gaps in the existing data and issues around the measurement of energy subsidies; modelling-based analysis of the implications of phasing-out fossil fuel subsidies on the economy, the environment, and the energy sector; and suggestions for the implementation of phase-out of these subsidies, drawing on country case studies, including discussion of how to address social impacts.

impede investment in clean energy sources and undermine efforts to reduce GHG emissions and mitigate climate change. While the commitments undertaken within G-20 and APEC are significant, the full extent of the potential gains will only be realized if more countries raise the level of commitment to the reforms they are pursuing.

In order to contribute to the goals set out by G-20 with respect to fossil fuels subsidies phase-out, it is proposed to assess whether the ECT constituency could set its own targets on fossil fuel subsidies reduction and monitor implementation. It would be necessary to define what types of subsidies – e.g. production/consumption – are targeted and set a timetable for their reduction with the appropriate mechanisms for monitoring. A number of mechanisms can be identified, in both advanced and transition economies, which encourage fossil fuel production or consumption, such as tax expenditures, under-priced access to scarce resources under government control (e.g. land) and the transfer of risk to governments (e.g. through guarantees). These subsidies are more difficult to identify and estimate than direct consumer subsidies.<sup>38</sup> In addition, it is necessary to allow for policies aimed at compensating for adverse social effects of removal/reduction of such subsidies.

### **Rationale for fossil fuel subsidies and their phase-out**

Energy subsidies have traditionally been used to pursue a variety of policy objectives such as energy security, maintenance of certain levels of domestic energy production and the diversification of energy sources. Social objectives such as alleviation of poverty and ensuring minimum levels of energy consumption by all income groups are typical rationales of fossil-fuel subsidies. Economic policy objectives are also important drivers of the decisions to grant subsidies such as employment policies, regional development, and improvement of the competitiveness of certain energy-intensive industries.

However, many fossil fuel subsidies encourage wasteful consumption, speed up the resources depletion for exporters, drain state budgets for importers, disproportionately benefit the middle class and rich, distort markets and create barriers to clean energy investment, increase CO2 emissions and exacerbate local pollution.

Energy subsidies are also viewed as trade distortive because of their downstream effects. Export subsidies and import substitution subsidies (contingent upon the use of domestic products over imported products) are the most trade-distortive. Such subsidies are prohibited under WTO/ECT rules but they are rarely used in the energy sector. It has been reported however that some ECT country granted preferential loans to coal producers for developing their exports.

The most common justification for consumption subsidies is that they help the poor gain or maintain access to basic energy services. However, subsidies to fossil-fuel use tend to benefit high-income households more than poor, due to the former's higher per capita consumption levels. The IEA research has shown that subsidies are an extremely inefficient means of assisting the poor: only 8 % of the USD 409 billion spent on fossil-

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<sup>38</sup> *The Scope of Fossil-Fuel Subsidies in 2009 and a Roadmap for Phasing Out Fossil-Fuel Subsidies*, An IEA, OECD and World Bank Joint Report, Prepared for the G-20 Summit, Seoul 11-12 November 2010.

fuel subsidies in 2010 went to the poorest 20 % of the population. Moreover, according to a World Bank Study, the bottom 40 percent of the population in terms of income distribution received only 15-20 % of the fuel subsidies in developing countries.<sup>39</sup> Nevertheless, subsidies reforms programs need to be carefully designed as low-income households are likely to be disproportionately affected by their removal.

Possibly downward price controls for energy products could be replaced with cash transfers. For consumers it does not matter if he receives a subsidy to buy a good or if he can buy a good at a price reduced by the value of a subsidy. However, while subsidies would show up in government budgets, market transfers do not. Since subsidies have a direct budgetary impact, making them more visible makes it easier to repeal them. Moreover, a cash subsidy would give opportunity to consumers to distribute money according to their priorities and encourage them to increase efficiency of their energy use.

Phasing out fossil-fuel subsidies would not only reduce emissions of GHG but would also enhance energy security. Eliminating fossil fuel subsidies would reduce dependence on imports. It would also encourage diversification of the energy mix and slow down the depletion of finite fossil-fuel resources. For energy exporting countries removal of subsidies would boost export capacity and earnings for energy related products.

Furthermore, OECD and IEA analyses indicate that subsidy reform would bring economic benefits as in many cases such subsidies are creating market distortions, imposing a heavy fiscal burden on budgets and weakening trade balances. The subsidy reform would lead to an immediate improvement in the fiscal position of many governments. Especially in the situation of economic recovery, the savings due to removal of inefficient fossil-fuel subsidies could be directed to such important policy areas as poverty alleviation, health and education. Also, based on the IEA estimates, fossil fuel consumption subsidies amount to 45 % of the additional yearly investment in low-carbon technologies and energy efficiency required to meet climate change mitigation goal.

In summary, both production and consumption subsidies, by encouraging excessive production or consumption, can lead to inefficient allocation of resources and market distortions. There is substantial amount of evidence that fossil-fuel subsidies result in an economically inefficient allocation of resources and market distortions, while often failing to meet their intended objectives. With high international energy prices subsidies are perceived to be a growing economic burden, especially in a situation of economic crisis. However a reform of inefficient fossil-fuel subsidies that encourage wasteful consumption may require some safety net to protect low-income households and other vulnerable populations that would otherwise benefit from such measures.<sup>40</sup>

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<sup>39</sup> World Bank Independent Evaluation Group (IEG) *Climate change and the World Bank Group. Phase I – An Evaluation of World Bank Win-Win Energy Policy Reforms*, (2008).

<sup>40</sup> World Bank Independent Evaluation Group (IEG), *Climate change and the World Bank Group. Phase I – An Evaluation of World Bank Win-Win Energy Policy Reforms*, (2008).

## Definition of fossil-fuel subsidy

The analysis in this paper is not aimed at determining which measures are “inefficient fossil fuel subsidies that encourage wasteful consumption” and no common definition has been established by the G 20 countries. The objective is to identify approaches that exist in other fora and open a discussion on this issue - in case of the positive decision to tackle inefficient fossil fuel subsidies in the Energy Charter process is made.

Energy consumption subsidies could take for instance the form of price controls related to cost of energy to consumers, direct financial transfers, schemes designed to provide consumers with rebates on purchases of energy products and tax relief. Although government interventions supporting energy consumption often involve the regulation or subsidization of domestic prices, they could also take the form of direct budgetary transfer. Moreover, a wide range of tax expenditures aim at consumers, for instance excise tax concessions on fuel designed to benefit particular users or areas.

Domestic price controls for energy products are especially prevalent in countries that are net exporters of oil. Governments often keep prices well below international levels, resulting in the implicit subsidisation of oil consumption. However, as these subsidies are often not recorded in government budgets as expenditures, their economic cost, as well as the incidence on different income classes is often poorly understood. The lack of readily available estimates of the size of these implicit subsidies has thus precluded a fuller discussion of their costs and benefits.<sup>41</sup>

As for producer subsidies, governments provide support by intervening in markets in such a way as to affect costs or prices, by transferring funds to recipients directly, by assuming part of their risk, by selectively reducing the taxes (often granting favourable tax treatment for capital or intermediate inputs) or by providing government-supplied goods or services at lower than market price.<sup>42</sup> The most economically distorting are those subsidies that are directly linked to production or that support the price of the commodity itself, and that are linked to the use of an input. Such policies include government requirements that particular classes of domestic users, usually electric utilities, consume a minimum amount of a particular fuel. This type of subsidies is often provided to producers that have higher cost structures than their foreign competitors. For instance, coal support in many ECT countries, most notable Europe and Japan, was this kind of subsidies. Now this support is very common in the renewables sector.<sup>43</sup>

Government policies that support capital formation in an industry are perceived as less distortive. These have largely been phased out for coal producers in OECD but exist

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<sup>41</sup> S. Gupta, B. Clements, K. Fletcher, G. Unchauste, *Issues in Domestic Petroleum Pricing in Oil-Producing Countries*, in IMF, *Fiscal Policy Formulation and Implementation in Oil-Producing Countries* (2003) at 383. Energy Charter Secretariat, *Taxation Along the Oil and Gas Supply Chain* (2008).

<sup>42</sup> *The Scope of Fossil-fuel Subsidies in 2009 and a Roadmap for Phasing Out Fossil-fuel Subsidies*, An IEA, OECD and World Bank Joint Report prepared for the G-20 Summit, Seoul 11-12 November 2010.

<sup>43</sup> R. Steenblik, *Subsidies in the Traditional Energy Sector*, in *Global Challenges at the Intersection of Trade, Energy and the Environment*, edited by J. Pauwelyn, The Graduate Institute Geneva, at 183.

elsewhere in the world. They are particularly used through special capital-depreciation facilities in domestic tax codes for oil and gas industry. Producing countries also subsidise R&D supporting their domestic fossil-fuel industries and geological surveys aimed at finding new deposits of hydrocarbons.<sup>44</sup>

Finding a common definition of subsidies that should be subject to the phase out has proven a major challenge in the G-20 context and countries have decided to adopt their own definition of subsidies.

As it is apparently most straightforward, an activity may be deemed ‘subsidised’ if it is taking place at below its cost of production by virtue of a transfer of funds from either government or a profitable private sector line of activity (the latter being referred to as a ‘cross-subsidy’). For example, the World Bank defines ‘subsidies’ as ‘the reduced cost of a good with government support and its cost in the absence of such support’.<sup>45</sup> Similarly, the *Oxford Dictionary of Economics* defines ‘subsidy’ as ‘A payment by the government to consumers or producers which makes the factor cost received by producers greater than the market price charged by producers.’<sup>46</sup> However, this apparent simplicity evaporates once a subsidy is also deemed to be ‘inefficient’. This is because to be able to identify ‘inefficiency’ there has to be a corresponding benchmark designating what would be an ‘efficient’ cost of production, something which neoclassic economic theory can only identify using the unrealistic assumptions of perfect competition.

However, despite the fact that the unrealistic assumptions required by this approach allow no practical application, it still conveys an essential truth: unless there is an objective benchmark it is impossible to deliver an objective definition of subsidy. The presence of a subsidy in the real world therefore tends to be pragmatically rather than objectively detected, in two different ways.

First of all, an activity may be deemed ‘subsidised’ if it requires a transfer payment from government or from a profitable private sector activity in order to cover either its current operating costs or, to suit the context in question, its operating costs + capital costs. This is the essence of the World Bank and Oxford Dictionary definitions above. But such pragmatism, trying to work round the lack of an objective benchmark, inevitably gives rise to problems. For example, some subsidised activities carry on over long periods of time without anyone referring to them as such because they do not actually require a current operating subsidy: the need for a subsidy only becomes apparent when investment requirements or major externalities are taken into account. Secondly, it has become conventional to depict as subsidised, activities which, while covering all their costs of production, take place at prices below the ‘international market price’. And it is just such situations which beset the oil and gas markets. For example, it is commonplace that both petrol and natural gas are sold at below international market prices in countries which produce either oil or gas or both. Even allowing for a purchasing power parity adjustment,

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<sup>44</sup> Id.

<sup>45</sup> World Bank, *Expanding the Measure of Wealth Indicators of Environmentally Sustainable Development*, Environmentally Sustainable Development Studies and Monographs Series No.17, (1997).

<sup>46</sup> J. Black, *Oxford Dictionary of Economics*, Oxford University Press, Oxford (2002) at .451.

it will still be the case, for example, that a Venezuelan citizen will be able to fill up his or her car with gasoline much more cheaply than a citizen of the United States.<sup>47</sup>

The WTO defines a subsidy in Art. I of its Agreement on Subsidies and Countervailing Measures as “a financial contribution by a government, or agent of a government, that confers a benefit on its recipients.” The jurisprudence of GATT and WTO has helped providing clarity on what counts as a government financial contribution and when respective action confers a benefit. However, WTO deals only with subsidies that are trade distortive by discriminating against foreign suppliers. Non-trade distortive subsidies that do not lead to discrimination are not targeted by WTO rules. Policies that lead to price differentials between domestic and international prices (OECD calls it “market price support” when referring to producers and “market transfer” when referring to consumers) are encompassed by the definition of subsidy because it represents “income or price support in the sense of Art. XVI of GATT 1994”, i.e. financial contribution by a government, such as through intervention purchases, “which operates directly or indirectly to increase exports of any product from, or reduce imports into, a Member’s territory”. However, subsidies that meet the above criteria would be subject to WTO subsidies disciplines only if they are specific. In accordance with Art. 2 of the SCM Agreement, a subsidy is said to be ‘specific’ if it is specific to an enterprise or industry or group of enterprises or industries within the jurisdiction of the granting authority.<sup>48</sup> Many programs that would be considered to be subsidies in economic terms would not fall therefore under WTO rules (for instance a provision of underpriced energy products to all consumers throughout the country’s economy).

The IEA defines fossil fuel subsidies as follows: “A fossil fuel subsidy is any government measure or programme with the objective or direct consequence of reducing below world-market prices, including all costs of transport, refining and distribution, the effective cost for fossil fuels paid by final consumers, or of reducing the costs or increasing the revenues of fossil-fuel producing companies.”<sup>49</sup>

## The work of other international organizations

In accordance with the Road Map for the Modernisation of the Energy Charter Process an assessment of the provisions of the ECT’s investment regime with regard to the subject of climate change and promotion of low-carbon investments has to take into account relevant assessments available from other international organizations. Moreover, it has been underlined by the ECT delegations that the work of the Energy Charter Secretariat should not duplicate the work of other organizations. It is intended to use the results of

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<sup>47</sup> See discussion in the report ECS’ Taxation Along the Oil and Gas Supply Chain (2008), at 58. In criticizing such a practice the argument used will be its opportunity cost – in defying the market in this way a government would be said to be impeding an ‘efficient’ allocation of resources at the expense of its citizens. The resources foregone could have been put to better use (See, for example, N.Gurer, & J. Ban, *The Economic Cost of Low Domestic Product Prices in OPEC Member Countries*, OPEC Review (June 2000).

<sup>48</sup> See detailed discussion in TTG 95.

<sup>49</sup> *G20 Initiative on Rationalizing and Phasing Out Inefficient Fossil Fuel Subsidies*, Implementation Strategies & Timetables, Annex, p.17.

work and conclusions of the assessments of other international organizations that dealt with the issues related to fossil-fuels subsidies in the work on phasing out inefficient fossil fuels subsidies within the Energy Charter Constituency.

Many international organizations are active in the field of energy subsidies. The IEA and OECD have done significant research to identify, measure and analyse the impact of fossil-fuel subsidies. The World Bank and IMF, having also significant research capacities, in addition have experience providing financial and technical support to assist developing countries in reforming harmful subsidies and introducing more effective poverty alleviation measures.<sup>50</sup> Market interventions, particularly those that keep fuel prices lower than their market value have been subject of reforms promoted by the World Bank and IMF since late 1980s. In the 1990s both the World Bank and IMF made the reform of fuel subsidies a priority. Consumer subsidies were reduced in most of the newly emerging countries in Central and Eastern Europe as well as several African and Asian countries – under pressure from multilateral lending institutions – resulting either in partial or complete deregulation of fuel prices.<sup>51</sup>

Below is the discussion on how different international institutions approached fossil fuel subsidy reform.

### **International Energy Agency (IEA)**

The International Energy Agency (IEA), within the framework of the World Energy Outlook, has been measuring fossil-fuel subsidies in a systematic and regular fashion for more than a decade. For instance, in its *World Energy Outlook 2008*, the IEA provided estimates for consumer subsidies for fossil fuels and electricity in the 20 largest subsidizing developing countries. Furthermore, it expanded this data set to around 40 countries, including all the G-20 members. In-depth reviews of IEA members' energy policies and occasional reviews of the energy policies of non-members include information about subsidy programs. The IEA also compiles estimates of subsidies to energy research and development in its member countries.<sup>52</sup>

IEA's analysis is aimed at demonstrating the impact of fossil-fuel subsidy removal for energy markets, climate change and government budgets. According to its estimates, fossil-fuel consumption subsidies worldwide amounted to \$409 billion in 2010, up from \$300 billion in 2009, with subsidies to oil products representing almost half of the total. Since 2009 the IEA has provided ongoing input to the G-20 in support of their commitment to "rationalize and phase out over the medium term inefficient fossil fuel subsidies that encourage wasteful consumption".

The IEA has also established an online database to increase the availability and transparency of energy subsidy data as this is seen as an essential step in building

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<sup>50</sup> See discussion in IISD, supra note 29..

<sup>51</sup> See Steenblik, supra note 43.

<sup>52</sup> IISD, supra note 29.

momentum for a global fossil-fuel subsidy reform. Improved access to data on fossil-fuel subsidies will raise awareness about their magnitude and incidence and encourage informed debate on whether the subsidy represents an economically efficient allocation of resources or whether it would be possible to achieve the same objectives by alternative more efficient means.

However, the energy subsidy estimations provided by the IEA are limited in that they only cover subsidies captured by the price-gap methodology and only cases in which the domestic price is below the reference price. Furthermore, the data cover a limited number of countries and are provided on an ad hoc basis. Finally, the data and assumptions underlying the estimations are not yet transparent.<sup>53</sup>

### **Organisation for Economic Cooperation and Development (OECD)**

The OECD has considerable experience in measuring producer subsidies in different sectors. The OECD provides policy tools and advice on reforming environmentally harmful subsidies and has done some economic modeling of the impacts of fossil-fuel subsidy reform on trade, gross domestic product and greenhouse gas emissions. The OECD has increased its work program on fossil-fuel subsidies in response to G-20 needs for more research and analysis.<sup>54</sup>

The work of the IEA and the OECD could be useful in providing analysis on country experiences on how to implement fossil fuel subsidy reform while protecting the poor and most vulnerable groups of population. Also the studies of OECD, IEA and World Bank can be used assessing the economic, social and environmental impacts of fossil fuel subsidy reform.

### **WTO**

Although WTO does not work on elimination of fossil fuel subsidies, low energy prices, due to their distorting effects on competition in energy-intensive industries, have been a contentious issue in negotiations over the accession to the WTO of certain energy-rich countries like Russia and Saudi Arabia. The issue of dual pricing being controversial, the conclusions as to its legality under WTO rules will most probably be hypothetical until the issue is resolved by the dispute settlement. It has to be pointed out however, that any government support policy including through price regulations is subject to WTO rules only if it meets specificity requirement (and so-called energy dual pricing policies as it is applied in most countries does not meet precisely this requirement).<sup>55</sup>

The substantive WTO rules on subsidies are contained in the Agreement on Subsidies and Countervailing Measures. The entering into force of the WTO SCM Agreement did not significantly change the debate on fossil fuels subsidies in WTO, maybe because many

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<sup>53</sup> See discussion in IISD, supra note 29.

<sup>54</sup> Id.

<sup>55</sup> See detailed discussion of this issue in J. Selivanova, *Energy Dual Pricing in WTO Law. Analysis and Prospects in the Context of Russia's Accession to the WTO*, Cameron May (2008).

oil producing states were not members of WTO at that point. Reporting mechanisms under the SCM Agreement and Dispute Settlement Body have not comprehensively addressed fossil-fuel subsidies to date – partially due to its trade-focus mandate and the lack of political will to address energy issues.

Articles 25 and 26 of the SCM Agreement provide for the notification of subsidies and a surveillance mechanism. Members must notify all specific subsidies to the SCM Committee, with sufficient detail to allow other members to assess the trade effects. New and full notifications are due every three years, with update notifications in intervening years. There is also provision for members to seek and respond to additional information requests.

A significant limitation of the surveillance mechanism is effective implementation. The difficulty is that the rates of reporting have not only been low but in fact have dropped from the initial levels in 1995. As a result, subsidies are woefully under-reported in the WTO.<sup>56</sup> The other major problem relates to the accuracy and consistency of the information provided by reporting members.<sup>57</sup>

The low rates of notifications, the lateness in submitting reports and the problems with the accuracy and completeness of reported data have been attributed to one main shortcoming of the transparency framework under the SCM Agreement.<sup>58</sup>

## UNEP

The United Nations Environment Program (UNEP) has conducted extensive policy research on the key issues, benefits and challenges of fossil-fuel subsidies reform. Its analysis focused on how energy subsidies are defined and measured, assessing their magnitude and impacts, notably through case studies in developing countries, and the challenges of reform. Also UNEP could be effective in widely disseminating information and providing technical assistance and capacity building through its network of regional offices.<sup>59</sup>

## Non-governmental organizations (NGOs)

NGOs play an important role in raising awareness and gathering momentum for international consensus on the importance of subsidy reform.<sup>60</sup> Independent NGOs such as the International Institute for Sustainable Development (IISD), World Wildlife Fund (WWF), Earth Track and Greenpeace have also undertaken detailed research and analysis,

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<sup>56</sup> R. Steenblik and J. Simón, *A New Template for Notifying Subsidies to the WTO*, IISD (2006).

<sup>57</sup> See Steenblik, *supra* note 43.

<sup>58</sup> Steenblik and Simón, *supra* note 56, See also S. Z. Bigdeli, *Will the Friends of Climate Emerge in the WTO? The Prospects of Applying the Fisheries Subsidies Model to Energy Subsidies*, CCLR, (2008), 1 at 78-88. See discussion in IISD, *supra* note 29 at 10-11.

<sup>59</sup> See discussion in IISD, *supra* note 29.

<sup>60</sup> *Id.*

including estimating subsidies, assessing their impacts and providing case studies of best practice for reform.<sup>61</sup>

The role of NGOs in this debate should not be underestimated as the work on fossil fuels subsidies of such non-governmental projects as Global Subsidies Initiative of the International Institute for Sustainable Development already plays a significant role in analysis and monitoring of fossil fuel subsidies especially in countries outside OECD such as Russia.<sup>62</sup>

## UNFCCC

Subsidy reform has formed only a minor part of discussions in the UNFCCC as it has never been a priority issue for the UNFCCC.<sup>63</sup>

The most serious discussion related to the fossil fuel subsidies issue has concerned Article 3.14 of the Kyoto Protocol<sup>64</sup> and its attempts to prioritize the actions developed countries should take to reduce their greenhouse gas emissions, and potential remedies for the impacts of developed countries' mitigation actions on other countries (Articles 4.8 and 4.9 of the Convention). Both Articles include a reference to subsidy reform but do not prioritize it against a range of other policies and measures. Similarly, discussions surrounding implementation of the Articles have not focused on subsidy reform in particular.<sup>65</sup>

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<sup>61</sup> Id.

<sup>62</sup> Ivetta Gerasimchuk, *Fossil Fuels – At What Costs? Government Support for Upstream Oil and Gas Activities in Russia*, WWF-Russia & Global Subsidies Initiative of the IISD, February 2012.

<sup>63</sup> Id. at 38.

<sup>64</sup> Section 3.14 of the Kyoto Protocol also spawned a discussion on the impacts on developing countries of response measures taken by developed countries, resulting in recommendations that developed countries take up a range of policies and measures including subsidy reform.

<sup>65</sup> See discussion in IISD, *supra* note 29, at 38.

## **Tackling fossil fuel subsidies in the Energy Charter**

The phasing out of subsidies on fossil fuels is an important step for transition to low carbon economy. The Energy Charter has among its members some non-OECD countries that do not yet address the issue to the extent necessary according to the conclusions of IEA, OECD and World Bank. At the same time, the Energy Charter could play a role in the process of reduction and eventual phase out of fossil fuel subsidies.

Any phasing out of inefficient fossil fuel subsidies in the ECT constituency would need to be implemented in a gradual manner in order to minimize the spill-over impact on the poor, especially considering the fact that a large part of the consumption basket of the poor is affected by higher fossil fuel prices.

The benefits from fossil fuel subsidies reform are high and an increasing number of organizations are now working toward attaining those goals. International cooperation plays a crucial role in the reduction of the harmful fossil fuel subsidies. Any effort undertaken within the Energy Charter should be coordinated with other international organizations that focus on the reduction of the fossil fuel subsidies, as described above in Section 2.

The necessary first step in the fossil subsidies phase-out is identifying those subsidies that should be phased out because they are inefficient and lead to wasteful consumption. Such analysis requires understanding of the special circumstances of each individual country and the analysis of the impact of the subsidy on energy consumption.

### **Availability of information**

Empirical data and analysis have been a serious problem in addressing energy subsidies even in OECD countries. Due to the different methodologies used and the variety of definitions of energy subsidies, studies have shown results with a large variance. This problem is even more serious with respect to non-OECD economies, where high-quality data are generally less available. Low energy prices, which lead sometimes to existence of consumer subsidies, particularly in developing countries and transitional economies, have been monitored by several organizations, including IEA, World Bank, IISD and Global Subsidies Initiative. Data on production subsidies is less available, although currently a series of studies have been undertaken by Global Subsidies Initiative to analyse for instance the extent of subsidies in upstream oil and gas activities in Russia.

### **Peer monitoring**

Many countries are now pursuing reforms, but steep economic, political and social hurdles will need to be overcome to realise lasting gains. Individual countries could assess themselves with the help of the peer review on which subsidies may be inefficient, which subsidies to retain, redesign or remove, focusing on the impact on the poor. It is important to assess cost effectiveness of the subsidy tools compared with alternative sectoral instruments. The process of peer monitoring would be an effective tool to measure progress across countries in removing fossil fuel subsidies in an objective and

clear manner. Establishing standardized and regular reporting on fossil-fuel subsidies would be the first step of the reform.

For example, this could follow the model of the OECD's "Global Forum on Transparency and Exchange of Information," which establishes a global monitoring and peer-review process on tax matters; however, informal peer-review processes and peer-to-peer exchanges of information, including best practice, are often more effective in promoting reform than rules-based agreements.<sup>66</sup>

### **Cooperation in sharing policy experience with respect to low carbon support schemes – transparency forum**

Cost reductions are crucial for a wide scale deployment of renewable energy. Most renewable energy technologies are capital-intensive, requiring significant upfront investments, and most cannot currently compete on price with conventional sources. Considering that certain renewable energy sources are not currently commercially viable, financial support and subsidies are often used to encourage renewable energy and other low carbon technological development. Low carbon technologies may need public support for development in order to attain widespread deployment that is necessary to make them cost competitive. Most countries that have developed a large renewables industry used financial incentives for that purpose.

Different support mechanisms could be used both on the production and the consumption side: portfolio standards, green certificates, feed-in-tariffs, premiums, and production, consumption and investment tax incentives. Subsidies for low carbon technologies could however be ineffective if designed incorrectly.

Building on the previous work by the Energy Charter, it could be envisaged that the ECT members could share experience among each other in the area of policies supporting renewable energy, energy efficiency, carbon capture and storage and other low carbon technologies.

A transparency forum where members could inform about and exchange policy experiences with respect to their national policies aimed at transition to low carbon economy could become an important element of a low carbon debate within the Energy Charter.

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<sup>66</sup> T. Laan, *Gaining Traction: The Importance of Transparency in Accelerating the Reform of Fossil-Fuel Subsidies*, IISD.

## Conclusions

The efforts to tackle fossil fuels subsidies are much more likely to be successful if they address as many subsidisers as possible. Subsidy reform must ultimately be implemented at the domestic level, necessarily taking account of political imperatives including the need to ensure that the poorest sectors of society are compensated for losses to their welfare. It has to be stressed that the fossil fuel subsidy reform has the potential to deliver economic, environmental and social benefits to the country instituting the reforms. The rationale of such reform is not limited to climate change, as has been shown earlier in this paper. Other motivations for subsidy reform include improving the country's financial position, allocating resources more efficiently and local pollution issues.<sup>67</sup> This also demonstrates that the decision to reform subsidies has an important national dimension.<sup>68</sup>

But reform of fossil-fuel subsidies requires a strategic vision, careful planning and deployment of scarce research and political resources, as well as a long-term commitment and political will. This can best be achieved by a concerted effort of governments and the international community working together.<sup>69</sup> When monitoring of subsidies has become institutionalized, countries would be more likely to lock in the reform process. A key benefit of an international approach is the peer pressure that countries can exert on each other to make progress.<sup>70</sup>

International cooperation could significantly advance fossil-fuel subsidy reform. Such cooperation would be supportive of domestic reform measures, adding to them rather than being an alternative. Currently many countries become increasingly aware of the issues raised by fossil-fuel subsidies, with the G-20 providing political leadership and IGOs, NGOs and other independent organizations and individuals providing an increasing volume of research and analysis. Were other countries to lend their support to the G-20, and were other forums to become more involved, the risk of a decline in leadership could be reduced and even reversed. APEC has already made a similar commitment as the G-20.<sup>71</sup>

Better information and transparency is the first step toward understanding fossil-fuel subsidies and their impacts on trade, the economy, the environment and social welfare. It is a prerequisite for thinking through the types of incentives and trade-offs that would be required to negotiate comprehensive reform in the longer term.<sup>72</sup> Improved reporting and transparency would also enhance members' opportunities to address the adverse effects of other members' subsidies under the trade provisions of the ECT. A subsidy-watch committee as a subsidiary body to the TTG could be envisaged.

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<sup>67</sup> See discussion in IISD, *supra* note 29.

<sup>68</sup> *Id.*

<sup>69</sup> *Id.*

<sup>70</sup> *Id.*

<sup>71</sup> One idea could be for a Friends of Fossil Fuel Subsidies Reform group to form, noting how the Friends of Fish group was a key component of raising the profile of fish subsidies reform within the WTO and the subsequent negotiations.

<sup>72</sup> See discussion in IISD, *supra* note 29 at 19.

Legally binding mechanisms that rely on new provisions may be difficult to negotiate in the short- to medium-term. Better opportunities of progress in the near future would be offered by non-binding mechanisms. The Energy Charter Conference could for instance issue a Recommendation or propose a Voluntary Agreement on subsidy reform or some supporting measure. Alternatively a Declaration could be adopted. This would of course require the generation of corresponding political support and finding time for negotiations and discussions.

A key lesson from previous successful initiatives is that an incremental approach combining technical work and awareness building holds much promise. Gathering facts, initiating discussion, and then negotiating the rules can be used as an algorithm for tackling of fossil fuel subsidy reform in the Energy Charter context.<sup>73</sup>

Some of the possible actions which the ECT constituency could consider to promote transition to low carbon economy would include the following actions with respect to the fossil fuel subsidy reform:

1. Recognize the need for reform of fossil-fuel subsidies;
2. Improve transparency and reporting of fossil-fuel subsidies;
3. Reduce and eliminate subsidies for fossil fuels;
4. Establish mechanisms for monitoring and ensuring compliance with commitments to reduce fossil-fuel subsidies;
5. Promote sharing of best practice and cooperation on the reform of subsidies;
6. Offer capacity building and technical assistance to each other.

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<sup>73</sup> Pascal Lamy, in an address to a Trade, Energy and Environment conference in October 2009, noted these three important steps for introducing a new topic to the WTO.