Increased trade in environmental goods and services (EGS) is a global climate change mitigation strategy. This is because use of these goods can result in more environmentally friendly outcomes compared to alternatives. Hence, reducing their costs, including through tariff reductions, can incentivise their use over conventional alternatives therefore improving global environmental outcomes.

Efforts to conclude on a list of EGS at different levels, multilateral as well as regional, have been underway for some time, but lately have received a renewed impetus. Since the Doha round of multilateral negotiations under the World Trade Organization (WTO) stalled, plurilateral negotiations have commenced between likeminded countries under the Environmental Goods Agreement (EGA). Regional efforts among members of Asia-Pacific Economic Cooperation (APEC) to liberalise EGS have also accelerated. Negotiations for a new global climate change framework to be agreed under the auspices of the United Nations Framework Convention on Climate Change (UNFCCC) are ramping up in time for the next decisive round of negotiations for a new international climate change agreement to be held in Paris in December 2015. Although the liberalisation agenda of EGS negotiated under the auspices of the WTO is not directly related to the UNFCCC process, an agreement by members could provide an important signal of intent towards the mitigation of global climate change.

This issue of Commonwealth Trade Hot Topics takes stock of negotiations for the liberalisation of environmental goods and services, and outlines the major issues for consideration by Commonwealth small states (CSS). The methodological approach undertaken here confirms the relevance of the list approach for CCS, and based on this assessment potential negotiation approaches have been identified. The paper is concluded with discussion as to the potential synergies between the trade and climate change regimes that could be sought within a liberalisation agenda, which promotes the mitigation of climate change and global public environmental goods.

### Negotiations for the liberalisation of environmental goods and services

There are a number of approaches towards defining environmental goods and services. These include list and project approaches. The list...
approach was first introduced within environmental good (EG) negotiations as a developed country proposal based on existing Organisation for Economic Co-operation and Development (OECD) and APEC lists of EGs. An initial list of 480 products compiled by the WTO Secretariat was trimmed to 153 EGs. This list classifies products at the six-digit level of the Harmonised System (HS) – a system used to classify global trade based on a unique code for each product. In comparison, the project approach uses more of a bottom-up strategy. This is where countries identify their needs – which might be related to investments planned in the future – and then ascertain the extent to which changes in trade policy may help to achieve particular sustainable development objectives.

One advantage of the project approach is that it helps to clearly identify not only the environmental products that may benefit from liberalisation, but also the services required to complement these. Adopting more of a project approach to negotiations for EGs may entail the creation of specific product and services alliances and examination of as yet unregulated areas at the multilateral level, for example, services areas where commitments under the General Agreement on Trade in Services (GATS) have not yet been made.

The work of the Trade and Environment Committee (CTE) under the WTO led to some trade and environment issues migrating to components of the Doha Development Agenda (DDA) negotiations. The WTO negotiations on trade and environment commenced in 1994, pursuant to the Marrakesh Ministerial Decision which inter alia mandates the following:

- Identify the relationship between trade measures and environmental measures in order to promote sustainable development.
- Make appropriate recommendations on whether any modifications of the provisions of the multilateral trading system are required, compatible with the open, equitable and non-discriminatory nature of the system.

The relevant trade and environment parts of the Doha Declaration are included in paragraphs 31–33, which agree to the reduction or, as appropriate, elimination of tariff and non-tariff barriers to EGs. However, the stalling of the DDA round, within which the liberalisation of EGs was included, has changed the future trajectory and dynamics of negotiations.

Given an inability to move forward at the multilateral level, efforts have accelerated between likeminded groups of countries upon multiple fronts. The list approach has received most attention in recent months. This is because a likeminded group of WTO members have agreed to pursue ‘global free trade’ in environmental goods.

This group of likeminded negotiators includes some of the major developing country producers and exporters of EGs, such as:

- China and India: leading producers of wind energy and wind energy manufacturing equipment;
- China: a major exporter of solar photovoltaic technologies; and
- Brazil: a world leader in the manufacture of biofuels and related technologies, such as ‘flex-fuel’ engines and vehicles.

Brazil regards improved market access for green products such as biofuels as contributing to poverty alleviation through income generation and job creation for local populations. It also points out that improved market access for products derived from incorporating cleaner technologies, such as ‘flex-fuel’ engines and vehicles, could encourage the use of environmentally efficient products and be supportive of the developmental concerns of developing countries.

Although many developing countries have objected to this list approach, it provides an analytical basis for identifying potential interests for Commonwealth small states. It was also developed to be a starting point for discussions rather than an exhaustive list. Using this list as the basis for analysis helps to articulate more clearly why and how the interests of CSS in these negotiations may differ from those of other trading partners, or where there may actually – contrary to expectations – be common interests.

New impetus for liberalisation

Given the stalling of the Doha round and limited agreement reached on the Bali package in December 2013, which did not include EGs, the following developments may be noted:

- APEC members announced in 2012 that they would reduce tariffs on a list of 54 green goods –
such as wind turbines and solar panels – to 5 per cent or less by the end of 2015. However, that regional pact was non-binding for its 21 members, and featured many products that already have low tariffs.

- Plurilateral negotiations have begun at the WTO which use the APEC goods list as a starting point and seek to reduce tariffs to 5 per cent or less by 2015. This is called the planned Environmental Goods Agreement. Commentators suggest this would likely envisage a reduction of all bound tariffs on any eventual list of environmental goods to zero. A number of APEC economies are also participants in the EGA while the non-APEC participants include China, the European Union, Norway, Switzerland, and Costa Rica. In total the group comprises 86 per cent of global environmental goods trade, as currently defined.1

The OECD/APEC list of products is based on end uses. It therefore falls into the first type of EGs, as follows: 2

- Type I goods operate in their end use (or in disposal) in a manner that causes less environmental damage than some baseline cases. High efficiency home appliances, such as washing machines and refrigerators, are examples of Type I goods. Renewable energy technologies also fall into this category; in their end use they generate power, but they do so in an environmentally superior manner compared to conventional technologies.

- Type II goods have environmental improvement as a primary objective. These include environmental remediation technologies, such as centrifuges, that can be used to remove oil from water in oil spills; pollution prevention technologies, such as chemicals and mechanical inputs used in the end-of-pipe process of carbon capture and storage; and natural resource management technologies, such as photogrammetrical surveying instruments used for geographic information systems imaging.

- Type III goods use processing and production methods (PPMs) that cause less environmental damage than other similar goods. Organic agriculture is an example of this sort of good. The current Chair’s listing of proposed goods (WTO CTESS, 2010, Annex III) does not contain any goods distinguished by virtue of their PPMs, but organic agricultural goods have been indirectly proposed by, among others, Brazil, in discussing the types of EGS liberalisation from which developing countries might benefit.

Although all WTO members concur that liberalisation of environmental services (ESs) is just as important as EGs, no concrete proposals have surfaced so far under the EGA negotiations. WTO members have in the past stressed the importance of special and differential treatment (SDT), technical assistance, capacity-building and transfer of technology within the context of EGS negotiations, but it remains unclear how these aspects will be operationalised within the current context. For example, SDT with regard to liberalisation on EGs could include various options such as implementation delays for developing countries and differences in treatment and coverage between developed and developing countries.3 There are other as yet unregulated areas related to trade and climate change mitigation, and this includes with respect to trade in carbon.

The take-home point to emphasise here is that although there are some differences between the current lists being discussed within the two main negotiating tracks at present – between likeminded countries at the WTO, and on an intra-regional basis – the major difference between past and current discussions relates to the depth of ambition. The liberalisation of EGS under the EGA intends to go further and undertake deeper tariff reductions, compared to discussions within APEC. However, discussions under the APEC negotiation track are considered more ambitious in relation to environmental services; this is because a negative list approach will be adopted (compared to a positive list approach under the WTO), and provisions on intellectual property are likely to be included which go beyond existing multilateral commitments. Both of the aforementioned groups include some of the world’s largest importers and exporters of EGs, which operate within deeply integrated global value chains. Negotiations for the EGA now include all of the major players and the outcomes will be applied in accordance with the most favoured nation (MFN) principle.

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1 http://www.wto.org/english/news_e/news14_e/envir_08jul14_e.htm
The integrated nature of global trade today means that the share of intermediate rather than final goods trade has increased, which has implications for both offensive as well as defensive trade interests. This has been demonstrated most obviously in recent years as a result of the EU anti-dumping case against China solar panel exporters. In this case, exporters were touted against importers, and an anti-dumping investigation launched by the European Commission. However, the loss of employment which could have resulted from the application of anti-dumping duties on imported Chinese solar panels was estimated to be considerably higher than those protected from the intervention. Moreover, the trade defence measure assumed final goods trade, and failed to take into account that countries no longer trade in final goods with each other, but rather firms trading across borders trade in intermediate goods, organised within production networks. Defensive trade measures may weaken efforts to mitigate global climate change through limiting the accessibility of the best available (and lowest cost) technologies, which promote more favourable environmental outcomes.

Relevance for Commonwealth small states

Given the new momentum and changed dynamics of negotiations for the liberalisation of EGs and ESs, in this section we explore the relevance for CSS. We make use of an analysis undertaken by Keane and Kennan (2013) which adapted the proximity of exports methodology developed by Hausmann and Klinger (2006) and used conditional probabilities to explore the potential that a country will export good \( x \) given that it already exports good \( y \). Essentially the methodology of Dutz and Sharma (2012) was adapted in order to analyse the potential export of EGs from CSS based on the OECD list.

Analysis of the potential export of EGs takes as its starting point that since the productive capacity already exists to export good \( x \) – a non-EG – there is a high probability that a country could also export good \( y \) – an EG – if, for example, tariffs did not constrain trade. This approach identified the following major OECD trading partners for current EG exports from CSS, and for which potential EGs also feature within the same HS code (see Table 1).

Although we recognise the limitations inherent in such an approach – that it may fail to pick up main markets for countries with low total export values – it nevertheless identifies OECD countries as the major trading partners at the current time for exports of EGs from CSS. In addition to the above mentioned countries, tariffs for other relatively major trading partners were reviewed including: Australia (accounting for 0.9% of group exports), Japan (also 0.9%), Singapore (1.1%) and China (1.5%). In the case of Singapore, it has a zero MFN rate on all items. In the cases of Japan and China, at the HS six-digit level only bound rates are readily available from the WTO which means we cannot include analysis of tariffs applicable across these countries’ regimes. The analysis was able to illustrate the current breakdown of major trading partners for CSS. However, it does not reflect the potential for trade to develop with emerging economies such as China, India and Brazil, particularly since trade in EGs is growing fastest between developing countries (Bucher et al., 2014).

Nevertheless, overall, the results suggest that it is possible to define the export interests of CSS based on the list approach used under discussion for the EGA. Analysis suggests that CSS as a group may benefit more from the liberalisation of EGs on the export side, which could help to expand productive capacities, compared to potential revenue losses on the import side. However, much further analysis would be required to substantiate this statement for the group, and the situation for individual CSS may also differ relative to the group’s position.

Environmental services

Much more detailed analysis would need to be undertaken to identify the offensive ESs interests of CSS and the extent to which this type of trade may be constrained in destination markets.

### Table 1: Major Markets for CSS

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<th>Partner Name</th>
<th>Trade Value in 1,000 US$</th>
<th>Share of total</th>
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</thead>
<tbody>
<tr>
<td>All countries</td>
<td>30,533,541</td>
<td></td>
</tr>
<tr>
<td>EU</td>
<td>9,557,605</td>
<td>31.3%</td>
</tr>
<tr>
<td>USA</td>
<td>6,596,294</td>
<td>21.6%</td>
</tr>
<tr>
<td>South Africa</td>
<td>2,381,548</td>
<td>7.8%</td>
</tr>
<tr>
<td>Canada</td>
<td>986,963</td>
<td>3.2%</td>
</tr>
</tbody>
</table>

Note: We look at the major markets for exports from CSS as a group. We take 2010 because of data limitations. Our data sources include the OECD 2005 list and UN COMTRADE database (data downloaded 10.1.13). Of the then 32 CSS, there are no data in UN COMTRADE in any year 2006-11 for three: Nauru, Papua New Guinea, Tuvalu.

Source: Keane and Kennan (2013).
Because there is no standard definition of what constitutes an ES, members are free to define them at their own discretion. Overall though, in order to take advantage of the availability of new technologies at reduced prices, there may be a need to ensure intellectual property rights in CSS are conducive; this means that other rules, for example, on trade related intellectual property agreement (TRIPS), become relevant.

**Concluding remarks**

In order to calculate the potential static monetary gains, as well as losses, from liberalisation of EGs as currently defined, further sectoral analysis at the country-level is required. It may be that tariffs are not actually the main constraint to trade. Other factors, including supply-side constraints or the presence of non-tariff barriers (public or private) may actually matter more.

Any liberalisation advocated by Commonwealth small states needs to be undertaken with the knowledge that the private sector, and firms, will respond to changes in price incentives which may occur through reductions in tariffs. For some CSS countries this may mean considering whether or not the list approach towards defining EGs – which would entail multilateral liberalisation if agreed – is the right one for their needs or whether a project approach – which is more likely to be undertaken on a regional or bilateral basis – may be preferable. This is where CSS first identify their needs and then the extent to which changes in trade policy may help to achieve particular sustainable development objectives.

In addition to different negotiating approaches, more accommodative transition periods may be required by some CSS compared to others. There may be a need for aid for trade resources to assist in the liberalisation and adjustment process. Other CSS such as small island developing states and small vulnerable economies might want to seek SDT within a trade and climate change context. New sources of climate change finance (including related to trade in carbon) might also be available to assist with trade-related adjustment as well as the expansion of supply-side capacity, which serves to underscore the importance of aligning trade and private sector development strategies.

**References**


International Trade Policy Section at the Commonwealth Secretariat

This Trade Hot Topic is brought out by the International Trade Policy (ITP) Section of the Economic Policy Division of the Commonwealth Secretariat, which is the main intergovernmental agency of the Commonwealth – an association of 53 independent states, comprising large and small, developed and developing, landlocked and island economies – facilitating consultation and co-operation among member governments and countries in the common interest of their peoples and in the promotion of international consensus-building.

ITP is entrusted with the responsibilities of undertaking policy-oriented research and advocacy on trade and development issues and providing informed inputs into the related discourses involving Commonwealth members. The ITP approach is to scan the trade and development landscape for areas where orthodox approaches are ineffective or where there are public policy failures or gaps, and to seek heterodox approaches to address those. Its work plan is flexible to enable quick response to emerging issues in the international trading environment that impact particularly on highly vulnerable Commonwealth constituencies – lease developed countries (LDCs), small states and sub-Saharan Africa.

**Scope of ITP Work**

ITP undertakes activities principally in three broad areas:

- It supports Commonwealth developing members in their negotiation of multilateral and regional trade agreements that promote development friendly outcomes, notably their economic growth through expanded trade.
- It conducts policy research, consultations and advocacy to increase understanding of the changing international trading environment and of policy options for successful adaptation.
- It contributes to the processes involving the multilateral and bilateral trade regimes that advance more beneficial participation of Commonwealth developing country members, particularly, small states and LDCs and sub-Saharan Africa.

**ITP Recent Activities**

ITPs most recent activities focus on assisting member states in their negotiations under the WTO’s Doha Round and various regional trading arrangements, undertaking analytical research on a range of trade policy, emerging trade-related development issues, and supporting workshops/dialogues for facilitating exchange of ideas, disseminating informed inputs, and consensus-building on issues of interest to Commonwealth members.

**Selected Recent Meetings/Workshops Supported by ITP**

- 15-16 December 2014: International Conference on ‘Mega Trading Blocs: Implications for Developing Countries’ held in New Delhi, India
- 5-7 November 2014: 7th South Asia Economic Summit (SAES VII): Towards South Asia Economic Union and the Launch of the Publication on Regional Integration in South Asia: Trends, Prospects and Challenges, held in New Delhi, India
- 14-15 October 2014: LDC IV Monitor’s Launch of the Publication on the Implementation of Istanbul Programme of Action for LCDs, held in New York, USA
- 3 October 2014: Commonwealth-UNCTAD Discussion Session at the 2014 WTO Public Forum: South-South Trade and South-Saharan Africa: Issues and Way Forward, held in Geneva, Switzerland
- 5-6 May 2014: Regional Meeting on ‘WTO and Post Bali Agenda’, held in Dhaka, Bangladesh
- 28-29 April 2014: Regional Meeting on ‘WTO and Post Bali Agenda’, held in Accra, Ghana
- 24-25 April 2014: Regional Meeting on ‘WTO and Post Bali Agenda’, held in Nairobi, Kenya
- 10-11 December 2013: Regional Workshop on ‘South-South Trade and Regional Value Chains in Sub-Saharan Africa’, held in Nairobi, Kenya
- 4 December 2013: WTO MC9 side event: Discussion Session on the Future of Aid for Trade, held in Bali, Indonesia
- 3 December 2013: WTO MC9 side event: UNCTAD-Commonwealth session on Reflections on Global Trade: From Doha to Bali and Beyond, held in Bali, Indonesia
Selected Ongoing Policy Research Projects

- Multilateral trade negotiations – specific issues for LDCs, SVEs and SSA
- The development impact of the Doha Round on least developed countries (LDCs)
- Aid for trade in small states and Sub-Saharan Africa
- Rise of emerging developing countries and implications for Sub-Saharan Africa and small vulnerable economies (SVEs)
- Mega trading blocs and implications for LDCs, SVEs and SSA
- Development issues under EPAs
- Trade in services
- Regional trading arrangements in South Asia and their implications
- Trade in services issues for small states and low-income countries
- Implementation of the Istanbul Programme of Action for LDCs
- Intra-Commonwealth trade & development cooperation
- Non-tariff barriers in South Asia and Sub-Saharan Africa
- Global value chains and the effective participation of LDCs, SVEs and SSA
- LDCs and SVEs in South-South trade
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