

BRIDGES NETWORK

# BIORES

Analysis and news on trade and environment

VOLUME 8, ISSUE 5 – JUNE 2014



## Dealing with emissions

### EMISSIONS TRADING SCHEMES

Exploring carbon market linkages

### BIORES INTERVIEW

Taking stock of progress on the UNFCCC Technology Mechanism

### RENEWABLE ENERGY

Scaling up green energy trade in Africa



International Centre for Trade  
and Sustainable Development

# BIORES

VOLUME 8, ISSUE 5 – JUNE 2014

## BRIDGES TRADE BIORES

The leading authority on news and analysis emerging from the trade and environment nexus.

PUBLISHED BY

**ICTSD**

**International Centre for Trade and Sustainable Development**

Geneva, Switzerland

[www.ictsd.org](http://www.ictsd.org)

---

PUBLISHER

Ricardo Meléndez-Ortiz

EDITOR-IN-CHIEF

Andrew Crosby

MANAGING EDITOR

Kimberley Botwright

ADDITIONAL SUPPORT

Andrew Aziz, Sofia Baliño, Jessika Berns

DESIGN

Flarvet

LAYOUT

Oleg Smerdov

---

To join the BIORES Editorial Advisory Board, write to us at [biores@ictsd.ch](mailto:biores@ictsd.ch)

---

BIORES welcomes all feedback and is happy to consider submissions for publication. Guidelines are available upon request. Please write to [biores@ictsd.ch](mailto:biores@ictsd.ch)

## EMISSIONS TRADING SCHEMES

- 4 **Linking up: The potential for a joint EU-South Korea carbon market**

*Sonja Hawkins and Ingrid Jegou*

## BIORES INTERVIEW

- 8 **Technology transfer in UNFCCC: State of play and future challenges**

## BIORES INTERVIEW

- 10 **Ready to go: the Climate Technology Centre and Network takes off**

## RENEWABLE ENERGY

- 12 **Removing trade barriers on selected renewable energy products: A modelling exercise**

*Veena Jha*

## RENEWABLE ENERGY

- 16 **Using trade policy to address renewable energy access challenges in Africa**

*Hari Manoharan and Madhavan Nampoothiri*

## ENVIRONMENTAL GOODS

- 19 **Preparations underway for green goods trade talks**

## CLIMATE CHANGE

- 21 **Obama announces plans to slash carbon emissions from existing power plants**

## POST-2015 DEVELOPMENT AGENDA

- 23 **UN group chairs unveil zero draft for sustainable development goals**

- 26 **The newsroom**

- 28 **Publications and resources**

## Dealing with emissions



*The Intergovernmental Panel on Climate Change (IPCC) confirmed in April that emissions rose more quickly between the years 2000-2010 than in any of the three previous decades. The Panel concluded that the dramatic increase was driven by human activity and it threatens to trigger a dangerous rise in global mean temperatures with devastating impacts, particularly on the poor and vulnerable. Scientists recommended urgent institutional and technological overhaul.*

*Avoiding a collision with nature – and setting the world on a path toward sustainable development – will require making full use of a range of available policies. Trading emissions virtually with a steadily rising permit price tag is one, increasingly used, option. The logic runs that this market mechanism will facilitate mitigation and adaptation actions at the lowest cost.*

*According to the World Bank, emissions trading schemes (ETs) worldwide currently have a value of about US\$30 billion, with around 40 national and 20 sub-national jurisdictions opting to use this much-debated climate policy tool. In this edition of BioRes, Sonja Hawkins and Ingrid Jegou of ICTSD's Global Platform on Climate Change, explore the potential benefits and drawbacks of creating links between the various schemes in place. The EU ETS – the world's largest – has suffered from dramatic swings in its carbon price. Could a link with South Korea's forthcoming ETS benefit the 28 member state bloc's ailing carbon market?*

*Beefing up the share of low-carbon energy in the global mix will be another crucial tool in tackling greenhouse gas emissions, while also generating jobs, and offering critical energy access solutions for remote communities. Good news on this front came from the Paris-based Renewable Energy Policy Network for the 21st Century (REN21) earlier this month which found that renewable power capacity jumped by more than eight percent in 2013.*

*Trade policy has an impact on sustainable energy diffusion. High import tariffs on relevant products, for example, can act as a significant barrier by raising the cost of using such technology. This issue also examines the environmental and economic impacts of domestic trade and energy policy reform and takes stock of the ongoing preparations by a group of WTO members towards launching a tariff cutting green goods trade agreement.*

*With delegates from 200 nations currently gathered in Bonn, Germany for the mid-year climate talks of the UN Framework Convention on Climate Change (UNFCCC), the pressure is on to pave the way for reaching a successful climate deal by the end of next year. We hope this issue of BioRes will help highlight the ways in which trade-related policies can support – both directly and indirectly – the climate community in this endeavour.*

*Be sure to follow us on [Twitter](#) and [Facebook](#) to keep up with our regular trade and environment news updates. And if you are interested in contributing material to future issues of BioRes, please [do write to us](#). We appreciate both your time and your feedback.*

The BioRes Team

## EMISSIONS TRADING SCHEMES

# Linking up: The potential for a joint EU-South Korea carbon market

Sonja Hawkins and Ingrid Jegou

*Emissions trading schemes have mushroomed in various constituencies around the globe in recent years as a way of lowering greenhouse gases from economic activity. The EU has now started negotiating linking its carbon market with other economies.*

Climate change mitigation efforts need to be scaled up to unprecedented levels in order to reach the internationally-agreed target of limiting climate change to two degrees Celsius above pre-industrial levels. This argument is clearly supported by the latest report trilogy from the Intergovernmental Panel on Climate Change (IPCC). At a time when multilateral action is progressing slowly and observers anxiously await a 2015 deadline set by parties to the UN Framework Convention on Climate Change (UNFCCC) to reach a new global climate deal, many countries are implementing unilateral mitigation measures.

Emissions trading schemes (ETSs) are an increasingly deployed climate policy tool. In theory, they provide a cost-effective market solution for curbing greenhouse gas (GHG) emissions as companies with relatively low abatement costs emit less, selling surplus allowances on the carbon market, while companies with relatively high abatement costs will purchase allowances to account for their additional emissions. 11 new mandatory ETSs have emerged since 2013 and 15 governments at varying levels are considering the introduction of mandatory ETSs. Parallel to this development, governments are increasingly discussing linking their ETSs and the first of such arrangements are already taking shape. Emissions trading schemes therefore have the potential to play an important role in international climate change cooperation in so far as they can help scale up action through a bottom-up approach.

This article explores the potential to link the EU's ETS and the upcoming South Korean ETS, which if opened early next year on schedule would be among the world's largest emissions markets. While South Korea has no binding reduction commitment under the UNFCCC Kyoto Protocol, it has pledged, as one of the world's top GHG emitting countries, to reduce emissions by 30 percent relative to its projected 2020 business-as-usual (BAU) emissions. The ETS, starting in January 2015, will be a key tool in this reduction effort.

### Forms of linkage

Linking enables firms covered by an ETS in one system to use allowances from another system to meet domestic compliance obligations. If no restrictions exist, allowances will flow from the higher-price system to the lower-price system until the prices converge at an intermediate level. Links can be direct or indirect, and the former can be of unilateral, bilateral, or multilateral nature. A unilateral link is a one-way link where only one of the systems accepts allowances from the other for domestic compliance obligations, but not vice versa. In case of bi- or multilateral links, allowances can flow in either direction. Indirect links can emerge when two systems each have a direct link with a common third system.

### Trade-offs: weighing up advantages and disadvantages

Linking the carbon markets of the EU and South Korea has multiple benefits. For South Korea, where some analysts expect the carbon price to be relatively high at more than €100 per tonne the potential for greater cost-efficiency is particularly convincing, although the government has predicted a lower price. The price convergence that linkage with the EU ETS would induce could help lower compliance costs for South Korean entities. At the same time, a lower carbon price could help reduce South Korea's risk of

## Top GHG-emitting nations

According to the World Resources Institute, in 2011 the top five emitters – excluding land-use change and forestry – were China, US, EU, India, and Russia. South Korea was the world's 13th largest emitter.

carbon leakage. The price convergence could also benefit the EU's ailing carbon market, where, according to many observers, allowance prices continue to be too low to stimulate significant abatement and low-carbon investments. At a size of 669 MtCO<sub>2</sub>e (million metric tons of carbon dioxide equivalent) in 2010, South Korea would likely exert a noticeable influence on the joint carbon price and could therefore provide a much needed boost to the EU's price. Linkage would also give firms in both systems access to a broader, more liquid allowance market with a wider range of abatement opportunities. For the EU, marked by price fluctuations, this could enhance price stability. A larger allowance market can also reduce concerns about market power by increasing competition and lowering the risk of market manipulation. Linking with the EU ETS could further help engender an institutional lock-in for the South Korean government, which would send an important policy signal for scaling up low-carbon investment.

These benefits do, however, come at a cost. Linking ETSs raises distributional issues; the expected higher carbon price in South Korea means that domestic entities buying allowances and EU entities selling allowances would be better off, while domestic entities selling allowances and EU entities buying allowances would be worse off. Linkage also leads to a loss of domestic regulatory control. South Korea, as the smaller system, should be more exposed to impacts originating in the EU. However, the EU would not be completely isolated from developments in South Korea and certain design features could filter into the linked system in due course.

### Hurdles to linking the EU and South Korean ETSs

The ability of the South Korean authorities to increase the volume of available allowances under exceptional economic circumstances could complicate linkage, as it would inflate the total number of allowances in the joint market. The Commission's proposed market stability reserve under the EU ETS would, however, also provide an opportunity for allowance adjustments, although this would be a more passive mechanism. While the EU development might render the South Korean provision less problematic, the conditions for overall allocation readjustments under the South Korean ETS would have to be clearly defined.

The provisions under the South Korean ETS permitting the government to intervene with pre-defined market stabilisation measures under specified circumstances in order to prevent significant price hikes and crashes would also likely raise concerns in the EU camp. The controversy surrounding the EU's back-loading proposal and the difficulty of passing this measure show that many in the EU oppose interventions in the carbon market. Although the Commission's proposal for a market stability reserve may lower resistance to South Korea's provision, objections to more active interventions persist. South Korea might, however, have a strong interest in controlling extreme price developments in both directions, particularly in light of the EU's experience with price volatility.

The wider scope and coverage of the South Korean ETS could also complicate linkage. Although South Korea plans to include three additional gases – methane, hydrofluorocarbons, and sulphur hexafluoride – this is unlikely to be the main stumbling block, since the currently threatened plans for the Australian ETS also foresaw the coverage of methane and this did not emerge as an obstacle during EU-Australian linkage negotiations. The inclusion of indirect emissions under the South Korean ETS, however, might prove more problematic. The EU would certainly require evidence of robust accounting methods to avoid double-counting and misallocating allowances. Conversely, South Korea might find the EU ETS scope too limited, given the global warming potential of the additional GHGs and the possibility to improve energy efficiency through the inclusion of indirect emissions. In addition, the differences in scope and coverage could increase resistance from South Korean business circles to the ETS, who might fear reduced competitiveness vis-à-vis their non-covered EU counterparts – although such concerns would exist irrespective of linkage. Competitiveness concerns could also arise due to differences in the sector coverage rules; while companies fall under the EU ETS based on their type of economic activity (sector-based system), all sectors will be subject to the South Korea ETS based on an emissions threshold level. The design of the South Korean penalty regime could also face EU opposition. The EU requires non-compliant entities

## The CDM

The UN Clean Development Mechanism, a market-based tool under the Kyoto Protocol, enables developing countries running emissions-reduction projects to earn certified emission reduction credits. These are sold to industrialised countries to help them meet their own emissions reduction targets.

to surrender missing allowances in addition to paying a set fine. If such a requirement is absent under the South Korean ETS, the cap on the fine of approximately €70 would effectively form a price ceiling for allowances in the joint carbon market.

Another potential barrier concerns the rules for the use of international offsets, which need to be harmonised as linkage creates a common pool of allowances. South Korea's quantitative restrictions are likely to be more stringent; covered entities will only be allowed to use international credits from Phase III of the country's ETS for a maximum of fifty percent of the total offset limit – domestic and international – set at ten percent of a company's compliance obligations. While the eligibility criteria are yet to be announced, evidence from the EU's previous linkage experiences, for example with Norway and Switzerland, suggests that the trade bloc would expect South Korea to impose similar qualitative restrictions. In addition, South Korea has yet to decide whether it will, like the EU, accept credits generated under the UN's Clean Development Mechanism (CDM). This situation could, however, change completely given the Commission's [proposal](#) earlier this year that emissions reductions from 2020 will have to be achieved through domestic actions alone, effectively banning international offsets from its ETS.

South Korea might also face an undesired propagation of borrowing rules into its own scheme. As indicated above, the country plans to limit the borrowing of allowances at ten percent of a company's compliance obligations. While borrowing is only implicitly possible under the EU ETS as new permits are handed out before the deadline for submitting the previous year's permits, there are no quantitative restrictions. Linkage would extend the EU's "more generous" provisions to South Korea who might find this unacceptable, since high levels of borrowing risk delaying abatement activities, potentially increasing mitigation costs in the long-term.

### In harmony

The literature and experience from EU negotiations with Norway, Switzerland, and Australia show that linkage requires that the key features of ETSs be sufficiently aligned. Stringency of emissions caps, penalty regimes, international offset rules, cost containment/market stabilisation measures, and scope and coverage are areas that require a certain degree of harmonisation. The preceding discussion showed that the EU and South Korea differ in some of these elements and would therefore need to make efforts to converge. Previous experience shows that the EU does not implement any changes, but rather requires the other party to work towards sufficient harmonisation. As a relatively large carbon market South Korea might, however, be able to obtain some concessions, for example on scope and coverage.

At the same time, there are also similarities between the EU and South Korean ETSs, which could facilitate linkage. Both ETSs are cap-and-trade systems with absolute emissions targets, making linkage less technically complex and giving less room to concerns about cap integrity, competitiveness, and liquidity shocks. The high level of stringency with regard to monitoring, reporting, and verification would also facilitate linkage. The same is true for the banking rules, which are already aligned, with no restrictions on the banking of allowances in either system. If one of the schemes had such restrictions, firms would be able to bank through swaps with companies in the unrestricted system. This could lead to "bankable" allowances from the more flexible system being sold at a premium, while "non-bankable" allowances from the more restrictive system might sell at a slight penalty.

Finally, the two schemes would not necessarily need to be perfectly aligned. Differences in some areas are unlikely to prevent linkage. The treatment of new entrants and plant closures, for example, differed even between member states at the beginning of the EU ETS. While not ideal, such a difference would not be a fundamental barrier. Differences would certainly exist between the EU and South Korea with regard to the allocation of allowances. Free allocations would be lower under the EU ETS, which has now been in place for eight years. In addition, South Korean firms considered to be at significant risk of carbon leakage will receive all their allowances for free, while the EU has moved to



an allocation system based on an industry benchmark. While such differences may raise equity concerns, these would exist irrespective of linkage and are therefore unlikely to pose a barrier.

### **Towards linkage**

The decision to link is a trade-off between the merits and demerits of linkage in light of a government's priorities. South Korean policymakers should therefore clearly assess their interest in linking with the EU ETS, as well as the likely benefits and disadvantages involved. This could help them take measures to facilitate linkage in the future, either by developing some elements more closely in line with the EU ETS or by identifying a road map to do so in the future.

South Korea and the EU should enter a transparent dialogue early on in order to specify expectations, requirements, and barriers. This could provide both parties with a clearer picture of opportunities and challenges. Such an engagement should begin before the start of South Korea's ETS. Prior to a full bilateral link, South Korea could also establish a unilateral link to the EU ETS, letting permits flow from the EU to South Korea, as was done by Norway. This would allow the country to achieve some key benefits without facing the trade-offs of a two-way link.

---

*Linkage therefore has the potential to help scale up global climate action and reinforce the process under the UNFCCC.*

---

### **The impact of carbon market linkages on global climate talks**

Linkage provides an important opportunity for international cooperation on climate change, while allowing countries to maintain some national autonomy. If ETSs continue to spread and linkage turns into a climate policy trend, it could complement cooperation through a bottom-up approach. Linkage therefore has the potential to help scale up global climate action and reinforce the process under the UNFCCC.

In the context of growing unilateral climate change mitigation and associated competitiveness and carbon leakage concerns, linkage can also offer an alternative to border carbon adjustments – a unilateral measure proposed by some governments, aimed at equalising the carbon cost by taxing imports from countries with lower or no carbon cost. Linking ETSs can help address concerns about distortions in competitiveness and the risk of carbon leakage in a cooperative way.

Linkage can contribute to sustainable development. In addition to enhancing the cost-effectiveness of ETSs, and reducing distortions in competitiveness and potential risks of carbon leakage presented by the unilateral implementation of emissions mitigation measures, linkage can further support important investments into low-carbon technologies, boosting growth while simultaneously lowering emissions. Consequently, emissions reductions can be undertaken in a manner that effectively balances the economic and environmental pillars of sustainable development.

*This article is based on a longer research paper: [Linking Emissions Trading Schemes – Considerations and Recommendations for a Joint EU-Korean Carbon Market](#), ICTSD, March 2014.*

---



**Sonja Hawkins**  
Programme Officer, Climate Change, Trade and Sustainable Energy, International Centre for Trade and Sustainable Development (ICTSD)



**Ingrid Jegou**  
Manager of the Global Platform on Climate Change, Trade and Sustainable Energy, International Centre for Trade and Sustainable Development (ICTSD)

- ① International Carbon Action Partnership, ICAP (2014), Emissions Trading Worldwide.
- ② Bloomberg New Energy Finance/Ernst & Young (2013), South Korea's Emissions Trading Scheme.

BIORES INTERVIEW

# Technology transfer in UNFCCC: State of play and future challenges



Gabriel Blanco, Chair,  
Technology Executive  
Committee, UNFCCC. Profesor  
Titular, Universidad Nacional del  
Centro de la Provincia de Buenos  
Aires

*Ahead of the mid-year June meetings, BioRes talked to Gabriel Blanco, Chair of the UN Framework Convention on Climate Change (UNFCCC)'s Technology Executive Committee (TEC), the policy arm of the international climate treaty's Technology Mechanism. The TEC has a mission to offer guidance on technological needs, as well as to provide policy and technical analysis on issues related to the development and transfer of technologies for climate mitigation and adaptation. This interview was conducted at the end of May.*

## **How would you assess the progress in the operationalisation of the Technology Mechanism agreed to at the 2010 UNFCCC Conference of the Parties in Cancún, Mexico?**

**[Gabriel Blanco]** My assessment of the progress of the operationalisation of the Technology Mechanism is very satisfactory. Let me say briefly why; the Technology Executive Committee [TEC] has already been delivering results. In a couple of years, we were able to provide key messages to the Conference of the Parties [COP]. We've processed and analysed information coming from various sources like the Technology Needs Assessments [TNA], and technology roadmaps or action plans. The TEC has also conducted thematic dialogues and workshops on various topics like technologies for adaptation, research and development, as well as finance. We've produced our own brand of TEC briefs and through these were able to deliver key messages in several areas like enabling environments, barriers for technology development and transfer, as well as research, development and demonstration [RD&D], TNA finance etc. So in less than two years, we've released quite a range of products.

Regarding the other part of the Technology Mechanism, the Climate Technology Centre and Network [CTCN], it's been established and the procedures and modalities for its work have been agreed to. The Climate Technology Centre was also able to set up criteria for network membership and with these criteria we've already started to bring in institutions from all over the world. Furthermore, the CTCN has established criteria for the requests for assistance from developing countries including criteria for prioritising these requests. And of course now we are working on the details of how the network is going to function in order to respond to these requests coming from parties. We expect the network to be very large; so we need clear, transparent modalities on how it will function. Again, all this has happened in just a year and a half or so.

## **At its latest TEC meeting held on 5-7 March, in Bonn, Germany, you stressed the importance of building linkages between UNFCCC's separate financial and technology mechanisms, which is also included in the Technology Executive Committee's work plan for the next two years. Can you tell us a bit more about this and the issues to be addressed in your future work?**

**[GB]** With regards to the first part of the question, it's very simple and straight forward. Finance is key to technology transfer. It's also necessary and fundamental for the work of the CTCN, which is the implementation arm of the Technology Mechanism. Of course the TEC also needs some financial resources to conduct its work as well, but the CTCN is going to be working on the ground, which is why it needs resources. But then the question comes as to how the linkages between the financial and technology mechanisms should be established and I see a role for the TEC here. In my view, the TEC should, and we are starting to work together with the financial mechanism people either in the Green Climate Fund or the Global Environment Facility, explore how the TEC can be involved in financial decision-making processes. For example, we have held meetings with the chairs of these other bodies. And then, there is another crucial aspect to all this, which



is the need to create coherence and synergies between all the bodies under the UNFCCC umbrella. As the climate negotiations move forward, some bodies are created as a result of a particular discussion. Sometimes the COP creates a body without looking precisely at the details as to how the new entity will work with the other existing instruments. This is then something that needs to be done afterwards. Now we have the Standing Committee on Finance, the Adaptation Committee, the Technology Mechanism, the Green Climate Fund, all these bodies should work together in a coherent mode. This is critical in my view; otherwise we may overlap in our activities, and duplicate our efforts. This is why the TEC has started to work with the Adaptation Committee, for example. The two bodies conducted a joint workshop on technologies for adaptation on 4 March 2014 and we always have members from the Adaptation Committee sitting in our meetings, and we've been invited to participate in their activities as well.

**You outlined what the TEC has achieved so far. What sorts of challenges remain to be addressed?**

[GB] I've already outlined what the TEC has achieved so far, but let me add one more thing that is very important with regards to addressing future challenges. I consider that we are pioneers in the participation of the "external world", in the work of the TEC. This is really very unique if you consider other UNFCCC bodies. I am very happy to be chairing a body with this sort of openness. We've created a number of taskforces within the TEC to address some of the issues in our work plan, and external experts will join these taskforces to discuss how to move forward, what key messages can be delivered, and so on.

**The role of intellectual property has been recurrently raised in UNFCCC discussions on transfer of climate technologies. How might this be addressed by the TEC?**

[GB] First of all let me say that we already delivered key messages on this issue. Our message two years ago in Doha was that intellectual property rights [IPR] issues require analysis on a case-by-case basis. That means we should look at the different sectors, different technologies, and see if there is any problem there with IPR and technology transfer. And vice-versa, if we see that IPR has been an incentive for the development and transfer of technology, we can work on how to replicate the case for other sectors and technologies. We are also due to conduct a workshop in October on national systems of innovation. IPR issues are part of the agenda again for that workshop, which will be open of course to observers and other experts.

**Where do you see the role of trade in enabling relevant technology transfer?**

[GB] Trade of course can be important in facilitating technology transfer, but in general this is a more comprehensive process that also involves capacity building, exchange of knowledge and expertise among parties. So under this umbrella called "technology development and transfer," I see a more comprehensive and profound process where parties can exchange, where trade is a key part of the process, but not the whole thing. Of course there could be some transfer of hardware, that's important too.

**What do you hope to see coming out of Bonn in the area of technology transfer?**

[GB] There are two or three issues in Bonn; we need to approve the joint annual report coming from the TEC and the CTCN. That got stuck in the past COP in Warsaw, Poland for other reasons, not due to the report itself. Another important piece will be the synthesis report on technology needs assessments. I hope parties will be able to see the value in that exercise. The Poznan Strategic and Long-Term Programmes on Technology Transfer are going to be discussed based on a new report from the Global Environment Facility. It seems to be that at some point we need to seriously talk about how to align the Global Environment Facility efforts on technology transfer with the Technology Mechanism. I'd like to be very clear that at this point I see that we're creating two parallel mechanisms. It's something we need to discuss and address in June and beyond. Finally, on the 2015 climate agreement negotiations, my major concern is that parties should see that the Technology Mechanism should be the institutional arrangement under the new agreement for 2015. I'm very concerned about that. My plea to the parties is to look at what we have done already in less than two years, to enhance the Technology Mechanism, and provide the necessary resources.

BIORES INTERVIEW

# Ready to go: The Climate Technology Centre and Network takes off



Heleen de Coninck, Associate Professor, Institute for Sciences, Innovation and Society, Radboud University Nijmegen, Netherlands, former RINGO representative on the CTCN Advisory Board

*As the UN Framework Convention on Climate Change (UNFCCC)'s Climate Technology Centre and Network (CTCN) kicks off its work, BioRes sat down with Heleen de Coninck, Associate Professor at the Institute for Science, Innovation and Society at Radboud University, and the RINGO representative on the CTCN Advisory Board for the first year of its existence, to discuss the challenges ahead for the body and technology transfer in the global climate talks. This interview was conducted at the end of May.*

**The UNFCCC Warsaw Conference of the Parties in December 2013 saw a decision on the modalities and procedures of the Climate Technology Centre and Network. Can you tell us a bit more about what this decision will mean?**

**[Heleen de Coninck]** The CTCN only really started to get operational in 2013. How it works in UN processes is you need to fix modalities and procedures to figure out the way that the CTCN is going to do its work. The mandate is pretty clear in the earlier documents, particularly the [Cancun Agreements](#), however as it gets operational you need rules and procedures. The whole approval process was actually quite fast for UN institutions. This is a good sign and Warsaw was an important moment. The work can now get started.

**What are the key challenges facing the CTCN on the road ahead?**

**[HdC]** There are a number. First of all, one of the things people ask is “can this make a difference?” Can such a small centre through a large network really make a difference globally? One aspect of this is whether the CTCN can become large enough without becoming a big bureaucracy. And in order to actually get anywhere, a second challenge is to secure finance. A lot has been secured for the first five years, but it remains unclear how things will work moving forward. I think that to guarantee more financial support the CTCN will need to demonstrate success, a key priority on the agenda. Success means: enabling and scaling up climate-friendly technologies in developing countries, and helping build local innovation capabilities – not an easy feat. A third challenge is to build up the network. Everyone is focusing very much on the Climate Technology Centre in Copenhagen, Denmark, but most of the work will be happening throughout the international network. This is supposed to be a huge system of institutions, private and public sector, research, and non-profit groups, which are going to collaborate to create a better enabling environment for the diffusion of climate friendly technologies in countries. If that network is not quickly built up, especially in developing economies, then the CTCN will not be worth much.

A further challenge is clearly outlining the reasons why an institution should join this network. The criteria for network membership have now been established and they are deliberately kept pretty open. How the network will actually work in practice, however, remains a bit unclear. One option would be to just let it grow organically, to see what happens, which might be better than pre-defining how it should grow.

**What role can South-South cooperation play in scaling up technologies for adaptation and mitigation?**

**[HdC]** In terms of South-South cooperation, this is one of the main goals of the CTCN. In my view this whole Technology Mechanism is about building up innovation capabilities in developing countries; capabilities to absorb technology, to improve on technology, to eventually start building and adding value to technology. In that way you get a synergy between economic progress and environmental integrity. In that sense, South-South cooperation is important because you allow for regional collaboration around specific technologies and areas. However, while such cooperation is important, this is not the

whole picture. The involvement of Annex I countries is also critical due to the resources, experience, and innovation capabilities they bring.

**Given the results of the technology needs assessments, what are the technology needs of developing countries?**

[HdC] There was a [synthesis report](#) published where 31 technology needs assessments [TNAs] were extensively discussed. While needs are clearly going to be different in every country, there were some commonalities. Many countries mentioned the energy sector and renewable energy, and also transportation. In the field of adaptation there was a focus on technologies in relation to agriculture.

But in my opinion technology needs also involve a broader scope than a list of technologies that would be useful. You also need to consider what kinds of skills and organisational or institutional aspects you need in order to bring those technologies to the market, or make accessible to users. This is something that the synthesis report is not very clear about. The assessment on barriers to technology transfer also seem a bit limited; they give a partial picture. So for example, countries mention economic and financial barriers, but that does not give you a detailed view of technology needs and especially responses. For example, what kinds of support would be helpful, what kinds of changes, and transformations, and how do you do that in countries? I think there are still many questions that are left unanswered in that space. In that sense the TNAs are really the start of a process towards a better idea on what kinds of interventions you could do as an international community in the different countries, with their approval and buy-in, to help them move forward in this area.

**What areas specifically might need to be addressed at the multilateral trade level to enhance relevant adaptation and mitigation technology transfer?**

[HdC] I'm not a trade expert by any means, but it seems to me as an outsider that trade can help technology transfer. But there are also areas where trade and technology transfer can contradict and create conflict. Trade is neutral, based on markets, helped by rules. If you look at the UN's [Clean Development Mechanism](#), what happened there in terms of markets is that projects went to countries that were already pretty well-placed to implement mitigation technologies. I think in the technology transfer debate, we're trying to make technologies go to places where the enabling environment isn't so good, which is important to remember when looking from a market perspective.

**What are the medium to long-term challenges that lie ahead in this area, and how do you see the UNFCCC talks moving forward?**

[HdC] Speaking very frankly, it is on the agenda of developing countries to build innovation capabilities in their countries, but countries like the US, or even Europe, this might be threatening. They might be hesitant to help their future competitors. So there's a rather fundamental contradiction here. My sense is that this is not spoken about much in the negotiations, even though it may be one of the underlying reasons why some of the discussions around technology transfer have moved so slowly, especially before the Technology Mechanism was started. Previously in the climate negotiations the agenda item was stuck for 15 years or so. The reason for this is that in the UNFCCC it is stated very clearly that developed countries should help developing countries with technology transfer. Broadly speaking, poor countries feel this promise has not been filled, but then rich countries say that the lack of proper markets in these countries is a real barrier to making technology transfer happen. Bridging these mentalities is another long-term challenge, but I am not sure what the right strategy might be. Perhaps focusing on innovation capabilities in least developed countries and not in countries such as China or Singapore?

On the UNFCCC talks, first everyone is looking at the UN summit in September, then to the Paris Conference of the Parties next year. I have the feeling that there are still more possibilities than those that are currently explored in the negotiations, which are still very much focused on whether it is legally binding, pledges, emissions reductions targets, etc., I think that if the discussion would shift more into the enabling sphere, and maybe focus on sectors or technologies, there's hope there.

RENEWABLE ENERGY

# Removing trade barriers on selected renewable energy products: A modelling exercise

Veena Jha

*This article provides a view of the environmental and economic impacts of domestic energy and trade policies on sustainable energy diffusion and greenhouse gas emissions reduction.*

The urgency of tackling climate change in order to prevent or at least minimise the adverse effects of a rise in average global temperatures beyond the 2 degree Celsius mark is a well-recognised international ambition. Equally, a shift away from fossil-fuel energy sources towards low-carbon renewable energy (RE) sources is also acknowledged as being among the most important ways of reducing carbon emissions. But this is not automatic.

While RE sources such as sunlight and wind are usually plentiful and free, the costs of harnessing them are expensive, and require technology deployment. This involves significant upfront investments. Generation costs of RE are also higher, owing to the intermittent nature of renewables and the lack of cost-effective storage options. And while costs are coming down, domestic policies may either encourage or tilt the playing field against renewables. First, explicit trade barriers and restrictions on RE equipment, such as import tariffs, can unnecessarily raise a given firm's cost of procuring such equipment. Second, incentives for RE generation in one country can affect deployment and trade opportunities for other countries. Third, removing government support provided to fossil-fuels and electricity can have dramatic impacts. Addressing barriers to trade in RE equipment created by these policies could help facilitate the scale up of RE, making it easier for governments to address not only climate change, but also provide access to sustainable energy for millions of people in the developing world who are presently not connected to the grid.

A number of countries presently apply a range of import tariff barriers to such products. They also impose local-content requirements (LCRs), despite the clear prohibition of such under the WTO Agreement on Trade Related Investment Measures (TRIMS) as reaffirmed by a recent WTO dispute settlement panel in the Canada feed in tariffs (FITs) ruling against local-content measures for solar and wind energy introduced in Ontario, Canada.

Addressing barriers to trade in RE equipment often requires governments to negotiate voluntary or binding agreements with each other. Such sustainable energy trade initiatives (SETIs) can take various forms, including a binding regional trade agreement that involves RE goods and/or services; a voluntary environmental goods liberalisation initiative, such as Asia-Pacific Economic Cooperation Forum (APEC)'s September 2012 Vladivostok Agreement to liberalise applied tariffs on environmental goods based on a list of 54 product categories, including RE goods; or a commitment to liberalise environmental goods trade between a willing group of nations, such as that [announced](#) at the World Economic Forum's annual Davos meet this year.

This article is based on a longer paper conceived by the International Centre for Trade and Sustainable Development (ICTSD), the publisher of BioRes. Using a Global Trade Analysis Project (GTAP) modelling exercise, the research aimed to assess the impact of import tariffs for selected groups of sustainable energy goods together with FIT incentives, LCRs, and fossil-fuel subsidies on a number of economic and environmental variables including, trade, energy and electricity prices, emissions, employment, and income. The model specifically incorporates both electricity and energy sources as inputs and outputs in a computable general equilibrium model. The model did not include energy services

associated with RE or take account of dynamic technological changes, but is predicated on existing technology. It is also unable to take into account the dynamic effects of subsidies in fostering technological change. Rather, it provides a comparative static analysis of the differential impacts of energy and trade policy reform on some selected countries.

Individual countries covered by this modelling exercise are China, Japan, Germany, France, Italy, US, Canada, Chinese Taipei, Korea, and India, among which are the top five GHG emitting economies and prominent exporters and importers of climate-friendly goods in 2010, according to a list compiled by ICTSD. In addition, other large exporters, such as South Africa and Brazil, have also been included. With this group, over 90 percent of global trade, GDP, employment and other macroeconomic indicators are covered by the exercise, suggesting that policy prescriptions could be more widely extended. One shortcoming is that the country coverage does not extend to oil-exporting countries, which account for the largest share of fossil-fuel subsidies.

Macroeconomic effects examined include gross domestic product (GDP), welfare, emissions, and electricity prices for the economy as a whole. The RE goods include those relevant to renewable electricity generation. Ethanol, which is relevant for sustainable transport systems, is also included as it is an important traded product, and transport accounts for a high proportion of GHG emissions. The goods included in this modelling exercise have been identified based on previous trade analyses conducted by ICTSD and are detailed in Annex III of the research paper. Broadly, they have been classified into three categories of goods. The first, called RE equipment, consists of products used for generating or using solar energy, hydroelectricity equipment, and ethanol. The second category of products consists of wind turbines. The third category of products consists mostly of parts of a wind energy generation system. The reason for choosing this small list is to ensure that the simulation exercises will be meaningful for negotiations conducted in this area and the products have a direct correspondence with RE generation and usage.

Some limitations of the original paper need to be emphasised. It should also be understood that the GTAP model, like all general equilibrium models, provides a comparative static analysis and is indicative of the general trends. The model cannot take technology choices of electricity producers or changes in technology into consideration. It also does not include energy services, except for electricity, which enters as a good in the GTAP model. The model does however include both production and consumption energy subsidies and is able to detect changes in prices.

### **Levelling the playing field?**

In order to better understand the contribution that trade reforms can make for RE, the research began by setting the context and exploring what would happen in another non-trade related sphere of domestic policy reform, namely the removal of fossil-fuel subsidies. The removal of such subsidies is likely to have wide-ranging effects that could also impact RE equipment. For example, the production of most metals is energy intensive, and wind turbines in turn require a high volume of metal. Subsidy removal will also affect the competitiveness of goods on global markets.

We therefore sought to examine what would happen if import tariffs on RE products were reduced to zero, alongside the removal of fossil-fuel subsidies. Several arguments for removing subsidies on fossil-fuels are presaged on levelling the playing field by increasing fossil-fuel energy prices and making RE more competitive. The research conducted shows that this may not necessarily be the case. The most important reason for this is that 76 percent of the global total fossil-fuel subsidies go to oil and petroleum (generally not used for electricity generation); only six percent goes to coal (used for electricity generation); and a little less for natural gas (sometimes used for electricity generation). Hence, removing fossil-fuel subsidies alone may not level the playing field for RE. The results suggest that removing fossil-fuel subsidies does affect electricity and energy prices, but price rises are much higher in countries where coal is widely used for electricity generation, such as India and South Africa.



## The Davos launch

In January, 14 WTO members signaled their intention to move towards negotiating a trade liberalising agreement for environmental goods. These nations include; Australia; Canada; China; Costa Rica; the EU; Hong Kong, China; Japan; Korea; New Zealand; Norway; Singapore; Switzerland; Chinese Taipei; and the United States.

The changes with tariff reform alone were much more significant for the RE sector in all countries than the combination of fossil-fuel subsidy elimination and trade reform. However in countries where tariff reduction leads to a significant fall in output such as Brazil and India, removing fossil-fuel subsidies somewhat mitigates these effects.

To the extent that renewables can be substituted for fossil-fuels, the model showed a greater likelihood for the deployment for solar photovoltaic (PV) and hydro-equipment. These results make sense, as hydro represents one of the lowest-cost sources of RE, and solar-PV has reached close to grid parity in a number of locations. Solar PV can also be deployed in an off-grid, decentralised manner without necessarily investing in grid connections. According to a Navigant research report, distributed solar – the kind put up on rooftops and carports and other small-scale installations, and which Navigant defines as less than one megawatt in capacity – accounted for 69 percent of all solar PV installed in 2012.<sup>①</sup>

While the effects of removing fossil-fuel subsidies may be somewhat limited for the RE sector, emissions would be reduced significantly for most countries. Clearly, the largest emission reductions would be for countries that are intensive users of fossil fuel energy. Emission reductions do not only include those generated by lowered electricity usage, but also those achieved through lower usage of oil and petroleum, including for transportation. The countries that provided the largest subsidies, mostly developing countries, stand to see the largest declines in GDP and welfare. In most cases, welfare losses caused by liberalisation cannot be compensated by welfare gains from emission reduction. Should carbon prices rise or reflect all externalities, the calculations of welfare gains and losses would be entirely different.

### Trade policy and renewable energy expansion

Although eliminating fossil-fuel subsidies remains an important long-term goal, trade reforms may be more easily achievable. Trade policies, such as tariffs and local-content measures are often part of the overall mix of policies aimed at increased deployment of RE expansion. Trade policies have also sometimes been used to protect domestic renewables industries. While some clean energy and trade policies may have a positive effect on the development of specific forms of RE in the country employing them, others may, depending on their design, have adverse effects on other economies as is shown by the spate of dispute settlement panels related to RE in the WTO.

Using the same GTAP-E model we analysed the macroeconomic effects of reducing import tariffs to five percent, as well as eliminating tariffs, FITs, and LCRs altogether, in selected countries where the liberalisation is undertaken by themselves or by their trading partners. The research found that the distributive effects of removing tariffs, subsidies, or LCRs would differ across the 12 countries studied. Nevertheless, on the whole, removing trade distortions would rebalance the RE industry and move it towards higher levels of deployment. If tariffs and FITs were removed simultaneously the global RE industry would increase by \$US2.3 billion. It should be specified, however, that the RE industry examined in this paper is based on a small group of single-use products that constitute a large volume of the total trade between the countries studied here. These products are also relevant to most of the issues that are currently covered by dispute settlement panels. Governments could be also be more favourably inclined towards tariff reduction for "single use" goods that are easier to identify from an environmental end-use perspective.

Of course, innovations in RE should continue until it reaches grid parity. A realistic picture, however, of the overall effect of deployment of RE should be admitted into policy discourse. As far as RE is concerned, trade reforms must be explored as an option to improve their deployment. Most countries see a welfare gain with import tariff reform for RE products as well as an income gain. While the effects will not be spread uniformly across all RE sectors or all countries, there is little to suggest that any particular group of countries would be consistent losers.

Both FITs and LCRs have been used by countries as policies to deploy RE. LCRs, however, were trade distorting and FITs based on their design could have trade impacts. FITs by themselves have minor effects on trade except in the case of solar energy, where removing

FITs was generally positive for the industry. When combined with LCRs, they may have a trade distortive effect. The effects of removing LCRs on the production of RE equipment are at best ambiguous. While most countries see a rise in output and employment, some see small decreases. LCRs are not trade neutral. In fact the trade effects are far more important than output effects. Developing countries such as China, India, and Brazil actually see an increase in their output, employment and trade as LCRs are removed in all these countries. This is especially true for wind turbines and components suggesting that LCRs in these industries are particularly trade distorting. Removal of LCRs in other countries would naturally stimulate increase in exports from competitive countries.

In terms of options, countries could consider retaining FITs while phasing out LCRs, except with respect to solar energy, where there is a good case in a number of locations for phasing out FITs as well. However, given the fiscal deficits in the global economy, the reverse is likely to be the case. This would imply that RE objectives would be pursued in an inefficient and trade distortive manner. Phasing out LCRs would shift production to countries that are more competitive in the production of RE products.

FITs are in a grey area, as the way they are implemented will determine their trade neutrality. They are also expensive to implement. LCRs, on the one hand, may help create jobs in the RE sector, but they may take jobs elsewhere in the economy, for instance in downstream industries. Other similarly trade restrictive policies, such as anti-dumping duties, have been shown to have this effect. For instance, according to a study carried out by the German consultancy Prognos and flagged by the Alliance for Affordable Solar Energy, a coalition of mainly European companies, a 60 percent duty on Chinese solar panels could cost 240,000 European jobs over 3 years. Therefore, RE measures with potential trade impacts need to be implemented carefully, keeping long-term environmental, economic, and trade goals in mind.

### Low hanging fruit

There is no clear case to change WTO rules on LCRs and FITs. However, the industry is still evolving; the players are changing and the role of supportive policies in the global economy is far from clear. The process of fossil-fuel subsidy reform may require carefully designed and targeted policies that take the needs of the local population into account over the longer term. When energy prices rise, policymakers in every country, but particularly in many developing countries, will need to maintain a good balance between spurring economic growth through improved energy efficiency and safeguarding the supply of energy services to vulnerable sectors of society. One way to provide energy and related services more efficiently is by ensuring the financing of upfront investments in more efficient appliances and that the wider population is aware of the economic return of those appliances in the long run.

Trade policy reforms are easily available and accessible to policymakers and can be implemented fairly rapidly, so they should be pursued as a low hanging fruit. In addition, trade liberalisation is of systemic importance as it can have positive spill-over effects on investment, innovation, and increased opportunities for cooperation and coordination of policies.

*This article is based on a longer research paper published by ICTSD: [Removing Trade Barriers on Selected Renewable Energy Products in the Context of Energy Sector Reforms](#), ICTSD, December 2013*



**Veena Jha**

Former Visiting Professorial Fellow at the Institute of Advanced studies, University of Warwick. Executive Director, Maguru Consultants Limited, London, UK.

① Navigant Research (2013), Distributed Solar Energy Generation: Market Drivers and Barriers, Technology Trends and Global Market Forecasts accessible at <http://bit.ly/1ksOovY>. Also see <http://bit.ly/1kuOij4>

RENEWABLE ENERGY

# Using trade policy to address renewable energy access challenges in Africa

Hari Manoharan and Madhavan Nampoothiri

*What role can trade policy play in tackling the various challenges that prevent a large-scale deployment of renewable energy systems in Africa?*

Estimates from the International Finance Corporation (IFC) show that close to 600 million people in Africa, around 70 percent of the continent's population, did not have access to electricity as of September 2012. Various studies have clearly established the correlation between a country's GDP and its per capita energy consumption. Affluent countries have a high rate of energy consumption, while a number of poor countries in Africa, for example, have very low GDP and energy consumption.

The Human Development Index (HDI) study run by the United Nations Development Programme (UNDP) suggests that no country with annual electricity consumption below 4000 kWh per person per year has an HDI value of 0.9 or higher, and similarly, no country above 5000 kWh per person per year has a HDI value lower than 0.8. The study has been conducted in the world's 60 most populous economies, comprising 90 percent of the world's population.

In case of Africa, with the exception of few countries like South Africa, almost every country shows some correlation between per capita electricity use per year and HDI. The lack of access to energy affects the rate of development in the country resulting in adverse impacts on general health and women's health in particular, safety, education, environment, and finally results in loss of productivity. While energy access is recognised as an important component in improving the lives of the rural poor, high capital costs and the remoteness of sparsely populated habitats is a major hindrance in expanding centralised electricity grids and reducing energy poverty. On the other hand, some renewable energy sources such as solar and biomass, have the inherent advantage of being good sources of distributed energy with no need for centralisation. Critical energy access could therefore be provided without having to rely on a central grid. Solar products such as lanterns, solar home lighting solutions, and small-scale power plants are particularly suited for providing such access.

## Challenges to renewables adoption

Renewable energy adoption is hindered by various challenges. Some of these include the high upfront costs of solar, lack of access to finance, lack of familiarity with the sector by the local banks and micro financing institutions (MFIs), lack of effective after-sales and maintenance structure for the product suppliers, market spoilage through proliferation of low cost, low quality products, and lack of consumer awareness. These problems are further aggravated by an absence of robust policy and regulatory mechanisms, distorted subsidy structures for fossil-fuel sources such as kerosene, high import duties levied on renewable energy based products and components associated with their manufacture and assembly, counterintuitive taxation regimes that favour import of prefabricated products as opposed to domestic manufacturing and assembly, local content requirements, and improper standardisation and quality control measures. Both trade and non-trade related options exist to tackle these barriers.

## Non-trade related tools to address renewables barriers

As a first step, raising awareness vis-à-vis the end consumer around available choices between traditional and alternate energy, as well as the relevant financing opportunities, is critical to scale up informed decisions that catalyse the shift to clean energy sources.

## HS-codes

The World Customs Organization's internationally agreed Harmonized System (HS) framework allows customs officials to identify goods. All HS codes are standard up to the 6-digit level, which in turn include various goods classified in each country under national tariff lines (NTLs).

Awareness creation as well as policy and regulatory reforms are also required in the case of imports where customs duties and taxes are levied on renewable energy based products even though they are, by law, exempt from such duties. In certain cases such levying of duties may be due to lack of awareness or understanding by customs authorities regarding the relevant internationally agreed Harmonized System (HS) codes under which the products are to be imported.

What's more, quality assurance programmes that function through the employment of testing and certification mechanisms do not exist in various countries in Africa. Testing centres should be set up across the continent to help overcome this issue. Standardisation and product approval for sale in a territory could also be decided on a product-to-product basis rather than a blanket criterion. Policy and regulation should be formulated to encourage financing through MFIs due to high upfront costs associated with renewable energy products and low income among the potential consumers.

In addition, subsidy mechanisms in various countries in Africa are limited to provision of capital subsidy, as a percentage of total capital cost, on various products. Innovative business models such as the "pay as you go" would not benefit from an upfront subsidy since the payments under that model are spread over a period of time – the payments are made per unit of electricity consumed till the cost of the system is recovered after which the ownership is transferred to the consumer. Thus the subsidy in this case would have to be provided per unit of electricity consumed. Regulations would have to be revised to accommodate such innovative business models to help alleviate the burden on the end consumer. Finally, fossil-fuels such as kerosene are currently heavily subsidised, which can render renewable energy systems uncompetitive. The subsidy offered for these fossil-fuel systems could instead be channelled towards the development of renewable energy systems.

### Tackling renewables trade barriers

Sustainable power generation is usually characterised by higher upfront equipment costs. While governments seek to bring down the costs of sustainable power through subsidies and various other fiscal incentives, they may also simultaneously try to meet other policy objectives. These objectives could include creating a manufacturing base for sustainable energy equipment and generating local jobs. While synergies are possible, it can become difficult for policymakers to balance sometimes seemingly conflicting objectives. It may be difficult, for instance, to seek sustainable power production at the lowest cost possible when power producers are facing import restrictions on technologies and equipment at the level of quality and prices they desire. These restrictive policy and regulations can also lead to trade disputes, which in turn may result in stalemates during negotiations related to climate change and sustainable development.

---

*Given this scenario, it may be worth setting up a Sustainable Energy Trade Agreement (SETA) as a stand-alone initiative that could address such barriers, allowing trade policy to advance climate change mitigation efforts while also increasing sustainable energy supply.*

---

Given this scenario, it may be worth setting up a Sustainable Energy Trade Agreement (SETA) as a stand-alone initiative that could address such barriers, allowing trade policy to advance climate change mitigation efforts while also increasing sustainable energy supply. Such an agreement would cover all trade-relevant aspects of sustainable energy production, allowing for possible scale-ups. A SETA is also a way to bring together

countries interested in addressing climate change and longer-term energy security while maintaining open markets.

### **Making a SETA work for Africa**

It is desirable for countries that are important traders of Sustainable Energy Access (SEA) products to identify and clearly define these products including within their national tariff lines as well as agree to arrive at a common description for these products, and ensure consistent tax treatment upon importation.

High import duties, as well as taxes levied on renewable energy products and components for assembly of sustainable energy goods, are particularly problematic where African countries are concerned. While many of the continent's economies may not be willing or ready to join a SETA immediately, they could consider voluntarily addressing high duties that hold back imports of these goods as well as simplify the duty structure for such products. Appropriate provisions for special and differentiated treatment for African countries could also be part of an eventual deal as well as enhanced provision of non-trade related technical assistance.

The importance of countries such as the US, EU, China, and India in manufacturing, exporting, importing products such as solar lighting equipment underscores the need and relevance for these countries to be part of an eventual SETA. And given the importance of addressing energy access issues for many African economies, it would be worthwhile these countries engaging either as observers or becoming involved in those provisions of a SETA that directly or indirectly affect their manufacturing, exports, or imports of SEA equipment.

The disbursal of government subsidies for consumer products such as solar lanterns or solar powered home power systems in certain countries requires that the product fulfil the local content requirement criterion. Such requirements can hold back dissemination of important equipment and restrict consumer choice. Standardisation policies as well as related capital subsidies and incentives, which may affect access to sustainable energy equipment such as solar lamps by constraining the sale of innovative or most-efficient models, should also be addressed. These should be designed in such a way that it ensures component choice based on performance rather than system design.

Trade facilitation related measures that speed up clearance of sustainable energy equipment at customs and ports could be also considered by a SETA. For instance, agreement could be reached that all SEA related goods would be subject to customs inspection and clearance in a certain number of hours or days, unless there is serious reason for an extension. An important aspect of this would be developing a classification system for relevant sustainable energy products based on clearly identifiable characteristics and the internationally agreed HS-codes, able to be easily understood by customs authorities.

Any technical cooperation or assistance mechanism that is set up by a SETA should take cognizance of measures that could help facilitate the dissemination of SEA products. For instance this article earlier pointed to a lack of awareness among customs officials regarding various tax and duty incentives eligible for SEA products as well as on relevant HS-codes under which the products are imported. This could be one of the areas where a SETA could create a fund for the training of customs authorities in countries where it may be felt necessary. Such awareness creation exercises could also include updated information on any changes to HS-codes or re-classifications agreed-upon by countries for SEA products.

Free trade is a very challenging issue for most countries trying to balance sourcing of solar components at minimised cost whilst encouraging a local manufacturing ecosystem. The latter can break down beneficial trade relations between countries. The creation of a SETA, and finding a way to include African economies, would likely help economies come together to reduce the trade tensions. Scaling up renewable energy diffusion in Africa would ensure that sustainable energy access is provided to the rural poor helping to improve their quality of lives.



**Hari Manoharan**  
Senior Consultant, RESolve



**Madhavan Nampoothiri**  
Founder and Director, RESolve



ENVIRONMENTAL GOODS

# Preparations underway for green goods trade talks

*The groundwork is currently being laid for the launch of negotiations towards a tariff liberalising and future orientated green goods trade agreement later this year between a group of WTO members.*

Since a group of 14 WTO members signalled their intention to pursue "global free trade" in environmental goods in January, participants have been working through domestic procedures to establish negotiating mandates. The green goods trade announcement, made on the sidelines of the World Economic Forum's annual Davos meet, outlined a plan to negotiate a deal to slash tariffs on a predetermined list of green products. (See BioRes, [28 January 2014](#)).

At that time, the group said that they would use a list of environmental goods agreed by the 21-member Asia-Pacific Economic Cooperation (APEC) as a starting point for their discussions, while pledging to negotiate a "future orientated agreement." In 2012, APEC members committed to reduce tariffs on green products contained within 54 broad tariff sub-headings to five percent or less by the end of 2015, although the arrangement is non-binding.

The "Davos group" includes prominent importers and exporters of such products, including the US, EU, China, and most recently Australia, who have engaged in a series of trade spats over certain renewables markets. Canada, Costa Rica, Hong Kong, Japan, Korea, New Zealand, Norway, Singapore, Switzerland, and Chinese Taipei were also among those on the Davos rostrum. According to US data, current participants account for 86 percent of global environmental goods trade, which had a total worth of nearly US\$955 billion in 2012.

"We are convinced that one of the most concrete, immediate contributions that the WTO and its Members can make to protect our planet is to seek agreement to eliminate tariffs for goods that we all need to protect our environment and address climate change," the [Davos statement](#) read.

The group has said they will aim to extend the deal to other WTO members as a most-favoured-nation (MFN) style pact, which would take effect once an agreed-upon critical mass of members participate. Observers have speculated this number could be 90 percent, following the model set by the WTO's Information Technology Agreement (ITA), an existent plurilateral tariff cutting arrangement. However, the actual critical mass threshold for the green goods deal is something that will need to be hashed out in the negotiations.

## Getting the green light to talk

In early May, EU ministers meeting in the bloc's foreign affairs council adopted negotiating directives to proceed with the green goods trade talks. "The Council looks forward to the rapid start of the negotiations as the first step in a process towards a multilateral outcome," a [statement](#) read.

Framing the talks in the context of the WTO Doha Ministerial Declaration, which launched the trade body's latest round of talks, specific reference was made to paragraph 31 (iii). That text committed WTO members to negotiate "the reduction of, as appropriate, elimination of tariff and non-tariff barriers to environmental goods and services." However, discussions in this area at the multilateral level stalled over the past decade, as divisions emerged around which goods to put forward for liberalisation and what approach to adopt. The WTO has compiled an account of the various member submissions of preferred goods to liberalise over the years, with a range of around 411 products (TN/TE/19).

Although the Davos group aims to build on the APEC 54 list, questions remain as to whether participants will be ambitious and liberalise trade at the Harmonized System (HS) 6-digit level – a World Customs Organization classification – or pick and choose more specific products from within these categories. This may also affect discussions on how the critical mass threshold will be set.

Some environmental non-government groups have been critical of the list approach, suggesting that certain goods included on the APEC list, for example, are not that climate friendly, while others could have adverse impacts.

The EU's conclusions recall two other historically thorny areas. The Doha mandate includes both environmental goods and services, but clarity on how to foster synergies between these two aspects has often remained aloof. Experts have speculated as to whether the environmental services will be dealt with under another plurilateral currently under negotiation between a different group of WTO members – although the participants overlap – known as the Trade in Services Agreement (TISA). Other analysts have stressed the importance of tackling non-tariff barriers.

As part of its preparations for addressing these challenges in the talks, Brussels recently launched an online public consultation process, soliciting input from all stakeholders. Other participants have done likewise. For example, Canada called for comments on its preliminary list, while Australia invited submissions particularly seeking advice on what additional products might be also be included in the agreement.

### **US green goods investigations**

Another key player in the talks, the US, is also well underway with domestic procedures undertaken prior to commencing negotiations. As part of these processes, US Trade Representative (USTR) Mike Froman formally notified Congress on 21 March of its intention to negotiate a plurilateral environmental goods tariff liberalisation deal, signalling that talks would begin on the new agreement at least 90 days after its transmittal.

While the US executive branch has the authority to strike international trade deals, implementation bills are required from Congress. The modalities of consultation are still governed by the former Trade Promotion Authority (TPA) mechanism despite its expiry in 2007, with the approval of an updated version currently proving to be a sticking point in US domestic politics, particularly in light of November's mid-term elections.

March's notification stressed that USTR would intensify consultations with both Congress as well as a wide range of stakeholders. In April, Froman requested that the US International Trade Commission (USITC) provide advice on the probable economic effect of offering duty-free treatment on imports on a pre-defined list of environmental goods. A second investigation was also called for on assessing the scope of US trade in the products included on the list, as well as tariff rates for these in key markets, and the estimated value of US imports and exports on the list. USITC has indicated it will deliver the first assessment on 4 August, while the latter will be released on 6 October.

For its part USITC, a nonpartisan fact-finding federal agency, has solicited input from stakeholders in the form of written submissions for both investigations and through a public hearing for the first, held on 14 May. Comments have been put forward from a number of interested parties both critical and supportive of the agreement in general, as well as offering specific feedback on certain goods ranging from lead-acid batteries to water filtering apparatus, and energy efficiency related technology. ICTSD, the publisher of BioRes, submitted a statement among other things recommending ways to identify and prioritise the most important climate friendly goods for liberalisation.

USTR also invited comment at a public hearing held at the beginning of June, where witnesses recommended the inclusion of a wide range of products. The green goods trade talks are now expected to take off over the summer.

CLIMATE CHANGE

# Obama announces plans to slash carbon emissions from existing power plants

*The US executive branch has unveiled plans to cut emissions on the country's power plants. The move may prove controversial in heated election year, while potentially boding well for international climate talks.*

The Obama Administration released plans in early June to slash carbon dioxide emissions by an average of 30 percent from 2005 levels by 2030 on all existing American power plants, in what has been touted as one of the most far-reaching moves ever made by the US executive branch to tackle the threat of climate change. "This plan cuts carbon pollution by building a clean energy economy – using more clean energy, less dirty energy, and wasting less energy throughout our economy," said US President Barack Obama, presaging the announcement in his [weekly address](#).

The initiative was formally unveiled by the Environmental Protection Agency (EPA), the federal agency with a mission to protect human health and the environment. Known officially as the "Clean Power Plan," the proposal would allow each state flexibility in planning and meeting specific targets. States could use a range of policy options, such as energy efficiency improvements, increasing the use of renewables, establishing state and regional-level carbon cap-and-trade systems, or using more natural gas.

Unlike other greenhouse gases, such as nitrogen oxides and sulphur dioxide, there are currently no national limits on carbon pollution levels. According to the EPA, power plants are the US' largest source of carbon pollution and are responsible for around one-third of the country's greenhouse gas emissions overall, which have been blamed for accelerating man-made climate change. Data from the Energy Department indicated that coal, the most carbon-intensive fossil fuel, provided 39 percent of the country's power mix last year.

"We don't have to choose between a healthy economy and a healthy environment – our action will sharpen America's competitive edge, spur innovation, and create jobs," said EPA chief Gina McCarthy, also placing an emphasis on the domestic socio-economic benefits.

The EPA estimates that the plan could result in climate and health benefits worth between an estimated US\$55 billion to US\$93 billion by 2030. Earlier this year, a US assessment confirmed the wider damage wrought by global climate change. That report echoed a climate study trilogy by UN-led climate scientists, who said there was a 95 percent probability that climate change is primarily influenced by human activity. (See [BioRes 2 April 2014](#)).

The latest news forms a long-awaited and central piece of Obama's promised efforts to tackle climate change. After years of wrangling with Congress in an unsuccessful attempt to pass national cap-and-trade legislation, the US President pledged early in his second term that he would do whatever necessary – even if it meant bypassing lawmakers – to address the subject before leaving office. In his "climate action plan" announced a year ago, Obama explained that he would use executive actions to rein in carbon emissions from new and existing power plants and boost renewables capacity, with further details to be outlined at a later date. A few months later, the EPA released draft regulations aimed at capping carbon emissions from new power plants, which were swiftly beset by legal challenges from its opponents – a result that many analysts already expect for these new rules. These executive actions have not just been limited to carbon pollution. Earlier this year, Obama confirmed an initiative aimed specifically at cutting methane emissions – another potent greenhouse gas.

### **Damage to economic competitiveness feared**

As expected by analysts ahead of the release, the news received cold welcome from certain lawmakers, particularly those from traditional coal states. Some experts have said the climate topic could be a key factor in the November's mid-term elections, pointing to a series of high-profile media campaigns. The entire House of Representatives – currently dominated by Republicans – and one-third of the Senate will go up for election this year. Republicans are already expected to keep their hold on the House in November, and are particularly eyeing the Senate, in the hopes that they can win enough seats to erode – or even eliminate – the slim Democratic majority in that chamber. Four of the Senate swing seats are among the top 10 coal producers nationally, according to Reuters.

"The president's plan is nuts, there's really no more succinct way to describe it. Americans are still asking 'where are the jobs' and here he is proposing rules to ship jobs overseas for years to come," said Speaker of the House John Boehner in response to the news. Boehner, a Republican from the state of Ohio, referred specifically to some politicians' fear of "carbon leakage," whereby jobs are lost to less climate-stringent countries.

Select industry, energy, and business groups also struck out at the proposal. "Today's regulations issued by EPA add immense cost and regulatory burdens on America's job creators. They will have a profound effect on the economy, on businesses, and on families," said Thomas J. Donohue, President of the US Chamber of Commerce. More positive words were offered by certain environmental groups. "The EPA's proposal to limit carbon pollution from power plants for the first time ever is a giant leap forward in protecting the health of all Americans and future generations," said Frances Beinecke, president of the Natural Resources Defense Council, a green non-profit.

The plan will now be open to comment for 120 days following publication in the Federal Register. The EPA has indicated it will hold four public hearings around the proposal during the last week of July. The input received will be used to inform the final standards, set to be issued in June of next year.

### **Global climate playing field**

The US announcement and subsequent outcome will be closely watched by the international community, particularly given that countries are gearing up to negotiate a universal climate deal ahead of an end-2015 deadline. The UN's annual preparatory climate talks are currently underway in Bonn, Germany, with this year's Convention of the Parties (COP) scheduled for December in the Peruvian capital of Lima. If a binding emissions cutting deal is indeed achieved at the 2015 COP in Paris, France, the result would likely have significant impact on global trade and investment flows. Christiana Figueres, head of the UN Framework Convention on Climate Change (UNFCCC) Secretariat, the body charged with helping economies tackle climate change at the global level, said the Obama Administration's move was a "good signal ... that one of the world's biggest emitters is taking the future of the planet and its people seriously."

A sticking point in the tough UN climate talks has been the distinction between countries with historical emissions responsibility, such as the US, and nations like China that have experienced a rapid surge in emissions in recent years. Following hot on the heels of the US announcement, however, a top Chinese government advisor signalled the world's largest greenhouse gas emitter would likely set a limit on its own absolute emissions by the end of the decade, rather than continuing to peg cuts according to its economic growth. Critics have nevertheless cautioned that this is not yet a concrete or precise offering in terms of the size of the cuts. Nonetheless, another positive step followed on the same day as Beijing also formally deposited its acceptance of the Doha Amendment of the Kyoto Protocol – the current international climate regime.

Some analysts expect that brokering a deal acceptable to both the US and China will be the linchpin of the talks. Positive signs of cooperation between these leading emitters have become manifest more recently. Beijing and Washington pledged in February to increase bilateral cooperation on addressing the effects of climate change.

#### **ICTSD reporting**

Additional sources,  
HUFFINGTON POST, THE  
NEW YORK TIMES, REUTERS,  
BLOOMBERG, THE GUARDIAN

POST-2015 DEVELOPMENT AGENDA

# UN group chairs unveil zero draft for sustainable development goals

*The formulation of a proposed set of sustainable development goals moved a step closer in June following the release of a zero draft for consideration by a designated UN group.*

A UN group tasked with formulating a proposed set of sustainable development goals (SDGs) will for the first time consider a zero draft of a possible text at their next meeting later this month, officials confirmed earlier this week.

The co-chairs of the Open Working Group on Sustainable Development Goals (OWG) – as the body is formally known – circulated the 21-page text on Monday 2 June, which now offers 17 suggested goals, following the separation of poverty and inequality into separate headlines. The co-chairs had foreshadowed this move at the close of the group's previous session in May, shortly after which they also released a draft introduction for the framework. (See BioRes, [15 May 2014](#))

Ahead of the expected release, it was not clear whether the co-chairs felt they had the mandate to produce a zero draft for line-by-line negotiations. Since the end of the earlier "stock-taking" phase in February, input for the group's meetings had been framed as working documents. (See BioRes, [11 March 2014](#)).

In an accompanying letter circulated to UN members, the co-chairs reminded delegations that the group's next week-long session would be preceded by three days of informal meetings from 9-11 June. While these gatherings will not pre-empt the official work, OWG participants have been urged to use this as an opportunity to take stock of the proposed goals, their targets, and means of implementation.

"As stated at OWG11, we would strongly request that delegations move directly into focused consideration of the proposed goals and targets contained in the zero draft in order to make progress towards a successful and timely conclusion of the report for onward submission to the General Assembly for appropriate action," the co-chairs' letter read.

The SDG effort – a direct result of a UN Conference on Sustainable Development (Rio+20) held in June 2012 – is part of a broader process to develop a post-2015 development agenda that would replace the current eight headline Millennium Development Goals once they expire next year.

Work in the OWG has been ongoing for over a year. Seats in the group are often shared between "troikas" of like-minded states, and broadly represent the five UN regional country groupings. The working group should produce a set of SDG recommendations by July, to be considered by the UN General Assembly this autumn.

## **Compromise structure for means of implementation**

The means to achieve development goals and targets has historically proved contentious in multilateral discussions of this type. Such divisions emerged noticeably at the group's April meet, with members split over whether to include relevant "means of implementation" (Mol) under each individual goal, separately as its own goal, or both.

The zero draft appears to make a bid for the middle ground. Although Mol are included as the final goal, this is made up of several subsections detailing options for each of the previous goals.



"What they have done is to show how particular Mol would fit under each goal. This enables there to be an agreement either to leave it as a separate goal or put them under the relevant goal at a later stage," said Felix Dodds, former executive Director of the Stakeholder Forum for a Sustainable Future (1992-2012).

### **Trade features across Mols**

In the previous version of the working document, trade featured as a sub-section within the "means of implementation" goal. In this version, trade-related targets are now posited as potential "means of implementation" for several of the proposed development goals.

The target of "timely implementation of duty-free quota-free [DFQF] market access... in accordance with WTO decisions and the Istanbul Programme of Action" is listed as one measure that would support progress towards the central target of poverty eradication.

DFQF was also included in previous working document iterations. Talks on the issue have struggled to advance at the WTO since a ministerial decision in 2005 to implement substantially increased DFQF market access for goods from least developed countries (LDCs), although ministerial decisions last December urged a renewal of efforts in this area. (See BioRes, [25 April 2014](#)).

Several trade-related targets appear as possible means of implementation for the goal of promoting strong, inclusive, and sustainable economic growth and decent work for all. This includes, for example, complying with the mandate for agriculture, services and non-agricultural products in the WTO Doha Round – the global trade body's latest series of talks.

The same Mol subcategory also mentions the implementation of the outcomes of the WTO Bali Ministerial Declaration. At the Bali December meet, trade ministers from the 159-member body formally agreed a multilateral deal on trade facilitation, along with a few items involving agriculture and development.

The subcategory for "sustainable growth implementation means" continues by mentioning increasing trade-related capacity building to assist development and Aid for Trade initiatives – a WTO-led financial assistance framework reaffirmed at the body's ninth ministerial meeting in December 2013.

Improving market access for agricultural, fisheries, and industrial exports from developing countries, African economies, and the world's poorest nations in order to increase their share of global exports is also included as a Mol to support progress towards the goal of sustainable economic growth and decent work. In a departure from the text for the May meeting, however, the zero draft has replaced the target of doubling LDC exports as a share of the global total by 2020 with the objective of simply "increasing" their share of exports in world markets.

Encouraging the full use of Trade-Related Aspects of Intellectual Property Rights (TRIPS) flexibilities is a new addition by the zero draft, now mentioned in two subcategories of Mol, supporting the goals of "attain healthy life for all at all ages" and "promote sustainable industrialization," the latter in the context of clean energy technology diffusion. A key text in the 1994 Uruguay Round documents establishing the WTO, the TRIPS Agreement brought intellectual property rules into the multilateral trading system for the first time.

Removing agricultural export subsidies – a polarising topic in trade negotiations – is placed as a Mol under the category for ending hunger, achieving food security and adequate nutrition for all, and promoting sustainable agriculture. The draft text calls for a reduction in distortions to international trade, including phasing out agricultural export subsidies. Reference is made to the WTO 2005 Hong Kong ministerial, where members agreed to the elimination of such trade support, with longer compliance timelines for developing economies.

### **Oceans goal intact**

Other forms of subsidies are also addressed as targets within other goals themselves. The proposed marine resources and oceans goal includes a target of eliminating subsidies that contribute to overcapacity and overfishing by 2020, and for the first time includes the idea of a standstill under which countries would refrain from introducing new subsidies of this kind. The target does, however, include language aimed at accounting for the special needs of poor countries and small island developing states (SIDS).

Dubbed 21st century issues, observers had feared that separate oceans and terrestrial ecosystems headlines would be assimilated into one goal as the proceedings moved forward. Although previous OWG sessions had seen some governments advocate for a stand-alone oceans goal, discussion around prioritising in both these areas has reportedly proved complex. Notably, no means of implementation are suggested at the end of the document for the ecosystems goal.

### **Climate and energy**

Elsewhere, phasing out inefficient fossil fuel subsidies by 2030 remains a target under the goal of affordable and sustainable energy services for all, together with doubling of the share of renewables in the global energy mix. As with the fisheries subsidies language, however, the target of reduction of fossil fuel subsidies is now somewhat more nuanced, and includes the development of “solutions that aim to secure affordable energy for the poorest.”

The renewable energy targets reflect UN Secretary General Ban Ki-moon's Sustainable Energy for All (SE4ALL) initiative, launched in 2011. Some critics have suggested that this figure will not be enough to achieve an energy mix that avoids further climate damage.

For its part, the proposed climate goal includes two phrases: “promote actions at all levels to address climate change,” as well as “build a climate change goal based on the outcome of COP21 of the UNFCCC,” referring to a process under the UN Framework Convention on Climate Change (UNFCCC). Countries are currently in the process of tough negotiations towards a universal climate deal to be concluded by next year's 21st Conference of the Parties (COP) in Paris, with a round of preparatory meetings currently taking place in Bonn, Germany.

### **Next steps**

As the clock ticks down on the expiry of the MDGs, observers and governments alike are increasingly looking for guidance on how the SDG and post-2015 process will move forward and come together as a coherent whole. Some suggest guidance may come from a synthesis report produced by the UN Secretary-General towards the end of 2014.

OWG participants will convene for their next formal session from 16-20 June. With only 10 working days left on the group's schedule, the pressure is on to produce a concise, action-oriented document required by the Rio+20 mandate. Analysts suggest that this next meeting will be particularly important in this respect.

# The newroom

Be sure to visit [ictsd.org/news/biores](http://ictsd.org/news/biores) regularly for breaking trade and environment news

## WTO Appellate Body rules on EU seal ban

The WTO Appellate Body has found that the EU's ban on imported seal products is justified under the right to protect public morals, specifically on the grounds of protecting animal welfare.

However, the global trade arbiter also the ban is discriminatory in the way it is applied, particularly with respect to certain exemptions, and should be modified in order to fully comply with global trade rules. Public statements from both sides involved the case appeared to claim partial victory upon hearing the outcome.

The dispute (DS400, DS401) is one of the most polarising and complex in the WTO's recent history and marks the first time that the Appellate Body has accepted "animal welfare" as moral grounds for justifying a country's violation of the global trade body's "most favoured nation" principle.

The measure at the heart of the case is a 2009 European Commission (EC) regulation and related measures, known together as the EU Seal Regime, which bans the sale of seal products in all EU member states, subject to certain exceptions. The ban specifically targets commercial sealing operations, such as those in Canada and Norway – the two complainants in the WTO case. These commercial sealing operations, the regulation's proponents have argued, are "inherently cruel" and "inhumane."

However, the regulation does allow the sale of seal products in the EU market in three exceptional circumstances: products derived from hunts carried out by indigenous peoples (IC), products from hunts that were conducted for the sustainable management of marine resources (MRM), and products brought in by tourists.

WTO judges said that the EU had failed to show how the different treatment of seal products derived from IC hunts can be reconciled with the 28-nation bloc's objective of addressing public moral concerns regarding seal welfare.

Last November, a dispute panel had found that while the ban does restrict international trade, the measures does fall within a carve-out for acceptable restrictions under the WTO's General Agreement on Tariffs and Trade (GATT 1994). The original panel therefore agreed with the EU that the prohibition was necessary for the protection of public morals.

## Green climate fund opens for business

The 24-member board of the UN's flagship Green Climate Fund (GCF) reached an agreement in May on eight "essential requirements" needed to kick-start an international climate finance mobilisation, management, and disbursement process.

Meeting over four days in the South Korean city of Songdo, board members took decisions on various operational building blocks such as the GCF's structure, rules governing its financial risk management and investment frameworks, and the procedures for accrediting bodies that will eventually implement projects in target countries.

Established at an international climate meet in Cancun, Mexico in 2010, the GCF is geared toward helping developed countries meet a 2009 pledge to set aside US\$100 billion per year by 2020, using a mixture of public and private finance. The GCF has been pitted as a key element in reaching an international climate deal on schedule next year in Paris.

## US confirms new duties on Chinese solar products

The US Commerce Department announced on Tuesday that it would be imposing preliminary countervailing duties on imports of certain Chinese crystalline silicon photovoltaic products – including solar cells, modules, laminates, and/or panels. The anti-subsidy duties are significantly higher than those confirmed in a separate probe two years ago and cover an expanded scope of products, including those partly manufactured in Taiwan.

The investigations were launched by the US government agency in January, in response to a complaint filed by SolarWorld Industries America, the US' largest solar panel manufacturer.

The company had alleged that Chinese producers – following the previous imposition of anti-dumping and countervailing duties in 2012 – had gotten around paying said duties by commissioning part or all of the production of these solar cells in Taiwan, and then using such cells to then assemble solar panels back in China.

## Allowance surplus grows in EU carbon market

Data released in May showed that the cumulative surplus in greenhouse gas (GHG) emission allowances in the EU's Emissions Trading System (ETS) last year increased to over 2.1 billion tonnes of carbon dioxide equivalent (CO<sub>2</sub>e), up from two billion tonnes in 2012.

EU climate commissioner Connie Hedegaard warned that the growing surplus "risks undermining the orderly functioning of the carbon market." In January, the bloc approved a back-loading measure to address the surplus for the short-term. The Commission has also proposed a market stability reserve mechanism to automatically adjust the supply of carbon credits from 2021.

The news came shortly before analysis presented by the European Alliance for Energy Efficiency in Buildings (EuroAce) showed that the EU had increased its reliance on fossil fuel imports as part of its energy mix in recent years.

Fossil fuel imports grew from 43 percent of the bloc's energy use in 1995 to 54 percent in 2011. One third of these are supplied by Russia. Analysts have called for a scaling up of the bloc's energy efficiency ambitions.

## Call for action on the blue economy at AfDB meet

The annual meeting of the African Development Bank (AfDB) in May saw a session addressing the various challenges presenting oceanic resources, among other topics. These were identified as climate change, sustainable supply chains, over-fishing, and toxic waste.

While tackling these issues, ministers stressed the importance of building infrastructure and capacity to maximise the continent's blue economies. According to ADB President Donald Kaberuka, the revenue countries earn from fishing in African waters "is more than the money they send to Africa through development aid."

Efforts to develop regional cooperation in ensuring the development of a blue economy were also emphasised. Ministers said that work should be undertaken to ensure that the benefits were not just enjoyed by coastal countries, but spread to neighbouring landlocked economies.

The week-long meeting also saw the release of the annual African Outlook Report, which this year included a strong message on the need for the continent to participate in value chains as a way to sustain growth.

## India announces duties on solar imports

India's Finance Ministry in May announced new anti-dumping duties on imported solar equipment after an investigation found evidence of alleged dumping and material injury. According to Reuters, the new duties are set between 11 and 81 US cents per watt for solar cell and panel imports from the United States, Malaysia, and China

The decision came just before Narendra Modi took office as the country's new prime minister. Modi's incoming government has pledged to develop the India's solar capacity enough over the next five years so that each household will be able to run at least one light bulb using such power. Recent data indicates that approximately one-third of the population still lack access to electricity.

Analysts predict that the move will not sit well with India's trade partners. The US has already filed two solar trade complaints against India at the WTO in relation to Delhi's Jawaharlal Nehru National Solar Mission (NSM). A dispute settlement panel was established at the end of May to examine the separate but related cases involving certain domestic content requirements for solar cells and modules under Phases I and II of the programme.

## EU launches biodiversity protection initiative

On occasion of the International Day for Biological Diversity - Thursday 22 May - the European Commission unveiled a new initiative designed to tackle biodiversity loss and address poverty in developing countries. Funding for the EU Biodiversity for Life (B4Life) scheme will be channelled from the bloc's Global Public Goods and Challenge programme, regional and national development funds, to the tune of €800 million for 2014-2020.

The scheme targets the world's poorest countries, as well as developing countries with "biodiversity hotspots," namely where there is both much to be gained and much to be lost vis-à-vis ecosystems. Three major priority areas include promoting good governance of natural resources, securing healthy ecosystems for food security, and developing nature-based solutions towards a green economy. The announcement also detailed a special unit dedicated to combating illegal trade of endangered species

While welcoming the EU's contribution to global conservation efforts, some environmental groups warned that more effort was required to implement nature legislation in the bloc.

# Publications and resources



## ICCWC Web-Portal – CITES, WCO, UNODC INTERPOL, World Bank – 2014

The International Consortium on Combating Wildlife Crime (ICCWC) has launched a new web portal to improve information-access and support capacity building. The ICCWC is a collaborative effort by five inter-governmental organisations. Targeting national wildlife law enforcement agencies and the sub-regional and regional networks, the portal offers information on relevant tools available in order to address poaching, as well as illicit trade in wildlife and forest products.

The web-portal can be accessed at <http://bit.ly/1sRpgWM>



## Artisanal and Small-Scale Mining – IIED – February 2014

This brief gives an overview of the Institute for Environment and Development's (IIED) work on artisanal and small-scale mining. IIED is running a five-year knowledge program aimed at generating the know-how, skills, tools, advocacy, and networks needed to improve policy and practice for the world's artisanal and small scale miners to create a policy environment that supports more secure livelihoods for miners, promoting collaboration within the sector, and tackling social and environmental challenges.

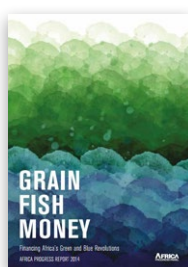
The brief can be found at <http://bit.ly/RscxeW>



## World We Want 2015 Trends – World We Want – May 2014

This data visualisation tool, launched by the World We Want 2015 Policy and Strategy Group, aims to provide an overview of the ongoing global conversation and related data in the post-2015 development agenda and sustainable development goals (SDGs). The tool, co-owned and designed by civil society and the UN, allows users to browse the consultations that have taken place so far in the process and explore connections between thematic issues.

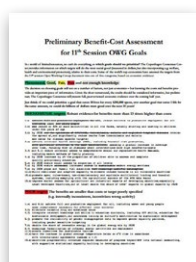
The tool can be accessed at <http://bit.ly/1lMKOOr>



## Grain, Fish, Money: Financing Africa's Green and Blue Revolutions – Africa Progress Panel – May 2014

This year's African Progress Report, published by Kofi Annan's think tank the Africa Progress Panel, spotlights illegal trade in forest and fisheries commodities. Tackling this illicit trade will require concerted efforts from the multilateral system, the report says. A focus on scaling up the continent's farming capacity and addressing trade barriers in this area is also included. The panel concludes with recommendations on ways to mitigate further damage.

The report can be found at <http://bit.ly/1k4Eg0x>



## Preliminary Benefit-Cost Assessment for 11th Session OWG Goals – Copenhagen Consensus Center – May 2014

This preliminary assessment by the Copenhagen Consensus Center is an evaluation of the targets included in the working document for the 11th session of the UN Open Work Group on sustainable development goals (OWG). The targets have been assessed based on interviews with 16 top global economics and were accordingly grouped into five categories of benefit relative to cost, ranging from "phenomenal," to "uncertain."

This preliminary assessment can be found at <http://bit.ly/1gqYhPW>





### **Carbon Cost Supply Curves: Evaluating Financial Risk to Oil Capital Expenditures – CTI – May 2014**

The Carbon Tracker Initiative (CTI) has released the first in a series of reports identifying risky and cost-ineffective projects in the oil, gas, and coal sectors, translating climate science into the language of financial markets. The report provides resources to improve investor understanding of financial risk under different demand, price, and emissions scenarios; and, using a carbon supply cost curve, evaluate how well companies will be able to adapt to a low-carbon future.

The executive summary of the report can be found at <http://bit.ly/1grGR5B>



### **Mitigating Climate Change in the Tea Sector – ITC – May 2014**

This training manual, developed by the International Trade Centre (ITC) with Ethical Tea Partnership, Rainforest Alliance and FLO-Cert, provides steps and resources to support the tea sector lowering greenhouse gas emissions and reducing energy costs. The manual is divided into three main parts aimed at tea factory management, tea farmers, and advice on the measurement of carbon footprint of tea production. The manual was piloted in Chinga tea factory in Kenya's Central Province.

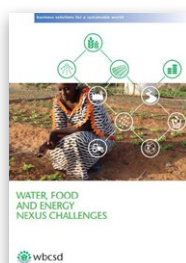
The training manual can be found at <http://bit.ly/1jm7zaq>



### **Indicators for Sustainable Development Goals – SDSN – May 2014**

This working draft, which will be periodically revised, outlines a possible indicator framework to accompany sustainable development goals (SDGs) and targets. Developed by the Sustainable Development Solutions Network (SDSN), the draft and process seeks to help inform discussions on the gaps that need to be filled by September 2015 to enable an effective SDG monitoring and management framework.

The working draft can be found at <http://bit.ly/1h4qXhX>



### **Water, Food and Energy Nexus Challenge – WBCSD – May 2014**

This report launched by the World Business Council for Sustainable Development (WBCSD) explores the linkages between water, food and energy. This paper aims to provide an overview of the main challenges associated with increasing demand for agricultural products as a result of population growth and changing consumption patterns. The authors also examine the impact of climate change on agriculture, energy requirements in agriculture, as well as future impacts on markets. The report is based on existing data sets and recent relevant publications.

The report can be accessed at <http://bit.ly/1hpKZhq>



### **Sustainable Consumption and Production (SCP) Targets and Indicators – IISD, UNEP – May 2014**

This International Institute for Sustainable Development (IISD) has published a discussion paper for the UN Environment Programme (UNEP) reviewing the recommendations of other researchers regarding targets and indicators on sustainable consumption and production (SCP), and outlines potential targets and indicators for SCP in the sustainable development goals (SDGs). The authors highlight the need for the SDGs to be relevant to both developed and developing countries, allow flexibility, and address both the consumption and production sides of sustainability.

The paper can be found at <http://bit.ly/1k8s7TS>

EXPLORE THE TRADE AND SUSTAINABLE DEVELOPMENT  
WORLD FURTHER WITH ICTSD'S BRIDGES NETWORK

## BRIDGES

Trade news from a sustainable development perspective  
*International focus - English language*  
[www.ictsd.org/news/bridges](http://www.ictsd.org/news/bridges)

## BIORES

Analysis and news on trade and environment  
*International focus - English language*  
[www.ictsd.org/news/biores](http://www.ictsd.org/news/biores)

## BRIDGES AFRICA

Analysis and news on trade and sustainable development  
*Africa focus - English language*  
[www.ictsd.org/news/bridges-africa](http://www.ictsd.org/news/bridges-africa)

## PUENTES

Analysis and news on trade and sustainable development  
*Latin America and Caribbean focus - Spanish language*  
[www.ictsd.org/news/puentes](http://www.ictsd.org/news/puentes)

## МОСТЫ

Analysis and news on trade and sustainable development  
*CIS focus - Russian language*  
[www.ictsd.org/news/bridgesrussian](http://www.ictsd.org/news/bridgesrussian)

## PONTES

Analysis and news on trade and sustainable development  
*International focus - Portuguese language*  
[www.ictsd.org/news/pontes](http://www.ictsd.org/news/pontes)

## 桥

Analysis and news on trade and sustainable development  
*International focus - Chinese language*  
[www.ictsd.org/news/qiao](http://www.ictsd.org/news/qiao)

## PASSERELLES

Analysis and news on trade and sustainable development  
*Francophone Africa focus - French language*  
[www.ictsd.org/news/passerelles](http://www.ictsd.org/news/passerelles)



### International Centre for Trade and Sustainable Development

Chemin de Balexert 7-9  
1219 Geneva, Switzerland  
+41-22-917-8492  
[www.ictsd.org](http://www.ictsd.org)

BIORES is made possible through generous  
contributions of donors and partners  
including

**DFID - UK Department for International  
Development**

**SIDA - Swedish International  
Development Agency**

**DGIS - Ministry of Foreign Affairs  
Netherlands**

**Ministry of Foreign Affairs, Denmark**

**Ministry of Foreign Affairs, Finland**

**Ministry of Foreign Affairs, Norway**

BIORES also benefits from in-kind  
contributions from its contributing partners  
and Editorial Advisory Board members.

BIORES accepts paid advertising and  
sponsorships to help offset expenses and  
extend access to readers globally. Acceptance  
is at the discretion of editors.  
The opinions expressed in the signed  
contributions to BIORES are those of the  
authors and do not necessarily reflect the  
views of ICTSD.



This work is licensed under the Creative  
Commons Attribution-Noncommercial-  
NoDerivative Works 3.0 [License](https://creativecommons.org/licenses/by-nc-nd/3.0/).

Price: €10.00  
ISSN 1996-9198

