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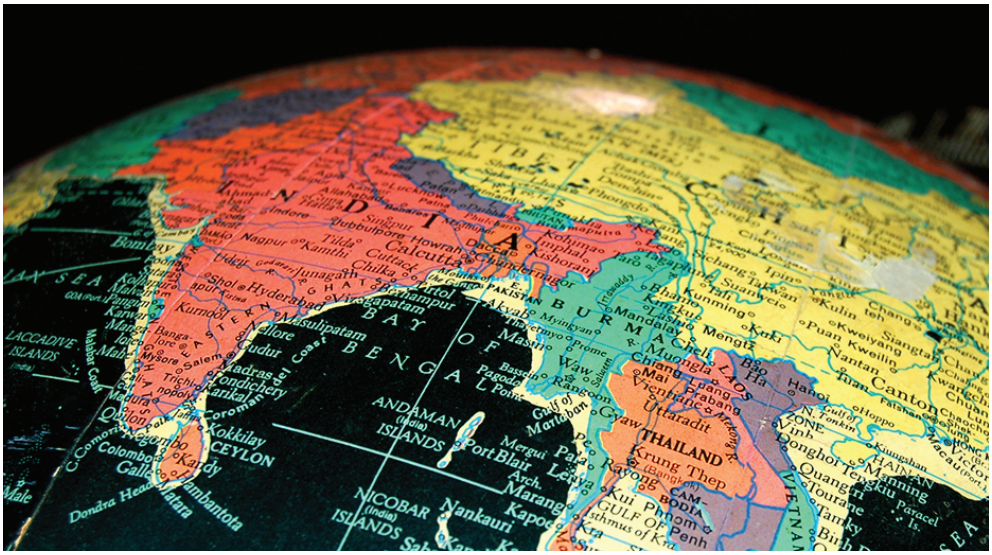
CEEW Policy Brief

Cutting Both Ways?

Climate, Trade and the Consistency of India's Domestic Policies

VYOMA JHA



ceew.in/publications

Thapar House
124, Janpath
New Delhi 110001
India

Tel: +91 11 41699270
Mob: +91 9717266277

info@ceew.in

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ABSTRACT

As the nature of climate talks veer towards a new bottom-up structure, there is an expectation of increased incidence of unilateral action on climate change mitigation by different countries. The surge in unilateral climate change mitigation measures around the world has led to a growing concern over the conflict between domestic climate policy and multilateral trade rules under the World Trade Organization regime. On one hand, there is the issue of unilateral trade measures that countries might adopt against other countries that are deemed to be not doing enough on climate change. As a pivotal player in international climate politics, India's announcement of a National Action Plan on Climate Change is a positive step forward in establishing a domestic climate policy. However, in the absence of a multilateral climate change agreement, India needs to be cautious that its domestic climate policy is not exposed to a challenge on grounds of inconsistency with or violation of multilateral trade rules. With the literature surrounding this issue focused largely at the regime level or from a developed country perspective, this policy brief advances an Indian position on the climate-trade debate. It attempts to analyse the twin dilemma that India's climate policy faces: vulnerability to climate-related trade measures in other countries or to challenges under international trade rules. The focus of this paper is to address the consistency of India's domestic policies with the climate and trade regimes, particularly to determine whether the Indian policies cut both ways: first, in order to protect itself from the threat of climate-motivated trade sanctions elsewhere and, secondly, to defend its domestic climate measures in the face of a WTO challenge.

POLICY IMPLICATIONS

- *Developing countries, under pressure to take more action on climate change, need clearer and more consistent rules in both the climate and trade regimes, so as not to be unfairly discriminated against.*
- *India's position with respect to climate-motivated trade measures such as border carbon adjustment measures and climate-related standards hinges primarily on the degree of "equivalence" or "comparability" of its domestic climate policies with those of other developed countries. Thus, the biggest policy decision will involve determination of the parameters of "equivalence" or "comparability" of various domestic climate regulatory programs around the world.*
- *Additionally, in order to defend its domestic climate policy from a possible WTO challenge, the main thrust of India's policies on domestic clean energy subsidies and regulatory measures needs to be oriented towards sustainable development rather than international competition. It must ensure that its policies do not get construed as 'a means of arbitrary or unjustifiable discrimination' or 'disguised restriction to international trade'.*
- *It is important that India maintains the fair and non-discriminatory nature of its domestic climate policies, which are essentially aimed towards achieving a low carbon economy.*

ABOUT THE AUTHOR

Ms Vyoma Jha, Research Associate

Vyoma is a Junior Research Associate at the Council on Energy, Environment and Water (CEEW). Her role involves providing research and legal analysis for CEEW's ongoing projects on: governance of climate finance, governance of geoengineering, integrated energy-environment-water policies, and climate change and business leadership. Her areas of interest include climate change law and policy, trade-investment-climate linkages, and sustainable global governance.

Previously, she was selected as the NYU International Finance and Development Fellow and worked at the International Institute for Sustainable Development (IISD) in Geneva. At IISD, she worked with the Investment and Sustainable Development Program on recent developments in international investment law and policy. She also contributed arbitration analyses and journalistic reports for Investment Treaty News, a quarterly journal published by IISD. In addition, she was involved in the management of the Fifth Annual Forum of Developing Country Investment Negotiators held in Kampala, Uganda from October 17-19, 2011.

In India, Vyoma has done a judicial clerkship at the Supreme Court of India with the Honorable Justice V.S. Sirpurkar, where she worked extensively on matters of constitutional law, environmental law, human rights, arbitration and judicial reforms. She has a varied work background with internships at The Energy and Resources Institute (TERI), an environmental policy and research organization in India; Economic Laws Practice, an international trade law firm; and the Competition Commission of India.

Vyoma holds an LL.M. in Environmental Law from New York University's School of Law. She graduated with a B.A. LL.B. (Hons.) degree from National Law University, Jodhpur (India) with a concentration in International Trade and Investment Laws. She is admitted to the Bar Council of Delhi, India. She is fluent in English and Hindi, and speaks French at an intermediate level

I. INTRODUCTION: ASSESSING THE CLIMATE CHANGE AND TRADE LINK

The failure of the international community to arrive at a binding multilateral climate agreement has led to a growing focus on unilateral domestic action on climate mitigation and adaptation. The surge in unilateral climate change mitigation measures around the world is raising serious concerns over the potential conflict between domestic climate change policies and multilateral trade rules under the World Trade Organization (hereinafter "WTO") regime.

As domestic climate change policies take a variety of forms such as regulatory, fiscal, procurement or price support policies, conflicts between domestic regulatory measures and WTO rules can arise due to the limits under the various WTO rules on unilateral measures taken by countries, which have an actual or potential impact on trade.[1]

The earliest recognition of this potential conflict between the climate change and trade regimes can be seen in Article 3.5 of the United Nations Framework Convention on Climate Change (hereinafter "UNFCCC"), which states that:

> The Parties should cooperate to promote a supportive and open international economic system that would lead to sustainable economic growth and development in all Parties, particularly developing country Parties, thus enabling them better to address the problems of climate change. *Measures taken to combat climate change, including unilateral ones, should not constitute a means of arbitrary or unjustifiable discrimination or a disguised restriction on international trade* [emphasis added].

Further, Article 2.3 of the Kyoto Protocol states that the parties "[s]hall strive to implement policies and measures… in such a way as to minimize adverse effects… including… effects on international trade".

A major concern evoked by the intersection of climate change and trade is the threat of governments resorting to protectionism on account of the high potential costs of implementing climate change policies. Climate policies can significantly affect economic competitiveness between countries that undertake climate efforts and those that do not. Due to increased mitigation costs in countries that take significant action on climate change, the governments of those countries may seek to compensate for the costs of domestic climate action – either by imposing comparable costs on imported products or by reducing costs on exported products. Both these approaches have the potential to invite a WTO challenge.[2]

This paper sets out to analyse the potential WTO implications of two sets of domestic climate-related trade measures. First, developed country measures that address issues of competitiveness and leakage such as border carbon adjustments and carbon labelling that threaten imports from developing countries. Secondly, domestic climate subsidies and regulatory measures, including those adopted by developing countries, which could potentially pose a WTO challenge on account of giving preference to local players.

This issue entails serious ramifications for an emerging economy like India, which is already under pressure by developed countries to take significant strides in reducing its greenhouse gas emissions. While the announcement of India's National Action Plan on Climate Change (hereinafter "NAPCC") is a marked step forward in India's domestic climate policy, it needs to be cautious that in the

absence of an internationally agreed framework on climate change commitments its domestic climate mitigation measures are not exposed to a challenge on grounds of inconsistency with or violation of multilateral trade rules. By analysing India's climate policy and its compatibility with international trade rules, this paper attempts to ascertain how coherent the international trade and climate regimes are, and how much regulatory clarity is available to countries like India.

II. INDIA'S POSITION ON CLIMATE CHANGE

India's stand on climate change commitments can be summed up in the words of the former Minister of Environment and Forests, Jairam Ramesh, that India *"is not yet prepared to take on legal binding targets"* regarding its carbon emissions, *"but it does not mean that India is not ready to take on responsibilities"*.[3]

There is an existing viewpoint that India is being unfairly labelled a "major emitter" and given its unfinished development agenda, any constraints on India are premature.[4]However, with the NAPCC, India is demonstrating that the policy and action of pitting climate and development objectives against each other was uncalled for. The NAPCC outlines the various policies addressing climate mitigation and adaptation in India. It identifies eight core "national missions" that promote India's development agenda while yielding co-benefits for addressing climate change effectively. It aims at a "qualitative shift" towards greater environmental sustainability in India's development trajectory.[5]

One of the striking features of the NAPCC is its emphasis on the principle of equity in any global approach to tackle climate change. India is determined that its per capita greenhouse gas emissions "will at no point exceed that of developed countries even as [it] pursue [its] development objectives."[6]In the aftermath of the Copenhagen Accord, India went on to formally pledge that it would reduce the emissions intensity of its gross domestic product by 20%–25% from 2005 levels by 2020.[7] In addition to its policies driven by environmental concerns, India also views climate change issue as an opportunity to leverage its position of being 'a leading diplomatic player and a responsible global power'.[8]

As India continues to advance domestic climate change related regulatory measures and policies, it is crucial to articulate a domestic legal climate framework that can protect itself from climate-motivated trade sanctions. Additionally, it is also important to ensure that the promised domestic climate measures in India are not in violation of international trade rules, since a WTO challenge to India's domestic climate policy can be extremely damaging to the sustained efforts at putting forth the climate policy. In case of a trade dispute arising at the WTO due to the implementation of climate-related trade measures by a country, either developed or developing, there is a serious potential for the panel ordering that a country's climate legislation, which is in violation of WTO rules be dismantled.[9] Thus, India needs to develop a sound understanding of its national climate policies and their coherence and consistency with multilateral trade rules in order to be able to defend its position if slapped with a climate-motivated trade sanction or if faced with a WTO challenge.

III. INDIA'S TWIN CONCERNS: CLIMATE-RELATED TRADE MEASURES OR TRADE-CONSISTENT CLIMATE POLICY?

This section reviews two sets of climate-related trade measures, with the aim of

analysing India's climate policy and its vulnerability to climate-related trade measures elsewhere or to challenges under international trade rules. It substantiates the steps India is taking with regard to climate change, first in order to protect itself from the threat of climate-motivated trade sanctions in other countries and, secondly, to defend its climate policies in the face of a WTO challenge.

A. Border Carbon Adjustments and Carbon Labelling

The first set of climate-related trade measures derives its primary motivation from the fear of competition from countries that do not undertake similar climate mitigation costs.[10] Until now it has been the developed countries that have contemplated trade measures as a part of domestic climate policy in order to address issues of competitiveness, prevent leakage and induce developing countries to take climate action. Climate-related trade rules will remain contentious, since it is unlikely that developed countries, like the United States or the European Union, will agree to an outright prohibition on the use of trade measures, while, on the other hand, developing countries like China or India will not agree to rules that explicitly authorise climate-related trade measures and target them.[11]In the face of many developing countries now taking the initiative to announce significant new domestic climate policies, it is important that these issues be ironed out at the regime level if the objectives of either regime are to be realised fully through the various countries' trade and climate policies.

What legal or policy challenges might India mount against such climate-related trade measures? And would India be in a position to defend its initiatives on climate mitigation as being 'comparable' or 'similar' in impact in case of being slapped with climate-motivated trade sanctions by a developed country? First, we focus our analysis on "border carbon adjustment" (hereinafter "BCA") measures, particularly in proposed domestic climate policy of the United States and then on the issue of climate-related standards and labelling.

Background on "Border Carbon Adjustments"

Advanced by the developed countries BCA measures can take the form of being either a carbon tariff or a mandatory requirement for importers to hold emissions allowances.[12]In order to mount a WTO challenge against a BCA measure it will be important to assess how the BCA is designed. It is essential that a BCA must be designed to take into account all policies and measures of its trading partners that might have an impact on climate change. If for example, the United States introduces a national cap-and-trade system, then it is incumbent on them to decide what range of policies (such as renewable portfolio standards, energy efficiency targets, technology requirements and fiscal measures) undertaken by other countries could be considered to deliver an equivalent result. Other countries would argue that, even if a sovereign nation made these decisions, ideally the criteria to determine equivalent action at an international level must be negotiated internationally as well. Moreover, the design of the BCA must take into account the prevailing differences between individual producers. In case there is simply a national baseline of carbon intensity of production for all producers in a given sector, then it has the potential to unfairly penalise the highly efficient producers from countries where the average efficiency was lower. Such a step would involve a firm-by-firm or even a factory-by-factory calculation of embodied carbon, thereby complicating the implementation of the measures even further. Lastly, it has been noted that BCAs should be implemented as a unilateral measure only upon the failure of a concerted effort to gain multilateral agreement to address the

problems that the BCA would address.[13]

"Border Carbon Adjustments" and the WTO

For a developing country, "border carbon adjustment" measures still pose a big risk as different countries could choose different methods to calculate the carbon footprint leaving exporters with the burden of carrying out different calculations, which would in turn lead to increased costs, less predictability and potential trade barriers.[14]In addition to the method for calculation of the carbon footprint, the accreditation of the calculation process of GHG emissions will pose bigger worries for developing countries. Apart from the potentially high costs involved in calculating the greenhouse gas emissions from a production process, if the responsibility for accreditation is assigned to the exporting country, it could become a major trade constraint for developing countries where the certification infrastructure is still weak.[15] How a country will treat downstream products while considering "border carbon adjustment" measures is also a critical issue. Imposition of a carbon tariff on greenhouse gas-intensive basic products and not on downstream products can cause serious distortions in trade patterns and carbon leakage.[16]

Thus, depending on whether the measure discriminates between domestic and foreign producers of "like" products or between "like" products based on the country of production, one can bring a WTO challenge based on the national treatment or most-favoured nation principle respectively. Another crucial determination in this regard will be the "likeness" of products. Will a country treat cement produced with solar energy and cement produced using coal as "like" products? Or will a ream of paper produced in a country with no climate change policies be "like" a ream of paper from a country with a domestic climate change policy?[17] Assuming that the BCA fails the national treatment or most favoured nation test, it can still survive based on the exceptions under Articles XX (b) and (g), which provide a justification for such a breach if the measure is 'necessary to protect human, animal or plant life or health' or if it is 'relating to the conservation of exhaustible natural resources'.

The biggest policy decision that emerges from this discussion is the issue of preventing emissions leakage. The negotiating objectives contained in the U.S. policy requiring it to begin negotiations on multilateral leakage rules, coupled with India and China's proposals to ban unilateral trade measures on climate grounds, point to the direction of emissions leakage being a regular feature of international negotiations.[18]

The calculation of emissions takes a territorial approach under the UNFCCC and Kyoto Protocol, wherein the emissions released during the production of the goods are assigned to the country where the production takes place rather than the country where the goods are consumed. This approach is attacked by developing countries on the grounds that it unfairly allows developed countries to claim that they are reducing their emissions when they are 'simply sending them offshore'.[19] A recent study concludes that emissions from the production of traded goods and services have increased from 4.3 Gt CO_2 in 1990 (20% of global emissions) to 7.8 Gt CO_2in 2008 (26%). Moreover, the net emission transfers via international trade from developing to developed countries has increased from 0.4 Gt CO_2 in 1990 to 1.6 Gt CO_2 in 2008, exceeding the Kyoto Protocol emission reductions. Thus, cuts in carbon emissions in developed countries have been cancelled out *many times over* [emphasis added] by increase in imported goods from developing countries. Since developed countries have '*increased their consumption-based emissions faster than their territorial emissions*' [emphasis added], international trade is said to

play a significant role in explaining the differences in emissions across the countries.[20]

Developing countries view developed countries' efforts at punitive border carbon adjustments within their domestic climate legislations as a sign of weak faith, reinforcing fears that it is an attempt to shift the burden of their historical emissions on to the developing world.[21] However, this argument presents an interesting contradiction: rising emissions in developing countries (although, partly, due to shifting production locations and greater reliance on imports in rich countries) is also the reason why developed countries press for BCA measures. Though the developing country argument tries to question the skewed nature of carbon emissions around the world, it ends up reinforcing "border carbon adjustment" measures as a response to the perceived risk of carbon leakage.

Use of "Border Carbon Adjustment" Measures Across Countries

At the moment the European Union seems unlikely to implement a border carbon adjustment on account of practical difficulties with the implementation. Since each category of goods in the border adjustment scheme will require an average E.U. carbon content to be defined, the entire process appears to be a rather difficult affair.[22] That said, the European Union's inclusion of aviation in its Emissions Trading Scheme (hereinafter, "ETS") has elements of BCA measures. The European Union has extended its ETS to aviation and its application extends to all airlines that land in or depart from EU airports. India has characterised this move as a "unilateral trade measure" and threatened a WTO challenge. However, the E.U. argument about the scheme is that it advances the climate regime's objectives to stabilise greenhouse gases in the atmosphere. Its application to *all* carriers, except small and high growth carriers, is being considered by some as contrary to the basic premise of the climate regime – "common but differentiated responsibilities". The ETS, however, allows for an exception to airlines from those countries who have adopted 'equivalent measures' to reduce the climate impact of EU flights.[23] Thus, throwing open a debate over what measures in India's climate policy could qualify as 'equivalent measures' to the EU ETS in order to escape the "unilateral trade measure".

Australia, too, has made the assessment that a border carbon adjustment scheme will involve great difficulty in implementing transparent, simple, verifiable and effective border adjustments for imported goods. Moreover, it is acknowledged that border adjustment could attract a challenge on grounds of being protectionist, thus proving to be a costly proposition for a small economy like Australia's.[24]

The American Clean Energy and Security Act

A country that is seriously considering the inclusion of "border carbon adjustment" measures within its domestic climate policy is the United States. The American Clean Energy and Security Act (hereinafter ACESA), popularly known as the Waxman-Markey Bill, laid the groundwork for the consideration of "border carbon adjustment" measures in U.S. domestic climate policy. According to the Natural Resources Defense Council, ACESA had "[t]he major ingredients to generate millions of jobs, break our dependence on oil, and reduce the pollution that causes global warming".[25]Though, the Bill died in the U.S. Senate,[26] there is a strong likelihood that these measures would be present in any future climate legislation in the country.

With many states[27] now taking the lead on climate change policy, political pressure on the U.S. government to enact federal climate

change legislation is unlikely to subside. Given the fact that the Waxman-Markey bill was debated in the U.S. Congress after a series of proposed climate legislations, it could still serve as a template for future climate policy in the United States. It will be crucial, then, for India to be prepared against any proposed climate-related trade measures in the domestic climate policy of the United States. In this context, we will examine the specific climate-related trade provisions in ACESA and its implications for India.

The border adjustment measures have been specifically intended to prevent free-riding by "[i]nduc[ing] foreign countries, and, in particular, fast-growing developing countries, to take substantial action with respect to their greenhouse gas emissions consistent with the Bali Action Plan developed under the United Nations Framework Convention on Climate Change".[28] But, whether the ACESA border measures will be able to create sufficient leverage on any significant exporting country to undertake a comparable cap on greenhouse gases is questionable. For example, less than 1% of China's steel production (a carbon-intensive sector) is exported to the U.S., thus making it unlikely that a unilateral trade measure applied by the U.S. will create a strong incentive for the Chinese to apply regulations on their steel sector.[29]

At the outset a provision that might be worrying for India is Section 3 on 'international participation', which stated that the Administrator of the U.S. Environmental Protection Agency (hereinafter, "EPA") '[s]hall annually prepare and certify a report to the Congress regarding whether China and India have adopted greenhouse gas emissions standards *at least as strict* [emphasis added] as the standards required under this Act'.

A parallel can be drawn between this provision and the 'Super 301', which proved to be a major impediment during the TRIPS negotiations. Section 301 of the U.S. Trade Act of 1974, commonly referred to as 'Super 301', required the United States Trade Representative (USTR) to issue a report to identify priority foreign countries that practiced unfair trade and priority practices, which had the effect of restricting U.S. exports. The USTR would then initiate a Section 301 investigation against the priority countries to eliminate the practices that impeded U.S. exports.[30] The biggest reservation that developing countries had regarding 'Super 301' was that the United States could apply this section '[i]n order to threaten or retaliate with trade sanctions against countries on the basis of what they consider to be 'non-compliance with adequate standards of intellectual property.'[31]

This is a clear example of a unilateral measure that gave the USTR sweeping powers to pressure developing countries to fall in line and formulate policies that were favourable to the United States. Similarly, the 'international participation' provision of the Waxman-Markey bill with its unilateral focus on China and India, appears to be highly problematic as there are no clear guidelines on what measures adopted by China or India might be considered *'at least as strict'* as the required U.S. standards. Subjecting Indian domestic climate measures to trade sanctions in case of dissimilar mitigation costs will appear to be a clear violation of the principle of "common but differentiated responsibility" – a central tenet of the UNFCCC. Thus, considering India will be on a constant watch by the EPA, there is a need for greater understanding between the two countries regarding what domestic climate policies might be considered 'comparable' or 'equivalent' to U.S. standards.

International Reserve Allowance Program

The ACESA was premised on negotiating goals for the U.S. Administration whereby it would work proactively to establish binding agreements under the UNFCCC to ensure "equitable" efforts from all major GHG

emitting nations.[32] In case the negotiating objectives were not met January 2018, the President shall establish an International Reserve Allowance Program.[33] In essence, importers of products in "eligible sectors" would have been required to purchase "International Reserve Allowances" from the U.S. government at a level that "minimizes the likelihood of carbon leakage" as a result of differences between compliance costs in the U.S. and compliance costs (if any) in the exporting country.[34]

The International Reserve Allowance Program for importers contained the following exemptions from border adjustment: products from least developed countries; or countries responsible for a *de minimis*(less than 0.5%) level of global GHG emissions; or those with less than 5% of U.S. imports in the relevant sector.[35]

In order to ascertain India's exposure to "border carbon adjustments" measures, the important determination would be whether it qualifies for any of the exemptions? Since, India is unlikely to have qualified for the first two exemptions, Indian exports could have escaped the border adjustment measures if they were less than 5% of the total U.S. imports in that sector. This would involve a product-by-product or a sector-by-sector determination of the possible sectors where Indian exports can escape "border carbon adjustment" measures.

Additionally, imports originating from countries that meet one or more of the following criteria would be also be exempt from border adjustment:
"(1) The country is a party to an international agreement to which the U.S. is a party that includes a nationally enforceable and economy wide greenhouse gas emissions reduction commitment for that country that is *at least as stringent* [emphasis added] as that of the United States.
(2) The country is a party to a multilateral or bilateral emission reduction agreement for that sector to which the United States is a party.
(3) The country has an annual energy or greenhouse gas intensity . . . for the sector that is equal to or less than the energy or greenhouse gas intensity for such industrial sector in the United States in the most recent calendar year for which data are available."[36]

These are considered to be an indication of what the United States might consider "equitable contribution" from its major trading partners to reduce greenhouse gas (hereinafter GHG) emissions.[37]

From an Indian negotiating perspective, one of the nagging concerns is whether there is a need to establish a cap-and-trade regulation for carbon emissions in order for its policy to be "at least stringent as" the U.S. climate policy or will the existing policies be sufficient for that purpose. India can also look to advance the case for multilateral or bilateral sectoral emission reduction agreements in order to ensure that its most carbon-intensive export sectors do not suffer, but rather adapt and adjust to the agreed climate mitigation terms facilitating trade.

The Appellate Body in the *US-Shrimp* case was of the view that rigidity and inflexibility in the application of a measure (e.g. by overlooking the conditions in other countries) constituted *unjustifiable discrimination* [emphasis added]. It was deemed not acceptable that a member would require another member to adopt essentially the *same* [emphasis added] regulatory program without taking into consideration that conditions in other members could be different and that the policy solutions might be ill-adapted to their particular conditions.[38] Such an approach of allowing greater flexibility in determining the comparability of regulatory programmes gives India room to defend its domestic efforts on climate change mitigation through the NAPCC as a "comparable" or "equivalent"

domestic climate policy to that in the European Union or the United States.

Climate-related Standards and Labelling

Another area where significant trade concerns may emerge in the years to come relates to climate-related standards and labelling. This set of climate-related measures will be contentious on account of various problems accompanying the structure and design of the measures.

Administration and Transaction Costs

Climate-related standards and regulations and their related conformity assessment procedures have the potential to be a 'barrier to trade' particularly when they differ from country to country, thus, being open to a challenge under WTO's Technical Barriers to Trade (hereinafter TBT) Agreement. Different requirements raise the cost of information making exports to other markets more difficult. One of the solutions for this obstacle will be the harmonisation of norms. A core principle of the TBT Agreement, harmonization of technical regulations, standards and conformity assessment procedures by WTO members is strongly encouraged.[39]

Private or Voluntary Climate-related Standards

The increasing numbers of climate-related standards and labelling that might evolve through private businesses, however, could further add to the woes of developing countries, as they will be left without the protection of WTO rules as these private and voluntary standards escape the purview of the TBT Agreement.[40]

Problem of Calculation of Carbon Footprint

Fuelled by the fear that developed countries will lose their competitive edge and outsource production to developing countries, there is a growing demand for climate-related standards and labelling by the developed world. However, developing a carbon standard or label will be a tough task for the developed countries, since costly standards could place a disproportionate burden on small producers in developing countries.[41] Such schemes will entail significant administration and transaction costs as well as issues of quality assurance for developing countries, thus, adversely affecting small producers who do not have the necessary infrastructure or skills to comply with such measures. Besides, compliance with carbon standards could also involve an estimation of the carbon footprint of the products. The compliance costs with these standards will vary according to the methodology adopted to calculate the carbon footprint. While a complex methodology will increase data collection and verification costs, settling for a simpler methodology might make the calculations less reliable and increase the possibility of glaring loopholes where emission-intensive products pass as low carbon products.[42]

"Likeness"

Potentially one of the most problematic issues in carbon standards or labelling would arise when a country starts discriminating between products that have a lighter carbon footprint and those that have a heavier carbon footprint. If the carbon footprint of a product emerges as a criteria to assess the "likeness" of products then methods by which a product is produced, consumed, and disposed of will also be relevant factors in addition to physical characteristics of the product itself. The central question would be whether products with heavier footprints are "like" products with lighter footprints? If yes, then the government must treat them in the same manner unless it can justify the disparate treatment based on the 'environmental exceptions' provided under Article XX of the

General Agreement on Tariffs and Trade.[43]

B. Domestic Climate Subsidies and Regulatory Measures in India

Domestic climate policies can be also pursued through subsidies that provide incentives to market actors to engage in emission-lowering behaviour. Taking different forms such as support for research and development, tax credits and price support measures like feed-in tariffs for renewable energy, the nature of energy efficiency subsidies is to provide loans or grants to consumers or business to 'acquire or adapt technology that increases energy efficiency'.[44] Moreover, '[t]he "market" into which subsidies to address climate change are intervening is one that has historically been pervasively distorted by subsidies including fiscal advantages, provided to producers and consumers of (GHG emitting) fossil fuels. It is also a market in which the existing networks of distribution and retailing of energy is designed to favour fossil fuels.'[45]Thus, it is open to debate how subsidies to incentivise use of renewable energy should be treated? If developing countries are using such measures to legitimately enhance their efforts on climate mitigation, then being slapped with a trade challenge on those very policies can be very damaging for the larger climate regime as developing country mitigation efforts get pushed further into the background.

Here, we analyse some of the various policies under India's NAPCC and its legal implications for international trade rules. Are there any unfair and discriminatory policies that pose a threat to international trade rules and may be open to challenge? Should India's climate policy be treated as measures designed to transform it into a low carbon economy, or are some of the policies disguised restrictions to international trade?

Summary of Significant Indian Domestic Climate Policies

In the Indian context, among the eight national missions announced in the National Action Plan on Climate Change, we focus our attention on the two most closely related to the renewable energy sector – National Solar Mission and National Mission for Enhanced Energy Efficiency.

National Solar Mission

Given India's potential for deploying solar-power solutions on a grand scale, the National Solar Mission lays the foundation for a clean energy future.[46]The plan includes: specific goals for increasing use of solar thermal technologies in urban areas, industry, and commercial establishments; a goal of increasing production of photovoltaics to 1000 MW/year; and a goal of deploying at least 1000 MW of solar thermal power generation.

It also envisages the establishment of a solar research centre, increased international collaboration on technology development, strengthening of domestic manufacturing capacity, and increased government funding and international support.

Given the large extent of non-electrified rural areas in India, one of the goals of the National Solar Mission is to replace the use of kerosene lamps in rural India with 20 million solar lighting systems. In order to ensure that its commitments do not appear baseless, the Indian government has included financing for the solar mission in the 2010-2011 national budget.

Other mechanisms used by India to provide funding incentives to solar power operators, financial institutions, state and local governments, utilities, NGOs, and entrepreneurs include capital subsidies up to 30% (up to 90% for village electrification programmes), low-interest loans, zero import duty on capital equipment and raw materials, exemption from excise duty and feed-in-

tariffs for rooftop solar and large grid-connected solar projects.[47]

National Mission for Enhanced Energy Efficiency

The National Mission for Enhanced Energy Efficiency has four key components: Perform, Achieve, and Trade (PAT), a market-based mechanism to make improvements in energy efficiency in energy-intensive large industries and facilities more cost-effective by certification of energy savings that could be traded; market transformation for energy efficiency (MTEE) by accelerating the shift to energy-efficient appliances in designated sectors through innovative measures that make the products more affordable; energy efficiency financing platform (EEFP), a mechanism to finance demand side management programs in all sectors by capturing future energy savings; and the framework for energy efficient economic development (FEEED), or developing fiscal instruments to promote energy efficiency.[48]

Indian Energy Efficiency Standards

India does not have a national cap-and-trade system in place; however, it plans to launch a market-based mechanism to enhance energy efficiency. Expected to enrol industrial polluters in energy-intensive sectors such as Thermal Power plants, Iron & Steel, Cement, Fertilizer, Aluminium, Textile, Pulp & Paper, Chlor-alkali, the pilot "Perform, Achieve and Trade" program will issue energy saving certificates (ESCerts) to participating industries that achieve the target reduction from the baseline specific energy consumption within a three-year period. The number of ESCerts issued will depend on the quantum of energy saved in the target year, and the same will be trade on special trading platforms created in the two power exchanges in India [The Indian Energy Exchange (IEX) and Power Exchange India Ltd (PXIL)].[49] Less transformative than a cap-and-trade system, the impact of this proposal on emissions reduction will be far from negligible.[50]

The Indian government also plans to come out with new fuel efficiency norms in an effort to encourage the use of eco-friendly vehicles. These new norms are expected to be mandatory for all companies from 2015, changing the voluntary nature of disclosure of fuel efficiency standards currently prevalent in the Indian automobile industry. There have been occasions when big carmakers such as BMW, Porsche, Audi, Lotus and Volkswagen have failed to meet local fuel standards in the United States and paid penalties for it.[51] Thus, it remains to be seen how the Indian fuel efficiency standards will impact foreign counterparts. It will be interesting to see if standards rolled out in India are more stringent than those in some developed countries. It will raise complex questions of determining whether it is a move aimed at protecting the domestic industry or a legitimate climate policy in keeping with India's commitments.

Meanwhile, the Government of India launched the Energy Conservation Building Code (ECBC) in May 2007, which is aimed at enhancing energy efficiency in the building sector through the setting of minimum energy standards for new commercial buildings as well as promoting the implementation of energy efficiency measures in existing buildings.[52]In January 2010, the Bureau for Energy Efficiency announced energy efficiency standards for appliances mandating energy efficiency rating for four key appliances – refrigerators, air conditioners, tube lights and transformers.[53] In June 2010, India has taken a lead in repealing subsidies for gasoline, lowering subsidies for diesel and kerosene, and reducing import duties on renewable energy equipment. Furthermore, India is now deliberating the launch of a

Renewable Energy Certificate (REC) trading scheme.[54]

Government Subsidies for Renewable Energy

Globally, the most widespread policy to promote renewable energy power generation are the feed-in laws, which establish tariffs at which small power producers can sell power to the utility grid. Popularised by the developed countries, these are now being widely applied in developing countries such as China, Brazil and India. India is also following in the footsteps of developed countries like the United States and Europe to establish Renewable Portfolio Standards (RPSs) that direct the utilities to derive a certain portion of their total generating capacity from renewable energy sources.[55]

Also, in February 2010, India announced a 50 Rupee tax (approximately $1) on every ton of domestic and imported coal, in order to capitalise a new National Clean Energy Fund to finance clean energy research and development.[56]

In order for a financial contribution by the government to be considered a subsidy, a necessary precondition is that it must confer a "benefit" on the recipient.[57] Thus, if the subsidies "[m]erely defray the cost of businesses acquiring renewable energy systems or which compensate enterprises for providing renewable energy in remote locations" then it cannot necessarily be considered a "benefit".[58] Rather it should be considered a reimbursement or compensation for the enterprise to take more energy-efficient measures that are a sub-set of a larger climate mitigation goal. At the moment it appears that only those subsidies that have a protectionist bent towards their domestic industry will be actionable at the WTO, instead of all measures subsidising renewable energy use such as feed-in tariffs for renewable energy.

A Potential WTO Challenge to India's Climate Measures?

The WTO's Agreement on Subsidies and Countervailing Measures (hereinafter "SCM Agreement") classifies subsidies as falling in two categories: prohibited subsidies[59] and actionable subsidies.[60] Article 3 of the SCM Agreement expressly prohibits two categories of subsidies: the first consists of subsidies contingent (in law or in fact) upon export performance ("export subsidies") and the second consists of subsidies contingent upon the use of domestic over imported goods ("local content subsidies"). Actionable subsidies, on the other hand, are not prohibited. However, they are subject to challenge in the event that they cause 'adverse effects to the interests of another Member'.[61]

In support of the cell and module manufacturers the National Solar Mission is eliminating duties on capital equipment and raw materials, exempting them from excise duty and offering low interest rates. However, for the first two years, the programme also imposes a strict local content requirement on PV systems. For Solar PV Projects to be selected in the first batch (FY 2010-2011), it will be "[m]andatory for Projects based on crystalline silicon technology to use the modules manufactured in India", while there is no domestic content requirement for Projects based on other technologies. And for the second batch of Projects (FY 2011-2012) it will be '[m]andatory for all the Projects to use cells and modules manufactured in India'.[62]

Under the SCM Agreement exports subsidies and domestic content requirements fall under the category of "prohibited subsidies".[63] Subsidies can also raise WTO concerns if they are "specific"[64] or channelled to a certain enterprise. When this specific subsidy causes adverse effects to competing entities on foreign countries, then it is actionable under

the WTO.[65] Thus, the above provision mandated by the National Solar Mission could possibly attract a WTO challenge as a prohibited subsidy as a result of domestic content requirements. However, the duration of this requirement may be the crucial factor in distinguishing whether the provision was envisaged as a transitional measure or simply as a means of disguised protectionism. It is unlikely that local content requirements imposed only for a brief period and that, too, for a scale of investment much smaller than the already existing solar capacity in many other countries, would attract any significant WTO challenge. But the WTO provisions do constrain the room for manoeuvre for domestic policy for subsequent stages of the NSM.

IV. THE CHINA PROBLEM – DIFFERENTIATING INDIA'S CLIMATE STANCE

In order to ascertain whether the Indian domestic policies relating to climate change are open to a WTO challenge, we will examine the WTO complaint against China and determine whether similar grounds can be applied to challenge Indian climate policies. From an Indian policy perspective, there is a need to carve out certain key differences between India and China's climate policies, so as to clarify India's position as distinct from that of China's.

The United States has recently filed a complaint under the WTO against China alleging that certain measures taken by the Chinese government in support of their wind power industry are violating Article 3 of the Subsidies and Countervailing Measures Agreement (hereinafter SCM Agreement).[66] This complaint is based on the petition filed by the Steelworkers Union in September 2010 with the Office of the U.S. Trade Representative, which complained of a wide range of policies undertaken by China to 'stimulate and protect' domestic producers of green technology, including wind and solar energy products, advanced batteries and energy efficient vehicles. The petition also argued that these policies have permitted China to become the dominant global supplier of green technology, and have 'drained manufacturing investment from the US to China, transferred valuable technology and research and development activities to China, cost American workers the high-skilled green jobs of the future, and increased the US trade deficit.'

The Steelworkers' petition identified five categories of China's green energy technology that allegedly violate WTO rules.[67] However, the U.S. complaint before the WTO addresses only the second of those five categories, which relates to the provision of subsidies contingent on export or domestic content. It specifically targets the "Manufacturing Regulations on Special Fund for Wind Power Manufacturing Sector in China" outlined in Ministry of Finance Document [2008] No. 476.[68] In order to support the wind power manufacturing sector, these regulations establish a "special fund", for the purpose of 'encouraging corporate R&D activities on market demanded products' and it is purported that it will be allocated as 'incentives instead of subsidies'. The U.S. complaint appears to focus, in particular, on the qualifications of wind power manufacturing companies applying for a grant from the fund, and in particular, that set out in Article 6(4), which requires that:

> "The wind turbine component of blades, gearboxes and generators must be manufactured by Chinese companies or Chinese controlled stock companies. Converters and

> bearings manufacturing are encouraged"[69]

The U.S. complaint alleges that the subsidy is, therefore, a "prohibited subsidy" under the terms of Art 3 of the SCM Agreement.

India's approach to low-carbon technology speaks first of energy scarcity and then competitiveness, thus making its policies consistently less "techno-nationalistic" than China's. China's low-carbon technology is driven by 'a desire to become world leader in clean energy'.[70] China's solar photovoltaic industry has been built entirely on foreign demand. Meanwhile, Chinese investments in carbon capture and sequestration also do not appear to be accompanied by any actual interest in deploying the technology on an environmentally meaningful scale.[71] Job creation is a significant incentive for boosting clean energy in China, but the same cannot be said about India's interest in clean energy.

Facing a very different set of challenges as compared to China, energy security is the biggest political and economic challenge in India. With almost 40 per cent of Indians having no access to electricity, rural electrification is one of the highest priorities and job creation is currently not looked upon as a significant incentive to boost the country's clean energy potential.[72] India's climate policies, thus, appear more oriented towards sustainable development than international competition. And there must be sustained efforts to ensure that India's climate policies aimed towards a low carbon economy must not get construed as disguised restrictions to international trade.

V. CONCLUSION

This brief has attempted to illustrate India's interests – current and potential – in the link between climate change and international trade. As India faces increased international pressure to take more action on climate change, it finds itself in a precarious position whereby if it does not take any action it is vulnerable to climate-related trade sanctions and, on the other hand, if it establishes a domestic climate policy, it is susceptible to a challenge under international trade rules. Thus, the paper has analysed two sets of climate-related trade measures and its implications for India. First, the use of climate-related trade measures against India and, secondly, the challenges to India's domestic climate policy under international trade rules. In doing so, the brief advances India's position as a responsible power with the policies to claim that its climate policies are sufficient and compliant with international trade rules.

While the focus has been to ensure that Indian policymakers achieve consistency and coherency of their domestic climate actions and international trade rules, there is still a need for clearer and more consistent rules in the climate and trade regimes so that a developing country like India is not discriminated against.

Unilateral use of climate-related trade measures without an overarching multilateral institutional framework on their legitimate application will have several policy implications. One of the most important considerations for India is whether the emission control measures undertaken by India, such as those under the National Action Plan on Climate Change, can be considered 'equivalent' or 'comparable' to the measures adopted by the E.U. or the U.S. in order for it to escape climate-related trade sanctions such as "border carbon adjustment" measures?

Thus, the future of any climate-related trade measure hinges greatly on the degree of 'equivalence' or 'comparability' of various domestic climate policies adopted worldwide. This establishes the need for in-depth study

on the essential parameters for determining "equivalence" or "comparability" of different domestic climate regulatory programmes.

Since China has faced a WTO challenge against its domestic climate policies and given developed countries' penchant for clubbing India and China together in international climate politics, India must be ready to defend its domestic climate policies from a possible trade challenge. In order to do so, the main thrust of India's policies on domestic clean energy subsidies and regulatory measures need to be oriented towards sustainable development rather than international competition.

The U.S. Steelworkers' petition had identified five categories of China's green energy technology that allegedly violate WTO rules – restriction on access to critical materials; prohibited subsidies contingent on export or domestic content; discrimination against foreign firms and foods; technology transfer requirements for investors and trade distorting domestic subsidies. Thus, the litmus test of the trade-consistency of India's climate policies will be a detailed comparison of Indian policies with the Chinese policies that allegedly violate WTO rules and determining whether India might be susceptible to the same challenges. India must consciously ensure that its policies do not get construed as 'a means of arbitrary or unjustifiable discrimination' or 'disguised restriction to international trade'.

Though the implications of climate-related trade measures and trade-consistent climate policies are still being debated, until greater consistency and coherence of rules can be achieved at the regime level, India needs to be prepared to protect itself from either challenge. More research on policy equivalence, the rationale for clean energy subsidies, and on possible exceptions based on the principle of common but differentiated responsibilities would be a good place to start.

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[2] Joseph E. Aldy, et. al., *Beyond Kyoto: Advancing the International Effort Against Climate Change* (Pew Center on Global Climate Change, Arlington, 2003) pp.141-142 (hereinafter *Beyond Kyoto*). See, *Green*, *supra* note 1 at p.145

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[6] http://www.pewclimate.org/international/country-policies/india-climate-plan-summary/06-2008 last visited on August 5, 2011

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[8] Manish Bapna, *India's Climate Bet: An Emerging Giant's Alternative Route to Power*, *Solutions* Vol 1, No. 6. (2010) pp. 44-50 available at: http://www.thesolutionsjournal.com/node/803 (hereinafter *Bapna*)

[9] Jacob Werksman, et al., *Trade Measures and Climate Change Policy: Searching for Common Ground on an Uneven Playing Field*, WRI Working Paper (World Resources Institute, Washington DC, 2009) p.2 (hereinafter *Werksman*)

[10] Arunabha Ghosh, *Enforcing Climate Rules with Trade Measures Five Recommendations for Trade Policy Monitoring*, in Richard B. Stewart, et. al. (eds.), *Climate Finance: Regulatory and Funding Strategies for Climate Change and Global Development* (New York University Press, New York and London, 2009) pp.273-274 (hereinafter *Ghosh*)

[11] *Werksman*, *supra* note 9 at p.2. See *Ghosh*, *supra* note 10. Also, at a meeting of the Ad Hoc Working Group on Long Term Cooperative Action (AWG-LCA) of the UNFCCC in Bonn in August 2009, India proposed the inclusion of the following paragraph in the negotiating text for the Copenhagen conference:

> *'Developed country parties shall not resort to any form of unilateral measures including countervailing border measures, against goods and services imported from developing countries on grounds of protection and stabilization of climate. Such unilateral measures would violate the principles and provisions of the Convention, including, in particular, those related to the principle of common but differentiated responsibilities (Article 3, Paragraph 1); trade and climate change (Article 3 paragraph 5); and the relationship between mitigation actions of developing countries and provision of financial resources and technology by developed country Parties (Article 4, Paragraphs 3 and 7).'*

Following this, the G-77 and China also called on developed countries not to adopt unilateral trade-restrictive measures against developing countries arguing that the adoption of such measures by the developed countries would be tantamount to passing on the mitigation burden by them onto developing countries, and that it would contravene the principles and provisions of the UNFCCC. See *Frequently Asked Questions: WTO Compatibility of Border Trade Measures for Environmental Protection (Indian Institute of Foreign Trade, Centre for WTO Studies) at* p.40 available at: http://wtocentre.iift.ac.in/FAQ/english/Environment_FAQ.pdf

[12] Sofia Persson, *Practical Aspects of Border Carbon Adjustment Measures – Using a Trade Facilitation Perspective to Assess Trade Costs,* ICTSD Global Platform on Climate Change, Trade Policies and Sustainable Energy, Issue Paper No.13 (International Centre for Trade and Sustainable Development, Geneva, 2010) at p.2 (hereinafter *Persson*). There are three major ways in which countries can approach the "border carbon adjustment" measures: firstly, though a border carbon tariff (or requirement to purchase emissions allowances) that charges imports according to the level of greenhouse gases emitted during the production of each specific imported product; secondly, the importing country could set a standardized tariff, or emission allowances required for each product category under the BCA to be paid when importing the product (the standardized charge could either be based on the carbon content of domestic production or on the carbon content embodied in imports); and thirdly by setting a standardized tariff, or emissions allowance purchase for each product under the BCA, while allowing producers in exporting countries to prove that they are more efficient (i.e. emits less greenhouse gases during the production of their products than the benchmark level) to pay a lower tariff. See *Persson* at p.19

[13] Aaron Cosbey, *Border Carbon Adjustment* (International Institute for Sustainable Development, 2008) at pp.3-5 available at: http://www.iisd.org/pdf/2008/cph_trade_climate_border_carbon.pdf (hereinafter *Cosbey*)

[14] *Persson*, *supra* note 12 at p.9

[15] *Id* at p.10

[16] *Id* at p.7

[17] *Cosbey*, *supra* note 13

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[19] *Carbon cuts by developed countries cancelled out by imported goods*, The Guardian, April 25, 2011, http://www.guardian.co.uk/environment/2011/apr/25/carbon-cuts-developed-countries-cancelled last visited on August 5, 2011

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[25]http://www.nrdc.org/globalWarming/legislation/files/waxman.pdf last visited on August 10, 2011

[26] http://www.govtrack.us/congress/bill.xpd?bill=h111-2454 last visited on August 5, 2011

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[29]*Werksman*, *supra* note 9 at p.6

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[35] ACESA, sec 768(a)(E).

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[63] Article 3 SCM Agreement

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[66] *China – Measures Concerning Wind Power Equipment*, Request for Consultations by the United States, WT/DS419/1 (6 January 2011) available at: http://www.worldtradelaw.net/cr/ds419-1(cr).pdf

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