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Renewable energy has emerged as a popular way to balance environmental concerns with the duty of states to provide their citizens with access to electricity. States have attempted to improve their domestic capabilities in relation to the generation of renewable energy to achieve this. A popular method to attain this goal has been to allow foreign investment in the energy sector, but with an important caveat: that of a mandatory minimum requirement of local content. This “green industrial policy” often falls foul of countries’ trade obligations under the WTO regime and has led to states filing disputes challenging these measures before the WTO. This article seeks to highlight how these cases have been adjudicated. It will focus on how these cases are significantly different from the “classic cases” on trade and environment. The analytical emphasis of this article is on Article III:8(a) of the GATT 1994, how the WTO has adjudicated cases relating to this provision and how it ought to take the debate forward.

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* Candidate, 2018, B.A. LL.B. (Hons.), The West Bengal National University of Juridical Sciences, Kolkata, India. The author can be reached at adityasarmah@nujs.edu. The author would like to thank Dr. Sandeepa Bhat (The West Bengal National University of Juridical Sciences) for providing feedback and guidance on an earlier draft of this article. The usual disclaimer applies.
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I. INTRODUCTION

Increasing advances in technology and declining reserves of traditional fossil fuels have changed the manner in which states view renewable energy.1 Originally subject to scepticism, renewable energy is now being embraced by states as a means of providing clean energy to its populace without incurring huge social and environmental costs. This trend has also resulted in a significant increase in cross-border trade of renewable energy goods.2 Simultaneously, states have also undertaken concerted efforts to improve their domestic capabilities to optimise the use of ‘clean’ energy within their borders. The spillover of this environmental progress is its clash with the principles of free trade, as countries seeking to enhance their renewable energy capacities have often adopted protectionist measures to optimise their usage of the same.3 Consequently, the traditional lack of interface between trade and energy security has seen a dramatic change in the form of an increased interlinkage between trade and energy security couched in environmental policy.4 This has resulted in an increased focus on energy by the World Trade Organisation (“WTO”), which was recently underscored by the former Director-General of the WTO, Pascal Lamy, who emphasised the need for discourse on the subject of energy trade within the WTO framework.5 This article seeks to do that, in the context of solar energy,

focusing on the “next generation” (“NextGen”) cases which have come up before the WTO. Under Part II, the author shall briefly set forth Wu and Salzman’s comprehensive postulation of the NextGen cases, while juxtaposing them with the “classic” cases concerning trade and environment. The author shall also highlight the unsuitability of the present WTO regime to deal with such cases. Thereafter, under Part III, the author shall examine Article III:8(a) of the General Agreement on Tariffs and Trade, 1994 (“GATT”), a provision which has received the attention of the WTO for the first time in these NextGen cases and attempt to understand the implications of its interpretation, while critiquing the same. In doing so, the author shall focus on the cases which have come up before the WTO concerning solar energy, namely, Canada–FIT6 and India–Solar Cells.7 Under Part IV, the author shall attempt to map out the manner in which the WTO regime can carry the debate forward, and finally under Part V, the author shall give his concluding thoughts on the subject.

II. THE ‘NEXT GENERATION’ OF TRADE AND ENVIRONMENT CONFLICTS – IS THE WTO READY?

In a comprehensive account of the emerging trade and environment conflict in the WTO, Wu and Salzman explain the shift in the type of cases concerning the environment being adjudicated by the WTO, and the reasons for the same. This trend forms the basis of the renewed interest of the WTO in energy trade and represents a watershed moment in the conflict between trade law and environmental law.8 The NextGen cases tend to be far more complex, and the stakes tend to be higher, with the authors not ruling out the possibility of a “trade war” and affirming the certainty of these cases dominating the trade-environment discourse.9 Whether the WTO is ready for this in the context of renewable energy is questionable. It is in this backdrop there has been a sustained call from stakeholders to reform WTO law, so as to optimise the relationship between free trade and environment protection.10

8 See Wu & Salzman, supra note 1, at 430-432.
9 Wu & Salzman, supra note 1, at 405.
10 See generally Aaron Cosbey & Petros Mavroidis, Heavy Fuel: Trade and Environment in the GATT/WTO Case Law, 23(3) RECIEL 288-301 (2014); Virginia Hildreth, Renewable Energy
The 1990s saw the emergence of the “classic” cases relating to trade and environment. These cases primarily involved developed countries implementing environmentally friendly policies to protect natural and living resources. While this in itself was not problematic, market access for foreign export was conditioned upon trade partners implementing similar measures so that local industries would not be at a competitive disadvantage. The Tuna–Dolphin, Shrimp/Turtle and US–Gasoline cases are all indicative of this pattern. The legal analysis of these cases hinged on an interpretation of Article XX of the GATT, with a tricky balancing test having to be employed to harmonise environmental protection against trade protectionism. Interestingly, these measures found large and diverse support with the population of the implementing (developed) countries as they ensured that the interests of the environmental lobby, the labour union lobby and the pro-domestic industry lobby were all aligned. In all the above-mentioned cases, the respective measures were struck down as being violative of the chapeau to Article XX. However, the Appellate Body (“AB”), through a landmark holding in the Shrimp/Turtle case, gave states sufficient capability to manoeuvre trade policy to advance environmental interests, by holding that:

“…it is not necessary to assume that requiring from exporting countries compliance with, or adoption of, certain policies (although covered in principle by one or another of the exceptions) prescribed by the importing country, [would] render[s] a measure a priori incapable of justification under Article XX.”

The significance of this pronouncement in the Shrimp/Turtle case becomes evident when contrasted with international trade law jurisprudence prior to this holding.

Subsidies and the GATT, 14(2) CHICAGO J. INT’L L. 702, 702-729 (2014); In the context of Article III:8(a), see India–Solar Cells (Panel), supra note 7, at ¶7.110 where India argued that the narrow interpretation given to Article III:8(a) in Canada–FIT would “be an unnecessary intrusion in to the nature and exercise of government actions relating to procurement of solar power”.

11 Wu & Salzman, supra note 1, at 408.

12 Id. at 412: “Within developed countries, the import bans enjoyed widespread support among unlikely allies in the domestic political economy. Environmental and animal rights groups welcomed them as a way to gain leverage over otherwise recalcitrant foreign governments. Anti-globalization groups resented the influence of international organizations on national policy decisions. Domestic producers supported the restrictions because they leveled the playing field. And labor unions endorsed them because they helped keep jobs at home. No other policy issues aligned these disparate groups’ interests so closely, and the political alliance proved potent”.

The general assumption that prevailed before this ruling was that measures imposed by an importing country which made market access contingent on the policies of the exporting country being aligned with that of the importing country were invalid.\textsuperscript{14} This was justified on the ground that such measures undermined the autonomy of member states to determine their own environmental policies\textsuperscript{15} by forcing them to bring such policies in line with the importing state’s laws and regulations.\textsuperscript{16} It was believed that this would lead to a situation where each member state would adopt policies making market access conditional on exporting states aligning their policies with the policies of the importing states, resulting in a scenario where there would be multiple conflicting regulations on a similar subject for each state to comply with.\textsuperscript{17} It was feared that this would undermine the fundamental requirement of security and predictability in international trade and would “rapidly lead to the end of the WTO multilateral trading system.”\textsuperscript{18} Thus, the AB through its monumental holding in the \textit{Shrimp/Turtle} case essentially reversed long standing international trade law jurisprudence by holding that measures which conditioned market access upon exporting states aligning their domestic policies with that of the importing state were not necessarily violative of the WTO system. Instead, it held that they would have to be tested against the chapeau of Article XX to determine its congruence with the GATT, thus marking a radical transformation in the environmental jurisprudence of the WTO.\textsuperscript{19}

While the narrative surrounding the “classic” cases is still prevalent in the trade-environment discourse – as evinced by the climate change debate\textsuperscript{20} – it has been eclipsed by the emergence of the NextGen cases which hinge on the implementation of “industrial policies with environmental benefits and protectionist results.”\textsuperscript{21} These policies are a product of pressures arising from the political economy which are manifested through unfavourable public opinion


\textsuperscript{15} \textit{US–Shrimp/Turtle (Panel), supra} note 14, ¶7.51. \textit{See also} Appellate Body Report, United states – Standards for Reformulated and Conventional Gasoline, at 30, WTO Doc. WT/DS2/AB/R (adopted Apr. 29, 1996) [hereinafter \textit{US–Gasoline}]: “Members have a large measure of autonomy to determine their own policies on the environment…”.

\textsuperscript{16} \textit{US–Shrimp/Turtle (Panel), supra} note 14, ¶7.45.

\textsuperscript{17} \textit{Id.}

\textsuperscript{18} \textit{Id.} at ¶7.45.

\textsuperscript{19} \textit{See} Robert Howse, \textit{The Appellate Body Rulings in the Shrimp/Turtle Case: A New Legal Baseline for the Trade and Environmental Debate}, 27(2) COLUM. J. ENVTL. L. 489, 496-502 (20) for a more detailed critique on the transformative significance of the \textit{Shrimp/Turtle} ruling on the environment-trade debate.

\textsuperscript{20} \textit{See} Wu & Salzman, \textit{ supra} note 1, at 413-416.

\textsuperscript{21} \textit{Id.} at 416.
about the “profligacy” of fiscal spending on renewable energy being offset by governmental attempts at creating a robust labour market in this sector. These pressures are further complicated by energy security concerns relating to the depletion of conventional energy sources and simultaneous technological advancement in renewable energy, which has made it more efficient and cost-effective. Driven by the triumvirate of these developments – pressures from the political economy, energy security and technological advancement – states have undertaken policies to promote “green industry”. These policies are deployed in numerous ways, such as subsidies targeted at the renewable energy sector (projected by the International Energy Agency to grow to almost $250 billion by 2035) or by making market access of foreign producers contingent on the deployment of local components sourced from domestic industries. Further, export restrictions are imposed on goods which have a positive environmental impact in hopes of ensuring that local producers can have better access to these goods which otherwise would have been profitably exported.

Wu and Salzman argue that the implications of this shift from the “classic” cases to the NextGen cases are transformational. First, they point out how these cases have changed the traditional North-South narrative of the “classic” cases. Traditionally, in the “classic” cases, developed nations used environmental measures to ‘discipline’ the trading behaviour of trading partners – primarily developing nations. This led to a number of developing countries filing claims before the WTO protesting against such measures on the grounds that they constituted a form of trade protectionism. Cases such as Shrimp/Turtle, US–Gasoline and Tuna–Dolphin are reflective of this practice. Conversely, the NextGen cases often feature developing countries implementing policy measures to protect the environment. However, this goal is often injected with a dose of protectionism, which ensures that local producers are able to gain competitive advantages vis-à-vis foreign exporters – the local content requirements at issue in India–Solar Panels or the...
impugned export restrictions in China–Raw Materials and China–Rare Earths stand testament to this phenomenon.\(^{27}\) Unsurprisingly, these measures have experienced a backlash, with proceedings being instituted by developed nations (notably Japan, the United states and the European Communities) to make these measures compliant with the WTO framework. Largely, such claims which have reached adjudication stage have been successful.\(^{28}\)

Second, these disputes have also seen the rise of multiple fora for the settlement of disputes, with an increasing number of cases being adjudicated outside the WTO in the form of domestic administrative proceedings.\(^{29}\) This has resulted in a considerable instances of unilateral action being taken by governments against foreign industrialists. The dispute between China and the United states involving solar energy generation equipment is a case in point.\(^{30}\) In a nutshell, certain American companies filed a complaint with the U.S. Government in 2012 against alleged dumping activities carried on by eight Chinese firms in the United states. This resulted in severe antidumping duties being imposed on Chinese solar panel producers.\(^{31}\) The Chinese government was expectedly condemnatory of the news.

\(^{27}\) Wu & Salzman, supra note 1, at 444.

\(^{28}\) See India–Solar Cells (Panel), supra note 7; India–Solar Cells (ABR), supra note 7; Appellate Body Report, China – Measures Related to the Exportation of Rare Earths, Tungsten and Molybdenum, WT/DS431/AB/R (adopted Aug. 29, 2014); while Canada–FIT (ABR)/(Panel), supra note 6 involved a case against Canada, a developed nation, the proceedings were instituted by another group of developed nations (namely the European Communities and Japan) and were ultimately successful.

\(^{29}\) Wu & Salzman, supra note 1, at 443.


Nevertheless, two Chinese industry associations decided to institute proceedings in relation to dumping of polysilicon (an important component of solar cells) by American and South Korean firms in China. This resulted in the imposition of high antidumping duties against American firms and South Korean firms.

Wu and Salzman express grave concern about developments such as these that, arguing that this may give rise to political considerations governing trade disputes across the world and may result in tit-for-tat behaviour from different states. They further highlight how this phenomenon is not unique to Sino-American relations, but has also spilled over into relations between various other states – for instance, in 2012 the Indian Solar Manufacturer’s Association filed a petition against Malaysian, Chinese, American and Taiwanese producers of solar panels alleging dumping in the Indian market. They argue that such a scenario, premised on unilateral (and politically tinged) state action would in turn severely distort trade in the form of higher tariffs for producers, higher prices for consumers or decreased consumer choice.

Third, the “classic” cases witnessed a convergence of environmental, domestic industry and labour union interests, which have seen a breakdown in the NextGen cases. With developing countries gaining competitive advantages through their policies and cheap labour, an increasing amount of business has been outsourced. Consequently, there has been a clash in the ideology of labour and environmental

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34 Wu & Salzman, supra note 1, at 466-67.


36 Wu & Salzman, supra note 1, at 438.

37 Wu & Salzman, supra note 1.
groups, with labour unions and pro-domestic industry groups lobbying governments to challenge these green policies, often to the disappropria-
tion of environmental groups.38 This is highlighted quite accurately in the solar energy cases before the WTO, where the local content requirements (“LCRs”) of the Indian and Canadian solar energy projects were challenged. Such conditions ensure long term growth and positive externalities in the domestic market they are aimed at. However, they disadvantage the stakeholders in the markets of exporting countries, causing them to lose the competitive advantages they previously enjoyed due to their more advanced markets. Environmental groups oppose such action on the grounds that striking down these policies would either lead to the environmentally friendly policy being annulled or would prevent underdeveloped markets from improving their capacity in terms of renewable energy goods, thereby hampering long term environmental progress. Scholars also point out that decisions which appear to indict environment friendly policies have an adverse normative impact on the policies of states, discouraging them from implementing such policy in fear of reprisals from other states and international institutions.39

Last, and central to the purposes of this article, is the change in the legal rights and obligations parties are invoking to defend their actions.40 As shown above, states relied on Article XX of GATT to invoke exceptions to their obligations under the WTO regime in the “classic” cases – using environmental and health concerns to justify protectionist policies.41 However, the NextGen cases have seen considerable change in this regard. Wu and Salzman focus on how the NextGen cases extensively involve the Agreement on Subsidies and Countervailing Measures (“SCM Agreement”), which does not contain any environmental exceptions, and thereby makes it difficult for the WTO to balance trade and environmental interests.42 Commentators have advocated extending the GATT exceptions to the SCM Agreement.43 Consensus on this, however, remains elusive.

That being said, the obligations under the GATT have also remained extremely relevant in the NextGen cases. There has been significant innovation in the arguments made by member states, with some provisions of the GATT being invoked for the first time – Article III:8(a) being a noteworthy example, and the

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38 Id. at 445.
40 See id. at 451-454.
42 Wu & Salzman, supra note 1, at 452.
prime focus of this article. Another example is Article XX(j), which was invoked by India in the India–Solar Cells dispute. The Appellate Body, however, rejected these defences and in doing so, interpreted them narrowly.\footnote{See Canada–FIT (ABR), supra note 6; India–Solar Cells (ABR), supra note 7.} This is particularly controversial in the case of Article III:8(a) which deals with government procurement of goods for government use. India, in fact, explicitly submitted before the WTO Panel that the interpretation adopted by the Appellate Body was “extremely intrusive” and severely limited the extent to which governments could pursue renewable energy policies.\footnote{India–Solar Cells (Panel), supra note 7, at ¶7.130.} The author will subsequently analyse the implications of this ruling in detail. What is important to note at this point is that the NextGen cases have thrown significant challenges to the WTO in terms of the applicable law, leaving the Panel and the AB to adjudicate cases with far reaching and momentous policy implications, but without the guidance and support of previous decisions.

B. The Challenges Posed to the WTO Regime by the NextGen Cases.

Green policy has become a ubiquitous phenomenon across the world and is widely being adopted by developed and developing countries. Specifically, solar energy has emerged as a focal point in these cases, as evidenced by the Canada–FIT and India–Solar Cells cases. Further, the European Union (“EU”) and the United states have both imposed significant tariffs on Chinese solar panels, raising costs manifold for solar installation.\footnote{Wu & Salzman, supra note 1, at 455.} China has also filed a request for consultations with the WTO against the EU (specifically Greece and Italy) for measures relating to LCRs in solar energy projects, as being violative of the GATT and the SCM.\footnote{Request for Consultations by China, European Union and Certain Member states—Certain Measures Affecting the Renewable Energy Generation Sector, WT/DS452/1 (Nov. 7, 2012).} After the setback to its renewable energy goals in India–Solar Cells, India filed a request for consultations on numerous grounds against renewable energy programs in the US, primarily those relating to solar energy, which are violative of WTO trade obligations.\footnote{Request for Consultations by the India, United states—Certain Measures relating to the Renewable Energy Sector, WT/DS510/1 (Sept. 19, 2016).} The cause for concern arises from the fact that WTO decisions in the NextGen cases have generally been unfavourable to environmental concerns.\footnote{Wu & Salzman, supra note 1, at 455.}

One wonders if the reason for this is that the WTO framework is ill-equipped to deal with trade in energy goods. There is a widespread view that the WTO framework does not comprehensively cover trade in energy and energy products.\footnote{James Nedumpara, Energy Security and the WTO Agreements, in TRADE, THE WTO AND ENERGY SECURITY: MAPPING THE LINKAGES FOR INDIA 15 (Sajal Mathur ed., 2014) [hereinafter Nedumpara].}

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with the current rules not being “fully fit”\textsuperscript{51} for the purposes of green industry policy. Additionally, commentators believe that there is a danger in adjudicating disputes relating to trade and energy with rules that were not negotiated keeping the realities of energy trade in mind. They argue that doing so would lead to a disjunction wherein evolving technologies would be pigeonholed into an antiquated legal system.\textsuperscript{52} While this debate is a larger policy driven one, the author will limit his analysis to the GATT and how it provides an extremely limited regime for addressing the green industrial policies of the NextGen cases.

Technically speaking, there is nothing \textit{per se} that excludes the trade of energy goods from the coverage of the GATT. They find mention in a number of the member states’ Schedule of Concessions, while “crude petroleum and derived products” also find a place in the Harmonised System.\textsuperscript{53} However, it has been noted that the GATT does not account for trade in energy goods in a pragmatic fashion.\textsuperscript{54} This has been attributed primarily to the fact that most energy abundant nations did not form part of the negotiations to the GATT, 1947;\textsuperscript{55} and subsequently, neither did they participate in the negotiations to the Uruguay Round, which culminated in the WTO regime and the GATT, 1994.\textsuperscript{56} Furthermore, the large oil mega-corporations such as BP, Exxon, Gulf, Mobil and others – popularly dubbed as the “Seven Sisters” – which dominated the oil industry from the 1940s to the 1980s preferred settling disputes outside the ambit of the global trading system.\textsuperscript{57} Lastly, energy being a strategic commodity, negotiations relating to it were often highly politicised, often leading to a deadlock.\textsuperscript{58} Energy abundant countries would emphasise sovereignty over ‘their’ natural resources and ‘their’ right to use them in a manner they deem fit, while energy deficient countries focussed on securing energy supply, tackling supply risks and aiming to diversify their energy sources to reduce external dependency.\textsuperscript{59} The inability to bridge this “energy divide” has also contributed to the lack of coverage of the WTO regime insofar as energy goods were concerned.\textsuperscript{60}

\textsuperscript{51} Luca Rubini, \textit{What does the recent WTO litigation on renewable energy subsidies tell us about methodology in legal analysis? The good, the bad, and the ugly}, (EUI RSCAS, Working Paper No. 2014/05), \url{http://cadmus.eui.eu/bitstream/handle/1814/29518/RSCAS_2014_05.pdf}.
\textsuperscript{53} Marhold, \textit{supra} note 4, at 2.
\textsuperscript{54} Marceau-Governance, \textit{supra} note 52, at 83.
\textsuperscript{55} Marhold, \textit{supra} note 4, at 2.
\textsuperscript{56} Nedumpara, \textit{supra} note 50, at 16.
\textsuperscript{57} Marhold, \textit{supra} note 4, at 2.
\textsuperscript{58} Nedumpara, \textit{supra} note 50, at 15.
\textsuperscript{59} \textit{Id.} at 14.
\textsuperscript{60} Sajal Mathur, \textit{An Introduction to the Trade, WTO and Energy Security: Linkages to India}, in \textit{TRADE, THE WTO AND ENERGY SECURITY: MAPPING THE LINKAGES FOR INDIA} 1, 3 (Sajal Mathur ed., 2014).
Consequently, the WTO Dispute Settlement Body did not really have to concern itself with the adjudication of energy disputes. However, with energy interests being at the heart of most modern green industrial policy initiatives, it is impossible for the WTO to ignore the same any longer. Fundamental issues, such as the lack of a definition of an “energy good” in the WTO framework, to more complex ones, such as determining if energy from renewable sources constitutes a “like product” when compared with energy derived from traditional sources, need to be resolved. This will require far greater impetus from the international community. Given that renewable energy is bound to play a significant role in the future of global energy security, the current paradigm is still lagging in terms of developing a framework which can actively promote and sustain such programs.

An interesting feature of solar energy programs across the world is that they mandate an LCR be fulfilled as a condition to access the market. These requirements are focussed on building the capacity of domestic markets to sustainably develop renewable energy goods so as to not be left beholden to foreign exporters. Under the current GATT framework, such LCRs would rarely, if at all, survive judicial scrutiny. Further, the traditional exceptions under Article XX would also not be very helpful to states in this regard, which explains why they have not been invoked by the respondents in these disputes. Article XX(b) requires that the measure be “necessary to protect human, animal or plant life or health.” Furthermore, it requires that the least restrictive measure be adopted to fulfil this objective, which has been interpreted to connote “a genuine relationship of ends and means between the objective pursued and the measure at issue.” It would be difficult to argue that local content measures in themselves necessarily contribute to the protection of human, animal and plant health, when the same could be achieved as effectively without the LCRs. Further, a capacity-building argument can also be rebutted on grounds that the same can be achieved without mandating LCRs. In terms of Article XX(g), one might be able to argue that such policies are “related” to conservation of natural resources as there exists a “reasonable means and ends relationship” between capacity-building and conservation of

61 Wu & Salzman, supra note 1, at 19.
62 Marhold, supra note 4, at 3.
63 Holger Hestermeyer & Laura Nielsen, The Legality of Local Content Measures, 48(3) J. WORLD TRADE 554, 590 (2014) [hereinafter Hestermeyer & Nielsen].
67 US–Shrimp/Turtle (ABR), supra note 13, at ¶141-142.
exhaustible natural resources. However, it would be difficult to justify the same under the “even-handedness” requirement of Article XX(g). While Article XX(g) may not require identical treatment to be meted out to domestic goods and foreign goods, it does require some degree of limitation on domestic products, or else the measure would “simply constitute naked discrimination for protecting locally-produced goods.”

It is not surprising then that states have attempted to justify their policies by looking towards other provisions in the GATT. As stated above, this is precisely how Article III:8(a) was “discovered” by member states, and has become a crucial (and arguably, the central) defence employed by parties under the GATT in the solar energy cases. The author shall now turn to an analysis of the provision.

III. THE ‘DISCOVERY’ OF ARTICLE III:8(a) – INTERPRETATION AND IMPLICATIONS

As explained above, the NextGen cases have resulted in a change to the applicable law in terms of the rights and obligations that member states are invoking to justify their respective green industrial policies. Resultantly, Article III:8(a) has featured prominently in the cases relating to solar energy, and questions arising from this provision mark a “tabula rasa” for the WTO, with the Panel having to interpret it for the first time in the Canada–FIT case. Article III:8(a) has been described as a derogation from the national treatment obligation enshrined under the GATT, exempting those government procurement activities which meet all its qualifications. The “derogation” requires three conditions to be fulfilled: (1) that the challenged measure can be characterized as “laws, regulations or requirements governing the procurement of products purchased”; (2) that the measure involves “procurement by governmental agencies of products purchased”; and (3) that the procurement be undertaken “for governmental purposes and not with a view to commercial resale or with a view to use in the production of goods for commercial sale.” Only once these stringent conditions have been satisfied can a party be said to have successfully invoked the exemption under Article III:8(a). Both Canada–FIT and India–Solar Cells have been adjudicated primarily on the first element of the

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72 Canada–FIT (Panel), supra note 6, at ¶7.122.
73 Canada–FIT (ABR), supra note 6, at ¶5.56.
74 See id. at ¶5.39.
provision itself (striking down the LCR), with the analysis of the other elements being limited to the factual circumstances of the case,\textsuperscript{75} or declared “moot”\textsuperscript{76} by the AB. The author shall now critique the interpretation of Article III:8(a) and focus on the implications of this interpretation. The analysis will be limited to the energy sector.

1. \textit{Whether the Measure Constitutes “Law, Regulations or Requirements Governing Procurement”}

The AB in \textit{Canada–FIT} stipulated that there must exist “an ‘articulated connection’ between the laws, regulation or requirements” and the procurement – such that it occurs within the scope of these relevant laws, regulations or requirements.\textsuperscript{77} The AB noted that the term “procurement” referred to the process by which the governmental agency acquired the product.\textsuperscript{78} Overturning the Panel’s ruling, the AB held that the derogation under Article III:8(a) would only become applicable if the impugned legal regime discriminated against foreign products which were competing against those like domestic products ultimately purchased by the government.\textsuperscript{79} Therefore, the AB mandated that to invoke the derogation under Article III:8(a), the product purchased by the government and the product governed by the legal regime relating to the procurement would have to be in a competitive relationship. In \textit{Canada–FIT}, as well as \textit{India–Solar Cells},\textsuperscript{80} the product that was being “purchased” by the government (electricity) was not in a competitive relationship with the product governed by the legal regime relating to procurement (solar energy generation equipment (“GE”)). Thus, it was held that the derogation under Article III:8(a) could not be availed by the parties to exempt the LCR condition. Neither the Panel nor the AB engaged with this holding in \textit{India–Solar Cells} on the ground that the factual situation could not be distinguished from \textit{Canada–FIT}.\textsuperscript{81}

However, there was an interesting observation in the \textit{Canada–FIT} case, which was used by India to invoke Article III:8(a). The AB in \textit{Canada–FIT} observed that “what constitutes a competitive relationship between products may require a consideration of \textit{inputs and process} [emphasis added] of production used to produce the product.”\textsuperscript{82} This rather enigmatic statement seemed to open the door to considering the “process and production method” (“PPM”) in an examination of

\begin{footnotesize}
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\item \textsuperscript{75} \textit{India–Solar Cells} (Panel), supra note 7, at ¶7.137.
\item \textsuperscript{76} \textit{Canada–FIT} (ABR), supra note 6, at ¶5.84.
\item \textsuperscript{77} \textit{Id.} at ¶5.58.
\item \textsuperscript{78} \textit{Id.} at ¶5.59.
\item \textsuperscript{79} \textit{Id.} at ¶5.63.
\item \textsuperscript{80} \textit{India–Solar Cells} (ABR), supra note 7, at ¶5.40.
\item \textsuperscript{81} \textit{Id.} at ¶5.39.
\item \textsuperscript{82} \textit{Canada–FIT} (ABR), supra note 6, at ¶5.63.
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\end{footnotesize}
Article III:8(a). The implication of this could be that in determining “likeness,” the product purchased by the government and the product governed by the domestic legal regime could involve a question of the inputs or method that was used to produce the product purchased. Consequently, this would mean that since the electricity being purchased by the government is being produced by solar energy GE, a nexus could be established between the two products and hence it would come within the ambit of Article III:8(a). In fact, the Panel in the Canada–FIT case had recognised this and on this ground deemed that the LCR in that case satisfied the first element of Article III:8(a).

The Panel in India-Solar Cells rejected this argument on the ground that the AB in Canada–FIT did not find the inputs and processes of the generated electricity germane to its analysis of electricity vis-à-vis GE – despite the above observation of the AB. The AB was also not forthcoming in its analysis of its observation in Canada–FIT, stating that the question only arose when “the product subject to discrimination has found to be…in a competitive relationship with the product purchased.” It went on to add that the consideration of inputs and process could not displace the competitive relationship standard, but merely informed it. However, it failed to clarify how this ought to be done. Thus, the holding in India-Solar Cells appears to suggest that only if it could be established that electricity was in a competitive relationship with the GE, could the PPM question be broached. This seems to be at odds with the observation made in Canada–FIT, which seems to suggest that the determination of the competitive relationship may turn on a “consideration of inputs and processes of production used to produce the product.”

The holding of the AB in both these cases seems to eliminate the possibility of employing the derogation in cases involving LCRs on renewable energy GE, as the content requirement relates to the equipment, but the purchase involves electricity. Further, these cases have a severely limiting impact on Article III:8(a), such that the procurement would have to relate to the final and complete product, and not merely a part of it. Hestermeyer and Nielsen provide the example of a car, arguing that while the holdings in these cases would allow a legal regime covering the governmental procurement for a car manufactured locally, it would not allow the procurement of cars made conditional upon solely the engine or tyres being manufactured locally.

While this outcome may appeal to free trade advocates by ensuring that protectionist measures are not allowed in the garb of government procurement, the

83 See Charnovitz & Fischer, supra note 71, at 18-19.
84 India–Solar Cells (Panel), supra note 7, at ¶7.128.
85 India–Solar Cells (ABR), supra note 7, at ¶5.24.
86 Id.
87 Hestermeyer & Nielsen, supra note 63, at 578.
question relating to inputs and processes requires deeper engagement and analysis. This issue will have far reaching implications on the energy security debate, and therefore requires a more detailed examination. If allowed, then even though the final product purchased is to be electricity, the fact that it is being produced by the “procured” GE would imply that the legal regime which governs the procurement would relate to the product being purchased. This therefore would, theoretically, meet the requirements of Article III:8(a). Whether this ought to be the case would require a more meaningful discussion upon the PPM question, which the author shall briefly touch upon later. Furthermore, the argument raised by India at the Panel in India–Solar Cells, that a narrow interpretation of Article III:8(a) would limit the derogation to situations wherein the government could only directly acquire the GE and generate the electricity from it, did not receive much attention.88 Ideally, further elaboration is required so as to understand what governments ought to do to successfully invoke this derogation.

2. Whether the Procurement is Done by “Governmental Agencies”

The second requirement of Article III:8(a) requires that the procurement be carried out by governmental agencies. In Canada–FIT, the AB understands “governmental agencies” to mean those entities which are acting in the public realm “for or on behalf of the government” within the “competencies conferred” upon them to perform their governmental functions.89 Thus, it sets the threshold to qualify under this second element of Article III:8(a) higher than that required by Article XVII of the GATT which deals with “State Trading Enterprises.”90 The implication of this is that an entity, merely by virtue of being owned by the state, would not qualify under this prong of the derogation. Instead, such entities will have to show that they are acting on behalf of the government and that they have been endowed with governmental authority to perform that action. In the context of the energy debate, this does not seem like an arduous threshold. Generation and distribution of electricity is a government function in most parts of the world.91 Thus, it follows that an entity engaged in generating or distributing electricity would only be able to do so if the government were to authorise it to do so, and in performing a core government function, would therefore be acting as an agent of the government.

In the India–Solar Panels case, the AB did not go into this second element of Article III:8(a). However, at the Panel stage, both parties agreed that the agencies which were responsible for implementing the solar power project by purchasing electricity from the solar power developers were acting on behalf of the government under the express authority conferred by it, which the Panel did not disagree with.92

88 India–Solar Cells (Panel), supra note 7, at ¶7.132.
89 Canada–FIT (ABR), supra note 6, at ¶5.61.
90 Hestermeyer & Nielsen, supra note 63, at 578.
91 Marceau-Governance, supra note 52, at 92.
92 India–Solar Cells (Panel), supra note 7, at ¶¶7.147-7.151.
Therefore, it seems evident that those entities cloaked with governmental authority, undertaking activities which are performed exclusively by the government, would qualify under the second element of Article III:8(a).

This appears to cover several public-private partnerships, especially those secured through a tendering process (or any such process which confirms governmental competencies) and are in furtherance of a governmental activity. This is especially relevant in the case of developing countries, where an increasing number of such partnerships are being entered into for large scale developmental projects, such as construction of highways or the development of rail services. Whether this will apply to those instances where private companies are performing activities not exclusively performed by the government, but which still qualify as public functions, still requires a more definitive answer. To do this, a case-to-case analysis would probably be necessary. Liberalising the requirement may lead to circumstances wherein activities commonly performed by non-governmental entities qualify, merely by the fact they would be acting under the competencies conferred by the government. However, this would not necessarily mean that they are “for or on behalf of the government” as required by Article III:8(a) according to Canada–FIT. Whether this liberalised understanding is permissible, and if so, desirable is something that may need to be pondered over by decisions in the future.

3. Whether the Procurement has Been Undertaken “for governmental purposes and not with a view to commercial resale or with a view to use in the production of goods for commercial sale”

The last element of Article III:8(a) is a “cumulative” one, requiring that the procurement is in furtherance of a governmental purpose and is not for commercial resale or for the use in the production of goods for commercial resale. The first leg of this element requires that the products that are purchased by the government are “consumed by the government or what is provided by the government to recipients in the discharge of its public functions.” The AB goes on to say that the purchase of the products must exist in a “rational relationship” with the government function being discharged. The Panel in India–Solar Cells refrained from answering whether the Indian solar program would qualify under this prong. It appears, however, in the context of the energy question that the supply of electricity to a grid would be in furtherance of a government purpose. LCRs mandating the purchase of GE would directly relate to the government function of providing electricity to the state. However, this analysis is specific to the case of energy and it would be difficult to extend the same logic to an activity which is not a core governmental function. Only a small number of purchases that

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93 Canada–FIT (ABR), supra note 6, at ¶5.69.
94 Id. at ¶5.68.
95 Id.
96 India–Solar Cells (ABR), supra note 7, at ¶7.162.
would be consumed by the government or provided by the government to recipients in the discharge of public functions would therefore meet this requirement.97

The second requirement of the third element of Article III:8(a) requires that the procurement and purchase of products should not be done with the view of commercial resale. The AB in Canada–FIT held that this would require a consideration of the entire transaction from the sellers’ and the buyers’ perspective which would often require an examination of the long term strategy of the parties’ behaviour in the market.98 Profit-orientation on part of the seller would not be the only manner in which the commercial resale could be determined.99 The AB held that that the key to determining the same would be examining whether the transaction was made at arm’s length.100 Thus, it seems that it would be required to examine whether the goods subject to the LCRs (the GE, in this case) are resold commercially or whether the electricity generated from the same is sold as a transaction on arm’s length basis. This would involve an intensive scrutiny on the exact structuring of electricity supply systems in states.

The Panel in the India–Solar Cells did precisely this, holding that it would be “difficult to characterize” the Indian solar energy supply transaction as a commercial resale from the perspective of the relevant governmental agencies, who act as sellers.101 However, it went on to say that the further downstream sale of electricity from the buyers in the first instance to the electricity distribution companies seemed to occur in a competitive and commercial setup.102 It also noted that there were parallels which existed with the Canadian solar program, but recalled that the findings of the Panel were mooted by the AB, and were therefore of no precedential value. Consequently, the Panel chose not to answer the question.103 What emerges from the above discussion is that judging whether commercial resale or commercial sale takes place would depend on the manner in which electricity supply systems are structured, a factor which would vary widely across different jurisdictions.

Thus, the AB seems to have curtailed the derogation under Article III:8(a) to a considerable extent in the fear of allowing the provision to be used as means of trade protectionism. Despite the overarching environmental implications of these solar energy cases, it seems that the Panel and the AB were not willing to let these considerations interfere with their reasoning, effectively taking sustainable

97 Hestermeyer & Nielsen, supra note 63, at 580.
98 Canada–FIT (ABR), supra note 6, at ¶5.71.
99 Id.
100 Id.
101 India–Solar Cells (ABR), supra note 7, at ¶7.185-7.186.
102 Id.
103 Id.
development out of the trade equation. It will be interesting to see what the future holds in terms of this provision and whether or not it will be moulded to promote sustainable development while preserving trade interests.

IV. THE WAY FORWARD FOR THE WTO

Having highlighted the uniqueness of the NextGen cases coming up before the WTO and the unsuitability of the current WTO regime to handle these cases, the author shall attempt to analyse how the WTO can take this debate forward. The author believes that three steps ought to be taken: first, the recalibration of the PPM debate in the WTO; second, employing the principle of sustainable development enshrined in WTO agreements in a more dynamic manner; and third, entering into an agreement which specifically deals with energy trade. It should be noted that none of these options are mutually exclusive; indeed, it would be desirable if concerted efforts are made in realising them simultaneously. These proposals have also been widely discussed in existing literature. The author shall largely limit his argument to Article III:8(a) in the context of the first two proposals, while the nature of the third proposal will be more overarching. The author merely attempts to briefly touch upon these approaches, as a detailed analysis of these methods is beyond the scope of this article with each approach itself being the subject of an exhaustive scope of research.

A. The PPM debate – a possible recalibration?

From an environmental perspective, PPMs represent a useful policy tool to align trade interests towards a greener direction. On the contrary however, they may also be used by states to implement protectionist policies in the cover of environmentally friendly measures. The PPM debate is reflective of a larger question on whether non-product characteristics can be used for determining “likeness.” Scholars have been calling for a re-examination of the PPM debate for a long time, especially in the context of the Shrimp–Turtle ruling of the WTO.

With the rise of the NextGen cases, it seems that the appropriate time to undertake this re-examination has definitively arrived.

In terms of Article III:8(a), the debate is somewhat different. What needs to be determined is whether the product purchased by the government can be considered “like” the product the legal regime of the state discriminates against, taking into account the inputs and processes for creating the purchased good. If “inputs and processes” can be considered for the purposes of generation of electricity, then the discrimination of foreign GE and local GE, through mandatory LCRs, for the purchase of electricity may be permissible insofar as Article III:8(a) is concerned. To elaborate, the product that is being purchased by the government (electricity) would be directly arising from the domestic GE, which is receiving favourable treatment as against the foreign GE. Taking “inputs and processes” into account would allow such discrimination. Therefore, the adjudication of the two solar energy cases would have been radically different, and the LCR may have been deemed compliant with the first element of Article III:8(a). Further, considering that Article III:8(a) has been interpreted rather narrowly, and can only be invoked when government functions are involved, the traditional slippery slope argument against PPMs is easily rebuttable. Generation and distribution of electricity being a core governmental function, GE serve as one of the few goods which could be brought within the ambit of Article III:8(a).

Interestingly, it should be noted that the Agreement on Government Procurement, a plurilateral agreement meant to ensure fair and transparent competition in the case of government procurement, allows for a PPM based distinction to be made under Article VI:1 of the original draft and Article X read with Article I(u)(i) of the revised draft. Whether the WTO wishes to pursue this avenue in the context of Article III:8(a) will be interesting to see. The question was not satisfactorily answered in either of the two solar energy cases and determination of the same will have pervasive policy and legal implications. Hopefully, the image of the accordion will guide the WTO in answering this question, and the adjudicators will bear in mind that the width of the term “like” can be interpreted more specifically in the light of particular provision.

B. Sustainable Development as An Interpretative Tool and Guiding Principle.

With the rise of the NextGen cases, the twin goals of sustainable development and improved standards of living under the trade regime. Some have chosen to argue this through advocating a linkage between the trade regime and international

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107 Marceau, EC-Seal, supra note 104, at 325.
108 Marceau-Governance, supra note 52, at 92.
110 Condon, supra note 41.
environmental law. However, one need not go that far. The GATT itself provides a textual hook in its preamble, which states that the GATT aspires to raise standards of living and develop the full use of the resources in the world. Furthermore, the Marrakesh Agreement which set up the WTO, also mandates that attempts should be made to ensure the:

“optimal use of the world’s resources in accordance with the objective of sustainable development, seeking both to protect and preserve the environment and to enhance the means for doing so in a manner consistent with their respective needs and concerns at different levels of economic development.”

As was held by the AB in the Shrimp/Turtle case, these provisions clearly indicate an intention on part of the framers of the WTO to let sustainable development add “colour, texture and shading” to the interpretation of WTO agreements. Essentially, this would require what Rubini feels ought to be done in the case of the SCM agreement (albeit for a very different reason) in the NextGen cases – employing the Dworkinian notion of “integrity.” Thus, this approach would require us to undertake a teleological quest, and attempt to interpret the WTO obligations in light of the sustainable development requirements as set out in the preamble to the GATT and the Marrakesh Agreement. This would require the WTO to realise the inherent importance of sustainable development as a goal within the WTO, and adopt it as an important consideration in its analysis of legal rights and obligations. This does not mean that the objective of free trade is to be sacrificed, but would entail more frequent attempts at harmonisation of trade and environment obligations. So far, this seems to have only been done in the context of Article XX of the GATT. Now with the emergence of a new set of legal rights and obligations in the NextGen cases, questions need to be raised whether such considerations ought to be extended to other provisions.

In the context of the NextGen energy cases under Article III:8(a), this would advocate an interpretation which would require a higher threshold to invalidate policies promoting renewable energy. To give an example, the first element of

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111 See generally Christina Voigt, Sustainable Development as a Principle of International Law: Resolving Conflicts between Climate Measures and WTO Law 265-289 (2009); see also Joost Pauwelyn, The Role of Public International Law in the WTO: How Far Can We Go? 95 AJIL 535 (2001), to understand in greater detail how WTO law ought to take cognizance of public international law.


115 Rubini, supra note 51, at 31.

116 See Jonathan Crowe, Dworkin on the Value of Integrity, 12(1) DEAKIN L.R. 167, 168-172 (2007), for an explanation to Dworkin’s theory of integrity.
Article III:8(a) may be interpreted in a manner more conducive to a PPM based argument. Importantly, employing this method would need such questions to be explored without being overly concerned (yet sufficiently mindful) of the “possible [trade liberalisation] policy implications of such a holding.”\textsuperscript{117} Thus, a domestic policy which was previously infringing trade obligations may now be interpreted in a manner which supports compliance with trade and environment obligations. In terms of the SCM, this may mean allowing the Article XX exceptions to be read into the SCM. Understandably, there will be situations where the harmonization between free trade and environmental considerations will be extremely difficult. However, the crux of this approach requires greater teleological thrust in interpreting WTO obligations in light of sustainable development and recognising its inherent value in the WTO framework by giving it weightage in judicial analysis.

\textbf{C. Tailoring the WTO Regime to Account for New Realities.}

As explained in Part II.B above, the WTO regime is ill-equipped to handle trade in energy goods. Thus, for the current framework to organically incorporate concerns relating to trade in energy goods seems difficult. Commentators have suggested that the WTO could perhaps be guided by the Energy Charter Treaty (“ECT”), which is tailored to regulate trade and investment in the energy sector. The ECT draws heavily from the GATT, and thus it may not be very difficult to execute such an agreement within the WTO framework.\textsuperscript{118} Having a sector specific agreement is not alien to the WTO, as evidenced by the Agreement on Agriculture, the Agreement on Textiles and Clothing. Using the ECT as a baseline framework, the WTO could also delve into the question of renewable energy in greater detail.\textsuperscript{119} Another less cumbersome approach suggested by Marceau is the adoption of an “Interpretation Decision” by the General Council of the WTO, clarifying (and possibly liberalising) how the current WTO regime ought to account for trade in energy goods.\textsuperscript{120}

Another perspective on this approach focuses on the environmental aspect of the debate. Based on the premise that trade law can foster environmental progress and sustainable development, this perspective argues that an agreement ought to be envisaged which reduces tariff rates on environmental goods – similar to the process adopted in the Information Technology Agreement (“ITA”).\textsuperscript{121} In 2001, the Doha Ministerial Declaration specifically mandated the same which resulted in intense negotiations at the WTO Committee on Trade and Environment Special

\textsuperscript{117} Rubini, supra note 51, at 31.
\textsuperscript{118} Marhold, supra note 4, at 5-6.
\textsuperscript{119} Id.
\textsuperscript{120} Marceau-Governance, supra note 52, at 92.
\textsuperscript{121} Wu & Salzman, supra note 1, at 458.
Session.\(^{122}\) Little headway has been made in this regard,\(^{123}\) because of a number of policy considerations dominating the negotiations. For example, parties have not yet been able to agree on the fundamental definition of an “environment good,” with developing countries (the Asia-Pacific Economic Co-operation bloc, specifically) attempting to give the same a limited understanding while developed countries (the Organisation for Economic Co-operation and Development bloc, specifically) have undertaken a far broader approach to the issue.\(^{124}\) Obstacles like this unfortunately seem unavoidable, due to the technological disparity between nations and their varied political objectives. Thus, any decision would hinge on strategic policy considerations. A broad approach favouring developed nations would allow them to profit from lowered tariffs due to a favourable export market. On the other hand, a limited approach favouring developing nations would ensure that loss of revenue is minimal and exporters are disincentivised to dump outdated technologies in their markets.

V. CONCLUSION

It is evident that there is a significant shift in the nature of trade and environment disputes in the global trading regime with the emergence of the NextGen cases. With countries aiming to improve their domestic capacity for renewable energy to facilitate energy security, it will be a challenging task for the WTO to answer these questions – questions which will have significant policy and legal ramifications. There seems to be a consensus that the WTO will have to alter its approach to energy trade. The current regime does not holistically cover the same, and addressing this debate in a regime ill-suited to it is fraught with the risk of stymieing both trade in energy goods and sustainable development.

From a legal perspective, the most intriguing aspect of the NextGen cases is the evolving legal regime. With the SCM agreement gaining prominence through these disputes, there has been significant discourse on how the WTO ought to interpret the agreement so as to harmonise, and if possible optimise, the relationship between trade, energy and the environment. The GATT has also seen some development in this regard, with Article III:8(a) of the GATT being one such provision and the prime focus of this article. The adjudication of this provision

\(^{122}\) World Trade Organization, Ministerial Declaration of 14 November 2001, ¶31(iii), /MIN(01)/DEC/1, 41 ILM 746, 751 (2002) (calling for “the reduction or, as appropriate, elimination of tariff and non-tariff barriers to environmental goods and services”).


\(^{124}\) Id. at 5-7.
currently leaves much to be desired and it is interesting to see how the WTO will take this forward. Specifically, the question relating to the consideration of “inputs and processes” is a momentous one and will probably dictate the manner in which the discourse surrounding renewable energy and trade is shaped. With India having filed a claim against the United states challenging various LCRs and subsidies instituted by various United states’ state governments in the renewable energy sector, the WTO may have another opportunity to engage with this newly emerging legal regime, and in particular, Article III:8(a). Hopefully, the dispute will witness a far more thorough analysis of this new legal regime and provide some sort of blueprint for enabling states to fulfil their environmental obligations within the larger international trade framework.

There is also a need for a stimulus on behalf of the WTO, which seems to have reached a bit of a stasis in the energy-trade debate. Judicial considerations of the PPM method being an appropriate consideration for determining the scope of the national treatment obligation and realising the inherent value of sustainable development will do much to change this. A more mediatory approach will involve building consensus within the WTO either through an agreement regulating trade in renewable energy or reinterpreting current WTO obligations in light of renewable energy. It is of utmost importance that the global trading regime systematically and coherently addresses these questions as their answers will be crucial in shaping the energy-trade-sustainable development discourse in the future. Addressing this debate in a holistic manner will allow nations across the world to usher in an age of sustainable development spearheaded by the intersection of industrial policy, equitable trade policy and renewable energy.