



The E15 Initiative STRENGTHENING THE GLOBAL TRADE SYSTEM



Does it FIT? An Assessment of the Effectiveness of Renewable Energy Measures and of the Implications of the Canada – Renewable Energy/FIT Disputes

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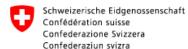
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ABSTRACT

This piece considers whether the recent Canada-Renewable Energy/FIT case gives any ammunition to the argument that the World Trade Organization's subsidy law, as embodied in the Agreement on Subsidies and Countervailing Measures, is in need of reform. It begins by considering the nature of the measures involved in this case. What is their object? Are they effective in achieving it? The answers to these questions help to inform a discussion in the second half of the paper analyzing how these measures fared in the case, and considering how such measures should be treated under WTO law. The idea is to uncover findings with applicability to a wider group of measures than simply these two, but the note uses these two and the Canada – Renewable Energy/FIT case as a salient case study.

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LIST OF ABBREVIATIONS

FIT feed-in tariff

GATT General Agreement on Tariffs and Trade

LCR local content requirement

PV photovoltaic

R&D research and development

RETs renewable energy technologies

SCM Subsidies and Countervailing Measures

MEASURES EXAMINED IN THE CANADA RENEWABLE ENERGY/FIT DISPUTES

The Canada – Certain Measures Affecting the Renewable Energy Generation Sector, Canada – Measures Relating to the Feed-In Tariff Program case (WT/DS412/R, WT/DS426/R) involved a feed-in tariff (FIT) enacted by the Province of Ontario, Canada. This is a scheme that pays guaranteed premium rates for set periods to electricity produced by renewable energy sources; in this case, solar photovoltaic (PV) and wind generation were favoured. Typical FITs also guarantee access to the distribution grid on specified terms. To be eligible for the premium rates embodied in the FIT, the electricity generated had to come from equipment that had some minimum level of domestic content; the required levels varied from technology to technology.¹ This stipulation is known as a local content requirement (LCR).

FEED-IN TARIFFS AND LOCAL CONTENT REQUIREMENTS: DIFFERENT MEASURES, DIFFERENT GOALS

It is analytically useful to think of these two as separate measures, though of course in this case they were inseparable from a regulatory perspective. Their objectives are quite different, as is their treatment under WTO law (a point to which we return). Since our ultimate objective is to ask whether these sorts of measures should be legal under WTO law, a useful starting point is to clarify their objectives, and how effective they are in achieving them. If some good result will eventually have to be balanced against the principles of the multilateral trading system, we should start by knowing what result, and how good.

FITs are environmental measures that have as their objective the rapid dissemination of renewable energy, typically with climate change mitigation as a major goal. It is worth noting that this is a rather important goal. The most in-depth economic analysis of climate change conducted to date called it the biggest market failure the world had ever seen, capable, if unaddressed, of shaving up to 20 percent of global gross domestic product (GDP) now and forever (Stern 2006). Almost all the world's nations have a legal commitment to address climate change by mitigating the emission of greenhouse gases.²

An LCR is a condition that can be attached to some benefit (such as FITs) as a threshold condition, and is not fundamentally an environmental measure if assessed by its objectives; rather it is an instrument of industrial policy, which seeks to build up backward linkages in the domestic economy. In the case of Ontario, it sought to build up inprovince capacity in the manufacturing sector that supplied the wind and solar PV-generating sector.

It can also be argued that the LCR is ultimately an environmental measure, since it is the "grease" that makes possible the environmental measure to which it is attached. That is, without the promise of local jobs as a payback, it might be difficult to convince voters to back a plan that would see their power bills increasing. In these times of fiscal restraint, it is difficult to sell environmental measures on their own, without also arguing that they will have economic benefits.

ARE FITS AND LCRS EFFECTIVE IN ACHIEVING THEIR GOALS?

Are FITs and LCRs effective in achieving their objectives? In the case of FITs, the consensus seems to be yes, they are highly effective at achieving a rapid deployment of renewable energy generating capacity. FITs are used in more than 90 jurisdictions worldwide, and numerous studies indicate their effectiveness at achieving this environmental objective (Lipp 2007; Butler and Neuhoff 2008; Fouquet and Johansson 2008; Deutsche Bank 2010). Of course, for any given regime of FITs it can be asked whether the objective could be achieved at a lower cost by other policy measures. The answer to this question is not so black and white. But this is not a particularly salient line of questioning if our ultimate objective is to consider these measures as they relate to WTO law.

There are a number of market failures that might argue the economic case for the use of FITs. They include:

- Renewable energy technologies (RETs): These face competition from highly subsidized competitors in the conventional generation sectors, subsidies going to both fossil fuels and research and development (R&D).
- Capital market imperfections: Lenders may have imperfect information about the new technologies and the associated risks.

The United Nations Framework Convention on Climate Change, Article 4.

Levels ranged from 25 percent for large wind projects to 60 percent for some solar PV. See Ontario Power Authority 2012.

- Latent comparative advantage: Market support may be necessary to bring out latent comparative advantage through learning by doing.
- Lack of appropriability: RET firms may underinvest (relative to the socially optimal levels) if their innovations, or even their discovery of a profitable market, may be easily appropriated by others.
- Environmental externalities: RET firms will certainly underinvest in both R&D and deployment of technologies if we consider the social returns to dissemination of renewable energy. These include the enormous returns that come from mitigating climate change, which is arguably our most significant global crisis; emissions from electricity generation account for more than 40 percent of global CO2 emissions (IEA 2012). If firms invested at levels that made the costs of investment commensurate with the global climate change-related benefits to be derived from that investment, it would mean much, much more investment.

To reiterate, these market failures are rationales for corrective government intervention. Most economists agree that the first best policy route would involve inter alia removal of perverse subsidies to the fossil fuel sector, and the imposition of a carbon tax. But other regulatory solutions may also be defensible, and the scale of the problem dictates that any effective solution will impact trade and investment flows in a significant fashion.

In the case of LCRs, the evidence is far less clear; there is not much out there, and what there is tends to be flawed (Kuntze and Moerenhout 2013). That is, we cannot say with certainty whether they are effective in achieving their industrial policy goals—certainly not at a general level, but even at the level of a specific LCR regime the question is difficult. We have some case studies of what seems to be successful use of these policies—as with autos in China, India and Mexico (Sutton 2004; Pack and Saggi 2006). But there are also many examples of unsuccessful use of LCRs—as with wind power in Ukraine (Hufbauer et al. forthcoming). And even in the case of the success stories, it is not clear what the counterfactual is—would those sectors have developed successfully even without the LCRs?

What evidence there is seems to coalesce around some basic guidance:

- LCRs will not work in isolation. They must be accompanied by complementary policies that build up the capacity of the upstream local sectors; the capacity of human resources; innovative capacity; and the capacity of domestic infrastructure and of domestic financial institutions to support the targeted upstream producers.
- LCRs will only work if the cost and quality differences between local and global suppliers are not too great. The

- objective is to have LCRs force a leap forward by local suppliers, but if the gap they are trying to clear is too wide, they will simply fall.
- LCRs that are too onerous (set at very high levels) simply drive up the costs of production or, worse, deter investment outright. Some schemes have been successful in gradually increasing the level of demand for local inputs.
- If the goal of an LCR is to create globally competitive firms, as opposed to creating temporary employment, the LCR and other protection will need to be phased out over time to expose domestic firms to international competition.
- LCRs require a large domestic market to make it profitable for investors to produce domestically in spite of the increased costs associated with them. Small markets imposing LCRs may see little or no investment.

It is also worth asking whether green LCRs achieve environmental goals, notwithstanding their basic industrial policy aims. It was noted that they can be argued to enable environmental measures such as FITs. Under specific circumstances, they might also be judged to be effective in addressing climate change. The test must be that the weaker dissemination of environmental technologies (due to higher costs forced on investors) must be more than compensated for by the environmental impacts of the supported industries. That is, there may be positive environmental outcomes from successful industrial policy if the infant industries mature and become significant innovators and competitors in the green technology space. This is not a test easily put into actual practice, but it conceptually highlights the key issues of concern.

As to the evidence that LCRs might actually accomplish such things, there is none available in the literature, this being a novel concept. But it should be noted that the discussion above on effectiveness is salient. If we were to find that LCRs are successful as industrial policy, they would also be successful in accomplishing the environmental goals described above, in creating new innovators and competitors.

ARE THEY TRADE-DISTORTING?

We also need to take into account the extent to which the two measures at issue are trade distorting. This consideration underlies much of current subsidy laws. The hierarchy of severity with which the Subsidies and Countervailing Measures (SCM) Agreement deals with subsidies is closely correlated with their trade-distorting potential; export-related subsidies, for example, are prohibited, while subsidies with little impact on trading partners (no adverse effects) are not in breach of obligations. And the now-expired Article 8 of the SCM, the only carve-

out that Members created for otherwise actionable subsidies, arguably takes the trade-distorting nature of those subsidies into account. It is likely, for one thing, that Members considered these subsidies as circumscribed by the subparagraphs to be minimally trade-distorting, though this is not explicit in the text. For another thing, Article 9.1 allows for consultations over any subsidies qualifying under Article 8.2 that result in serious adverse effects.³

In general, supply-side policies such as FITs, where they do not favour domestic over foreign producers, actually act to increase flows of trade and investment. They create new markets for goods and services from both domestic and foreign suppliers, and similarly encourage investment from both domestic and foreign sources. LCRs cannot be examined in isolation for their trade-distorting impacts, since they almost always act as a condition for the receipt of some benefit. Where they are attached to incentives such as FITs, however, they have clear and significant trade-distorting impacts (Bahar et al. 2013).

CONCLUSIONS ON THE MEASURES

We are interested in the characteristics of the measures involved in this case because, as a starting point, we recognize the importance of dealing with climate change. FITs seem to be aimed at doing just that, and measure up well in terms of effectiveness at achieving their objectives, and in terms of minimal degree of trade distortion. The question to explore in the following section, then, is how FITs fared under WTO law.

LCRs, unlike FITs, are not primarily aimed at environmental goals. We noted that they could achieve environmental goals under certain circumstances—primarily if they were effective enough as tools of industrial policy in the clean energy space. But the evidence on this question is thin, and what there is seems to tilt away from considering LCRs as effective (Hufbauer et al. forthcoming). Certainly they are explicitly aimed at distorting trade and investment flows, and, for this reason, expressly prohibited under WTO subsidy laws.

The characteristics should be borne in mind as we turn to the question of how these measures fared under WTO law. There would seem to be a strong argument for legal flexibility to use tools such as FITs, while LCRs are a more difficult challenge.

THE DISPUTES

The disputes focus on how consistent the 2009 FIT programme of the Province of Ontario is with WTO law. Japan and the EU lodged complaints with the WTO dispute settlement, claiming in particular that

- i) the LCR imposed on electricity generators using solar PV or wind power technology was incompatible with the prohibition of non-discrimination as laid down in the obligation of national treatment of Article III: 4 of the General Agreement on Tariffs and Trade (GATT) and Article 2.1 of the Agreement on Trade-Related Investment Measures (TRIMs), and
- ii) the FIT was prohibited under Article 3 of the SCM Agreement because it did include the LCR.

It is worth highlighting that the focus of the two legal claims is partly different, with the first being exclusively concentrated on the legality of the LCR, and the latter on the FIT and the LCR. The two disputes were heard by a Panel and then by the Appellate Body, and reports were issued by them respectively on 19 December 2012 and 6 May 2013.

Now, does the Canada – Renewable Energy/FIT ruling allow for good incentives for green energy? What are its implications? The assessment cannot but be preliminary. The findings of the Appellate Body are not fully clear, since they are often expressed in terms of principles rather than detailed guidelines.

POLICY NARRATIVES AND LEGAL OUTCOME

Two different policy narratives surrounded the case and one arguably influenced the legal outcome. In particular:

• Policy narrative 1: At one level there was the narrative of local labour lobbies and green movements that unreservedly supported Ontario's programme, and criticized the legal challenge and possible WTO intrusions with what it perceived as a good policy. Crucially, this narrative does not distinguish between the two elements of the policy, that is, the FIT and the LCR, and seem to look at them as a single policy measure.

It is interesting to note that this implies that Members understood that the subsidies covered by Article 8 might in some cases not be minimally trade-distorting. Actionable subsidies causing adverse effects as per Article 5 are, of course, in breach of obligations. But the Article 9.1 threshold is higher; subsidies classifying as non-actionable under Article 8 had to cause

"serious" adverse effects before they triggered a consultation mechanism.

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 Policy narrative 2: Another narrative comes out from recurring statements of the complainants during the legal proceedings. This narrative crucially separates FITs, as good policy, and LCRs, as bad policy. It is the latter's discriminatory element—not the FIT—that troubled Japan and the EU (and many of the intervening third parties) and prompted the litigation. It is this element—not the FIT which they want to have struck down.

Three comments can be made. The first narrative is not appropriate since it does not distinguish between the different goals and effects of the two policies. The second narrative, with its approval of FITs and disapproval of LCRs, is partly in line with what happens and what is normally accepted in most countries. The legal discussion and the outcome of the case closely reflect the policy distinction of the second narrative. The national treatment route is explored up to its very end, and with a rigorous prohibition of the LCR. Once this goal is achieved, the subsidy route is pursued only in so far as it is necessary to determine that there is not enough evidence to conclude that the FIT is a subsidy. In other words, the bad, discriminatory element is expunged with surgical precision, leaving the tissue of the FIT ultimately intact.

LEGAL ANALYSIS AND POLICY IMPLICATIONS OF THE CASE

The legal interpretations of the Panel and the Appellate Body focus on two claims, one on the breach of the principle of non-discrimination, the other of subsidy rules.

NATIONAL TREATMENT AND GOVERNMENT PROCUREMENT EXCEPTION

Legal findings: Both the Panel and Appellate Body easily concluded that the LCR element of Ontario's programme did breach the prohibition of non-discrimination. It was comfortably found that the LCR did confer an "advantage" on local producers of inputs. This conclusion was not discredited by Canada's defence whereby the LCR could not be discriminatory because it was imposed as part of Ontario's purchasing of goods "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."⁴

ANALYSIS AND POLICY IMPLICATIONS

- The flexibility allowed by this "government procurement" defence could indeed have been significant. But the Appellate Body interpreted it narrowly. The defence could not be accepted because the discrimination did not directly refer to what Ontario was purchasing, that is, electricity. By contrast, the obligation of sourcing locally did refer to another market, that of inputs.
- Neither the Panel nor the Appellate Body made a finding on whether Ontario's programme constituted a prohibited subsidy because they were unable to find whether there was a subsidy in the first place. But had they found the FIT to be a subsidy, they would arguably have found no particular difficulty in concluding that the LCR breached Article 3.1 (a) of the SCM Agreement that prohibits so-called "local content subsidies."⁵
- It is now clear that you cannot discriminate in such a patent way as with an LCR—a measure not motivated by environmental considerations.
- The prohibition of discrimination has also been reinforced by the narrow interpretation of the defence of "government procurement," whose availability looks now more limited.
- Clearly, the analysis above does not say anything about whether this strict legal conclusion is desirable or not, or if there is a need for a more flexible rule for LCRs.

SUBSIDIES RULES

Does Ontario's FIT constitute a subsidy? A positive subsidy determination would have been necessary to conclude that the programme was prohibited because of the LCR element. WTO's legal definition of subsidy is constituted of two parts. You need to have a form of "financial contribution" in one of the examples provided under Article 1 of the SCM Agreement, or, alternatively, a form of "income or price support." In addition to this, the measure must confer a "benefit."

Both the Panel and the Appellate Body concluded that Ontario's FIT was a "purchase of goods." The focus then shifted to whether this purchase of goods could confer a

Article III: 8(a) of the GATT reads: 'The provisions of this Article [i.e., the prohibition of discrimination] shall not apply to laws, regulations or requirements governing the procurement by governmental agencies of products purchased 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."

Which prohibits "subsidies contingent, whether solely or as one of several other conditions, upon the use of domestic over imported goods."

"benefit"—which is the crucial legal issue in this case. This issue was so controversial that the Panel was split, with one member issuing a separate opinion.

A benefit is found to exist if the recipient does receive an economic advantage that would have been not received in the marketplace. It is therefore necessary to identify an appropriate commercial benchmark against which the measure under examination can be compared (Appellate Body report, Canada-Aircraft, para. 157). Now, Ontario's energy market was very complex and heavily regulated by the government through various public bodies. In such a scenario, could this market be considered "competitive"? Could the prices coming out from this market be regarded as reliable benchmarks for the benefit analysis? At the same time, it was crystal clear that the FIT programme had been introduced to facilitate the development of green energy.⁷

The Panel majority was of the view that it was not possible to talk of a competitive energy market in Ontario (and perhaps even elsewhere). More fundamentally, it was crucially noted that no competitive market would even hypothetically attract the type of supply of energy sought. In other words, the supply-mix decisions of Ontario, which did include reliability of supply and environmental and human health considerations, did make a "public good" scenario, one which would not have existed but for public intervention.⁸ Consequently, the various benchmarks put forward by Japan and the EU, all substantially relating to Ontario's wholesale market, were not appropriate. Similarly, the benchmarks based on what happened in other provinces or neighbouring US regions were not considered appropriate.

The dissenting panellist disagreed with the majority and essentially opined that an appropriate benchmark could well be found, even in a hypothetical competitive market. Further, he did note that the fact that the FIT is there to "facilitate" the development of certain technologies is indicative of the existence of a benefit.⁹

The Panel's majority approach seems to conflate the two separate issues of the existence of a subsidy with its economic and policy justification. The dissenting panellist seems to have been more sensitive to the need, and possibility, of keeping market and policy considerations separate. The benefit should be determined only on the basis of the former, keeping the latter aside.

Finally, it should be noted that the Panel majority did come out with its own benchmark, based on the average cost of capital in Canada for projects having a comparable risk profile in the same period. Now, this test looks wrong from an economic perspective. The risk profile of a comparable investment cannot be pertinent when, fundamentally, risk is not an issue in measures such as FITs, which involve long-term (20 or 40 years) contracts. Moreover, this test is not particularly useful in practice. It is not clear how we might quantify the risk profile of this or any other sector, much less find sectors with similar risk profiles and derive the

undistorted cost of capital faced by that sector.

The Appellate Body introduced two important innovations with respect to the analysis of benefit (definition of relevant market, and concept of market creation) which may well have important implications for future policies in the area of clean energy (and perhaps even beyond).

The Appellate Body held that it is first necessary to define the relevant product market to identify the necessary benchmark to an alleged benefit. With an analysis that is reminiscent of anti-trust, they looked at energy markets from both the demand side and supply side. While the former, substantially based on what consumers do, would have pointed to one single energy market (irrespective of the source of generation), the latter led to narrowing it down to renewable energy only (and in particular wind and solar). The factor that led to concluding that a separate market existed was the extremely high upfront costs of renewable energy generating capacity (partially offset by low operating costs) and the intermittency of renewable energy production, both of which contribute to the inability of wind and solar PV producers to compete unaided with conventional electricity producers.

There was no discussion of whether "energy," and in particular "electricity," is a "good" or a "service." The Panel did simply take note that the parties seem to agree it was a good. The issue did not come out before the Appellate Body. In fact, the classification of energy as either a good or a service is highly significant. Had energy been considered as a service, WTO subsidy disciplines would have simply not applied (the SCM Agreement only applies to subsidies to goods). National treatment considerations would have still been relevant but the analysis would have focused on the GATS and the commitments taken by Canada in its schedule for the relevant sectors. Further, neither the Panel nor the Appellate Body ruled on whether Ontario's programme could constitute a form of "price support." This leaves an important question open. The potential of this element of the definition of subsidy is still unexplored and could represent an easy gateway to cover FITs and other regulatory measures of support of green energy.

This clearly comes out in the litigation. "Canada accepts that 'most' of the contested FIT generators would be unable to conduct viable operations in a competitive wholesale market for electricity in Ontario. Indeed, Canada points out that one of the objectives of the FIT Programme was to encourage the construction of new renewable energy generation facilities that would not have otherwise existed" (Panel report, para. 7.277, emphasis added).

It is useful to quote the Panel itself. "The complainants have not convinced us of the premise underlying their two main lines of benefit arguments, namely, that in the absence of the FIT Programme, the FIT generators would be faced with having to operate in a competitive wholesale electricity market. The evidence before us indicates that competitive wholesale electricity markets, although a theoretical possibility, will only rarely operate in a way that remunerates the mix of generators needed to secure a reliable electricity system with enough revenue to cover their allin costs, let alone a system that pursues human health and environmental objectives through the inclusion of facilities using solar PV and wind technologies into the supply-mix" (Panel report, para.7.309, emphasis in original).

It is again useful to quote one passage from his opinion. "I am of the view that facilitating the entry of certain technologies into the market that does exist—such as it is—by way of a financial contribution can itself be considered to confer a benefit. ... The fact that a market is imperfect in its operation or does not meet the objectives that a government might have ... does not shield financial contributions which take place in the market from the benefit analysis that is required under the SCM Agreement" (Panel report, paras. 9.3 and 9.6, emphasis added).

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A couple of comments on the findings of the relevant market.

- Legal point: Is the definition of the relevant market something that should be done in the benefit analysis? Market analysis such as the one carried out by the Appellate Body was never used in benefit determinations before. This can probably be explained with the fact that the identification of the appropriate market benchmark was in the main clear. The definition of the relevant market is traditionally done to determine what the competitive constraints of firms are, and this is preliminary to the determination of whether there is market power and use of it. This type of analysis is already done in subsidy laws, but only at a subsequent stage, when it is necessary to establish whether the subsidy has caused a serious prejudice—which makes its use comparable to what is done in anti-trust. 10 By contrast, the focus of the benefit is different and perhaps more simple, that is, to determine whether the company or sector at issue has received an advantage from the measure. If this is correct, the market should be defined in the benefit context only if this is necessary to identify the relevant benchmarks.
- The practical concern is that a too comprehensive market analysis carried out at the relatively preliminary step of analysis of the benefit may make subsidy determinations unduly more difficult. In a word, increase the risk of "under-inclusion" of the disciplines. This risk would be particularly sensitive from the transparency and governance perspectives. If no benefit (and hence no subsidy) is found to exist, there is no duty to notify.
- Economic point: Assuming market definition is warranted at the level of the definition, has the Appellate Body done it correctly? Here the answer is clearly no. Assuming supply-side considerations are relevant when defining relevant markets, the factors relied on by the Appellate Body—costs of production of renewable energy—are not relevant to show substitutability or lack of it. They show the cost of production, not the cost of shifting production. This is a precedent that will come back to haunt us outside of the realm of clean energy.

The second innovation of the Appellate Body's benefit analysis is the introduction of the concept of market creation and its distinction from intervention in already existing markets. In particular, the Appellate Body noted:

A distinction should be drawn between ... government interventions that create markets that would otherwise not exist and ... other types of government interventions in support of certain players in markets that already exist, or to correct market distortions therein. ... While the creation of markets ... does not *in and of itself* give rise to subsidies within the meaning of the SCM Agreement, government interventions in existing markets may amount to subsidies. (Appellate Body Report, para. 5.188)

This statement, duly prepared by the narrow definition of the relevant market, is probably the most important in the Appellate Body's report. It is the watershed that expressly lays down the new line on what can be done without triggering the application of subsidy rules. The importance of the Appellate Body's approach can be fully appreciated if it is contrasted to that of the dissenting panellist. The latter relies on the premise that we would have no FIT incentive but for the public hand. In such circumstances, we can clearly talk of a benefit and a subsidy.

By looking at the general finding on the "creation of the market" together with other parts of the ruling, it looks like the Appellate Body wanted to indicate that the "creation of the market" scenario does include supply-mix decisions.¹¹ Now, the definition of the supply-mix would cover the regulation of the quantity and type of electricity supplied through the network and the timing of supply, in order to ensure constant and reliable supply (Appellate Body Report, para. 5.185), or more generally the parameters of the system, but may also include price-setting, such as FITs (cost recovery and a reasonable margin) and quantity mandates (Appellate Body Report, para. 5.175). Once the market has been created, benefit benchmarks should be found in the resulting "competitive" markets (Appellate Body Report, para. 5.190, 5.219). In this respect, the attribution of more than adequate remuneration would appear to go beyond the creation scenario and constitute an intervention in an already existing competitive market (Appellate Body Report, para. 5.228).

Finally, the Appellate Body attempted to complete the analysis on the basis of the factual evidence on file and seemed to indicate that, at least for wind, appropriate benchmarks could have been represented by renewable energy initiatives where the remuneration was fixed through competitive bidding (Appellate Body Report, paras. 5.240–5.244). Eventually, it did not make any finding due to the "complexity of the issues" and "absence of full exploration" before the Panel.

A couple of remarks on the findings on the "creation of the market."

- First, does this notion of "creation of the market" make some economic sense?
- In any event, what is certain is that, through this general and powerful language, and the findings referring to the adequacy of the level of remuneration which make it partly operational, the Appellate Body is in effect creating a shelter for some significant measures of support to renewable energy.

In particular, a common statement is that the definition of the energy supply mix does not *in and of itself* constitute a subsidy. See Appellate Body Report, paras. 5.175, 5.190, 5.227.

- To be sure, if one wants to make the notion of "creation of the market" operational, a lot of questions about the precise boundaries of this safe harbour are left unanswered.
- These are important questions because they may ultimately lead to the conclusion that subsidy laws do not apply at all. This has important consequences for the transparency and monitoring of subsidies, even beyond renewable energy, if these findings are applicable beyond this sector.
- For example, the Appellate Body is suggesting that the dividing line for FITs is whether the remuneration is adequate or not. But the key legal issue is that the criteria to determine this adequate level are still vague. What costs are we talking about? At any level? Further, what is the reasonable profit the Appellate Body is referring to? In sum, what does adequate remuneration mean? Is the fact that remuneration is set through "competitive bidding" always sufficient to avoid over-compensation when the process "sets prices for delivered electricity at the levels of the lowest bids *meeting specified conditions*"? (Panel Report, para. 7.29; emphasis added). What do these conditions pertain to? Can policy considerations go into them, and thus alter the commercial nature of the auction? In sum, how should this bidding process be designed so that the signals coming out of it are economically reliable?

PRICE OF FLEXIBILITY

More generally, this case shows the price that had to be paid to achieve policy flexibility. All this may support a need for reform.

If it is desirable that the outcome of a legal case is "just," the correctness of the process to reach this outcome is also equally, if not more, important. Why? Because cases do create precedents which may be applied to other cases in the future, and even beyond the green energy sectors. Now, following this decision, it may be argued that the risk of under-inclusion of subsidy disciplines is unduly increased. This is clear with the "creation of the market" safe harbour, but may also be the result of the requirement to define the relevant market.¹² This underinclusion may have serious consequences for subsidy transparency and good governance. We repeat one important point made above. If there is no benefit, there is no subsidy. If there is no subsidy, there is no obligation to notify to WTO, hence: fewer possibilities of monitoring and peer control. The central, but already shaky, pillar of subsidy governance control in the WTO would be seriously undermined.

- Further, one should ask whether this is a just outcome anyway. Remember that the measure at issue was not the FIT but the LCR. The conclusion that the FIT was a subsidy was not instrumental to objecting to it, but rather to have the discriminatory LCR struck down. It is not even clear that to comply with a ruling of the Appellate Body saying that Ontario's programme was a prohibited subsidy, Canada should have had to withdraw the FIT element too (and not only the LCR). 13
- Ontario's FIT programme was certainly the "wrong" set of measures to test the rules because of its combination of good and bad policy elements. It can certainly be said, however, that if more generally subsidy rules had not been like this, that is, with no express shelter for certain good green energy incentives, neither the Panel nor the Appellate Body would have probably felt the need and pressure to do what they have done. The awareness that they were laying down a precedent for future cases—even without discriminatory elements—must have been very strong. Although a finding that a measure is a subsidy is not the last word—WTO subsidy laws do not object to subsidies as such, if there are no trade spillovers—it is a finding that has important political and symbolic connotations, and may trigger crucial transparency obligations.14 In sum, the lack of a clear, well-defined carve-out led dispute settlement to create one, but a tortuous one.
- These considerations may support the case for reform with a clear set of rules outlining what subsidies are good and should be permitted. This would spare the Panel and Appellate Body from distorting the definition of subsidy in the first place, in order to put the good policies out of the way. The options are various. This could, for example, be done via an interpretive understanding, authentic interpretation, a temporary waiver, or treaty amendment.

Indeed, the narrower the market is, the more targeted the benchmarks for the benefit analysis are, and the less likely we are to conclude there is a benefit and hence a subsidy.

Although a finding that Ontario's programme was also a prohibited subsidy would have certainly required Canada to withdraw the "measure" "without delay" (a rapidity which is not required for a finding of breach of national treatment only and which may justify a policy and judicial preference for the latter route). See Article 4.7 of the SCM Agreement.

According to Article 25.2 of the SCM Agreement, specific subsidies must be notified to the WTO Committee on Subsidies.

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IMPLICATIONS OF THE CASE

What are the main implications of the *Canada – Renewable Energy/FIT* case for future policies?

- First, it is now clear (if ever confirmation was needed) that you cannot discriminate in such a patent way as with LCRs—that is, measures that are not motivated by environmental considerations. This is the message of the legal analysis of the national treatment claim (arguably, a similar conclusion would have been reached under subsidy laws, if the Panel and the Appellate Body had determined that the Ontario's programme was a subsidy in the first place).
- Second, it is clear that this case has created a shelter for certain non-discriminatory support policies from the application of subsidy laws. This is especially clear if one considers the concept of "market creation." Those measures that are considered to contribute to creating a market are not subject to scrutiny under subsidy laws, they are protected.
- Crucially, this shelter is not full immunity. The Appellate Body has not said that a FIT is never a subsidy. They have indicated that if they were provided with better evidence that the remuneration is more than adequate as compared to other relevant market benchmarks (that is, other closely comparable supported solar and wind power markets), they would conclude that the FIT at issue is a subsidy. In other words, although they have not concluded that a FIT is never a subsidy, they have raised the bar.
- That being said, the precise contours of this shelter are not fully clear yet. It remains to be seen what would be permitted and what would not. Future litigation will tell us.
- On the other hand, the creation of a partial safe harbour for non-excessive measures of support may have come at a certain price for transparency and subsidy governance. It should be asked whether the Appellate Body's approach has solid economic grounding. Most importantly, the implications of the flexibility achieved with respect to future subsidy cases and the system of subsidy control at large should be seriously pondered. The risk is that, unless rigorous conditions are imposed, this shelter will provide safe harbour for forms of industrial policy that are protectionist and trade distorting, without subjecting them to serious forms of scrutiny.

- All this supports the case for reform of subsidy rules. As this case shows, a case-law solution has inherent limitations. Members—not dispute settlement—should take the lead and responsibility for identifying what is good policy and should therefore be permitted. Only reform, which may take various forms (from official interpretation to permanent waiver, up to treaty amendment), all ultimately in the hands of Members, would enable reaching the objectives of desirable policy space; respect the integrity of the rules; and safeguard transparency and good governance. Only reform can ensure the legitimacy of the fundamental decision of what type of government intervention should be permitted and what should not. Only reform can ensure the necessary legal certainty to both government and business action.
- The prospect of more litigation on green energy support may further exacerbate the deficiencies of subsidy rules and make the case for reform even more evident. In this respect, the effects of policies in support of renewable energy (which may well go beyond FITs) can be so complex and diverse, depending on the circumstances, including supply chains and developments in technology and investment trends, that it is unwise to speculate or make generalizations, inevitably based on stylized factual scenarios, that "nobody will challenge this subsidy." Legal certainty is an essential value and needs to be re-instated.

REFERENCES

Bahar, H., Egeland, J. and Steenblik, R. 2013. "Domestic Incentive Measures for Renewable Energy with Possible Trade Implications." OECD Trade and Environment Working Papers, 2013/01, OECD Publishing, http://dx.doi.org/10.1787/5k44srlksr6f-en.

Butler, L. and Neuhoff, K. 2008. "Comparison of Feed-in Tariff, Quota and Auction Mechanisms to Support Wind Power Development." *Renewable Energy*, 33, pp. 1854–67.

Deutsche Bank. 2010. "Global Energy Transfer Feed-in Tariffs for Developing Countries." GET FIT Programme, Deutsche Bank, Frankfurt.

Fouquet, D. and Johansson, T. 2008. "European Renewable Energy Policy at Crossroads—Focus on Electricity Support Mechanisms." *Energy Policy*, 36 (11), pp. 4079–92.

Hufbauer, G. C., Schott, J. J., Cimino, C., Vieiro, M. and Wada, E. Forthcoming. "Local Content Requirements: Report on a Global Problem." Peterson Institute for International Economics, Washington, DC.

IEA. 2012. *Electricity in a Climate-Constrained World: Data and Analysis*. International Energy Agency, Paris.

Kuntze, J-C and Moerenhout, T. 2013. "Local Content Requirements and the Renewable Energy industry - A Good Match?" International Centre for Trade and Sustainable Development, Geneva.

Lipp, J. 2007. "Lessons for Effective Renewable Electricity Policy from Denmark, Germany and the United Kingdom." *Energy Policy*, 35 (11), pp 5481–95.

Stern, Nicolas. 2006. *Stern Review on the Economics of Climate Change*. Her Majesty's Treasury, London.

Ontario Power Authority. 2012. "Feed-in Tariff Program FIT Rules Version 2.0," 10 Aug, http://fit.powerauthority.on.ca/august-10-2012-final-fit-20-program-documents-posted.

Pack, H. and Saggi, K. 2006. "Is There a Case for Industrial Policy? A Critical Survey." *World Bank Research Observer*, Vol. 21, No. 2, pp 267–97.

Sutton, J. 2004. "The Auto-component Supply Chain in China and India: A Benchmark Study."

Economics of Industry; El 34, El/34. Suntory and Toyota International Centres for Economics and Related Disciplines, London School of Economics and Political Science, London.

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