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Industrial Strategies for Green Jobs: Opportunities and Obstacles in the Ontario Case

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Abstract

Doing something about the environmental crisis without harming the economy and jobs has been a dilemma for governments for many years. This paper explores the potential and opportunities conferred by green jobs economic strategies using the example of Ontario's Green Energy policy. This case also highlights the obstacles to achieving that positive sum result posed by international economic agreements. Trade agreements like NAFTA and the WTO, however, may have an impact on state capacity to enact and implement industrial policies, since green economic strategies can be seen as a particular variant of an industrial strategy. The domestic content provisions in Ontario's Green Energy Act, and alleged subsidization through the FIT have already triggered trade complaints and an action by Japan. Government procurement is a central plank in the defence of Ontario's policy, though one that is threatened by possibly enhanced procurement openness that Canada is negotiating, with provinces at the table, in new economic agreements such as CETA. Outcomes are uncertain but as this case study shows trade and investment agreements do pose a challenge to green industrial policies especially if government procurement protections are sacrificed or substantially weakened.

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Introduction

Doing something about the environmental crisis without harming the economy and jobs has been a dilemma for governments for many years. All too often such environmental measures as have been taken ignore the employment implications of the measures they contain; and employment policy is often equally blind to the economic effects. Public opinion tends to vacillate, ranking environmental protection high in times of economic prosperity and being willing to sacrifice the environment in times of economic difficulty. Industrial strategies that stimulate employment in sectors that help build a green economy are thus especially attractive since they hold the promise of escape from the environment versus jobs dilemma. This paper explores the potential and opportunities conferred by this type of economic strategy and, using the example of Ontario's Green Energy policy also illustrates the obstacles to achieving that positive sum result posed by international economic agreements, the economic and financial crisis, and fluctuating political will. Here our focus is on the international agreements; other obstacles will be explored in a subsequent version of the paper.

The Positive Sum Possibilities of Industrial Strategies for Green Jobs

Conventional wisdom from mainstream political and economic circles has long posited the position that growth and environmentally-friendly public policies were ultimately irreconcilable. In short, that a zero sum relationship exists between economic and job growth and environmentally sustainable policies (Whaples 2009, 337-8). This kind of thinking has been exemplified in *The Economist* magazine in articles with titles such as "Saving the plant and creating jobs may be incompatible" (2009). Supporters of neoliberal models of growth have long downplayed the issue of environmental threat altogether largely denying the near scientific consensus regarding global warming. They suggest that the intrinsic dynamic of unfettered global capitalism through technological innovation can address any serious environmental problems that arise (Heynen, et.al 2007). The fact is that environmental degradation is too often seen, along with growing levels of inequality and exclusion, as the unavoidable but necessary collateral damage of neoliberal growth strategies (Bauman 2011).

By the end of the 20th Century a strong environmental movement had developed gaining political currency. Those sympathetic to environmental concerns have been expressed in two broad developments, one an 'ecology' movement which is associated with deeper more radical change, and those that identify themselves with "environmentalism" which is reformist in character (Giddens 1994: 203) and has had a strong applied policy orientation. This later position adopts the approach that capitalism can be regulated and market mechanism adapted to work in favour of environmentally friendly goals in conjunction with economic growth. Third Way political developments have, in particular, developed the policy position that a middle way is available within a reformed market framework where new and emerging risks like those associated with the environment can be successfully managed (Wills and Wilsdon 2003; Jacobs 2001).

Such positive sum approaches to the economy and environment are also associated with sustainable development which involves the adoption of alternative clean energy sources and new directions in industrial production and enhancement of the service economy that minimizes harm to the environment while promoting measured growth. Obstacles to the movement toward positive sum sustainability approaches include the costs involved in conversion in the movement away from 'dirty employment', overcoming powerful entrenched economic interests, resistance to unfettered profit making in favour of environmentally regulated enterprise and managed development, among others.

Reports from prominent international bodies have presented some perspectives regarding the role of public policy in promoting environmentally sustainable growth. The United Nations Environmental Programme (UNEP) 'green economy initiative' offers some guideposts to aid governments in 'greening' their own economies "by reshaping and refocusing policies, investments and spending towards a range of sectors, such as clean technologies, renewable energies, water services, green transportation, waste management, green buildings and sustainable agriculture and forests" (UNEP n.d.). Moreover, the UNPE conceptualizes the greening process in the following way:

> "Greening the economy refers to the process of reconfiguring businesses and infrastructure to deliver better returns on natural, human and economic capital investments, while at the same time reducing greenhouse gas emissions, extracting and using less natural resources, creating less waste and reducing social disparities" (UNEP n.d.).

The Organization of Economic Cooperation and Development (OECD) has acknowledged that the greening of the economy will result in substantive job losses in carbon-intensive economic sectors. But the OECD also has now come to the position that these job losses will be more than compensated for by the creation in other sectors of "green jobs" (OECD 2010: 40). In fact the UNEP by the year 2030 sees some ten times the number of jobs in the clean energy field compared to 2010 (The Economist 2009: supra note 1).

The Genesis of Ontario's Green Energy Strategy

In Canada the environmental industry, as of 2005, was composed of some 7,500 companies employing greater than 160,000 people and the supply of environmental goods and services was valued at about $14.4 billion in 2000 (OECD 2008: 26). However, the country is also on a per capita basis the third largest emitter of CO2s and is generally acknowledged as a laggard in terms of climate change public policy (UNEP 2008: 132, 11). For example, by 2008 Canadian greenhouse gas (GHG) emissions rested at 24% over its 1990 levels even though there was a commitment to reduce GHG emissions by 6% over this time period. The current federal Conservative government has steadfastly refused to unilaterally move the environmental policy agenda forward instead favouring delay in action to pursue a harmonized cap-and-trade approach with an ever more hesitant United States (OECD 2010: note 2 pg. 14; White 2010: 23-24), a country now facing prolonged economic stagnation and political deadlock. Lack of progress at

the national level in Canada has, however, opened up space at the provincial level for environmental policy action and leadership. Many provinces have adopted substantive environmental reforms and strategies with Ontario under its current Liberal government generally conceded to be in the forefront.

The Ontario Liberal government of Premier Dalton McGuinty in contrast to the former Conservative administrations in Ontario has pursued an economic policy path that includes prominent green directions. In fact green policy can be said to be "a centrepiece of [the government's] economic plan" (Radwanski 2011). The 2007 *Climate Change Action Plan*, which was centred on green job creation, building liveable and sustainable communities and long term GHG reductions, was the forerunner of the most prominent piece of environmental legislation the 2009 *Green Energy and Economy Act* (generally referred to as the Green Energy Act) as a cornerstone in its commitment to make Ontario North America's leading green energy economy (Marshall 2011c). This Act was further designed to strategically position Ontario to fully participate in an emerging carbon trading market (Centre for Civic Governance 2011:7). According to Tim Weis, director of the Pembina Institute[1] renewable energy program, "Ontario's Green Energy Act is modeled off the most successful renewable energy policies in Europe- policies that create the long-term market stability necessary to attract continued investment and create jobs" (Burda 2011a).

Central to the Green Energy Act is its Feed-in Tariff (FIT) mechanism. The FIT is based on German legislation which has helped to make it leader in wind and solar energy technology and which is credited with creating in excess of 300,000 jobs there (Marshall 2011c). The Ontario FIT enables:

> "...individuals, companies, municipalities, and cooperatives to sell electricity from wind, solar, hydro, biomass, biogas and landfill gas projects back to the provincial energy grid at guaranteed rates for the next 20 years. The prices vary by technology, ranging from 10.3 cents per kilowatt-hour for landfill gas projects to 80.2 cents per kilowatt-hour for small residential solar rooftop projects. Incentives were also provided for Aboriginal and community-based projects" (Marshall 2011c).

Significantly, green generated jobs are designed to be created not just by green energy producers through energy production but also in the province's manufacturing, construction and installation sectors by way of the FIT's requirements in energy producer contracts requiring minimum Ontario content (Marshall 2011c). By attaching green energy production to its actual physical creation in Ontario, a jobs generating multiplier effect was introduced. As of 2011 the government claimed that the Green Energy Act was responsible for the creation of some 20,000 jobs and was on track to generating a promised 50,000 jobs by 2012 (Government of Ontario 2011). The Pembina Institute calculated that green energy creates between three to ten times the number of jobs per hour of energy generation compared to fossil fuels and nuclear power (Burda 2011b).

[1] The Pembina Institute is a national non-partisan sustainable energy think tank focused on sustainable energy with long-term goals for behavioural change to achieve environmental goals.

An interesting feature of the Green Energy Act is that it is targeted at both large and small producers -- corporate entities, as well as communities and individuals. This lends a populist flavour to the program that is an important component in its attempts to win over popular support. This populist appeal is also brought to the fore through the strong connection drawn by the government between green energy and job creation.

The Liberal's environmental strategy has encountered some challenges along the way. Their pledge to eliminate the heavily polluting coal power electricity plants had to be pushed back from 2007 to 2010, and now to 2014. The expansion of nuclear power has also run into cost and construction problems. All of this in the context of a declining manufacturing base in the province hit hard by the 2008 recession (Lorinc 2011) which has depressed provincial revenues and created new political pressures.

Moreover, the sitting regulation for wind farms has created considerable controversy in rural areas and the Ontario-content regulations associated with the Green Energy Act has caused trade issues in the case of the $7 billion agreement with the Korean company Samsung which is setting up operations in the province (Marshall 2011c). The content regulations of the Act are also blamed for greatly increasing the costs of green energy production in Ontario and for creating 'supply chain problems' that have delayed production (Lorinc 2011).

The Green Energy Strategy Outlined

The McGuinty Liberals have distinguished themselves from hard-line neoliberals by embracing a third way policy direction. The Green Energy Act as with their strategic investments in education and anti-poverty strategy have been central to establishing their 'progressive' credentials. As opposed to neoliberal free market approaches they have embraced 'progressive competitiveness' policies involving an active state centred around promoting higher end employment through business incentives (Evans and Shields 2011: 140) while supporting broad social policies to address the risks produced by global capitalism, including environmental risks (Jacobs 2001: 325).

The *Green Energy Act* has secured some prominent endorsements which haven enhanced their political and social creditability. For example, former U.S. Vice President Al Gore has called the act "the single best green energy program on North American continent" (Yuen 2009). Also the prominent Canadian environmentalist David Suzuki criticized heavily Ontario Progressive Conservative leader Tim Hudak for his campaign commitment to cancel the Green Energy Act offering his endorsement of the Liberal program (Mcavoy 2011).

The 2011 Ontario election posed a significant test for the McGuinty government. Not only was it seeking a third term but its green energy policies were at the heart of much of the campaign and they generated strong opposition with elements of the electorate. Both the Progressive Conservative and NDP opposition had targeted the Liberal's environmental policies with the right focusing in on tax cuts (Marshall 2011d) and the left proposing a variety of initiatives aimed at other family-friendly measures (including

mass transit) to address environmental concerns (Marshall 2011b). The greatest threat came from the Conservatives who promised to scrap the Liberal Green Energy Act and associated environmental proposals altogether (Marshall 2011a). The election outcome proved to be a victory, of sorts, for the Liberals winning an unexpected third term but with a minority government although shy only one seat from a majority.

A post-election assessment suggest that: "The green-energy file will now be at the heart of Mr. McGuinty's biggest challenge: shepherding his vision for transforming Ontario into a clean-energy powerhouse with a minority government for the next four years" (Howlett and Ladurantaye 2011). Part of the challenge is that the world and Ontario economies remain fragile. The financial and political resources needed for green energy transformation in such an unstable environment will face stiff competition from demands related to more traditional economic and social concerns.

Another element of the challenge is that the Liberal government lost many of its rural seats in the 2011 election, defeats which cost them their majority and their environment minister John Wilkinson. A primary issue for rural voters was opposition to green energy initiatives and in particular wind turbines (Butler 2011; Howlett and Ladurantaye 2011; Radwanski 2011) that have become an ever more prominent feature of the Ontario rural landscape. The Liberals had greater success among urban voters, especially in contrast to the Conservatives, in their appeals for an active pro-environmental policy agenda. In fact, a focus on green energy "offers the government some potentially significant electoral advantages, particularly among younger voters..." into the future (Winfield 2011). However, the environmental policy divide between rural and urban Ontario is one that will need to be carefully managed, especially in the context of minority government.

Obstacles: Trade Agreements

There are various obstacles to the development of green economic strategies including austerity triggered by the economic and financial crisis, and fickle political support. Here, though, we focus on the provisions of international trade and investment treaties that may foreclose or render difficult certain policy options. Arguably, the agreements are intended to tie the hands of governments in areas such as intervention in the operation of markets and to make such neo-liberal changes permanent. It is in this sense that Stephen Gill (1995) used the term "new constitutionalism" to refer to a system of "disciplinary neoliberalism." Such agreements reach into areas of investment, services and intellectual property rights. In so doing, they "condition" a large part of what was previously considered to be "domestic" policy (Grinspun and Kreklewich 1994). For these reasons, "Third Way" initiatives like those just described are vulnerable under the international trade regime.

Here we pay particular attention to the impact such agreements, specifically NAFTA and the WTO, may have on state capacity to enact and implement industrial policies, since green economic strategies can be seen as a particular variant of an industrial strategy.

For example, NAFTA imposes a variety of obligations including the application of *national treatment* to trade in goods (chapter 3 of the agreement), government procurement (chapter 10), investment (chapter 11), cross-border trade in services (chapter 12), financial services (chapter 14), and intellectual property rights (chapter 17); and *most-favoured-nation* status for investment (chapter 11), cross-border trade in services (chapter 12), and financial services (chapter 14). Reservations to the various obligations are contained in annexes. The degree of obligation varies by topic, but to a greater or lesser extent all of the provisions operate to reduce a nation's discretion to discriminate in favour of domestic industries.

Article 105 commits the signatories to "ensure that all necessary measures are taken in order to give effect to the provisions of this agreement…including their observance…by state and provincial governments" whose actions, by this means, are covered by the agreements even if it is the federal government which must take responsibility under international trade law. Subject to certain conditions (such as size of contract)[2] federal government procurement contracts for goods and services are also subject to national-treatment rules. Nor may a government discriminate against a local supplier on the basis of foreign affiliation or ownership or on the basis that its goods or services are imported from another NAFTA signatory (Article 1003). The agreement's Chapter 11 covers, subject to certain reservations, all forms of investment interests. With respect to provinces and states the principle of "best in Province" treatment is to be applied (Article 1102.3). A noteworthy aspect of this article is its prohibition of a wide range of performance requirements and the creation of investor rights in dispute resolution. The lengthy list of prohibited performance requirement measures include requirements to export a certain proportion of goods or services produced, or achieve any specified level or balance of foreign exchange earnings, or target specific export markets. Particularly germane to the present example, the agreement bars domestic content or purchasing requirements, as well as provisions that would insist on transfers of technology.

The WTO comprises a group of agreements, including the GATT, which contains the essential principles of the liberalized trading system. According to the WTO itself the first principle is that the trading system should operate without discrimination. This means no discrimination in a country between its own and foreign products, services or nationals, all of whom are given "national treatment". Any benefit given to one is extended to all. Other principles include achievement of freer trade through lowering trade barriers, guaranteeing predictability through "binding" states' commitments on issues like tariffs, and promoting fair competition through working towards elimination of subsidies and dumping (selling overseas below cost in order to gain market share).

The impact of GATT trade rules becomes far-reaching especially when extended under the WTO from trade in goods to trade in services and to investment. The agreement on Trade Related Investment Measures (TRIMS) (Das 1998: ch. 16) identifies a number of measures that are inconsistent with GATT. These include so-called domestic content provisions, such that an enterprise must use or buy a particular quantity or proportion of domestically sourced products in its operations. This removes one of several

[2] See NAFTA Article 1001.

"performance requirements" (domestic content) that countries often used before authorizing foreign investments. The domestic content provisions in Ontario's Green Energy Act have already triggered trade complaints (see below).

There are, however, other interpretations that suggest continued capacity for state intervention and activism. Linda Weiss (2005: 723) argues that:

> "Rich nations as a group have carved out a multilateral order which best suits their current development trajectory – one that diminishes space for promoting industries critical to their climb up the development ladder, which increasing scope for sponsoring the technology-intensive sectors now critical to securing national prosperity". In this view: " the measures *prohibited* under the WTO are those of diminishing importance to a relatively *advanced* level of development, which depends increasingly on knowledge-intensive technologies. Second, the measures *permitted* – or at least not explicitly prohibited – are *advanced-country friendly*: they enable the industrialized state to align its national growth goals with significant support for industry, technology and exports... the tighter rules of the WTO era, rather than constraining or limiting the scope for state activism, have made it more technologically focused, hence unintentionally stimulating a more *strategic* or proactive approach to industrial governance, even in contexts not noted for industrial strategy. In this respect, the new multilateralism appears to have served more generally as an *upgrading device* for the development economies" (p. 724-725).

Weiss looks at the impact of TRIMs and the WTO agreement on Subsidies and Countervailing Measures (SCMs) on states' 'room to maneuver': "No matter where a country stands on the development ladder, it can no longer apply with impunity the regulatory framework that virtually industrializing countries have used to nurture fledgling industries" (see Chang, 2002, as cited in Weiss, 2005, p. 726).

This is because five key measures contravene to GATT rules under TRIMs. These are: local content and trade balancing requirements, foreign exchange balancing requirements, forex restrictions and domestic sales limitations (p. 726). However, Weiss suggests that against the limitations of the GATT and TRIMs, "we must weigh those requirements or 'bargains' that governments may negotiate, more or less formally, with foreign investment companies as a condition of access to generous state-provided benefits, in order to support domestic industry development" (p. 726).

This kind of strategic activism is active policy and is not necessarily reactive to or confrontational with trade agreements. Weiss identifies four key areas for governments to have a renewed or increased participation: "governance of science and technology, venture capital promotion, *government procurement*, and the enlargement of export capacity" (p.732, emphasis added). Government procurement is significant because: "it can be used both as a tool for creating national champions and supporting domestic producers, and as a lever to entice foreign suppliers to comply with national development projects, government procurement has gained renewed importance as an instrument for accomplishing national development objectives" (p. 736).

As we shall see below, local content provisions and alleged subsidization lie at the centre of international trade challenges to Ontario's Green Energy Act. Government procurement is a central plank in its defence, though one that is threatened by possibly enhanced procurement openness that Canada is negotiating, with provinces at the table, in new economic agreements such as CETA.

On September 13, 2010, Japan filed an official dispute with the WTO against Ontario's GEA FIT programme, citing GATT 1994 and the Trade Related Investment Measures (TRIMs). The EU launched a similar WTO complaint. The dispute is not with the GEA per se, but rather the requirements necessary to access feed-in-tariff (TIF) payments; to qualify for FIT payments by the Government of Ontario, wind projects must have a minimum of 25% domestic content (increasing to 50% in 2012, and solar energy producers must use 60% local content (Green Energy Act Alliance, n.d.). The Green Energy Act Alliance states that "if a contract facility does not meet the Minimum Required Domestic Content Level, the Supplier will be default under the FIT Contract" (Green Energy Act Alliance, n.d.) Japan made the following arguments against Ontario's FIT program in a preliminary meeting with the WTO in May 2010:

1. It is inconsistent with Article III: 4 of GATT 1994 and is in opposition to the Most Favoured Nation (MNF) principle: 'treatment (to important products) is no less favourable than that accorded to like products of national origin in respect to laws, regulations and requirements affecting their internal sale, offering for sale, purchase, transportation, distribution or use';
2. It violates GATT III: 4 not to 'establish or maintain any internal quantitative regulation relating to the mixture, processing, or use of products in specified amounts or proportions which requires, directly or indirectly, that any specified amount or proportion of any product which is the subject of the regulation must be supplied from domestic sources' and not to 'otherwise apply internal quantitative regulations in a manner contrary to the principles set forth in paragraph 1';
3. It violates article 2.1 of TRIMs not to 'apply any TRIM that is inconsistent with the provisions of Article III or Article XI of GATT 1994' (WTO, May 21, 2010).

Moreover, Japan argues that under articles 3.1(b) and 3.2 of the Subsidies and Countervailing Measures (SCM) Agreement, FIT payments are contingent on the use of domestic products over imports (Todgham-Cherniak, October 1, 2010). Japan officially filed a Request for Consultations with the WTO dispute settlement body (DSB) on September 13, 2010, and was joined two weeks later by the United States and the European Union (EU).

In an analogous, but far from identical case, US complaints prompted China to end a system of subsidies for wind generated electricity. The United States filed a complaint with the WTO on October 15, 2010 after receiving a complaint from the United Steelworkers (USW). The USW referred to section 301 of the Trade Act of 1974 when calling for the US federal government to challenge Chinese subsidies for wind power equipment that made US producers less competitive in the Chinese market. The Act in

question is "US legislation (i.e. Sections 301-310 of the Trade Act of 1974) authorizing certain actions by the Office of the United States Trade Representative ("USTR"), including the suspension or withdrawal of concessions or the imposition of duties or other import restrictions, in response to trade barriers imposed by other countries" (WTO, n.d.).

The US challenged China's Special Fund for Wind Power Equipment (Special Fund) subsidies under Article 3 of the WTO Subsidies and Countervailing Measures (SCM) agreement (USTR, 2011 June), which prohibits local content subsidies that give preference to a state's manufacturers over another state, therefore interfering with trade (WTO(2), n.d.). According to the USTR website, "the subsidies took the form of grants to Chinese wind turbine manufacturers that agreed to use key parts and components made in China rather than purchasing imports. The United States estimated that the grants provided to Chinese companies since 2008 could have totaled several hundred million dollars. The size of the individual grants ranged between $6.7 million and $22.5 million" (USTR, 2011 June). China revoked its wind power equipment subsidies on June 7, 2011. The US has successfully challenged Chinese subsidies three times at the WTO (USTR, 2011 June). Commenting on the decision, US trade representative Ron Kirk said:

> "The United States is pleased that China has shut down this subsidy program. Subsidies requiring the use of local content are particularly harmful and are expressly prohibited under WTO rules. This outcome helps ensure fairness for American clean technology innovators and workers. We challenged these subsidies so that American manufacturers can produce wind turbine components here in the United States and sell them in China. That supports well-paying jobs here at home" (as cited on www.ustr.org).

Cassels Brock Lawyers (2011, June 13) in Toronto had this to say on the possible relevance of China's cancellation of wind energy equipment subsidies on the Japan-Green Energy Act case:

> "As an interesting development in a related case, China and the US have just settled a US WTO complaint over China's wind power subsidy program. The Americans complained that grants to Chinese wind turbine manufacturers, on condition that they use locally-produced inputs rather than foreign imports, were prohibited under the SCM Agreement. To settle the dispute, China voluntarily agreed to end the program. It is not clear the impact this will have, if any, on the Japanese case against Ontario when the matter comes before the WTO panel" (Cassels Brock Lawyers, 2011, June 13).

Several watchers of global trade policy argue that Japan has a winnable case. Global Trade Alert, which claims to provide "information in real time on state measure taken during the current global economic downturn that are likely to discriminate against foreign commerce" has marked the local content requirement of the GEA as a non-tariff barrier (NTB) to trade and therefore an 'actionable subsidy' (Global Trade Alert, n.d.). The Government of Ontario however, maintains that the OGE Act is "consistent with

Canada's international trade obligations under the WTO" (Energy Minister Brad Duguid, as quoted in Blackwell, 2010, para. 5).

There are three key arguments that could potentially secure a victory for Ontario: 1) FIT payments are not government subsidies (Brigham, 2009, p. 8); 2) FIT payments do not discriminate on national grounds; and 3) this type of government/public procurement is exempt from GATT/WTO local content disputes (Laing, 2006).

A key problem for Ontario is this: without the creation of Ontario jobs – an estimated 50,000 by 2012 – the high costs of the FIT payments are not worth the government's expense (Blackwell, 2010, para. 13). If Ontario loses the case and eliminates the local content requirement, "companies can then import their solar panels and wind turbines from anywhere in the world and still profit from high renewable energy rates" (Trew, 2010, para. 14) and green jobs will be removed from sustainable economy dialogue. Therefore, a WTO ruling in Japan's favour could 1) put an end to high FIT payments provided by Ontario taxpayers, 2) end the GEA's local content requirement, but continue FIT payments to all investors, and/or 3) end consumer demand for renewable energy sources, due to higher costs and lower benefits (in terms of local content generated job creation). Even if Canada were to prevail in the case with Japan, on the grounds of government procurement, it may be weakening its capacity to win future cases by concessions on the procurement issue in the CETA negotiations.

Ontario's Green Energy strategy has also been the subject of a complaint under NAFTA Chapter 11. Mesa Power Group, a US based renewable energy multinational, alleged favouritism (discrimination) in the award of contracts when it failed to win anticipated contracts under the feed-in tariff (FIT) provisions of the Ontario Green Energy Act. The company also mentioned local content provisions and alleged preferential treatment to other foreign investors like Samsung. Mesa claimed damages of $775 million.

Conclusion

Ontario's green energy strategy is an interesting initiative designed to green the economy and ensure that a proportion of the jobs created by the strategy are home grown. Sustaining the strategy in difficult economic times with uncertain political support will be a difficult task. The provisions of the trade agreements to which Canada is a signatory may make that task even more difficult. A WTO ruling in Japan's favour could further erode public support for the plan if it had the effect of reducing the benefits (in terms of local content generated job creation). Even if Canada were to prevail in the case with Japan, on the grounds of government procurement, it may be weakening its capacity to win future cases by concessions on the procurement issue in the CETA negotiations. An unfavourable result in the NAFTA Chapter 11 case could create "regulatory chill". The outcomes of the cases launched so far are uncertain, but the trade and investment agreements certainly pose a challenge to green industrial policies, especially if government procurement protections are sacrificed or substantially weakened.

Bibliography

Bauman, Zygmunt. 2011. *Collateral Damage: Social Inequalities in a Global Age*. (Cambridge: Polity Press).

Blackwell, R. (13 September 2010). Japan takes issue with Ontario's green energy plan. The Globe and Mail. Retrieved April 22, 2011 from: http://www.theglobeandmail.com/report-on-business/japan-takes-issue-with-ontarios-green-energy-plan/article1705239/

Burda, Cherise. 2011a. "New analysis compares Ontario election promise on clean energy, climate action and sustainable transportation." *The Pembina Institute*, Sept. 20, 2011: http://www.pembina.org/media-release/2271

Burda, Cherise. 2011b. "Fact: Green energy is good for Ontario." *The Pembina Institute*, October 3, retrieved Sunday October 30, 2011: http://www.pembina.org/blog/578

Butler, Don. "Anti-turbine forces turned election tide; Liberals lost 10 seats targeted by coalition group Wind Concerns Ontario." *The Ottawa Citizen*, October 9, 2011, A1, retrieved Saturday October 22, 2011, Canadian Newsstand Core.

Cassels Brock Lawyers. (2011, June 13). Green Energy Act – Japan`s Challenge in the WTO. [web page]. Retrieved July 11, 2011: http://www.casselsbrock.com/CBNewsletter/Green_Energy_Act___Japan_s_Challenge_in_the_WTO

Centre for Civic Governance. 2011. *This Green House: Building Fast Action for Climate Change and Green Jobs*. (Vancouver: Columbia Institute, May), retrieved Monday October 31, 2011: http://www.columbiainstitute.ca/files/uploads/This_Green_House_May25.pdf

Das, B.L. 1998. *An Introduction to the WTO Agreements*. Penang: Third World Network

The Economist. 2009. "The grass is always greener: Saving the planet and creating jobs may be incompatible", *The Economist*, April 2: http://www.economist.com/node/13404568

Evans, Bryan and John Shields. 2011. "From Pragmatism to Neoliberalism: Ontario's Hesitant Farewell to Dr. Keynes". In *The Guardian: Perspectives on the Ministry of Finance of Ontario*. Patrice Dutil, ed. (Toronto: University of Toronto Press), 131-161.

Giddens, Anthony. 1994. *Beyond Left and Right: The Future of Radical Politics*. Stanford: Stanford University Press.

Gill, Stephen. 1995. "Globalisation, Market Civilisation and Disciplinary Neoliberalism." *Millennium* 5, 24 (Winter).

Grinspun, Ricardo, and Robert Kreklewich. 1994. “Consolidating Neoliberal Reforms: ‘Free Trade’ as a Conditioning Framework.” *Studies in Political Economy*, 43.

Heynen, Nik, James McCarthy, Scott Prudham and Paul Robins. 2007. *Neoliberal Environments: False Promises and Unnatural Consequences*. New York: Routledge.

Howlett, Karen and Steve Ladurantaye. “How McGuinty’s green-energy policy cost him a majority in Ontario.” *The Globe and Mail*, Saturday October 8, 2011, retrieved Sat. October 15, 2011: http://www.theglobeandmail.com/news/politics/ontario-election/how-mcguintys-green-energy-policy-cost-him-a-majority-in-ontario/article2195401/

Jacobs, Michael. 2001. "The Environment, Modernity and the Third Way". In *The Global Third Way Debate*. Anthony Giddens, ed. (Cambridge: The Polity Press), pp. 317-339.

Laing, M. (2006). Government procurement at GATT/WTO. *Asian Journal of WTO and International Health Law and Policy*. 1:2, 277-289.

Lorinc, John. 2011. "Ontario's search for a solar system", *The Globe and Mail*, 24 February: http://www.theglobeandmail.com/report-on-business/rob-magazine/ontarios-search-for-a-solar-system/article1919546/

Marshall, Dale. 2011a. “Populism beats good policy: the Ontario Progressive Conservative platform.” David Suzuki Foundation, May 30, 2011, retrieved Fri. October 21: http://www.davidsuzuki.org/blogs/panther-lounge/2011/05/populism-beats-good-policy-the-ontario-progressive-conservative-platform/

Marshall, Dale. 2011b. “The Ontario NDP platform: Politics trump good energy policy…again.” David Suzuki Foundation- Climate and Clean Energy Blog, July 12, retrieved Fri. October 21, 2011: http://www.davidsuzuki.org/blogs/climate-blog/2011/07/the-ontario-ndp-platform-politics-trump-good-energy-policyagain/

Marshall, Dale. 2011c. "Backgrounder: Ontario's Green Energy Act." David Suzuki Foundation- Climate and Clean Energy Blog, August 23, retrieved Sat. October 29, 2011: http://www.davidsuzuki.org/blogs/climate-blog/2011/08/backgrounder-ontarios-green-energy-act/

Marshall, Dale. 2011d. “Ontario Liberal platform maintains green energy focus.” David Suzuki Foundation- Climate and Clean Energy Blog, September 9, retrieved Sat. October 15, 2011: http://www.davidsuzuki.org/blogs/climate-blog/2011/09/ontario-liberal-election-platform-a-mixed-bag/

Mcavoy, Christine. 2011. "Suzuki warns Tory scheme to cancel green energy plans is ‘absolute insanity", *The Toronto Star*, July, 21, retrieved Sunday October 30: http://www.thestar.com/news/canada/politics/article/1028008--suzuki-warns-tory-scheme-to-cancel-green-energy-plans-is-absolute-insanity

OECD. 2008. *Eco-Innovation Policies in Canada*. (Environment Directorate, OECD: Paris), retrieved Monday October 31, 2011: http://www.oecd.org/dataoecd/27/14/42876916.pdf

OECD. 2010. OECD *Economic Surveys: Canada, 2010*. (OECD Publishing: Paris).

Ontario, Government of. 2011. "Green Energy Act creates 20,000 jobs", July 25, retrieved Sunday October 30: http://news.ontario.ca/mei/en/2011/07/green-energy-act-creates-20000-jobs.html

Radwanski, Adam. "McGuinty's treacherous path/Where party line meets compromise." *The Globe and Mail*, October 7, 2011, A1, retrieved Saturday October 22, 2011, Canadian Newsstand Core.

Todgham-Cherniak, C. (October 1, 2010). The U.S. and EU join Japan's WTO complaint against Ontario's Green Energy Act. Retrieved April 29, 2011: http://www.tradelawyersblog.com/blog/article/the-us-and-eu-join-japans-wto-complaint-against-ontarios-green-energy-act

United Nations Environment Programme (UNEP). nd. *Green Economy Initiative*. Retrieved Saturday October 29: http://www.unep.org/roap/Home/tabid/roap/Activities/ResourceEfficiency/GreenEconomyInitiative/tabid/6825/Default.aspx

United Nations Environment Programme (UNEP). 2008. *Green Jobs: Towards Decent Work in a Sustainable, Low-Carbon World*. (Nairobi: United Nations), retrieved Mondayday October 31, 2011: http://www.unep.org/labour_environment/PDFs/Greenjobs/UNEP-Green-Jobs-Report.pdf

USTR (2011 June). China ends wind power equipment subsidies challenged by the United States in WTO dispute. Retrieved July 6, 2011: http://www.ustr.gov/about-us/press-office/press-releases/2011/june/china-ends-wind-power-equipment-subsidies-challenged

Weiss, L. (2005). Global governance, national strategies: how industrialized states make room to move under the WTO. *Review of International Political Economy*. 12:5, 723-749.

Whaples, Robert. 2009. "The Policy Views of American Economics Association Members: The Results of a New Survey", *Econ Journal Watch*, 6 (3), 337-348.

White, Rodney. 2010. *Climate Change in Canada*. (Dom Mills, Ontario: Oxford University Press).

Wills, Rebecca and James Wilsdon. 2003. "Technology, Risk and the Environment". In *The Progressive Manifesto*. Anthony Giddens, ed. (Cambridge: Polity Press), pp. 202-222.

Winfield, Mark. 2011. “Ontario’s energy election.” *The Toronto Star*, Editorial Opinion, Monday September 26: http://www.thestar.com/opinion/editorialopinion/article/1060025--ontario-s-energy-election

WTO (n.d.) US section 301 Trade Act (DS152). Retrieved July 2, 2011: http://www.wto.org/english/tratop_e/dispu_e/cases_e/1pagesum_e/ds152sum_e.pdf

WTO(2). (n.d.) Agreement on Subsidies and Countervailing Measures (“SCM Agreement”). Retrieved July 2, 2011: http://www.wto.org/english/tratop_e/scm_e/subs_e.htm