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RE-ASSESSING MINERAL EXPORT RESTRAINTS AS INDUSTRIAL POLICY INSTRUMENTS: WHAT ROLE, IF ANY, FOR THE WTO SUBSIDY LAW?

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This article takes stock of the legacy of some new generation WTO disputes relating to trade and environment, specifically with a view to explore whether and, if so, to what extent export restrictions could be effectively dealt with under the WTO Agreement on Subsidies and Countervailing Measures (ASCM) when used as industrial policy measures. The article discusses the cases where such restrictions subsidise industries that utilise raw materials of mineral origin and operate in the renewable energy sector. After discussing the shortcomings of WTO disciplines on export restrictions (which emerged after the China – Raw Materials and China – Rare Earths cases), the article reviews economic and legal arguments in favour of treating export restrictions, more generally, and mineral export restraints, more specifically, under the ASCM. It argues that at least under certain conditions the ASCM may be better placed from a regulatory point of view to govern trade instruments of an industrial nature that de facto operate as subsidies, such as export restrictions, especially in light of the inconsistencies of current WTO rules on export duties. It discusses whether the approach espoused by the Appellate Body in Canada – Renewable Energy may grant any flexibility to “green” industrial policy instruments and questions whether mineral export restraints may directly benefit from the partial carve-out built in by the WTO adjudicators.
I. INTRODUCTION

The use of export restrictions on mineral resources has been heavily scrutinized in recent years at the World Trade Organization (WTO). It has featured prominently in all of the Organization’s reports on the new and potentially restrictive measures introduced in response to the global economic and financial crises.\(^1\) It has raised considerable concern as one of the fastest growing components of trade restrictive

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\(^1\) Since the end of the 2000s, the WTO has reinforced and/or contributed to various surveillance mechanisms to monitor the use of new trade restrictions during crisis, including the Joint Report released by the Secretariats of the WTO, the Organisation for Economic Co-operation and Development (OECD) and United Nations Conference on Trade and Development (UNCTAD), instigated at the request of the G20, the periodic trade monitoring reports issued by the Director General to the Trade Policy Review Body (TPRB), and, the Trade Policy Reviews (TPRs) conducted by the TPRB. For a more detailed overview, see ILARIA ESPA, EXPORT RESTRICTIONS ON CRITICAL MINERALS AND METALS: TESTING THE ADEQUACY OF WTO DISCIPLINES 69-72 (2015).
measures in the latest phases of the 2000s commodities super-cycle.\footnote{2} Resource-endowed countries negotiating the terms of their accession to the WTO have repeatedly been required to assume country-specific, and often onerous, obligations in addition to standard rules contained in the General Agreement on Tariffs and Trade\footnote{3} (GATT).\footnote{4} Three WTO disputes have accordingly targeted one such Member, China, for its regime of export restrictions (mainly duties and quotas) imposed on various mineral resources since 2009.

In the first two disputes, \textit{China – Raw Materials} and \textit{China – Rare Earths}, China’s export duties were found in breach of the commitments assumed under its Accession Protocol, whereas its export quotas were declared inconsistent with the general elimination of quantitative restrictions obligation under Article XI:1 of the GATT. China’s arguments seeking justification under the environmental exception and the conservation exception (Article XX (b) and (g) of the GATT, respectively) were dismissed in both cases.\footnote{5} The latest dispute, \textit{China – Raw Materials II}, is still pending but it may be reasonably expected that China’s measures would be condemned here as well, since the core legal issues have remained unchanged.\footnote{6}

The recent WTO case law on export restrictions has brought into the spotlight the more general issue of policy space available to newly acceded Members after the enforcement of a proliferating number of (uneven) WTO-plus commitments on export duties. At the same time, it has also shed light on the vulnerability of WTO members imposing quantitative types of export restrictions covered under Article XI:1 GATT, such as export quotas, including when introduced within the context

\footnote{2} WTO Director General, \textit{Annual Report on Overview of Developments in the International Trading Environment}, WTO Doc. WT/TPR/OV/14 at 17 (Nov. 21, 2011).


of comprehensive environmental and/or conservation strategies. In particular, the Appellate Body has made it clear that mineral export restraints are difficult to justify because environmental externalities and depletion risks derive from domestic mine production rather than exports. In the same vein, it warned against invoking the principle of sustainable development and the principle of sovereignty over natural resources under the pretext of sheltering export restrictions under the conservation exception when they are rather used as instruments of industrial policy.

Based on these developments, developing country members are arguably left with a lesser margin of manoeuvrability to legitimately use export restrictions to achieve economic diversification goals. This is not only true for more trade-distortive Article XI:1-inconsistent export restrictions like quotas, but it also applies, to a certain extent, to the use of export duties (that is, the only type of export restrictions otherwise available under Article XI:1). This is due to the uneven playing field created by the WTO accession regime on export duties, which contrasts with the paucity of commitments for the original WTO Members.

Against this backdrop, this article aims to answer one simple question: what if the types of export restrictions that have been targeted in WTO disputes were considered as industrial tools under the WTO Agreement on Subsidies and Countervailing Measures (ASCM)? China’s efforts to defend such measures through the classical trade and environment narrative relying on Article XX of the GATT were dismissed precisely because the Appellate Body considered that they were applied as a means to reserve low-price supplies for domestic manufacturing sectors to the detriment of foreign competitors, irrespective of whether they were meant to constitute an integral part of comprehensive “green” industrial policies. From an economic standpoint, such measures indeed artificially reduce the

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7 For a detailed description of how export restrictions have served both industrial and environmental goals, see ESPA, supra note 1, at 111-18.
8 Appellate Body Report, China – Raw Materials, supra note 5; Appellate Body Report, China–Rare Earths, supra note 5; ESPA, supra note 1, at 209-13.
9 Appellate Body Report, China – Raw Materials, supra note 5; Appellate Body Report, China–Rare Earths, supra note 5; ESPA, supra note 1, at 209-13.
10 Commodity exporting countries have consistently resisted any attempts at reinforcing international trade disciplines on export restrictions since the GATT era. See, e.g., supra note 4, at 1180-86.
11 See infra § 2(A).
13 See Appellate Body Report, China – Rare Earths, supra note 5, ¶ 5.156.
domestic price of raw materials, thereby subsidizing national downstream industries *de facto*.

Attempts to bring export restrictive measures within the purview of the ASCM are not entirely new; however, the Appellate Body has not definitively clarified the status of export restrictions under this Agreement. Yet, it is argued that focusing on the ASCM when dealing with export restrictions is worth exploring for two main reasons. First, it may address, at least provisionally, some of the shortcomings of the existing WTO disciplines on export restrictions, particularly those arising from the fragmentation of the WTO regime on export duties, due to two main features of the ASCM: its trade injury focus on the one hand and the general applicability of its provisions on the other hand. In other words, the ASCM could serve as an avenue for levelling the playing field among WTO Members to the extent that all export restrictions (that is, including export duties) imposed by all Members would be actionable when causing adverse effects. Second, it may be an option for those countries imposing mineral export restraints within the context of green industrial policies to take shelter under the more complex and relatively under-explored trade and climate change narrative which has been inspiring a new generation of WTO disputes. One such landmark case is *Canada – Renewable Energy*. Here, the Appellate Body has, albeit controversially, engaged in what has been described as “legal acrobatics” to avoid an explicit standing on the legitimacy of a classical type of clean energy subsidy (that is, Ontario’s feed-in tariff scheme promoting green electricity generation) under the ASCM. The question now is

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15 In only one dispute, *US – Export Restraints*, had the Panel been confronted with the issue of whether certain export restraints constituted a “subsidy” under the ASCM. It concluded in the negative but the Panel Report was not appealed against. See Panel Report, *United States – Measures Treating Export Restraints as Subsidies*, WTO Doc. WT/DS194/R (adopted June 29, 2001) [hereinafter Panel Report, *US – Export Restraints*].


whether anything in the Appellate Body’s reasoning could be interpreted, and perhaps replicated, to shelter otherwise unlawful export restrictions used to promote the competitiveness of domestic renewable energy industries.  

This approach may be particularly relevant, considering that many of the raw materials whose exportation is restricted by the Chinese government are in fact used as inputs for the manufacture of clean energy technology components.

This article is organized as follows. Section II recaps briefly the main arguments raised by the Appellate Body to condemn China’s mineral export restraints (both duties and quotas) to show the limits of China’s defence based on the classical trade and environment narrative relying on Article XX. Section III discusses whether and, if so, to what extent it could and/or should be argued that export restrictions qualify as subsidies within the meaning of the ASCM, both from an economic and a legal perspective. Section IV discusses whether and, if so, the extent to which the approach espoused by the Appellate Body in Canada – Renewable Energy may grant any flexibility to export restrictions used to subsidize downstream industries which operate in the renewable energy sector. The final section concludes the discussion.

II. LIMITS OF A GATT ARTICLE XX-BASED APPROACH TO MINERAL EXPORT RESTRAINTS

Efforts to defend mineral export restraints forming part of green industrial policies have so far revolved around Article XX of the GATT. In particular, in both China – Raw Materials and China – Rare Earths, the Chinese government invoked Article XX (b) and (g) due to the alleged environmental goal which impelled its export duties and quotas. A defensive strategy such as this, however, has consistently been ineffective- Article XX of the GATT was found a priori unavailable for violations of China’s export duty commitments as contained in its Accession Protocol, and China’s Article XI:1 GATT-inconsistent quantitative restrictions were instead condemned as constituting an instrument of industrial policy.

19 Salzman & Wu, supra note 16, at 411-13. As argued by Salzman and Wu, such disputes do not constitute isolated rulings; rather, they represent first blocks of a new strand of WTO case law on trade and environment in the context of climate change. In other words, both the subsidies and the export restrictions at issue originate from modern “green” industrial policies ultimately aimed at promoting the competitiveness of domestic renewable energy industries.


21 GATT, supra note 3, arts. XX(b) and XX(g) respectively justify measures necessary to protect human, animal and plant life or health, and are related to the conservation of exhaustible natural resources. Pursuant to the introductory paragraph of Article XX, any
A. Policy Space to Impose Export Duties

The raw materials disputes against China have shown that the policy space to use export duties varies considerably depending on whether a WTO Member is exclusively bound by GATT obligations or has assumed country-specific export duty commitments. In the former case, which includes all original WTO Members and twenty-three out of the thirty-five newly acceded Members, there is no obligation to either eliminate or reduce export duties as per Article XI:1 of the GATT. Such Members can in principle assume export duty concessions in their GATT schedules on a voluntary basis, following the same scheduling and binding procedure envisaged under Article II:1(b) for import tariffs. To date, all Members exclusively bound by GATT obligations have however refrained from engaging in such practices with the only exception of Australia. Accordingly, they remain free to lawfully introduce and/or maintain export duties without the need to seek justification under Article XX of the GATT. This holds true for large suppliers of raw materials, irrespective of whether they use export duties for economic diversification purposes, causing adverse effects to other Members.

In the latter case, the situation varies greatly depending on the specific language of the export duty commitments assumed by newly acceded Members and on the legal technique used to incorporate them within the context of their accession—either in individual accession protocol provisions or into their GATT schedules as admitted by GATT provisions. At the time of writing this article, the Russian Federation, Kazakhstan and Afghanistan have created a new Part in their GATT Schedule (Part V- “Export Duties”) where they included export duty concessions such measure cannot be “applied in a manner which would constitute a means of arbitrary or unjustifiable discrimination between countries where the same conditions prevail, or a disguised restriction on international trade”.

Article XXVIII (bis), in particular, encourages WTO Members to negotiate both import and export duty commitments alike. Once included in GATT schedules, export duty concessions are binding and legally enforceable by virtue of Article II:1(a) and Article II:7, and could be subject to the deconsolidation procedure under Article XXVIII. For a more detailed explanation, see ESA, supra note 1, at 131-35.

Australia has negotiated export duty concessions in its GATT schedule by inserting an ad-hoc note referring to 11 HS 8-digit tariff lines- accounting for a predominant share of its exports of mineral products (that is, iron ore, titanium ore, zirconium ore, coal, peat, coke, refined copper, unwrought nickel, nickel oxide, and lead waste and scrap)- in Section 2 of Part I of its Schedule on “MFN [most-favoured nation] import tariff commitments on non-agricultural products.” The note states, “There shall be no export duty on this product.” See Australia MFN Tariff Schedule, AUS1-201-AUS1-204, https://www.wto.org/english/thewto_e/countries_e/australia_e.htm.
on a number of various tariff lines. All the other ten Members (Mongolia, Latvia, Croatia, China, Saudi Arabia, Vietnam, Ukraine, Montenegro, Lao People’s Democratic Republic and Tajikistan) have assumed country-specific obligations on the use of export duties under individual accession protocol provisions. Such export duty commitments are quite uneven in terms of scope and coverage, with some countries abiding by general elimination obligations which at times are mitigated by the existence of a list of export tariff bindings (that is indeed the case for China), and others committing to phase down and bind the export duties applied on a specific list of products (for instance, Vietnam and Kazakhstan). Significantly, such “WTO-plus” obligations also differ based on whether their exact wording grants access to Article XX of the GATT. As clarified by the Appellate Body in China – Rare Earths, such access is granted only to the extent that such commitments exhibit an “objective link” to the GATT, mainly in the form of an express reference to the GATT Agreement or to the WTO Agreement more generally, or to Article XX GATT itself, more specifically.

According to the “objective link” test, the conditional applicability of Article XX GATT to export duty commitments contained in individual accession protocols provisions requires a case-by-case analysis, having due regard to the specific language of the provision taken in its context and in light of the purpose of the WTO Agreement, as well as to the specific circumstances of the case (including the measure(s) at issue and the nature of the alleged violation). Based on such an approach, China’s export duty commitments are, not surprisingly, particularly onerous inasmuch as Paragraph 11.3 of its Accession Protocol imposes a general obligation to eliminate export duties altogether, except for 84 HS 8-digit products listed in Annex 6 to the Protocol, and does not incorporate any GATT flexibilities. Accordingly, China’s export duty commitments cannot be derogated

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26 For a complete overview, see ESPA, supra note 1, at 147-61.
27 Appellate Body Report, China- Rare Earths, supra note 5; For a thorough account of the Appellate Body’s reasoning, see ESPA, supra note 1, at 194-204.
28 This has led some authors to speak of a “multi-tiered” membership. See GATT, supra note 3, at 1161-62.
30 See ESPA, supra note 1, at 150-52.
from *a priori*, nor can they be renegotiated in accordance with GATT-specific procedures available to duty concessions.\(^{31}\)

While China’s policy space to use export duties is particularly impaired, it is not the only newly acceded, resource-endowed Member that has assumed broad and inflexible WTO-plus commitments on export duties.\(^{32}\) As shown by the evolution of China’s defensive strategy under Article XX of the GATT along the various raw materials disputes, in such cases Members are left with the harder task to seek justification for more trade-dissusive, but GATT-inconsistent, types of export restrictions, such as export quotas, under Article XX of the GATT.

### B. Policy Space to Impose Export Quotas

The policy space left to WTO Members to use export restrictions covered under Article XI:1 GATT was tested in *China – Raw Materials* and *China – Rare Earths*. Here, China’s strategy is increasingly focused on the conservation exception under Article XX(g).\(^{33}\) It is argued that Article XX(g) should be interpreted broadly in light of the principle of sustainable development and the principle of sovereignty over natural resources.\(^{34}\)

The WTO adjudicatory bodies did accept that the term “conservation” in Article XX(g) incorporates the notion of exercising rights over natural resources in the interests of a Member’s economic and sustainable development, and accordingly recognized the right of WTO Members to design their conservation programmes based on “their own assessment of various, sometimes competing, policy considerations and in a

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31 The classical way for members to renegotiate their tariff concessions is the deconsolidation procedure under Article XXVIII of the GATT. For a more detailed explanation, see ESPA, supra note 1, at 202-04. See also Qin, supra note 4, at 1161-70.

32 ESPA, supra note 1, at 204-08.

33 As shown in the Appellate Body Report, *China – Raw Materials*, the necessity test incorporated into Article XX (b) would have made China’s efforts even more difficult. See ESPA, supra note 1, at 209-13.

34 The latter principle was invoked to sustain that China’s “... right to ‘manage the supply’ of exhaustible natural resources is inherent to its sovereignty over exhaustible natural resources, which [...] allows resource-endowed Members to ‘freely use and exploit their natural wealth and resources...for their own progress and economic development’”. Panel Report, *China – Measures related to the exportation of Rare Earths, Tungsten, and Molybdenum*, ¶ 7.457, WTO Docs. WT/DS431/R, WT/DS432/R and WT/DS433/R (adopted Mar. 26, 2014) [hereinafter Panel Report, *China – Rare Earths*]. Furthermore, China argued that the principle of sustainable development as enshrined in the Preamble of the WTO Agreement informs the interpretation of the conservation exception so as to allow Members to “adopt measures, including export quotas, that foster the sustainable development of their domestic economies consistently with general international law and WTO law.”
way that responds to their own concerns and priorities”. However, they clarified that while “conservation” policies may take sustainable economic development into account, measures that have a “sustainable economic development” objective, such as supply management, cannot be pursued under the rubric of “conservation” within the meaning of Article XX(g) GATT. In other words, Article XX(g) cannot be “stretched” into an exception protecting measure which pursues industrial policy goals. This conclusion is based on the premise that the exercise of sovereignty over natural resources cannot be used to allow a WTO Member to allocate the available stock of a product between foreign and domestic consumers because, once extracted and in commerce, natural resources are subject to WTO law.

Accordingly, several factors were taken into consideration by the WTO adjudicators to condemn China’s measures. First, albeit forming part of China’s comprehensive conservation policy, China’s export quotas lacked the requisite close and genuine relationship with the conservation goal inasmuch as they burdened foreign consumers while reserving a supply of low-price raw materials to domestic downstream industries. Second, the design and structure of China’s export quotas system was not even-handed in the sense required by Article XX(g) as the extraction, production and export quotas were applied “at different dates, on different products, and denominated in different values without any apparent coordination among them”, and the domestic caps were set at levels which were lower than the expected demand for the period during which they were intended to be applied.

All this notwithstanding, the Appellate Body did admit that “Article XX(g) of the GATT 1994 does not exclude, a priori, export quotas or any other type of measures from being

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35 Id. ¶ 7.459.
36 Id. ¶ 7.460. The Panel reiterated that “measures adopted for the purpose of economic development … are not ‘measures relating to conservation’ but measures relating to industrial policy”.
37 Panel Report, China – Rare Earths, supra note 34, ¶¶ 7.451–452 and ¶¶ 7.459–460. See also Appellate Body Report, China – Rare Earths, supra note 5, ¶¶ 5.159–160.
38 Panel Report, China – Rare Earths, supra note 34, ¶ 7.462. As noted by the panel in China – Raw Materials, a State’s sovereignty is also expressed in its decision to ratify an international treaty and accept the benefits and obligations that such ratification entails. In becoming a WTO Member, China has of course not forfeited permanent sovereignty over its natural resources, which it enjoys as a natural corollary of its statehood. Nor has China or any other WTO Member “given up” its right to adopt export quotas or any other measure in pursuit of conservation. China has, however, agreed to exercise its rights in conformity with WTO rules, and to respect WTO provisions when developing and implementing policies to conserve exhaustible natural resources.
39 Panel Report, China – Rare Earths, supra note 34, ¶¶ 7.419–488.
40 Panel Report, China – Rare Earths, supra note 34, ¶ 7.611.
41 Panel Report, China – Rare Earths, supra note 34, ¶ 7.550.
justified by a WTO Member pursuing the conservation of an exhaustible natural resource”. On a more practical level, however, the very nature of export restrictions as “measures that increase the cost of [a raw material] to foreign consumers but decrease their costs to domestic users” was considered in both China–Raw Materials and China–Rare Earths as “difficult to reconcile with the goal of conservation”. In other words, a Member’s sovereign rights must be exercised within the parameters of Article XX(g). The Article cannot be invoked to transform an export restraint into an industrial policy exception meant to assist downstream processing industries.

III. ECONOMIC AND LEGAL PRECONDITIONS FOR TREATING MINERAL EXPORT RESTRAINTS AS SUBSIDIES

Recent WTO case laws on export restrictions seems to leave no room for China to successfully defend its export duties and quotas under Article XX GATT. For mineral export restraints such as quotas, which are inconsistent with Article XI:1 of the GATT, the above difficulty would persist for any WTO Member imposing export restrictions for sustainable economic development purposes, given the Appellate Body’s interpretation of Article XX (g). For mineral export duties, the situation is mixed and depends on the status of WTO Members.

Against this backdrop, this section explores whether the ASCM is better placed to deal with trade instruments of an industrial nature that de facto operate as subsidies, such as mineral export restraints. This section examines the extent to which this could be possible from an economic and legal perspective.

42 Appellate Body Report, China – Rare Earths, supra note 5, ¶ 5.162.
43 Panel Report, China – Raw Materials, supra note 34, ¶ 7.434; Panel Report, China – Rare Earths, supra note 34, ¶ 7.541.
44 From a regulatory point of view, it is noteworthy that the idea of dealing with export restrictions under the ASCM has already been indirectly promoted in the context of the Doha Development Agenda (DDA). A specific proposal was in fact submitted within the Negotiations on Rules on the opportunity to categorize so-called “dual pricing” schemes as prohibited subsidies under Article 3 of the ASCM. See Negotiating Group on Rules, Communication from the United States, Subsidies Discipline Requiring Clarification and Improvement, WTO Doc. WTO/TN/RL/W/78 (Mar. 19, 2003); Negotiating Group on Rules, Paper from the United States, Expanding the Prohibited ‘Red Light’ Subsidy Category, WTO Doc. WTO/RL/GEN/94 (Jan. 16, 2006); Negotiating Group on Rules, Submission of the European Communities, Subsidies, WTO/TN/RL/GEN/135 (Apr. 24, 2006). As dual pricing is a “two-tier pricing policy whereby government or a public monopoly keeps domestic prices low comparatively with export or world prices”, V. Pogoretskyy, The System of Energy Dual Pricing in Russia and Ukraine: The Consistency of the Energy Dual Pricing System with the WTO Agreement on Anti-Dumping, 4 GLOBAL TRADE & CUSTOMS J. 313 (2009), export restrictions are generally considered as one of the instruments through which to implement dual pricing. See Y. SELIVANOVA, ENERGY DUAL PRICING IN WTO LAW: ANALYSIS AND PROSPECTS IN
A. Economic Effects of Export Restrictions

Export restraints can be used as instruments that are functionally equivalent to subsidies. Governments have indeed typically taxed and/or restricted the exportation of raw materials to promote local downstream processing industries within the context of comprehensive industrial plans aimed at achieving, accelerating and/or consolidating economic diversification.45 Based on the standard economic theory, such instruments induce a contraction of exports, which in turn causes a diversion of the reduced exports into the domestic markets.46 The domestic supply of the restricted product will thus increase, thereby generating a decline in the domestic price and a parallel reduction in domestic production.47 Moreover, when a country is large, the reduction of exports from the imposing country affects world supply, ultimately putting an upward pressure on world prices and accordingly creating a wedge between the domestic price of a product and its international price.48

Although WTO Members have frequently pointed to the predicted effect of contraction in domestic production to invoke environment-related public policy goals,49 empirical evidence has shown that the decline in the domestic price, as a consequence of export restrictions actually induces an expansion of downstream

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45 For a complete account, see ESPA, supra note 1, at 111-16.
46 This so-called trade effect can either be direct (that is, in the case of quantitative export restrictions such as export quotas) or result out of the price-effect induced by the imposition of an export tax (that is, the fact that domestic producers will prefer to sell the taxed products at home rather than abroad to avoid bearing the cost of the tax). Fung & Korinek, supra note 14, at 15.
48 Given the geographical concentration of mineral resources, the model that best describes the effects of export taxes on minerals and metals is that of a large country. Fung & Korinek, supra note 14, at 17.
49 For more, see ESPA, supra note 1, at 116-18.
production, which is made possible by the use of domestic below-the-world-price inputs.\textsuperscript{50} In other words, export restraints are often used as a means to support local industries that avail themselves of the restricted raw materials, and are therefore considered to provide an indirect subsidy to downstream producers.\textsuperscript{51}

This ultimate effect was explicitly acknowledged in \textit{China – Rare Earths} as the “perverse signal to domestic consumers” and described in the following terms:

“Whereas export quotas may reduce foreign demand for Chinese rare earths [because of the world price increase, which also has a signalling effect], it seems likely to the Panel that they will also \textit{stimulate} domestic consumption by effectively reserving a supply of low-price raw materials for use of domestic downstream industries. They may also encourage relocation of rare-earth-consuming industries to China”.\textsuperscript{52}

According to the adjudicators’ analysis, in particular, the actual effects of the Chinese system of export quotas were indeed in apparent contradiction to the goal of conservation to the extent that this system “...incentivizes the development and expansion of domestic raw-earth consuming industries”.\textsuperscript{53}

Thus, the \textit{de facto} subsidisation arising out of the industrial nature of export restrictions such as the Chinese export quota at issue, incentivises the development and expansion of national downstream sectors and qualifies such restrictions, at least in the economic sense, as subsidies.

\textbf{B. Legal Characterization of Export Restrictions as Subsidies}

As explained above, export restrictions artificially reduce the domestic price of raw materials, thereby conferring an advantage on downstream processing industries that make use of such materials. The fact that export restrictions, at a practical level, operate as subsidies does not mean that they can be subject to the ASCM. Only measures falling within the scope of the definition of “subsidy” contained in

\textsuperscript{50} A substantial body of literature has shown mixed evidence as to the adequateness of export restrictions as tools to achieve environment-related goals in comparison with alternative options such as straight conservation policies and the regulation of domestic production. \textit{See} \textit{ESPA, supra} note 1, at 119-22; M. Ruta & A. Venables, \textit{International Trade in Natural Resources: Practice and Policy} 16 (Oxcarre, Working Paper No. 84, 2012).

\textsuperscript{51} A. Bouet & D. Laborde Debucquet, \textit{The Economics of Export Taxes in the Context of Food Security, in The Economic Impact of Export Restrictions on Raw Materials} 64 (2010); Fung & Korinek, \textit{supra} note 14, at 114-115.

\textsuperscript{52} Panel Report, \textit{China – Rare Earths, supra} note 34, ¶ 7.444.

\textsuperscript{53} Panel Report, \textit{China – Rare Earths, supra} note 34, ¶ 7.541.
the Agreement can in fact be covered under the Agreement. As per Article 1 of the ASCM, a subsidy within the meaning of the Agreement must fulfil two definitional elements: (i) it must constitute a financial contribution given by a government or any public body within the territory of a Member (Article 1.1(a)(1) of the ASCM)\textsuperscript{54} or any form of income or price support in the sense of Article XVI of GATT 1994 (Article 1.1(a)(2) of the ASCM); and, (ii) this financial contribution must confer a benefit on the recipient (Article 1.1(b) of the ASCM). A “subsidy” must then also be “specific” as per Article 2 of the ASCM to fall within the purview of the ASCM.

The Appellate Body has not definitively clarified the status of export restrictions (be it export taxes or export quantitative restrictions) under the ASCM. In only one dispute, \textit{US–Export Restraints}, was the Panel confronted with the issue of whether certain export restraints constituted a “subsidy” for the purposes of the ASCM and, in particular, a government-entrusted or government-directed provision of goods in the sense of Article 1.1(a)(1)(iv) of the ASCM. It observed that, although export restraints in the sense used in the dispute\textsuperscript{55} were based on a government intervention having an effect on the marketplace, the “entrusts or directs” standard was not satisfied to the extent that it requires an “explicit and affirmative action of delegation or command”.\textsuperscript{56} Accordingly, the Panel concluded that the export restraints which were at issue did not constitute a “financial contribution” within the meaning of Article 1.1(a)(1)(iv) of the ASCM, and thus did not go on to assess these measures under the benefit test under Article 1.1(b) of the ASCM.

Thus, although the Appellate Body has never explicitly ruled on the issue, the “governmental financial contribution” requirement appears difficult to satisfy in the case of an export restriction. The only category that may be relevant is the government provision of goods under Article 1.1(a)(1)(iv) of the ASCM, which

\textsuperscript{54} ASCM, \textit{supra} note 12, art. 1.1(a)(1)- there is a financial contribution when: (i) a government practice involves a direct transfer of funds (e.g. grants, loans, and equity infusion), potential direct transfers of funds or liabilities (e.g. loan guarantees); (ii) government revenue that is otherwise due is foregone or not collected (e.g. fiscal incentives such as tax credits); (iii) a government provides goods or services other than general infrastructure, or purchases goods; (iv) a government makes payments to a funding mechanism, or entrusts or directs a private body to carry out one or more of the type of functions illustrated in (i) to (iii) above which would normally be vested in the government, and the practice, in no real sense, differs from practices normally followed by governments.

\textsuperscript{55} The definition of export restraint referred to by Canada for the purpose of the dispute was: “a border measure that takes the form of a government law or regulation which expressly limits the quantity of exports or places explicit conditions on the circumstances under which exports are permitted, or takes the form of a government-imposed fee or tax on exports of the products calculated to limit the quantity of export”. \textit{See} Panel Report, \textit{US–Export Restraints}, \textit{supra} note 15, § 4(a), ¶ VIII.3.

\textsuperscript{56} \textit{Id.} § 4(d)(ii), ¶ VIII.5.
brings within the definition of a subsidy, the financial contributions by a
government, where “the government entrusts or directs a private body to carry out
one or more of the type of functions illustrated in (i) to (iii) above”. The effect of
an export restraint is that the government entices national economic operators to
provide the material to domestic, and not foreign, consumers at a price that is
below the prevailing international market prices, although the government does not
itself provide the cheaper raw material. The difficulty would be in demonstrating
that such an encouragement is a form of “entrustment” or “direction” within the
meaning of Article 1.1(a)(1)(iv) of the ASCM. Existing relevant WTO case law
seems to require that the government be in a position to control the private
suppliers and to command them to sell the input material to domestic users.57
A scenario where a government has this extent of control cannot be excluded in
those cases where an export restriction is associated with sales or purchases by
domestic state-trading enterprises.

Another way to establish the existence of a subsidy is if a measure provides “any
form of income or price support in the sense of Article XVI of GATT 1994” as
per Article 1.1(a)(2) of the ASCM. Article XVI of the GATT does not specify the
notion of “income or price support”, but Note 2 of Ad Article XVI adds that the
subsidies it addresses are those which “operate directly or indirectly to increase
exports of any product from [the Contracting Party which grants the subsidy], or
to reduce imports of any product into [the Contracting Party which grants the
subsidy]”.58 This definitional element has not yet been interpreted by WTO dispute
settlement bodies, but the language of Note 2 Ad Article XVI seems to
contemplate measures inducing a price differential that is profitable for domestic
producers rather than consumers.59 Yet, it remains to be seen whether export
restrictions may be considered as falling under the ambit of this definitional
element considering that, in the case of an export restriction, the domestic
consumers benefiting from the artificial advantage created by the measure are
producers of downstream products.

Under the second definitional element of subsidy under Article 1.1(b) of the
ASCM, a financial contribution by a government or an income or price support
measure must provide a “benefit” to the recipient. According to Article 14 of the
ASCM, and based on a substantial body of consistent case law, the existence of a
benefit is defined in relation to normal commercial conditions applicable in a given

57 See Appellate Body Report, United States – Countervailing Duty Investigation on DRAMS, ¶¶
141-198, WTO Doc. WT/DS296/AB/R (June 27, 2005).
58 See GATT, supra note 3, Note 2 to Ad Article XVI, ¶ 1.
59 V. Pogoretskyy, Energy Dual Pricing in International Trade: Subsidies and Anti-dumping
Perspectives, in Regulation of Energy in International Trade Law: WTO, NAFTA and the Energy
market (i.e. a measure must improve the competitive position of the recipient compared with what their situation would be in the “market” without the measure). Although export restrictions confer a benefit on domestic downstream producers in the economic sense when they artificially decrease domestic input prices below the world level, proving the existence of a “benefit” under Article 1.1(b) of the ASCM requires the identification of an appropriate “market benchmark”. This may be difficult when a domestic market is distorted by a government intervention, such as in case of an export restriction. Depending on the specific criteria used to determine the market benchmark, the benefit test may yield different results. If the WTO adjudicators determine that the benchmark is the price before the export tax was introduced, then there would be a benefit. However, if the benchmark is determined as the price existing in the market at the time the domestic inputs were purchased, all regulatory measures existing at the time, including the export tax, would be incorporated into the benchmark price and there could be no benefit. WTO dispute settlement bodies may however decide to consider alternative cross-border benchmarks in situations where domestic market conditions cannot be of use due to the predominant role played by the government.60 Under this scenario, alternative benchmarks may include proxies construed on the basis of the world or export price for similar goods, or the “prices for the same inputs in economies at a similar stage of development with a similar resource base”.61

Finally, an export restriction would need to be “specific” within the meaning of Article 2 of the ASCM as it does not come under the category of prohibited subsidies under Article 3 of the ASCM.62 In principle, it would be unlikely to meet the de jure specificity criterion as it artificially reduces the price of a raw material for any domestic users. In this sense, it does not apply to specific enterprises or groups of enterprises, or industries or groups thereof, or specific sectors as outlined by Article 2 of the ASCM. Yet, it could arguably be considered a de facto specific subsidy under Article 2.1(c) of the ASCM inasmuch as only certain enterprises or

60 Appellate Body Report, US – Softwood Lumber IV, ¶ 90, WTO Doc. WT/DS257/AB/R (Jan. 19, 2004). For the Appellate Body, the role of the government is predominant when “it effectively determines the price at which the private suppliers sell the same or like products”. Ibid ¶¶ 87–96 and ¶ 101.
61 Selivanova, supra note 44, at 123.
62 Provided they fall within the definition of subsidy under Article 1 of the ASCM, subsidies that are de jure or de facto contingent on export performance (Art 3.1(a) of the ASCM) or on the use of domestic goods over imported goods (Art 3.1(b) of the ASCM) fall under the category of prohibited subsidies and are deemed to be specific within the meaning of Article 2 of the ASCM. See MAVROIDIS, TRADE IN GOODS 549 (2d. ed. 2012).
industries reap the benefits generated by the export tax.\textsuperscript{63} In this regard, WTO adjudicators seem to retain a quite significant margin of manoeuvre. It cannot be concluded at the outset that export restrictions may be considered actionable subsidies due to their effects on domestic downstream producers although chances to prove that they constitute a "subsidy" within the meaning of the ASCM seem generally low. In any case, a lot would depend on the specific circumstances of each case.

**IV. DISSECTING MINERAL EXPORT RESTRAINTS IN LIGHT OF CANADA – RENEWABLE ENERGY**

As explained above, to date there is no conclusive evidence as to whether export restrictions may qualify as subsidies within the meaning of the ASCM. Yet, in light of the goal of this article, it is useful to pursue an arguendo analysis to determine whether export restrictions adopted in the context of “green” industrial policies would potentially have a better chance to be defended under the ASCM rather than forcibly proved conservation goals under a more traditional trade and environment narrative based on Article XX of the GATT. This question is quite interesting to the extent that the Appellate Body report in Canada – Renewable Energy may be interpreted in such a way so as to suggest that, were export restraints to constitute a subsidy, it could not be hypothetically excluded that they be “saved” in a similar way as Ontario’s feed-in tariff scheme was, provided the industries they support similarly operate in the renewable energy sector. Such a prospect could in principle rehabilitate mineral export restraints when adopted within the framework of a new wave of resource nationalism backed by the principle of sustainable development.\textsuperscript{64}

**A. Preconditions for Treating Mineral Export Restraints as “Green” Subsidies**

Before assessing whether any of the elements of the Appellate Body’s approach in Canada – Renewable Energy could be applied in the case of export restrictions, it is necessary to clarify at the outset that such an approach would in principle only work for a limited set of mineral export restraints, that is, those measures meant to foster renewable energy industries. China’s export restrictions on rare earths, for instance, were defended as conservation measures in China – Rare Earths, but targeted by the complainants as measures instrumental to making China a global leader in the manufacture of green technologies such as solar panels and wind turbines.\textsuperscript{65}


\textsuperscript{64} H. Ward, Resource Nationalism and Sustainable Development (IIED, Working Paper, 2009).

\textsuperscript{65} See RAFAEL LEAL-ARCAS ET AL., INTERNATIONAL ENERGY GOVERNANCE: SELECTED LEGAL ISSUES 413-14 (2014).
Admittedly, this would apply only to a small fraction of export restrictions applied on primary commodities. However, such a scenario could still represent an important avenue for mineral export restraints, whose proliferation mostly affects a restricted nucleus of materials that are vital for expanding clean energy technologies.\textsuperscript{66} This is even more important if one considers that, in light of the growing importance of the renewable energy sector, WTO members are more likely to challenge mineral export restraints when they put this sector at a better footing compared to foreign competitors.

\textit{B. The Appellate Body’s Approach in Canada – Renewable Energy and its Implications}

\textit{Canada – Renewable Energy} was the first ever dispute concerning a “straight” green subsidy programme brought under the ASCM. The measure at issue was a feed-in-tariff scheme granted by Ontario’s government to wind and solar producers of electricity, which incorporated a local content requirement.\textsuperscript{67} While such discriminatory treatment is illegal under Article III:4 of the GATT and Article 2.1 of the TRIMs, the Appellate Body avoided an explicit standing on the illegitimacy of the scheme considered altogether under the ASCM by engaging in a complex legal reasoning, which left it unable to determine that Ontario’s programme constituted a subsidy within the meaning of the Agreement in the first place.\textsuperscript{68} In particular, the Appellate Body did acknowledge that the scheme qualified as a “government purchase of goods” as per Article 1.1(a)(1)(iii) of the ASCM,\textsuperscript{69} but considered that it had insufficient elements to complete the benefit analysis required under the second definitional element of a subsidy.\textsuperscript{70} Although its interpretative approach to the benefit analysis has raised ample controversy, with some scholars considering it a mere exercise of “legal acrobatics”,\textsuperscript{71} its underlying arguments are worth mentioning with a view to explore whether and, if so, to what

\textsuperscript{66} ESPA, \textit{supra} note 1, at 72-100.

\textsuperscript{67} For an excellent overview of the facts of the dispute, see Charnovitz & Fisher, \textit{supra} note 18, at 177-81.

\textsuperscript{68} Had the Appellate Body found Ontario’s FIT programme to constitute a subsidy within the meaning of the ASCM, it would have been left with no choice but to condemn it under Article 3 of the ASCM because of its domestic content requirement component. For a more detailed explanation, see D. De Bièvre, I. Espa & A. Poletti, \textit{No Iceberg in Sight: On the Absence of Potential and Actual WTO Disputes Against Fossil Fuel Subsidies,} 17 INT’L ENV’T AGREEMENTS: POL., L. & ECON. 411 (2017).

\textsuperscript{69} Appellate Body Report, \textit{Canada – Renewable Energy, supra} note 17, ¶ 5.128.

\textsuperscript{70} \textit{Id.} ¶ 5.244.

extent they could/should be replicated to provide at least a partial carve-out, if not a safe haven, for mineral export restraints.

The starting point of the Appellate Body’s benefit analysis was the clarification of the appropriate relevant market and the benefit benchmark for wind and solar electricity in accordance with Article 14(d) of the ASCM – that is, the provision which sets forth the legal standard for determining the existence of a benefit when a measure qualifies as a “governmental purchase of goods”.

Pursuant to this provision, the Appellate Body dismissed the market benchmarks proposed by the complainants. In its view, these were wrongly argued to be the single wholesale electricity market whereas the relevant market for conducting the benefit analysis should have been the competitive markets for wind- and solar PV-generated electricity. This fundamental distinction between conventional and renewable electricity markets was derived after noticing that supply-side factors such as “differences in cost structures and operating costs and characteristics between wind and solar technologies, on the one hand, and other technologies, on the other hand, make it very unlikely, if not impossible, that the former may exercise any form of price constraint on the latter”.

Moreover, this consideration led the Appellate Body to recognize that, because of non-substitutability based on such supply factors, “markets for wind- and solar PV-generated electricity can only come into existence as a matter of government regulation”. And yet, it posited that “new” markets (that is, markets shaped by a government’s definition of its energy supply mix) can still provide appropriate benefit benchmarks. Based on the distinction between already established markets and new markets, the Appellate Body ultimately concluded that “the benefit

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72 Article 14 (d) of the ASCM, in particular, requires that an assessment be made whether the purchase is made for “less than adequate remuneration”, which has to be determined “in relation to prevailing market conditions for the good…in question in the country of the…purchase (including price, availability, marketability, transportation and other conditions of purchase…)).


74 Id. ¶ 5.174.

75 Appellate Body Report, Canada-Renewable Energy, supra note 17, ¶ 5.175.

76 In the words of the Appellate Body: “Although this type of “[government] intervention has an effect on market prices, as opposed to a situation where prices are determined by unconstrained forces of supply and demand, it does not exclude per se treating the resulting prices as market prices for the purposes of a benefit analysis under Article 1.1(b) of the SCM Agreement”. See Appellate Body Report, Canada L. Rubini, The Wide and the Narrow Gate: Benchmarking under the SCM Agreement after the Canada – Renewable Energy/FIT Ruling Renewable Energy, supra note 17, ¶ 5.185.

77 Appellate Body Report, Canada – Renewable Energy, supra note 17, ¶ 5.188.
comparison under Article 1.1 (b) should not be conducted within the competitive wholesale electricity market as a whole, but within competitive markets for wind- and solar PV-generated electricity, which are created by the government definition of the energy-supply mix”.

By narrowing the relevant market within which the appropriate benchmark prices are to be located for the benefit comparison to the “competitive markets for wind- and solar PV-generated electricity” (rather than the competitive wholesale electricity market as a whole), the Appellate Body has arguably made it harder for future complainants to demonstrate the existence of a benefit, and hence that feed-in tariff programmes constitute a subsidy for the purposes of the ASCM Agreement. The question is whether the criteria identified by the Appellate Body may ultimately make it easier for other types of measures, such as mineral export restraints, to evade ASCM scrutiny. The next section assesses whether and to what extent the approach adopted in Canada – Renewable Energy could or should be applied in case such measures are used to foster the development and the expansion of domestic renewable energy industries.

C. Are Mineral Export Restrictions Worthy of “Legal Acrobatics”?

As indicated above, the two criteria informing the Appellate Body’s benefit test were the consideration of supply-side factors for the determination of the appropriate relevant market and the distinction between new and established market for determination of the relevant price benchmark. The first criterion was meant to consider specific renewable energy markets as separate from the wholesale electricity market for the purpose of establishing a higher benchmark price. Such a distinction was needed because in that case the good being subsidized through the feed-in tariff scheme was electricity itself, whose characteristics render it absolutely identical irrespective of whether it is generated from renewable energy sources or fossil fuel-fired plants.

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79 For a critical appraisal of whether this was necessary to avoid a clash between the ASCM and international climate change mitigation objectives, considering that feed-in tariff schemes are classically regarded as “good” types of clean energy subsidies, see G. Marin Duran & Ilaria Espa, Government Support to Renewable energy and WTO Subsidy Law – Revisiting the Case for Reform Beyond Canada – Renewable Energy/FIT Program, WORLD TRADE REV. (forthcoming 2018) (on file with authors).

however, the good being subsidized would not be electricity itself, but rather various forms of green technology products (equipment and components), such as wind turbines or solar panels, whose respective markets are obviously clearly distinguished from that of conventional technologies. The question is whether the WTO adjudicators could argue that, because of supply-side factors-based non-substitutability, the market of, for instance, wind turbines of a country applying the export restrictions should be considered as a separate market from the competitive market producing like products in other countries not needing to apply export restrictions. Based on the reading of the Appellate Body’s interpretative approach given by some authors, in particular, this could not be excluded at the outset inasmuch as the adoption of supply-related criteria as a basis for distinguishing between different markets “grant[s] surprisingly generous leeway to states engaging in industrial policy”. 81

The second criterion was aimed at requiring that the benchmark price be found in the relevant new competitive markets, i.e. relevant markets created by a government intervention. This criterion may be of use for mineral export restraints to the extent that it could be shown that, in the country applying the export restrictions, the downstream sectors benefiting from the provision of cheap inputs could not have developed and become competitive. This circumstance may indeed be substantiated as industrial export restrictions often serve to achieve economic diversification. 82 Under this premise, the price benchmark would need to be found in other new relevant markets. In this respect, it may suffice to find other relevant markets that have come into existence because of a government intervention, or the WTO adjudicators may want to find a price benchmark in other relevant markets created by the existence of similar export restrictions entailing the same effects in the relevant industrial sectors. In the former case, the relevant market whose price could be used as a benchmark could be relatively easier to find considering that a wide range of national support schemes support the development of clean energy industries around the world. 83 In the latter case, the level of complexity would increase in that mineral resources that are critical for clean energy technologies are heavily geographically concentrated, 84 thus rendering it more unlikely to find another market similarly “created” through the imposition of similar export restrictions. In the case of “green” mineral export restraints, therefore, there is in principle the possibility to argue that the benefit test under Article 1.1(b) cannot be completed.

81 Cosbey & Mavroidis, supra note 18, at 26.
82 See § 3(A).
84 See § 3(A).
Another relevant question to address is whether such measures should be sheltered when benefitting clean energy industries. Here again, the answer is mixed. On the one hand, the link between export restrictions and climate change is much less evident than in case of a feed-in tariff scheme. Mineral extraction not only poses conservation problems but it is in fact highly polluting. Moreover, while feed-in tariff schemes directly stimulate green electricity generation, “green” export restrictions foster the competitiveness of domestic industries producing clean energy technologies. More specifically, mineral export restraints as such directly subsidize the immediate downstream industries along the value chain and, what is more, in many more potential sectors which are not “green” (e.g. rare earths are also essential inputs for military applications). In this respect, mineral export restraints may be considered much closer to local content requirements with respect to their environmental effects, inasmuch as their focus is on supporting renewable energy industries that operate domestically.

In sum, the flexibility built-in by the Appellate Body’s interpretative approach to the benefit analysis in Canada – Renewable Energy, albeit conceived for “good” clean energy subsidies such as feed-in tariff schemes, may still leave some room to defend industrial policy instruments with a green core. Yet, mineral export restraints seem unlikely to benefit from “legal acrobatics” on the part of the WTO adjudicators.

V. CONCLUSION

This article aimed at assessing whether mineral export restraints could be dealt with under the ASCM as industrial policy measures and, if so, to what extent this option could allow for greater flexibility on the part of resource-endowed WTO Members when such instruments are used to subsidize industries operating in the renewable energy sector. It reviewed economic and legal arguments in favour of treating export restrictions, more generally, and mineral export restraints, more specifically, under the Agreement. It argued that, at least under certain conditions, the ASCM may be better placed, from a regulatory point of view, to discipline trade instruments of an industrial nature that de facto operate as a subsidy such as export restrictions, particularly in light of the inconsistencies of current WTO rules on

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86 For a more detailed explanation of such difference, and its implications under WTO subsidy law, see G. Marin & Espa, supra note 79.
87 Id. This is different from a straight feed-in tariff scheme which, in and of itself, “can and does benefit investors and traded goods from any provenance without discrimination”. See Cosbey & Mavroidis, supra note 18, at 30.
export duties. It also indicated that the interpretative approach espoused by the Appellate Body in Canada – Renewable Energy might to a certain extent make it easier to shelter “green” industrial policy instruments. However, mineral export restraints may directly benefit from the partial carve-out built-in by the WTO adjudicators through this emerging strand of new generation case law.

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88 This is even more so considering that attempts at reforming current WTO rules on export duties on a multilateral level have so far failed. For more details, see ESA, supra note 1, at 257-71.