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RENEWABLE ELECTRICITY TAX EXEMPTIONS AND TRADE REMEDIES UNDER INTERNATIONAL LAW

An Assessment of Policy Space under WTO Law, the Swiss-EU FTA and EU Law

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Renewable Electricity Tax Exemptions and Trade Remedies under International Law

An Assessment of Policy Space under WTO Law, the Swiss-EU FTA and EU Law

Legal Opinion to the attention of the Swiss Federal Office of Energy

March 8, 2015

Prof Thomas Cottier, Dr Ilaria Espa, Dr Kateryna Holzer

Senior Research Fellows

EXECUTIVE SUMMARY

The problem of increasing imports of subsidized renewable electricity from neighbouring countries and Member States of the EU, undermining level playing fields for power plants in Switzerland, can be addressed by means of preferential taxation of electricity generated from renewable energy sources. Both under WTO law and the rules of the 1972 Free Trade Agreement, distinctions may be drawn on the basis of production and process methods (PPMs), provided the same rules apply to domestic and imported electricity produced with similar methods. Differential taxation can be implemented on the basis of green electricity certificates which need to be made available alike to domestic and foreign producers. A privilege exclusively granted to domestic producers cannot be lawfully sustained. Also, quantitative restrictions on the eligibility of certificates cannot be properly justified. Restrictions based on qualitative criteria could be defended on environmental grounds as long as they objectively apply to both domestic and imported electricity alike.

The paper recommends adopting a system comparable to the UK model of renewable electricity exemption scheme under the Climate Change Levy, in place since 2001. In contrast to an electricity tax system based on guarantees of origin (GOs) discussed in the legal opinion dated April 18, 2014, the value added of the UK model based on tax exemption certificates consists in permitting to condition the eligibility of electricity tax exemptions based on qualitative criteria designed according to the Swiss environmental legislation (or industry/technology standards).

To the extent that considerations of industrial policy dominate the motivation, rather than the promotion of green electricity, measures could be adopted on the basis of countervailing duties, offsetting foreign subsidies granted. Also, recourse to safeguard measures, albeit limited in time, can be contemplated. As Switzerland has little experience in taking recourse to trade remedies, a proper methodology taking into account WTO law would need to be developed and communicated in advance. Finally, efforts should be made to address the issue in negotiations with the European Union and Member States. Both unilateral measures relating to differential taxation as well as trade remedies may be used as an argument to bring about a settlement with exporting countries of subsidized electricity.

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ABBREVIATIONS

AB	Appellate Body
Art.	Article
ASCM	Agreement on Subsidies and Countervailing Measures
EC	European Community
ECJ	Court of Justice of the European Union, European Court of Justice
ECR	European Court Reports
EU	European Union
FIT	Feed-in tariff
FTA	Free trade agreement
GATS	General Agreement on Trade in Services
GATT	General Agreement on Tariffs and Trade
GHG	Greenhouse gas
GO	Guarantee of origin
HS	Harmonized Commodity Description and Coding System
ISO	International Organization for Standardization
LEC	Levy exemption certificates
MFN	Most-favoured nation
MWh	Megawatt-hours
NCS	National certification system
npr-PPM	Non-product related process and production methods
NT	National treatment
OECD	Organisation for Economic Co-operation and Development
Para.	Paragraph
PPM	Processes and Production Methods
RE	Renewable energy
REC	Renewable Energy Certificate
RES	Renewable energy sources
TBT	Technical Barriers to Trade
TEC	Tax exemption certificates
TFEU	Treaty on the Functioning of the European Union
TWh	Terawatt-hours
UK	United Kingdom
VERs	Voluntary Export Restrictions
WTO	World Trade Organization

1. Mandate

1.1 Background

The Swiss government examines the introduction of an electricity tax with differentiated tax rates for grey and green electricity. The tax would equally apply to domestic and imported electricity sold in the domestic market. The consumption of renewable electricity would be encouraged through tax exemptions upon submission of certificates certifying the renewable source of electricity. The scheme discussed is in pursuit of the Energy Strategy 2050 and part of the transition from a renewable energy support system mainly relying upon state funding, to a renewable energy steering system purely based on market mechanisms.

The scheme raises legal and practical questions under international law, in particular in relation to certificates of origin which form an inherent and necessary part of it in order to determine the origin of the electricity. As the scheme may not eliminate all distortions introduced by extensive subsidization abroad, recourse to trade remedies in terms of flanking measures are to be examined.

1.2 Objectives and tasks

An earlier legal opinion on differentiated electricity taxation alluded to a national certification scheme which could be established for the purposes of differentiated electricity taxation.[1] Subject to the fulfilment of certain certification criteria, both domestic and foreign producers of green electricity would have access to such a certification scheme for the purposes of receiving exemptions from, or reductions of, an electricity tax. The first task of the study is to elaborate on the design features of a certification scheme for differentiated electricity taxation, which meets the requirements under WTO law and the 1972 FTA between Switzerland and the EU.

A certification scheme that provides equal access to tax reductions or exemptions for domestic and foreign renewable energy producers is unlikely to create a level playing field between Swiss producers of renewable electricity, particularly hydropower plants, and their foreign counterparts, given the fact that the latter receive extensive subsidies under various renewable energy support schemes in their home countries. Our second task, therefore, is to examine the lawfulness of restricting the availability of tax exemption certificates for foreign renewable energy producers.

The third task of the study aims to examine flanking or alternative measures based upon trade remedies under international law, in particular the law on safeguards and the WTO Agreement on Subsidies and Countervailing duties, taking into account the Swiss-EU 1972 Free Trade Agreement.

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[1] Thomas Cottier et al., *Differential Taxation of Electricity: Assessing the Compatibility with WTO Law, EU Law and the Swiss-EEC Free Trade Agreement*, WTI / Heuking Kühn Lüer Wojtek (Bern April 18, 2014), available at:

http://www.efv.admin.ch/e/downloads/finanzpolitik_grundlagen/els/Differentiatial%20_Taxation_e.pdf?lang=de&msg-id=50122.

2. The Scheme of Renewable Electricity Tax Exemptions

Differential taxation essentially requires the determination of the source and origin of the electricity benefitting from the tax break. Within the EU, a scheme of particular interest to this effect was introduced by the United Kingdom. It is briefly described below. To the best of our knowledge, the scheme has not been contested under EU law. It thus offers important guidance.

2.1 Certification scheme based on the UK model

Seeking to promote energy efficiency and to facilitate the attainment of climate policy goals, the UK government introduced the Climate Change Levy (CCL) in 2001. It is an excise tax imposed on electricity and some fossil fuels (coal, gas and liquefied petroleum gas). The CCL is paid per kilowatt hour of electricity or per unit (kilogram) of fossil fuel to Her Majesty's Revenue and Customs (HMRC) Office at the time of supply to industrial and commercial consumers of energy).[2] It shows variable tax rates for different types of fuels, ranging *ad valorem* from 6.1% on coal to 16.5% on natural gas.[3] Revenues from the CCL are partly recycled back to the industry through a 0.3% reduction of the employers' National Insurance Contributions[4], and partly diverted to the Carbon Trust, an institution, which fosters research and promotion of energy efficiency and renewable energy sources.

Importantly, the CCL not only applies to domestically produced electricity, but also to imported electricity. For electricity and fossil fuels imported from EU countries, the CCL is payable at the time of supply to industrial or commercial consumers in keeping with the principles of the single market. For electricity and fossil fuels imported from countries outside the EU, the CCL is payable at the time of importation and included in the importer's customs declaration.

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[2] For more details on the CCL and other policy instruments deployed in the UK to promote renewable energy, see Cottier et al., Differential Taxation of Electricity: Assessing the Compatibility with WTO Law, EU Law and the Swiss-EEC Free Trade Agreement, WTI / Heuking Kühn Lüer Wojtek, pp. 19-22, available at: http://www.efv.admin.ch/e/downloads/finanzpolitik_grundlagen/els/Differentiatial%20_Taxation_e.pdf?lang=de&msg-id=50122; Ralf Martin et al. (2009), The impacts of the Climate Change Levy on business: evidence from microdata, Centre for Climate Change Economics and Policy Working Paper No. 7 and Grantham Research Institute on Climate Change and the Environment Working Paper No. 6, available at

http://www.cccep.ac.uk/Publications/Working-papers/Papers/1-9/Working_Paper7.pdf (last visited 10 February 2015).

[3] It should be noted that while the CCL establishes a meaningful price incentive for energy efficiency overall, individual CCL rates created a perverse effect in that the carbon contained in gas and electricity is taxed at almost twice the rate of carbon contained in coal. Some explain this by political pressures arising from historical ties between the Labour Party and the coal industry, which had suffered from the dash for gas over the 1990s. See Martin R. et al. (2009), The Impacts of Climate Change Levy on Business: Evidence from Microdata, http://www.bruegel.org/fileadmin/bruegel_files/Website_images/Funded_research_projects/ECE_folders/Event_1_280909/Paper_contribution_28.09.2009.pdf (last visited 10 February 2015).

[4] First introduced by the National Insurance Act 1911, the UK National Insurance (NI) is a system of contributions paid by workers and employers. The so-called National insurance Contributions (NICs) determine eligibility for certain state benefits (e.g. state pension) and are collected by the Majesty's Revenue and Customs (HMRC), which is a non-ministerial department of the UK Government.

The CCL scheme provides for exemptions for green electricity, irrespective of its origin.[5] For the implementation of the CCL exemptions, a separate electricity certification system has been introduced. The certification is done by Great Britain's Office of Gas and Electricity Markets or the Northern Ireland Authority for Utility Regulation in the form of Renewables Levy Exemption Certificates (Renewables LECs). These certificates are issued for each complete MWh of renewable electricity produced by an accredited installation located in the UK or abroad. Electricity from renewable sources is then acquired by an electricity utility and offered for sale to an industrial or public sector consumer under the terms of a renewable source contract.[6]

2.1.1 Main traits of an electricity tax exemption scheme based upon the UK model

As suggested in the legal opinion on differential taxation of electricity, differentiated electricity tax rates may be implemented through a certification scheme for renewable electricity based on the UK model.[7] Tax exemption certificates (TECs) based on the UK model of levy exemption certificates (LECs) would be different from all other RE electricity certificates circulated in the market in so far as they would be used only for the tax exemption or tax reduction purposes. Suppliers of domestic and imported green electricity in the Swiss market would be fully or partly exempted from an electricity tax for the amount of TECs (e.g. a TEC can be issued for 1 MWh of green electricity) which they could redeem.

Based on the UK model, TECs could be issued to the Swiss electricity producers by a Swiss-based certification body upon the verification of the source of the electricity produced. The certification body is still to be determined. This could be either the Swiss Federal Office of Energy, or a mandated institution. To obtain accreditation and to apply for TECs, an electricity generator would need to register with a certification body through an electronic account and provide regular (monthly) data on its generation of green electricity. TECs would be granted only to green electricity coming from accredited Swiss or foreign generators. In order to be certified, a power plant (Swiss or foreign) would need to fulfil certain requirements. The audit, i.e. the assessment of

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5 Note that the UK exports/imports electricity only to/from EU Member States (whereas gas comes mainly from Norway, but also from the Netherlands and Belgium, and coal mainly from Russia but also from the US and Colombia). The UK has three electricity interconnectors (to/from France, the Netherlands and Ireland) that are used for importation and exportation of electricity. Until recently the interconnector with France was used solely for imports and the one with Ireland solely for exports. This pattern has changed since 2008 with more exports to France, fewer exports to Ireland and some imports from Ireland. In 2011, imports from France were 6 terawatt hours and exports were 1 terawatt hour. Imports from the Netherlands were 3 terawatt hours and exports below 1 terawatt hour. Trade with Ireland was less than 1 terawatt hour in either direction. See http://www.nemo-link.com/pdf/Nemo-Link-Interconnector-EN.pdf and Bolton P. (2013), Energy imports and exports, Standard Notes for UK Parliament, http://www.parliament.uk/business/publications/research/briefing-papers/SN04046/energyimports-and-exports- (last visited 10 February 2015).

6 See OFGEM, Applying for accreditation and claiming LECs, available at https://www.ofgem.gov.uk/environmental-programmes/climate-change-levy-exemption/informationgenerators/applying-accreditation-and-claiming-lecs (last visited 10 February 2015).

7 Thomas Cottier et al. (2014), *Differential Taxation of Electricity: Assessing the Compatibility with WTO Law, EU Law and the Swiss-EEC Free Trade Agreement*, WTI / Heuking Kühn Lüer Wojtek, available at:

http://www.efv.admin.ch/e/downloads/finanzpolitik_grundlagen/els/Differentiatial%20_Taxation_e.pdf?lang=de&msg-id=50122, at 62.

whether a power plant meets the requirements, would be done by an accredited independent auditor. Also foreign auditors could be accredited. The auditor would check if all certification criteria were met. The certification body would review the assessment report of the independent auditor and issue the certificates (in case all requirements are met).

Once TECs have been issued to accredited generators, they can be transferred from, or sold by, generators to suppliers who will then provide the TECs to a tax authority as a piece of evidence in order to fully or partly exempt the supply of electricity from taxation. Electricity suppliers would allocate or redeem TECs obtained from generators through an electronic account opened for suppliers.

The advantage of a differentiated electricity tax scheme based on TECs is that it addresses the problem of heterogeneity pertinent to all other RE certificates (e.g. GOs and green certificates) issued in different jurisdictions. Although GOs can accompany physical flows of electricity together with TECs, the double counting should not happen since the two certificates will serve different purposes (only TECs will be accepted for tax exemptions). In addition, the issuance of TECs will be governed based on specific criteria by a Swiss certification body.

2.1.2 Consistency with WTO law, the provisions of the Swiss-EU FTA and Directive 2009/28/EC

The effect of an electricity tax scheme based on the UK model on suppliers of foreign green electricity is neutral, as long as it is open and applies on equal terms to domestic and foreign electricity installations. The legal issues are similar to those discussed in previous opinions. [8] While electricity is a like product, whatever its mode of production, distinctions based upon process and production methods (PPMs) are acceptable under WTO law subject to the fulfilment of the substantive and procedural conditions for justification under the health and/or environmental exceptions of the GATT.[9]As foreign producers within the same categories of processing electricity (renewables v. non-renewables, old v. new plants) are not treated less favourably, the principles of non-discrimination and equal level playing fields are respected. The final assessment will depend upon the modalities of the measure based upon objective criteria and whether efforts were made to find a negotiated solution under Article XX GATT. We do not expect major WTO and FTA issues to arise in implementing this option. Importantly, there is nothing to prevent Switzerland from introducing TECs as part of an electricity tax scheme in the exercise of its regulatory autonomy in comparison to EU law and in accordance with policies of euro compatibility of Swiss law. As a measure aimed at promoting the use of energy from renewable sources by reducing the cost of that energy, a TEC scheme qualifies as a "support scheme" within the meaning of the Directive 2009/28/EC, just like the green certificates used by several EU Member States.[10] It follows that

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[8] See Thomas Cottier et al. (2014), *Differential Taxation of Electricity: Assessing the Compatibility with WTO law, EU law and the Swiss-EEC Free Trade Agreement*, and Thomas Cottier et al. (2014), *CO2 Levies and Tariffs on Imported Electricity: Assessing the Compatibility of Options with WTO law, EU law and the Free Trade Agreement Switzerland-EEC*. See also a discussion of WTO law and EU law implications of TECs in the WTI study for Swisscleantech (forthcoming).

[9] Thomas Cottier et al. (2014), *Differential Taxation of Electricity: Assessing the Compatibility with WTO law, EU law and the Swiss-EEC Free Trade Agreement*, at 67-71.

[10] See Article 2 (k) of the Directive 2009/28/EC.

Switzerland would not be obliged to link such a scheme with the existing markets for RECs in the EU. In this respect, the *Ålands Vindkraft* ruling offers clear guidance. The ECJ recognized that, "as the EU law currently stands, such a territorial limitation may in itself be regarded as necessary in order to attain the legitimate objective pursued in the circumstances, which is to promote increased use of renewable sources in the production of electricity".[11] Although this conclusion relates to the admissibility of the territorial limitation of the energy obligation support scheme based on green certificates adopted in Sweden, the reasoning of the Court is based on the consideration that "EU law has not harmonized the national support schemes for green electricity".[12] In other words, the ECJ starts from the premise that green electricity support scheme authorized under the Directive 2009/28/EC have not been harmonized. It thus allows for domestically defined schemes; TECs are no exception to this consideration. A TEC scheme implemented in Switzerland would not need to be linked with other renewable certificates schemes. Besides, TECs performs functions different from other RECs. The merger of different systems would thus create confusion: EU green certificates, for instance, are used to implement a renewable quota obligation support scheme, and do not grant tax exemptions.

Should Switzerland accept to be bound by the terms of the Directive 2009/28/EC within the context of a future Electricity Agreement,[13] the Confederation thus could still introduce its own green certificates within the meaning of Article 2 (k) of the Directive 2009/28/EC. Similar to its function in some of the EU Member States, the green certificates would then serve as a support scheme in order to facilitate the implementation of a renewable quota obligation for the purposes of fulfilling the mandatory national target for renewables under Article 3 of the Directive 2009/28/EC.

Based on the *Ålands Vindkraft* ruling, Switzerland would again be free to design such a scheme as a purely national scheme limited to green certificates produced on its own territory. However, green certificates as such could not be used to also grant tax exemptions, as in this case solely the green electricity produced in the Swiss territory would qualify for the tax exemptions, thereby running afoul to Article 13 FTA or corresponding special treaty obligations based upon Article 34 TFEU, as explained in section 4.1.1 below. As green certificates cannot substitute for TECs, under this scenario Switzerland would still need to introduce a TEC in parallel to a green certificate scheme.

2.2 Certification scheme with adjustments for subsidized imports

To level a playing field between the Swiss and foreign producers of renewable electricity, a national certification system for electricity tax exemptions could include special requirements for the certificates. These requirements are still under discussion, but it is conceivable that "hydro power plants would need to fulfil the minimum residual water flows (cf. Water Protection Act, Article 31, Para. 1 and 2) other provisions of Water Protection Act, Environmental Protection Act

[11] C-573/12 Ålands Vindkraft AB v. Energimyndigheten, cit., para. 92.

[12] *Ibid.*, para. 94 (emphasis added).

[13] Thomas Cottier et al. (2014), *Differential Taxation of Electricity*, cit., at 20.

(EPA) or any provisions on landscape conservation. Only non-supported/subsidized facilities, power plants may get certificates."[14]

In the next section, we examine the legal feasibility of a national certification system (NCS) that foresees the introduction of restrictions on the access of foreign renewable electricity producers to NCS based on quantitative or qualitative criteria.

2.2.1 Analysis of quantitative limitations

Under the first scenario, the number of TECs eligible for tax exemptions would be limited by means of a quota imposed on TECs issued to foreign (EU) installations. Consequently, TECs issued to Swiss electricity producers will always qualify for the tax exemptions whereas 'foreign' TECs will be granted the tax exemption only to the extent that they are not over quota.

The exclusion of electricity produced at foreign installations from the tax exemption, when exceeding a certain fixed thresholds, potentially favours the production and consumption of domestic green electricity to the disadvantage of imported electricity. The fact that different tax conditions are attached to domestic and foreign electricity depending on their origin could induce an increase in the demand for electricity produced from Swiss installations that received TECs. In this respect, such a quantitative limitation would discourage the importation of green electricity.

The actual implications on trade in electricity of quantitative limitations would depend on the specific modalities of implementation of such a tax design option. Particularly it depends on the manner by which the quota is administrated. A quota on 'foreign' TECs admitted for the purposes of tax exemptions, for instance, could be fixed at the national level and then proportionally allocated to each Swiss supplier. Alternatively it could either be set in such a way as to correspond to a certain fixed percentage of the total TECs eligible for tax exemption for each Swiss supplier, or to a progressive percentage depending on the proportion of the total volume of green electricity imported by Swiss suppliers.

While TECs do not regulate the physical flow of electricity and quotas do not formally amount per se to an import restriction for electricity, they nevertheless create incentives which may result in enhanced de facto limitations of imports of electricity. Inasmuch as a measure limiting the eligibility of TECs affects the physical volumes of green electricity imported into Switzerland, it is thus likely to impinge on both the Free Trade Agreement and related WTO law provisions regulating trade in goods, as discussed below.

a. FTA and European Union law

Under the EU legal framework and within the EU, the implications on trade in electricity linked to the introduction of a quota on the eligibility of 'foreign' TECs for tax exemptions may run counter to the principle of free circulation of goods and, in particular, impinge on Article 13 FTA and corresponding provisions following Article 34 TFEU. Article 34 TFEU prohibits any "[q]uantitative restrictions on imports and all measures having equivalent effect […] between Member States". Measures running counter to Article 34 TFEU, however, may still be justified

[14] As described in the BFE note of August 14, 2014.

on one of the public interest grounds recognized under Article 36 TFEU[15] or on the grounds of environmental protection, which the ECJ case law has consistently considered to constitute an overriding requirement.[16]

Within the EU, the applicability of Article 34 TFEU to cases where a restriction on foreign electricity arises out of the selective use of electricity certificates was recently confirmed by the ECJ in the judgment *Ålands Vindkraft* addressed above.[17] The measure at issue in the *Ålands Vindkraft* dispute was an RE obligation support scheme introduced by Sweden under the Directive 2009/28/EC,[18] which relied on the use of green certificates awarded solely to domestically produced green electricity. For the ECJ, the exclusion of green electricity produced outside of Sweden from the scope of the domestic renewable support scheme was "indirectly capable of promoting trade in electricity from Sweden in that suppliers may have an additional incentive to acquire electricity from Swedish producers because the latter are also able to provide them with the certificates that those suppliers need in order to fulfil their quota obligations".[19] According to the ECJ, the existence of such a possibility was sufficient to encourage "the establishment of contractual relationships – in some cases, on a long-term basis – concerning the supply of *national* electricity by those producers to suppliers or electricity users"[20]. The Court thus considered that the Swedish scheme constituted a measure having equivalent effect to quantitative restrictions on imports within the meaning of Article 34 TFEU[21] because "the effect of the support scheme at issue…is, at least potentially, to curb electricity imports from other Member States"[22], especially green elec-

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[15] Article 36 TFEU states: "The provisions of Articles 34 and 35 shall not preclude prohibitions or restrictions on imports, exports or goods in transit justified on grounds of public morality, public policy or public security; the protection of health and life of humans, animals or plants; the protection of national treasures possessing artistic, historic or archaeological value; or the protection of industrial and commercial property. Such prohibitions or restrictions shall not, however, constitute a means of arbitrary discrimination or a disguised restriction on trade between Member States." Measures aimed at stimulating the share of green electricity supplied and/or consumed domestically could then in principle be defended under the 'public health' exception recognized in Article 36.

[16] Although the 'protection of the environment' is not explicitly mentioned in Article 36 TFUE, EU Member States have increasingly resorted to environmental justifications, and a consistent body of ECJ jurisprudence has recognized it to be an overriding mandatory requirement under which it is possible to defend limitations to the principle of free movements of goods. Case C-2/90 *Commission v. Belgium* (1992) ECR I-4431, Case 302/86 *Commission v. Denmark* (1988) ECR 4607, Case C-473 *Toolex* (2000) ECR I-5681 and Case C-379/98 *PreussenElektra* (2001) ECR I-2099.

[17] Under this scheme, however, both Swedish suppliers and electricity users importing electricity were under the obligation to surrender annually a certain number of green certificates corresponding to a certain proportion of the total amount of electricity that they had supplied or used. C-573/12 *Ålands Vindkraft AB v. En ergimyndigheten*, cit., para. 55.

[18] See Section 2.1.3.

[19] C-573/12 Ålands Vindkraft AB v. Energimyndigheten, cit., para. 28.

[20] C-573/12 *Ålands Vindkraft AB v. Energimyndigheten*, cit., para. 72 (emphasis added).

[21] *Ibid.*, para. 75. The Court based its conclusion on a substantial body of past jurisprudence interpreting Article 34 TFEU on the prohibition of measures having equivalent effect to quantitative restrictions on importation. See, among others, from Case C-379/98 *PreussenElekta* (2001) ECR I-2099 and the case law therein cited.

[22] *Ibid.*, para. 73.

tricity imports.[23] It thus turned to analyse whether the scheme at issue was justified on the grounds of environmental protection. It concluded that the Swedish scheme could indeed be defended as a measure responding to considerations relating to the protection of the environment as it could be proportional to this goal[24], irrespective of the fact that the tradable certificates were awarded to green electricity producers solely for the green electricity produced in the Swedish territory.[25]

A fortiori, the same reasoning also applies to the 1972 Swiss-EU Free Trade Agreement. The measure amounts to a quantitative restriction essentially banned under Article 13 para. 1 of the Agreement. It may be justified under the exceptions of Article 20 FTA for similar reasons as within the EU. To the extent that the measure is justified under EU law, the same holds true of the FTA. The latter, however, reaches less far, and it may be that measures not found compatible with the TFEU are acceptable under the FTA. The latter requires actual trade restrictions while the former already excludes the possibility of restrictions.[26] Policy space under the FTA is thus somewhat larger than within the EU.

The *Ålands Vindkraft* ruling offers considerable guidance in the assessment of compliance of a quota imposed on the eligibility of foreign TECs for tax exemptions, with EU law and the 1972 FTA.[27] The measure in fact presents various analogies with the Swedish green certificates at issue in the *Ålands Vindkraft* case in terms of its effects on trade in electricity. It in fact results in an incentive for Swiss suppliers to purchase domestically produced green electricity with the effect of impeding imports of green electricity. It is therefore very likely that a quota on foreign TECs eligible for tax exemptions would qualify as a measure having equivalent effect to quantitative restrictions inconsistent with Article 34 TFEU and Article 13 para 1 FTA.

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[23] *Ibid.*, para. 75.

[24] According to a substantial body of ECJ case law, a measure inconsistent with Article 34 TFEU could justified on environmental protection grounds insofar as it complies with the principle of proportionality, i.e. it must be appropriate for ensuring the attainment of the objective pursued and must not go beyond what is necessary for fulfilling that objective. See, for instance, Case C-524/07 *Commission v Austria* (2008) ECR I-187, para. 54 and the jurisprudence therein cited.

[25] C-573/12 *Ålands Vindkraft AB v. Energimyndigheten*, ft. 18, paras. 83-119. The ECJ, in particular, recognized that "*as the EU law currently stands*, such a territorial limitation may in itself be regarded as necessary in order to attain the legitimate objective pursued in the circumstances, which is to promote the use of renewable energy sources in the production of electricity". C-573/12 *Ålands Vindkraft AB v. Energimyndigheten*, ft. 18, para. 92 (emphasis added). Among the considerations leading the ECJ to this conclusion is the fact that "EU law has not harmonized the national support schemes for green electricity [i.e. including the green certificates schemes used to implement *national* renewable energy obligation support schemes within the meaning of Article 2 (k) of the Directive 2009/28/EC]". C-573/12 *Ålands Vindkraft AB v. Energimyndigheten*, ft. 18, para.94.

[26] See Thomas Cottier et al, Die Rechtsbeziehungen der Schweiz und der Europäischen Union, Bern 2014 pp. 229240.

[27] It should be noted that the ECJ judgement for the first time did not follow the Opinion of the Advocate General. According to the Advocate General Bot, while the Swedish national renewable energy support scheme complied with the RES Directive, but Article 3(3) of the Directive 2009/28/EC was in breach of the principle of the free movement of goods to the extent that it permits a Member State to deny or restrict access to its national support regime to producers whose plants are situated in other Member States. C-573/12 *Ålands Vindkraft AB v. Energimyndigheten*, Opinion of the Advocate General Bot, 28 January 2014.

The introduction of tax exemptions for green electricity based on the submission of TECs can be relatively easily defended as a measure aimed at promoting the use of electricity from RE sources with a view to reducing greenhouse gas (GHG) emissions and combating climate change.[28] However, proving that a quota needs to be imposed solely on foreign TECs for the purpose of tax exemptions in order to achieve such a legitimate goal is more difficult. It can in fact be argued that the goal of environmental protection can be pursued without the need to stimulate an increase in the share of domestically produced green electricity. Granting tax exemptions upon submission of TECs of all origins, in itself, induces Swiss suppliers to conclude contracts concerning the supply of green electricity. In other words, a quota imposed solely on foreign TECs is difficult to justify on environmental grounds as it inherently favours the national production of green electricity to the detriment of green electricity of foreign origin.

This conclusion holds true irrespective of the fact that the *Ålands Vindkraft* ruling admitted the national support scheme implemented by Sweden on environmental protection grounds. True, the Swedish scheme scrutinized in the *Ålands Vindkraft* ruling does present some similarities with the measure under review, as both measures exclude – completely in the former case and partially in the latter case (i.e. for the part of foreign TECs exceeding the quota)[29] – that the green electricity produced outside the national territory benefits from the same treatment accorded to nationally produced green electricity on environmental grounds. Yet, the analogies end here. In the *Ålands Vindkraft* case, the measure at issue was, in fact, an RE obligation support scheme based on green certificates within the meaning of Article 2 (k) of the Directive 2009/28/EC. In other words, the green certificates introduced by Sweden were aimed at fulfilling the mandatory national quota for the production of green electricity within the terms of Article 3 (1) and Article 5 (1) and (3) of the Directive 2009/28/EC. They were used to implement a purely national support scheme which was allowed to be territorially limited by terms of the RES Directive.[30] In the case under review, the partial exclusion of *foreign* green electricity from tax exemptions would not correspond to the need to fulfil national mandatory targets for the production of green electricity within the meaning of the RES Directive on the part of a country imposing such a limitation (in the present case – Switzerland).

In conclusion, it is unlikely to replicate the approach adopted in the *Ålands Vindkraft* judgment in order to justify a quota imposed on foreign TECs for the purpose of tax exemptions on grounds related to protection of the environment.

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[28] See Case C-379/98 *PreussenElekta* (2001) ECR I-2099, paras. 73–75.

[29] The volume of imported green electricity *de facto* excluded from the tax exemptions would depend on the stringency of the quota fixed for the eligibility of foreign TECs.

[30] More precisely, the ECT stated that: "[s]ince, in particular, EU law has not harmonized the national support schemes for green electricity, it is possible in principle for Member States to limit access to such schemes to green electricity located in their territory". C-573/12 *Ålands Vindkraft AB v. Energimyndigheten,* cit., para. 94. At the same time, the European Commission has recently approved a German renewable energy law which allows foreign (i.e. not German) renewable energy producers participating in the German renewable energy support scheme and making them eligible for FITs to the same extent as domestic green electricity producers. European Commission Press Release, 'State aid: Commission approves German renewable energy law EEG 2014', 23 July 2014, available at http://europa.eu/rapid/press-release_IP-14-867_en.htm.

b. WTO law

Under the WTO legal framework, the implications of a quantitative limitation on TECs eligible for tax exemptions are likely to impinge on the obligation of general elimination of quantitative restrictions under Article XI:1 GATT. The provision outlaws both import "prohibitions" and import "restrictions … whether made effective through quotas, import … licenses or other measures".

The exclusion of foreign TECs from the tax exemption when they exceed a certain fixed threshold could be considered as a "measure" ultimately amounting to a "restriction…on importation" of green electricity within the meaning of Article. XI:1 GATT. Existing WTO case law has in fact consistently interpreted the expression "other measures" in connection with the term "restriction" as to significantly expand the scope of the provision, including not solely a category of measures that may be considered formal quantitative restrictions, such as quotas, but also a whole variety of means insofar as they impose a limiting condition on trade, i.e. they reduce the volume of imports (or exports).

In *India – Autos*, in particular, the Panel suggested that the term "restrictions" encompasses all measures imposing a condition that has a limiting effect.[31] In *Colombia – Ports of Entry*, the panel opined that Article XI:1 would also cover "measures which create uncertainties and affect investment plans, restrict market access for imports or make importation prohibitively costly".[32] In *China – Raw Materials*, the panel further added that any measure having "the very potential to limit trade… constitute[s] a 'restriction' within the meaning of Article XI:1 of the GATT 1994".[33] Based on past jurisprudence, the introduction of a quota on the number of foreign TECs eligible for the tax exemption/reduction is likely to be considered a measure having a limiting effect on importation within the meaning of Article XI:1 GATT inasmuch as it creates uncertainties with respect to eligibility of foreign TECs for the purposes of tax exemptions. It would thus negatively affect the competitive opportunities of green electricity produced outside Switzerland compared to domestically produced electricity accompanied by Swiss TECs for the purpose of securing eligibility for tax exemptions.[34]

Furthermore, Article XI:1 GATT is not the only provision that may be relevant for assessing the legal feasibility of quantitative limitations on foreign TECs eligible for tax exemptions. A viola-

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[31] Panel Report, *India – Measures Affecting the Automotive Sector*, circulated on 21 December 2001, WT/DS/146/R and WT/DS/175/R, para. 1.14.

[32] Panel Report, *Colombia – Indicative Prices and Restrictions on Ports of Entry*, adopted on 20 May 2009, WT/DS366/R, para. 7.240.

[33] Panel Report, *China – Measures Related to the Exportation of Various Raw Materials*, circulated on 5 July 2011, WT/DS394/R, WT/DS395/R and WT/DS398/R, para. 7.1081.

[34] This conclusion holds true if one considers that in *Colombia – Ports of Entry* the panel specified that the limiting effect on importation would not need to be proved based on the specific trade effects of a measure given that "changes in trade volumes result not only from governmental policies, but also from other factors, and that, in most circumstances, it is not possible to determine whether a decline in imports following a change in policies is attributable to that change or to other factors". Panel Report, *Colombia – Ports of Entry*, cit., para. 7.254. Hence, it would not be necessary to quantify the impact determined by the preference of domestic over foreign TECs on the volume of green electricity imports for the purpose of proving the violation of Article XI:1 GATT.

tion of the national treatment rule under Article III:4 GATT may arise to the extent that a more favourable treatment would be granted to Swiss suppliers submitting TECs of Swiss origin obtained by purchasing green electricity produced domestically instead of importing it from abroad. This would modify the conditions of competition in Switzerland between imported and domestic green electricity to the detriment of the former.[35]

Moreover, designing an electricity tax scheme in such a way that tax exemptions would be fully available to domestic green electricity upon submission of Swiss TECs while making it possible to exclude imported green electricity accompanied by foreign TECs exceeding the quota may create problems with its justification under Article XX (b) and (g) GATT.[36] Recourse to the GATT exceptions might be needed to justify the imposition of an electricity tax based on processes and production methods (PPM) and also the possible discriminatory effects on foreign green electricity compared to domestic green electricity discussed above.[37] As a quota imposed on foreign RE TECs for the purposes of tax exemptions would ultimately discourage green electricity imports while stimulating the production of green electricity in Switzerland, the question is whether the preference for domestic over foreign green electricity could be considered "necessary to protect human, animal or plant life or health" under Article XX (b) GATT, or "relating to the conservation of exhaustible natural resources if such measures are made effective in conjunction with restrictions on domestic production or consumption" within the meaning of Article XX (g) GATT. The necessity test imposed under Article XX (b) renders a justification of a quota imposed solely on foreign TECs practically impossible, as the use of electricity from renewable sources in Switzerland's electricity mix could be promoted just as effectively by exempting domestic and foreign green electricity alike. Likewise, a successful defence under Article XX (g) seems unlikely given that this Article requires that the measure at issue is taken "in conjunction with restrictions on domestic production or consumption". In this respect, the quota on TECs eligible for tax exemptions would have to be imposed on both domestic and foreign GOs alike and not solely on non-Swiss TECs. Finally, even if provisionally justified under either of the exceptions, the quota on foreign TECs will need to fulfil the requirements of the chapeau of Article XX. According to the chapeau, a measure shall not constitute "a means of arbitrary or unjustifiable discrimination between countries where the same conditions prevail, or a disguised restriction on international trade". Very recently, the WTO's Appellate Body discussed at length the impli-

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[35] A detailed analysis of the case law interpreting Article III:4 GATT and a thorough explanation of its applicability to a quantitative limitation imposed on GOs for the purposes of tax exemptions were given in Thomas Cottier et al. (2014), *Differential Taxation of Electricity: Assessing the Compatibility with WTO Law, EU Law and the Swiss-EEC Free Trade Agreement*, WTI / Heuking Kühn Lüer Wojtek, available at:

http://www.efv.admin.ch/e/downloads/finanzpolitik_grundlagen/els/Differentiatial%20_Taxation_e.pdf?lang=de&msg-id=50122, at 55.

[36] The conditions for seeking justification under such exceptions were thoroughly discussed in Thomas Cottier et al. (2014), *Differential Taxation of Electricity*, cit., at 35–36.

[37] The likeness issue of grey and green electricity and the problems which may arise from the differential treatment accorded to various types of electricity were analysed in Thomas Cottier et al. (2014), *Differential Taxation of Electricity*, cit., at 24–27. See also Kateryna Holzer et al. 'Promoting green electricity through differentiated electricity tax schemes', Background paper prepared for the World Trade Forum 2014 on "International Trade in Electricity and the Greening Economy", WTI 26-27 September 2014, forthcoming.

cations of the analysis under the chapeau in the *EC – Seal Products* dispute.[38][39] In particular, it clarified that the chapeau "entails an assessment of whether the 'conditions' prevailing in the countries between which the measure allegedly discriminates are the same".[40] Accordingly, Switzerland would need to prove that the "conditions" prevailing domestically, on the one hand, and in the EU (or in any country potentially exporting electricity to Switzerland), on the other hand, are "relevantly different".[41] It seems unlikely that Switzerland could rely on the existence of the tax exemptions to argue that its domestic conditions are different than those prevailing in the EU Member States where different green electricity promotion schemes are widespread, e.g. in the form of green certificates or even in the form of levy exemption certificates as in the case of the UK. Based on WTO jurisprudence, because the quota on foreign TECs would result into discrimination between countries where the same conditions exist, the reason for such discrimination should have a link to the objective reflected by Article XX (b) and (g) GATT.[42] However, as already noted, the reason for discriminating against imported green electricity in favour of domestic green electricity does not seem to relate directly to public health or environmental protection considerations, as the use of electricity from renewable sources would be promoted just as effectively by measures incentivizing the consumption of green electricity irrespective of its origin. For all the foregoing reasons, a quota imposed on foreign TECs eligible for tax exemptions would likely run afoul of GATT provisions.

Finally, the scenario under scrutiny does not seem to raise additional compatibility problems under the TBT Agreement so long as the use of TECs for the purposes of tax exemptions does not touch upon the issues of certification of electricity.

2.2.2 Analysis of qualitative restrictions

Under the second scenario, the admissibility of TECs for tax exemptions would be limited by the introduction of qualitative criteria, abstaining from quantitative restrictions discussed above. Such criteria would apply to both Swiss and foreign (EU) TECs alike, on the basis of Swiss standards. In other words, Swiss suppliers submitting either type of TECs will qualify for tax exemptions to the extent that they fulfil certain qualitative criteria which may entail different policy goals, in particular environmental concerns. In principle, it would also be possible to differentiate even between new and old plants, so long as the defining criteria are objective (environment-related) and

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[38] The requirements imposed by the chapeau have been examined in detail in Thomas Cottier et al. (2014), *Differential Taxation of Electricity*, cit., at 36–37 and Thomas Cottier et al. (2014), *CO_2 Levy or Tariff on Imported Electricity: Assessing Compatibility with WTO Law, EU Law and the Free Trade Agreement Switzerland–EEC*, WTI/Heuking Kühn Lüer Wojtek, available at http://www.bfe.admin.ch/php/modules/publikationen/stream.php?extlang=en&name=en_756795622.pdf, at 31-

[39] .

[40] Appellate Body Report, *European Communities – Measures Prohibiting the Importation and Marketing of Seal Products* (EC Seal Products) adopted 22 May 2014, WT/DS400/AB/R , WT/DS401/AB/R, para. 5.317.

[41] *Ibid*, para. 5.299.

[42] Appellate Body Report, *Brazil – Measures Affecting Imports of Retreaded Tyres (Brazil–Retreaded Tyres)*, adopted 20 August 2009, WT/DS332/AB/R, para. 227.

apply on equal terms to domestic and imported green electricity and the distinction between old and new plants is based on the fulfilment of these criteria

There are two ways to implement qualitative criteria. One is where the physical flows criteria apply only at the exemption stage. In this case, tax exemptions will apply to green electricity consumed in Switzerland (domestic or imported electricity) and thus will not apply to Swiss produced exports of green electricity. The other way is where the physical flows criteria apply at the initial stage of determining the tax base. This means that the tax itself will not concern Swiss green electricity produced for exports.

a. Tax exemptions

One qualitative criterion for the model of tax exemption could consist in linking TECs to physical flows of electricity, as in the UK system. In this case, only TECs coming from Swiss-based installation, which correspond to electricity produced and consumed in Switzerland (i.e. not exported to other countries) and only foreign TECs, which correspond to green electricity actually imported and thus consumed in Switzerland would be eligible for the tax exemptions.

The basic underlying rationale of such an option is different to the option relying on quantitative limitations on foreign TECs. In the latter case, the idea behind the introduction of a quota on foreign TECs is to limit the granting of a tax exemption when green electricity is not produced on the Swiss territory. In the former case, the idea is to exempt from the tax the green electricity actually consumed on the Swiss territory. This fundamental difference seems to better reflect the environmental goal of stimulating the use of electricity from renewable sources in Switzerland's electricity mix.[43]

b. Determination of tax base

To the extent that the physical flows criteria applies only at the exemption stage, however, tax exemptions granted upon submission of TECs would only apply to green electricity consumed in Switzerland (domestic or imported electricity) but could not apply to Swiss-produced green electricity destined for exports. One option to obviate this problem could be to implement the physical flows criterion at the initial stage of determining the tax base. This means that the tax itself will not concern Swiss green electricity produced for exports from the very outset, as such electricity will be subject to the tax regime of the importing country.

c. Criteria related to physical flow of electricity

The limitation on the admissibility of TECs for the purposes of taxation based on a proven physical flows criterion applied to both domestic and imported (but not exported) electricity is not likely to raise compatibility problems with WTO law, EU law and the FTA. It is in fact a formally objective, country-neutral criterion that permits to use TECs as a tool to extend a domestic tax regime to imports in such a way as to treat domestic and foreign green electricity alike in the do-

[43] From an environmental perspective, it is irrelevant whether the increase in the production of green electricity occurs on the territory of Switzerland or elsewhere due to the global nature of climate change.

mestic market.[44] For such reason, it does not entail any violations of relevant WTO and FTA provisions regulating trade in goods. Moreover, because such a criterion would be equally applicable to Swiss and foreign TECs accompanying green electricity flows in a way similar to labels, no additional legal hurdles would arise out of the WTO TBT Agreement.

Another qualitative criterion upon defining the tax base excluding exports could consist in granting the tax exemption for domestic consumption upon the fulfilment of specific ecological requirements, such as those existing under green electricity labels. In parallel to the development of green certificates systems for tax purposes, a whole range of different electricity labels has been introduced to serve the function of disclosing information on different quality aspects of electricity to consumers.[45] Green electricity labels are issued by a specific certification body upon request of electricity installations provided they fulfil sustainability requirements under the labelling scheme. Green electricity labels are thus attached to the physical flows of electricity produced by certified electricity installations. The main difference between green certificates and green electricity labels is that the former certify the green origin of electricity per kWh, whereas the latter provide information on the sustainability footprint of the electricity plants, including their environmental impacts, social and economic criteria and various process criteria. Green electricity labels are usually based on the ISO requirements for 'Environmental labels or eco-labels' (ISO 14025:2006). Under ISO 14025:2006, different countries have developed various labelling schemes for renewable electricity, which provide consumers with information on the environmental impacts of the electricity generation process. In Switzerland, two main labelling systems are used for green electricity: 'naturemade' and TÜV SÜD. Swiss consumers can choose among the certified green electricity types ordering electricity directly from electricity suppliers. This market segment is still relatively small, however.[46]

The idea behind this option is clearly to restrict the availability of tax exemptions not simply to green electricity as such (i.e. CO_2-free electricity generated from renewable sources) but more specifically to green electricity produced in an ecologically sustainable manner.[47]

Although in principle this criterion would be applicable to both Swiss and foreign TECs, depending on the choice of a label, *de facto* problems of discrimination against imported green electricity under both the WTO and the EU legal frameworks for trade in goods may arise. For instance, 'naturemade' labels certify almost half of all renewable electricity products in Switzerland[48] but

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[44] Under this design option, what would be excluded from tax exemptions would only be TECs not linked to the importation of green electricity, while imported green electricity would be accorded the same tax treatment as would be accorded to Swiss green electricity.

[45] PriceWaterhouseCoopers & WWF (2009), Green Electricity Making a Difference. An International Survey of Renewable Electricity Labels, May 2009.

[46] In 2009, it accounted for 8% of the entire consumption of electricity in Switzerland, PriceWaterhouseCoopers & WWF (2009), Green Electricity Making a Difference. An International Survey of Renewable Electricity Labels, May 2009, p. 87.

[47] Green electricity labels in fact take into account a wider range of requirements concerning ecological, social, organizational and professional factors. See Naturemade Swiss Quality Label: A Top Global Brand, available at http://www.naturemade.ch/Dokumente/Kommunikation/PWC-Report-kurz-e.pdf.

[48] PriceWaterhouseCoopers & WWF (2009), Green Electricity Making a Difference, cit., at 87.

they are not diffused to other countries.[49] This means that TECs qualifying for tax exemptions will almost exclusively be those of Swiss origin, whereas EU TECs would hardly qualify for tax exemptions.

In these cases, the implications for trade in electricity will be similar to those arising out of the introduction of a formal quota on foreign TECs eligible for tax exemptions. The introduction of such a qualitative criterion is thus likely to entail a violation of Article 13 FTA , as well as Article III:4 and Article XI:1 GATT, while posing similar problems of justification under the relevant environmental exceptions available under EU law and WTO law. In order to avoid a *de facto* discrimination against imported green electricity, the tax exemption scheme should thus be based on a label which can be fulfilled by both domestic and foreign suppliers of RE electricity and should not solely focus on local criteria for production, promotion and markets.[50]

3. Trade Remedies

As discussed in the previous section, competitiveness concerns of Swiss green electricity producers could be addressed under the differentiated electricity tax scheme by imposing objective criteria to the issuance of renewable electricity certificates based on national environmental standards (e.g. requirements to hydro power plants). This section is aimed to look at alternative policy tools that could be employed in parallel to a differentiated electricity tax in order to level the playing field between domestic and foreign producers of green electricity in compliance with WTO and FTA rules. We first address rules relating to off-setting foreign subsidization and then turn to safeguards measures.

Importantly, main trade remedies under WTO law offer the option of unilateral imposition of measures by Switzerland. The examination and determination of the lawfulness of these measures thus is unilaterally undertaken, but may eventually be challenged by trading partners, in particular the EU, before the WTO. Alternatively, foreign subsidies may be directly challenged by Switzerland before the WTO.

3.1 Available options under subsidy rules

3.1.1 Application of the WTO Subsidy Agreement in Swiss - EU relations

The 1972 Free Trade Agreement between Switzerland and the European Union (FTA) essentially deals with trade in goods, at the exclusion of services, but also primary agricultural commodities (SR 0.632.401). Electricity, in accordance with tariff position 2716 in the International Convention on the Harmonized Commodity and Coding System (Harmonised System)

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[49] Electricity installations based abroad may in principle apply to designate and certify their electricity under the naturemade quality label. Naturemade Certification Guidelines (2014), available at

http://www.naturemade.ch/Dokumente/zertifizierung/Richtlinien_e.pdf, at 9. In practice, however, electricity installations tend to certify their electricity through the nationally dominant labels. PriceWaterhouseCoopers & WWF (2009), Green Electricity Making a Difference, cit., at 20.

[50] PriceWaterhouseCoopers & WWF (2009), Green Electricity Making a Difference, ft. 4, at 11.

(www.wcomd.org) and the tariff line 2716.0089 of the WTO Schedule of Concessions (Tariffs on Goods, List LIX – Swiss Confederation, 1994 (www.wto.org), is defined as pertaining to the realm of goods. It therefore also falls under the disciplines of the 1972 Free Trade Agreement. Other than the WTO and GATT 1994, the FTA does not provide disciplines for countervailing duties, other than for anti-dumping in Article 24 of the Agreement. Subsidies are merely addressed in the context of competition rules, and the Swiss Government is of the view that EU disciplines on subsidies do not apply to Article 23(1)(iii) FTA. The FTA, however, refers in its preamble to the General Agreement of Tariff and Trade and seeks to remove trade barriers in line with the disciplines of GATT. Today, such reference relates to the WTO Agreements as a whole, and in particular includes Article XVI GATT and the Agreement on Subsidies and Countervailing Measures (SR 0632. 20 Anhang I(A)13).

With both the EU and Switzerland being Members of the WTO, the Agreement thus applies between the Parties, both in relation to the FTA, but also independently between Switzerland and the EU as Members of the WTO. The disciplines on subsidies established by the Agreement countervailing duties, imposed in accordance with these disciplines, are not pre-empted by the FTA and its obligation to eliminate all tariffs and quantitative restrictions. For example, the application of the Agreement was discussed in the context of the dispute between the EU and

Switzerland on differential taxation of holding companies.[51] Other than the European Union or the United States, Switzerland never transposed the Agreement on Subsidies and Countervailing Duties into domestic legislation. No special procedures were developed for the purpose of assessing causation and injury of subsidies granted abroad. The same also applies to anti-dumping and safeguard measures. This policy of deterring recourse to trade remedies, however, does not exclude recourse to these instruments under Swiss Constitutional law and general administrative procedures.

Article 101 of the Federal Constitution states[52]:

> 1. The Swiss Confederation shall safeguard abroad the interests of the Swiss economy.
>
> 2. In special cases, it may take measures to protect the domestic economy. It may, if necessary, depart from the principle of economic freedom.
>
> In legislation, measures of this kind are provided for by the Swiss Foreign Trade Act (Bundesgesetz über aussenwirtschaftliche Massnahmen vom 15. Juni 1982 (SR 946.201). Article 1 states:
>
> Art. 1 Schutz gegen Auswirkungen ausländischer Massnahmen oder ausserordentliche Verhältnisse im Ausland

[51] See Thomas Cottier & René Matteotti, Der Steuerstreit Schweiz-EG: Rechtslage und Perspektiven, in: Schweizerisches Jahrbuch für Europarecht 2006/2007, at 221-256 (Bern/Zürich 2007).

[52] Non-authentic official translation, reproduced in Thomas Cottier & Matthias Oesch, International Trade Regulation: Law and Policy in the WTO, the European Union and Switzerland, at 285 (Bern/London 2005).

> Sofern ausländische Massnahmen oder ausserordentliche Verhältnisse im Ausland den Waren-, Dienstleistungs- oder Zahlungsverkehr der Schweiz derart beeinflussen, dass wesentliche schweizerische Wirtschaftsinteressen beeinträchtigt werden, kann der Bundesrat für so lange, als es die Umstände erfordern:
>
> a) die Einfuhr, Ausfuhr und Durchfuhr von Waren sowie den
>
> Dienstleistungsverkehr überwachen, bewilligungspflichtig erklären, beschränken oder verbieten;
>
> b) den Zahlungsverkehr mit bestimmten Ländern regeln und gegebenenfalls die Erhebung von Beiträgen zur Überbrückung preis- oder währungsbedingter Störungen im Waren-, Dienstleistungs- und Zahlungsverkehr anordnen.

For the purpose of tariffs, the Tariff Act (Zolltarifgesetz, SR 632.10) provides the basis for measures taking to address extraordinary situations calling for enhanced protection. Article 7 authorizes the Federal Government to increase tariffs and to take other appropriate measures as long as necessary:

> Art. 7 Ausserordentliche Verhältnisse in den Beziehungen zum Ausland
>
> Werden durch ausländische Massnahmen oder ausserordentliche Verhältnisse im Ausland die Aussenhandelsbeziehungen der Schweiz derart beeinflusst, dass wesentliche schweizerische Wirtschaftsinteressen beeinträchtigt werden, kann der Bundesrat, für solange als es die Umstände erfordern, die in Betracht kommenden Zollansätze abändern oder, soweit Zollfreiheit besteht, Zölle einführen sowie andere geeignete Massnahmen treffen.

The Government thus is empowered to increase tariffs and take safeguard measures, which in return, need to comply with international agreements entered into. The broad language of the legislation thus has to be applied in accordance with relevant agreements entered into by the Confederation, i.e. the Agreement on Subsidies and Countervailing Measures in the present configuration.

Article 14 of the SCM Agreement requires governments to set out the methodology for the calculation of subsidies and countervailing duties in national legislation or implementing regulations. Switzerland has neither done so. There are no specific legislative provisions addressing countervailing duties, nor are methodologies defined in regulations. The Government submitted the following communication to the WTO:

> Switzerland has not established an authority competent to initiate and conduct an investigation within the meaning of Article 25.12 of the Agreement on Subsidies and Countervailing measures… and thus has not, today, taken any countervailing actions within the meaning of Article 25.11 of the Agreement and does not anticipate taking any countervailing actions for the foreseeable future (footnote omitted). Switzerland shall promptly notify the Committee on Subsidies and Countervailing Measures… of any changes that may take place in this regard. Specifically, Switzerland shall notify the Committee pursuant Article 25.11 of the Agreement upon the establishment of the authority competent to initiate and conduct

countervailing duty investigations, as well as the domestic procedures governing the initiation and conduct of such investigations.[53]

It may be argued that Switzerland voluntarily refrained from taking recourse to trade remedies. Yet, such a view ignores existing legal foundations in the Foreign Trade Act and as well as in tariff legislation discussed above. Moreover, WTO Agreements in Switzerland are open to direct application. Given the absence of implementing legislation, the Government directly applied the previous Agreement in measures against dumped imports from abroad.[54] It is submitted that the measures discussed below thus can be directly implemented by the Government, taking recourse to general administrative proceedings (Bundesgesetz ¨über das Verwaltungsverfahren, SR 172.021). However, it would be necessary under Article 14 of the SCM Agreement to specifically define the methodology to be applied to a particular case and to communicate these regulations to the WTO and its Members, based upon the criteria set out in Article 14 (a)-(d) SCM Agreement. It is another issue whether countervailing duties imposed on the basis of the Agreement can be successfully challenged before a domestic court of law. Direct effect of WTO law in Switzerland is not excluded, but courts showed reluctance to review decisions in particular if they conflict with domestic law. It is an issue defined on a case by case basis.[55] No case law exists, to the best of our knowledge, in the field of trade remedies. Yet, in cases where an administrative law determination is directly based upon a WTO Agreement, and the issue of challenging domestic law is not present, a court of law is likely to review the determination directly invoking the Agreement on Subsidies and Countervailing Duties.

On these premises, we turn to the examination of the possibility to impose countervailing duties in order to offset subsidies imports of electricity.

Subsidized imports can be challenged under WTO rules on subsidies. Both the GATT (Article VI and Article XVI) and the WTO's Agreement on Subsidies and Countervailing Measures (ASCM) provide the possibility of remedies against subsidized imports. The fact that Switzerland equally operates feed-in tariffs for renewable energy production does not necessarily neutralise the option of trade remedies. While it is possible that counter-claims will be made (as e.g. in the US-EU civil air craft subsidy disputes before the WTO), the legal nature and impact of these measures are not identical and do not necessarily imply the same distortions. Trading partners against which measures are contemplated may thus threaten to take up, or actually take up trade remedies against Swiss feed-in tariffs, as long as they are in place and not replaced by other incentives

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[53] G/SCM/N/202/CHE, 21.12.2009.

[54] See Thomas Cottier, Die Bedeutung des GATT im Prozess der Europäischen Integration: eine Untersuchung aus schweizerischer Sicht, in: Olivier Jacot-Guillarmod, Dietrich Schindler, Thomas Cottier, EG-Recht und schweizerische Rechtsordnung, at 139 and177, in particular note 113 (Reply of the Federal Council to a motion to introduce anti-dumping duties on lumber in the context of measures against then deteriorating Swiss forersts, Amtl. Bull. NR 1988 p. 639, 694/5.

[55] For a comprehensive analysis see Lukas Engelberger, Die unmittelbare Anwendbarkeit des WTO Rechts in der Schweiz: Grundlagen und Perspektiven im Kontext internationaler Rechtsentwicklungen, 7 Studies in Global Economic Law (Bern 2004). See also Thomas Cottier & Matthias Oesch, International Trade Regulation: Law and Policy in the WTO, the European Union and Switzerland, at 209, 223-226 (Bern/London 2005).

based upon non-discriminatory taxation. However, legally, the two sets of measures have to be assessed in separation and on their own. In this context, Switzerland may pursue two different avenues in addressing foreign subsidization of exported electricity.

The one option, so-called unilateral track, consists of unilaterally imposing surcharge tariffs, offsetting the level of subsidization abroad. The other option is to address the issue of subsidized green electricity production abroad is to seek a withdrawal of a subsidy or its modification following the decision of a WTO panel. The latter option reflects the so-called multilateral track under which a country makes use of the WTO dispute settlement system through filing a complaint against a subsidy in the WTO. Yet, a complaint can only be made under certain conditions. We first turn to this option.

3.1.2 Subsidy claims before the WTO

First of all, a support scheme should fall under the legal definition of a subsidy under ASCM Article 1. It means it should constitute a direct or indirect government financial contribution (or income or price support) and provide a benefit to a recipient.[56] This does not seem to be always the case with support schemes for green electricity. It is not clear whether feed-in-tariff (FIT) schemes constitute a subsidy within the meaning of the ASCM. All depends on the design of a particular FIT, which differs considerably among countries.[57] A FIT that is managed and funded by a government will qualify as a subsidy. A FIT that operates without any financial involvement of government will not fall under the definition of a subsidy and will not raise issues under WTO subsidy rules. It will be considered a regulatory issue, despite financial implications for private operators, not unlike those, for example, addressing product or labour standards. The case of German FIT is a tricky one. The FIT scheme is implemented through a purchase obligation at a minimum price. Reimbursement to utilities is shared among electricity supply undertakings that purchase this renewable energy and upstream network operators. The German government acts thus only as a regulator, and the funding of the FIT scheme is carried out on a private basis, although it is mandated by the government. The German FIT was challenged under EU law, when in 1998 the German energy company *Preussen Elektra* brought a claim against the German FIT in the district court of Kiel. When the case reached the European Court of Justice, the ECJ did not find the German FIT to be a subsidy-based scheme, as the funding under the scheme was secured by private entities through the costs being divided among private actors with no involvement of government.[58]

However, it is important to note that the subsidy definition under WTO law is wider than the definition of a state aid under EU law. The WTO subsidy definition covers also situations where a government provides support indirectly (e.g. through payments in a funding mechanism) or en-

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[56] For a more detailed explanation of the necessary components in the ASCM definition of a subsidy, see Thomas Cottier et al (2014), *Differential Taxation of Electricity: Assessing the Compatibility with WTO Law, EU Law and the Swiss EEC Free Trade Agreement,* at 42-7, http://www.efv.admin.ch/e/downloads/finanzpolitik_grundlagen/els/Differentiatial%20_Taxation_e.pdf. .

[57] See e.g. Marie Wilke (2011), Feed-in Tariffs for Renewable Energy and WTO Subsidy Rules: An Initial Legal Review', Issue Paper no. 4, ISTCD.

[58] See ECJ, *PreussenElektra AG v. Schleswag AG*, 13 March 2001, Case ECJ. C-379/98 (*PreussenElektra*), p. 58 ff.

trusts a private body to provide a financial contribution.[59]Thus, a FIT managed by private entities on the instruction of a government (e.g. through a governmental regulation/law) may qualify as a subsidy under WTO rules. It could be argued however that this applies only to situations where the private entity is engaging in a 'function normally vested in the government which does not differ from practices normally followed by governments'.[60] Is support of green electricity through FIT 'normal government practice'? When giving the answer to this question, it is important not to blur the line between a subsidy and a usual government regulation (commandand-control).[61]

Once a support scheme has met the definition of a subsidy, a complaint can be made under the premises that the measure constitutes an export or import-substitution subsidy if the measure seeks to increase exports of the product at hand. These are subsidies conditioned upon export performance or subsidies contingent upon the use of domestic over imported goods (either *de jure* or *de facto*). WTO subsidy law prohibits the use of such subsidies (ASCM Article 3). If a support scheme falls in the category of prohibited subsidies, the outcome of a dispute will lead to the termination of this support scheme without delay (ASCM Article 4.7). This was the case of the feed-in-tariff scheme (FIT) for renewable electricity that contained local content requirements in the Canadian province of Ontario (*Canada-Renewable Energy*). Even though the *Canada Renewable Energy* dispute left the issue of import substitution subsidy under the ASCM unsettled due to the complexity of the subsidy issue in the case and lack of factual evidence, the local content requirements of the FIT were found to constitute a violation of the national treatment (NT) obligation under the GATT and the TRIMS Agreement. It should be noted that the claim of a violation of the national treatment rule and the claim of a prohibited subsidy were made with respect to different products (electricity generating equipment and electricity, respectively).[62] The *Canada-Renewable Energy* dispute made it clear that FITs with domestic content requirements are not consistent with WTO law and thus a no-go for countries intending to support renewable energy. However, it did not answer the question of whether a FIT is a subsidy and whether a FIT with local content requirements is a prohibited import-substitution subsidy.

A challenge based upon the category of prohibited subsidies is less likely in the present field as the measures of support primarily impact the domestic markets of the country concerned. These subsidies in WTO law are defined 'Actionable Subsidies' under Part III of the SCM Agreement. The complaint can only be successful if in addition to the determination of a measure as a subsidy and alleging its specificity (Article 2 of the ASCM), the complaining party can provide evidence of adverse effects of the subsidy within the meaning of Article 5 and Article 6 of the ASCM. The legal analysis on the premises of actionable subsidies (i.e. related to the definition of a subsidy, specificity and adverse effects) was discussed in detail in the legal opinion on differential electric-

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[59] See ASCM Art. 1.1(a)(1)(iv).

[60] *Ibid.*

[61] Marie Wilke (2011), Feed-in Tariffs for Renewable Energy and WTO Subsidy Rules: An Initial Legal Review, Issue Paper no. 4, ISTCD, at 16.

[62] See Appellate Body Report, *Canada - Certain Measures Affecting the Renewable Energy Generation Sector (Canada-Renewable Energy)*, adopted on 24 May 2013, WT/DS412/AB/R,, para. 5.84.

ity taxation.[63] We stress the importance of providing evidence of adverse effects. A subsidy would only be subject to a withdrawal or modification, if adverse effects inflicted by the subsidy can be shown and evidenced. In the context of subsidized green electricity imports, adverse effects could be manifested through the reduction in the production volumes or revenues of Swiss hydropower plants.[64] Such effects will only be recognised if it can be shown that they are caused by the subsidy at hand. It is thus important to the causation link between the injury and the subsidized imports (footnote 11 and Article 15 of the ASCM).

In sum, WTO subsidy law gives the possibility to bring a subsidy dispute to the WTO and obtain a legal remedy through withdrawal or modification of a subsidy.[65] The existence of the 1972 FTA does not exclude this option. It should be noted, however, that a subsidy claim against foreign green electricity support schemes is not settled in case law. The field is in its beginning, and all claims and litigation will face legal uncertainty and a lack of predictability of outcomes.

Bringing a subsidy dispute in the WTO therefore cannot be considered to be the best way to address the issue of subsidized green electricity imports. A remedy under this track is not automatic but subject to the affirmative finding of a prohibited or actionable subsidy by a WTO panel following the costly and long-lasting[66] dispute settlement procedure with uncertain outcomes, much depending on the specificities of the programme supporting renewable energies challenged. Furthermore, if the outcome of the dispute leads to a withdrawal or modification of support measures, no compensation can be expected from a defending party for past damages (i.e. no compensation would be available for Swiss green electricity producers for damages inflicted by foreign subsidies).[67]

Finally, once a subsidy claim in relation to foreign support schemes for green electricity is brought to the WTO, there is no reason for those countries, whose support schemes are being challenged, not to bring counterclaims against Swiss renewable energy support measures. This is what can be observed as the EU, US, India and China launch complaints in the WTO challenging each other's support schemes for solar panels.[68]

In the next section, we look at the possibility to address the issue of subsidized green electricity imports through the unilateral track, i.e. charging countervailing duties on subsidized imports.

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[63] Thomas Cottier et al. (2014), *Differential Taxation of Electricity: Assessing the Compatibility with WTO Law, EU Law and the Swiss EEC Free Trade Agreement*, at 47-78, http://www.efv.admin.ch/e/downloads/finanzpolitik_grundlagen/els/Differentiatial%20_Taxation_e.pdf

[64] Other cases of adverse effects include nullification or impairment of benefits under tariff concessions and serious prejudice to the interests of a WTO member. See Art. 5 of the ASCM.

[65] The Swiss-EU FTA will not be a barrier to such an action. So long as both Switzerland and a country from where subsidized imports might originate (e.g. the EU) are WTO Members, they have the right to use the WTO dispute settlement system for settling issues arising under provisions of the WTO Agreement.

[66] Up to two years, on average.

[67] See Art. 22.2 of the WTO's Dispute Settlement Understanding.

[68] See the List of disputes brought under the ASCM at http://www.wto.org/english/tratop_e/dispu_e/dispu_agreements_index_e.htm?id=A20.

3.1.3 Countervailing duties on electricity imports originating from subsidized power plants

A countervailing duty (CVD) is 'a special duty unilaterally levied for the purpose of offsetting any bounty or subsidy bestowed, directly, or indirectly, upon the manufacture, production or export of any merchandise'.[69] The application of CVDs are known as 'the unilateral track' under WTO rules on subsidies, as the duties are imposed unilaterally by importing countries upon evidence of material injury to a domestic industry from subsidized imports (Article VI:6(a) of the GATT and Article 10 of the ASCM). For an affirmative decision on CVDs to be taken, an internal investigation respecting administrative law proceedings and principles need to reveal that the subsidized imports cause or threaten material injury to domestic producers of like products.

The injury to a domestic industry can be established after an objective examination of the volume of the subsidized import (e.g. there is a significant increase in subsidized imports in absolute terms or relative to domestic production or consumption), their effect on prices in the domestic market for like products (e.g. price undercutting) and the impact of subsidized imports on the domestic producers of like products (e.g. decline in output, sales, market share, profits, return on investments etc.).[70] Again, it is crucial to establish the causal link between the subsidized imports and injury to domestic producer(s) of like products.

CVDs can only be used against the category of actionable subsidies (see section 3.1.2). The surcharge tariff imposed must not exceed the margin of subsidization, i.e. the amount of the subsidy provided for the production of imported products (Article VI:3 of the GATT), which is calculated on the basis of the benefit conferred by the subsidy to producers of imported products following the guidelines of Article 14 of the ASCM. Importantly, the ASCM does not prescribe the methodology to be used for the calculation of the amount of subsidy. WTO Members, which intend to use CVDs, have to develop a methodology in line with the guidelines of Article 14 of the ASCM.

Once a decision on the application of CVDs is taken, a country shall report the measure taken without delay to the WTO's Committee on Subsidies and Countervailing Measures (Article 25.11 ASCM). It is important to note that 'countervailing duty shall remain in force only as long as and to the extent necessary to counteract subsidization which is causing injury'.[71] Thus, CVDs are imposed on a temporary basis and the investigating national authorities have to periodically review the need for the imposition of CVDs.

3.1.4 The case for CVDs on certain renewable electricity imports

As discussed above, CVDs can only be imposed upon a formal investigation of the effects of subsidized imports on a domestic industry. The investigation must reveal that the subsidized imports cause, or threaten, material injury to domestic producers of like products. What products should be compared here is not entirely clear. The issue of likeness of different types of electricity was discussed in our previous study.[72] However, the meaning of likeness under the ASCM and the

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[69] Art. VI:3 of the GATT and fn 36 of the ASCM.

[70] Art. 15 of the ASCM.

[71] Art. 21.1 of the ASCM.

[72] See Thomas Cottier et al (2014), *Differential Taxation of Electricity*, cit.

meaning of likeness under the GATT are not necessarily identical. Moreover, the Appellate Body in the *Canada-Renewable Energy* case pointed out that the determination of relevant market for comparison for the purposes of the benefit analysis should take into account not only demandside factors but also supply-side conditions, such as 'the type of contract, the size of the customer, and the type of electricity generated (base-load *versus* peak-load).'[73] If it can also be applied to the injury analysis, hydropower electricity could be viewed as being 'unlike' electricity generated from other sources, including other renewable energy sources. In that case, if a remedy is sought for domestic hydropower producers, comparison for the purposes of injury investigation will have to be made between domestic hydropower electricity and imported hydropower electricity. CVDs could therefore be only applied to subsidized imports of hydropower electricity, rather than to subsidized imports of electricity in general. This could significantly constrain the policy space Switzerland would have for addressing the subsidy issue through CVDs.

In practical terms, since CVDs can be applied only against subsidized imports, the implementation of CVDs on subsidized imports of green electricity also requires the use of certificates with the information on the origin of electricity (i.e. a country of electricity generation). If a CVD measure is implemented in parallel to a differentiated electricity tax based on the certification scheme including tax exemption certificates (TECs), as was discussed in section 2, TECs can also be used for the purposes of assessing CVDs. This would imply that upon the submission of TECs, green electricity imports would be exempted from the electricity tax same as domestic green electricity, unless TECs were issued to electricity generators from a country against which CVDs are imposed. As TECs are transferred from electricity generators to electricity suppliers, CVDs will eventually be reflected in the electricity bill paid by consumers. Finally, when applying CVDs to subsidized green electricity imports, it is important to exclude from duties electricity that is merely in transit through Switzerland. Given the geographical position of Switzerland, this is an issue which requires careful further attention. The application of duties on goods in transit would be in breach of the provisions of GATT Article V. Yet, since the application of CVDs is likely to be facilitated by the use of certificates that could also be submitted at the stage of final consumption of electricity, the imposition of CVDs on transited electricity could be avoided.

3.2 Available options under safeguard rules

Another policy tool in principle available to Switzerland in order to address competitiveness concerns of Swiss green electricity producers is the use of safeguards in parallel to a differentiated electricity tax. Safeguard measures can be used in derogation of GATT rules as a safety valve in those cases where a surge of imports causes, or threatens to cause, serious injury to a domestic industry.[74] Switzerland may lawfully take action against imported electricity provided that domestic green electricity producers suffer from a sharp increase of green electricity imports coming from the country/ies supporting green electricity production. Unlike the SCM Agreement, these measures do not imply the demonstration of subsidization. On the other hand, they are limited in time.

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[73] Appellate Body Report, *Canada - Certain Measures Affecting the Renewable Energy Generation Sector (Canada-Renewable Energy)*, adopted on 24 May 2013, WT/DS412/AB/R, para. 5.170.

[74] See generally, Fernando Piériola, The Challenge of Safeguards in the WTO, Cambridge: Cambridge University Press 2014.

The use of safeguard measures is admitted by both the GATT Article XIX and the WTO Agreement on Safeguards. As explained above, although Switzerland has not transposed the GATT and the Agreement on Safeguards into domestic law, recourse to these instruments remains possible as per Article 101 of the Constitution and Swiss Foreign Trade Act[75] and the doctrine of direct effect. Specific provisions dealing with use of safeguards are also included in the 1972 Free Trade Agreement between the European Union and Switzerland (Article 24 and Article 27).

3.2.1 WTO law

Both the GATT Article XIX and the WTO Agreement on Safeguards provide the possibility to adopt safeguards measures. Article 1 of the Agreement on Safeguards states:

> This Agreement establishes rules for the application of safeguard measures which shall be understood to mean those measures provided for in Article XIX of GATT 1994.

Accordingly, WTO case law has inferred that safeguards measures need to comply with Article XIX GATT *and* the provisions of the WTO Agreement on Safeguards cumulatively.[76] Article XIX:1 (a) on 'Emergency Action on Imports of Particular Products', states:

> If, as a result of unforeseen developments and of the effect of the obligations incurred by a contracting party under this Agreement, including tariff concessions, any product is being imported into the territory of that contracting party in such increased quantities and under such conditions as to cause or threaten serious injury to domestic producers in that territory of like or directly competitive products, the contracting party shall be free, in respect of such product, and to the extent and for such time as may be necessary to prevent or remedy such injury, to suspend the obligation in whole or in part or to withdraw or modify the concession.

Article 2.1 of the Agreement on Safeguards also establishes the preconditions allowing recourse to safeguards measures:

> A Member may apply a safeguard measure to a product only if that Member has determined, pursuant to the provisions set out below, that such product is being imported into its territory in such increased quantities, absolute or relative to domestic production, and under such conditions as to cause or threaten to cause serious injury to the domestic industry that produces like or directly competitive products.

As per a combined reading of Article XIX GATT and Article 2.1 of the Agreement on Safeguards, Switzerland may resort to safeguard measures on subsidized imported electricity provided the following three conditions are met:

a. imports of subsidized green electricity increase as a result of unforeseen developments;

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[75] See section 3.2.1.

[76] Appellate Body Report, *Argentina – Footwear (EC)*, para. 81.

b. such increase causes or threatens to cause a serious injury to domestic green electricity producers;

c. there is causation between the surge of imports and the serious injury.

a) Increased imports as a result of unforeseen developments

According to Article 2.1 of the Agreement on Safeguards, the increase of imports can be absolute or relative. WTO case law has however clarified that the surge of imports must be "recent enough, sudden enough, sharp enough, and significant enough, both quantitatively and qualitatively, to cause or threat to cause serious injury".[77] In *US – Steel Safeguards*, the Appellate Body further opined that there is no absolute standard against which to check the fulfilment of these four elements, but a 'concrete' evaluation must be conducted on a case-by-case basis.[78] Such evaluation should take into account the rate and the amount of the increase as per Article 4.2 (a) of the Agreement of Safeguards. An increase of imports must clearly results from the analysis of the import trends during the investigation period.[79] The period of investigation, moreover, should be long enough and include data relating to the period which immediately precedes the determination to introduce a safeguard measure.[80] Data relating to the most recent past should be given more weight.[81]

Importantly, moreover, the surge of imports shall occur as a result of unforeseen development as per Article XIX:1 GATT. According to the Appellate Body in *Korea – Diary*, unforeseen developments means unexpected developments.[82] Competent national authorities are required to demonstrate that a causal relationship exists between the increase in imports and the unforeseen developments. Yet, the two remain "two distinct elements", in the sense that "[a] statement that the increase in imports, or the way in which they were being imported, was unforeseen, does not constitute a demonstration as a matter of fact of the existence of unforeseen *developments*."[83] In *US – Steel Safeguards*, the Appellate Body also clarified that causation between unforeseen developments and increased imports must be demonstrated for the specific product subject to safeguards.[84]

Based on these requirements, Swiss authorities would need to prove that imports of green electricity have recently, sharply, suddenly and significantly increased as a result of unexpected developments, i.e. the effects of green electricity subsidization leading to an increase in foreign production at competitive prices. They would be required to show the rate and the amount of such

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[77] Appellate Body Report, *Argentina – Footwear (EC)*, para. 131.

[78] Appellate Body Report, *US – Steel Safeguards*, paras. 352-360.

[79] Appellate Body Report, *Argentina – Footwear (EC)*, para. 129.

[80] *Ibid.*, para. 130.

[81] Appellate Body Report, *US – Steel Safeguards*, para. 388.

[82] Appellate Body Report, *Korea – Diary*, para. 84.

[83] Panel Report, *Argentina – Preserved Peaches*, para. 7.24.

[84] Appellate Body Report, *US – Steel Safeguards*, para. 319.

increase based on statistics showing electricity inflows from the countries. It would need to show that these increases are due to the support schemes in a manner which could not be readily foreseen at the time. Importantly, green electricity merely transiting through Switzerland could not be counted towards the fulfilment of the increased imports requirements. Finally, based on *US – Steel Safeguards*, Switzerland would need to provide evidence of increased imports of those specific forms of green electricity. To this end, statistics of green electricity inflows would need to be broken down into different types of green electricity. In this respect, two sets of difficulties may arise. On the one hand, it is uncertain whether the Swiss GOs system, as currently configured, may serve the purpose of 'isolating' subsidized green electricity imports, especially when electricity is not purchased by Swiss suppliers by means of bilateral long-term contracts but rather on the spot market. On the other hand, depending on whether the WTO dispute settlement bodies would consider different types of green electricity to be 'like' products or not,[85]

Switzerland may have to consider green electricity as a category of itself and thus apply safeguard measures on all types of green electricity. Yet, in this case the increased imports requirements may be more difficult to prove.

b) Serious injury of a domestic industry

Article 4.1 of the Agreement on Safeguards defines 'serious injury' as "a significant impairment in the position of a domestic industry". The Appellate Body has interpreted this requirement to be stricter than the standard of material injury in the ASCM.[86] As per Article 4.1 (c) of the Agreement on Safeguards, moreover, a 'domestic industry' consists of "the producers as a whole of the *like or directly competitive products* operating within the territory of a Member, or those whose collective output of the like or directly competitive products constitutes a major proportion of the total domestic production of those products".

The meaning of 'like or directly competitive products' is not specified in the Agreement on Safeguards. Existing WTO case law clarifying these concepts under the GATT is thus particularly important.[87] In this respect, the question of likeness of green and grey electricity becomes crucial, as well as the potential for distinction between different types of green electricity. This question was addressed thoroughly in our previous study.[88] In the only WTO dispute on safeguards specifically addressing the question of likeness, however, the Appellate Body affirmed that "the focus must be on the identification of the *products*, and their 'like or directly competitive' relationship and not on the *processes* by which those products are produced".[89] Hence, under existing case law and depending on the assessment of likeness, Switzerland may not be able, for instance, to impose safeguard measures on certain (subsidized) green forms of electricity only based on the

[85] See below in the section on 'Serious injury of a domestic industry'.

[86] Appellate Body Report, *US – Wheat Gluten*, para. 149.

[87] Peter Van de Bossche, *The Law and Policy of the World Trade Organization*, 3rd edition (Cambridge University Press: 2013), pp. 616-7.

[88] Thomas Cottier et al. (2014), Differential Electricity Taxation: An assessment of the compatibility with WTO law and EU law", at 31-7.

[89] Appellate Body Report, *US – Lamb*, para. 94.

serious injury suffered from a sole domestic industry producing green electricity (e.g. hydropower producers).

According to Article 4.2 (a) of the Agreement on Safeguards, moreover, the assessment of the serious injury requirement must take into account all relevant 'injury factors' having a bearing on the situation of that industry. These include the rate and amount of the increase in imports in absolute and relative terms, the share of the domestic market taken by increased imports, changes in the level of sales, production, productivity, capacity utilization, profits, and losses, and employment. The list provided under Article 4.2 (a) contains the injury factors which must be examined but it is not exhaustive.[90] Although the Appellate Body clarified that not all injury factors must indicate that the domestic industry is seriously suffering, national authorities shall give a reasoned and adequate explanation supporting their determination of 'serious injury'.[91] Finally, safeguard measures may also be used when a surge of imports "threatens to cause" serious injury to a domestic industry. Under Article 4.1 (b) of the Agreement on Safeguards, this requirement implies that a serious injury is "clearly imminent". In *US – Lamb*, the Appellate Body clarified that the injury must be "on the verge of occurring" and that there must exist a

"very high degree of likelihood that the threat will materialize in the very near future".[92] Accordingly, data from the most recent past are to be given more weight,[93] in view of basing the determination "on facts and not merely on allegations, conjecture or remote possibility" as per Article 4.1 (b) of the Agreement on Safeguards.

c) Causation requirement

As per Article 4.2 (b) of the Agreement on Safeguards, the causation requirement is fulfilled when two conditions are met: (i) there must be a 'causal link' between the increased imports and the serious injury or threat thereof; (ii) the injurious effects caused by other factors must not be attributed to the injurious effects caused by increased imports to the domestic industry.

The Appellate Body in *US – Wheat Gluten* interpreted the 'causal link' element to mean that there must be a genuine and substantial relationship of cause and effect between the surge of imports and the serious injury caused to the domestic industry. However, other factors may also concur to determine serious injury to a domestic industry in combination with increased imports.[94] In this case, the 'non-attribution' requirement demands that either type of effects be distinguished and separated by national competent authorities so that they do not attribute to increased imports just any injury caused by other factors. As explain3ed by the Appellate Body in *US – Lamb*:

> The non-attribution language in Article 4.2 (b)…requires that the competent authorities assess appropriately the injurious effects of the other factors, so that those effects may be disentangled from the injurious effects of the creased imports. In this way, the final determination rests, properly, on the genuine and sub-

[90] Appellate Body Report, *Argentina – Footwear*, para. 136.

[91] Appellate Body Report, *US – Lamb*, para. 131.

[92] *Ibid.*, para. 125.

[93] *Ibid.*, para. 138.

[94] Appellate Body Report, *US – Wheat Gluten*, para. 67.

stantial relationship of cause and effect between increased imports and serious injury.[95]

In this respect, Switzerland may lawfully resort to safeguard measures on imports of subsidized green electricity only insofar as an evident causal link can be established between increased imports of green electricity and the injury suffered from its domestic sector. Under this requirement, that fact that imported green electricity is subsidized does not play a role in the determination of causation. In contrast, it may be considered a factor other than increased imports whose effects must be clearly separated and distinguished from the effects of the surge of imports in and of itself.

d) Procedural requirements for national investigations

As explained above, safeguards may be used by a government following an investigation by the national investigating authorities pursuant to previously established procedures which shall be made public (Article 3 of the Agreement on Safeguards). Similar considerations apply as those made in the context of the SCM Agreement. Switzerland may rely upon the Foreign Trade Act, but would need to make sure that the procedural requirements are met under Article 8 Safeguard Agreement.

Competent authorities must publish a report with their findings and reasoned conclusions on each relevant issue of fact and law. Immediate notification to the WTO Committee on Safeguards must occur whenever investigation is initiated, a finding of serious injury or threat thereof is made or where a decision is taken to apply or extend the safeguard measure (Article 12.2 of the Agreement). Adequate opportunity for prior consultations with Members affected by the measures must be provided (Article 12.3 of the Agreement on Safeguards).

It is also important to note that safeguards shall apply "*only to the extent necessary* to prevent or remedy serious injury and to facilitate adjustment" (Article 7.1 of the Agreement on Safeguards). Specific time-limits for the application, extension and termination are thus provided under Article 7 the Agreement and the investigating national authorities have to periodically review the need for the imposition of CVDs (Article 7.2 of the Agreement). In this respect, Switzerland may not be able to impose safeguards on green electricity for more than 4 years. As a practical matter, such measures often stay in force longer and are only removed upon successful challenge in WTO dispute settlement. These proceedings may take up to three additional years.

3.2.2 Swiss-EU FTA

The use of safeguard measures is also envisaged in the FTA between Switzerland and the EU. Under Article 24 of the Swiss-EU FTA, in particular, a safeguard measure may be imposed "where an increase in imports of a given product is or is likely to be seriously detrimental to any production activity carried on in the territory of one of the contracting parties". As per Article 24.1 of the Swiss-EU FTA, contracting parties may resort to 'appropriate' measures when the import increase results out of the following two scenarios:

[95] Appellate Body Report, *US – Lamb*, para. 179.

(i) the partial or total reduction in the importing contracting party, as provided for in the agreement, of customs duties and charges having equivalent effect levied on the product in question;

(ii) the fact that the duties or charges having equivalent effect levied by the exporting contracting party on imports of raw materials or intermediate products used in the manufacture of the product in question are significantly lower than the corresponding duties or charges levied by the importing contracting party.

Specific procedural requirements, in essence similar to those provided under Articles 3 and 12 of the WTO Agreement on Safeguards, are then set out under Article 27 of the Swiss-EU FTA, to which Article 24.2 explicitly refers. Under Article 27.3 (b), in particular, the importing contracting party suffering from increased imports may levy a compensatory charge on the product imported.

The conditions laid out in Article 24 of the Swiss-EU FTA are somewhat more stringent than the requirements provided under Article XIX GATT and the Agreement on Safeguards. Under the WTO regime, Switzerland may in principle impose a safeguard measure when a domestic industry is seriously injured by increased imports of a specific product due to *any* unforeseen development. In this respect, Switzerland enjoys a larger margin of manoeuvre under WTO rules. As per Article 24 of the Swiss-EU FTA, in contrast, the serious injury must be caused by increased imports resulting out of the effect of tariff concessions. In the case at issue, Switzerland agreed on eliminating import duties on electricity coming from the European Union. Yet, it is not because of the long-dated 0% tariff binding that a safeguard measures would be needed to provide a safety valve to Swiss green electricity producers. This additional requirement essentially excludes recourse to safeguard measures under the FTA. It may, however, be argued that the subsidization of imported electricity de facto amounts to a unexpected distortion of level playing fields equivalent to an additional removal of charges having equivalent effect as a tariff duty, causing new harm and difficulties to domestic producers.

The FTA does not exclude recourse under WTO rules and the Safeguard Agreement as an alternate legal basis for such measures (see section 3.2.1 above) In relation to the EU, both instruments need to be applied in combination. An assessment in WTO dispute settlement, however, would only rely upon the disciplines of WTO law.

On these premises, we turn to the examination of the possibility to impose safeguard measures as a way of granting temporary relief to Swiss renewable electricity producers.

3.2.3 The case for safeguards on certain renewable electricity imports

As discussed above, safeguards can only be imposed upon an investigation ascertaining the injury caused by a surge of imports on a domestic industry. Similarly to CVDs, however, Switzerland has not instituted a specialized unit responsible for carrying out such investigations. Moreover, Switzerland has also never resorted to safeguard measures. This creates hurdles to the implementation of safeguard measures on imported green electricity which would need to be overcome.

Should Switzerland establish the necessary methodological guidelines based upon the Foreign Trade Act, the rules and regulations governing administrative procedures and provided that investigating authorities be able to demonstrate the fulfilment of the substantive injury and the causation analysis and respect the procedural requirements set out under the WTO Agreement on Safe-

guards, Switzerland may either apply customs duties on the importation of subsidized green electricity in contrast with its tariff concessions under Article II:1 GATT and the Swiss-EU FTA, or restrict the importation of green electricity through the imposition of quantitative restrictions in derogation of Article XI:1 GATT. The latter may be implemented through the curtailment of allocable and/or allocated cross-border transmission capacity.[96]

In either case, Switzerland would need to track the flow of subsidized green electricity to make sure that safeguards are imposed solely on those electricity inflows causing serious injury to its domestic sector and, moreover, that no safeguards applies to electricity merely transiting through Switzerland. Practically speaking, the implementation of safeguards would thus require the use of certificates with the information on the origin of electricity (i.e. a country of electricity generation).

It should be noted, however, that the Agreement on Safeguards prescribes, as a general rule, the non-discriminatory application of safeguard measures, i.e. Switzerland would need to impose import duties or restrict imports of green electricity on an MFN basis (Article 2.2), including partners in a free trade area or a custom unions.[97] In this respect, Switzerland may be able to differentiate the treatment of subsidized and non-subsidized green electricity flowing from different EU Member States into the country under limited conditions: (1) based on the so-called principle of parallelism, where national authorities were able to conduct their investigations and make their determination with respect to subsidized green electricity only;[98] (2) as per Article 5.2 (b) of the Agreement on Safeguards, where national authorities were able to demonstrate that imports from a certain Member/s have increased "in disproportionate percentage in relation to the total increase of imports". In the latter case, however, Switzerland would only be able to apply a quota on the importation of subsidized green electricity.[99]

Finally, a safeguard measure may also in principle be implemented in parallel to a differentiated electricity tax based on the certification scheme including ROs or tax exemption certificates (TECs), as was discussed in section 2. Under this scenario, domestic and imported green electricity would both be exempted from the electricity tax TECs upon submission of TECs, unless such certificates were issued to electricity generators from a country against which safeguards are imposed. Inasmuch as TECs are transferred from foreign electricity generators to Swiss electricity suppliers, the cost of safeguards (namely, the increased cost of imported green electricity after the application of an import duty or the higher cost of Swiss green electricity purchased by Swiss suppliers in response to the implementation of a quantitative restriction on imported green electricity) will eventually be passed through in the electricity bill paid by consumers.

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[96] See Ilaria Espa, 'Import and Export Restrictions on Electricity', conference paper discussed at the World Trade Forum 2014 on "International Trade in Electricity and the Greening Economy", WTI 26-27 September 2014, forthcoming, pp. 5-6.

[97] Appellate Body Report, *Argentina – Footwear*, para. 112.

[98] According to the principle of parallelism, the imports included in the determination made under Articles 2.1 and 4.2 of the Agreement on Safeguards should correspond to the imports included in the application of the measure. See Appellate Body Report, *US – Wheat Gluten*, para 96.

[99] As per Article 5.1 of the Agreement on Safeguard, when safeguard measures take the form of quotas which reduce the quantity of imports below the level of a recent period (namely, the average of imports in the last three representative years for which statistics are available) 'clear justification' must be provided.

4. Negotiated Solutions and the Ban of VERs

4.1 Advantages of a negotiated solution

The prime function, at this stage, of the law allowing Switzerland to take unilateral measures may be to inform negotiations with the European Union and particular Member States. These rights may serve as an appropriate leverage in support of bringing about a settlement and compromise with a view to reduce the level of subsidization of imported renewable electricity and to discharge the pressures on domestic hydropower production. We recall that Switzerland is bound to seek a negotiated settlement prior to taking measures under Article XX GATT. The chapeau of this provision so requires a WTO Member to do under the case law so before measures can unilaterally be imposed. Consultations within the WTO also are necessary before unilateral measures relating to trade remedies can be implemented. A settlement, of course, does not need to comply with the detailed provisions of WTO law and the FTA and procedural and substantive challenges, in particular demonstrating causality and injury only need to be meet to the extent this is politically necessary and feasible

At the same time, it should be recalled that the WTO Safeguard Agreement prohibits the imposition of unilateral and voluntary export restrictions. This also applies to negotiated solutions. An attempt to seek such measures for example from Germany would meet the resistance of Article 11(1)(b) and request to this effect by Switzerland will be readily discarded. Given time pressures, it is advisable to explore to what extent these negotiations can be directly held with key Member States, in particular the neighbouring countries of Austria, France, Germany and Italy, and to what extent this is a matter pertaining the EU on the basis of internal allocations of powers.

4.2 Electricity agreement negotiations

Pending negotiations between the EU and Switzerland on a bilateral agreement on energy offers a window to address the issue. RE support schemes are a vital element of the EU energy strategy inscribed in the RES Directive discussed above. The RES Directive gives the EU Member States the right to determine the level of support for RE production based on the needs of their energy sector. It is therefore unlikely that the EU as a whole, or Germany in particular, would denounce or phase out their RE support schemes on request of Switzerland. Negotiations, however, could focus on criteria and conditions for specific safeguard measures, limiting the amount of subsidized electricity on the basis of ROs and TECs originated in respective countries on a reciprocal basis. EU Member states would be entitled to invoke the same restrictions vis-à-vis subsidized electricity exported by Swiss based companies on a reciprocal basis. The agreement could also address levels of taxation and introduce, and elaborate, the idea of increasing tax rates following the principles of tariff quotas without imposing quantitative restrictions properly speaking. Finally, the agreement could seek enhanced cooperation in the production of hydropower in the Alpine region in the context of making best use of existing reservoirs and capacities for the purposes of renewable energy storage.

5. Main Findings

A national certification scheme (NCS) for renewable electricity such as the one examined in this study provides a lawful basis under international law for preferential taxation of renewable electricity compared to electricity produced from fossil fuels and atomic energy. Hydropower, subject to the above-mentioned conditions (potentially including residual water flows), solar energy, wind energy, thermal energy and biomass can be subject to lower taxation or the exemption of taxation, upon the submission of the certificate either at the stage of domestic production/sale or upon importation of renewable electricity.

The principle of differential taxation for renewable electricity production was set out in the legal opinion dated April 18, 2014. We found that different tax rates can be justified under WTO law subject to the fulfilment of substantive and procedural requirements for the use of environmental and health exceptions. The same holds true for the 1972 Free Trade Agreement with the European Union, also taking into account legal developments within the EU. The basic parameters of non-discrimination (both MFN and National Treatment) are set out that opinion. They are equally valid in the present context.[100]

From the point of view of GATT 1994, the NCS and its conditions would need in principle to apply to all producers of renewable electricity within the country and those located abroad. The same implicitly holds true under the 1972 FTA with the European Union. All countries need to be treated equally and no less favourable treatment should be applied to imported electricity vis-à-vis domestic electricity. We do not therefore advise to limit certificates to domestic producers. The crux of the matter, again, is whether the like product of electricity can be treated differently based upon distinctions of source and ways of production. The exclusion of fossil fuel-based electricity (oil, gas, coal) and nuclear electricity can be justified by taking recourse to the provisions of Article XX(g) GATT and Article XX(b) GATT addressing the protection of human, animal and plant health. The former includes the protection of the atmosphere and thus combating CO_2 emissions and global warming. The latter allows addressing potential domestic and transnational health risks related to the risk of radiation for the population and related to the storage of atomic waste. Article 20 of the FTA allows for similar exceptions.

These exemptions clearly focus on the environment and on public health. Importantly, they do not entail privileges accorded on the basis of industrial policy. To the extent that NCS primarily serves the purpose of supporting Swiss hydropower plants in light of distorted conditions of competition due to feed-in tariffs, particularly in Germany, or an alternative way to support the new renewables (as part of industrial policy) only, the exceptions would not stand and could be challenged. If such is the prime motive of the scheme, alternative options of subsidization or the imposition of countervailing duties under the WTO SCM Agreement (to which the FTA refers) are more appropriate. Alternatively, recourse to safeguard measures for a period of up to four years can envisaged, provided the legal criteria expounded are met and the necessary methodology will be developed and communicated, so far lacking in Swiss law. Thus, much depends upon the

[100] Thomas Cottier et al. (2014), *Differential Taxation of Electricity: Assessing the Compatibility with WTO Law, EU Law and the Swiss EEC Free Trade Agreement*,

http://www.efv.admin.ch/e/downloads/finanzpolitik_grundlagen/els/Differentiatial%20_Taxation_e.pdf

proper motivation of the measure as a means to support CO_2 reductions and as a means to reduce the risks for health and the environment.

We found that permanent quantitative limitations on certificates for foreign RE electricity outside of temporal safeguard measures would be likely to affect the volumes of green electricity imported into Switzerland and would therefore trigger a violation of both WTO law and the FTA provisions regulating trade in goods. Qualitative restrictions on the eligibility of RE electricity certificates might be defended under both WTO law and the FTA if the same criteria apply to domestic and foreign suppliers of RE electricity.

In conclusion, it is therefore suggested to draft a NCS on that basis, taking into account the experience made in the United Kingdom. The UK system of tax exemptions under the Climate Change Levy scheme is designed on the basis of certificates. It has been in place since 2001. It has not been challenged, neither within the European Union nor before the WTO. The system equally applies to all producers, at home and abroad. Certificates are issued for the purpose of tax exemption only.[101] They can be registered electronically and are not subject to inspections abroad and at home. Rather, they rely upon documenting apparent features and mode of production, reducing the risk of fraud and cheating.[102] Depending on the objective of the Swiss government, these certificates could be linked to physical flows of electricity as in the UK model. Exports of Swiss electricity could be legally exempted in defining the tax base.

The UK model could be modified though the introduction of additional qualitative criteria to certification. However, it is important that such a certification scheme be based on formally objective, country-neutral criteria that permit the use of NCS as a tool to extend a domestic tax regime to imports in such a way as to treat domestic and foreign green electricity alike. In this respect, some qualitative criteria derived from national environmental requirements and equally imposed on domestic and foreign power plants for certification purposes could be envisaged. Finally, options should be further studied to take up the matter in negotiations, either with the neighbouring countries and the EU within the context of a future agreement on energy. The trade remedy measures available under WTO law and the FTA may primarily serve as leverage in support of such negotiations. They may be implemented if progress in such negotiations cannot be made. The necessary preparations in domestic legislation for guidelines and methodology should thus be taken up.

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[101] OFGEM (2014), Climate Change Levy exemption, available at https://www.ofgem.gov.uk/environmentalprogrammes/climate-change-levy-exemption.

[102] OFGEM (2014), Ofgem Renewables and CHP Register: System User Guide, available at https://www.ofgem.gov.uk/ofgempublications/87973/renewablesandchpregisteruserguidemay2014.pdf.