

Bundesamt für Energie BFE Produktion

8. August 2014

## CO<sub>2</sub> LEVIES AND TARIFFS ON IMPORTED ELECTRICITY

Assessing the Compatibility of Options with WTO Law, EU Law and the Free Trade Agreement Switzerland–EEC



Schweizerische Eidgenossenschaft Confédération suisse Confederazione Svizzera Confederaziun svizra Eidgenössisches Departement für Umwelt, Verkehr, Energie und Kommunikation UVEK

Bundesamt für Energie BFE Produktion

#### **Begleitgruppe:**

BFE Renato Marioni

EFV Pierre-Alain Bruchez

Die Autoren danken den Mitgliedern der Begleitgruppe für ihre Beiträge.

#### Erarbeitet durch

World Trade Institute, Universität Bern Heuking Kühn Lüer Wojtek, Brussels

#### Autoren

Prof. Thomas Cottier, Dr Ilaria Espa, Simon Hirsbrunner, Dr Kateryna Holzer, Tetyana Payosova

## Für den Inhalt und die Schlussfolgerungen sind ausschliesslich die Autoren dieses Berichts verantwortlich

# **CO<sub>2</sub> Levies and Tariffs on Imported Electricity**

Assessing the Compatibility of Options with WTO Law, EU Law and the Free Trade Agreement Switzerland–EEC

#### August 8, 2014

To the attention of:

Dr Pierre-Alain Bruchez, Federal Financial Administration (FFA)

Renato Marioni, Swiss Federal Office of Energy (SFOE)

**Prof. Thomas Cottier** World Trade Institute, Universität Bern

Dr Ilaria Espa World Trade Institute, Universität Bern

Simon Hirsbrunner, LL.M. Heuking Kühn Lüer Wojtek, Brussels

Dr Kateryna Holzer World Trade Institute, Universität Bern

Tetyana Payosova, MLaw

World Trade Institute, Universität Bern

#### your contact person for the project:

Tetyana Payosova, tetyana.payosova@iew.unibe.ch

#### Scientific coordination:

Prof. Thomas Cottier Simon Hirsbrunner, LL.M

#### Acknowledgement and Disclaimer:

The authors are grateful to the Members of the Working Group accompanying the study for informed and competent input and critical review of previous drafts. The opinions expressed herein are the authors' own findings and do not reflect the official views of the Swiss Government.

#### **KEY FINDINGS**

Differential taxation of electricity based on production methods or on the CO2 content of electricity may raise discrimination concerns under WTO law, EU law and Switzerland - EEC 1972 FTA. However, to the extent that differentiated taxation constitutes part of a comprehensive domestic tax system and is applied equally to imported and domestic electricity, it can pass the test on non-discrimination under substantive rules or be justified under environmental exceptions of Art. XX of the WTO's General Agreement on Tariffs and Trade (GATT). The Switzerland-EEC 1972 FTA sets tighter constraints, as the agreement does not offer an explicit justification similar to GATT in the field of taxation. The lawfulness of differentiated taxation of electricity will depend on the modalities of tax, also avoiding that it amounts to a domestic subsidy in effect. While Switzerland is not bound by EU law, it may have an interest in aligning its own legislation with selected aspects of EU law. Apart from non-discrimination provisions, EU law also contains a number of specific regulations relevant for the EU internal electricity market. EU Member States grant tax exemptions or reductions on electricity from renewables under Council Directive 2003/96/EC. There is an on-going debate on the introduction of a tax on the CO<sub>2</sub> content of energy inputs. While risks of incompatibility with state aid provisions under EU law cannot be excluded, they are manageable.

Under WTO law, EU law and the Switzerland–EEC 1972 FTA, it is unlikely that a differential electricity tax will have to be readjusted for imported EU electricity in order to take into account the costs incurred by EU electricity producers subject to the EU ETS.

Taxing imported nuclear electricity requires a comprehensive differentiated electricity tax imposed equally on domestic and imported nuclear electricity, both under WTO law and under the Switzerland–EEC 1972 FTA. EU Member States can decide on the appropriate energy mix and adopt appropriate measures of public health, which enables them to tax electricity of nuclear origin at a higher rate. Nevertheless, the margin of manoeuvre of individual Member States in this regard is limited.

The introduction of an import tariff on electricity from fossil fuels or nuclear power under WTO law requires deconsolidation of Swiss tariffs for electricity bound at zero per cent based on production methods according to Art. XXVIII GATT. Such deconsolidation is subject to compensation for the decreased market access for main suppliers. Under the Switzerland–EEC 1972 FTA, as well as under EU law, imposition of any tariffs on the import of electricity is prohibited and cannot be justified without revoking the Free Trade Agreement. As trade in electricity mainly concerns neighbouring countries benefiting from obligations under the FTA, the introduction of import tariffs on electricity is not a legally feasible option.

The implementation of differentiated taxation, however, creates practical problems in all constellations discussed. Currently EU GOs do not contain the necessary information for tracing the exact  $CO_2$  footprint of electricity from fossil fuels, and do not distinguish fossil electricity from nuclear electricity. This issue could be taken up in bilateral negotiations with the EU.

### **Table of Contents**

List of	f abbreviations	6			
1 Su	mmaries (E/D/F)	7			
1.1	Executive summary	7			
1.2	Zusammenfassung	11			
1.3	Résumé	14			
2 Mandate and issues					
3 Exi	isting Swiss tax legislation in the field of minerals and $\mathrm{CO}_2$				
em	issions	. 20			
3.1	The Swiss policy for the reduction of greenhouse gas emissions	21			
3.2	The Swiss CO <sub>2</sub> levy system	22			
3.3	Fuel taxes in Switzerland	28			
3.4	Future energy taxation in Switzerland according to the Energy Strateg	у			
	2050	29			
	plication of CO <sub>2</sub> levies and tariffs to imported electricity under the				
W	FO law, EU law and the FTA Switzerland–EEC	29			
4.1	Assessment under WTO law	29			
4.1.1	Tax on the source of electricity	31			
4.1.2	Tax on the CO <sub>2</sub> content of electricity	38			
4.1.3	A charge on fossil-fuel-generated electricity designed as a tariff	40			
4.1.4	Options for taxing imported nuclear electricity	51			
4.1.5	Taxation of imported electricity and subsidies disciplines under WTO				
	law	52			
4.2	EU law	54			
4.2.1	Compatibility of an import tariff with EU law	54			
4.2.2	Compatibility of a levy with EU law	55			

4.2.3	Interim conclusions from the viewpoint of EU law	. 64		
4.3	Switzerland–EEC 1972 FTA	. 64		
4.3.1	Differentiation between tariffs and taxes under the Switzerland–EEC 1972 FTA	. 65		
4.3.2	Compatibility of a tax on imported electricity stemming from fossil			
	fuels and nuclear energy with the Switzerland-EEC 1972 FTA	. 67		
4.3.3	State aid prohibition under the Switzerland–EEC 1972 FTA	. 69		
5 Legal conclusions				
5.1	Consistency with WTO law	. 70		
5.2	Consistency with EU law	.72		
5.3	Consistency with the Switzerland-EEC 1972 FTA	.73		
6 Political risk assessment74				
7 Annex: Summary table of legal arguments				

## List of abbreviations

AB	Appellate Body
ASCM	Agreement on Subsidies and Countervailing Measures
Art.	Article
BGE	Judgment of the Federal Tribunal (Bundesgericht)
BTA	Border Tax Adjustment
CCGT	Combined cycle gas turbine (power plant)
CERs	Certified Emission Reductions
CDM	Clean Development Mechanism
ECJ	Court of Justice of the European Union, European Court of Justice
ECR	European Court Reports
EEA	European Economic Area
EFTA	European Free Trade Association
ERU	Emission Reduction Units
ETS	Emission trading scheme
EU	European Union
FOEN	Swiss Federal Office for the Environment
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
LDC	Least Developed Country
MFN	Most-favoured nation
MOTA	Mineral Oil Tax Act
npr-PPM	Non-product related process and production method
NT	National treatment
OECD	Organisation for Economic Co-operation and Development
OJ	Official Journal of the European Union
QR	Quantitative restriction
REC	Renewable Energy Certificate
RES	Renewable energy sources
ROC	Renewable Energy Obligation
SR	Directory of Swiss Law (Systematische Rechtssammlung)
TFEU	Treaty on the Functioning of the European Union
TWh	Terawatt-hours
VAT	Value added tax
WTO	World Trade Organization

#### 1 Summaries (E/D/F)

#### **1.1** Executive summary

Current Swiss legislation establishes a comprehensive framework aimed at bringing climate and environmental sustainability to the domestic energy sector. Switzerland aims to reduce generation of electricity from fossil fuels and from nuclear power and to increase utilization of renewable energy sources in the electricity sector. In this effort, the Federal Act on the Reduction of CO<sub>2</sub> Emissions Act of December 23, 2011 (CO<sub>2</sub> -Act, SR 641.71) as revised is of paramount importance. The Act establishes a system of measures aiming at the reduction of greenhouse gas emissions. According to the Act, domestic electricity producers using fossil fuels for electricity production have one of the following four obligations: (i) they have to comply by means of a 100% compensation for CO<sub>2</sub> emissions, or (ii) they are obliged to participate in the emission trading scheme (ETS), or (iii) they can set a voluntary emission reduction target, or (iv) pay a  $CO_2$ levy. While Swiss electricity producers have to comply with this set of stringent rules, electricity imported into Switzerland is not currently subject to the CO<sub>2</sub> Act.

The study examines three options for ways in which a more level playing field between domestic and imported electricity can be achieved. Under the *first option*, an electricity tax is linked to the source of electricity, targeting fossil fuel electricity generation. The *second option* foresees the application of a tax on imported fossil fuel electricity, based on the  $CO_2$  content of the electricity. Under the *third option*, Switzerland uses import tariffs as an instrument to tax imported fossil fuel electricity. Finally, the study addresses the possibility of taxing imported electricity from nuclear power.

Differential taxation of imports on the basis of Processes and Production Methods (PPMs) raises issues of non-discrimination. To the extent that all electricity is considered to be a like product independent of the methods used for its production, it merits equal treatment irrespective of its origin and source. If green and grey electricity are considered to be unlike products, no discrimination against imported electricity would occur in the first place. In any case, domestic and imported fossil fuel based electricity have to be taxed equally. Thus, should Switzerland expand its production of grey electricity, any tax on fossil fuel electricity should be imposed equally on domestic and imported grey electricity.

#### Taxes under WTO Law

In the case that a differentiated tax under *the first option* is found to be discriminatory, it can be justified under the law of the World Trade Organization (WTO) by resorting to environmental exceptions under Art. XX of the General Agreement on Tariffs and Trade (GATT). It is unlikely that such a tax needs to be readjusted for imported European Union (EU) electricity in order to take into account the costs incurred by EU electricity producers subject to the EU Emission Trading Scheme (ETS). This is because there are inherent differences between the electricity tax and the emission allowances obligation under the ETS. The first option may also raise subsidy issues under WTO law if it causes adverse effects, e.g. impedes or displaces imports of electricity from fossil fuels or nuclear power.

The legality of the *second option* under WTO law depends to a large extent on the exact modalities of the future general  $CO_2$  levy. To the extent that the domestically generated power benefits from taxes imposed on imported electricity, it is unlikely that such taxes on the  $CO_2$  content of imported electricity could constitute a border tax adjustment (BTA) measure consistent with WTO rules. To legally implement a carbon BTA on electricity, the existing  $CO_2$  levy in Switzerland would have to be applied to domestic fossil fuel power plants without any exemptions. The considerations on subsidies mentioned above equally apply to a  $CO_2$  levy.

#### Taxes under EU Law

In shaping the *first* and the *second option* for the tax, it is advisable to take into account EU law. An EU Member State may apply a measure of internal taxation, provided this does not result in indirect discrimination. The tax measure should be designed in such a way that it is in line with the overall objectives and the structure of the Swiss tax system in order to ensure compliance with EU state aid law. Moreover, the tax rate cannot be set below the minimal tax rate imposed by Council Directive 2003/96/EC of 27 October 2003 restructuring the Community framework for the taxation of energy products and electricity. According to the 'output taxation principle' the tax may not, as a rule, be imposed on the input energy products used for the production of energy. Notwithstanding, power plants are obliged to participate in the ETS and energy inputs may in the future also become subject to a  $CO_2$  levy. Under current EU law it is unclear whether the same principles apply to electricity from nuclear energy. Finally, a tax is not deemed to be a (prohibited) tariff (customs duty) or a charge having equivalent effect simply because it concerns a kind of energy which is not produced domestically.

#### Taxes under the Switzerland – EEC Free Trade Agreement 1972

From the perspective of bilateral relations between Switzerland and the EU, the introduction of an electricity tax on the source of electricity under the first option or a CO<sub>2</sub> levy on electricity under the second option is possible in principle, but again depends on the modalities of such a tax. Under the Switzerland-EEC 1972 FTA a new electricity tax should not result in direct or indirect discrimination against imports of electricity from the EU. The Agreement sets tighter constraints than WTO law, as it does not offer an explicit justification similar to Art. XX GATT in the field of taxation. Moreover, an electricity tax under the first option and a  $CO_2$  levy could raise political concerns and be complicated in terms of implementation. To avoid political concerns and reduce risks of discriminatory taxation of imported electricity from the EU, one could think of a progressive  $CO_2$  levy taking into account adjustments undertaken by the EU electricity producers. There is a certain risk of finding that the suggested differentiated taxation constitutes state aid under the Switzerland-EEC 1972 FTA and the application of implicit exceptions would depend on the modalities and design of the tax.

#### Taxes on Nuclear Electricity

Taxing imported nuclear electricity requires a comprehensive differentiated electricity tax imposed equally on domestic and imported nuclear electricity, both under WTO law and under the Switzerland–EEC 1972 FTA. A  $CO_2$  levy cannot be applied to nuclear electricity, as it is based on the  $CO_2$  content of electricity and nuclear electricity generation is  $CO_2$  neutral. EU Member States can decide on the appropriate energy mix and adopt appropriate measures of public health, which enable them to tax electricity of nuclear origin at a higher rate. Nevertheless, the margin of manoeuvre of individual Member States in this regard is limited.

#### Import Tariffs

The *third option* takes recourse to import tariffs. Under WTO law, this option would require deconsolidation of Swiss tariffs for electricity bound at zero per cent according to Art. XXVIII GATT. Tariff deconsolidation would be based on production methods. This is a new approach and has not been tested in practice. Moreover, it is subject to compensation for the decreased market access for main suppliers in another field of interest to them. Under EU law, as well as under the Switzerland–EEC 1972 FTA, imposition of any tariffs on the import or export of electricity is prohibited and cannot be justified without revoking the Free Trade Agreement. As trade in electricity mainly concerns neighbouring countries benefiting from obligations under the FTA, the introduction of import tariffs on electricity is not a legally feasible option. It is likely to create political problems with the EU, based upon the GATT law and the FTA and would necessitate renegotiation with the EU on this issue.

#### **Practical Problems of Tracing Modes of Production**

From the perspective of implementation, *all three options* face a challenge of tracing the origin of electricity. Currently, only electricity from renewable energy sources is certified by the guarantees of origin (GOs). If the import of electricity is linked to a general requirement to submit a GO, there is a risk that this may have to be reviewed under the rules pertaining to non-tariff barriers to trade. In a long-term perspective the whole system of certification of the origin of electricity may have to be adjusted. Current negotiations on linking the Swiss ETS and EU ETS could be used as an opportunity to set up a coherent  $CO_2$  tax system, or a general electricity tax system, that would not discriminate in any manner against foreign electricity ity producers. The issue of mutual recognition and equivalence of the compensation measures and the like could be also taken up in the current negotiations of the Electricity Agreement.

#### 1.2 Zusammenfassung

Das revidierte Bundesgesetz über die Reduktion der CO<sub>2</sub> Emissionen vom 23.12.2011 (CO2-Gesetz, SR 641.71) beinhaltet ein umfassendes Massnahmenpaket, mit dem die Reduktion von Treibausgasen angestrebt wird. Inländische Stromproduzenten, welche fossile Brennstoffe für die Stromerzeugung verwenden, haben dabei eine von vier Optionen. Sie müssen sich entweder (i) zu einer hundertprozentigen Entschädigung für CO<sub>2</sub> Emissionen verpflichten oder (ii) sich am "emission trading scheme" (ETS) beteiligen; oder (iii) freiwillige CO<sub>2</sub>-Emissionsreduktionsziele festlegen oder (iv) eine CO<sub>2</sub>-Abgabe entrichten. Während Schweizer Stromproduzenten diesen strengen rechtlichen Anforderungen nachkommen müssen, unterliegt der importierte Strom dem CO<sub>2</sub>-Gesetz nicht. Vor diesem Hintergrund untersucht die Studie drei Möglichkeiten für die Gestaltung einer Steuer auf importierten Strom, welcher aus fossilen Energiequellen stammt. Die erste Option sieht eine Stromsteuer vor, welche an die Stromerzeugungsquelle (Stromerzeugung aus fossiler Energie) anknüpft. Gemäss der zweiten Option wird eine Steuer auf importierten Strom aus fossilen Energien erhoben, welche sich nach dem CO<sub>2</sub>-Gehalt des Stroms richtet. Unter der dritten Option werden Einfuhrzölle als Instrument verwendet, um importierten Strom, welcher aus fossilen Brennstoffen stammt, zu besteuern. Abschliessend wird die Möglichkeit der Besteuerung von importiertem Strom aus Kernkraft geprüft.

#### Besteuerung im Rahmen des WTO Rechts

Die *erste Option* kann aus Sicht des Rechts der Welthandelsorganisation (WTO) mit der allgemeinen Ausnahmeregelung von Art. XX des Allgemeinen Zoll- und Handelsabkommen (GATT) gerechtfertigt werden, soweit grüner und grauer Strom rechtlich als gleichartige oder unmittelbar konkurrierende Ware betrachtet werden. Für den Fall, dass grüner und grauer Strom nicht als gleichartige Waren gelten, liegt apriori keine Diskriminierung des höher besteuerten importierten Stroms vor. Im Falle eines Ausbaus der Produktion des grauen Stroms, der zu erwarten ist, müsste eine Steuer auf Strom aus fossilen Brennstoffen in jeden Fall in gleichem Mass für einheimischen wie auch für eingeführten grauen Strom eingeführt werden. Dabei ist wenig wahrscheinlich, dass eine solche Steuer auf importiertem Strom die im Rahmen des EU ETS anfallenden Belastungen berücksichtigen muss. Dies erklärt sich durch die inhärenten Unterschiede zwischen der Strombesteuerung und der Verpflichtung, Emissionszertifikate im Rahmen des ETS nachzuweisen. Schliesslich wirft die die *erste Option* Fragen hinsichtlich allfälliger Subventionen unter dem WTO-Subventionsabkommen auf, falls die Steuer sich nachteilig auswirkt, z.B. wenn Importe von Strom, welcher durch fossile Brennstoffe oder durch Kernenergie gewonnen wird, behindert oder verdrängt würden.

Die Rechtmässigkeit der *zweiten Option* hängt in starkem Mass von den genauen Modalitäten einer zukünftigen CO<sub>2</sub>-Steuer ab. In dem Masse, wie die einheimische Produktion von der Steuerbelastung ausländischer Produktion profitiert, kann nicht von einer rechtmässigen Grenzausgleichsmassnahme (GAM) ausgegangen werden. Um eine CO<sub>2</sub>-GAM für Elektrizität rechtmässig in Kraft zu setzen, müsste in der Schweiz ausnahmslos eine CO<sub>2</sub>-Abgabe auf einheimischen, mit fossilen Brennstoffen betriebenen Kraftwerken erhoben werden. Die oben gemachten Ueberlegungen zu den Subventionen gelten hier auch für die CO<sub>2</sub>-Abgabe.

#### Besteuerung im Rahmen des EU Rechts

Für die Ausarbeitung der ersten und zweiten Option empfiehlt es sich, die Rechtslage in der EU zu berücksichtigen. Im Rahmen des EU-Rechts können EU-Mitgliedstaaten eine interne Besteuerung vorsehen, sofern diese nicht zu einer indirekten Diskriminierung führt. Der Steuersatz darf jedoch nicht unter den in der Richtlinie 2003/96/EG des Rates vom 27. Oktober 2003 zur Restrukturierung der gemeinschaftlichen Rahmenvorschriften zur Besteuerung von Energieerzeugnissen und elektrischem Strom, vorgesehenen Mindeststeuersatz angesetzt werden. Gemäss dem "Prinzip der Outputbesteuerung" kann eine Abgabe in der Regel nicht auf Energieerzeugnisse erhoben werden, welche zur Erzeugung von Strom verwendeten werden. Dies trifft ungeachtet der Tatsache zu, dass Kraftwerksbetreiber verpflichtet sind, am Emissionshandelssystem teilzunehmen, oder dass Energieeinspeisungen in Zukunft einer CO<sub>2</sub>-Abgabe unterliegen könnten. Unklar ist derzeit, ob unter geltendem EU-Recht dieselben Prinzipien auch auf Strom aus Kernkraft Anwendung finden. Eine Abgabe ist schliesslich weder ein (verbotener) Zoll noch eine Abgabe gleicher Wirkung, nur weil sie eine bestimmte Art der Energie betrifft, die im Inland nicht hergestellt wird.

## Besteuerung im Rahmen des Freihandelsankommens Schweiz-EWG 1972

Aus der Sicht der bilateralen Verträge zwischen der Schweiz und der EU ist die Einführung einer Stromsteuer - je nach deren Modalität – grundsätzlich möglich. Sie könnte jedoch politische Bedenken aufwerfen und sich hinsichtlich der Umsetzung als kompliziert erweisen. Gemäss dem Freihandelsabkommen zwischen der Schweiz und der EWG von 1972 sollte eine neue Stromsteuer weder eine direkte noch indirekte Diskriminierung der Importe nach sich ziehen. Eine progressive CO<sub>2</sub>-Abgabe wäre denkbar, welche die Anpassungen seitens der EU-Stromproduzenten berücksichtigt, um politische Bedenken und das Diskriminierungsrisiko bei der Strombesteuerung von importierter Energie abzuwenden. Es besteht ein gewisses Risiko, dass die vorgeschlagene, differenzierte Besteuerung gemäss dem Freihandelsabkommen von 1972 seitens der EU als staatliche Beihilfe beurteilt wird. Die Anwendung impliziter Ausnahmen wird von den genauen Modalitäten und der Ausgestaltung der Steuer abhängen.

#### Besteuerung von nuklearer Elektrizität

Die Besteuerung von eingeführter nuklearer Elektrizität verlangt im Rahmen einer differentiellen Besteuerung nach einer Lösung, welche gleichermassen auch die Inland produzierte nukleare Elektrizität erfasst. Das ergibt sich sowohl aus dem WTO Recht wie auch dem Freihandelsabkommen von 1972. Eine CO<sub>2</sub>-Abgabe kann auf nuklearer Energie nicht erhoben werden, da diese CO<sub>2</sub> neutral ist. In der EU können die Mitgliedstaaten über einen je angemessenen Energiemix entscheiden und Nuklearenergie aus Gründen der öffentlichen Gesundheit höher besteuern. Dabei bleibt der Gestaltungsspielraum allerdings beschränkt.

#### Erhebung von Einfuhrzöllen

Was im Rahmen der *dritten Option* die Erhebung von Einfuhrzöllen betrifft, so könnte diese gemäss Artikel XXVIII GATT durch eine Dekonsolidierung der Nullzölle der Schweiz auf Elektrizität nur dann umgesetzt werden, wenn diese an Produktionsmethoden anknüpfen und die Kosten des verringerten Marktzugangs anderweitig kompensiert werden. Aus der Sicht des EU-Rechts und des Freihandelsabkommens von 1972 ist die Erhebung jeglicher Einfuhr- oder Ausfuhrsteuer untersagt und kann nicht gerechtfertigt werden ohne Kündigung des Freihandelsabkommens. Da in erster Linie Einfuhren aus den Nachbarstaaten betroffen wären, sind Importzölle unter dem geltenden Recht keine rechtlich zulässige Option. Sie würde zu politischen Problemen mit der EU führen und Neuverhandlungen erfordern.

#### Praktische Probleme beim Nachweis von Produktionsmethoden

Für die Umsetzung bestehen für alle drei Optionen dieselben Herausforderungen. Die Rückverfolgung der Herkunft erweist sich als schwierig, weil zurzeit Herkunftsnachweise nur bei Strom aus erneuerbaren Energien ausgestellt werden. Wird Stromimport generell an die Erstellung eines Herkunftsnachweises gekoppelt, führt dies möglicherweise zu einer Neubeurteilung der Situation gemäss den Regelungen zu den nichttarifären Handelshemmnissen. Auf längere Sicht könnte eine Anpassung des ganzen Systems der Herkunftsnachweise für Strom aufdrängen. Die derzeitigen Verhandlungen über die Verknüpfung der Emissionshandelssysteme zwischen der Schweiz und der EU könnten dazu genutzt werden, eine kohärente CO<sub>2</sub>-Abgabe einzuführen oder ein allgemeines System der Strombesteuerung anzuwenden, welche keine Diskriminierung für ausländische Stromproduzenten nach sich ziehen. Die gegenseitige Anerkennung und Gleichwertigkeit von Kompensationsmassnahmen und verwandten Fragen könnten ebenfalls in den laufenden Verhandlungen über das Elektrizitätsabkommen aufgenommen werden.

#### 1.3 Résumé

La Loi fédérale sur la réduction des émissions de  $CO_2$  dans sa version du 23 décembre 2011 (Loi sur le CO2, RS 641.71) met en place un système compréhensif visant une réduction d'émissions de gaz à effet de serre. Selon cette loi, les producteurs domestiques d'électricité provenant de combustibles fossiles ont quatre possibilités: ils peuvent (i) soit se conformer à l'obligation de compensation de 100% des émissions de  $CO_2$ ; (ii) soit participer au programme d'échange de droits d'émissions; (iii) soit fixer un objectif facultatif de réduction d'émissions ou encore (iv) s'acquitter d'une contribution pour ces émissions. Tandis que les producteurs d'électricité suisses sont soumis à ces règlementations strictes, la loi sur le  $CO_2$  ne s'applique pas à l'électricité importée. Dans ce contexte, cette étude analyse trois options possibles pour la conception d'une imposition des importations d'électricité à base de combustibles fossiles. Selon la *première option*, l'imposition de l'électricité serait liée à sa source, visant l'énergie à partir de combustibles fossiles. La *deuxième option* prévoit l'application d'un impôt en fonction de la teneur en  $CO_2$  de l'électricité importée provenant de combustibles fossiles. La *troisième option* utilise des droits de douane en tant qu'instrument de perception d'impôt d'électricité de combustibles fossiles. Enfin, nous abordons brièvement la possibilité de prélever un impôt pour l'électricité nucléaire importée.

#### Impôts dans le cadre du droit de l'OMC

La première option est réalisable selon le droit de l'OMC en ayant recours aux exceptions prévues à l'article XX GATT, dans la mesure que l'électricité verte et l'électricité grise soient considérées comme des produits similaires ou directement concurrents. Lorsque l'électricité verte et l'électricité grise ne sont pas considérées comme des produits similaires, aucune discrimination à l'égard de l'électricité importée n'aura lieu. Si la Suisse compte élargir sa production d'électricité grise, ce qui semble être probable, un impôt prélevé sur l'électricité provenant de combustibles fossiles doit en tout état de cause s'appliquer de la même manière à l'électricité grise domestique qu'à celle qui est importée. En outre, nous estimons peu probable qu'un tel impôt devrait être réajusté pour l'électricité importée de l'UE pour tenir compte des coûts résultant aux producteurs d'électricité de l'UE qui sont, eux, soumis au système européen d'échange de quotas (SCEQE). Ceci est dû à des différences inhérentes entre l'imposition sur l'électricité et l'obligation découlant des quotas d'émissions. Enfin, en vue de l'Accord de l'OMC, la première option pourrait soulever des questions en lien avec des subventions dans le cas que l'impôt soit néfaste aux échanges commerciaux, par exemple si par ce moyen les importations d'électricité à base de combustibles fossiles ou d'énergie nucléaire soient empêchées ou évincées.

La *deuxième option* dépend largement des modalités précises de l'impôt général sur le  $CO_2$  futur qui s'appliquerait à la fois sur l'électricité domestique et importée. Si la production nationale d'électricité bénéficie d'exceptions privilégiées, il est peu probable, du point de vue du droit de l'OMC, qu'un tel impôt sur la teneur en  $CO_2$  de l'électricité importée puisse constituer une mesure d'ajustement fiscal à la frontière (MAFF) compatible avec les règles de l'OMC. Afin de mettre en œuvre légalement une MAFF sur le contenu en carbone de l'électricité, une contribution sur le  $CO_2$  devrait être appliquée sans exceptions en Suisse aux centrales électriques domestiques à combustibles fossiles. Les considérations mentionnées ci-dessus s'appliquent également à une contribution sur le  $CO_2$ .

#### Impôts dans le cadre du droit de l'Union Européenne

Du point de vue du droit de l'UE, un état membre peut prévoir un impôt interne, à condition que celui-ci n'entraîne pas une discrimination indirecte. Le taux d'imposition ne peut être inférieur au taux minimal prévu par la directive 2003/96/EC du Conseil du 27 octobre 2003, restructurant le cadre communautaire de taxation des produits énergétiques et de l'électricité. Selon le principe de l'imposition en aval, la contribution ne peut pas, en règle générale, être imposée à des produits énergétiques utilisés pour la production d'énergie. Nonobstant, les exploiteurs de centrales électriques sont obligées de participer au système d'échange de quotas d'émissions et l'alimentation en énergie ou peuvent encore être, dans le futur, soumis à une contribution sur le CO<sub>2</sub>. Le droit actuel de l'Union n'a pas encore élucidé si ces principes s'appliquent également à l'électricité provenant d'énergie nucléaire. Enfin, une contribution n'est pas considérée comme un droit tarifaire (prohibé) ou une taxe ayant un effet équivalent aux droits de douane, simplement parce qu'elle touche à un certain type d'énergie qui n'est pas issu de la production intérieure.

#### Impôts dans le cadre de l'accord de libre-échange Suisse-CEE 1972

En principe, dans l'optique des relations bilatérales entre la Suisse et l'UE, l'introduction d'un impôt sur l'électricité est possible, mais dépend des modalités de son application. En effet, elle pourrait susciter des inquiétudes politiques et des problèmes au niveau de la mise en œuvre. Selon l'accord de libre-échange entre la Suisse et la CEE de 1972, un nouvel impôt ne devrait pas entraîner des discriminations directes ou indirectes envers les importations. Afin d'éviter des préoccupations politiques et de minimiser les risques de discriminations en matière d'imposition de l'électricité importée de l'UE, une contribution progressive tenant compte des ajustements réalisés par les producteurs d'électricité de l'UE pourrait être envisagée. Par contre, l'imposition différenciée suggérée comporte un certain risque d'être considérée comme une aide d'Etat, au sens de l'accord de libre-échange de 1972. L'application d'exceptions implicites dépendrait des modalités et de la conception de l'impôt.

#### Impôts sur les importations de l'énergie nucléaire

L'introduction d'impôts sur les importations de l'énergie de provenance nucléaire dans le cadre d'un système d'imposition différentielle demande une solution qui appliquera les mêmes tariffs pour la production importée et la production de provenance suisse. Cela s'impose sur la base du droit de l'OMC tant que l'accord de libre-échange de 1972. Il n'est pas possible d'imposer une taxe CO2 car l'cette énergie est neutre en ce qui concerne ce type d'émission. Dans un cadre restreint, les Etats Membres de l'UE peuvent justifier des taux augmentés sur la base des risques pour la santé publique.

#### Imposition des Droits de Douanes

Finalement, selon l'article XXVIII GATT, l'introduction des droits des douanes sur les importations pourrait être mise en œuvre uniquement par une déconsolidation des tarifs à taux zéros suisses pour l'électricité basées sur les méthodes de production et par une compensation en conséquence de la réduction d'accès au marché. Du point de vue du droit de l'UE ainsi que de l'accord de libre-échange de 1972, des droits de douanes sur les importations ou les exportations d'électricité sont interdites et ne sauraient être justifiées. Pour cette raison, de telles mesures sont susceptibles de créer des problèmes politiques avec l'UE en se basant sur le droit du GATT et de l'accord de libre échange qui et exigeront des renégociations avec l'UE au sujet de cette question.

#### Défis pratiques liés à la détermination de méthodes de production

Sur le plan de la mise en œuvre, les *trois options* sont soumises aux mêmes défis. La détermination de l'origine de l'électricité s'avère problématique puisque pour l'instant seule l'électricité issue de sources renouvelables est certifiée par une garantie d'origine (GO). Si l'importation d'électricité est liée de manière générale à des exigences de fournir une GO, le risque persiste que la problématique doive être réexaminée dans le contexte des règles concernant les barrières non tarifaires. Dans une perspective à long terme, le système de certification de la garantie d'origine d'électricité de-vrait éventuellement être ajusté dans son ensemble. Les négociations ac-

tuelles sur la question de relier les SCEQU suisses et européens pourraient servir d'occasion afin de mettre en place un système d'imposition d'électricité se basant une contribution cohérente sur le  $CO_2$  ou encore un système général d'imposition qui n'aurait pas d'effet discriminatoire pour les producteurs d'électricité étrangers. Le principe de la reconnaissance et de l'équivalence mutuelle en ce qui concerne les mesures de compensation, ou encore d'autres mesures pourraient également être réalisé dans les négociations actuelles sur l'accord sur l'électricité.

#### 2 Mandate and issues

Energy supply in Switzerland is dependent to a large extent on energy from abroad – about 80% of the primary energy sources are imported. At the same time, the electricity sector can be characterized by an almost equal trade balance. In 2012 Switzerland imported around 87 TWh of electricity while it exported 89 TWh.<sup>1</sup> Domestic gross electricity consumption in 2012 constituted around 63 TWh. Switzerland's final energy consumption has been steadily growing. In 2012 the final energy consumption grew by 3.7% compared to 2011,<sup>2</sup> and in 2013 – by 0.6% compared to 2012.<sup>3</sup> Increasing demand for energy in Switzerland can be explained by changing weather conditions (colder winters and warmer summers), economic growth and an increasing population. However, higher levels of consumption are also being accompanied by growing electricity production in Switzerland. About 60% of the domestic electricity in 2012 was produced from renewable energy sources, mainly from hydropower. Electricity from solar, biomass, biogas, wind and waste accounted for 3%. Currently there are only a few fossil fuel power plants generating electricity in Switzerland.<sup>4</sup>

<sup>&</sup>lt;sup>1</sup> Botschaft zum ersten Massnahmenpaket der Energiestrategie 2050 (Revision des Energierechts) und zur Volksinitiative "Für den geordneten Ausstieg aus der Atomenergie (Atomausstiegsinitiative)", 4 September 2013, BBI 2013 7561, 7574-7575.

<sup>&</sup>lt;sup>2</sup> Swiss Federal Office of Energy, Energy consumption up 3.7% in 2012, press release 27.06.2013, available at: http://www.bfe.admin.ch/energie/00588/00589/00644/index.html?lang=en&msg-id=49443 (last visited on 10.05.2014).

<sup>&</sup>lt;sup>3</sup> Swiss Federal Office of Energy, Energy consumption up 0.6 percent in 2013, press release 10.04.2014, available at: http://www.bfe.admin.ch/energie/00588/00589/00644/index.html?lang=en&msg-id=52616 (last visited on 10.05.2014).

<sup>&</sup>lt;sup>4</sup> Currently there are three combined cycle gas turbine (CCGT) power plants in Switzerland: Monthey with 55 MW of total installed capacity (since 2009), Pierre-de-Plan with 34 MW of total installed capacity and Cornaux with 43 MW of total installed capacity. Some other small fossil fuel plants are mostly operated for transport sector needs. Thus current-

The planned combined cycle gas turbine (CCGT) power plants, including Cornaux II with 420 MW of total installed capacity, Utzenstorf with 400 MW of total installed capacity, Perlen with 240 MW of total installed capacity and Vernier with 60 MW of total installed capacity, will have to comply with the new overall efficiency requirement and use the thermal heat and will also have to fully compensate their  $CO_2$  emissions.<sup>5</sup>

Generation of electricity from Swiss nuclear power plants still plays a key role in the Swiss energy mix with the average share of 39% over the last ten years. After the Fukushima catastrophe most of the European countries reassessed their policies with respect to nuclear energy. Germany was quite radical and planned for a transition from nuclear energy by 2022, whereas France, which is the second largest producer of electricity from nuclear energy worldwide, planned only a small reduction of the share of nuclear energy. In Switzerland, the Federal Office of Environment (FOEN) decided in 2011 to reassess the existing energy strategy and the energy perspectives for 2035. On 25 May 2011 the Swiss Federal Council decided in favour of a gradual transition away from nuclear power. The existing nuclear power plants will operate only until the end of their secure operational life-span and will not be refurbished after that.<sup>6</sup> In the longterm this means that one third of Switzerland's electricity supply will have to be produced from sources other than nuclear. In this respect the construction of new gas-fired power plants may play a certain role for a secure energy supply.

While Switzerland exports to large extent electricity produced from hydropower plants, it imports almost the same amount of electricity produced at fossil fuel (coal) or nuclear power stations abroad (predominantly in France and Germany). This situation led to initiatives being brought to the Swiss Parliament envisaging a tax on electricity produced from fossil fuels abroad. For instance, a proposal has recently been submitted by Laurent

ly production of electricitz from natural gas in Switzerland constitutes about 800 GWh annually. See: Verband Schweizerischer Elektrizitätsunternehmen, Gaskombikraftwerk (GuD), Basiswissen-Dokument, Stand November 2012, available at: http://www.strom.ch/uploads/media/VSE\_BWD\_09\_GuD\_03-2013.pdf (last visited on 25.05.2014).

<sup>&</sup>lt;sup>5</sup> See: Verband Schweizerischer Elektrizitätsunternehmen, Gaskombikraftwerk (GuD), *Basiswissen-Dokument*, Stand November 2012, available at: http://www.strom.ch/uploads/media/VSE\_BWD\_09\_GuD\_03-2013.pdf (last visited on 25.05.2014). For detailed explanations of the requirements related to overall efficiency of fossil fuel power plants see Section 2.1 and the chart on p. 10.

<sup>&</sup>lt;sup>6</sup> Energiestrategie 2050, p. 7588-7592.

Favre to the Swiss Parliament addressing the key question of accounting for the  $CO_2$  emissions with respect to the imported electricity produced from fossil fuels.<sup>7</sup>

In the context of these recent developments and the existing Swiss legislation on taxes in the energy sector, we have been asked to evaluate the compatibility of imposing a  $CO_2$  levy on imported electricity from a WTO and EU law perspective, including the 1972 Free Trade Agreement between Switzerland and the EEC (Switzerland–EEC 1972 FTA).

This legal opinion is a follow-up to the legal opinion on differentiated taxation of electricity submitted on 18.04.2014<sup>8</sup> (hereinafter referred to as Legal Opinion on Differentiated Electricity Taxation), where we presented an analysis of several options for a differentiated electricity tax, both for domestic and imported electricity and its compatibility with WTO law, EU law and Switzerland–EEC 1972 FTA.

### 3 Existing Swiss tax legislation in the field of minerals and CO<sub>2</sub> emissions

Swiss taxation in the energy sector is rooted to a large extent in Art. 131 of the Federal Constitution of the Swiss Confederation.<sup>9</sup> The provision stipulates that the Confederation may levy special consumption taxes on various energy sources, as well as a surcharge on motor fuels. This led to the adoption of the Mineral Oil Tax Act on 21 June 1996.<sup>10</sup> The bill introduced a petroleum tax and a surcharge on motor fuels. In parallel, Switzerland introduced incentive fees through the Environment Protection Act,<sup>11</sup> namely an incentive fee on sulphurous heating oil and an incentive fee on

<sup>&</sup>lt;sup>7</sup> Favre Laurent, CO2 Abgabe auch auf importiertem Strom?, 14.3038 Postulat, 5.03.2014, available at: http://www.parlament.ch/d/suche/Seiten/geschaefte.aspx?gesch\_id=20143038 (last visited on 10.05.2014).

<sup>&</sup>lt;sup>8</sup> Cottier at 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, available at: http://www.efv.admin.ch/e/downloads/finanzpolitik\_grundlagen/els/Differentiatial%20\_Taxation\_e.pdf?lang=de&msgid=50122 (last visited on 10.05.2014).

<sup>&</sup>lt;sup>9</sup> SR 101, Federal Constitution of the Swiss Confederation of 18 April 1999.

<sup>&</sup>lt;sup>10</sup> SR 641.61, Mineralölsteuergesetz vom 21. Juni 1996 (Stand am 1. Januar 2012) (in this legal opinion referred to as MOTA).

<sup>&</sup>lt;sup>11</sup> SR 814.01, Bundesgesetz über den Umweltschutz vom 7. Oktober 1983 (Stand am 1. November 2013).

sulphurous petrol and diesel oil.<sup>12</sup> In light of the concerns regarding climate change and the obligations Switzerland undertook according to the Kyoto Protocol, an additional  $CO_2$  levy has been introduced and will be addressed in detail below.

Fiscal measures also play an important role in the future Swiss energy policy. The Swiss Energy Strategy 2050 set the short-term (till 2020), medium term (till 2035) and long-term (till 2050) goals for the Swiss energy sector. The strategy is based on four main pillars: fiscal measures (namely, the increase of the  $CO_2$  levy rate on heating fuels and adjustment of the feed-in tariff for renewables), increasing production of electricity from renewable energy sources, decreasing energy consumption (e.g. energy efficient construction) and upgrading energy sector infrastructure (also in light of enhanced energy trade with neighbouring countries).

#### 3.1 The Swiss policy for the reduction of greenhouse gas emissions

In pursuit of the emissions reduction target of 8% undertaken under the Kyoto Protocol, at the end of the 1990s Switzerland adopted climate change related legislation. They key element of this legislative package was the CO<sub>2</sub> Act, which came into force in 2000 and set emission reduction targets for 2008–2012. The revised CO<sub>2</sub> Act entered into force in 2013<sup>13</sup> and set reduction targets up to 2020.<sup>14</sup> According to Art. 3 of the CO<sub>2</sub> Act the target is to reduce greenhouse gas emissions in Switzerland by 20% by 2020 in comparison to the base year 1990.

The CO<sub>2</sub> Act of 2013 established an enhanced system of measures aiming at reduction of greenhouse gas emissions. The CO<sub>2</sub> Act differentiates between industries based on their energy intensity and imposes on them a number of respective obligations. The Act foresees a combination of measures: a CO<sub>2</sub> levy, emission reduction certificates, and a system of compensation for CO<sub>2</sub> emissions. Furthermore it sets a foundation for the

<sup>&</sup>lt;sup>12</sup> Rolf Weber, *Energy Law in Switzerland*, Wolters Kluwer/Stämpfli Publishers (2012), at 662-663.

<sup>&</sup>lt;sup>13</sup> SR 641.71, Bundesgesetz über die Reduktion der CO2-Emissionen (CO2-Gesetz) vom 23. Dezember 2011, Stand am 1. Januar 2013.

<sup>&</sup>lt;sup>14</sup> Thomas Cottier et al., Die Reschtsbeziehungen der Schweiz und der Europäischen Union, Stämpfli Verlag, 2014, at 379.

Swiss emission-trading scheme (ETS). The provisions of the  $CO_2$  Act are detailed in the Ordinance on the Reduction of  $CO_2$  Emissions ( $CO_2$  Ordinance).<sup>15</sup>

Currently, the Swiss ETS is mandatory only for large  $CO_2$  emitters (e.g. paper industry) and also applies to mid-scale fossil fuel power plants with at least 20 MW and up to 100 MW of total installed capacity.<sup>16</sup> For other enterprises of specific industries listed in Annex 7 to the CO<sub>2</sub> Act, participation in the Swiss ETS is voluntary and based upon contractual arrangements. <sup>17</sup> The FOEN sets the quantity of available emission allowances based on a cap, which is lowered every year. The emission allowances can be issued for free only in quantities that are required for CO2-efficient operations to those companies, which participate in the ETS. Other emissions allowances are auctioned via the national Emissions Trading Registry.<sup>18</sup> The ETS in Switzerland is similar to the EU ETS, but not yet linked to the latter. The Federal Department of the Environment, Energy, Transport and Communication has been negotiating with the EU since 2009 with a view to linking the two systems. The latest (fifth) round of negotiations was completed in December 2013 and resulted in the fine-tuning of a draft agreement.19

#### **3.2** The Swiss CO<sub>2</sub> levy system

A CO<sub>2</sub> levy is the main instrument for attaining the greenhouse gas (GHG) emission reduction targets in Switzerland.<sup>20</sup> As mentioned above the CO<sub>2</sub> levy was introduced by the CO<sub>2</sub> Act. The provisions of the latter are detailed in the CO<sub>2</sub> Ordinance. The tax is levied on the production, extraction

<sup>&</sup>lt;sup>15</sup> SR 641.711, Verordnung über die Reduktion der CO2-Emissionen (CO2-Verordnung) vom 30 November 2012.

<sup>&</sup>lt;sup>16</sup> Annex 6 to the CO2 Ordinance. The requirements for fossil fuel power plants are detailed in Art. 22-25 of the CO2 Act and Art. 80-83 of the CO2 Ordinance.

<sup>&</sup>lt;sup>17</sup> See Annex 7 to the CO2 Ordinance for an exhaustive list of activities, that give right to participate in the ETS or to an exemption from a CO2 tax based on their emission reduction obligations.

<sup>&</sup>lt;sup>18</sup> FOEN; Topic Emissions trading. Swiss emissions trading scheme, available at: http://www.bafu.admin.ch/emissionshandel/05545/?lang=en (last visited on 10.07.2014).

<sup>&</sup>lt;sup>19</sup> Fifth Round of Swiss-EU Negotiations on Linking their Emissions Trading Systems, FOEN News Release, 12.12.2013, available at: http://www.bafu.admin.ch/dokumentation/medieninformation/00962/index.html?lang=en&msg-id=51350 (last visited on 10.05.2014).

<sup>&</sup>lt;sup>20</sup> FOEN, *Topic CO2 levy*, available at: http://www.bafu.admin.ch/co2-abgabe/index.html?lang=en (last visited on 10.05.2014).

and import of fossil fuels [Art. 29 (1)  $CO_2$  Act]. The  $CO_2$  levy was introduced in 2008 and set at 12 Swiss francs per tonne of  $CO_2$ . The revised  $CO_2$  Act, which entered into force in 2013, also prescribes the minimum rate of the  $CO_2$  levy, namely 36 Swiss francs per tonne of  $CO_2$ , which can be than increased by the Federal Council up to 120 Swiss francs, if the intermediate goals are not achieved. As of 1 January 2014 the  $CO_2$  levy was increased to 60 Swiss francs, since the objectives set out in Art. 94 of the  $CO_2$  ordinance had not been met.<sup>21</sup>

The CO<sub>2</sub> levy applies to coal, as well as other heating fuels, that are subject to mineral oil tax according to the Mineral Oil Tax Act (MOTA),<sup>22</sup> namely crude oil, natural gas etc. The CO<sub>2</sub> levy does not apply to motor fuels (diesel or gasoline). However, since January 2014 any person who releases into circulation motor fuels for consumption is obliged to compensate for part of the emissions that are attributable to the use of the motor fuels as an energy source.<sup>23</sup> Exemptions from the compensation obligation related to motor fuels are possible for de minimis imports.<sup>24</sup> Also fuels that are exempted from mineral oil tax according to Art. 17 MOTA are respectively exempted from the compensation obligation (e.g. for regular airline services).<sup>25</sup>

Importantly, according to Art. 25 of the  $CO_2$  Act, fossil fuel power plants are exempted from a  $CO_2$  levy through a reimbursement procedure, but they must comply with the compensation obligation as described below.

According to Art. 22 of the  $CO_2$  Act all operators of fossil fuel power plants are obliged to compensate for the amount of their  $CO_2$  emissions and to operate their plants according to up-to-date technological requirements. A new fossil fuel power plant can receive an operation permit if it has an overall efficiency of 62%, which is only possible if some of the heat produced in the combustion process is also utilized. The only exception where a lower rate of overall efficiency is permitted (58.5%) applies to

<sup>&</sup>lt;sup>21</sup> BAFU, Erhebung der CO2-Abgabe auf Brennstoffen, available at: http://www.bafu.admin.ch/co2abgabe/12357/index.html?lang=de (last visited on 10.05.2014).

<sup>&</sup>lt;sup>22</sup> See Art. 2(1) MOTA.

<sup>&</sup>lt;sup>23</sup> Art. 26(1) CO2 Act.

<sup>&</sup>lt;sup>24</sup> Art. 26(4) CO2 Act.

<sup>&</sup>lt;sup>25</sup> Art. 86(2) CO2 Ordinance.

fossil fuel power plants operated in places where fossil fuel power plants already existed (e.g. in the case of Chavalon).<sup>26</sup>

For the purposes of the  $CO_2$  Act the fossil-fuel power plants can be subdivided into two groups: those that mainly produce electricity and those that mainly produce thermal heat (combined heat and power (CHP) plants).

- CHP plants produce mainly thermal heat if their overall efficiency is at least 80%.<sup>27</sup> They only have a compensation obligation if their total capacity exceeds 100 MW.
- CHP plants with a total capacity below 100 MW have to pay a CO<sub>2</sub> levy on the fossil fuels they use unless they participate in the Swiss ETS under Articles 15 or 16 of the CO<sub>2</sub> Act or undertake an emission reduction obligation and provide an annual report on progress according to Art. 31(1)(b) of the CO<sub>2</sub> Act.<sup>28</sup> CHP plants with a total capacity below 100 MW and with an overall efficiency of less than 80% are considered to mainly produce electricity and fall under the scope of the compensation obligation.

There are also a number of fossil fuel power plants that are exempted from the compensation obligation, e.g. those with a total capacity of less than 1 MW or temporary fossil fuel power plants that are operated for less than 2 years (e.g. for construction purposes).<sup>29</sup>

Thus, a compensation obligation exists as an alternative to the  $CO_2$  levy. Fossil fuel power plants with a total installed capacity of more than 100 MW will fall under the scope of compensation provisions, and only CHP plants mainly producing heat (heat-CHP) with a total capacity below 100 MW but at least 20 MW must participate in the ETS scheme in accordance with Annex 6 of the  $CO_2$  Ordinance. Pursuant to Annex 9 of the  $CO_2$  Ordinance, no free emission certificates are granted for the generation of electricity. Otherwise such heat-CHP power plants can qualify under Annex 7 for voluntary participation in the ETS<sup>30</sup> or undertake a voluntary

<sup>&</sup>lt;sup>26</sup> Art. 81 of the CO2 Ordinance.

<sup>&</sup>lt;sup>27</sup> Art. 80 of the CO2 Ordinance.

<sup>&</sup>lt;sup>28</sup> BAFU, Verordnung über die Reduktion der CO2-Emissionen: Erläuternder Bericht, 30.11.2012, at 36.

<sup>&</sup>lt;sup>29</sup> Art. 82 of the CO2 Ordinance.

<sup>&</sup>lt;sup>30</sup> See also Art. 41 of the CO2 Ordinance.

emission reduction obligation under Art. 66 of the  $CO_2$  Ordinance. Otherwise, such heat-CHP power plants will be subject to the  $CO_2$  levy. Although all of the compensation measures have a financial element, as they require a considerable investment in the emission reduction projects, only a small number of fossil fuel power plants would actually pay a  $CO_2$  levy. The flow chart below illustrates the application of the  $CO_2$  levy to fossil fuel power plants.

The compensation measures for the fossil fuel power plants include:

(i) emission reduction projects in Switzerland, which fulfil all the criteria as fixed by Art. 5 of the  $CO_2$  ordinance, namely the criteria of additionality;<sup>31</sup>

(ii) investment in production of electricity or heat from renewable energy sources;

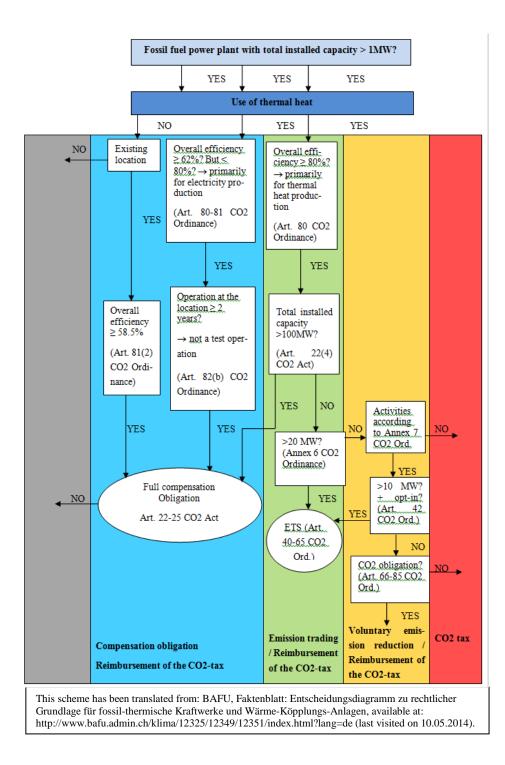
(iii) replacing existing fossil heat sources with heat produced by the power plant and directly extracted;

(iv) confirmation of the emission reductions in Switzerland, and

(v) provision of emission reduction certificates.<sup>32</sup>

<sup>&</sup>lt;sup>31</sup> Art. 83 of the CO2 Ordinance. See also BAFU, Projekte zur Emissionsverminderung im Inland. Ein Modul der Mitteilung des BAFU als Vollzugsbehörde zur CO2-Verordnung, 2013, available at: http://www.bafu.admin.ch/publikationen/publikation/01724/index.html?lang=de (last visited on 25.05.2014).

<sup>&</sup>lt;sup>32</sup> Emission reduction certificates can be accepted only for compensation of up to 50% of the CO2 emissions according to Art. 22 (2) CO2 Act.



The exact compensation measure has to be agreed between the government and the power plant operator in a compensation agreement.<sup>33</sup> Under certain conditions emission reduction projects abroad can also be taken into account up to 50% of the emissions produced.<sup>34</sup> Namely, Switzerland ac-

<sup>&</sup>lt;sup>33</sup> Art. 84 of the CO2 Ordinance.

<sup>&</sup>lt;sup>34</sup> Art. 4 of the CO2 Ordinance.

cepts only internationally recognized emission reduction certificates, i.e. Certified Emission Reductions (CERs) from the Clean Development Mechanism projects (CDM) under Art. 12 of the Kyoto Protocol and Emission Reduction Units (ERU) from the Joint Implementation Projects under Art. 6 of the Kyoto Protocol.<sup>35</sup> Emission reduction certificates for projects abroad based on a voluntary market are not accepted for the purposes of compensation.<sup>36</sup> Moreover, it is required to show that the reduction of emissions was additional, meaning that it would not have been possible without participation of Switzerland in the project. Finally, emission reduction certificates are to be accepted only in the case that they are not excluded under Annex 2 of the CO<sub>2</sub> Ordinance (e.g. certificates for the operation of hydro power plants with total installed capacity of more than 20 MW, certificates from projects not in least-developed countries (LDCs), emission reduction certificates that were received from projects whose operation was in violation of human rights).

The CO<sub>2</sub> levy is reimbursed to fossil fuel power plants that are subject to a compensation obligation.<sup>37</sup> The same is true for those fossil fuel plants that undertake voluntary emission reduction obligations<sup>38</sup> or participate in ETS.<sup>39</sup> However, if the fossil fuel power plants do not comply with either of these obligations they have to face sanctions. Where there is a breach of a compensation obligation, the contractual penalty will be levied by the Federation and will be calculated based on the estimated costs of emission reduction services that have not been provided.<sup>40</sup> In the case that some of the CO<sub>2</sub> emissions are not covered by the emission rights and emission reduction certificates, a fossil fuel power plant has to pay 120 Swiss francs per tonne of Carbon Dioxide Equivalent (CO2eq).<sup>41</sup> The same penalty ap-

<sup>&</sup>lt;sup>35</sup> ERUs result from Join Implementation projects that can be carried out jointly by two industrialized countries. CERs result from CDM projects in developing countries that are carried out by an industrialized country listed in Annex I of the Kyoto Protocol.

<sup>&</sup>lt;sup>36</sup> FOEN, *Fact Sheet: Emission Reductions Achieved Abroad: Quality, Quantity and Carry-Over*, 28 May 2013, available at: http://www.bafu.admin.ch/emissionshandel/05545/12456/index.html?lang=en (last visited on 25.05.2014).

<sup>&</sup>lt;sup>37</sup> Art. 25 CO2 Act.

<sup>&</sup>lt;sup>38</sup> Art. 31(1)(b) CO2 Act, Art. 96(2)(c).

<sup>&</sup>lt;sup>39</sup> Art. 17 CO2 Act.

<sup>40</sup> Art. 24 CO2 Act.

<sup>&</sup>lt;sup>41</sup> CO2eq. or Carbon Dioxide Equivalent (CDE) is based on the so-called global warming potential (GWP) of a greenhouse gas. The GWP of a gas is the warming caused over a 100-year period by the emission of one ton of the gas relative to the warming caused over the same period by the emission of one ton of CO2.

plies if a fossil fuel power plant does not comply with its voluntary emission reduction obligations.<sup>42</sup>

#### 3.3 Fuel taxes in Switzerland

The Petroleum Tax Act or the Mineral Oil Tax Act (MOTA), as it is also referred to in English, was enacted based on Art. 131 of the Federal Constitution of the Swiss Confederation. It introduced a petroleum tax on crude oil, other mineral fuels, natural gas and products obtained through their refinement and motor fuels, as well as a surcharge on motor fuels.<sup>43</sup> According to Art. 3 of the MOTA not only manufacturing and production of the mentioned goods, but also their imports are subject to the tax. The petroleum tax varies considerably depending on the type of product and its use. A number of goods are exempted, e.g. fuels that are used by aircraft for their regular services. The revenues from petroleum tax are mainly directed to road traffic projects.<sup>44</sup>

The MOTA was amended in 2008 to take into consideration the changes in the fuel market. Only locally produced biofuels are exempted (partially or fully) from the mineral oil tax if they comply with a number of criteria.<sup>45</sup> Both domestic and foreign biofuels have to comply with the environmental and social requirements.<sup>46</sup> In light of these requirements and the domestic production of biofuels, the Swiss Federal Council determines the quantities of biofuels that can be imported tax-free.

For the purposes of the legal analysis below this act plays an important role inasmuch the  $CO_2$  Act applies to fossil fuels covered by MOTA.<sup>47</sup>

- <sup>45</sup> Art. 12b of the MOTA.
- <sup>46</sup> Art. 12b(3)(b) of the MOTA.

<sup>&</sup>lt;sup>42</sup> Art. 76 CO2 Ordinance.

<sup>&</sup>lt;sup>43</sup> Art. 1 of the MOTA.

<sup>&</sup>lt;sup>44</sup> Weber, at 206-207.

<sup>&</sup>lt;sup>47</sup> Art. 93 CO2 Ordinance.

### 3.4 Future energy taxation in Switzerland according to the Energy Strategy 2050

According to the Energy Strategy 2050 a considerable reform of fiscal measures should be carried out mid-term, i.e. by 2021. In the initial phase of this reform, profits from this new energy tax can be used for support measures. However, the link to financial support measures should be grad-ually eradicated. In the case of electricity, the Swiss Energy Strategy suggests that the tax could be based on the amount of electricity consumed (CHF per kW/h).<sup>48</sup> Some of the possible options for the implementation of the energy tax on electricity were addressed in our previous legal opinion<sup>49</sup> and thus will not be repeated in this follow-up study.

## 4 Application of CO<sub>2</sub> levies and tariffs to imported electricity under the WTO law, EU law and the FTA Switzerland– EEC

#### 4.1 Assessment under WTO rules

We have been asked to assess whether Switzerland could successfully make the case for taxing imported electricity produced from fossil fuels (for the purposes of this study, "grey" electricity) under WTO law. The rationale for such a measure rests on the need to accelerate the transition towards the decarbonisation of the Swiss power system, which in particular implies best use and recourse to existing hydropower in Switzerland. Since at present Switzerland produces only a negligible amount of electricity from fossil fuels,<sup>50</sup> any fiscal measure uniquely addressing 'grey' forms of electricity risks being treated as if it exclusively targets imports. This could give rise to additional complications under WTO law.

Under the present circumstances, the following design options could be considered:

<sup>&</sup>lt;sup>48</sup> Botschaft zum ersten Massnahmenpaket der Energiestrategie 2050 (Revision des Energierechts) und zur Volksinitiative "Für den geordneten Ausstieg aus der Atomenergie (Atomausstiegsinitiative)", 4 September 2013, BBI 2013 7561, 7599-7600.

<sup>&</sup>lt;sup>49</sup> See fn. 8 above.

<sup>&</sup>lt;sup>50</sup> The situation may change in the future, should a gas combustion plant be constructed on the Chavalon site in Western Switzerland.

- 1. Fossil-fuel-generated forms of electricity are subject to a higher tax within the framework of a comprehensive scheme of electricity tax differentiation, to be framed along the lines of Options A and B discussed in our previous Legal Opinion.<sup>51</sup> In other words, it would be an electricity tax differentiated according to the source of the electricity. Although such schemes have been assessed as generally compatible with WTO law, two additional points need to be discussed when shifting the focus of an electricity tax scheme from "exempting renewables" to "taxing fossil fuels":
- Options A and B were analysed in the context of their implementation by means of GOs. In EU Member States, however, GOs are issued only for renewable forms of energy. Therefore, while GOs could be used in the scheme to exempt both domestic and imported green electricity, the same is not true when the tax differentiates between different forms of non-renewable electricity.
- EU producers of grey electricity importing it into Switzerland already compensate for the environmental externalities associated with the burning of fossil fuels through EU ETS. It remains to be seen whether the price paid for emission allowances under such a scheme could be considered comparable to the proposed Swiss tax on grey electricity.
- 2. A tax on electricity produced from fossil fuels could also be based on the CO<sub>2</sub> content of electricity. This would raise a different set of issues. Such a 'carbon' tax on electricity could be framed within an overall carbon taxation scheme in Switzerland. With respect to this option, specific problems to be addressed include:
- The relation of this tax to the CO<sub>2</sub> levy scheme currently in place in Switzerland;
- The implementation problem associated with the EU GO system not accounting for non-renewable sources of electricity and the EU and Swiss GO system not certifying the CO<sub>2</sub> content of electricity generation;
- The consideration of emissions costs paid by importers of fossil fuel electricity under the EU ETS.
- 3. A charge on fossil-fuel-generated electricity would be imposed in Switzerland as a tariff (an import duty). In this case a tariff on renewable electricity would be kept at the current zero rate of a bound tariff and a tariff on

<sup>&</sup>lt;sup>51</sup> See fn. 8 above.

non-renewable electricity would be set above zero. To implement this option, the bound tariff on electricity in Switzerland's GATT schedule of concessions would need to be deconsolidated according to the procedure foreseen in GATT Art. XXVIII. It would be subject to negotiated compensation of interested parties. In addition, this option requires consideration of the following issues:

- The relationship of an electricity tariff to the current CO<sub>2</sub> levy scheme and to the proposed differentiated electricity tax scheme in Switzerland (as discussed in Legal Opinion on Differentiated Electricity Taxation<sup>52</sup>)
- The implementation hurdles of tracing the source of electricity and the CO<sub>2</sub> content of electricity generation through the current EU GO system.

#### 4.1.1 Tax on the source of electricity

# a) Taxing fossil fuel electricity in the absence of domestic production of electricity from fossil fuels

An electricity tax on fossil fuel electricity can either be imposed as part of a differentiated electricity tax system in Switzerland, which was analysed in the Legal Opinion on Differentiated Electricity Taxation,<sup>53</sup> or as a separate measure. In our previous legal opinion,<sup>54</sup> we described the three possible outcomes of the likeness analysis under the non-discrimination test of GATT Art. III:2.

If fossil fuel electricity is found to be a like product  $(1^{st} \text{ scenario})$  or a product which is directly competitive or substitutable  $(2^{nd} \text{ scenario})$  in relation to nuclear or renewable electricity, the application of a tax on fossil fuel electricity can be justified under the environmental exceptions of GATT Art. XX.

If fossil fuel electricity is found to be a product which is not like to electricity generated from other sources (e.g. nuclear or solar) (3<sup>rd</sup> scenario), one needs to give particular consideration to the fact that only a small

<sup>&</sup>lt;sup>52</sup> See fn. 8 above.

<sup>&</sup>lt;sup>53</sup> See fn. 8 above.

<sup>&</sup>lt;sup>54</sup> See fn. 8 above.

amount of electricity is currently produced from fossil fuels in Switzerland.<sup>55</sup> This would mean that the tax predominantly affects imported electricity. Here the relevant question is whether WTO law allows the application of taxes on importation with respect to products that are not domestically produced by the importing country. The main rule of the WTO Agreement that regulates the application of taxes to imported products is found in GATT Art. III:2. This rule sets forth the national treatment (NT) principle in taxation, according to which taxes on imported products that are like domestic products should not be imposed in excess of taxes imposed on domestic products; and taxes on imported products that are directly competitive or substitutable for domestic products should not be imposed so that they afford protection to domestic production.

In other words, the core idea of the NT rule for the application of taxes on imports, as explained in GATT Art. III, is that imported products are not discriminated against in favour of domestic products, or, in general terms, domestic production should not be protected from imports. In the situation where domestic production of like products is absent, the object of potential protection is also absent, and therefore there is no possibility for discrimination against imported products. In this situation, a tax on imported products can still be imposed as an internal tax. There is nothing in the text of GATT Art. III:2 to suggest otherwise. This was also the conclusion of the 1970 Working Party on BTAs. It noted that GATT Art. III 'could not be interpreted as forbidding the application of taxes to products not domestically produced...'.<sup>56</sup>

In fact, it is not uncommon for excise taxes, value-added-taxes or other indirect taxes to be imposed on imported products in the absence of domestic like products.<sup>57</sup> Examples include specific excise taxes on tea, coffee and chocolate imposed by developed countries on importation of these products from tropical developing countries. Likewise, VATs are imposed on all imported products irrespective of whether like products are produced domestically or not. A differentiated tax on electricity (also if linked to the

<sup>&</sup>lt;sup>55</sup> The situation can however change in the future with the planned reconstruction of a natural gas power plant in Chavalon.

<sup>&</sup>lt;sup>56</sup> GATT, Report by the Working Party on Border Tax Adjustments, L/3464, 2 December 1970, BISD 18S/97, para. 32.

<sup>&</sup>lt;sup>57</sup> K. Holzer, Carbon-related Border Adjustment and WTO Law (Edward Elgar, 2014), pp. 74-75.

 $CO_2$  content as discussed below) has all the characteristics of an excise tax: it is a tax eventually paid by consumers on the purchase or consumption of the product (electricity).

In the absence of like domestic production, a tax which would be imposed on imported fossil fuel electricity would still fall under GATT Art. III:2 as an internal tax and not under GATT Art. II:1(b) as an import duty (tariff) under conditions discussed below. The Appellate Body (AB) in *India* – *Additional Import Duties* found that 'if a charge satisfies the conditions of Art. II:2(a), it would not result in a violation of Art. II:1(b)'.<sup>58</sup> It should be noted that GATT Art. II:2(a) refers to GATT Art. III:2 and allows, in addition to an import duty, the imposition of a non-discriminatory domestic tax on imported products consistent with GATT Art. III:2, i.e. in a nondiscriminatory manner.

However, the current situation in Switzerland is not characterised by the complete absence of domestic production of fossil fuel electricity. In order to qualify as a tax rather than a tariff, the emolument must also apply to domestically produced electricity from fossil fuels, including the electricity which may in future be produced in new fossil fuel power plants, such as the one planned on the Chavalon site. The India - Additional Import Duties dispute provides a good illustration in this regard. In that dispute, the panel and the AB had to distinguish between border tax adjustments compliant with GATT Articles II:2(a) and III:2 and import duties in excess of bound tariffs in violation of GATT Art. II:1(b).<sup>59</sup> The US, as a complainant, insisted that additional and extra-additional import duties imposed by India fell under Art. II:1 and were in violation of this provision since they were in excess of bound tariffs. In response, India argued that these fiscal measures fell under GATT Articles II:2(a) and III:2 because they were 'levied in lieu of state excise duties imposed in respect of like alcoholic beverages produced or manufactured in the state imposing the duty', and also 'to counterbalance sales taxes, VAT and other local taxes

<sup>&</sup>lt;sup>58</sup> India – Additional Import Duties, AB Report, para 153.

<sup>&</sup>lt;sup>59</sup> The subject of the dispute was the additional duties imposed by India on imports of alcoholic beverages and extraadditional duties imposed by India on imports of alcoholic beverages and some agricultural and industrial products, including milk, raisins, orange juice and calculating and processing machines.

and charges'.<sup>60</sup> The main question that the panel and the AB asked when deciding whether the measures could qualify as internal taxes was whether they were also applied to existing like domestic products. Since the measures were not imposed on the existing like domestic products, the panel and the AB could not put them in the category of BTAs imposed on imported products in addition to import duties. Instead, they considered them to be import duties that were imposed on imported products in excess of bound tariffs and thus in violation of GATT Art. II:1 (b).

In conclusion, in the absence of domestic production, the imposition of a tax on fossil fuel electricity leading to the situation where the tax burden would fall entirely on imported fossil fuel electricity is in principle acceptable under WTO rules so long as this means that there would be no like domestic electricity generated from fossil fuels receiving a more favourable treatment.<sup>61</sup> Yet, considering that at present Switzerland does generate some fossil fuel electricity and that it plans to expand this production in the future, the imposition of a tax only on imported fossil fuel electricity runs the risk of violating the national treatment rule, while also being difficult to defend under Art. XX GATT.

#### b) Implementation hurdles associated with the use of GOs

The imposition of a tax on imported electricity generated from fossil fuels faces the problem of tracing the source of electricity which cannot be resolved through the use of the GO system currently in place in the EU. While the Swiss GO system accounts for different sources of electricity, including fossil fuel sources, GOs are usually used in EU member states to trace only renewable sources of electricity. Hence, to tax imported fossil fuel electricity would require the upgrading of the current EU GO system to include information on all sources of electricity. If this were done, it

<sup>&</sup>lt;sup>60</sup> India-Additional Import Duties, AB Report, para 4.

<sup>&</sup>lt;sup>61</sup> It is important to note that this conclusion is only valid under the third scenario of the like products analysis of grey and green electricity, i.e. where grey and green electricity are found to be unlike products. Under the first and second scenarios of the assessment of likeness, where grey and green electricity qualify as like products or products directly competitive or substitutable, an application of a tax only to imported fossil fuel electricity would result in a violation of the NT rule, as the taxed imported grey electricity would be treated less favourably than the not-taxed like or directly competitive green domestic electricity. Under these scenarios, a tax on fossil fuel electricity would need to be justified under the environmental exceptions of GATT Art. XX, along the lines of argument described in Legal Opinion on Differentiated Electricity Taxation.

would also be possible to further differentiate a tax treatment to include electricity generated from nuclear sources.

# c) Accounting for the emissions costs paid by producers of imported fossil fuel-generated electricity under EU ETS

A further question relates to the fact that – to the extent that the grey electricity imported by Switzerland comes from EU Member States - EU power generators are under the obligation to comply with the EU Emission Trading Scheme (EU ETS).<sup>62</sup> This means that the EU producers of fossilfuel-generated electricity are domestically required to buy and surrender annually emissions allowances up to the amount necessary to cover the number of tonnes of carbon emitted in each previous year. In other words, they are already subject to a financial burden whose aim coincides with the rationale for imposing the tax on grey electricity imported to Switzerland, i.e. to internalize the negative environmental externalities associated with burning fossil fuels in the course of electricity generation and thus to disincentivise fossil-fuel-generated forms of electricity production. The question then arises whether grey electricity coming into Switzerland from EU power generators participating in the EU ETS could still be legitimately subjected to a Swiss tax on fossil-fuel-generated electricity or whether such a tax would have to be somehow readjusted (i.e. reduced or even exempted) in order to take into account the EU ETS costs component already borne by EU electricity producers.

There is no precedent in WTO law to suggest that a state may have to take into account the effects of a foreign ETS when imposing a tax on the import of electricity. Moreover, it must be borne in mind that, even under EU law, electricity producers are not exempt from taxation simply because they bear the costs of ETS allowances.

An assessment under WTO law primarily depends on whether the imposition of a full tax on grey electricity covered by the EU ETS could be claimed to reveal a protectionist intent (i.e. in the absence of fossil fuel electricity production in Switzerland, the mere discouragement of cheap

<sup>&</sup>lt;sup>62</sup> For an overall overview of the EU cap-and-trade scheme, see: http://ec.europa.eu/clima/policies/ets/index\_en.htm (last visited on 25.05.2014).

imports of grey electricity could look like surreptitious support for more expensive forms of green electricity produced domestically). This could impair justification under Art. XX GATT, as arbitrary discrimination cannot be justified under the chapeau.<sup>63</sup> When considering this possibility, however, two elements should be kept in mind. First, the CO<sub>2</sub> allowances bought by operators of electricity installations covered by the EU ETS impose a certain price per tonne of CO<sub>2</sub> emissions. Accordingly, to the extent that the tax imposed on fossil fuel-generated electricity in Switzerland would not be per se designed as a carbon tax but as an electricity tax expressed in terms of a certain amount per kWh, the equivalence between the two types of measures would not be immediate. The only way for the two measures to become comparable would be to determine and attribute a certain amount of CO<sub>2</sub> emissions per kWh of electricity.<sup>64</sup> However, depending on the technology used, varying amounts of CO<sub>2</sub> emissions would be released into the atmosphere by different power stations, and differences would also occur within different installations using the same fossil fuel.<sup>65</sup> Although, as from 2013, power stations must buy all their allowances in order to cover each tonne of  $CO_2$  emitted in the previous year, quite often the installations covered by the EU ETS, and especially the power stations, have benefited from free allowances granted by the governments during the previous phases of the EU ETS and have thus accumulated a vast reserve of surplus allowances.<sup>66</sup> This circumstance has determined, on the

<sup>&</sup>lt;sup>63</sup> For the requirements of chapeau of Art. XX GATT see Legal Opinion on Differentiated Electricity Taxation, fn.8 above.

<sup>&</sup>lt;sup>64</sup> It should be noted that estimates of CO2 emissions from fuel combustion have been calculated by the International Energy Agency (IEA) using the IEA energy balances and the default methods and emission factors from the Revised 1996 IPCC Guidelines for National Greenhouse Gas Inventories. States are also required to submit this estimates to the UNFCCC based on the same guidelines. However, not only IEA estimated and national estimates do often differ, but they are average estimates of the CO2 emissions per each fuel combustion per country. IEA (2012), CO2 Emissions from Fuel Combustion. Viewed at: http://www.iea.org/co2highlights/co2highlights.pdf (Accessed 15 June 2014). For the implications of setting a flat rate of CO2 emissions/kWh of each type of fossil fuel-generated electricity see footnote 65.

<sup>&</sup>lt;sup>65</sup> Hence, the Swiss authorities would have two different options: (i) they could set a flat rate of CO2 emissions/kWh of each type of fossil fuel-generated electricity based on different guiding criteria (i.e. one for gas-generated electricity, one for coal-generated electricity, etc.); (ii) they could differentiate such rate on a case-by-case basis. In the former case, on the one hand, there could be problems of discrimination as the flat rate could put the installations running under the best available technology at a disadvantage; on the other hand, the choice of best available technology criterion would risk not to ensure the level of environmental protection which Switzerland aims to achieve by placing its own level of internal taxation. The latter solution would be realistically difficult to administer and not immune from WTO-compatibility problems. (See fn. Error! Bookmark not defined, below).

<sup>&</sup>lt;sup>66</sup> K. Neuhoff et al., *Baking of Surplus Emissions Allowances*, German Institute for Economic Research, 2012, available at http://www.diw.de/documents/publikationen/73/diw\_01.c.394484.de/dp1196.pdf (last visited on 25.05.2014).

one hand, the shrinkage of  $CO_2$  allowances in the EU market<sup>67</sup> and, on the other hand, increased the flexibility of power generators to resort to their own reserve to cover the need for extra allowances instead of buying them on the market.<sup>68</sup> Hence, it would be even harder to determine what exactly was the price imposed on imported grey electricity as a result of its inclusion in the EU ETS for the purposes of assessing whether it has already been "taxed" sufficiently (i.e. at a rate which corresponds to the level of environmental protection sought by Switzerland) before entering Switzerland.

For these reasons, even if the  $CO_2$  price paid by EU operators of power stations under the ETS could be somehow converted into a comparable "kWh tax unit", too many variables seem to prevent such an exercise from ultimately providing an accurate and reliable estimate of the price per kWh borne by grey electricity imported into Switzerland as a result of its inclusion in the EU ETS.<sup>69</sup> It is therefore unlikely that the taxation of imported grey electricity could be successfully contested before the WTO dispute settlement bodies on the basis that EU generators of grey electricity already pay a price as a result of their inclusion in the EU ETS. Apart from the burdensome technicalities inherent in constructing a methodology aimed at determining the EU ETS price component to be taken into account for the purposes of re-modulating the Swiss level of taxation on imported grey electricity, there is a strong chance that it would result in an overestimation of the CO<sub>2</sub> price borne by EU grey electricity generators in the EU ETS, thus limiting the environmental benefit which constitutes the very rationale upon which such taxation is based.

<sup>&</sup>lt;sup>67</sup> Ibid.

<sup>68</sup> Ibid.

<sup>&</sup>lt;sup>69</sup> To solve this problem, the producer/supplier could be left free to demonstrate on a case-by-case basis whether he would be entitled to a tax reduction for the grey electricity imported into Switzerland based on the proved cost incurred to for the production of that volume of electricity as a result of the inclusion in the ETS. However, even in that case, additional WTO compatibility issues would arise out of the additional burden on Swiss suppliers for the part of grey electricity imported from abroad. As mentioned in our previous legal opinion, given the broad interpretation of the term "restriction" on the importation embraced by the WTO dispute settlement bodies, nothing excludes that, based on the inherent difficulties in proving the price paid per kWh by grey electricity producers importing into Switzerland as a result of the inclusion into the EU ETS, such requirement could be considered to run afoul of Art. XI:1 GATT. See fn. 8 above, Legal Opinion of Differentiated Electricity Differentiation, section 4.1.4 b) for a discussion of the case-law on Art. XI:1 GATT and also section 4.2.4c) for an application of the case-law.

Finally, it is also worth noting that a vast body of literature has analysed the extent to which the economic burden imposed on installations covered by the EU ETS (i.e. the price of CO<sub>2</sub> allowances bought on the market) could be considered a "tax" for the purposes of WTO law. No clear answer, however, has been reached.<sup>70</sup> Hence, there is even a possibility that the comparability between the two instruments for the sake of elaborating guiding criteria to fully or partially exempt EU power generators from a Swiss tax on grey electricity would not even be found to be possible.<sup>71</sup>

In conclusion, if Switzerland imposes a tax within the context of a general scheme of differentiated electricity taxation, the chances are slim that it could be challenged based on the fact that the EU ETS already imposes a  $CO_2$  price on covered installations. In the case that such tax is construed as a  $CO_2$  levy, this aspect would have different implications (see section 3.1.2 below).

## 4.1.2 Tax on the CO<sub>2</sub> content of electricity

As was discussed in the Legal Opinion on BTAs (Ecoplan 2013),<sup>72</sup> a carbon tax on electricity, if introduced in Switzerland, could be extended to imported electricity as a border tax adjustment (BTA) measure within the meaning of GATT Articles II:2(a), III:2 and Ad Art. III. Possible violations of non-discrimination rules resulting from the PPM nature of the tax (the fact that it is levied on emissions that occurred during the production process) could in principle be justified under the environmental exceptions

<sup>&</sup>lt;sup>70</sup> J De Cendra, 'Can Emissions Trading Schemes be Coupled with Border Tax Adjustments? An Analysis vis-à-vis WTO Law' (2006) 15(2) RECIEL 131, p. 136; J Pauwelyn, 'U.S. Federal Climate Policy and Competitiveness Concerns: the Limits and Options of International Trade Law' (2007) Nicholas Institute for Environmental Policy Solutions Working Paper, pp. 21-22; R Ismer and K Neuhoff, 'International Cooperation to Limit the Use of Border Adjustment' Workshop summary (Workshop convened by *Climate Strategies*, South Center, Geneva, 10 September 2008), p. 9; C McLure, 'The GATT-Legality of Border Adjustments for Carbon Taxes and the Cost of Emissions Permits: a Riddle, Wrapped in a Mystery, Inside an Enigma' (2011) 11 Fla. Tax Rev. 221 286; R Ismer, 'Mitigating Climate Change Through Price Instruments: An Overview of the Legal Issues in a World of Unequal Carbon Prices' in C Herrmann and J Terhechte (eds), *European Yearbook of International Economic Law* (Berlin: Springer-Verlag 2010), pp. 220-221; The Inclusion of Aviation in the EU ETS: WTO Law Considerations' (2011) ICTSD Global Platform on Climate Change, Trade and Sustainable Energy Issue Paper no. 6, p. 4; Hufbauer G, Charnovitz S and Kim J, *Global Warming and the World Trading System* (Washington DC: Peterson Institute for International Economics 2009), p. 69.

<sup>&</sup>lt;sup>71</sup> Along with a whole body of literature supporting the conclusion that an emissions allowance requirement must be considered to be a non-fiscal measure (i.e. a regulation), it is noteworthy that the European Union Court of Justice has also recently expressed a similar view in the preliminary ruling concerning the ECJ Case C-366/10, Air Transport Association of America and others v. Secretary of State for Energy and Climate Change [2011], see paras 142-144, 147.

<sup>&</sup>lt;sup>72</sup> Ecoplan et al. (2013), Border Tax Adjustments: Can energy and carbon taxes be adjusted at the border?, available at http://www.efv.admin.ch/e/downloads/finanzpolitik\_grundlagen/els/Ecoplan\_2013\_e.pdf.

of the GATT.<sup>73</sup> The problem, however, would arise at the implementation stage when the determination of the adjustment level (i.e. tax rate imposed on imported electricity) would require tracing emissions in electricity. For instance, electricity of different origin generated from coal would have different emissions footprints depending on the technology used at coal-fired power plants (e.g. whether plants are equipped with carbon capture and storage or not).<sup>74</sup> The criteria used for determining the tax rate for imported electricity are therefore the crucial factors influencing consistency of the tax with WTO law.

#### a) The relation to the CO<sub>2</sub> levy scheme currently in place in Switzerland

As was discussed in section 2.2, Swiss fossil fuel power plants are in principle subject to the CO<sub>2</sub> levy. However, in practice they benefit from a complex system of various exceptions. Therefore, it is questionable whether the imposition of the CO<sub>2</sub> levy on imported electricity under the present circumstances could constitute a BTA measure consistent with WTO rules (see Ecoplan, 2013). To legally implement a carbon BTA on electricity, a CO<sub>2</sub> levy in Switzerland should be levied on domestic fossil fuel power plants without exemptions. This would allow an import BTA on electricity even in the situation where only a small amount of electricity is produced from fossil fuels in Switzerland. In that case, the *de facto* discrimination effects of the heavier tax burden for imported electricity could be defended under GATT Art. XX.

# b) Accounting for the emissions costs paid by importers of fossil fuelgenerated electricity under the EU ETS

If a tax on fossil-fuel-generated electricity were designed on the basis of the carbon content, the similarity of the measure to the charges paid by electricity generators for emissions allowances under the EU ETS would be greater. Therefore, it would be more difficult to disregard the fact that

<sup>&</sup>lt;sup>73</sup> Ecoplan et al. (2013), Border Tax Adjustments: Can energy and carbon taxes be adjusted at the border?, pp. 86-87, 96-97, 100-105.

<sup>&</sup>lt;sup>74</sup> For an overview of legal issues arising from tracing emissions in final products, see K. Holzer, *Carbon-related Border Adjustment and WTO Law* (Edward Elgar, 2014), pp. 219-233.

EU power generators already bear the  $CO_2$  costs under the EU ETS and not to grant EU electricity imported into Switzerland an exemption from (or a reduction of) the Swiss  $CO_2$  levy. At the same time, it could be argued that the  $CO_2$  in Switzerland and the costs paid for emissions allowances under the EU ETS are hardly comparable measures considering that the rate of the former is fixed by the government, whereas the rate of the latter is determined by the supply and demand forces of emissions trading (see section 3.1.1.c). Also, it can be argued that the current price of the EU emissions allowances does not sufficiently incorporate the environmental costs of  $CO_2$  emissions, at least not to the extent that the Swiss government intends to achieve through the imposition of a  $CO_2$  levy on electricity.

# c) Implementation hurdles associated with the use of the current Swiss and EU GO systems

The imposition of a  $CO_2$  levy on fossil fuel electricity faces the problem of tracing emissions which cannot be solved using the GO systems currently in place in Switzerland and the EU. While the Swiss GO system accounts for different sources of electricity, including fossil fuel sources, GOs are usually used in EU member states to trace renewable sources of electricity. Furthermore, neither the Swiss nor EU GO systems account for the  $CO_2$  content of electricity generation. Hence, to tax imported electricity on the basis of the  $CO_2$  content would require the upgrading of current GO systems to include information on emissions. Moreover, the  $CO_2$  levy on electricity would not allow for nuclear-generated electricity to be included in the scheme, as the generation of electricity from nuclear power is not associated with GHG emissions. Thus, with respect to nuclear electricity other measures should be considered, if there is a need to stimulate the phasing out of nuclear electricity in Switzerland.

#### 4.1.3 A charge on fossil-fuel-generated electricity designed as a tariff

#### a) Tariff differentiation as a climate change policy tool under the GATT

Switzerland may use a policy of tariff differentiation in relation to imports of electricity that would address concerns related to GHG emissions from burning fossil fuels and contribute to the goals of climate change.<sup>75</sup> In other words, Switzerland may introduce in its GATT Schedule of Concessions a distinction of electricity-related tariff lines for the purpose of differentiating the tariff treatment applied to imported electricity based upon PPM criteria.<sup>76</sup> This would imply that a tariff on RE electricity would be kept at the current zero rate of bound tariff whereas a tariff on nonrenewable electricity would be raised above zero, thus coming into conflict with the provision of Art. II:1(b) GATT.<sup>77</sup> Under the third scenario of the like products analysis of grey and green electricity, that is where grey and green electricity are found to be unlike products, such tariff differentiation would need no justification beyond the disciplines on tariff deconsolidation under GATT Art. XXVIII discussed below. However, should green electricity and fossil-fuel-generated forms of electricity be considered to be like products, Switzerland would need to defend a tariff differentiation based on PPMs by claiming that it is pursuing a legitimate public policy objective falling under the scope of one or more of the general exceptions recognized under Art. XX GATT. This would also presuppose that the existing FTA with the EU allows the introduction of new tariffs. As explained below, it is doubtful that this is the case.

Under this scenario, the first issue that arises is whether the GATT Art. XX exceptions apply to violations of Art. II GATT. So far, the WTO case law has not specifically addressed the question of the applicability of the general exceptions of Art. XX GATT to tariff rules of Art. II:1 (b) GATT.<sup>78</sup> Nevertheless, it could be argued that the language of the chapeau of Art. XX where it says that "nothing *in this Agreement* shall be construed to prevent the adoption or enforcement..." (emphasis added) of a whole range of public policy measures could be interpreted as to allow the applicability of Art. XX to every substantive rule under the GATT. The idea

<sup>&</sup>lt;sup>75</sup> Aerni et al., Climate Change and International Law: Exploring the Linkages between Human Rights, Environment, Trade and Investment, German Yearbook of International Law, 2010, vol. 53, at 164-166.

<sup>&</sup>lt;sup>76</sup> At present, Switzerland has included in its Schedule of concessions the commitment to bound to zero its tariff rate on electricity. However, under the HS used under WTO law electricity generally comes under the optional heading HS 2716.0089, without further distinctions between different sources of generation. See Legal Opinion on Differentiated Electricity Taxation, fn. 8 above, at 28.

According to Art. II:1 (b) GATT, a Member shall refrain from imposing ordinary custom duties or tariffs in excess to those set forth in its Schedule of concessions.

<sup>&</sup>lt;sup>78</sup> This is in contrast to a whole body of jurisprudence explicitly endorsing the availability of GATT general exceptions for violations of the national treatment principle by the application of taxes and domestic regulatory measures under Art. III GATT. See, for instance, US-Gasoline; US-Shrimps and Brazil-Retreaded Tyres.

that the general exceptions of the GATT "potentially appl[y] to all provisions of the Agreement, including those relating to tariffs in Art. II and Art. XXVIII GATT" has already received support in the literature within a more general framework of promoting the reconsideration of tariff policies as trade-related climate change instruments.<sup>79</sup>

Assuming that Art. XX GATT is in principle available as a defence for a tariff differentiation on imported electricity, various exceptions may be relevant to this end. In light of the underlying rationale of using tariffs as a tool for climate change mitigation, the immediate venue for justification of tariffs imposed in relation to the source of electricity, whether imposed in relation to the carbon footprint of fossil fuel-generated electricity (i.e. "carbon" tariff) or not,<sup>80</sup> are the health and/or environmental exceptions under Art. XX (b) and (g) GATT. The conditions for seeking justification under such exceptions were discussed in the Legal Opinion on Differentiated Electricity Taxation. One general conclusion reached in that document was that the health exception under Art. XX (b) is more convincing as a justification for differential treatment of RE electricity and nuclear electricity,<sup>81</sup> whereas Art. XX (g) could be more suitable for explaining differential treatment of RE electricity and fossil fuel-generated electricity.<sup>82</sup> In the case of tariff instruments, however, Art. XX (g) may entail an additional hurdle as it requires that a measure relating to the conservation of natural resources is taken "in conjunction with restrictions on domestic production or consumption". In this respect, the very fact that Switzerland would be imposing a tariff would per se exclude a similar type of instrument being applied to electricity produced internally. Accordingly, one option for Switzerland would be to put in place a differentiated electricity tax in parallel to a tariff on the source of fossil fuel electricity.<sup>83</sup> Alternatively, Switzerland could opt for the introduction of "carbon" tariffs on fossilfuel-generated electricity and claim that the existing Swiss legislation on

<sup>&</sup>lt;sup>79</sup> T Cottier, O Nartova and A Shingal, *The Potential of Tariff Policy for Climate Change Mitigation: Legal and Economic Analysis*, Journal of World Trade (2014), forthcoming.

<sup>&</sup>lt;sup>80</sup> Should the tariff differentiation be based on the carbon footprint of fossil fuel-generated electricity (i.e. a carbon tariff), it would be possible to also distinguish between different forms of grey electricity.

<sup>&</sup>lt;sup>81</sup> See fn. 8 above, at 35.

<sup>&</sup>lt;sup>82</sup> *Ibid*, at 36.

<sup>&</sup>lt;sup>83</sup> The co-existence of such instruments would be legal under GATT rules as discussed in section b) below.

the  $CO_2$  levy and the emissions trading system could qualify under the even-handedness requirement imposed by Art. XX(g) GATT.<sup>84</sup>

Another potential avenue for justification could be Art. XX (d) GATT. Under this exception, Switzerland could justify measures "necessary to secure compliance with law or regulations that are not inconsistent with the provisions of [the GATT]...". According to WTO jurisprudence in order to sustain an Art. XX (d) defence two prerequisites must be met: (i) the measure must be designed to "secure compliance" with "laws or regulations" that are "not inconsistent" with WTO law; (ii) the measure must be "necessary" to secure such compliance.<sup>85</sup> With regard to the first element, Switzerland would need to identify the law or regulations with which the imposition of tariffs on grey electricity seeks to secure compliance. As a climate change rationale ultimately subsumes the differentiation between RE and non-RE electricity tariff treatment, Switzerland could in principle present supporting evidence that the application of a tariff on nonrenewable forms of electricity is meant to secure compliance with the CO<sub>2</sub> Act or any eventual piece of legislation aimed at establishing a differentiated electricity tax.<sup>86</sup> Importantly, the domestic measure invoked must firstly not in itself be GATT-inconsistent. In Colombia - Ports of Entry the Panel opined that the fact that one provision in a country's regulation is WTO-inconsistent does not necessarily mean that any or all of the provisions are incompatible as well and therefore considered this requirement to be satisfied notwithstanding the fact that several provisions of the measure at issue were WTO incompatible.87

<sup>&</sup>lt;sup>84</sup> In principle, the argument could also be made that the existing system of CO<sub>2</sub> taxation and/or the Swiss ETS could represent proof of fulfilment of the even-handedness requirement also if Switzerland decided to apply a tariff based on the source of fossil fuel electricity. Such a tariff differentiation policy would ultimately aim at discouraging grey forms of electricity for climate change purposes. For the existence of the territorial nexus required by Art. XX GATT, see Legal Opinion on Differentiated Electricity Taxation, fn. 8 above, at 36.

<sup>&</sup>lt;sup>85</sup> Thailand – Customs and Fiscal Measures on Cigarettes from the Philippines, Panel Report, WT/DS371/R, circulated on 15 November 2010, paras 7.749-758.

<sup>&</sup>lt;sup>86</sup> The WTO case law is in fact clear with respect to the possibility of invoking *national* law or regulations only. In *Mexico – Taxes on Soft Drinks*, in particular, the Panel elaborated on this point and clarified that the use of the terms "law" or "regulations" in the GATT Agreement "relate principally to domestic rules" and not to obligations under international agreements". Moreover, it opined that the phrase "to secure compliance" does not apply to measures taken by a Member in order to induce another Member to comply with obligations owed to it under a non-WTO treaty". See paras 8.162-204. Hence, Switzerland could in no way invoke the existence of either its own or other countries' international commitments on emission reduction targets undertaken within the UNFCCC regime.

<sup>&</sup>lt;sup>87</sup> Colombia – Ports of Entry, Panel Report, paras 7.526-532.

Second, the tariff differentiation must be proved to "enforce compliance" with such domestic legislation,<sup>88</sup> thus effectively securing the attainment of its objectives.<sup>89</sup> This requirement relates to the second element imposed by Art. XX (d) GATT, i.e. the measure must be "necessary" to the enforcement of a law or regulation. The necessity test under Art. XX (d) has been interpreted by WTO dispute settlement bodies similarly to that under Art. XX (b) GATT. In other words, for a measure to be deemed necessary, there must be no alternative, less restrictive, measure available which can equally achieve the same level of enforcement with respect to the pursued objective.<sup>90</sup> In this respect, although it is not clear whether tariffs on nonrenewable forms of electricity can be considered to be the least restrictive available measure, the fact that the tariff is applied to address important public interests may influence a decision under the necessity test. WTO case law on Art. XX (d) recognizes that "a treaty interpreter assessing a measure claimed to be necessary to secure compliance of a WTOconsistent law or regulation may, in appropriate cases, take into account the relative importance of the common interests or values that the law or regulation to be enforced is intended to protect. The more vital or important those common interests or values are, the easier it would be to accept as 'necessary' a measure designed as an enforcement instrument".<sup>91</sup> Hence, the goal of reducing greenhouse gas emissions for the purposes of climate change mitigation is likely to be considered a "vital" interest appropriate to locate a tariff on fossil-fuel-generated electricity "closer to the pole of 'indispensable' than to the opposite pole of simply 'making a contribution to",<sup>92</sup> thus qualifying it as "necessary" within the meaning of Art. XX (d) GATT.

Finally, it should be recalled that once a differentiated tariff is provisionally justified under one of the above-mentioned general exceptions under Art. XX GATT, it would also have to satisfy the conditions of the chapeau

<sup>&</sup>lt;sup>88</sup> See Mexico – Taxes on Soft Drinks, Panel Report, paras 8.170-181.

<sup>&</sup>lt;sup>89</sup> In *Canada – Periodicals*, in particular, the Panel clarified that a measure cannot be regarded as an enforcement measure within the meaning of the phrase "to secure compliance" under Art. XX (d) GATT only because it may accomplish some of the goals of the relevant domestic "law or regulation" as a mere "incidental effect". See Panel Report paras 5.6-11.

<sup>&</sup>lt;sup>90</sup> See Korea – Beef, AB Report, paras 159-170; Dominican Republic – Cigarettes, Panel Report, paras 7.203-232.

<sup>&</sup>lt;sup>91</sup> Korea - Beef, AB Report, cit., paras 162-3; see also Canada - Wheat, Panel Report, paras 6.220-251.

<sup>&</sup>lt;sup>92</sup> Korea – Beef, AB Report, cit., para. 161.

of Art. XX. The requirements imposed by the chapeau have been examined in detail in the Legal Opinion on Differentiated Electricity Taxation.<sup>93</sup> Very recently, the AB discussed at length the implications of the analysis under the chapeau. 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".<sup>94</sup> Moreover, it specified that "only 'conditions' that are *relevant* for the purpose of establishing arbitrary or unjustifiable discrimination in the light of the specific character of the measure at issue and the circumstances of a particular case should be considered ...".<sup>95</sup> Accordingly, it opined that "in conducting this assessment, the subparagraph under which a measure has been provisionally justified, as well as the provision of the GATT with which a measure has been found to be inconsistent, provide important context".<sup>96</sup> It thus concluded that "the question is thus whether the conditions prevailing in different countries are *relevantly* the same".<sup>97</sup>

On the basis of this recent AB ruling, Switzerland would thus need to show 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". In this respect, it seems likely that Switzerland could not successfully rely on the existence of a domestic ETS since the EU has a similar system in place in its territory. However, the existence of an advanced  $CO_2$  levy system or of a comprehensive scheme of differentiated taxation according to the source of electricity could be considered as important elements to show that "conditions" in Switzerland and the EU are relevantly different with respect to the pursued objective of GHG emission reductions for climate change mitigation purposes.

Finally, GATT Art. XXVIII allows WTO members to modify their tariff concessions. However, when considering tariffs as a policy option for electricity, it should be kept in mind that import duties may be increased be-

<sup>&</sup>lt;sup>93</sup> See fn. 8 above, at 36-37.

<sup>&</sup>lt;sup>94</sup> EC – Seals Products, AB Report, para. 5.317.

<sup>&</sup>lt;sup>95</sup> *Ibid*, para. 5.299 (emphasis not added).

<sup>&</sup>lt;sup>96</sup> *Ibid*, para. 5.317.

<sup>&</sup>lt;sup>97</sup> *Ibid*, para. 5.299 (emphasis not added).

yond the bound tariff rates only after the deconsolidation of bound tariffs. Even if a deconsolidation were compatible with the Switzerland–EEC 1972 FTA, it presupposes prior consultations with a subset of those WTO members that hold initial negotiating rights and have the principle supplying interests or substantial interests.<sup>98</sup> The agreement with these WTO members would normally be linked to compensation by Switzerland so that overall levels of access to the Swiss market could be maintained. Should this agreement fail, Switzerland would still be free to raise tariffs unilaterally, although this would risk retaliation from EU member states, which could withdraw equivalent concessions in the same or other sectors.<sup>99</sup>

## b) The relationship between a tariff on fossil fuel electricity and a differentiated electricity tax

The application of a tariff to fossil fuel electricity raises the question of whether the tariff could be applied in parallel to a differentiated electricity tax system as discussed in section 3.1.1. The answer to this question requires an analysis of the relationship between a customs duty (tariff) and an internal tax imposed on imports or a BTA.<sup>100</sup>

The difference between tariffs (customs duties) as defined by GATT Art. II:1(b) and internal taxes applied to imports as defined by GATT Art. III:2 (and Ad Art. III) has been addressed in GATT/WTO jurisprudence. In the 1952 case *Belgian Family Allowances*, the Panel considered a levy collected on products purchased by public bodies and charged, not at the time of importation, but when the purchase price was paid by the public body to constitute an "internal charge" within the meaning of Art. III:2 GATT and not an import charge for the purposes of Art. II:1 (b) GATT.<sup>101</sup> The 1978 Panel Report on *EEC – Measures on Animal Feed Proteins* considered the fact that the EEC regulation at issue applied to both imported and domestically produced vegetable proteins contributed to the conclusion that such a

<sup>&</sup>lt;sup>98</sup> See Understanding on the Interpretation of Art. XXVIII of GATT 1994.

<sup>&</sup>lt;sup>99</sup> Cottier, Nartova, and Shingal, at fn. 79 above.

<sup>&</sup>lt;sup>100</sup> A BTA is considered to be a charge enforced at the border under GATT Art. II:2(a), III:2 and Ad Art. III. See K. Holzer (2010), *Proposals on Carbon-Related Border Adjustments*, Carbon and Climate Law Review, 4(1), at 53-54.

<sup>&</sup>lt;sup>101</sup> G/32, adopted on 7 November 1952, 1S/59, para. 2.

measure could not be considered as a border measure under Art. II GATT, but should be examined as an internal measure within the meaning of Art. III:2 GATT.<sup>102</sup> In the 1985 Panel Report *Canada – Measures Affecting the Sale of Gold Coins*, the Panel excluded the possibility that a retail sales tax could fall under the scope of Art. II GATT when levied at the time of retail sale of goods within a territory, and not at the time of importation.<sup>103</sup>

The Panel Report on EEC – Regulation on Imports of Parts and Components recalled that "the distinction between import duties and internal charges is of fundamental importance because the General Agreement regulates ordinary customs duties, other import charges and internal taxes differently: the imposition of 'ordinary customs duties' for the purpose of protection is allowed unless they exceed tariff bindings; all other duties or charges of any kind imposed on or in connection with importation are in principle prohibited in respect of bound items (Art. II:1(b)). By contrast, internal taxes that discriminate against imported products are prohibited, whether or not the items concerned are bound (Art. III:2)".<sup>104</sup> Against this background, the Panel elaborated on whether the policy purpose of a charge is relevant to the issue of whether the charge is imposed in 'connection with importation' within the meaning of Art.II:1(b). It concluded that, according to the text of Art. II:1 (b) and Art. III:2, it "is not the policy purpose attributed to the charge but rather whether the charge is due on importation or at the time or point of importation or whether it is collected internally".<sup>105</sup> Furthermore, the Panel stated that, because "the policy purpose of charges is frequently difficult to determine objectively [...], [o]nly at the expense of creating substantial legal uncertainty could the policy purpose of a charge be considered to be relevant in determining whether the charge falls under Art. II:1(b) or Art. III:2".<sup>106</sup> Finally, the Panel excluded the possibility that the mere description or categorization of a charge under the domestic law of a contracting party is relevant to deter-

<sup>&</sup>lt;sup>102</sup> However, the Panel did not exclude in principle the possibility that a measure could be examined "both as internal measures under Art. III and border measures under Art. II". L/4599, adopted on 14 March 1978, 25S/49, 66-67, para. 4.15.

<sup>&</sup>lt;sup>103</sup> L/5863, unadopted, dated September 1985, para. 50.

<sup>&</sup>lt;sup>104</sup> L/6657, adopted on 16 May 1990, 37S/132,191-192, para.5.4.

<sup>&</sup>lt;sup>105</sup> *Ibid.*, para. 5.6.

<sup>&</sup>lt;sup>106</sup> *Ibid.*, para. 5.6.

mining whether it is subject to the requirements of Art. II or those of Art. III:2. To conclude otherwise, according to the Panel, would imply that "contracting parties could determine themselves which of these provisions would apply to their charges", ultimately running counter to "the basic objective underlying Articless II and III, namely that discrimination against products from other contracting parties should only take the form of ordinary customs duties imposed on or in connection with importation and not the form of internal taxes".<sup>107</sup>

Similarly, a report of a subcommittee at the Havana Conference stated that "the fact that ... charges are described as internal taxes in the laws of the importing country would not in itself have the effect of giving them the status of internal taxes...".<sup>108</sup> Thus, the term used for describing a particular measure does not determine whether the measure should be classified as a customs duty, internal tax or a BTA. Also the Harmonized Commodity Description and Coding System (the 'Harmonized System') of the World Customs Organization, which is used as a basis for countries' Schedules of Concessions cannot be considered a decisive factor for the differentiation between a customs duty and an internal tax.<sup>109</sup>

The difference between ordinary customs duties under first sentence of Art. II:1(b) and internal taxes or other internal charges under Art. III:2 was further clarified by the WTO jurisprudence. In *China – Auto Parts* the AB found that

"(T)he moment at which a charge is *collected* or *paid* is not determinative of whether it is an ordinary customs duty or an internal charge. Ordinary customs duties may be collected *after* the moment of importation, and internal charges may be collected at the moment of importation (footnote omitted). For a charge to constitute an ordinary customs duty, however, the *obligation* to pay it must accrue at the moment and by virtue of or, in the words of Art. II:1(b), 'on', importation".<sup>110</sup>

<sup>&</sup>lt;sup>107</sup> *Ibid.*, para. 5.7.

<sup>&</sup>lt;sup>108</sup> Havana Reports, at 62, para. 42.

<sup>&</sup>lt;sup>109</sup> China-Auto-Parts, AB Report, paras 155 and 163.

<sup>&</sup>lt;sup>110</sup> Ibid., para 158.

Thus, customs duties and internal taxes mainly differ with respect to the moment when the authority is entitled to impose the measure and when this measure must be complied with. Also important is whether the obligation to comply with a measure is determined by factors which are external or internal to the country concerned (is the obligation to comply with the measure triggered by the fact that a certain good is imported into the country or that it is put on sale or is reused in the country?).

"... (I)n examining the scope of application of Art. III:2, in relation to Art. II:1(b), first sentence, the time at which a charge is collected or paid is not decisive. ... (A) key indicator of whether a charge constitutes an "internal charge" within the meaning of Art. III:2 of the GATT 1994 is whether the obligation to pay such charge accrues because of an *internal* factor (e.g., because the product was *re-sold* internally or because the product was *used* internally), in the sense that such 'internal factor' occurs *after the importation* of the product of one Member into the territory of another Member...".<sup>111</sup>

In the China – Auto Parts case, the AB came to the conclusion that a charge could not be qualified as an import duty but could be qualified as an internal tax on the basis that the declaration of payment of a charge was made after motor vehicles were assembled on the market of China and not at the time when automobile parts were imported into China.<sup>112</sup> Applying the logic used by the AB in *China – Auto Parts*, we come to the conclusion that the imposition of a charge on fossil fuel electricity is driven by internal factors (selling electricity on the market of Switzerland), rather than by external factors (complying with a clearance procedure). Also the moment at which the obligation to pay a charge on fossil fuel electricity occurs does not seem to be the moment of importation, but rather the moment of selling electricity to the consumer on the Swiss internal market. Thus, the criteria for distinguishing between customs duties and internal taxes used by the AB in China - Auto Parts would put a charge on fossil fuel electricity into the category of internal taxes falling under GATT Art. III:2 and not under GATT Art. II:1(b). This is even more so if one considers that, ac-

<sup>&</sup>lt;sup>111</sup> *Ibid*, paras 162-163.

<sup>&</sup>lt;sup>112</sup> *Ibid*, para 173.

cording to previous jurisprudence, it is apparently difficult to argue that the rationale declaratorily attached to a measure could be relevant to determining whether a measure could be considered a tariff falling under the scope of Art. II:1 (b) or an internal tax or other internal charge within the meaning of Art. III:2.<sup>113</sup>

Finally, it should be mentioned that a fiscal measure imposed on fossil fuel electricity could not be considered to be a tariff and a tax at the same time. In *India – Additional Import Duties*, the AB noted that 'Art. II:2(a), subject to the conditions stated therein, exempts a charge from the coverage of Art. II:1(b)',<sup>114</sup> thus taking it under the scope of Art. III:2.

In conclusion, a tariff on fossil fuel electricity could be applied in parallel to the differentiated electricity tax system, which has been discussed in the Legal Opinion on Differentiated Electricity Taxation. In this respect, the existence of a domestic tax scheme that gives different treatment to domestically produced RE and non-renewable forms of electricity may increase the chances of successfully defending a tariff differentiation policy under Art. XX (d) and (g) GATT (see section 3.1.3 a).

# c) Implementation hurdles associated with tracing the source and the CO<sub>2</sub> content of electricity under the current EU GO system

If the tariff differentiation is based on the source of electricity, the GO system as currently implemented at the EU level could be useful only to the extent that the tariff policy aims at distinguishing between RE electricity and non-renewable forms of electricity. In this respect, Switzerland could in practical terms impose a tariff on the importation of all electricity flows not accompanied by a RE GO. This would include both nuclear electricity and different forms of fossil-fuel-generated electricity. The different treatment of nuclear electricity may in principle be defended under Art. XX (b) GATT<sup>115</sup> whereas, depending on the regime applied to internally produced electricity, justification for different tariff rates applied to fossil fuel electricity may be sought under Art. XX (d) or (g) GATT (see section 3.1.3 a).

<sup>&</sup>lt;sup>113</sup> See the Panel Report on *EEC – Regulation on Imports of Parts and Components*, paras. 5.5-5.8.

<sup>&</sup>lt;sup>114</sup> India-Additional Import Duties, AB Report, para 153.

<sup>&</sup>lt;sup>115</sup> See fn. 8, at 35.

However, this type of GO system would neither allow differential treatment between nuclear and fossil fuel-generated electricity, nor distinguishing between different forms of more or less polluting fossil-fuel-genereted electricity.

An alternative could be to adopt a "carbon" tariff. However, as already discussed in section 3.1.2.c, the GO system, as it currently exists in the EU, could not be used for tracing the  $CO_2$  content of different forms of non-renewable electricity, as already discussed in section 3.1.2.c. It is not clear whether nuclear electricity would need to be treated similarly to RE electricity under such a scheme, due to its carbon neutrality.

#### 4.1.4 Options for taxing imported nuclear electricity

The possibility of applying a differentiated tax rate for domestic and imported nuclear electricity, including the possibility to justify it under the general exceptions of Art. XX GATT, was analysed in the Legal Opinion on Differentiated Electricity Taxation.<sup>116</sup> In this subsection, we look into the possibility of applying a tax solely on imported nuclear electricity.

The conditions to be taken into account for legal assessment are different to those relating to the application of a tax on imported fossil fuel electricity. Switzerland produces a considerable amount of electricity from nuclear sources. The application of a tax solely on imported nuclear electricity would imply a violation of the national treatment rule, in so far as domestic nuclear electricity enjoys a more favourable treatment. Against this backdrop, the previously discussed design options for implementing a tax on imported fossil fuel electricity would have the following implications when applied to imported nuclear electricity. Under the first option, an electricity tax would be linked to the source of electricity, targeting nuclear electricity generation. In this case the chances that nuclear electricity would be considered to be an unlike product to fossil fuel and RE electricity are slim. Imposing a tax only on nuclear electricity would require justification under Art. XX (as a measure necessary to protect public health and, possibly, also related to environmental risks). Yet, the imposition of a tax only on imported nuclear electricity where the same risks are associat-

<sup>&</sup>lt;sup>116</sup> See fn. 8.

ed with domestic production would prevent the successful defence of the measure under Art. XX. That would imply that a tax should equally apply to both domestic and imported nuclear electricity. Moreover, this design option faces the same problem of tracing the source of imported electricity as discussed in section 3.1.1.

The second option cannot be applied to nuclear electricity taxation, as it is based on the  $CO_2$  content of electricity, whereas nuclear electricity is  $CO_2$  neutral.

The instrument of import tariffs under the third option faces legal constraints when applied to nuclear electricity. Deconsolidation of bound tariffs for nuclear electricity could in principle be done under Article XXVIII GATT subject to compensation and the introduction of process based distinctions in the tariff classification. Yet, in the European context, deconsolidation faces main obstacles within the Switzerland-EEC 1972 FTA which does not provide for this option.

In conclusion, in light of the legal issues associated with the existence of domestic nuclear power generation in Switzerland, nuclear electricity should be taxed within the framework of a comprehensive differentiated electricity tax scheme equally applicable to both domestic and imported electricity, such as the one discussed in the Legal Opinion on Differentiated electricity Taxation.

# 4.1.5 Taxation of imported electricity and subsidies disciplines under WTO law

Some of the options for differentiated taxation of imported electricity mentioned above may raise questions in relation to their compatibility with WTO disciplines on subsidies. A detailed analysis of the respective legal background has been provided in the Legal Opinion on Differentiated Electricity Taxation<sup>117</sup> and therefore only a short compatibility analysis is provided here.

It should be noted at the outset that the question of subsidies will arise only if energy tax or a  $CO_2$  tax is applied only to imported electricity from fos-

<sup>&</sup>lt;sup>117</sup> See fn.8, at p. 36 et seqq.

sil fuels and nuclear power. In this case, the tax scheme will have to be scrutinized under a four-step test.<sup>118</sup> First, it is necessary to determine whether there is a financial contribution by the government or any public body. Given the language of Art. 1.1(a)(ii) ASCM, financial contribution includes fiscal incentives where government revenue, which is otherwise due is foregone. It is generally recognized that the notion of "otherwise due" depends on the rules of taxation that the WTO member established. In order to identify what is in fact "due" in Switzerland the panel will have to analyse the energy/CO<sub>2</sub> levy on imported electricity based on three criteria:

- 1. Comparison between the tax treatment applicable to the alleged subsidy recipients (the objective reason behind the differential treatment should be taken into consideration);
- 2. Benchmark for comparison tax treatment of comparable income of comparably situated taxpayers, whereas structure of domestic tax regime and its organizing principles play an important role;
- 3. Comparing reasons for the challenged tax treatment with the benchmark tax treatment.<sup>119</sup>

In a case with a different energy tax on imported electricity from that imposed on fossil fuels it is very probable that the element of financial contribution will be established. The same is true for the  $CO_2$  tax on imported electricity, as the large fossil-fuel power plants in Switzerland are subject to a 100% compensation obligation, and mid-scale fossil-fuel power plants are subject to the Swiss ETS, and therefore the  $CO_2$  tax is reimbursed to them.

The second element that has to be analysed is whether the financial contribution confers a benefit to the Swiss electricity producers. Similarly to the conclusions in the Legal Opinion on Differentiated Electricity Taxation<sup>120</sup> and based on the same arguments we would suggest that the finding of a benefit conferred by a differential tax would depend on the magnitude of

<sup>&</sup>lt;sup>118</sup> Art. 1 and 2 ASCM.

<sup>&</sup>lt;sup>119</sup> Appellate Body Report, US – Large Civil Aircraft (2<sup>nd</sup> Complaint), supra, para. 831.

<sup>&</sup>lt;sup>120</sup> See fn. 8, at p. 40-41.

the difference between the tax rate on imported electricity from fossil fuels in light of the capital costs of green electricity production.

The third element, namely the specificity of the subsidy has a high probability of being met.

Finally, similarly to our conclusions for Options B and C in the Legal Opinion on Differentiated Electricity Taxation<sup>121</sup> the last key element of the analysis is the determination of a possible adverse effect. The latter would have place if a future taxation scheme would lead to significant sales losses or significant price suppression of the imported electricity, or to displacement or impedance of imports of such electricity. The exact answer to the question of compatibility would depend on the specific modalities of the measure.

# 4.2 EU law

# 4.2.1 Compatibility of an import tariff with EU law

The conditions governing tariffs on imports from a non-EU country into the EU are in principle subject to multilateral trade rules, such as in particular the above-mentioned WTO and GATT rules, and bilateral trade arrangements, such as the Switzerland–EEC 1972 FTA.

Meanwhile, trade between the EU member states is governed exclusively by the rules of the EU legal order. Arts. 28 and 30 of the Treaty on the Functioning of the European Union (TFEU) are among the main cornerstones of the relevant EU legal framework. Whilst Art. 28 TFEU establishes the principle of the creation of a customs union, Art. 30 TFEU prohibits all customs duties on imports and exports and charges having equivalent effect between EU member states. Accordingly, the introduction of a new tariff on trade in electricity between EU member states would be considered incompatible with the very essence of the EU rules concerning the creation of a customs union and an internal market, irrespective of the objectives pursued by the tax measure.

<sup>&</sup>lt;sup>121</sup> See fn. 8, at p. 61.

Art. 30 TFEU does not only provide for the abolition of custom duties, but also of charges having equivalent effect. For the purposes of this provision, a charge having equivalent effect is a pecuniary charge, other than a custom duty, which is levied on goods exported from another EU member state by reason of the fact that the goods cross the border, irrespective of the denomination used to describe the charge under consideration, the level of the charge, or the manner by which the charge is levied.<sup>122</sup> Moreover, a pecuniary charge is characterised by the fact that it is either not imposed in the same way on similar or comparable domestic products, or it does not fall, in the absence of such products, within the framework of general internal taxation. Neither is it intended to compensate for such internal taxation.<sup>123</sup> Otherwise, the charge may be considered a tax measure and different rules apply. If the pecuniary charge meets these conditions it must be abolished and it is irrelevant whether or not the charge is levied for the benefit of the State, is discriminatory or protective or the good is in competition with a domestic good.<sup>124</sup>

For these reasons, it would not be possible to impose a custom duty or a charge having equivalent effect on the trade with electricity from fossil fuels between EU member states. This is because the EU is based on a customs union.

## 4.2.2 Compatibility of a levy with EU law

#### a) Obligations flowing from harmonised tax rules

The introduction by a member state of the EU of an environmentally related levy on electricity generated from fossil fuels, by contrast, is in principle possible. This is an area which has been the object of several harmonization measures:

<sup>&</sup>lt;sup>122</sup> ECJ, Judgment of 5 February 1976, Case 87/75, Conceria Daniele Bresciani, ECR 1976 129, para. 9; see also Seiler in: Grabitz/Hilf/Nettesheim, Das Recht der Europäischen Union, Art. 110 TFEU, para. 19 seq.; Herrmann in: Grabitz/Hilf/Nettesheim, op. cit., Art. 30 TFEU, para. 9.

<sup>&</sup>lt;sup>123</sup> ECJ, Judgment of 1st July 1969, Commission/Republic of Italy, Case 24/68, ECR 1969 193, para. 11.

<sup>&</sup>lt;sup>124</sup> ECJ, Judgment of 1st July 1969, Commission/Republic of Italy, Case 24/68, ECR 1969 193, para. 9.

- Art. 1 (1) (a) of Council Directive 2008/118/EC of 16 December 2008 concerning the general arrangements for excise duties and repealing Directive 92/12/EEC<sup>125</sup> lays down general rules concerning excise duties which are levied either directly or indirectly on the consumption of energy products and electricity.
- Directive 2008/118/EC refers to Council Directive 2003/96/EC of 27 October 2003 restructuring the Community framework for the taxation of energy products and electricity,<sup>126</sup> which introduces certain minimum taxation levels, as already mentioned in our previous legal opinion concerning a differential energy tax. According to Art. 15 (1) b, c and d of the Directive, Member States may apply under fiscal control total or partial exemptions or reductions in the level of taxation among other things to electricity, which is either of solar, wind, wave, tidal or geothermal origin; of hydraulic origin produced in hydroelectric installations; generated from biomass or from products produced from biomass; generated from methane emitted by abandoned coalmines; or generated from fuel cells. The exemptions or reductions may furthermore be applied to energy products and electricity used for combined heat and power generation and under certain circumstances to electricity produced from combined heat and power generation. The tax reduction or exemption may also be implemented by means of a refund of the tax paid by the user to the energy producer, by virtue to Art. 15 (2) of the Directive. Furthermore, Art. 14 (1) (a) of Directive 2003/96/EC introduces the principle of an "output taxation", according to which "energy products and electricity used to produce electricity and electricity used to maintain the ability to produce electricity" shall as a rule be exempt from taxation.

However, this principle is not absolute for a number of reasons, including the following:

• First, EU member states may nevertheless subject the energy products concerned to taxation "for reasons of environmental policy" without having to respect the minimum levels of taxation laid down in this Directive. According to a proposal submitted by the European Commission on 13

<sup>&</sup>lt;sup>125</sup> Official Journal (OJ) L 9 of 14/01/2009, p. 12.

<sup>&</sup>lt;sup>126</sup> OJ L 283 of 31.10.2003, p.51.

April 2011,<sup>127</sup> member states may in the future only invoke this exception if environmental reasons other than the objective of reducing CO2 emissions are concerned. The fate of the proposed renewal of Directive 2003/96/EC is currently uncertain. The Commission acknowledged prior to a meeting of the EU Finance Ministers on 20 June 2014 that there was "no sign of a political compromise" and that the upcoming Italian Presidency would continue working on the file.<sup>128</sup>

• Secondly, only those energy products which are concerned by the Directive are in principle exempted from a levy. This is particularly relevant for uranium, which is not explicitly mentioned in the Directive<sup>129</sup> and an application of the Directive per analogy seems doubtful.<sup>130</sup> As a consequence of a referral for a preliminary ruling by the Hamburg Finance Court of 19 November 2011, the Court of Justice of the European Union (ECJ) may possibly have to provide guidance whether the output taxation principle prohibits a levy on nuclear fuel.<sup>131</sup>

It is also important to note that the "output taxation principle" does not mean that the energy suppliers concerned are exempt from a participation in the Emission Trading System (ETS). In other words, the EU member states have currently no obligation to take into account the costs of emission allowances when setting tax rates for electricity.

It is possible that the energy inputs will in the future also be subject to a tax on the CO2 content, in addition to an ETS allowance according to the above mentioned Commission proposal for a revision of Directive 2003/96/EC. However, the precise conditions are still subject to negotiations between the EU Member States. The General-Secretariat explained in a progress report on the negotiations of 3 June 2014 that the Council was

<sup>&</sup>lt;sup>127</sup> COM (2011) 169 final.

<sup>&</sup>lt;sup>128</sup> European Commission, press release of 18 June 2014 on the "Preparation of Economic and Finance Ministers Council, Luxembourg 20 June", MEMO/14/428.

<sup>&</sup>lt;sup>129</sup> Jatzke, ZfZ 2010, 278 281.

<sup>&</sup>lt;sup>130</sup> This is at least the opinion defended by Martini, Die Kernbrennstoffsteuer – ein steuerrechtlicher Störfall? Offene verfassungs- und unionsrechtliche Fragen, ZUR 2012, 219, 227; apparently also Jatzke, *ibidem; contra* Kube, Kernbrennstoffsteuer und EU-Sekundärrecht, IStR 2012, 553, 556.

<sup>&</sup>lt;sup>131</sup> Referral for a preliminary ruling in the case 4 K 122/13; see press release of the "Finanzgericht Hamburg" of 19/11/2013, http://justiz.hamburg.de (26/05/2014); see also the judgement of the "Finanzgericht Hamburg" of 11/04/2014 in the injunction proceeding 4 V 154/13, http://justiz.hamburg.de/contentblob/4302476/data/4-k-154-13.pdf (26/05/2014), pp. 20 seq. with further references.

mindful to base taxation on an energy-related and a CO2-related components and that the Member States would have the option to express their national tax levels either as one single rate or as separate components.<sup>132</sup> Furthermore, installations falling within the ETS could possibly be taxed at specific minimum rates, according to a compromise proposal of 23 January 2014. However, the Council noted that additional work was needed in this and other areas to achieve further progress towards a final compromise. It also noted that the link between the method of calculation of the minimum levels of taxation and the compatibility with EU state aid law had been assessed by the Greek Presidency, but that these findings were only provisional pending the outcome of the on-going reforms in the state aid field.

### b) Obligation flowing from provisions of primary EU law

When applying their internal tax measures, the EU member states must observe the provisions of EU primary law, including the state aid prohibition pursuant to Art. 107 (1) TFEU and the prohibition of discriminatory taxation within the meaning of Art. 110 TFEU. Both provisions have already been discussed extensively in our previous legal opinion. We shall therefore limit ourselves to some brief comments.

#### (1) State aid prohibition

Imposing a levy on electricity from fossil fuels and nuclear energy necessarily implies that other categories of electricity – which are generated from renewable sources – are treated more favourably. This could possibly give rise to concerns from a state aid perspective. However, the fact alone that a certain kind of electricity is exempt from a levy does not mean that one can automatically assume a finding of state aid. Rather, this depends on the various criteria which form part of the substantive state aid test. In particular, state aid must be selective in order to be relevant in this context. This is the case if the difference in treatment corresponds to an economic benefit which is selective in favour of certain companies or economic sec-

<sup>&</sup>lt;sup>132</sup> Council of the European Union, Proposal for a Council Directive amending Directive 2003/96/EC restructuring the Community framework for the taxation of energy products and electricity, Progress Report of 3 June 2014 by the General-Secretariat of the Council to the Permanent Representatives Committee/Council, 2011/0092 (CNS), 10417/14.

tors. There is no selectivity if the measure under consideration, although conferring an advantage on its recipient, is justified by the nature or general scheme of the tax system of which it is part. <sup>133</sup> Consequently, there is no state aid if the member state concerned is able to demonstrate that the measure results directly from the basic or guiding principles of its tax system. A distinction must be made between, on the one hand, the objectives attributed to a particular tax scheme which are extrinsic to it and, on the other, the mechanisms inherent in the tax system itself which are necessary for the achievement of such objectives. Differences in taxation resulting from an objective that is unrelated to the tax system of which they form part cannot circumvent the requirements under Art. 107 (1) TFEU.<sup>134</sup>

Accordingly, one must first identify the common or "normal" regime applicable in the Member State concerned. Subsequently, one needs to determine whether the measure derogates from that common regime inasmuch as it differentiates between economic operators who, in the light of the objective assigned to the tax system of the particular State, are in a comparable factual and legal situation.<sup>135</sup> This means in essence that one must assess, in light of the environmental objective of a levy on electricity from fossil and nuclear origins, whether there is an unjustified tax differentiation to the detriment of certain goods or technologies.<sup>136</sup> Even if one were to consider that Switzerland may legitimately grant an advantage to green electricity suppliers, the fact of excluding certain other green technologies may put into doubt the legitimacy of the measure from a state aid perspective.

If the levy is exclusively imposed on imports the risk of a negative assessment from a state aid perspective increases considerably.

<sup>&</sup>lt;sup>133</sup> ECJ, Case C-143/99, Adria-Wien Pipeline, ECR 2001, I-8365, para. 42; Case 88/03, Portugal v Commission, ECR 2006, I-7115, para. 52.

<sup>&</sup>lt;sup>134</sup> See the summary of the case law by the GC, Judgement of 07/03/2012, Case T-210/02 RENV, British Aggregates, para. 46 - 48.

<sup>&</sup>lt;sup>135</sup> GC, Judgement of 07/03/2012, Case T-210/02 RENV, British Aggregates, para. 49.

<sup>&</sup>lt;sup>136</sup> GC, Judgement of 07/03/2012, Case T-210/02 RENV, British Aggregates, para. 68 seq.

## (2) Prohibition of discriminatory taxation

First, we need to determine whether an EU member state may legitimately apply a certain levy exclusively to electricity from a certain source, although most if not all of the electricity concerned is imported. Under such circumstances, one may indeed wonder if the levy does not constitute a covert import tariff, which is intended to put imported electricity at a cost disadvantage.

According to the ECJ's case law, a pecuniary charge is not deemed to be a tariff (custom duty) or a charge having equivalent effect simply because it concerns a product which is not produced domestically. This also applies to pecuniary charges which are in principle imposed indiscriminately on imported and domestic products but in practice apply almost exclusively to imports because domestic production is extremely small, provided the levies are part of a coherent system of internal dues, applied systematically to categories of products irrespective of their origin.<sup>137</sup> Rather, the distinction between custom duties (tariffs) and charges having equivalent effect, on the one hand, and internal taxes, on the other hand, essentially depends on whether the pecuniary charge under consideration exclusively targets imports or rather, is part of a system of taxes and levies, which concerns indiscriminately imported and domestic goods according to objective criteria.<sup>138</sup> Under such circumstances, a levy that is specifically imposed on imports but forms nevertheless an integral part of the taxation system, it is in principle deemed a tax, and not a tariff.

When carrying out this distinction one also needs to have regard to the way how the proceeds from the tax are redistributed. If a surcharge is levied indiscriminately on imported and domestic goods and the proceeds are refunded to compensate the surcharge on the domestic goods the following distinction applies.<sup>139</sup>

ECJ, Judgment of 7 July 1987, Case 193/85, Co-Frutta, ECR 1987 2085, para. 14; Judgment of 16 July 1992, Case C-343/90, Manuel Jose Lourenco Dias/Director da Alfandega do Porto, ECR 1992 I-4673, para. 53.

<sup>&</sup>lt;sup>138</sup> ECJ, Judgement of 1st July 1969, Case 24/68 – *Commission/Republic of Italy*, ECR 1969 193, para. 11.

<sup>&</sup>lt;sup>139</sup> Herrmann in: Grabitz/Hilf/Nettesheim, Das Recht der Europäischen Union, Art. 30 TFEU, para. 19.

- If the proceeds of the levy are used to partly compensate the levy on the domestic goods the charge is deemed to be a tax within the meaning of Art. 110 TFEU. Should this result in discrimination against imports, then the charge may have to be prohibited or adapted.<sup>140</sup> Whether or not this is necessary must be assessed on a case-by-case basis.
- If on the other hand the proceeds are used to completely refund the levy on the domestic goods the levy corresponds to a charge having equivalent effect as a custom duty within the meaning of Art. 30 TFEU.<sup>141</sup>

For these reasons, the fact alone that nearly all grey electricity consumed in Switzerland is imported doesn't necessarily mean that a levy on grey electricity must be treated as if it were an import tariff. This would however be the case if the proceeds from the tax were to be used to completely refund the tax on the domestically produced grey electricity.

Secondly, primary EU law in principle does not prohibit a double taxation.<sup>142</sup> As long as the EU legislator has not harmonised the rules governing a particular tax, an importing EU member state must not take into account whether a particular good or service has already been taxed in the country of export.

# (3) Free movement of goods

Finally, any national legislation making the import of electricity conditional on the production of a GO would have to undergo a review as to its compatibility with the rules governing the free movement. This is confirmed by an on-going investigation of the European Commission against an amendment to the Austrian "Elektrizitätswirtschafts- und organisationsgesetz (ElWOG)" which provides that all sales of electricity in Austria are conditional on the production of a certificate of origin.

<sup>&</sup>lt;sup>140</sup> ECJ, Judgement of 23 April 2002, Case C-234/99, Nygard, ECR 2002 I-3676, para. 42 with further references.

<sup>&</sup>lt;sup>141</sup> ECJ, Judgment of 25 May 1977, Case 77-76, F.lli Cucchi v Avez S.p.A, ECR 1977 987, para. 16 and 19; see also the less differentiated statement of the ECR, in the preceding Judgement of 23 January 1975, Case 51/74, van der Hulst, ECR 1975 79, para. 13-17.

<sup>&</sup>lt;sup>142</sup> See for example ECJ, Judgement of 29 June 1978, Case 142/77, *Larsen and Kjerulff*, ECR 1978 1543, paras. 33-35; Judgement of 27 October 1993, Case C-72/92, *Scharbatke*, ECR 1993 I-5509, paras. 14 and 15; Judgement of 23 April 2002, Case C-234/99, *Nygard*, ECR 2002 I-3676, para. 38.

#### c) Options for taxing imported nuclear electricity under EU law

EU law does not explicitly deal with a scenario whereby the EU member states impose higher levies on electricity from nuclear energy. As explained above, the tax rates according to the already mentioned Council Directive 2003/96/EC of 27 October 2003 restructuring the Community framework for the taxation of energy products and electricity apply equally to all categories of electricity which do not fall within one of the exceptions in favour of "green" electricity, mentioned in Art. 15 (1) b, c and d of the Directive (see above). Given that these are minimal tax rates, the Directive does not strictly prevent the member states from imposing higher levies on electricity of nuclear origin. To the extent that this results in a differentiation compared to electricity from renewable energy, this can in all likelihood be justified with reference to the already mentioned practice of the ECJ as follows.

As noted in our earlier legal opinion, the EU member states are in principle authorised to use their fiscal sovereignty to apply different tax rates based on grounds that are recognised by the EU legal order in order to orientate the demand towards certain product groups, as long as this does not result in a direct or indirect discrimination against imports.<sup>143</sup> As set out in more detail in our previous legal opinion, there are clear precedents to the effect that a differentiation may in principle be compatible with the non-discrimination principle applying to internal taxation measures if it is based on reasons of environmental policy.<sup>144</sup> The ECJ has taken the view in its *Outokumpu* judgment that the member states are not precluded from taxing electricity according to a rate which varies

"according to the manner in which the electricity is produced and the raw materials used for its production, in so far as that differentiation is based ... on environmental considerations."<sup>145</sup>

This case law doesn't directly concern the case at hand. This is because the objectives which may justify a discrimination against electricity from fos-

<sup>&</sup>lt;sup>143</sup> Seiler, in: Grabitz/Hilf/Nettesheim, Das Recht der Europäischen Union, Art. 110 TFEU, para. 31.

<sup>&</sup>lt;sup>144</sup> See fn. 8 above.

<sup>145</sup> ECJ, Case C-213/96, Outokumpu Oy, ECR 1998 I-1777, para. 31.

sil energy do not necessarily apply here. Electricity generation in nuclear power plants does not give rise to the same pollution issues as for example the operation of coal- or gas-fired plants. However, on closer inspection it becomes apparent that the ECJ showed a willingness to recognise other policy objectives as legitimate provided they were themselves compatible with the requirements of the Treaty and its secondary legislation.<sup>146</sup> It is therefore encouraging to note that the primary and secondary EU law, such as for example in Art. 36 TFEU, recognise the protection of health and life of humans, animals or plants as an objective worth pursuing. For these reasons it is in principle defendable to argue that electricity from nuclear energy should be taxed higher than electricity from renewable sources, for example by referring to the need to protect human health from harmful incidents or the long-term effects associated with storing nuclear waste.

However, the margin of manoeuvre of the member states in this regard should not be overstated, given that the European Union has already undertaken significant steps to harmonise the national legislation in this area. Art. 30 of the Treaty on the Establishment of the European Atomic Energy Community provides that the Union shall define the basic standards for the protection of the health of workers and the general public against the dangers arising from ionizing radiation. On the basis of this provision, the Council of the EU has adopted Directive 2013/59/Euratom of 5 December 2013 laying down basic safety standards for the protection against the dangers arising from exposure to ionising radiation.<sup>147</sup>

It follows that a member state may not assume the right to take measures against the operation of nuclear power plants in neighbouring countries with the pretention to improve the protection of public health.<sup>148</sup>

Similarly, the fact that the Treaty on the Functioning of the European Union (TFEU) recognises the right of the member states to choose "between different energy sources" in Art. 194 (2) subpara. 2 TFEU<sup>149</sup> and to a certain extent also in Art. 192 (2) c TFEU, gives a certain comfort to Member

<sup>146</sup> ECJ, Case C-213/96, Outokumpu Oy, ECR 1998 I-1777, para. 30.

<sup>&</sup>lt;sup>147</sup> OJ 2014 L 13, 1.

<sup>&</sup>lt;sup>148</sup> ECJ, Case C -115/08, Land Oberösterreich / ČEZ as (Temelin), para. 136.

<sup>&</sup>lt;sup>149</sup> See Hirsbrunner in Schwarze, *EU-Kommentar*, 3rd edition 2012, Art. 194 AEUV, para. 29.

States wishing to favour the generation of renewable over nuclear energy. But again, the margin of manoeuvre resulting from these provisions should not be overstated and it is probably fair to say that any differentiated treatment must be based on a coherent system, which doesn't result in an unjustified discrimination.

## 4.2.3 Interim conclusions from the viewpoint of EU law

To sum up, an EU member state may not impose an import duty or charge having an equivalent effect on imports of electricity from another EU member state. The member state concerned may apply a measure of internal taxation, provided this does not result in indirect discrimination. The tax rate must be in line with the provisions of Council Directive 2003/96/EC of 27 October 2003 restructuring the Community framework for the taxation of energy products and electricity. According to the "output taxation principle" the levy may not, as a rule, be imposed on the energy products used for the production of energy. Nonetheless, power plants are obliged to participate in the ETS and energy inputs may in future also become subject to a  $CO_2$  levy. At the current state of the development of EU law it is unclear whether the same principles apply to electricity from nuclear energy. Finally, a levy is not deemed to be a (prohibited) tariff (customs duty) or a charge having equivalent effect simply because it concerns a kind of energy which is not produced domestically.

## 4.3 Switzerland–EEC 1972 FTA

Similarly to the situation in the EU described above, the conditions governing tariffs on imports of goods, including electricity, to Switzerland are subject to multilateral trade rules, in particular the WTO and GATT disciplines. Moreover, the Swiss–EU bilateral trade relations are governed by the FTA Switzerland–EEC of 1972. The relationship between an FTA and WTO law has been dealt with in our previous Legal Opinion on Differentiated Electricity Taxation.<sup>150</sup> It has been also clarified that the Switzer-

<sup>&</sup>lt;sup>150</sup> See fn. 8 above, at 22-23.

land–EEC 1972 FTA applies to trade in electricity as electricity is legally defined as a good.<sup>151</sup>

# 4.3.1 Differentiation between tariffs and taxes under the Switzerland–EEC 1972 FTA

The Switzerland-EEC 1972 FTA, similarly to the EU law, contains separate provisions dealing with taxes and tariffs. According to Articles 3 and 6 of the Switzerland-EEC 1972 FTA no new custom duties or charges having effect equivalent to a customs duty on imports can be introduced in trade between Switzerland and the EU. Art. 7 further prohibits introduction of export customs duties or charges having equivalent effect. Whereas each of the parties to the FTA is free to introduce internal taxation and even to replace customs duties of fiscal nature by an internal tax (Art. 4(1)) Switzerland-EEC 1972 FTA), the internal fiscal measures or practices should not directly or indirectly discriminate between like products from the EU and Switzerland (Art. 18). The interpretation of provisions on customs duties and internal taxes by Swiss courts is still marginal.<sup>152</sup> However, the existing decisions explain the difference between taxes as measures having equivalent effects to a custom duty and thus prohibited under the FTA and taxes as part of internal taxation that are compatible with the FTA unless they discriminate between like products.

In a court case relating to an automobile tax on used Maserati imported into Switzerland, the Swiss Federal Customs Appeal Committee<sup>153</sup> found that if a tax is charged as part of an internal taxation system and applies similarly to both imported and to domestic products it does not constitute a measure of equivalent effect. However, it can still be tested for its compatibility with the non-discrimination requirement. The Customs Appeal Committee referred to the primary EU law as well as to the relevant ECJ case law and accordingly confirmed that if a levy is envisaged as an internal tax and basically applies both to imported and to domestic like products, it does not fall under the notion of a tariff. Although the automobile

<sup>&</sup>lt;sup>151</sup> *Ibid.*, at 23.

<sup>&</sup>lt;sup>152</sup> Th. Cottier et al., Die Reschtsbeziehungen der Schweiz und der Europäischen Union, Stämpfli Verlag, 2014, at 220.

<sup>&</sup>lt;sup>153</sup> Swiss Federal Customs Appeal Committee was liquidated and most of its functions were vested to the Federal Administrative Court.

tax was indeed imposed as an internal tax, it was applied predominantly to imported cars, given that the Swiss domestic production is very small (less than 300 cars per year). The Customs Appeal Committee came to the conclusion that the cars produced domestically in Switzerland and imported from the EU can be considered like products and the automobile tax applies not only to imported cars but also to domestic production, which even if minimal, does exist. Moreover, the Customs Appeal Committee took the view that even if there is no domestic production of a certain good, this does not necessarily mean that the tax discriminates against imports within the meaning of Articles 18 FTA and III GATT. As the Swiss automobile tax was an excise tax that clearly formed a part of an internal taxation system applying to domestic and imported cars alike, no discriminatory taxation under Art. 18(1) FTA was found to exist. Moreover, there was nothing to suggest that the tax was used as a disguised restriction on trade between Switzerland and the EU, since the tax rate was rather low (4%) it did not have an impeding impact on imports and thus did not contravene the objectives of the FTA.<sup>154</sup>

A similar case with respect to an export-related fiscal measure, namely a tax on waste, was decided by the Swiss Federal Supreme Court in 2005.<sup>155</sup> According to the Swiss environmental legislation, waste is subject to a tax both of domestic residue and if it is exported abroad. Depending on the types of waste repositories different tax rates applied: for a waste repository available in Switzerland the tax rate amounted to 15 Swiss francs per tonne, whereas waste exported abroad to the subsurface repositories was subject to a considerably higher tax rate of 50 Swiss francs per tonne. The Swiss Federal Supreme Court found, similarly to the automobile tax case, that taxation of waste (including different tax rates) constitutes a part of the internal taxation system in Switzerland. The taxation does not depend on the single fact of border crossing and it is based on objective criteria which are applied equally to domestic and exported waste. Consequently the tax does not constitute an export duty within the meaning of Art. 7 of the Switzerland-EEC 1972 FTA. Drawing on an analogy with Art. 110 TFEU the Supreme Court took the view that there is no discrimination as

<sup>&</sup>lt;sup>154</sup> Entscheid der Eidgenössichen Zollrekurskommission vom 29. August 2001 i.S.S. (ZRK 2000-020), VPB 66.44.

<sup>&</sup>lt;sup>155</sup> BGE 131 II 271 (Sonderabfallverwertungs-AG (SOVAG) gegen BUWAL und UVEK).

long as the domestic tax system is neutral and differences are objectively justified. However, due to the lack of evidence it could not determine whether a higher tax rate for waste destined for subsurface repositories was justified.<sup>156</sup>

In light of the clear prohibition on import and export tariffs, the important question is whether the exceptions of the Switzerland–EEC 1972 FTA apply. Unlike in the WTO law, where, as mentioned above, general exceptions pursuant to Art. XX GATT can be invoked as a justification both for discriminatory tax measures and most probably for violations of Art. II GATT on import duties, the exceptions under Art. 20 Switzerland–EEC 1972 FTA apply neither to the issues of taxation nor to import or export tariffs. The wording of Art. 20 FTA clearly indicates that its application is limited to the cases of restrictions (quantitative and non-tariff measures) on imports, exports and transit of goods or the equivalent measures. Moreover, as mentioned in our previous legal opinion, the FTA Switzerland–EEC does not contain a proportionality requirement for tax measures.<sup>157</sup>

# 4.3.2 Compatibility of a tax on imported electricity stemming from fossil fuels and nuclear energy with the Switzerland–EEC 1972 FTA

The implementation of a tax on imported electricity, whether CO<sub>2</sub>-based or based on input products, would face the same practical challenges as described above. However, it should be noted upfront that the Switzerland– EEC 1972 FTA does not contain any similar provisions to Art. XXVIII GATT that allows deconsolidation of tariff lines, since it is a free trade agreement which aims at the highest level of liberalization of trade, and a deconsolidation would *per se* contravene the objective and key provisions of the FTA.

If the implementation of the first two options, i.e. a higher differentiated tax on electricity generated from fossil fuels and a tax based on  $CO_2$  footprint of the electricity, were feasible the key question for determining compatibility with the Switzerland–EEC 1972 FTA would be whether this tax results in discrimination against imported electricity. Our conclusions

<sup>&</sup>lt;sup>156</sup> D. Wüger, Bundesgericht wendet Freihandelsabkommen erstmal unmittelbar an – ein Schritt zurück, Jusletter vom 4. April 2005, available at: http://jusletter.weblaw.ch/juslissues/2005/320.html (last visited on 27.05.2014).

<sup>&</sup>lt;sup>157</sup> See fn. 8 above, at 29.

for the first option would be the same as for Options A and B in the previous legal opinion.<sup>158</sup>

Under the current system, where most of the fossil fuel plants do not pay a  $CO_2$  levy but instead have to comply with the compensation obligation or have to participate in the Swiss ETS, the CO<sub>2</sub> levy that will apply to imported electricity might raise a number of legal questions. First, as the CO<sub>2</sub> levy on imported electricity will be a part of a well-established taxation system, following the available case-law on the Switzerland-EEC 1972 FTA, the tax would not be considered to constitute a tariff or a measure having equivalent effect. Thus, it would be treated under Art. 18 Switzerland-EEC 1972 FTA with the key question of whether there is discriminatory tax treatment of imported electricity. Following the above-mentioned case-law the revised CO<sub>2</sub> levy system, including a tax on imported electricity, would have to be neutral and be based on objective criteria. Additional legal risks may arise if Swiss judges refer to the established ECJ case law on the matter, which also perceives the final use of tax revenues as an important indicator of neutrality.<sup>159</sup> Moreover, it is questionable whether the measures for differentiating domestic electricity from fossil fuels (namely, an obligation to comply with a 100% compensation, or a mandatory participation in the ETS, or a voluntary emission reduction target, or a  $CO_2$  levy – depending on the type of fossil fuel plant, as explained in Section 2.2 could be seen as neutral and objective, whereas the imported electricity produced from fossil fuel plants would be subject to a  $CO_2$  levy.

The prohibition of discriminatory taxation pursuant to Art. 18 FTA does not prohibit double taxation. This is confirmed by the case law of the ECJ concerning Art. 110 TFEU which is the counterpart to Art. 18 FTA.<sup>160</sup> However, such double taxation shall not lead to discrimination (direct or indirect between like domestic and imported products). Under these circumstances we doubt that the financial burden imposed by the EU ETS on EU electricity suppliers needs to be taken into account by the Swiss tax authorities. In any event, the EU example shows that an emission allowance

<sup>160</sup> See above.

<sup>&</sup>lt;sup>158</sup> See fn. 8 above.

<sup>&</sup>lt;sup>159</sup> ECR, Judgement of 23 April 2002, Case C-234/99, Nygard, ECR 2002 I-3657 para.42 with further references.

and an energy tax may co-exist. To the extent that there might be inconsistencies between the EU ETS and a new Swiss  $CO_2$  levy, this may have to be dealt with in the on-going negotiations between Switzerland and the EU concerning the linking of the two ETS systems.

Finally, unlike in WTO law, discriminatory tax measures cannot profit from the exceptions under Art. 20 of the Switzerland–EEC 1972 FTA. Thus, the imposition of a  $CO_2$  levy or an energy tax on imported electricity is exposed to more stringent legal provisions under the FTA than under WTO law.

## 4.3.3 State aid prohibition under the Switzerland–EEC 1972 FTA

Similarly to the prohibition of state aid in the EU law, Art. 23(iii) of the Switzerland–EEC 1972 FTA provides for a prohibition of "any public aid, which distorts or threatens to distort competition by favouring certain undertakings or the production of certain goods". As addressed in detail in the Legal Opinion on Differentiated Electricity Taxation<sup>161</sup> it is not clear whether both contracting parties intended this Article to apply to state aid granted by means of tax exemptions or reductions. Moreover, implicit exceptions apply to the state aid prohibition in the Switzerland–EEC 1972 FTA that mainly stem from the EU regulations and communications. To sum up, the legal situation is far from clear, however there is certain risk of finding that the suggested differentiated taxation constitutes state aid and the application of implicit exceptions would depend on the modalities and design of the tax.

<sup>&</sup>lt;sup>161</sup> See fn. 8, at p. 32.

# 5 Legal conclusions

#### 5.1 Consistency with WTO law

We have analysed three design options for taxing imported fossil fuel electricity.

1. Under the first option, an electricity tax would be linked to the source of electricity, targeting fossil fuel generation. If green and grey electricity are considered to be like or directly competitive products, the enhanced tax burden borne by imported electricity could in principle be justified under the environmental exceptions foreseen in Art. XX GATT, notwithstanding the relatively minor share of fossil fuel electricity in Swiss domestic production. If, on the other hand, green and grey electricity are found to be unlike products, no discrimination against imported electricity arises so long as the amount of domestically produced fossil fuel electricity could be considered to be negligible. Yet, whether or not the amount of electricity currently produced in Swiss fossil fuel plants is negligible is a matter of opinion. Also, it necessary to take into account that it may increase in the future, replacing nuclear energy supplies. Under these circumstances, it seems risky to treat domestic production of electricity from fossil fuels differently, also bearing in mind that the FTA with the EU may impose stricter standards in this regard. Should Switzerland expand its production of grey electricity, which seems likely, then a tax on fossil fuel electricity will in any event have to apply equally to domestic and imported grey electricity. Moreover, this design option faces the implementation problem of tracing the source of imported electricity so long as the EU GO system does not provide information on non-RE electricity sources. Finally, we consider it unlikely that such a tax needs to be readjusted for imported EU electricity in order to take into account the costs incurred by EU electricity producers subject to the EU ETS. This is because there are inherent differences between the electricity tax and the emission allowances obligation under the ETS.

- 2. The second option foresees the application of a tax on imported fossil fuel electricity based on the CO<sub>2</sub> content of electricity. It is an open question whether the exemptions granted to domestic fossil fuel plants under the current Swiss CO<sub>2</sub> Act will also apply to such a future tax. If domestic power generation benefits from privileged exceptions, it is unlikely that such a tax on the CO<sub>2</sub> content could constitute a border tax adjustment (BTA) measure consistent with WTO rules. To legally implement a carbon BTA on electricity, a CO<sub>2</sub> levy in Switzerland should applied to domestic fossil fuel power plants without exemptions. This design option also faces implementation hurdles, which are mainly due to the fact that the current Swiss and EU GO systems do not certify the CO<sub>2</sub> content of electricity. Finally, the CO<sub>2</sub> basis of the tax could provide a compelling reason for the emissions costs borne by EU power generators under the EU ETS to be taken into account when applying the tax to the electricity imports from the EU.
- 3. Under the third option, Switzerland could use import tariffs as an instrument to tax imported fossil fuel electricity. This could be implemented through deconsolidation of Swiss bound tariffs for electricity based on production methods and the introduction of a new tariff lines based upon process and production methods. Yet, as tariff deconsolidation is barred under the Switzerland-EEC 1972 FTA, there would be no practical effect of the measure, as it cannot be applied to the electricity imported from Member States of the EU, as well as EFTA countries. Moreover, as in the case of the two previous options, it is unclear how the fossil fuel content of imported electricity would be traced. It is doubtful whether the current GO system could be of practical use in this context.

Moreover, we addressed the question whether any of the options presented, including a tax on imported nuclear electricity would be compatible with the subsidies disciplines under WTO law. We came to the conclusion that an energy tax on electricity inputs or a  $CO_2$  tax on electricity which is imposed only on imported electricity with high probability will constitute a subsidy under Articles 1 and 2 of the ASCM. A key element here would be whether the adverse effect is exerted on the imported electricity, e.g. where imports of electricity from fossil fuels and nuclear power are displaced or impeded. The exact answer to the question of compatibility would depend on the specific modalities of the measure. Finally, we assessed whether these design options could also be used to tax imported nuclear electricity. We came to the conclusion that WTO law constraints arise due to the existence of domestic production of nuclear electricity in Switzerland, which make the case different to that of taxing imported electricity from fossil fuel sources. A comprehensive differentiated electricity tax scheme, which would equally apply to both domestic and imported electricity, is thus more suitable for taxing nuclear electricity.

## 5.2 Consistency with EU law

Switzerland, not being a member of the EU, is not bound by EU law. Nevertheless, Switzerland may have an interest in aligning its own legislation with selected aspects of EU law for the reasons that have been set out in more detail in our previous legal opinion.

As explained above, EU member states may not impose any tariffs on the import or export of electricity to and from other member states, irrespective of the particular reason.

They may impose internal fical levies on electricity but their margin of manoeuvre is limited in various respects.

- The levy should not result in direct or indirect discrimination against imports. This also extends to the way in which the proceeds from the tax are redistributed. If the proceeds are used to refund either partly or completely the tax on the domestically produced electricity this may, under certain circumstances, result in the measure either being treated like a covert import tariff or a discriminatory tax.
- 2. The EU member states may grant tax exemptions or reductions on electricity from renewables, by virtue of Council Directive 2003/96/EC of 27 October 2003 restructuring the Community framework for the taxation of energy products and electricity. There is risk that such tax exemption or reduction could be considered to constitute state aid but this risk seems manageable. In order to ensure compatibility with state aid provisions, the tax system must be designed in such a way that the protection of the environment is one its objectives and there is coherence between the general scheme of the tax system and the particular measure.

- 3. In addition, energy products and electricity used to produce electricity are in principle exempted from taxation by virtue of the "output taxation principle", although the member states are authorised to deviate from this principle for environmental reasons. Notwithstanding the output taxation principle, power plants are obliged to participate in the emission trading system (ETS). For the time being, the member states are not obliged by EU law to take account of the costs incurred by energy companies as a consequence of the ETS when imposing a levy on electricity, although this could possibly change in the future. There is also a debate about the introduction of a tax on the CO2 content of energy inputs.
- 4. Given that electricity of nuclear origin does not fall under one of the categories that qualify for a tax exemption or reduction according to the above mentioned Directive 2003/96/EC, it can in principle be taxed at a higher rate than "green" electricity. Whether or not nuclear electricity can be taxed at a higher rate than electricity from fossil fuels is not clear. A tax differentiation could possibly be justified by reference to public health considerations and the right of the individual member states to decide on the appropriate energy mix on their territory. However, the national margin of manoeuvre in this regard is limited.

## 5.3 Consistency with the Switzerland–EEC 1972 FTA

As explained above, currently the key agreement governing bilateral trade relations between Switzerland and the EU is the Switzerland–EEC 1972 FTA. After the preliminary legal analysis we came to the following conclusions with respect to compatibility of the proposed taxes or respective tariffs on electricity produced from fossil fuels:

 Under the Switzerland–EEC 1972 FTA, similarly to EU law, it is clear that no new customs duties or charges having effect equivalent to a customs duty on imports can be introduced in trade between the two partners. The FTA Switzerland–EEC does not contain any provisions similar to Art. XXVIII GATT that allow deconsolidation of tariff lines. As it is a free trade agreement, which aims at the highest level of liberalisation of trade, such deconsolidation would *per se* contravene the objective and key provisions of the FTA. The exceptions under Art. 20 FTA Switzerland–EEC do not apply to import or export tariffs.

- 2. In general, each of the parties to the FTA is free to introduce internal taxation and even to replace customs duties of a fiscal nature by an internal tax (Art. 4(1) Switzerland–EEC 1972 FTA). However, such taxes or other internal fiscal practices should not directly or indirectly discriminate between the like products from the EU and Switzerland (Art. 18). As electricity would be considered a like product, the Swiss tax should be applied in a non-discriminatory manner both to Swiss and to imported electricity from fossil fuels or nuclear power. Exceptions under Art. 20 Switzerland–EEC 1972 FTA also do not apply to the issues of taxation. Thus, if the CO<sub>2</sub> taxation scheme is found to violate Art. 18 Switzerland–EEC 1972 FTA, there will be no possibility to justify it.
- 3. There is a risk of a finding that the suggested differentiated taxation constitutes state aid under the Switzerland–EEC 1972 FTA and the application of implicit exceptions would depend on the modalities and design of the tax.

Our legal analysis of the consistency of all the options outlined with WTO law, EU law and the Switzerland–EEC 1972 FTA is summarised in the table in Annex 1 below.

## 6 Political risk assessment

Introduction of import tariffs on electricity is likely to create political problems with the EU, based upon GATT law and the FTA. While the introduction of import tariffs under WTO law would in principle be legally possible subject to conditions mentioned above, which would require negotiations with the EU, the FTA clearly forbids any new import tariffs thus excluding this option in relation to the main suppliers in neighbouring member states of the EU. One also needs to bear in mind that import tariffs would affect economic interests of Swiss market participants, in particular the Swiss electricity providers which have conclude long-term supply agreements with producers in France and other countries.

The introduction of a tax is in principle possible but, depending on the modalities of such a tax, this could raise political concerns and be complicated in terms of implementation. As mentioned above, currently GOs do not contain the information necessary to make it possible to trace the exact

 $CO_2$  footprint of electricity from fossil sources. If the tax does not distinguish according to the  $CO_2$  content, this may be easier to implement but the effects cannot be calibrated. Thus, in the long-term the whole system of the certification of origin of electricity in terms of its inputs might have to be adjusted.

Taxation rates which would substantially reduce imports of fossil fuel electricity are likely to be challenged politically. Thus, to a large extent, it would be a matter of setting tax rates appropriately. The introduction of a new tax in light of the existing Swiss  $CO_2$  Act and its comprehensive system of various compensation measures apart from a  $CO_2$  levy might be complicated. Perhaps, one could think in terms of a progressive  $CO_2$  levy taking into account adjustments made by the EU electricity producers. This would also reduce the risks of discriminatory taxation of imported electricity from the EU.

The negotiations on linking the Swiss ETS and EU ETS could be further used as an opportunity to set up a coherent  $CO_2$  levy system that would not discriminate in any manner against foreign electricity producers. The issue of mutual recognition and equivalence of the compensation measures could be also taken up in the current negotiations of the Electricity Agreement.

## 7 Annex: Summary table of legal arguments

Measure / Compatibility with	WTO law	EU law	Switzerland – EEC FTA
Energy tax on electricity from fossil fuels	<ul> <li>Violation of Art. III:2 GATT if considered like electricity products; no violation of con- sidered unlike electricity products based upon differ- ence in PPMs</li> <li>Possible justification for vio- lation of Art. III:2: Art. XX (b) and (g) GATT, if:</li> <li>RE and nuclear are differentiated vs. fossil fuels;</li> <li>If imposed on both domestic and imported electricity.</li> </ul>	In principle it is possible under Directive 2003/96/EC (see Art. 14 and 15), but should not lead to indirect discrimination. Double taxa- tion is not prohibited by primary EU law if tax rules are not harmonized. Subsidies: Art. 107(1) TFEU (objective of differ- entiation should be an in- herent part of the specific tax system at hand). Appli- cation of state aid rules is not excluded. As a conse- quence, a differentiation may either be completely incompatible or it must be adapted to be in conformity with the state aid regime.	In principle possible, but should be non- discriminatory (Art. 18 Switzerland-EEC FTA). Tax has to be neutral and based on objective criteria. Even if no or marginal domestic production, but a tax forms a part of internal taxation system applying to domestic and imported goods alike and does not have an impeding impact on imports. Justification under Art. 20 Switzerland-EEC FTA is not possible. Violation of state aid rules is not excluded.

CO2 levy on electricity	<ul> <li>Violation of Art. II:2(a), III:2, Ad Art. III GATT</li> <li>Possible justification under Art. XX(b) and (g) GATT if tax is applied to both domestic and imported electricity.</li> <li>Subsidies: Determination of subsidy is probable (Art. 1 and 2 ASCM), adverse effect depends on modalities (Art. 6 ASCM); Art. XX GATT does not apply.</li> </ul>	Mind the output tax principle under Art. 14(1)(a) of the Directive 2003/86/EC + on-going legislative initiatives in the EU. Double taxation is not prohibited by primary EU law if tax rules are not harmonized. Subsidies: Art. 107(1) TFEU (objective of differentiation should be an inherent part of the specific tax system at hand). Application of state aid rules is not completely excluded. As a consequence, a differentiation may either be completely incompatible or it must be adapted to be in conformity with the state aid regime.	In principle possible, but should be non- discriminatory (Art. 18 Switzerland-EEC FTA). Tax has to be neutral and based on objective criteria. Even if no or marginal domestic production, but a tax forms a part of internal taxation system applying to domestic and imported goods alike and does not have an impeding impact on imports. Justification under Art. 20 Switzerland-EEC FTA is not possible. Violation of state aid rules is not excluded.
-------------------------	--	--	---

Import duty on electricity from fossil fuels + domestic differentiated electricity tax system	Violation of Art. II:1(b) GATT Possible justification under (b), (g) and (d), especially if combined with domestic dif- ferentiated electricity tax sys- tem. Deconsolidation of zero tariff rates on electricity under Art. XXVIII possible subject to compensation	<ul> <li>Imposition of an import duty or charge having an equivalent effect on imports of electricity from another EU member state is prohibited.</li> <li>Differentiation of taxes and tariffs, is based on the objective (exclusively target imports or not) and on the redistribution of proceeds.</li> <li>Lack of domestic production of the taxed product does not lead to the conclusion that such tax constitutes a tariff.</li> </ul>	Prohibited under Art. 3 and 6 of the Switzerland-EEC FTA. Justification under Art. 20 Switzerland-EEC FTA is not possible.
Energy tax on imported nu- clear electricity	Violation of Art. III:2 GATT Justification under Art. XX is not possible	Reference to Member States' right to decide on the appro- priate energy mix and public health reasoning may to some extent justify differential taxa- tion; nevertheless risk that autonomy of Member States in is limited.	Not possible: cannot be non- discriminatory, as there are still nuclear power stations in operation in Switzerland (Art. 18 Switzerland-EEC

Massnahme / Vereinbarkeit mit 	WTO-Recht	EU-Recht	FHA Schweiz – EU
Steuer auf Stromerzeugung aus fossiler Energie	<ul> <li>Verstoß gegen Art. III:2 GATT falls der Stromimport als Stromprodukt angesehen wird. Kein Verstoß, wenn der Strom anhand von differenzierten Produktionsverfahren und -methoden als nicht gleichartig angesehen wird.</li> <li>Mögliche Rechtfertigung des Verstoßes von Art. III:2: Art. XX (b), (g) GATT, wenn:         <ul> <li>erneuerbare und nukleare Energien von fossiler</li> </ul> </li> </ul>	Im Prinzip durchführbar unter der Richtlinie 2003/96/EG (siehe Art. 14 und 15), solange dies nicht zu einer indirekten Diskriminierung führt. Eine doppelte Besteuerung ist durch primäres EU-Recht nicht verboten, solange die Steuerbestimmungen in dieser Hinsicht nicht harmonisiert sind. Staatliche Beihilfen: Art. 107(1) AEUV (Die Zielsetzung der Differenzierung sollte ein inhärenter Teil des spezifischen Besteuerungssystem sein).	Im Prinzip durchführbar, sollte jedoch nicht diskriminierend sein (Art. 18 FHA). Abgaben müssen neutral und auf objektiven Kriterien abgestützt sein. Sogar wenn keine oder nur eine marginale inländische Produktion besteht, ist die Erhebung einer Steuer erlaubt, wenn sie Teil eines inländischen Besteuerungssystems ist, dass auf inländische und gleichartige importierte Güter
	<ul> <li>Energie differenziert werden;</li> <li>die Steuer sowohl auf dem im Inland produzierten und dem im Ausland produzierten Strom erhoben wird.</li> </ul>	Es ist nicht vollkommen ausgeschlossen, dass die Massnahme als staatliche Beihilfe qualifiziert wird. Als Konsequenz daraus, müsste eine Differenzierung entweder vollkommen unvereinbar sein oder sie müsste angepasst werden, um mit den EU- Beihilferecht übereinstimmend zu sein.	besteht und sich nicht erschwerend auf Importe auswirkt. Eine Rechtfertigung nach Art. 20 FHA ist nicht möglich. Ein Verstoß gegen die Bestimmungen zu staatlichen Beihilfen ist nicht ausgeschlossen.
CO <sub>2</sub> Abgabe auf Strom	Verstoß gegen Art. II:2(a), III:2, und Art. III GATT.	Zu beachten sind der Grundsatz der Ausgangssteuer (" <i>output taxation principle</i> ") von Art. 14(1)(a) der Richtlinie 2003/96/EG und ferner laufenden legislativen Initiativen in der EU. Eine Doppelbesteuerung wird durch primäres EU- Recht nicht verboten, solange die nationalen Steuergesetz-gebungen in dieser Hinsicht nicht harmonisiert sind.	Im Prinzip durchführbar, sollte jedoch nicht diskriminierend sein (Art. 18 FHA). Abgaben müssen neutral und auf objektiven Kriterien abgestützt sein. Sogar wenn keine oder nur eine marginale inländische Produktion besteht, ist die Erhebung einer Steuer erlaubt, wenn sie Teil eines inländischen Besteuerungssystems ist, dass auf
	Mögliche Rechtfertigung nach Art. XX(b), (g) GATT, wenn die Abgabe auf inländischen und importierten Strom angewendet wird.	Staatliche Beihilfen: Art. 107(1) AEUV (Die Zielsetzung der Differenzierung sollte ein inhärenter Teil des spezifischen Besteuerungssystem sein). Es ist nicht ausgeschlossen, dass die Massnahme als staatliche Beihilfe qualifiziert wird. Als Konsequenz daraus, müsste eine Differenzierung entweder vollkommen unvereinbar sein oder sie müsste	inländische und gleichartige importierte Güte besteht und sich nicht erschwerend auf Importe auswirkt. Eine Rechtfertigung nach Art. 20 FHA ist nich möglich. Ein Verstoß gegen die Bestimmungen zu staatlichen Beihilfen ist nicht ausgeschlossen.
	Subventionen: Finanzielle Ausgleichsleistungen sind wahrscheinlich möglich (Art. 1 und 2 ASCM). Ob eine beeinträchtigende Wirkung vorliegt, hängt von den Modalitäten ab (Art. 6 ASCM); Keine Anwendung von Art. XX GATT.	angepasst wer-den, um mit den EU-Beihilferecht übereinstimmend zu sein.	

Einfuhrzoll auf Stromerzeugung aus fossiler Energie differenziertes inländisches Stromsteuersystem	Verstoß gegen Art. II:1(b) GATT. Mögliche Rechtfertigung nach (b), (g) und (d), besonders, wenn dies mit einem differenziertem Strom- Besteuerungssystem verbunden wird. Eine Entkonsolidierung von Null-Zollsätzen auf Strom unter Art. XXVIII führt möglicherweise zu Schadenersatzansprüchen.	Die Auferlegung von Einfuhrzöllen oder -abgaben, welche Auswirkungen auf die Importe von Strom aus einem anderen EU-Mitgliedsstaat haben, ist verboten. Die Zulässigkeit von differenzierenden Abgaben und Zöllen hängt vor der Zielsetzung ab (ob sie sich nun exklusiv gegen Einfuhren richten oder nicht) und gegebenenfalls auch davon, wie die Erträge aus der Abgabe verteilt werden. Das Fehlen einer inländischen Produktion des besteuerten Produkts bedeutet nicht zwingend, dass eine solche Steuer einen Zoll darstellt.	Verboten gemäß Art. 3 und 6 FHA. Eine Rechtfertigung nach Art. 20 FHA ist nicht möglich.
Abgabe auf importierten Strom aus nuklearer Energie	Verstoß gegen Art. III:2 GATT. Eine Rechtfertigung nach Art. XX ist nicht möglich.	Es liegt in der Zuständigkeit der Mitgliedsstaaten, über den angemessenen Energiemix und Erfordernisse der öffentlichen Gesundheit auf ihrem Staatsgebiet zu entscheiden, woraus sich logischerweise unters-chiedliche Besteuerungsarten ergeben; dennoch ist die Autonomie der Mitgliedsstaaten in dieser Hinsicht beschränkt.	Nicht möglich: Eine Abgabe nur auf importiertem Strom ist zwangsläufig diskriminierend, weil in der Schweiz immer noch AKWs in Betrieb sind (Art. 18 FHA).

Mesure / Compatibilité avec	Droit de l'OMC	Droit de l'UE	ALE Suisse – UE
	Infraction à l'Art. III:2 GATT si les importations d'électricité sont considérés comme des produits d'électricité. Il n'y a pas d'infraction si l'électricité est différenciée sur la base des processus et des méthodes de production.	En principe réalisable d'après la directive 2003/96/CE (cf. Art. 14 et 15), pour autant que cela ne conduise pas à une discrimination indirecte. Une double imposition n'est pas interdite par le droit communautaire primaire tant que les dispositions fiscales ne soient pas harmonisées.	En principe réalisable mais ne devrait pas être discriminatoire (Art. 18 ALE). Des redevances doivent être neutres et pouvoir s'appuyer sur des critères objectifs. Même s'il n'y a pas de production au niveau national ou que celle-ci n'est que marginale,
Imposition de production d'électricité à base de combustibles fossiles	<ul> <li>Justification potentielle de l'infraction à l'Art. III:2:</li> <li>Art. XX (b), (g) GATT, si: <ul> <li>les énergies renouvelables et nucléaires sont différenciées de l'énergie fossile;</li> <li>l'impôt est perçu sur la production d'électricité nationale et importée.</li> </ul> </li> </ul>	Aides d'Etat: Art. 107(1) TFUE (l'objectif de différenciation devrait être une part inhérente du système d'imposition). L'application d'aides d'Etat n'est pas exclue. En conséquence, la différenciation pourrait soit être complètement incompatible soit devrait être adaptée afin d'être conforme avec le régime d'aides d'Etat.	la perception d'un impôt faisant partie d'un système d'imposition national perçu sur des biens suisses et des produits similaires importées est autorisée pour autant qu'il n'y a pas d'impacts aggravants sur les importations. Une justification selon l'Art. 20 ALE n'est pas possible. Une infraction contre les règles concernant les aides d'Etat n'est pas exclue.
Redevance de CO2 sur l'électricité	Infraction à l'Art. II:2(a), III:2 et l'Art. III GATT.	En vertu du principe de la taxe en aval de l'Art. 14(1) (a) de la directive 2003/96/CE et d'initiatives législatives existantes au sein de l'UE, une double imposition n'est pas interdite par le droit communautaire primaire si les normes fiscales ne sont pas harmonisées.	En principe réalisable mais ne devrait pas être discriminatoire (Art. 18 ALE). Des redevances doivent être neutres et pouvoir s'appuyer sur des critères objectifs. Même s'il n'y a pas de production au niveau national ou que celle-ci n'est que marginale, la perception d'un impôt faisant partie d'un système d'imposition national perçu sur des biens suisses et des produits similaires importées est autorisée pour autant qu'il n'y a pas d'impacts aggravants sur les importations. Une justification selon l'Art. 20 ALE n'est pas possible. Une infraction contre les règles concernant les aides d'Etat n'est pas exclue.
	Justification potentielle d'après l'Art. XX (b), (g) GATT, si la redevance est perçue sur l'électricité suisse et importée.	Aides d'Etat: Art. 107(1) TFUE (l'objectif de différenciation devrait être une part inhérente du système d'imposition). L'application d'aides d'Etat n'est pas exclue. En conséquence, la différenciation pourrait soit être complètement incompatible soit devrait être adaptée afin d'être conforme avec le régime d'aides d'Etat.	
	Subventions: Des subventions d'équilibre sont probablement possibles (Art. 1 et 2 ASCM). L'effet défavorable dépend des modalités d'application (Art. 6 ASCM); Pas d'application de l'Art. XX GATT.		

Droit d'entrée sur production d'électricité à base de combustibles fossiles + un système d'imposition d'électricité national	Infraction à l'Art. II:1(b) GATT. Justification potentielle d'après (b), (g) et (d), surtout s'il y a une combinaison avec un système d'imposition d'électricité différencié. Une déconsolidation de droits nuls sur l'électricité d'après l'Art. XXVIII pourrait éventuellement mener à des demandes de dommages et intérêts.	L'imposition de taxes et de redevances d'importations qui auraient des effets sur les importations d'électricité d'un Etat membre de l'Union est interdite. Une différenciation de redevances et de droits de douane peut être admissible si elle est basée sur l'objectif (qu'elles s'opposent exclusivement à des importations ou non) et, le cas échéant, sur la redistribution des rendements de la redevance. L'absence d'une production nationale du produit soumis à l'impôt ne conduit pas à la conclusion qu'une telle taxation représente un droit de douane.	Interdit d'après les Art. 3 et 6 ALE. Une justification d'après l'Art. 20 ALE n'est pas possible.
Redevance sur l' d'électricité nucléaire importée	Infraction à l'Art. III:2 GATT. Une justification d'après l'Art. XX n'est pas possible.	Il convient aux Etats membres de conclure au bouquet énergétique approprié et à la santé publique sur leurs territoires. Logiquement, il en résulte de différents modes d'impositions. Malgré tout, l'autonomie des Etats membres à cet égard est limitée.	Pas possible : La redevance ne peut pas être non-discriminatoire car des centrales nucléaires sont toujours en service en Suisse (Art. 18 ALE).