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Promoting green electricity through differentiated electricity tax schemes

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Renewables Support Instruments in EU 28

Source: European Commission Staff Working Document of 05/11/2013

Austria	FiT, Subsidy
Belgium	Net-metering, Quota, Subsidy
Bulgaria	FiT, Loan, Subsidy
Croatia	FiT, Loan
Cyprus	Premium, Subsidy
Czech Rep.	FiT, Loan, Premium tariff, Subsidy
Denmark	Loan, Net-metering, Premium tariff, Subsidy
Estonia	Premium tariff, Subsidy
Finland	Premium tariff, Subsidy
France	FiT, Tax regulation mechanisms
Germany	FiT, Loan, Premium tariff
Greece	FiT, Subsidy (soft loan), Tax
Hungary	FiT, Subsidy
Ireland	FiT, Tax regulation mechanisms
Italy	FiT, Quota , Premium tariff, Net-Metering, Tax
Latvia	FiT
Lithuania	FiT, Loan, Subsidy, Tax
Luxembourg	FiT, Subsidy, Regulation mechanism
Malta	FiT
Netherlands	Loan, Net-metering, Premium tariff, Subsidy, Tax
Poland	Quota, Tax regulation mechanism
Portugal	FiT
Romania	Quota System, Subsidy
Slovakia	FiT, Subsidy, Tax regulation mechanism
Slovenia	FiT, Loan, Premium tariff, Subsidy
Spain	FiT, Premium tariff, Tax
Sweden	Quota system, Subsidy, Tax
UK	FiT, Quota system, Tax

The Idea Behind Differential Taxation

- Regulatory shift from the renewable energy promotion to renewable energy steering systems
- Different tax rates based on the electricity source are aimed not only to reduce consumption of electricity but also to promote electricity from RE
  - *tax reduction/exemption for green electricity*
- Reliance on electricity certification schemes for distinguishing between grey and green electricity:

  - guarantees of origin (GOs)

  - green certificates

  - electricity labels

  - separate tax exemption certificates (e.g. renewables levy exemption certificates (LECs) under the UK Climate Change Levy scheme)

The Scope of Application of WTO Law to Trade in Electricity

- Electricity is special
  - reliance on grids => limited trade
  - prospects for a global interconnected grid => increasing role of int. law
- WTO: electricity is a good (GATT Schedule of Concessions HS 2716.00, *Canada-Feed-in Tariff Program*)
  - GATT (MFN, national treatment, optional tariff commitments), ASCM subsidy rules (tax exemptions, tax revenue recycling), TBT rules (use of certificates)
  - GATS (to the extent that a tax affects services suppliers and operations with RECs)

GATT Non-discrimination Rules

Likeness of grey and green electricity and a potential violation of GATT Art. III:2

Scenario 1: 'Like'	Same tax rates should be applied
Scenario 2: 'Directly competitive & substitutable'	Tax burden should be distributed proportionally within the 'bunches' of domestic and imported electricity
Scenario 3: 'Unlike'	Same tax rates should be applied only to domestic & imported electricity of the same type

Under scenarios 1 & 2, recourse to justification under Art. XX

Justification under General Exceptions GATT Art. XX

- Under para (g): as a measure related to environmental protection *(for differential tax treatment of all fossil fuel & possible nuclear electricity)*
- Under para (b): as a measure addressing life and health risks *(for differential tax treatment of nuclear electricity)*
- It is important that a different treatment of electricity coming from 'where the same conditions prevail' would have a link to the objective under the paragraph *(see Chapeau)*

Restrictions on Eligibility of RECs for Tax Exemptions

- *Quantitative restrictions on foreign RECs (e.g. GOs) eligible for tax exemptions*
  - A 'restriction on importation' made effective through 'other measures' => Art. XI GATT violation
  - Less favourable treatment accorded to suppliers of imported green electricity => Art. III:4 GATT violation
  - 'A means of arbitrary discrimination' =>Justification under Art. XX problematic
- *Qualitative requirements to RECs*
  - RECs attached to physical flows of electricity: *OK*
  - RECs attached to a green label: *OK* if the label is equally accessible for domestic and foreign electricity facilities

An Electricity Tax Based on CO2

- Can be applied to imported electricity as an extension of a domestic CO2 levy system (a BTA measure)
- No tax exemptions for domestic electricity facilities
- Cannot be levied on nuclear electricity
- Practical difficulties of tracing the CO2 footprint of imported electricity:

  - *Existing RECs are not helpful*

  - *WTO law compliance of a construed level (flat rate based on the average level in the exporting country, rate of the lowest domestic etc.) is questionable*

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Conclusions

- A source-based electricity tax implemented through RECs can generally be rendered compatible with WTO law.
- Additional requirements and constraints for imported green electricity eligible for tax exemptions may complicate the compliance of a differentiated electricity tax with WTO law.
- A carbon-based electricity tax could apply to imported electricity as an extension of a domestic CO2 levy scheme on the principles of border tax adjustment, but it faces implementation problems linked to tracing emissions.