

Towards Smart Sustainable Cities - Integrated Approaches Topic B - Smart Energy Systems: Decentral Energy Systems & Smart Grids

New Borders in the European Common Market for Electricity

Livia Camenisch 15 June 2017



Berner Fachhochschule Haute école spécialisée bernoise

Bern University of Applied Sciences

Schweizerische Eidgenossenschaft Confédération suisse Confederazione Svizzera Confederaziun svizra

Swiss Confederation

Commission for Technology and Innovation CTI

www.kti.admin.ch



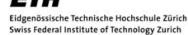
Lucerne University of HOCHSCHULE LUZERN

Engineering and Architecture













Towards Smart Sustainable Cities - Integrated Approaches Topic B - Smart Energy Systems: Decentral Energy Systems & Smart Grids

New Borders in the European Common Market for Electricity

Livia Camenisch 15 June 2017

















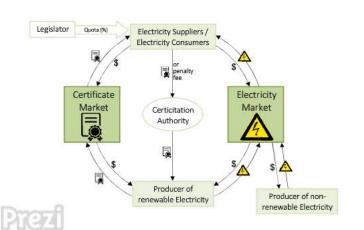
- · State support for renewable electricity
- · Decentralization of electricity production
- · Transformation of the energy and electricity system







Quota Model



International Legal Framework

World Trade Organization (WTO)



General Agreement on Tariffs and Trade (GATT)

· International contract to remove trade barriers · Goal: Enhance world trade and global economy

Principle of National Treatment





European Court of Justice (ECJ)

· Pursue a common commercial policy

· Eliminate restrictions in European trade

European Union (EU) Fundamental goals:



GATT: Prohibition of unequal treatment EU: No trade restrictions between member states

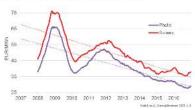
ECJ approved nationally limited guota models

Market Situation

- State support for renewable electricity
- · Decentralization of electricity production
- · Transformation of the energy and electricity system



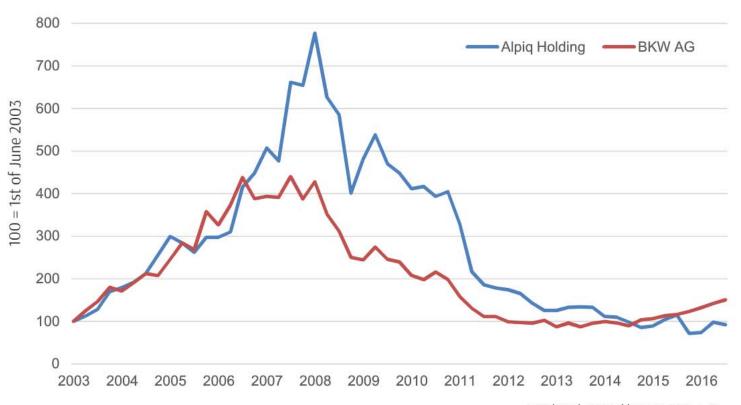
Decline in the Electricity Price



- · European emission trading system
- · Overcapacity in Germany



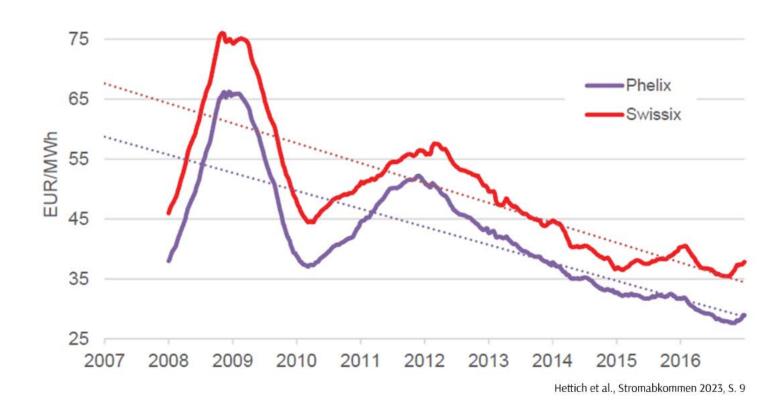
Stock Prices Alpiq and BKW (indexed)







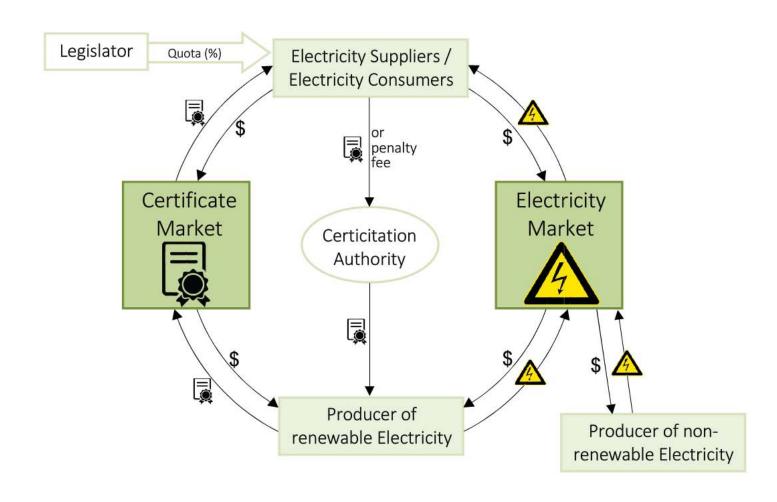
Decline in the Electricity Price



- European emission trading system
- Overcapacity in Germany



Quota Model





International Legal Framework

World Trade Organization (WTO)



WTO Members WTO Members represented by EU WTO Observers Others

General Agreement on Tariffs and Trade (GATT)

- International contract to remove trade barriers
- · Goal: Enhance world trade and global economy

Principle of National Treatment



European Union (EU)



Fundamental goals:

- · Pursue a common commercial policy
- · Eliminate restrictions in European trade

European Court of Justice (ECJ)

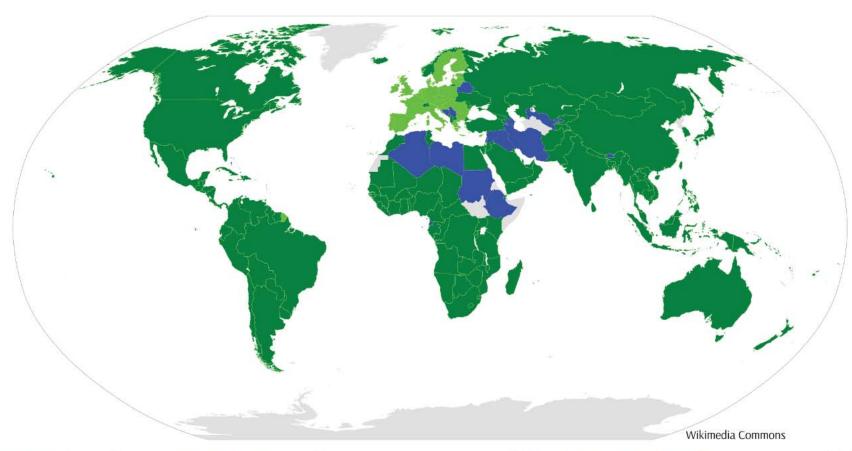


GATT: Prohibition of unequal treatment EU: No trade restrictions between member states

ECJ approved nationally limited quota models



World Trade Organization (WTO)



WTO Members WTO Members represented by EU WTO Observers Others



General Agreement on Tariffs and Trade (GATT)

- International contract to remove trade barriers
- Goal: Enhance world trade and global economy

Principle of National Treatment



- 1. The contracting parties recognize that internal issues and other internal charges, and knot, negulations and requirements affecting the internal sale, offering for sale, purches, transportation, distribution or as of products, and internal quantitative regulations negativing the mixture, processing or use of products in applied on properties, should not be applied to imported or domestic products so as to afford protection to domestic production.⁵
- 2. The products of the territory of any contracting party imported into territory of any other contracting party shall not be subject, directly or indirectly, in internal lases or other internal charges of any lates are seen of the contracting party shall ofference of the contracting party shall ofference and the products. Motorover, or contracting party shall ofference along the internal team of the party of the p
- 3. With respect to any octaling internal has which is inconsistent with the provisions of pumping 1,5 but which is specifically authertain studies a trade agreement, in force on April 10, 1987, in which the import duty on the total product is bound against increase, the contenting party imposing the text shall be tree to perspens the application of the provisions of perspaped to so the text with white into an it can ordinar insluses from the duty to the center inconserver to compensate for the elimination of the protective element of the tax.
- 4. The products of the territory of any contracting party imported into the territory of any other contracting party shall be associated interesting the forecastion that accordate the line products of restinated religion in respect of all laws, neglidations and negligeness and disciplinate in respect of all laws, neglidations and exponential disciplination or ass. The provisions of this perspectation, disciplination or ass. The provisions of this pensymbol shall not provent the application of officiental internal terriportation charges which are based exclusively on the accordact operation of the means of transport and not on the nationally of the product.

ARTICLEIII

- 5. No contracting purty shall establish or maintain any internet quantitative regulation relating to the mixture, precessing or use of products in specified amounts or properties on which requires, directly or incidencily, that any specified amount or proportion of any product which is the subject of the regulation must be supplied from domestic accross. Moreover, no contexting party shall otherwise apply internet quantitative regulations in a manner contrary to the principles set forth in paragraph 1.5.
- 6. The provisions of paragraph 5 shall not apply to any internal quantitative regulation in force in the iteritory of any certaincing party on July 1, 1999, April 10, 1947, or March 20, 1984, at the option of that octoristing party; Provided that any such regulation which is containty to the provisions of percepting 5 shall not be modified to the derificant of imports and shall be treated as a customs duty for the purpose of regional content of the contract of the content of the
- No internal quantitative regulation relating to the mixture, processing or use of products in specified amounts or proportions shall be applied in such a manner as to allocate any such amount or proportion among external sources of supply.
- 8. (d) The provisions of this Article shall not apply to laws, regulations or requirements governing the procurement by governmental agencies of proclacib purchased for governmental purposes and not with a view to commercial result or with a view to use in the production of goods for commercial sale.
- (b) The provisions of this Article shall not provent the payment of subaldies exclusively to domestic producers, including payments to domestic producers derived from the procession of internal tosse or charges applied consistently with the provisions of this Article and aubsidise effected through governmental pourhasse of domestic products.
- 9. The contracting parties recognize that internal maximum price confidence when the contraction of the other provisions of this Article, on have offered products to the internet of confracting parties supplying imported products. Accordingly, contracting parties applying such measures shall take accord of the internet of experiting contracting parties with a view to avoiding to the fullest practicable outent such principal effects.
- 10. The provisions of this Article shall not prevent any contracting party from establishing or maintaining internal quantitative regulations relating to exposed cinematograph films and meeting the requirements of

ARTICLES XIX AND XX

has requested the action. In critical circumstances, where delay would cause demage which it would be difficult to repair, action under peragraph of this Articles way be taken provisionally without princresultation, on the condition that consultation shall be affected immediately defer toking such action.

- S. (a) If agreement strong the interested contracting parties with respect to the action is not reached, the contracting party which propose to take or contrains the scales while resolutions, for feet in 45 or, and if each action is below or continued, the effected contenting perfect shall the contracting perfect the contracting perfect shall expend, space the experience of the scales of the contracting perfect shall expend, space the experience in section 15 by the CORNACIDAL PARTIE, the expend, space the experience is necessary by the CORNACIDAL PARTIE, the expend space has do the contenting proby taking may be stime, or, in the case survisaged in paragraph 1 (b) of this Artista, in the trade of the contenting period peaks after the order than 10 to the state of the contracting period peaks after the order than 10 to the contracting period peaks after the order than 10 to the state of the contracting period peaks after the order than 10 to the state of the which the CORNACIDAL PARTIES do not disapprove.
- (§) Nintetiluturding the provisions of sub-paragraph (s) of this peragraph, where action is taken under paragraph 2 of this Artists without piets consolitation and causes of relatives actions integrit integrit in the solitation of the provision of relatives action integrit integrit in the solitation of the solitation

Garard Enceptions

Subject to the requirement that such measures are not applied in a manner which would constitute a means of arbitrary or subjectifiable discrimination between countries where the same conditions proved, or a disguised restriction on interestined trade, ordering in this Agreement hall be construed to prevent the adaption or enforcement by any

- (ii) necessary to protect public numbs;
- (b) necessary to protect human, around or plant life or healt
- (c) relating to the importations or exportations of gold or silver;
- (d) necessary to secure compliance with laws or regulations which are not incursistent with the provisions of this Agraement including those

ARTICLES XX AND X

- slating to costness enforcement, the enforcement of monopul pended under paragraph 4 of Article II and Article XVII, t entection of patents, trade marks and copyrights, and t
- (s) relating to the products of prison labor
- (f) imposed for the protection of national treasures of artistic
- (g) relating to the conservation of extractible calical resources such measures are trade effective in conjunction with restriction on domestic production or consumption;
- (b) undertaken in pursuance of obligations under any intergovernmental commodity appearant which confirms to criteria submittals of the CONTRACTION PARTIES and not disapproved by them or which is their so enhanced and not so disapproved.²
- 6) involving matrixities on security of densestic materials measure to essent searched quartities of each materials to a demonstrapersoning industry during periods when the demostic prices such materials is half below the cortif price as part of a governmental shalldenties place Personal that wash materials whill not opport to increase the expects of or the posteration of the production of the expects of the posteration of affirmed to such demostic industry, and shall not depart from the provisions of this Agreement relating to more discrimination;
- 6) sensitial to the computation on distribution of products in greated as but also set registry. Neveral the comp and measurements and I be exceident with the principle that all contacting parties are striked to an exemplical stem of the internettional registry of each products, and that any such measures, which are interested as the content of t

4 41 7 1000

Security Europine

Northing in this Agreement shall be construed

 (a) to require any contracting party to furnish any information the disclosure of which it considers contrary to its essential accordinterests; or



Imported products must be treated the same way as similar national products

Imported electricity and nationally produced electricity must be treated the same way

PART II

Article III*

National Treatment on Internal Taxation and Regulation

- 1. The contracting parties recognize that internal taxes and other internal charges, and laws, regulations and requirements affecting the internal sale, offering for sale, purchase, transportation, distribution or use of products, and internal quantitative regulations requiring the mixture, processing or use of products in specified amounts or proportions, should not be applied to imported or domestic products so as to afford protection to domestic production.*
- 2. The products of the territory of any contracting party imported into the territory of any other contracting party shall not be subject, directly or indirectly, to internal taxes or other internal charges of any kind in excess of those applied, directly or indirectly, to like domestic products. Moreover, no contracting party shall otherwise apply internal taxes or other internal charges to imported or domestic products in a manner contrary to the principles set forth in paragraph 1.*
- 3. With respect to any existing internal tax which is inconsistent with the provisions of paragraph 2, but which is specifically authorized under a trade agreement, in force on April 10, 1947, in which the import duty on the taxed product is bound against increase, the contracting party imposing the tax shall be free to postpone the application of the provisions of paragraph 2 to such tax until such time as it can obtain release from the obligations of such trade agreement in order to permit the increase of such duty to the extent necessary to compensate for the elimination of the protective element of the tax.
- 4. The products of the territory of any contracting party imported into the territory of any other contracting party shall be accorded treatment no less favourable than that accorded to like products of national origin in respect of all laws, regulations and requirements affecting their internal sale, offering for sale, purchase, transportation, distribution or use. The provisions of this paragraph shall not prevent the application of differential internal transportation charges which are based exclusively on the economic operation of the means of transport and not on the nationality of the product.

- 5. No contracting party shall establish or maintain any internal quantitative regulation relating to the mixture, processing or use of products in specified amounts or proportions which requires, directly or indirectly, that any specified amount or proportion of any product which is the subject of the regulation must be supplied from domestic sources. Moreover, no contracting party shall otherwise apply internal quantitative regulations in a manner contrary to the principles set forth in paragraph 1*
- 6. The provisions of paragraph 5 shall not apply to any internal quantitative regulation in force in the territory of any contracting party on July 1, 1939, April 10, 1947, or March 24, 1948, at the option of that contracting party; *Provided* that any such regulation which is contrary to the provisions of paragraph 5 shall not be modified to the detriment of imports and shall be treated as a customs duty for the purpose of negotiation.
- 7. No internal quantitative regulation relating to the mixture, processing or use of products in specified amounts or proportions shall be applied in such a manner as to allocate any such amount or proportion among external sources of supply.
- 8. (a) The provisions of this Article shall not apply to laws, regulations or requirements governing the procurement by governmental agencies of products purchased for governmental purposes and not with a view to commercial resale or with a view to use in the production of goods for commercial sale.
- (b) The provisions of this Article shall not prevent the payment of subsidies exclusively to domestic producers, including payments to domestic producers derived from the proceeds of internal taxes or charges applied consistently with the provisions of this Article and subsidies effected through governmental purchases of domestic products.
- 9. The contracting parties recognize that internal maximum price control measures, even though conforming to the other provisions of this Article, can have effects prejudicial to the interests of contracting parties supplying imported products. Accordingly, contracting parties applying such measures shall take account of the interests of exporting contracting parties with a view to avoiding to the fullest practicable extent such prejudicial effects.
- 10. The provisions of this Article shall not prevent any contracting party from establishing or maintaining internal quantitative regulations relating to exposed cinematograph films and meeting the requirements of Article IV.

protective element of the tax.

4. The products of the territory of any contracting party imported into the territory of any other contracting party shall be accorded treatment no less favourable than that accorded to like products of national origin in respect of all laws, regulations and requirements affecting their internal sale, offering for sale, purchase, transportation, distribution or use. The provisions of this paragraph shall not prevent the application of differential internal transportation charges which are based exclusively on the economic operation of the means of transport and not on the nationality of the product.

6

Imported products must be treated the same way as similar national products

Imported electricity and nationally produced electricity must be treated the same way

37

38

has requested the action. In critical circumstances, where delay would cause damage which it would be difficult to repair, action under paragraph 1 of this Article may be taken provisionally without prior consultation, on the condition that consultation shall be effected immediately after taking such action.

- 3. (a) If agreement among the interested contracting parties with respect to the action is not reached, the contracting party which proposes to take or continue the action shall, nevertheless, be free to do so, and if such action is taken or continued, the affected contracting parties shall then be free, not later than ninety days after such action is taken, to suspend, upon the expiration of thirty days from the day on which written notice of such suspension is received by the CONTRACTING PARTIES, the application to the trade of the contracting party taking such action, or, in the case envisaged in paragraph 1 (b) of this Article, to the trade of the contracting party requesting such action, of such substantially equivalent concessions or other obligations under this Agreement the suspension of which the CONTRACTING PARTIES do not disapprove.
- (b) Notwithstanding the provisions of sub-paragraph (a) of this paragraph, where action is taken under paragraph 2 of this Article without prior consultation and causes or threatens serious injury in the territory of a contracting party to the domestic producers of products affected by the action, that contracting party shall, where delay would cause damage difficult to repair, be free to suspend, upon the taking of the action and throughout the period of consultation, such concessions or other obligations as may be necessary to prevent or remedy the injury.

Article XX

General Exceptions

Subject to the requirement that such measures are not applied in a manner which would constitute a means of arbitrary or unjustifiable discrimination between countries where the same conditions prevail, or a disguised restriction on international trade, nothing in this Agreement shall be construed to prevent the adoption or enforcement by any contracting party of measures:

- (a) necessary to protect public morals;
- (b) necessary to protect human, animal or plant life or health;
- (c) relating to the importations or exportations of gold or silver;
- (d) necessary to secure compliance with laws or regulations which are not inconsistent with the provisions of this Agreement, including those



- relating to customs enforcement, the enforcement of monopolies operated under paragraph 4 of Article II and Article XVII, the protection of patents, trade marks and copyrights, and the prevention of deceptive practices;
- (e) relating to the products of prison labour;
- imposed for the protection of national treasures of artistic, historic or archaeological value;
- (g) relating to the conservation of exhaustible natural resources if such measures are made effective in conjunction with restrictions on domestic production or consumption;
- (h) undertaken in pursuance of obligations under any intergovernmental commodity agreement which conforms to criteria submitted to the CONTRACTING PARTIES and not disapproved by them or which is itself so submitted and not so disapproved;*
- (i) involving restrictions on exports of domestic materials necessary to ensure essential quantities of such materials to a domestic processing industry during periods when the domestic price of such materials is held below the world price as part of a governmental stabilization plan; Provided that such restrictions shall not operate to increase the exports of or the protection afforded to such domestic industry, and shall not depart from the provisions of this Agreement relating to non-discrimination;
- (j) essential to the acquisition or distribution of products in general or local short supply; Provided that any such measures shall be consistent with the principle that all contracting parties are entitled to an equitable share of the international supply of such products, and that any such measures, which are inconsistent with the other provisions of the Agreement shall be discontinued as soon as the conditions giving rise to them have ceased to exist. The CONTRACTING PARTIES shall review the need for this sub-paragraph not later than 30 June 1960.

Article XXI

Security Exceptions

Nothing in this Agreement shall be construed

 (a) to require any contracting party to furnish any information the disclosure of which it considers contrary to its essential security interests; or

European Union (EU)



Wikimedia Commons

Fundamental goals:

- Pursue a common commercial policy
- Eliminate restrictions in European trade



European Court of Justice (ECJ)



GATT: Prohibition of unequal treatment

EU: No trade restrictions between member states

ECJ approved nationally limited quota models



Towards Smart Sustainable Cities - Integrated Approaches Topic B - Smart Energy Systems: Decentral Energy Systems & Smart Grids

New Borders in the European Common Market for Electricity

Livia Camenisch 15 June 2017

















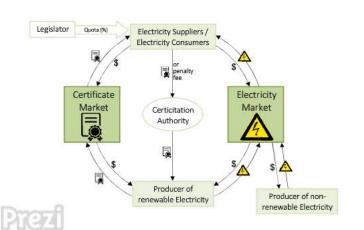
- · State support for renewable electricity
- · Decentralization of electricity production
- · Transformation of the energy and electricity system







Quota Model



International Legal Framework

World Trade Organization (WTO)



General Agreement on Tariffs and Trade (GATT)

· International contract to remove trade barriers · Goal: Enhance world trade and global economy

Principle of National Treatment





European Court of Justice (ECJ)

· Pursue a common commercial policy

· Eliminate restrictions in European trade

European Union (EU) Fundamental goals:



GATT: Prohibition of unequal treatment EU: No trade restrictions between member states

ECJ approved nationally limited guota models