COMMISSION OF THE EUROPEAN COMMUNITIES

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Brussels, 22 July 1992

REPORT FROM THE COMMISSION TO THE COUNCIL

on the progress
on cooperation between public utilities and
auto-producers of electricity

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1. Introduction

- 1.1. On 8 November 1988 the Council adopted recommendation 88/611/EEC to promote cooperation between public utilities and auto-producers of electricity.¹
- 1.2. The recommendation seeks to promote auto-production of electricity, based on renewable energy sources, waste-derived energy and combined heat and power generation (RWC) by introducing a framework for cooperation governing electricity exchanges with public utilities.
- 1.3. As part of the framework for cooperation standard contract criteria must be introduced entailing:
 - (a) an obligation on public utilities to purchase surplus electricity produced by RWC auto-producers;
 - (b) the authorization in principle of RWC auto-production;
 - (c) remuneration for the purchases referred to at (a) above in line with the "costs avoided"; 2
 - (d) non-discriminatory treatment of auto-producers compared with other consumers as regards supplies of electricity from the public utility;
 - (e) the above rights of RWC auto-producers must, however, be compatible with the smooth economic operation of the public utility.
- 1.4. The recommendation calls on the Member States to report to the Commission after three years on the progress on cooperation between public utilities and auto-producers of electricity. The Commission has drafted this report on the application of the recommendation and the progress of the framework for cooperation on the basis of information received from the Member States during 1991.

OJ No L 335, 7.12.1988, p. 29 (see Annex 1).

^{2 &}quot;Costs avoided" = fuel savings made by electricity-generating companies as a result of independent production and savings made in investment costs where the regularity of independent production permits such savings to be made.

2. Situation in the Member States

2.1. Description

The situation in each Member State is described in Annex 2 and summarized at 2.3 below.

The evaluation is structured as follows:

- general remarks (definition of the framework for cooperation);
- Introduction of standard contract criteria;
- specific procedures for resolving disputes about contract conditions;
- obligation on public utilities to purchase electricity from RWC auto-production;
- authorization of RWC auto-production;
- principles of pricing for RWC electricity sales to the public supply network;
- principles of pricing for electricity sales to RWC auto-producers from the public supply network no discrimination;
- transparency of pricing principles;
- assessment of the obstacles to the framework for cooperation;
- new legislation;
- other measures (not included in the recommendation) taken by the Member States to promote RWC auto-production.

The evaluation of the situation in the United Kingdom is structured differently, as certain points of the recommendation are not applicable to the new liberalized framework for electricity supplies: no distinction between auto-producers and producers, remuneration fixed by the market (cost avoided is not applicable), etc.

2.2. Comparison

The situation with regard to auto-production varies greatly from one Member State to another. However, it is possible to group together the various types of circumstances which determine this situation. A table has been drawn up to facilitate this comparison.

The table contains the following information:

2.2.1. Framework for cooperation and standard contract (points 1 and 2 of the recommendation)

The way in which the framework for cooperation is defined is of great importance: the absence of a legal framework, even where the supervisory authorities have adopted a recommendation, can lead to uncertainty for new auto-producers; the existence of an agreement between the parties concerned, signed by the representative associations on both sides, has an equivalent effect to legislation.

The following types of situation occur:

- legal framework for RWC auto-production (or for certain forms of auto-production);
- agreements between the parties concerned;
- recommendation adopted by the supervisory authorities;
- standard contract for RWC auto-production (or for certain forms of auto-production).
- 2.2.2. Specific procedures for resolving disputes (point 2 of the recommendation)

These apply to RWC auto-production in general, to certain forms of auto-production or to certain aspects thereof (e.g. pricing).

2.2.3. Obligation to purchase electricity arising from RWC autoproduction

This applies to RWC auto-production in general or to certain forms of auto-production. In some cases there is no explicit obligation, but the public utility does in practice purchase electricity produced by auto-producers.

2.2.4. Authorization of RWC auto-production (point 3(b) of the recommendation)

In general, and up to certain thresholds, which vary greatly from one Member State to another, RWC auto-producers do not require special authorization, provided they comply with technical, environmental and other standards. Beyond those thresholds authorization is generally required (in some cases the public utility is consulted).

2.2.5. Pricing for sales to the public utility (point 3(c) of the recommendation)

The following types of situation occur:

- base load: fuel cost avoided, prices defined by the market or higher than the cost avoided for certain forms of autoproduction (wind energy or renewable sources in general);
- peak-load: prices defined by the market or cost avoided, which may include capacity payments (minimum regularity or supply on demand).

The following factors have a major influence on the prices paid to RWC auto-producers:

- the type of tariff used by the public utility as a basis for calculating auto-production prices;
- major regional differences in prices paid to auto-producers within a Member State;
- prices paid to auto-producers guaranteed by the Member State for a number of years.
- 2.2.6. Pricing of sales to the public utility (point 3(c) of the recommendation)

in addition to non-discriminatory treatment compared with other consumers, it is important for auto-producers to pay tariffs which do not penalize irregular consumers, i.e. for the standing charge to be reduced during periods in which the auto-producer does not need to purchase electricity from the public utility.

2.2.7. Transparency of pricing principles (point 3(c) of the recommendation)

The situation is similar in all Member States and is generally satisfactory.

2.2.8. New legislation

Legislation adopted by the Member States since the recommendation was published.

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TABLE I COMPARISON OF THE SITUATION

Country	Framework for cooperation and standard contract 	Specific procedures for resolving disputes 	Obligation to purchase	Authorization of RWC auto-producers	Pricing of sales to the public utility	Pricing of sales from the public utility	Transparency of pricing principles	New legislation
Belgium	Electricity and Gas	No (supervisory authority may intervene)	Accepted in principle by the public utility	No special authorization	- base load: fuel cost avoided - high-load hours: cost avoided in the long term (payment per kWh and per kW)	- no standing charge 	Prices of sales to and from the public utility clearly defined	None
Denmark	producers	No (supervisory authority may intervene with regard to prices)	Yes for wind energy and industrial auto- production	Less than 25 MW: authorization not required Over 25 MW: as for other producers	- Wind energy: higher than cost avoided - In general: symmet. pricing of sales and purchases	No discrimination	Principle of symmetrical pricing of sales and purchases	None
Germany	Legal framework (concerns above all renewable energies) Agreement for industrial auto-producers	Yea	industrial auto- producers	Authorization required for installations above 1 MW which supply electricity to the public supply network	- Renewable energies: higher than cost avoided (in certain cases) - Other RWC: cost avoided; different regional prices	No discrimination	Pricing principles clearly defined -	1991 Law on renewable energies
Greece	Legal framework	No .	Yes	Authorization required (public utility consulted) Capacity limits calculated on the basis of own-use requirements	- Puel cost avoided - No capacity payments - Discrimination between private auto- producers and regional authorities (25% difference)	- No discrimination - Option of reduced fixed charge and higher kWh price 	Prices of sales to and from the public utility clearly defined	None
Spain	Legal framework	Yee	Yes	Authorization required (for CHP, energy savings of 45% compared with conventional systems required)	Cost avoided: different prices for programmed or guaranteed energy or supply on demand (capacity payments)	- No discrimination - Standing charge can be reduced to 18%	based on price of	None
France	Legal framework	Yea	Yes	- Limit of 8 000 kVA (except for secondary industrial auto-production or auto-production from waste) - Beyond that limit, authorization required (EDF consulted)	- Cost avoided - Capacity payments for partially guaranteed supplies - Prices based on (unfavourable) tariffs for *very long use*		Prices of sales to and from the public utility 'Flearly defined	None

Country		Specific procedures for resolving disputes 	Obligation to purchase		the public utility	Pricing of sales from the public utility	Transparency of pricing principles	New legislation
Ireland	Standard contract	Yes for hydro power	•	No special authorization	- Fuel cost avoided - Capacity payment from 70% (daytime during the winter) - Renewable energies: higher than cost avoided	No discrimination	Prices of sales to and from the public utility clearly defined	1991 standard contract
Italy	Legal framework	No		Authorization required (on condition that surplus power is sold to ENEL)	•	-	,	1991 legislation
-	Standard contract (up to 100 kW) -	Yes	Yes	Authorization required above 100 kW	- Fuel cost avoided - No capacity payments 	No discrimination	Prices of sales to and from the public utility clearly defined	1989 standard contract
	Legal framework Standard contract for power generated from waste and from CHP	Yes	Yes		Average cost avoided Very favourable terms for regular supplies (kWh and kW)	No discrimination	Sale prices linked to purchase prices 	1989 Law
~	- Legal framework - Standard contract 	Yee	Yes	authorization not required (no limit	- Extra payment may be - Capacity payment to made by the State limited to 20% Prices guaranteed by		Sale prices linked to purchase prices 	- 1990 standard contract - 1991 Laws
United Kingdom	Legal framework	Yes	- Yes for renewable energies - Market (open 'pool')	Same trestment as public utility producers	Prices fixed by the market (open *pool*) Renewable energies: prices above market prices (NFFO)	No discrimination	Price fixing mechanism clearly defined	
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2.3. Summary

in general, cooperation between RWC auto-producers and the public utilities has progressed along the lines laid down in the recommendation.

In Belgium, recommendation C.C. (e) 91/12 of the Electricity and Gas Supervisory Committee sets the prices paid to RWC auto-producers in line with the Council recommendation. Surplus electricity is accepted by the public utility, although there is no legal obligation.

In Denmark, the agreements concerning wind energy (1984) and industrial auto-producers (1982), supplemented by the recommendation of the association of electricity producers (1990), ensure that auto-producers receive treatment in line with the Council recommendation. On account of the insignificant quantities involved, the other RWC auto-production sectors (hydroelectricity, etc.) are not covered by any agreement, but the 1990 recommendation of the association of electricity producers does apply to them. The threshold beyond which auto-producers require an authorization, like other electricity producers, is relatively high: 25 MW.

In Germany, the 1991 Law provides for uniform, favourable treatment for renewable energies. The principles underlying the agreement with industrial auto-producers (1979, amended in 1988) are in line with those set out in the Council recommendation. As the costs of regional producers vary greatly, the payments made to industrial auto-producers also vary. Auto-producers with a capacity greater than 1 MW who supply surplus power to the public utility require an authorization (granted on the basis of the public interest).

In Greece, RWC auto-production is allowed under the 1985 Law (the contract and pricing principles date from 1988). RWC auto-producers must hold a licence, granted after consultation of the public utility, and the capacity limits are based on the auto-producer's own electricity or heat requirements (this provision discourages independent production). Prices are based solely on fuel cost avoided and are lower for private auto-producers than for the regional authorities (difference of 25%).

In **Spain**, the legal framework (1980 and 1982 Laws) ensures favourable treatment for RWC auto-producers in line with the Council recommendation.

In France, the 1955 Law on Independent producers and subsequent implementing measures provide for treatment of RWC auto-producers below 8 000 kVA in line with the principles set out in the Council recommendation. However, the prices paid to auto-producers, based on the public utility's tariffs for "very long use", seem rather unfavourable.

in **Ireland**, the standard contract and the new tariffs (1991) for non-fuel auto-producers are very favourable. Although there is no legal obligation, since 1990 the public utility has accepted the surpluses of industrial auto-producers (CHP³); these auto-producers receive capacity payments only if supplies from November to February exceed 70% of capacity.

In **Etaly**, the 1991 legal framework provides for very favourable treatment for RWC auto-producers in line with the Council recommendation.

In Euxembourc, the 1989 standard contract applies to RWC autoproducers below 100 kW; prices are based on the fuel cost avoided.

In the Netherlands, the 1989 Law ensures treatment in line with the Council recommendation for RWC auto-producers below 5 MW.

In **Portugal**, the standard contract (1990) and the Laws (1988: up to 10 MW; 1991: over 10 MW) provide for treatment of RWC autoproducers in line with the Council recommendation. Independent producers with a capacity greater than 10 MW can obtain an unlinked licence enabling them to generate electricity for their own use or for sale to third parties under market arrangements.

In the **United Kingdom**, under the new liberalized arrangements for electricity, the purchase obligation (except for renewable energies) and payments to auto-producers based on the cost avoided, contained in the Council recommendation, are not applied. However, an equivalent effect is achieved, as the operation of the market (open "pool") avoids discrimination compared with other producers or consumers. The Non-Fossil Fuel Obligation (NFFO) entails very favourable treatment for renewable energies: purchase obligation and prices higher than market prices.

³ Combined Heat and Power.

3. Measures taken by the Member States to promote RWC auto-production not included in the recommendation

3.1. Renewable energies

Remuneration based on the cost avoided, as provided for in the recommendation, is not sufficient to promote the use of certain renewable sources of energy. In view of the environmental benefits, the remuneration in a growing number of Member States is higher than the cost avoided: In Denmark (since 1984 for wind power), Germany (since 1991), Ireland (since 1991), Italy (since 1991) and the United Kingdom (since 1990, prices above market prices).

This remuneration is supplemented in certain cases by tax exemptions, investment subsidies or preferential loans: in Denmark (wind power), Spain (RWC auto-production), Italy, Netherlands, etc.

3.2. Remuneration guarantees

In order to reduce the risks faced by new RWC auto-producers, Portugal guarantees remuneration during the first eight years: the tariffs will not be less than 90% of those initially applied. This promotion measure is supplemented by a subsidy paid by the State per kWh, equal to the subsidy (if any) paid to thermal power stations on their fuel oil consumption (payment equivalent to 300 g of fuel oil per kWh).

3.3. State aids

insofar as the above measures constitute State aids within the meaning of Article 92 of the EEC Treaty, the Commission is in the process of examining or has already approved these measures.

3.4. Promotion of combined heat and power generation (CHP)

A policy of active promotion of CHP generation is being conducted in various Member States, including the Netherlands, Ireland (aimed at industry), Denmark (conversion of district heating installations to CHP), Italy (agreement between the public utility and leading industrialists to increase auto-production from 800 MW to 4 000 MW), etc.

4. Conclusions

- 4.1. In spite of the good progress which has been made, there are still a number of obstacles to the application of the recommendation, as follows:
 - (a) Authorization of RWC auto-producers

In general, beyond a certain capacity threshold, auto-producers require a special authorization. The threshold varies greatly from one Member State to another, and so cannot be justifled only on the need to ensure the smooth operation of public sector undertakings, as provided for in the recommendation. In practice, the decision regarding the authorization of RWC auto-producers above the capacity thresholds is taken by the public authorities, who are liable to take account principally of the interests of the public utility companies: in Greece (the public utility is consulted in all cases), Luxembourg (100 kW), Germany (1 MW), France (public utility consulted above 8 000 kVA), etc.

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(b) Purchase obligation

The public utility agrees to purchase surplus electricity, but is not in all cases under a legal obligation to do so (i.e. guaranteed by a legal framework, a standard contract or an agreement). This situation implies a degree of uncertainty for new auto-producers in Belgium and in Ireland (except for renewable energies).

(c) Pricing of sales to the public utility

Taking account only of the cost of fuel avoided in high-load hours results in discrimination against RWC auto-producers in Luxembourg and Greece. In France, the public utility calculates the remuneration of auto-producers on the basis of rather unfavourable tariffs (tariffs for very long use). In Germany, in view of the differences in costs between regional public utility producers, the remuneration of industrial auto-producers varies greatly (by up to 40%).

(d) Pricing of purchases from the public utility

RWC auto-producers pay the same prices as other consumers. However, the standing reserve charge can be considered to discriminate against irregular consumers, as the average price of energy purchased is likely to be very high. There is no such standing charge in Belgium, it is limited to 20% in Portugal and can be limited to 18% in Spain. In Italy, RWC auto-producers can set their sales to the public utility against future purchases during the same type of annual period and for the same time of day.

4.2. The Directive on the completion of the internal market in electricity is currently under discussion. Once the new legal framework has been defined, the Commission will consider whether it is appropriate to propose specific measures for RWC auto-production to the Council.

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(Acts whose publication is not obligatory)

COUNCIL

COUNCIL RECOMMENDATION

of 8 November 1988

to promote cooperation between public utilities and auto-producers of electricity

(88/611/EEC)

THE COUNCIL OF THE EUROPEAN COMMUNITIES,

Having regard to the Treaty establishing the European Economic Community, and in particular Article 235 thereof.

Having regard to the proposal from the Commission ().

Having regard to the opinion of the European Parliament (2),

Having regard to the opinion of the Economic and Social Committee ('),

Whereas, in its resolution of 16 September 1986 concerning new Community energy policy objectives for 1995 and the convergence of the policies of the Member States (*), the Council adopted as sectoral objectives improved energy efficiency in all sectors and a greater contribution from new and renewable sources of energy

Whereas, in accordance with the resolution of 26 November 1986 on a Community orientation to develop new and renewable energy sources ('), the Council adopted, on 9 June 1988, recommendation 88/349/EEC on developing the exploitation of renewable energy sources in the Community (*);

Whereas on 25 October 1977 the Council adopted recommendation 77/714/EEC on the creation in the Member States of advisory bodies or committees to promote combined heat and power production and the exploitation of residual heat();

Whereas combined heat and power generation (CHP) and waste energy (combustion of waste and use of residual heat in industry), with their potential for oil substitution and savings of exhaustible primary energy sources, couldmake an important contribution to the achievement of the Community's 1995 energy policy objectives:

Whereas the generation of electricity is a common field of application not only for renewable sources of energy but also for waste energy and for CHP (in total hereafter called RWC) and is therefore of crucial importance to the development of this energy supply potential;

Whereas these power generation processes are mainly suited, because of inherent factors, to auto-production outside the public supply system.

Whereas the profitability of RWC auto-production will also depend on the conditions of cooperation with the public utilities (*) as regards sales of surplus electricity, purchases of additional electricity, and the provision of reserve capacity;

Whereas certain existing laws and administrative provisions can constitute an obstacle to the development of RWC auto-production;

⁽¹) OJ No C 172, 1. 7. 1988, p. 9 (¹) OJ No C 235, 12. 9. 1988, p. 174. (¹) OJ No C 309, 5 12. 1988 (¹) OJ No C 241, 25. 9 1986, p. 1. (¹) OJ No C 316, 9. 12. 1986, p. 1.

^(*) OJ No L 160, 28. 6. 1988, p. 46.

⁽⁾ OJ No L 295, 18 11, 1977, p. 5

^{(&#}x27;) For the purposes of this recommendation, 'public utility' shall mean an undertaking whose principal objective is the generation, transmission and/or distribution of electricity for supply to third parties. Public utilities may have different corporate structures.

7: 12. 88

Whereas the price for the auto-producer's electricity sales to the public network should be geared as closely as possible to the costs that can be avoided in the public supply system in order to guarantee appropriate revenues tor the auto-producer;

Whereas a framework of appropriate measures should govern cooperation on electricity between auto-producers and public utilities by establishing common principles and hence creating better conditions for the further development of RWC auto-production of electricity in the Community,

HEREBY RECOMMENDS TO THE MEMBER STATES

- I that, in order to promote auto-production of electricity, based on renewable energy sources, waste energy and combined heat and power (RWC), they should provide a framework for cooperation between public utilities and all RWC auto-producers, under which the conditions concerning the quantity and price of electricity exchanges are agreed in accordance with common principles.
- that they should facilitate the creation of this framework by the introduction of standard contract criteria:
 - either by voluntary arrangements between the parties concerned, or
 - if necessary, through specific legal or administrative provisions.

and that existing legal or administrative provisions at variance with such criteria should be adapted accordingly. The need for defining specific procedures for resolving disputes about contract conditions should also be examined;

- 3 that they should ensure within such arrangements or provisions:
 - (a) that the public utilities should be obliged to offer to purchase those quantities of electricity which arise out of RWC auto-production, always provided that the smooth economic operation of existing public generating plants is not thereby jeopardized;

- (b) that, with regard to quantities, RWC auto-production of electricity is authorized in principle as long as a public interest is not thereby infringed, and that it is impeded neither by legal and administrative provisions nor by conditions imposed by the public utilities;
- - reimbursement for electricity sales to the public supply network from RWC auto-production should:
 - be based primarily on the long-term average costs avoidable by the public utilities in their area of supply,
 - correspond at least to the variable costs a avoidable by the public utilities, i.e. mainly the savings made in fuel costs.
 - guarantee the auto-producer additional reimbursement to the extent that he enables the public supply network to make savings in investment costs in the generation or purchase of electricity. The size of this reimbursement should depend on how regularly the auto-producer's electricity production capacity is available, especially at peak periods.
 - reimbursement for the purchase of electricity from the public supply network is determined in such a way that auto-producers are treated in the same way as comparable purchasers who have no means of auto-production.
 - the rules regarding this reimbursement are framed so as to be as transparent as possible.
- that they report to the Commission after three years on the progress on cooperation between public utilities and auto-producers of electricity.

Done at Brussels, 8 November 1988.

For the Council

The President

A PEPONIS

Annex 2

Evaluation of the situation in each Member State

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Belglum

Progress report

1. General remarks

- No legal framework.
- Recommendation C.C. (e) 91/12 of the Electricity and Gas Supervisory Committee: tariff measures to be applied from 1.1.91 (based on the Committee's descriptive notes C.G.E.E. 2896 and 2901 of 1.4.89, applicable to auto-producers who produce electricity with a view to recovering or saving energy).

2. (a) Introduction of standard contract criteria

- No standard contract.
- General rules fix the tariffs for electricity bought and sold by auto-producers (see point 1).

(b) <u>Definition of specific procedures for resolving disputes about contract conditions</u>

- No specific procedure.
- In case of serious dispute, the Control Committee and the Ministry for Economic Affairs may intervene.

3. (a) Obligation on public utilities to purchase electricity arising from RWC auto-production

- No legal obligation.
- "The producers/distributors of electricity are in principle prepared to purchase surplus energy produced by auto-producers and to supply them with supplementary or standby energy supplies." (Letter from Beigium, dated 22.12.89)

(b) Authorization of RWC electricity auto-production

No special authorization for auto-producers.

4. (a) Principles of pricing for RWC electricity sales to the public supply network

- Tariffs fixed by the descriptive notes (see point 1).
- Tariffs based on:
 - kWh: fuel cost + part of the "supplementary investment costs of new nuclear power stations" (between 60% and 80% during high load hours only);
 - kW: 80% of the capacity payment during high-load hours (average of power minimá during high-load and peak-load hours).

(b) Principles of pricing for electricity sales to RWC auto-producers from the public supply network. No discrimination

- No discrimination compared with other consumers.
- Tariffs structured as at point 4(a):
 - kWh: fuel cost + "supplementary investment costs of new nuclear power stations" (different prices according to season and time of day)
 - kW: capacity payment based on the maximum power consumption each month (different prices according to season and time of day)
- Tariffs which do not penalize irregular consumers: capacity payment based on the maximum power consumption each month.

(c) Transparency of pricing principles

The prices of sales and purchases are clearly defined and have the same structure.

5.	Assessment	of	the	obstacles	to	the	framework	for	cooperati	on
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- No legal framework, resulting in uncertainty for new autoproducers.
- In practice, no obstacles to RWC auto-production.

6. New legislation

None.

7. Other measures (not included in the recommendation) to promote RWC autoproduction taken by the Member State

None.

Denmark

Progress report

1. General remarks

- No legal framework for auto-production.
- Wind power: 1984 agreement between DEF (Danish Association of Electricity Producers) and Danish Wind Power and the Association of Danish Wind Mill Producers valid until 1994.
- Industrial auto-producers: 1982 agreement between DEF and indukraft, amended by the 1990 DEF recommendations on tariffs.

2. (a) Introduction of standard contract criteria

- No standard contract.
- Wind power: 1984 agreement between DEF and the wind power sector.
- Industrial auto-production: 1982 agreement between DEF and Indukraft, amended by the 1990 DEF recommendations on tariffs, applied by ELKRAFT (Zealand area) and to be applied by ELSAM (Jutland and Funen area) from 1992.
- Other sectors of auto-production (hydroelectricity, etc.): no agreement because of insignificant quantities involved; the 1990 DEF recommendations apply.
- (b) <u>Definition of specific procedures for resolving disputes about contract conditions</u>
- In the event of disagreement regarding prices, the Committee on Electricity Prices can intervene under the 1976 General Electricity Law.
- 3. (a) Obligation on public utilities to purchase electricity arising from RWC auto-production

There is a legal obligation to purchase electricity from the sectors covered by agreements with DEF (Industrial auto-producers, wind power).

(b) Authorization of RWC electricity auto-production

- No authorization is required for installations below 25 MW (other than for technical and safety reasons).
- Authorization is required for installations over 25 MW, as for all electricity producers.

4. (a) Principles of pricing for RWC electricity sales to the public supply network

- Wind power (until 1994):
 - 85% of price to consumers if all production is sold; 70% of price to consumers if part of production is consumed;
 - State premium per kWh: the State pays the electricity tax and VAT;
 - payment of part of the connection and investment costs.
- Other private producers (for ELKRAFT, and from 1992 for ELSAM):
 - symmetrical pricing for sales and purchases (kWh);
 - availability premium (kW);
 - time-of-day tariffs;
 - before these tariffs were applied, the price was based on the marginal cost of fuel avoided.

(b) Principles of pricing for electricity sales to RWC auto-producers from the public supply network. No discrimination

- Wind power (until 1994): same price as for other consumers.
- Other private producers (for ELKRAFT, and from 1992 for ELSAM):
 - symmetrical pricing for sales and purchases;
 - available-capacity premium;
 - time-of-day tariffs;
 - before these tariffs were applied, preferential capacity premium compared with other consumers (made up of normal supplies and cheaper reserve supplies).

(c) Transparency of pricing principles

- Principle of uniform pricing of sales and purchases.

5. Assessment of the obstacles to the framework for cooperation

In spite of the lack of legal framework, there are in practice no obstacles to RWC auto-production.

6. New legislation

None.

7. Other measures (not included in the recommendation) to promote RWC autoproduction taken by the Member State

- Wind power:
 - State premium per kWh: the State pays the electricity tax and VAT-
 - payment of part of the connection and investment costs.
- Energy 2000 Programme: conversion of district heating installations to combined heat and power production.

Germany

Progress report

1. General remarks

- There is a legal framework.
- Electricity Law (StromeInspelsungsgesetz), entered into force on 1 January 1991: it contains provisions on the production of electricity from wind power, solar power, agricultural products and biological wastes (without capacity restrictions) and other renewable sources such as hydro (up to 5 MW).
- Agreement of 1 August 1979 on greater cooperation between the public utility companies and industrial auto-producers, amended on 27 June 1988, signed by the Association of German Power Stations (VDEW), the Federation of German Industry (BDI) and the Association of Industrial Power Producers (VIK).

2. (a) Introduction of standard contract criteria

- No State control over contracts for the supply of electricity produced by private installations, which are concluded under private law.
- The 1991 Electricity Law contains provisions (prices, purchase obligation) to promote the production of electricity from renewable energies (see point 1).
- The agreement between VDEW, BDI and VIK lays down the principles governing contracts between the public utility companies and industrial auto-producers who produce electricity using combined heat and power generation (CHP), residual fuels or hydroelectric installations (see point 1).

(b) <u>Definition of specific procedures for resolving disputes about contract conditions</u>

- Point 3 of the agreement between VDEW, BDI and ViK of 1 July 1985 stipulates that disputes between member companies of the associations concerned are to be resolved by a conciliation procedure conducted by those associations.
- Auto-producers who receive discriminatory treatment from the public utility can appeal to the authorities under the Law on Restrictive Practices (§103, paragraph 5, sentence 2, No 3 of the "Gesetz über Wettbewerbsbeschränkungen").

3. (a) Obligation on public utilities to purchase electricity arising from RWC auto-production

- The agreement between VDEW, BDI and VIK provides for the electricity produced by industrial auto-producers from CHP, residual fuels or hydroelectric plants to be purchased by the public utility companies (see point 1).
- The 1991 Electricity Law obliges the public utility companies to purchase electricity produced from renewable sources of energy (see point 1).

(b) Authorization of RWC electricity auto-production

- Authorization is not required for RWC auto-production; however, the local public utility company must be informed (§5(2) of the Energiewirtschaftsgesetz (Energy Law)). Authorization is required to supply electricity to third parties, except for installations below 1 MW which sell their surplus production to the public supply network.
- Construction, renovation or extension must be notified to the supervisory authorities in the case of (1) auto-production installations above 10 MW and (2) auto-production installations above 1 MW which sell electricity to third parties (including the public supply network). The authorities can require notification for smaller installations in certain cases. Authorization for notified installations to sell electricity to third parties is given on the basis of the public interest.

4. (a) Principles of pricing for RWC electricity sales to the public supply network

- The agreement between VDEW, BDI and VIK provides for prices based on the cost avoided by the public utility, taking account of savings made in transport and distribution. The prices vary according to the season (summer, winter) and the time of day (peak load, base load). The agreement provides for an availability premium for supplies at peak-load periods exceeding 1/3 of the capacity of the auto-producer. As the cost of the public utility varies from one region to another, the remuneration of auto-producers also varies (by up to 40%), in spite of the minimum price provided for in the agreement.
- Sales of electricity produced from renewable energies (with the restrictions indicated at point 1 above) are subject to a minimum level of remuneration throughout Germany, which may be higher than the cost avoided:

- 90% of the average price paid by the final consumer for solar and wind power;
- 75% of the average price paid by the final consumer for other renewable sources; the price is reduced for installations above 500 kW, with a minimum of 65%.

(b) Principles of pricing for electricity sales to RWC auto-producers from the public supply network. No discrimination

- No discrimination compared with other consumers.
- In case of discrimination, the auto-producer can appeal to the authorities under the Law on restrictive practices (§22(5), 26(2), 103(5) and 104a).
- It is possible to conclude temporary or long-term reserve contracts.

(c) <u>Transparency of pricing principles</u>

Pricing principles are clearly defined. Via his association, the auto-producer can compare his tariffs with those applied by other public utility companies.

5. Assessment of the obstacles to the framework for cooperation

- Authorization required above 1 MW if the auto-producer sells electricity to the network.
- Remuneration of auto-producers varies from one region to another.

6. New legislation

Electricity Law entered into force on 1 January 1991.

7. Other measures (not included in the recommendation) to promote RWC autoproduction taken by the Member State

Remuneration higher than the cost avoided for certain auto-producers using renewable energies.

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Greece

Progress report

1. General remarks

- There is a legal framework.
- Law 1559/85 of 25 April 1985 applies to auto-producers who use alternative sources of energy or conventional fuels.
- Ministerial Decisions:
 - SE 2689/17.12.87 wind-power generators
 - SE 2708/17.12.87 licences
 - SE 2752/15.2.88 remuneration of auto-producers
 - SE 2769/27.4.88 contracts
 - 7214/F11/4/8.7.88 supplements SE 2708/17.12.87
 - SE 2792/21.4.88 categories of Islands

2. (a) Introduction of standard contract criteria

The existing legal framework determines the relationship between auto-producers and the Public Power Corporation (DEI).

(b) <u>Definition of specific procedures for resolving disputes about contract conditions</u>

No specific procedure.

3. (a) Obligation on public utilities to purchase electricity arising from RWC auto-production

There is a legal obligation to purchase surplus electricity: Article 8 of Law 1559/85.

(b) Authorization of RWC electricity auto-production

- Authorization required from the Ministry of Energy, after consulting the DEI, to obtain establishment, installation and operation licences, except for:
 - Installations using wind power, solar power or energy from the sea, and reserve installations (establishment licence),

- generators below 10 kW, standby generators below 50 kW or Industrial standby generators below 100 kW (Installation and operation licences).
- To obtain these licences, auto-producers must be in one of the following cases:
 - installations using wind power, solar power, blomass or energy from the sea, with a capacity of less than 3 times own-use requirements;
 - geothermal installations with a capacity of less than twice own-use requirements (this limit does not apply if DEI decides not to exploit the remaining geothermal power);
- hydroelectric installations with a capacity of less than 5 MW (provided DEI does not intend to operate them within 5 years);
 - combined heat and power generation (CHP) installations with a capacity of less than the heat consumed or distributed to third parties:
 - electricity production installations which use residual heat or residual products, without any restriction on capacity;
 - standby installations which cover interruptions in DEI electricity supplies;
 - Installations which cover own-use electricity requirements which DEI is unable to cover;
 - installations below 100 kW, where the cost of connection is exorbitant.

4. (a) Principles of pricing for RWC electricity sales to the public supply network

- Price based on the fuel cost avoided:
 - auto-producers above 1 000 kW: tariffs vary according to voltage and time of day: (peak load (based on the cost of oil), base load (based on the price of lignite), intermediate (weighted average of the preceding two prices));
 - auto-producers below 1 000 kW: tariffs vary according to voltage and time of day: normal load and base load;
 - auto-producers situated on Islands: tariffs depend on the cost of fuel oil used by DEI (Islands classified in 3 groups).

- No capacity payments.
- There is a 25% premium for electricity produced by companies belonging to or managed by regional authorities.

4. (b) Principles of pricing for electricity sales to RWC auto-producers from the public supply network. No discrimination

- No discrimination compared with other consumers.
- Tariffs based on capacity (kW) of contract and the energy (kWh), which depends on voltage and time of day (day and night rates).
- Option of a tariff with a lower standing charge and a higher energy charge.
- Lower energy prices apply above a certain level of consumption (400 kWh per kW).

4. (c) Transparency of pricing principles

- The prices of sales and purchases are clearly defined.

5. Assessment of the obstacles to the framework for cooperation

- Capacity limits for auto-producers: calculated in general by reference to the auto-producer's own energy needs (electricity orheat).
- Role of DEI in the process of obtaining the various types of licence.
- Discrimination between private auto-producers and regional authorities (25% difference in the DEI tariffs for purchases of electricity).

6. New legislation

None since the publication of the Council recommendation.

7. Other measures (not included in the recommendation) to promote RWC autoproduction taken by the Member State

- None.

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Spaln

Progress report

1. General remarks

- There is a legal framework.
- Law 82/80 of 30 December 1980 on energy conservation: applicable to auto-producers, small hydroelectric power stations and power stations using renewable sources of energy.
- Decree 907/1982 of 2 April on auto-production.
- Decree 1217/1981 of 10 April on the promotion of small hydroelectric power stations.
- Decree 1544/1982 of 25 June on the promotion of the construction of hydroelectric power stations.
- Minister | a | Order of 7 January 1991: fixes electricity tariffs for 1991.

2. (a) Introduction of standard contract criteria

- No standard contract, but the existing legal framework fixes the conditions for sales and purchases of electricity between autoproducers and the electricity companies (rights, obligations and tariffs).
- In order to benefit from more favourable conditions for guaranteed or programmed energy sales, there must be a contract, which must be lodged with the competent provincial authorities.

(b) <u>Definition of specific procedures for resolving disputes about contract conditions</u>

Disputes concerning contractual conditions are resolved by the provincial bodies of the competent administration.

3. (a) Obligation on public utilities to purchase electricity arising from RWC auto-production

There is a legal obligation to purchase surplus electricity.

(b) Authorization of RWC electricity auto-production

- Authorization required from the Ministry of Industry and Energy or the competent regional authority.
- To obtain the necessary authorization, auto-producers using combined heat and power generation (CHP) must achieve a minimum energy efficiency: minimum 45% primary energy saving compared with production of the same amount of electricity using conventional systems.

4. (a) Principles of pricing for RWC electricity sales to the public supply network

- Electricity is divided into 3 categories:
 - guaranteed energy (minimum 2 years),
 - programmed energy (weekly),
 - other energy.
- Energy tariffs (kWh) are based on the prices paid by consumers:
 95% for guaranteed energy, 90% for programmed energy, 85% for other energy.
- Capacity payments are made to auto-producers who supply electricity to the electricity company on demand.
- Energy produced by the auto-producer is exempt from certain charges contained in the tariffs: uranium stock, second part of the fuel cycle, stoppage of nuclear power stations, percentage for OFICO (Electricity Compensation Office).

(b) Principles of pricing for electricity sales to RWC auto-producers from the public supply network. No discrimination

- No discrimination compared with other consumers.
- Tariffs based on capacity (kW) of contract and energy (kWh), which depends on the time of day: low-load, high-load, peak-load periods.

Option (on certain conditions) to choose tariffs which do not penalize irregular consumers: the auto-producer must pay for the maximum capacity used each month and only 18% of the difference between this and the capacity specified in the contract, thus enabling the auto-producer to reduce the standing charge to 18%.

(c) <u>Transparency of pricing principles</u>

The prices of sales are based on the prices of purchases.

5. Assessment of the obstacles to the framework for cooperation

No obstacles to RWC auto-production.

6. New legislation

None.

7. Other measures (not included in the recommendation) to promote RWC autoproduction taken by the Member State

Energy produced by the auto-producer is exempt from certain charges contained in the tariffs:

- uranium stock.
- second part of the fuel cycle,
- stoppage of nuclear power stations,
- percentage for OFICO (Electricity Compensation Office).

France

Progress report

1. General remarks

- There is a legal framework.
- Decree 55-662 of 20 May 1955 on independent electricity producers.
- Annex III to Article 27 of the General Conditions of the concession to EDF of the general supply network: "Purchases of energy from independent producers".
- Conditions for the purchase of electricity by EDF of 20.4.90.

2. (a) Introduction of standard contract criteria

- Article 1 of the Decree of 20 May 1955: energy purchased by EDF under a contract lasting at least 5 years or for the period of amortization of the auto-producer's installation (at the producer's request).
- There are standard contracts for low-voltage and medium-voltage supplies, partly guaranteed supplies and independent hydroelectricity producers.

(b) <u>Definition of specific procedures for resolving disputes about contract conditions</u>

Article 27 of the General Conditions of the concession to EDF of the general supply network: "In the event of disagreement on the implementation of this Article, a ruling shall be made by the Minister responsible for electricity, after consulting the Electricity and Gas Council."

3. (a) Obligation on public utilities to purchase electricity arising from RWC auto-production

Article 1 of the Decree of 10 May 1955: obligation on EDF to purchase "provided this does not result in any obstacle to the smooth operation of supply".

(b) Authorization of RWC electricity auto-production

- Authorization in principle for: .
 - installations producing electricity for consumption by the operating company which either operate in an ancillary capacity to the main manufacturing process by recovering residual energy or are of only ancillary value to EDF;
 - installations up to 8 000 kVA;
 - local authority installations which use urban waste or which supply a district heating system.
- For installations not covered by one of the above cases, authorization is possible by ministerial decision and with the agreement of EDF, provided they are of only ancillary value to the public utility.
- Auto-producers subject to the ordinary law in force:
 - authorization of hydroelectricity production,
 - environmental protection,
 - authorization of the use of fuel oils.

4. (a) Principles of pricing for RWC electricity sales to the public supply network

- Prices based on the "very long use" sales tariffs, which are relatively low.
- Remuneration of energy (kWh) under tariffs which vary according to time of day (peak load, high load, low load), season and voitage
- Remuneration of capacity (kW) for partially guaranteed supplies in excess of 30% of the commitment.
- Penalty for kWh shortfalls compared with commitment.
- Simplified tariff (with no standing charge) for small hydroelectricity producers (up to 4 500 kW).

- (b) Principles of pricing for electricity sales to RWC auto-producers from the public supply network. No discrimination
 - No discrimination compared with other consumers.
 - Energy tariffs (kWh) vary according to time of day (peak load, high load, low load), season and voltage.
 - Capacity payments (kW) depend on the guaranteed capacity.
- (c) Transparency of pricing principles

The prices of sales and purchases are clearly defined.

- 5. Assessment of the obstacles to the framework for cooperation
 - Capacity limited to 8 000 kVA.
 - Prices of sales to the network based on EDF's "very long use" tariff: rather unfavourable to auto-producers.
- 6. New legislation

None.

7. Other measures (not included in the recommendation) to promote RWC autoproduction taken by the Member State

None.

Ireland

Progress report

1. General remarks

- No legal framework.
- Standard contract of 24.6.91 between the Electricity Supply Board (ESB) and hydroelectricity auto-producers.

2. (a) Introduction of standard contract criteria

There is a standard contract: basis of payment, metering arrangements, supply connection, etc.

(b) <u>Definition of specific procedures for resolving disputes about contract conditions</u>

- Discussed between ESB and the representative bodies (Irish Hydro Power Association or Confederation of Irish Industry)
- In the event of failure to reach agreement, Issues are raised with the Department of Energy. The standard contract of 24.6.91 between ESB and hydroelectric auto-producers includes a specific arbitration procedure.

3. (a) Obligation on public utilities to purchase electricity arising from RWC auto-production

- No legal obligation in general.
- "ESB is anxious to enter into contracts with as many RWC autoproducers as possible to purchase from them any electricity which they are prepared to supply to the utility network." (Letter from Ireland of 26.3.91)
- Obligation to purchase electricity from hydro auto-producers (standard contract of 24.6.91).

(b) Authorization of RWC electricity auto-production

No specific authorization is required for RWC auto-production.

4. (a) Principles of pricing for RWC electricity sales to the public supply network

- Tariffs consist of a price per kWh (medium/high-voltage and day/night) which covers fuel cost savings.
- Capacity payment: an increased price on all day kWh supplied in a year, provided the day load factor of the supply during the months of November to February exceeds 70%.
- Non-fuel auto-producers (hydro, wind and solar power): increased price incorporating an environmental premium (up to 85% for supplies up to 10 GWh a year).

(b) Principles of pricing for electricity sales to RWC auto-producers from the public supply network. No discrimination

- No discrimination compared with other consumers.
- Tariffs based on:
 - maximum power used:
 - bi-monthly standing charge;
 - charges per kWh (day and night); cheaper in daytime after the first 350 kWh per kW.

(c) Transparency of pricing principles

Payments based on a published tariff.

5. Assessment of the obstacles to the framework for cooperation

- No legal framework.
- No general legal obligation to purchase electricity produced by auto-producers.

6. New legislation

Standard contract and new tarlffs (June 1991) for non-fuel auto-producers.

- 7. Other measures (not Included in the recommendation) to promote RWC autoproduction taken by the Member State
 - In July 1990, the following changes were introduced by ESB:
 - special standby charges payable by CHP producers withdrawn;
 - measures taken to promote the concept of CHP to commercial and industrial customers.
 - Environmental premium for non-fuel auto-production (see point 4(a) above).

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italy

Progress report

1. General remarks

- New legal framework.
- -- Law 9 of 9.1.91 on the new national energy plan amends the legal framework for auto-production.
- Law 10 of 9.1.91 on renewable (or similar) sources of energy, rational energy use and energy savings.
- Procedure No 15/1989 of 12.7.89 of the CIP (Interministerial Price Committee).
- Procedure No 34/1990 of 14.11.90 of the CIP (amends the above).

2. (a) Introduction of standard contract criteria

Relations between auto-producers, independent producers and Enel are fixed by the new legal framework.

(b) <u>Definition of specific procedures for resolving disputes about contract conditions</u>

No specific procedures.

3. (a) Obligation on public utilities to purchase electricity arising from RWC auto-production

Enel is obliged to purchase all electricity or surplus electricity produced by auto-producers.

(b) Authorization of RWC electricity auto-production

- Ministerial authorization for polluting emissions (Law 203/88).
- The energy produced or surplus energy must be sold to Enel.

 Distribution of the energy produced by the auto-producer within the industrial group or consortium: ministerial authorization based on an assessment of the savings involved and production requirements.

4. (a) Principles of pricing for RWC electricity sales to the public supply network

- Tariffs based on the cost avoided as a general rule.
- In reality tariffs vary for new installations and existing installations, depend on whether all or part of production is sold, on the size of the installation (up to 3 MW), on the regularity of supplies and especially on the type of installation: new wind, photovoltaic and geothermal installations are offered very favourable tariffs (much higher than the cost avoided).

(b) Principles of pricing for electricity sales to RWC auto-producers from the public supply network. No discrimination

- No discrimination compared with other consumers.
- It is possible to set surplus production against future purchase requirements during the same type of annual period and for the same time of day.

(c) <u>Transparency of pricing principles</u>

- The prices of sales and purchases are clearly defined.
- The tariffs referred to at 4(a) above are intended to promote certain types of production.

5. Assessment of the obstacles to the framework for cooperation

- There are no obstacles to auto-production or independent RWC production.
- The legal and tariff framework currently in force is not only in line with recommendation 88/611/EEC, but also applies other tariff measures and State aids (see points 4(a) and 7) to promote RWC auto-production.

6. New legislation

New legislation in 1991.

- 7. Other measures (not included in the recommendation) to promote RWC autoproduction taken by the Member State
 - State aid for new investments: up to 80% (representative value of 30%).
 - Very favourable tariffs (higher than the cost avoided) for certain types of production (see point 4(a)).
 - Agreement between Enel and the main industrial auto-producers to promote auto-production and sales of electricity to the network.

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Luxembourg

Progress report

1. General remarks

- No legal framework.
- Standard contract of 15 September 1989 for auto-producers producing electricity from a renewable form of energy or combined heat and power generation (CHP) plant up to a capacity of 100 kW.

2. (a) Introduction of standard contract criteria

A standard contract has existed since 15 September 1989 (see point 1 above).

(b) <u>Definition of specific procedures for resolving disputes about contract conditions</u>

Article 13 of the standard contract: the Luxembourg courts have jurisdiction, unless the parties agree to accept the decision of an arbitration tribunal.

- 3. (a) Obligation on public utilities to purchase electricity arising from RWC auto-production
 - Article 2 of the standard contract: obligation to purchase.
 - There is no obligation to purchase electricity from autoproducers who do not fulfill the conditions of the standard contract (see point 1 above).
 - (b) Authorization of RWC electricity auto-production

No authorization is required (other than compliance with technical and safety standards) for auto-producers who fulfill the conditions of the standard contract (see point 1 above).

4. (a) Principles of pricing for RWC electricity sales to the public supply network

The standard contract sets a single price for energy supplied to the network (kWh) and does not remunerate capacity availability (kW) (see Article 7 of the standard contract).

- (b) Principles of pricing for electricity sales to RWC auto-producers from the public supply network. No discrimination
 - No discrimination compared with other consumers.
 - Standing charge and price per kWh according to time of day (peak/day/night).
- (c) Transparency of pricing principles

The prices of sales and purchases are clearly defined in the tariffs and the standard contract.

- 5. Assessment of the obstacles to the framework for cooperation
 - Limit of 100 kW laid down in the standard contract applicable to RWC auto-production.
 - No remuneration for the capacity which auto-producers make available to the network.
- 6. New legislation

Standard contract of 15 September 1989.

7. Other measures (not included in the recommendation) to promote RWC autoproduction taken by the Member State

None.

Nether lands

Progress report

1. General remarks

- There is a legal framework.
- Electricity Law of 16.11.89, which also governs independent production, a broader concept than auto-production.

2. (a) Introduction of standard contract criteria

- Standard contracts provided for in Article 42.
- Standard contract for 1991 for combined heat and power generation (CHP) and for the production of electricity from waste.
- There is as yet no standard contract for the production of electricity from renewable energies, but the conditions should be at least as favourable as for the other types of independent production, in line with Article 42(4).
- (b) <u>Definition of specific procedures for resolving disputes about contract conditions</u>

In the event of disagreement about the establishment of a standard contract between the distributors' organization (VEEN) and the organizations representing the independent producers, Article 43 provides for the creation of a mediation committee to decide on the content of the standard contract.

3. (a) Obligation on public utilities to purchase electricity arising from RWC auto-production

Article 41 obliges the distributor for the area in which the independent producer is located to purchase all the electricity produced (applies from 24 August 1990).

(b) Authorization of RWC electricity auto-production

No authorization is required for independent producers up to a capacity of 5 MW (Article 3(2)).

4. (a) Principles of pricing for RWC electricity sales to the public supply network

- Article 42 stipulates that prices are to be based on the average cost avoided; the agreement can set different prices for each method of electricity production.
- The standard contract referred to at point 2(a) above fixes remuneration for energy (kWh) depending on the voltage supplied and remuneration of capacity (kW) depending on the regularity of supplies (the independent producer can choose between 3 options). These tariffs are very favourable for the independent producer: for example, regular low-voltage supplies (more than 6 000 hours a year) are remunerated at 90% per kW and more than 90% per kWh of the price paid by the final consumer.

(b) Principles of pricing for electricity sales to RWC auto-producers from the public supply network. No discrimination

- No discrimination compared with other consumers.
- Article 27 sets maximum prices for the final consumer.

(c) Transparency of pricing principles

The ratio of sale and purchase prices is clearly defined.

5. Assessment of the obstacles to the framework for cooperation

- There are no obstacles to RWC auto-production other than the 5 MW limit per installation for independent producers.
- Other than the above comment, the Dutch legislation is currently in line with the essential points of recommendation 88/611/EEC of 8.11.88.

6. New legislation

The 1989 Law brings the Dutch legislation into line with the essential points of recommendation 88/611/EEC of 8.11.88.

- 7. Other measures (not included in the recommendation) to promote RWC autoproduction taken by the Member State
 - Availability of more favourable tariffs for renewable energies (Article 42(4)).
 - Promotion of the use of combined heat and power generation (CHP).
 - State aid to promote investment in wind power, solar power and CHP.

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Por tugal

Progress report

1. General remarks

- There is a legal framework.
- Decree Law 189/88 of 27.5.88 governs "Independent production", a broader concept than auto-production.
- Regulatory Decrees:
 - 445/88 of 8.7.88 (hydro power: authorization to use water)
 - 958/89 of 28.10.89 (amendment of the above)
 - 305/90 of 18.4.90 (correspondence between Decree Law 189/88 and the tariff system)
 - 416/90 of 6.6.90 (standard contracts)
- Technical guide for independent electricity production installations (April 1990).

2. (a) Introduction of standard contract criteria

- There Is a standard contract.
- The content of the standard contract is laid down by Regulatory Decree 416/90 of 6.6.90.
- (b) <u>Definition of specific procedures for resolving disputes about contract conditions</u>

Disputes resolved by an arbitration agreement or by the courts: clause 27 of the Regulatory Decree referred to at point 2(a) above.

3. (a) Obligation on public utilities to purchase electricity arising from RWC auto-production

EDP is obliged to purchase all electricity produced: clause 1 of the Regulatory Decree referred to at point 2(a) above.

(b) Authorization of RWC electricity auto-production

- No authorization is required (other than compliance with technical and safety standards) for RWC producers and producers using indigenous fuels up to an installed capacity of 10 000 kVA; this limit does not apply to combined heat and power generation (CHP) plant whose primary function is not to produce electricity. Article 1 of Decree Law 189/88 of 27.5.88.
- For hydro power, Regulatory Decrees 445/88 of 8.7.88 and 958/89 of 28.10.89 govern the administrative procedures for authorization to use water.

4. (a) Principles of pricing for RWC electricity sales to the public supply network

- Tariffs defined by Articles 22 and 23 of Decree Law 189/88 of 27.5.88 and Regulatory Decree 305/90 of 18.4.90.
- Tariffs based on the average cost avoided in the long term by the receiving company.
- Tariffs based on:
 - kWh: price paid by the consumer for the next higher voltage level;
 - kW: 80% of the average capacity made available to the system (peak-load and high-load hours), at the price paid by the consumer for the next higher voltage level;
 - subsidy paid by the State per kWh equal to the subsidy (if any) paid to thermal power stations for their fuel oil consumption (premium equivalent to 300 g of fuel oil per kWh).
- State guarantee to auto-producers during the first eight years of operation: tariffs will not be lower than 90% of those initially applied.

(b) <u>Principles of pricing for electricity sales to RWC auto-producers</u> from the public supply network. No discrimination

- No discrimination compared with other consumers.
- Tariffs which do not penalize irregular consumers: the consumer must pay 80% of the capacity used and 20% of the capacity specified in the contract, thus enabling an auto-producer to pay a reduced standing charge of 20%.
- Meters for two or three time-of-day rates available.

(c) <u>Transparency of pricing principles</u>

The ratio of sale and purchase prices is clearly defined.

5. Assessment of the obstacles to the framework for cooperation ...

There are no obstacles to RWC auto-production.

6. New legislation

- Standard contracts: publication of Regulatory Decree 416/90 of 6.6.90 on standard contracts brings Portuguese legislation into line with the major points of recommendation 88/611/EEC of 8 November 1988.
- Production of electricity and regulation thereof for installed capacities greater than 10 MVA: Decree Laws 99/91 and 100/91 of 2 March determine the general principles of the legal arrangements for the electricity production of installations with a capacity greater than 10 MVA and lay down the procedure for the granting of production licences.

Access to this activity is unrestricted, once the licence granted by the Director-General for Energy has been obtained. The production licence can be:

- linked: where the owner undertakes to supply the public power network (SEP);
- unlinked: where the owner produces electricity to cover his own needs or those of third parties under market arrangements.

7. Other measures (not included in the recommendation) to promote RWC autoproduction taken by the Member State

As stated at point 4(a) above, the State applies the following tariff measures:

- subsidy paid by the State to auto-producers for each kWh sold to EDP: equal to the subsidy (if any) paid to thermal power stations for their fuel oil consumption (premium equivalent to 300 g of fuel oil per kWh);
- State guarantee to auto-producers during the first eight years of operation: tariffs will not be lower than 90% of those initially applied.

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United Kingdom

Progress report

1. General remarks

- There is a legal framework.
- The 1989 Electricity Act liberalized the operation of the public utility.
- The new legal framework liberalizes electricity production; as a result it establishes equal treatment of public utility producers and independent producers, the category to which auto-producers belong.

2. Authorization: purchase and sale of electricity by auto-producers

(a) Auto-producers in general

- Liberalization of electricity production and the creation of an open "pool" has removed all forms of discrimination between the various participants in the electricity market, whether buyers or sellers of electricity. Thus auto-producers can sell surplus electricity to or purchase supplementary power from the "pool", on conditions fixed by the market.
- The electricity services supplied by the network, necessary for the smooth operation of the system, are remunerated by a charge per kWh ("uplift"). Energy produced and consumed directly by auto-producers is not at present subject to this charge. This is a matter of contention between producers and auto-producers. A decision by the supervisory authority (Energy Secretary) is expected soon.

(b) Auto-production from renewable sources of energy or waste

- The Non-Fossil Fuel Obligation (NFFO) imposes measures to protect the market for new technologies (1989 Electricity Act). The Secretary of State for Energy can impose a NFFO order requiring a specified amount of non-fossil fuel generating capacity: nuclear power, renewable sources and waste. Energy produced in accordance with the NFFO is supplied to the network and may receive a premium price financed through the Fossil Fuel Levy. The first order setting a NFFO was made in February 1990 and related to nuclear-generated electricity.

- The first NFFO order for renewable sources of energy was made in September 1990. The obligation was set at 102.25 MW declared net capacity (DNC). Seventy-five projects were contracted for under this order, with an installed capacity of 170 MW or 152 MW DNC. A second NFFO order, involving 152 MW DNC and divided up according to type of renewable energy, was made in November 1991 and covers the period 1991-98.
- There is no NFFO applying to Scotland at present. However, independent producers using renewable sources receive a premium on the kWh sold to producers or distributors. This premium is of the order of 60% per kWh, for a production of 58 GWh.

3. Assessment of the obstacles to the framework for cooperation

There are no obstacles to RWC auto-production.

4. New legislation

The 1989 Electricity Act guarantees non-discriminatory treatment for RWC auto-producers.

5. Other measures (not included in the recommendation) to promote RWC autoproduction taken by the Member State

The NFFO permits favourable treatment of independent electricity producers using renewable sources of energy and waste (see point 2(b) above).