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CONTENTS

SYMBOLS AND ABBREVIATIONS

-/	Nil
0	Data less than half the unit used
.	No data available
%	Per cent

V	Volt
kV	Kilovolt (= 1 000 V)
kVA	Kilovoltampere
kW	Kilowatt
h	Hour
kWh	Kilowatthour
GWh	Gigawatthour (10^6 kWh)
n	Number

DM	pf	German mark, Pfenning = 1/100 DM
FF	cent	French franc, Centime
Lit		Italian Lira
HFL	cent	Dutch guilder, cent
BFR		Belgian franc
LFR		Luxembourg franc
UK£	p	Pound sterling, penny = 1/100 UK£
IR£	p	Irish pound, penny = 1/100 IR£
DKR	øre	Danish crown, øre = 1/100 IR£
DR		Greek drachma
PTA		Peseta
ESC		Escudo

PPS	Purchasing power standard
ECU	European currency unit

EUR 12	Total of the member countries of the European Communities

Eurostat	Statistical Office of the European Communities

I - INTRODUCTION

The present publication is a complete updating of the study "Electricity prices 1980-1985" published by Eurostat in 1985.

It contains the most recent prices, valid in 1986 together with a time series going back to 1980.

The text describes all recent changes in tariffs, taxation, supply and conditions of sale liable to affect consumer price levels.

The scope of the study has been widened to include Spain and Portugal with as complete a description as possible of the structure of the electricity industry, tariffs and taxes in these two new Member States.

The definitions and methods remain the same as those used in previous studies, so that the formation and development of electricity prices can be observed over a very long time series. In addition, the definitions are harmonized with those of the International Union of Producers and Distributors of Electrical Energy (Unipede).

For reasons of economy this publication is only available in two languages : English and French.

The survey on which the study is based was conducted by the Statistical Office of the European communities and would not have been possible without the cooperation of the electricity companies and professional associations, to whom we express our sincere thanks.

II. CONDITIONS AND METHODS

1. SCOPE AND LOCATIONS

The present study aims to show the actual price of electricity paid by the consumer in the member countries of the European Community.

The prices are recorded at the beginning of each year based on the tariffs, contracts, conditions and rules in force at that time.

It is concerned with the actual price paid by the electricity consumer, corresponding to the invoiced delivery price to the consumer at the beginning of each year including any eventual rebates and subsidies. Our consumers are defined as those who purchase electricity for their own use and exclude those who offer it for resale. We have not considered the bulk price paid by the electricity distributors.

As regards consumers, the study considers all types of customers supplied through the public distribution network with low, medium and high-voltage electricity. In the interests of simplified presentation, consumers are subdivided into two groups, one for domestic and the other for industrial users. The survey does not cover certain industrial consumers :

(i) who themselves produce part of their electrical energy requirement;

(ii) who purchase electricity under special contract terms because of their exceptionally high power requirements and consumption demand.

These exceptions are mainly steelmaking and chemical enterprises, enterprises engaged in the production of aluminium and other metals by electrolysis, railways, etc.

Most of these enterprises consume over 10 million kWh annually. They are few in number, but nevertheless consume an appreciable part of the total electrical energy supplied.

In order to reflect as accurately as possible the real position of consumers, it seemed advisable to record prices at selected locations, i.e. towns, conurbations or distribution networks, rather than give average prices per country.

The choice of location is decided by several criteria, namely, population, economic importance, different tariff districts, even geographical coverage of a country, harmonization with the locations used in statistics relating to the prices of other sources of energy, particularly gas.

The prices were recorded in the following towns or conurbations :

FR of Germany	: Hamburg, Hanover, Düsseldorf, Frankfurt am Main, Stuttgart, Munich, Western Zone, Southern Zone.
France	: Lille, Paris, Marseille, Lyon, Toulouse, Strasbourg.
Italy	: Northern and central Italy, southern Italy and the islands.
Netherlands	: Rotterdam (GEB), North Holland (PEN), North Brabant (PNEM).
Belgium	: The country as a whole (standard national tariff).
Luxembourg	: Grand Duchy (Cegedel).
United Kingdom	: London, Glasgow, Leeds, Birmingham.
Ireland	: Dublin.
Denmark	: Copenhagen (KB), North Zealand (NESA).
Greece	: Athens (standard national tariff).
Spain	: Madrid (standard national tariff).
Portugal	: Lisbon.

Certain towns selected are representative of larger regions which is indicated in the chapter concerning each country.

2. STANDARD CONSUMERS

The survey is based on the system of standard consumers, i.e. the prices are recorded for certain levels of electricity consumption and under certain conditions of supply, chosen as being representative of the population of electricity consumers. These standard levels of consumption remain fixed from one year to the next and for all the countries, this being one of the primary conditions for spatial and temporal comparability of prices.

Two families of standard consumers are taken : domestic uses and industrial uses.

Five domestic standard consumers (supply at low voltage) coded D_a to D_e have been taken :

Standard consumer	Annual consumption kWh		Approx. subscribed demand in kW	Standard dwelling
	Total	(of which night)		
D_a	600	-	$\leq$ 3	50m^2 2 rooms+kitchen
D_b	1 200	-	3 - 4	70m^2 3 rooms+kitchen
D_c	3 500	(1 300)	4 - 9	90m^2 4 rooms+kitchen
D_d	7 500	(2 500)	6 - 9	100m^2 4 rooms+kitchen
D_e	20 000	(15 000)	$>$ 9	120m^2 5 rooms+kitchen

As a guideline these standard consumers may be expected to possess the following household facilities and appliances :

D_a Lighting, radio, television, refrigerator, small electric appliances; (1)

D_b as for D_a plus washing machine or dishwasher;

D_c D_d as for D_b with washing machine and dishwasher plus storage water heater;

D_e "all-electric" system with water heater and electric central heating operating on a storage basis.

Seven industrial standard consumers (for voltage see point 4) coded I_a to I_g have been taken :

Standard consumer	Annual consumption kWh	Maximum demand in kW	Annual load factor h
I_a	30 000	30	1 000
I_b	50 000	50	1 000
I_c	160 000	100	1 600
I_d	1 250 000	500	2 500
I_e	2 000 000	500	4 000
I_f	10 000 000	2 500	4 000
I_g	24 000 000	4 000	6 000

(1) E.g. : vacuum cleaner, electric toaster, hair dryer, food mixer, coffee grinder, etc.

The maximum demand is the maximum offtake in any quarter of an hour recorded in one year, expressed in kilowatts (kW). The price of supply is calculated for $\cos\varphi = 0.9$. The annual load factor determines the regularity of consumer offtake of electricity from the grid during the year. The longer this time the more even the pattern of consumption during the 8 760 hours of the year. It indicates the number of hours in which the consumer would reach his annual consumtion level if the demand level were permanently equal to maximum demand.

Additional details are sometimes needed before the tariffs can be applied :

(i) In the case of tariffs based on half hourly maximum demand, the maximum demand of the standard consumer is multiplied by a coefficient of 0.98.

(ii) In the case of tariffs based on a maximum demand expressed in kVA an adjustment is made by dividing the standard consumer's maximum demand in kW by the coefficient $\cos\varphi = 0.90$.

(iii) In the case of tariffs based on maximum demand readings more frequent than once a year the standing charge is multiplied by the following coefficients :

Table of power correction coefficients

Standard consumers	I_a I_b	I_c	I_d	I_e I_f	I_g
Annual load factor	1 000h	1 600h	2 500h	4 000h	6 000h
Maximum monthly demand	0,81	0,83	0,85	0,90	0,96
Maximum two-monthly demand	0,83	0,85	0,87	0,91	0,97
Maximum three-monthly demand	0,86	0,88	0,90	0,95	0,98
Average of the three highest values for max. monthly demand	0,94	0,95	0,96	0,98	0,99
Average of the two highest values for max. monthly demand	0,96	0,97	0,98	0,99	0,995
Annual max. demand (basic principle)	1	1	1	1	1

A harmonized table for consumption during "off-peak" periods has also been compiled in order to be able to calculate prices when tariffs vary according to the time of the day (e.g. lower tariff during the night).

Standard consumer	Annual load factor	Annual consumption	Annual consumption (in 1 000 kWh) charged at off-peak rates according to the average daily duration of off-peak periode					
	h	1 000 kWh	7 h	8 h	9 h	10 h	11 h	12 h
I_a	1 000	30	0	0	0	0	0	0
I_b	1 000	50	0	0	0	0	0	0
I_c	1 600	160	11	13	16	19	22	25
I_d	2 500	1 250	197	225	262	300	338	375
I_e	4 000	2 000	438	500	580	660	740	820
I_f	4 000	10 000	2 190	2 500	2 900	3 300	3 700	4 100
I_g	6 000	24 000	7 140	8 160	9 120	10 080	11 040	12 000

If off peak rates are charged during other periods, for example all day Sunday we have only taken one half as supplementary off peak hours. Such cases are mentioned as they occur in our study.

Account has not been taken of changes in tariff parameters during the course of a year. In other words no weighted price is calculated for a year.

3. DEFINITION OF THE PRICE LEVELS RECORDED

All prices are shown per unit of electricity sold, that is per kilowatt hour (kWh). The results represent the unit price actually paid at the beginning of each year and take account of the relevant tariff, parameter, index, etc. applicable as from 1 January. In the case of tariffs or contracts with short term indices (month, quarter) it is the index which is in force during January which is applied. This means that any changes in the tariff structure during the year are not taken into account, i.e no price weighting is applied to the year. The prices include meter rental, the standing charge and the commodity rate. They do not include the initial installation charge to the consumer.

If there are several possible tariffs, it is the tariff which is most advantageous to the consumer that is taken into account, after the elimination of the tariffs which are not used in practice or which apply only to a marginal or negligible number of users.

When there are only quasi-tariffs, special contracts, or freely negotiated prices, the most commonly found price (most representative) for the given supply conditions has been recorded. In the case of freely negotiated prices or contracts, the returns relate respectively to the bills paid during the month of January or to the prices resulting from the contracts in force during that month. Such cases are mentioned and explained in the body of our study.

In the case of a consumer having two separate meters or a switch meter (e.g. to record night and day consumption), the price reflects total consumption.

Account has been taken of special tariff or supplementary arrangements which may exist for reactive power.

Three price levels are shown :

(i) the price net of tax;
(ii) the price excluding VAT but including all other taxes;
(iii) the selling price (inclusive of all taxes).

The price excluding tax is obtained directly from the tariffs or contracts.

The price excluding VAT includes, where payable, other specific taxes which is interesting in cases where VAT is deductible.

The price inclusive of all taxes corresponds to the sum paid by the consumer.

"Taxes" is used here to mean fiscal and para-fiscal levies applying directly to electricity at the stage of sale at the consumer. These taxes may be levied at the national, regional, local or municipal level, etc. by the State, regional or local administrations, professional associations, etc.

On the other hand, the taxes levied before the sale of the electricity, such as taxes on companies, profits, wages, etc., which are obviously part of the production or distribution costs, are not calculated separately. They remain an integral part of the price excluding tax.

The results for each country are shown in national currencies at current prices, i.e. at face value.

For the purposes of international comparison, it was necessary to use a representative common monetary unit which would create a minimum of distortion in both space and time. Accordingly, the present study uses the purchasing power standard (PPS). The comparative tables are also shown in European currency units (ECU).

These units of value are explained in the following chapter.

4. TARIFF VOLTAGE

The voltage at which electricity is supplied to the consumer is an element which may affect the industrial price levels. The higher the voltage, the lower the price. But in this case, the consumer has to bear the expense of the electricity transformer (the investment cost or the rental).

In practice the supply voltages vary according to the grid and the tariffs. According to our general definitions, the voltage taken into account is the one at which electricity is commonly supplied to the consumer.

Where several supply voltages coexist for the same category of users it is the most representative (greatest number of users) which is considered.

The table below gives the tariff voltages according to which the prices for the industrial standard consumers have been calculated.

Voltage applied to industrial standard consumers

kV

Standard consumers	I_a	I_b	I_c	I_d	I_e	I_f	I_g
FR of Germany							
- Süd Gebiet	0,38		20				
- Hamburg, Hannover, Düsseldorf, Frankfurt	0,38		10				/
- West Gebiet Stuttgart, München	10						/
France	0,38			15			40-130
Italy	0,38		≤ 50				
Netherlands							
- GEB	0,38					10	25
- PEN	0,38		10				
- PNEM	10						
Belgium	10/15						
Luxembourg	10/15					65	
United Kingdom	0,415			11			
Ireland	0,38			10		38	
Denmark	0,40		< 10			10	
Greece	0,38		6,6			20	22
Spain	≤ 1		> 1-36			36-72,5	
Portugal	1		> 1 < 60				≥ 60
	I_a	I_b	I_c	I_d	I_e	I_f	I_g

III. UNITS OF VALUE

To permit comparisons between countries, prices expressed in national currencies need to be converted to a common unit. In this study two common units are used :

(i) the European currency unit (ECU);

(ii) the purchasing power standard (PPS).

1. THE EUROPEAN CURRENCY UNIT (ECU)

The ECU is a basket-type currency unit based on the market exchange rates of a certain amount of each of the Community currencies, weighted according to the gross national product and intra-Community trade of each Member State.

In 1984, this weighting was revised on the accession of Greece and will remain in force until further notice.

The new composition of the ECU basket is as follows:

DM 0.719	LIT 140	FF 1.31	DKR 0.219	HFL 0.256
IR£ 0.00871	BFR 3.71	UK£ 0.0878	LFR 0.14	DR 1.15.

The conversion rates for the ECU against the national currencies in January of each year are given in a table in the Statistical Annex.

The definition of the ECU is such that it reflects fluctuations in exchange rates and is suitable for measuring the prices and values of international flows of goods and services. Data expressed in ECU therefore permit the comparison of prices in terms of money changed at a bank. Such currency conversion at the market exchange rates, however, has the disadvantage that it fluctuates in time under the influence of many factors which are independent of internal price movements :

(i) capital transfers;

(ii) political decisions;

(iii) regulations;

(iv) speculation;

(v) interest rates.

2. THE PURCHASING POWER STANDARD (PPS)

The PPS is a reference unit so calculated that its value in relation to the various national currencies is proportional to the purchasing power parities (PPP) between these currencies.

The purchasing power parities reflect the ratios between price levels in the different countries. The ratios between the prices expressed in national currencies are calculated for each of the products included in the uses of the GDP. If these ratios are suitably weighted, one obtains mean price ratios, the most general of which is the mean calculated for the GDP and known as the PPP at GDP level.

Such parities would be adequate to express all the data in real terms in the currency of any one of the countries considered. The method ensures that they are transitive and unaffected by the country chosen as a basis of reference. For Community calculations another reference unit known as the PPS is used. It is defined by applying the price ratios to the GDP of the various countries expressed in national currency and adjusting the parities so that the value of the GDP of the Community as a whole in 1975 is identical whether expressed in ECU or PPS. Only the proportion accounted for by each country will be different.

When prices are converted to PPS using the GDP parity, the result may be interpreted as follows :

If one gigajoule of energy costs 10 PPS in country A and 5 PPS in country B, this means that after allowance has been made for the differences between the general level of prices in the two countries, this gigajoule of energy is twice as expensive in country A as in country B.

This conclusion is independent of market exchange rates, which are influenced by factors other than the level of prices (movements of capital, speculation, interest rates, political decisions, etc.).

The conversion rates for the years covered by the study are given in a table in the annex. They were revised when the base year was changed.

3. PRICES IN CURRENT PPS AND CONSTANT PPS

The price surveys required to calculate purchasing power parities are not carried out every year. The most recent available is that for 1980 an another is planned for 1985. Since the parities are price ratios, however, their value for the other years may be estimated by extrapolation using the movement of the GDP price indices for the various countries, referred to as the Community average. These are known as "current parities".

The data can also be converted into base year PPS. If price series deflated by the GDP price index for each country are expressed in base year PPS, one obtains an indication of the change in prices for the product in question in relation to the general level of prices in the country. The data so calculated can also be compared between countries, giving the same results in relative terms as will be obtained using current prices and current PPP, since the latter are extrapolated using the same indices, namely, the GDP price indices for each country and the average Community index.

Calculation using deflated PPS is thus carried out as follows :

1. The prices of the time series in current national currency are divided by one hundredth of the GDP price index of each of the years concerned;

2. This deflated series is converted to PPS using the conversion factor of the base year 1980.

4. PRICE SERIES

In the light of the foregoeing, the results of this survey of Community prices are given in three forms :

1. a series of current prices in the national currency for each country;

2. a series in current ECU using the conversion rates for January of the year concerned;

3. a series in "deflated" PPS (base year 1980), which allows prices to be compared for different times and places.

IV. TAXATION

In the Community, sales of electricity are subject to a general indirect tax :

(i) value-added tax (VAT) in eleven countries (two having a zero rate);
(ii) turnover tax in one country (Greece), applied to domestic consumption only.

Furthermore, specific taxes are levied in seven countries.

The prices inclusive of all taxes shown in this study comprise all the taxes mentioned above. In the tables in the annex, the amount of any specific taxes can be calculated from the difference between the tax-exclusive and VAT-exclusive price, while the difference between the total tax-inclusive price and VAT-exclusive price gives the amount of value-added tax (turnover tax for Greece) in national currency per kWh.

1. GENERAL INDIRECT TAX

In general, VAT is calculated and applied to the price excluding VAT but including any specific taxes, these being part of the basis of assessment. France constitutes an exception since VAT is computed on the price excluding specific taxes.

The rates are as follows :

Value-added tax on electricity sales

(% of price before VAT)

January	1980	1981	1982	1983	1984	1985	1986
FR of Germany	13	13	13	13	14	14	14
France	17,6	17,6	17,6	18,6	18,6	18,6	18,6
Italy (domestic)	6	8	8	8	8	9	9
Italy (non-domestic)	14	15	15	18	18	9/18	9/18
Netherlands	18	18	18	18	19	19	19
Belgium	16	16	17	17	17	17	17
Luxembourg	5	5	5	5	6	6	6
United Kindom	0	0	0	0	0	0	0
Ireland	0	0	0	0	0	0	0
Denmark	20,25	22	22	22	22	22	22
Spain	-	-	-	-	-	-	12
Portugal	-	-	-	-	-	-	8

In Italy, the new VAT rates depend on the activity; 9 % for extractive and manufacturing industries, including printing and publishing, and 18 % for other non-domestic activities.

VAT is deductile for industrial and commercial consumers registered for the purposes of value added tax.

Turnover tax on electricity sales

(% of price before tax)

January	1980	1981	1982	1983	1984	1985	1986
Greece (domestic)	8	8	8	10	10	10	10

2. SPECIFIC TAXES

(a) Federal Republic of Germany

Since 1 January 1975 a compensatory tax (Ausgleichsabgabe) has been levied to promote the use of Community coal in power stations, the rates of which vary according to region :

(% of price before tax)

	1980	1981	1982	1983	1984	1985	1986
Hamburg	5.1	5.1	4.7	3.8	3.9	3.9	3.6
Hannover	4.3	4.2	4.0	3.3	3.4	3.4	3.2
Düsseldorf	5.3	5.3	4.8	4.0	4.0	4.0	3.7
Western Zone	5.3	5.3	4.8	4.0	4.0	4.0	3.7
Frankfurt/Main	4.1	4.0	3.8	3.2	3.2	3.3	3.1
Stuttgart	4.0	4.0	3.7	3.1	3.2	3.1	2.9
München	4.0	4.0	3.9	3.2	3.2	3.3	3.1
Southern Zone	4.0	4.0	3.9	3.2	3.2	3.3	3.1
Federal average	4.5	4.5	4.2	3.5	3.5	3.5	3.3

(b) France

Sales of electricity were subject to municipal and departmental taxes at the following rates during the period studied :

Locations	Municipal tax		Departmental tax		Total	
	1980-1985	1986	1980-1985	1986	1980-1985	1986
Lille	8	8	1	2	9	10
Paris	13.2	13.2	-	-	13.2	13.2
Marseille	8	8	4	4	12	12
Lyon	8	8	-	4	8	12
Toulouse	8	8	2	4	10	12
Strasbourg	-	-	4	4	4	4

For details of the application of these taxes see chapter V.2.b)

(c) Italy

Electricity consumption is subject to a State tax (imposta erariale), the rates of which have been as follows since 1981[1] :

LIT/kWh

Region	Domestic	Non-domestic	
		≤ 200 000kWh/month	>200 000 kWh/month
North and centre	1.10	1.10	0.65
South and islands	0.55	0.55	0.325

Certain types of consumption are exempt from this tax : electro-chemical, electro-metallurgical, public lighting, railways.

(1) A more complicated system was in force before 1981

Furthermore, at the end of 1982 local taxes were introduced as follows:

(LIT/kWh)

Users	Municipalities				Provinces			
	1983	1984	1985	1986	1983	1984	1985	1986
Domestic for the block 75 kWh/month	10	11	12	13	-	-	-	-
Non-domestic 1 000kW/month	4	4.5	5	5.5	4	4.5	5	5.5

All these taxes are included in the basis of assessment to VAT.

(d) Denmark

A special government tax on electricity was introduced in April 1977, the rates of which were as follows :

1.1.80-29. 6.80	8 øre/kWh	1.1.83-31.12.85	15.50 øre/kWh
30.6.80-14. 6.82	12.50 øre/kWh	1.1.86-....	19.00 øre/kWh
15.6.82-31.12.82	14.30 øre/kWh		

This tax is included in the assessment to VAT and is deductible in the same way as VAT; in other words, the tax is only payable once in the event of resale.

(e) Greece

Since 1984 a stamp duty of 1.2 % which is taken into account in calculating turnover tax has been applied to the tax exclusive selling price of electricity to domestic consumers only.

(f) Spain

Several specific taxes were applied during the period 1980-1985. These taxes which were abolished on 31.12.85 may be summarised as follows :

Period	Sector	Special tax PTA/kWh	IGTE %	Provincial tax %	Municipal tax %
1/1980	Households	-	1.5	0.075	1.5
1/1981	Industry	-	5.0	0.250	1.5
1/1982	Households	0.23	1.5	0.075	1.5
	Industry	0.23	5.0	0.250	1.5
1/1983	Households	0.27	1.5	0.075	1.5
	Industry	0.27	5.0	0.250	1.5
1/1984	Households	0.29	6	0.3	1.5
	Industry	0.29	6	0.3	1.5
1/1985	Households	0.35	6	0.3	-
	Industry	0.35	6	0.3	-

For details of the application of these taxes see chapter V.12.b).

g) Portugal

An inspection tax which is included in the basis of assessment to VAT is levied at the following rates :

	Households	Industry
6.8.76 - 22.4.82	2.50 esc/month	12.50 esc/month
23.4.82 -	7.50 esc/month	37.50 esc/month

V. ELECTRICITY PRICES IN THE VARIOUS COUNTRIES

1. FR of Germany
2. France
3. Italy
4. Netherlands
5. Belgium
6. Luxembourg
7. United Kingdom
8. Ireland
9. Denmark
10. Greece
11. Spain
12. Portugal

1. FR OF GERMANY

a) Situation in the electricity industry

There are around 1 000 electricity distribution companies in the FR of Germany, 347 having their own generating capacity while the others are solely retailers. The companies are of varying size and legal form. This decentralized system leads to, insofar as interests us here, a great diversity of prices reflecting the nature of each zone.

Three pricing systems are to be found :

(i) the tariffs applied to small low voltage consumers which must be published by the seller and contain an obligation to supply according to the "Law on energy";

(ii) the quasi-tariffs, principally for supplies in low voltage for storage heating (households, shops, offices, etc.) which take the form of non-published agreements;

(iii) individual contracts cover all other cases, notably for supplies to industry and are negotiated between the parties concerned. Often the contracts offer the same price to all clients having similar supply conditions.

To illustrate this the table below shows the sales of electricity by the public distibution companies in 1984 broken down by sector and pricing system :

(GWh)

Sector	Tariffs	Quasi-tariffs	Individual contracts	Total
Households	74 405	19 651	-	94 056
Industry	-	-	136 779	136 779
Commerce etc.	23 172	2 575	14 330	40 077
Public adm.	2 200	-	20 707	22 907
Agriculture	6 305	660	388	7 353
Public lighting	1 095	-	1 499	2 594
Transport	-	-	4 632	4 632
TOTAL	107 177	22 886	178 335(1)	308 398

(1) including 162 292 high voltage

At the end of 1984 the consumers supplied by the public distribution network were made up as follows :

Users	1 000 n	%	Standard consumers
Households	26 221	87.1	D_a....D_e
Commerce, administration, small industry	3 017	10.0	I_a....I_b
Industry	207	0.7	I_c....I_g
Agriculture	652	2.2	
TOTAL	30 096	100	

The average consumption per domestic user has evolved as follows :

	kWh/year		kWh/year
1980	3 454	1983	3 464
1981	3 462	1984	3 580
1982	3 430		

The eight distribution networks chosen for this study are amongst the largest and represent 53 % of electricity sales in the FR of Germany.

To meet these needs the following energy sources are used in the public power stations :

Sources	1980	1984	1985
	%		
Hydroelectric	5.3	4.7	4.1
Nuclear fuels	14.4	27.9	36.5
Coal	26.5	30.5	28.1
Lignite	30.1	27.0	24.1
Fuel-oil	5.0	1.1	1.3
Natural gas	17.4	7.6	4.6
Derived gases	0.8	0.4	0.5
Other	0.4	0.8	0.8
TOTAL	100	100	100

b) Taxes

Sales of electricity are subject to value-added tax (VAT) at the rate of 14 % on the VAT exclusive price since 1.7.83, 13 % before. VAT is deductible for commercial and industrial consumers.

In addition, since 1 January 1975 a compensatory tax (Ausgleichsabgabe) has been levied on electricity sales with the object of increasing the use of Community coal in the power stations. The rates are revised periodically, in general once a year and since 1978 they have differed according to Federal region. At the beginning of each year the rates were as follows in the regions chosen for our study :

(% of price before tax)

	1980	1981	1982	1983	1984	1985	1986
Hamburg	5.1	5.1	4.7	3.8	3.9	3.9	3.6
Hannover	4.3	4.2	4.0	3.3	3.4	3.4	3.2
Düsseldorf	5.3	5.3	4.8	4.0	4.0	4.0	3.7
Western zone	5.3	5.3	4.8	4.0	4.0	4.0	3.7
Frankfurt/Main	4.1	4.0	3.8	3.2	3.2	3.3	3.1
Stuttgart	4.0	4.0	3.7	3.1	3.2	3.1	2.9
Münich	4.0	4.0	3.9	3.2	3.2	3.3	3.1
Southern zone	4.0	4.0	3.9	3.2	3.2	3.3	3.1
Federal average	4.5	4.5	4.2	3.5	3.5	3.5	3.3

This tax is included in the basis of assessment to VAT.

c) Household prices-tariff

The regulations governing domestic tariffs were explained in "Electricity prices 1980-1985". It should be remembered that each distributor must offer a choice of 4 tariffs to their customers :

- two two-part tariffs with a different make up of standing charge and commodity rate ;
- a small users tariff ;
- an optional off peak tariff to be combined with one of the above.

These tariffs apply to small domestic consumers (D_a D_b D_c).

Above this level, particularly when electricity is used for heating (standard consumers D_d and D_e) the distributors are free to offer more advantageous conditions which form the basis of non published contracts (quasi tariffs).

d) Household prices - analysis

The results are shown in tables 1-4 in the annex.

Selling prices rose by 4-8 % in Düsseldorf and the Western Zone between January 1985 and January 1986 whilst in all other regions tax exclusive prices remained the same. The difference of less than 1 % in the selling prices is due to small changes in compensatory tax which was reduced.

During the period 1980-1986 it is the larger consumers, charged according to the quasi tariffs who have suffered the largest increases (40-55 % for D_e). This has had the effect of reducing tariff degressivity which nonetheless remains wide. In 1986 the standard consumer D_e pays 67-74 % less per kWh than D_a as against 69-76 % in 1980.

The range between extreme prices in the eight locations surveyed varies from 8-22 % according to the level of consumption in 1986. This regional dispersion is more pronounced for "heating" users (D_e) than for the small consumers (D_a, D_b) and has grown since 1980. This is due to the independence of companies to formulate their tariffs based on costs.

This creates a difficulty in selecting a location which typifies the level and price trend in the F.R. Germany. One solution seems to be to calculate a median price from the eight locations surveyed for each year and standard consumer. This exercise, which confirms our earlier remarks gives the following results :

Median prices (Pf/kWh)

Stand. cons.	1980	1981	1982	1983	1984	1985	1986	%1986/80
D_a	34.39	37.73	43.55	44.36	45.89	46.40	46.31	+ 35
D_b	26.07	28.96	33.15	33.67	35.14	35.68	35.67	+ 37
D_c	18.92	20.41	23.56	24.57	25.44	26.08	25.94	+ 37
D_e	9.56	11.24	13.26	13.41	14.14	14.33	14.64	+ 53

Between 1980 and 1986 tax inclusive prices rose by 30-61 % depending on the region and standard consumer. Taxes, which remained around 15-16 % of the selling price played little part. The rising cost of fuel however played a considerable part (95 % of electricity is of thermal origin). The implicit gross domestic product price index rose by only 19 % in the same period making electricity more expensive in real terms, especially for the larger consumers who suffered the largest increases.

e) Industrial prices-tariffs

All industrial users are charged according to individual contracts drawn up by each distributor, there being no published tariffs. A detailed explanation of the system was given in "Electricity prices 1980-1985".

f) Industrial prices - analysis

The results are shown in tables 5-8 in the annex.

It should be noted that the analysis is based on the price excluding VAT but including the compensatory tax. Whilst prices in five of the regions surveyed remained virtually unchanged from their 1985 levels, prices in the remaining three areas increased by between 2 % and 14 % with Düsseldorf (9-14 %) and the Western Zone (6-8 %) suffering increases substantially above the 2 % inflation recorded between 1985 and 1986.

It is difficult to choose a location which is representative of the level and evolution of prices in Germany. One solution is to calculate a median price from the eight locations surveyed for each standard consumer. This gives the following results :

Median price (Pf/kWh)

Standard consumers	1980	1981	1982	1983	1984	1985	1986	% 1986/80
I_c	20.20	21.84	25.32	25.27	25.32	26.12	26.53	+ 31
I_d	16.05	17.34	20.40	20.26	21.00	21.10	21.28	+ 33
I_e	13.23	14.54	16.63	16.68	17.45	17.50	18.22	+ 38
I_f	12.63	13.73	15.87	16.35	17.09	17.10	17.28	+ 37

Due to a lack of price information we have not calculated a median price for the standard consumers I_a, I_b and I_g.

Regional price differences are greater for the small consumers (31 % between extreme prices for I_c) than for the large consumers (19 % for I_f) and result from the liberty of the distribution companies to establish their tariffs based on costs.

For international comparison we have chosen Düsseldorf to ensure harmonization with household prices and other sources of energy (gas prices for example).

Tariff degressivity has changed little throughout the period studied with the standard consumer I_f paying 34-47 % less per kWh than Ic.

Electricity is currently more expensive in real terms for all consumers than in 1980, prices having risen by 28-47 % whilst the implicit gross domestic product price index rose by 19 %.

2. FRANCE

a) Situation in the electricity industry

Whilst it does not enjoy a monopoly the public enterprise "Electricité de France" (EDF) created by the nationalisation law of April 1946 dominates the electricity sector. In 1985 only 10 % of the production was accounted for by other companies (colleries, railways, local authorities and industrial autoproducers) and 8 % of the consumption distributed by other undertakings.

The distribution of electricity (all companies) was made up as follows in 1985 :

	GWh	%
Low voltage	114 700	41
Households	86 500	31
Professional users	21 400	8
Public lighting	6 800	2
High voltage	165 100	59
Industry	127 000	45.5
Railways	9 700	3.5
Tertiary and professional	26 200	9
Agriculture	2 200	1
TOTAL	279 800	100
(of which EDF	257 400	92)

The subscribers served by EDF were as follows at the end of 1985 :

Low voltage		25 300 000
High voltage		171 850
of which	large industry	550
	others	171 300

In turn domestic consumers were made up as follows :

Category KWh/year	% n	% GWh	Standard consumers
under 1 000	26.3	3.9	D_a
1 000 - 2 000	24.8	11.0	D_b
2 001 - 5 000	30.8	28.8	D_c
5 001 - 10 000	10.5	22.0	D_d
over 10 000	7.6	34.3	D_e
TOTAL	100	100	

Net production of the public services comes from the following sources:

%

Sources	1980	1984	1985
Hydroelectric	30.9	23.1	19.8
Nuclear	26.9	64.2	70.7
Solid fuel	21.2	10.5	7.7
Petroleum products	18.4	1.2	0.9
Natural gas	1.8	0.5	0.3
Manufactured gas	0.8	0.5	0.6
TOTAL	100	100	100

An agreement was signed between the State and EDF on the 24th October 1984 which forsees in particular :

- a better reflection of costs in the selling price ;
- regular updating of tariffs with the price per kWh being kept 1 % below inflation if possible ;
- identical tariffs for the whole metropolitan territory ;
- tariffs should help users decide on the basis of the actual cost of supply ;
- equal treatment for consumers with the same characteristics, each having the choice between different tariff options ;
- the extension of seasonal and optional tariffs to low voltage ;
- a narrowing of the gap between domestic and professional tariffs with a view to equality ;
- emphasis on sales to industry with an advertising camaign to promote consumption ;
- proposition of long term contracts to large industry with guaranteed prices in return for a consumption commitment.

All the tariff changes since 1985 have followed these objectives.

b) Taxes

i. Value-added tax

All supplies of electricity are liable to VAT, calculated on the tax-exclusive price, the rate being 18.6 % from 1 July 1982 and 17.6 % before. VAT is deductible for industrial and commercial consumers who have opted for the general VAT scheme.

ii. Local taxes

The rates and basis for the assessment of municipal and departmental taxes on electricity supplies were modified by the law of 29 December 1984 though the change only came into effect in March 1985. The basis of assessment is now as follows :

Subscribed demand kVA	Subscribed demand kW	% of tax excl. price	Standard consumers
≤ 36	≤ 32.4	80	D_a-D_e I_a
36-250	32.4-225	30	I_b I_c
> 250	> 225	0	I_d...I_g

Previously the taxes were applied to 80 % of the tax exclusive price for low voltage supplies (standard consumers D_a-D_e).

The maximum rate permitted by law is 12 % with however an exception for Paris.

The following table summarises the rates of the municipal and departmental taxes during the period studied :

%

Locations	Municipal tax		Departmental tax		Total	
	1980-1985	1986	1980-1985	1986	1980-1985	1986
Lille	8	8	1	2	9	10
Paris	13.2	13.2	-	-	13.2	13.2
Marseille	8	8	4	4	12	12
Lyon	8	8	-	4	8	12
Toulouse	8	8	2	4	10	12
Strasbourg	-	-	4	4	4	4

c) Household prices - tariffs

The "blue" tariff introduced after the revision of the tariff system is still in effect, though it was modified on 6 December 1985 (valid in January 1986).

This tariff is made up of simple two-part formulae comprising :

(i) a rental which increases with the amount subscribed to;
(ii) a single commodity rate, with an option as regards "off-peak hours".

This tariff is applied to domestic and agricultural customers whose requirements are up to 36 kVA.

		Normal tariff		Off peak hours option		
Standard consumers	Subscribed demand kVA	Standing charge FF/year	Commodity rate c/kWh	Standing charge FF/year	Commodity rate: Peak hours	Commodity rate: Off peak hours(2)
D_a D_b	≤3 (1)	135.24	60.72	-	-	-
D_c	6	403.92	↑	687.84	↑	↑
D_d	9	777.00		1 114.56		
	12	1 137.00	50.19	1 567.08		
	15	1 497.00	↓	2 019.60		
D_e	18	1 857.00		2 472.12	50.19	28.71
	24	-	=	3 719.88	↓	↓
	30	-	-	4 967.64		
	36	-	-	6 215.40		

(1) small supplies tariff

(2) 8 hours

Standard consumers D_c, D_d and D_e are charged according to the off peak hours option.

The tariff for small supplies is intended to protect the least-favoured social groups.

The off-peak hours option is interesting for storage heaters. There is also an "erasable peak day" option which is not described here as it is now little applied.

For more details see Electricity prices 1978-1984, ISBN 92-825-5166-0.

This tariff system is characterized by a progressive standing charge which is more than proportional to demand (14 times more expensive when demand increases six times) and by a low price for off-peak hours. The aim is to encourage the consumer to spread out his consumption more favourably.

d) Household prices - analysis

The results are shown in Tables 9-11 in the annex. As there is a standard national tariff, the tax-exclusive price is the same for all locations. On the other hand, the price including all taxes differs from one city to another by virtue of the local taxes.

Up until 1985 the price trend was the same for all cities surveyed. The changes in the rates of the local taxes during 1985 meant that the rates of increase between 1985 and 1986 were not the same in all cities surveyed as the following comparison of prices including all taxes shows :

% 1986/1985

	D_a	D_b	D_c	D_d	D_e
Paris	+ 3	+ 6	+ 3	+ 4	+ 4
Lille	+ 4	+ 6	+ 4	+ 5	+ 5
Lyon	+ 6	+ 8	+ 6	+ 6	+ 7
Marseille	+ 3	+ 6	+ 3	+ 4	+ 4
Toulouse	+ 4	+ 7	+ 5	+ 5	+ 5
Strasbourg	+ 3	+ 6	+ 3	+ 4	+ 4

With the exception of Lyon the increases are generally below the rate of inflation (+ 6 %) during the same period.

Between 1980 and 1986 prices increased by between 36 % and 77 % with the largest consumers (D_c D_d D_e) suffering the highest increases. For these consumers electricity is now more expensive in real terms than in 1980 (rise of 62 % in the implicit gross domestic product price index).

Regional differences in tax inclusive prices which are due to the varying rates of the local taxes remained at 6 % during the period studied with Paris being the most expensive and Strasbourg the cheapest.

The increased production of electricity in nuclear power stations has had two consequences : lower off peak commodity rates, currently 43 % cheaper than day time and the ability to offer "social tariffs" to protect those small consumers whose consumption is unavoidably during the day.

With intense competition in the heating market from gasoil and natural gas the relatively high price of electricity is likely to mean stagnation of its market penetration. For instance at the beginning of 1986 natural gas is 55 % cheaper than electricity per kWh (NCV) for space central heating.

e) Industrial prices - tariffs

The tariff system introduced on 15 February 1984 remains in force at the beginning of 1986 and incorporates the following changes introduced in February 1985 :

- abolition of supplementary standing charge for lighting in professional tariff;
- abolition of reactive energy bonus;
- new revised rates.

There are three tariffs for professional and industrial uses :

Tariff	Application	Standard consumers
Professional	low voltage, demand < 36 kVA	I_a
Yellow	low voltage, demand 36-250 kVA	I_b, I_c
Green	medium voltage, demand > 225 kW	I_d, I_e, I_f, I_g

Professional tariff

Demand kVA	Standing charge per month		Commodity rate c/kWh		
	Without off-peak	With off-peak	First block(1)	Surplus	Off-peak(2)
6-24	41.58 FF +11.27 FF/kVA	45.54 FF +13.46 FF/kVA	53.62	50.19	28.71
⩾ 24	48.51 FF +19.31 FF/kVA	69.30 FF +22.18 FF/kVA	-	50.19	28.71

(1) The second block is 25 times the subscribed demand, rounded off in units of 3 kVA.
(2) In principle, off-peak hours are 22-6 h.

The yellow and green tariffs can be summarised as follows :

Load factor	Annual standing charge	Commodity rate c/kWh				
		winter			summer	
		High peak	Peak hours	off-peak hours	Peak hours	Off-peak hours
- Yellow	FF/kVA[1]					
> 4 000 h	366.38	/	61.01	27.62	17.75	9.86
≤ 4 000 h	118.32	/	89.48	38.89	19.17	10.29
- Green	FF/kW					
> 6 000 h	848.23	42.13	32.97	23.39	13.38	9.44
4 000-6 000 h	553.75	61.58	45.08	24.37	16.21	9.58
1 800-4 000 h	349.44	107.66	54.76	25.52	17.51	10.45
< 1 800 h	112.72	150.10	75.64	34.01	21.58	11.88

Reactive energy : penaly = 12.12c/kVarh

[1] Rounded up in multiples of 6 kVA up to 108 kVA and in multiples of 12 kVA thereafter.

The tariff periods are now the same for the yellow and green tariffs. Summer extends from April to October. The winter peak covers four hours per day (9-11 h and 18-20 h) from December to February whilst off peak hours comprise eight hours per day and the whole of Sunday.

In order to calculate prices a complete breakdown between tariff periods is necessary. The following which results from the average distribution in France has been applied.

%

Load factor	1 000 h	1 600 h	2 500 h	4 000 h	6 000 h
Winter high peak	/	/	6.44	5.17	4.13
Winter peak hours	55.5	42.57	30.60	26.55	22.38
Winter off-peak hours	-	3.62	9.28	12.15	15.73
Summer peak hours	44.5	49.31	41.52	38.68	34.88
Summer off-peak hours	-	4.50	12.16	17.45	22.87
TOTAL	100	100	100	100	100

The penalty for reactive energy is only calculated for the green tariff where tg $\varphi > 0,6$, and therefore does not apply to the standard consumers in this study.

All these tariffs apply to the whole of the metropolitan territory served by EDF with the exception of very high power requirements (> 40 000 kW) where regional differences occur but affect only a very small number of companies.

f) Industrial prices - analysis

The results are given in tables 12 and 13 in the annex.

The extension of the application of the municipal and departmental taxes to the small industrial and commercial sector (I_a-I_c) during 1985 meant that the rates of increase between January 1985 and January 1986 differed from one city to another as the following table shows :

% 1986/1985

	I_a	I_b	I_c
Lille	11	5	6
Paris	13	6	7
Marseille/Lyon/Toulouse	12	6	6
Strasbourg	6	3	4

In general the rises in this sector are above the rate of inflation (+ 6 %). The rises for the larger industrial consumers (I_d-I_g) at 2-3 % are significantly below the rate of inflation.

This together with the favourable off peak rates has served to increase tariff degressivity. At the beginning of 1986, the standard consumer I_g paid 60-62 % less per kWh than a small consumer (I_a) against a 48 % reduction in unit price in 1980. Whilst quantity plays some part in this reduction it is mainly due to the low off peak rates. Under the 1986 tariffs off peak summer energy is 4 to 12 times cheaper than during the winter peak.

Inflation during the period 1980-1986 attained 62 % (increase in the implicit gross domestic product price index) whilst the price of electricity rose by 63-126 % thus becoming more expensive in real terms.

3. ITALY

a) Situation in the electricity industry

ENEL (Ente nazionale per l'energia elettrica) was established by the law of 6 December 1962 (N° 1643) and is a public service responsible for the production, transport, distribution and sale of electricity. However, the sector is not fully nationalized as the law authorized three exceptions :

- municipal undertakings existing before 1962, numbering about 150;
- self-producers, consuming at least 70 % of their own production;
- small producers (less than 15 GWh/year).

Two further exceptions were allowed by a law in 1982 (N° 308) :

- production from renewable sources;
- combined electricity-heat production in plants of less than 3 000 kW.

In addition ENEL has a coordinating and managing fuction for the whole electricial system of the country, including the activities of non-nationalized companies.

In practise, the current structure of production is as follows :

ENEL	82 %
Municipal undertakings	4 %
Small producers and self producers	14 %.

The net production of electricity from public power stations comes from the following sources :

%

Sources	1980	1984	1985
Hydroelectric	25.6	24.9	20.8
Geothermal	1.8	1.8	1.7
Solid fuels	9.4	15.0	16.2
Petroleum products	57.3	40.0	42.8
Natural gas	4.4	13.8	12.9
Manufactured gas	0.0	0.0	1.0
Nuclear	1.4	4.4	4.5
Other	0.1	0.1	0.1
TOTAL	100	100	100

ENEL's selling prices must conform to the directives of the Interministerial Price Committee (CIP). Tariffs are identical for the same type of consumer though there is a distinction between two large zones :

(i) North and centre

(Piemonte, Valle d'Aosta, Lombardy, Trentino-Alto Adige, Veneto, Friuli-Venezia Giulia, Liguria, Emilia-Romagna, Toscana, Umbria, Marche and a part of Lazio);

(ii) South and islands

(a part of Lazio, Abruzzi, Molise, Campania, Puglia, Basilicata, Calabria, Sicily and Sardinia).

Consumers and sales (ENEL) are broken down as follows :

	Consumers in 1984	% GWh in 1984
Households	19 528 003	24,8
Industry and services	5 410 006	66,7
(< 30 KW	(5 302 933)	(13,2)
(30-500 KW	(100 924)	(15,5)
(> 500 KW	(6 149)	(38,0)
Public lighting	66 298	1,8
Railways	1	2,5
Resale distributors	170	4,1
TOTAL	25 004 478	100

Sales to households in 1985 can be divided into the following blocks :

KWh/	% n	% GWh	Standard consumers
< 1 000	28,8	6,8	D_a
1 000 - 2 000	30,1	23,1	D_b
2 001 - 5 000	37,1	56,7	D_c
5 001 - 10 000	3,8	12,3	D_d
> 10 000	0,2	1,1	D_e

The average consumption per domestic consumer stood at around 1 910 kWh/year in 1985.

b) Taxes

(i) Value-added tax

The tax system was modified on 1 January 1985 by a law of 19 December 1984 (N° 853). In particular, value-added tax rates were modified and standardized though there is a whole set of exceptions. VAT rates, applied to VAT-exclusive electricity prices have evolved as follows :

%

Period	Domestic	Non-domestic
1.12.1977 - 31.12.1980	6	14
1. 1.1981 - 30. 9.1982	8	15
1.10.1982 - 31.12.1984	8	18
1. 1.1985 -	9	9 or 18

The normal rate of 18 % has been applied to non-domestic uses since 1985 except for the extractive and manufacturing industries (including printing and publishing) which benefit from a reduced rate of 9 %. In this study, 18 % has been applied for simplicity's sake to standard consumers I_a, and I_b and 9 % to consumers I_c - I_g.

(ii) Treasury tax (imposta erariale)

This specific tax is levied on electricity sales on the basis of the following amounts which differ according to the consumer and zone :

(LIT/kWh)

Users	Period	North and centre	South and islands
Domestic	1980-1986	1.10	0.55
Non-domestic	since 1981[1]		
< 200 000 kWh/month	since 1981	1.10	0.55
>200 000 kWh/month	since 1981	0.65	0.325

(1) A more complex system existed before 1981.

Certain types of consumption are exempt from the "imposta erariale", e.g. electrochemeical and electrometallurgical consumption, public lighting and traction. This tax is included in the basis of assessment of VAT and is taken into account in this study.

(iii) Local taxes

A law of 30.12.1982, modified on 27.12.1983 and 22.12.1984, allows :

(a) local authorities to levy a tax at the rates given below on domestic consumption with the exception of the first 75 kWh/month for users having a demand up to 3 kW;

1983	10 LIT/kWh	1985	12 LIT/kWh
1984	11 LIT/kWh	1986	13 LIT/kWh

(b) the local authorities and provinces to each apply a tax at the following rates on all non domestic consumption with a subscribed demand up to 1 000 kW;

1983	4 LIT/kWh	1985	5 LIT/kWh
1984	4,5 LIT/kWh	1986	5,5 LIT/kWh

These local taxes are included in the basis of VAT assessment.

As these local taxes have been collected by virtually all the local authorities and provinces, they are included in this study.

c) Household prices-tariffs

Three part tariffs, made up of the following elements are applied in the country as a whole :

- a monthly standing charge;

- a block commodity rate;

- a thermal surcharge which reflects fuel costs.

These elements vary according to the subscribed demand i.e. the meter size. The tariffs have two unusual features :

1) the abscence of reduced prices for off peak or night consumption;

2) the progressive nature of the commodity rate.

It is for this reason that electric central heating is very expensive and thus rare. Therefore no price is shown for the standard consumer D_e (all electric) who is not representative in Italy.

The tariff, applicable to principal residences valid in January 1986 is summarised below :

Standard consumer	Demand kW	Standing charge LIT/month	Price per block kWh/month ≤75	76-150	151-225	>225 LIT/kWh	Thermal surcharge LIT/kWh
D_a	≤ 1,5	735	37,10	40,10	79,10	112,10	56,00 (1)
D_b	1,5 - 3	3 100	38,10	58,10	79,10	112,10	56,00 (1)
D_c	3 - 4,5	10 890	←	112,10		→	70,60
	3 - 6	14 520	←	112,10		→	70,60
D_d	6 - 10	24 200	←	112,10		→	70,60

(1) reduced surcharge on consumption up to 150 kWh/month.

Since January 1986 the thermal surcharge has been revised twice :

drop of 11.521 % on 1 March 1986
drop of 37.18 % on 1 May 1986.

Furthermore the tariffs were changed on 27 May 1986. The new rates were not taken into account in this study are as follows :

Demand kW	Standing charge LIT/mont	Price per block kWh/month ≤ 75	76-150	>150 LIT/kWh	Thermal surcharge LIT/kWh
≤1,5	1 500	37,10	62,10	112,10	31,13
1,5 - 3	4 300	38,10	80,10	112,10	31,13
3 - 4,5	10 890	←	112,10	→	39,25
4,5 - 6	14 520	←	112,10	→	39,25
6 -10	24 200	←	112,10	→	39,25

d) Household prices - analysis

The prices are given in table 14 in annex.

Prices rose by 3-11 % between January 1985 and January 1986 which for most consumers is considerably below the 13 % inflation recorded. Nevertheless, the subsequent drop in the thermal surcharge and the tariff change in May 1986 leads to price decreases of about 6-9 % for small domestic consumers (D_a D_b) and 14 % for the others (D_c D_d). These decreases are not taken into account in the table in annex.

The progressive nature of the tariff system leads to a situation where a large consumer using 7 500 kWh per year (D_d) pays twice as much per kWh as a small consumer using 600 kWh per year (D_a). This combined with the absence of a night tariff mitigates against the use of electricity for space heating which is rare and the market accounted for by natural gas and heating oil which are more competitively priced. Thus no price is shown for the standard consumer D_e.

Prices in the south and islands remain slightly lower, solely on account of the lower treasury tax since tax-exclusive prices are the same throughout the country because of the standard national tariff. The tax burden increases with consumption, representing 10 % of the price paid by a small consumer (D_a) and 16 % for a large consumer (D_d) in 1986.

Whilst electricity prices increased by 136-200 % between 1980 and the beginning of 1986 the implicit gross domestic product rose by only 105 % thus making electricity more expensive in real terms for all consumers in 1986 than in 1980.

e) Industrial prices - tariffs

The tariffs introduced in 1984, of which a detailed description is given in "Electricity prices 1980-1985" remain in force with changes only in the thermal surcharge.

Two tariffs systems are still available side by side :

- general tariffs based on the demand with a standard commodity rate, two variants possible : low and middle voltage;
- multi-period tariffs with five price levels depending on the season and the time of day, two variants : middle and high voltage.

The multi-period tariffs are applied to demands in excess of 2 000 kW.

Both systems consist of three parts : demand charge, commodity rate and thermal surcharge based on fuel costs.

Non domestic subscribers in the south and islands having a subscribed demand of $\leq$ 30 kW receive a rebate of 25 % on the demand charge and commodity rate. This explains the different tax exclusive prices for the standard consumer I_a.

Under the general tariffs a consumer may subscribe a different demand than his actual demand to benefit from a block with a lower unit price. The demand charge is based on the highest demand, subscribed or actual.

There are now four rates for the thermal surcharge:

		(values in January 1986) LIT/kWh
users with a demand ≤ 500 kW	(low voltage	77,40
	(medium voltage	70.70
users with a demand > 500 kW	(1st block	72.00
	(remainder	6.60

The first block is equal to 3 000 kWh x demand. The thermal surcharge is recalculated whenever a major change occurs in the cost of fuels burnt in the thermal power stations.

f) Industrial prices - analysis

The prices are shown in table 15 in annex.

It should be noted that the analysis is based on the price excluding VAT but including the specific taxes.

Between January 1985 and January 1986 prices rose by 3-5 %, the same increase as seen in the domestic sector which is below the rate of inflation.

The tariffs are standard over the national territory with the exception of small non-domestic users whose demand does not exceed 30 kW; a rebate is accorded to those in the southern zone and the islands. This gives rise to regional price diferences of the order of 20 % in 1986. For other users, the difference between regions is minimal (0,5 %) and derives exclusively from tax abatement. The tax system brings another difference in favour of the largest industrial consumers (> 1 000 kW) who are exempt from local taxes (see results for I_f and I_g in the table).

Contrary to the progressive tariffs for household users the industrial tariff system encourages higher consumption. The lower rises suffered by the large consumers has meant an increase in tariff degression. A large consumer (I_g) now pays 53-60 % less per kWh than a small consumer (I_a) compared to 17-38 % in 1980.

Increases of 110-270 % were experienced between 1980 and 1986 whilst the implicit gross domestic product price index rose by 105 % thus making electricity more expensive in real terms, particularly for the smaller consumers in 1986 than in 1980.

4. NETHERLANDS

a) Situation in the electricity industry

There are 84 companies operating in the electricity sector and these may be divided into three categories according to their activity :

(i) producers (3);
(ii) producer-distributors (13);
(iii) resale distributors (68).

The producer-distributors provide three quarters of the electricity for the domestic market. The three companies surveyed are of this type and account for over 40 % of the sales of electricity within the country.

Following the report of the Commission into the streamlining of companies in the public interest (Coconut), various restructuring measures were studied by the Minister for Economic Affairs and the interested parties with the aim of centralising the organisation, reinforcing harmonisation and lowering costs. This will lead to a structure characterised by :

- an amalgamation of producers (3 to 5 companies serving several provinces);
- a pooling of production costs;
- a division between production and distribution to break vertical integration;
- a horizontal integration to allow the combined distribution of electricity, gas and heat;
- a ceiling of 75 000 consumers per distributor which would reduce the number of distributors to around 35.
- a reduction of regional price differences at consumer level.

The sales of electricity broken down by consumer sector in 1985 were as follows (provisional results) :

	% GWh	Standard consumers
Households	28.3	$D_a \ldots D_e$
Agriculture	1.0	
Drainage, polders	0.7	
Public lighting	1.3	
Transport	2.0	
Commerce, services	24.1	I_a, I_b
Industry	42.6	$I_c \ldots I_g$
TOTAL	100	

All electricity is of thermal generation from the following energy sources (net production of the public services) :

%

Source	1980	1984	1985
Coal	11.7	26.9	27.1
Petroleum products	40.8	1.3	1.3
Natural gas	37.9	60.0	61.2
Derived gas	2.5	3.4	3.5
Nuclear fuel	7.1	6.6	6.9
Others	0.0	1.8	0.0
TOTAL	100	100	100

b) Taxes

Only value added tax (VAT) is levied on electricity sales, the rate being 18 % of the tax exclusive price until 31.12.83, 19 % thereafter. VAT is deductible for industrial and commercial consumers.

c) Household prices tariffs

While the association VEEN oversees tariffs generally and sets guidelines, each distributor is responsible for his own tariffs. These must cover the costs of each enterprise taking account of the fact that price levels differ accoring to the region or municipality as a result of the different nature of the network and the consumer structure.

Low voltage tariffs are simple and of similar form :

- Standing charge to cover general costs;

- two part commodity rate :

  - basic price to cover the power supplied;
  - fuel cost adjustment.

All tariffs are degressive as a result of quantities consumed. All companies offer a night tariff which, for the payment of an additional standing charge affords a lower basic rate per kWh at night. The night tariff is offered for at least eight hours and is always combined with a day tariff.

The night tariff was applied to the standard consumers D_c, D_d, D_e. By way of example the tariffs for small users, valid at the beginning of 1986 are as shown below :

	Rotterdam	North Holland	North Brabant
- Satnding charge HFL/year			
(single meter	63	57	67,80
(supplement for double meter	42.84	33	28.20
- Commodity rate Cents/kWh			
(day	12	11.4	8.9
(night and off peak	5.5	4.9(1)	4.2
- fuel cost variation Cents/kWh	11.30	11.35	7.0
Definition (night	Mon.-Fri. 22h30-8h	8h between ±23h30 and ± 8h30	23h-7h
(off peak	Saturday Sunday	2h between ±11h30 and ±17h15	-
Supplements to standing charge	X 2 if 3 phase and > 35 A	+432HFL/year if 23,1kVA (2)	+216 HFL/year if ≥ 35 A

(1)
(2) minimum consumption 600 kWh/year applied to the "all electric" consumer (D_e)

d) Household prices - analysis

The prices for the three zones surveyed are shown in tables 16 and 17 in annex.

Between January 1985 and January 1986 prices fell by between 3 and 16 %, which is due to the fall in natural gas and coal prices, the principal fuels used in electricity generation. This is reflected in the "fuel cost variation" of the tariffs.

In 1986 regional price differences ranged from 24 % for small consumers, 41 % for medium consumers and up to 47 % for electric central heating and have widened since 1980. In all cases it is North Brabant which is cheapest. The differences result from the independence of companies to formulate their tariffs based on their costs.

For the same reasons the price trend is not the same in all regions. The following average prices excluding taxes give a general idea of the trend in domestic unit prices :

19.3 cents in 1980'
aroung 23 cents at present.

Since 1980 the price of electricity has risen by 26-45 % in Rotterdam, 21-29 % in North Holland and by 11-13 % in North Brabant. In the same period the gross domestic product price index measured an increase of 21 %. However since 1983 the price of electricity has risen less than the price of all goods and services. Despite this favourable trend and the fact that night energy costs less than half the day rate electricity remains little used for central heating, natural gas being cheaper. This explains why the average consumption per user is not very high (a little over 3 000 kWh/year) and unlikely to rise appreciably.

e) Industrial prices - tariffs

Following discussions with the association VDEN the voltages applied to our standard consumers have been revised to reflect the actual delivery conditions. The time series has been recalculated using the following voltages :

Voltage (kV)	Rotterdam	North Holland	North Brabant
0,380	$I_a - I_e$	I_a I_b	-
10	I_f	$I_c - I_g$	$I_a - I_g$
25	I_g	-	-

The use of high voltage is not permitted within the Rotterdam city limits, however a strong low voltage network capable of high loads exists.

Small industrial and commercial consumers supplied in low voltage are charged according to a simple two part tariff similar to that for domestic uses, the standing charge being based on the capacity of the fuse.

The other industrial consumers are charged according to tariffs which consists of :

- a standing charge;
- a demand charge;
- an additional charge for maximum demand during certain peak periods;
- a charge per kWh with a lower off peak rate;
- a fuel cost adjustment

4)

The standing charge covers the meter rental and administrative charges. The demand charge is based on the quarter hourly monthly maximum demand expressed in kW or kVA with a minimum charge based on 60 % of the subscribed demand.

In some cases an additional charge is levied on the maximum monthly demand during certain peak periods fixed by each distributor during three winter months between November and February. A reduced night (23-7 h) kWh rate is offered by certain distributors.

The fuel cost adjustment, expressed in cents/kWh is similar to the small users tariffs.

The demand charge and the kWh rate vary according to :

- the supply voltage;
- the demand block (reductions above certain limits);
- the load factor (length of demand usage).

The tariff structure is recommended by VEEN but each distributor freely decides on the rates which gives rise to a great variety of tariffs which cannot be shown in detail in this study.

In the North Brabant region the high voltage tariffs (10 kV) are equally applied to the consumers who receive their supply in low voltage (220-380 V) through a cable connected to the 10 kV network. If the metering is carried out on the low voltage side of the transformer the maximum demand and the energy consumption are increased by 2 %. It is for this reason that the "high voltage" tariffs were applied to the small commercial and industrial consumers even though they use low voltage electricity.

f) Industrial prices - analysis

The prices for the three regions surveyed are shown in tables 18 and 19 in annex.

Fuel costs play a large part in consumer prices as coal, and particularly natural gas are used in electricity generation. Whilst natural gas is produced in the Netherlands, the price is linked to fuel oil prices with a few months lag. Thus electricity prices fluctuate under external influences, the price of imported oil and the dollar exchange rate.

The fall in oil prices and the value of the dollar at the end of 1985 started to affect electricity prices at the beginning of 1986 as can be seen from the table below which shows how prices have dropped between January 1985 and January 1986 :

% 1986/1985

	I_a	I_b	I_c	I_d	I_e	I_f	I_g
Rotterdam	- 6	- 2	- 7	- 7	- 8	- 8	- 6
North Holland	- 5	- 7	- 16	- 16	- 18	- 12	- 15
North Brabant	- 25	- 26	- 13	- 14	- 15	- 15	- 15

As a result of the uneven rates of decrease, regional price differences have increased. The difference between the cheapest and dearest locations varied from 34-53 % in 1980 and 52-69 % in 1986, with North Brabant always the cheapest. Production costs, tariffs and supply voltage all serve to produce these regional price differences.

Despite the recent decreases, 1986 prices are higher in constant terms than in 1980 :

% 1986/1980

	I_a	I_b	I_c	I_d	I_e	I_f	I_g
Rotterdam	+ 12	+ 15	+ 10	+ 25	+ 30	+ 28	+ 22
North Holland	+ 52	+ 47	+ 20	+ 19	+ 18	+ 16	+ 14
North Brabant	+ 8	+ 9	+ 9	+ 10	+ 10	+ 10	+ 8

This confirms the regional divergence of prices which a number of measures taken by the profession hope to alleviate. Prices have risen least since 1980 in the cheapest region. Whilst regional price differences are large so also is the range of prices between small and large consumers in the same area. In 1986, the reduction in unit price between a small consumer (I_a) and a large consumer (I_g) is of the order of 45-55 % (tariff degressivity).

5. BELGIUM

a) Situation in the electricity industry

Under Belgian law, anyone is free to set themselves up as an electricity producer whether they be private individuals or companies, communes, provinces or the State itself. The communes have the sole right to use the distribution grid up to 1 000 kW, a right which they may concede to other bodies. The law allows private companies or individuals to participate in intercommunal associations. This has led to the creation of numerous mixed intercommunales in which the public authorities and the private sector are closely associated.

This freedom has led to a very complex production and distribution system with 63 companies divided as follows :

Private concessionary companies	2
Local authorities	17
Intercommunales with private participation	24
Intercommunales without private participation	10

The whole is coordinated at national level, as if it were a single enterprise. This coordination is brought about by several distinct bodies, the most important of which are :

(i) "La Société pour la Coordination de la Production et du Transport de l'Energie Electrique (CPTE)" which runs the distribution centres;
(ii) "Le Pool des Calories et SYNATOM" which assures the supply to all power stations of fuel at a unified price;
(iii) "la Fédération Professionnelle des Producteurs et Distributeurs d'Electricité de Belgique (FPE)";
(iv) "L'Union des Exploitations Electriques en Belgique (UEEB)";
(v) "Le Comité de Gestion des Entreprises d'Electricité (CGEE)".

The whole is supervised by the "Comité de Contrôle de l'Electricité et du Gaz" whose object is to generate coordinated and unified management. As far as prices are concerned, harmonization has led to the application of a standard national tariff.

Tariffs are recommended by the "Comité de Contrôle" but must be approved by the distributors. They come into force after publication in the form of a Ministerial order in the "Moniteur belge".

The breakdown of electricity consumption by consumers supplied by the public distribution network was as follows in 1985 :

Sector	% GWh
Industry	51.5
Households	28.6
Railways	2.5
Public lighting	2.0
Commerce, administration and other services	15.4
TOTAL	100

The average consumption per domestic user, including the night only tariff was 3 150 kWh/year in 1984.

The net production of electricity by the public services is from the following sources :

%

Sources	1980	1984	1985
Hydroelectric	0.6	0.7	0.6
Nuclear	25.4	54.8	64.9
Coal	24.7	29.1	21.8
Petroleum products	35.9	7.8	6.0
Natural gas	9.7	3.6	3.1
Manufactured gas	3.7	3.9	3.5
Other	0.0	0.0	0.2
TOTAL	100	100	100

b) Taxes

Electricity sales are subject to value-added tax. The rate was set at 16 % of the tax-exclusive price from 1.1.1978 to 1.7.1981 and 17 % subsequently. VAT is deductible for industrial and commercial consumers.

c) Household prices - tariffs

Following a recommendation by the "Comité de contrôle de l'électricité et du gaz" low-voltage tariffs were modified as of 1 January 1985. The tariffs, described in "Electricity prices 1980-1985" remained in force at the beginning of 1986.

The value of the indices I_{NDB}, N_{DB} and N_C has been as follows :

January	I_{NDB}	N_{DB}	N_C
1985	1.081	1.4841	2.3154
1986	1.444	1.5748	1.6411

The above indices have the same definitions as the indices I_{NDH} N_{DH} and N_C applied to the high voltage tariffs (see § e).

d) Household prices - analysis

Table 20 in annex gives the prices for Brussels which are valid for the country as a whole.

The period 1980-1986 is characterised by large increases until 1983 and by more moderate increases or falling prices thereafter.

Between 1985 and 1986 prices for small consumers using only daytime electricity rose by 2-3 % while those with off peak consumption benefitted from a 1-7 % drop in price depending on the percentage of night consumption. In the case of the standard consumer D_e 20 000 kWh (15 000 kWh night) the price paid in 1986 is below the 1983 level.

At the other end of the scale the standard consumer D_a 600 kWh is now charged according to the social tariff since 1985. Despite a 3 % rise in 1985 the price paid in 1986 remains below the January 1984 level.

Whilst the tariff system favours consumers with off peak consumption those with small daytime consumption have been protected. In 1986 off peak electricity is 58 % cheaper than during the day (exclusive night/normal tariffs).

Despite the social tariff which puts a ceiling on prices, tariff degression is very marked. The reduction in unit price between a consumption of 600 kWh/year in the daytime (D_a) and 20 000 kWh/year, mainly at night (D_e), remained the same (64 %) in 1980 and 1986.

During the period 1980-86, electricity prices have gone up faster than the price of all goods and services (38 % increase in the implicit GDP price index), making electricity more expensive in "constant" francs than in 1980.

e) Industrial prices - tariffs

Following a recommendation by the "Comité de contrôle de l'Electricité et du gaz" high voltage tariffs were changed slighly from 1.9.1985.

Two main tariffs are still offered (two part A and B), the most common variant being the "motive power" tariff which is automatically applied if the consumption for lighting represents less than 15 % of the total, as is the case of our standard consumers.

The tariffs can be summarised as follows :

Two part A

Standing charge	BFR x kW x month	Sept-April 184.6 $I_{NDH} \times N_{DH} \times D$ May-Aug. 175.4 $I_{NDH} \times N_{DH} \times D$
Commodity rate	BFR x kWh	Day 1.017 $I_{NDH} \times N_{DH} \times D + 0.642\ N_C$ Night 0.549 $I_{NDH} \times N_{DH} + 0.542\ N_C$
Ceiling price	BFR x kWh	Day $(1.278+1.017\ D) I_{NDH} \times N_{DH} + 0.642\ N_C$
Minimum price	BFR x kWh	3 770 N_{DH}

Two part B

Standing charge	BFR x kW x month	Nov-Feb 445 $I_{NDH} \times N_{DH}$ Mar,Apr,Sept,Oct " May-August "
Commodity rate	BFR x kWh	Day 0.367 $I_{NDH} \times N_{DH} + 0.642\ N_C$ Night 0.291 $I_{NDH} \times N_{DH} + 0.542\ N_C$
Minimum price	BFR x kWh	3 770 N_{DH}

For two part A and B

Meter rental	BFR x month	single 525 N_{DH} double 580 N_{DH}

Consumers with a demand below 1 000 kW are charged according to the two part A tariff. Those with a demand between 1 000 kW and 4 000 kW are charged according to the two part B tariff or alternatively the two part A tariff if this is more favourable on a yearly basis.

The ceiling price of the two part A tariff concerns the standing charge and the day commodity rate. The night is 9 hours, the limits being fixed by each distributor.

The demand considered is the maximum quarter hourly demand measured monthly in kW.

For 1986 we have applied the indexed meter charge included in all new contracts. The double meter charge is applied to consumers with night consumption (I_c...I_g).

In the calculations, the various tariff periods have simply been weighted by duration.

Reactive energy is free if daily consumption does not exceed 50 % of active energy consumed by day, which corresponds to a value of cos = 0.8944. There is a penalty when the proportion of 50 % is exceeded. As the price of supplying the standard consumers of this study must be calculated for $\cos\varphi = 0.90$, reactive energy does not give rise to any bills.

The tariffs are updated by the following indices :

$$D = 0.75 + \frac{70}{280 + kW}$$

I_{NDH} takes account of the extra investment costs in nuclear power stations compared with conventional thermal power stations. It is modified when any significant unit enters into service.

N_{DH} represents the running and depreciation charges of the high voltage distribution network.

N_C shows the cost of fuels burnt in the power stations.

The latest values of these indices are :

	January 1985	January 1986
I_{NDH}	1.123	1.239
N_{DH}	1.3921	1.4777
N_C	2.3154	1.6411

For greater detail on the make up of these indices see the EUROSTAT publication "Electricity prices 1980-1985".

f) Industrial prices - analysis

The results are shown in table 21 in annex.

Between 1985 and 1986 prices increased by 3 % for the smaller standard consumers (I_a I_b I_c) whilst those for the larger consumers fell as the table below shows :

	I_a	I_b	I_c	I_d	I_e	I_f	I_g
% 1986/1985	+ 3	+ 3	+ 3	- 2	- 4	- 2	- 1
% 1986/1980	+ 51	+ 50	+ 42	+ 49	+ 48	+ 54	+ 60

The increases are approximately half the rate of inflation for the period January 1985 to January 1986. This and the reductions in price are due to the sustantial decrease in the price of fuel (factor N_c) which offset the rises in wages, certain material costs and the additional investment in nuclear power (factors I_{NDH} and N_{DH}).

Electricity has however become more expensive in constant terms since 1980 as the implicit gross domestic product price index rose by 38 % between 1980 and 1986.

The ceiling price, which differs according to the power requirements affects the standard consumers I_a and I_b from 1984 onwards. However the floor price referred to in paragraph (e) does not affect the standard consumers in this study as it applies mainly to those companies which cease activities during the holiday period and which must still pay a minimum charge even if their electricity consumption is zero or negligible.

The tariff changes introduced in September 1985 meant that for January 1986 the two part A tariff was applied to the standard consumer I_f as it was the most advantageous.

6. LUXEMBOURG

a) Situation in the electricity industry

The supply and distribution of electricity within the Grand Duchy of Luxembourg is shared by two companies : Sotel and Cegedel.

Sotel serves the iron and steel sector and its supplies come mainly from the electricity produced by the steel industry itself in thermal power stations fired by blast furnace gas while the remainder is imported from Belgium. Sotel has its own service grid and does not supply electricity to the public.

This is done by Cegedel either directly or through resale agencies. Cegedel does not produce electricity but imports 96 % of its supplies from Germany and the remaining 4 % is purchased from local hydroelectric power stations. The sales of Cegedel are made up of one quarter to resale distributors and three quarters direct sales.

The domestic market (Sotel, Cegedel, resale distributors and industrial self producers) was broken down as follows in 1984 :

Users	% GWh	Standard consumers
Households	15	$D_a \ldots D_e$
Railways	1	
Commerce, services	17	I_a, I_b
Industry	66	$I_c \ldots I_g$
TOTAL	100	

Low voltage sales in 1985 to households were made up as follows :

kWh/year	% consumers	% GWh	Standard consumers
< 1 000	8.1	1.1	D_a
1 000 - 2 000	15.3	5.1	D_b
2 001 - 5 000	47.8	35.5	D_c
5 001 - 10 000	22.0	31.7	D_d
> 10 000	6.8	26.8	D_e
TOTAL	100	100	

The prices shown in this study are those supplied by Cegedel.

b) Taxes

Electricity sales are subject to value-added tax at the rate of 6 % of the VAT exclusive price, 5 % before 1 July 1983. VAT is deductible for industrial and commercial consumers.

c) Household prices - tariffs

The tariff system, described in detail in Electricity prices 1978-1984 remains in force with some small modifications.

With effect from 1 October 1985 peak hours were reduced to 3 hours per day (10.00-11.30 and 17.00-18.30) and have thus been taken as 9 % of the total consumption excluding night (instead of 12 % before).

From January 1986 a special non indexed rebate of 0.108 LFR/kWh was applied to reflect prevailing supply conditions. The amount of this rebate will be reviewed at the beginning of each year.

The index E_B which is applied to the standing charge and commodity rate has evolved as follows :

January	1982	1983	1984	1985	1986
E_B	1.00	1.121	1.310	1.336	1.373

d) Household prices - analysis

The prices are given in table 20 in annex.

Between January 1985 and January 1986 prices for small household consumers (D_a D_b) rose by 1 % whilst those for the larger household consumers having off peak consumption fell by 4 %. The decrease recorded for the larger consumers is mainly due to the 3 % reduction in peak consumption. The rebate of 0.108 LFR/kWh was also a factor and contributed to keeping the increase for smaller consumers significantly below the rate of inflation (7 %) during last year.

Tariff degression remains stable, the largest standard consumer (electrical heating D_e) paying one third of the unit price paid by the smallest (D_a). This degression is very marked, resulting mainly from the low night prices offered (six times less expensive than for peak hours).

During the period 1980-1984 prices rose faster than the implicit gross domestic product price index making electricity more expensive in real terms, however this trend has been broken since 1984. Despite the earlier trend the average consumption per household continues to grow, standing at 4 591 kWh/year in 1985.

e) Industrial prices - tariffs

The medium voltage tariffs, applied to standard consumers I_a - I_e which result from the agreement signed between CEGEDEL and the government on 27 January 1982 remain in force. A detailed description can be found in the publication "Electricity prices 1978-1984". Three price levels are calculated corresponding to 0 %, 50 % and 100 % power reduction. The prices resulting from a 50 % power reduction which is the most common have been taken for international comparison.

The high voltage tariffs (65 kV) are not covered by the agreement of 27 January 1982 and take the form of non published contracts. A new tariff system was introduced in January 1986, more in line with the principles of the recommendation of the Council of the European Communities of 27 October 1981 on electricity tariffs.

The maximum half hourly demand in high voltage and the reduced demand in medium voltage is rounded to the nearest half kilowatt.

The rebate of 0.108 LFR/kWh described under c) above applies also to medium and high voltage.

An index E_M is applied to the medium voltage tariff formulae and E_H, to the high voltage formulae. These indices have developed as follows:

January	1982	1983	1984	1985	1986
E_M	1.000	1.138	1.351	1.374	1.404
E_H	1.000	1.152	1.386	1.406	1.431

f) Industrial prices - analysis

The results are shown in tables 21 and 22 in annex.

Between January 1985 and January 1986 medium voltage price levels changed by between -2 % and +2 %, whilst high voltage prices fell by 7-8 % reflecting the new tariff introduced in January 1986.

The large decrease for high voltage consumers has increased tariff degressivity. In 1980 a large consumer (I_g) paid 46 % less per kWh than a small consumer I_a which has increased to 61 % in 1986.

Over the period 1980-1986 current VAT exclusive prices rose by 37-141 % depending on the level of consumption and the power reduction. Inflation registered a 46 % increase in the same period, thus for all consumers with the exception of I_g electricity is more expensive in constant terms. The increases between 1980 and 1984 were responsible for this trend as since 1984 increases have not matched the rate of inflation.

7. UNITED KINGDOM

a) Situation in the electricity industry

The electricity supply industry was brought under public ownership in 1947 with a further reshaping in 1957 which gives the pattern still in force, with some small changes.

In England and Wales the structure has two levels :

(i) generation and transmission under the responsibility of the CEGB;

(ii) distribution and sales under the responsibility of Area Boards.

The Central Electricity Generating Board (CEGB) is a statutory corporation in charge of planning, construction and operation of power stations and the transmission grid (400 kV and 275 kV) within England and Wales. The CEGB does not sell directly to customers apart from a few exceptions at a national level, like railways.

The Area Boards, of which there are 12 over England and Wales take their supplies from around 100 supply points on the transmission grid of the CEGB and sell electricity to customers through distribution grids (at voltages from 132 kV down to 415 volts).

In Scotland and Ulster there are three "all purpose" Area Boards operating generation, transmission and distribution of electricity.

Activity in England and Wales is coordinated by the Electricity Council. The Electricity Council acts in the fields of finance, demand forecasting, investment, planning, tariff proposals, research and public relations.

Neither the CEGB not the Area Boards are in a monopoly position, this situation being inforced by the 1983 Energy Act, which introduced competition by permitting persons to generate and supply electricity as a main business.

All Electricity Boards are required :

(i) to supply electricity, on request, to the private generators or suppliers of electricity;

(ii) to purchase privately generated electricity;

(iii) to allow the use of their own transmission and distribution systems by private generators and suppliers.

This has resulted in three tariff systems :

(i) Bulk supply tariff for sales by the CEGB to the Area Boards;

(ii) Areas Board retail tariffs for industrial, commercial and domestic customers, which are of interest to us in this study;

(iii) Tariffs for purchase, sale and transport, applied to private generators or suppliers.

In 1984 the sales of electricity via the public grid were made up as follows (revised figures) :

Users	Number of subscribers 1 000 n	%	Sales % GWh	Standard consumers
Households	21 192	90.4	36.6	D_a.... D_e
Administration, commerce, services etc.	1 788	7.6	22.7	I_a, I_b
Industry	209	1.0	37.1	I_c.... I_g
Railways	-	-	1.1	
Agriculture	238	1.0	1.6	
Public lighting	5	-	1.0	
TOTAL	23 432	100	100	

Indigenous coal remains the principal fuel for the generation of electricity as can be seen from the following table which gives the net production of the public power stations (CEGB + Scotland + Ulster);

%

Sources	1980	1984	1985
Primary hydroelectric	1.3	1.4	1.3
Nuclear fuel	11.8	17.6	19.2
Coal	76.8	47.5	63.3
Petroleum products	9.9	33.1	15.7
Natural gas	0.2	0.4	0.5
TOTAL	100	100	100

1984 was affected by the miners strike which explains the massive and unexpected recourse to petroleum products.

The four zones chosen for this study were :

(i) London (London Electricity Board);
(ii) Birmingham (Midlands);
(iii) Leeds (Yorkshire);
(iv) Glasgow (South of Scotland);

and represent about one third of the population and the sales of electricity in Great Britain.

b) Taxation

No taxes are levied on electricity sales, the VAT rate remaining at 0 % during the period studied.

c) Household prices - tariffs

It is sufficient to summarize the tariff system as little change has taken place since the last study.

Households can choose between three tariffs :

(i) Credit tariff of the simple two-part type;
(ii) Prepayment tariff which differs from the above in that the fixed charge is to cover the costs of the more complicated meter which also records the standing charge. Nearly 1.4 million or more than 7 % of all domestic consumers are charged according to this tariff.
(iii) "Economy 7" tariff which has different rates for day and night and was applied to standard consumers D_c, D_d and D_e who take part of their electricity at night.

The domestic standing charge rebate scheme which benefitted consumers whose quarterly consumption was around 110/120 kWh was abolished on 1 April 1985. Tariffs were increased by an average of 4.4 % on the same date.

d) Household prices - analysis

Two tables in the annex (Nos 22 and 23) give the prices for the four regions covered by the study. Despite the lack of prices for Leeds and Birmingham due to survey difficulties a short analysis of the available results is possible.

Between January 1985 and January 1986 prices rose by 2-5 % in London and a standard 4 % in Glasgow, which is below the rate of inflation in the same period. The miners strike increased fuel costs very substantially, the full burden of which was not passed on to the consumer. Sales to the domestic sector were 2.1 % higher in 1984/85 than in the previous year with off-peak sales increasing for the second successive year. The Economy 7 rate continues to be less than 40 % of the standard domestic rate.

Prices rose by 62-78 % during the whole period studied whilst the implicit GDP price index rose by 46 % thus making electricity more expensive in real terms in all regions.

e) Industrial prices - tariffs

There have been no changes to the tariff system since the publication of "Electricity prices 1978-1984" wherein a detailed description may be found.

f) Industrial prices - analysis

The available prices for the four cities surveyed are shown in tables 25 and 26 in annex. Despite the gaps in the time series notably for 1986 due to survey difficulties a short analysis is possible.

Between January 1985 and January 1986 prices increased by 4-5 % in Leeds and Glasgow, which as was seen in the domestic sector is below the rate of inflation. In general industrial prices are heavily influenced by fuel costs, however the substantial increase following the massive recourse to fuel oil during the miners strike has not been passed on to the consumer.

A comparison with the implicit GDP price index shows that the price of electricity rose faster than the price of all goods and services until 1983 though less dramatically thereafter. Despite the fact that electricity has become more expensive in real terms than in 1980 and the loss of sales to the coal mining industry in 1984/85 electricity sales grew by 1.6 % overall, reversing the trend seen up to 1983.

8. IRELAND

a) Situation in the electricity industry

The generation and supply of electricity is vested in a single authority, the Electricity Supply Board (ESB) which was established by government order in 1927. A unified national tariff system is operated, the rates being set by the governement based on the recommendations of the National Prices Commission.

The ESB supplies over 10 000 GWh per year to around 1 145 000 consumers of whom approximately 6 000 are industrial. The pattern of sales may be summarized as follows, showing the position of the standard consumers in this study.

Domestic consumers

kWh/year	% of total consumers			% of total sales			Standard consumers
	Urban	Rural	Total	Urban	Rural	Total	
< 1 000	13.4	26.2	19.0	1.7	3.6	2.4	D_a
1 000 - 2 000	19.2	24.0	21.3	8.5	12.1	9.9	D_b
2 001 - 5 000	46.5	33.9	41.0	45.5	36.7	42.0	D_c
5 001 - 10 000	18.9	12.2	16.0	36.3	28.0	33.0	D_d
> 10 000	2.0	3.7	2.7	8.0	19.6	12.7	D_e

Industrial consumers (high voltage)

Power kW	% of sales	Standard consumers
≤ 100	3.9	I_a, I_b
100 - 500	17.1	I_c, I_d, I_e
501 - 1 000	14.6	
1 001 - 5 000	36.8	I_f, I_g
> 5 000	27.6	

(5)

The use of natural gas from the field off the Cork coast which has been coming onshore since 1978 has decreased the dependence on imported petroleum products as the following table of net production sources shows :

%

Sources	1980	1984	1985
Primary hydroelectric	8.3	6.4	7.4
Coal	0.7	0.4	0.6
Peat	15.2	18.7	19.6
Petroleum products	60.2	19.7	20.6
Natural gas	15.6	54.8	51.8
TOTAL	100	100	100

b) Taxes

The rate of value added tax stood at 0 % during the period studied and no specific taxes were levied.

c) Household prices - tariffs

The standing charge and normal commodity rate were increased by around 9 % and 4 % respectively in January 1986 whilst the night heating commodity rate remains unchanged since January 1985.

Urban domestic consumers are charged according to a two-part tariff consisting of a standing charge and a constant kWh rate. In addition to this a reduced rate is available for night space heating during a nine-hour night period. Deliveries under this reduced tariff are measured separately and controlled by a time switch.

Rural farm and domestic consumers are charged according to a similar tariff but the standing charge is related to the floor area and there is a charge for out offices. The kWh rates for normal use and night space heating are the same as urban domestic. The prices for Dublin are calculated according to the urban domestic tariff, the rates of which for January 1986 are shown below :

Standard consumers	Standing charge per 2-month period	Commodity rate p/kWh	
		Normal	Night heating
D_a, D_b	IR£ 3.50	8.20	-
D_c, D_d, D_e		8.20	3.85

There is also a night and day tariff available to domestic consumers but only a small percentage of consumers have availed of this tariff to date.

Night heating rates were reduced by 0.5 p from 1 April 1986. Domestic rates will be further reduced by an average of 5 % from 1 September 1986.

d) Household prices - analysis

The prices are given in table 18 in annex.

The rise of 9 % and 4 % in the standing charge and day commodity rate respectively in January 1986 caused increases of between 2 % and 6 % for our standard consumers. The larger consumers suffered the smallest increases due to the lower incidence of the standing charge and the fact that the night commodity rate was not increased.

Prices in rural areas are between 2 % and 20 % higher than in urban areas as can be seen from the following table of prices in rural areas for January 1986 :

p/kWh

Standard consumer	D_a	D_b	D_c	D_d	D_e
	14.20	11.20	7.61	7.30	5.14

The recent tariff changes have served to increase tariff degressivity. In 1986 D_e pays 57 % less per kWh than D_a as against 53 % in 1980. The night heating rate is now less than half the normal rate.

The increases recorded between January 1985 and 1986 are below the rate of inflation (9 %). However prices rose by 105-123 % between 1980 and 1986 whilst the implicit gross domestic product price index rose by 80 % thus making electricity more expensive in real terms.

e) Industrial prices - tariffs

Whilst household tariff rates were increased in January 1986 industrial tariffs remain unchanged since January 1985.

A detailed description of the tariff system can be found in "Electricity prices 1980-1985" (the table on page 77 thereof should read January 1985 and not 1984 as shown).

From 1 April 1986 industrial prices were reduced by an average of 6.3 % and commercial charges by nearly 4 %.

f) Industrial prices - analysis

Prices are given in table 20 in annex.

A number of factors including increased use of indigenous natural gas and significantly cheaper oil costs enabled the E.S.B. to keep January 1986 prices at their January 1985 level.

However between 1980 and 1986 current prices rose by between 100 % and 114 % depending on the level of consumption. Increases were not regular in time with rises exceeding 50 % in 1980 and 1981 following the second oil crisis.

Whilst prices remained the same between January 1985 and 1986 electricity is now more expensive in real terms than in 1980 (80 % increase in the implicit GDP price index between 1980 and 1986).

Tariff degressivity has remained faily constant, a large consumer (I_f) now pays 47 % less than a small consumer (I_a I_b) against 44 % in 1980. The reduction in unit price is mainly derived from the increased load factor and night consumption (29 % for standard consumer I_f). Night commodity rates are particularly advantageous, being 47-70 % below the day rates whilst for standard consumers I_f and I_g there is only a 4-5 % difference between winter and summer day commodity rates.

9. DENMARK

a) Situation in the electricity industry

Electricity in Denmark is distributed by 117 companies of varying size, owned chiefly by local administrations (51) or cooperatives (54). For reasons of scale, power stations are operated by 12 major companies. Interconnections exist between these and with the neighbouring countries of Germany, Norway and Sweden. However, there is no link between the West (Jutland and Fyn) and the East (Zealand and other islands) across the Great Belt. In the West, companies are grouped in the Elsam association and in the East, the Elkraft association, the aim being to coordinate production, transport, common fuel purchases and exchanges with other countries.

Electricity distribution in the country as a whole is broken down as follows :

(1985 estimates)

Sector	% GWh	Standard consumers
- Domestic	33	
($\leq$ 10 000 kWh/year)	(27)	D_a D_b D_c D_d
($>$10 000 kWh/year)	(6)	D_e
- Agriculture, horticulture	8	
- Commerce, administration, services	28	I_a I_b
- Industry	28	
($\leq$1,5 GWh/year)	(10)	I_c I_d
($>$1,5 GWh/year)	(18)	I_e I_f I_g
- Public lighting, railways and others	3	
	100	

There are currently around 2 630 000 consumers in Denmark, of which 2 200 000 are household and 35 000 industrial, only 550 of the latter consuming more than 1.5 GWh per year.

The prices given in this study are for the two companies which cover the Copenhagen urban area : the Copenhagen Lighting Board (Københavns Belysningsvæesen), which supplies most of the suburban communities and the north of Zealand). These two companies are the largest in the country, accounting for the third of sales and consumers in Denmark and 62 % in the Elkraft zone.

Almost all the electricity comes from conventional power stations which are mainly fuelled with imported coal. Hydroelectric production is negligible and there are no nuclear stations.

The net production of the public power stations is from the following sources :

%

	1980	1984	1985
Hydroelectric	0.1	0.1	0.1
Coal	81.5	96.8	95.4
Petroleum products	18.4	3.1	4.5
TOTAL	100	100	100

b) Taxes

Electricity sales are subject to two taxes, both of which are deductible for non-domestic users :

(i) a special tax introduced in 1977 which amounts to a lump sum per kWh consumed ;
(ii) VAT, which is a percentage of the price including the special tax.

Their rates have developed as follows :

January	1980	1981	1982	1983	1984	1985	1986	Basis
Special tax	8	12.5	12.5	15.5	15.5	15.5	19	øre/kWh
VAT	20.25[1]	22	22	22	22	22	22	% of price before VAT

[1] Increased on 1.7.1980

c) Household prices - tariffs

(i) Københavns Belysvingsvæsen

The tariff structure, described in detail in "Electricity prices 1978-1984" remains in force with the following tax exclusive rates in 1986.

Tariff	Standing charge DKR/year	Commodity rate Øre/kWh	Fuel surcharge Øre/kWh	Standard consumers
Normal	98	29.7	19.5 x 1.1	$D_a \ldots D_e$
Night	180	10.0	19.5 x 0.9	$D_c \ldots D_e$

The night tariff is applied in conjunction with the normal tariff.

(ii) NESA

Two tariffs are offered to domestic consumers, the rates being as follows for January 1986 (excl. taxes) :

Tariff	Standing charge DKR/year	Commodity rate Øre/kWh	Standard consumers
Normal	480	36.1	$D_a \ldots D_d$
Peak/off peak	750	Peak 39.6 Off peak 22.6	D_e

Application of the peak/off-peak tariff presupposes the installation of a three-phase meter. The peak hours run from 6 to 20 h on working days (7 to 21 h during the summer). This tariff is only interesting when the consumer uses more than half his electricity during off-peak hours and was thus only applied to standard consumer D_e.

d) Household prices - analysis

The prices for the two companies surveyed are shown in table 27 in annex.

At the beginning of 1986 tariff rates fell whilst the specific tax was increased. In the North Sjaelland region one compensated for the other whereas in Copenhagen the drop in tariff rates was greater and tax inclusive prices fell by 5-7 % compared to January 1986. Nevertheless the recent drop does not compensate for past rises.

Between 1980 and 1986 current prices including all taxes rose by 60-73 % in Copenhagen and 38-79 % in North Sjaelland which for the majority of consumers is greater than inflation (+ 49 %).

Regional price differences are small in 1986 except for the small users who benefit from an advantageous tariff in the city of Copenhagen.

The tax element continues to rise, now accounting for 30-50 % of the amount paid by domestic users according to the level of consumption. Because one tax is a lump sum amount the effect is progressive, the larger consumers being most affected by the tax.

e) Industrial prices - tariffs

(i) Københavns Belysningsvæsen

The normal tariff (see c) above) is applied to non domestic consumers up to 100 000 kWh/year (I_a I_b). For the larger consumers more complex tariffs, described in "Electricity prices 1978-1984" are applied. The tax exclusive rates for January 1986 may be summarised as follows :

	Standing charge DKR/year	Demand charge DKR/KVA/year	Commodity rate öre/kWh		Fuel surcharge öre/kWh	Standard consumers
Low voltage	240	240[1] (min. 4800DKR/year)	1st block[3] excess	19.1 17.5	19.5x1.1	I_c...I_e
High voltage	492	208[2]	15.7		19.5x1.05	I_f I_g

(1) Based on the quarter hourly maximum demand measured during the year.
(2) Based on average of the two highest monthly demands measured quarter hourly during the year.
(3) 1 000 000 kWh/year.

Under the terms of the low voltage tariff the amount of the demand charge, commodity rate and the fuel surcharge taken together may not exceed the price resulting from the application of the normal tariff without the standing charge. In cases where the maximum price is exceeded, the excess is reimbursed at the end of the year. Such was the case for the standard consumer I_c.

In addition to the above tariffs two double tariffs exist (low and high voltage). The demand charge and commodity rate are identaical to the single tariffs described above whilst the standing charge is higher. The fuel surcharge differs between day and night (20.00 - 06.00 Monday-Friday). These tariffs were not used in the calculation of prices for our standard consumers.

(ii) NESA

New tariffs were introduced in January 1985 which were compulsory for new subscribers and optional for existing ones. In this study we considered our standard consumers to be existing subscribers opting for the most favourable tariff.

Non-domestic users whose demand corresponds to a circuit breaker of less than 200 amperes (I_a I_b I_c) are charged according to the normal domestic tariff (see c) above) whilst the larger consumers (I_d....I_g) are charged under the B tariff which has two voltage variants, the rates, excluding taxes on 1 January 1986 being as follows :

Voltage	Standing charge DKR/quarter	Demand charge DKR/kW/quarter	Commodity rate öre/kWh	Standard consumers
0.4 kV	1 200	85	21.4	I_d....I_e
10 kV	2 000	80	21.3	I_f I_g

f) Industrial prices - analysis

The results are given in table 28 in annex.

For non-domestic uses the analysis is based on the tax-exclusive prices since the specific tax is deductible, as is VAT. Under these conditions, it is not surprising to find that price levels are much more moderate than for the domestic sector where the tax burden represents a large part of the selling price.

Between 1985 and 1986 prices fell by between 8 % and 17 % in both regions due mainly to lower fuel prices. These large decreases have contributed to making electricity cheaper in real terms in 1986 than in 1980. The price of electricity rose by only 28-48 % with consumers in Copenhagen suffering the largest increases whilst the implicit gross domestic product price index rose by 49 % in the same period. This has served to increase the difference between the two areas surveyed with Nord Sjaelland being currently 37-57 % cheaper than Copenhagen.

Tariff degression has remained around 20-24 % when consumption is multiplied by 300 (I_f/I_a).

In Copenhagen (KB), standard consumers I_b and I_c pay the same prices although the second consumes three times more. This is the effect of the tariff threshold referred to above. This system avoids distortions between small and large consumers (between two tariff families). Another particularity of the tariff (KB) is the influence of the fuel surcharge (the bulk of electricity production costs) which decreases as more and more electricity is consumed. The correction coefficient for this surcharge is 1.1 for low-voltage consumers and 1.05 for high-voltage consumers.

10. GREECE

a) Situation in the electricity industry

A State body (Public Power Corporation) was founded in 1950 and given a monopoly of the production, transport and distribution of electricity. This corporation acquired all the concessionary electricity companies in the State. Its initial aims were to unify the electricity industry and to develop production from native sources : lignite and hydroelectric. The extraction of lignite was also controlled by a State body which joined with the Pulic Power Corporation to ensure a speedier realization of the latter aim.

The Public Power Corporation accounts for 99 % of the electricity production in Greece, the rest being maide up by some industrial self-producers (oil refineries, chemicals, food processing, textiles).

The consumption of electricity was broken down as follows (revised results for 1984) :

Sectors	% GWh	Standard consumers
- Households	30,7	D_a....D_e
- Public lighting	1,4	
- Transport	0,6	
- Agriculture	2,8	
- Commerce, administration handicraft	14,6	I_a I_b
- Industry	49,9	I_c....I_g
TOTAL	100	

In their turn, sales to households may be broken down as follows :

Consumption kWh/year	% n	% GWh	Standard consumers
< 1 000	43,5	9,2	D_a
1 000 - 2 000	21,9	18,3	D_b
2 001 - 5 000	29,3	45,7	D_c
5 001 - 10 000	3,9	13,0	D_d
> 10 000	1,4	13,8	D_e
TOTAL	100	100	

The average consumption per domestic user is 1 848 kWh/year in 1984 and 1 917 kWh/year in 1985.

The generation of the public power stations is from the following sources :

%

	1980	1984	1985
Primary hydroelectric	16.0	12.5	11.0
Hard coal	-	4.5	2.5
Lignite	43.3	56.3	62.9
Petroleum products	40.2	26.7	23.6
Others	0.5	-	-
TOTAL	100	100	100

Tariffs, which are the responsibility of the Public Power Corporation are revised annually if deemed necessary. In principle the date of change is 7 January but the new tariffs are not published until the end of the first quarter and are applied retrospectively. In the present study we have shown, for each year the prices valid after 7 January i.e. retrospective application of the tariffs.

b) Taxes

Value-added tax (VAT) has not yet been introduced in Greece. Sales of electricity to households are subject to turnover tax at the rate of 10 %, 8 % before 1983.

In addition a stamp duty of 1.2 % was applied from 1984 onwards for domestic uses. This duty is included in the basis of calculation of the turnover tax.

c) Household prices - tariffs

The tariff system for domestic and professional uses in the home is the same for the whole country.

The basic tariff is two part with progressive price blocks. A night tariff is offered in conjunction with the basic tariff for consumtpion between 23 h and 7 h and involves a supplementary standing charge.

d) Household prices - analysis

The prices are shown in table 29 in annex.

Between January 1985 and January 1986 prices in general rose by 19-22 % which is below the rate of inflation (39 %) in the same period. However the price paid by the standard consumer D_a rose by 46 % following the introduction of a standing charge.

A pecularity of the tariff system is the progressive kWh rates which explains why some larger consumers pay more than smaller consumers. On the other hand advantageous night kWh rates compensate for the progressive day kWh rates when night consumption is significant, standard consumers D_c and D_e for example.

Between 1980 and 1986 electricity prices rose by 130-139 %. In the same period the implicit gross domestic product price index rose by 191.5 % which makes electricity cheaper in real terms.

The difference in unit price between the smallest and largest domestic consumers has remained at the same narrow level (35-36 %).

e) Industrial prices - tariffs

Industrial tariffs are valid for the country as a whole. The tariffs for small industrial consumers (I_a I_b) supplied in low voltage comprise a standing charge, a demand charge and a commodity rate.

Standard consumers I_c....I_g supplied in middle voltage are charged according to two part tariffs with degressive kWh price blocks.

f) Industrial prices - analysis

The results are shown in table 30 in annex.

Between 1985 and 1986 prices rose by 16-20 % which is well below the rate of inflation (39 %).

Tariff degressivity, i.e. the reduction in unit price as offtake and demand increase depends on two factors : two-part formula and the reduced price per kWh above a limit which varies according to the demand. Therefore the lower the demand in relation to the kWh consumption the lower the unit price paid (lower standing charge and ceiling of the reduced block reached sooner). This is the only incentive to spread consumption more evenly. In 1986, the reduction in unit price between the standard consumers I_g and I_c is 34 %, the same as in 1980.

January 1986 price levels are 152-205 % above January 1980. However the implicit gross domestic product price index rose by 191.5 % which means that the price of electricity has remained stable or fallen in "constant" terms.

11. SPAIN

a) Situation in the electricity industry

The 21 public and private companies who produce and or distribute electricity have formed themselves into an association, UNIDAD ELECTRICA S.A (UNESA). In 1984 a company RED ELECTRICA de ESPAÑA S.A was formed with a majority public holding to take over the running of the network from the association ASELECTRICA to ensure better co-ordination in the running of the transport network.

As far as tariffs are concerned the harmonisation has led to uniform tariffs. Because production costs and the nature of the consumption vary from one region to another an inter company compensatory system based on standard costs has been introduced. An agreement signed on 6.5.1983 between the government and the electricity sector ensures a tariff policy which permits a sufficent profitability for the companies, guaranteeing a return on capital and a reserve for investment.

Tariff changes during the last few years have followed this objective. The tariffs take the form of a royal decree and are published in the official journal (B.O.E). Electricity usage in the country as a whole is as follows (1984 results) :

Sector	Consumers 1 000 n	Consumers %	Consumption GWh	Consumption %
Households	13 810	90,7	23 466	22,9
Commerce, crafts, administration	1 300	8,5	12 597	12,3
Industry	28	0,2	59 500(1)	58,0
Transport	0	0	2 592	2,5
Agriculture	36	0,2	2 728	2,7
Public lighting	53	0,3	1 740	1,7

(1) including approx. 3 000 GWh autoproduction.

In turn sales to households can be broken down as follows (1984) :

kWh/year	% n	% GWh	Standard consumers
< 1 000	46,3	10,9	D_a
1 000 - 2 000	27,3	24,5	D_b
2 001 - 5 000	21,7	39,4	D_c
5 001 - 10 000	3,7	15,3	D_d
> 10 000	1,0	9,9	D_e
	100	100	

The net production of the public services is from the following sources :

%

	1980	1984	1985
Primary hydroelectric[1]	28	26,3	24,6
Nuclear fuel	5	20,1	23,1
Coal)		41,9	44,5
Petroleum products)	67	9,3	5,7
Gas)		2,4	2,2
	100	100	100

(1) excluding pumped storage.

b) Taxes

The taxes applied during the period studied can be summarised in the table below :

Period	Sector	Special tax PTA/kWh	IGTE %	Provincial tax %	Municipal tax %
1/1980	Households	-	1.5	0.075	1.5
1/1981	Industry	-	5.0	0.250	1.5
1/1982	Households	0.23	1.5	0.075	1.5
	Industry	0.23	5.0	0.250	1.5
1/1983	Households	0.27	1.5	0.075	1.5
	Industry	0.27	5.0	0.250	1.5
1/1984	Households	0.29	6	0.3	1.5
	Industry	0.29	6	0.3	1.5
1/1985	Households	0.35	6	0.3	-
	Industry	0.35	6	0.3	-
1/1986	Households	-	VAT 12	-	-
	Industry	-	12	-	-

The three proportional taxes are calculated on the tax exclusive price and are not cumulative. The IGTE is a general transaction tax. The municipal tax is a charge for the area occupied by the aerial or underground lines within the urban conurbations. This tax is not shown separately from October 1984 onwards. Instead it is taken as a general cost and included in the tariffs, nevertheless the distributors continue payment of the tax to the communes. Only consumers within the urban territory were subject to this tax. A large number of medium and large industries outside this area were therefore exempt. On average the effective rate was only 0.8 % for industry in general and 0.6 % for industry supplied in high voltage ($>$ 1kV).

For simplicity in this study we have taken the full rate of the municipal tax (1.5 %) for all domestic and small industrial/commercial consumers (I_a-I_c) whilst the other industrial standard consumers (I_d-I_g) were considered to be outide the urban territory.

From 1 January 1986 the various taxes were replaced by value added tax at the rate of 12 % on the tax exclusive price, deductible for non domestic users.

c) Household prices - tariffs

The tariff structure was substantially changed in October 1983.

The tariffs are of the simple two part type with a monthly demand charge and a rate per kWh with the exception of the public lighting tariff which has no demand charge.

The tariff structure and prices are the same for the mainland as a whole.

In low voltage there are four general tariffs (1.0 to 4.0) and two for specific uses :

1.0 Social tariff with a reduced demand charge for users having a demand not greater than 770 watts;
2.0 Simplified tariff for consumers having a demand not greater than 15 kW;
3.0 Normal usage tariff;
4.0 Prolonged usage tariff;
B.0 Public lighting tariff; strictly for supplies to central, autonomous or municipal authorities;
R.0. Agricultural irrigation tariff.

The tariffs 2.0 and B.0 also include a night/day option. Under the double tariff a reduction of 43 % is accorded for energy consumed during the night (eight hours).

The subscribed demand must be a multiple of 1.1 kW. The majority of residential consumers are charged according to tariff 2.0.

For the beginning of 1986 the tariff rates are as follows :

Tariff	Demand charge PTA/kW/month	Commodity rate Normal PTA/KWH	Commodity rate Night PTA/kWh
1.0	83	8.93	-
2.0	218	8.93	5.09
3.0	218	8.89	-
4.0	265	8.42	-
B.0	-	11.73	6.69
R.0	66	7.55	-

d) Household prices - analysis

The prices shown for Madrid in table 29 in annex are valid for continental Spain as a whole.

Despite a number of gaps in the time series, notably the year 1981, a reasonably complete analysis is possible.

Between 1980 and 1982 prices rose by a staggering 76-89 % whilst inflation for the same period was only 29 %. For all other years the increases ranged from 1-14 % according to the level of consumption, always below the rate of inflation.

Degressivity, the reduction in unit price as consumption increases has remained stable, the standard consumer D_d paying 30 % less per kWh than the small consumer D_a.

The part of taxes in the selling price has grown throughout the period form 3 % in 1980 to 10.68 % in 1986 though the effect on prices has been moderate compared to other factors. Whilst the implicit gross domestic product price index rose by 93 % between 1980 and 1986 prices increased by 175 % making electricity considerably more expensive in real terms. Electricity prices were further increased by 7-8 % in March 1986 corresponding to the projected general increase in costs in the electrical sector for the year 1986 though this was not taken into account in this study.

e) Industrial prices - Tariffs

The tariff strucure was substantially changed in October 1983. Since that date tariffs which differed according to the use made of the energy have partly disappeared whilst seasonal and interruptable tariffs have been introduced together with the middle use high voltage tariffs.

The tariffs are simple two part with a monthly demand charge and a rate per kWh. However the kWh rate and even the demand charge vary according to time of day-seasonal coefficients.

The tariffs and prices are valid for all mainland Spain.

In high voltage there are three levels of load factor and four voltage levels which gives twelve general tariffs :

Voltage level	Load factor		
	Low	Medium	High
1. (> 1 kV and ≤ 36 kV)	1.1	2.1	3.1
2. (> 36 kV and ≤ 72,5 kV)	1.2	2.2	3.2
3. (> 72,5 kV and ≤ 145 kV)	1.3	2.3	3.3
4. (> 145 kV)	1.4	[illegible]	3.4

In addition to the general tariffs there are three for specific uses

T (voltage levels 1-3) for electric railways;
R (voltage levels 1-3) for agricultural irrigation;
E.3 (voltage levels 1-4) for electricity distributors.

Finally there is an "industrial extra high load factor" tariff (I) for consumers with a demand greater than 100 MW and a load factor above 8 000 hours per year.

Meters with two or three dials are obligatory above 50 kW to measure the consumption during the various time of day-seasonal blocks provided in the tariffs.

Time of day blocks

The increases and rebates to be applied to the commodity rate are expressed in percent as follows :

Single tariff : the price for all energy consumed is increased by 20 %.

Double tariff : the price for energy consumed during peak periods (4 daily) is increased by 40 % whilst the remainder is unaffected.

Normal triple tariff : the price for energy used at peak times (4 daily) is increased by 70 % whilst that for off peak (8h daily) is reduced by 43 %. The balance during normal hours is not affected.

Special triple tariff : the price for consumption during peak hours (6 per day on workdays) is increased by 100 % and that for offpeak hours (8 per day during workdays and 24h Saturday and public holidays) is reduced by 43 %.

6)

Seasonal blocks

These are optional for consumers with a subscribed demand greater than 5MW. The year which runs form 1 December to 30 November is divided into three periods or seasons :

High season : December, January, February and March;
Mid season : April, July, October and November;
Low season : May, June, August and September.

An increase of 10 % in high season and a reduction of 10 % in low season is applied to the price per kWh whilst taking account of the time of day coefficients or percentages.

Monthly billed demand

is calculated, taking account of the maximum quarter hourly demand recorded in the twelve preceeding months, according to the formula :

$$Pj = 1{,}1\ P_1 + 0{,}95(P_2-P_1) + 0{,}50(P_3-P_2) + 0{,}30(P_4-P_3) + 0{,}20(P_5-P_4) + 0{,}05(P_6-P_5)$$

P_1 = Maximum demand during high season peak hours;
P_2 = Maximum demand during high season normal hours;
P_3 = Maximum demand during mid season peak hours;
P_4 = Maximum demand during mid season normal hours;
P_5 = Maximum demand during low season peak hours and high season off peak hours;
P_6 = Maximum demand during mid season off peak hours and low season normal and off peak hours.

If $(P_{i+1} - P_i) < 0$, zero is taken.

Reactive energy

All tariffs include a supplement for reactive energy with the exception of the low voltage tariffs 1.0 and 2.0 in the form of a percentage (Kr) applied to both the demand charge and commodity rate calculated according to the formula :

$$Kr(\%) = \frac{17}{\cos^2 \varphi} - 21$$

If the result is negative (for $\cos \varphi$ above 0.90) it is applied as a rebate.

Kr % may not be greater than 47 or less than - 4.

Interruptable supplies

Optional for consumers capable of accepting a reduction in demand of at least 5 MW. There are four types and the period of interruption can vary from 45 minutes to 12 hours with between 5 minutes and 16 hours notice. Interruptions may not exceed 120 hours per month and 240 hours per year.

Interruptable consumers receive a reduction in their bills according to the amount of their supplies they contract as interruptable, fixed part, and the number and type of interruptions during the year, variable part. Reductions of 10-15 % can be considered normal.

Price table

The prices in force during January 1986 are shown in the table below :

Tariff (1)	Demand charge (PTA/KW/month)	Commodity rate (PTA/kWh)
Low usage		
1.1	250	8.14
1.2	230	7.71
1.3	225	7.52
1.4	220	7.33
Medium usage		
2.1	480	7.22
2.2	450	6.85
2.3	440	6.67
2.4	430	6.49
Long usage		
3.1	1 200	5.81
3.2	1 150	5.44
3.3	1 130	5.28
3.4	1 110	5.13
Railways		
T.1	83	6.62
T.2	76	6.30
T.3	75	6.15
Irrigation		
R.1	75	6.62
R.2	69	6.30
R.3	67	6.15
Special industrial		
I	1 176	0.97

(1) The figure on the right indicates the voltage.

f) Industrial prices - analysis

The prices shown for Madrid in table 30 of the annex are valid for all mainland Spain.

The abscence of prices for 1981 and other gaps does not prevent a short analysis of the results. As with the domestic sector the period 1980-1982 is marked by a doubling of prices, which in itself is greater than the rate of inflation during the whole period studied. Rises thereafter were less severe.

The reduction in taxation through the introduction of deductable VAT at the beginning of 1986 was compensated by a tariff increase. As a result the price excluding VAT remained stable, give or take a few percent between January 1985 and January 1986.

A further tariff increase of around 12 % took effect in March 1986 which is not taken into account here and corresponds to the expected increase in costs during this year.

In 1980 the standard consumer I_g paid 49 % less per kWh than a small user (I_a), in 1986 this degressivity had fallen to 41 %.

Inflation, as measured by the implicit GDP price index reached 93 % between 1980 and 1986 whilst current electricity prices rose by 180-240 %. In real terms this energy is now more than twice as expensive as in 1980. For this reason it is not surprising to see a stagnation of electricity consumption by industry since 1980.

12. PORTUGAL

a) Situation in the electricity industry

A public company, Electricidade de Portugal (EDP) deals with the production, transport and distribution of electricity under licence from the Minister for industry and energy.

EDP does not serve the whole country, certain areas are still served by local distribution companies, as is the case in Porto. However these companies are gradually being taken over by EDP to ensure greater harmonisation in the day to day running and tariffs. To achieve this the statutes of EDP were modified by law (n° 427/82) on 21 October 1982, allowing the participation of town corporations, together with regional and local councils.

There is also a thermal support fund (FAT) which was given legal standing and financial autonomy in 1983 which absorbs the extra costs of irregularities in hydro-electric production when recourse must be made to thermal production or imports. The fund's revenue is provided by a thermal surcharge in the tariffs which plays a large part in the level of consumer prices. The following table shows the annual fluctuations in public production and imports of electricity :

%

	1980	1981	1982	1983	1984	1985
Hydro-electric production(1)	49.7	31.3	39.8	43.9	51.7	54.7
Thermal production(2)	38.7	49.1	42.7	48.8	44.5	34.2
Net imports	11.6	19.6	17.5	7.3	3.8	11.1
Total availability	100	100	100	100	100	100

(1) excluding pumped storage.
(2) principally from fuel oil.

The distribution of electricity is as follows (based on 1983 results) :

	% GWh	Standard consumers
- Transfers to non integrated distributors	20.5	$D_a \ldots D_e$ I_a
- EDP direct sales	79.5	
Industry (middle and high voltage)	46.2	$I_c \ldots I_g$
Agriculture	0.6	
Railways	1.5	
Public lighting	1.6	
Commerce, administration and small industry	13.0	I_a I_b
Households	16.6	$D_a \ldots D_e$
	100	

Two remarks can be made concerning the above distribution statistics :

- EDP's direct sales increase as the local distribution companies are integrated

- the non integrated distributors serve a large proportion of small users : households and shops.

In turn the direct sales by EDP to household are broken down as follows :

kWh/year	% GWh	Standard consumers
< 1 000	18.7	D_a
1 000 to 2 000	30.0	D_b
2 001 to 5 000	29.2	D_c
5 001 to 10 000	12.2	D_d
> 10 000	9.9	D_e
	100	

The average consumption in the domestic sector is 1 300 kWh/year.

In 1983 EDP had the following number of consumers :

low voltage	2 653 326
medium voltage	11 873
high voltage	49

b) Taxes

Two taxes were levied on electricity sales during the period studied :

i) Inspection tax

ESC/month/consumer

	Households	Others
5.8.76 - 22. 4.82	2.50	12.50
12.4.82 -	7.50	37.50

This tax has only a minor effect on price levels as can be seen from the table below which shows the amounts paid by the standard consumers in this study :

ESC/kWh

	D_a	D_b	D_c	D_d	D_e	I_a	I_b	I_c	I_d..I_g
5.8.76-22.4.82	0.050	0.025	0.009	0.004	0.002	0.005	0.003	0.001	0.000
23.4.82-....	0.150	0.075	0.026	0.012	0.005	0.015	0.009	0.003	0.000

ii) Value added tax

This was introduced on 1 January 1986 at the rate of 8 % on the price excluding VAT but including the inspection tax. It is deductible for industrial and commercial consumers.

c) Household prices - tariffs

In low voltage ($\leq$ 1 000 volts) and for a demand of up to 19.8 kVA EDP offers two part tariffs with several options :

- single or double tariff
- with or without additional erasable demand during peak periods.

The formula comprises a monthly standing charge with 7 levels of subscribed demand and a commodity rate which may vary according to the time of day.

Tariff	Standing charge ESC/month Subscribed demand in Kva 1.1	3.3	6.6	9.9	13.2	16.5	19.8	Commodity rate ESC/kWh Peak	Off-peak
1 Single non-erasable	151	451	901	1352	1802	2253	2703	8.65	/
2 Single erasable	-	631	1081	1532	1982	-	-	8.65	/
3 Double non-erasable	-	631	1081	1532	1982	-	-	8.65	7.60
4 Double erasable	-	811	1261	1712	2162	-	-	8.65	7.60

In the case of erasable supplementary demand the billed demand corresponds to the block immediatly above the demand actually supplied (subscribed).

In all cases where several options were available the most advantageous tariff was applied. There are 70 hours off peak per week. Taking the above into account the following tariffs were applied to the standard consumers of this study :

Standard consumer	Demand in kVA subscribed	billed	Tariff
D_a	1,1	1,1	Single non erasable
D_b	3,3	3,3	"
D_c	6,6	6,6	"
D_d	9,9	6,6	Double erasable
D_e	13,2	9,9	"

Whilst having off peak consumption the single non erasable tariff is more advantageous for D_c. Further non-representative options are offered to seasonal consumers.

Domestic consumers living in a dwelling of 3 rooms or less with a subscribed demand of up to 1,1 kVA and an annual consumption of less than 240 kWh receive a 25 % reduction in the standing charge.

All tariffs are indexed to the cost of fuels to finance the thermal support fund (FAT). Two methods of indexation were employed. Up until 11 January 1985 a surcharge, A, was added to the commodity rate of the tariffs, calculated according to the formula :

A = C x (P-Po) ESC/kWh

where

P = weighted price of fuel oil in ESC/kg delivered to EDP in the month before billing.

Po = reference price, 19 ESC/kg.

C = coefficient equal to 0,145 for low voltage.

Since 12 January 1985 a percentage surcharge is applied to all tariff elements. Originally 8 %, it was raised to 23.2 % from 23 November 1985.

d) Household prices - analysis

The prices are shown in table 31 in annex.

The most striking feature is the continual price rises : + 388 % to + 450 % including all taxes between 1980 and 1986. Even in the light of 208 % inflation during the same period the increases are considerable. This is mainly due to the rise in the price of fuel oil burnt in power stations. It is the largest consumers who suffered the greatest increases.

This has served to decrease the tariff degressivity. In 1986 D_e pays only 24 % less per kWh than D_a as against 32 % in 1980. This small reduction in unit price when consumption is multiplied 33 fold and 75 % of consumption is at night does little to incite consumption or to force consumption into off peak periods.

Taxes have had little effect on prices, the rate of the inspection tax having been insignificant. Prices were reduced by 8 % on 1 January 1986, thus the introduction of VAT had no effect at consumer level.

As can be seen from the table in annex the rises were not regular in time. In general with the exception of 1983 and 1985 the increases exceeded the rate of inflation as measured by the implicit gross domestic product index. For all consumers electricity is now considerably more expensive than in 1980.

e) Industrial prices - tariffs

The tariff system introduced by regulation n° 31-A/77 in January 1977 remains in force with however some changes at the beginning of 1985 and rate changes almost annually.

The principal characteristics are :

- uniform application throughout the mainland;
- a structure which must take account of marginal costs whilst ensuring a balanced operation;
- equality of price for consumers having the same characteristics;
- calculation of price taking account of the demand, voltage and energy according to the time of supply;
- fuel cost adjustments.

The tariffs are generally two part with several tariff periods and a seasonal difference in some cases.

The standing charge is based on the invoiced demand, obtained from the formula :

$$PF = (d \times PS) + (1 - d)\ Pm$$

PF invoiced demand.
PS subscribed demand
Pm monthly maximum demand
d coefficient having the following values :

Dates	Low voltage	High voltage
before 31.12.80	1	1
01.01.81 - 31.12.81	1	0,5
01.01.82 - 12.01.85	1	0,2
13.01.85 -	0,5	0,2

Thus a weighted demand, comprising the subscribed demand and the monthly maximum demand is calculated.

If PM $>$ PS the value of Pm is taken. The demand, expressed in kW is measured quarter hourly. In this study we have considered the subscribed demand to be equal to the annual maximum demand.

The tariffs can be summarised by the table below :

(PS $>$ 19,8 kVA)

Voltage (kv)		Low $\leq$ 1	Middle $>1<60$	High $\geqslant$ 60
- Monthly demand charge	ESC/kW	136,50	497,50	418,50
- Weighting coefficient	d	0,5	0,2	0,2
- Commodity rate	ESC/kWh			
- Winter (November-April)				
High peak		21,50	7,65	6,85
Peak		8,65	7,65	6,85
Off peak		7,60	6,25	5,20
- Summer (May-October)				
High peak		21,50	7,65	7,10
Peak		8,65	7,65	7,10
Off peak		7,60	6,25	6,00
- Monthly supplement for a change in tariff voltage	ESC/kW			
Supplied voltage (low		-	275	-
Supplied voltage (middle		-	-	360
Standard consumers :		I_a	$I_b \ldots I_f$	I_g

High peak : 4 hours per day but not more than 3 consecutive hours;
Off peak : 70 hours per week;
Peak : the balance of supply.

Consumers may ask for the application of a higher voltage tariff than that in which they are supplied provided a supplement, calculated on the subscribed demand is paid. Such is the case of I_g who would normally be supplied in medium voltage but for whom the high voltage tariff is cheaper despite the supplement. As the high voltage tariff is seasonal, we have taken the consumption of I_g to be 50 % summer, 50 % winter. In the calculation of prices we have taken the high peak consumption as the average recorded by EDP i.e. :

I_a	9 000 kWh	I_e	380 000 kWh
I_b	15 000 kWh	I_f	1 920 000 kWh
I_c	40 200 kWh	I_g	3 980 000 kWh
I_d	272 000 kWh		

A penalty may be imposed if reactive energy exceeds 50-60 % of active energy outside of off-peak hours, but this does not affect the standard consumers in our study.

There is also a very high voltage tariff, similar to the high voltage tariff but with a lower standing charge and lower commodity rates outside of the high peak period. It only applied to a small number of very large consumers.

All tariffs are indexed to the cost of fuels to finance the thermal support fund (FAT). The two methods employed are the same as apply to the domestic tariffs and are described under c) above except that coefficient C is equal to 0,125 for middle and high voltage supplies.

f) Industrial prices - analysis

The results are shown in table 32 in annex.

The trend in industrial prices has been the same as observed in the domestic sector. Between 1980 and 1986 prices rose by between 430 % and 469 % with rises of up to 65 % in a single year. Only in 1983 and 1985 were increases below the rate of inflation. However the large increases of other years combined to make electricity considerably more expensive in 1986 than in 1980, inflation being 208 % in the same period (growth of implicit gross domestic product price index).

Despite a higher rate the inspection tax has had a negligable effect on unit prices, not affecting the prices given for standard consumers I_d-I_g. The latest tariff increase (14 % for all users) occured in November 1985).

Prices for industrial consumers were not reduced on 1 January 1986 as was seen for households as VAT is generally deductable for commercial and industrial users. Tariff degressivity remained unchanged throughout the period, the reduction in unit price between extreme consumers (I_a/I_g) being 43-44 %.

VI. COMMUNITY COMPARISON AND CONCLUSIONS

The locations chosen for the international comparison are :

Düsseldorf	Rotterdam (GEB)	London (domestic)
Paris*	Brussels*	Dublin
Milan (=North and Centre)	Luxembourg (Cegedel)	Copenhagen (KB)
	Leeds (industry)	Athens*
		Madrid*
		Lisbon

The findings are presented in Tables 34-37 in the annex according to two units of value : current ECU and deflated PPS (see Chapter III). Table 33 gives the rates of conversion between ECU, PPS and national currencies. It also shows the deflator used (GDP price index). The prices taken for analysis were inclusive of all taxes for domestic consumers and excluding VAT for industrial consumers.

The difficulties involved in comparing price levels internationally mean that interpretations and conclusions drawn from these tables should be treated with caution.

The selection of a representative price in a country where wide regional differences exist is difficult e.g. F.R. Germany. Also electricity tariffs and therefore prices do not change on the same date which gives rise to certain transitory differences. It is therefore necessary to make international comparisons in the correct perspective, based on a time series rather than on a point in time. In addition conversion to a common unit is dubious because of exchange rates.

Nevertheless these are general problems associated with all international conmparison regardless of the object of the observations.

Bearing the above in mind, these findings permit some comments and analyses based mainly on deflated PPS prices, the only unit allowing spatial and temporal comparisons.

a) The rising price trend has been broken

The upward trend of electricity prices in national currencies which has been seen for several years was broken, even reversed in 1986. Several decreases in prices are seen between the beginning of 1985 and 1986 : Rotterdam, Belgium, Luxembourg, Copenhagen. In the other cases the increases in current prices are below the rate of inflation for the past year. Further tariff reductions have already come into force or are planned before the end of 1986 in several countries.

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* standard national tariff.

This has been brought about by :

- the drop in oil prices which has in turn lowered natural gas and coal prices thus reducing the fuel costs in conventional thermal power stations.

- lower inflation which has an effect on salaries and other fixed costs.

The drop in fuel prices means that in two part tariffs the commodity rate falls, relative to the standing charge. Thus the reduction in selling prices is more marked for the larger consumers (lower influence of standing charges).

On the other hand the electricity companies have had to cut prices to retain their position in a market heavily influenced by

- the competitiveness of other energies in a non expanding market;

- the effects of energy saving measures;

- the crisis which has reduced household budgets and who are most inclined to economise energy;

- the continuing slump in heavy industry, large energy consumers;

- the relatively mild 1985/86 winter, despite some cold spells (lower number of degree days compared to the previous winter).

b) Prices have fallen in constant terms

If inflation is taken into account and the effect eliminated a real fall in the price of electricity is seen in most cases in 1986.

Tables 34 and 36 in annex, in delated PPS (base 1980) give an idea of this trend reversal.

For the FR Germany the example of Düsseldorf does not give a true picture as prices dropped in the other regions.

The rates of decrease in deflated PPS between the beginning of 1985 and the beginning of 1986 vary from a few percent to - 19 %.

This is most noticeable for the large domestic and industrial consumers for the reason mentioned above. This new situation thus benefits the larger consumers which should improve the competitive position of electricity for space heating.

This change of direction was seen already at the beginning of 1985 in some countries but it has now been confirmed.

c) The recent reductions do not cancel the previous rises

Whith few ecxeptions the current reductions do not counterbalance the high rises previously experienced; The table below, based on prices in deflated PPS (base 1980) shows the true price trend between 1980 and 1986 :

% 1986/1980

Domestic users

Standard consumers :	D_a	D_b	D_c	D_d	D_e
Düsseldorf	+ 18	+ 19	+ 26	.	+ 26
Paris	- 16	- 1	- 6	- 8	- 9
Milan	+ 15	+ 27	+ 33	+ 36	/
Rotterdam	+ 5	+ 7	+ 13	+ 14	+ 20
Brussels	+ 4	+ 14	+ 13	+ 12	+ 6
Luxembourg	+ 20	+ 13	+ 7	+ 32	+ 22
London	+ 15	+ 14	+ 11	+ 10	+ 11
Dublin	+ 25	+ 28	+ 24	+ 17	+ 14
Copenhagen	+ 8	+ 9	+ 14	+ 14	+ 16
Athens	- 18	- 21	- 21	- 21	- 20
Madrid	+ 42	+ 42	.	+ 42	.
Lisbon	+ 60	+ 61	+ 63	+ 66	+ 79

Industrial users

Standard consumers	I_a	I_b	I_c	I_d	I_e	I_f	I_g
Düsseldorf	.	.	+ 13	+ 15	+ 16	+ 17	.
Paris	+ 39	+ 19	+ 13	+ 6	+ 1	+ 2	+ 1
Milan	+ 61	+ 32	+ 33	+ 39	+ 29	+ 25	+ 3
Rotterdam	- 8	- 5	- 9	+ 4	+ 8	+ 6	+ 1
Brussels	+ 9	+ 9	+ 6	+ 8	+ 7	+ 12	+ 16
Luxembourg	+ 31	+ 32	+ 27	+ 24	+ 22	+ 21	- 6
Leeds	.	.	+ 11	+ 8	+ 8	+ 8	+ 7
Dublin	+ 11	+ 11	+ 15	+ 17	+ 19	+ 16	+ 15
Copenhagen	- 1	- 1	- 1	- 2	- 4	0	- 1
Athens	- 13	- 8	- 1	- 1	0	+ 5	- 11
Madrid	+ 29	+ 60	+ 77	+ 72	+ 61	+ 52	+ 47
Lisbon	+ 79	+ 72	+ 74	+ 76	+ 79	+ 79	+ 85

Furthermore these results show the divergent trends between the Member States of the Community.

d) Relative price levels between contries are changing

Because tariff changes do not occur either at the same time or at the same rate the respective position of the countries is always changing.

The ranking order not only varies accoring to the period considered but also according to the level of consumption due to degressivity curves which are more or less accentuated.

Furthermore in international comparison the conversion of prices into ECU or deflated PPS gives different results due to the differences which exist between market exchange rates and the real purchasing power of currencies;

The above is further evidence of the risks encountered in the comparison of price levels internationally.

However certain obvious remarks can be made :

- the low prices for all consumers and throughout the period studied in Denmark. It is the cheapest country for electricity in the Community;

- the effect of the progressive domestic tariffs in Italy and Greece with low prices for the small consumers and high, even dissuasive prices for the largest domestic consumers;

- the low prices for French industry, just above the Danish level;

- Spanish prices are about average for the Community whilst those in Portugal are the highest, particularly in 1986.

- during the period 1980-1986 the marked increased in constant terms (deflated PPS) in Italy, Spain, Portugal and Ireland which have worsened the position of these countries relative to the others and the Community average.

- the large difference sometimes seen between ECU and PPS. The ECU over estimates the purchasing power of the DM and under estimates that of the Escudo. The latter is very obvious. In 1980 the prices for Portugal expressed in ECU differ by 100 % from those expressed in PPS. This is further evidence of the need for great care in making international comparisons, particularly in extreme cases.

e) Median prices show the general trend in the Community

Faced with the divergences and differences between the countries of the Community it is difficult to give an overall picture. Moreover it is not easy to choose an average representative value.

The solution least affected by stray values remains the calculation of a median price. For lack of someting better we have calculated Community median prices to show the general trend. The inclusion of Spain and Portugal gives a new dimension to the calculations without upsetting the results.

Community median price in deflated PPS/100 kWh

Standard consumers	Domestic users 1980	1981	1982	1983	1984	1985	1986
D_a	11,61	12,03	12,50	12,72	12,41	12,46	12,24
D_b	9,33	9,98	10,70	10,60	10,88	10,72	10,60
D_c	7,40	7,94	8,38	8,17	8,48	8,40	8,40
D_d	6,95	7,55	8,52	8,16	8,13	7,90	7,86
D_e	5,16	6,11	6,05	6,01	6,28	6,23	5,88

Standard consumers	Industrial users 1980	1981	1982	1983	1984	1985	1986
I_a	8,56	9,18	8,99	9,49	9,88	10,05	9,50
I_b	8,37	8,96	8,83	9,47	10,82	9,28	9,43
I_c	7,23	8,04	8,15	8,14	8,07	8,12	8,00
I_d	5,94	6,36	6,40	6,79	6,91	6,91	6,63
I_e	5,22	5,75	5,96	6,26	6,27	6,28	5,99
I_f	4,80	5,29	5,54	5,80	5,81	5,84	5,54
I_g	4,34	4,85	5,24	5,20	5,00	5,11	4,77

The results for the small industrial and commercial users are affected by the lack of certain prices.

The increases up until 1985 for the industrial consumers (I_c...I_g) are confirmed by the above.

Since 1980 the average increase in "constant" terms ranged from 11 to 15 % except for the small domestic consumers (+5 %) who were protected.

Also these results show that the prices for night heating (D_e D_d) are very close to those for industry.

Finally the above table permits the comparison of the prices in deflated PPS for each country (tables 34 and 36 in annex) with a central community value.

f) The difference in price between countries is increasing

Considering the twelve Member States we get another view of the dispersion of prices within the Community.

We have recalculated the difference between the highest and lowest prices found in the Community on the basis of deflated PPS, the sole unit allowing spatial and temporal comparisons.

(7)

For the domestic consumers extreme prices differ by a factor of two in 1986.

Meanwhile for industrial users the differences are even greater, up to a factor of three in 1986 (between Denmark and Portugal). The inclusion of the two new Member States has increased the difference. If the calculation is based on prices in ECU the differences are greater still.

In all cases the international range of prices has widened since 1980. In conclusion, tariff policies and as a consequence, selling prices move further apart in the Community.

For the domestic sector taxes play a part in the dispersion of selling prices which is not the case for industry where taxes have little influence on price levels.

g) Domestic consumers are more affected by taxes

Because of the great diversity of tax systems the rates of tax imposed on the sales of electricity to domestic users differ enormously.

(% of tax excl. price)

	1980	1985	1986		1980	1985	1986
Düsseldorf	19	19	18	London	0	0	0
Paris	27-30	29	29	Dublin	0	0	0
Milan	7- 9	10-16	10-16	Copenhagen	40-61	47-66	56-89
Rotterdam	18	19	19	Athens	8	11.32	11.32
Brussels	16	17	17	Madrid	3- 4	9-11	12
Luxembourg	5	6	6	Lisbon	0.0	0.1-0.2	8- 9

In eight countries taxation has increased since 1980. In certain cases (Italy, Denmark, Spain until 1985) specific taxes are levied per kWh which have a progressive effect. The lower the tax exclusive price of electricity the heavier the tax burden.

Excluding deductible VAT, sales of electricity to commercial and industrial users aer hardly taxed :

(% of tax excl. price)

	1980	1985	1986		1980	1985	1986
Düsseldorf	5.3	4.0	4.0	London	0	0	0
Paris	0	0	0-11	Dublin	0	0	0
Milan	1-2	1-8	0- 6	Copenhague	23-30	26-32	37-48
Rotterdam	0	0	0	Athens	0	0	0
Brussels	0	0	0	Madrid	7	9-12	0
Luxembourg	0	0	0	Lisbon	0.0	0.0	0

In France the local taxes are applied to low demands and thus have little effect on the large consumers. In Denmark the specific tax is deductible along with VAT. It can thus be concluded that taxation has little effect on the price of electricity for non domestic uses.

h) Price degressivity is very varied

In general prices are degressive i.e. unit prices fall as consumption, demand, voltage or load factor increase. Nevertheless two progressive tariff systems are found, in Italy and Greece where the unit price rises with consumption.

In the other cases the degressivity can be measured by the percentage reduction between small and large standard consumers :

Domestic users

	1980	1986	% D_e/D_a	1980	1986
Düsselforf	71	69	London	69	70
Paris	57	44	Dublin	53	57
Milan	(1)	(1)	Copenhagen	42	38
Rotterdam	51	44	Athens	35(2)	36(2)
Brussels	64	64	Madrid	.	43
Luxembourg	67	67	Lisbon	32	25

Industrial users

	1980	1986	% I_g/I_a	1980	1986
West. Region	.	56	Leeds	.	.
Paris	48	62	Dublin	51	50
Milan	38	60	Copenhagen	19	22
Rotterdam	49	45	Athens	41	40
Brussels	53	50	Madrid	48	41
Luxembourg	46	61	Lisbon	45	43

(1) Progressive tariff
(2) Reduction due entirely to night consumption.

The large reductions offered to domestic users come primarly from the advantageous night rates offered for storage heating (as in the case of D_e who consumes 15 000 kWh at night out of a total of 20 000 kWh).

The new hourly/seasonal tariff in Italy has brought about increased tariff degression in 1986 for industry.

A flat degressivity curve as seen for industrial consumers in Copenhagen and domestic consumers in Greece and Portugal does not encourage consumption.

These few examples show again the diversity of tariff systems.

The varying slopes and forms of the degressivity curves explain also why the international comparison of prices can lead to different results according to the quantity consumed and the conditions of supply.

i) Tariffs are becoming more complicated

Faced with the difficulties of adapting the supply to the demand, the electricity retailers have turned instead to modelling the demand to the supply which has led to a number of often complex measures to incite consumption. Tariff policies are turning more and more towards inciting consumption during off peak periods and dissuading peak consumption.

In the first instance this had led to a growing gap between day and night kWh rates. The table below gives an idea of the gap that exists between the night and day kWh rates in the 1986 domestic tariffs :

FR Germany	around	53 %	Ireland		53 %
France		43 %	Denmark NESA		43 %
Netherlands	53 to	57 %	Denmark KB		46 %
Belgium		58 %	Greece	around	50 %
Luxembourg		50 %	Spain		43 %
United Kingdom		65 %	Portugal		12 %

The above percentages only concern the commodity rate (kWh) and do not take acount of standing charges which nevertheless affect the total price paid.

The same reductions are generally found in the industrial tariffs. However some tariffs also have seasonal differences and larger differences are found between winter peak and summer off peak periods. For example under the new industrial tariffs in France and Italy the difference between extreme periods can reach 1 to 13 times.

Alongside these time of day/seasonal tariffs we see the introduction or extension of demand reducing incentives. The consumer agrees to reduce his demand during peaks in return for a lower price.

Finally tariff measures have been introduced or strengthened to protect small users, often of low income whose consumption is unavoidably during the day with winter peaks. Such "social" tariffs exist in France, Italy, Belgium, United Kingdom, Greece, Spain and Portugal.

All this proves the great diversity of tariffs and their growing complexity which makes the task of price collection more arduous.

The same complex tariff system applied to all consumers may lead to many different price levels.

VII. STATISTICAL ANNEX

VII. ANNEXE STATISTIQUE

NOTE : In the Statistical Annex, the Continental practice of using a comma for the decimal point is adopted.

☐ TABLES ☐ TABLEAUX

B R DEUTSCHLAND

Pf/kWh

January/Janvier		Hamburg			Hannover		
		Price incl. all taxes Prix TTC	Price excl. VAT Prix hors TVA	Price excl. all taxes Prix hors taxes	Price incl. all taxes Prix TTC	Price excl. VAT Prix hors TVA	Price excl. all taxes Prix hors taxes
D_a	1980	31,67	28,03	26,67	33,71	29,83	28,60
	1981	38,30	33,89	32,25	37,84	33,49	32,14
600 kWh	1982	40,70	36,02	34,40	44,35	39,25	37,74
	1983	40,35	35,71	34,40	44,05	38,98	37,74
	1984	43,86	38,47	37,03	46,51	40,80	39,46
	1985	46,85	41,10	39,55	46,51	40,80	39,46
	1986	46,71	40,97	39,55	46,42	40,72	39,46
D_b	1980	26,03	23,04	21,91	25,46	22,53	21,60
	1981	31,32	27,72	26,38	29,07	25,73	24,69
1 200 kWh	1982	33,11	29,30	27,98	33,31	29,48	28,34
	1983	32,82	29,04	27,98	33,08	29,27	28,34
	1984	35,47	31,11	29,95	34,80	30,53	29,52
	1985	37,86	33,21	31,97	34,80	30,53	29,52
	1986	37,76	33,12	31,97	34,73	30,46	29,52
D_c	1980	20,18	17,86	17,00	17,49	15,48	14,84
	1981	24,40	21,59	20,54	20,42	18,07	17,54
3 500 kWh	1982	25,68	22,73	21,71	22,98	20,34	19,55
(1 300 kWh night/nuit)	1983	25,46	22,53	21,71	22,82	20,19	19,55
	1984	27,24	23,89	23,00	23,95	21,01	20,32
	1985	29,01	25,45	24,49	23,95	21,01	20,32
	1986	28,92	25,37	24,49	23,91	20,97	20,32
D_d	1980	16,66	14,74	14,03	.	.	.
	1981	21,52	19,04	18,12	.	.	.
7 500 kWh	1982	22,20	19,65	18,76	.	.	.
(2 500 kWh night/nuit)	1983	22,00	19,47	18,76	.	.	.
	1984	22,82	20,02	19,27	.	.	.
	1985	24,23	21,25	20,46	.	.	.
	1986	24,16	21,19	20,46	20,84	18,28	17,72
D_e	1980	9,79	8,66	8,25	9,15	8,10	7,76
	1981	11,76	10,41	9,90	12,27	10,86	10,42
20 000 kWh	1982	13,40	11,86	11,33	13,58	12,02	11,56
(15000 kWh night/nuit)	1983	13,81	12,22	11,78	13,49	11,94	11,56
	1984	14,31	12,55	12,09	14,22	11,47	12,07
	1985	14,74	12,93	12,45	14,22	11,47	12,07
	1986	14,70	12,89	12,45	14,20	12,46	12,07

B R DEUTSCHLAND

Pf/kWh

January/Janvier		Düsseldorf			Westliche Gebiete		
		Price incl. all taxes Prix TTC	Price excl. VAT Prix hors TVA	Price excl. all taxes Prix hors taxes	Price incl. all taxes Prix TTC	Price excl. VAT Prix hors TVA	Price excl. all taxes Prix hors taxes
D_a	1980	34,98	30,96	29,40	31,41	27,80	26,40
	1981	38,55	34,12	32,40	32,96	29,17	27,70
600 kWh	1982	40,26	35,63	34,00	39,79	35,21	33,60
	1983	42,54	37,65	36,20	39,49	34,95	33,60
	1984	45,29	39,73	38,20	41,73	36,61	35,20
	1985	45,29	39,73	38,20	42,68	37,44	36,00
	1986	48,94	42,93	41,40	45,16	39,61	38,20
D_b	1980	25,94	22,96	21,80	24,15	21,37	20,30
	1981	29,51	26,12	24,80	25,70	22,74	21,60
1 200 kWh	1982	31,03	27,46	26,20	30,38	26,89	25,65
	1983	32,49	28,75	27,65	30,14	26,67	25,65
	1984	34,38	30,16	29,00	31,89	27,97	26,90
	1985	34,48	30,16	29,00	32,84	28,81	27,70
	1986	36,77	32,25	31,10	34,70	30,44	29,35
D_c	1980	18,32	16,21	15,40	18,04	15,96	15,16
	1981	21,88	19,36	18,39	19,58	17,33	16,46
3 500 kWh	1982	23,15	20,49	19,55	23,03	20,38	19,44
(1 300 kWh night/nuit)	1983	24,42	21,61	20,78	22,85	20,22	19,44
	1984	25,76	22,60	21,73	24,43	21,43	20,61
	1985	25,76	22,60	21,73	25,38	22,26	21,41
	1986	27,44	24,07	23,21	26,96	23,65	22,80
D_d	1980	.	.	.	14,77	13,07	12,41
	1981	.	.	.	16,42	14,53	13,80
7 500 kWh	1982	.	.	.	19,22	17,01	16,23
(2 500 kWh night/nuit)	1983	.	.	.	19,07	16,88	16,23
	1984	.	.	.	20,49	17,97	17,29
	1985	.	.	.	21,36	18,74	18,02
	1986	23,13	20,29	19,56	22,74	19,95	19,24
D_e	1980	10,11	8,95	8,50	9,32	8,25	7,83
	1981	11,97	10,59	10,06	10,85	9,60	9,12
20 000 kWh	1982	13,11	11,60	11,07	12,87	11,39	10,87
(15000 kWh night/nuit)	1983	13,32	11,79	11,33	12,77	11,30	10,87
	1984	14,06	12,33	11,86	13,97	12,25	11,78
	1985	14,06	12,33	11,86	14,44	12,67	12,18
	1986	15,14	13,28	12,81	15,05	13,20	12,73

B R DEUTSCHLAND

Pf/kWh

January/Janvier		Frankfurt/Main			Stuttgart		
		Price incl. all taxes Prix TTC	Price excl. VAT Prix hors TVA	Price excl. all taxes Prix hors taxes	Price incl. all taxes Prix TTC	Price excl. VAT Prix hors TVA	Price excl. all taxes Prix hors taxes
D_a	1980	34,35	30,40	29,20	36,78	32,55	31,30
	1981	35,61	31,51	30,30	41,01	36,29	34,90
600 kWh	1982	43,52	38,51	37,10	43,59	38,58	37,20
	1983	45,13	39,94	38,70	44,97	39,80	38,60
	1984	45,53	39,94	38,70	47,88	42,00	40,70
	1985	47,22	41,42	40,10	50,07	43,92	42,60
	1986	47,13	41,34	40,10	49,97	43,83	42,60
D_b	1980	26,11	23,11	22,20	27,50	24,34	23,40
	1981	27,38	24,23	23,30	30,91	27,35	26,30
1 200 kWh	1982	33,20	29,38	28,30	33,04	29,24	28,20
	1983	34,29	30,35	29,40	34,25	30,31	29,40
	1984	34,59	30,34	29,40	36,29	31,83	30,85
	1985	35,80	31,40	30,40	37,96	33,30	32,30
	1986	35,73	31,34	30,40	37,89	33,24	32,30
D_c	1980	18,90	16,73	16,07	18,93	16,75	16,11
	1981	20,13	17,81	17,13	21,29	18,84	18,11
3 500 kWh	1982	23,96	21,20	20,42	22,74	20,13	19,41
(1 300 kWh night/nuit)	1983	24,71	21,87	21,19	23,83	21,09	20,45
	1984	24,93	21,87	21,19	25,11	22,03	21,34
	1985	25,59	22,45	21,73	26,39	23,15	22,45
	1986	25,54	22,40	21,73	26,34	23,11	22,45
D_d	1980	.	.	.	.	.	.
	1981	.	.	.	.	.	.
7 500 kWh	1982	.	.	.	.	.	.
(2 500 kWh night/nuit)	1983	.	.	.	.	.	.
	1984	.	.	.	.	.	.
	1985	.	.	.	.	.	.
	1986	20,88	18,32	17,76	21,58	18,93	18,40
D_e	1980	8,88	7,86	7,55	8,83	7,81	7,51
	1981	9,72	8,60	8,27	10,54	9,33	8,97
20 000 kWh	1982	11,38	10,07	9,70	11,44	10,12	9,76
(15000 kWh night/nuit)	1983	11,70	10,35	10,03	12,52	11,08	10,75
	1984	11,97	10,50	10,18	12,88	11,30	10,95
	1985	12,14	10,65	10,31	13,18	11,56	11,22
	1986	12,12	10,63	10,31	13,16	11,54	11,22

BR DEUTSCHLAND

Pf/kWh

January/Janvier		München			Südliche Gebiete		
		Price incl. all taxes Prix TTC	Price excl. VAT Prix hors TVA	Price excl. all taxes Prix hors taxes	Price incl. all taxes Prix TTC	Price excl. VAT Prix hors TVA	Price excl. all taxes Prix hors taxes
D_a	1980	34,43	30,47	29,30	35,14	31,10	29,90
	1981	37,61	33,28	32,00	35,14	31,10	29,90
600 kWh	1982	45,20	40,00	38,50	44,97	39,79	38,30
	1983	44,90	39,73	38,50	44,66	39,52	38,30
	1984	46,24	40,56	39,30	46,24	40,56	39,30
	1985	46,28	40,60	39,30	46,28	40,60	39,30
	1986	46,19	40,52	39,30	46,19	40,52	39,30
D_b	1980	26,62	23,56	22,65	27,03	23,92	23,00
	1981	28,85	25,53	24,55	27,03	23,92	23,00
1 200 kWh	1982	34,81	30,81	29,65	34,69	30,70	29,55
	1983	34,58	30,60	29,65	34,46	30,50	29,55
	1984	35,65	31,27	30,30	35,65	31,27	30,30
	1985	35,68	31,30	30,30	35,68	31,30	30,30
	1986	35,61	31,24	30,30	35,61	31,24	30,30
D_c	1980	20,14	17,82	17,14	20,53	18,18	17,47
	1981	21,83	19,32	18,57	20,53	18,17	17,47
3 500 kWh	1982	26,28	23,26	22,39	25,92	22,94	22,08
(1 300 kWh night/nuit)	1983	26,11	23,11	22,39	25,75	22,79	22,08
	1984	27,03	23,71	22,97	26,72	23,44	22,71
	1985	27,05	23,73	22,97	26,74	23,46	22,71
	1986	27,00	23,68	22,97	26,69	23,41	22,71
D_d	1980	.	.	.	16,69	14,77	14,16
	1981	.	.	.	16,64	14,73	14,16
7 500 kWh	1982	.	.	.	22,00	19,47	18,74
(2 500 kWh night/nuit)	1983	.	.	.	21,85	19,34	18,74
	1984	.	.	.	22,65	19,87	19,25
	1985	.	.	.	22,67	19,89	19,25
	1986	22,87	20,06	19,46	22,63	19,85	19,25
D_e	1980	9,86	8,73	8,39	10,68	9,45	9,09
	1981	11,05	9,78	9,41	11,43	10,12	9,72
20 000 kWh	1982	14,56	12,88	12,40	15,09	13,35	12,85
(15000 kWh night/nuit)	1983	14,46	12,80	12,40	14,99	13,27	12,85
	1984	14,59	12,80	12,40	15,29	13,41	13,00
	1985	14,60	12,81	12,40	15,31	13,43	13,80
	1986	15,41	13,52	13,11	15,28	13,40	13,00

B R DEUTSCHLAND

Pf/kWh

	January/Janvier		Hamburg			Hannover		
			Price incl. all taxes Prix TTC	Price excl. VAT Prix hors TVA	Price excl. all taxes Prix hors taxes	Price incl. all taxes Prix TTC	Price excl. VAT Prix hors TVA	Price excl. all taxes Prix hors taxes
I_a	30 000 kWh (30 kW, 1000 h)	1980						
		1981						
		1982						
		1983						
		1984						
		1985						
		1986						
I_b	50 000 kWh (50 kW, 1000 h)	1980						
		1981						
		1982						
		1983						
		1984						
		1985						
		1986						
I_c	160 000 kWh (100 kW, 1600 h)	1980	28,71	25,41	24,18	23,81	21,07	20,20
		1981	34,53	30,56	29,08	26,75	23,67	22,72
		1982	35,93	31,80	30,37	30,37	26,88	25,85
		1983	39,26	34,74	33,47	30,17	26,70	25,85
		1984	37,64	33,02	31,78	31,71	27,82	26,90
		1985	37,75	33,11	31,87	31,71	27,82	26,90
		1986	38,65	33,90	32,73	31,65	27,76	26,90
I_d	1 250 000 kWh (500 kW, 2500 h)	1980	20,67	18,29	17,40	18,57	16,43	15,75
		1981	24,86	22,00	20,93	20,87	18,47	17,73
		1982	25,88	22,90	21,87	23,71	20,98	20,17
		1983	28,26	25,01	24,09	23,55	20,84	20,17
		1984	27,09	23,76	22,87	24,85	21,80	21,08
		1985	26,56	23,30	22,42	24,85	21,80	21,08
		1986	27,23	23,89	23,06	24,80	21,75	21,08
I_e	2 000 000 kWh (500 kW, 4000 h)	1980	16,31	14,43	13,73	14,86	13,15	12,61
		1981	19,61	17,35	16,51	16,71	14,79	14,19
		1982	20,41	18,06	17,25	19,15	16,95	16,30
		1983	22,29	19,73	19,01	19,03	16,84	16,30
		1984	21,38	18,75	18,05	20,04	17,58	17,00
		1985	21,32	18,70	18,00	20,04	17,58	17,00
		1986	21,89	19,20	18,54	20,00	17,54	17,00
I_f	10 000 000 kWh (2500 kW, 4000 h)	1980	15,11	13,37	12,72	14,74	13,04	12,50
		1981	18,17	16,08	15,30	16,57	14,66	14,07
		1982	18,90	16,73	15,98	19,00	16,81	16,16
		1983	20,66	18,28	17,61	18,86	16,69	16,16
		1984	19,80	17,37	16,72	19,87	17,43	16,86
		1985	21,32	18,70	18,00	19,87	17,43	16,86
		1986	21,89	19,20	18,54	19,84	17,40	16,86
I_g	24 000 000 kWh (4000 kW, 6000 h)	1980	.	.	.	.	.	.
		1981	.	.	.	.	.	.
		1982	.	.	.	.	.	.
		1983	.	.	.	.	.	.
		1984	.	.	.	.	.	.
		1985	.	.	.	.	.	.
		1986	18,48	16,21	15,64	16,67	14,62	14,17

B R DEUTSCHLAND

Pf/kWh

January/Janvier		Düsseldorf			Westliche Gebiete		
		Price incl. all taxes Prix TTC	Price excl. VAT Prix hors TVA	Price excl. all taxes Prix hors taxes	Price incl. all taxes Prix TTC	Price excl. VAT Prix hors TVA	Price excl. all taxes Prix hors taxes
I_a	1980				24,18	21,40	20,32
	1981				26,87	23,78	22,58
30 000 kWh	1982				30,34	26,85	25,62
(30 kW, 1000 h)	1983				30,10	26,64	25,62
	1984				32,15	28,20	27,11
	1985				32,58	28,58	27,48
	1986				34,47	30,24	29,16
I_b	1980				23,39	20,70	19,66
	1981				25,99	23,00	21,84
50 000 kWh	1982				29,35	25,97	24,78
(50 kW, 1000 h)	1983				29,12	25,77	24,78
	1984				31,10	27,28	26,23
	1985				31,51	27,64	26,58
	1986				33,37	29,27	28,23
I_c	1980	22,49	19,90	18,90	20,93	18,52	17,59
	1981	25,05	22,17	21,05	23,26	20,58	19,54
160 000 kWh	1982	26,36	23,33	22,26	26,25	23,23	22,17
(100 kW, 1600 h)	1983	26,16	23,15	22,26	26,06	23,06	22,17
	1984	27,93	24,50	23,56	27,83	24,41	23,47
	1985	27,93	24,50	23,56	28,20	24,74	23,79
	1986	30,51	26,76	25,82	29,97	26,29	25,35
I_d	1980	17,76	15,72	14,93	16,60	14,69	13,95
	1981	19,70	17,51	16,63	18,44	16,32	15,50
1 250 000 kWh	1982	20,83	18,43	17,59	20,83	18,43	17,59
(500 kW, 2500 h)	1983	20,67	18,29	17,59	20,67	18,29	17,59
	1984	22,07	19,36	18,62	22,07	19,36	18,62
	1985	22,07	19,36	18,62	22,37	19,62	18,87
	1986	24,42	21,42	20,66	23,96	21,02	20,27
I_e	1980	15,56	13,77	13,08	14,36	12,71	12,07
	1981	17,55	15,53	14,75	16,14	14,28	13,56
2 000 000 kWh	1982	18,57	16,43	15,68	18,45	16,33	15,58
(500 kW, 4000 h)	1983	18,43	16,31	15,68	18,31	16,20	15,58
	1984	19,53	17,13	16,47	19,60	17,19	16,53
	1985	19,53	17,13	16,47	19,85	17,41	16,74
	1986	21,72	19,05	18,37	21,33	18,71	18,04
I_f	1980	14,36	12,71	12,07	13,21	11,69	11,10
	1981	16,22	14,35	13,63	14,79	13,09	12,43
10 000 000 kWh	1982	17,13	15,16	14,47	16,86	14,92	14,24
(2500 kW, 4000 h)	1983	17,01	15,05	14,47	16,74	14,81	14,24
	1984	18,01	15,80	15,19	17,90	15,70	15,10
	1985	18,01	15,80	15,19	18,14	15,91	15,30
	1986	20,11	17,64	17,01	19,56	17,16	16,55
I_g	1980	.	.	.	.	.	.
	1981	.	.	.	.	.	.
24 000 000 kWh	1982	.	.	.	.	.	.
(4000 kW, 6000 h)	1983	.	.	.	.	.	.
	1984	.	.	.	.	.	.
	1985	.	.	.	.	.	.
	1986	17,11	15,01	14,47	15,24	13,37	12,89

B R DEUTSCHLAND

Pf/kWh

January/Janvier		Frankfurt/Main			Stuttgart		
		Price incl. all taxes Prix TTC	Price excl. VAT Prix hors TVA	Price excl. all taxes Prix hors taxes	Price incl. all taxes Prix TTC	Price excl. VAT Prix hors TVA	Price excl. all taxes Prix hors taxes
I_a	1980				30,96	27,40	26,35
	1981				35,03	31,00	29,81
30 000 kWh	1982				37,95	33,58	32,38
(30 kW, 1000 h)	1983				39,74	35,17	34,11
	1984				41,69	36,57	35,44
	1985				43,26	37,95	36,81
	1986				43,18	37,88	36,81
I_b	1980				30,96	27,40	26,35
	1981				35,03	31,00	29,81
50 000 kWh	1982				37,95	33,58	32,38
(50 kW, 1000 h)	1983				39,74	35,17	34,11
	1984				41,69	36,57	35,44
	1985				43,26	37,95	36,81
	1986				43,18	37,88	36,81
I_c	1980	22,92	20,28	19,48	23,93	21,18	20,36
	1981	23,93	21,18	20,37	27,09	23,97	23,05
160 000 kWh	1982	27,58	24,41	23,52	29,32	25,95	25,02
(100 kW, 1600 h)	1983	28,66	25,36	24,57	30,77	27,23	26,41
	1984	28,91	25,36	24,57	32,38	28,40	27,52
	1985	29,73	26,08	25,25	33,69	29,55	28,66
	1986	29,67	26,03	25,25	33,62	29,49	28,66
I_d	1980	18,13	16,04	15,40	18,85	16,68	16,04
	1981	18,93	16,75	16,10	21,35	18,89	18,16
1 250 000 kWh	1982	21,81	19,30	18,59	23,06	20,41	19,68
(500 kW, 2500 h)	1983	22,65	20,04	19,42	24,27	21,48	20,83
	1984	22,85	20,04	19,42	25,60	22,46	21,76
	1985	23,51	20,62	19,96	26,72	23,44	22,74
	1986	23,46	20,58	19,96	26,68	23,40	22,74
I_e	1980	14,81	13,11	12,60	15,57	13,78	13,25
	1981	15,48	13,70	13,17	17,53	15,51	14,91
2 000 000 kWh	1982	17,83	15,78	15,20	19,01	16,82	16,22
(500 kW, 4000 h)	1983	18,50	16,39	15,88	19,99	17,69	17,16
	1984	18,68	16,39	15,88	21,09	18,50	17,93
	1985	19,22	16,86	16,32	21,96	19,26	18,69
	1986	19,19	16,83	16,32	21,92	19,23	18,69
I_f	1980	14,17	12,54	12,05	14,55	12,88	12,39
	1981	14,79	13,09	12,59	16,28	14,41	13,86
10 000 000 kWh	1982	17,05	15,09	14,54	17,70	15,66	15,10
(2500 kW, 4000 h)	1983	17,72	15,68	15,19	18,66	16,51	16,01
	1984	17,88	15,68	15,19	19,70	17,28	16,75
	1985	18,38	16,12	15,61	20,62	18,09	17,55
	1986	18,34	16,09	15,61	20,59	18,06	17,55
I_g	1980	.	.	.	.	.	.
	1981	.	.	.	.	.	.
24 000 000 kWh	1982	.	.	.	.	.	.
(4000 kW, 6000 h)	1983	.	.	.	.	.	.
	1984	.	.	.	.	.	.
	1985	.	.	.			
	1986	15,86	13,91	13,49	17,10	15,00	14,58

B R DEUTSCHLAND

Pf/kWh

January/Janvier		München			Südliche Gebiete		
		Price incl. all taxes Prix TTC	Price excl. VAT Prix hors TVA	Price excl. all taxes Prix hors taxes	Price incl. all taxes Prix TTC	Price excl. VAT Prix hors TVA	Price excl. all taxes Prix hors taxes
I_a	1980	30,11	26,65	25,63			
	1981	32,24	28,53	27,43			
30 000 kWh	1982	37,61	33,28	32,03			
(30 kW, 1000 h)	1983	37,35	33,05	32,02			
	1984	38,95	34,17	33,11			
	1985	38,99	34,20	33,11			
	1986	38,92	34,14	33,11			
I_b	1980	30,11	26,65	25,63			
	1981	32,24	28,53	27,43			
50 000 kWh	1982	37,61	33,28	32,03			
(50 kW, 1000 h)	1983	37,35	33,05	32,02			
	1984	38,95	34,17	33,11			
	1985	38,99	34,20	33,11			
	1986	38,92	34,14	33,11			
I_c	1980	22,72	20,11	19,34	22,48	19,89	19,13
	1981	24,30	21,50	20,67	22,48	19,89	19,13
160 000 kWh	1982	28,63	25,34	24,39	28,58	25,29	24,34
(100 kW, 1600 h)	1983	28,44	25,17	24,39	28,39	25,12	24,34
	1984	29,80	26,14	25,33	29,53	25,90	25,10
	1985	29,83	26,17	25,33	29,57	25,94	25,10
	1986	29,78	26,12	25,33	29,50	25,88	25,10
I_d	1980	18,14	16,05	15,43	17,84	15,79	15,18
	1981	19,39	17,16	16,50	17,84	15,79	15,18
1 250 000 kWh	1982	23,06	20,41	19,64	23,05	20,40	19,63
(500 kW, 2500 h)	1983	22,91	20,27	19,64	22,89	20,26	19,63
	1984	24,11	21,15	20,49	23,83	20,90	20,25
	1985	24,13	21,17	20,49	23,85	20,92	20,25
	1986	24,09	21,13	20,49	23,80	20,88	20,25
I_e	1980	14,18	12,55	12,07	15,03	13,30	12,79
	1981	15,12	13,38	12,87	15,03	13,30	12,79
2 000 000 kWh	1982	18,52	16,39	15,77	19,56	17,31	16,66
(500 kW, 4000 h)	1983	18,66	16,51	16,00	19,42	17,19	16,66
	1984	19,73	17,31	16,77	20,22	17,74	17,19
	1985	19,74	17,32	16,77	20,25	17,76	17,19
	1986	19,71	17,29	16,77	20,20	17,72	17,19
I_f	1980	13,89	12,29	11,82	14,09	12,47	11,99
	1981	14,80	13,10	12,60	14,09	12,47	11,99
10 000 000 kWh	1982	18,16	16,07	15,47	18,90	16,73	16,10
(2500 kW, 4000 h)	1983	18,29	16,19	15,69	18,78	16,62	16,10
	1984	19,37	16,99	16,46	19,56	17,16	16,63
	1985	19,38	17,00	16,46	19,60	17,19	16,63
	1986	19,35	16,97	16,46	19,55	17,15	16,63
I_g	1980	.	.	.	11,98	10,60	10,19
	1981	.	.	.	12,02	10,64	10,19
24 000 000 kWh	1982	.	.	.	16,49	14,59	14,04
(4000 kW, 6000 h)	1983	.	.	.	16,37	14,49	14,04
	1984	.	.	.	17,20	15,09	14,62
	1985	.	.	.	17,21	15,10	14,62
	1986	16,76	14,70	14,26	17,19	15,08	14,62

FRANCE

Centimes/kWh

January/Janvier		Lille			Paris		
		Price incl. all taxes Prix TTC	Price excl. VAT Prix hors TVA	Price excl. all taxes Prix hors taxes	Price incl. all taxes Prix TTC	Price excl. VAT Prix hors TVA	Price excl. all taxes Prix hors taxes
D_a	1980	76,81	65,98	61,54	78,87	68,04	61,54
	1981	80,02	68,74	64,12	82,17	70,89	64,12
600 kWh	1982	91,30	78,43	73,16	93,76	80,89	73,16
	1983	99,53	84,82	79,12	102,19	87,47	79,12
	1984	105,42	89,83	83,80	108,24	92,65	83,80
	1985	101,52	86,51	80,70	104,23	89,22	80,70
	1986	105,41	89,92	83,26	107,54	92,05	83,26
D_b	1980	56,21	48,28	45,04	57,72	49,80	45,04
	1981	58,98	50,66	47,26	60,57	52,25	47,26
1 200 kWh	1982	67,33	57,83	53,95	69,15	59,65	53,95
	1983	76,32	65,04	60,67	78,36	67,08	60,67
	1984	81,63	69,72	65,04	84,01	71,91	65,04
	1985	85,61	72,95	68,05	87,90	75,24	68,05
	1986	91,14	77,75	71,99	92,98	79,59	71,99
D_c	1980	45,36	38,96	36,34	46,58	40,18	36,34
	1981	47,61	40,90	38,15	48,89	42,18	38,15
3 500 kWh	1982	55,12	47,35	44,17	56,60	48,83	44,17
(1 300 kWh night/nuit)	1983	63,08	53,75	50,14	64,76	55,43	50,14
	1984	71,28	60,74	56,66	73,18	62,64	56,66
	1985	75,26	64,13	59,82	77,27	66,14	59,82
	1986	78,32	66,81	61,86	79,90	68,39	61,86
D_d	1980	41,65	35,38	33,38	42,77	36,90	33,38
	1981	43,88	37,69	35,16	45,06	38,87	35,16
7 500 kWh	1982	50,93	43,75	40,81	52,30	45,12	40,81
(2 500 kWh night/nuit)	1983	58,39	49,76	46,42	59,95	51,32	46,42
	1984	66,35	56,54	52,74	68,12	58,31	52,74
	1985	70,20	59,82	55,80	72,07	61,69	55,80
	1986	73,29	62,52	57,89	74,77	64,00	57,89
D_e	1980	33,09	28,42	26,51	33,98	29,31	26,51
	1981	34,81	29,90	27,89	35,74	30,83	27,89
20 000 kWh	1982	40,65	34,92	32,57	41,75	36,01	32,57
(15000 kWh night/nuit)	1983	46,63	39,74	37,07	47,88	40,99	37,07
	1984	52,98	45,15	42,12	54,40	46,57	42,12
	1985	56,12	47,82	44,61	57,62	49,32	44,61
	1986	58,80	50,16	46,44	59,98	51,34	46,44

FRANCE

Centimes /kWh

January/Janvier		Marseille			Lyon		
		Price incl. all taxes Prix TTC	Price excl. VAT Prix hors TVA	Price excl. all taxes Prix hors taxes	Price incl. all taxes Prix TTC	Price excl. VAT Prix hors TVA	Price excl. all taxes Prix hors taxes
D_a	1980	78,28	67,45	61,54	76,31	65,48	61,54
	1981	81,56	70,28	64,12	79,51	68,22	64,12
600 kWh	1982	93,06	80,18	73,16	90,72	77,84	73,16
	1983	101,43	86,72	79,12	98,90	84,18	79,12
	1984	107,43	91,84	83,80	104,75	89,16	83,80
	1985	103,46	88,45	80,70	100,87	85,86	80,70
	1986	106,74	91,25	83,26	106,74	91,25	83,26
D_b	1980	57,29	49,36	45,04	55,85	47,92	45,04
	1981	60,11	51,80	47,26	58,60	50,28	47,26
1 200 kWh	1982	68,62	59,13	53,95	66,90	57,40	53,95
	1983	77,78	66,49	60,67	75,84	64,55	60,67
	1984	83,38	71,28	65,04	81,30	69,20	65,04
	1985	87,24	74,58	68,05	85,07	72,41	68,05
	1986	92,29	78,90	71,99	92,29	78,90	71,99
D_c	1980	46,23	38,67	36,34	45,07	38,67	36,34
	1981	48,53	41,81	38,15	47,31	40,59	38,15
3 500 kWh	1982	56,18	48,41	44,17	54,77	47,00	44,17
(1 300 kWh night/nuit)	1983	64,28	54,95	50,14	62,68	53,35	50,14
	1984	72,64	62,10	56,66	70,83	60,29	56,66
	1985	76,69	65,56	59,82	74,78	63,65	59,82
	1986	79,31	67,80	61,86	79,31	67,80	61,86
D_d	1980	42,45	36,58	33,38	41,39	35,52	33,38
	1981	44,73	38,54	35,16	43,60	37,41	35,16
7 500 kWh	1982	51,91	44,73	40,81	50,60	43,42	40,81
(2 500 kWh night/nuit)	1983	59,51	50,88	46,42	58,02	49,39	46,42
	1984	67,61	57,80	52,74	65,93	56,12	52,74
	1985	71,54	61,16	55,80	69,75	59,37	55,80
	1986	74,22	63,45	57,89	74,22	63,45	57,89
D_e	1980	33,72	28,21	26,51	32,88	28,21	26,51
	1981	35,48	30,57	27,89	34,58	29,67	27,89
20 000 kWh	1982	41,43	35,70	32,57	40,39	34,65	32,57
(15000 kWh night/nuit)	1983	47,52	40,63	37,07	46,34	39,44	37,07
	1984	53,99	46,16	42,12	52,65	44,82	42,12
	1985	57,19	48,89	44,61	55,77	47,47	44,61
	1986	59,54	50,90	46,44	59,54	50,90	46,44

FRANCE

Centimes /kWh

January/Janvier		Toulouse			Strasbourg		
		Price incl. all taxes Prix TTC	Price excl. VAT Prix hors TVA	Price excl. all taxes Prix hors taxes	Price incl. all taxes Prix TTC	Price excl. VAT Prix hors TVA	Price excl. all taxes Prix hors taxes
D_a	1980	77,30	66,47	61,54	74,34	63,60	61,54
	1981	80,53	69,25	64,12	77,46	66,17	64,12
600 kWh	1982	91,89	79,01	73,16	88,38	75,50	73,16
	1983	100,17	85,45	79,12	96,37	81,65	79,12
	1984	106,09	90,50	83,80	102,07	86,48	83,20
	1985	102,17	87,16	80,70	98,29	83,28	80,70
	1986	106,74	91,25	83,26	101,41	85,92	83,26
D_b	1980	56,57	48,64	45,04	54,41	46,48	45,04
	1981	59,36	51,04	47,26	57,09	48,77	47,26
1 200 kWh	1982	67,76	58,27	53,95	65,18	55,68	53,95
	1983	76,81	62,52	60,67	73,89	62,61	60,67
	1984	82,34	70,24	65,04	79,22	67,12	65,04
	1985	86,15	73,49	68,05	82,89	70,23	68,05
	1986	92,29	78,90	71,99	87,68	74,29	71,99
D_c	1980	45,65	39,25	36,34	43,90	37,50	36,34
	1981	47,92	41,20	38,15	46,08	39,37	38,15
3 500 kWh	1982	55,48	47,70	44,17	53,35	45,58	44,17
(1 300 kWh night/nuit)	1983	63,48	54,15	50,14	61,07	51,74	50,14
	1984	71,73	61,19	56,66	69,01	58,47	56,66
	1985	75,74	64,59	59,82	72,86	61,73	59,82
	1986	79,31	67,80	61,86	75,35	63,84	61,86
D_d	1980	41,92	36,05	33,38	40,32	34,45	33,38
	1981	44,16	37,97	35,16	42,48	36,29	35,16
7 500 kWh	1982	51,25	44,07	40,81	49,30	42,12	40,81
(2 500 kWh night/nuit)	1983	58,76	50,13	46,42	56,54	47,91	46,42
	1984	66,77	56,96	52,74	64,24	54,43	52,74
	1985	70,64	60,26	55,80	67,97	57,59	55,80
	1986	74,22	63,45	57,89	70,51	59,74	57,89
D_e	1980	33,30	28,63	26,51	32,03	27,36	26,51
	1981	35,03	30,12	27,89	33,69	28,78	27,89
20 000 kWh	1982	40,91	35,18	32,57	39,34	33,61	32,57
(15000 kWh night/nuit)	1983	46,93	40,04	37,07	45,16	38,26	37,07
	1984	53,32	45,49	42,12	51,30	43,47	41,12
	1985	56,48	48,18	44,61	54,34	46,04	44,61
	1986	59,54	50,90	46,44	56,57	47,93	46,44

FRANCE

centimes/kWh

	January/Janvier		Lille			Paris		
			Price incl. all taxes Prix TTC	Price excl. VAT Prix hors TVA	Price excl. all taxes Prix hors taxes	Price incl. all taxes Prix TTC	Price excl. VAT Prix hors TVA	Price excl. all taxes Prix hors taxes
I_a		1980	46,03	39,14	39,14	46,03	39,14	39,14
		1981	48,87	41,22	41,22	48,87	41,22	41,22
	30 000 kWh	1982	55,66	47,33	47,33	55,66	47,33	47,33
	(30 kW, 1000 h)	1983	64,93	54,75	54,75	64,93	54,75	54,75
		1984	87,87	74,09	74,09	87,87	74,09	74,09
		1985	92,59	78,07	78,07	92,59	78,07	78,07
		1986	101,17	86,30	79,94	103,25	88,38	79,94
I_b		1980	46,03	39,14	39,14	46,03	39,14	39,14
		1981	48,47	41,22	41,22	48,47	41,22	41,22
	50 000 kWh	1982	55,66	47,33	47,33	55,66	47,33	47,33
	(50 kW, 1000 h)	1983	64,93	54,75	54,75	64,93	54,75	54,75
		1984	80,62	67,98	67,98	80,62	67,98	67,98
		1985	84,08	70,89	70,89	84,08	70,89	70,89
		1986	88,02	74,56	72,39	88,72	75,26	72,39
I_c		1980	39,41	33,51	33,51	39,41	33,51	33,51
		1981	41,70	35,46	35,46	41,70	35,46	35,46
	160 000 kWh	1982	48,46	41,21	41,21	48,46	41,21	41,21
	(100 kW, 1600 h)	1983	58,56	49,38	49,38	58,56	49,38	49,38
		1984	64,67	54,53	54,53	64,67	54,53	54,53
		1985	67,84	47,08	47,08	55,84	47,08	47,08
		1986	71,47	60,54	58,78	72,04	61,11	58,78
I_d		1980	32,79	27,88	27,88	32,79	27,88	27,88
		1981	34,89	29,67	29,67	34,89	29,67	29,67
	1 250 000 kWh	1982	40,36	34,32	34,32	40,36	34,32	34,32
	(500 kW, 2500 h)	1983	46,55	39,25	39,25	46,55	39,25	39,25
		1984	52,31	44,11	44,11	52,31	44,11	44,11
		1985	55,84	47,08	47,08	55,84	47,08	47,08
		1986	57,00	48,06	48,06	57,00	48,06	48,06
I_e		1980	28,34	24,10	24,10	28,34	24,10	24,10
		1981	30,25	25,72	25,72	30,25	25,72	25,72
	2 000 000 kWh	1982	34,67	29,48	29,48	34,67	29,48	29,48
	(500 kW, 4000 h)	1983	39,43	33,25	33,25	39,43	33,25	33,25
		1984	43,80	36,93	36,93	43,80	36,93	36,93
		1985	45,78	38,60	38,60	45,78	38,60	38,60
		1986	46,80	39,46	39,46	46,80	39,46	39,46
I_f		1980	27,92	23,74	23,74	27,92	23,74	23,74
		1981	29,81	25,35	25,35	29,81	25,35	25,35
	10 000 000 kWh	1982	34,14	29,03	29,03	34,14	29,03	29,03
	(2500 kW, 4000 h)	1983	38,79	32,71	32,71	38,79	32,71	32,71
		1984	43,35	36,51	36,51	43,35	36,51	36,51
		1985	45,78	38,60	38,60	45,78	38,60	38,60
		1986	46,80	39,46	39,46	46,80	39,46	39,46
I_g		1980	23,96	20,37	20,37	23,96	20,37	20,37
		1981	25,71	21,86	21,86	25,71	21,86	21,86
	24 000 000 kWh	1982	29,24	24,86	24,86	29,24	24,86	24,86
	(4000 kW, 6000 h)	1983	32,88	27,72	27,72	32,88	27,72	27,72
		1984	36,59	30,85	30,85	36,59	30,85	30,85
		1985	38,07	32,10	32,10	38,07	32,10	32,10
		1986	39,32	33,15	33,15	39,32	33,15	33,15

FRANCE

centimes/kWh

	January/Janvier		Marseille - Lyon - Toulouse			Strasbourg		
			Price incl. all taxes Prix TTC	Price excl. VAT Prix hors TVA	Price excl. all taxes Prix hors taxes	Price incl. all taxes Prix TTC	Price excl. VAT Prix hors TVA	Price excl. all taxes Prix hors taxes
I_a		1980	46,03	39,14	39,14	46,03	39,14	39,14
		1981	48,47	41,22	41,22	48,47	41,22	41,22
	30 000 kWh	1982	55,66	47,33	47,33	55,66	47,33	47,33
	(30 kW, 1000 h)	1983	64,93	54,75	54,75	64,93	54,75	54,75
		1984	87,87	74,09	74,09	87,87	74,09	74,09
		1985	92,59	78,07	78,07	92,59	78,07	78,07
		1986	102,48	87,61	79,94	97,47	82,50	79,94
I_b		1980	46,03	39,14	39,14	46,03	39,14	39,14
		1981	48,47	41,22	41,22	48,47	41,22	41,22
	50 000 kWh	1982	55,66	47,33	47,33	55,66	47,33	47,33
	(50 kW, 1000 h)	1983	64,93	54,75	54,75	64,93	54,75	54,75
		1984	80,62	67,98	67,98	80,62	67,98	67,98
		1985	84,08	70,89	70,89	84,08	70,89	70,89
		1986	88,46	75,00	72,39	86,72	73,26	72,39
I_c		1980	39,41	33,51	33,51	39,41	33,51	33,51
		1981	41,70	35,46	35,46	41,70	35,46	35,46
	160 000 kWh	1982	48,46	41,21	41,21	48,46	41,21	41,21
	(100 kW, 1600 h)	1983	58,56	49,38	49,38	58,56	49,38	49,38
		1984	64,67	54,53	54,53	64,67	54,53	54,53
		1985	67,84	57,20	57,20	67,84	57,20	57,20
		1986	71,83	60,90	58,78	70,42	59,49	58,78
I_d		1980	32,79	27,88	27,88	32,79	27,88	27,88
		1981	34,89	29,67	29,67	34,89	29,67	29,67
	1 250 000 kWh	1982	40,36	34,32	34,32	40,36	34,32	34,32
	(500 kW, 2500 h)	1983	46,55	39,25	39,25	46,55	39,25	39,25
		1984	52,31	44,11	44,11	52,31	44,11	44,11
		1985	55,84	47,08	47,08	55,84	47,08	47,08
		1986	57,00	48,06	48,06	57,00	48,06	48,06
I_e		1980	28,34	24,10	24,10	28,34	24,10	24,10
		1981	30,25	25,72	25,72	30,25	25,72	25,72
	2 000 000 kWh	1982	34,67	29,48	29,48	34,67	29,48	29,48
	(500 kW, 4000 h)	1983	39,43	33,25	33,25	39,43	33,25	33,25
		1984	43,80	36,93	36,93	43,80	36,93	36,93
		1985	45,78	38,60	38,60	45,78	38,60	38,60
		1986	46,80	39,46	39,46	46,80	39,46	39,46
I_f		1980	27,92	23,74	23,74	27,92	23,74	23,74
		1981	29,81	25,35	25,35	29,81	25,35	25,35
	10 000 000 kWh	1982	34,14	29,03	29,03	34,14	29,03	29,03
	(2500 kW, 4000 h)	1983	38,79	32,71	32,71	38,79	32,71	32,71
		1984	43,35	36,51	36,51	43,35	36,51	36,51
		1985	45,78	38,60	38,60	45,78	38,60	38,60
		1986	46,80	39,46	39,46	46,80	39,46	39,46
I_g		1980	23,96	20,37	20,37	23,96	20,37	20,37
		1981	25,71	21,86	21,86	25,71	21,86	21,86
	24 000 000 kWh	1982	29,24	24,86	24,86	29,24	24,86	24,86
	(4000 kW, 6000 h)	1983	32,88	27,72	27,72	32,88	27,72	27,72
		1984	36,59	30,85	30,85	36,59	30,85	30,85
		1985	38,07	32,10	32,10	38,07	32,10	32,10
		1986	39,32	33,15	33,15	39,32	33,15	33,15

ITALIA

LIT/kWh

January/Janvier		Settentrionale e Centrale			Meridionale e Insulare		
		Price incl. all taxes Prix TTC	Price excl. VAT Prix hors TVA	Price excl. all taxes Prix hors taxes	Price incl. all taxes Prix TTC	Price excl. VAT Prix hors TVA	Price excl. all taxes Prix hors taxes
D_a	1980	50,40	47,55	46,45	49,82	47,00	46,45
	1981	61,51	56,95	55,85	60,91	56,40	55,85
600 kWh	1982	77,56	72,00	70,90	77,17	71,45	70,90
	1983	97,96	90,71	89,60	97,36	90,15	89,60
	1984	102,38	94,80	93,70	101,79	94,25	93,70
	1985	112,71	103,40	102,30	112,11	102,85	102,30
	1986	118,70	108,90	107,80	118,10	108,35	107,80
D_b	1980	56,23	53,05	51,95	55,65	52,50	51,95
	1981	70,71	65,48	64,38	70,12	64,93	64,38
1 200 kWh	1982	87,22	80,76	79,66	86,63	80,21	79,66
	1983	113,79	105,36	101,76	113,19	104,81	101,76
	1984	129,44	119,85	116,00	128,84	119,30	116,00
	1985	140,28	128,70	124,60	139,68	128,15	124,60
	1986	146,55	134,45	130,10	145,95	133,90	130,10
D_c	1980	93,40	88,11	87,01	92,82	87,57	87,01
	1981	114,16	105,70	104,60	113,56	105,15	104,60
3 500 kWh	1982	131,55	121,81	120,71	130,96	121,26	120,71
(1 300 kWh night/nuit)	1983	172,44	159,67	148,57	171,85	159,12	148,57
	1984	231,60	214,44	202,34	231,00	213,89	202,34
	1985	246,66	226,29	213,19	246,06	225,74	213,19
	1986	255,21	234,14	220,04	254,61	233,59	220,04
D_d	1980	85,99	81,12	80,02	85,40	80,57	80,02
	1981	105,34	97,54	96,44	104,75	96,99	96,44
7 500 kWh	1982	122,56	113,48	112,38	121,96	112,93	112,38
(2 500 kWh night/nuit)	1983	151,07	139,88	138,78	150,48	139,33	138,78
	1984	216,36	200,33	188,23	215,76	199,78	188,23
	1985	231,28	212,18	199,08	230,68	211,63	199,08
	1986	256,72	235,52	221,42	256,12	234,97	221,41
D_e	1980	.	.	.	.	.	.
	1981	.	.	.	.	.	.
20 000 kWh	1982	.	.	.	.	.	.
(15000 kWh night/nuit)	1983	.	.	.	.	.	.
	1984	.	.	.	.	.	.
	1985	.	.	.	.	.	.
	1986	.	.	.	.	.	.

ITALIA

LIT/kWh

January/Janvier		Settentrionale e Centrale			Meridionale e Insulare		
		Price incl. all taxes Prix TTC	Price excl. VAT Prix hors TVA	Price excl. all taxes Prix hors taxes	Price incl. all taxes Prix TTC	Price excl. VAT Prix hors TVA	Price excl. all taxes Prix hors taxes
I_a	1980	83,74	73,46	72,61	62,44	54,77	54,36
	1981	100,64	92,73	91,63	81,85	71,18	70,63
30 000 kWh	1982	125,41	109,05	107,95	99,87	86,84	86,29
(30 kW, 1000 h)	1983	173,52	147,05	137,95	147,04	124,61	116,06
	1984	217,56	184,37	174,27	181,55	153,86	144,31
	1985	273,55	231,82	220,72	228,41	193,57	183,02
	1986	285,67	242,09	229,99	240,00	203,89	191,84
I_b	1980	88,92	78,00	77,16	88,44	77,57	77,16
	1981	111,36	96,83	95,73	110,72	96,28	95,73
50 000 kWh	1982	130,12	113,15	112,05	129,49	112,60	112,05
(50 kW, 1000 h)	1983	173,52	147,05	137,95	172,87	146,50	137,95
	1984	193,35	163,86	153,76	192,71	163,31	153,76
	1985	243,32	206,20	195,10	242,67	205,65	195,10
	1986	249,56	211,49	199,39	248,91	210,94	199,39
I_c	1980	78,71	69,04	68,60	78,46	68,22	68,60
	1981	99,62	86,63	85,53	98,99	86,08	85,53
160 000 kWh	1982	113,69	98,86	97,76	113,06	98,31	97,76
(100 kW, 1600 h)	1983	152,70	129,41	120,31	152,05	128,86	120,31
	1984	168,76	143,02	132,92	168,11	142,47	132,92
	1985	196,21	180,01	168,91	195,61	179,46	168,91
	1986	204,76	187,85	175,76	204,17	187,31	175,76
I_d	1980	65,21	57,20	56,80	64,98	57,00	56,80
	1981	82,82	72,01	70,91	82,18	71,46	70,91
1 250 000 kWh	1982	100,47	87,36	86,26	99,83	86,81	86,26
(500 kW, 2500 h)	1983	135,87	115,14	106,04	135,22	114,59	106,04
	1984	148,88	126,17	116,07	148,23	125,62	116,07
	1985	167,72	153,87	143,22	167,61	153,77	143,22
	1986	176,77	162,17	150,07	176,17	161,62	150,07
I_e	1980	60,92	53,44	53,04	60,69	53,24	53,04
	1981	77,76	67,62	66,52	77,13	67,07	66,52
2 000 000 kWh	1982	95,25	82,83	81,73	94,62	82,28	81,73
(500 kW, 4000 h)	1983	129,17	109,47	100,37	128,53	108,92	100,37
	1984	141,00	119,49	109,39	140,35	118,94	109,39
	1985	146,25	134,17	123,52	146,14	134,07	123,52
	1986	153,91	141,20	129,10	153,31	140,65	129,10
I_f	1980	58,10	50,96	50,64	57,91	50,80	50,64
	1981	74,15	64,48	63,72	73,71	64,10	63,72
10 000 000 kWh	1982	91,52	79,59	78,83	91,09	79,21	78,83
(2500 kW, 4000 h)	1983	114,94	97,41	96,65	114,50	97,03	96,65
	1984	124,90	105,85	105,09	124,45	105,47	105,09
	1985	136,10	124,86	124,10	135,68	124,48	124,10
	1986	142,03	130,30	129,54	141,61	129,92	129,54
I_g	1980	52,28	45,86	45,55	52,11	45,71	45,55
	1981	66,73	58,03	57,72	66,56	57,88	57,72
24 000 000 kWh	1982	85,36	74,23	73,53	84,95	73,87	73,53
(4000 kW, 6000 h)	1983	106,77	90,48	89,78	106,34	90,12	89,78
	1984	116,44	97,68	96,98	114,84	97,32	96,98
	1985	100,69	92,38	91,68	100,30	92,02	91,68
	1986	104,86	96,20	95,50	104,47	95,84	95,50

NEDERLAND

cents/kWh

January/Janvier		Rotterdam			Noord-Holland		
		Price incl. all taxes Prix TTC	Price excl. VAT Prix hors TVA	Price excl. all taxes Prix hors taxes	Price incl. all taxes Prix TTC	Price excl. VAT Prix hors TVA	Price excl. all taxes Prix hors taxes
D_a	1980	31,86	27,00	27,00	29,85	25,30	25,30
	1981	34,57	29,30	29,30	32,45	27,50	27,50
600 kWh	1982	39,18	33,20	33,20	35,90	31,30	31,30
	1983	40,95	34,70	34,70	37,88	32,10	32,10
	1984	40,82	34,30	34,30	38,71	32,53	32,53
	1985	41,65	35,00	35,00	41,19	34,61	34,61
	1986	40,22	33,80	33,80	38,38	32,35	32,35
D_b	1980	26,31	22,30	22,30	26,55	22,50	22,50
	1981	29,03	24,60	24,60	29,15	24,70	24,70
1 200 kWh	1982	33,51	28,40	28,40	33,15	28,55	28,55
	1983	34,93	29,60	29,60	33,75	28,60	28,60
	1984	34,57	29,05	29,05	34,55	29,03	29,03
	1985	35,40	29,75	29,75	36,28	30,49	30,49
	1986	33,97	28,55	28,55	32,74	27,51	27,51
D_c	1980	20,88	17,69	17,69	22,44	19,00	19,00
	1981	23,79	20,16	20,16	24,66	20,90	20,90
3 500 kWh	1982	28,39	24,06	24,06	28,83	24,71	24,71
(1 300 kWh night/nuit)	1983	29,58	25,07	25,07	28,76	24,37	24,37
	1984	29,04	24,40	24,40	29,51	24,80	24,80
	1985	29,88	25,11	25,11	31,02	26,07	26,07
	1986	28,45	23,91	23,91	27,26	22,91	22,91
D_d	1980	19,61	16,62	16,62	21,12	17,90	17,90
	1981	22,42	19,00	19,00	23,98	20,30	20,30
7 500 kWh	1982	26,89	22,79	22,79	28,46	24,12	24,12
(2 500 kWh night/nuit)	1983	27,42	23,04	23,04	27,85	23,60	23,60
	1984	27,42	23,04	23,04	28,55	23,99	23,99
	1985	28,25	23,74	23,74	29,88	25,11	25,11
	1986	26,83	22,55	22,55	25,92	21,78	21,78
D_e	1980	15,61	13,23	13,23	19,58	16,60	16,60
	1981	18,36	15,56	15,56	19,82	16,80	16,80
20 000 kWh	1982	22,77	19,30	19,30	24,23	20,61	20,61
(15000 kWh night/nuit)	1983	23,86	20,22	20,22	25,32	21,46	21,46
	1984	23,15	19,45	19,45	26,05	21,89	21,89
	1985	23,98	20,15	20,15	27,86	23,41	23,41
	1986	22,56	18,96	18,96	24,38	20,49	20,49

NEDERLAND — cents/kWh

IRELAND — p/kWh

January/Janvier		Noord-Brabant			Dublin		
		Price incl. all taxes Prix TTC	Price excl. VAT Prix hors TVA	Price excl. all taxes Prix hors taxes	Price incl. all taxes Prix TTC	Price excl. VAT Prix hors TVA	Price excl. all taxes Prix hors taxes
D_a	1980	29,03	24,60	24,60	5,232	5,232	5,232
	1981	29,50	25,00	25,00	7,152	7,152	7,152
600 kWh	1982	35,05	29,70	29,70	8,877	8,877	8,877
	1983	35,52	30,10	30,10	9,350	9,350	9,350
	1984	34,63	29,10	29,10	10,300	10,300	10,300
	1985	35,11	29,50	29,50	11,050	11,050	11,050
	1986	32,37	27,20	27,20	11,700	11,700	11,700
D_b	1980	22,77	19,30	19,30	4,332	4,332	4,332
	1981	23,25	19,70	19,70	6,076	6,076	6,076
1 200 kWh	1982	28,56	24,20	24,20	7,627	7,627	7,627
	1983	28,85	24,45	24,45	8,025	8,025	8,025
	1984	27,91	23,45	23,45	8,825	8,825	8,825
	1985	28,38	23,85	23,85	9,450	9,450	9,450
	1986	25,64	21,55	21,55	9,950	9,950	9,950
D_c	1980	17,79	15,08	15,08	3,228	3,228	3,228
	1981	18,28	15,49	15,49	4,686	4,686	4,686
3 500 kWh	1982	23,40	19,83	19,83	5,911	5,911	5,911
(1 300 kWh night/nuit)	1983	23,45	19,87	19,87	5,951	5,951	5,951
	1984	22,41	18,83	18,83	6,474	6,474	6,474
	1985	22,89	19,23	19,23	6,913	6,913	6,913
	1986	20,11	16,90	16,90	7,184	7,184	7,184
D_d	1980	16,44	13,93	13,93	3,330	3,330	3,330
	1981	16,88	14,30	14,30	4,600	4,600	4,600
7 500 kWh	1982	21,92	18,57	18,57	5,790	5,790	5,790
(2 500 kWh night/nuit)	1983	21,92	18,58	18,58	5,832	5,832	5,832
	1984	20,88	17,55	17,55	6,346	6,346	6,346
	1985	21,36	17,95	17,95	6,700	6,700	6,700
	1986	18,58	15,61	15,61	7,030	7,030	7,030
D_e	1980	13,83	11,72	11,72	2,465	2,465	2,465
	1981	14,15	11,99	11,99	3,702	3,702	3,702
20 000 kWh	1982	18,99	16,09	16,09	4,651	4,651	4,651
(15000 kWh night/nuit)	1983	18,77	15,91	15,91	4,350	4,350	4,350
	1984	17,65	14,83	14,83	4,649	4,649	4,649
	1985	18,12	15,23	15,23	4,946	4,946	4,946
	1986	15,30	12,86	12,86	5,043	5,043	5,043

NEDERLAND

cents/kWh

	January/Janvier		Rotterdam			Noord-Holland		
			Price incl. all taxes Prix TTC	Price excl. VAT Prix hors TVA	Price excl. all taxes Prix hors taxes	Price incl. all taxes Prix TTC	Price excl. VAT Prix hors TVA	Price excl. all taxes Prix hors taxes
I_a		1980	30,96	26,24	26,24	25,25	21,40	21,40
		1981	31,97	27,09	27,09	28,68	24,31	24,31
	30 000 kWh	1982	36,33	30,79	30,79	33,02	27,98	27,98
	(30 kW, 1000 h)	1983	35,20	29,83	29,83	34,96	29,63	29,63
		1984	36,15	30,38	30,38	36,82	30,94	30,94
		1985	37,19	31,25	31,25	40,72	34,22	34,22
		1986	34,86	29,29	29,29	38,72	32,54	32,54
I_b		1980	30,17	25,57	25,57	24,99	21,18	21,18
		1981	31,97	27,09	27,09	28,41	24,07	24,07
	50 000 kWh	1982	36,33	30,79	30,79	32,74	27,75	27,75
	(50 kW, 1000 h)	1983	35,20	29,83	29,83	33,91	28,74	28,74
		1984	36,15	30,38	30,38	35,97	30,23	30,23
		1985	35,74	30,03	30,03	39,85	33,39	33,49
		1986	34,86	29,29	29,29	37,01	31,10	31,10
I_c		1980	25,43	21,55	21,55	22,88	19,39	19,39
		1981	27,49	23,30	23,30	26,15	22,16	22,16
	160 000 kWh	1982	33,34	28,25	28,25	30,21	25,60	25,60
	(100 kW, 1600 h)	1983	32,10	27,20	27,20	30,79	26,09	26,09
		1984	29,26	24,59	24,59	33,30	27,98	27,98
		1985	30,18	25,36	25,36	32,95	27,69	27,69
		1986	28,19	23,69	23,69	27,69	23,27	23,27
I_d		1980	20,77	17,60	17,60	19,42	16,46	16,46
		1981	22,79	19,31	19,31	22,47	19,04	19,04
	1 250 000 kWh	1982	28,45	24,11	24,11	26,42	22,39	22,39
	(500 kW, 2500 h)	1983	27,08	22,95	22,95	26,30	22,29	22,29
		1984	27,13	22,80	22,80	27,12	22,79	22,79
		1985	28,10	23,61	23,61	27,77	23,34	23,34
		1986	26,14	21,97	21,97	23,35	19,62	19,62
I_e		1980	18,24	15,46	15,46	17,12	14,51	14,51
		1981	20,23	17,14	17,14	20,11	17,04	17,04
	2 000 000 kWh	1982	25,81	21,87	21,87	23,99	20,33	20,33
	(500 kW, 4000 h)	1983	24,36	20,64	20,64	23,62	20,02	20,02
		1984	24,95	20,97	20,97	24,40	20,50	20,50
		1985	26,03	21,87	21,87	24,79	20,83	20,83
		1986	23,95	20,13	20,13	20,42	17,16	17,16
I_f		1980	17,13	14,52	14,52	16,50	13,98	13,98
		1981	19,02	16,12	16,12	19,47	16,50	16,50
	10 000 000 kWh	1982	24,31	20,60	20,60	23,33	19,77	19,77
	(2500 kW, 4000 h)	1983	22,93	19,43	19,43	22,70	19,24	19,24
		1984	22,99	19,32	19,32	23,42	19,68	19,68
		1985	24,10	20,25	20,25	21,88	18,39	18,39
		1986	22,18	18,64	18,64	19,27	16,19	16,19
I_g		1980	15,67	13,28	13,28	14,90	12,63	12,63
		1981	17,51	14,84	14,84	17,84	15,12	15,12
	24 000 000 kWh	1982	22,64	19,19	19,19	20,64	17,49	17,49
	(4000 kW, 6000 h)	1983	19,67	16,67	16,67	18,96	16,07	16,07
		1984	19,56	16,44	16,44	19,27	16,19	16,19
		1985	20,47	17,20	17,20	20,18	16,96	16,96
		1986	19,30	16,22	16,22	17,15	14,41	14,41

		NEDERLAND			IRELAND		
		cents/kWh			P/kWh		
		Noord-Brabant			Dublin		
January/Janvier		Price incl. all taxes Prix TTC	Price excl. VAT Prix hors TVA	Price excl. all taxes Prix hors taxes	Price incl. all taxes Prix TTC	Price excl. VAT Prix hors TVA	Price excl. all taxes Prix hors taxes
I_a	1980	21,31	18,06	18,06	5,320	5,320	5,320
	1981	21,43	18,16	18,16	7,835	7,835	7,835
30 000 kWh	1982	27,62	23,41	23,41	9,711	9,711	9,711
(30 kW, 1000 h)	1983	26,22	22,22	22,22	9,653	9,653	9,653
	1984	25,30	21,26	21,26	10,129	10,129	10,129
	1985	23,28	19,56	19,56	10,633	10,633	10,633
	1986	23,28	19,56	19,56	10,633	10,633	10,633
I_b	1980	20,27	17,18	17,18	5,320	5,320	5,320
	1981	22,99	19,48	19,48	7,835	7,835	7,835
50 000 kWh	1982	26,07	22,09	22,09	9,711	9,711	9,711
(50 kW, 1000 h)	1983	25,24	21,39	21,39	9,653	9,653	9,653
	1984	24,25	20,38	20,38	10,129	10,129	10,129
	1985	22,23	18,68	18,68	10,633	10,633	10,633
	1986	22,23	18,68	18,68	10,633	10,633	10,633
I_c	1980	16,64	14,10	14,10	4,236	4,236	4,236
	1981	17,03	14,43	14,43	6,314	6,314	6,314
160 000 kWh	1982	21,64	18,34	18,34	7,937	7,937	7,937
(100 kW, 1600 h)	1983	21,52	18,24	18,24	7,916	7,916	7,916
	1984	20,49	17,22	17,22	8,374	8,374	8,374
	1985	20,91	17,57	17,57	8,790	8,790	8,790
	1986	18,46	15,51	15,51	8,790	8,790	8,790
I_d	1980	14,24	12,07	12,07	3,299	3,299	3,299
	1981	14,58	12,36	12,36	4,938	4,938	4,938
1 250 000 kWh	1982	19,13	16,21	16,21	6,271	6,271	6,271
(500 kW, 2500 h)	1983	18,96	16,07	16,07	6,283	6,283	6,283
	1984	17,89	15,03	15,03	6,690	6,690	6,690
	1985	18,31	15,39	15,39	6,933	6,933	6,933
	1986	15,84	13,31	13,31	6,933	6,933	6,933
I_e	1980	12,77	10,82	10,82	2,852	2,852	2,852
	1981	13,10	11,10	11,10	4,327	4,327	4,327
2 000 000 kWh	1982	17,58	14,90	14,90	5,539	5,539	5,539
(500 kW, 4000 h)	1983	17,39	14,74	14,74	5,514	5,514	5,514
	1984	16,27	13,67	13,67	5,903	5,903	5,903
	1985	16,68	14,02	14,02	6,098	6,098	6,098
	1986	14,20	11,93	11,93	6,098	6,098	6,098
I_f	1980	12,72	10,78	10,78	2,847	2,847	2,847
	1981	13,04	11,05	11,05	4,238	4,238	4,238
10 000 000 kWh	1982	17,35	14,86	14,86	5,428	5,428	5,428
(2500 kW, 4000 h)	1983	17,33	14,69	14,69	5,406	5,406	5,406
	1984	16,21	13,62	13,62	5,785	5,785	5,785
	1985	16,64	13,98	13,98	5,932	5,932	5,932
	1986	14,14	11,88	11,88	5,932	5,932	5,932
I_g	1980	11,70	9,91	9,91	2,590	2,590	2,590
	1981	12,00	10,17	10,17	3,900	3,900	3,900
24 000 000 kWh	1982	16,46	13,95	13,95	5,012	5,012	5,012
(4000 kW, 6000 h)	1983	15,79	13,38	13,38	5,003	5,003	5,003
	1984	14,60	12,27	12,27	5,291	5,291	5,291
	1985	14,99	12,60	12,60	5,360	5,360	5,360
	1986	12,70	10,67	10,67	5,360	5,360	5,360

BELGIQUE/BELGIE — BFR/kWh — GRAND-DUCHE DE LUXEMBOURG — LFR/kWh

January/Janvier		Bruxelles			Luxembourg		
		Price incl. all taxes Prix TTC	Price excl. VAT Prix hors TVA	Price excl. all taxes Prix hors taxes	Price incl. all taxes Prix TTC	Price excl. VAT Prix hors TVA	Price excl. all taxes Prix hors taxes
D_a	1980	6,36	5,48	5,48	4,68	4,46	4,46
	1981	6,90	5,95	5,95	5,05	4,81	4,81
600 kWh	1982	7,57	6,47	6,47	6,16	5,87	5,87
	1983	8,72	7,45	7,45	6,83	6,50	6,50
	1984	9,23	7,89	7,89	7,94	7,49	7,49
	1985	8,86	7,57	7,57	8,09	7,63	7,63
	1986	9,17	7,84	7,84	8,17	7,71	7,71
D_b	1980	4,96	4,28	4,28	3,70	3,53	3,53
	1981	5,48	4,72	4,72	4,01	3,82	3,82
1 200 kWh	1982	6,05	5,17	5,17	4,57	4,35	4,35
	1983	6,97	5,96	5,96	5,08	4,84	4,84
	1984	7,30	6,24	6,24	5,94	5,60	5,60
	1985	7,64	6,53	6,53	6,04	5,70	5,70
	1986	7,80	6,67	6,67	6,10	5,75	5,75
D_c	1980	3,51	3,03	3,03	2,61	2,49	2,49
	1981	3,96	3,41	3,41	2,82	2,68	2,68
3 500 kWh	1982	4,41	3,77	3,77	3,30	3,14	3,14
(1 300 kWh night/nuit)	1983	5,10	4,36	4,36	3,57	3,40	3,40
	1984	5,27	4,50	4,50	4,15	3,92	3,92
	1985	5,53	4,73	4,73	4,23	3,99	3,99
	1986	5,48	4,68	4,68	4,07	3,84	3,84
D_d	1980	3,24	2,79	2,79	2,06	1,96	1,96
	1981	3,69	3,18	3,18	2,25	2,14	2,14
7 500 kWh	1982	4,12	3,52	3,52	3,03	2,88	2,88
(2 500 kWh night/nuit)	1983	4,76	4,07	4,07	3,47	3,31	3,31
	1984	4,90	4,19	4,19	4,07	3,84	3,84
	1985	5,10	4,36	4,36	4,15	3,91	3,91
	1986	5,00	4,27	4,27	3,98	3,75	3,75
D_e	1980	2,26	1,95	1,95	1,52	1,45	1,45
	1981	2,64	2,28	2,28	1,66	1,58	1,58
20 000 kWh	1982	3,00	2,56	2,56	2,12	2,02	2,02
(15000 kWh night/nuit)	1983	3,47	2,97	2,97	2,34	2,23	2,23
	1984	3,51	3,00	3,00	2,75	2,59	2,59
	1985	3,56	3,04	3,04	2,80	2,64	2,64
	1986	3,32	2,84	2,84	2,70	2,55	2,55

BELGIQUE/BELGIE — BFR/kWh

GRAND-DUCHE DE LUXEMBOURG — LFR/kWh

	January/Janvier		Bruxelles			Luxembourg 0 % *		
			Price incl. all taxes Prix TTC	Price excl. VAT Prix hors TVA	Price excl. all taxes Prix hors taxes	Price incl. all taxes Prix TTC	Price excl. VAT Prix hors TVA	Price excl. all taxes Prix hors taxes
I_a		1980	4,00	3,45	3,45	3,10	2,95	2,95
		1981	4,38	3,78	3,78	3,48	3,31	3,31
	30 000 kWh	1982	4,70	4,02	4,02	5,39	5,14	5,14
	(30 kW, 1000 h)	1983	5,51	4,71	4,71	6,13	5,84	5,84
		1984	5,81	4,97	4,97	7,33	6,91	6,91
		1985	5,90	5,04	5,04	7,43	7,01	7,01
		1986	6,10	5,21	5,21	7,49	7,07	7,07
I_b		1980	4,00	3,45	3,45	3,07	2,92	2,92
		1981	4,38	3,78	3,78	3,44	3,28	3,28
	50 000 kWh	1982	4,70	4,02	4,02	5,35	5,10	5,10
	(50 kW, 1000 h)	1983	5,51	4,71	4,71	6,08	5,79	5,79
		1984	5,81	4,91	4,91	7,28	6,87	6,87
		1985	5,92	5,02	5,02	7,40	6,98	6,98
		1986	6,06	5,18	5,18	7,45	7,03	7,03
I_c		1980	3,72	3,21	3,21	2,58	2,46	2,46
		1981	4,11	3,54	3,54	2,91	2,77	2,77
	160 000 kWh	1982	4,40	3,76	3,76	4,00	3,79	3,79
	(100 kW, 1600 h)	1983	5,16	4,41	4,41	4,52	4,31	4,31
		1984	5,42	4,63	4,63	5,42	5,11	5,11
		1985	5,35	4,57	4,57	5,51	5,20	5,20
		1986	5,49	4,69	4,69	5,52	5,21	5,21
I_d		1980	2,82	2,43	2,43	2,26	2,15	2,15
		1981	3,17	2,73	2,73	2,54	2,42	2,42
	1 250 000 kWh	1982	3,44	2,94	2,94	3,13	2,98	2,98
	(500 kW, 2500 h)	1983	4,02	3,44	3,44	3,56	3,39	3,39
		1984	4,15	3,55	3,55	4,26	4,02	4,02
		1985	4,31	3,68	3,68	4,34	4,09	4,09
		1986	4,22	3,61	3,61	4,31	4,07	4,07
I_e		1980	2,48	2,14	2,14	1,94	1,85	1,85
		1981	2,87	2,47	2,47	2,19	2,09	2,09
	2 000 000 kWh	1982	3,09	2,64	2,64	2,56	2,44	2,44
	(500 kW, 4000 h)	1983	3,63	3,10	3,10	2,91	2,77	2,77
		1984	3,71	3,17	3,17	3,49	3,29	3,29
		1985	3,84	3,28	3,28	3,55	3,35	3,35
		1986	3,70	3,16	3,16	3,51	3,31	3,31
I_f		1980	2,27	1,96	1,96	1,51	1,44	1,44
		1981	2,63	2,27	2,27	1,70	1,62	1,62
	10 000 000 kWh	1982	2,87	2,45	2,45	2,06	1,96	1,96
	(2500 kW, 4000 h)	1983	3,40	2,91	2,91	2,37	2,25	2,25
		1984	3,46	2,96	2,96	2,88	2,71	2,71
		1985	3,59	3,07	3,07	2,92	2,75	2,75
		1986	3,53	3,02	3,02	2,69	2,54	2,54
I_g		1980	1,89	1,63	1,63	1,61	1,53	1,53
		1981	2,25	1,94	1,94	1,40	1,33	1,33
	24 000 000 kWh	1982	2,47	2,11	2,11	1,68	1,60	1,60
	(4000 kW, 6000 h)	1983	2,93	2,50	2,50	1,93	1,84	1,84
		1984	2,95	2,52	2,52	2,35	2,22	2,22
		1985	3,08	2,64	2,64	2,39	2,25	2,25
		1986	3,05	2,61	2,61	2,23	2,10	2,10

* power reduction/effacement de puissance

GRAND-DUCHE DE LUXEMBOURG

LFR/kWh

	January/Janvier		Luxembourg 50 % *			Luxembourg 100 % *		
			Price incl. all taxes Prix TTC	Price excl. VAT Prix hors TVA	Price excl. all taxes Prix hors taxes	Price incl. all taxes Prix TTC	Price excl. VAT Prix hors TVA	Price excl. all taxes Prix hors taxes
I_a		1980	2,99	2,85	2,85	2,10	2,00	2,00
		1981	3,35	3,19	3,19	2,36	2,25	2,25
	30 000 kWh	1982	4,18	3,98	3,98	3,01	2,87	2,87
	(30 kW, 1000 h)	1983	4,74	4,52	4,52	3,42	3,26	3,26
		1984	5,67	5,35	5,35	4,08	3,85	3,85
		1985	5,78	5,45	5,45	4,12	3,89	3,89
		1986	5,77	5,44	5,44	4,12	3,89	3,89
I_b		1980	2,96	2,82	2,82	2,07	1,97	1,97
		1981	3,34	3,18	3,18	2,33	2,22	2,22
	50 000 kWh	1982	4,17	3,97	3,97	2,95	2,81	2,81
	(50 kW, 1000 h)	1983	4,74	4,51	4,51	3,35	3,19	3,19
		1984	5,67	5,35	5,35	4,01	3,78	3,78
		1985	5,75	5,42	5,42	4,09	3,86	3,86
		1986	5,78	5,45	5,45	4,05	3,82	3,82
I_c		1980	2,38	2,27	2,27	1,82	1,73	1,73
		1981	2,68	2,55	2,55	2,04	1,95	1,95
	160 000 kWh	1982	3,23	3,08	3,08	2,49	2,37	2,37
	(100 kW, 1600 h)	1983	3,67	3,50	3,50	2,82	2,69	2,69
		1984	4,40	4,15	4,15	3,39	3,20	3,20
		1985	4,47	4,22	4,22	3,45	3,25	3,25
		1986	4,45	4,20	4,20	3,40	3,21	3,21
I_d		1980	1,98	1,89	1,89	1,62	1,54	1,54
		1981	2,23	2,13	2,13	1,83	1,74	1,74
	1 250 000 kWh	1982	2,65	2,52	2,52	2,17	2,07	2,07
	(500 kW, 2500 h)	1983	3,01	2,87	2,87	2,47	2,35	2,35
		1984	3,62	3,40	3,40	2,96	2,79	2,79
		1985	3,67	3,46	3,46	3,01	2,84	2,84
		1986	3,64	3,43	3,43	2,96	2,79	2,79
I_e		1980	1,72	1,64	1,64	1,49	1,42	1,42
		1981	1,94	1,84	1,84	1,68	1,60	1,60
	2 000 000 kWh	1982	2,26	2,15	2,15	1,96	1,87	1,87
	(500 kW, 4000 h)	1983	2,57	2,45	2,45	2,23	2,13	2,13
		1984	3,08	2,91	2,91	2,67	2,52	2,52
		1985	3,14	2,96	2,96	2,71	2,56	2,56
		1986	3,08	2,91	2,91	2,66	2,51	2,51
I_f		1980	1,51	1,44	1,44	1,51	1,44	1,44
		1981	1,70	1,62	1,62	1,70	1,62	1,62
	10 000 000 kWh	1982	2,06	1,96	1,96	2,06	1,96	1,96
	(2500 kW, 4000 h)	1983	2,37	2,25	2,25	2,37	2,25	2,25
		1984	2,88	2,71	2,71	2,88	2,71	2,71
		1985	2,92	2,75	2,75	2,92	2,75	2,75
		1986	2,69	2,54	2,54	2,69	2,54	2,54
I_g		1980	1,61	1,53	1,53	1,61	1,53	1,53
		1981	1,40	1,33	1,33	1,40	1,33	1,33
	24 000 000 kWh	1982	1,68	1,60	1,60	1,68	1,60	1,60
	(4000 kW, 6000 h)	1983	1,93	1,84	1,84	1,93	1,84	1,84
		1984	2,35	2,22	2,22	2,22	2,22	2,22
		1985	2,39	2,25	2,25	2,39	2,25	2,25
		1986	2,23	2,10	2,10	2,23	2,10	2,10

* Power reduction/effacement de puissance

UNITED KINGDOM

P/kWh

January/Janvier		London			Glasgow		
		Price incl. all taxes Prix TTC	Price excl. VAT Prix hors TVA	Price excl. all taxes Prix hors taxes	Price incl. all taxes Prix TTC	Price excl. VAT Prix hors TVA	Price excl. all taxes Prix hors taxes
D_a	1980	6,467	6,467	6,467	4,812	4,812	4,812
	1981	8,753	8,753	8,753	6,420	6,420	6,420
600 kWh	1982	9,687	9,687	9,687	7,132	7,132	7,132
	1983	10,437	10,437	10,437	7,808	7,808	7,808
	1984	10,140	10,140	10,140	7,808	7,808	7,808
	1985	10,310	10,310	10,310	8,218	8,218	8,218
	1986	10,847	10,847	10,847	8,578	8,578	8,578
D_b	1980	4,983	4,983	4,983	3,846	3,846	3,846
	1981	6,636	6,636	6,636	5,075	5,075	5,075
1 200 kWh	1982	7,353	7,353	7,353	5,631	5,631	5,631
	1983	7,953	7,953	7,953	6,164	6,164	6,164
	1984	7,953	7,953	7,953	6,164	6,164	6,164
	1985	8,073	8,073	8,073	6,474	6,474	6,474
	1986	8,253	8,253	8,253	6,754	6,754	6,754
D_c	1980	3,489	3,489	3,489	2,912	2,912	2,912
	1981	4,548	4,548	4,548	3,805	3,805	3,805
3 500 kWh	1982	5,028	5,028	5,028	4,221	4,221	4,221
(1 300 kWh night/nuit)	1983	5,438	5,438	5,438	4,595	4,595	4,595
	1984	5,438	5,438	5,438	4,595	4,595	4,595
	1985	5,529	5,529	5,529	4,809	4,809	4,809
	1986	5,635	5,635	5,635	5,012	5,012	5,012
D_d	1980	3,225	3,225	3,225	2,723	2,723	2,723
	1981	4,193	4,193	4,193	3,529	3,529	3,529
7 500 kWh	1982	4,624	4,624	4,624	3,912	3,912	3,912
(2 500 kWh night/nuit)	1983	5,015	5,015	5,015	4,259	4,259	4,259
	1984	5,015	5,015	5,015	4,259	4,259	4,259
	1985	5,018	5,018	5,108	4,451	4,451	4,451
	1986	5,192	5,192	5,192	4,636	4,636	4,636
D_e	1980	1,990	1,990	1,990	1,810	1,810	1,810
	1981	2,628	2,628	2,628	2,367	2,367	2,367
20 000 kWh	1982	2,871	2,871	2,871	2,623	2,623	2,623
(15000 kWh night/nuit)	1983	3,068	3,068	3,068	2,816	2,816	2,816
	1984	3,068	3,068	3,068	2,816	2,816	2,816
	1985	3,128	3,128	3,128	2,938	2,938	2,938
	1986	3,222	3,222	3,222	3,057	3,057	3,057

UNITED KINGDOM

P/kWh

January/Janvier		Birmingham			Leeds		
		Price incl. all taxes Prix TTC	Price excl. VAT Prix hors TVA	Price excl. all taxes Prix hors taxes	Price incl. all taxes Prix TTC	Price excl. VAT Prix hors TVA	Price excl. all taxes Prix hors taxes
D_a	1980	5,720	5,720	5,720	5,613	5,613	5,613
	1981	7,387	7,387	7,387	5,257	5,257	5,257
600 kWh	1982	8,243	8,243	8,243	8,333	8,333	8,333
	1983	9,050	9,050	9,050	9,273	9,273	9,273
	1984	9,050	9,050	9,050	9,273	9,273	9,273
	1985	9,150	9,150	9,150	9,313	9,313	9,313
	1986	.	.	.	.	.	.
D_b	1980	4,470	4,470	4,470	4,427	4,427	4,427
	1981	5,803	5,803	5,803	5,723	5,723	5,723
1 200 kWh	1982	6,477	6,477	6,477	6,517	6,517	6,517
	1983	7,110	7,110	7,110	7,157	7,157	7,157
	1984	7,110	7,110	7,110	7,157	7,157	7,157
	1985	7,210	7,210	7,210	7,257	7,257	7,257
	1986	.	.	.	.	.	.
D_c	1980	3,156	3,156	3,156	3,195	3,195	3,195
	1981	4,136	4,136	4,136	4,133	4,133	4,133
3 500 kWh	1982	4,607	4,607	4,607	4,625	4,625	4,625
(1 300 kWh night/nuit)	1983	5,019	5,019	5,019	4,994	4,994	4,994
	1984	5,019	5,019	5,019	4,994	4,994	4,994
	1985	5,097	5,097	5,097	5,071	5,071	5,071
	1986	.	.	.	.	.	.
D_d	1980	.	.	.	.	.	.
	1981	.	.	.	.	.	.
7 500 kWh	1982	3,980	3,980	3,980	.	.	.
(2 500 kWh night/nuit)	1983	4,320	4,320	4,320	.	.	.
	1984	4,413	4,413	4,413	.	.	.
	1985	4,493	4,493	4,493	.	.	.
	1986	.	.	.	.	.	.
D_e	1980	1,870	1,870	1,870	1,950	1,950	1,950
	1981	2,498	2,498	2,498	2,510	2,510	2,510
20 000 kWh	1982	2,738	2,738	2,738	2,756	2,756	2,756
(15000 kWh night/nuit)	1983	2,929	2,929	2,929	2,923	2,923	2,923
	1984	2,929	2,929	2,929	2,923	2,923	2,923
	1985	2,984	2,984	2,984	2,978	2,978	2,978
	1986	.	.	.	.	.	.

UNITED KINGDOM

P/kWh

	January/Janvier		London			Glasgow		
			Price incl. all taxes Prix TTC	Price excl. VAT Prix hors TVA	Price excl. all taxes Prix hors taxes	Price incl. all taxes Prix TTC	Price excl. VAT Prix hors TVA	Price excl. all taxes Prix hors taxes
I_a		1980	-	-	-	-	-	-
		1981	5,220	5,220	5,220	5,012	5,102	5,102
	30 000 kWh	1982	5,756	5,756	5,756	5,581	5,581	5,581
	(30 kW, 1000 h)	1983	6,318	6,318	6,318	6,051	6,051	6,051
		1984	6,214	6,214	6,214	6,051	6,051	6,051
		1985	6,315	6,315	6,315	6,312	6,312	6,312
		1986	.	.	.	6,561	6,561	6,561
I_b		1980	4,448	4,448	4,448	3,967	3,867	3,867
		1981	5,220	5,220	5,220	4,949	4,949	4,949
	50 000 kWh	1982	5,712	5,712	5,712	5,413	5,413	5,413
	(50 kW, 1000 h)	1983	6,243	6,243	6,243	5,867	5,867	5,867
		1984	6,132	6,132	6,132	5,867	5,867	5,867
		1985	6,233	6,233	6,233	6,115	6,115	6,115
		1986	.	.	.	6,357	6,357	6,357
I_c		1980	3,777	3,777	3,777	3,525	3,525	3,525
		1981	4,681	4,681	4,681	4,528	4,528	4,528
	160 000 kWh	1982	5,313	5,313	5,313	5,017	5,017	5,017
	(100 kW, 1600 h)	1983	5,823	5,823	5,823	5,460	5,460	5,460
		1984	5,693	5,693	5,693	5,532	5,532	5,532
		1985	5,803	5,803	5,803	5,788	5,788	5,788
		1986	.	.	.	6,055	6,055	6,055
I_d		1980	3,178	3,178	3,178	2,800	2,800	2,800
		1981	3,891	3,891	3,891	3,688	3,688	3,688
	1 250 000 kWh	1982	4,326	4,326	4,326	4,029	4,029	4,029
	(500 kW, 2500 h)	1983	4,678	4,678	4,678	4,363	4,363	4,363
		1984	4,439	4,439	4,439	4,435	4,435	4,435
		1985	4,544	4,544	4,544	4,640	4,640	4,640
		1986	.	.	.	4,853	4,853	4,853
I_e		1980	2,783	2,783	2,783	2,447	2,447	2,447
		1981	3,346	3,346	3,346	3,234	3,234	3,234
	2 000 000 kWh	1982	3,771	3,771	3,771	3,495	3,495	3,495
	(500 kW, 4000 h)	1983	4,065	4,065	4,065	3,772	3,772	3,772
		1984	3,853	3,853	3,853	3,844	3,844	3,844
		1985	3,958	3,958	3,958	4,017	4,017	4,017
		1986	.	.	.	4,201	4,201	4,201
I_f		1980	2,783	2,783	2,783	2,399	2,399	2,399
		1981	3,346	3,346	3,346	2,987	2,987	2,987
	10 000 000 kWh	1982	3,764	3,764	3,764	3,217	3,217	3,217
	(2500 kW, 4000 h)	1983	4,056	4,056	4,056	3,461	3,461	3,461
		1984	3,844	3,844	3,844	3,532	3,532	3,532
		1985	3,949	3,949	3,949	3,692	3,692	3,692
		1986	.	.	.	3,859	3,859	3,859
I_g		1980	.	.	.	2,076	2,076	2,076
		1981	.	.	.	2,671	2,671	2,671
	24 000 000 kWh	1982	.	.	.	2,841	2,841	2,841
	(4000 kW, 6000 h)	1983	.	.	.	3,053	3,053	3,053
		1984	.	.	.	3,124	3,124	3,124
		1985	.	.	.	3,265	3,265	3,265
		1986	.	.	.	3,395	3,395	3,395

UNITED KINGDOM

	January/Janvier		Birmingham			Leeds		
			Price incl. all taxes Prix TTC	Price excl. VAT Prix hors TVA	Price excl. all taxes Prix hors taxes	Price incl. all taxes Prix TTC	Price excl. VAT Prix hors TVA	Price excl. all taxes Prix hors taxes
I_a		1980	-	-	-	-	-	-
		1981	5,253	5,253	5,253	6,557	6,557	6,557
	30 000 kWh	1982	5,855	5,855	5,855	5,249	5,249	5,249
	(30 kW, 1000 h)	1983	5,461	5,461	5,461	5,640	5,640	5,640
		1984	5,461	5,461	5,461	5,566	5,566	5,566
		1985	5,566	5,566	5,566	5,671	5,671	5,671
		1986	.	.	.	.	.	.
I_b		1980	4,360	4,360	4,360	4,133	4,133	4,133
		1981	5,303	5,303	5,303	4,975	4,975	4,975
	50 000 kWh	1982	5,854	5,854	5,854	5,818	5,818	5,818
	(50 kW, 1000 h)	1983	6,355	6,355	6,355	6,350	6,350	6,350
		1984	5,345	5,345	5,345	6,312	6,312	6,312
		1985	5,448	5,448	5,448	6,422	6,422	6,422
		1986	.	.	.	.	.	.
I_c		1980	3,629	3,629	3,629	3,451	3,451	3,451
		1981	4,434	4,434	4,434	4,196	4,196	4,196
	160 000 kWh	1982	5,108	5,108	5,108	4,924	4,924	4,924
	(100 kW, 1600 h)	1983	5,627	5,627	5,627	5,319	5,319	5,319
		1984	5,476	5,476	5,476	5,247	5,247	5,247
		1985	5,586	5,586	5,586	5,357	5,357	5,357
		1986	.	.	.	5,611	5,611	5,611
I_d		1980	2,800	2,800	2,800	2,863	2,863	2,863
		1981	3,514	3,514	3,514	3,482	3,482	3,482
	1 250 000 kWh	1982	4,047	4,047	4,047	4,034	4,034	4,034
	(500 kW, 2500 h)	1983	4,360	4,360	4,360	4,341	4,341	4,341
		1984	4,303	4,303	4,303	4,231	4,231	4,231
		1985	4,408	4,408	4,408	4,336	4,336	4,336
		1986	.	.	.	4,521	4,521	4,521
I_e		1980	2,447	2,447	2,447	2,578	2,578	2,578
		1981	3,151	3,151	3,151	3,135	3,135	3,135
	2 000 000 kWh	1982	3,626	3,626	3,626	3,633	3,633	3,633
	(500 kW, 4000 h)	1983	3,870	3,870	3,870	3,888	3,888	3,888
		1984	3,817	3,817	3,817	3,784	3,784	3,784
		1985	3,922	3,922	3,922	3,889	3,889	3,889
		1986	.	.	.	4,044	4,044	4,044
I_f		1980	2,399	2,399	2,399	2,562	2,562	2,562
		1981	3,122	3,122	3,122	3,116	3,116	3,116
	10 000 000 kWh	1982	3,592	3,592	3,592	3,614	3,614	3,614
	(2500 kW, 4000 h)	1983	3,837	3,837	3,837	3,864	3,864	3,864
		1984	3,783	3,783	3,783	3,760	3,760	3,760
		1985	3,888	3,888	3,888	3,865	3,865	3,865
		1986	.	.	.	4,019	4,019	4,019
I_g		1980	.	.	.	2,357	2,357	2,357
		1981	.	.	.	2,856	2,856	2,856
	24 000 000 kWh	1982	3,191	3,191	3,191	3,311	3,311	3,311
	(4000 kW, 6000 h)	1983	3,443	3,443	3,443	3,526	3,526	3,526
		1984	3,285	3,285	3,285	3,431	3,431	3,431
		1985	3,490	3,490	3,490	3,536	3,536	3,536
		1986	.	.	.	3,669	3,669	3,669

DANMARK

øre/kWh

January/Janvier		København			Nord Sjaeland		
		Price incl. all taxes Prix TTC	Price excl. VAT Prix hors TVA	Price excl. all taxes Prix hors taxes	Price incl. all taxes Prix TTC	Price excl. VAT Prix hors TVA	Price excl. all taxes Prix hors taxes
D_a	1980	66,0	54,9	46,9	92,31	76,77	68,77
	1981	87,6	71,8	59,3	129,24	105,93	93,43
600 kWh	1982	88,8	72,8	60,3	154,74	126,83	114,33
	1983	109,6	89,8	74,3	149,73	122,73	107,23
	1984	98,8	81,0	65,5	154,82	126,90	111,40
	1985	111,1	91,0	75,5	158,97	130,30	114,80
	1986	105,5	86,5	67,5	164,82	135,10	116,10
D_b	1980	58,8	48,9	40,9	67,26	55,93	47,93
	1981	80,3	65,8	53,3	96,71	79,27	66,77
1 200 kWh	1982	81,5	66,8	54,3	116,10	95,17	82,67
	1983	99,7	81,7	66,2	110,10	91,07	75,57
	1984	89,0	73,0	57,5	109,07	89,40	73,90
	1985	101,1	82,9	67,4	113,22	92,80	77,30
	1986	95,5	78,3	59,3	116,02	95,10	76,10
D_c	1980	49,9	41,5	33,5	50,80	42,24	34,24
	1981	69,9	57,3	44,8	75,33	61,74	49,24
3 500 kWh	1982	70,9	58,1	45,6	90,72	74,36	61,86
(1 300 kWh night/nuit)	1983	88,7	72,7	57,2	85,71	70,26	54,76
	1984	78,7	64,5	49,0	79,01	64,76	49,26
	1985	90,0	73,7	58,2	83,16	68,16	52,66
	1986	84,6	69,3	50,3	83,95	68,81	49,81
D_d	1980	47,7	39,7	31,7	.	.	.
	1981	67,6	55,4	42,9	.	.	.
7 500 kWh	1982	68,8	56,4	43,9	.	.	.
(2 500 kWh night/nuit)	1983	84,7	69,4	53,9	78,65	64,47	48,97
	1984	74,6	61,1	45,6	70,64	57,90	42,40
	1985	85,9	70,4	54,9	74,79	61,30	45,80
	1986	80,5	66,0	47,0	75,03	61,50	42,50
D_e	1980	38,0	31,6	23,6	43,71	36,35	28,35
	1981	56,0	45,9	33,4	66,12	54,20	41,70
20 000 kWh	1982	57,1	46,8	34,3	79,79	65,40	52,90
(15000 kWh night/nuit)	1983	69,7	57,1	41,6	74,78	61,30	45,80
	1984	60,4	49,5	34,0	66,06	54,15	38,65
	1985	70,9	58,1	42,6	61,71	50,58	35,08
	1986	65,6	53,8	34,8	60,51	49,60	30,60

9)

DANEMARK

Øre/kWh

	January/Janvier		København			Nord Sjaelland		
			Price incl. all taxes Prix TTC	Price excl. VAT Prix hors TVA	Price excl. all taxes Prix hors taxes	Price incl. all taxes Prix TTC	Price excl. VAT Prix hors TVA	Price excl. all taxes Prix hors taxes
I_a		1980	51,8	43,1	35,1	43,21	35,93	27,93
		1981	73,2	60,0	47,5	65,47	53,67	41,17
	30 000 kWh	1982	74,5	61,0	48,5	79,02	64,77	52,27
	(30 kW, 1000 h)	1983	90,1	73,9	58,4	74,01	60,67	45,17
		1984	79,4	65,1	49,6	65,15	53,40	37,90
		1985	91,5	75,0	59,5	69,30	56,80	41,30
		1986	86,0	70,5	51,5	69,17	56,70	37,70
I_b		1980	51,7	43,0	35,0	42,81	35,60	27,60
		1981	73,1	59,9	47,4	64,95	53,24	40,74
	50 000 kWh	1982	74,4	60,9	48,4	78,40	64,26	51,76
	(50 kW, 1000 h)	1983	89,9	73,7	58,2	73,39	60,16	44,66
		1984	79,2	64,9	49,4	64,42	52,80	37,30
		1985	91,4	74,9	59,4	68,56	56,20	40,70
		1986	85,9	70,4	51,4	68,39	56,06	37,06
I_c		1980	51,7	43,0	35,0	42,40	35,26	27,26
		1981	73,1	59,9	47,4	64,42	52,80	40,30
	160 000 kWh	1982	74,3	60,9	48,4	77,76	63,74	51,24
	(100 kW, 1600 h)	1983	89,9	73,7	58,2	72,76	59,64	44,14
		1984	79,2	64,9	49,4	63,66	52,18	36,68
		1985	91,4	74,9	59,4	67,81	55,58	40,08
		1986	85,8	70,3	51,3	67,59	55,40	36,40
I_d		1980	51,6	42,9	34,9	40,57	33,74	25,74
		1981	72,8	59,7	47,2	61,51	50,42	37,92
	1 250 000 kWh	1982	74,1	60,7	48,2	72,05	59,06	46,56
	(500 kW, 2500 h)	1983	89,5	73,3	57,8	69,61	57,06	41,56
		1984	79,0	64,8	49,3	63,01	51,65	36,15
		1985	90,9	74,5	59,0	65,12	53,38	37,88
		1986	85,3	69,9	50,9	64,36	52,75	33,75
I_e		1980	48,6	40,4	32,4	37,04	30,80	22,80
		1981	68,1	55,8	43,3	56,15	46,02	33,52
	2 000 000 kWh	1982	69,3	56,8	44,3	66,96	54,89	42,39
	(500 kW, 4000 h)	1983	83,7	68,6	53,1	64,52	52,89	37,39
		1984	72,9	59,8	44,3	55,28	45,31	29,81
		1985	85,1	69,7	54,2	57,93	47,48	31,98
		1986	79,8	65,4	46,4	59,23	48,55	29,55
I_f		1980	43,7	36,3	28,3	36,63	30,46	22,46
		1981	62,7	51,4	38,9	55,72	45,67	33,17
	10 000 000 kWh	1982	64,1	52,5	40,0	65,71	53,86	41,36
	(2500 kW, 4000 h)	1983	78,5	64,3	48,8	64,12	52,56	37,06
		1984	68,2	55,9	40,4	54,55	44,71	29,21
		1985	79,8	65,4	49,9	57,07	46,78	31,28
		1986	74,3	60,9	41,9	58,34	47,82	28,82
I_g		1980	42,2	35,1	27,1	.	.	.
		1981	61,1	50,1	37,6	.	.	.
	24 000 000 kWh	1982	62,5	51,2	38,7	.	.	.
	(4000 kW, 6000 h)	1983	76,2	62,4	46,9	.	.	.
		1984	65,9	54,0	38,5	.	.	.
		1985	77,5	63,5	48,0	.	.	.
		1986	72,0	59,0	40,0	55,45	45,45	26,45

ELLAS — DRA/kWh

January/Janvier		Athinai		
		Price incl. all taxes Prix TTC	Price excl. VAT Prix hors TVA	Price excl. all taxes Prix hors taxes
D_a	1980	4,82	4,46	4,46
	1981	5,70	5,28	5,28
600 kWh	1982	6,17	5,61	5,61
	1983	6,95	6,31	6,31
	1984	7,02	6,39	6,31
	1985	7,87	7,15	7,07
	1986	11,51	10,46	10,34
D_b	1980	4,82	4,46	4,46
	1981	5,70	5,28	5,28
1 200 kWh	1982	6,17	5,61	5,61
	1983	6,95	6,31	6,31
	1984	8,10	7,37	7,28
	1985	9,07	8,25	8,15
	1986	11,09	10,08	9,96
D_c	1980	4,13	3,82	3,82
	1981	4,76	4,41	4,41
3 500 kWh	1982	5,15	4,68	4,68
(1 300 kWh night/nuit)	1983	5,79	5,26	5,26
	1984	6,96	6,33	6,25
	1985	7,88	7,16	7,08
	1986	9,55	8,68	8,58
D_d	1980	4,32	4,00	4,00
	1981	5,01	4,64	4,64
7 500 kWh	1982	5,41	4,92	4,92
(2 500 kWh night/nuit)	1983	6,09	5,54	5,54
	1984	7,41	6,74	6,66
	1985	8,36	7,60	7,51
	1986	9,97	9,07	8,96
D_e	1980	3,14	2,91	2,91
	1981	3,51	3,25	3,25
20 000 kWh	1982	3,80	3,45	3,45
(15000 kWh night/nuit)	1983	4,27	3,88	3,88
	1984	5,42	4,93	4,87
	1985	6,20	5,64	5,57
	1986	7,36	6,69	6,61

ESPAÑA — PTA/kWh

January/Janvier		Madrid		
		Price incl. all taxes Prix TTC	Price excl. VAT Prix hors TVA	Price excl. all taxes Prix hors taxes
D_a	1980	5,61	5,61	5,44
	1981	.	.	.
600 kWh	1982	9,90	9,90	9,38
	1983	11,23	11,23	10,63
	1984	12,81	12,81	11,61
	1985	13,80	13,80	12,65
	1986	15,38	13,73	13,73
D_b	1980	5,61	5,61	5,44
	1981	.	.	.
1 200 kWh	1982	9,90	9,90	9,38
	1983	11,23	11,23	10,63
	1984	12,81	12,81	11,61
	1985	13,80	13,80	12,65
	1986	15,38	13,73	13,73
D_c	1980	.	.	.
	1981	.	.	.
3 500 kWh	1982	.	.	.
(1 300 kWh night/nuit)	1983	.	.	.
	1984	10,40	10,40	9,38
	1985	10,95	10,95	9,97
	1986	12,08	10,79	10,79
D_d	1980	3,90	3,90	3,76
	1981	.	.	.
7 500 kWh	1982	7,37	7,37	6,88
(2 500 kWh night/nuit)	1983	8,37	8,37	7,81
	1984	9,30	9,30	8,36
	1985	9,80	9,80	8,89
	1986	10,72	9,57	9,57
D_e	1980	.	.	.
	1981	.	.	.
20 000 kWh	1982	.	.	.
(15000 kWh night/nuit)	1983	.	.	.
	1984	7,92	7,92	7,08
	1985	8,01	8,01	7,21
	1986	8,71	7,78	7,78

		ELLAS			ESPAÑA		
		DRA/kWh			PTA/kWh		
		Athinai			Madrid		
January/Janvier		Price incl. all taxes Prix TTC	Price excl. VAT Prix hors TVA	Price excl. all taxes Prix hors taxes	Price incl. all taxes Prix TTC	Price excl. VAT Prix hors TVA	Price excl. all taxes Prix hors taxes
I_a	1980	5,01	5,01	5,01	4,97	4,97	4,66
	1981	5,32	5,32	5,32	.	.	.
30 000 kWh	1982	8,41	8,41	8,41	.	.	.
(30 kW, 1000 h)	1983	9,46	9,46	9,46	.	.	.
	1984	9,38	9,38	9,38	.	.	.
	1985	10,88	10,88	10,88	12,50	12,50	11,43
	1986	12,63	12,63	12,63	13,85	12,37	12,37
I_b	1980	4,71	4,71	4,71	3,73	3,73	3,49
	1981	4,97	4,97	4,97	.	.	.
50 000 kWh	1982	8,31	8,31	8,31	.	.	.
(50 kW, 1000 h)	1983	9,34	9,34	9,34	.	.	.
	1984	9,35	9,35	9,35	.	.	.
	1985	10,84	10,84	10,84	11,00	11,00	10,02
	1986	12,59	12,59	12,59	12,91	11,53	11,53
I_c	1980	4,03	4,03	4,03	3,09	3,09	2,89
	1981	4,14	4,14	4,14	.	.	.
160 000 kWh	1982	5,88	5,88	5,88	6,17	6,17	5,56
(100 kW, 1600 h)	1983	6,61	6,61	6,61	7,10	7,10	6,40
	1984	8,64	8,64	8,64	9,21	9,21	8,27
	1985	10,02	10,02	10,02	10,35	10,35	9,41
	1986	11,63	11,63	11,63	11,80	10,54	10,54
I_d	1980	3,45	3,45	3,45	2,95	2,95	2,76
	1981	3,48	3,48	3,48	.	.	.
1 250 000 kWh	1982	4,96	4,96	4,96	5,87	5,87	5,28
(500 kW, 2500 h)	1983	5,59	5,59	5,59	6,72	6,72	6,04
	1984	7,20	7,20	7,20	8,50	8,50	7,62
	1985	8,32	8,32	8,32	9,59	9,59	8,69
	1986	9,95	9,95	9,95	10,93	9,76	9,76
I_e	1980	3,09	3,09	3,09	2,74	2,74	2,57
	1981	3,07	3,07	3,07	.	.	.
2 000 000 kWh	1982	4,40	4,40	4,40	5,56	5,56	4,99
(500 kW, 4000 h)	1983	4,95	4,95	4,95	6,33	6,33	5,68
	1984	6,69	6,69	6,69	7,70	7,70	6,87
	1985	7,75	7,75	7,75	8,65	8,65	7,81
	1986	9,00	9,00	9,00	9,53	8,51	8,51
I_f	1980	2,95	2,95	2,95	2,74	2,74	2,57
	1981	2,92	2,92	2,92	.	.	.
10 000 000 kWh	1982	4,20	4,20	4,20	5,08	5,08	4,54
(2500 kW, 4000 h)	1983	4,73	4,73	4,73	5,78	5,78	5,16
	1984	6,69	6,69	6,69	7,33	7,33	6,53
	1985	7,75	7,75	7,75	8,23	8,23	7,41
	1986	9,00	9,00	9,00	9,03	8,06	8,06
I_g	1980	2,94	2,94	2,94	2,59	2,59	2,43
	1981	2,88	2,88	2,88	.	.	.
24 000 000 kWh	1982	4,14	4,14	4,14	4,80	4,80	4,28
(4000 kW, 6000 h)	1983	4,66	4,66	4,66	5,45	5,45	4,85
	1984	5,70	5,70	5,70	6,66	6,66	5,91
	1985	6,57	6,57	6,57	7,46	7,46	6,69
	1986	7,62	7,62	7,62	8,23	7,35	7,35

PORTUGAL

ESC/kWh

January/Janvier		Lisboa					
		Price incl. all taxes Prix TTC	Price excl. VAT Prix hors TVA	Price excl. all taxes Prix hors taxes	Price incl. all taxes Prix TTC	Price excl. VAT Prix hors TVA	Price excl. all taxes Prix hors taxes
D_a	1980	2,943	2,943	2,893			
	1981	4,340	4,340	4,290			
600 kWh	1982	6,200	6,200	6,150			
	1983	8,400	8,400	8,250			
	1984	9,050	9,050	8,900			
	1985	12,754	12,754	12,604			
	1986	14,537	13,460	13,310			
D_b	1980	3,289	3,289	3,264			
	1981	4,835	4,835	4,810			
1 200 kWh	1982	6,875	6,875	6,850			
	1983	9,205	9,205	9,130			
	1984	9,955	9,955	9,780			
	1985	14,288	14,288	14,213			
	1986	16,292	15,085	15,010			
D_c	1980	2,886	2,886	2,877			
	1981	4,327	4,327	4,318			
3 500 kWh	1982	6,139	6,139	6,130			
(1 300 kWh night/nuit)	1983	8,135	8,135	8,109			
	1984	8,785	8,785	8,759			
	1985	12,704	12,704	12,678			
	1986	14,494	13,420	13,394			
D_d	1980	2,484	2,484	2,480			
	1981	3,760	3,760	3,756			
7 500 kWh	1982	5,382	5,382	5,378			
(2 500 kWh night/nuit)	1983	7,172	7,172	7,160			
	1984	7,822	7,822	7,810			
	1985	11,155	11,155	11,143			
	1986	12,729	12,786	11,774			
D_e	1980	1,992	1,992	1,990			
	1981	3,191	3,191	3,189			
20 000 kWh	1982	4,550	4,550	4,548			
(15000 kWh night/nuit)	1983	6,038	6,038	6,033			
	1984	6,688	6,688	6,683			
	1985	9,606	9,606	9,601			
	1986	10,959	10,147	10,142			

PORTUGAL

ESC/kWh

	January/Janvier		Lisboa					
			Price incl. all taxes Prix TTC	Price excl. VAT Prix hors TVA	Price excl. all taxes Prix hors taxes	Price incl. all taxes Prix TTC	Price excl. VAT Prix hors TVA	Price excl. all taxes Prix hors taxes
I_a		1980	3,123	3,123	3,118			
		1981	5,094	5,094	5,089			
	30 000 kWh	1982	7,272	7,272	7,267			
	(30 kW, 1000 h)	1983	9,732	9,732	9,717			
		1984	10,382	10,382	10,367			
		1985	15,121	15,121	15,106			
		1986	18,622	17,243	17,228			
I_b		1980	2,953	2,953	2,950			
		1981	4,345	4,345	4,342			
	50 000 kWh	1982	6,113	6,113	6,110			
	(50 kW, 1000 h)	1983	8,205	8,205	8,196			
		1984	8,755	8,755	8,746			
		1985	13,739	13,739	13,730			
		1986	16,923	15,670	15,661			
I_c		1980	2,456	2,456	2,455			
		1981	3,716	3,716	3,715			
	160 000 kWh	1982	5,292	5,292	5,291			
	(100 kW, 1600 h)	1983	7,113	7,113	7,110			
		1984	7,663	7,663	7,660			
		1985	11,567	11,567	11,564			
		1986	14,251	13,195	13,192			
I_d		1980	2,140	2,140	2,140			
		1981	3,310	3,310	3,310			
	1 250 000 kWh	1982	4,754	4,754	4,754			
	(500 kW, 2500 h)	1983	6,396	6,396	6,396			
		1984	6,946	6,946	6,946			
		1985	10,169	10,169	10,169			
		1986	12,529	11,601	11,601			
I_e		1980	1,913	1,913	1,913			
		1981	3,040	3,040	3,040			
	2 000 000 kWh	1982	4,398	4,398	4,398			
	(500 kW, 4000 h)	1983	5,921	5,921	5,921			
		1984	6,320	6,320	6,320			
		1985	9,246	9,246	9,246			
		1986	11,393	10,549	10,549			
I_f		1980	1,913	1,913	1,913			
		1981	3,040	3,040	3,040			
	10 000 000 kWh	1982	4,398	4,398	4,398			
	(2500 kW, 4000 h)	1983	5,921	5,921	5,921			
		1984	6,320	6,320	6,320			
		1985	9,246	9,246	9,246			
		1986	11,393	10,549	10,549			
I_g		1980	1,716	1,716	1,716			
		1981	2,837	2,837	2,837			
	24 000 000 kWh	1982	4,123	4,123	4,123			
	(4000 kW, 6000 h)	1983	5,554	5,554	5,554			
		1984	5,566	5,566	5,566			
		1985	8,561	8,561	8,561			
		1986	10,543	9,762	9,762			

CONVERSION TABLE FOR THE PURCHASING POWER STANDARD (PPS)

TABLE DE CONVERSION DU STANDARD DE POUVOIR D'ACHAT (SPA)

1 PPS =	BR DEUTSCHL. DM	FRANCE FF	ITALIA LIT	NEDER-LAND HFL	BELGIË BELGIQUE BFR	LUXEM-BOURG LFR	UNITED KINGDOM UK£	IRELAND IR£	DANMARK DKR	ELLAS DRA	ESPAÑA PTA	PORTUGAL ESC	= 1 SPA
1980 (1)	2,65	5,85	847	2,82	40,9	38,6	0,543	0,515	8,29	39,5	71,0	35,3 (2)	
1981	2,49	5,92	907	2,69	38,8	37,8	0,549	0,550	8,25	42,9	73,0	37,2 (2)	
1982	2,36	6,05	970	2,59	37,7	37,8	0,536	0,579	8,33	48,6	75,3	41,2 (2)	
1983	2,26	6,15	1036	2,45	37,3	38,1	0,523	0,594	8,36	54,1	82,5	47,4 (2)	
1984	2,18	6,24	1084	2,37	37,1	37,6	0,516	0,598	8,36	61,3	82,5	56,3 (2)	
1985 (2)	2,12	6,26	1115	2,31	37,1	38,3	0,518	0,603	8,27	68,3	85,3	65,2	
1986 (2)	2,07	6,24	1142	2,24	37,2	38,2	0,521	0,609	8,11	75,8	90,3	74,6	

(1) base year/année de base
(2) provisional/provisoire

CONVERSION TABLE FOR THE EUROPEAN CURRENCY UNIT (ECU)

TABLE DE CONVERSION DE L'UNITE MONETAIRE EUROPEENNE (ECU)

1 ECU =	BR DEUTSCHL. DM	FRANCE FF	ITALIA LIT	NEDER-LAND HFL	BELGIË BELGIQUE BFR	LUXEM-BOURG LFR	UNITED KINGDOM UK£	IRELAND IR£	DANMARK DKR	ELLAS DRA	ESPAÑA PTA	PORTUGAL ESC	= 1 ECU
1980	2,4885	5,8302	1161,3	2,7474	40,4260	40,4260	0,6373	0,6734	7,7713	55,5901	95,4266	71,9021	
1981	2,5806	2,9657	1225,8	2,8047	41,4920	41,4920	0,5346	0,6919	7,9395	60,8793	103,5850	69,0901	
1982	2,4442	6,2102	1308,9	2,6790	41,6068	41,6068	0,5653	0,6922	7,9886	62,6924	104,8940	70,8809	
1983	2,2967	6,5095	1320,9	2,5287	45,0461	45,0461	0,6103	0,6909	8,0884	77,5595	121,9240	89,7922	
1984	2,2580	6,9034	1371,2	2,5379	46,0675	46,0675	0,5706	0,7288	8,1769	82,3314	128,4850	109,2830	
1985	2,2242	6,8083	1367,8	2,5126	44,5188	44,5188	0,6220	0,7140	7,9483	90,6900	122,9570	120,8140	
1986	2,1777	6,6816	1484,5	2,4543	44,5101	44,5101	0,6258	0,7154	7,9826	132,4240	136,2850	140,5430	

GDP PRICE INDICES

INDICES DE PRIX DU PIB

1980 = 100

	BR DEUTSCHL.	FRANCE	ITALIA	NEDER-LAND	BELGIË BELGIQUE	LUXEM-BOURG	UNITED KINGDOM	IRELAND	DANMARK	ELLAS	ESPAÑA	PORTUGAL
1981	104,0	111,8	118,3	105,5	105,0	108,1	111,8	118,2	110,1	120,0	113,6	116,5 (1)
1982	108,6	125,9	139,4	111,9	112,4	118,8	120,2	137,0	122,5	149,7	129,1	141,9 (1)
1983	112,2	137,9	160,3	113,7	119,6	128,6	126,2	151,3	132,4	179,5	144,4	176,1 (1)
1984	114,3	148,0	177,5	116,7	125,9	137,2	131,7	161,2	140,0	215,2	161,2	221,1 (1)
1985 (1)	116,7	156,0	192,0	119,4	132,3	138,9	139,0	171,0	145,6	252,0	175,2	267,7
1986 (1)	118,9	162,0	204,7	120,6	138,1	145,9	145,8	179,6	148,7	291,5	193,0	307,8

(1) provisional/provisoire

Deflated PPS/100 kWh

SPA déflaté/100 kWh

E U R 1 2

January/janvier		DÜSSEL-DORF	PARIS	MILANO	ROTTER-DAM	BRU-XELLES	LUXEM-BOURG	LONDON	DUBLIN	KOBEN-HAVN	ATHINAI	MADRID	LISBOA
D_a	1980	13,20	13,48	5,95	11,30	15,55	12,12	11,91	10,16	7,96	12,20	7,90	8,34
	1981	13,99	12,56	6,14	11,62	16,07	12,10	14,42	11,75	9,60	12,03	.	10,55
	1982	13,99	12,73	6,57	12,42	16,47	13,28	14,84	12,58	8,74	10,43	10,80	12,38
600 kWh	1983	14,31	12,67	7,21	12,77	17,83	13,76	15,23	12,00	9,99	9,80	10,95	13,51
	1984	14,95	12,50	6,81	12,40	17,92	14,99	14,18	12,41	8,51	8,26	11,19	11,60
	1985	14,64	11,42	6,93	12,37	16,37	15,09	13,66	12,55	9,20	7,91	11,09	13,50
	1986	15,53	11,35	6,85	11,83	16,24	14,52	13,70	12,65	8,56	10,00	11,22	13,38
D_b	1980	9,79	9,87	6,64	9,33	12,13	9,59	9,18	8,41	7,09	12,20	7,90	9,32
	1981	10,71	9,26	7,06	9,76	12,76	9,61	10,93	9,98	8,80	12,03	.	11,76
	1982	10,78	9,39	7,39	10,62	13,16	9,85	11,27	10,81	8,03	10,43	10,80	13,73
1 200 kWh	1983	10,93	9,71	8,38	10,89	14,25	10,23	11,61	10,30	9,08	9,80	10,95	14,81
	1984	11,35	9,70	8,61	10,50	14,18	11,22	11,12	10,63	7,67	9,53	11,19	12,75
	1985	11,15	9,63	8,63	10,51	14,12	11,27	10,70	10,73	8,38	9,11	11,09	15,12
	1986	11,67	9,81	8,45	9,99	13,81	10,84	10,42	10,78	7,75	9,63	11,22	14,99
D_c	1980	6,91	7,96	11,03	7,40	8,58	6,76	6,43	6,27	6,02	10,46	.	8,18
	1981	7,94	7,48	11,39	8,00	9,22	6,76	7,49	7,70	7,66	10,04	.	10,52
	1982	8,04	7,68	11,14	9,00	9,59	7,11	7,70	8,38	6,98	8,71	.	12,26
3 500 kWh	1983	8,21	8,03	12,70	9,23	10,43	7,19	7,94	7,64	8,08	8,17	.	13,09
(1300 kWh night/nuit)	1984	8,50	8,45	15,40	8,82	10,23	7,84	7,60	7,80	6,78	8,19	9,09	11,26
	1985	8,33	8,47	15,16	8,87	10,22	7,89	7,33	7,85	7,46	7,92	8,80	13,44
	1986	8,71	8,43	14,72	8,37	9,70	7,23	7,12	7,77	6,86	8,29	8,82	13,34
D_d	1980	.	7,31	10,15	6,95	7,92	5,34	5,94	6,47	5,75	10,94	5,49	7,04
	1981	.	6,89	10,51	7,54	8,59	5,39	6,91	7,56	7,41	10,57	.	9,14
	1982	.	7,10	10,38	8,52	8,96	6,61	7,08	8,85	6,77	9,15	8,04	10,74
7 500 kWh	1983	.	7,43	11,13	8,55	9,73	6,99	7,32	7,48	7,72	8,59	8,16	11,54
(2500 kWh night/nuit)	1984	.	7,87	14,39	8,33	9,52	7,69	7,01	7,64	6,43	8,72	8,13	10,02
	1985	.	7,90	14,22	8,39	9,43	7,74	6,77	7,69	7,12	8,40	7,88	11,80
	1986	7,34	7,89	13,83	7,89	8,85	7,07	6,56	7,60	6,53	8,66	7,82	11,72
D_e	1980	3,82	5,81		5,54	5,53	3,94	3,66	4,79	4,58	7,95	.	5,64
	1981	4,34	5,46		6,17	6,15	3,98	4,33	6,08	6,14	7,41	.	7,76
	1982	4,56	5,67		7,22	6,53	4,57	4,40	6,59	5,62	6,43	.	9,08
20 000 kWh	1983	4,48	5,94		7,44	7,09	4,71	4,48	5,58	6,35	6,07	.	9,71
(15000 kWh night/nuit)	1984	4,64	6,28		7,03	6,82	5,19	4,29	5,60	5,20	6,38	6,92	8,57
	1985	4,55	6,31		7,12	6,58	5,22	4,14	5,62	5,87	6,23	6,44	10,17
	1986	4,81	6,33		6,63	5,88	4,80	4,07	5,45	5,32	6,39	6,36	10,09

ECU/100 kWh

E U R 1 2

January/janvier		DÜSSEL-DORF	PARIS	MILANO	ROTTER-DAM	BRU-XELLES	LUXEM-BOURG	LONDON	DUBLIN	KOBEN-HAVN	ATHINAI	MADRID	LISBOA
D_a	1980	14,06	13,53	4,34	11,60	15,73	11,58	10,15	7,77	8,49	8,67	5,88	4,09
	1981	14,94	13,77	5,02	12,33	16,63	12,17	16,37	10,34	11,03	9,36	.	6,28
	1982	16,47	15,10	5,93	14,62	18,19	14,81	17,14	12,82	11,12	9,84	9,44	8,75
600 kWh	1983	18,52	15,70	7,42	16,19	19,36	15,16	17,10	13,53	13,55	8,96	9,21	9,41
	1984	20,06	15,68	7,47	16,08	20,04	17,24	17,77	14,13	12,10	8,53	9,97	7,04
	1985	20,36	15,31	8,24	16,58	19,90	17,14	16,58	15,48	13,98	8,68	11,22	10,37
	1986	22,47	16,09	8,00	16,39	20,60	18,36	17,33	16,35	13,22	8,69	11,29	10,67
D_b	1980	10,42	9,90	4,84	9,58	12,27	9,15	7,82	6,43	7,57	8,67	5,88	4,57
	1981	11,44	10,15	5,77	10,35	13,21	9,66	12,41	8,78	10,11	9,36	.	7,00
	1982	12,70	11,13	6,66	12,51	14,54	10,98	13,01	11,02	10,20	9,84	9,44	9,70
1 200 kWh	1983	14,15	12,04	8,61	13,58	15,47	11,28	13,03	11,62	12,33	8,96	9,21	10,31
	1984	15,23	12,17	9,44	13,62	15,85	12,89	13,94	12,11	10,88	9,84	9,97	7,75
	1985	15,50	12,91	10,26	14,09	17,16	12,80	12,98	13,24	12,72	10,00	11,22	11,62
	1986	16,88	13,92	9,87	13,84	17,52	13,70	13,19	13,91	11,96	8,37	11,29	11,95
D_c	1980	7,36	7,99	8,04	7,60	8,68	6,46	5,47	4,79	6,42	7,43	.	4,01
	1981	8,48	8,20	9,31	8,48	9,54	6,80	8,51	6,77	8,80	7,82	.	6,26
	1982	9,47	9,11	10,05	10,60	10,60	7,93	8,89	8,54	8,88	8,21	.	8,66
3 500 kWh	1983	10,63	9,95	13,05	11,70	11,32	7,93	8,91	8,71	10,97	7,47	.	9,11
(1300 kWh night/nuit)	1984	11,41	10,60	16,89	11,44	11,44	9,01	9,53	8,88	9,62	8,45	8,09	6,84
	1985	11,58	11,35	18,03	11,89	12,42	8,96	8,89	9,68	11,32	9,57	8,91	10,33
	1986	12,60	11,96	17,19	11,59	12,31	9,14	9,00	10,04	10,60	7,21	8,86	10,64
D_d	1980	.	7,34	7,40	7,14	8,01	4,85	5,06	4,95	6,14	7,77	4,09	3,45
	1981	.	7,55	8,59	7,99	8,89	5,16	7,84	6,65	8,51	8,23	.	5,44
	1982	.	8,42	9,36	10,04	9,90	6,92	8,18	8,36	8,61	8,63	7,03	7,59
7 500 kWh	1983	.	9,21	11,44	11,08	10,57	7,35	8,22	8,44	10,47	7,85	6,86	8,03
(2500 kWh night/nuit)	1984	.	9,87	15,78	10,80	10,64	8,34	8,79	8,71	10,39	9,00	7,24	6,09
	1985	.	10,39	16,91	11,24	11,46	8,78	8,21	9,48	10,81	9,22	7,97	9,07
	1986	10,62	11,19	16,16	10,93	11,23	8,94	8,30	9,83	10,08	7,53	7,87	9,34
D_e	1980	4,06	5,83		5,68	5,59	3,76	3,12	3,66	4,89	5,65	.	2,77
	1981	4,64	5,99		6,55	6,36	4,00	4,92	5,35	7,05	5,77	.	4,62
	1982	5,36	6,72		8,50	7,21	5,10	5,08	6,72	7,15	6,06	.	6,42
20 000 kWh	1983	5,80	7,36		9,44	7,70	5,19	5,03	6,30	8,62	5,51	.	6,76
(15000 kWh night/nuit)	1984	6,23	7,88		9,12	7,62	5,97	5,38	6,38	7,39	6,58	6,16	5,21
	1985	6,32	8,46		9,54	8,00	5,93	5,03	6,93	8,92	6,84	6,51	7,81
	1986	6,95	8,98		9,19	7,46	6,07	5,15	7,05	8,22	5,56	6,39	8,04

ELECTRICITY PRICES FOR INDUSTRY (1)

PRIX DE L'ELECTRICITE POUR USAGES INDUSTRIELS (1)

Deflated PPS/100 kWh

SPA déflaté/100 kWh

E U R 1 2

January/janvier		DÜSSEL-DORF	PARIS	MILANO	ROTTER-DAM	BRU-XELLES	LUXEM-BOURG	LEEDS	DUBLIN	KOBEN-HAVN	ATHINAI	MADRID	LISBOA
I_a	1980	.	6,69	8,67	9,31	8,44	7,38	.	10,33	4,23	12,68	7,00	8,85
	1981	.	6,30	9,25	9,11	8,80	7,65	10,80	12,87	5,20	11,22	.	12,39
	1982	.	6,43	9,24	9,76	8,74	8,58	8,04	13,76	4,78	14,22	.	14,52
30 000 kWh	1983	.	6,79	10,83	9,30	9,63	9,11	8,23	12,39	5,32	13,34	.	15,66
(30 kW, 1000 h)	1984	.	8,56	12,26	9,23	9,65	10,10	7,78	12,20	4,27	11,03	.	13,30
	1985	.	8,55	14,35	9,28	9,31	10,16	7,51	12,07	4,93	10,93	10,05	16,00
	1986	.	9,33	13,96	8,61	9,22	9,66	.	11,50	4,18	10,97	9,03	15,87
I_b	1980	.	6,69	9,21	9,07	8,44	7,31	7,61	10,33	4,22	11,92	5,25	8,37
	1981	.	6,30	9,66	9,11	8,80	7,62	8,20	12,87	5,19	10,49	.	10,57
	1982	.	6,43	9,58	9,76	8,74	8,56	8,91	13,76	4,77	8,40	.	12,20
50 000 kWh	1983	.	6,79	10,83	9,30	9,63	9,09	9,27	12,39	5,30	11,72	.	13,20
(50 kW, 1000 h)	1984	.	7,85	10,90	9,23	9,54	10,10	8,83	12,20	4,26	10,99	.	11,35
	1985	.	7,77	12,77	8,92	9,28	10,11	8,51	12,07	4,92	9,39	8,84	14,54
	1986	.	7,94	12,20	8,61	9,17	9,68	.	11,50	4,17	10,93	8,41	14,42
I_c	1980	7,50	5,73	8,15	7,64	7,85	5,88	6,36	8,23	4,22	10,20	4,35	6,96
	1981	8,04	5,42	8,65	7,83	8,24	6,11	6,91	10,37	5,19	8,73	.	9,04
	1982	8,11	5,60	8,37	8,95	8,18	6,64	7,54	11,25	4,77	9,94	6,73	10,56
160 000 kWh	1983	7,79	6,12	9,53	8,48	9,02	7,05	7,76	10,16	5,30	9,32	6,93	11,44
(100 kW, 1600 h)	1984	8,09	6,30	9,51	7,47	8,99	7,84	7,34	10,09	4,26	10,16	8,05	9,82
	1985	7,92	6,27	11,14	7,53	8,45	7,87	7,10	9,98	4,92	10,07	8,32	12,24
	1986	8,49	6,45	10,83	6,97	8,30	7,46	7,09	9,50	4,17	10,10	7,69	12,14
I_d	1980	5,93	4,77	6,75	6,24	5,94	4,90	5,27	6,41	4,21	8,73	4,15	6,06
	1981	6,35	4,54	7,19	6,49	6,36	5,10	5,74	8,11	5,17	7,34	.	8,05
	1982	6,40	4,66	7,40	7,64	6,40	5,43	6,18	8,89	4,75	8,39	6,40	9,49
1 250 000 kWh	1983	6,15	4,87	8,48	7,16	7,03	5,78	6,33	8,06	5,27	7,88	6,55	10,29
(500 kW, 2500 h)	1984	6,39	5,09	8,39	6,93	6,89	6,42	5,92	8,06	4,25	8,47	7,43	8,90
	1985	6,26	5,16	9,53	7,01	6,80	6,45	5,74	7,87	4,89	7,23	7,71	10,76
	1986	6,80	5,07	9,35	6,46	6,39	6,09	5,71	7,50	4,13	8,64	7,12	10,68
I_e	1980	5,20	4,12	6,31	5,48	5,23	4,25	4,75	5,54	3,91	7,82	3,86	5,42
	1981	5,64	3,93	6,75	5,76	5,75	4,41	5,16	7,11	4,74	6,48	.	7,39
	1982	5,71	4,00	7,02	6,93	5,74	4,63	5,57	7,85	4,36	7,44	6,07	8,78
2 000 000 kWh	1983	5,49	4,12	8,06	6,44	6,34	4,94	5,67	7,08	4,84	6,98	6,17	9,52
(500 kW, 4000 h)	1984	5,66	4,27	7,95	6,37	6,16	5,49	5,29	7,11	3,82	7,87	6,73	8,10
	1985	5,54	4,23	8,31	6,50	6,06	5,52	5,15	6,92	4,49	7,79	6,95	9,78
	1986	6,05	4,16	8,14	5,92	5,59	5,17	5,11	6,59	3,76	7,82	6,21	9,71
I_f	1980	4,80	4,06	6,02	5,15	4,79	3,73	4,72	5,53	3,41	7,47	3,86	5,42
	1981	5,21	3,88	6,44	5,42	5,29	3,88	5,13	6,96	4,26	6,16	.	7,39
	1982	5,27	3,94	6,74	6,53	5,33	4,22	5,54	7,69	3,94	7,10	5,54	8,78
10 000 000 kWh	1983	5,06	4,05	7,17	6,06	5,95	4,53	5,64	6,94	4,45	6,67	5,64	9,52
(2500 kW, 4000 h)	1984	5,22	4,22	7,04	5,87	5,75	5,12	5,26	6,97	3,48	7,87	6,40	8,10
	1985	5,11	4,23	7,73	6,01	5,67	5,13	5,12	6,74	4,13	7,79	6,62	9,78
	1986	5,60	4,16	7,52	5,48	5,35	4,51	5,08	6,41	3,40	7,82	5,88	9,71
I_g	1980	.	3,48	5,41	4,71	3,99	3,96	4,34	5,03	3,27	7,44	3,65	4,86
	1981	.	3,34	5,79	4,99	4,52	3,19	4,70	6,41	4,12	6,08	.	6,90
	1982	.	3,38	6,28	6,08	4,59	3,49	5,07	7,10	3,81	7,00	5,24	8,23
20 000 000 kWh	1983	.	3,44	6,66	5,20	5,11	3,71	5,15	6,42	4,27	6,57	5,32	8,92
(4000 kW, 6000 h)	1984	.	3,56	6,53	5,00	4,88	4,19	4,80	6,37	3,32	6,71	5,82	7,13
	1985	.	3,52	5,72	5,11	4,88	4,20	4,68	6,09	3,98	6,60	6,00	9,06
	1986	4,76	3,50	5,55	4,77	4,62	3,73	4,63	5,79	3,24	6,62	5,36	8,98

(1) Excluding VAT/Hors TVA

ECU/100 kWh

E U R 12

January/janvier		DÜSSEL-DORF	PARIS	MILANO	ROTTER-DAM	BRU-XELLES	LUXEM-BOURG	LEEDS	DUBLIN	KOBEN-HAVN	ATHINAI	MADRID	LISBOA
I_a	1980		6,71	6,33	9,55	8,53	7,05	.	7,90	4,52	9,01	5,21	4,34
	1981		6,91	7,56	9,66	9,11	7,69	12,27	11,32	5,98	8,74	.	7,37
	1982		7,62	8,33	11,49	9,66	9,57	9,29	14,03	6,07	13,41	.	10,26
30 000 kWh	1983		8,41	11,13	11,80	10,46	10,03	9,24	14,75	7,22	12,20	.	10,90
(30 kW, 1000 h)	1984		10,73	13,45	11,97	10,79	11,61	9,75	13,90	6,07	11,39	.	8,08
	1985		11,47	16,95	12,44	11,32	12,24	9,12	14,89	7,49	12,00	10,17	12,30
	1986		13,23	16,31	11,93	11,71	12,22	.	14,86	6,45	9,54	9,08	12,65
I_b	1980		6,71	6,72	9,31	8,53	6,98	6,49	7,90	4,50	8,47	3,91	4,11
	1981		6,91	7,90	9,66	9,11	7,66	9,31	11,32	5,97	8,16	.	6,29
	1982		7,62	8,64	11,49	9,66	9,54	10,29	14,03	6,06	13,26	.	8,62
50 000 kWh	1983		8,41	11,13	11,80	10,46	10,01	10,40	14,75	7,20	12,04	.	9,19
(50 kW, 1000 h)	1984		9,85	11,95	11,97	10,66	11,01	11,06	13,90	6,04	11,36	.	6,81
	1985		10,41	15,08	11,95	11,28	12,17	10,32	14,89	7,47	11,95	8,95	11,17
	1986		11,26	14,25	11,93	11,64	12,24	.	14,86	6,44	9,51	8,46	11,50
I_c	1980	8,00	5,75	5,95	7,84	7,94	5,62	5,42	6,29	4,50	7,25	3,24	3,42
	1981	8,59	5,94	7,07	8,31	8,53	6,15	7,85	9,13	5,97	6,80	.	5,38
	1982	9,55	6,64	7,55	10,54	9,04	7,40	8,71	11,47	6,06	9,38	5,88	7,47
160 000 kWh	1983	10,08	7,59	9,80	10,76	9,79	7,77	8,72	11,95	7,20	8,52	5,82	7,97
(100 kW, 1600 h)	1984	10,85	7,90	10,43	9,69	10,05	9,01	9,20	11,49	6,04	10,49	7,17	5,94
	1985	11,02	8,40	13,16	10,09	10,27	9,48	8,61	12,31	7,47	11,05	8,42	9,41
	1986	12,29	9,15	12,65	9,65	10,54	9,44	8,97	12,29	6,44	8,78	7,73	9,68
I_d	1980	6,32	4,78	4,93	6,41	6,01	4,68	4,49	4,90	4,49	6,21	3,09	2,98
	1981	6,79	4,97	5,87	6,88	6,58	5,13	6,51	7,14	5,94	5,72	.	4,79
	1982	7,54	5,53	6,67	9,00	7,07	6,06	7,14	9,06	6,03	7,91	5,60	6,71
1 250 000 kWh	1983	7,96	6,03	8,72	9,08	7,64	6,37	7,11	9,32	7,15	7,21	5,51	7,16
(500 kW, 2500 h)	1984	8,57	6,39	9,20	8,98	7,71	7,38	7,42	9,18	6,03	8,75	6,62	5,41
	1985	8,70	6,92	11,25	9,40	8,27	7,77	6,97	9,71	7,42	9,17	7,80	8,27
	1986	9,84	7,19	10,92	8,95	8,11	7,71	7,22	9,69	6,38	7,51	7,16	8,51
I_e	1980	5,53	4,13	4,60	5,63	5,29	4,06	4,05	4,24	4,17	5,56	2,87	2,66
	1981	6,02	4,31	5,52	6,11	5,95	4,43	5,86	6,25	5,45	5,04	.	4,40
	1982	6,72	4,75	6,33	8,16	6,35	5,17	6,43	8,00	5,55	7,02	5,30	6,20
2 000 000 kWh	1983	7,10	5,11	8,29	8,16	6,88	5,44	6,37	8,13	6,56	6,38	5,19	6,63
(500 kW, 4000 h)	1984	7,59	5,35	8,71	8,26	6,88	6,32	6,63	8,10	5,42	8,13	5,99	4,92
	1985	7,70	5,67	9,81	8,70	7,37	6,65	6,25	8,54	6,82	8,55	7,03	7,52
	1986	8,75	5,91	9,51	8,20	7,10	6,54	6,46	8,52	5,81	6,80	6,24	7,74
I_f	1980	5,11	4,07	4,39	5,28	4,85	3,56	4,02	4,23	3,64	5,31	2,87	2,66
	1981	5,56	4,25	5,26	5,75	5,47	3,90	5,83	6,13	4,90	4,80	.	4,40
	1982	6,20	4,67	6,08	7,69	5,89	4,71	6,39	7,84	5,01	6,70	4,84	6,20
10 000 000 kWh	1983	6,55	5,02	7,37	7,68	6,46	4,99	6,33	7,96	6,03	6,10	4,74	6,63
(2500 kW, 4000 h)	1984	7,00	5,29	7,72	7,61	6,43	5,88	6,59	7,94	4,94	8,13	5,70	4,92
	1985	7,10	5,67	9,13	8,06	6,90	6,18	6,21	8,31	6,28	8,55	6,69	7,52
	1986	8,10	5,91	8,78	7,59	6,78	5,71	6,42	8,29	5,25	6,80	5,91	7,74
I_g	1980	.	3,49	3,95	4,83	4,03	3,78	3,70	3,85	3,49	5,29	2,71	2,39
	1981	.	3,66	4,73	5,29	4,68	3,21	5,34	5,64	4,74	4,73	.	4,11
	1982	.	4,00	5,67	7,16	5,07	3,85	5,86	7,24	4,84	6,60	4,58	5,82
20 000 000 kWh	1983	.	4,26	6,85	6,59	5,55	4,08	5,78	7,24	5,80	6,01	4,47	6,22
(4000 kW, 6000 h)	1984	.	4,47	7,12	6,48	5,47	4,82	6,01	7,26	4,71	6,92	5,18	4,33
	1985	.	4,71	6,75	6,85	5,93	5,05	5,68	7,51	6,04	7,24	6,07	6,96
	1986	6,89	4,96	6,48	6,61	5,86	4,72	5,86	7,49	5,01	5,75	5,39	7,16

(1) Excluding VAT/Hors TVA

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Classificação das publicações do Eurostat

EN

THEME [1] General statistics (midnight blue) [2] Economy and finances (violet) [3] Population and social conditions (yellow) [4] Energy and industry (blue) [5] Agriculture, forestry and fisheries (green) [6] Foreign trade (red) [7] Services and transport (orange) [9] Miscellaneous (brown)

SERIES [A] Yearbooks – [B] Short-term trends – [C] Accounts, surveys and statistics – [D] Studies and analysis – [E] Methods – [F] Rapid reports

ES

TEMA [1] Estadísticas generales (azul oscuro) [2] Economía y finanzas (violeta) [3] Población y condiciones sociales (amarillo) [4] Energía e industria (azul claro) [5] Agricultura, silvicultura y pesca (verde) [6] Comercio exterior (rojo) [7] Servicios y transportes (naranja) [9] Diversos (marrón)

SERIE [A] Anuarios – [B] Coyuntura – [C] Cuentas, encuestas y estadísticas – [D] Estudios y análisis – [E] Métodos – [F] Estadísticas rápidas

FR

THÈME [1] Statistiques générales (bleu nuit) [2] Économie et finances (violet) [3] Population et conditions sociales (jaune) [4] Énergie et industrie (bleu) [5] Agriculture, sylviculture et pêche (vert) [6] Commerce extérieur (rouge) [7] Services et transports (orange) [9] Divers (brun)

SÉRIE [A] Annuaires – [B] Conjoncture – [C] Comptes, enquêtes et statistiques – [D] Études et analyses – [E] Méthodes – [F] Statistiques rapides

DA

EMNE [1] Almene statistikker (mørkeblå) [2] Økonomi og finanser (violet) [3] Befolkning og sociale forhold (gul) [4] Energi og industri (blå) [5] Landbrug, skovbrug og fiskeri (grøn) [6] Udenrigshandel (rød) [7] Tjenesteydelser og transport (orange) [9] Diverse statistikker (brun)

SERIE [A] Årbøger – [B] Konjunkturoversigter – [C] Regnskaber, tællinger og statistikker – [D] Undersøgelser og analyser – [E] Metoder – [F] Ekspresoversigter

IT

TEMA [1] Statistiche generali (blu) [2] Economia e finanze (viola) [3] Popolazione e condizioni sociali (giallo) [4] Energia e industria (azzurro) [5] Agricoltura, foreste e pesca (verde) [6] Commercio estero (rosso) [7] Servizi e trasporti (arancione) [9] Diversi (marrone)

SERIE [A] Annuari – [B] Tendenze congiunturali – [C] Conti, indagini e statistiche – [D] Studi e analisi – [E] Metodi – [F] Note rapide

DE

THEMENKREIS [1] Allgemeine Statistik (Dunkelblau) [2] Wirtschaft und Finanzen (Violett) [3] Bevölkerung und soziale Bedingungen (Gelb) [4] Energie und Industrie (Blau) [5] Land- und Forstwirtschaft, Fischerei (Grün) [6] Außenhandel (Rot) [7] Dienstleistungen und Verkehr (Orange) [9] Verschiedenes (Braun)

REIHE [A] Jahrbücher – [B] Konjunktur – [C] Konten, Erhebungen und Statistiken – [D] Studien und Analysen – [E] Methoden – [F] Schnellberichte

NL

ONDERWERP [1] Algemene statistiek (donkerblauw) [2] Economie en financiën (paars) [3] Bevolking en sociale voorwaarden (geel) [4] Energie en industrie (blauw) [5] Landbouw, bosbouw en visserij (groen) [6] Buitenlandse handel (rood) [7] Diensten en vervoer (oranje) [9] Diverse statistieken (bruin)

SERIE [A] Jaarboeken – [B] Conjunctuur – [C] Rekeningen, enquêtes en statistieken – [D] Studies en analyses – [E] Methoden – [F] Spoedberichten

GR

ΘΕΜΑ [1] Γενικές στατιστικές (βαθύ μπλε) [2] Οικονομία και δημοσιονομικά (βιολετί) [3] Πληθυσμός και κοινωνικές συνθήκες (κίτρινο) [4] Ενέργεια και βιομηχανία (μπλε) [5] Γεωργία, δάση και αλιεία (πράσινο) [6] Εξωτερικό εμπόριο (κόκκινο) [7] Υπηρεσίες και μεταφορές (πορτοκαλί) [9] Διάφορα (καφέ)

ΣΕΙΡΑ [A] Επετηρίδες – [B] Συγκυρία – [C] Λογαριασμοί, έρευνες και στατιστικές – [D] Μελέτες και αναλύσεις – [E] Μέθοδοι – [F] Ταχείες στατιστικές

PT

TEMA [1] Estatísticas gerais (azul escuro) [2] Economia e finanças (violeta) [3] População e condições sociais (amarelo) [4] Energia e indústria (azul) [5] Agricultura, silvicultura e pesca (verde) [6] Comércio externo (vermelho) [7] Serviços e transportes (laranja) [9] Diversos (castanho)

SÉRIE [A] Anuários – [B] Conjuntura – [C] Contas, inquéritos e estatísticas – [D] Estudos e análises – [E] Métodos – [F] Estatísticas rápidas

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E	–	7	2	–	2	1	–	–
F	–	–	1	1	–	–	–	–

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This publication is an updating of the annual enquiries on electricity prices in the countries of the Community, with a time series back to 1980. For the first time the results for Spain and Portugal are shown. Prices are recorded in approximately 30 locations for both domestic and industrial uses, with a breakdown by type of consumers. The text explains definitions, tariff systems and taxation, and gives an analysis of results together with an international comparison.