

Training Module 1 – How to read an energy invoice

EnergyEfficiency4SMEs Project

Reference: LIFE21-CET-AUDITS-EnergyEfficiency4SME/101076459

Date, Location





ENERGY EFFICIENCY 4SMES

A European Project

• European Program: LIFE

• Length: 36 months (Nov 2022 - Oct 2025)

• Total Budget : 1,84 M€

• Consortium: 23 partners from 10 different countries

• **Coordinator**: Eurochambres

• Structure of the project: 8 WP

Targets : SMEs from 3 sectors:

- Hospitality and restaurants (NACE codes I 55 to I 56.3.0)
- Agri-food Industry (NACE codes C10 to C11.0.7)
- Metals Industry (NACE codes C24 to C25.9.9)



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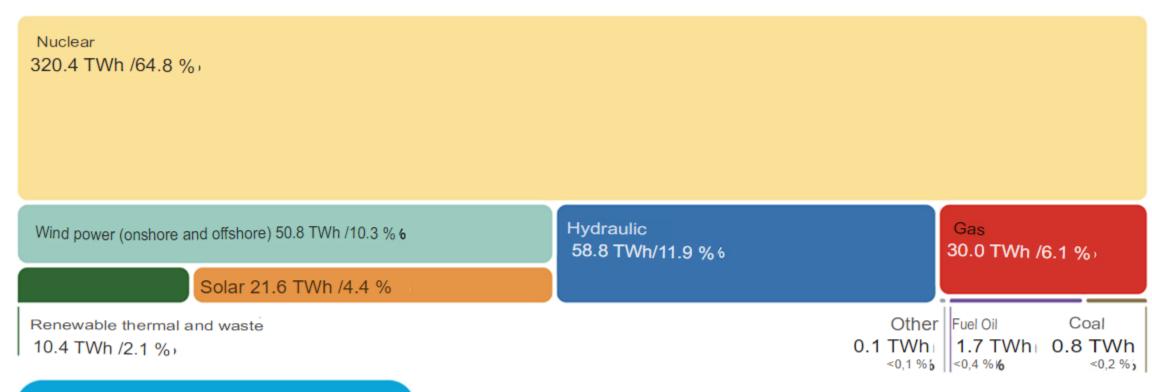
INTRODUCTION

The different sources of energy



MEs

Total electricity production in France in 2023 and distribution by sector



Total production: 494.7 TWh

There are several energy suppliers in France



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ALPIQ • ALTERNA • DYNEFF GAZ • EDF • EKWATEUR • ELECOCITÉ • ELMY • ENERCOOP • ENERGIE D'ICI • ENERGIES DU SANTERRE • ENGIE • ENI • GAZ DE BORDEAUX • GEDIA ENERGIES & SERVICES • GEG SOURCE D'ENERGIE • ILEK • JPME • LA BELLENERGIE • MINT ENERGIE • OCTOPUS ENERGY • OHM ENERGIE • PAPERNEST ENERGIE • PRIMEO ENERGIE • PROXELIA • SELIA • SOWEE • SYNELVA • TOTALENERGIES • URBAN SOLAR ENERGY • VATTENFALL • WEKIWI •
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List of national suppliers as of 18 April 2024

Each supplier has its own way of presenting its bill.

Legislation imposes mandatory information on energy bills.

Please note: the energy supplier is obliged to produce a bill free of charge at least once a year. If you choose to pay on a monthly basis, a schedule must be provided once a year, along with a regularization bill.

Invoice in paper or digital format



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Mandatory information on energy bills

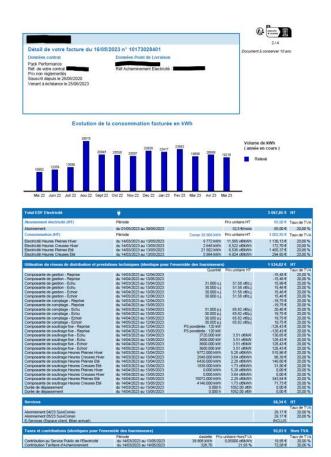
- Supplier information
- Customer information
- Contract, tariffs and consumption
- Annual consumption reports (at least once a year)
- Energy delivery and taxes
- Billing method
- Source of energy (renewable energy, energy mix, etc.)

INVOICE EXAMPLE



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Total Hors TVA pour ce site					4 753,04 €	Hors TVA
TVA (identique pour l'ensemb	le des fournisseurs)		Assiette		950,61 €	
TVA à 20,00%		4 753,04 €		950,61 €		
Total TTC pour ce site					5 703,65 €	TTC
Données de comptage		-	Puissance(s) souscrite(s) (kW ou k	1781		
Type de comptage : Type de compteur : PME-PMI Acheminement : Tarf BT sup 36N/A Courte Utilisation Puissance souscrite actuelle (kW ou kWA) : 120			Opérateur Heures pleines hiver	120		
			Opérateur Heures creuses hiver	120		
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ELECTRICITY



Electricity

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The different components of the bill:



Breakdown of bill:



Negotiable

Non-negotiable but optimisable

Supply

Returns to the supplier and helps to cover its supply and commercial costs

Tariff for use of the electricity distribution network (TURPE), paid to network operators

Transport and Distribution

Taxes

CTA,
Excise duty on electricity,
VAT



Electricity

Segmentation of electricity supply contracts = classification based on customer consumption, meter type and wattage

Dates	Blue	Yellow	Green		
Rates	C 5	C4	C3	C2	C1
DomVoltage and	Low Voltage	High Voltage	High Voltage	High Voltage	High Voltage
power range	PS ≤ 36 kVA	37 kVA ≤ PS < 250 kVA	PS ≤ 250 kVA	PS > 250 kVA	PS > 250 kVA

Special features of C5 meters

This meter is intended for private individuals and small businesses. No power is allowed to be exceeded, and in the event of over-consumption, the meter disconnects.

There are 2 options:

- Base option: the price per kWh is always the same
- Peak/off-peak option: the price per kWh is lower for 8 hours a day.
- This option is interesting if certain electrical equipment can be used during off-peak hours.







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- Time-of-use tariffs
- Electricity prices vary according to the day of the year and the time of day:
- Winter Peak Hours (HPH)
- Winter off-peak (HCH)
- Peak Summer Hours (HPE)
- Summer off-peak hours (HCE)
- Peak hours (P)

TURPE tariff versions (Tariff for Use of the Public Electricity Network)Hours of use affect the price of kWh

Calculation of hours of use:
$$H = \frac{Annual\ consumption}{Power\ demand}$$





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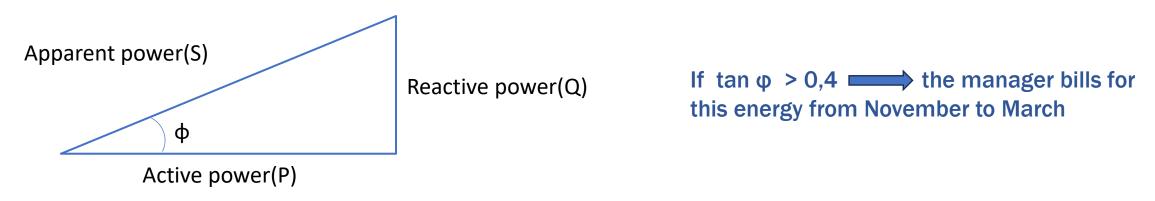
These meters require the installation and use of a transformer substation

For the C2 meter, billing is based on remote readings taken every 10 minutes, whereas for the C3 meter, monthly index readings are taken.

Reactive energy

Electrical energy is distributed in the form of alternating current via distribution networks. It is made up of 2 types of energy:

- active energy (kWh) is the power transformed into movement or heat
- reactive energy (kVARh) is the power used by electrical equipment consisting of magnetic circuits (motors, transformers, etc.).





The load curve

A graphical representation of the meter's electricity consumption over a specific period.







NATURAL GAS



Natural gas

The different components of the bill



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Distribution of the invoice:

40 - 50 % 25 - 30 % 25 - 30 %

Negotiable

Non-negotiable but optimizable

Supply

Return and allo costs s commer

Returns to the supplier and allows you to cover your costs supply chain and its commercial expenses

Network usage tariff gas distribution, is up to the managers of the network

Transportation and Distribution

Taxes CTA, TICGN, VAT

Natural gas

Rate options



Tariff option	Uses	Consumption range		
T1	Cooking, hot water	< 6 MWh/year		
T2	Individual heating, small boiler rooms	Between 6 and 300 MWh/year		
T3	Large boiler rooms, small tertiary	Between 300 and 5000 MWh/year		
T4.	Industrial and large tertiary	> 5 GWh/year		
TP	Industrials and large tertiary sectors eligible for a direct connection to the transport network	> 5 GWh/year + eligibility for a connection direct to the transport network		

THE TARIFF ZONES



Natural gas



Annual Reference Consumption (CAR): Estimated gas consumption for a meter over 1 year, based on consumption in the previous year.

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Consumption profiles

There are nine consumption profiles, ranging from P011 to P019. These profiles vary according to consumption during the winter. Every gas consumption site in France can be categorised in this way.

P011	BECAUSE < 6000 kWh and changes every semester
P012	CAR > 6000 kWh and changes every semester
P013	The winter share is less than or equal to 39% of annual consumption
P014	The winter share is less than or equal to 50% of the annual consumption
P015	The winter share is less than or equal to 58% of annual consumption
P016	The winter share is less than or equal to 69% of annual consumption
P017	The winter share is less than or equal to 75% of annual consumption
P018	The winter share represents up to 81% of annual consumption
P019	The winter share represents more than 81% of annual consumption



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Thank you for your attention!

