1 Introduction to the energy business

STARTER

Match the word with its image.

(hard) coal

wind

oil

sun

uranium

gas

biomass

lignite







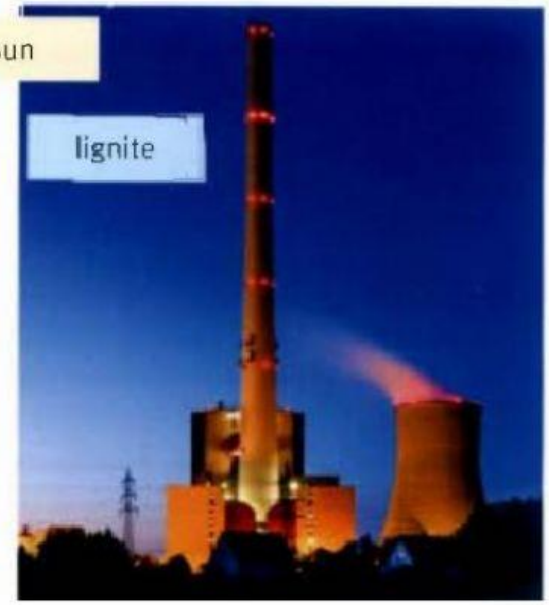




Work with a partner. Sort the fuels and energy sources below into the correct category. Can you add any more to the lists?

fossil fuel(s)	renewables	nuclear fuel(s)

(hard) coal | wind | oil | sun | uranium | gas | biomass | lignite



Now answer these questions.

1 What fuels and sources are used at your company, or the companies you do business with?
2 Which one is used most?
3 Where do these fuels come from?
4 Which are imported?

LIVEWORKSHEETS

1 Match these different power plants to their descriptions.

1 hydro power plant
2 solar power plant
3 nuclear power plant
4 wind power plant
5 gas-fired power plant
6 run-of-river power plant
7 coal-fired power plant
8 lignite-fired power plant
9 pump-storage power plant

a a traditional type of power plant which burns a solid, black fossil fuel
b a power plant which pumps water back uphill into a reservoir during periods of low demand
c a plant which uses the flow of water from a reservoir to generate electricity
d a power station utilizing the natural flow of water in a river for generating power
e type of power plant that uses uranium as its primary fuel
f a power plant which uses the natural flow of air to generate electricity
g a fossil fuel power plant which burns a solid, dark brown fuel
h a power plant that generates electricity utilizing energy from the sun
i a power station which burns gas as its primary fuel

AUDIO 2

2 Listen to a phone call between a journalist, Colin Maitland, and the public relations officer of the company ELEC, Maria Berger. Complete the journalist's notes.

ELEC'S fossil fuel use

_____[1] and _____[2]

Power plants and loads

Lignite-fired plants for _____[3] load
Gas-fired plants for _____[4] and peak-load ranges
Gas plants also used to supply _____[5]

Technology to protect environment

ELEC say they have _____[6] equipment installed in their plants.

Altrath plant, near Berlin

Commissioned in _____[7] but has been _____[8] since then.

Wind generation

Company building more power stations, but difficult to get _____[9] in some countries. ELEC views criticism that these _____[10] the countryside as 'exaggerated'.

What other questions would you expect the journalist to ask?

LIVEWORKSHEETS

3 Match the two parts to make phrases from the dialogue. Then listen again to check your answers.

1	base	a	equipment
2	company	b	fuels
3	electricity	c	heating
4	energy	d	mix
5	fossil	e	policy
6	power	f	production
7	district	g	station
8	state-of-the-art	h	load



Match the expressions you have just formed to the following definitions.

9 _____ _____ = the generation of electrical power

10 _____ _____ = energy sources such as gas, oil and coal but not water and wind

11 _____ _____ = the power level at which basic demand and consumption is covered

12 _____ _____ = apparatus of the latest technological level

13 _____ _____ = the different primary fuels and sources used for energy production

14 _____ _____ = a plan of action chosen by a business or firm

15 _____ _____ = a plant in which electricity is produced

16 _____ _____ = a system of distributing heat in one centralized location, often linked to a power plant

TELEPHONING FOR INFORMATION

Introductions
Hello ... . This is ... speaking.
Good morning. Is that ...?
Hi ..., it's ... here.

Asking for information
I need some information about ...
I'd like to have some (more) information about ...
Can/Could you give me more information about ...?
Can/Could you please tell me (about) ...?
Who/What/When/Where/Why/How ...?
What about ...?

Asking for repetition
Sorry, I didn't quite catch that.
Would you mind repeating that?

Positive response
Sure.
No problem.
I'd be happy to.

Negative response
I'm afraid I can't help you there.
I'm afraid not.

LIVEWORKSHEETS

UNIT 1, EXERCISE 2

2

Maria ELEC Public Relations, Maria Berger speaking. How can I help you?

Colin Oh hello, this is Colin Maitland. If you remember we spoke a few days ago...

Maria Yes, yes of course. Hello, Colin. How are you?

Colin Fine, thanks. And you?

Maria Fine, thanks. So what can I do for you today?

Colin Well, as I explained last time, I'm writing this series of articles on European utilities and I'd like to include ELEC in my reports.

Maria Yes, as I said, I'm happy to give you all the support I can. Where would you like to start?

Colin Well, first I'd like some general information, and I was wondering if you could outline ELEC's energy mix first of all.

Maria Sure. Well, we have a number of fossil fuels which we use for electricity production – we mostly burn lignite and gas.

Colin Right.

Maria Yes, and our lignite-fired plants are used for base load while the gas-fired ones cater for the intermediate, or medium, and peak load ranges.

Colin Mm, OK I've got that.

Maria Then we have a number of gas plants which are combined heat and power plants; we use them to generate electricity and also to supply district heating systems.

Colin Sorry, I didn't quite catch that, what sort of systems?

Maria District heating systems.

Colin Ah, yes.

Maria So those are the fossil fuel plants. Then we also have some nuclear plants which are also needed for base load.

Colin I see. Now what about the issue of emissions? I mean, the burning of fossil fuels produces these harmful emissions and environmental problems that people of course are very much aware of these days. Could you outline your company policy on this?

Maria We take this issue very seriously indeed. All our plants are fitted with state-of-the-art equipment to reduce harmful effects on the environment.

Colin Can you give me some exact figures?

Maria I'm afraid I can't help you there, but why don't I take you round one of our plants? You could then see exactly what we do.

Colin Yes, that would be great. Um, you have a number of power stations in your portfolio. What's the largest one?

Maria Well, in terms of installed capacity that would be Altrath near Berlin. It has four 600-megawatt units and can produce enough electricity to meet the needs of some two million people.

Colin I read up on that. It's relatively old, isn't it?

Maria Well, it was commissioned in 1979, but it's been retrofitted since then. Most of our other plants came on line in the 1980s and 1990s.

Colin What about wind?

Maria We're building more wind power stations although they are still quite controversial. It can be difficult to get planning permission in some countries. Not everyone is in favour of them as they say they spoil the countryside and create too much noise if you live near them.

Colin And what's your view on this?

Maria We believe these claims to be exaggerated.

peak load
The maximum amount of electricity delivered and required over a specific period.

base load
The minimum amount of electricity delivered and required over a specific period.

energy mix
The combination and proportions of primary fuels and sources used for electricity production.

fossil fuel
Hydrocarbons such as gas, oil or coal used for producing electricity.

power plant/station
A complex of buildings, machinery and equipment used for generating electricity.

LIVEWORKSHEETS