

OXFORD ENGLISH FOR CAREERS

Student's Book

# OIL AND GAS<sup>2</sup>

Jon Naunton and Alison Pohl



Series Consultant: Peter Astley

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# OIL AND GAS ②

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**Student's Book**

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# 1 Oil and gas today

## Kick off

1 Match the labels with the photos.

- |                |                    |
|----------------|--------------------|
| 1 pipeline     | 5 terminal         |
| 2 oil refinery | 6 exploration team |
| 3 oil well     | 7 petrol pump      |
| 4 tanker       |                    |

2 Put them in order from the well to the customer. There is more than one possible order.

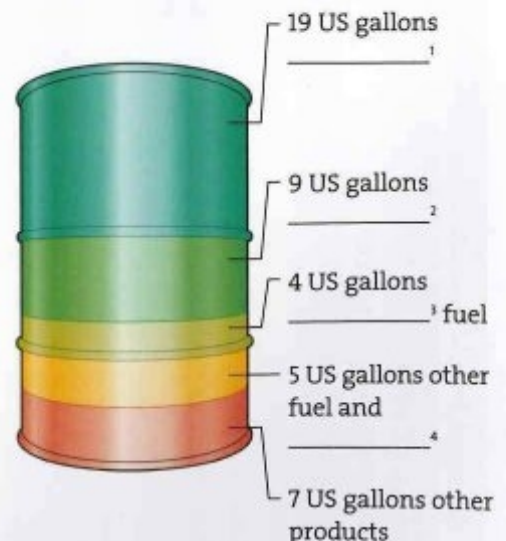


## Listening

### A barrel of crude oil

- 1 An expert describes what happens to a barrel of crude oil. Listen to part A and answer the questions.
- What are the different colours of crude oil?
  - How many metric tonnes of oil travel by tanker each year?
  - How many barrels of oil go through the Straits of Hormuz each day?
  - How long is the Druzhba pipeline?
  - How many barrels does the Druzhba pipeline transport each day?
- 2 A barrel of oil contains 42 US gallons (159 litres), but it can make 44 gallons of petroleum products! Listen to part B and complete the labels on the diagram.
- 3 Listen to part C. What uses of petroleum does the speaker talk about? Does anything surprise you?

Br E	Am E
petrol	gasoline
bitumen	asphalt





**In this unit**

- finding out about oil reserves
- describing routines and activities
- discussing the upstream and downstream sectors
- identifying key jobs in the petroleum industry
- describing responsibilities
- introductions and greetings

**Project**

- 1 Find out which regions have the biggest known oil reserves.
- 2 Find a map of the Druzhba pipeline and see where it goes.

**It's my job**

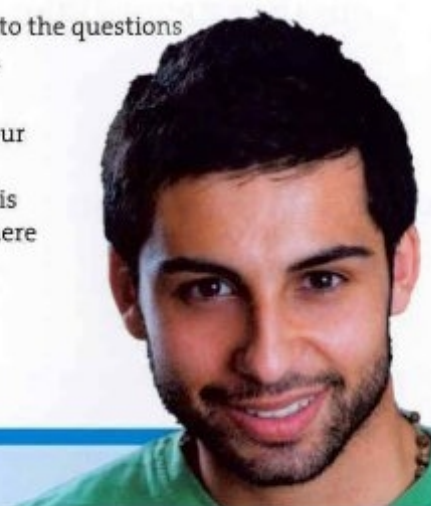
- 1 Hamdan Al Nuami comes from Abu Dhabi. He is a trainee instrument engineer. Complete the interview by matching 1–7 with a–g.
- 1 What are you doing at the moment?
- 2 Who are your colleagues?
- 3 How did you join the company?
- 4 What do you do when you're not at work?
- 5 So what's the next step?
- 6 What do you like best about your job?
- 7 Why did you want to work in this field?

- 2 Read the interview again and answer the questions.

- 1 How did Hamdan get his job?
- 2 How does Hamdan feel about the opportunity he has?
- 3 Does Hamdan want to specialize in one area?
- 4 Why does Hamdan believe that local students are special?
- 5 How else does the company help Hamdan in his free time?

- 3 Discuss your answers to the questions in groups or as a class.

- 1 Are there similar opportunities in your country?
- 2 How international is the oil business where you come from?
- 3 How clear is your career plan?

**Hamdan Al Nuami**

a \_\_\_\_\_  
During the summer vacation, I joined our national oil company's training programme. I'm training to be a fully qualified instrument engineer. It takes two years. I work at the main refinery. Our refinery produces a wide range of petroleum products.

b \_\_\_\_\_  
I am interested in computers and science. The job means I can use the theory in real-life situations.

c \_\_\_\_\_  
Well, right now we are updating the control rooms for the refinery. You know, to make it more modern. It is a really interesting project. Safety is a major part of the instrumentation so you can learn about how the whole refinery works. I don't understand everything yet.

d \_\_\_\_\_  
Well, I work with several other nationalities. We often spend time together after work. But I'm also proud to be part of a growing number of local students and trainees. I believe it is important to increase know-how in the country.

e \_\_\_\_\_  
For me, the best thing is that I can learn about a lot of different things. I know something about instruments but there is also telecommunications, computer technology, and other engineering subjects. I want to learn more about administration, petroleum engineering in general, and the different cultures of the people I work with.

f \_\_\_\_\_  
I like sport – I often play volleyball after work. I usually play twice a week, but this evening we are working late. My family owns a large house where I live with my parents and brothers and sisters, but this week I am staying in the company guest house.

g \_\_\_\_\_  
I want to apply for a place on the company's graduate development programme, which means a placement at an overseas university. If you work hard, there is no limit to what you can achieve.

## • Language spot

### Routines and activities

1 Sentences a–c use the Present Simple. Which sentence

- 1 describes a general fact?
- 2 describes something that happens regularly / a routine?
- 3 gives a piece of personal information?
- a I come from Abu Dhabi.
- b Our refinery produces a wide range of petroleum products.
- c We often spend time together after work.

2 Sentences d–f use the Present Continuous. Which sentence describes

- 1 an action we can see right now?
- 2 an action in progress over a longer period of time – around now?
- 3 an action which is a change in habit / routine?
- d I'm training to be an instrument engineer.
- e I usually play twice a week, but this evening we are working late.
- f At the moment, we're updating the control rooms.

3 Which time phrases do we use with which tense? Write PS (Present Simple) or PC (Present Continuous).

- |                    |                |
|--------------------|----------------|
| 1 always           | 5 sometimes    |
| 2 at the moment    | 6 this week    |
| 3 most of the time | 7 today        |
| 4 right now        | 8 twice a week |

4 Some verbs always use the Present Simple, never the Present Continuous. Identify the verbs in these sentences.

- 1 I know something about instruments.
- 2 I like sport.
- 3 My family owns a large house.

Find more examples of verbs that only use the Present Simple in *It's my job*.

5 Complete these sentences with the correct form of the verbs in brackets.

- 1 Most of the time he \_\_\_\_\_ (sit) behind a desk, but this week he \_\_\_\_\_ (get) some practical experience offshore.

- 2 A lot of different nationalities \_\_\_\_\_ (work) in the refinery, so sometimes people \_\_\_\_\_ (have) problems communicating.
- 3 I \_\_\_\_\_ (not understand) how this instrument \_\_\_\_\_ (work). Can you explain it to me?
- 4 I'm sorry, Mr Peters isn't here.  
He \_\_\_\_\_ (have) an Arabic lesson.  
He \_\_\_\_\_ (always have) one on Monday evening.
- 5 He \_\_\_\_\_ (enjoy) sport a lot. He \_\_\_\_\_ (go) to the gym twice a week. He \_\_\_\_\_ (train) for next month's marathon.

6 Write two sentences that describe your routines and actions that are in progress. Exchange and compare them with a partner.

» Go to **Grammar reference** p.115

## Reading

### The petroleum process

1 Look at the flow chart and decide if 1–8 are upstream, midstream, or downstream. Tick (✓) the boxes.

	Upstream	Midstream	Downstream
1 transportation of crude oil			
2 selling of natural gas to consumers			
3 exploration and discovery			
4 refining crude oil			
5 gas gathering			
6 asphalt production			
7 recovery of crude oil and natural gas			
8 buying petrol / gasoline from a filling station			



**downstream** (adj) refining, processing, and selling

**fertilizer** (n) a chemical or natural substance that is used to help plants grow better

**lubricant** (n) often a type of oil that is used to stop parts of machinery rubbing or sticking together

**2** Make nouns from the verbs.

- |              |             |
|--------------|-------------|
| 1 explore    | 5 recover   |
| 2 transport  | 6 refine    |
| 3 distribute | 7 lubricate |
| 4 discover   |             |

**3** Say the words in 2. What do you notice about their stress pattern?

EXAMPLE

explore ●●● exploration ●●●●●

## From well to user

### Upstream activity

Exploration and discovery of oil and natural gas (E&P – exploration and production)

Drilling well

Recovery and production of oil  
Gas gathering

### Midstream

Transportation by pipeline or tanker of oil, gas, or natural gas liquids

Initial processing may happen at well head or FPSO (Floating Production, Storage, and Offloading) vessel

### Downstream

Arrival at oil terminal and refinery

Refining process

Crude oil turned into different products:

- fuel: gasoline / petrol, diesel, LPG (liquid petroleum gas), butane
- asphalt for road building
- synthetic rubber for tyres
- plastics, e.g. polyurethane, polyethylene

Other products: **lubricants**, antifreeze, **fertilizers**

Distribution: products stored or transported to customers

Petrol / gasoline stations

Factories for further treatment

## Vocabulary

### Key jobs

**1** Match the jobs with the photos.

- |                          |                    |
|--------------------------|--------------------|
| 1 land surveyor          | 4 piping designer  |
| 2 maintenance technician | 5 refinery manager |
| 3 petroleum chemist      | 6 safety officer   |



**2** Which do you think is the most interesting?

**3** Listen and repeat the names in 1. Follow the intonation patterns.

EXAMPLE

land surveyor

**4** Six people describe their jobs. Listen and say who is speaking.

- |         |         |         |
|---------|---------|---------|
| 1 _____ | 3 _____ | 5 _____ |
| 2 _____ | 4 _____ | 6 _____ |

**5** Suffixes: -er at the end of a noun often shows that we are talking about a job or profession. Identify similar suffixes in 1.



## • Language spot

### Describing responsibilities

- 1 Study the list of verbs and expressions that the speakers in *Vocabulary* use to talk about their jobs and responsibilities. Go to the listening script on p.123 and underline them.

#### Verbs

I look after  
I monitor  
I oversee

#### Expressions

I'm in charge of (doing something)  
I'm involved in (something / doing something)  
I'm responsible for (something / doing something)

- 2 Work in pairs and imagine that you have one of the jobs from *Vocabulary* 1. Make short conversations.

#### EXAMPLE

A Hi, are you new here?

B Yes, I am. My name's Walid. I'm a piping designer

A Oh really? So what does your job involve / What do you do every day?

B Well, I design piping systems in a refinery. It involves calculating flow rates and pressures. What about you?

- 3 Think of one more job and describe its activities and responsibilities to the class. Can they say what you do?

#### EXAMPLE

Well, I'm in charge of taking the oil tanker into the terminal. When I get on the tanker, the captain gives me control of the vessel. I know the waters around the terminal better than anyone else. I am responsible for the safe arrival of vessels in our port.

Answer: tanker pilot

» Go to **Grammar reference** p.115

## Speaking

### Hello, goodbye

- 1 Mr Gibson, the safety manager, is introducing Hamdan to Dr Al Harbi, the refinery manager. Listen to conversation A and answer the questions.
- How does Mr Gibson introduce Hamdan?
  - What question does Dr Al Harbi ask?
  - How does Hamdan reply?
- 2 Listen to conversation B and answer the questions.
- Who is Farid?
  - What is Farid doing at the moment?
- 3 Which conversation is more formal and polite?
- 4 Listen again and write T (true) or F (false).
- Dr Al Harbi and Mr Gibson are close friends.
  - Dr Al Harbi is more senior than Mr Gibson.
  - Hamdan shows respect to Mr Gibson.
  - Hamdan is Farid's boss.
  - Hamdan and Farid are the same age / level in the company.
- 5 Match a more polite expression from A with a less formal expression from B.
- |                                    |                            |
|------------------------------------|----------------------------|
| <b>A</b>                           | <b>B</b>                   |
| 1 Hello.                           | a Have you got a minute?   |
| 2 I'd like to introduce you to ... | b How's it going?          |
| 3 I'm very pleased to meet you.    | c Bye.                     |
| 4 How are you finding it?          | d I want you to meet ...   |
| 5 I'm very happy to be here.       | e Nice to meet you.        |
| 6 Please excuse me, I have to go.  | f See you around.          |
| 7 I hope to see you again.         | g Hi.                      |
| 8 May I bother you a moment?       | h I'm having a great time. |
| 9 Goodbye.                         | i Sorry, I have to go.     |
- 6 Are you more confident in formal or informal situations?
- 7 Work in groups of three. Choose jobs from *Vocabulary* 1 on p.7. Take turns to introduce each other. Use formal and less formal expressions.

## Professional skills

### Meeting and greeting



- 1 How do people in your culture greet each other? Do you
- shake hands?    • kiss?    • hug?



- 2 Look at the list. Which subjects are good ways of starting a conversation with

- 1 someone you meet for the first time?
- 2 friends and people you work with?

family	work
sport	money
health / health problems	holidays
the weather	the news

- 3 What advice can you give to

- a visitor who is coming to your country for the first time?
- someone new to your school or company?

## Checklist

Assess your progress in this unit. Tick (✓) the statements which are true.

- ☐ I can describe what happens to crude oil
- ☐ I can talk about routines and current activities
- ☐ I can talk about responsibilities
- ☐ I can introduce, meet, and greet new people

## Key words

Adjectives  
downstream  
upstream

Nouns  
fuel  
instrument  
oil refinery  
pipeline  
plant  
reserve  
rig  
sample  
terminal

Verbs  
flow  
oversee  
refine  
update

Look back through this unit. Find five more words or expressions that you think are useful.