

**UNIT 4**  
**The World Around Us**

### 4.1 Environmental Problems

#### **PAGE 165**

##### **Introduction**

2.

- a) nonrenewable energies
- b) deforestation
- c) water pollution
- d) smog
- e) endangered species

#### **PAGE 166**

##### **Lead-in**

1.

Mongolia (279 µg/m<sup>3</sup>), Botswana (216 µg/m<sup>3</sup>), Pakistan (198 µg/m<sup>3</sup>), Senegal (145 µg/m<sup>3</sup>) and Saudi Arabia (143 µg/m<sup>3</sup>).

3.

Egypt (138 µg/m<sup>3</sup>), United Arab Emirates (132 µg/m<sup>3</sup>), Iran (124 µg/m<sup>3</sup>), Nigeria (124 µg/m<sup>3</sup>) and Kuwait (123 µg/m<sup>3</sup>).

#### **PAGE 167**

##### **Reading**

2.

**Sugestões de resposta:** Smog and the cost of development

#### **PAGE 168**

##### **Reading**

3.

- a) is one of the most polluted countries in the world
- b) the use of coal, trucks and factories
- c) mercury, carbon dioxide and other pollutants
- d) avoid taking children to play outdoors and prefer to work at home whenever this is possible

4.

- a) China
- b) of the people in general
- c) rapid urbanisation, booming population growth and rising incomes
- d) Chinese parents

5.

a) China has developed its economy very rapidly. It has not been able to provide the conditions required to minimise the impact of such a fast growth on the environment.

b) Chinese people are now buying many cars at a rapid rate.

6.

a) According to the text the situation won't get any better in the near future. Pollution is not decreasing which means that the costs associated with its prevention are becoming higher every day.

b) Pollution has cost, so far, more than \$1 billion in four large Chinese cities and has led to the death of more than 8,000 people in just one year.

c) Because China has developed very rapidly, manufacturing goods and exporting them on a massive scale, it's a flourishing economy and its industry are good examples of this.

#### **PAGE 169**

##### **Grammar**

1.

a); c); d); g).

2.

- a) Smoke from factories has polluted many cities.
- b) Students haven't read the text yet.
- c) Have you watched the documentary about the environment yet?
- d) We have already been to China.

3.

- a) We have seen the Chairman of the Company.
- b) He has received us just before the Press Conference.
- c) Last year the Company's policy was always to protect the environment.
- d) A part of its profit has been donated to environmentalist organisations.

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##### Grammar

4.

- a) have been watching ... since
- b) has been cutting off ... since
- c) have been studying ... for
- d) have been researching / for
- e) have been collecting ... since

5.

- a) Have you cleaned ...
- b) ... have been learning ...
- c) ... haven't watched ...
- d) ... has never been ...
- e) ... have been painting / has lit up ...
- f) ... hasn't noticed ...
- g) ... has been taking ...
- h) ... has already read ...

#### PAGE 171

##### Listening and Speaking

1.

Jack Johnson: g), b).  
Michael Jackson: c), e).  
Counting Crows: f), a)  
Hannah Montana: h), d).

#### PAGE 172

##### Listening and Speaking

2.

a); b); d); e); f); g); h); j); l).

3.

##### Sugestões de resposta:

**Consumption and Domestic waste:** "You've got to bring your own bags and you learn to reduce your waste."

**Deforestation:** They took all the trees

**Global warming:** "global warming."

**Building industries:** "They paved paradise / And put up a parking lot."

**Nature protection:** "But leave me the birds and the bees."

**Recycling:** "Reduce, reuse, recycling."

**Use of pesticides:** "Put away that DDT now."

#### PAGE 173

##### Lead-in

1.

- a) Climate changes.

- b)** Drought, flooding, glaciers melt and sea level rise, small islands can simply disappear due to the loss of ice in Antarctica, biodiversity suffers as all the earth's species are threatened with disappearing.
- c)** All of us by reducing our consumption patterns. But it is largely up to governments to ensure that the right choices are available.

### Reading

1.

- a)** commits; **b)** responsible; **c)** amendment; **d)** greenhouse; **e)** pertaining; **f)** industrialized; **g)** emissions.

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#### Reading

2.

- a)** False. "The Kyoto Protocol is an international agreement linked to the United Nations Framework Convention on Climate Change, which commits its Parties by setting internationally binding emission reduction targets." (ll. 1-5)
- b)** True. "The Protocol was adopted in Kyoto, Japan, on 11 December 1997 and entered into force on 16 February 2005." (ll. 12-15)
- c)** False. "New commitments for Annex I Parties to the Kyoto Protocol who agreed to take on commitments in a second commitment period from 1 January 2013 to 31 December 2020;" (ll. 23-26) "A revised list of green-house gases..." (l. 27)
- d)** True. "During the first commitment period, 37 industrialized countries and the European Community committed to reduce GHG emissions to an average of five percent against 1990 levels" (ll. 40-44)

3.

- a)** Because they have greater responsibility when it comes to pollution. Their carbon dioxide emissions are higher and therefore the restrictions must be heavier on those countries.
- b)** The amendments were needed to extend the periods of its duration and to update the list of greenhouse gases to reflect the current reality.

### PAGE 175

#### Lead-in

**Objetivo:** Dar a conhecer aos alunos algumas medidas e tecnologias capazes de reverter ou minimizar os efeitos dramáticos da poluição no meio ambiente.

### PAGE 176

#### Reading

2.

- a)** enables the production of a great deal of power, representing a big share of the country's needed energy
- b)** a pioneering mechanism designed to transform wave power into electricity with a capacity to satisfy the whole country's needs
- c)** it will create more jobs thus reducing unemployment, which is constantly increasing

3.

- a)** leader (l. 1)
- b)** deployed (l. 20)
- c)** surplus (l. 26)
- d)** substitute (l. 24)

4.

- a)** In spite of having a great deal of electric charging points, the number of electric vehicles is still too low to make a difference because these are very expensive vehicles.
- b)** Due to the economic crisis the government has stopped funding electric cars and solar panels.
- c)** According to IT start-up company Watt-IS software people can do simple things such as defrosting their refrigerators more often, turning their electronic devices off when they are not using them or people can put their washing machine to work during the night when electricity is cheaper in Portugal.