

## Unit 8 Globalisation – Choosing environmentally-friendly cars

### Teacher's notes

#### Preparation

Before you use this lesson plan:

- make one copy of each worksheet per student.
- visit the proposed websites to check they are operational.

#### Warmers

*Short (5 minutes)*

Write the word *green* on the board. Ask the students what they understand by being green. Ask whether they consider themselves to be green. You could also use *carbon footprint* – the impact we individually make on the environment through our consumption and pollution.

*Long (10 – 15 minutes)*

Ask the students whether they would consider electric cars to be a green option for personal transport. Brainstorm what they know about electric cars: any facts, rumours, or experience they might have. Make a provisional list of what they believe the advantages and disadvantages of electric cars are.

#### Set the scene

*(15 minutes)*

Distribute the worksheet. Ask the students to read the *Situation*. Check that they understand the criteria the company sets for its cars and how it uses them. Ask whether anyone knows what the London congestion charge is. If no one does, explain that it is a fixed charge for driving certain types of vehicles into the centre of London Monday to Friday and its introduction has successfully reduced traffic in the city centre. Go through the table to make sure everyone understands the type of information they have to find. Draw their attention to the cost calculations. Do an example on the board to demonstrate how to calculate the costs per car over three years.

#### Present the tasks

*(2 minutes)*

Explain the procedure:

- 1 The group divides into small groups or pairs. Explain that each group or pair should choose one electric and one petrol car they think will meet the company's needs.
- 2 They use the website to research and collect information and fill in the tables.
- 3 They have a short meeting in which they use the results of their research to discuss the advantages and disadvantages and choose which car or cars the company will buy.

#### Do the tasks

*Research (20 minutes)*

- If computers are available, allocate one to each small group or pair and let the students do their research.
- If computers are not available, set the research as homework to be performed at home or during free time at work. Emphasise to the students that they do not need to spend more than about 20 – 30 minutes collecting information.

*Presentations (Meeting: 25 minutes)*

If necessary, appoint a chairman. The students discuss the advantages and disadvantages of electric and petrol city-cars. This information can be used to modify or augment the provisional list made during the warmer. The students then have a discussion to decide which car(s) the company should choose. Encourage them to consider all the company's requirements as stated in the situation. Monitor and give language feedback after the meeting.

## Unit 8 Globalisation – Choosing environmentally-friendly cars

### Aims

- Talking about facts and figures
- Making suggestions

### Tasks

- 1 You are going to research environmentally-friendly cars on the Web.
- 2 You are going to have a meeting to choose the best vehicles to buy.

### Situation

You work for a company in London. The company operates a fleet of five cars. These cars seat four people. They usually only carry a driver but occasionally have to take up to three passengers. Most of the company's business is with clients in the city but employees also make visits outside London. Therefore, the policy is to buy cars which present a good, professional image. This fleet is three years-old and the company is considering replacing these petrol cars with a greener option. There is also a financial reason: electric cars are exempt from the London congestion charge.

### Task 1 – the research

Find out how much the London congestion charge is and then research and select two cars (one petrol and one battery-run) to complete the research data table. These websites will give you all the information you need. Remember to use the cost calculations formulas on the next page to calculate costs over three years.

#### Transport for London

<http://www.cclondon.com/paymentinformation.shtml>

Make a note of how much the Congestion charge is for one day.

#### What Green Car?

<http://www.whatgreencar.com>

Click the *Green Car Search* button on the top navigation panel. On the new page, enter the following search criteria: *City-car* for vehicles; *Petrol* and *Battery Electric* for fuel/technology; and *Fuel cost per mile* for the sorting criteria. Then, click on the *Search* button to create a list of city cars that run on both petrol and batteries. Click on the names of the cars to open a window with detailed information.

Finally, click on the *Green Car Guides* tab at the top of the page, and then click on *Battery electric* and/or *Petrol & diesel* to read about the advantages and disadvantages of the different model types.

#### Research data table

	Type of car	Petrol	Electric
Costs over 3 years	Make and model		
	Congestion charge		
	Fuel cost		
	Road tax		
	Purchase price		
	Total		
Other data	Range		
	Number of seats		
	Top speed		
Green data	CO <sub>2</sub> emissions		
	Environmental score		
	Advantages		
	Disadvantages		

**Cost calculations**

The company estimates that the cars will enter the London congestion charging zone three times a week, 50 weeks in the year. Each car in the fleet averages 5000 miles a year. Cars are replaced after three years of use.

Congestion charge = congestion charge per day x 150 days per year x 3 years

Fuel cost = fuel cost per mile x 5000 miles per year x 3 years

Road tax = road tax per year x 3 years

**Task 2 – the discussion****Language box**

In the meeting you will need to present arguments for why the cars you have chosen would be the best choice for the company. Use some of the phrases in the box.

**Stating benefits:**

The advantage / disadvantage of ... is ... One drawback is that ...

The main benefit is ... This vehicle is more cost-effective ...

We could reduce the company's carbon footprint ...

If we choose ... , we will ...

This will allow us to ...

**AGENDA**

Aim: to choose new city-cars for the company fleet (5 vehicles).

- Advantages and disadvantages
  - electric cars
  - petrol cars
- Discussion – choice of car
- Conclusion