gases by 6% from 1990 levels by the year 2010. With energy consumption growing at over 1% per year, it was clear that Japan would not be able to keep its promise. Japanese negotiators began to propose loopholes such as emissions trading, whereby Japan would gain credit for helping other nations to cut their carbon emissions, carbon sinks (the absorption of carbon dioxide by Japan's forests), and nuclear power, which generates electricity without emitting greenhouse gases. When the US abruptly declared in 2001 that it was pulling out of the Kyoto Protocol, compromises were made in order to ensure the survival of the agreement. As a result, the carbon sink credits demanded by Japan were approved.

The Intergovernmental Panel on Climate Change has declared that the cuts agreed to in the Kyoto Protocol are hopelessly inadequate, and that even an immediate 60% cut in greenhouse gas emissions would not be enough. Japan's current energy policies are no longer viable. It is time to follow the example of the EU and begin the transition to renewable energy resources, by eliminating subsidies for fossil fuels and nuclear power and incorporating environmental and social costs in electricity charges, and by promoting the use of energy derived from the wind, sunshine, waves, underground heat and other clean, safe, environment-friendly resources.

Comprehension check

1. Why does Japan need to reduce dependence on fossil fuels?
2. What source of energy was favored in the 1960s?
3. Why is it unlikely that the long-term goal for atomic energy

will be achieved?
4. What alternative sources of energy does the writer mention?
5. Have Japan' policymakers done all they can to promote renewable energy? Why (not)?
6. Do BP and Royal Dutch Shell see renewable energy as a threat or an opportunity? Why?
7. What did the Kyoto Protocol of 1997 require Japan to do?
8. Why was this problematic for Japan?
9. How did Japan hope to reduce its obligations?
10. Which of Japan's proposals was accepted? Why?
11. Would the Kyoto Protocol be effective in preventing major climate change?
11. How could Japan cut its greenhouse gas emissions?

Questions for discussion or composition

How do you feel about the construction of new atomic power plants in Japan?
Does your home use solar energy? Why (not)?
In your opinion, why has Japan failed to exploit renewable energy?
How could energy consumption be cut?
What should Japan do now?

Vocabulary check

Fill each gap with a suitable word or phrase from the text.

1. Coal, oil and gas, the main _____ fuels, cause global warming.
2. The generating capacity of a nuclear reactor greatly _____ that of a wind turbine.

3. Voters no longer trust the government; it has lost its _____.
4. Bangladesh has very little oil, but it has an _____ of coal.
5. Germany has decided to _____ _____ its nuclear power plants and replace them with renewable energy sources.
6. Solar energy was not popular at first, but now it is beginning to _____ _____.
7. Our village receives no electricity or fuel from outside; it is completely _____ _____ in energy.
8. The new treaty will not be effective, because it has too many _____, allowing each country to evade its commitments.
9. In Hokkaido, the supply of sunshine in the winter is _____ to allow people to make do with solar energy.
10. Fuel cells are too expensive now, but with _____ from the government, they could be sold more cheaply.

Further research

You can find out more from <www.foe-j@ccom.or.jp> and <www.greenpeace.org.uk>.