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SCIENCE ISSUES TODAY

今日科学聚焦

# Using Energy 能源利用

KATE BOEHM JEROME (美) 著

外语教学与研究出版社

FOREIGN LANGUAGE TEACHING AND RESEARCH PRESS

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**如**果你希望读到地道的英语，在享受英语阅读乐趣的同时又能增长知识、开拓视野，这套由外语教学与研究出版社与美国国家地理学会合作出版的“国家地理科学探索丛书”正是你的选择。

“国家地理科学探索丛书”分为9个系列，内容涉及自然科学和社会研究，秉承《国家地理》杂志图文并茂的特色，书中配有大量精彩的图片，文字通俗易懂、深入浅出，将科学性和趣味性完美结合，称得上是一套精致的小百科。

这套丛书以英文注释形式出版，注释由国内重点中学教学经验丰富的英语教师完成。特别值得推荐的是本套丛书在提高青少年读者英语阅读能力的同时，还注重培养他们的科学探索精神、动手能力、逻辑思维能力和沟通能力。

本丛书既适合学生自学，又可用于课堂教学。丛书各个系列均配有一本教师用书，内容包括背景知识介绍、技能训练提示、评估测试、多项选择题及答案等详尽的教学指导，是对课堂教学的极好补充。

本套丛书是适合中学生及英语爱好者的知识读物。

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**A grizzly bear roams near the trans-Alaska pipeline,  
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the Arctic Ocean to Valdez on the Pacific Ocean.**



**Communication Skill..... 26**

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# The Switch Is

**Flip<sup>1</sup> a switch and a light goes on. Turn a key and the car starts up. Press<sup>2</sup> a button<sup>3</sup> and the TV springs<sup>4</sup> to life.**

Energy powers<sup>5</sup> our lives, and there is plenty of<sup>6</sup> it. Right? Well, maybe not. The fact<sup>7</sup> is that we are using more energy than ever before and finding it harder to meet our increasing<sup>8</sup> energy demands. So what should we be doing to protect<sup>9</sup> both our future<sup>10</sup> energy needs and our planet<sup>11</sup>?

Some people say we should spend more money looking for new sources<sup>12</sup> of oil<sup>13</sup>, coal, and natural gas<sup>14</sup>. Others say we should put more effort<sup>15</sup> into developing<sup>16</sup> new energy sources that don't pollute<sup>17</sup>. But most people agree that we should all be conserving<sup>18</sup> energy, or using our energy resources<sup>19</sup> more wisely<sup>20</sup>.

In this book we'll look at energy sources and explore<sup>21</sup> the advantages<sup>22</sup> and disadvantages<sup>23</sup> of each source. Then we'll take a closer look at ways to meet our future energy needs. You'll find out that energy use is an issue<sup>24</sup> with many questions and few clear-cut<sup>25</sup> answers.

1. flip	<i>v.</i>	轻击	15. effort	<i>n.</i>	精力
2. press	<i>v.</i>	按	16. develop	<i>v.</i>	开发
3. button	<i>n.</i>	按钮	17. pollute	<i>v.</i>	污染
4. spring	<i>v.</i>	跃出; 触发	18. conserve	<i>v.</i>	保存
5. power	<i>v.</i>	为……提供动力	19. resource	<i>n.</i>	资源
6. plenty of		大量的	20. wisely	<i>adv.</i>	明智地
7. fact	<i>n.</i>	事实	21. explore	<i>v.</i>	探索
8. increasing	<i>adj.</i>	日益增长的	22. advantage	<i>n.</i>	优势
9. protect	<i>v.</i>	保护	23. disadvantage	<i>n.</i>	劣势
10. future	<i>adj.</i>	未来的	24. issue	<i>n.</i>	议题
11. planet	<i>n.</i>	星球(此处指地球)	25. clear-cut	<i>adj.</i>	明确的
12. source	<i>n.</i>	源头	26. nighttime	<i>n.</i>	夜间
13. oil	<i>n.</i>	石油	27. Brooklyn		布鲁克林区
14. natural gas		天然气	28. Manhattan		曼哈顿





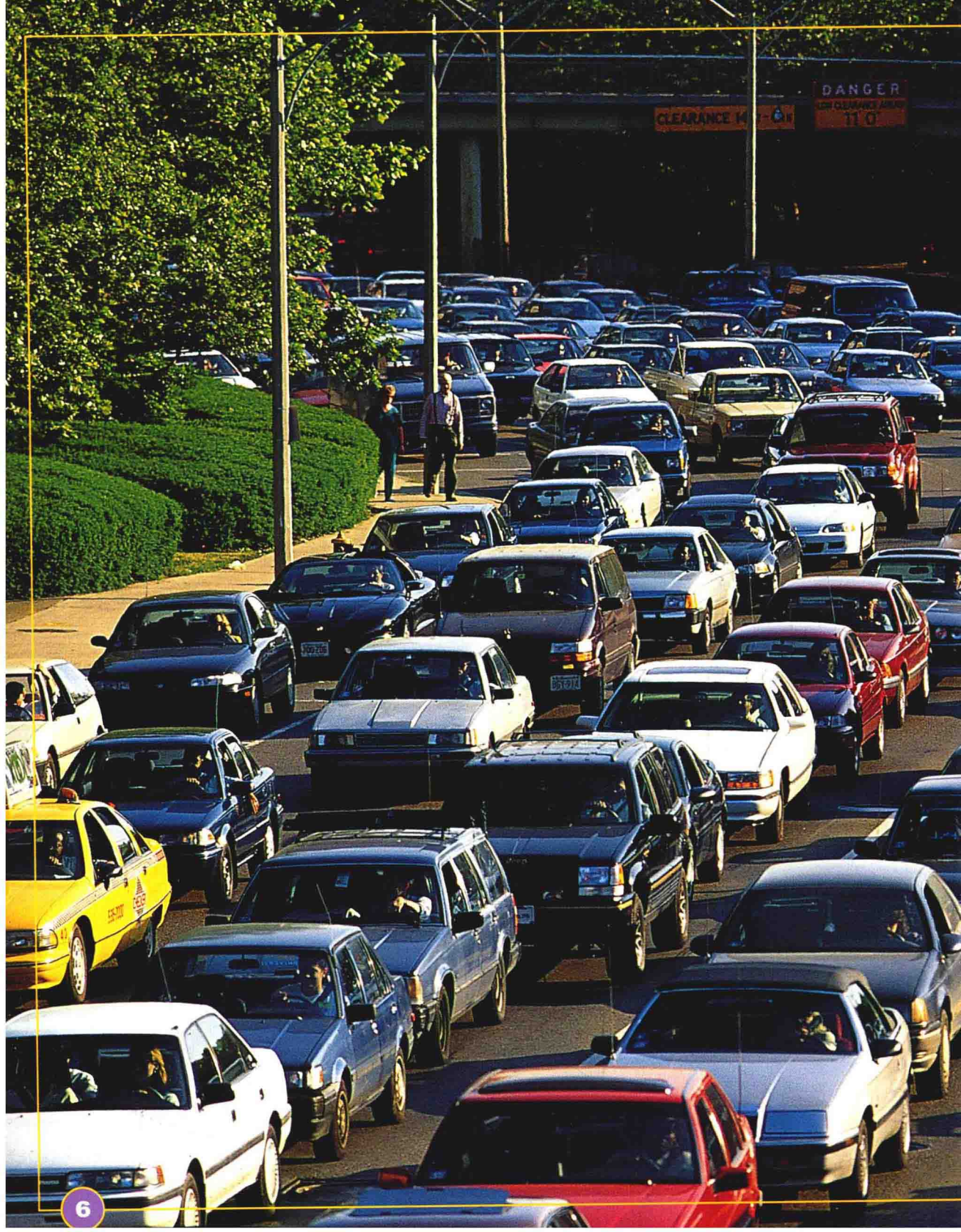
# On 开关已打开



A nighttime<sup>26</sup> view of the Brooklyn<sup>27</sup> and Manhattan<sup>28</sup> Bridges in New York

(注释见第4页)







# How Well Are We Doing?

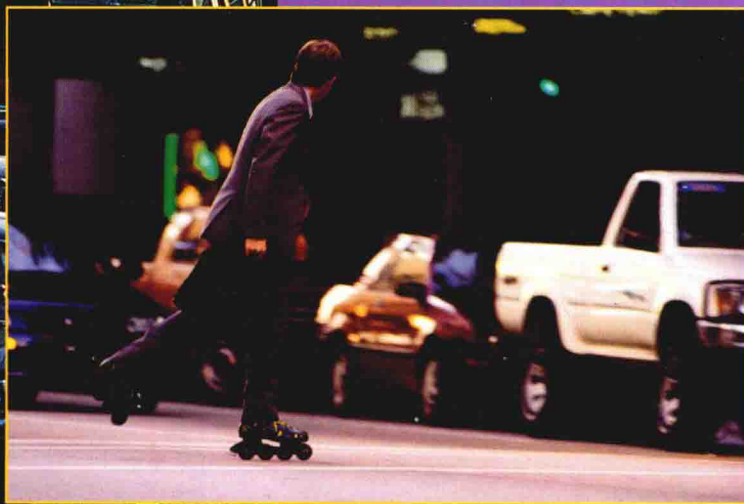
## Good News

- Untapped<sup>1</sup> sources of energy in the form of oil, coal, and natural gas still can be found.
- New sources of energy that create<sup>2</sup> less pollution<sup>3</sup> are being developed and used more frequently<sup>4</sup>.
- People are making greater efforts<sup>5</sup> to conserve, or save, energy.

## Bad News

- People are using more and more energy each year. Experts<sup>6</sup> estimate<sup>7</sup> that the United States alone could need at least 1,300 new power plants<sup>8</sup> over the next 20 years.
- The burning of fossil fuels<sup>9</sup> provides<sup>10</sup> more than 85 percent of energy in the U.S. However, fossil fuels pollute the planet, and supplies of fossil fuels eventually<sup>11</sup> will run out<sup>12</sup>.
- Alternative<sup>13</sup> energy sources are not yet completely affordable<sup>14</sup> or efficient<sup>15</sup>.

1. untapped	<i>adj.</i>	未开发的
2. create	<i>v.</i>	产生
3. pollution	<i>n.</i>	污染
4. frequently	<i>adv.</i>	频繁地
5. effort	<i>n.</i>	努力
6. expert	<i>n.</i>	专家
7. estimate	<i>v.</i>	估计
8. power plant		发电厂
9. fossil fuel		矿物燃料
10. provide	<i>v.</i>	提供
11. eventually	<i>adv.</i>	最终
12. run out		枯竭
13. alternative	<i>adj.</i>	可替代的
14. affordable	<i>adj.</i>	负担得起的
15. efficient	<i>adj.</i>	有效率的
16. gasoline	<i>n.</i>	汽油



To save fuel, this man skates to work.

In the United States drivers use more gasoline<sup>16</sup> than in any other country in the world.

# Meeting Our Energy Needs

满足能源的需要

# Supply and Demand 供给与需求

*The modern need for energy began more than a hundred years ago when cars and electric light bulbs<sup>1</sup> began to replace<sup>2</sup> horse-drawn<sup>3</sup> carriages<sup>4</sup> and candles. Today we depend on<sup>5</sup> energy to power everything from computers to space shuttles<sup>6</sup>.*

Energy is very important to our lives. The energy in food powers our bodies. The energy stored<sup>7</sup> in fuels lets us produce electricity, run our cars, and make products<sup>8</sup> like clothes and toys. Over time, our energy needs have grown. Today we are using more energy than ever before.

In the United States, most of the energy that we use in homes and schools comes from large utility<sup>9</sup> companies<sup>10</sup>. These companies usually burn fuel, such as coal, to make electricity. However, there are many sources of energy that can meet our energy needs. As you might guess, there are advantages and disadvantages to each.

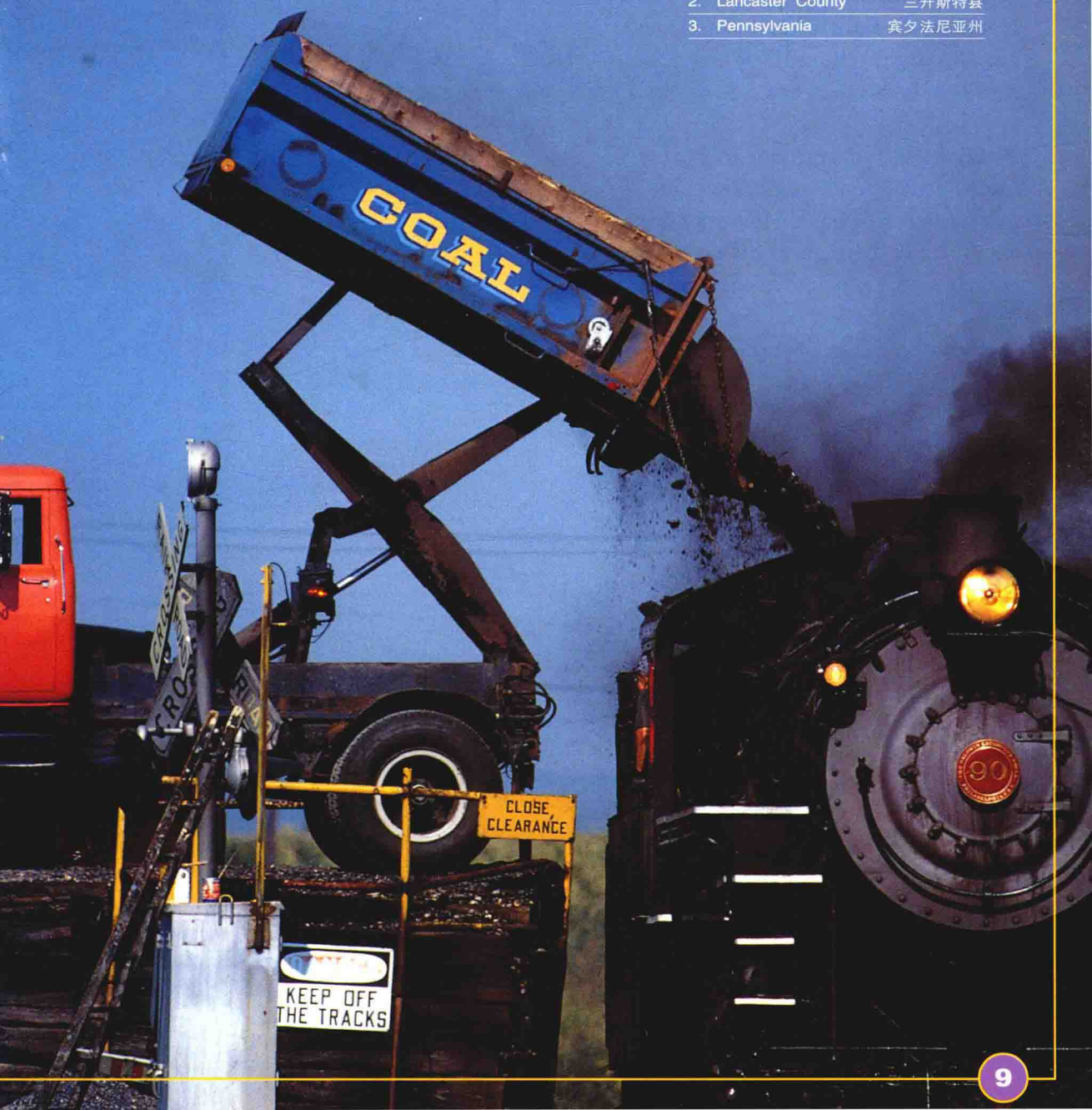
1. light bulb		电灯泡	6. space shuttle		航天飞机
2. replace	v.	代替	7. store	v.	存储
3. horse-drawn	adj.	马拉的	8. product	n.	产品
4. carriage	n.	马车	9. utility	n.	公用事业
5. depend on		依靠	10. company	n.	公司





A driver fills a railroad  
car<sup>1</sup> with coal in  
Lancaster County<sup>2</sup>,  
Pennsylvania<sup>3</sup>.

- |                     |        |
|---------------------|--------|
| 1. railroad car     | 火车车厢   |
| 2. Lancaster County | 兰开斯特县  |
| 3. Pennsylvania     | 宾夕法尼亚州 |



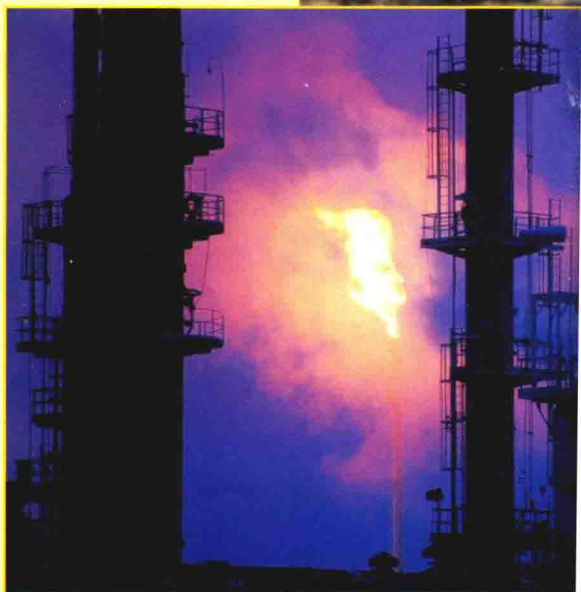
## Here Today, Gone Tomorrow

Fossil fuels are sources of energy in the form of coal, oil, and natural gas. These fuels are called fossil fuels because they are formed over millions of years from the fossils<sup>1</sup>, or remains<sup>2</sup>, of dead plants and animals. Eventually the fossils are buried<sup>3</sup> under dirt<sup>4</sup> and rock<sup>5</sup>. Over time pressure<sup>6</sup> from dirt and rock and heat from within Earth change the fossils into coal, oil, and natural gas. It would take millions of years to renew<sup>7</sup>, or make more, fossil fuels. So they are called nonrenewable energy sources.

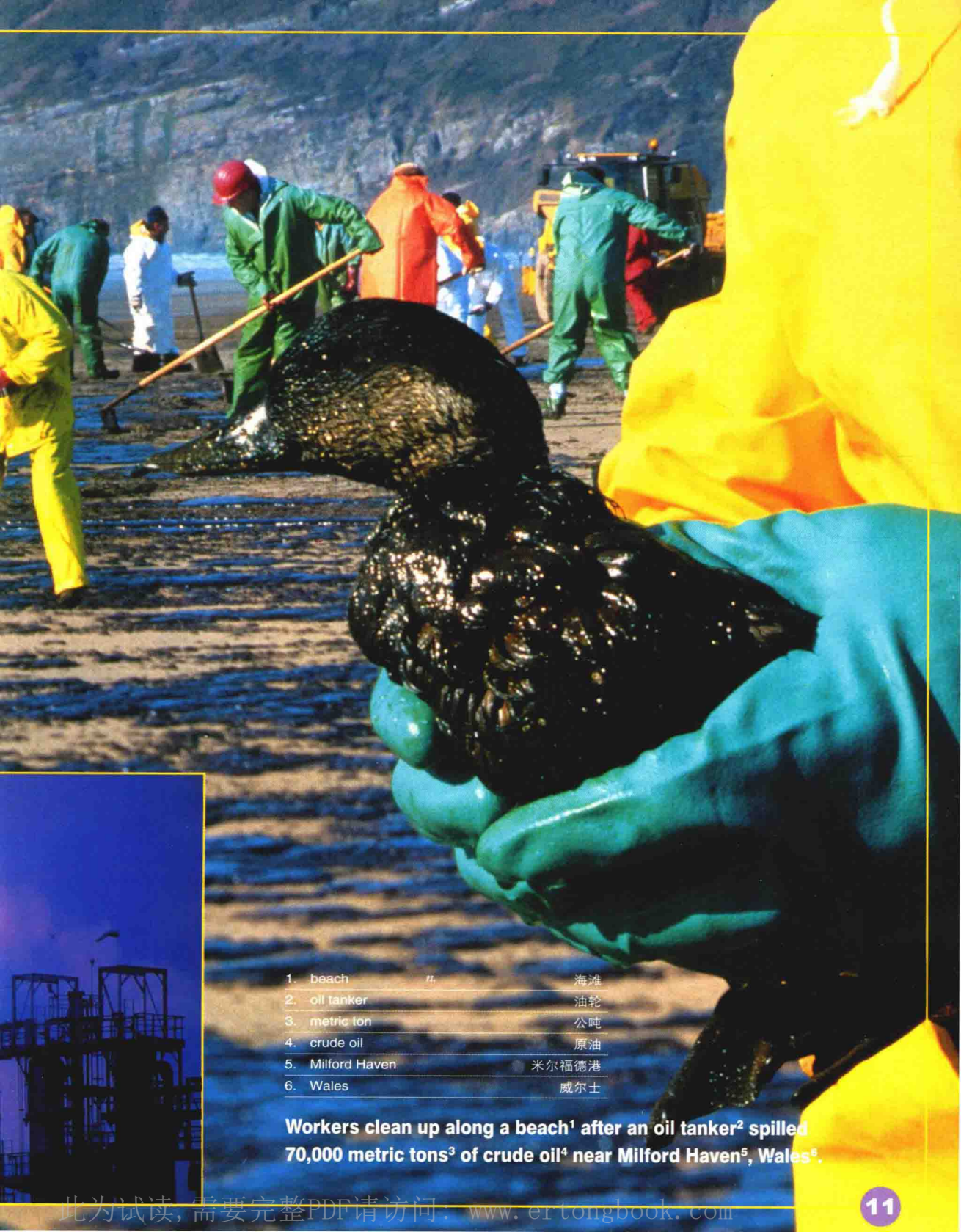
Today fossil fuels provide more than 85 percent of the energy we use in the United States. Compared with other sources of energy, fossil fuels are cheap. However, burning fossil fuels pollutes the air. Burning them gives off the gas carbon dioxide<sup>8</sup>. Some scientists think high levels<sup>9</sup> of this gas are causing<sup>10</sup> global warming<sup>11</sup>, or the heating up of our planet. Fossil fuels also can cause other problems in the environment<sup>12</sup>. Oil spills<sup>13</sup> can kill plants and animals and pollute their habitats<sup>14</sup>. The mining<sup>15</sup> of coal can damage<sup>16</sup> the land. And most experts predict<sup>17</sup> that our supply of fossil fuels will run out within the next few centuries.

1. fossil	<i>n.</i>	化石
2. remains	<i>n.</i>	残余; 遗骨
3. bury	<i>v.</i>	掩埋
4. dirt	<i>n.</i>	泥土
5. rock	<i>n.</i>	石头
6. pressure	<i>n.</i>	压力
7. renew	<i>v.</i>	更新
8. carbon dioxide		二氧化碳
9. level	<i>n.</i>	含量
10. cause	<i>v.</i>	引起
11. global warming		全球变暖
12. environment	<i>n.</i>	环境
13. spill	<i>n.</i>	溢出
14. habitat	<i>n.</i>	栖息地
15. mining	<i>n.</i>	开采
16. damage	<i>v.</i>	损坏
17. predict	<i>v.</i>	预言
18. oil refinery		炼油厂

**Natural gas burns  
at an oil refinery<sup>18</sup>.**







1. beach	“	海滩
2. oil tanker		油轮
3. metric ton		公吨
4. crude oil		原油
5. Milford Haven		米尔福德港
6. Wales		威尔士

Workers clean up along a beach<sup>1</sup> after an oil tanker<sup>2</sup> spilled 70,000 metric tons<sup>3</sup> of crude oil<sup>4</sup> near Milford Haven<sup>5</sup>, Wales<sup>6</sup>.