Unit 3

Energy

Listening (p.28)

Energy Sources

Paragraph 1 (トラック14：Our main energy source)

Energy can be produced in a wide variety of ways. Our main energy sources––oil, gas, and coal––all involve burning. Unfortunately, this causes air pollution and **contributes to** global warming.

Paragraph 2 (トラック15：Nuclear energy)

**Nuclear** energy, which is produced from uranium, is much cleaner than coal, oil and gas. But **radioactive** waste from nuclear power plants is extremely dangerous.

Paragraph 3 (トラック16：garbage)

Garbage is another source of energy: when it’s burned, the heat produced is often used to pro- vide the local community with hot water or to make electricity. But unless it’s burned at a very high **temperature**, garbage gives off very **harmful** gases, including dioxin. These can be removed by filters.

Paragraph 4 (トラック17：discarded tires)

In many countries, **discarded** tires are burned to produce the heat needed in steel or cement factories, or to generate electricity. This is convenient, but it causes air pollution, and the ash left over contains many harmful **substances**.

Paragraph 5 (トラック18：animal dung)

In poor villages in developing countries, animal dung is burned as a fuel. When burned in people’s homes, this can cause health problems, but it’s safe for use in small-scale power plants.

Paragraph 6 (トラック19：gasohol)

In Brazil, many cars use gasohol, a **biofuel** made from sugar cane. It’s **carbon-neutral**: when the sugar cane grows, it **absorbs** carbon dioxide, and when it’s used as fuel, it **releases** the gas. So it’s less harmful for the environment than gasoline or diesel. But a lot of tropical rainforests have been cut down to plant sugar cane.

Paragraph 7 (トラック20：seven cleaner energy sources)

There are much cleaner ways to produce energy. For example, we can get energy from rivers, wind, hot springs and waves. We can also get it from the sun, the source of solar energy. Tidal power is another clean source of energy. And finally, let’s not forget hydrogen. This is going to become a **major** energy source within the next ten years.