**UNIT 9**

Watch the following video <https://www.youtube.com/watch?v=1kUE0BZtTRc&t=3s> and answer the following questions:

1. What is renewable energy?
2. What are the 5 most common sources of renewable energy?
3. How much of the energy consumed by humans is derived from fossil fuels?
4. Write down 3 benefits of renewable sources of energy.
5. Write down 3 downsides of renewable energy.
6. In your opinion, do the advantages outweigh the disadvantages or not? Why? Be prepared to discuss in class.
7. Based on the 17SDGs, can you find out which Sustainable Development Goal is about renewable energy?
8. What type(s) of renewable energy could we use in our school to make it more eco-friendly?

Watch the video <https://www.youtube.com/watch?v=6xavPLHszoM> and be prepared to discuss on the four projects presented.

Which one did you find the most interesting and effective in promoting sustainability and which one would you like to visit the most and why?

In teams of 4, choose an eco friendly destination for summer holidays or an eco-school for a school trip. Be prepared to present it in class and explain what makes it a destination that actively promotes sustainability.

Watch the following video twice <https://www.weforum.org/videos/sustainable-tourism-d786c79d73/> and in pairs write down 2-3 tips on how to be a sustainable tourist. Then, share your ideas in class in order to make our own online poster titled ‘How to be a sustainable tourist‘ on Canva and share it with our school community on our school blog.

**Vocabulary List for Renewable and Non-Renewable Sources of Energy**

1. **Renewable**   
   A type of energy source that can be replenished naturally over time, such as solar, wind, and hydroelectric energy.
2. **Non-renewable**   
   Energy sources that are limited in supply and cannot be replenished within a human timescale, such as fossil fuels like coal, oil, and natural gas.
3. **Sustainability**   
   The ability to maintain certain processes or states indefinitely, often referring to the use of resources in a way that does not deplete them for future generations.
4. **Fossil Fuels**   
   Natural substances formed from the remains of ancient plants and animals, including coal, oil, and natural gas, which are used as energy sources.
5. **Biomass**   
   Organic material that comes from plants and animals, which can be used as a renewable energy source through combustion or conversion into biofuels.
6. **Hydroelectric**   
   Relating to the generation of electricity using water flow, typically through dams or river currents, considered a renewable energy source.
7. **Photovoltaic**   
   Technology that converts sunlight directly into electricity using solar cells, a key method for harnessing solar energy.
8. **Wind Turbine**   
   A device that converts wind energy into mechanical power, which can then be transformed into electricity, contributing to renewable energy generation.
9. **Geothermal**   
   Energy derived from the heat stored beneath the Earth's surface, used for heating and electricity generation, classified as a renewable source.
10. **Energy Efficiency**   
    Using less energy to provide the same service, which can reduce overall energy consumption and is vital for sustainable practices.
11. **Carbon Footprint**   
    The total amount of greenhouse gases emitted directly or indirectly by an individual, organization, or product, often measured in carbon dioxide equivalents.
12. **Depletion**   
    The reduction or exhaustion of a resource, particularly referring to non-renewable sources like fossil fuels as they are consumed faster than they can be replenished.
13. **Alternative Energy**   
    Energy sources that are different from the traditional fossil fuels, including renewables such as solar, wind, and geothermal, aimed at reducing environmental impact.
14. **Emission**   
    The release of pollutants or greenhouse gases into the atmosphere, often associated with the burning of fossil fuels.
15. **Clean Energy**   
    Energy derived from renewable sources that produce little to no pollution or greenhouse gases, contributing to a healthier environment.