

الجمهورية الجزائرية الديمقراطية الشعبية

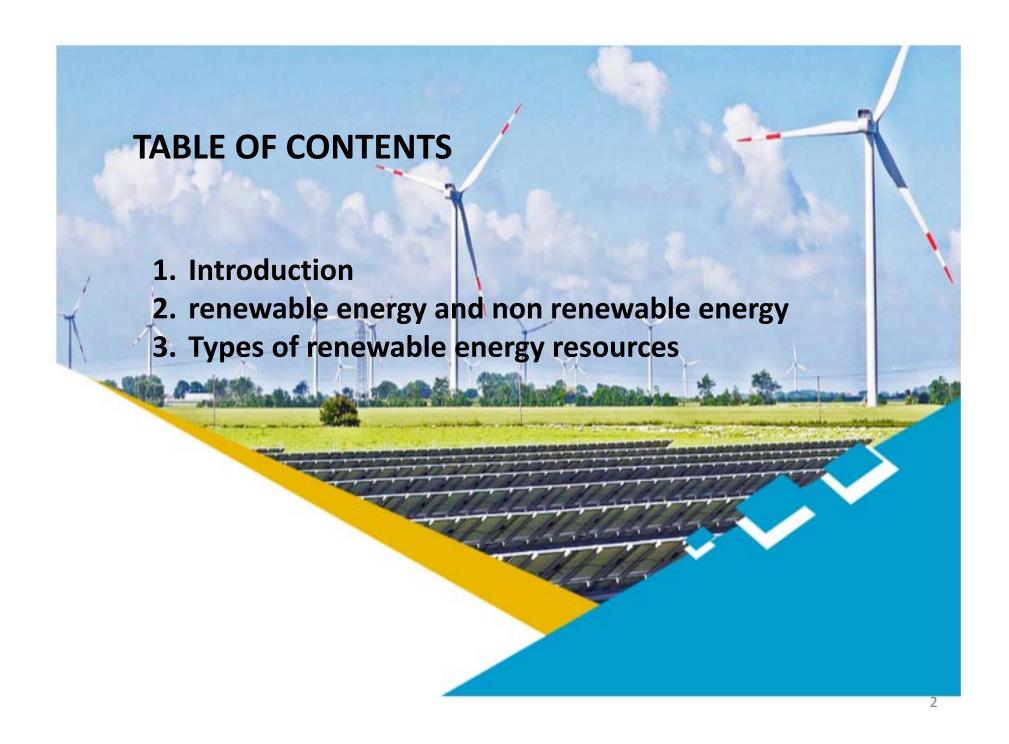
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Master 1 Energie renouvelable



Module Technical English

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1. Introduction

Our everyday activities depend heavily on energy. Traditional fossil fuels like coal, oil and natural gas, however, pollute the environment, and it is becoming more and more expensive to find and extract them. Furthermore, we are running out of them. So, it is very urgent to find new sources to meet the increasing energy needs of the growing population of the Earth.

Eco-friendly, or green energy sources like solar and wind power, hydropower and biomass do not have a negative impact on the environment. They are also renewable, which means we will never run out of them as they are continuously replenished.

1.1 Term definition

depend heavily
fossil fuels
pollute
expensive
extract
increasing
needs
growing

1.1 Term definition

Eco-friendly	
green energy	
impact	
continuously replenished	

Renewable energy?

Energy derived from resources that are regenerative or for all practical purposes can not be depleted.

non renewable energy?

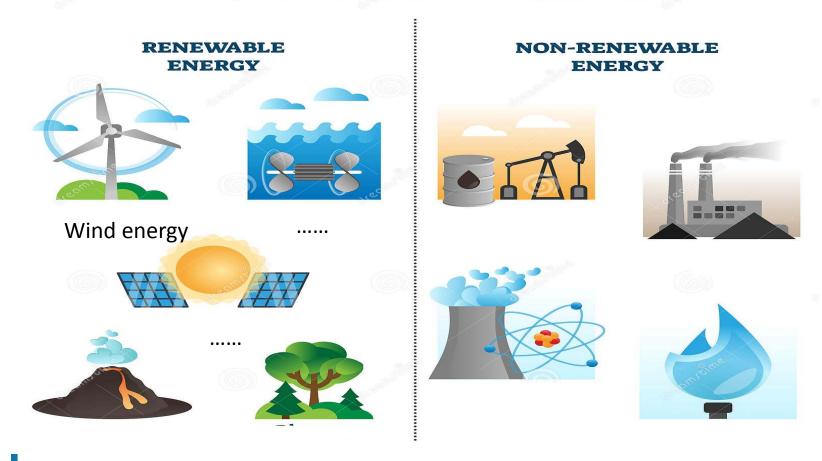
Energy derived from resources that cannot be easily made or "renewed,".

Exercice 1 a) Which of these energy resources are renewable?

- wind energy
- coal
- oil
- solar energy
- hydropower
- natural gas
- biomass

b) fill in the gaps with the correct name of source in the picture below

ENERGY SOURCES



c) Match the words to form phrases

fossil needs

Depend an impact on something

to have on something

to meet fuel

3. Benefits of Renewable Energy Use

Renewable energy wind, solar, geothermal, hydroelectric, and biomass provides a lot of benefits for our climate, our health, and our economy.

Human activity is overloading our atmosphere with carbon dioxide and other greenhouse gas emissions, which trap heat, steadily drive up the planet's temperature, and create significant and harmful impacts on our health, our environment, and our climate.

Electricity production accounts for more than one-third of U.S. greenhouse gas emissions, with the majority generated by coal-fired power plants, which produce approximately 25 percent of total U.S. greenhouse gas emissions; natural gas-fired power plants produce 6 percent of total emissions. In contrast, most renewable energy sources produce little to no greenhouse gas emissions. (...)

Generating electricity from renewable energy rather than fossil fuels offers significant public health benefits. (...) Replacing fossil fuels with renewable energy has been found to reduce premature mortality and lost workdays, and it reduces overall health care costs. (...) Compared with fossil fuel technologies, which are typically mechanized and capital intensive, the renewable energy industry is more labor-intensive. This means that, on average, more jobs are created for each unit of electricity generated from renewable sources than from fossil fuels. (...)

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While renewable facilities require upfront investments to build, once built they operate at very low cost and, for most technologies, the fuel is free. As a result, renewable energy prices are relatively stable over time. (...) In contrast, fossil fuel prices can vary dramatically and are prone to substantial price swings

Choose the best answer on the basis of the previous text.

Renewable energy has ...

a) a lot of benefits. b) very few benefits.

Carbon dioxide is a

- a) greenhouse gas.
- b) b) renewable gas.

Choose the best answer on the basis of the previous text.

Electricity generation

- a) is responsible for more than 1/3 of greenhouse gas emissions in the US.
- b) b) reduces greenhouse gas emissions by one-third in the US.

Most of the energy in the US is

- a) generated by coal-fired power plants.
- b) natural gas-fired power plants.

Choose the best answer on the basis of the previous text.

Premature mortality means

- a) early deaths.
- b) early birth

Renewable energy facilities (e.g. wind farms, solar panels) are expensive ... and cheap

- a) to use; to build
- b) to build; to use

Exercice 2 check the meanings of the red words in a dictionary