



BREVET DE TECHNICIEN SUPÉRIEUR / SESSION 2017 (BTS BLANC)

FILIERE : Maintenance des Systèmes de Production

ÉPREUVE : Anglais Technique

Durée de l'épreuve : 3 Heures

Coefficient de l'épreuve : 2

TEXT: TYPES OF RENEWABLE ENERGY

Fossil fuels are non-renewable, that is, they draw on finite resources that will eventually dwindle, becoming too expensive or too environmentally damaging to retrieve. In contrast, the many types of renewable energy resources-such as wind and solar energy-are constantly replenished and will never run out.

Most renewable energy comes either directly or indirectly from the sun. Sunlight, or solar energy, can be used directly for heating and lighting homes and other buildings, for generating electricity, and for hot water heating, solar cooling, and a variety of commercial and industrial uses.

The sun's heat also drives the winds, whose energy, is captured with wind turbines. Then, the winds and the sun's heat cause water to evaporate. When this water vapor turns into rain or snow and flows downhill into rivers or streams, its energy can be captured using hydroelectric power.

Along with the rain and snow, sunlight causes plants to grow. The organic matter that makes up those plants is known as biomass. Biomass can be used to produce electricity, transportation fuels, or chemicals. The use of biomass for any of these purposes is called bioenergy.

Hydrogen also can be found in many organic compounds, as well as water. It's the most abundant element on the Earth. But it doesn't occur naturally as a gas. It's always combined with other elements, such as oxygen to make water. Once separated from another element, hydrogen can be burned as a fuel or converted into electricity.

In fact, ocean energy comes from a number of sources. In addition to tidal energy, there's the energy of the ocean's waves, which are driven by both the tides and the winds. The sun also warms the surface of the ocean more than the ocean depths, creating a temperature difference that can be used as an energy source. All these forms of ocean energy can be used to produce electricity

Adapted from Internet

I- Comprehension check

Read the text and provide accurate and short answers to the following questions

- 1- What is the difference between fossil energy and the other types of renewable energy?
- 2- How can water vapor energy be captured?
- 3- What is biomass?
- 4- How can hydrogen be converted into electricity
- 5- What is the source of tidal energy

II- translate

1- Translate the following passage from the text into French

From “Most renewable energy comesdown to
commercial and industrial uses.”

2- Translate the following passage from the text into English

L'énergie renouvelable provient des ressources énergétiques naturellement
régénératrices telles que le soleil, le vent, l'eau, la biomasse et la chaleur de l'intérieur de
la Terre

II- Writing

Topic: show the importance of renewable energy

(Introduction- development –conclusion)