name: class: date:

Understanding Biomass Energy

1. Fill in the gaps with the right words!
2. Scan the QR code to check your answers interactively!
3. Copy the text in your exercise book!
4. Formulate the content of the text yourself!
   Use all gap words!

Biomass energy is a form of _____ energy that comes from organic materials. Plants, for instance, capture sunlight and store it in the form of _____ energy through the process of photosynthesis. When these plant materials, such as _____ chips, agricultural crops, or even waste from forests and households, are used to generate energy, they produce biomass energy. This energy can be converted into different forms, such as _____, electricity, or biofuels, making it a versatile source of power.

One of the main advantages of biomass energy is its ability to reduce _____ gas emissions. Since plants absorb carbon dioxide while growing, the _____ released during the burning of biomass is balanced by the carbon absorbed, making it a carbon-neutral _____. However, this balance depends on careful management of biomass resources and ensuring that new _____ are grown to replace those used for energy.

Biomass is often hailed as a sustainable _____ to fossil fuels. Unlike oil, coal, or natural gas, biomass resources can be replenished on a relatively short _____. For instance, trees can be replanted, and agricultural crops can be regrown each _____. This cycle of growth and use makes biomass a potentially infinite source of energy.

However, there are _____ associated with biomass energy. The process of collecting, transporting, and processing biomass materials can be _____ and expensive. Moreover, if not managed sustainably, the use of biomass can lead to deforestation, loss of _____, and other environmental issues.

Despite these challenges, biomass plays a crucial role in the global _____ mix. It is particularly important in rural areas where it provides a primary source of heating and cooking energy. Innovations in technology are making biomass energy more efficient and _____, helping to reduce reliance on fossil fuels and combat climate change.

energy | challenges | labor-intensive | alternative | season | carbon | sustainable | chemical | heat | renewable | biodiversity | greenhouse | process | timescale | wood | plants

Reference: https://materials.school/educational-activities/task-collection/environmental-science/understanding-biomass-energy (created with ChatGPT)