**Alternative Energy Pros and Cons Worksheet** **– Biomass Answer Key**

**Type of alternative energy**:

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| Biomass |

Individual work:

Define alternative energy source:

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| Biomass is organic matter that comes from plants and animals. Organic waste like wood, animal waste, food waste, yard waste. |

What are the pros and cons of the energy source you focused on?

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| **Pros** | **Cons** |
| Biomass is renewable, waste is quickly generated. | Biomass is expensive. Constructing the biomass energy plant is extensive plus the cost of harvesting and transporting the biomass. |
| Biomass is abundant. There is organic biomass growing every day. The supply will need to be managed responsibly. | Needs a lot of space to grow crops. |
| Using biomass will cause less waste to go into landfills. | Even though it is carbon-neutral, greenhouse gases are still being emitted. |
| Biomass is carbon neutral. The only carbon it released is the carbon that it took in over its lifetime. | Biomass is not efficient. It takes more energy to burn the organic material that can be produced. |
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Highlight 2 pros and 2 cons that you think are most important to share with the rest of your group. When everyone has learned about the alternative energy source they are focusing on, share what you have identified as most important with your group. Take notes in the table below so that you can share this information with your poster group.

Answers will vary depending on student presentations

Group sharing:

|  |  |  |
| --- | --- | --- |
| Type of energy | Pros | Cons |
| Solar |  |  |
| Wind |  |  |
| Geothermal |  |  |
| Hydropower |  |  |
| Nuclear |  |  |
| Biomass |  |  |

Based on what you heard from these presentations, which type of energy do you recommend be used in getting electricity to your building?

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| Answers will vary. |

What is the evidence and reasoning behind this recommendation?

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| Answers will vary. |