Resource	Advantages/uses	Disadvantages/limits
Biomass		
Hydro-electric power		
Solar power		
Geothermal		
Wind		

Resource	Advantages/uses	Disadvantages/limits
Biomass	• Gets rid of agricultural waste (manure, plant wastes) • Can reduce landfill space • No net contribution of greenhouse gas, if the land used to grow the biomass is replanted	• Sources other than garbage are scarce in city areas • Odor from burning may be unpleasant • Burning causes air pollution
Hydro-electric power	• Supply never runs out • Does not produce pollution or greenhouse gases • Most efficient way to make large amounts of electricity • Can help with flood control • The reservoir created can be used for recreation	• Can change the natural course of a river • Water intake can kill fish • Can only be used in areas that have rivers or oceans • Can affect the water plants and animals downstream
Solar power	• Supply never runs out • Good for use where there are no electric power lines available • Can be placed in unused spaces such as roofs • Does not produce pollution or greenhouse gases • If installed on a house, you may have no electric bills • Sunlight is free	• Panels are expensive to produce • Requires some sort of storage, such as batteries • Making the cells uses resources and makes pollution • Can only be used on sunny days
Geothermal	• This heating and air conditioning system can be used on any home • Heat from the earth is free • It never runs out • Does not produce pollution or greenhouse gases • Heating bills are very cheap • No outside source of fuel is needed	• Hydrovent power plants can only be made in certain spots • More expensive to buy this heating and cooling system for your house than a standard furnace • If you got a leak in your underground tube of liquid, it would be a pain to dig up your yard and fix it.
Wind	• Does not produce pollution or greenhouse gases • If installed on a house you may have free electric bills • It never runs out • Wind is free	• Will not work on some days • Can be noisy and aren't nice to look at • Storms or high winds could knock it over

Resource	Advantages/uses	Disadvantages/limits
Natural gas		
Petroleum		
Coal		
Nuclear power		

Resource	Advantages/uses	Disadvantages/limits
Natural gas	• Easy and cheap to transport by existing pipelines (no trucks needed) • US has a large supply • Somewhat inexpensive and efficient to use for heating homes • Produces the least amount of pollution of all the fossil fuels	• Since more people want to use it because it is cheap, the prices are going up • The US only has so much of it and then its gone • When we take it out of the ground it can damage wildlife habitats • When it is burned it makes greenhouse gases • When it is burned it makes air pollution (sulfur dioxide)
Petroleum	• Used in most internal combustion engines • Used by most vehicles, trains, and airplanes • The delivery system (by pipeline) is already established • Produces less sulfur dioxide (pollution gas) than coal	• We have to depend on other countries to get it • When there is a war in those countries our supplies get disrupted and prices increase • When it is burned it makes greenhouse gases and air pollution (sulfur dioxide) • When it is pumped out of the ground or when trucks or boats transport it, accidents can happen and the spills ruin habitats
Coal	• One of the cheapest ways to generate electricity • We have good supplies of it in the US • Main source of fuel for large generating plants • Transported by railroad or ship, and we have this system in place so we are used to it	• Pollution control equipment is very expensive • Produces more greenhouse gas and air pollution than any other fossil fuel • Produces ash that has to be disposed of • Mining it can hurt ecosystems and ruin underground water supplies • Mining it can cause erosion and acid drainage into streams and rivers
Nuclear power	• If the plant is already existing, producing electricity is fairly inexpensive • Does not make air pollution or greenhouse gases • Only takes a small amount of fuel to make a huge amount of electricity (1 lb uranium makes the same electricity as 2,436,375 lbs of coal) • It helps us to be independent from other countries because the fuel source (uranium) is found in the US	• Plants are extremely expensive to build and its hard to get permission to do it • Keeping the plant safe is expensive • If accidents occur, millions of people would suffer from the radiation and the land would be unusable for hundreds of years • It produces hazardous wastes that are toxic for hundreds of years