

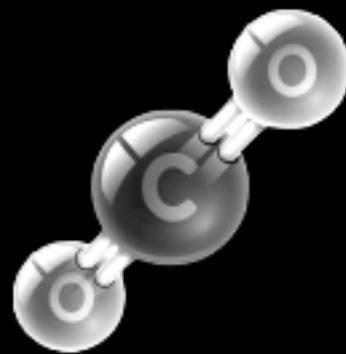
# G47

Climate Summit 2019  
Olympiade Charnwood

Solar Power



Carbon Dioxide



Hydro Power



Methane





# Climate Change

Climate change is caused by the enhanced greenhouse effect. This is where greenhouse gases such as carbon dioxide and methane are released into the atmosphere and trap heat inside. This causes a net rise in temperatures, and also more extreme weather such as hurricanes, fires and even floods. Carbon dioxide is released through the burning of fossil fuels such as coal, and methane is released from fuels such as oil and gas, as well as a variety of natural sources. Furthermore, some gases released can destroy the ozone layer, making sunburn and skin cancer much more common.

There are many alternatives for energy production, including solar power and hydro power. As well as these two, other viable options include wind power (using large windmills with turbines), geothermal (pumping water down into magma inside the earth, which then rises back up as steam and can be used to drive turbines) and biofuels (creating fuels from agricultural waste). Nuclear power is also another option, where the energy from radioactive substances is used to heat water which turns turbines. Although there were safety concerns in the past, modern nuclear power plants are considered safe.

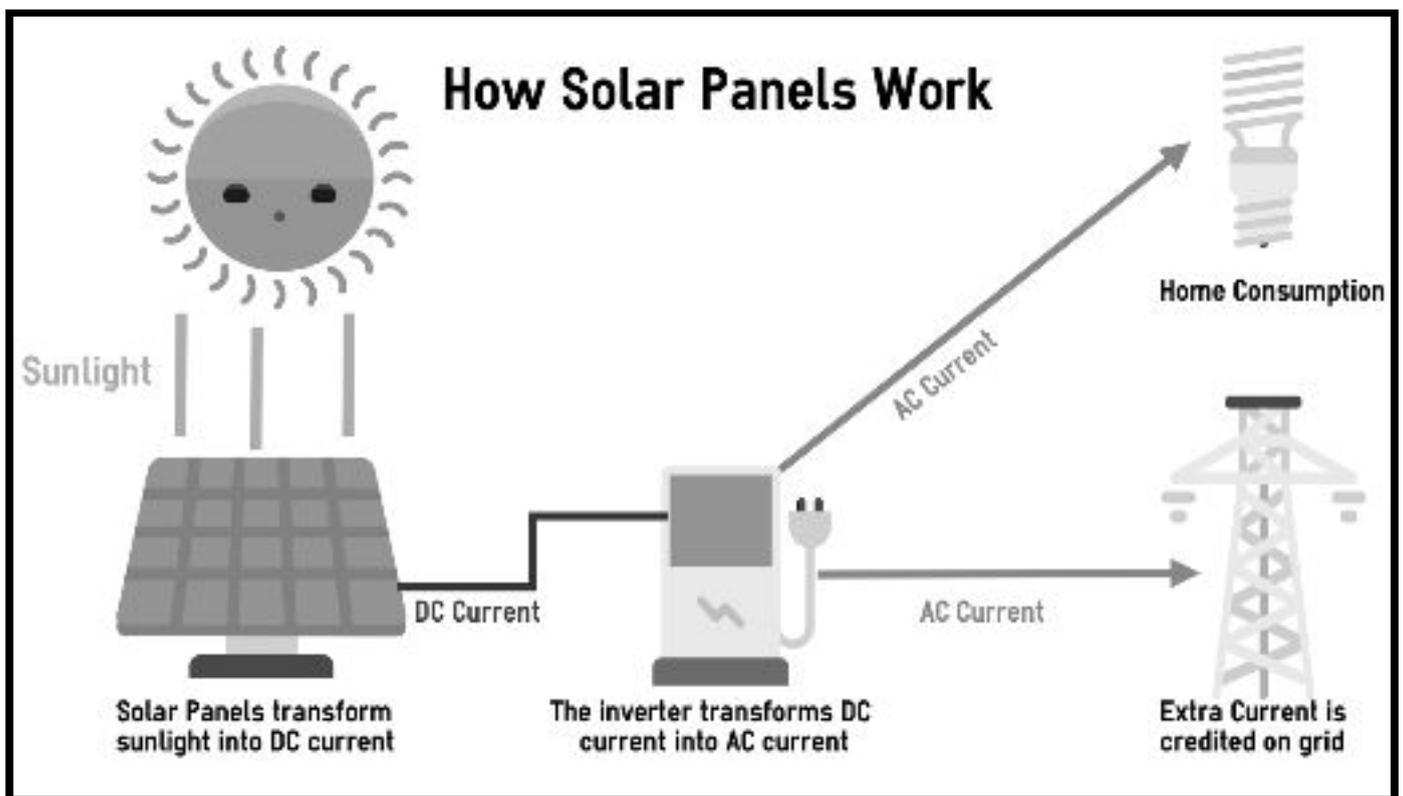
Different countries require different renewable energy approaches. For example Iceland which lies near a tectonic fault line can produce almost 100% of its energy from geothermal and hydropower. The United Kingdom is very windy and generates more electricity through wind power than coal power. Morocco has created the world's largest solar farm using mirrors and molten salt, and Germany and China are creating significant amounts of energy through solar power.

# Solar Power Team

*Zun Elektrye Manshaft*

**Colour: Yellow/White**

Solar power is the conversion of energy from sunlight into electricity, either directly using photovoltaics (PV) or indirectly using concentrated solar power, or a combination. Concentrated solar power systems use lenses or mirrors and tracking systems to focus a large area of sunlight into a small beam. Photovoltaic cells convert light into an electric current using the photovoltaic effect.



**Ongoing task:** Prove those naysayers wrong and show them that solar power is a viable source of energy.

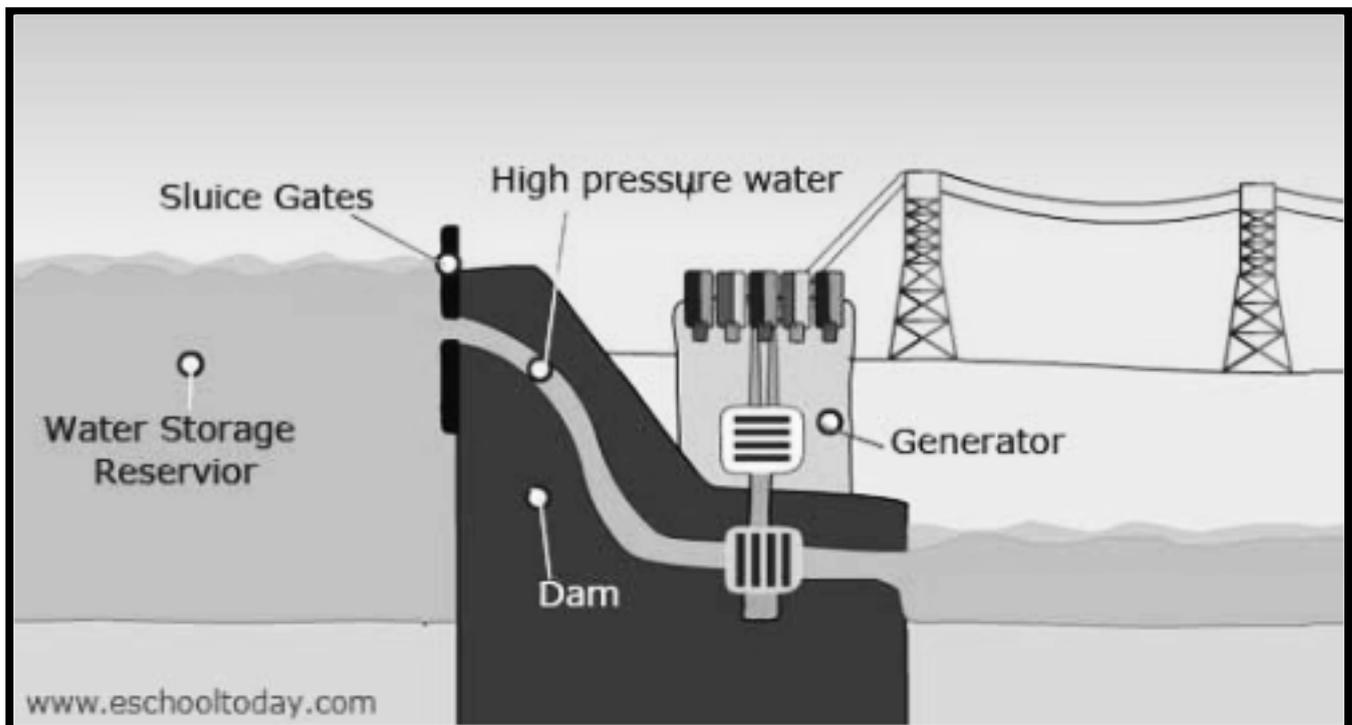
Build a solar powered car. Show your current attempt at each meal.

# Hydropower Team

*Vaser Elektrye Manshaft*

## Colour: Blue

Hydropower is power derived from the energy of falling or fast-running water, which may be harnessed for useful purposes. Since ancient times, hydropower from many kinds of watermills has been used as a renewable energy source for irrigation and the operation of various mechanical devices, such as gristmills, sawmills, textile mills, trip hammers, dock cranes, domestic lifts and ore mills.



**Ongoing task:** *Water is powerful. Water is productive. Water is precious. Water is hard to breathe under. One of you must be wearing a snorkel at all times.*

# Carbon Dioxide Team

*Koynshtof-Tsveyoksid Manshaft*

**Colour: Black**

Carbon dioxide is a colorless gas. It consists of a carbon atom bonded to two oxygen atoms. It occurs naturally in Earth's atmosphere as a trace gas. Natural sources include volcanoes, hot springs and geysers. It is present in deposits of petroleum and natural gas. Because carbon dioxide is soluble in water, it may occur naturally in groundwater, rivers and lakes, ice caps, glaciers and seawater. Carbon Dioxide is a greenhouse gas.



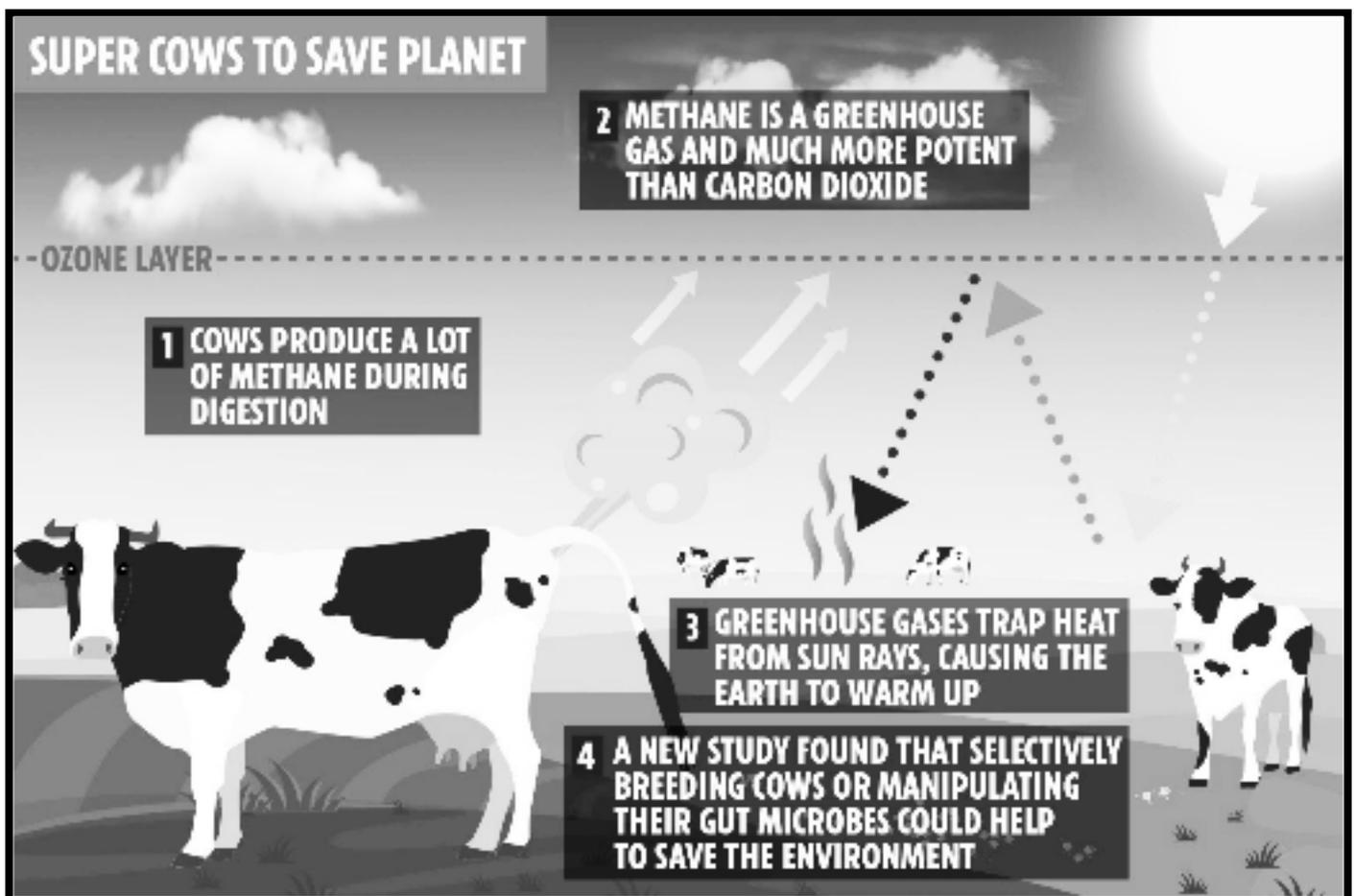
***Ongoing task:** You must keep a plant alive. If it dies you lose olympiade. Seriously. Like not even kidding. None of this 'SKIF draw' stuff. You think we're joking don't you?*

# Methane Team

*Metan Manshaft*

**Colour: Red**

Methane is a chemical compound made up of one carbon atom and 4 hydrogen atoms. It is the main part of natural gas. There is a high relative abundance of methane on Earth which is an attractive fuel, although capturing and storing it poses challenges due to it usually being gaseous under normal temperature and pressure. Methane is one of the most common greenhouse gases.



**Ongoing task:** Cows are life. They are the apple of your eye and the reason you breathe.

Three people must scull a glass of milk at every meal. But first they must toast "Tzu Di Kauz"

## **Mir Kumen On**

A yontef makht oyf ale merk

Un fayern tsint on oyf berg

Mir kumen, shturems on, a tsam,

Fun land tsu land, fun yam tsu yam

Mir kumen on, mir kumen on ) REPEAT

## **Chorus**

Un fest un zikher undzer trot

Mir kumen on fun dorf fun shtot

Mit hunger, feyern in blik,

Mit hertser oysgebenkt nokh glik,

Mir kumen on, mir kumen on ) REPEAT

Mir geyen ale fest un dreyst

Vi likhtik flatter undzer freyd

Mir shlogn fayer oys fun shteyn

Un ver s'iz yung zol mit undz geyn, (NOR MIT UNZ)

Mir kumen on, mir kumen on ) REPEAT

## **Chorus**