Earth Day, the Tech Way: Can Technology Save Us From the Climate Crisis?

April 14, 2022



What exactly is technology?



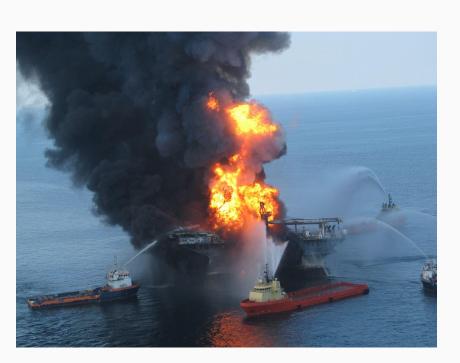
Ans-Technology is science or knowledge put into practical use to solve problems or invent useful tools.

How has technology impacted climate change?

Ans- The climate crisis began with technology, as a result of the Industrial **Revolution. The Industrial Revolution took** us from agriculture & handmade items, into large-scale industry, mechanized manufacturing, and the factory system. New machines, new power sources, and new ways of organizing work made existing industries more productive and efficient.



What are some of the things that have happened as a result of the industrial revolution?

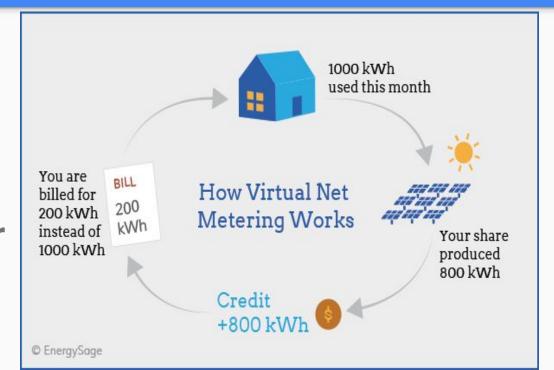


Ans- One of the main byproducts of the Industrial Revolution has been pollution. Pollution is the introduction of contaminants into the natural environment that cause adverse change.

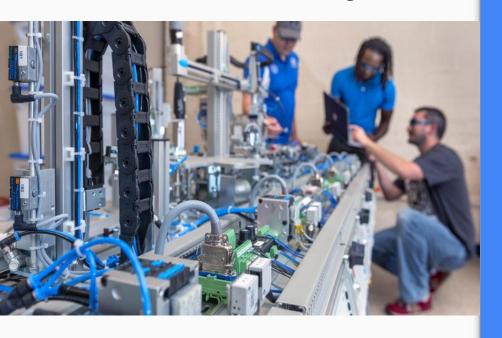
Major forms of pollution include air pollution, light pollution, litter, noise pollution, plastic pollution, soil contamination, radioactive contamination, thermal pollution, visual pollution, and water pollution.

Can technology impact climate change in a good way?

Ans-Yes! There are new technologies, inventions, and industries that can eliminate our need for fossil fuels completely.



What are some of the new types of technology that could reduce or eventually eliminate the threat of climate change?



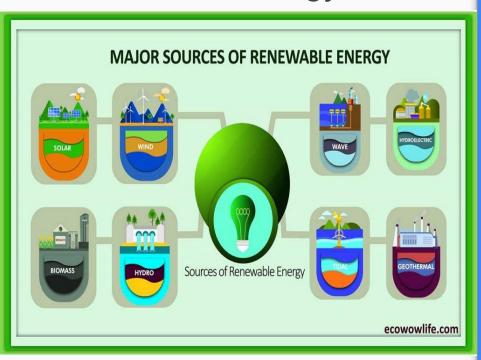
- Renewable Energy
- Energy Storage
- Carbon capture and storage
 - Zero Emissions Vehicles
 - Green Cement
- Plant-based & insect eating
 - Remote working
- Household energy efficiency
 - 3D Printing
 - And many, many more!

What is Renewable Energy?

Ans- Renewable energy is a type of energy that comes from natural sources, and is constantly replenished with little or no human effort, like wind.

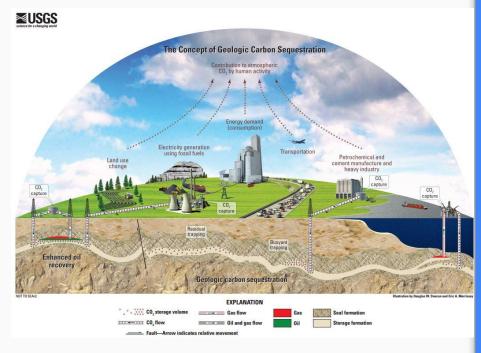


What are some types of renewable energy?



- Solar Energy
- Wind Energy
- Hydropower
- Geothermal Energy
- Tidal/Wave Power
 - Fuel Cells
 - Biomass
 - Biofuels

Are there other types of technology that could help renewables reduce climate change?



Ans- Absolutely! Some of the other types of technology which could aid renewable energy in fighting climate change are:

Energy Storage

Carbon capture and storage

Zero Emissions Vehicles

Green Cement

Plant-based & insect eating

Remote working

Household energy efficiency

3D Printing

And many, many more!

What exactly is Energy Storage?



Ans- Energy storage is the capture of energy produced at one time for use at a later time to reduce imbalances between energy demand and energy production. **Think leftovers!**

What are some types of Energy Storage?



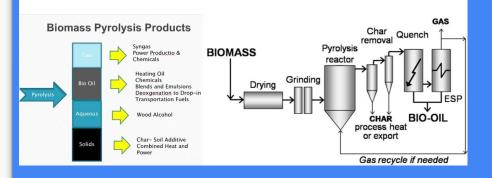
Ans- Types of Energy storage include:

- Mechanical
- Thermal
- Chemical
- Batteries
- Biological

Are there any ways to turn pollution into power?

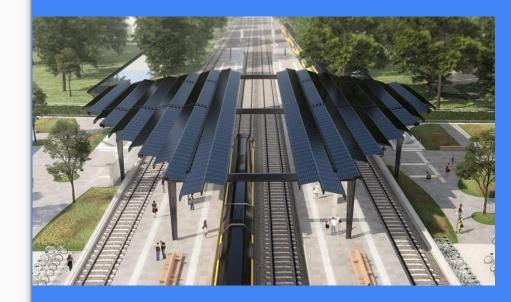
Ans- Definitely! Pyrolysis turns plastic into power, by heating waste at a very high temperature without oxygen.



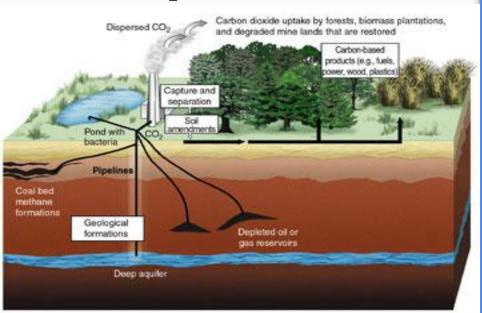


Are there any renewable energy powered forms of transportation?

The world's first solar farm to directly power a train station is in the UK, which could lay the foundations for the world's first solar-powered this.



Are there any other ways to use pollution?



Ans- Yes, there are other ways you can use pollution. One way is called Carbon **Sequestration. Carbon** sequestration is the process of capturing and storing atmospheric carbon dioxide.

What is Net Zero Transportation mean?



Ans-Net Zero Transportation is a type of transportation that produces absolutely no emissions, and particularly, no air pollution.

Are there other types of Net Zero products?



Ans- There are! In Net **Zero Buildings! The total** amount of energy used yearly by the building is equal to or less than the amount of energy created onsite.

How can we stop burning fossil fuels for heating?

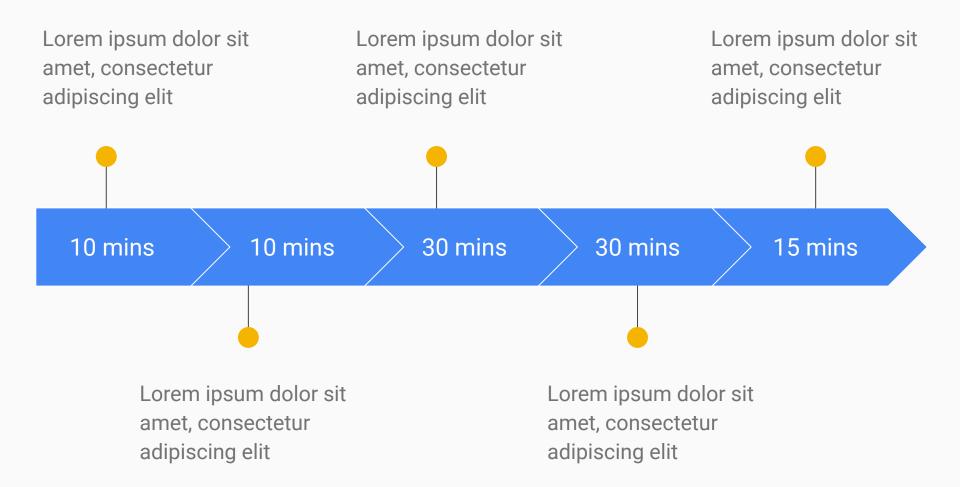


Ans- Yes, we can stop burning fossil fuels for heat by using a Heat Pump, which is a machine that moves heat from a cold place to a hot place.

Are there other types of Zero **Emissions Vehicles** besides cars/trucks?

Ans- Indeed. There are electric airplanes, bicycles, rollerblades, and many more in development currently.





For Questions, or to further discuss these new technologies, please contact me at: knowledge.murphy@multco.us!

The Office of Sustainability advocates for using all types of renewable energy and new technologies to reduce the harms of climate change as soon as possible, to avoid catastrophic weather events from becoming the new norm. Please stay tuned for some of our upcoming initiatives!!!