Climate Change

"Climate change is no longer some far-off problem; it is happening here, it is happening now."

Barack Obama

Microsoft

People are calling climate change the biggest crisis of our time. Research shows that 3.6 billion people already live in areas highly susceptible to climate change. Between 2030 and 2050 climate change is expected to cause approximately 250,000 additional deaths.

Our earth is beyond saving. Icebergs in Antarctica have already melted, Sea levels are already rising, floods and droughts are causing more deaths with each year. Some problems are irreversible. But we can still try to save as much of our earth that is left.

A new study conducted by scientists from Britain's University of Leicester has revealed another possible consequence: a lack of oxygen on Earth. They discovered that a slight increase in the temperature of world's oceans could prevent phytoplankton oxygen production by disturbing photosynthesis "It would mean oxygen depletion not only in the water, but also in the air" said the research team. "Should it happen, it would obviously kill most of life on Earth"

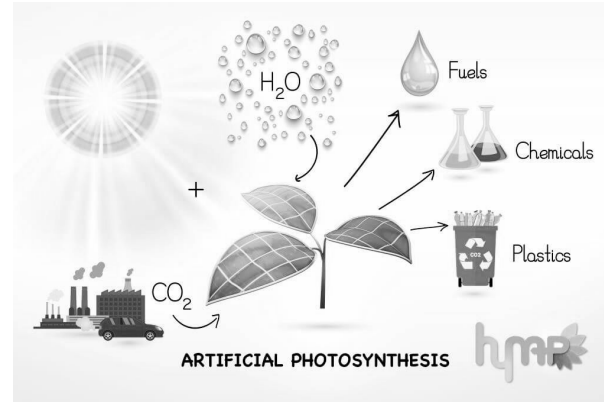The Problem – A lack of Oxygen on earth

Losing oxygen will be the most difficult problem we will face and we will have to be prepared for it. All creatures on earth need oxygen to survive. Today, oxygen makes up 21% of Earth's atmosphere. Researchers predict that it will take more than a few billion years for us to completely lose oxygen but Earth's oxygenated atmosphere will not be a permanent feature for long. One of the main reasons that researchers predict this will happen is because as the sun ages it will become hotter and release more energy. This will likely lead to a decrease in carbon dioxide in the atmosphere as C02 absorbs heat and breaks it down.

The Problem – A lack of Oxygen on earth
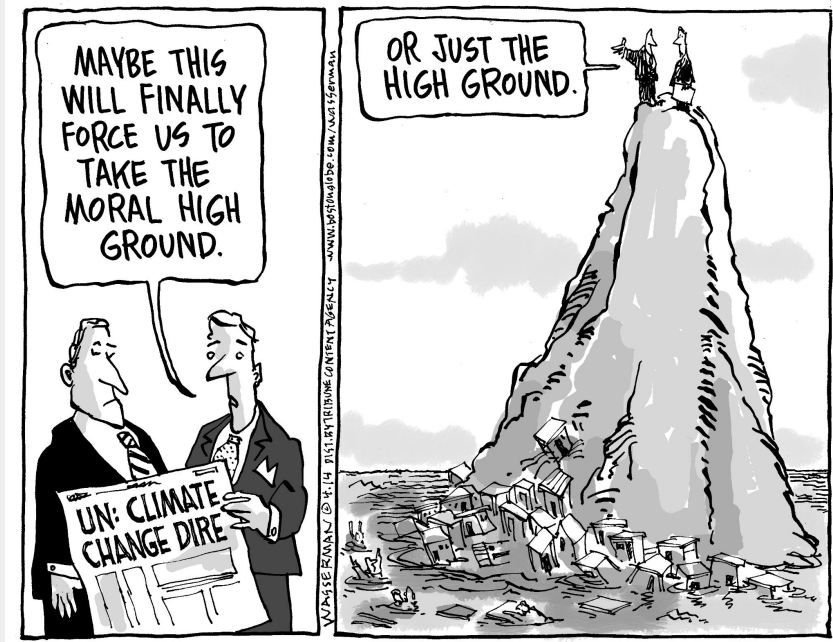
Not only will this help with future issues, it will also help increase oxygen levels in areas that are located near the equator. Many countries like Saudi Arabia are very hot, tend to be dry and have very low oxygen levels.

Our invention will look similar to a flower, and will conduct the photosynthesis process (When plants take in carbon dioxide and release oxygen)

Parts of a Flower

We're going to add a artificial photosynthesis system that does not need the factors of a real photosynthesis process.

Your AI concept

ARTIFICIAL PHOTOSYNTHESIS

Our idea is that we are going to plant these in areas located near the equator, but we were faced with a problem because we can't create a lot of these flowers to cover a desert (it will cost a lot and will end up being ineffective to the real purpose) These designs are more suited for sidewalks, restaurants, or any other place located near or in the city.

Instead of actual leaves we are going to add solar panels, that will work on absorbing the sun's energy.

The solar panels will change colour with the seasons and will also add a little bit of style.

Your AI concept

We want to add oxygen sensor to detect how much carbon dioxide is needed to be absorbed to release oxygen. Then this information will be sent to AI where it will work on analysing the information taken and will send specific instructions to the tree, explaining how much carbon dioxide needs to be absorbed and how long it will take approximately.

The design of the flower was more suited for local places in cities whereas this design is perfect for bigger spaces.

ANATOMY OF A TREE

Label all the parts of a deciduous tree:

BRANCH

CROWN

TRUNK

LEAVES

ROOTS
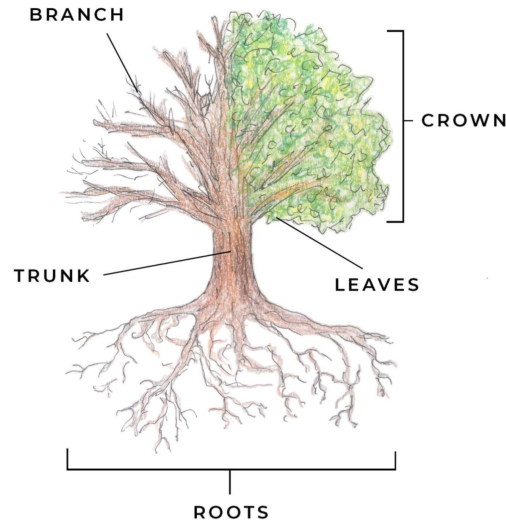
We don't want to add any wires in case of any bad weather (like rain, thunderstorms, etc) The design is equipped with environmental monitoring, so if the machine detects any bad weather it will automatically turn into sleep mode to preserve energy and to protect itself

Instead of branches, we are going to add solar panels but we want the design to fit in with nature so the solar panels will light up with green lights or red lights depending on the season.

These trees are perfect for the city as well but are more purposed for deserts or any big spaces in the countryside.

Use of Artificial Intelligence

AI to analyse information from oxygen sensors

AI will analyse information form oxygen sensors and send information to the plant based on how long the operation will take and the amount of carbon dioxide needed to be absorbed.

Security sensors

These security sensors will work on the overall security of the machine and will protect it from intruders or any animals.

Environmental monitoring

This AI will analyse the amount of pollution that is in the air, once the rate of pollution is higher than average than the machine will get to work.

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IMPACT

Our concept will definitely impact the environment in the long run. Pollution will most likely decrease by big percentages. Oxygen levels will increase in areas that tend to be dry, hot or located near the equator. Also people that struggle with asthma or any lung problems will definitely be effected in a positive way.
Also it's a great substitute for real plants so we won't have to depend on plants as much. Also it's created to camouflage with nature.

Ethics

Our AI idea is reliable and safe, because we have used an artificial photosynthesis system that scientists have already approved. Some scientists say that this system is 10 times more effective and absorbs up to 80% of the Earth's energy.

Cybersecurity

We have taken measures to make sure our concept is safe. We have considered adding a camera where the carpel of the flower is supposed to be to add some more security. We have also considered adding a sensitivity sensor to protect the plant if an animal or human were to get near it, we also want to add an alarm that beeps too.
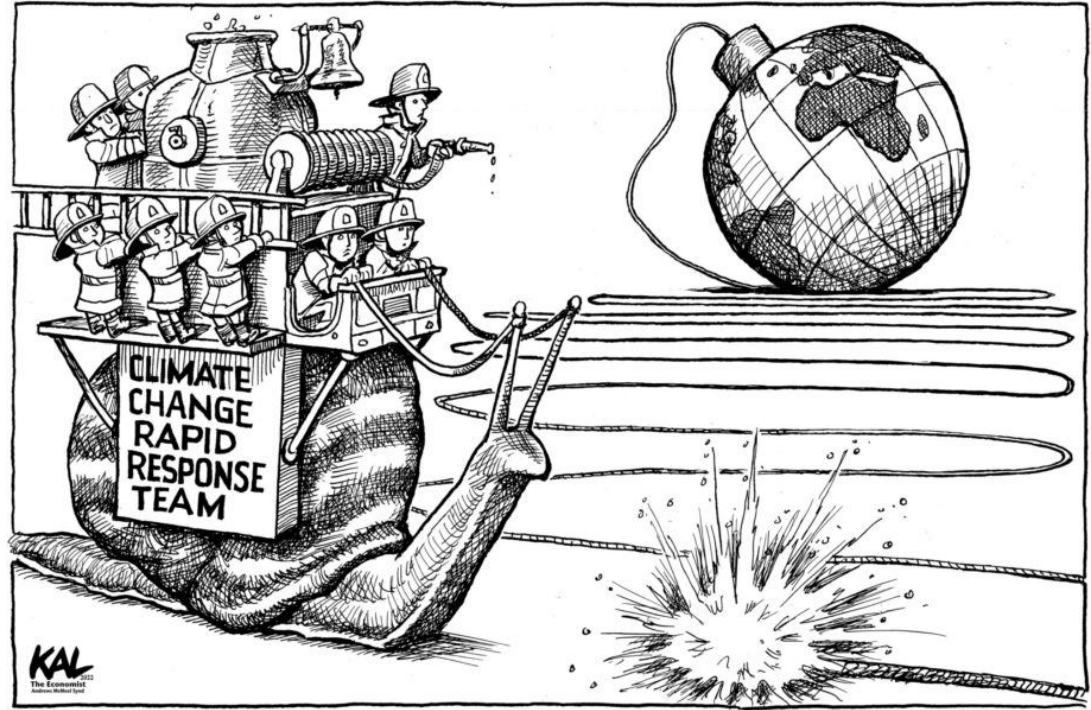
Sources

(Any time you drew on ideas, summarized information, mentioned data, a reference, or gave examples that you found in a source and used within your submission, please list it on this slide)