**Environemental Letter**

Dear future Josh, I'm writing this to ask you about how our world is going in the future and mostly just to ask you about how energy use issues I was afraid of panned out and how they affected your future. Since you most likely won’t be able to reply, this is mostly designed to be somewhat rhetorical questions or just telling you of the issues I’m witnessing and how I believe they will end up. In the event of your ability to reply though I have also inserted some questions about the future of our energy if you can’t though that’s fine thanks for your cooperation.

**Fossil Fuels**

Within the present day, one of the main and biggest issues is the usage of fossil fuels as our main source of energy with them being the most efficient and powerful. They are used in almost every form of transport including cars, boats, trucks, and planes. I'm afraid with so much usage and dependence on this form of energy eventually it will die out as it's a nonrenewable resource and with that will come an increasing amount of hardships and destruction of the market as well as job availability. I would like to ask you if we were able to reduce our usage of fossil fuels in time to save them for more dire situations or if you were able to find a method of production within the advancements in technology or resources of new planets or even just our own.

**Emissions**

Not only do fossil fuels have a great effect on our planet but one of the main issues that I'm mostly sure you still have affecting the future is greenhouse gas emissions. Fossil fuels are notorious for increasing the production of greenhouse gasses. The gasses damage the atmosphere and ozone layer. These have dire consequences with damages to the ozone layer which can lead to an increased rate of climate change.

**Climate Change**

Climate change is slowly but surely destroying our world, increasing temperatures in hot climates causing increased forest fires, skin-related diseases or sun problems, and reducing the number of animals that can survive in an area slowly destroying ecosystems. Not only are there increased temperatures there can be temperature fluctuations with extremely decreased temperatures leading to snow and ice that destroys environments and kills animals that can’t survive the colder climates. Lastly, due to these temperature fluctuations, there are also changes in precipitation as well as the number of natural disasters in general occurring causing more damage to our environment and the animals or people living within it. This can also pollute water bodies with garbage when the flooding recedes or through hurricanes.

In accordance with this, I want to ask the question of how our planet is handling this. Have we been able to find a solution to the breaking of the ozone layer or has it fully been destroyed and has our planet become uninhabitable due to the temperatures or natural disasters.

The increases in precipitation and natural disasters are causing increased sea levels which are flooding our planet and flooding the environment, reducing the number of lands that are livable for land animals as well as land usable for humans. With all the damage to the environment and species’, food will be harder to come by in the future I believe as most animals will be dead due to the often changing temperature spikes and the destruction of their habitats slowly causing extinction on a large scale without intervention by humanity.

Despite all the climate and environmental issues, there are still many economic issues attached as well they’re connected to the environment. This can include work such as fisheries which can’t continue due to fish dying from the increased temperatures or freezing temperatures as well as other industries connected to organisms and the environment. The removal of these industries will create enormous economic decline and will in turn reduce job opportunities and increase the gap between the rich and the lower class slowly destroying the lower class.

If we have found a solution, is it sustainable or are you planning for an evacuation of the planet? Finally, did we lose many animals and species due to these climate issues or were we able to save enough of them for reproduction and to keep the species from going extinct?

**Production**

Not only is the usage of fossil fuels an issue but the effects of their production and excavation have harsh effects alongside it. The excavation of these resources sends pollutants into the air and the placement or building of the oil rigs needs heavy equipment to clear the land destroying the environment. These damages to the environment cannot be fixed quickly and the effects can last for years into the future. Many times even these areas cannot be restored for centuries or with human intervention and work. The drilling of the devices causes loud noise pollution scaring away animals and overall emptying a habitat or environment of organisms which is one of the main reasons that the environment cannot be restored since there is no wildlife to continue and preserve the state.

As well as the movement and production of oil, spills can be caused often these spills can have adverse effects, the oil will cover animals like ducks covering their wings making them unable to escape predators or causing them to drown due to the oil that floods their lungs or covers their respiratory systems.

In the future, I hope to know if you have found a way to make this impossible to occur with increased safety measures and more care of the resources in general and if it still occurs if you’ve improved in the restoration or removal of the spills.

**Light Pollution**

Lastly, one of the most unknown or forgotten issues of drilling is light pollution. The light of these devices is said to be seen from space; this can hurt pollinators such as bees or birds who are distracted by the light whilst flying or are unable to see within the area causing them to crash. The light disrupts the cycles of these pollinators including their sleep, feeding, and reproductive cycles which is another reason for the almost impossible restoration and preservation of an area affected by the drilling.

**Garbage Production**

Another topic I would like to cover is garbage production. Nowadays so much garbage is produced due to increased amounts of plastic within products to grab consumer attention most of these materials used are unrecyclable and therefore will stay in the environment for a long time damaging it and the organisms within. The increased amounts of plastic waste mean that not all of it can be recycled or disposed of within enough time to keep up with the production of the plastic, meaning landfills are slowly overflowing and there are fewer places to store our garbage nowadays.

With garbage overflowing this means more will be in the environments of animals and therefore these environments and organisms will be destroyed. There is a lot of garbage that can have effects on the land that it's on for long periods and will release chemicals into the ground. These areas will become unusable like the oil drilling sites and extremely hard to restore at all.

Eventually, at this rate, most if not all of our planet will be covered in garbage and at that point, the next option is putting it into the oceans eventually polluting our whole planet and causing mass extinction. Not only is the over-production of recyclable material garbage a problem, non-recyclable materials and objects are an even worse issue with them remaining around for many years to come and unable to be disposed of without human intervention which most likely won’t occur within the present day.

These materials will increase the pile-up of garbage and eventually slow the rate of the removal of garbage to the point where there is so much more garbage piling up compared to the amount being removed or recycled to where there’s no effect and the garbage pile up can’t be stopped.

If you can let me know if you have found a way to remove all forms of human garbage which I assume you should have invented by then on a large scale to hopefully forever remove the issue or iif despite the invention due to new resource usage we still have resources that are unable to be properly disposed of continuing the cycle.

**Water pollution**

Water pollution is an extreme issue right now and with the growing interest in finding water on other planets, I firstly want to ask if you’ve found water on other planets but otherwise I'll explain some of what we’re experiencing right now.

Water pollution is becoming an increasing problem as with the pollution of water we’re reducing the amount of freshwater we have and the amount is extremely small in comparison to the amount of salt and polluted water, eventually at this rate all water bodies will become polluted and undrinkable forcing us to drink treated water. At the moment we are working towards creating water filters that are cheaper and affordable for the lower class but I fear not fast enough and if this continues the lower class may die out due to inaccess to water and only the rich will survive. Water will become a rarity almost like in movies like Dune where water is a rare commodity to come by.

Please let me know if you have found a way to treat large amounts of water or remove the sodium from saltwater so that we have more “freshwater”. With water pollution comes environmental destruction as the water pollution kills organisms such as fish and the chemicals poison them or can suffocate them as they are unable to gain oxygen. This can create dead zones with no life and polluted water leading to extinction and extreme irreversible damage to the food chain and web as water creatures are a necessity to the survival of many land creatures and environments. Without them, environments will collapse, species will die out and eventually, our planet will be destroyed meaning we’ll have to find another planet.

In the future, though, it may be possible to recreate extinct species although not fully similar such as the study into cloning and bringing back a close resemblance of a wooly mammoth. In the future has this been perfected and if so have we been able to preserve our planet eternally.

**Plastic Goods**

The garbage from garbage pollution also fills the water bodies resulting in more chemicals. The most known issue of water garbage pollution is the plastic goods directly killing animals for example the plastic rings strangling the animals and straws stopping respiratory functions. In the present day, many are working towards alternatives but none seem to be perfected at the moment or making it fully in the modern market. Even if solutions are found in the future, masks are becoming a problem with the straps working almost the same as the plastic rings suffocating animals, hopefully though in the future a full cure for Covid-19 and its branching variants is produced making this problem disappear. The plastic also pollutes coral reefs damaging the plants that live on them making it take longer times for the plants to rebuild or they may even die outright removing the coral reef forever slowly removing the habitats of many aquatic organisms.

Lastly, I would like to ask the question of if you have found a way to recreate coral reefs artificially and if so are they able to be exact replicas and can be used in a real environment reducing the fear of extinction of aquatic organisms.

Thank you for reading my letter. I hope if you have the technology you can respond to my few questions. This may not cover all the issues and their present effects but this should have a general scope of our issues. Thanks for reading and I hope to see our technological advancements and environmental impacts in the future.

See you in many years