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https://climate.nasa.gov/system/content_pages/main_images/1320_effects-image.jpg



Introduction

In this assignment I am going to discuss the risks caused by global warming in the paper production industry. This paper production industry is Mondi paper production which is situated in Merebank South of Durban in KwaZulu Natal. Global warming is referred to as climate change is the rise in the temperature of the Earth's climate system the global surface temperature is likely to rise from 0.3 to 1.7°C in the lowest emission scenario, and 2.6 to 4.8°C in the highest emissions scenario. We will be looking at how the climate change affects the company, the effects that we will be looking at are effects of higher temperature, effects of drought, effects of heavy rainfall on trees, floods, wildfire, etc.

Also, we will be looking at the impact costs experienced by the company in terms of their personnel when temperature is high, their production or operation, the assets of the company etc. We then after all will be discuss the strategies that the industry may take in order to

perverse their nature of working also which will in touch of all people by educating them the importance of keeping our nature in a good condition, the damages caused by climates, things that must be taken into account.

Causes of Global Warming

Air Pollution

It occurs when any harmful gases, dusts, smoke enters into the atmosphere and makes it difficult for human, plants and animals to survive as the air is dirty. The ozone layer considered crucial for the existence of the ecosystems of the planet is depleting due to increase of pollution.

Causes of Air Pollution

Burning of Fossil Fuels

Sulfur dioxide emitted from the combustion of fossil fuels like coal, petroleum and other factory combustibles is major cause of air pollution.

Agricultural Activities

Ammonia is one of the most hazardous gases in the atmosphere and is commonly used by farmers. Use of pesticides and fertilisers, they emit harmful or toxic chemicals into the air also may cause water pollution when it is washed away by the rain through waterways into rivers, lakes, oceans and dams.

Emissions From industries and Factories

Normally, industries and factories release large quantity of gases into the atmosphere such carbon dioxide, hydrocarbon and toxic gases which pollute air. They form smog.

Indoor Air Pollution

Household cleaning products, paintings release harmful chemicals into the atmosphere to pollute the air.

Core Climate Change Risks

Effects of Heavy Rain and Strong Winds

The trees during the heavy rains normally fallen down those that are not fully grown. If a tree experiences a long period of drought then become dry during the heavy rains it will come out with their roots out. When there are heavy rains the trees normally can not withstand the forces that experience during the period of time. The new planted trees can be washed away by these heavy weathers. Soil erosion is caused by heavy rains the nutrients that are needed by the roots that are on the top soil are being washed away and the trees are facing the problem of getting these nutrients to grow some will die some will produce what is not useful to company.

Too much raining also causing the floods blocking the roads, railways, making potholes on the road etc.



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Effects of Drought

Long period of drought can not normally breath, then that will lead to dying of many trees. Long period of drought causes the tree to be dry, easily to be broken down during the heavy winds while it is not yet reaching it stage of fully grown. The trees won't able to make food via leaves since they will be fallen down because of dryness photosynthesis won't able to take place. This will make it hard for the trees to grow properly. Even if period of drought has passed the trees won't able to restore the water properly since some trees have their roots outside the soil when they where trying to collect that little water outside. Shrubs of the tree are being affected protect the tree from the insects, pests etc. they will eat the tree till it goes down. Those damages trees will be hard them to regain the strength after the drought.



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Effect of Temperature

Rise too much in temperature may cause soil to be hot which will affect the germination of seed. Also, may cause the wildfire to take place which will be hard to slow down the fire the whole forest may be burnt to ashes. If the temperature is too low the tree finds it hard to grow, this may increase the length of tree's growth not to grow fast. The plants may lost the timing of growth if temperature changes now and then. wildfires occurring as a result of natural causes vary from one region to another depending on the vegetation, weather, climate and topography.



Effects of Emissions

Emissions from industries cause the acid rain. This rain will affect the soil causing soil pollution which in turn affect the ecosystem. Some emissions are bad for the trees only the Carbon Dioxide is good for the trees. Emissions normally cause heavy rains.



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Effects of Depletion of Ozone Layer

The ozone layer gone thinner, it will release the harmful rays back to the Earth and affect the ecosystem, causing skin cancer and eye related problems. Ultraviolet rays can affect environment.

Effects of Wildfires

Loss of Ecosystems and Biodiversity

Wildfires simply damage the habitable and adaptable land for specific animal and plant species. It alters or kills the plant life features which support thousands of wildlife thereby forcing the animals out of the regions or even killing them.

The Impact Costs On The Company

Temperature Related Impact

Higher the temperature will lead to hotter days and more frequent and longer heat waves. These changes may lead to an increase of related deaths in workers that are working to cut down the trees. They will require lot of breaks due to increase of temperature this may lead to reduction of cutting many trees at a shorter time which means they will cut less trees in a longer period. The staff members may get skin cancer, heat stroke and dehydrated. The company may lose workers due to this high rate of temperature. Trucks that take trees from the forest, during their transportation may over heat causing trucks to stop time after time this may reduce the production process, inside the plant at the firm have to wait until the truck reaches the gates of Mondi. The machineries at the industry normally to working accordingly because of high temperatures they have to work on stop and go basis. Sometimes the lightening can strike power cables, trees, or rocks and any other thing and this can trigger off a fire.

Air Quality Impact

Members working in forest during their process of cutting down the trees, may experience a greater risk of dying or being admitted to the hospital for respiratory problems. Since some governments' rules work against deceased of workers during their work.

Impacts From Extreme Weather Events

Increases in the frequency of some weather events, such as extreme precipitations, flooding, droughts, and storm, threaten the health of people hired by the company also the company's profit itself, during and after the event.

Impact on Drought

Company won't able to produce papers since trees will be dead, not growing well not reaching their maturity state where the paper can be made from. The company won't make any profit during that period they will do only loss. Company may lose their customers, staff may be fired since the company won't make any money or profit, the stakeholders or shareholder may

withdrawn their shares or sell them since company won't make any profit. They won't be able to plant trees for their production since soil is infertile and won't be able to fertilise it for the purpose of plantation of trees. There is no water no rain hard for those trees to survive

Impact on Flooding

Normally, damaging roads, bridges, disruption access into the company and various accesses of other companies where they are transporting their production. The daily business will stop. Staff members won't be able to come to work. The property may be flooded away those that are old. Trees on the truck may be lost during this period, truck may be endangered by this weather. Forcing the truck to be repaired if it is highly damaged even insurance won't be able to cover everything the company also contributes. Company will loss may be almost every trees being stored or half, the driver may be harmed.

Impact on Storms

The old structures (building, tanks, pipes etc.) may be fallen down due to strong winds. Storms at sea since some of papers are shipped to other countries overseas may encountered the problem of storms whereby ship have to change the route which will increase the costs. Oceans change time to time with no warnings before the ship may sink with the property. Also trees may fall down in their younger stages or may broken