Good example of facilitator research paper

Environment, Water

Executive Summary

This process of making 17 reams release 100 pounds of Carbon dioxide in the environment. Forests and trees are mainly responsible for maintaining a stable environment of the world. Going paperless will help reduce the total waste that disturbs the natural environment. Trees are naturally responsible for absorbing carbon dioxide through the process of photosynthesis. The amount of paper recycled is proportional to the amount of tree saved. The increased usage of recycled paper will help decrease the demand for virgin paper. Decrease in the demand of virgin paper will automatically help reduce the air and water pollution. The paper usage and its relationship with carbon dioxide are interrelated. The process of paper making is responsible for the release of major greenhouse gases and carbon dioxide is one of them. Trees are mainly responsible for the reduction of carbon dioxide from the environment. The latest entrant for environment conservation is the tabloids and e-readers. It has been observed that a large amount of paper is used to print books and a multitude of reading materials. The conversion of paper based documents and pictures are now being digitalized. Internet and cloud computing now allow users from different parts of the world to share electronic documents. These technologies have the potential to realize the vision of going paperless.

Going Paperless and Its Impact on the Environment

Introduction

The impact on the environment due to paper production, distribution, and processes as well as the efficiency losses and business cost are the major

driving force for solutions that are aimed towards a Paperless Society. A tree that grows in several decades could only make around 17 reams of papers. This process of making 17 reams release 100 pounds of Carbon dioxide in the environment (Bennie, MaryAnne & Hinneberg 147). The raw material that is required to make paper and the entire process of paper making are the activities that cause major threats to the natural environment. Since industrialization, the issue of global warming has evolved that has immense potential hazards. It has caused man-made climatic change, deforestation, and the entire process causes the production of greenhouse gases. Not only this production causes serious threats to the trees, but the process is involved in releases gases like sulfur dioxide, nitrogen oxide, and carbon dioxide. Going paperless not only guarantees saving trees and retaining a natural environment, but it has its economic perks, as well. A company that decreases its carbon footprint through business automation can save a large chunk of the amount spent on papers.

Discussion

Going Paperless and Helping Environment

The first major benefit of going paperless is the notion of saving trees, which are responsible for sustaining the natural environment in the world. During the last 40 years, the paper consumption has increased by 400% due to the advent of printing press. Harvested trees that account for 35% are used for the manufacturing of papers (Kissell 2013). Majority of the pulp comes from plantation forest and old growth forests. Plantation forests are monoculture that increases the negative effects of this practice. Going paperless will

drastically reduce the deforestation. Forests and trees are mainly responsible for maintaining a stable environment of the world. This process also decreases the threats of global warming, which is a major concern of the current and future generations. This process of paper production is also involved in releasing a multitude of hazardous gases including sulfur dioxide and nitrogen oxide, which is primarily responsible for acid rain. It also produces greenhouse gas, carbon dioxide that is majorly responsible for climatic change. Going paperless will help reduce emission of greenhouse gases that are mainly responsible for ozone layer depletion.

The companies that are involved in pulps and paper production releases solid discharge in the water that has myriad organic matters including lignin, chelating agents, alcohols, and inorganic substances like transition metal and chlorates compounds. These matters are responsible for contaminating rivers, oceans, and lakes. These substances cause risk to the environment. When such organic matters are mixed with the fresh water that can be measured by Biological Oxygen Demand (BOD), causes transformations in the ecological traits. These can also lead to the death of living organism in that locality. Such releases can also discolor the water, which causes loss of its aesthetics. Such instances has happened Tarawera River of the New Zealand that became infamous for being called as “ Black River” (Coile 2002). If the notion of going paperless is implemented then the intensity of such organic compounds, which contaminates water, can be reduced. Reducing the carbon footprint will not only reduce the production of these organic compounds, but it will also help enhance the health of the living organisms.

In United States, the waste caused by papers amounts to 40% of the total waste that makes 71. 6 million tons of waste that occurs every year. The paper waste is accompanied by additional hazardous toxic dyes, polymers, inks that cause additional danger to the environment. The effect of this hazard can be reduced by burying these products in the landfill sites. Although, the effect of such waste can be reduced by this method, but the dangerous chemicals continue to pose threats to the living organisms and the associated environment. Going paperless will help reduce the total waste that disturbs the natural environment.

Importance of Trees for Global Warming and Absorption of Carbon Dioxide

Global Warming is the phenomenon of increasing temperature of the world. Global warming causes major threats to the activities of living organism in the world. According to Intergovernmental Panel on Climatic Change (IPCC), the major global environmentalists have claimed that the major contributor of the global warming is through the emission of greenhouse gases. Amongst all the greenhouse gases produced, Carbon dioxide is a major contributor to the increasing temperature of the world or global warming (Environmental Protection Agency 78). Trees are naturally responsible for absorbing carbon dioxide through the process of photosynthesis. Photosynthesis is the process through which plant generates energy by using carbon dioxide as a primary raw material. Since plants use this greenhouse gas as a raw material, this is mainly responsible for maintaining a balance of carbon dioxide in the natural environment. A number of negative climatic conditions are caused by global warming including change in the precipitation pattern, rise in sea level,

expansion of deserts, droughts, heat waves, species' extinction, and ocean acidification. All the living organisms will suffer from these causes. The effect of global warming will cause a major threat to food security of the human being as it is going to reduce the yield of crops and loss of habitat (Anthony 228).

The process of photosynthesis by trees is also responsible for releasing oxygen as a by-product. The oxygen produced tree in the environment contributes significantly to lives. Apart from being a constant eliminator of carbon dioxide and producer of oxygen, trees are also responsible for preventing against soil erosion and salinity, shade and shelter, and food for animals. Trees also help control avalanches, conserve water and soil, protect coastal areas, prevent desertification, and stabilize sub dunes. Forest houses almost 90% of the terrestrial species of the world.

Pollution by Paper Industry and Paper Recycling

According to a report of Energy Information Administration, if paper recycling is used, around 40% of the total energy usage can be reduced in comparison with using un-recycled pulp. According to figures, recycling around one ton of newspaper can produce 4, 000 kWh of energy. This amount of energy is sufficient to lighten up a luxury three rooms. In an era of immense energy shortages and increase oil prices, this method of energy conservation is the best to implement without any hurdles. Saving fuel that is involved in the production of recycled papers not only save the energy and money, but it also helps in reducing the carbon footprint that is necessary for the environment. The amount of paper recycled is proportional to the amount of

tree saved. The transformation of trees into pulp requires the process of Kraft Pulping that separates lignin from the wood to make it of high quality (Salter 324). This process requires an additional amount of trees. Using the process of recycling has immense positive effects on the conservation of energy.

According to the municipal figures, around 35% of the total weight of the waste is from the paper and paper products. If the paper is recycled, the process of burying it in the landfill sites can be avoided. This will decrease the waste management and the cost associated for burying it in the landfill sites. According to the figures by United States Environmental Protection Agency (EPA), recycling paper can decrease air pollution by 74% and water pollution by 35% in comparison with making virgin papers. Virgin pulp is made by the process of bleaching the pulp to it becomes whiter. The process is hazardous, and the usage of recycled paper is increased, it may help decrease the demand for virgin paper. Decrease in the demand of virgin paper will automatically help reduce the air and water pollution. Recycled pulp is normally bleached with chlorine free substances (Young 233).

Alternative of Paper and Intensity of being Harmful

The technological advancement has enhanced the opportunities for going paperless. The vision of saving the trees and the environment is ensured by the introduction of numerous technologies. The latest entrant for environment conservation is the tabloids and e-readers. It has been observed that a large amount of paper is used to print books and a multitude of reading materials. The conversion of paper based documents and pictures

are now being digitalized. The companies through automation are now adopting methods that have reduced or removed the usage of paper. Internet and cloud computing now allows users from different parts of the world to share electronic documents. Unlike past, more companies instead of sending paper invoices are sending e-bills.

The notion of electronic banking can drastically decrease the usage of papers. Millions of tons of paper can be saved through this mechanism. Not only, it will save millions of tree, but it will save a huge amount of money, as well. Previously, companies were reluctant to rely on emails and electronic documents because they did not trust the legal status of these e-documents but now the United States government has passed regulations that give them legal status. Previously, myriad papers were used to send letters, agreements, invoices, invitation cards, and more but the major trust on e-communication proves this technology as a major alternative. The usage of digital signature and its legal status can help towards the vision of going paperless.

Carbon Dioxide Relation with Papers and Its Replacement

The paper usage and its relationship with carbon dioxide are interrelated. The process of paper making is responsible for the release of major greenhouse gases and carbon dioxide is one of them. The raw materials from which the paper is made are trees, and reduction in the amount of trees, in the world will cause serious threats to them (Shaw 77). Trees are mainly responsible for the reduction of carbon dioxide from the environment. This gives an idea that low amount of trees in the world means high amount of

carbon dioxide in the environment. The major replacement of paper is electronic documents like emails, electronic forms, electronic signatures, and more. Since these things are neither involved in producing carbon dioxide nor deforestation, it will help the trees to sustain in the world. High sustainability of the trees in the world will result in low carbon dioxide emission, which will help reduce the effects of global warming.

Conclusion

Although the notion of going paperless will need myriad years to realize, but this aim can be brought to reality through recycling of papers and using alternatives like electronic papers. A company that decreases its carbon footprint through business automation can save a large chunk of the budget spent on papers. The first major benefit of going paperless is the notion of saving trees, which are responsible for sustaining the natural environment in the world. The companies that are involved in pulps and paper production releases solid discharge in the water that has myriad organic matters including lignin, chelating agents, alcohols, and inorganic substances like transition metal and chlorates compounds. These matters are responsible for contaminating rivers, oceans, and lakes. The major contributor of the global warming is through the emission of greenhouse gases. Amongst all the greenhouse gases produced, Carbon dioxide is a major contributor to the increasing temperature of the world or global warming. Trees are naturally responsible for absorbing carbon dioxide through the process of photosynthesis. The effect of global warming will cause a major threat to food security of the human being as it is going to reduce the yield of crops

and loss of habitat. Saving fuel that is involved in the production of recycled papers not only save the energy and money, but it also helps in reducing the carbon footprint that is necessary for the environment. The amount of paper recycled is proportional to the amount of tree saved. The vision of saving the trees and the environment is ensured by the introduction of numerous technologies. The latest entrant for environment conservation is the tabloids and e-readers. It has been observed that a large amount of paper is used to print books and a multitude of reading materials. The conversion of paper based documents and pictures are now being digitalized. Internet and cloud computing now allow users from different parts of the world to share electronic documents. These technologies have the potential to realize the vision of going paperless.

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