

Recycle and global economy research paper example

[Environment](#), [Pollution](#)



Recycling refers to a process of converting waste materials into new products to avert the waste of potentially useful materials. It is a practice of reusing items that would otherwise be discarded as waste. There are different variations of recycling including; upcycling, down cycling and precycling. Up cycling involves adding value to an item to make it more important for reuse. Down cycling refers to breaking down an item into its components and reusing anything that can be salvaged from the item. Precycling is an alternative approach to recycling and involves avoidance of acquisition or use of unnecessary items that would eventually have to be recycled and dealt with as waste (Conserve Energy Future 2014). Recycling is well known for its environmental benefits mainly in terms of resource conservation, reduction in air and water pollution including reduction of generation of green house gases. Recycling is also known to help in energy conservation. Recycling is an essential segment of the economy because it helps create jobs and save money that would however be used to clear waste. It also helps reduce pollution which might lead to serious health challenges (EPA 2014). Many economies and businesses therefore see more economic and environmental sense in recycling. This article will focus on both economic and environmental benefits of recycling.

Benefits of recycling

Many countries across the world have made recycling a mandatory process due to its economic and environmental benefits. Over the past decade, recycling has encouraged the growth of industry and lead to job creations. Another important factor of recycling to the economy has been the amount of savings that states and countries have realized through recycling. Such

savings have been realized due to the avoided or reduced costs of disposals, reduction in need of solid waste management services as well as the potential revenue realized from the sale of recyclables. Generally, recycling has benefits associated with health and conservation of environment, such as reduction of landfills which pose great challenge to the ecosystem and public health, recycling also has benefits to the economy such as job creation and reduction in revenues on waste management.

Health benefits associated with recycling

Poor disposal or management of landfills is a major a risk to human and animal health. It also leads to serious environmental pollution and has a great negative impact on the ecosystem. Recycling has been seen as a major way of reducing the size of landfills. By recycling waste products or using them in a constructive way, the size of landfills can slowly be reduced. Population increase makes it even more difficult for landfills to hold more waste. The more the landfills get filled up by waste the more the cities and landscape face pollution which leads to poisoning and health problems. The benefit of recycling therefore is that it helps keep pollution in check and helps reduce it bit by bit (Irons, 2013). Environmental degradation poses a serious health risk, and one of the most serious threats to human health mainly exacerbated by modern lifestyle is the rising levels of greenhouse gas emissions. Recycling helps preserve natural resources thereby reducing the need of new raw materials and results to use of less energy, which consequently contributes to reduction in carbon emissions and the health conditions associated with such emissions and climatic change.

Landfill gas contains seriously hazardous air pollutants and carcinogens which are cancer causing substances. Landfill gases cause adverse health effect to adjacent residents and environment. Many landfills contain a myriad of pollutants that range from heavy metals to organic compounds and priority pollutants which are all likely to contaminate ground water. Contaminated groundwater is virtually impossible to clean up and environmental authorities such as EPA often recommend abandoning the source. Ground water is the main source of domestic water for many residents, revealing how much risk such pollution causes to the population. Use of incinerators to destroy and dispose of waste also poses great health risk to the population. Incinerators produce dioxin which is one of the most toxic substances known to man. Incinerators also produce mercury which is a powerful neurotoxin. In addition, they are also a source of other dangerous heavy metals such as cadmium, chromium lead and arsenic among other metals. In addition, incinerators produce combustion by products including green house gases and other unknown chemicals from incomplete combustion which are a great health risk.

Apart from reducing carbon emissions, recycling also helps preserve natural resources. Leads to reduced demands for raw materials for industries and as such, fewer trees need to be cut down and fewer metals and minerals would be needed from the mines. Generally recycling contributes to the biggest saving on carbon dioxide and raw materials leading to maximum environmental and health benefits. For instance, recycling raw materials to produce a white paper reduces air and water pollution by 74 % and 35% respectively. This can be compared to producing white paper from 1st

generation raw materials, which causes more pollution rates. Furthermore, recycled cans produce 97% less water pollution and 95% air pollution as opposed to using aluminum ores to manufacture cans. In addition, remanufacturing and recycling strategies are effective ways to reduce greenhouse gas emissions by 194 times. This is much better than conventional manufacturing and land filling.

Recycling therefore helps reduce potential health risks associated with these pollutants. Health conditions such as cancer which may be caused by the greenhouse gases and carcinogens are very expensive to treat. They pose a great burden to individuals and the government. Reduction of these health conditions through proper waste management systems like recycling helps save a lot of money for both individuals and the government.

Reduction In manufacturing costs

The process and cost of producing a product through its entire lifecycle helps us understand the benefit of recycling. It takes a lot of resources, manpower, time and energy to produce a product. This cycle involves extracting raw materials, product manufacturing process, product consumption, and then its disposal. Recycling helps reduce the process by creating a systematic looplike process whereby, disposed products are returned back to the manufacturers. They are then used as raw materials again in the production of the same product, or totally different products. This helps save on extraction of raw materials such as minerals and destruction of trees. It also saves on the associated energy and transport costs. Management of resources through a sustainable recycling process and technologies is

fundamental in the growth and development of an economy. This is why many countries view recycling as key to conservation of other resources including water and energy due to increase in world population and the finite nature of resources.

Recycling saves energy associated with the entire process of extracting the raw materials of a product to manufacture, consumption and disposal. For instance recycle of aluminum cans helps save 95% of the energy required to produce these cans from raw material. Likewise, the energy saved from recycling a glass bottle is equivalent to lighting a bulb for 4 hours. This shows how much energy can be saved if we take recycling is practiced on a larger scale. It would greatly reduce the reliance of foreign oil helping the economy save money in the long run (Pullen, 2011).

Recycling creates jobs

It is estimated that for every job in a land fill, there are ten jobs in recycling. In the year 2011, more than 2.3 million worked in and around recycling business. This number includes those who design labels for recycling to facility operators. There are four times more jobs in the recycling industry than in entire waste management. Waste management leads to landfills meaning that it is a source of pollution to the environment.

Recycling saves money.

In generation of wastes, lots of money can be realized through recycling. These savings are realized through avoided cost of disposal, potential revenue from sale of recyclables and the need for solid waste management services. Avoided cost of disposal is the saving realized when one does not

have to send waste to a landfill, to a transfer station for disposal or to an incinerator. In as much as these costs vary, on average one would spend \$80 per ton for garbage disposal. The avoided cost of disposal is significant considering how much waste institutions produce daily. Well established recycling programs may enable organizations and businesses to utilize smaller solid waste options like the use of dumpsters, thereby reducing the number of solid waste pickups. This would also lead to significant savings on waste disposal. Businesses can also realize significant amount of revenues from the sale of their recyclable materials. Prices of recyclable materials fluctuate just like many other commodities, and therefore organizations producing these recyclable materials can still earn significant revenues from the sale of the materials depending on their nature. For instance Janssen pharmaceutical companies of Johnson & Johnson in New Jersey implemented a waste recycling program that realized a total cost avoidance saving of \$ 85, 694 in 2011. The program keeps tons of materials out of their waste stream, saves waste disposal related costs thereby benefiting the company and the environment in the long run.

Benefits of recycling to the Environment

Landfills have been used for centuries as a means of waste disposal.

However, due to negative environmental impacts caused by these landfills, governments and organizations are increasingly discouraging their use.

Landfills are not only ugly scenes but they smell a lot, leading to massive air pollution. Landfills and other waste disposal techniques are seen to contribute to waste disposal costs as well as pollution (Tessin, 2013). In as

much as they are still widely used today, landfills so leak, and their garbage juice or toxic leachate can seep and contaminate ground water supplies and soil. Clean-up costs of these landfills totals to millions of dollars, which is often left to taxpayers at the expense of the polluting industries. When left to industries clean up costs will definitely have an adverse economic effect on them. Industries should therefore adopt the cheaper and cleaner recycling option.

Incinerators on the other hand require vast amounts of capital to establish. In addition, they require a continual stream of garbage to stay operational and have an economic sense. They are therefore by far the most expensive waste management and treatment option, and furthermore the least job creating waste management option by far (Eco-Cycle, 2010). Many communities and companies in the US have found themselves indebted to the incinerators by failing to supply the required amount of trash by volume to the incinerators under long term contracts referred to as “ put or pay” contracts. To repay these debts, the community or company is required to continue supplying the incinerator with waste. This perpetually prevents them from using other cheaper and cleaner waste management options like recycling. This shows that recycling remains by far the most economical option for solid waste management system. Communities and organizations should focus their efforts on establishing recycling plants as opposed to the use of incinerators or landfills.

Recycling prevents environmental degradation and depletion of resources. Resources such as land and minerals are finite. There is limited supply of productive land on the planet. Use of land for landfills should be discouraged

and people should adopt recycling as an alternative to use of already depleted resources. As earlier discussed recycling of materials helps reduce the need to produce goods from raw materials to manufacture, consumption and disposal. Raw materials such as minerals required for production are often finite meaning that they will get depleted at some point. Continual mining of these resources leaves ugly scars on the surface of the planet (McIntosh, 2013). Massive mining often lead to dereliction of these lands, the lands can hardly be used resourcefully, for agriculture, construction or dwelling. Recycling these products therefore minimized wastage of resources in trying to come up with a new product that otherwise be recycled for use. Recycling helps preserve natural resources such as trees and vegetation. For instance cutting trees to produce paper increases to deforestation and also requires more energy than recycling paper to use in production of the paper. Energy is required in industries for production of goods. We commonly use fuel such as wood, petrol or gasoline to produce the energy. Less energy would be used if the goods could be obtained from recycled materials. Recycling helps create awareness Recycling of wastes and the campaigns associated with it helps create awareness on safe disposal practices and environmental conservation. When a school for instance ventures on recycling, this practice can easily be adopted by the community and the entire state. Use of recycling makes people more aware of its importance and word gets spread to many people. This way people can adopt other environmental conservation practices.

Conclusion

In conclusion, it is clear that recycling of waste products has a lot of

economical benefits to a business or community. It is therefore important for any economy or organization to adopt best practices with regards to their waste management and disposal. As discussed in the article it is clear that there are immense economical benefits from recycling wastes. A business can save money by using better waste management techniques through increasing recycling rates. For instance one can reduce the costs of handling and managing waste, spend less on buying goods and raw materials and reducing the amount of money spent on landfills by reducing wastes you send to the landfills (EPA 2012). One can also generate significant income by selling recyclable materials. Recycling can also create jobs and

Recycling waste also has benefits to the environment, in that it reduces the amount of resources required to reproduce a product. It reduces the amount of energy required to produce the material by up to 95%. In addition less wastage to the landfills help reduce the release of greenhouse gases that lead to climatic change. Recycling also helps conserve the environment thereby reducing pollution related health conditions like cancer

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