Public Awareness of Paper's Sustainability in a Digital Society

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People often think of paper as an environmentally harmful product because trees are cut down to make it. A new generation that has grown up in today's digital society may think that the use of digital devices is a waste-free way to protect our environment. Although the pulp and paper industry is making various efforts to preserve the environment, it has not been properly recognized. Developing new technologies to produce better products at lower cost while protecting our environment is important. But it is also important to enhance the image of the pulp and paper industry in the eyes of the public. The pulp and paper industry's efforts to reforestation for raw materials and to expand the recycling of waste paper should be more widely introduced.

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Paper, Carbon Neutrality and Forest Conservation

In order to limit the increase in the global average temperature to 1.5 °C by 2100, the Intergovenmental Panel on Climate Change (IPCC) has established a path that carbon neutrality (Netzero), which must be achieved by 2050. It is a very challenging task to achieve in less than 30 years. One of the action plans that has been proposed in South Korea to achieve carbon neutrality is to use electronic receipts instead of paper receipts. A recent advertisement claimed that eliminating paper receipts is equivalent to planting 1 million pine trees per year. This advertisement makes people think that paper-free habits offer a way to protect our environmental and keep the earth planet green.

The messaging from the digital industry also forces us think of paper as a product that destroys our environment, as it is made from trees cut down from our green forests. Young generations grown and educated in a digital society may think that the use of digital devices is a waste-free way to protect the environment of the earth. On the other hand, they may think that using paper products surely generates waste and is harmful to the environment. Until the 1980s, this may have been the case. Until then, the pulp and paper industry had little awareness of the conservation of natural forests or the environment. This is not true anymore. Pulp and paper products can be regarded as carbon-neutral materials because they are manufactured from wood or agricultural wastes formed by absorbing carbon dioxide through photosynthesis. World paper production nearly doubled from 240 million tons in 1990 to 490 million tons in 2020. If trees had to be cut down from natural forests, without replacement, to produce such a huge amount of paper, it would have caused serious and irreversible damage to the natural forest. According to a report by the Food and Agriculture Organization of the United Nations (FAO), paper production has increased in

the world's major producing countries, such as the United States, China, and the European Union, but the forest area in these countries has increased.

Save Forest and Make the World Sustainable: Paper Way

One of the reasons for the stability of the wood supply is that the pulp and paper industry is making continual efforts to protect natural forests by not using illegal wood as a raw material. In fact, most of the pulp produced in many countries including US, UK, EU, Japan, Chile, Brazil, Indonesia, *etc.*, is being certified by FSC (Forest Stewardship Council) or PEFC (Programme for the Endorsement of Forest Certification). The pulp and paper industry continues to work to keep the industry sustainable by planting more trees than are harvested. Furthermore, the practice of recycling the waste paper continues to grow. For example, the paper recycling rate in South Korea was 85.9% in 2020, and this was more than double the plastic recycling rate of 33% in the same year. This means that almost all paper is being recycled, except for those items that are severely contaminated. This is because the paper is easy to recycle. It is easy to produce paper again and again with a little energy input and quality loss.

We are prone to think that we are doing something good for the environment by using electronic devices instead of paper. However, we need to look carefully at how these new technologies will affect our environment in the long run. About 100 years have passed since plastics were invented. During the last 100 years we have failed to realize how harmful plastics can be. We've all been addicted to plastic's convenience, affordability, and versatility, and did not realized its danger and threat. It took us 100 years to understand that the plastic has two sides, and now we realize that the dark side of the plastic often outweighs the light side. The same can happen with electronics.

Computers, laptops, mobile phones, *etc.*, are not garbage if they are new and working right. However, it is very likely that sooner or later they will be ignored, thrown away and replaced with new and better ones, becoming real garbage. We need to be wiser and smarter to reduce the use of non-recyclable items and use more sustainable ones. Paper has been with us for more than 2000 years, and it is still with us, proving how sustainable it is, and surely will be. It is time for us to make the paper more sustainable and greener. In addition, we need to make people aware of its sustainable character.