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# Sustainable Management and Innovations that Changes the World

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**ABSTRACT**

The study tells that Sustainable management takes the concepts from sustainability and synthesizes them with the concepts of management. Sustainability has three branches: the environment, the needs of present and future generations, and the economy. Using these branches, it creates the ability of a system to thrive by maintaining economic viability and also nourishing the needs of the present and future generations by limiting resource depletion. From this definition, sustainable management has been created to be defined as the application of sustainable practices in the categories of businesses, agriculture, society, environment, and personal life by managing them in a way that will benefit current generations and future generations. The world has to change with the interesting sustainable innovations and initiatives that could save the planet. There's never been a greater push for sustainable products and technologies than there is today. We've reached a critical point with regards to climate change, and many innovators and businesses are stepping up to build a green future.

## INTRODUCTION

Sustainable management takes the concepts from sustainability and synthesizes them with the concepts of management. Sustainability has three branches: the environment, the needs of present and future generations, and the economy. Using these branches, it creates the ability of a system to thrive by maintaining economic viability and also nourishing the needs of the present and future generations by limiting resource depletion. Sustainable management has been created to be the application of sustainable practices in the categories of businesses, agriculture, society, environment, and personal life by managing them in a way that will benefit current generations and future generations.

Sustainable management is needed because it is an important part of the ability to successfully maintain the quality of life on our planet. Sustainable management can be applied to all aspects of our lives.

### *Management Position*

A manager is a person that is held responsible for the planning of things that will benefit the situation that they are controlling. To be a manager of sustainability, one needs to be a manager that can control issues and plan solutions that will be sustainable, so that what they put into place will be able to continue for future generations. The job of a sustainable manager is like other management positions, but additionally they have to manage systems so that they are able to support and sustain themselves. Whether it is a person that is a manager of groups, business, family, communities, organizations, agriculture, or the environment, they can all use sustainable management to improve their productivity, environment, and atmosphere, among other things. Some practical skills that are needed to be able perform the job include:

- Seeing problems/issues
- Being able to set goals/agendas
- Planning Skills
- Creating new ways of doing things
- Taking action when it is needed
- Organizational skills
- Being able to teach, make aware, and train people

- Ability to make tough decisions
- Keeping track of progress
- Taking responsibility
- Ability to project current issues/ideas/plans into the Future
- Possessing whole systems thinking

**BUSINESS**

In business, time and time again, environmentalists are seen facing off against industry, and there is usually very little "meeting in the middle" or compromises. When these two sides agree to disagree, the result is a more powerful message, and it becomes one that allows more people to understand and embrace.

Organizations need to face the fact that the boundaries of accountability are moving fast. The trend towards sustainable management means that organizations are beginning to implement a systems wide approach that links in the various parts of the business with the greater environment at large.

Additionally, companies must make the connection between sustainability as a vision and sustainability as a practice. Managers need to think systematically and realistically about the application of traditional business principles to environmental problems. By Helding the two concepts together, new ideas of business principles emerge and can enable some companies-those with the right industry structure, competitive position, and managerial skills- to deliver increased value to shareholders while making improvements in their environmental performance.

***Business economics***

The economic system, like all systems, is subject to the laws of thermodynamics, which define the limit at which the Earth can successfully process energy and wastes.Managers need to understand that their values are critical factors in their decisions. Many of current business values are based on unrealistic economic assumptions; adopting new economic models that take the Earth into account in the decision-making process is at the core of sustainable management.. This new management addresses the interrelatedness of the ecosystem and the economic system.

The strategic vision that is based on core values of the firm guides the firm's decision-making processes at all levels. Thus, the sustainable management requires finding out what business activities fit into the Earth's carrying capacity, and also defining the optimal levels of those activities. Sustainability values form the basis of the strategic management, process the costs and benefits of the firm's operations, and are measured against the survival needs of the planets stakeholders. Sustainability is the core value because it supports a strategic vision of firms in the long term by integrating economic profits with the responsibility to protect the whole environment.The most interesting sustainable innovations and initiatives that could save the planet.There's never been a greater push for sustainable products and technologies than there is today. We've reached a critical point with regards to climate change, and many innovators and businesses are stepping up to build a green future.Here are just some of the incredible break-throughs and initiatives that could change the world and pave the way for a more sustainable way of living.

**1. The Smog Free Project: Jewellery Made From Air Pollution**

Daan Roosegaarde is the mastermind behind the world's first smog vacuum cleaner. The Smog Free Tower measures almost 23 feet high (7 meters) and sucks in polluted air, cleaning it through a process of ionization before releasing it again.

**2. Zéphyr Solar: Bringing Electricity to Disaster Zones**

Zéphyr is a photovoltaic balloon and eco-friendly generator created by Karen Assaraf, Julie Dautel, and Cédric Tomissi. The balloon only requires water in order to inflate, and can capture solar energy from as high as 165 feet (50 meters) in the air.The balloon is connected by a cable to a base, where the energy is stored. Its creators hope that it will bring power to areas struck by natural disasters.

**3. The Green Building Initiative: Building Homes and Reducing Emissions:**

The Green Building Initiative (GBI) is an international effort towards creating sustainable, resource efficient buildings. They offer a certification program for commercial buildings who adhere to their environmentally-friendly vision.Their goal is to establish a standard of best practices for green buildings globally, as well as providing third-party assessment tools for sustainability requirements.

4. **B-Droid:** Buzzing Toward a Brighter Future B-Droid is just one of a few efforts to create robotic bees that can pollinate crops as effectively as their organic counterparts. B-Droid's mission is to help boost the natural be population, by giving low-nutritional and high-labor pollination tasks to robotic bees.

5. **Groasis Waterboxx:** Bringing Life to the Desert the Groasis Waterboxx was created by Dutch flower exporter, Pieter Hoff. The Groasis is a planting device that makes growing crops in the desert possible, and resource efficient.It consists of an "intelligent bucket" made from recycled paper, which can germinate seeds, incubate saplings, and water plants. It requires 90% less water than traditional growing methods, and can be used in some of the most extreme climates on Earth.

**6. Supermarket Herb Gardens: Less Waste, Better Taste:** Dutch supermarket chain Albert Heijn introduced in-store herb gardens in 2017, to combat waste and give customers the freshest possible produce. The initiative was developed in collaboration with design agency, studiomfd.The herbs are grown to maturity off-site, before being transported to stores. Customers can then cut as many sprigs of the herbs as they need, without buying pre-packaged sprigs. It's a simple and effective way to cut down on plastic packaging.

**7. AirCarbon: A Sustainable Plastic For the Future.** AirCarbon was developed by Newlight Technologies, and has already won many awards for its innovative sustainability. It's made from carbon emissions that would otherwise be released into the air, and can have a multitude of uses. It's a verified carbon-negative material, meaning every step of its production and use is fully green and sustainable. Because it is not made from oil like other plastics, it is also a cost-effective alternative to other synthetic materials.

**8.Desso Airmaster:** Carpet That Cleans the Air. Desso Airmaster is an innovative carpet brand that can purify the air in home, office, or school and college. It captures dust and other pollutants, leaving the indoor air clean and fresh. The benefits of Desso's design are self-evident. Improved air quality can have an enormous positive effect on health and well-being. As it uses no power to function, Desso carpetings are an energy efficient way of maintaining clean air indoors.

**9. ENGIE Insight: Resources for a Sustainable World:** Formerly known as Ecova, ENGIE Insight is a sustainable resource management initiative that works with businesses to reduce environmental impacts. They provide technology and experts to help businesses with their goal of becoming more sustainable, and reducing their carbon footprinte resource-efficient business practices that don't harm the environment.

**10. Demetra: Reducing Food Waste Organically:** Created by Italian start-up Green Code, Demetra is an all-natural treatment for food preservation. It's made from 100% plant extracts, and can improve the shelf life of natural produce.Thanks to Demetra, produce would no longer require to be kept at cold temperatures while in transit, saving a lot of energy. The produce itself could also stay fresh and ripe longer, effectively reducing food waste in supermarkets and groceries.

**11. The Seabin: Cleaning the Oceans Safely:** The Seabin was invented by Andrew Turton and Pete Ceglinski, two surfers who wanted to clean up the world's oceans. The Seabin can gather plastic, detergents, and oil, allowing clean water to filter through its structure.Inside the bin is a catch bag, which traps any floating pollutants. A submersible water pump sucks water through the bin, passing it out again once it has been cleaned. It only needs to be emptied once a month, and could make a huge impact on water pollution Worldwide.

**12. S.Café: Fabric Recycled from Coffee Grounds:** S. Café has created a method of transforming coffee grounds into wearable textiles, that are more energy efficient and faster to produce than traditional natural fibers.Their patented yarn dries 200% faster than cotton, and can be produced with low temperatures and little energy. In addition to this, the yarn naturally absorbs odors and reflects UV rays, thanks to its unique micro-pores.

**13. Sundrop Farms: Energy Efficient Agriculture:**

Sundrop Farms are known for cultivating a set of agricultural technologies that require fewer finite resources than traditional farming. Their eco-friendly greenhouse operations depend on concentrated solar power and thermal desalination.Their farm in Port Augusta, South Australia is irrigated with water drawn from

Spencer Gulf, which is desalinated before being used to feed the crops. This desalination process, along with other operations on the farm, is entirely powered by concentrated solar power.

**14. The Veganbottle: An All-Natural Alternative to Plastic Bottles:**

Created by LYSPACKAGING, the Veganbottle is made from an all-natural bioplastic that could replace plastic bottles forever. Everything in the Veganbottle, from the cap to the wrapper, is made from 100% biodegradable materials.The bottle is made from sugar cane extracts. Sugar cane requires far less water than other crops, and the manufacturing of the bottle itself depends on little energy.

**15. PowWow Energy: Save Water and Money With This Innovative App.**

PowWow Energy is an app that messages farmers when there's an issue with their irrigation system. They offer two products - a Pump Monitor to reduce water waste, and an Irrigation Advisor to ensure the best possible crop yield.Their products allow farmers to monitor their own data when it comes to water usage, and identify pipe leaks or breakages immediately. Users only receive messages from the app when there's an issue, allowing them to efficiently avoid waste and get the most out of the crops.

**16. Fairphone:** The World's First Ethical Smartphone:Fairphone is a modular smartphone designed with fair work practices and recycling in mind. To combat the growing waste caused by discharged electronic goods, Fairphone created a long-lasting smartphone that can be easily repaired.Rather than replacing the entire phone if part of it breaks, Fairphone allows you to simply replace the broken module. Everything from the battery to the audio jack can be replaced, meaning fewer phones will end up in landfills.

**17. Outerwall EcoATM:** Get Cash for Old Electronics Discarded electronic products account for huge amounts of waste, and recycling efforts are ramping up to encourage people against throwing away their old gadgets. One initiative is the EcoATM - a machine that gives cash in exchange for discarded devices.All have to do is bring device to an EcoATM kiosk where it is evaluated and valued and walk away with cash! A great incentive for staying green.

## CONCLUSION

Sustainable development relies on technological change to achieve its aims but will governments take the tough steps that are required to force radical technological innovation rather than the technological fixes that have been evident to date. Such measures would require a long-term view and a preparedness to bear short-term economic costs while industry readjusts. Although technology holds much promise in terms of sustainable development, we should not be credulous believers in the power of technology. Technological innovation is essential for sustainable development, but - like digital technology - its transformational potential can be exploited for the benefit .Even if people put their faith in the ability of human ingenuity in the form of technology to be able to preserve their lifestyles and ensure an ever increasing level of consumption for everyone, they cannot ignore the necessity to redesign our technological systems rather than continue to apply technological fixes that are seldom satisfactory in the long term. Technological optimism does not escape the need for fundamental social change and a shift in priorities. That was the mistake many in the Appropriate Technology Movement made. It takes more than the existence of appropriate or clean technologies to ensure their widespread adoption.

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