

The Advantages and Disadvantages of Green Technology

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Abstract—Meaning of green technology is the technology which is environment friendly, developed and used in such a way so that it doesn't disturb our environment and conserves natural resources. Some people refer green technology as environmental technology and clean technology. The present expectation is that this field will bring innovation changes in daily life of similar magnitude of information technology. Green technology is based on the four pillars on various sectors. Government takes initiatives to promote green technology. Government introduced many fiscal incentives that generate electricity from renewable sources. Import duty and sales tax exemption for solar systems equipment, sales tax exemption for the purchase of solar heating system equipment from local manufacturers. Ministry of energy has also implemented national level annually month to raise awareness about renewable energy & promote green technology. The goals of green technology are as follows: To meet the needs of society in ways without damaging or depleting natural resources on earth is the main objective of green technology. The idea is to meet present needs without making any compromises Focus is being shifted on making products that can be fully reclaimed or re-used. By changing patterns of production and consumption, steps are being taken to reduce waste and pollution, as one of the important goals of green technology. It is essential to develop alternative technologies to prevent any further damage health and its advantages and their disadvantages of the green technology. Many companies have committed to establishing business & manufacturing practices. These are: Dell, IBM, Intel, Nike, and Johnson & Johnson.

1. WHAT IS TECHNOLOGY?

The word "technology" can also be used to refer to collection of techniques, skills, methods and processes used in the production of goods or services or in the achieving of objectives, such as scientific investigation. Technology can be the knowledge of how to combine resources to produce desired products, to solve problems, fulfill needs, or satisfy wants; it includes technical methods, skills, processes, techniques, tools and raw materials., etc. or it can be embedded in machines, computers, devices and factories, which can be operated by individuals without detailed knowledge of the workings of such things.to a collection of techniques. In this context, it is the current state of technology is the application of math, science, and the arts for the benefit of life as it is known Technology.^[1]

2. WHAT IS GREEN TECHNOLOGY?

Green Technology is the development and application of products, equipment and systems used to conserve the natural environment and resources, which minimize and reduces the negative impact of human activities.

Green Technology refers to products, equipment or systems which satisfy the following criteria:

- a) It minimizes the degradation of the environment;
- b) It has zero or low greenhouse gas (GHG) emission is safe for use and promotes healthy and improved environment for all forms of life;
- c) It conserves the use of energy and natural resources;
- d) It promotes the use of renewable resources.

3. IMPORTANCE OF GREEN TECHNOLOGY

Green technology, an environmentally friendly technology is developed and used in a way that protects the environment and conserves natural resources. A part of the renewable energy branch of the environmental technology movement, the green technology importance cannot be ignored. We have come to a point, where we need to pause and reflect on the growing green technology importance and why it is going to be important for humanity.

With many reasons behind green technology importance, perhaps volumes can be written and spoken on the subject. Whether it is the growing importance of green technology in the industry or at homes, it is certain that things need to be done fast. It does not take a rocket-scientist to state that mankind has to do something about clean environment and save energy resources.

Going green can only help us come out of the present tough situation. Before things turn for the worst, we should realize the green technology importance to solve this problem.^[5]

4. FOUR PILLARS OF GREEN TECHNOLOGY POLICY

- ✓ **Energy** – Seek to attain energy independent and promote efficient utilization;
- ✓ **Environment** - Conserve and minimize the impact on the environment;
- ✓ **Economy** - Enhance the national economic development through the use of technology; and
- ✓ **Social** - Improve the quality of life for all^[2]

1. **Environmental Pillar** All human activities have an impact on the environment. Conversely, the relative health of the environment will determine and will contribute to the nature and scale of activities in the other pillar areas of this plan: economic, cultural and social. Earlier in this plan, we noted some of the major global environmental challenges: climate change exhausting nonrenewable resources, shrinking natural habitats, diminishing biodiversity, ocean acidification; and increasing human population pressures. Clearly, all of these issues have economic, social and cultural element

2. **Social pillar** The **Social Equity Pillar** will help social agencies and residents to raise awareness about social needs and to engage both citizens and community partners to plan and act in response to these needs. The end result will be to improve the well-being of the whole community. Together, we will build social capital in the community between individuals and groups in order to enable collaborative action on projects of common interest. With this, we stress the importance of personal and group well-being and security, including full access to effective health care, housing, food, and education services-these being the essential components for full participation in cultural, environmental, and economic activities.

3. **Economic Pillar** It is focused on the attraction of new businesses and people to India. This is critical to the city's growth and sustainability and assists us in building a strong and vibrant local community. The recruitment of talented people in the public, private, and non-profit sectors in India are fundamental to achieving this. Present businesses and the jobs they create are main components of a strong, sustainable economy. Together we can achieve and be the difference that makes the difference.

4. **Energy Harvesting** An important pillar of green technology is energy harvesting, which seeks new innovative ways to extract useful energy from otherwise useless waste by-products, as well as to develop new technologies to maximize the harnessing of energy. Energy efficiency has proven to be a cost-effective plan for building economies by minimizing the amount of energy used.

5. OBJECTIVES

- To reduce the rate of growth of energy consumption while enhancing economic development;
- To facilitate the growth of the Green Technology industry and enhance its contribution to the national economy;
- To increase the capacity for innovation in Green Technology development and enhance competitiveness in Green Technology in the field;
- To ensure sustainable development and preserve the environment for future generations, and
- To increase public awareness and education on green technology and encourage its widespread use Green Technology.

6. GOALS OF GREEN TECHNOLOGY

The goals of green technology are many. To meet the needs of society in ways without damaging or depleting natural resources on earth is the main objective of green technology. The idea is to meet present needs without making any compromises. You have reached the right destination to know all about the goals of green technology.

Focus is being shifted on making products that can be fully reclaimed or re-used. By changing patterns of production and consumption, steps are being taken to reduce waste and pollution, as one of the important goals of green technology. It is essential to develop alternative technologies to prevent any further damage health and the environment. Speeding their implementation can benefit our environment and truly protect the planet. Explore the goals of green technology, introducing sustainable living, develop renewable energy and reduce waste.

7. MAJOR SECTOR

- i) **Energy Sector:** Application of Green Technology in power generation and energy supply management, including co-generation (co-generation) in the industrial and commercial sectors, and Sector Energy Consumption Application of Green Technology in all sectors of energy consumption and energy demand management programs.
- ii) **Building Sector:** Adoption of Green Technology in the construction, management, maintenance and destroying of buildings
- iii) **Water and Waste Management Sector:** Adoption of Green Technology in the management and use of water resources, wastewater treatment, solid waste landfill
- iv) **Transport Sector:** Incorporation of Green Technology in the transportation infrastructure and vehicles, in particular, biofuels and public road transport.

8. GREEN TECHNOLOGY AND ADMINISTRATION

On 9 April, the Prime Minister announced the establishment of the Ministry of Energy, Green Technology and Water to replace the Ministry of Energy, Water and Communications. I believe the emphasis on "green technology" is the right approach in dealing with environmental problems and economic growth. It is also in line with the agenda of the Governments around the world currently giving priority to environmental issues in particular the phenomenon of climate change. We as people of the world need to be responsible to jointly play a role in making the world a better place to live in.

In applying green technology, the biggest benefit is in terms of enhancing the quality of life by ensuring the quality of the environment more sustainable. Pollution of air, water, noise and so on will affect the quality of life if the problem is allowed to continue. When we use green technology, the negative impact on the environment is least.

Green technology also has great potential in driving the country's development. Industries that use or develop products on green technology can provide employment opportunities for the local community. We can also explore export opportunities "green" products that we have produced. The market for green technologies and products is very large, particularly in the renewable energy or renewable energy. For example, the solar photovoltaic industry has been identified as a new source of economic growth for our country. According to our estimates, by 2020, the PV industry to contribute 4 percent of the income of the Gross Domestic Product (GDP).

The Government will provide favorable policies to promote green technology. The private sector, professionals and researchers should work together to create and commercialize green technologies.

9. INITIATIVES BY GOVERNMENT FOR GREEN TECHNOLOGY

For energy efficiency and renewable energy, the Government has introduced various fiscal incentives since 2003 for companies that generate electricity from renewable energy sources or the Renewable Energy (RE) and companies to adopt energy-saving activities of the Energy Efficiency (EE) where they are eligible for tax exemption Investments (Investment Tax Allowance). These companies can also apply for an exemption of import duty and sales tax for a period of one year for machines, equipment, materials and spare parts imported directly used in the generation of electricity from RE sources and activities and EE. These incentives have been enhanced under the 2009 Budget which exemption may be granted for:

- i. import duty and sales tax exemption for solar systems equipment for the use of third parties be given to importers including photovoltaic service providers approved by the EC;

ii) A sales tax exemption for the purchase of solar heating system equipment from local manufacturers;

- iii) Exemption of import duty and sales tax exemption on EE equipment such as energy efficient motors (high efficiency motors) and insulation materials (insulation material) is given to importers including authorized agents approved by the EC.
- iv) sales tax exemption to purchase consumer goods' EE approved by the EC such as insulating materials, domestic refrigerators, Ballast for fluorescent lamps, domestic fans, lights and air conditioning.

10. PROGRAM HELD TO BRING AWARENESS TO THE COMMUNITY

In addition, the Ministry of Energy has also implemented a National level annually Month to raise awareness about renewable energy and promote energy efficiency practices among the public and private sectors. Among the activities carried out during the program Energy Month is holding talks related to energy efficiency, publishes guidebooks Energy Efficiency at Home, and published a series of articles in newspapers and the mass media to promote energy efficiency.

In the future, the Ministry will undertake a campaign for Green Technology will involve relevant stake-holders including the public and the Ministry / Department of the Government, NGOs and other authentic agencies to educate and increase awareness and knowledge of all parties on the importance of technology Green in our lives. This is to ensure that the programs that will be implemented by the Government in promoting and developing the local Green Technology can be implemented effectively and appreciated by all sections of society.

11. FOUR STEPS OF GREEN TECHNOLOGY

BANGI: Prime minister today gave four strategic steps for the success of the National Green Technology Policy.

1. The Prime Minister said, the first step is to strengthen the institutional framework, especially among minister while the second step aims to provide a suitable environment for Green Technology Development.
2. He said the third step will help the development of human capital through the provision of training and education programs.
3. "Step three is to encourage research and innovation through commercialization Green Technology.
4. "The final step is to strengthen efforts to promote and increase public awareness on green technology," he said when launching the National Green Technology Policy, here today.^[3]

12. ADVANTAGES OF GREEN TECHNOLOGY

1. Does not emit anything harmful into the air
2. Can bring economic benefits to certain areas.
3. Requires less maintenance so you don't have to shell out a lot of money to operate it
4. Renewable which means we will never run out.
5. Can slow the effects of global warming by reducing CO2 Emissions.

13. DISADVANTAGES TO ADOPTING GREEN TECHNOLOGIES

- High implementing costs.
- Lack of information.
- No known alternative chemical or raw material inputs
- No known alternative process technology
- Uncertainty about performance impacts
- Lack of human resources and skills.^[4]

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