

Sam Higginbottom Institute of Agriculture, Technology & Sciences

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Seminar Report on Green Technology

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GREEN TECHNOLOGY





WHAT IS GREEN TECHNOLOGY?

- Environmental friendly technology
- Conserve natural resources and the environment – Sustainable development
- Radical thinking to change
- Innovative technology

GOALS OF GREEN TECHNOLOGY

- Rethinking
- Recycling
- Renewing
- Reducing
- Responsibility



GOALS OF GREEN TECHNOLOGY

1. RETHINKING

Radical thinking for
fundamental changes



GOALS OF GREEN TECHNOLOGY

2. RECYCLING

- ◎ Aggregates and Concrete
- ◎ Paper
- ◎ Plastic
- ◎ Can
- ◎ Batteries
- ◎ Clothing



GOALS OF GREEN TECHNOLOGY

3. RENEWING

⊙ Renewing Energy

1. Wind power
2. Water power
3. Solar Energy
4. Bio-fuel

⊙ Waste water



GOALS OF GREEN TECHNOLOGY

4. REDUCING

- ⊙ Fuels
- ⊙ Waste
- ⊙ Energy consumption



GOALS OF GREEN TECHNOLOGY

5. RESPONSIBILITY

- ✓ One world
- ✓ One dream



TYPES OF GREEN TECHNOLOGY

- GREEN ENERGY
- GREEN BUILDING
- GREEN PURCHASING
- GREEN CHEMISTRY
- GREEN NANOTECHNOLOGY

GREEN ENERGY

- ⊙ Reasons for the Need of Green Energy
 - ⊙ Natural resources used in the energy generation process is on the decline
 - ⊙ Increasing pollution caused by the non renewable sources

GREEN BUILDING

⊙ Hindrances

- ⊙ High initial cost of setting up the projects
- ⊙ Emerging technology, so risks involved
- ⊙ Doesn't cater to the promoter's short term interest of profit making

⊙ Advantages

- ⊙ Reduces cost of operation in the long term
- ⊙ Consumers now more environment conscious

BC CANCER AGENCY RESEARCH CENTRE





BC CANCER AGENCY RESEARCH CENTRE

- ③ 50 percent less energy consumption than a building of comparable size
- ③ 43 percent saving of potable water demands
- ③ 98.5 percent of the construction waste for the project was diverted from landfill

GREEN CITIES IN CHINA AT A GLANCE



GREEN PURCHASING

⊙ Product

- ⊙ Product dimension includes providing and using engineering with market-driven trends for green product attributes such as energy savings, organic clothing, low volatile organic compounds, green chemicals etc.
- ⊙ Greener selection and use of resources results in savings from less waste, less chemicals and less processing.
- ⊙ Wal-Mart has made tremendous strides in greening their transportation, energy usage, facility design and adoption of some greener products such as organic clothing.



GREEN CHEMISTRY

- ① Design of processes to maximize the amount of raw material that ends up in the product.
- ① Use of safe, environment-benign substances, including solvents, whenever possible.
- ① Design of energy efficient processes.
- ① Best form of waste disposal, not to create it in the first place.



GREEN NANOTECHNOLOGY

- Green nanotechnology refers to the use of nanotechnology to enhance the environmental-sustainability of processes currently producing negative externalities.
- Aims to minimize potential environmental and human health risks associated with the manufacture and use of nanotechnology products, and to encourage replacement of existing products with new nano-products that are more environmentally friendly throughout their lifecycle.



APPLICATIONS

- ③ The use of green technology can reduce the amount of waste and pollution and provide early warning message that is created during production, consumption, and impact of natural disaster.
- ③ This special issue provides an international forum for scientists, engineers, researchers, technocrats, and academicians for consolidating research activities and findings in all experimental, theoretical, and practical aspects of green science, technology, and engineering into a single and unique reference source.



WHAT CAN WE DO?

- **Responsibility for the environment**
- **Rethinking the way we live**
- **Reducing Exhaustion**
- **Recycling Waste**
- **Renewing Energy**

CONCLUSION

- ① Although there are some defects of green technology, everything done should have both positive and negative impacts.
- ① Global warming and energy crisis cannot be solved with one or two years.
- ① It really requires our determination and continue effort in improving the situation.
- ① Green technology will definitely be the solution that gets the potential in helping us to solve those problems and improve our environment

REFERENCES

- ❑ National Renewable Energy Laboratories (NREL)
<http://www.nrel.gov>
- ❑ US Green Building Council
<http://www.usgbc.org/>
- ❑ US EPA: Environmentally Preferable Purchasing
<http://www.epa.gov/epp/>
- ❑ Project on Emerging Nanotechnologies
<http://nanotechproject.org/>
- ❑ US EPA: Green Chemistry Program
<http://www.epa.gov/greenchemistry/>



THANK YOU