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UNITED NATIONS
UNCTAD

GLOBAL LAUNCH OF THE WORLD INVESTMENT REPORT 2010

INVESTING IN A GREENER FUTURE”

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Is it possible to be environmentally friendly and still make money?

Yes!





What Does *Green Investing* Mean?



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- Investment activities that focus on the establishment of companies or projects that are committed to :
 - the conservation of natural resources,
 - the production and discovery of alternative energy sources,
 - the implementation of clean air and water projects, and/or other environmentally conscious business practices.



Areas for Green Investments Internationally



- Renewable Energy
 - Solar
 - Wind
 - Geothermal
 - Biofuels
 - Hydro
- Agriculture / Organic Food
- Reforestation
- Recycling
- Water Technologies
- Energy Efficiency
- Carbon Emissions Market
- Green Cars
- Green Building
- Eco-tourism



Areas for Green Investments Internationally



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1. Renewable Energy: Solar

- Solar energy is the most abundant renewable energy resource on the planet.
- **Thermal solar energy** (solar energy is captured to produce heat)
- **Photovoltaic solar energy** (solar cells are used to convert solar light *directly* into electricity)
- Examples: There are several retail sales, wholesale suppliers who import products such as, photovoltaic commercial and residential systems, deep cycle batteries, DC to AC power inverters, solar garden lights, solar water heating systems, etc.





Areas for Green Investments Internationally



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2. Renewable Energy: Wind

- Windmill farms are sprouting up around the world. Most wind energy is used to generate electricity.
- Individual wind turbines may be installed locally to provide electricity for isolated locations as well as for homes, small businesses etc. (“off-grid”), while large wind farms are usually connected to electrical grids.
- Examples:
 - Wigton Wind Farm (a wholly owned subsidiary of the Petroleum Corporation of Jamaica in Central Manchester)
 - JPS’ first of four wind turbines for their Wind Power Plant at Munro in St. Elizabeth





Areas for Green Investments Internationally



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3. Renewable Energy: Biofuels

- Biofuels are renewable types of energy derived from biological sources such as plants. They can come in solid, liquid or gas form.
- Common types of biofuel: ethanol (produced from sugarcane or corn); biodiesel (produced from palm oil); and more recently, biofuels produced from waste material
- Examples: Petrojam Ethanol Limited, Jamaica Ethanol Processing Limited and Jamaica Broilers' Group of Companies Ethanol plant



Areas for Green Investments Internationally



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4. Renewable Energy: Hydro

- Generating power from water – hydro-electric dams
- Small scale hydro power systems can be installed in small rivers or streams with little or no discernible environmental effect on things such as fish migration. Most small scale hydro power systems make no use of a dam or major water diversion, but rather use water wheels
- Example: JPS' Constant Spring Hydroelectric Power Plant and Maggotty Hydroelectric Power Plant in St Elizabeth





Areas for Green Investments Internationally



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5. Renewable Energy: Geothermal

- Geothermal energy is the energy generated by the heat located under the surface of the Earth.
- It is used mainly to heat buildings and generate electricity
- Example: Since August 2009, customers and employees doing business and working in the cool of FirstCaribbean International Bank, Portmore branch, have experienced a part of a major green initiative by the bank. The banking location is on a list of only a few buildings in the Caribbean using geothermal energy systems





Areas for Green Investments Internationally



6. Agriculture / Organic Food

Organic farming uses natural inputs and processes for growing crops, and avoids the use of artificial fertilizers and pesticides and genetically modified organisms.

- Organic foods have dramatically risen in popularity over the last several years. The high demand for organic foods has resulted in higher profits for green investors as well as significant benefits for the human health and for the wider environment.
- In the USA, organically produced food has grown at close to 20%, while sales of conventional foods have grown 2-3%.



Areas for Green Investments Internationally



7. Reforestation

- This investment offers the opportunity to make long-term investments in sustainable timber, which is a valuable product on international markets.
- Examples: Reforestation programmes by the Environmental Foundation of Jamaica and the Ministry of Agriculture's Forestry Department



Areas for Green Investments Internationally



8. Recycling/Waste Management

- This is the recovery, reprocessing and re-use of waste materials for new products
- Waste comes from 4 major areas – *industrial, commercial, municipal & residential* activities, which generate solid waste and waste water.
- Many types of waste such as metals, paper & wood, glass, plastics, waste water can be effectively recycled and re-used.
- Examples: Waste management/energy management/water conservation practices of local hotels that are Green Globe certified



Areas for Green Investments Internationally



9. Water Technologies/Sustainable water supplies

- With increasing water shortages around the world, this area will be a very important one in this century.
- Agriculture, industry and residences consume huge amounts of water, and securing sustainable water supplies has already become a big issue both in the USA and many other countries.
- Investments in water desalination and purification technologies as well as water infrastructure companies will become a priority



Areas for Green Investments Internationally



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10. Energy Efficiency

- The energy efficiency industry offers anything from energy-saving consultancy services to manufacturing of energy-efficient light bulbs, washing machines and cookers, etc.
- Examples: Several Energy Service Companies (ESCOs) and Consultants in Jamaica





Areas for Green Investments Internationally



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12. Green Cars

- Green cars are the vehicles that use renewable sources of energy *or* consume significantly less gasoline / diesel than traditional oil-powered cars.
- There are currently 3 main types of green cars that green investors can look out for: electric cars (run on electric motors); hybrid cars (electric motors *plus* traditional internal combustion engines), and hydrogen cars (use hydrogen instead of gasoline)





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11. Carbon Emissions Market

- The carbon emissions market is a quite new concept. It is also called a cap-and-trade system.
- Its main idea is to bring *carbon pollution* under control by allowing companies to buy and sell *carbon credits* through international trading platforms.
- Under the Kyoto Protocol, companies and institutions from developed countries are also allowed to create and trade new *carbon credits* by investing in “green” projects in developing countries.



Areas for Green Investments Internationally



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13. Green Buildings

- Construction and operation of industrial, residential and office buildings are major sources of environmental pollution and greenhouse gases.
- These processes can be improved through the most efficient use of energy & raw materials, the use of green building materials, as well as efficient planning.





Areas for Green Investments Internationally



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14. Eco-tourism

- The International Ecotourism Society (TIES) defines ecotourism as "Responsible travel to natural areas that conserves the environment and improves the well-being of local people."
- Ideally, ecotourism should satisfy several criteria such as:
 - conservation of biological diversity and cultural diversity through ecosystem protection and minimization of tourism's environmental impact
 - promotion of sustainable use of biodiversity, by providing jobs to local populations
 - sharing of socio-economic benefits with local communities and indigenous peoples by having their informed consent and participation in the management of eco-tourism enterprises
- Example: Mystic Mountain





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Investment Opportunities



Investment Opportunities: Forestry



- Private Planting Programme of the Ministry of Agriculture – encouraging private sector forestry
 - Establishing a hardwood plantation (Blue Mahoe)
 - Christmas Tree Farm Establishment



Investment Opportunities: Forestry



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- Recreational Forestry: Non-timber services that contribute to employment and income generation
- There are several sites that exist within the Forest Estate that may be considered for development:
 - Gourie, Manchester
 - Clydesdale, St. Andrew
 - Bogue Estate, St. Ann



Investment Opportunity: PCJ



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- Opportunities for investments in Hydropower for Rural Electrification & Community Water Supplies
 - Back Rio Grande Hydro scheme located in Portland - The feasibility update, which was completed on December 20, 2009, identified four (4) cost-effective hydro schemes with total capacities of 10 MW.
 - Hydropower project at Great River located in St. James: This site also has a hydro scheme capacity of about 8 MW. The feasibility study will be completed by August 2010.
 - Hydropower scheme at Laughlands Great River in St. Ann. PCJ completed a third feasibility study for the development of the 2 MW hydropower facility



Investment Opportunity: SRC



- Wastewater treatment systems
 - Biodigesters - developed to promote the use of alternate sources of energy, provide organic fertilizer; and water for irrigation thereby reducing the use of potable water.
 - Biodigester Septic Tanks (BSTTM) – developed to replace soak away pits. This system allows for construction (e.g. houses) to be possible in areas that would not be appropriate due to risk of polluting underground water. SRC has a patent for the BST.



Investment Opportunity: SRC



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Wastewater treatment systems

- Up-flow Anaerobic Sludge Blanket (UASB) Reactor treats industrial, agro-processing and municipal waste.
- The UASB is one of the refined versions of the anaerobic system that can efficiently treat complex waste. The SRC commissioned the first UASB in Jamaica at SRC to treat agro-processing waste.



How can JAMPRO help you



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- Facilitation
- Business Approval Services
- Partnering and Matchmaking Services
- Lobbying Services



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Thank you