



The Indian Cleantech Industry

DIBD – OMII

Own Man In India

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Introduction to the Indian Cleantech Industry

- Market situation
- Key drivers
- Segments
- Future investments





Market situation

- It is worldwide acknowledged that it is an unsustainable world if pollution keeps increasing at the same level that it has been for many years.
- The international focus in this area has increased tremendously the past years. COP15 in 2009 in Denmark is just one example of the importance this area is given. Therefore, investments in the cleantech business have gone up globally.
- Especially the Indian cleantech industry is growing rapidly during these years.
- A growing economy and a population that is expected to reach 1.4 billion by 2030, the demand for a sustainable society in the future increases.
- In 2005 India accounted for 4% of the world's overall carbon emission by 2030 this figure is expected to double.
- Thus, India is trying to minimize the CO2 emission in the country.
 - The investments in the cleantech market in India have increased by 32% between 2008 and 2009 growing from approximately \$280 billions to \$380 billions.



Market situation

- **Indian companies are also focusing more on reducing the CO2 emission in the country:**
 - As a result, India has finalized around 2800 cleantech deals in 2009 compared to 2100 cleantech deals in 2008
 - India's most polluting industries such as Power, Steel, Cement , Energy, Plastics and Automotives are all expected to heavily reduce their CO2 emission by 2030.
 - To meet the requirements for the emission reductions the Indian government has adopted a low carbon plan from 2010 to 2011.
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Key Drivers for the Indian cleantech industry

- **The cleantech industry has the following key drivers for investment in India**
 - India's developing economy, growing population and availability of natural resources are some of the key drivers for the cleantech industry.
 - The Indian economy is expected to grow between 8-9% between 2010-11 after achieving a growth of less than 7% in 2008.
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Key Drivers for the Indian cleantech industry

- **Developments in the Indian cleantech industry in the different sectors:**
 - India plans to use solar thermal technologies in urban areas, industries and also in commercial establishments.
 - In 2009, the Indian government prepared a National Action Plan on Climate Change. This Plan finances public and private partnerships to reduce the energy consumption by conducting management programs in the municipals and the agricultural sectors.
 - Due to the water scarcity in the country, India is also planning to improve the water usage efficiency by 20% through changes in the price level.
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Segments in the cleantech industry

The Cleantech Group, one of the biggest players in the Indian cleantech industry, has categorized the cleantech industry into the following 11 segments:

- Agriculture
 - Air and environment
 - Energy efficiency
 - Energy generation – wind, solar, hydro, biofuels and geothermal
 - Energy infrastructure
 - Energy storage
 - Industrial manufacturing
 - Materials – nano, bio, chemical and other material with cleantech applications
 - Recycling and Waste
 - Transportation
 - Waste & Waste Water
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Investments in the Indian Cleantech Industry



• Investment in the Indian Cleantech industry in 2007 and 2008

- SE Forge – a subsidiary of Suzlon - has invested \$91 million in wind energy in 2008.
- Moser Baer who is into photo voltaic and solar energy has invested \$50 million in solar energy in 2007.
- Green Infra who is into renewable energy has invested \$40 million in renewable energy and energy efficiency in 2007.
- Doshan - a solution provider in the water management – has invested \$8 million in waste water management system in 2007.



Future Investments in the Indian Cleantech Industry

- India would be focussing on improving the environment, as a result India would be investing around \$10 billion a week by 2030 in the cleantech sector.
 - India is planning to reduce 20-25% of their carbon emission intensity by 2020, which includes setting up mandatory fuel efficiency standards for all vehicles, and furthermore they will improve the very polluting coal industry with advanced cleantech products.
 - The Indian energy sector is expected to grow to \$19 billion between 2008-2012.
 - Green Infra will be investing \$595 million in renewable power generation projects in India by 2012.
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Danish contact in India

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