

# **THE CLEAN TECH REVOLUTION**

## **The Next Big Growth and Investment Opportunity**

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The Web site for this book is at [www.thecleantechrevolution.com](http://www.thecleantechrevolution.com).

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**MAIN IDEA**

Developing “clean technology” is no longer just a social cause championed by the tree huggers or environmentalists – it is rapidly becoming the next big engine of business and economic growth for a large number of mainstream companies.

“Clean tech” is any product, service or process that delivers value while eliminating or reducing the use of natural resources. As such, clean tech companies and technologies typically:

- Harness renewable resources and materials.
- Reduce the use of nonrenewable resources.
- Eliminate or reduce pollution or toxic wastes.
- Deliver superior performance.
- Provide investors with increasing returns.

In the 1970s, clean tech was often labeled as “alternative” but today, industry giants like Toyota, Sharp and Goldman Sachs are making multi-billion-dollar investments in clean technology for solid business reasons rather than in an attempt to change the world. This is due to six major forces which are fueling the drive towards clean tech:

1. *Costs* – clean-energy costs are falling as the costs of oil and fossil fuels steadily rise.
2. *Capital* – there is now a large influx of capital flowing into making clean tech products better.
3. *Competition* – many governments are going green in order to help build the jobs of the future.
4. *China* – the explosive growth of developing nations is driving clean tech development.
5. *Consumers* – who are starting to prefer cleaner products which use less resources.
6. *Climate* – business feels a need to be seen to be contributing to the solutions to the world’s problems rather than generating still more.

In short, clean tech has now moved from the back-to-basics fringe elements to the business mainstream. The big profit opportunities of the future lie in designing, selling or funding eco-friendly products and services. Literally trillions of dollars in economic opportunities and prosperity will be created in this sector of the economy in the years ahead, so the time to get on board is here.

**The eight key sectors of the clean tech revolution . . . . . Pages 2 - 7**

Sector	Size	Current Challenge	Page
1 Solar Energy	\$13.6 billion in 2006 \$69.3 billion in 2016	To scale up manufacturing sufficiently so as to be able to drive down costs to the end consumer.	2
2 Wind Power	\$17.9 billion in 2006 \$60.8 billion in 2016	To exploit the availability of big finance, very large scale projects and emerging technology niches.	2 - 3
3 Biofuels and Biomaterials	\$20.5 billion in 2006 \$80.9 billion in 2016	To develop the next-generation plants and feedstocks required to supercede hydrocarbons.	3
4 Green Buildings	Style in 2006 Efficiency in 2016	To come up with good ways to leverage advanced building materials and electrical power systems.	4
5 Personal Transportation	20 mpg in 2006 40-60+ mpg in 2016	To design, build and service ultra-efficient vehicles which are also low-emissions and high-performance.	4 - 5
6 Smart Power Grid	\$3 trillion in 2006 \$10 trillion in 2016	To create an intelligent, distributed power grid better suited to the demands of the twenty-first-century.	5
7 Mobile Technologies	\$13 billion in 2006 \$25 billion in 2016	To provide energy storage and power for people to use their electronic devices on the go away from home.	6
8 Water Filtration	\$400 billion in 2006 Unknown by 2016	To turn oceans, wastewater and other untapped sources into pure water fit for human consumption.	6 - 7

**The single most attractive commercial opportunity of the clean tech revolution . . . . . Page 7**

The most attractive commercial opportunity of the clean tech revolution is for cities and regions to become world-class hubs or clusters for specific clean technologies. Whoever ends up building the “Silicon Valleys” of the clean tech future will prosper.

**The five marketing keys to selling clean tech in mainstream markets . . . . . Page 8**

The key to moving clean tech into the mainstream is marketing. This will be its make-or-break point. If great marketing happens, clean tech will move from the tree-hugger niche to the mass markets. It’s all about how the message gets framed that counts.

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