

## The Clean Tech Revolution

**Author: Bostan Dumitru  
Ling. cons: M. Ababii**

*This article is about how clear technology comes in our life, how it is used every day by humanity and the plans for the future.*

In the 1970s, clean technology was considered “alternative”. Even at the start of the 21st century, the term ‘clean tech’ was not yet widely used. But now, throughout much of the world, there is "the beginning of a revolution that is changing the places where we live and work, the products we manufacture and purchase, and the development plans of cities, regional governments, and nations around the globe" [1].

Scientists Pernick and Wilder highlight eight major clean technology sectors: solar power, wind power, bio fuels, green buildings, personal transportation, the smart grid, mobile applications, and water filtration. They also identify six major forces, which they call the six C’s, that are pushing clean technology into the mainstream and driving rapid growth and expansion: costs, capital, competition, China, consumers, and climate [2].

Costs. "Perhaps the most powerful force driving today’s clean-tech growth is simple economics. As a general trend, clean-energy costs are falling as the costs of fossil fuel energy are going up. The future of clean tech is going to be, in many ways, about scaling up manufacturing and driving down costs."

Capital. "An unprecedented influx of capital is changing the clean tech landscape. With billions of dollars, euro, yen, and Yuan pouring in from a myriad of public and private sector sources."

Competition. "Governments are competing aggressively in the high tech race to dominate in the clean-tech sector and build the jobs of the future."

China. "Clean tech is being driven by the inexorable demands being placed on the earth not only by mature economies but also by the explosive demand for resources in China, India, and other developing nations. Their expanding energy needs are driving major growth in clean-energy, transportation, building, and water-delivery technologies."

Consumers. "Savvy consumers are demanding cleaner products and services that use resources efficiently, reduce costs, and embrace quality over quantity."

Climate. "The debate around climate change has gone from question mark to peer-reviewed certainty, and smart businesses are taking heed."

"Wind energy has been expanding rapidly since the mid-1990s -- right up there with solar. From 1995 to 2006, global cumulative installed wind-power capacity expanded fifteen fold.

Today's green buildings use some 30% less energy than their comparably sized nongreen counterparts (some save much more), and they're generally brighter, healthier, and more aesthetically pleasing. Often built with little or no additional up-front cost, green offices, for instance, pay back not only in energy savings but also in greater employee retention, attendance, and productivity" [3].

### **Bibliography:**

1. Godfrey Boyle, *Renewable Energy*, Oxford University Press, USA; 2 edition (May 6, 2004)
2. Richard W. Asplund, *The Clean Tech Revolution: The Next Big Growth and Investment Opportunity*, 2009.
3. Ron Pernick, Clint Wilder, *The Clean Tech Revolution: The Next Big Growth and Investment Opportunity*, HarperBusiness; First Edition edition (June 12, 2007)