

# Environmental Technology Market (ET) Fast Facts

September 2010



The Environmental Technology (ET) market is asking for integrated solutions for complex environmental challenges. The competence level in environmental technology is high in the USA and EU. Also, the environmental image of the USA and EU is excellent. The share of the global market does not reflect the potential. In order to increase competitiveness, US and EU need to combine their expertise and capacity, and improve their innovation capability. There is a need for a new type of networking and clustering in the environmental technology sector at global level in order to exploit the market possibilities. The CEC will focus on technology commercialization projects that will address issues such as commercialization, attracting investment, eco-innovation, new value chains.

In 2004, the global market for ET was growing at about 8% in developed countries. In a survey of industry leaders, China topped the list of countries with the most potential growth which is running over 20% yearly. The China market was estimated at \$13.4 billion in 2008 and will be \$34 billion by 2013 with the largest sectors being products and services for water pollution, air pollution, then municipal solid waste. While there are numerous large Chinese companies that can afford to consider ET applications, most firms are small and cannot afford the new technology. With a population over one billion, eventually regulations will be enforced to recover any lost quality of life for its citizens.

Environmental Technology (ET) encompasses a wide variety of products and services including biotechnology, sanitary engineering, hazardous, industrial and solid waste management, and air/ water pollution control. While the scope is large and hard to define, the initial concern is prioritizing those environmental problems that can be solved by systems in a cost-effective way starting with better organization and measurement using information services and equipment. Ultimately, the environment has benefited from these systematic approaches to defining the situation, as well as advancing technologies which hope to protect or restore nature.

Water and wastewater treatment accounts for about 40% of the total funds spent on ET. While the public sector provision of water, sewage, and refuse are the largest sector for ET products, also included are noise, vibration, vegetation, and pest control. Because of the adoption of new environmental standards and compliance, the global ET market value is high and growing rapidly. Currently, ET revenues are estimated at \$700 billion worldwide and are expected to double by 2020. The U.S. represents the largest producer and consumer market for ET at around 40% of revenues. Nearly 2 million Americans work in 122,000 eco-industries generating over \$280 billion per year. The European Union represents about one-third of the market. Top U.S. export destinations for ET are Canada, Mexico, Germany, China, and Japan. In total, the U.S. exported over \$40.2 billion in ET goods and services in



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2008. While the U.S. is a leading producer of ET, it exports only about 11% of its output, while key competitors (Japan, Germany, and Great Britain) export over 20%.

## APPLICATIONS

- Monitoring and Assessment: Products and services used to establish and monitor the condition of the environment.
- Pollution Prevention: Equipment and processes used to prevent or minimize the generation of pollutants in the air, water, or ground.
- Pollution Control: Products and technologies that render hazardous substances harmless before they enter the environment.
- Remediation and Restoration: Products and services used to render hazardous substances harmless and can burn toxic chemicals from contaminated soil, or turn sludge into safe topsoil.
- Energy: Products and services include solar, wind, and hydroelectric power generation equipment and technologies, electricity conservation technology and machinery.

## HOT ENVIRONMENTAL TECHNOLOGY MARKETS

Target markets by country/region: United States, Western Europe, Eastern Europe, Canada, China, India, Mexico, Central and South America, Middle East, Africa, and Australia.

## SUB-SECTOR SERVICE ACTIVITIES

Growth Prospects Ranked by Favorability

- Energy Efficiency and Renewable Energy
- Strategic Environment Management Carbon Emissions and Climate Change
- Water Purifications and Delivery
- Air Quality Permitting and Compliance
- Natural Resources
- Wastewater Treatment
- Private Remediation and Redevelopment
- Environmental Information Management
- Pollution Prevention Project Management
- Design, Operation, and Maintenance Monitor / Investigate / Assess / Audit Solid Waste Government Remediation and Base Conversion On-going Generation of Hazardous Waste

While energy is the current buzz, air and water pollution are more readily addressed by new and competing ET firms. Furthermore, cross-border issues arise which must be resolved and the expenses shared. Along with infrastructure projects, funding is available from world agencies for countries that cannot afford ET solutions. U.S. firms have the advantage in technology and experience so their role is instrumental.



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## KEY INDUSTRY SECTORS

**Financial Services:** Banks, private equity firms and insurance companies can increase efficiency, reduce risks and use environmental innovations to build new revenue streams.

**Fleet Vehicles:** With new tools and good information, companies can reduce pollution from their car and truck fleets, position themselves as good corporate citizens and cut costs.

**Food and Agriculture:** By sourcing more environmentally friendly meat and seafood, companies can address consumer concerns and invest in the long-term viability of their business.

**Healthcare:** Hospitals and pharmaceutical and medical equipment companies can become more energy efficient and drive improvements in their supply chains to save money and reduce waste.

**Manufacturing:** Efficiency improvements in production and design and proper risk management policies can drive environmental improvement and cost-savings throughout the supply chain.

**Real Estate:** In today's difficult financial environment, building owners and tenants have a prime opportunity to get back to basics, cut costs, and improve the value of their asset.

**Restaurant and Dining:** Dining managers now have an incredible opportunity to improve the environmental footprint of the food they serve and the restaurants they operate.

**Retail and Consumer Goods:** Customers are increasingly rewarding retailers who improve the environmental performance and safety of their products and environmental improvements can reduce costs and waste.

**Telecom and Information Technology:** Leading companies are cutting costs by finding ways to cut electricity use, reduce toxic chemicals and non-recyclable materials and improving reuse and recycling rates.