

Environmental Industries in Korea

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Environmental Industry

- A New Engine for Economic Development
 - the most promising industries in the 21st century along with IT & BT
 - The market for the Environmental Technology(ET) industry
 - Estimated at 11 trillion won in Korea
 - Through 2005, expected to annual growth of 15% domestically

Environmental Industry

■ Environmental Industry in Korea

(Unit: 100 Mill. Won, %)

Area	1995	2005	2015	Ann. Growth Rate	
				'95-'05	'05-'15
Water	28,937(48.9)	82,319(39.5)	84,900(30.0)	11.0	0.3
Air Pollution	10,803(18.2)	34,595(16.6)	42,450(15.0)	12.3	2.1
Waste	17,011(28.7)	50,641(24.3)	56,600(20.0)	11.5	1.1
Soil	2,008(3.4)	15,005(7.2)	31,130(11.0)	22.3	7.6
Service	446(0.8)	25,842(12.4)	67,920(24.0)	50.1	10.1
Total	59,205(100.0)	208,402(100.0)	283,000(100.0)	13.4	3.1

Environmental Industry

- ET Development Strategy
 - The Eco-technopia 21 program
 - Develop environmental technology essential for the growth and competitiveness of the ET industry
 - Build the environmental infrastructure
 - Will invest 5.5 trillion won
 - Enter international environmental market
 - China and Southeast Asia

Environmental Industry

- Strategic Plans for Sustainable Development
 - The Basic Environmental Policy Act
 - The establishment of an integrated long-term policy
 - Green Vision 21
 - Established with forward-looking environmental policy objectives and action plans
 - Annual and mid-term action plans
 - Improve the quality of life by maintaining the balance between development and conservation

Environmental Industry

- Seven Areas by the Korean Government
 - environmental ethics and education
 - sustainable production and consumption patterns
 - sustainable land-use
 - improving basic living conditions
 - developing environmentally friendly technology
 - global environmental health
 - the greening of the government.

Environmental Industry

- (Eco-2 Project); 3 Targets
 - Environmental Industry Expansion
 - Enhancement of Eco-efficiency
 - Integration of Economy and Environment

Environmental Industry

- (Eco-2 Project); Areas
 - Strategic Plan of Environmental Industry
 - Strategic Plan (2001 – 2003)
 - Env. Venture Funds (10 Bill. Won)
 - Core-Environmental Technology Development
 - Plan (by 2002)
 - Regional Env. Technology Development Center (10 ⇒ 18)
 - Oversea Env. Industrial Market Expansion
 - In China: Exhibition Center for Korean Env. Industry & Technology
 - ‘Supporting Group for Env. Industry Export’

Environmental Technology

- Development of Environmental Technology
 - Korean environmental technology lags behind that of advanced nations by roughly 4-5 years
 - short history and lack of fundamental experience and access to basic technologies
 - Transformed from an emphasis on post-treatment processes to a greater emphasis on proactive processes
 - Focus on prevention and elimination of pollution sources
 - expected to move beyond post-treatment of air, water, and waste to pollution prevention

Environmental Technology

- Status of Environmental Technology
 - the level of overall environmental technology remains at 30-60% of that of developed countries
 - The first generation post treatment technologies
 - such as dust collection, advanced waste water treatment, and small-scale incineration
 - in the demonstration stage
 - evaluated to be up to 60-80% of the level of the advanced nations

Environmental Technology

- Status of Environmental Technology
 - Cutting-edge technologies of the future
 - second-generation clean production technology, bioengineering and aerospace technologies,
 - still in their infancy and dependent on imported technology
 - Core post treatment and pollution prevention technologies are especially under-developed

Environmental Technology

- The direction of environmental technology development
 - focused on the development of basic environmental facilities like wastewater treatment
 - lead the industry in coming years for their high added value, vast marketability, and efficiency

Environmental Technology

■ R& D Project

- a three-stage public-private technology development partnership project
 - the development of environmental engineering technologies in air, water quality, waste, clean production, and environmental health in general
 - 325 billion won was invested on 306 research and development tasks, out of which 199 tasks were completed

Environmental Technology

- Next Generation Environmental Technology (Eco-technopia 21 Project)
 - initiated to meet the demands for new environmental technologies
 - some 22 core technologies in four unit projects, including pollution prevention technology, and ecosystem preservation and restoration
 - For 10 years, roughly 100 billion won in annual subsidies will be offered by the government, amounting to 1 trillion won in total support

Environmental Technology

- The Direction of **Eco-technopia 21 Project**
 - to organize a consortium of industry, academia, and research institutes to develop package technology
 - to follow the principle of selection and concentration
 - is to develop technology for pollution prevention and ecosystem restoration, which is unique to the Ministry of Environment
 - technology R&D, commercialization, and international cooperation should all be integrated
 - comprehensive technology development method will be adopted