

Green Industries for Green Growth

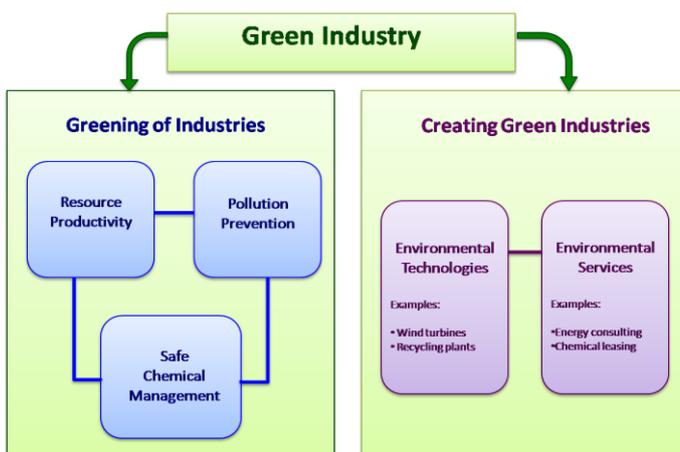
The DCED Green Growth Working Group (GGWG) aims to generate and share knowledge, and raise awareness, on private sector contributions to green growth. This document, developed by the GGWG under the auspices of UNIDO, is part of a series of fact sheets that introduce different green growth approaches and illustrate relevant development agency activities. They also aim to spur further engagement and in-depth discussion on green growth issues and with the GGWG. For further information, visit the GGWG's page on the DCED website at www.Enterprise-Development.org/page/ggwg, or contact the DCED at aarons@Enterprise-Development.org.

The Challenge

The challenges are to *decouple growth and revenues from excessive and increasing resource use and pollution, to have closed resource cycles and to have minimized waste in every form, as well as to utilize renewable resources as input materials and energy.*

The Response

Green Industry is a two-pronged strategy aiming at:



1. Greening existing industries:

ensuring that all industries, regardless of sector, size or location, continuously reduce the environmental impacts of their processes and products, through using resources more efficiently, phasing out toxic substances, substituting fossil fuels with renewable energy sources, enhancing corporate responsibility and reducing risks to the environment, climate and people.

2. Creating green industries that provide all type of environmental goods and services, contributing to reducing negative environmental impacts or addressing the consequences of various forms of pollution.

The Results

A Green Industry strategy aims at mainstreaming environmental and social considerations into the operations of enterprises. This can be realized by demonstrating how using resources more efficiently can lead to cost reductions and thereby enhance their competitiveness. Furthermore, it enables industries, especially in developing and transition countries, to actively participate in developing solutions needed for a Green Economy. Green Industry approaches ensure a sustainable upgrading of industry and increase in productive capacity without corresponding increases in resource use and pollution. Industries that are resource-efficient and clean contribute to internalizing externalities through taking extended responsibility for the consequences of their operations and taking measures to mitigate these impacts. Furthermore, this stimulates technological innovation, boosts employment, opens up new markets and provides benefits to consumers through more sustainable products.

The Examples

Promoting Green Industry through establishing National Capacity: A central instrument for Green Industry is the global network of National Cleaner Production Centres established by UNIDO and UNEP¹. These centres, which are part of a global network spanning over almost 50 developing and transition countries, have assisted thousands of companies to implement sustainable production while saving costs and increasing revenues:

- With support from the centre in Kenya, a manufacturer of edible oils and soaps was able to expand its production capacity and improve production efficiency through more resource-efficient and cleaner production. Annual benefits include more than USD 623,000 in savings, which have fuelled company expansion, including the creation of new jobs and new business ventures.
- The centre in Sri Lanka has helped a coconut mill to save over USD 200,000 per year for an investment of less than USD 5,000. Options identified by the centre enabled the company to simultaneously decrease waste quantities and reduce the amount of greenhouse gas emissions to nearly zero through the utilization of waste as energy. The coconut mill has taken a leading role in greening the sector by helping other coconut mills to optimize processes and decrease waste.

Advisory Services in Environmental Management for Indian SMEs: The Indo-German Environment Partnership, jointly implemented by GIZ, on behalf of BMZ, and the Indian Ministry of Environment and Forests, has extensive experience in supporting Indian SMEs to increase their resource efficiency and improve environmental performance, thus enabling them to comply with environmental regulation and, simultaneously, gain competitiveness. Since 2003 more than 120 SMEs, mostly located in clusters or industrial parks, have participated in training and consultancy activities, resulting in improved performances related to the use of energy, water, auxiliary materials and other material input, and production of waste. On average, four times the investment cost has been returned and 90% of these investments paid back in less than one year. For example, a tyre manufacturer saved around 12,000 kilolitres of water and decreased 1785 tons of coal usage due to a

¹ UNIDO - UNEP (2010). Taking Stock and Moving Forward - The UNIDO - UNEP National Cleaner Production Centres. Further case studies: <http://www.unido.org/index.php?id=o4545000>

reduction in steam leakage. The enterprise also reduced compressed air losses by 26% and shrunk energy needs by 329,400 KWh/year.

According to the OECD-ILO 2011 publication 'Job-rich growth in Asia', **governments of China, India, Korea, Malaysia and Singapore are undertaking a series of green initiatives and have made a low-carbon economy one of their strategic priorities and plans**, as they provide fresh business and investments opportunities, especially in low-carbon technologies. For example, in Singapore, a number of firms now see the proposed Energy Conservation Act – to take effect in 2013 - as the key impetus towards increased carbon management. The proposed act contains similar proposals to those tabled by a number of European nations. When it comes into force, the act will require companies to submit energy improvement plans, introduce labeling of energy consumption and standards on energy use, and appoint a trained professional in high-energy consumption companies (Luan, 2010).

Lessons Learned

While numerous enterprise level achievements have been made, and technologies and approaches to improve resource efficiency have been developed, the progress made is in no way sufficient. Wide-scale replication and up-scaling is still to be achieved. This requires addressing gaps and barriers, creating enabling framework conditions through regulatory frameworks, providing access to finance (through loans, grants, seed funds, etc.), removal of harmful subsidies, demand policies (e.g. public procurement), environmental indicators to support monitoring and enforcement regimes, intensifying technology transfer, enhancing South-South cooperation, strengthening innovation systems, and building national capacity.

Intensified national and international commitment and effort are needed to effectively respond to the scale and scope of interrelated and increasingly urgent global industrial challenges. There is a need to move beyond win-win rhetoric and take action. Green Industry plays a key role in the progress towards a Green Economy in which industries are not only part of the solution to the global economic, environmental and social challenges, but a driving force.