



Green Industry

Water Management Unit



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Green Industry

Trade Capacity Building
Poverty Reduction through Productive Activities
Energy and Environment



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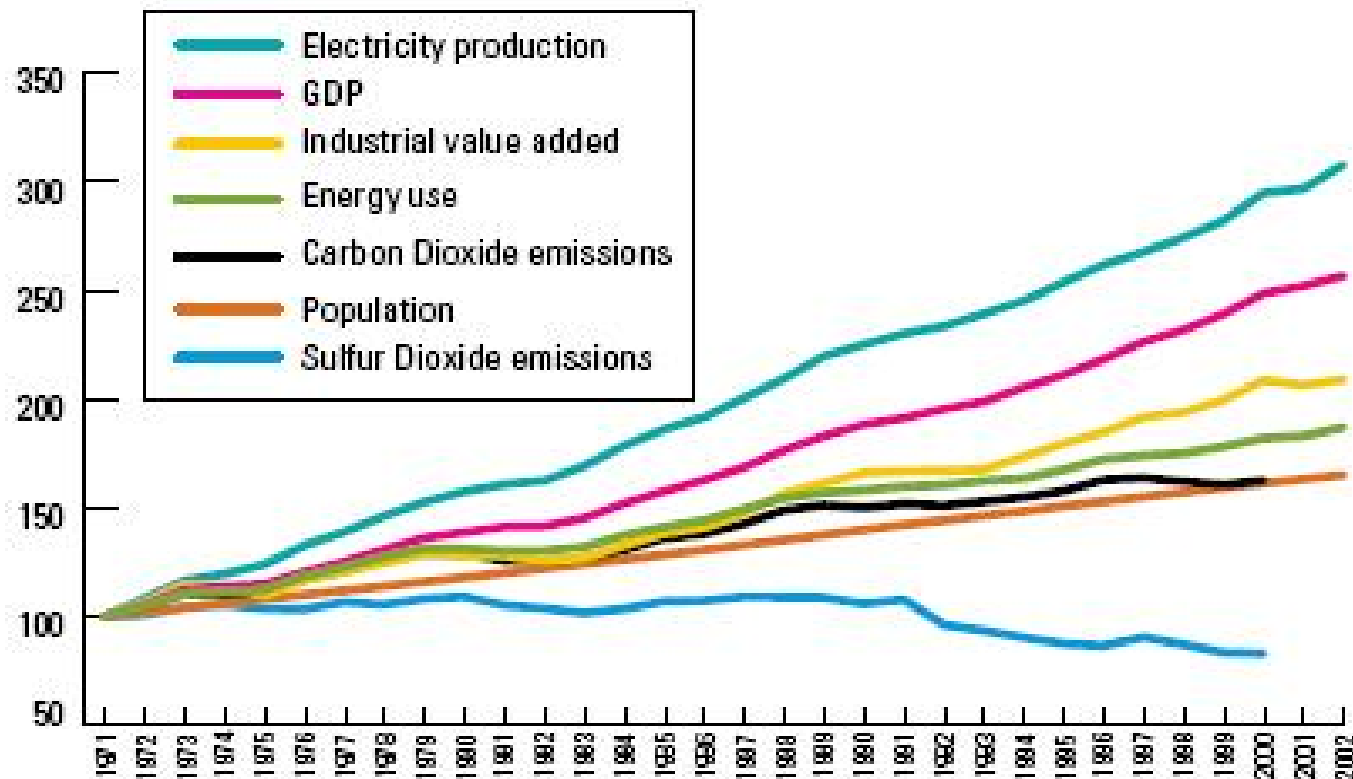


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Global Trends: Growth in economy, energy and emissions



Note: Index: 1971=100

Source: UNDESA-DSD, based on data from World Bank, World Development Indicators 2005, and Stern, D., 2005.



Something to think about....

Figure 4.2 Labour productivity, material productivity, and energy productivity, EU-15, 1960–2002



Note: Labour productivity: GDP per annual working hours (1999 USD (converted at EKS PPPs) per hour); material productivity: GDP per domestic material consumption (DMC) (EUR per kg); energy productivity: GDP per total primary energy supply (TPES) (thousand 1995 USD per toe).

- Labour productivity is already high, having increased by more than 270 % over the past four decades
- In the same period, the productivity of raw materials and energy increased by much less, 100 % and 20 % respectively



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Green Industries

- **Greening Industries** = any industry that has **committed to reducing** the various **environmental impacts** of its processes and products, and is actually doing so on a continuous basis (by this definition, all types of industries can be green)
- **Green Industries** = industries in the **environmental services sector**, i.e. recycling companies, waste treaters (e.g., incineration companies), waste disposers (e.g., landfill companies), waste transporters, environmental consultants, engineering companies specializing in wastewater treatment, air pollution control, waste treatment equipment, companies manufacturing and installing renewable energy equipment, energy consultants, ENSCOs, labs specializing in environmental measurement and analysis, maybe even companies which specialize in manufacturing clean or cleaner technologies, ..



Challenge of the international context

**Sustainable
Industrial
Development**

should:

increase
health, income,
quality of life

decrease
resource use, pollution,
waste, impact on nature, ...



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The challenge

- To provide more **value** with less environmental **impact**
- To **de-link** growth of welfare from the use of nature
- To improve both **economic** and **ecological efficiency**

= ECO-EFFICIENCY

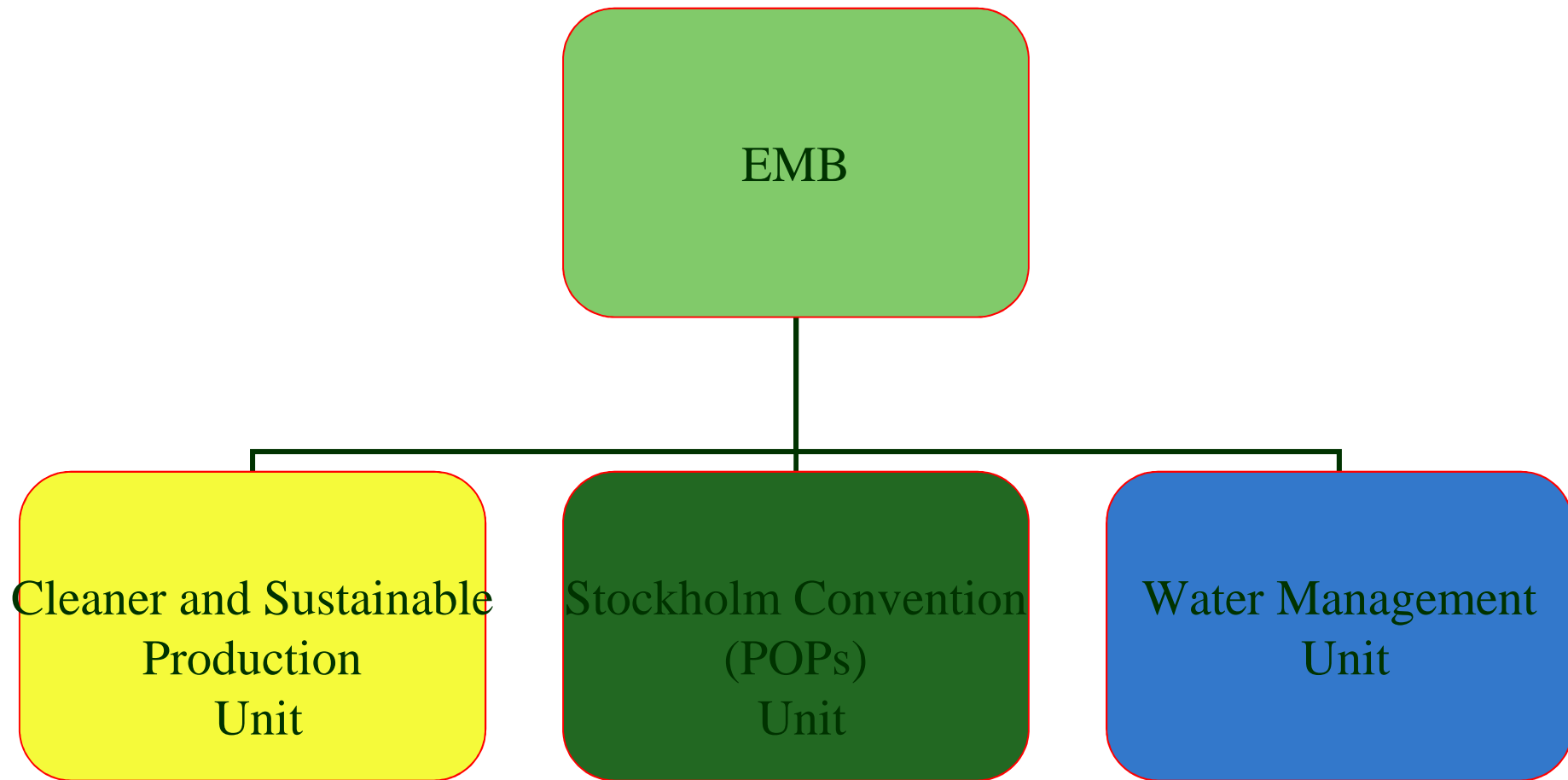


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Environmental Management Branch





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Increase Water Productivity

Reducing Effluents => Zero Discharge



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UNIDO Water Projects **components**

- **Transfer of best available environmentally sound technologies** and environmental practices to improve water productivity in industry and prevent discharge of industrial effluents into international waters (rivers, lakes, wetlands and coastal areas) thereby protecting water resources for future generations
- **Protection** of environment and human health **from toxic pollutants and substances**
- **Sustainable management** of ecosystem resources



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protection of environment and human health from toxic wastes

Impacts to date:

10 Mining Communities and hundreds of miners and their families in
8 countries are now producing MORE gold,
with LESS mercury, and BETTER health
(funding sources: France, Japan and GEF)

Global Mercury Project



The Facts:

- ASGM involves over 100 million people worldwide
- more than 1,000 t of mercury released annually (1/3 of anthropogenic emissions)
- poverty driven activity, mostly informal activity
- Mercury pollution entering the global food chain through
 - methyl-mercury fish contamination

UNIDO Solutions:

- formalization of the sector
- introduction of close-circuit mercury system and transfer of mercury-free & locally built extraction techniques
- extensive training and awareness raising campaigns





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protection of human health from toxic wastes and substances

Impacts to date (Bangladesh):

20 community based and 1,500 household based ARUs now in operation, 60,000 villagers sensitized, 12,000 patients received treatment (*funding sources: UN Trust Fund for Human Security*)



The Facts:

- Arsenic intoxication causes skin lesions and contributes to the development of lung, bladder, liver & skin cancer
- Arsenic contamination of groundwater is often of natural origin or freed by human activity (mining)
- millions of people exposed worldwide. In Bangladesh arsenic concentration is higher than WHO limit in 30% of tubewells



UNIDO Solutions:

- awareness raising & promotion of health camps (WHO)
- technology transfer & capacity building
- provision of community and household ARUs
- provision of testing laboratory and recycling units



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sustainable management of ecosystem resources

main objective

- enhance sustainable management of Ecosystem resources

main activities

- Integrated Coastal Area Management (ICAM) and land degradation
- industrial fisheries management and restoration of depleted stocks
- restoration of degraded habitats
- managements of contaminants from industrial activities
- ecosystem wide assessment and management framework for sustainable use of living and non living resources



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sustainable management of ecosystem resources

1. combating living resources depletion and coastal areas degradation in the Guinea Current Large Marine Ecosystem through ecosystem based regional actions

participating countries: Angola, Benin, Cameroon, Congo, DRC, Côte d'Ivoire, Gabon, Ghana, aquatorial Guinea, Guinea, Guinea-Bissau, Liberia, Nigeria, Sao Tome and Principe, Sierra Leone, Togo

funding: GEF: US\$ 21 mio, National Governments: US\$ 44 mio

2. integrated assessment and management of the Gulf of Mexico LME

participating countries: Mexico, United States of America

funding: GEF: US\$ 4.5 mio, Mexico: US\$ 15.6 mio, USA: US\$ 80 mio

3. demonstrating and capturing best practice and technologies for reduction of land-sourced impacts resulting from coastal tourism

participating countries: Cameroon, Gambia, Ghana, Senegal, Seychelles, Kenya, Mozambique, Tanzania

funding: GEF: US\$ 6 mio, National Governments: US\$ 14.5 mio, others: US\$ 2.6 mio

Impacts to date:

GCLME: TDA, SAP concluded, Interim Guinea Current Commission established

Gulf of Mexico: project management structure established

Coastal Tourism: tourism stakeholders mobilized (9 countries)



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