



National Cleaner Production Centre Programme

UNIDO

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UN & Cleaner Production

- **With the convening of UNCED in 1992, and the adoption of Agenda 21** and related Conventions, the world community adopted a comprehensive international policy statement on the need to attain sustainable patterns of development.
- The same focus was given to the 10-years framework programme of **the Plan of Implementation (POI)** of the World Summit on Sustainable Development in Johannesburg (2002).
- The POI states in its Chapter 16, that one of the expected initiatives is to: “Establish and support cleaner production programmes and centres and more efficient production methods by providing, inter alia, incentives and capacity-building to assist enterprises, especially SMEs.”





Why UNIDO's Assistance is sought?

- **To enhance the competitiveness of industries** in developing countries through the application of cleaner production, UNIDO decided to set up the National Cleaner Production Centres Programme.
- During the first phase, which started in 1994, the programme set up **10 NCPCs in Brazil, China, India, the Czech Republic, Hungary, Mexico, Slovakia, Tanzania, Tunisia, and Zimbabwe.**
- Based on the progress of the programme during this first phase, UNIDO has included additional **33 NCPCs in Costa Rica, Croatia, El Salvador, Ethiopia, Guatemala, Kenya, Korea, Mozambique, Morocco, Nicaragua, Sri Lanka, Vietnam, Lao PDR, Cambodia, Serbia, Montenegro, Uganda etc.**





Resourcing

- NCPCs are supported on country by country basis for three to eight years
- Contributions from host institutions, national government and some service income
- NCPCs participate in global network and contribute to multi-country projects, e.g. on energy efficiency, chemical leasing
- Range of donors, *including* Switzerland, Austria, Japan, Norway, Italy, Netherlands, Denmark, Sweden, Germany, EC, etc.





Objectives

- Increase efficiency in the production process
- Increase competitiveness
- Open access to new markets
- Stimulate public-private partnerships
- Promote CP investments and CP technology development & transfer





Core Services

- Technical Assistance and In-plant Assessments
- Training and Capacity building
- CP Technology and Investment Promotion
- Information Dissemination
- CP Policy Advice



Case study in INDIA

The Situation Before:

- The ceramic clusters in India have been facing stiff competition on both quality and price.
- The main barriers facing the ceramic industry in India are :
 - Lack of R&D efforts to economize on energy costs
 - Lack of exposure to global scientific methods
 - Investment constraints for advanced technology.
 - Lack of testing facilities/quality control.
 - Lack of basic infrastructure such as electricity and roads.

The Situation After:

- Created awareness among entrepreneurs, managers and others about the efficacy of even routine energy efficiency measures.
- Achieved 15 to 20 % savings in energy costs of the participating units through the demonstration of new and energy - efficient technologies.
- Providing exposure to international competitors and new markets.





Case study in SRI LANKA

- The company had wastewater treatment and disposal problems. The company also wanted to reduce production costs by reducing wastage of energy, water and other resources.
- A cleaner production assessment was carried out and as a result, by stopping the leakage of chemicals, the company saved Rs. 360,000/= (US\$ 3750) per annum.
- Recovery of sugar syrup saved the company Rs. 180,000/= (US\$ 1875) per annum. Shutting down the boiler saved the company over Rs. 300,000/= (US\$ 3125) per annum. The action of recovering ice cream mix saved the company Rs. 3 million (US\$ 31,250) per annum..





Case study in VIETNAM

- An audit was carried out using the CP Energy Efficiency methodology with a focus on energy and resource conservation and also to estimate the potential for reducing Green House Gas (GHG) emission. The waste areas identified include raw materials, energy and product.
- 7 opportunities for energy savings were identified, 6 of which outlined below were implemented.
- Annual savings of US\$ 341,764 were realized from a total investment of US\$ 335,192, which is an average payback period of 12 months.





Lessons Learned

- Increasing the sectoral coverage
- Stimulating Public-Private partnerships
- Integrating Environmental Management System (EMS) within Cleaner Production programme
- Promoting investment in CP technologies and fostering CP technology development and transfer
- Increasing interaction between actors in Cleaner Production





Future Prospects

- The Joint UNIDO-UNEP Programme on **Resource Efficiency and Cleaner Production (RECP)** building upon the lessons and experiences from the NCPC programme is being explored.
- It specifically works to advance:
 - *Production efficiency* through improved productive use of natural resources by enterprises
 - *Environmental conservation* through minimization of the impact on nature by enterprises
 - *Human development* through reduction of risks to people and communities from enterprises and supporting their development





Thank You for your attention



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