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Internationale Weiterbildung  
und Entwicklung gGmbH Capacity Building  
International, Germany

# ENERGIZING CLEANER PRODUCTION

*A Guide for Trainers*

UNITED NATIONS ENVIRONMENT PROGRAMME



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ISBN: 978-92-807-2797-5

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**A Guide for Trainers**

**United Nations Environment Programme  
Division of Technology, Industry and Economics**

**2007**



# Foreword

Industrial production is at the heart of a growing US\$ 60 trillion global economy, and industrial development is a key element to reducing poverty. The increasing demand for the energy to power industry, however, is also producing unwanted effects, including higher energy prices, increased air pollution and higher emissions of greenhouse gases linked to climate change.

To protect both economic growth and environmental values, we need to rapidly increase energy efficiency and deploy less carbon-intensive energy sources. Due to its size and importance, the industrial sector is a key player to achieving these goals.

But this change is often not easy, and can follow a steep learning curve. Cleaner Production Centres and research/academic institutes can help, as can industry associations and consultancies, but many of these organizations lack the resources to develop comprehensive training regimes and materials.

UNEP programmes are designed to fill such gaps. This guide *Energizing Cleaner Production – a Guide for Trainers*, includes a Management Course for company managers, which outlines an approach to improve energy efficiency, more effective national policies, mechanisms to finance projects, and the Clean Development Mechanism of the Kyoto Protocol. The Guide also includes a Technical Course providing company staff with more detailed knowledge about energy equipment, such as boilers and electric motors, and training to assess performance and identify cost-effective energy efficiency opportunities.

*Energizing Cleaner Production – a Guide for Trainers* was developed with support from InWent - Capacity Building International, Germany, and is based on materials from previous UNEP projects that apply the cleaner production approach to improve energy efficiency. Our experience from that work is that opportunities abound, and we encourage you to use and profit from this guide. UNEP and InWent also invite your feedback and comments, which can be sent to the organization addresses provided.

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# Acknowledgements

This guide was prepared with support from InWEnt - Internationale Weiterbildung and Entwicklung gGmbH, or, in English, InWEnt - Capacity Building International, Germany.

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Many of the training sessions were based on materials from the “Energy Efficiency Guide for Industry in Asia” ([www.energyefficiencyasia.org](http://www.energyefficiencyasia.org)) that was developed by UNEP as part of the Greenhouse Gas Emission Reduction from Industry in Asia and the Pacific project and funded by the Swedish International Development Cooperation Agency (Sida).

UNEP, therefore, wants to thank InWEnt and Sida for their support to the training guide and course materials.

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