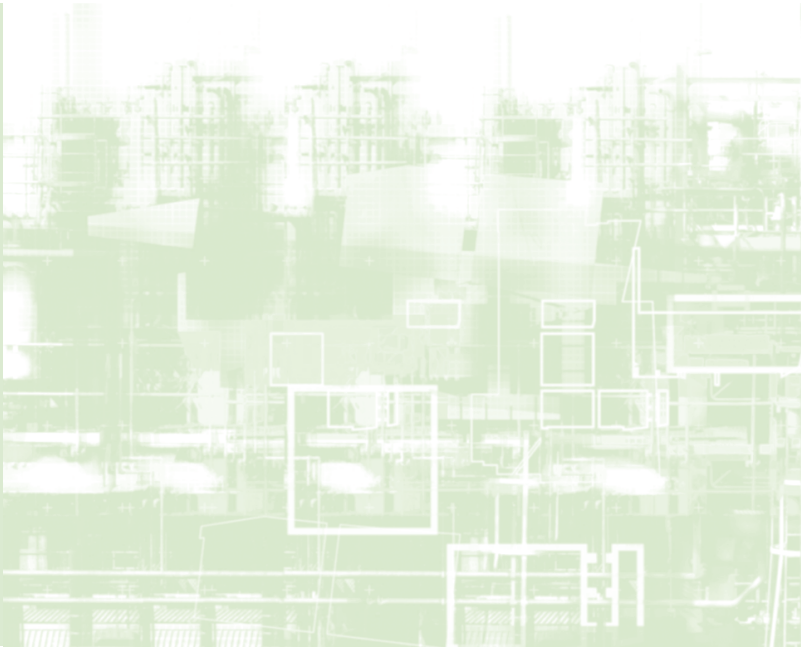


INTRODUCTION



UNIDO TEST PROGRAMME IN CENTRAL AND EASTERN EUROPEAN (CEE) COUNTRIES AND THE TEST APPROACH

The United Nations Industrial Development Organization (UNIDO) has developed a programme designed to promote competitiveness and effective environmental performance in the industrial sector by supporting the adoption and Transfer of Environmentally Sound Technology (TEST) and incorporation of Environmental Management Accounting (EMA) in an enterprise's decision-making process. With these programmes companies will finally be able to review all the factors affecting competitiveness, including the effect of environmental choices, and make better-informed business decisions based on more accurate data. This new initiative, funded by the Global Environmental Facility (GEF) and developed within the framework of the Danube River Basin Commission (ICPDR),² was launched in April 2001 in five Danubian countries (Bulgaria, Croatia, Hungary, Romania and Slovakia).

Seventeen industrial hot spots of the Danube river basin, representing five different industrial sectors (chemical, food, machinery, textile, pulp and paper), were selected and pilot projects were set-up to implement the new integrated TEST approach to industrial environmental management.

As a result of the TEST project's success, their national counterparts have implemented the TEST approach and programme³ so that they can, in turn, pass on the acquired expertise to other enterprises and institutions in their own countries and throughout the Danube River Basin. These national counterparts include the UNIDO-UNEP Cleaner Production Centres in Hungary, Slovakia and Croatia, the Institute for Industrial Ecology (ECOIND) in Romania and the Technical University of Sofia in Bulgaria.

² www.icpdr.org.

³ R. De Palma and V. Dobes, *Increasing Productivity and Environmental Performance: An Integrated Approach—Know-How and Experience from the UNIDO TEST project in the Danube River Basin*, UNIDO.

The TEST approach starts with a preventative philosophy of cleaner production, (preventative actions based on pollution prevention techniques within the production process) and moves into the transfer of additional technologies for pollution control (end-of-pipe) only after other win-win solutions have been exhausted. This leads to environmental and economic optimisation of the transferred technologies.

TEST builds on company strategies of corporate sustainability. The implementation of these strategies is based on the introduction of different tools, each of which will increase the enterprise's competitiveness. With better management of existing processes and the integration of environmental considerations into new investment decision-making, enterprises will become more competitive. One of the core tools introduced within the TEST approach is Environmental Management Accounting (EMA). EMA will bring competitive advantages to the company in terms of better understanding and control of production costs, particularly environmental costs.

The TEST approach is a methodology designed to simultaneously combine the introduction of management tools like EMA, Clean Production Assessment (CPA) and EMS under one programme. The method demonstrates how combining these tools within an integrated framework will result in reaching positive synergies and better results.

The aim of this publication is to present the experience that was gained during the implementation of the EMA tool at selected enterprises within the framework of the UNIDO-TEST project in the Danube River Basin. It is meant to assist the corporate and organizational managers, accountants and engineers of the developing and transitional countries, in understanding how environmental issues influence accounting business practices.

The publication is organized into three parts. In the first, it clearly and concisely describes the principals behind EMA and the linkages between business management and other environmental management tools. The second part outlines the methodology used during the practical implementation of EMA systems at the companies participating in the project. The third and last part presents a detailed description of four case studies, which provide practical advice on how to successfully integrate EMA systems into business operations. The case studies are presented in this publication in chronological order of completion within the framework of the TEST project.