Environmentally sound and climate-friendly city

Theme / Approach

Creating a liveable urban environment in a resource-saving, energy efficient and ecologically sustainable way.

1. The challenge

In view of the high concentration of production and intensive use of resources by industry, transport and private households, cities are generally centres of atmospheric, water and soil pollution. The high demand for land, over-use of resources, and untreated solid wastes and waste water aggravate the problem. Cities are the prime causers of climate change. However, they are thus also the principal actors for implementing preventive measures to mitigate climate change consequences.

2. Our approach

We promote integrated environmental management enabling the cities to plan their development on an environmentally sound basis and to implement suitable measures that contribute to maintaining an intact environment and climate for all inhabitants. We support the cities in creating the necessary legal frameworks and enabling them to develop solutions for key ecological problems. The task of an integrated urban environmental management is to prevent negative impacts and mitigate harm that has already occurred.

3. Service packages

We advise municipal administrations and associations, technical authorities and business enterprises on sectoral and organisational aspects of environmental management. Our work focuses on

- Urban planning (resource-saving, ecological and climate-oriented land use and infrastructure planning);
- Support in measures to prevent and cater for the consequences of climate change;
- Infrastructure management as well as organisation of environmentally relevant processes (including supplies of energy and water, waste water and solid waste disposal, air cleaning, transport, energy-saving construction measures, municipal factory inspectorates);
- Embodying environment-oriented principles and instruments in municipal policy and developing and implementing regulations measures (e.g. including environmentally relevant aspects in urban development and sector planning, inter-authority cooperation, regional coordination; introduction of fiscal instruments; monitoring and surveillance);
- Integrated municipal environmental administration (e.g. environmental information systems, environmental monitoring, eco-budgeting);
- Energy-efficient and resource-saving building and housing, including construction materials and engineering, supply systems and user behaviour;
- Enhancing the attractiveness of public transport.

We advise businesses on

- Implementing innovative techniques and processes of environmental management, for example by drawing up branch concepts, “Profitable Environmental Management (PRUMA®)“ or implementing Cleaner Production Audits;

- Structuring and managing industrial areas, including utility systems and logistics (under the aspects of resource efficiency and emission reduction; cleaner production methods, accident management etc.);
- Reducing energy consumption (energy saving in building or mobility systems, user behaviour);
- Reducing light industry and transport emissions, monitoring air quality;
- Reducing water pollution, reducing waste generation, regulated solid waste disposal;
- Developing overall transport concepts to reduce negative transport pollution.

4. Benefits

The module promotes environmentally sound orientation of urban development and helps to minimise nuisance for the population, surrounding rural areas and future generations. Businesses, citizens and the administration all equally ensure that local potentials and resources are used in a socially, economically and ecologically balanced fashion. The conservation of natural resources in a balanced development process and improvement of the urban environment enhances the quality of life for people, in particular for the urban poor and slum dwellers.

5. An example from practice

Environmentally sound and sustainable urban development in China (PN 2000.2253.3)

China's Eco-City programme offers a concept for balanced steering of headlong progress in the urbanisation process. The programme comprises ecological, social and economic aspects and supplies innovative solutions for specific challenges such as improving environmental quality and enhancing living conditions for urban inhabitants. Old city centres are preserved in order to protect and maintain social structures and cultural traditions. The programme supports long-term sustainability by introducing integrated learning systems and improving consultation between the key sectors.

The Chinese cities of Yangzhou and Changzhou are affected by the negative effects on the environment of the high-speed advance in urbanisation. Both cities are currently endeavouring to become model cities for sustainable urban development in line with the Eco-City concept of the Chinese environmental authority SEPA.

One of the results achieved so far is that the Eco-City master plan for Yangzhou was approved in August 2003 by SEPA as the first of its kind. The municipal master plan for Changzhou was presented to the urban environmental protection office for approval. Since being approved, the total area of public green facilities in Yangzhou has increased by 26% and that in Changzhou by 52 %.

In Yangzhou the originally planned demolition of old inner city quarters to build a new through-road was stopped. Instead, a high-ranking steering group was set up to promote "careful" urban renewal. A co-financing agreement with the Cities Alliance gives the Eco-City programme the opportunity of promoting the entire historic centre of Yangzhou through a comprehensive development strategy. In October 2006 UN Habitat awarded the "Scroll of Honour Award" to the city for its efforts.

In addition, specifically for this module:

- Proven expertise in environmental management and both sector-specific and cross-sectoral solution approaches that have been successfully tried and tested in practice. Many reference projects.
- Thematic leadership in the area of modern environmental technologies, renewable energies, eco-efficiency in business.