

Topic III. Sustainable Production and Resource Efficiency

Presentation

Title of abstract: Complex Diagnosis of Potential for Sustainable Consumption and Production (SCP) Innovations in Enterprises

Authors: Vladimír Dobes¹, Klara Najmanová²

Affiliations and Addresses:

¹SCP expert

ENVIROS s.r.o.

Na Rovnosti 1, 130 00 Praha 3, Czech Republic

Tel.: +420

Fax: +420

E-Mail: vladimir.dobes@iiee.lu.se

²Director of the Czech National Cleaner Production Center hosted by

CENIA, Czech Environmental Information Agency

Litevská 8, 110 05 Praha 10, Czech Republic

Tel.: +420 267 225 279

Fax: +420 271 742 306

E-Mail: klara.najmanova@cenia.cz

Short abstract: This paper presents experience from two projects called Partnership for Sustainable Consumption and Production (SCP) implemented in the Czech Republic by ENVIROS s.r.o. and CENIA. Core of this presentation is a new methodology focusing on an integrated assessment for SCP innovations and opportunities in industrial sites, municipalities and also service providers. Projects applied innovative methodology which puts emphasis on voluntary instruments such as Cleaner Production Assessment, Ecolabelling, Environmental Management Systems, Life Cycle Management, Social Responsibility, Eco-design, Monitoring and Targeting, Green Purchasing, Environmental Management Accounting, etc. The methodology reposes upon a procedure when all levels of an enterprise's management pyramid are throughout assessed in a systematic way for SCP opportunities for improvements which would enhance enterprise's value. The methodology is implemented at four basic levels: products, processes, systems and stakeholders, proposing

the most effective SCP innovations and projects for the given company to be implemented. The main benefit of this new methodology is the holistic approach. The new integrated diagnosis enables to find the most significant problems and subsequently appropriate solutions. There will be presented experience from implementation of this methodology in 20 companies in the Czech Republic.

Keywords: Sustainable Consumption and Production, innovation, assessment, voluntary instrument,

Long abstract: Enterprises are very often approached by specialists with offers to implement particular instruments such as Environmental Management System, Cleaner Production, Eco-design, Corporate Social Responsibility etc. This approach is sometimes missing a broader context and does not correspond with companies' actual needs and potential for improvements. The objective of the projects was to introduce more sustainable patterns in companies including resource efficiency. To accomplish this objective, both projects included educational and promotion activities and a new methodology was developed. Main goal of the new methodology was to provide useful and holistic information for enterprises what kind of potential and in which area there is to be improved by means on voluntary instruments. The methodology is implemented at all company's levels: products, processes, systems, strategies, aims and stakeholders, proposing the most effective SCP innovations and projects for the given company to be implemented (See Figure 1.).

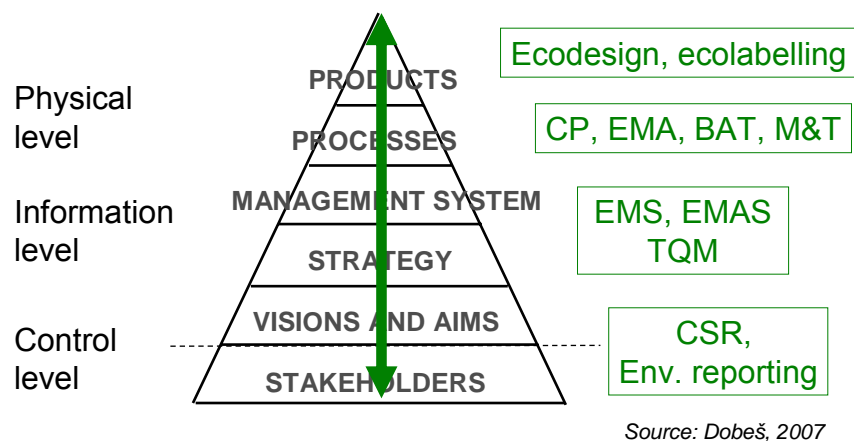


Figure 1. Assessment procedure throughout the company's management pyramid

Complex diagnosis consists of two phases. First one is Screening (step No. 0) and second one is Initial Assessment (step No. 1-6):

- 0) Screening
- 1) Determination of areas for improvements

- 2) Instrument selection
- 3) Instrument analysis
- 4) Project proposal
- 5) Project evaluation
- 6) Identification of funding options

Screening is regarded to estimate company's potential for SCP innovations. If the estimated potential is significant, the initial assessment follows in above mentioned steps. In order to determinate of areas for improvements a detail analysis of the company is undertaken. Analysis covers stakeholders, energy and material flows, life cycle assessment. According to the results areas for improvement are identified. Our methodology helps to distinguish the most important areas among others. When areas for improvements are found, suitable instruments are allocated. Subsequently, the USV team evaluates the allocated instruments, how suitable it is and what are the potential savings. At last project proposals are submitted containing project evaluation with estimated savings and benefits in economical, environmental and social areas. The USV team can also propose funding options for specific projects even including Energy Performance Contracting scheme.

In our two projects we applied the new methodology of initial assessment in 20 companies representing manufacturing concerns, municipalities, high-tech companies, medical care and educational institutions and public administration bodies. Almost in all cases significant potential for SCP innovations was found and subsequently project proposals were submitted to companies' representatives. Feasibility of innovation and increasing of business (organization) value were mainly proved in the fields of material and energy flows, pollution reduction and social responsibility.

References:

DOBES V., VAVRINEK J. 2007. Project Partnership for Sustainable Consumption and Production and Methodology of Initial Assessment for SCP Innovations, (Projekt Partnerství pro udržitelnou spotřebu a výrobu a metodika vstupního hodnocení možností inovací USV v podnicích). In: Technical paper *Environmentální aspekty podnikání*, CEMC, 2007/1, pp. 23-26. ISSN 1211-8052.