

An organization which has effectively integrated an ISO 14001 Environmental Management System with its other business management systems is well on its way towards managing its processes with a view towards compliance, consistency and continuous improvement, and can accrue the accompanying benefits.

## PRINCIPLES OF ECONOMIC EVALUATION OF ENVIRONMENTAL BENEFITS

*Inessa Mishenina,  
Sumy State University, Ukraine*

A taxonomy of environmental goods can be derived from three criteria: the opportunity cost of their consumption; property rights of the producer; property rights of the consumer.

Usually the goods are codified in a certain way depending whether these respective attributes are present: private goods, non-congestion goods; Open access, or commons; semi-public goods; pure public goods.

The failure of the market to supply public goods has led to environmental regulation, public supply of these goods, taxes on pollutants, and subsidies for the provision of public goods. Where the benefits of public goods are difficult to quantify, and in a framework of budgetary constraints for specific environmental programs (with cost minimization as a priority and where financial compensation has to be paid for rights foregone), then a cost approach to assessing priorities for environmental improvements is often appealing to regulators.

We start with the *effect on production approach*. Environmental regulation may influence the profitability of producers by constraining the production process, and hence either increasing their production costs or reducing their outputs. Where such regulation has an effect on the price and supply of goods it also impinges on the welfare of consumers. If this is the case then the impact of an environmental regulation can be measured by the value of the change in output it causes: this is known as the effect on production (EOP) approach. This approach can estimate the magnitude of both negative and positive impacts, e.g. the impact on fisheries of water pollution (negative), water quality improvement (positive), or the creation of a new reservoir (which might be positive or negative).

Also the following approaches have been considered: *the opportunity cost (OC) approach, the human capital (HC) approach, the dose-response (DR) techniques, the replacement cost, preventative, mitigatory expenditure and averting behavior approaches*.

Mitigatory and preventative expenditure create implicit prices for environmental amenities and biodiversity. People also undertake averting action to improve their environmental quality. People may purchase bottled water to avoid drinking from public water supplies or install water filtration systems in their homes. Similarly,

people may spend more time indoors to avoid exposure to air pollution, and install air purifiers in their homes to improve air quality. These purchases are effectively substitute goods for a cleaner environment. People may also install double glazing to reduce road traffic noise in their homes. However, this does not prevent road traffic noise from invading their gardens and backyards; thus preventative and mitigatory expenditure, in this instance, is a minimum estimate of the utility lost due to this type of noise. In extreme cases people may move to another residential location to avoid an environmental externality. However, if the general environment is improved by some policy initiative, the individual will spend less on these substitute goods. Thus changes in expenditures on substitute goods is a measure of people's values for environmental improvements.

## **INNOVATIVE COMPONENT OF THE UKRAINIAN ECONOMY ON IT'S WAY TO THE INFORMATION SOCIETY**

*Elena Mitsura,  
Sumy State University, Ukraine*

The age in which we are living is characterized by a high speed of innovation in the development of information and communication technologies and by the consequent changes in organizational aspects of the social and economic systems. The ongoing transformations seem deep, multiplex and pervasive, crossing the boundaries of the countries, regions, institutions, social groups and classes, involving and affecting the lives of people of whatever status, ages and conditions.

One of the effects of the spread of the new technologies is an increase in communication all around the world, making the different national economies – more often than before – in direct competitiveness. This phenomenon – usually referred as globalization – is bringing about a different convenience in the innovation division in the world. In the most developed countries the old form of industrialism based on manufactures has rapidly contracted under the pressure of the increased competition from the emerging countries in the East and South of the world. This process is provoking deep transformation in the innovation market, with the decrease of traditional products and an increase of new products in their form and content. The more developed economies abandon the manufacturing industrialism and transit to a new form of it based on knowledge. Knowledge reduces the requirements for rude materials, labor, time, space, capital and other resources. Knowledge becomes the indispensable tool, the main resource of the modern economy, the value of which continuously increases.

If one may say so, “cognitive revolution” is taking place: it completely changes economy, whether national economy or the world economy. The economy of the Third Wave is made revolutionary by the following fact: while land, labour, rude