

INTERNATIONAL ASPECT FOR ECOLOGICAL SAFETY OF INNOVATIVE TECHNOLOGIES USE

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For all types of safety ecological-economics aspect is the most actual today. A number of problems also need to be solved within separately taken state or region, but generally ecological safety of inhabitants of the Earth can be ensured only by efforts of all human beings. This requires a common understanding of the problems of the planet ecological crisis and coordinated actions of all countries and peoples.

The technological aspect should consider the principles of international cooperation in the field of environmental protection which are formulated in the UN Declaration of the Stockholm Conference on environment problems in 1972:

1. States are free to use their own resources, in accordance with their national policies in dealing with environmental problems. However, they have a responsibility to ensure that their activities do not cause damage to the environment of other States or of areas beyond the limits of the national territory.

2. Natural resources of Earth, including air, water, the earth, flora, fauna and especially representative (characteristic) samples of natural ecosystems, have to be kept for the benefit of present and future generations by careful planning of activity of the people.

3. Non-renewable resources should be developed in such a way as to be protected from exhaustion in the future and the benefit from their development in the international space should be given to all humanity.

The "Ecology" magazine (USA) gave the characteristic classification of industrial productions accepted in the USA: 1) the enterprises which, being characterized by the minimum damage to environment, can take place in the territory of America; 2) the enterprises which can be placed only within the sea basin of the USA; 3) the enterprises which have to be taken out as it is possible further from borders of the USA, for example to the developing countries of Asia and Africa at as much as expensive transportation of finished goods back in the USA.

Proceeding from this ranging, some monopolies of the USA nowadays pursue policy so-called "ecological colonialism". Its important element is so-called double standards: more expensive and perfect from the ecological point of view technology is implemented in the territory of the developed capitalist countries, and cheaper and "dirty" – developing.

The purpose for conducting the State expertise in technology transfer should become the effective identification of economic feasibility and usefulness society

and the State, taking into account possible environmental and socio-economic consequences of their use.

Effective determination of economic feasibility and usefulness of technology and its components for the state and society including possible ecological and social and economic consequences from their application has to become the purpose of carrying out state expertise in technology transfer.

Thus it is necessary to introduce practice of "best available techniques". BAT is technology which is based on the last achievements of science and technology and directed on decrease in negative impact on environment. It has an established period of practical application taking into account economic and social factors.

The concept of BAT was introduced as a key principle in the IPPC Directive 96/61/EC (Directive 2008/1/EC codified version). This Directive has been incorporated into Irish law by the Protection of the Environment Act 2003. To meet the requirements of this Directive, relevant sections of the Environmental Protection Agency Act 1992 and the Waste Management Act 1996 have been amended to replace BATNEEC (Best Available Technology not entailing Excessive Costs) with BAT. Thus, for activities falling within the scope of the Directive and regulated by these Acts, BAT must be applied.

Also the international cooperation is very important. For example, Helmholtz Centre for Environmental Research (UFZ) cooperates with research establishments and universities almost in all continents of the globe. Nowadays it unites ecological investigations into one European net. By the way it happens by the impact of the sixth European Society typical research program.

The most considerable initiative is PEER (partnership in the field of ecological examines in Europe), strategic alliance of seven largest European centers for environment research (ALTERRA, Netherlands; CEH, Great Britain; CEMAGREF, France; NERI, Denmark; SYKE, Finland; JRC-IES, Italy; UFZ, Germany).

These centers which are participants of alliance, within PEER combine their efforts to carry out joint strategy in the field of ecological sciences and to improve researches for ensuring ecological stability.

1. International Cooperation in Science, Technology and Innovation: Strategies for a Changing World, Report of the Expert Group established to support the further development of an EU international STI cooperation strategy, Directorate-General for Research and Innovation International Cooperation, EUR 25508 EN, 2012

2. Best Available Techniques Guidance Notes [Электронный ресурс]. – Режим доступа: <http://www.epa.ie/whatwedo/advice/bat/>

Економіка для екології: матеріали ХІХ Міжнародної наукової конференції, м. Суми, 30 квітня – 3 травня 2013 р. / редкол.: Д. О. Смоленніков, М. С. Шкурат. – Суми : Сумський державний університет, 2013. – С. 119-120.