

Ministry of Education and Science of Ukraine
Sumy State University
Economic Research Centre
Youth NGO "ECO"

10th International Student Conference

***"Economics for Ecology"
ISCS'2004***

*Sumy, Ukraine,
May 5-9, 2004*



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конференція

"Економіка для екології"

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5-9 травня 2004 р.*



10th INTERNATIONAL STUDENT
CONFERENCE
"ECONOMICS FOR ECOLOGY"
(ISCS'2004)
May 5-9, 2004, Sumy, Ukraine

**The conference
organizers:**

Sumy State University
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Sumy Regional Youth NGO "ECO"

The official sponsors:

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Support:

Grigoriy Dashutin, Ukrainian Parliament Deputy

**The topics of the
conference:**

theoretical problems, case studies, methodology, co-
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activities and so on.

**The conference is
directed to:**

students, young researchers, representatives of youth
organisations and NGOs.

Conference languages:

the official conference language is **English**

Conference place:

Sumy State University

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**PROGRAM OF THE INTERNATIONAL STUDENT
CONFERENCE
"ECONOMICS FOR ECOLOGY" (ISCS'2004)
May 5-9, 2004
Sumy, Ukraine**

Wednesday, 5

8.00 – 17.00	Registration of the participants (Sumy State University)
14.00 – 16.00	Sightseeing tour (Sumy downtown)
17.00	Departure from Sumy to the recreation center "Zoryanyy" (15 km from Sumy)
18.00 – 19.00	Accommodation
19.00 – 20.00	Dinner
21.00 – 23.00	Welcome party

Thursday, 6

8.00 – 8.45	Breakfast
9.00	Departure to the Sumy State University
10.00 - 11.00	Opening Ceremony. Lectures of invited speakers
11.30 – 12.00	Coffee Break
12.00 – 13.45	Plenary session
14.00 – 15.00	Lunch
15.00 – 17.45	Plenary session
18.00	Departure from the Sumy State University
19.00 – 20.00	Dinner
20.30 – 23.00	Ukrainian party

Friday, 7

8.00 – 8.45	Breakfast
9.00 – 11.00	Workshops
11.00 – 11.30	Coffee break
11.30 – 14.00	Workshops
14.00 – 15.00	Lunch
15.00 – 17.30	Workshops
17.30 – 18.00	Coffee break
18.00 – 19.00	Conclusions of the workshops
19.00 – 20.00	Dinner
20.00 – 23.00	International party

Saturday, 8

6.30 – 7.00	Breakfast
7.00 – 20.00	Excursion
20.00 – 21.00	Dinner
21.00 – 23.00	Farewell party, Camp-fire party

Sunday, 9

8.30 – 9.00	Breakfast
11.00	Departure to Sumy

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TRANSFORMATION OF INFORMATION REVOLUTION

*Leonid Melnyk, Dr., Prof.,
Sumy State University, Ukraine*

Changes brought by the information revolution connect not only with production sphere. They lead to transformation of features of whole social life as a whole including politics, culture, education, way of life and other sides of a human being's activity. The author makes bold to formulate hypothetically the main directions of the transformational reorganizations on the basis of the material examined before. Short characteristics are the expected socio-economic transformations are given in the table 1.

Humanitarian transformations. The most considerable determining transformation is to take place in a human being himself. In the triad of his components "bio-labour-socio" the personal (information) matter of a human being, i.e. a "socio" human being should take the first (leading) place (see details in the chapter 2). It means that just the personal characteristics of a human being will determine the development of the productive sphere and formation of the outlines of the whole society.

Table 1. The content of all possible socio-economic transformations to change into the information society (names of the transformation types are symbolical).

Type of transformation	Short content
1	2
1. Humanitarian	From the priority a "labour" person to the priority a "socio" person
2. Technological	From technologies based on the material means of production to the technologies based on information
3. Space-time concentration of the productive factors	From concentration of the productive factors (p.f.) in space to their concentration in time and space simultaneously
4. Productive sphere	From the centralized collective environment to the decentralized working places
5. Labour	From the predominance of the economically necessary labour to the predominance of the creative activity
6. Forms of labour motivation	From motivation priority based on the economic compulsions to the motivation priority based on the socio-psychological influence
7. Economic relations	From relations based on the economic agreements to relations based of the information control
8. Communicative	From transformation of mainly material substances to the transformation of mainly information factors

9. Consumption	From priority to consume material welfares to priority to consume the information ones
10. Health Protection	From correction of the human being's organism state by means of the influence on the material substances to correction by means of the influence on the information organism system
11. Place of Residence	From the urban residence to the formation of the suitable for living complexes
12. Economic paradigms	From "cowboy economics" (non limited resources and space) to the "spacemen' economic" (limited resources and space)
13. Political	From power of the private means of production to the power of the intellectual elite (being able to control the information)
14. Social	From subregional social organizations to the monosocial (global) ones
15. Cultural	From subethnic cultural development to acumenic development of cultures
16. Educational	From knowledge given to getting skills of selfeducation
17. Mental	From linear mental to the priority of the nonlinear way of thinking
18. Competitional strategy	From direct competition on the goods markets to the competition to win the means of consumption
19. Types of predominant motivations in the society	From priority of the negative motivation to priority of the positive ones
20. Social memory	From local memory systems to the formation of the common system of the social memory
21. Management	From specialized functions of management to individual self-management
22. Administrative	From centralized command administration to decentralized "ecosystem" one

Information needs of a "socio" human being are called to transform the whole system of the valuable orientators (points) forming a specific social demand. Its main purpose is to satisfy demands necessary for the development of a human being's personal features. The demands of a "socio" human being such as: physical human being's perfection, his mental development, realization of his creative abilities, getting knowledge, etc, replace the physiological needs of a "bio" human being (demand for food, water, place of residence, etc.) and technocratic needs of a "labour" human being (lust profit, carrier, prestige, etc).

Principle difference of a human being-consumer of the previous epochs is the fact that all these mentioned components of the personal human being's development becomes a consumption aim, but not a means to get material welfares in future (e.g. a car becomes a transport means to go to the forest to have a rest and reproduction of the spiritual forces but not to go to the garden only to grow and to gather in a good harvest).

A human being-producer influences more and more on information than the material welfares. Even in case he produces the material goods his aim to from information programs of combinations and interaction of the material blocks in space and time but not the transformation of the material substances (this function will be performed by machines).

A human being-constructor designs outlines of the environment he will live and work in and the products to be consumed. In all probability one can foresee two key transformations in a human being-constructor's activity:

- sphere of consumption: change from designing concrete goods and serviced to the formation of the welfare complexes that create condition for the comfortable life of a "bio" human being, maximum development of a "socio" human being and create realization of a "labour" human being;
- field of production: change from creation of the not typical for nature matters of labour and "unlinked" productive processes to the formation of the allied to nature matter of nature, production of which is organized at the circled cycles.

A group of the supposed changes given in the table 8.1 is symbolical and can characterize only some features of a complicated many sided phenomenon called an information revolution. A part of the changes given in the table 8.1 has been described in detail in the previous chapters and it lets us be more laconic explaining the certain phenomena and pay more attention to examine the other moments.

INFORMATION BASIS OF ECOLOGICAL MANAGEMENT

*Alla Anchurova,
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The information is the items of information on the environmental world and processes, proceeding in him perceived by the man or the special device. For ecology it is the items of information on a condition of an environment, factors of influence on it and demographic data, which allow to spend monitoring and to accept the decisions on the basis of the received information.

As a result of accumulation of the large files of the information there is a necessity for its ordering and simplified access to her. With this purpose the databases and cartographical systems are created.

As have shown special researches, 80-90 % of all items of information in our information field, make geographical information, that is not the simply abstract, impersonal data, and the information having the certain place on a map, scheme, plan etc. Therefore it is no wonder, that 25 years back was created technology, united operations of job with databases and the high-grade geographical analysis.

In its work the geographical information systems operate with any data, which can be placed on a map or circuit. In effect, the GIS is a combination of maps to databases. As the geographical information systems include advantages of databases (volume of the information) and maps (presentation), GIS in the greater measure are accessible to perception. The important feature of the GIS is also that these systems allow leading both account, and planning, and forecasting.

Working GIS includes five key components: hardware, software, information, executors and methods (plan and rules of the work).

The given technology is applied in all spheres of human life. For example it helps to solve problems of territory's pollution of, reduction of forests, search of the best route of movement between items, various municipal tasks. Besides GIS promotes development of ecological education, ecological tourism and restoration of environment.

The GIS are effective in all spheres, where the account & management of territory and objects on it is carried out. It practically all directions of activity of bodies of management and administrations: land resources and objects of the real estate, transport, engineering communications, development of business, provision of law and order, management of extreme situations, demography, ecology, public health services etc.

The GIS allow exactly taking into account coordinates of objects and area of sites. Due to a complex opportunity, in view of set of geographical, social and other factors, analysis of the information about quality & value of territory and objects on it, these systems allow most objectively to estimate sites and objects. So, for example, in scientific researches of A.M. Telizhenko and S.V. Glivenko the new approach to optimization of atmospheric-safe expenses is developed within the limits of Europe. The developed models require constant information filling and the geographical information systems optimum approach for this purpose.

Thus, GIS is an effective means of maintenance of the administrative decisions. And if the 21st century - is the century of the information, the GIS - is the control facility by it.

PUBLIC INVOLVEMENT IN THE ENVIRONMENTAL POLICY

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Since 1991, in response to significant environmental problems, especially due to Chernobyl disaster much effort has been concentrated on the process of developing Ukraine's environmental policy.

Today modern environmental policy must be viewed more comprehensively. Not only has deal with protection of natural environment, but also and in particular, with the utilization of the environment and its natural resources in ecologically sensitive areas.

Experience has shown that it is not possible for a nation to develop a sound environmental policy when it is not independent, held in high esteem, and widely supported by the population. From my point of view not only governmental institutions, which are empowered to look after environmental interests, have to be strengthened, but also, non-governmental institutions and organizations must be involved in decision making process concerning environment. Together with economic and social policy, environmental policy is indispensable for a sustainable and promising development of Ukraine.

It is very important to increase an ecological consciousness of people, especially youth, in Ukraine.

As a representative of the Master Course “ENARECO” - Environment and Natural Resource Economics, I should say that this Course is aimed to train professionals competent to solve complex tasks in the field of sustainable development. It covers a broad set of environmental economics issues including environmental policy.

Non-governmental organizations and institutions of Lviv Region, such as “Green Cross”, “European Dialogue”, “Ecopravo Lviv”, “Green party” etc. have a deal with environmental policy as well and their activity helps our society to become aware of existing problems and contributes to solve a part of them.

ECOLOGICAL MARKING AS A WAY OF STIMULATING THE ECOLOGICALLY PURE FOOD MARKET GROWTH

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During the last few years the income of the population of our region has gradually grown and in 2003 real wage index came to 115.4%. At the same time this raised a demand upon high quality food products. The potential quantity of the

ecologically pure goods market has very much increased. One of the facts which testify to this is a shear grows of the natural juice production in Ukraine. The consuming structure is also changing. People tend to consume more fish and vegetables and less potatoes.

Public opinion poll results prove that people are eager to pay up to 30% extra for the high ecologic quality of their food. But at the same time they are not completely aware of such characteristics of products they consume. We lack for a well-known ecological brand. The international system of standards ISO 9000 and ISO 14000 although used in our country, are not widely known to common user. The majority of developed countries provide state support to ecological brands. Successful examples are The blue angel in Germany, Environmental choice in Canada, White swan (Scandinavian lands).

The development of ecological marking and certification ought to become a serious aspect of state activity. Some governmental support should be provided to a new or an already existing mark. This may include developing and financing some marketing program and healthy life promotion. State must convince the businessmen that putting such a mark on their products would make them competitive and increase the volume of sales. This way they would agree to invest in reorganizing their production process and accept the additional certification expenditures.

All these measures would assist to improve the life quality in Ukraine and make our products worldwide competitive.

FOREIGN ECONOMIC RELATIONS OF UKRAINE WITH CIS STATES IN THE CONDITIONS OF THE GLOBAL MARKETING DEVELOPMENT

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1. Social marketing encompasses the strategic design, implementation, and control of programs that seek to increase the acceptability of a social or environmental idea, cause, or practice among members of a target audience and, ultimately, to change the behavior of key target audiences

2. Environmental marketers recognize that people do not simply enact behavior based on accessible information. Attitudes, feelings, and beliefs about behavioral control all influence consumer and corporate action. Consequently, educational efforts cannot, by themselves, be expected to make behavior sustainable because they only impact awareness. Education will not necessarily change attitudes, feelings, or behavioral control.

3. In Ukraine income is quite unevenly distributed so that these average measures may not be very meaningful. Similarly, great regional differences exist between different regions inside Ukraine. Ukraine had high levels of inflation several years ago. The Ukrainian Hryvna has remained much more stable in recent 4-5 years at 5.3 -5.4 per dollar.

4. A great deal of interest has arisen in recent years on the potential for marketing on the Internet. While the jury is still out on this medium's ultimate potential, sales so far have been limited, although a large potential may exist. Larger segment of the population in Ukraine is still not "connected". Internet may serve purposes other than direct sales.

5. Within the Commonwealth of Independent States, Ukraine will continue to limit integration to economic issues, although even here Kyiv will continue to run into three problems with Russia. First, Russia will continue to apply pressure upon Ukraine to join the CIS Customs and CIS Payments Unions, to both of which Kyiv is unlikely to agree. Ukraine will also remain an associate member of the CIS Economic Union (just as it is likely to remain only an associate member of the CIS). Second, although Ukraine and Russia have normalized their energy relations, problems will remain. Ukraine and Russia will continue to search for alternative suppliers and alternative supply routes. In the case of Ukraine, this means developing Ukraine's strategic alliance with Turkmenistan and Azerbaijan (both oil and gas producers) and Georgia (as an energy route to the Black Sea and the Odesa oil terminal). In the Russian case, this means strengthening relations with Belarus (whose energy sector is already de facto under Russian control). Third, Russia will continue to utilize economic pressure in pursuit of its strategic agenda in Crimea (pressure such as the unilateral September 1996 imposition of import taxes solely on Ukrainian goods, and refusal to provide components for Ukrainian military exports that would allow Kyiv to become a major arms exporter and serious competitor to Russia).

COMPETITION POLICY IN GLOBALIZATION PROCESSES OF WORLD TRADE

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Competition:... 6. Ecology. The struggle between individuals of the same or different species for food, space, light, etc., when these are inadequate to supply the needs of all.

Collins English Dictionary (Millennium Edition), 1999

1. Competition policy provides opportunities for civil society to mobilise and intervene in defence of consumer rights. Consumer groups can:

- informally monitor compliance with the standards which have been set;
- monitor the truthfulness of advertising;
- examine the safety of products;
- engage with the private sector, using the legal requirements as a minimum benchmark;
- make submissions to regulators;
- where dialogue with the private sector interests in question fails, they can run test cases in court.

2. At the same time, civil society (and consumer groups in particular) can foster the political will to pursue a process that stimulates an understanding of how a properly-conceived competition policy works in the interests of all.

Quite apart from intellectual property considerations, globalisation brings a new dimension to competition policy. Abuse is not confined within national borders. International cartelization and similar abuse, and other forms of corruption, can impact seriously on international trade, and there is a growing realisation of the need for international guidelines for the control of anti-competitive conduct. These abusive practices do not impact simply on final consumer goods, but also on "input goods" such as steel, fertiliser and energy.

3. Countries with weak domestic institutions are particularly vulnerable to cross-border restrictive trade practices and international business conspiracies. Integration into the global economy may increase competition, but it does not necessarily ensure it. Cartels, vertical restraints (agreements between sellers and buyers), exclusive dealerships and controls over domestic imports can effectively block people from receiving the development benefits which globalisation should bring. Concern over these vulnerabilities lie at the heart of some of the protests against globalisation presently taking place around the world.

4. The problem, too, is a growing one as privatisation continues to place more and more previously publicly-owned assets into private hands, thus paving the way for increased levels of international mergers and acquisitions. As the public barriers to competition are removed the private barriers must, correspondingly, be addressed - and the more so with the growth of globalisation.

THE SAFETY OF INDUSTRIAL RAW MATERIAL IN THE ASPECT OF GLOBAL PROBLEMS

*Nataliya Bykova, T. Shkabara,
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Nowadays there are a lot of ecological problems? Which do not have any “national face”. They are equal for many countries, that’s why they are global.

Soiling of industrial raw material by dangerous substances of chemical, physical and biological nature results in ecological disproportions, which accompany the development of modern agrarian production of the world.

The most dangerous substances are: nitrates, nitrides, pesticides, radio nuclides, heavy metals and bacterial pollutants. One of the aspects of ecological loading on agrarian ecological systems is the soil pollution, which concerns almost each country, dealing with agriculture. Modern agricultural production, based on industry, uses the rank of chemical substances. It would be impossible to provide with the proper level of economic effect of production without them.

As for Ukraine, the problem of soil pollution is in excessive use of mineral fertilizations in agriculture during the period of 70-80th of the 20th century, and its disproportionate use in the conditions of private use of the land. The given breaches result in accumulation of chemical substances in the soil and their coming into vegetation which becomes the source of toxic influence on people, using such production.

Soil pollution results in the breaches of soil physical structure. It is an important ecological problem. In relation to plants, being grown on such soil, these soil breaches will result in the change of qualitative indexes of vegetation.

According to it, the given problems necessitate ecological and economical decisions. To provide people with qualitative production we should:

- create the centers of products safety;

- control the use of mineral fertilizations and chemicals by manager-ecologists;

- create systems of economical stimulation on the basis of the technologies of biological agriculture;

- stimulate the involving of foreign investments for ecological purposes.

The experience of various economical-developed countries highlights the decisions of such problems. Their experience can be used in Ukraine as well. It is an example of real improvements which also denote the processes of globalization.

ECONOMIC INFORMATION AS SCIENTIFIC CATEGORY

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Giving of the unambiguous determination of notion "information" is enough complex since depending on concrete practical sphere of use given category gains some particularities, characteristic exactly this application and in many specific. However it is possible to select row of the general signs, allowing define the notion "information", and give characteristics for its most important sides, revealing under any practical use.

Information in economy reveals itself in ensemble of aspects. Here is only some ways of manifestation:

information production is the production branch i.e. type of economic activity;

information is a factor of production, one of the the fundamental resources of any economic system;

information is an object bathe-sale i.e. acts as goods;

a certain part of information is a public good, consumed by all members of society;

information is an element of market mechanism, which alongside with the price and usefulness influences upon determination optimum and balance conditions of economic system;

information of one of the the most important factors becomes in modern conditions in competitive fight;

information becomes the reserve business and governmental circles, used at decision making and shaping the public opinion.

Thereby, on measure of its creation an economy of information society begins to use not two, but four main resources: labour, capital, individual, group and regional liberty, as well as umbral information i.e. constantly updated theoretical knowledges and different sort an information, including practical skills of people. First two of them serve the factors of production, but two last — necessary conditions their efficient use. Hereunder, economy of industrial society moves over to its next postindustrial phase — information economy.

ECONOMIC ASPECTS OF SUSTAINABLE DEVELOPMENT

*Yulia Chortok, Tatyana Chuyko,
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Sustainable development means the development that guarantees balance between social, economic and natural components.

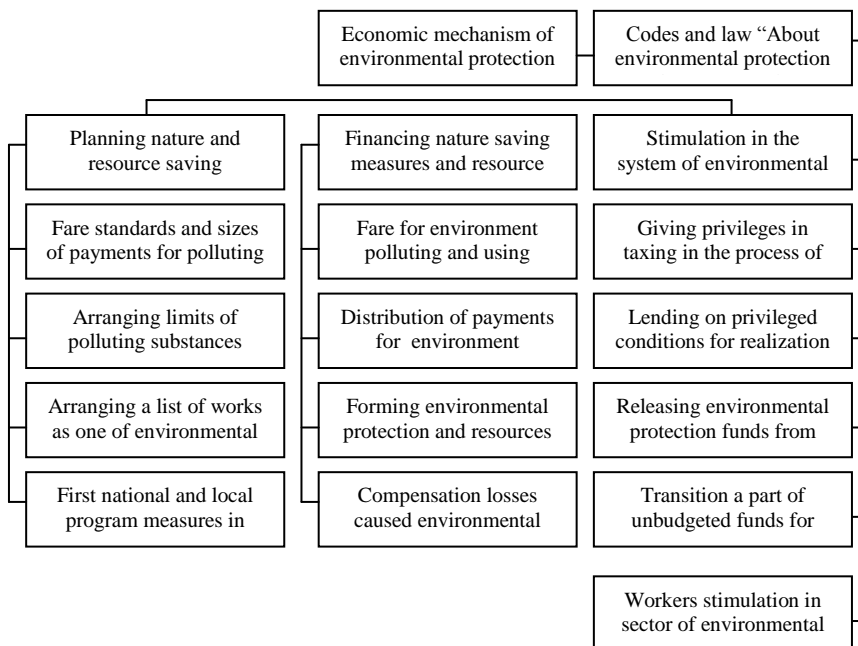
Difficult ecologic and economic situation in Ukraine is a result of disproportion in productive forces placing.

Nature and resources using has on extensive trend in our country.

Map and graphic method of exploration a scientific conception of Ukrainian transition to sustainable development.

Social and economic aspects, work for saving and rational using natural resources , role intensification of the main groups of the population are presented (offered) as constructive measures in European Program “Agenda for 21 century”.

Economic mechanism of nature saving work is demonstrated on the picture.



EFFICIENCY PROMOTION THROUGH INTRODUCTIONS OF INNOVATIONS AND TECHNOLOGIES

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Human wants are known to be unlimited and tend to expand whereas in its turn physically available production resources get exhausted. Economic tasks how to produce, for whom and how have existed throughout all times, but for recent decades the mankind has attempted to give real evaluation to resources and these issues have become even more crucial.

Let's consider in details the production process. In order to produce goods any plant needs necessary factors of production, such as: capital, labour, information. All the components are consolidated in a production process which consequently makes commodities and unwelcome but inherent wastes.

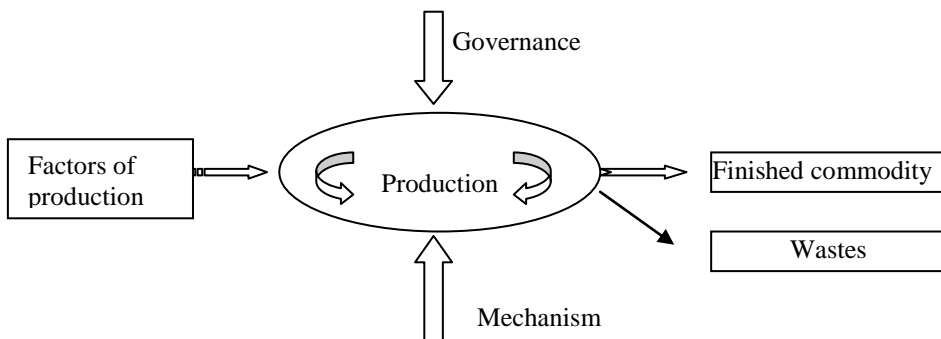


Exhibit – Production process

There is a consolidation of factors of production which when interacting with one another are capable of producing commodity or providing services. There are a variety of crucial factors given below for it.

1. **Innovations and technologies.** One can take a constant set of production factors but organizing it in a number of ways the final output may differ. By means of technologies resources can be utilized more complexly, fully and with greater output. A technology establishes real resource reserves predetermining as both effectiveness of recourse utilization and opportunity to seek, mine, determine, distribute and reserve them. From this standpoint all production processes have in their core material and immaterial components. The former is necessary for production of equipment and the latter is a production technology. Varying this ratio and implementing energization of innovation processes it is possible to increase the output for the factor of ΔP at constant exhausted resources.

2. **Information.** In order to produce at least costs effective consumed resource governance should be carried out. It is necessary to note that information is regarded

both as a resource and commodity. It becomes a strategic input of an organization so crucial for decision making and response to external events. As any other kind of a resource information needs governing and effective utilization. The former is implemented via information technologies. It is worth mentioning that introduction of information technologies doesn't entail the production efficiency by itself but turns a good instrument to imbed up to date governance methods. In order to promote governance effectiveness it is not the stocks of introduced technologies and software means so crucial but defining what sort of information is most relevant on that or other working place to support and encourage production. It is so because the stream of inessential data catastrophically decreases effectiveness of decision making process whereas getting it at the right time substantially increases it.

3. **Psychology and employees' incentives.** It is possible to underline that workers are one of the most precious resource of any organization. They represent intellectual resource which can solve present governance tasks and be a source of initiatives on improving processes. In order to work effectively a worker should get both sufficient initiatives on the part of an organization and favourable work conditions (availability of information). The purpose of introduction of information technologies is providing worker with relevant information. An organization's information system must contain data which reflects all processes of its activity with required completeness. It means any actions and alterations in organization must lead to changes in its information image imbedded in the information system.

In this way three above points are a mechanism (under impact of modern technologies) for strategic governance of production factors. An objective of strategic planning is defining necessary transformations inside the production in response to tendencies of external factors variations which can't be governed but which are capable of implementing substantial impact on organization's economic position.

PROBLEMS OF SUSTAINABLE DEVELOPMENT IN THE CONTEXT OF GLOBALIZATION

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For 12 years that have passed since the "Agenda of the XX1 century" was approved in Rio de Janeiro, processes of globalization have considerably increased the impact on the issues of sustainable development. The analysis of this impact and possibilities of the consideration of realities of globalization on the way to a sustainable development became the question of the day. The possibility of their constructive interaction is estimated not rather optimistically. The prevailing opinion

is that globalization represents the basic barrier for achievement of a sustainable development. Globalization has not provided those positive results that were expected by the participants of the summit in Rio de Janeiro: the improvement of economic welfare in the countries of the third world, the possibilities (as it was in the West) for implementation of the environmental protection measures and for solution of social problems.

On the other hand, sustainable development envisages the orientation of efforts of all countries towards decrease of the anthropogenous stress. This is impossible without economic, legal and trade integration, which means without implementation of one of the globalization tendencies of globalization. It is mentioned in the United Nation's documents, that even though globalization puts new challenges and serious problems in the field of sustainable development (financial crisis, danger, impoverishment, inequality, etc.), at the same time it gives new opportunities (expansions of trade, investments and flow of capital, technical progress, including development of information technologies). The advanced countries recognize existence of specific difficulties that are created by globalization for the countries with transitive economy. The opportunity for their solution can consist in transformation of globalization in a comprehensive regulated process directed, in particular, to ensure the sustainable development.

Globalization is an objective, irreversible and inconsistent process. Whatever is the balance of risks and advantages of globalization, global changes will certainly take place. And the only thing that can be done now, is to understand the nature of these changes and to learn to administer their consequences so that globalization could facilitate the development of a social system which would be characterized by social justice, high level of life and an ecological sustainability.

Meanwhile, serious changes related to globalization much more exceed ability to adjust these changes. As a result an institutional gap has appeared that will cause more and more big concern of those groups and the countries which have not received benefit from globalization and whose interests are not adequately taken into account by current universal international institutions. Challenges of globalization put in the agenda of the world community the question of essential reconsideration, in a context of problems of sustainable development, of the role and tasks of international institutions, in particular such as the World Trade Organization, the International Monetary Fund and the World Bank and, probably, reorganizations of these institutions.

ECOLOGICAL EDUCATION IN UKRAINE

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Nowadays the ecological education is one of the most powerful mean that can replace the human and public attitude to environment from destructive and consumer's to careful and renovating.

Almost every citizen of Ukraine has not known in matters of rational using of natural resources and environmental protection. The same we can say about poor ecological culture and frequent indifference towards actual ecological problems.

The purpose of the ecological education is:

- to help forming behaviour compatible with undestruction of environment;
- to enlarge practical experience necessary for developing and using effective decisions to preserve environment.

General negative tendencies that we can see in the educational system have an influence to position in ecological education. The system of ecological education continues to stay poor and uneffective. The critical position of education is caused by:

- consumer's attitude to nature;
- ignorance of national traditions and rational using of nature;
- absence of necessary legislative base;
- deficient responsibility of executive structures;
- poor financial and technical methodical maintenance of educational process;
- imperfect system of studying;
- absence of governmental supporting organizations held in ecological education.

State educational structures aren't ready to developing and instilling new ecological and environmental programs. The reason is in changing for the worse of educational state budget finances.

The position of ecological education in Ukraine needs immediate influence from the side of government and reinforced attention of society.

ECOLOGICAL ASPECTS OF INTERNATIONAL SAFETY

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Every state for highest good attends to trend assurances their own safeties and sovereignties. Yet until quite lately the factor have has an influence on safety first at all was military power. Today being of service military power can not be unpunished, because even the states with the most modern armaments cannot use it without any regards of consequence such uses, which one will be exposure of their own country on retaliation. Except the military factor one should take under attention row additional, such as: economic, technological, financial, ecological whether of modern centres of information. All states taking under attention these factors shapes their own policies of safety, understood as elements entire policies of state of relating connected undertakings with creation and with utilization of defensive potential in aim target of prevention and counteractions of different kind to threats. The state safety is changing in degree and proportions answering to changes, which are reaching in international environment. From state safety and sum of safety every and all states – international members of community creates bases of safety international. His foundations is a team circumstances, of norms, rules, conductions and an international mechanisms assuring to states smaller or greater feeling do not threatened of existence, survivals and free development.

The main principle of the problem is existence and survival of civilization. His solution demand first of all maintenances of ecological safety, understood as a diminution to minimum threats of health and lives a humans in continuous process and permanent activities aiming to successes quiet, not disturbed and healthy of human existence and all of ekosystem elements. At defining ecological safeties are separated two trends. First - „negative”, shows points on ecological threats and manners their avoidances. Second – „positive”, does not appeal to necessities of avoidance of threats, but underlines need undertaking of affirmative activities, in aim of formation desirable from point of human view business and state of natural environment.

The second meaning of ecological safety ecological, founds undertaking by international community various, of complex activities in figure of formation of development strategy, influences on social consciousness and formations of adaptation in sphere of international cooperation. This while will imply necessity of connection of activities in sphere of policy and in sphere of protection of natural environment, in ecological policy and initiating of undertakings in total scale, in aim of creation of international ecological system safeties. Irrevocable in relationship from this co-ordination of activities in frames of bilateral and regional cooperation, will demand previous qualifications of hierarchy threats and charges of environment, in short time -limits, average and longlashing. Process of strengthening international

ecological safeties ecological should obtain permanent legal frames in figure of rules and of ecological norms, on the ground which states will unroll cooperation.

ECONOMIC MECHANISMS IN ECOLOGY

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During the XX - XI scientific – technical revolution entailed huge growth of material and spiritual possibilities of humanity – both creative and destructive. Presently world public spares considerable attention to the sharp ecological problems. The interest to these problem is caused foremost by the anxieties about safety and survival of humanity and all the living on Earth.

The reasons of crisis ecological position of Ukraine are mainly economic factors, namely:

- • structural deformation of economy with prevailing of material – extractive production;
- • extensive development of agricultural production which is not able to provide the population of the state in an enough body by ecologically safe food products;
- • almost absent effectively operating administratively–economic mechanisms of protection of environment, low moral level of society.

Economic mechanisms are the effective method of adjusting of nature protection activity, they can be grouped in two groups : mechanisms of reimbursement of losses and mechanisms of prevention of them. *The mechanisms of reimbursement of losses* which arise up at catastrophes and are to provide conducting of estimation of losses, necessity in compensative resources and compensation of charges. Thus it costs to distinguish two forms of loss is inflicted and recovered. The system of insurance is the important way of indemnifications. *Now about the mechanisms of prevention of losses.* These mechanisms are to provide: legal and economic defense of activity of prevention of losses; legal and economic responsibility for the increase of size of risk; personal interest of subjects of management in prevention of risk. This mechanism has the measures of both economic and administrative character. Its constituents can be grouped in five groups.

The first group of mechanisms is related to the change of structure of national economy in behalf of industries which satisfied the needs of man at considerable reduction of share of military – industrial complex. *The second group* consists of mechanisms which are to be instrumental in the decline of accidents. *The third group* of mechanisms requires replacement and improvement of technical base, renewal of equipment, introduction of new technologies and informative systems. *A fourth group* is to extend the market of skilled labour force and reorganize the

system of retraining of workers. *The fifth group* of mechanisms is directed on stimulation of investments which prevent losses by tax policy.

The component staples of economic mechanism of use of nature have to be: pay for the special use of natural resources; system of financing and crediting of nature protection; tax and price systems taking into account ecological factors; support of becoming and development of ecological industry.

Thus, the problems of man influencing on the natural environment of Ukraine objectively require the radical change social – political way of thinking, strengthening of attention to the solving nature protection problems at all levels of organization of society, search for the newest approaches to its solving on the basis of priority of ecological laws and scientific knowledges.

PSYCHOSOCIAL ISSUES OF THE GLOBALIZATION

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It's common knowledge, that the process of the globalization now is an integral part of our life. But except visible economical issues, that are certain, globalization has some psychosocial issues. These issues influence the society and people greatly, but are not studied as well, as economical issues. So I'd like to make a short summary of the most important issues to understand, how the globalization influence the society.

Informational stress.

The modern society is often called “informational”. Information is everywhere and it's impossible to imagine our life without news from different parts of the world, Internet, etc. But such stream of information provokes stress in all society. As a result now we face with such a problems, as unusual children's fears (the fear of catastrophes, terrorists, etc.), increasing number of suicides, especially among youth, heart attacks, insults and so on. These phenomena all are the results of informational stress.

The growth of the social aggression.

Since early ages mankind always were afraid of aliens. In conditions of globalization of the world's economy increase the number of immigrant to the countries with high level of economy. Are these facts connected? For the first sight – no, but deep analyses show, that in countries, where the level of immigration is high, increase the level of social aggression. As a result, grow the number of nationalistic organizations that unite aggressive youth (skinheads, Nazi etc.), begin the “hunting” on immigrants, political parties, that are nationalistic, get places in the Parliaments.

The erasing of national borders.

The globalization opens the borders of countries and nations. This brings to such consequences, as the erasing of national specialties, growth of the level of

transnational corporations, unification of the world. Now practically in every European country we can find “fast-food” restaurants etc. All these negatively influence on the national situation of the countries, especially those one, that are developing now.

The increasing abilities for countries that develop.

Except negative issues, globalization brings progressive to the world. In modern society more and more attention are focused on the developing countries. The international organizations try to decide the social problems of those countries, go there with humanitarian missions.

PROBLEMS AND PROSPECTS OF ECOLOGICAL EDUCATION IN THE CONDITIONS OF SOCIETY INFORMATIZATION

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In the situation of narrow-mindedness of natural resources countries, which have the adequate educational systems that provide by necessary knowledges and ability of adaptation in informative society, go out on leading positions, and if necessary - would allow quickly to adjust to new terms of existence. The question is about introduction of ecological constituent in the departmental teaching, which would include the educational and informative programs with the purpose of acquisition of knowledges, skills and desires sufficient for achievement of economy ecologization tasks.

In recent years in Ukraine distinctly there is an ecological crisis, the further deepening of which compels to search new ways of development of economy of country, which took into account its ecological constituent and put her in the row of basic priorities.

Concept “ecological education” absorbed in itself the aggregate of education elements, teaching and enlightenment of all layers of population, the purpose of which is the personality ecological culture increasing. The increase of this culture is achieved mainly due to actively developing information technologies which provide the receipt of ecological information.

But frequently people are not inwardly ready to perception of information which satisfies personal responsibility necessity for the health of nature and does not affect economic interests, that is the brake of the economic growth of country in the process of transition to informative society.

Greater part of the Ukrainian population does not have the clear picture of aims, tasks and maintenance of ecological education. Problem is that the tasks of such education are not quite inscribed in practice of work of the general system of Ukraine. The methods of ecological education are absent, which can really achieve

the ecological culture increase purpose. Teaching experience through collaboration, through priority of moral values remains property of not many socially responsible teachers. Insufficient desire to use the perspective methods of teaching, which were offered by sociologists in the programs, makes teaching ineffective. The vagueness of aims of ecological education in the general system causes the unwillingness of teachers to accumulate experience by the study of new more effective methods, and application of amotivational knowledges is not possible in modern terms.

Taking into account imperfection of education system in our country, the individual people aspiration to promote an ecological culture remains the priority. The most leading role is herein played by information technologies, due to which intellectual capabilities develop, an ecological culture is educated, availability and efficiency of the most ecological education through the informative providing rises (knowledge and information bases). Multimedia, in particular, help to expose individual possibilities, and today hypertext, as teaching mean, already begins to be actively used in an educational process, making contribution to perfection of teaching individualization.

It is necessary to educate sense of responsibility of everybody for what is going on in the world, labouring for clear consciousness of interdependence of man and nature. This enormous important task lies down, foremost, on the education systems and facilities of mass informatization of society.

THE MONITORING AND ACCOUNTING IN THE SYSTEM OF ECOLOGICALLY SUSTAINABLE NATURE MANAGEMENT

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Ecologically sustainable nature management should be based on accounting and a long-term and all-round monitoring of environment. In present Ukraine it does not exist which hinders sensibly the ecological by stability of nature management. Creating database in order to assess the biodiversity and landscape diversity of the country and to support those systems of nature management that defends biological species should become a priority task of such monitoring.

An important step in solving this problem could be the foundation of Ukrainian informational center that would deal with ecologically sustainable economic development and have its subdivisions in regional and local bodies.

The creating such center will make state management in the sphere of nature management more effective. It will be possible due to:

registration, active analysis and accounting of economic necessity to exploit the natural resources of local territories in the qualitative and quantative aspect;

existence of database about natural objects that need special care for the amount of their usage;

preparation of optimum decision variants so as to avoid an ecological risk;

providing with the informational and management connection between all three state branches.

Overall functioning of such center should ensure a proper monitoring of ecological sustainable of using natural capital in the country.

Transition of national economy to the model of ecologically sustainable development should be enforced on the basis of the following principles:

following spatial biophysical criteria of ecologically balanced management;

creating socio-ecological programs of developing the territories that provide for implementation the number of measures towards the ecologically balanced nature management;

improving territory proportions of economic development due to more efficient use of regional potentials towards the natural and human resources;

adjusting industrial objects to using ecologically clean technologies and producing the corresponding goods that are aimed at decreasing energy and material consumption. It is also important to take into consideration a biophysically necessary capacity of local systems;

all-round increasing of ecological wealth and informational services through the creating new scientific technologies of balanced nature management, taking into consideration biophysical peculiarities of natural potential of each region;

elaborating permissible limits of action in nature management inside the local territories.

PROGRESS TRENDS OF WIND ENERGY IN UKRAINE

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Modern powergenerative technologies are orientated mainly on incineration of the fossil fuel accumulated by nature for a long period of time. Many scientists are counted, that such way can bring humanity over to the catastrophic consequences, shown above all things in formation of environment useless for life. Very big interest appears to the untraditional sources of receipt of energy, including to wind energy.

For the modern technical level of wind energetic options we can use districts with average annual speeds of wind 5 m/s. Therefore the preliminary estimate of wind descriptions of territory of Ukraine is given with the use of this criterion. 214 weather-stations for a long period of time testify the analysis of these long-term supervisions that in Ukraine winds prevail from 0 - 5 m/s. But experience showed that data was given about average annual speeds of wind, got the weather-stations of Ukraine, useless for production of electric power by windy power-stations, because their error very often makes 40-70%. General power of perspective wind power

station. Ukraine is estimated in 16000 megawatt with the possible annual making of electric power about 30 billion kilowatt-hour.

As for a legal base, on June, 15, 1994 Cabinet of Ministers of Ukraine adopted the decision №415 «About building of wind power-stations in Ukraine», and on March, 2, 1996 Decree of President of Ukraine was accepted №159/96 with the same name, which formed the special fund of building of wind power station, due to the increase of tariff on electric power in a size 0,75% from the volume of commodity products of production of electric power. Development of wind energetics of Ukraine supports Law of Ukraine «About an electroenergy», Law of Ukraine «About energy supply», Law of Ukraine «About alternative energy sources».

After average speeds of wind - 5 m/s, it is possible to select 6 districts (Carpathians, Prichernomorsky, Priazovsky, Donbassky, Western-crimean, East-crimean) and 2 areas (Poltava, Kharkov). There are such wind power station in Ukraine: Donuzlavaska, Myrnovska, Vorobiyovska, Truskavetska, Askanivska, and also on the stage of planning - Western-Syvashska, Sudanese, Black sea, Djankoyaska and other.

Special researches with the purpose of estimation of public thought in behalf of introduction of wind energetics in Ukraine was not conducted. But events of negative plan for all active period, beginning with 1989, place does not take. And judging on the publications in mass medias, it is possible to do a conclusion about positive perception of this direction. Positive argumentation is based on: receipt of electric power; improvement of ecological situation; creation of alternative to the nuclear power plants; creation of new workplaces. However, there are three fundamental problems in relation to development of wind energetics crisis of economy; unfavorable character of influencing of legislative base; imperfect organizational structure.

INFLUENCE OF RATES' CHANGING ON THE WATER AND SEWERAGE SERVICES FOR CARRYING-OUT THE MEANS OF ENVIROMENTAL PROTECTION

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Nowadays the housing and communal services of L'viv region consist of many enterprises, which are in deep economic stagnation. Industrial and financial activities of Server busies in all L'viv region are unsatisfactory. Water facilities are the capital intensive branch. But the large part of fixed capital stocks are threadbare, objects of infrastructure are becoming old-fashioned. Besides this, the inputs of electrical energy, materials and human labour, which concern of plumbing

attendance, are increasing gradually. At the same time, the negative profits of water are rising.

So, the plumbing of L'viv region has been developing since 1901. Presently, 29.300 km of the networks or 25 percent of their total length need repairing. In terms of value, a quarter of water treatment plants and each fifth pump station have exhausted their depreciable life, and 40 percent of pumps need to be replaced.

The most of important constituents of water rates are moral and technical wastes. As a conclusion, water rates are enhancing.

The legislation of Ukraine includes the investments' components in water rates. But incorrect using of them influences on irrational and unexpedient utilization of water resources. As the result, the environment is suffering. So, the main directions for enviromental improvement and economic-expedient working of Server buses, are:

- activate investments for development and modernization of plumbing;
- using the reserves of reduction of water rates;
- establish conditions at the state level for effort coordination of authorities at all levels, non-government organizations and public to spread the experience onto other regions;
- reconstruct a number of water supply pump stations in region.

NETWORKED BUSINESS: THE ANALOGY WITH ECOSYSTEM

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As writing changed the way we see and interpret the world about us the same will undoubtedly happen as we travel deeper into informational age. In the 21st century e-business will be the basis for production ties between different industries and territories, it will influence the structure of world's economy and will stimulate further geographical division of labor.

But providing a new type of environment for business to operate in, internet requires new methods of controlling and managing business activities. This results as a transformation of traditional company's management. And this is here where the concept of ecosystem comes up.

No business is an island. You cannot manage a business, let alone networked business, on its own. You must manage ecosystem which your business inhabits. The basic idea is that you manage ecosystems rather than specific species or disciplines. It takes more sense to look at any given situation organically or holistically rather than from a single perspective. If 'abstract thought' emerged as a

child of writing and literacy than its equivalent for the internet and world wide web is 'ecosystem'.

'Two centuries of economic thought, both capitalist and socialist, are based on the concept of 'economy as machine' rather than 'economy as ecosystem'. Nonetheless, history has demonstrated that no economy behaves as a simple, cyclical machine. Like ecosystems, economies are spectacularly complex and endlessly adaptable.'

The background to ecosystem - the 12 principles of networked business.

- | | | |
|-------------|--------------|----------------|
| 4. Learning | 8. Security | 12. Invent/log |
| 5. Planning | 9. Payment | 13. Selling |
| 6. System | 10. Buying | 14. Customer |
| 7. Network | 11. Supplier | 15. Personal |

The 12 principles is not a process it is an ecosystem of organizations each of which has four main communities: a community of customers, a community of businesses, a community of shareholders and a community of employees. The 12 principles is also a catalogue of the whole market. All organizations fit into one of the principles on the basis of their core activity. The 12 principles have diverse in any organization. They can be used to define clearly which board member is responsible for what areas. They can be used as the framework or language between the technical and the sales sides of organization as well as between partnering organizations working on a project for the same client. They can be used to train your employees. But the real benefit of the 12 principles for your organization is when you implement and cross-fertilize it with, within and without your organization.

SIGNIFICANCE OF ECOLOGICALLY FOCUSED MARKETING IN SYSTEM OF ECOLOGICAL MANAGEMENT

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Decision on introduction of ecological management at the enterprise is the important step attracting changes of many processes and, first of all, administrative and production. The primary goal facing to such enterprises are search and realization of such directions of development which alongside with satisfaction of interests of concrete consumers and manufacturers, would allow to support the certain balance of ecological and social and economic interests of a society.

In a situation which was generated now, such concept is actual. First, sharp disbalans between manufactures and distributions of the goods and services creates threat for global ecosystem. Second, rates of changes occurring in the world are constantly accelerated and rational wildlife management considerably lags behind

rates of economic development. Overcoming of such disproportions is a unique way to maintenance of sustainable future of our society.

For introduction of effective ecological management decisive importance plays creating of the system of ecologically focused marketing. The main difference of ecologically focused marketing from traditional is an orientation of supply, manufacture, selling and consumption to ecologically sustainable social and economic development. [1]

Main tasks of ecologically focused marketing are:

1. revealing ecologically focused needs of consumers;
2. orientation of "know-how" and production of goods and services to satisfaction of ecologically focused needs of consumers and societies as a whole;
3. promotion and stimulation of consumption of the harmless (ecological) goods, and formation of ecological needs of consumers.

For realization of these tasks marketing should contain a number of processes:

1. the analysis of existing market opportunities (revealing of missing / unsatisfied ecologically focused values and needs by the analysis of the markets, the basic players, existing technologies, products, etc.);
2. analysis of internal opportunities (the analysis key competencies of the company: potential, resources, skills, knowledge, technologies, etc., allowing to achieve efficiency of actions within the framework of the chosen strategy of ecologization);
3. revealing of new opportunities (comparison of existing market opportunities and internal opportunities of the company);
4. formation of general strategy (a choice of a segment, a target audience, consumer value of the goods, market behaviour);
5. development of concrete strategy (strategy of creation of product / service, an output on the market, promotion, pricing, the organization of manufacture, distribution (selling), service).

Maintenance of functioning of system of ecologically focused marketing will allow the company developing in a direction ekologozation of the activity, to reach competitiveness and leading position in the market and will provide an innovative way of development of the company.

SOCIAL ECOLOGY

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Both anthropologists and sociologists have studied the relationships among population, natural environment, technology, and society.

Anthropologists, in their ecological studies, have been concerned primarily with past civilizations and with tribal people, and with the wide variety of technical and economic adaptations to given environments.

The concepts of anthropological ecology derive from 19th century German ethnic geographers, such as Friedrich Ratzel, who pointed out that man's relationships to environment are conditioned by technology and that parts of culture can be explained by a knowledge of the relationships between technology and environment. Of course, available natural resources do not necessarily determine particular cultural adaptations: man can make a choice.

On the other hand, if a specific resource is relied upon extensively, this fact may condition the entire course of development. The Egyptian use of the Nile is an example the decision to develop agriculture in a narrow, annually flooded strip in a desert permitted the population to build up in a small space; the compact population, plus the task of controlling the waters, led to bureaucratic structures that influenced every aspect of Egyptian Civilization.

A close relationship has developed between ecology and studies of cultural evolution. The American Anthropologist Julian Stewart has shown that, given similar natural resources and levels of technology, the development of widely separated people, will bear close resemblance.

Sociological Ecology developed in the 1920's at the University of Chicago where sociologists produced a series of studies, illustrating the use of ecological principles in charting population and cultural movements in a modern city.

One approach used in this work was based on concepts borrowed from natural ecology. Thus the concept of "succession", referring to the replacement in the natural environment of one plant species by another, was applied to human social or economic groups. These natural ecology principles were combined with the principles of "social morphology" as defined by the French sociologist Emile Durkheim. Social morphology concerns the relationships of size, density, and spatial distribution of the population to the separation of functions in a society. Common to both approaches was a concern with competition as the moving force in the environment.

Modern sociological ecology bases its study of the development and form of an Urban community on both approaches. There is an emphasis upon spatial distribution insofar as it relates to the overall balance of activities and groups within a city. Economic pressures and competition are still the driving forces for the distribution or movement of people, goods, and services throughout various areas of a city.

Research has shown that the American city has about five concentric zones. The business district is at the center, and outside of this is a zone for light manufacturing and recreation. The latter may also contain an area of cheap lodgings. The next three zones are areas of residence: the first for working people; then middle-income groups; and finally the suburbs. Much research has been devoted to demonstrating statistical relationship between the location and characteristics of these natural areas. And the characteristics of their residence. For example

alcoholism and delinquency are much more common in areas adjacent to the city center and declined toward the suburbs.

Some sociological ecologists have also investigated natural-resource utilization by agrarian people. A characteristic problem concerns the extent to which people display “rationality” in their use of resources, the cost of developing it, and the need for conservation. Such studies contribute to our knowledge of how man can utilize nature without destroying it in the process.

ECOLOGIZATION OF THE INVESTMENT PROJECTS AS THE FACTOR OF PRESERVATION OF AN ENVIRONMENT

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The crisis condition of natural environment, resource-ecological safety are represented the largest problems of XXI century all over the world. These problems didn't bypass our country: the deep financial and economic crisis is accompanied by ecological crisis, that essentially complicates reaching stable economic increase, definition of effective model of development. Quality of natural environment and continued aggravation of ecological conditions, degradation of ecosystems and natural landscapes, exhaustion of a nature-resource potential, insufficiency of received measures on reproduction of natural riches of country are call the large concern.

Ecologization of investment projects is one of the directions of activity of the enterprises which are capable to result of improving of ecological conditions, beginning with stage of their development.

Ecologization of investment projects represents installation of the balanced relationships between natural processes and investment activity during of development and realization of the investment project because of regularities and laws of development of ecology-economical systems.

The modern practice of realization of a various kind of the projects has recognized, that is considerably more expedient to supplement planning and development of the projects by the analysis of effect on an environment, than to ignore this moment and to pay for ecological errors hereafter. Large part of the actual projects are potential sources of contamination, as a rule, negatively influencing on an environment. Therefore careful preliminary planning of the projects can help to minimize and even to prevent a contamination and irreversible changes in an environment. Therefore special attention is necessary to give to correlations between selection of technological process or it's development and potential capability of minimization of scraps or their repeated use with the purpose of decreasing of their direct influence on an environment.

At an evaluation of influence of the project on an environment (atmosphere, the water and ground resources, flora and fauna etc.), first of all it is necessary to take into account the influence to health of the people and safety of working places, and also on social and cultural values of company.

The successful development of the investment projects provides an availability of reliance that the potential negative influence to an environment will be determined and to be evaluated in such a manner that it can be avoided or reduce by entering respective alterations for stages of designing.

The quantitative measurement of influence of the project on an environment is offered to be based on an evaluation of ecology-economical damage reflecting consequence of ecological changes accompanying the project. Thus the special attention is necessary to giving to definition of size of damage on natural resources used at realization of the project (especially not renewed or renewed during long period).

INTERNET BANKING

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Internet banking is one of today's hottest topics among bankers, and it's being driven by growing consumer demand, peer pressure and pressure to improve profits. Globalisation influenced this sphere too. People travel all over the world, move from one place to another and they want to be in touch with their bank every minute they desire.

Internet banking service is defined as banking service that allows customers to access and perform financial transactions on their bank accounts from their computers with internet connection to banks web sites using web browser software, such as Netscape navigator or Microsoft Internet Explore.

What is the History of Online Banking?

In 1990 the Wells Fargo Bank, based in California USA, introduced the world's first online banking service. It was not until 1997 that a similar service was launched in the UK by the Nationwide Building Society. Since the introduction of the first services many banks have started their electronic banking services with access available via your PC, Mobile phone or an interactive TV.

Since 1995, internet has become less expensive and available for customers to access information, exchange products and services world wide from their personal computers and modems at home and/or work. The increasing population of internet customers and demand for payments via the internet has an impact on banking services provided by many banks and force them to extend their banking services to customers on the internet. Many new internet – based banking serviced have been initiated and lunched into the market and attract both old and new customers to

continue their services with the banks. For examples, e-banking centers, e-ATMs, E-phone banking, e-cash cards and e-saving accounts in UAE banks have been developed and provided to customers with easy to use interface and faster service than the traditional over the counter services.

With Internet Bank you can:

- Internet Banking gives you access to your accounts and loans online, making it fast and easy to do your banking when it's convenient for you.
- Check account balances and transactions.
- Pay bills online
- Transfer your funds between accounts.
- View and print your account transactions
- Export your information to a financial management application
- Make payments to any business you want - utilities, telephone, or even your childcare provider
- Transfer money between your checking and savings accounts
- Review account information, including balances
- Get an up-to-date look at your checking or savings activity

The number of banking Web sites doubled more than during 2002- 2003. A recent study concluded that institutions with Internet banking outperformed non-Internet banks in terms of profitability. Greater reliance on Internet banking may allow banks to reduce expenditures on “bricks and mortar,” thereby generating lower expenses.

The banking industry are developing together with developing of the technology. Only a few banks in Ukraine provide full internet banking services/ They are generally large banks.

The possible reasons for such slow “crawling in” of our banks into Internet are:

- Absence of correspondent legislation, regulating relations between client and bank. However, the ice moving here, as well – April 5, 2001 the Law of Ukraine “Of payment systems and money transfers in Ukraine” was born. Just recently legislation concerning electronic signature - for legal significance of electronic payment documents was adopted.
- Client’s fear and “unpreparedness” to conducting operation, which in first turn, associated with the possibility of fraudulent activities, and with partial or total loss of its personal earnings. Considering the situation in the banking service of Ukraine and aggravating of the situation by the national Mass Media the fear of being fooled seems logical. Banks top management thinking stereotypes, passiveness and unwillingness to implement new technologies cause narrowing down the e-banking basis, and eventually, low rate of e-banking usage. \
- Becoming everyday fact poor quality of communication, low capacity lines, outdated equipment, and analog ATS.

Ukraine needs to work on the providing this new service. Internet banking is quick, easy and convenient and give you more control over your day-to-day

finances. It's unsurprising then that it's getting more and more popular all over the world.

BARNYARD MANURE UTILIZATION RESOURCES

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The imperfection of the use of big stock-raising complexes' manure on the whole territory of Belarus creates the threat of the ecological catastrophe. To times diluted, raw and unfit for fertilization manure, containing seed of the weeds is applied to the fields. Thus the diluted manure becomes not a fertilizer but ecological dangerous factor created by man.

Actually existing blow down-system of the manure removing while keeping cattle on the slotted floors, has a main disadvantage-settling and fractions separation of the manure in collecting canals. After the gates having been opened a hard part of the manure stays on the canals bottom which is removed by the sheet of water given by machines of the MGT or RGT type. It is convenient and economically for solving and economically profitable to use a homogenizer. The homogenizer presents a mixing tool which is driven by electric engine (5,5 kVt).

Using given technologies will allow to reduce economic expenses that will occur in the process of improvement of manure removal system and while building storages up to six times. It will also give the possibility to reduce the negative influence of manure flows due to the reduction of water expenditure wasted on removal of agricultural wastes.

THE PROBLEMS OF THE ENVIRONMENTAL INFORMATION IN UKRAINE

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Every citizen in democratic society has some essential environmental, political and social rights. The state itself must guarantee the implementation of these rights through developing procedures, setting institutional framework and providing control. One of the most important rights is the right on access to environmental

information. No doubt, that accessible information concerning environment, is one of the most valuable and significant in democracy.

Process of democratization of the society needs the transparency of decision-making and public participation in it.

Very often public notice the defects of the projects, offers the alternative variants of its implementation that give the opportunity to avoid the harm of the project and to soften the negative influence on the environment.

The Constitution (Article 50) and the Law on Environmental protection (Article 9) also declare citizen's right on access to environmental information. Thus, we can see that Ukrainian legislative base is substantial and gives legal to public in accessing environmental information, participation in decision-making on environmental problems, access to justice and opportunities to sue authorities if this information was not given (the latest is set by Article 47 of the Law on Information). Ukrainian parliament has accepted laws that deal with environmental information and has ratified The Aarhus Convention (7.06.1999). Public was pleased with the acceptance of the Convention and coming into implementation of it. One of the next steps is to realize it in practice. The process of the working out negotiations, signing and ratification of the Aarhus Convention was an example of drawing of public into the admission of vitally important political decision on the highest international level.

For public the environmental information is important because every person can identify and evaluate the risk possible for his/her health and environment by determination of the sources and the amounts of the potentially dangerous emissions, their transitions and other processes. People will also be able to choose the work taking into account its danger.

Journals and papers being the most important sources of Mass Media very often turn their attention to the problems of environmental information. We can easily find many projects that are proposed by public environmental organizations that are to raise public's awareness. People should know about their ability to participate in decision-making, access to justice and opportunities to sue authorities.

OZONE HOLES

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In May 1985, a team of British scientists stunned the world with an article in Nature magazine that reported a remarkable 40-percent loss of stratospheric ozone over Antarctica between September and October, 1984. Despite extensive research on the subject, no such precipitous decline had been predicted by the atmospheric models the scientists, relied on. The ozone losses were so unexpected that the

investigators at first suspected instrument error and delayed the release of the data. But subsequent satellite readings confirmed the presence of this massive ozone "hole"—which covered an area the size of the continental United States. The findings revealed that during the Antarctic spring, ozone levels were becoming low enough to present serious risk of cancer, cataracts, and other health problems in New Zealand and other southern countries.

Suddenly the plodding negotiations turned into an avalanche of key decisions. Just over two years after the discovery of the ozone hole, on September 16, 1987, negotiators meeting in Montreal finalized a landmark in international environmental diplomacy: the Montreal Protocol on Substances That Deplete the Ozone Layer. This treaty mandated far-reaching restrictions in the use of CFCs as well as halons, another group of ozone-damaging chemicals.

Ozone depletion is a quintessentially global problem: CFCs released mainly in northern industrial countries are destroying a protective layer of the atmosphere nearly everywhere—and doing so most dramatically in the remotest and supposedly unpolluted "upper" and "lower" corners of the world. But ozone depletion is global for another reason: the technologies that cause it are a twentieth-century invention that spread rapidly around the world as a result of the acceleration of global trade and investment that marked the final decades of the century. The response to ozone depletion has also been global, with diplomats around the world—advised by scientists, and lobbied by businesses and environmental organizations from dozens of countries—breaking new ground in international law and diplomacy in order to turn the problem around.

The successful conclusion of the ozone treaty negotiations in Montreal was widely hailed at the time as a historic event. The protocol was the most ambitious attempt ever to combat environmental degradation on an international scale. Governments from poor countries as well as rich, from the East as well as the West, were involved in the talks. The protocol they agreed on would have extensive effects on the multibillion-dollar global industry that produced the offending chemicals, as well as on the numerous businesses that manufactured products dependent on them, such as the rapidly growing computer chip industry. Billions of consumers also faced changes in products they had grown accustomed to, such as foam coffee cups and car air conditioners. The accord was signed on the spot by 24 nations and the European Community, and has since been ratified by more than 170 countries.

Despite the encouraging decline in CFC production, the world is currently suffering through the period in which the ozone layer will be most severely damaged. This is due to the long time lag between when CFCs and other ozone-depleting compounds are released and when they reach the stratosphere. And once there, CFCs can persist for centuries. The largest "ozone holes" on record have developed above the Antarctic over the last few years. Ozone losses over mid to high latitudes in both the northern and Southern hemispheres have also increased rapidly, leading to higher levels of UV radiation over populated and agriculturally productive corners of Earth, such as Canada, Chile, and Russia.

The increased levels of UV radiation reaching Earth are thought to be having the expected range of adverse effects on human and ecological health," including impaired immune systems, elevated skin, cancer rates, and disruption of aquatic ecosystems. Current estimates suggest that if all countries comply with the Montreal Protocol, the ozone shield will gradually begin to heal within the next few years, but a full recovery to pre-1980 levels is not expected until about 2050.

THE ROLE OF FOREIGN ECONOMIC ACTIVITY IN REGIONAL SUSTAINABLE DEVELOPMENT

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1. The system of economic relations has gone to impasse since development has reached such a level of anthropogenous loading on a nature that there is a threat of global ecological accident. Therefore there is a necessity to develop economic and public relations in an essentially new direction - in a direction of the sustainable development (the steady balanced ecological-economic development). First of all it is necessary to provide such a development at the local level. The purpose of a regional policy at the present stage should become a generality of state and regional competitiveness with reduction of spatial disproportions in development potential.

2. Foreign economic activity influences greatly on the local sustainable development. Thus the system "state foreign trade policy – local foreign economic activity" is considered.

Among the factors of foreign economic activity which influence local sustainability are:

- regional policy;
- development of inter-regional cooperation;
- foreign trade – local economy;
- efficiency of commodity structure; qualitative change of the produced goods;
- qualitative improvement of reproduction process;
- the mechanism of financial and economic tools to support local export activity;
- export strategy;
- integration processes.

3. Sumy region has significant experience in inter-regional and frontier cooperation. This allows to form the certain regional policy for local steady

economic development and to observe requirements of the balanced ecological-economic development. Thus, programs in sphere of ecology are developed together with regions of Russia (for example, clearing of the rivers Psel, Seim, prevention of a soil erosion, supervision over emissions of polluting substances in atmospheric air by European technique COORINAIR, etc.).

4. The commodity structure of the enterprises' foreign trade relations and the organizations in Sumy region (Ukraine) is determined by mechanical engineering production (51,85 %), food production (4,62 %) and the chemical industry (13,28 %). Therefore within last five years export of the region has the steady tendency to growth: about 164,1 million \$ in 1999 up to 351,9 million \$ in 2003. Competitive production of mechanical engineering provides more than 50 % of Sumy region export (SMNPO "Frunze", DP "Aviakon" Konotop, Konotop factory "Motordetal Praveks").

"The Program to revive the enterprises' work in Sumy region for a period of 2000-2004" is developed. It promotes introduction of energy-saving technologies, re-structurings of the enterprises in Sumy region, and also to escalating of competitive, hi-tech production.

Strategic direction in escalating export volumes is expansion of the nomenclature and improvement of produced food stuffs' quality. The enterprises of a processing industry have considerably expanded the markets of competitive production deliveries (Romny Milk factory, Belopolye Cheese factory).

5. Expansion of the output nomenclature, improvement of its quality and making it conform to the world standards have enabled enterprises of Sumy region to expand foreign markets, also to determine the niche in world trade, and to develop export strategy on the nearest future.

6. Obligations of Ukraine according to the Agreement on partnership and cooperation with EU provide the introduction into World Trading Organization (WTO). At a present stage a work is carried out to make some changes in the economy of Sumy region because of the joining Ukraine to WTO. Branches which will undertake the basic cargo of foreign trade are determined. And also branches which will suffer most of all from the process of connection or will not sustain a competition at all are defined.

7. Efficiency of a regional policy in the way to steady balanced ecological-economic development will depend on participation in its realization of all interested groups: the enterprises, public organizations, authorities, scientists, etc.

TECHNOLOGIES OF AN INFORMATION SOCIETY AND SUSTAINABLE DEVELOPMENT

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Introduction

Two main tendencies which render huge influence on our life in 21 century have arisen in the last decades of the 20th century. Among them are: occurrence of new *technologies of Information Society* (TIO) and growing comprehension of necessity of search of ways of *Sustainable development*. While TIO (Internet, mobile telephony etc.) influence our life and its style more and more, loading on an environment also amplifies. On the other hand, TIO give numerous opportunities for decrease of the specified loading. Thus, *the problem* is to understand in what way new technologies can be applied better not only for protecting environment but also for development of social sphere and economy. For this purpose it is necessary to study complex influence of TIO on *ecological, social and economic* stability.

TIO and social stability

TIO give a potential opportunity of creating a global network society where all members will have equal rights. Those people which for any reasons are usually restrained, for example, through illness or old age, can receive new ample opportunities for employment, education and quality of life. Everything, that is required for participation in such processes is to have the computer, the necessary software connection to a network. But frequently the problem consists exactly in this.

TIO and economic stability

TIO have created the world market, and all over the world on their basis commercial operations are carried out. However they also have brought great contribution to the growth of financial gambles. As a result there is decrease of a tax standards' level. The small countries become helpless victims of such gambles. TIO do not render guaranteed positive influence on sustainable development in economic sense. For prevention of a tax dumping and decrease of gamble volume it is required to create new international frame conditions or to adapt already existing institutes, such as GATT/WTO.

TIO and environmental stability

Having addressed to classical sphere of stability (i.e. ecology), we may note, that TIO really show huge potential for *dematerialization*. But constant growth of the general consumption of the goods and services "eats" any economy of resources. Such threat to the economy of natural materials and energy is called *as an effect of roll*. For example, consumption of a paper is also increased with increase of amount of personal computers. The average world parameter today is at a level of 50 kg per person. Thus, TIO not so necessarily result in "steadier" charge of paper resources. In future the situation can be even worse.

Thus, we do not have obvious answer to a question, whether technologies of the Information Society promote ecological stability. Their influence will depend on how we shall use them, that, in turn, is closely connected to creation of the frame conditions determining our behaviour.

MODEL OF “CLEAN MANUFACTURE” AS A COMPONENT OF THE GUARANTEE OF SUSTAINABLE DEVELOPMENT THE SEA REGION

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During the previous centuries the quantity of money served as a measure of all values in the industrial world and of the trying to achieve maximum profits companies did not take into consideration the environment. As a result we have an increasing member of ecological disasters and the threat of global ecological disaster.

For reducing negative consequences of industrial human's activity, it is necessary: first of all, to include the quality of life in to a modern scale of values, and then take steps to prevent and to predict the technogenic influences on an environment.

Signing in 1992 in Rio de Janeiro the international «the Agenda for XXI century» has brought into life modern concept of Sustainable Development the main aim of which is the coordination of the economic, ecological and social purposes and interests of the present and future generations.

The Ukraine is the sea state, a crossroads of the international transport ways. Therefore the port sector being an important part in transport and industrial complex is responsible for approximately 80 % of international trade. As Ukraine increases the participation to the European economical process, it should follow and accept international standards (such as ISO14000).

The turnover of cargoes in ports of Ukraine, makes some millions tons a year. Basically there are bulk cargoes, : chemicals (5,87mln.t), building materials (3,75mln.t), coal (3,2mln.t); and oil products (13,17mln.t).

The most of these cargoes are known to be ecologically dangerous. In this connection, introduction of the model of «clean manufacture» in the Ukrainian ports and its conformity to ISO 14000 should become an important component of the guarantee of Sustainable Development the sea region.

CONDITIONS FOR THE IMPLEMENTATION OF ECO-AUDITING OF UKRAINIAN ENTERPRISES

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Starting from the beginning of the 20th century, the attention in the world began to focus on different methods of nature protection. Today, enterprises are increasingly interested in implementing ecological practices and demonstrating their ecological awareness because consumers are asking for products and manufacturing processes that do not harm their health or environment. EU enterprises voluntarily apply environmental management systems and eco-auditing to prove effectiveness of environmental soundness of their activities.

However, these problems are very urgent in Ukraine. There currently is no effective environmental auditing system in place in Ukraine. Certification, in effect, began at the end of 1990s. Ukrainian enterprises that are trying to compete on the world market with their production can't maintain competitiveness with foreign enterprises that have certification documenting their environmental protection practices.

The application of the principles of environmental auditing systems has many obstacles, such as legal constraints, low levels of investment and production quality, etc.

In order to take part in environmental auditing systems, enterprises must go through a series of steps on the internal company level and then incorporate an outside expert for the external evaluation.

As an example, an internal eco-audit of the public corporation "Iskra" is proposed. In order to attain this goal, a specific environmental policy (stated environmental objectives) for manufacturing. The main goals are: minimize use of water, decrease energy consumption, curtail the contamination of water with molybdenum, and reduce manufacturing wastes and their utilization in the next production process, improve the ecological-economic level of manufacturing. An environmental program which includes various amelioration measures must be in place. The achievement of these objectives will allow the enterprise to take part in an environmental auditing system and will acknowledge the company as complying with the requirements of the eco-audit.

The integration of an environmental management system and eco-auditing will allow enterprises to systematically decide environmental problems and to incorporate environmental protection activities as a normal element of their production.

ECONOMY OF HEALTH AND ECOLOGY IN THE POLISH-UKRAINIAN RELATIONS

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If the governments cannot eliminate some ecological factor of bad influence on our health, the supply of goods caring about creating artificial conditions rises. The example of this is air conditioners industry, production of water filters, as well as the fashion for apartments with all the conveniences, including the simulators of desirable nature. Physical, chemical sunscreens and sun protecting materials preventing from skin cancer are more and more popular due to the changes in the atmosphere. Thus, one can assume that the artificial nature could replace the real one. Such kinds of topics are closely correlated with the economy and human health issues, and represent background for a research in this field. The economy deals with the methods of satisfying human needs using production factors (resources) and the money. According to the "lonely planet"TM, the peak of health means beauty, strength, success, which being at the same time among the main needs of a person.

It is thought, nowadays, that the health, life expectancy and living quality depend to 80% on the lifestyle and the human behavior towards the environment. The environment, in its turn, has a strong effect on the health, which being the subject for research of economy of ecological medicine. Economic relations between two countries in this sphere may be divided into four main sections: science, tourism, business, and political relations, the outcome of which should be mutual agreements and common funds or organizations.

On the occasion of the tenth anniversary of Polish doctors in Lviv, an international scientific symposium "The medicine of last decade of 20th century" was organized on 5-8 July 2001. The use of Internet, economic and ethic issues were among the topics discussed at the meeting.

The Internet resources are rich in ecology and health protection information, especially in that one that concerns common European or global ecology policy. But still there is a lack of information about Polish-Ukrainian relations in ecology and medicine issues. The Polish environmental policy is more concentrated on cooperation with EU countries rather than the Eastern ones. There is a range of support programs in the EU, which are to help Poland improve the real condition of its environment. Thus, in April 2000 was created European Proecological Center, the main activities of which include organizing trainings and conferences, consulting and publishing relative information in the context of EU integration.

When talking about tourism it is meant the rehabilitation and treatment in different kinds of sanatoriums and healthy recreational areas, which requires an appropriate environment. Until quite recently the priority was given to a seaside recreation (sunlight, beach). Now, active, cognitive, green, healthy and medical recreation forms are more popular and prestigious. Here, I cannot but mention the role of the Ukrainian special zone "Truskavets" and "Karpaty" region, which being

the factor of Polish-Ukrainian relations not only at the consumers' level, but also in the business directly associated with health and environment issues.

In 2001 was created a consortium "Tourism potential of Western Ukraine" by Institute of tourism in Warsaw, Kiev University of tourism, economy and law, and the Lviv University. The project is based on Polish experience and intended on looking for possible ways of tourism investments. The Poland-America-Ukraine Cooperation Initiative (PAUCI) gives the money for such a research.

As any other aspect of our society, the ecology and personal health need some contribution to it, in case we want to have an advantage from it in the future. Partly, we dispose of these aspects in two possible ways – by means of money, or without it. In the time of economic globalization especially important becomes the economic behavior, that is the first way. The second way means consciousness of each part of society and the correct understanding of things.

INFLUENCE OF GLOBALIZATION ON UKRAINIAN SOCIETY

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Since Ukraine became independent, everything has changed in the country. The reason is one: it became more open to the influences of different countries and cultures. The first place among these trends belongs to the USA.

You may ask why, but the answer is obvious. Nowadays the USA is one of the most developed and powerful countries in the world. So, its foreign influence is very tangible in most countries and Ukraine is not an exception. This influence was reflected on each side of Ukrainian life.

The overloading of various innovations in Ukrainian cultural life leads to humiliations of our traditions and habits, to forgetting them.

We can see the manifestation of Americanization nearly every day and we got used to this. We try to adapt our habits and holidays to theirs (like it happens at our Orthodox Christmas and New Year's Eve), to make them look like each other. We accept some of their holidays (like Halloween, St. Valentine's Day), but forget about some of ours. We try to celebrate our holidays as Americans do; thus, we decorate our apartments and houses as they do. We dress up our children and ourselves (on birthdays, for fancy-dress balls) in their costumes (policeman, cowboy, etc.), but not in our national costumes. But there are many positive sides of globalization. Nowadays Ukraine has diplomatic relations with the USA. Our government has relations in politics, economics, culture, sports, and other sides of life. True friendship is built by the people of our two countries.

Tourism is very popular now. You can see a lot of Ukrainian tourists in the USA and a lot of American tourists visit our country. We also exchange students and

teachers. We have close relations with ethnic Ukrainians who live in the US. In the Soviet times it was forbidden to keep in touch with Ukrainian Diaspora.

Thus, influence of globalization on our society in general is good, but some people are fond of the West too much.

ENVIRONMENTAL SECURITY AND RISK

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Using major natural resources as an indicator, Ukraine's national economy is characterized by large-scale, unsustainable resource use with serious negative environmental consequences. Ukraine has the highest rate of forest, surface fresh water and land use (for agricultural purposes) in Europe. Unfortunately, since Independence in 1990 resources are being used less efficiently in the economy (i.e., for each unit of GDP more resources are being dedicated). Indeed, one of the paradoxes of Ukraine's transition is that ambient levels of pollution have for the most part not declined despite significant drops in production.

Since Ukraine's independence lawmakers have created a new legislative framework for environmental issues. The Verkhovna Rada adopted the codes on land (1992), forests (1994), water (1995) and mineral resources (1994), laws on the environment (1991), on the nature sanctuary fund (1992), on air quality protection (1992), on animals (1993), examination of ecological experts (1995), on the use of nuclear energy and radiation safety, on handling radioactive waste (1995), on wastes (1998), on plants (1998) and others. Ukraine takes an active part in the world nuclear security system. It has signed and acceded to all the main UN International Agreements on guaranteeing non-proliferation and non-possession of nuclear weapons and has not violated their provisions.

Guaranteeing environmental safety requires a consistent and progressive national policy. For Ukrainian politicians it is important to draw from the varied experiences of such states as Russia, the USA, Germany and France. Our government must protect us from different natural and man-made threats.

**ENVIRONMENTAL SECURITY = PERMISSIBLE RISK + LACK OF DAMAGE;
ENVIRONMENTAL DANGER = INADMISSIBLE RISK + DAMAGE.**

Risk is a probability of coming undesirable events and consequences. Carriers of probable danger are different substances of natural and man-made origin, which can cause serious danger for peoples' health and life, and for the environment. International treaties risk becoming ineffective in restraining the proliferation of nuclear arms materials and technology. International organizations and technical expertise must be focused on the fight against 'nuclear terrorism', to which Ukraine may make a significant contribution by assisting international criminal investigations and shutting down transportation routes for illegal shipments. Ukraine

is in a position to make lasting contributions to the development of nuclear technology, nuclear policy and world nuclear security.

Priorities for future legislation are the following:

- to draft and introduce a detailed regulatory frame work which facilitates the implementation of broadly-worded legislation;
- to draft and introduce new laws, specifically On Dangerous Waste, On the Control over the Trans-Border Transfer of Dangerous Waste and its Disposal, On Ecological Safety, On the National Ecological Fund, and a number of other laws; to harmonize national legislation with European laws.

GLOBALIZATION PROGRESS OR THREAT

*Larisa Lorinczi,
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On the topic of Globalization I have written my License Thesis entitled: ‘Globalization: Progress or a Threat’, as well as several course and conference papers that deal with the impact of Globalization on Higher Education, Culture, Economy, etc., I have attended numerous international conferences on issues related to this field and was part of the organizing team for the World Youth Summit on Globalization in Brussels.

My license thesis represents a research on the global aspects of Globalization, positive and negative aspects, actors involved and the impact that Globalization has on the development of democracies, on the global political, economical and social arena, on culture and nations.

Globalisation creates unprecedented new opportunities and risks. If the poorest countries can be drawn into the global economy and get increasing access to modern knowledge and technology, it could lead to a rapid reduction in global poverty – as well as bringing new trade and investment opportunities for all. But if this is not done, the poorest countries will become more marginalised, and suffering and division will grow. And we all are affected by the consequences.

The issue of Globalisation is a concern for the world leaders and there is an unprecedented consensus – across the UN system, the IMF and World Bank, most Regional Development Banks, leaders of developing countries, the G8 and the OECD – regarding the achievement of the International Development Targets.

The International Development Targets are:

- A reduction by one half in the proportion of people living in extreme poverty by 2015.
- Universal primary education in all countries by 2015.

- Demonstrated progress towards gender equality and the empowerment of women by eliminating gender disparity in primary and secondary education by 2005.
- A reduction by two-thirds in the mortality rates for infants and children under age 5 and a reduction by three-fourths in maternal mortality – all by 2015.
- Access through the primary HealthCare system to reproductive health services for all individuals of appropriate ages as soon as possible, and no later than the year 2015.

The implementation of national strategies for sustainable development in all countries by 2005, so as to ensure that current trends in the loss of environmental resources are effectively reversed at both global and national levels by 2015.

LEGISLATIVE CONTROL OF CITY BUDGET OBJECTS ENERGY CONSUMPTION MANAGEMENT PROJECT FUNCTIONING

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Without energy management system the President Decree N662/99 from June 16, 1999 “About activities directed to energy consumption reduction by budget organizations and State enterprises” won’t be fulfilled. Without reliable control system it’s impossible to implement the energy management system.

Energy consumption management starts from project energy investigations, which have to be provided by highly skilled specialists-professionals equipped with energy diagnostic equipment. During the process of previous energy investigations, we have come to the conclusion about the necessity and importance of energy management implementation on locations. Without energy management system it’s impossible to talk about the optimization of energy resources consumption and about implementation of any energy saving activities. Energy Management coordinates and increases the efficiency of the technical functions of an installation. Energy management conditionally consists of the following components: 1) trained, prepared personnel – object energy manager; 2) control of energy resources consumption system; 3) system of energy consumption analysis and implementation of energy saving activities. The main goal of energy management on preliminary stage is creation of schedule (balance) of energy consumption, optimization of energy consumption taking in account existing energy supply systems. Then, the energy management system has to be treated as a cycle that consists of the following stages: The first stage – energy consumption control with the help of control system; registration of the energy consumption line. The second stage – analysis of actual energy consumption. The third stage – preparation of activities for energy consumption reduction and expenditures for energy resources. The activities have to

be developed by the energy servicing company specialists-energy managers; business-planning of activities; search of financial sources; selection of equipment and executors. The forth stage – application of planned activities.

The main task is to provide uninterrupted energy management recurrence. Only when the energy management system is permanently functioning, the object's owners could receive desired results, which would be reflected in technical reports of energy servicing company. Otherwise, everything that have been done and will be done by energy managers would be only good desires written on paper.

Without energy management system the objects will have unjustified expenses: for unnecessary consummated energy resources; for penalty sanctions by inspected bodies. Consequences: exceed budget for object maintenance; comfort reduction; labor productivity reduction.

While investment energy efficient projects implementation, the presence of energy management gives the opportunity to conform the process of investment work and forming the object owners' and investors' profit. The beginning of energy efficiency – the detailed energy audit with the following application of energy management in full volume. Only after this, financing organization and investors will readily participate in investment energy efficient projects.

FACTORS AND POTENTIALS OF THE TRANSBORDERING COOPERATION BETWEEN UKRAINE AND POLAND

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Nowadays, in the conditions of worldwide globalisation processes and expansion of European Union (EU) on the East the question on foreign trade policy's strategy choice of the states is extremely actual. The further development of the countries and the sustainable economics creation in it depends on the fact of what choice they will make, as far as it will be right choice, as far as the effective decision will be taken. Future social, economic and cultural development of the country depends on the fact of what way of development it choose, with what country or group of the countries it decides to cooperate, as far as this cooperation will be close.

What is the most effective way, at least? What development strategy is optimal? This question is difficult enough and for the answer requires the complex analysis of economical, political, social, etc. development of the country and also consideration of all possible variants of carrying out foreign trade policy and their consequences. Also it is necessary to analyse and study an economical, political, cultural life of the country or group of the countries cooperation or association with which is planned.

Creation of the complex analysis mechanism on the basis of which process of preparation, acceptance and realization of the foreign trade decisions will be carried out is a necessary stage of countries' foreign trade strategy creation. Thus by the example of the Ukrainian situation the author suggests making a model of this scheme, which can be applicable for the various countries with the subsequent adaptation to their individual conditions.

So, now more attention is given to the regional politics of the countries, the aim of which is the development of transbordering cooperation between nearbordering districts and regions.

The relations of strategic partnership development with Poland is a priority direction of Ukrainian foreign policy. Close relations between these two states are caused by a their geopolitical situation, many long years historical, cultural and economic relations. Necessity of multilateral relations development with Poland is stipulated also by the fact that this country is a member of the NATO and soon becomes a member of European Union. Taking this fact into consideration, the deepening of the Ukrainian-Polish relations will promote achievement of the Ukrainian foreign policy strategic aim - integration into the European and Euro-Atlantic structures. The important factor having an influence on a condition of the Ukrainian-Polish relations, is the presence in Ukraine and Poland accordingly Polish (219,2 thousand of people) and Ukrainian (more than 350 thousand of people) national minorities. Also Poland is one of the basic trading partners of Ukraine. Now the basic part of the Polish import from Ukraine consists of seven commodity sections. Also Poland and Ukraine cooperate closely in sphere of a military-industrial complex, in humanitarian, cultural, environmental and other spheres.

THE PERSPECTIVES AND THE OPPORTUNITIES OF LEASING ECOLOGIZATION

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Sumy region, along with the entire Ukrainian state, continues its progress toward transition to a market economy. The process demands cardinal changes concerning the standards of property rights, the principles and methods of overall management, the implementation of more effective methods of controlling economic processes, methods of increasing the effectiveness of producers, their profitability and competitiveness. During the last years more and more perspective path becomes leasing as effective method of promotion state development. Future prospects of this investment form for the economy of our country are very attractive. In contrast to traditional of investment payment and production realization in this case a leaser has a possibility to use expensive machinery of investment goods owner without spending his own circulating assets. Leasing gives a possibility to leaseholder to pay leasing fees after earning of profit made from exploitation of leasehold and they are usually untaxed. At the same time they can be in the form of liquid assets. And also the risk to lose lessor in the case of client insolvency is reduced. Machinery bought on terms of financial leasing is not set to leaseholder balance, it does not increase the assets of leaseholder and also it is not includes into account payable. It is profitable for agricultural manufactures at first. The advantages of buying machinery of financial leasing terms is comparing with other structures: less sum of payment; less necessity in credit resources; less sum of deposit that is necessary for receiving of credit; receiving of the biggest profits for 5 years of machinery exploitation; less total expenses for machinery exploitation; less total expenses for machinery purchase; bigger possibility of own circulating assets usage. Agriculture is one of the most complicated spheres of economic activity and transition to market-driven model has required a relatively long period of time. According to economy and ecological crisis in Ukrainian agriculture orientation to using of power- and ecologically-keeping technologies (such as biogas production from industrial and agricultural wastes, universal power units and modular-block machine structures and flexible mechanization systems development in order to enhance the productivity of the new generation agricultural machinery efficiency presented of resource-power values) has become the paramount task of leasing relations development.

Hazardous materials handling and disposal is difficult and expensive. This has made pollution prevention an attractive option. But for some business up-front equipment costs make pollution prevention a challenge. Leasing equipment can be an answer, especially when you discover that implementing waste reduction saves money. To sum up by recycling, using of safes substitutes, closed loop systems and more efficient equipment, can: reduce waste, increase worker health and safety; increase overall; save money. All these factors taken into account with unique potential agriculture opportunities of Sumy region (excellent soil qualities) should

provide to be able to produce high volumes of ecologically-clean produce and commodities meeting all domestic dietary needs, to enjoy profitability and an excellent return on investment.

ETHIC OF ECONOMY

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The term “ethic” takes its origin from Greece culture, but plays decisive significance in society processes and evolves in some new spheres. Ethic is an incarnation of society principles in economy's branches. Economy is a forming element of society life and consciousness, decisive factor of production and reproduction spheres. Today economists are not only motivated in economic factors of economy's existence, but also in out of economic, such as psychological, cultural, religious etc. Taking these factors into accountment can influence on economy's development positively, whilst decisions, which are accepted against existing moral principles, lead to crises in production relations.

Economy, policy and spirituality are the interactive categories, and this whole system's duration is defined by a list of ethic values, which are formed and changed during centuries. Thus, if you want to analyze a level of economic growth of a country, you have to consider historical aspects of its ethic principles' forming.

Classics of economy science (A. Smith, D. Ricardo) estimated all appearances of society life under the corner of economic rationality and material productivity. However the main economic goal can't be established without a person. Different to nature economy is a cultural historical phenomenon, which is directly related to the human existence.

From the first steps of economic science study everybody comes up with necessity of three independent questions: “What should one produce and in what quantity? How should production be organized? Whom should products be produced for?” On one hand these three questions are economic, but it is important to take its ethic component into accountment today.

One can come to a conclusion, that taking ethic component into accountment is vitally necessary in the modern economy. Complex realization of promotion directions can give the following ethic-economic advantages for the humanity:

- usage of technologies, which provide the basic human needs all over the world;
- observation of obligations to the next generations in space and time;
- respectation to all life's forms as a next stage of ethic evolution;
- implementation of advisable technologies, which take social, ecological and national peculiarities into accountment;

- realization of human's rights in maintained work, which can provide good welfare and an opportunity of self-realization;
- participation of each worker in making technical decisions as a mechanism of democracy and discouragement of technocratic power.

CORPORATIONS IN UKRAINE: A STEP OF GLOBALIZATION

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Modern competition hardening demonstrate that a separate enterprises has no enough competitive strength to fight with the bigger corporations. United companies are faster in making new product and mastering new technologies, their products have high quality and low prices.

Two basic factors which prove that it is worth to unit into corporations are:

- 1) lowering of transaction costs about an output unit;
- 2) positive result of production scale which leads to cost price decreasing while the volume of production is increasing.

Corporations' advantage can be clearly observed in the sphere of information: total level and quality of information software are essentially higher than one in a separate enterprise. The trends of technical advance are foreseen more exactly, researches about new product creation are provided on-line and in time, works referred to higher the quality of output are realized in the most complete way.

Corporate advantages in the information sphere becomes so important as lately technology has been the main driver of globalisation. The most pressing moral, political and economic issue of our time – poverty – can be solved in part. The advances achieved in computing and telecommunications in the West offer enormous scope for raising living standarts in the third world. New technologies promise not just big improvements in local efficiency, but also the further and potentially bigger gains which are not only the profits of corporations but productive employment and higher incomes for the world's poor. The gains flow from an infinitely denser network of connections, electronic and otherwise, with the developed countries.

In Ukraine, however, the influence of the factors that promote no progress and effective proceeding of corporatemaking process such as insufficient development of the market infrastructure, low level of the stock market development, imperfections in legislative base, low management, limited investment resources.

CONCERNING THE EFFECTIVENESS OF REGIONAL ECOLOGICAL POLICY

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In the recent years a considerable worsening of the condition of the environment started influencing the living conditions of the population, limiting the possibilities of social and economic development of huge industrial areas and cities of Ukraine. In this situation of transformation of ecological system there occurs the need to develop new state ecological policy on different levels of control: national, regional and local.

But the experience proves that the regional level of control over environmental protection turns out to be the most active one. Basically on this level the ecological problems of society are formed and here there appears the requirements for ecologization of industry and rational usage of the natural resources.

Therefore, the control over environment protection should be realized by the local administration grounding on the principles conditioned by the state regional ecological policy.

The organization of cooperation between the local administration and nature users in the region based on the real price of all the resources should become the major link in the realization of the ecological policy. Within this more attention should be paid to the formation of the ecological infrastructure of every region. This infrastructure should determine the interdependent unity of the elements, which regulate the dynamic balance between the environment, rational usage, renewal of the natural resources and activities of population in region.

Taking into consideration the real ecological situation in region, we suggest the following ways of improving it:

- to use more effectively the economic instruments of improving the condition and protection of environment on all hierarchical levels;
- to reform the institutional basis for the environmental protection and control over thep
natural resources;
- to introduce constantly the policy of waste prevention and revitalization of environment in the whole state as well as in separate regions;
- to develop and realize national, regional, local and sector plans of the environmental protection.

ECOLOGICAL ECONOMICS AS THE ECONOMICS OF SUSTAINABLE DEVELOPMENT

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The physical linkage between economics and the environment is an important aspect of sustainable development. Current and future needs can only be fulfilled within relatively hard (bio)physical constraints. However, the contemporary dominant mainstream economic theory gives limited attention to the dependency of economic activity on physical factors. The rate at which natural capital can provide resources and energy to meet human needs depends, apart from human knowledge and state of technology, on physical constraints and therefore requires a physical analysis. In this context it is a logical first step to carry out a physical analysis before attempting to satisfy economic wants.

Resource economics and environmental economics traditional taught at the universities are both subfields of neoclassical economics. They do not consider scale an issue, have no concept of resource throughput, and are focused on efficiency of allocation. Rather they deal efficiency of allocation of labor and capital devoted to extractive industries, concepts of internalizing externalities by Pigouvian taxes or Coasian property rights, which are certainly useful and policy relevant, but their aim is allocative efficiency via right prices, not sustainable scale.

Ecological economics connects resource and environmental economics by connecting depletion with pollution by the concept of throughput. It also pays much more attention to impacts on, and feedbacks from, the rest of the ecosystem induced by economic activities that cause depletion, pollution and entropic degradation, chief among which is the growing scale of the human economy.

In a broader sense, ecological economics is mainly about three issues: allocation of resources, distribution of income, and scale of the economy relative to the ecosystem – especially the third. A good allocation of resources is efficient (Pareto optimal); a good distribution of income or wealth is just (a limited range of acceptable inequality); a good scale does not generate “bads” faster than goods, and is also ecologically sustainable (it could last a long time, although nothing is forever). The third issue of “scale”, by which is meant the physical size of the economy relative to the containing ecosystem, is not recognized in standard economics, and has therefore become the differentiating focus of ecological economics.

Ecological economists’ pre-analytic vision of the economy as an open subsystem of a larger ecosystem that is finite, non growing, and materially closed (though open with respect to solar energy), immediately suggests several analytical questions regarding scale:

How large is the economic subsystem relative to the earth ecosystem?

How large could it be, i.e., what is its maximum scale?

And most importantly, How large should the subsystem be relative to the ecosystem?

Is there an optimal scale (less than the biophysical maximum) beyond which physical margin than it is worth, in terms of human welfare?

According to Costanza , ecological economics is a transdisciplinary field addressing the relationship between ecological and economic systems in the broadest sense.

Ecological economics does not constitute a new single unified theory for or of sustainable development. The emergence of this field of activity signals, rather, the need for economic, social and natural science analyses to be brought together in new perspectives, responding to the concerns expressed worldwide for ecological, social, economic and political dimensions of sustainability. It represents a new practice of economics responding to a specific problem domain which may legitimately be addressed in a variety of ways.

PROSPECTS OF JOINT IMPLEMENTATION PROJECTS IN UKRAINE

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Article 6 of the Kyoto Protocol (Joint Implementation) provides for the creation of transferable GHG emission reductions through investment in projects aimed at climate change mitigation. Such projects should contain a justified reference to additionality of GHG emissions reduction, because Article 6 envisages "reduction in emissions by sources, that is additional to any that would otherwise occur". Thus the determination of the achieved emissions reduction requires the specification of a baseline to which the reduction would be additional. It means that for each potential JI project a bottom-up baseline scenario has to be developed in order to estimate what would most probably have occurred without the project.

Currently there are no strict rules for the definition of the project baseline. Widely formulated Article 6 is open for interpretation and decisions by project developers as to the methods for setting baselines. On the other hand, project-specific baselines require a lot of detailed information and are therefore expensive. It should be mentioned that the uncertainty surrounding project baselines, novelty and complexity of the JI mechanism and possibly high transaction costs do not create a strong incentive for project owners and developers to determine possible baselines. It is one of the reasons why the project baseline description is usually based on the current situation that would persist in the absence of the JI project. The other reason is insufficient experience of enterprises' staff in developing and preparing project documentation.

In order to develop and implement JI projects successfully a clearly defined institutional framework is needed. There is no official governmental entity in Ukraine for qualification and approval of projects meeting the JI requirements as yet. There is not a specialized national organization for promoting and preparing projects targeted at GHG emission reductions. The lack of institutional capacity hampers the identification and development of successful project proposals and information exchange among possibly interested entities and building up awareness of JI. Currently, projects are not being developed in Ukraine specifically for JI mechanism. This situation has developed not only because often enterprise's low awareness of this new possibility for attracting investments but also because there are unclear criteria for project identification, and eligibility for JI. Also such projects must meet the additionality principle (i.e. must be impracticable without JI financial contribution). Low cost of ERU's will be the factor that attracts potential investors. For example, Prototype Carbon Fund intends to identify projects where the cost of emissions reduction is of the order of \$1-3 per 1 ton of CO₂. It is evident that most projects with comparable estimated costs of emission reductions would be very cost-effective and economically attractive. As a result, the principle of additionality for such projects may be hardly applicable and problematic.

Estimation of project eligibility for the JI criteria can be based on the principle of additionality or the barrier approach. The current absence of ERU transfers as an established and common practice is deemed to be the main obstacle for JI activity as a whole. There are also a number of other internal barriers and risks in Ukraine that make even highly profitable projects potentially additional. The main barrier is the limited access to investment capital and its high cost.

Taking into account all the aforementioned aspects, it should be noted that the current state of affairs may be provisionally considered as a baseline scenario for the projects. The final baseline may be defined at the outset of the project, based on mutual agreement of the parties involved. The following study of the project by potential investors may require a more detailed analysis of the project baseline and substantiation of additionality approved by the government.

A secondary effect of the JI mechanism will be increased awareness of companies about JI advantages, and resulting need for capacity building and institutional strengthening related to project identification, description and economic and environmental analysis.

From the year 2000 the economy of Ukraine has started overcoming a crisis, the highest GDP growth rates in the world being observed. This growth occurs alongside with improvement of all main macroeconomic indicators, is accompanied with reduction in the level of inflation, continuous stabilization of the national currency and reduction in external debts of the country. Positive trends in the economy have favorable impacts on the investment climate in the country. The evidence of this is the fact that the rates of growth of capital investments at the expense of all funding sources take the lead over rates of growth of the production volume. Furthermore, there have been adopted lately several important legislative

acts, including civil and land codes, which will promote further stirring up of investment activity.

INTERNATIONAL STANDARDS ISO 14000 AS A CONSISTENT, INTERNATIONALLY RECOGNIZED MODEL FOR ENVIRONMENTAL MANAGEMENT

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Environmental Management is a tool for an organization to keep aware of the interactions that its products and activities have with the environment and to achieve and continuously improve the desired level of environmental performance.

ISO 14000 is the package that ties the mandatory requirements into a management system which is made up of objectives and targets focusing on meeting and exceeding the mandatory requirements with a focus on prevention and continuous improvements. An organization may elect to comply with ISO 14001 as a model for an Environmental Management System.

Benefits of implementing an ISO 14001 Environmental Management System may include:

- enhanced compliance to legislation

- facilitated financial and real estate transactions, where environmental performance is a factor

- reduced costs associated with consumer audits

- ability to bid for contracts (protection or increase of market share)

- market forces (a real or perceived 'greening' of the marketplace)

- economic return from increased efficiency of resource use

- increased ability to adapt to changing circumstances.

Some organizations may choose to implement an ISO 14001 program but not seek registration. Senior management needs to provide a focus for the Environmental Management System by defining the organization's environmental policy. This policy must include, among other things, a commitment to continuous improvement, prevention of pollution and compliance with legislation and regulations. Next, an initial review the organization's existing environmental program is needed. This review includes the consideration of all applicable environmental regulations, existing processes, documentation, work practices and effects of current operations. Once the initial review is completed, a strategic or implementation plan can be developed. Both in the initial review and on an ongoing basis, the organization's activities, products and services require evaluation to determine their interaction with the environment. Environmental issues such as noise, emissions, environmental impact, waste reduction and energy use must be

identified. The identified impacts are then used as a basis for setting environmental objectives within the organization. Objectives of the organization need to be determined and specific targets set. After that the organization needs to implement the strategic plan.

Once the Environmental Management System is implemented, its progress needs to be continually measured and monitored. Routine auditing and review are the keys to continuous improvement. Where issue specific audits address regulatory compliance, site assessment or emissions, the Environmental Management System audits address effectiveness of the management system.

Periodic Environmental Management System audits are needed to determine if the Environmental Management System conforms to the requirements of ISO 14001, and that the program is implemented and is continuously improving.

The Environmental Management System must be integrated with the organization's other activities. If it is seen as a separate program, it will be difficult or impossible to maintain. An effective Environmental Management System is the consistent and systematic control of procedures or operations, products or services which can have a significant impact on the environment. It is obviously concerned with environmental performance, but what it is about is effective corporate management.

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,
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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,
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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 materials and, perhaps, even capital can be viewed as limited resources, knowledge is actually unlimited.

As opposed to blast furnace or factory line, knowledge can be used simultaneously by unlimited number of market participants. And the latter can employ knowledge in order to create even more knowledge. This is vital for production survival, because innovation nature of information economy dictates the principle: “You are the one to make your product to become outdated”. Today it is one of Microsoft slogans. The product will become outdated anyhow; just the main role in this process will be played by competitors. This is true and this formula works also for the most powerful economic giants. With the technology progress, which everyday discovers new ways to serve yesterday’s markets, monopolies “once and for a long time” are replaced by competitive battlefields. Even if monopolies are created, the pace of technological transformation is threatening to make them short-lived. Dynamic competition – the essence of what Austrian economist of the first half of the 20th century Joseph Schumpeter called “creative destruction”– is the nature of the cyberspace economy.

United States experience is an evidence, that in a big market investments may be made faster and more economically. Since 1980 40% of all the American investments (not loans) were directed to Ireland. And what portion of Europe is taken up by Ireland? Much less than 40%, even less than 10%, isn’t it? (To be precise, it takes up 0.7 % assuming a general area of Europe is 10 million square kilometers. Following the same calculations, Ukraine takes up 6% (70,000 square kilometers and 603,000 square kilometers respectively).

We in Ukraine need a big market in order to fully enjoy the opportunities created by new technologies. A very big amount of investment is required. Their return directly related to the volume of the market, which will benefit from implementing innovation. Enterprises with essential financial basis are required to invest billions in innovation technologies. Ability to keep up with the initial speed is as much important as infrastructural investments, since such level of development can recoup itself only on the long-term basis. This is one of the reasons for a company's size being a key factor of survival in a quickly developing market.

So, what percentage of the world's investments can get Ukraine provided there is efficient investment policy and informatization? It is policy efficiency, properly chosen strategy (rather than filling up the budget), perfection of the entire legal base, priority of relevant industries or even the level of citizens' literacy is the guarantee for a country's economic progress.

Ukraine with its human resources and scientific potential must not lose its chance to start "international career". Increasing world's demand opens opportunities for countries with basic prerequisites to create or to develop information technology for own needs or for export at the expense of investment.

Taking in account all the above mentioned, the conclusion will be as follows: "Virtualization and Informatization" has to become a slogan for Ukrainian economy for the nearest decades.

First steps of independence were marked with significant curtailment of production of high-tech products, outflow of specialists abroad, a number of other negative phenomena. At the same time it was possible to preserve modern educational system, create a footing for new market economy, go over to economical development with increasing gross (GDP). Today the society can benefit from a so-called "tunnel effect" to make a rapid leap over several stages of development of ICT and more efficiently implement the most up-to-date technologies for the sphere of telecommunications and the sphere of informatization.

Ukraine proclaimed its European choice as a long-term strategy of social and economical development. The goal of this strategy is to turn our country into a modern, developed democratic state with strong market economy, a state where interests of all layers of population are properly represented and protected without any exception. Actions of the government of Ukraine are directed to persistent realization of tasks, which come out of this goal. To more completely use ICT there were approved in the state and are in force National programme on informatization, Complex programme on development of the communication field, State programme of computerization of village schools, State programme on creation of a Unified state automated passport system, other programmes on implementation of ICT in everyday life of the society and in the work of all branches of the state power. At the same time there is a need to introduce integrated, inter-branch and inter-disciplinary approach to more effective and fast accomplishment of tasks which are currently faced by the Ukrainian society and the Ukrainian economy.

EAST DIMENSION OF EUROPEAN UNION POLICY, ASYMMETRICAL THREATS AND ENVIRONMENTAL SECURITY IN THE REGION

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The western frontier of Ukraine became the eastern border of the European Union after the fifth enlargement on the 1st of May 2004. This fact creates the conditions for mutually beneficial cooperation or for a new confrontation along the borderline of the Commonwealth of the Independent States as a successor to the Soviet Union's (Russia Empire's) political heritage. Ukraine does not meet the requirements of modern Europe economically and socially, so at present it might turn out to be the dividing line between the wealthy and the poor, the civilized and the barbarians, the environmentally protected countries and unstable underdeveloped regions. Because of the asymmetrical threats (terrorism, internet attacks, ecocatastrophes, illegal migration etc.) the sustainable development of the region may be interrupted and it may have a negative effect on the rest of Europe and the whole world. To avoid this disadvantageous situation Ukraine should use the economical, political and social possibilities at her disposal to influence on forming the Eastern European Union policy and establishing stable understate cooperation in the region. The Eastern dimension competes with the Mediterranean and Northern in the EU policy¹. So it is not an easy task.

Obtaining these goals is possible if acting upon the following guidelines:

the strategic significance of the oil-pipe line Odesa-Brody-Polotsk-Gdansk for diversification of the energy supply for Europe and importance of the rail-way transport corridor Odesa-Gdansk;

Ukrainian-Polish and Ukrainian-Polish-American cooperation in anti-terrorist actions in Iraq and relations within the pro-NATO team in the EU;

international collaboration in migration control;

good relations with the groups of the EU countries which stand for domination of the Eastern dimension over the Mediterranean and Northern, as well as for predominance of the enlargement of the European Union over its deepening.

Including the new Eastern neighbours of the EU (particularly Ukraine) into the cooperation with modern Europe is the most effective way of protection against new kinds of threats and it can be very beneficial for the environment and the people in the region.

¹ See http://europa.eu.int/comm/external_relations/search/regions.htm

YOUTH AND TECHNOLOGY

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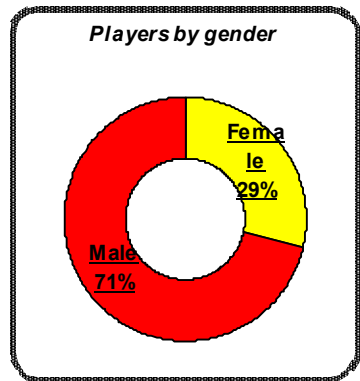
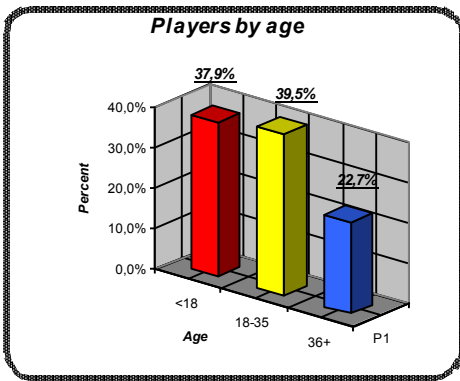
Mikle Johnston,

associate professor, Peace Corps

To tell the truth, nowadays mankind lives in a post industrial century. As we know, there are 4 commonly known factors of production, which include: land, labor, capital and entrepreneurship. Modern society needs more accurate classification of these factors, such a productive factor as information is of great importance nowadays. We need information whenever and wherever we can get it. We want to know as much as possible about problems or events that are sometimes of vital importance for us. Thus we watch news on TV, read newspapers or magazines and surf the World Wide Web looking for this information almost daily. Sometimes our senses are simply bombarded and overloaded with information that flows from every direction and get us anywhere. So the problem that disturbs modern individuals greatly is their ability to understand the point of information correctly and the ability to process it quickly and adequately.

Being an economist I understand that information as communication technologies, by means of which information could be received, is a broad sphere of economic activity. It is a rather perspective one. In the result of competition of world giant producers of high-tech communication technologies and equipment, mankind gains greatly. Among the most popular communication technologies are: telephone with help of which one can make a call or even a conference call, when several business partners for instance may discuss their problems or strategies simultaneously. There is also a possibility to fax original documents, to leave a voice mail for your friends and of course send them an SMS or even access Internet by means of a cell phone. With help of your PC you can reach the Internet, sent an instant message or find the information that you are interested in; you can even buy sea-food at a Chinese restaurant that is situated on your street. This is not just a complete list of things you can do with help of modern technologies. Such a situation may seem not real one for some parents who grown up without electricity, though it is truth.

Generally, high-tech technologies are used by the sort of people who really need them for work. What could be said if such technologies were used just for fun? Wouldn't it be just a mere vast of time and money? To tell the truth children have never been so wired. So the main source of culture nowadays is technologies rather than mores or fashion. Skills are being acquired less from books than from videogames which is the part of modern life of almost every teenager. Here you are the statistics of how much do teens play games on the PC.



Are videogames dangerous for youth or are playing games a great resource of free time? In order to answer this question children's brains should be studied to see what happens on during the hours spend engaged in videogames or rambling the Web. It is clear that modern youth develop their skills handling visual information and multitasking, which is of great importance nowadays.

Trying to measure the visual perception of children and to explain the ability of an impressible young brain to adopt various stimuli (violence in PC games for instance) Daphne Bevalier, a professor of Rochester University in New York, conducted an experiment. She put together 2 groups of students – avid gamers and non gamers - and during a certain period of time gave both series of computerized visual-perception tests. On average, the avid gamers scored 30 percent better than nonplayers. So she concluded that videogames enhance the capacity of visual attention. Gaming seems to be some sort of visual task for brain and that is why it gets processes in the right hemisphere. So gaming is training for non analytical right hemisphere while more rational left hemisphere does not participate in the process.

According to the another experiment that was conducted by Craig Anderson, psychologist of the University of Missouri-Columbia, playing violent games such as Mortal Combat cause antisocial behavior, aggressive personalities, poor academic performance and delinquency.

Nowadays when every second may cost one thousand or even millions \$, multitasking in the process of search of information and the ability to apply it is considered to be one of the most eager skills that is evaluated by most employers. Multitasking – the practice of performing several tasks simultaneously – is in demand now. So what if gaming is the perfect way to develop the very ability? It is clear that the mind does not switch its attention from one thing to the next one instantaneously; it takes about seven tenths of a second.

So we thing there is some sort of dilemma when, on the one hand, “Kids are getting better at paying attention to several things at ones. Though, on the other hand, there is a cost in that they don't go into anyone thing in as much depth”, says Patricia Greenfield, director of Children's Digital Media Centre.

Thus, it is you to decide which way is better.

ENVIRONMENTAL PROBLEMS

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Contributing and volunteering ideas is humanity as it helps others gain access both technically and academically to divergent perspectives from different geographical, cultural and religious backgrounds. Volunteering has been the catalyst that started making my dreams and goals a reality. When I contributed to International Youth Parliaments (IYP) book titled *Youth Guide To Globalization*, co-sponsored by Oxfam Community Aid Abroad, I was the first amongst all to be quoted in the forward, page 44 and the back cover. This made me able to reinvent who I was and become a better version of myself. I would like to take part in this year's conference to add up, share and to contribute my ideas to international social justice on environment. I have also realized that observation is good but to take part is better. I feel helping to blow the whistle on environmental decadence is a worthy crusade.

Environmental issues take many forms and as such character weakness with regards to human attitude is what is wrecking and cursing all the havoc. The environment is our supermarket of all our resources we need.

We should not lose sight of the fact that our wrong attitude that is depleting the Ozone layer, endangering and exterminating many wild life and their habitat and aquatic life. It is very wrong to hear that some countries continue to trade in banned elephant and whale parts thus enhancing their extinction.

The Kyoto accord on industrial pollution to the environment has also not been recognized by major industrial countries. Some countries also sidestep the nuclear non-proliferation treaty and produce and test nuclear devices which is wrong-headedness because their stereotypical national character can not avoid having to face today's international systems where boundaries of territorial state and their societies cannot be made to exclude the rest of the world's environmental heritage to be wantonly destroyed.

We need to change our mind before we can change what we are doing. It is going to be issues like our attitude towards the environment that is more compelling so we need to make environmental issues a perpetual crusade.

GLOBALIZATION

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Institute of Mathematical Science, Ghana

Young peoples experience of globalization with regards to environmental, education and economy is extremely complex and divers. How one is affected by globalization depends on interesting factors such as gender, nationality, religion, sexuality, ethnicity and education. It seems that globalization may create uneven development because there are still war ravaged countries in Africa and other parts of the world that are still under UN economic sanctions left out of the globalization process. These countries do not benefit from it as a result we the youth are experiencing uneven development. We have to admit that globalization is happening and we just cant wish it away The important and most essential thing is to recognize each country's role in the process so that the political and economic state of the nation is stable. And the most important thing is that globalization must improve conditions of young people but not deepen social injustice. I also see that globalization develops the sense of nationalism and nationalism makes people not want foreigners in their countries because they feel threatened.

PARTICULARIZED INFORMATION SYSTEMS AS AN ELEMENT OF STOCK OF ORDERS MANAGEMENT PROCESS

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Modern management conditions based on the marketing concepts, economy of stable development, globalization, general quality control and orientation to the consumer that had been formed in so-called epoch of “The Economic Renaissance” are demanding practices from the modern business new approaches to the industrial and economic activity organization process, data ware, stock of orders management process etc.

The one from the actual problems which had on the agenda for all scientific-industrial enterprises, that had appeared on realization of marketing projects and forming the stock of orders was got a problem of absence accurate mechanism that was capable to ensure institutional and organization support of interchange process at the conditions of exchange relations. Major task of this mechanism is utilization support of consulting firms’ potential for decision of accurate marketing problems, forming of bracing that will be able to help to enterprises takes necessary marketing information and executors which will be capable to realize accurate marketing projects with maximum efficacy.

Forming of this mechanism assigns a work on the two interrelated directions. The first direction is creation the information base for enterprises use. Second – is the permanent coordination employ and offer to enterprises accurate executors.

In our opinion, one of the effectiveness ways of task this one in two solution can be creation “The National Marketing System of Ukraine”. As an example, it can be the business model of “ABB” corporation which was built Percy Barnewik at the base of global specialists’ network or “The National Marketing System of Russian Federation” that was created in Marketing Association of Russian Federation.

ECOLOGICAL PRODUCT PACKING

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Protection of environmental from the impact made by the results of people’s industrial activity becomes urgent and important target for society. Because of that the packing is supposed to play its protection role. First of all it is to protect people and the objects around — shelves, loading facilities, storage areas, city — from pollution and harmful impact of the product. Moreover, the impetuous development of scales and form of the packing shouldn’t turn out to be irrational resource usage and global pollution of the environment.

More and more difficult and serious becomes the problem of protection of the environment from irrational development of the packing and thoughtless and massive destruction of the irreplaceable raw materials. For the last decade this problem has been of global character and its solution brooks no delay. People that are interested in protection of the world resources are sometimes called “tree-hugger”. In fact protection is to become the target of great moment of the whole society. The scientists, enterprises managers and professionals involved in packing must admit choosing of the right packing materials, projecting and applying of the resource saving strategy in packing, providing of the peak reuse of the packing materials, massive treatment and resource restoration, and finally the elimination of the environmentally harmful rests, to be the matter of first importance.

Due to the topic another urgent point should be mentioned — the priority development of the kinds of packing that could be reused after outputting the product. Jelle package, for example, could be used as juice glasses, metallic package becomes the capacity for flour, coffee, tea etc., baby food cans are used for the small screws that should be separated and efficiently placed on the working table. Such creativity in packing reuse can stimulate the sales and reduce the packing materials expenses.

Natural resources restoration by picking up and using secondary raw materials means aluminum tan melting applied to get aluminum for other goods, using of breakage for new glass packages, or even the usage of paper fibers as isolation

material. All mentioned above presents great possibilities for saving of natural resources.

Deliverance of the unnecessary rests of the packing is another problem while making a package. Here are most of the packing materials: paper, cardboard and plastic that are flammable and can be burnt. If burning is inaccessible or not allowed by the government, deliverance causes a lot of problem. That's why it is important to point out that one of way to improve the packing is reduce of using the packing materials. That is the point that could possible become the criteria for more potential efficiency and influence the techniques of producing the form of the packing for each product.

PROSPECTS OF RATIFYING THE KYOTO PROTOCOL IN UKRAINE

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The Kyoto protocol, which was adopted in 1997, is an international agreement between Europe, Japan and Canada which obliges its participants to restrict the volume of greenhouse gases emitted into the atmosphere.

Because the level of pollution in Ukraine has dropped sharply in the last several years, mostly due to the near total collapse of economic structures for much of the 1990s, Ukraine has dropped below its allocated pollutant levels as agreed upon in the 1997 Kyoto Protocol. The Supreme Rada of Ukraine has ratified the Kyoto protocol, which means Ukraine agrees to restrict its level of pollution, the level of carbon gases in particular.

Today, by selling its unused quotas for greenhouse gas emissions Ukraine can earn from an estimated \$700 million to \$3 billion every year in 2008-2010. Ukraine is a country that currently has many unused quota-shares. Since 1990, greenhouse gas emissions have fallen by a factor of two. The reason for such a dramatic change lies in a sharp drop in GDP - and especially in industrial production - over the last decade. This should guarantee Ukraine an ample stockpile of unused and salable greenhouse gas quotas when that mechanism is activated.

Another flexibility mechanism that Kyiv may be able to utilize for financial advantage is called "joint implementation." This mechanism allows investors to develop a project in which they find an enterprise where a reduction of greenhouse gas levels could be achieved in the cheapest way. Investors could finance such a project and then sell the level of the emissions that were reduced if they fell below the allowable emission level.

For Ukraine it is one of the rare cases in which the extreme energy inefficiency of its industry became a benefit, attracting foreign "climate" investments.

Western companies are already looking for opportunities in Ukraine. Ruhrgas (Germany) and Ukrtransgaz (Ukraine) have developed a joint project to optimize the work of the Ukrainian gas transit system, which could cut carbon dioxide emissions by 350,000 tons annually and cost the German firm approximately 15 million euros.

In return for the investment, the Ukrainian side would have to provide the German firm with emissions certificates for achieved greenhouse gas reductions.

A number of firms have already started their own greenhouse gas emissions reduction programs, their projects to reduce emissions will continue and a greenhouse gas emissions market should soon take off the European Union, Japan and Ukraine develop potent national programs.

ECOLOGICALLY FOCUSED SOCIETY

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XX century has brought to humanity many blessings, connected with the rapid development of the scientific and technical progress. But at the same time it has put a life on the Earth on a side of ecological accident. Nowadays there are a lot of ecological problems, in decision of which different state and not state organizations are engaged.

The decision of ecological problems on a global scale is impossible without the change of public opinion. Now public puts a human in charge of the Word and doesn't take into account the interests of the surrounding nature.

Decisions of ecological problems will mostly depend on acceptance and understanding of their importance among the people. Even under the condition of high efficiency and effectiveness of the state in the field of ecology, it is impossible to control all on the Earth. If the majority of the population don't respect and support ecology as a science, than it cannot execute its main function – to provide the normal existence of the nature in the harmony with the people. The optimum ecological policy is one, which provides a clever and fair way of the attraction of the necessary support of the population. As such system is clear and fair, then it should be held in respect of the population. If it is so, then such system will have good chances for the maintaining the necessary level of ecological balance. And, on the contrary if people don't respect the ecology and environment, then it is impossible to provide its necessary support.

Let's imagine, that the most part of the population of the Earth has realized all the importance of the ecological and environmental problems and has decided to struggle for a non-polluting condition of the Earth. Then each person will aspire to use only non-polluted products. It will compel producers to make only such products; they will be interested in taking into account the ecological factor in production of the goods and services. Then people will be interested to live in the

non-polluted industrial cities, and will search for less-polluted cities. It will stimulate pure cities to growth and develop.

So, if people are interested in ecology, then both the industry and science will be compelled to take care about the ecology. So the main task is to build ecologically focused society, the major aim of which is to save our nature.

UKRAINE–NATO CO-OPERATION: ECOLOGY AND LAW

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1. The relations between Ukraine and the North Atlantic Treaty Organisation (NATO) have been developing in the framework of the Euro-Atlantic Partnership Council (NACC until 30 May 1997), the multilateral forum for consultations and co-operation on political and security-related issues, more individualised partnership in the field of defence, military co-operation and peacekeeping operations - the Partnership for Peace Program (PfP) (carried out under the EAPC auspices since May 1997), as well as Ukraine-NATO distinctive partnership under 19+1 formula (16+1 formula until mid 1998), formalised in the Charter on a Distinctive Partnership between Ukraine and NATO. These relations are determined by the necessity to establish constructive co-operation with NATO as a leading structure, which tends and has prospects to become the centre of a new all-European security system, particularly in the context of ecological security and ecology as a whole.

2. Ukraine determines its national interests concerning NATO with regard to the Organisation's role in maintenance of stability and security, namely the elaboration of approaches to the problems of disarmament, arms control and prevention of proliferation of weapons of mass destruction – which are of ecological character.

3. There are a number of scientific and environmental programs carried out under the aegis of NATO in which Ukrainian scientists take an active part. The Scientific Program of NATO, co-ordinated through NATO Science Committee, is a highly efficient tool for promotion of international co-operation in scientific research for ecological purposes. The Program provides for intensification of contacts of Ukrainian scientists with their foreign colleagues (visits, probation, seminars and conferences) and strengthening of their scientific potential.

4. Ukrainian scientists have been participating in realisation of a number of environmental protection projects under the aegis of a NATO Committee on the Challenges of Modern Society. A number of such projects and seminars were dedicated to the issues of ecological protection of the Black Sea, environmental protection during military exercises etc.

5. The Ukraine-NATO Joint Working Group On Science and Environmental Protection was set up in 2000 for the purpose of establishing co-ordination and increasing efficiency of participation of Ukrainian representatives in scientific and

ecological programs of NATO. The said Working Group held its meetings regularly (first meeting was in Brussels in October 2000, the second one came off in Kyiv in April 2001).

EXTRACURRICULAR ECOLOGICAL EDUCATION IN KHARKOV HUMANITARIAN UNIVERSITY “ PEOPLE’S UKRAINIAN ACADEMY ”

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The ecological education is defined as an aimed process of education for the personality interests, the society and the state and it reposes the increase of country population ecological culture level by effective preparation of the citizens with high level of ecological knowledge, ecological consciousness and culture on the basis of new criteria of the estimation of the relation of human society and nature. The basic purpose of ecological education is the formation of complete ecological knowledge and thinking necessary for the acceptance of the ecologically reasonable economic decisions at such levels as: the person, family, enterprise, branch, region, country as a whole.

The learning of ecological knowledge, formation of ecological thinking, consciousness and culture are decided at the Kharkov Humanitarian University “People’s Ukrainian Academy” at the following levels:

- Preschool of primary education (PPE);
- Specialized economics and law school (SELS);
- The kharkov humanitarian university "PUA" (KHU "PUA").

The main parts of the system of ecological derivation and education should be formal and informal. And its forms and methods are different.

The informal ecological education in Academy is a part of activity of the ecological service and it penetrates all academic structures: PPE, SELS, KHU "PUA". The purpose of creation of an ecological service was to direct the education process to the forming of personal ecological outlook based on understanding of its unity with the nature for the whole practical activity to have the careful relation to the nature and nature preservation.

The tasks of the ecological service are:

- Formation of the careful relation to flora and fauna;
- Realization of measures directed for the preservation of woods,
- Developing of the realized attitude to the health and respect for protection of work condition;
- Popularization of knowledge of noise influence, vibration, electromagnetic fields, static electricity, radiation on the environment and organism of a person; to

keep to the rules of the safety precautions in everyday life during educational and production processes;

Increase of the prestige of specially guarded natural territories;

The tasks and purposes of the ecological service extend gradually every year.

INFORMATION POTENTIAL OF THE ENTERPRISE

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On a boundary third millennium the information becomes one of the most relevant resources which one is possible to esteem as innovate a potential of the enterprise. The increasing relation to presence of the information, level of development and efficiency of usage of means of its processing also has resulted in occurrence of such in essence new concept as information resources. The development of information resources promotes a stability augmentation of activity of the enterprise and rising of a national economy.

The report is dedicated to problems of influencing of increase of an information potential, through information resources with the purpose of development of the enterprise as a whole. Under an information potential of the enterprise we shall understand set of all information resources of the enterprise, which one can be involved on outcomes and qualities of internal business processes of the enterprise and on processes bound with activity of the enterprise behind his limits.

Of information resources consists large innovate potential. This potential is exhibited in different areas of economical activity of the economic subjects on means of implementation of the different factors. in area «production» by pacing factors is: new know-hows, it is know-how; in area «trade» - trade mark, image of the company; in area «economical science, training» - database, knowledge bases, electronic archive documents, electronic library funds; in area «management» - information resource management of the enterprise, control of staff; in area «marketing activity» - research of the market, research of the new "know-how" and implementations of commodity, mining of development strategies of information resources of the enterprise.

The offered approach allows in further executing construction of new models and methods of development of the enterprise on the basis of usage of information resources. The concept an information potential of the enterprise was updated.

WAYS AND PROBLEMS OF TRANSFORMATIONS IN THE PRODUCT-SERVICE MIX FOR TRANSPORT

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There are a multitude of possible product-service options to mitigate the current environmental impacts of transport. These include measures to improve the efficiency of vehicles and close the 'materials loop', enhancing existing services operating in the transport sector, and other options which may reduce the demand to travel. There are some main ways we can marked.

Enhanced maintenance and repair services. In order to operate efficiently and with minimal environmental impact, vehicles require regular maintenance and, when necessary, appropriate repair. Routine maintenance work ensures the vehicle's optimum performance and prevents premature deterioration. Normally, the manufacturer specifies the frequency and nature of maintenance service requirements. These services could be enhanced to improve the general performance of the current vehicle fleet.

Eco-leasing of vehicles. Traditional forms of vehicle leasing are conducted via third party financial service companies. Most companies operating traditional lease agreements restrict their services to vehicles under five years old and with a fixed mileage. But we must noted, eco-leasing is somewhat different to a traditional vehicle leasing arrangement. First of all, because in eco-leasing models we don't use 'end-of-life' vehicles.

Collective vehicle services. The assumption underlying collective vehicle services is that ownership or long term possession of the same vehicle is not necessary as long as a person can have access to the use of a vehicle when mobility is needed. In this case we'll speak about:

- vehicle rental;
- vehicle sharing;
- ride sharing.

Integrated transport services. Integrated Transport Services enhance existing transport systems by improving the 'chain of mobility', making the linkages between and within transport systems more efficient and increasing the flexibility and attractiveness of public transport service options.

Need-related service solutions. Integrated Transport Services could provide considerable environmental savings in comparison to individual vehicle use, but the objective is mainly supplying in order to meet demand. By contrast, the most environmentally effective product-service options for transport are those that eliminate or reduce transport demand. There are two product-service options in particular that could successfully substitute transport services:

- information technology service solutions;
- local service solutions.

This case demonstrates that there are numerous feasible alternatives to the current product-service mix for transport that could provide environmental, economic and social benefits. In theory, industrial, public and voluntary organizations should be able to establish and operate viable transport service enterprises. The potential success of many of these options is however thwarted by the public obsession with the private vehicle, which makes efforts to internalize its true costs (and therefore compete fairly with alternatives), or replace it, politically difficult. In summary, key factors that are crucial to ensuring the success of transport services are:

- the internalization of the external costs for all forms of transport and associated infrastructure;
- the provision of public and private financial support to pilot transport service enterprises;
- improved urban planning to facilitate reduced car demand and prevent car-dependent out of town developments.

ENVIRONMENTAL CONTEXT OF SOCIAL RESPONSIBILITY OF BUSINESS

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Corporate Social Responsibility (CSR) is a set of economic, social and environmental rights and norms to be observed by commercial enterprises. A functional CSR system is characteristic of every democratic state and is not only a mechanism of regulating the performance of the enterprises with regard to their social stakeholders, but also a tool of supplementing municipal and non-profit budgets from the local source, improving the transparency and accountability of the enterprises and contributing to their sustainable development.

In practical sense CSR is a set of policies, practices and programs that are integrated throughout business operations, and decision-making processes that are supported and rewarded by top management. The social stakeholder groups that are impacted on which is assessed within the CSR framework are: a) employees; b) women; c) national minorities; d) customers; e) communities, f) environmental situation in the community; g) shareholders including minority shareholders; h) interest groups relevant to the major business operations of the enterprise.

Corporate societal responsiveness includes environmental management, stakeholder management and issues management. The environmental issue is peculiar to some extent. Compared to the other components of corporate social responsibility, the environment in many cases directly affects production processes and products; as such, it might be related to firms' core activities, and managers,

consequently, respond differently. And in general the CSR framework regulates quite a wide range of processes such as local government, private sector development, poverty reduction, environmental protection, employment, health care services, education and youth development, food security etc.

The concept of CSR is on the one hand an instrument of monitoring and enhancing observance of social, economic and cultural rights of people and on the other hand a tool for promoting sustainable economic and environmental development of businesses, a supplementary source of funding for social and environmental protection, a tool of inclusive development and a source of leveraging local funds for the non-profit institutions.

There are the following principles that fund Corporate Social Responsibility:

Principle of legitimacy: society grants legitimacy and power to business;

Principle of public responsibility: businesses are responsible for outcomes related to their primary and secondary areas of involvement with society;

Principle of managerial discretion: managers are moral actors. Within every domain of corporate responsibility they are obliged to exercise such discretion as is available to them towards socially responsible outcomes.

Corporate Social Responsibility in Four Domains

	Social legitimacy	Public responsibility	Managerial discretion
Economic domain	Produce goods and services, provide jobs, create wealth for shareholders	Price goods and services to reflect true production costs	Produce ecologically sound products, use low-polluting technologies, cut costs with recycling
Legal domain	Obey laws and regulations; do not lobby for or expect privileged positions in public policy	Work for public policies	Take advantage of regulatory requirements to innovate in products or technologies
Ethical domain	Follow fundamental ethical principles (e.g. honesty in product labelling)	Provide full and accurate product use information, to enhance user safety beyond legal requirements	Target product use information to specific markets and promote as a product advantage
Discretionary domain	Return a portion of revenues to the community	Invest the firm's charitable resources in social problems	Choose charitable investments that actually pay off in social problem solving

In Ukraine there are the following shortcomings that essentially restrict the potential of the CRS framework implementation:

Poor corporate culture of Ukrainian commercial sector;

Poor quality and accessibility of social services;

Insufficient local funding of the civil society organisations.

INFLUENCE OF MOTOR TRANSPORT ON THE ENVIRONMENT OF KYIV AND WAYS OF ITS IMPROVEMENT

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Over half-million cars are registered in Kyiv now. The State Traffic Inspection registers 80-100 thousand transit cars every day on the city roads. Automobile traffic in Kyiv generates over 260 thousand tons harmful substances in year, that is more than 100 kgs per capita. Additionally, land and water are polluted by oils, lubricants and wastes from automobile washing; the city territory is cluttered with rubber tyres, storage batteries and metal parts. Utilization of these wastes has not been properly organized yet.

In Kyiv this problem is addressed by the municipal enterprise “Ecotrans”, established to implement measures provided in the Kyiv program “Transport Ecology”.

Petrol containing 10-20 per cent of various fuel additives is used widely in many countries of the world. One of such additives is fuel ethyl alcohol, that has been produced in Ukraine since 1999 under the trade mark "high octane and oxid content addition to petrol". The technology and technical specification documents were developed by Ukrainian Research Institute of Alcohol and Biotechnology of Food Products.

The use of fuel ethanol will allow to decrease dependence of Ukraine on import of petroleum fuel, reduce environment pollution and preserve jobs at alcohol factories.

BIOLOGICAL TEST OF THE WATER QUALITY OF THE RIVER BYCK FROM THE AREA OF THE MUNICIPALITY OF CHISINAU

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In the Republic of Moldova the river Byck is considered one of the most polluted, because the hydrographical basin is more densely populated and the river Byck crosses the main industrial centers of Moldova – Calarasi, Straseni, Chisinau etc., from where flow many toxic substances in it. The facts from literature prove that the river Byck is polluted with different chemical substances and the municipality of Chisinau devotes the most important role in this process. In the sector of the river in the area of the city, the concentration of some of them more than 50 times /3/. The biodiversity in this sector of the river is changing essentially in diminution from 38 species upstream the city, to 5 species downstream the city/4/.

Through the agency of the biological test of the river is established its toxicity and it is possible to determine the sources of pollution and the most critical sectors where it is really necessary to orientate primordial measure for removing them.

For the fulfillment of this studies served the result of the biological test of 12 tests on water from the river Byck which were collected from 4 stations placed on the stream of the river from the area of the municipality of Chisinau. As a test-object there were taken gamarids (*gammarus gammarus*). These organisms can exist only in clean waters, especially in springs. The gamarids were adapted at the room conditions during a week, being kept up with leaves and enriching, recurrently the water with oxygen. For the witness tests (of control) was used water from tap dischlorated during 7 days. The samples were collected on weekdays (on Wednesday, on Friday) and on a weekend (on Sunday).

From the results of the collected samples it comes out that all organisms from the control test survived during the experiment. But in the test with water of the river from different stations, the organisms began to die after 24 hours.

Biological test of the water from river Byck

<i>Points of drawing of the test</i>	<i>Wednesday ay (%)</i>	<i>Friday (%)</i>	<i>Sunday ay (%)</i>
<i>Control</i>	0	0	0
<i>At the entrance of the city</i>	6,66	3,33	3,33
<i>Mihai Viteazul street</i>	20,0	16,6	10,0
<i>Ismail street</i>	30,0	36,6	20,0
<i>Upper to the combing out station</i>	36,6	46,6	26,6

Comparing the tested water samples that were collected in different days of the week, we can find out that the water from the river is not acute toxic, because there didn't die more than 50 % of the organisms, but the received results from the last station (downstream the city) are very closed to this index. On the weekend (on Sunday) when less factories are in function, the death rate of organisms in the tested water is lower, but the maxim death rate was registered on Friday in the samples collected from the stream of the river downstream the city.

The results of this investigation permits to make the following conclusions:

1. It was proved that the river Byck doesn't manifest any acute toxicity on gamarids. But in the samples drawing from the stream of the river downstream the city, the death rate of the organisms during 96 hours approaches more to the critic amount (50 % death rate) that characterize the acute toxic water. Downstream the city was registered a death rate of 46,6 % gamarids introduced in the water samples.

2. Comparing the biological test results of the water of Byck with modification of the chemical composition of the water and of the biodiversity on this sector of the river is distinguished a direct correlation.

3. The biological test of the river with the help of gamarids is a kind of operative method, it reflects the objective reality and it's not expensive.

4. I suggests this method to be used widely in school programs in order to trace out the main sources of pollution of the lakes rivers and springs.

SEWAGE WATER BIOMONITORING USING INVERTEBRATES AS BIOINDICATORS

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In connection with constantly growing anthropogenous load on the water objects it is more sharply felt the necessity of development and creation the system, including continuous monitoring of the water environment. Dumping of sewage water of a various origin in the water objects makes the big changes in their hydrochemical and biological status, change the water quality, break the normal ability for living of flora and fauna. Among the variety of existing methods biological ones, characterizing quality of the water as the habitat of hydrobionts, allow to give an integrated estimation of a complex influence of different components and factors of the water environment on its population, to estimate the biological effect of the reservoirs pollution. Advantage of these methods in comparison with physicochemical ones is the possibility to carry out the analysis based on the reactions of alive organisms, when it is possible to judge a degree of positive and negative influence of various factors of environment on the different levels. Perspective branch of such ways of the water quality control is the method

based on the registration of the hydrobionts physiological parameters. The best way to see the dynamics of the water quality as a habitat of alive organisms is to arrange the continuous biomonitoring, tracing changes of physiological characteristics of objects-bioindicators.

So the purpose of the given study was estimation the quality of the water at the Northern Station of Aeration in Saint-Petersburg as the hydrobionts habitat with a help of the method of their cardiac activity registration, using the crayfish species *Procambarus clarkii* (Girard) as bioindicators, by realization the continuous monitoring of the sewage water. Scientific work was carried out on the basis of the Saint-Petersburg Scientific Research Center for Ecological Safety, Russian Academy of Sciences, in the laboratory of experimental ecology of water systems, and also at the Northern Station of Aeration of the State Unitary Enterprise "Vodokanal Saint-Petersburg".

For realization the biomonitoring of the water at Northern Station of Aeration was developed and created a special system with four experimental aquariums, providing as the individual maintenance, so the maintenance of crayfish family in the stream of industrial water. The non-invasive method was used for estimation the water quality, developed in the laboratory mentioned above. On its basis lays the registration of the crayfish heart activity with the help of the optical fibre gauge, which fastens on the animals carapace, allowing to carry out the analysis of the data taken from the laser photocardioagrams in conditions of the free animals behaviour. Experimental installation includes laser cardiograph, consisting of the receiving-radiating block and the analogous converter, optical paths, the optical fibre gauge, a digital remembering oscillograph and the computer for secondary processing of the signals. The method allows to carry out the operative control of the heart activity and by its changes to judge about the physiological state of an organism-bioindicator as by the single measurements, also in a mode of the continuous control in the real time, to estimate a functional state not only of adults, but also of the animals during their early ontogenesis.

Various functional states of crayfish are determined by the features of the cardiac activity, in particular, by the change of time and amplitude characteristics of the cardiac cycles. Further the fragments of cardiograms are automatically processed on the computer using the method of variation pulsometry, which is the mode of the statistical analysis with the elements of probabilistic approach. Variation pulsometry allows to reveal the law of distribution of the casual process, like the heart rhythm is, and to characterize it quantitatively.

The control of the crayfish functional state was carried out by the analysis of their cardiac activity as follows: heart rate of the animals was registered in the rest and stress functional states. Right at the transition from a rest functional state to a stress one in reply to an influence of the factor, which change the state of the bioindicator, animals show change of the heart rate, proportional to loading, including the pollution of the environment. As the deterioration of environment increases, crayfish show the increase of the intensity of the cardiovascular system condition, so the heart rate will also increase. The similar situation is observed

during the process of transition animals from a state of health to illness as a result of the desadaptation to the influences of the certain environmental factors. Hence, by the changes of the cardiograms parameters it is possible to judge about the state of the cardiovascular system, estimated mainly by the size of the heart rate, what objectively testify the stress functional state of the animals in response to the changes of the quality of environment.

RENT-SEEKING AND THE QUALITY OF ENVIRONMENT: THE CASE OF UKRAINE

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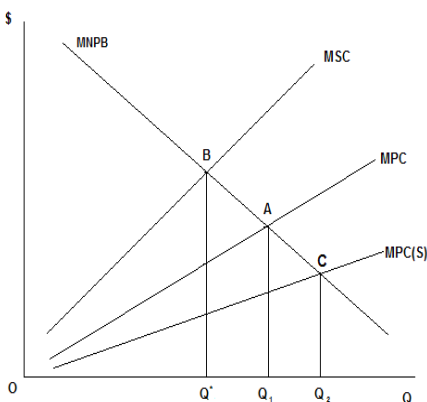
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Market failure is inability of market to allocate resources efficiently or more accurately - inability of equaling quantity demanded to quantity supplied. It means that market forces do not maximize social net benefits by equaling marginal social benefits with marginal social costs. Therefore market failure may create a *divergence between private costs and social costs*. This means that society gets not the optimal proportion of produced good and saved environment but gets more products and less environment than it would rather receive.

Here we will concentrate on inappropriate government intervention as the reason of market failure. This is the case when government intervenes in the economy not to correct a divergence between private costs and social costs, but for other purpose, which can even worsen the status quo.

Rent-seeking is one of the causes of inappropriate government intervention. It is the desire to get through the government some material benefits at the expense of society or individuals.

Rent can be granted to the enterprise as subsidies or tax advantages for example.



On the figure we can see graphically that marginal private cost for production reduces when subsidy or tax privilege is received and optimum for producer goes from Q_1 to Q_2 instead of moving towards Q^* which is a *social optimum*. So inappropriate government intervention creates more production and therefore more pollution without any compensation to the society. Our Marginal Net Private Benefic Curve here includes Marginal Social Benefit curve also as far as society benefits

from production also. Still we must say that in this situation we accept the assumption that production gives no positive externalities because if such externalities are present Marginal Social Benefit Curve would lie above MNPB.

From the figure we see that ideally policy-makers should make all the possible so that points A and B coincided in order to quadrature contradicting interests in the society. But subsidies do the contrary thing and in this meaning contradict the goal of policy.

Still in Ukraine the economy is highly characterized by rent-seeking and the policy goal described is not achieved. Major rent-seekers are the strongest political-economic groups, like Donetska, Kyivska, Dnipropetrovska, Pintchuk and Poroshenko-Yushchenko ones. All of them own rather environmentally dangerous industries but as far as they have an entry to power cabinets they produce even more intensively and damage environment as social good more.

Through the analysis of empirical data we can determine the rate of danger correspondent to every group's activity.

So, besides negative social and economic consequences which 'oligarchs' bring with their activity they appear also harmful environmentally. This is because of several reasons: (a) under subsidies they produce more and as a result pollute more; (b) subsidy leaves the state budget without a substantial amount of money which could have been spent to environment also; and (c) subsidy is usually given to weak enterprises whose productivity is low so we receive not much good but a lot of bad as a result. Besides this we can assume that those weak industries are old ones in Ukraine which remained from the Soviet times and due to this they are not supplied by filters and other environmentally-friendly cleansing devices.

Due to this complex reasons we can conclude that rent-seeking substantially harms the environment and especially in the conditions of Ukrainian "political-economic groups" system.

INSTRUMENTS OF SUSTAINABLE DEVELOPMENT IMPLEMENTATION ON THE LOCAL LEVEL

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Decentralization is one of the main current global trends. What is more it is considered to be dramatically synergetic with sustainable development (SD) concept. In other words decentralization fastens SD and vice versa. Therefore decentralization of social administration structure is a crucial question in context of SD.

The most evident form of decentralization is local governments system. Local government is not a part of state power but it is the power raised from below, out of local community and it is not straightly dependent on central administration. Local governance is a realization of subsidiarity principle, which claims that everything should be done on the lowest possible level. This principle is very sane because it mobilizes all social resources and encourages the society to work as one organism for solving common problems.

SD from the other side aims to account for the maximum different interests possible, to coordinate them in a universally beneficial way and lessen contradictions and trade-offs whenever possible. The task is super-difficult indeed, but still achievable.

Now let us look on the reasons for which local governance can contribute to the achievement.

Representatives of local government know local environmental, social and economic problems better therefore it is easier for them to predict problems and prevent them on the micro level. This feature of local governance implements the classical principle of 'think global, act local';

Local government is more effective in communication with people, therefore it can better represent their interests in all 3 aspects of SD;

People are more concerned about their neighborhood environment and for this they will be more active in lobbying their environmental interests in front of local rather than national government;

Green parties prove to be more successful and effective on the local, not national level, so local governance is the potential for local green governance to flourish;

Local officials have more time to dedicate for social, economic and environmental questions as far as they are not busy with high politics, national policy and international relations;

Local government can form sustainable consciousness among people better as far as it is aware of micro specifics of the population and has a valuable for the purpose resource of 'being close'.

The psychological factor is that for officials on the local level it is more difficult to ignore problem situation than to the officials 'far there';

And at last local government according to legislation has wide strategic responsibilities in socio-environmental sphere such as urban development, land use, construction, water supply and discharge, road and transport management, fire safety, cleaning of public area, elementary education, health care, waste management etc. Therefore sustainability of local governance is nearly a guaranty of region's sustainability.

As for specific instruments of SD implementation on the local level we can borrow 2 from international or foreign practice: strategic environment assessment (SEA) and local Agenda-21 (LA-21). SEA is assessment of policies, plans and programs according to their potential influence on the environment, including the social one. And LA-21 is the policy plan of local government that incorporates social, economic and environmental interests and aims.

Due to the reasons and potentials listed above development local governance and its sustainability is a substantial contribution to increasing sustainability itself.

JOINT IMPLEMENTATION PROJECTS. UKRAINIAN WAY

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Kyoto protocol was accepted in maintenance of Sustainable Development Conception. But after set hand on a document many problems on international and local levels were appeared. One of the most dangerous problems is lack of importance understanding and economical priorities. The main contra is unprofitable of conception for developed states. Emission sales use for control by greenhouses effect gases pollution. There are few interesting moment of using, for example, the method was developed in The United States of America, but now USA does not speak in support of the protocol.

The Kyoto Protocol to the United Nations Framework Convention on Climate Change (UNFCCC) adopted by the third session of the Conference of the Parties (COP 3) on 11 December 1997 in Kyoto. Protocol establishes a legally binding obligation on Annex I countries (subject to entry into force) to reduce emissions for six greenhouse gases (GHGs) in total by about 5.0% below 1990 levels by the years 2008-2012 (Article 3).

Joint Implementation is the avoidance or reduction of GHG emissions by one party (investor country and/or company) on the territory of another (host country) and getting credit for it at home (in the investor country). Both parties are Annex I countries.

Examples of JI Project Ideas for Avoiding GHG Emissions for Ukraine: energy efficient light bulbs, high energy efficient electric motors and processes, less carbon intensive fuel, co-generation of electricity and heat, renewable energy technologies, cleaner coal technology, methane capture/use, reforestation or afforestation.

Joint Implementation is a very flexible instrument and does not address such difficult distributional issues like taxes or tradable permits do. However, it does have to deal with the allocation of emission control responsibilities. It also does not depend on the existence of a global agreement; only the domestic incentives are a necessary condition. Private firms, non-governmental organizations (NGOs) and individuals can take part in Joint Implementation projects if there are sufficient incentives.

Besides reaching an emission target at minimum cost, JI has the following goals: reaching a broad country participation in emission reduction to counter the leakage problem and raise the potential for efficient climate policy; furthering transfer of technology to developing countries by setting incentives for both sides; funding

projects in sustainable energy and land use that currently lack funds; furthering the development targets of the host countries.

Sectors directly concerned by the Kyoto Protocol (Janssen, 1998): energy production, transportation and consumption, electricity production and consumption, co-generation, transportation, cement production, industrial processes, waste management, forestry, agriculture.

So, Joint Implementation mechanism gives an opportunity for Ukraine to attract investments and develop their societies and economies according to their priorities and along a more sustainable path.

TOURISM WITHIN THE FRAMEWORK OF CONCEPTION OF SUSTAINABLE DEVELOPMENT

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Conception of sustainable development presently got wide distribution. Practically principles of this conception are certain in all spheres of vital functions of society, in particular, in the field of international tourism which the last years began to act noticeable part in a world economy. Absence of synonymous interpretation of the concept sustainable development and applications of it in tourism strengthens actuality of researches in this field.

The concept of sustainability, which appears in transition of the system (natural, antropogenic) from one state in other, is characterized by ability of the system to save certain properties during time and resist to external influences without the change of these properties, or adapt to them. Sustainable development supposes no change of such states, and creation and planning of such terms (taking into account influence of all external factors), at which system, attaining the state of sustainability, does not pass to other states.

On this basis, tourism will be able to develop only at the rational use of natural resources, during minimization of negative influence on an environment. Taking into account all problems arising up because of development of tourist industry, into which it is necessary to run to the tourists, local habitants, regional authorities, there was the necessity of complex decision of different difficult situations, that implies transition to sustainable development.

Sustainable development of tourism in the end can result in sustainable development of all territory, including conservancy, guard of culture, social and economic development. Primary efforts on introduction of sustainable development must take the negative ecological consequences of tourism to the minimum. In addition, industry of trips and tourism creates workplaces much easier and quick,

than any other sector economies, that is exceptionally important for the developing states with a high unemployment rate.

Ecotourism, in same queue, opens possibilities not existing before abilities to a village, is instrumental in maintenance of local handicrafts and handicraft industries wherein industrial development is impossible. Ecotourism are trips in places with relatively untouched nature with a purpose, not violating integrity of ecosystem, to get the picture of natural and in a civilized manner-ethnographic features of this territory, which creates such economic terms, at which conservancy becomes advantageous to the local population.

Thus, tourism can and must develop on principles of conception of sustainable development, but it is necessary to examine it as component part of world economy, which depends on steady development of other industries.

THE REFORM OF UKRAINE'S ENERGY COMPLEX AS A PRECONDITION OF ELIMINATING UKRAINE'S ENERGY DEPENDENCE

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Only 16 per cent of Ukraine's gas and 13 per cent of its oil is produced domestically and more than half of Ukraine's imports consist of energy. Most of energy imports originate in Russia. This energy dependence upon Russia and problems to pay for energy deliveries is perceived as a big threat to Ukraine's sovereignty. It is argued that with a reform of the energy economy, energy dependence would be very limited. The level of energy dependence is, among others, dependent upon the levels of domestic energy consumption and production. Energy consumption is very high due to lack of incentives to economize on energy consumption. The payments crisis and the parasitic role of energy traders constitute the root of the current energy crisis. The obstacles that prevent a reform of the energy economy are the same that prevent Ukraine reducing its energy dependence.

Energy trade is one of the most profitable business in Ukraine, despite the fact that there is a payments crisis in the energy sector. Official statistics about the financial situation in the energy sector are not reliable because most actors involved are opposed to transparency. In many ways tax-authorities are cheated. The fact that large part of energy is traded in barter deals makes energy trade very opaque. Energy traders are often on paper loss making and do not pay for all energy delivered by energy producers. Often, the state jumps in and subsidises the energy traders and energy producers. Energy traders often bought from energy producers energy on loans, guaranteed by the state. When the energy trader failed to pay, the state paid back the loan.

Energy producers are squeezed by intermediaries and do not get incentives to invest. A reformed energy sector and better investment climate could lead to less subsidies and turning loss making energy companies into profitable ones. In some areas, like methane and nuclear power, production could be enhanced. To replace the nuclear power station Chernobyl, two new nuclear power stations will be finished, in Rivne and Khmelnytsky, with Western help.

During ten years of regular reductions of energy supplies from Russia and continuous shortfalls of energy supplies, especially during winter time, Ukraine has done very little to promote energy conservation measures that could diminish energy dependence significantly and has done very little to reform the energy sector, that could free billions of hryvnas yearly.

The energy reform, embarked upon early 2000, was half hearted and failed to raise significantly collection rates of energy payments. It highlighted bottlenecks in the energy sector and deeply rooted vested interests that block energy reform. Under President Putin, Russian attitude towards accumulating energy debts of Ukraine and non-authorised siphoning of gas by Ukraine became tougher. Diversification of energy supplies is rendered difficult by the bad payments record of Ukraine. This is making import prices of gas higher. Lack of reform in the energy sector will further undermine Ukrainian sovereignty while giving Russia more economic leverage.

PROBLEMS AND PERSPECTIVES OF ENVIRONMENTAL NGOS ROLE AS A KEY COMPONENT OF SUSTAINABLE POLICY

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Obviously, that 21st century will be the century of the environment. In the near future, environmental issues will inevitably have paramount political importance. Presently, the transformation from an economic paradigm into environmental one is taking in modern politics. From a political point of view, the ideal social and democratic state must also be the environmental one. Therefore, it is necessary to establish administrative and legal institutions, which will promote protection of the environment. We need to change society for sustainable living. We need to turn from nature transformation for society's needs to modernisation of society, aiming at harmonisation of human-nature relationships. Sustainable development requires sustainable policy.

The idea of nature conservation emerged about 150 years ago, mainly with appearance of the term "ecology" and became one of the main priorities of modern policy. A system of replication of environmental values is created. Now a system of environmental education works in many countries. However, there is not enough social institutions, oriented on environmental values. Now we have unsustainable

social institutions like the armaments industry and armed forces. What we really need - bombs and missiles or skilled people and clean environment? This is an ethical problem - the problem of moral choice. For realization of an "ecological revolution" we should experience ourselves as spiritually alive and politically active persons. We shall always need people who insist that their main goal in life has not been to amass money, but to protect the natural beauty and create something useful. Representatives of environmental NGOs have made their choice. They have chosen environmental values. NGOs are typically value-based and people-centred independent organisations. Principles of altruism and voluntarism remain key defining characteristics of the NGO sector. Civil society development (particularly environmental NGOs) and education (especially environmental learning) are key components of the system of replication of environmental values. Strengthening of environmental education and NGO development, we will promote strengthening of the environmental replicative system.

Here it is some proposes tools for building the sustainability ethic into decision-making:

- incorporating ethics in policy analysis;
- including ethical analysis in policy dialogues;
- declarations of principles and ethical codes;
- representing ethics in organizational structures;
- informal interventions.

There are some problems of environmental NGO functioning as an ethical committee: the absence of universal ethical criterion, the problem of being an activist, the problem of NGO's ability to act as a team of like-minded persons, the absence of real precedents.

CLIMATE CHANGE – GLOBAL WARMING

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Everyone knows that the population of the Earth have many problems, but the most serious problems are ecological. And today we'll talk about the one of them.

It could be a title of a 21st century horror movie: „Death by Global warming”. Instead, it's a real-life warning from ecologists who believe global warming may account for millions of human deaths from disease.

The climate is always changing and has forever been a hot topic of discussion for park-bench philosophers. The climate does its thing and we adopt. It's not like humans can actually control the climate, right?

But this park-bench philosophy has grown up over the last couple hundred years to evolve into the world of meteorological studies, have discovered that we humans are not quite as powerless as we think when it comes to the climate. Human activity has caused the Earth to warm by about one degree Fahrenheit since the late 19th century.

And this one degree has the world up in arms.

The problem, as first identified by the Swedish chemist Svante Arrhenius in 1896, is that human activities, like driving our cars, burning coal to heat our homes and run our factories, chopping down forests to build our cities and produce our paper, and raising cattle to fill our bellies have significantly increased the atmospheric concentrations of key greenhouse gases, namely carbon dioxide, methane and nitrous oxide. This increase in greenhouse gases is thought to enhance the greenhouse effect and lead to global warming.

"Right now the evidence of significant global climate change is minimal, but there are already noticeable increases in human diseases worldwide," said David Pimentel, a professor of ecology and entomology at Cornell University in Ithaca, New York.

The researchers consulted authorities about several issues: morbidity and mortality due to climate change; extreme weather events such as tornadoes, hurricanes and extreme precipitation; air pollution; water- and food-borne diseases; vector- and rodent-borne diseases. Other studies have shown that summer heat waves in urban areas are associated with increased mortality.

Climate change is expected to alter the frequency, timing, intensity and duration of extreme weather events such as tornadoes, hurricanes and extremely heavy rainfall, the researchers note. Direct results of these events are injury or death. Other effects include post-traumatic stress disorder and contamination of drinking water from flooding.

The researchers call for improved climate models "to project trends, if any, in regional extreme events." Such predictions could help communities develop programs to handle weather emergencies.

One area not addressed in the report is the expense involved in averting human health disasters due to climate change. "We can probably adapt to most of these issues, but we do not know how much it will cost us," said Patz.

As you see, there are many factors which influence on changing, and how many problems they bring.

Now the population of Earth must think and try to change its policy of life to more careful attitude to the nature, it'll help to length our life on our Earth.

THE PRACTICAL ACCOUNT OF THE LEVEL OF ENTERPRISE'S ECOLOGICAL SAFETY

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The most interesting thing in every science is the practical side of theoretical topics. That's why I decided to account one of the Economic Safety components – Ecological. As a vivid example I take JSC “Sumykhimprom”, that is the main cause of ecological danger in our region.

First of all we should distinguish factors that influence the environment. In our situation it will be accumulation of waste materials, air and water pollution. The level of Ecological Safety of enterprise can be accounted as an average of these factors:

$$L_{ES} = \frac{1}{3} \left(k_m \frac{S_m}{S} + k_w \frac{Z_w}{Z_{mw}} + k_a \frac{Z_a}{Z_{ma}} \right),$$

S – total area occupied by enterprise; S_m – territory occupied by waste materials; Z_w, Z_a – real concentration of polluted substances in the water and air; Z_{mw}, Z_{ma} – marginal concentration of polluted substances in the water and air; k_m – coefficient that reflects the danger level of waste materials; k_w, k_a – coefficient that reflects the danger level of polluted substances in the water and air.

The level of Ecological Safety can be classified:

$L_{ES} = 0$ – absolute ecological safety;

$L_{ES} \leq 0,25$ – normal ecological safety;

$0,25 < L_{ES} \leq 0,50$ – unstable ecological state;

$0,50 < L_{ES} \leq 0,75$ – dangerous level of ecological safety;

$L_{ES} > 0,75$ – ecological crisis.

According to the information that I took from “Sumykhimprom” Ecological department and after some calculations, we have such a result about the dynamic of ecological safety changing in 1998-2001:

years	1998	1999	2000	2001
L_{ES}	0,54	0,55	0,69	0,87

So, the enterprise “Sumykhimprom” has a dangerous level of Ecological Safety in 1998-2000 years and in 2001 it seems to be an ecological crisis. It's a real picture of existing situation. What should we wait in the future?

Solutions:

- The enterprise has the projects of purifying equipment that can considerable reduce the amount of environmental pollution.

- Besides, there is a magnificent project of changing all the manufacturing technologies to the totally new ecologically pure and safe.

BUT it's very difficult and even impossible to finance the realization of those projects both for the enterprise and for the government. And I think that even the foreign investor will never put in his money in the improvement of our ecological situation, as it's our own problem.

RESOURCE SAVING DEVELOPMENT IN UKRAINE: ECONOMICAL PROBLEMS AND PERSPECTIVES

*Irina Sotnyk, Olha Sotnyk,
Sumy State University, Ukraine*

Resource saving as the activity directed on natural resources using reduction at the social production, assumes the development of the new technologies providing more full satisfaction of public needs due to smaller quantity of used resources. Thus, resource saving does not limit public needs and assumes their satisfaction by more effective methods. Besides this, resource saving activity promotes the preservation of environmental quality by providing the reduction of used resources and the harmful waste quantity generated per goods unit.

During several decades the resource saving policy has been the integral element of developed countries economical policy. Resource saving technologies introduction allowed the developed countries to achieve significant successes in resources economy: for example, for twenty years (from 1970 to 1990) Denmark has passed from power resources import to self-power supply; now the Great Britain imports only half of energy resources volumes from a level of 1970th years.

The resource saving problems are not less important and actual for Ukraine now. Material and power capacity of country's GDP exceeds the similar parameters of the developed countries in 5-13 times. With regard to the own energy and other natural resources deficit in Ukraine and real scales of environmental contamination as a result of irrational resources use, these figures give the basis to believe, that resource saving strategy realization for the country is the survival strategy.

Despite of the set of existing brilliant technical decisions in resource saving sphere, their realization in Ukraine is frequently complicated owing to absence of sufficient economic incentives provision of these processes, first of all, from the governmental side. Thus, today the actual problem of a state policy is the economic mechanism formation to stimulate the resource saving. In our opinion, provision of resource saving economic incentives should be carried out on the following directions: 1) the governmental support of domestic resource saving technologies by budgetary financing at all management levels, the preferential taxation of the

organizations engaged in resource saving activity; 2) the state protectionism introduction for the domestic resource saving equipment; 3) the introduction of preferential import duties in Ukraine for resource saving technologies and the equipment, which are not have domestic analogues; 4) exemption or reduction of profit tax for the profit part received from realization of production, made with the help of resource saving technologies; 5) certification and standardization resource saving equipment and technologies; 6) improving of resource saving equipment pricing, etc.

SOCIO-ECONOMIC PROBLEMS OF ECOLOGICAL EDUCATION IN UKRAINE

*Lyudmila Starchenko, Tetyana Popovtceva, Oleksiy Goncharenko,
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It is necessary to reconstruct the way of people's life – to save nature and resources - for softening of ecological crisis. The possible ways of such reconstruction are to bring to conformity the conduct of man in an environment, build a new society for the coexistence of nature and man, create the picture of harmonization of relationships with nature. All of these measures are the tasks of ecological education, which development is one of strategic principles of Ukrainian governmental policy.

History of ecological education has the certain stages of development. The first stage consists in the ratified programs of ecological education in educational institutions, forming of basic questions for the decision. The slump of interest to the ecological problems determined the second stage. There is the revival of Ukrainian leading elite interest to the decision of thorny ecological problems on the third stage. The necessity of ecological education methods and facilities perfection by creation of ecologically directed governmental organs is examined.

On a modern stage ecological education distribution at school is its foreground task, as love to nature is necessary to create from childhood. Preparing to the entry at universities attention is spared to the study of the special objects, here a second-rate role is taken to natural disciplines. As a result there is development of devices and equipment that do not take into account the environmental impact. Therefore it is necessary to take into account the synthesis value of scientific disciplines (physics, chemistry, biology and other) with ecology.

To ecological education inherent certain problems, namely: money insufficiency, absence of skilled teachers, lack of literature, weak laboratory base, narrow-mindedness of possibilities to conduct the even field educational and production practical works on a due.

Today not enough attention is spared to ecological education. There is the necessity of environment protection disciplines teaching methods changing from informational-reference to scientifically applied. Basic task of ecological education – to educate at the students of all specialties ecological thought, world view, culture; to educate new environmentalists with skills of ecological problems decision, able to think critically, be oriented and be able to defend the puffs of smoke.

E-LEARNING FOR ENVIRONMENT ON THE EXAMPLE OF THE DISTANCE EDUCATION COURSE: INTRODUCTION TO CLEANER PRODUCTION AND SUSTAINABLE DEVELOPMENT

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How to ensure environmental sustainability that is one of UNs millenium development goals? How to educate students and prepare the decision-makers of today and tomorrow?

The achievement of a sustainable society is ultimately an educational enterprise. E-learning has a role to play in this endeavor, as it permits global access to environmental education, independent of time and place, once the courses are available on the Internet.

Besides reaching new target groups not able to attend higher education on campus, e-learning may potentially be a more resource efficient way of delivering education compared with conventional education in physical classrooms.

This presentation provides a description of e-Learning for Environment. The Learning Model is introduced to provide a structure of how to support performance improvements through education. The result of the presentation is an action model to be used by developers and evaluators of e-learning courses.

In the distance education course over the Internet, it is possible to learn about preventive environmental strategies, how to approach an ill-structured real-world environmental problem in a team, how to conduct an initial environmental review in a small organisation (5-50 employees), and promote collaborative learning on the Internet.

In the distance learning can participate teachers in upper secondary school and university focused on environmental issues, as well as practitioners and students within the field of environmental management.

Description of the project:

Studytime is 20 hours/week (part-time). All instructions are in English and entirely web-based via a learning management platform. The hosting University is

The International Institute for Industrial Environmental Economics (IIIEE) at Lund University, Sweden.

Main theme

The main theme is to introduce the participants to well-established concepts, methods and tools that successfully address environmental problems before they arise, thereby actively contributing to sustainable development. These preventive strategies, including an introduction, are presented in 14 learning units.

Learning units:

- Environmental philosophy
- Environmental problems and trends
- Sustainable development
- Cleaner production
- Waste minimisation assessment
- Cleaner technology
- Design for environment
- It and the environment
- Environmental management systems
- Environmental reporting
- Product service systems
- Corporate social responsibility
- Integrated product policy and green taxes. Course overview
- The “introduction to cleaner production and sustainable development” (icp)

course is divided into five parts:

- Start here: Introduction (week 1)
- Learning Units: Preventive Environmental Strategies (week 2-10)
- Team-work: Real-world environmental problem (week 11-13)
- Project-work: Initial environmental review (week 14-18)
- Web-tutor: Collaborative learning on the Internet (week 19-20)

INTEGRATION OF ENVIRONMENTAL CONSIDERATION INTO THE DECISION-MAKING PROCESS OF THE LOCAL AUTHORITIES IN RUSSIAN FEDERATION AND UKRAINE (CASE OF STRATEGIC ENVIRONMENTAL ASSESSMENT)

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Studies of the integration of environmental policy instruments into the decision making process of countries in transition (CIT) are underrepresented in the academic literature. The exact knowledge about the instrument implementation mechanisms and realization of the importance of those processes would help researchers and

decision-makers to improve the environmental performance on the local level, as well as to predict the outcomes of the decisions made. In the NIS countries this informational gap in studying environmental decision-making on the local level is especially deep. This study of environmental performance and the practices of environmental policy instrument integration on the local level with a specific focus on Russian Federation and Ukraine aims to meet the need for such knowledge and to stimulate academic discussion on the topic. Strategic Environmental Assessment is hypothetically suggested to be an effective tool in improving the environmental performance of the given municipality. The SEA relevance and applicability for the conditions of transitional economies is analyzed.

Managing the local environment has always been a key aspect of local policies even before environmental problems gained large-scale attention in the 1980s (Szarvas 2003). However, it was only recently that environmental decision support and management tools, such as impact assessments, environmental planning, programming, and management systems started to play a more significant role in local policies. Long term planning and the implementation of systematic tools have been strongly supported by the development of the sustainability agenda.

During the transition to a market economy the planning principles of the administrative/command system in the Newly Independent States (NIS) were not considered reliable and the planning capacities were significantly weakened. One of the most affected levels of decision-making was the local planning process. In the Russian Federation and Ukraine (the patterns of governance of which are widely used by other NIS countries) the following main features were characteristic of local planning in recent years (REC 2003):

Emphasis on short-term planning. For a number of years the municipalities used mostly one-year plans or even no plans at all. Most of the cities have outdated master plans (they expired several years ago) and there is no initiative to upgrade them.

Disintegrated sectoral approach. The considerations of economic development, social improvement and saving the environment are considered as separate and partly contradictory issues.

Administrative and technical approach instead of open planning. Most officials and proponents consider stakeholders' participation as a 'nuisance' that disorganises the planning process. Strategic planning thus lacks transparency and public credibility.

Local authorities, which make the strategic decisions and set out plans of local development, are the most effective in dealing with the environmental problems. There is a number of environmental policy instruments, integration of which might then serve as an effective tool for gaining sustainability on the local level.

The instruments to be addressed include:

Environmental impact assessment (EIA) and strategic environmental assessment (SEA).

Environmental management systems (including environmental management and audit scheme (EMAS) and standards of environmental management ISO 14001)

Financial mechanisms of environmental performance (taxes, quotas for pollution, debts and payments)

Strategic Environmental Assessment, which is defined as the application of environmental assessment for plans, policies and programs, is a particularly relevant and effective tool for government at all levels. At the last meeting of the International Association for Impact Assessment (IAIA) in Marrakech, Marocco (June 2003), SEA was recognized as an instrument of environmental policy which is being applied frequently and successfully, although, there is still a need to search for the most effective way of implementing it (IAIA 2003). Since signing the Kiev SEA Protocol of the Espoo convention on Environmental Impact Assessment in a Transboundary Context², most countries began launching inserting pilot projects on SEA implementation into the general state policy. As the SEA practices are progressing in development, they are not just used to support decision making, but also to manage decision processes.

The aim of the research is to establish a research framework for the analysis of environmental policy instrument integration into regional development planning in Russian Federation and Ukraine, in order to investigate the possible effectiveness of the instrument integration in other countries of the NIS.

Given this aim the concrete *objectives* set are as follows:

To provide an overview of the conditions of the functioning of local government in Russian Federation, and Ukraine

To analyze whether transparency and the goals of sustainability in local planning might be achieved through the Strategic Environmental Assessment integration into the decision-making process

To describe and evaluate the efficiency and relevance of the instruments used by the EU-accession countries (Hungary, Poland) for the contemporary conditions of the NIS countries (Russian Federation, Ukraine)

To provide a comparative analysis of practices used in different countries of the region in the realm of the local decision-making process

To develop recommendations for the national and local authorities in Ukraine and Russian Federation, based on the experience of the EU-accession countries and integration of strategic environmental assessment in the decision-making process of other NIS countries.

The next conclusions are to be drawn from the research conducted:

Local governments in the NIS countries are performing poorly in the context of sustainable decision-making process. The whole variety of environmental policy instruments is there to address the crisis and improve the environmental performance of the local governments in the CIT (countries in transition).

The experience of the EU-accession countries can provide useful assistance to the other developing countries of the region (including fSU) in improving and increasing the transparency of the decision-making process in local authorities.

² Kiev Ministerial Conference, 21 May 2003

The process of integrating strategic environmental assessment practices into the decision-making process of local governments in the Russian Federation and Ukraine is a relevant and effective tool of improving the environmental performance of a given local community.

The experience of the Russian municipalities where SEA is being implemented, can be used in other neighboring NIS countries (e.g. Ukraine) to make the process of decision-making transparent and environmentally sustainable.

IMPACT OF TRADE LIBERALIZATION ON THE ENVIRONMENT

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There is no simple pattern to the relationship between trade, environment and development. Depending on the sector, the country, the markets and prevailing policies, trade and trade liberalization may be good or bad for the environment and development. At the most basic level, trade and the environment are related because all economic activity is based on the environment (physical and economic linkages). At another level, environment and trade represent two distinct bodies of international law (legacy and political linkages).

1. Physical and economic linkages:

1.1 Product effects occur when the traded products themselves have an impact on the environment or development.

1.2 A subset of product effects, sometimes termed “technology effects,” are associated with changes in the way products are made depending on the technology used. Technology effects stem from the way in which trade liberalization affects technology transfer and the production processes used to make traded goods.

1.3 Trade and trade liberalization can expand the level of economic activity possible by making that activity more efficient (scale effects).

1.4 Trade liberalization will lead to changes in the composition of a country’s economy, causing it to produce more of the goods it makes well or has in abundance, to trade for those it does not (structural effect).

2. Legacy and political linkages

2.1 Environmental standards and process and production methods (PPM). Trade law does not question the right of countries to discriminate based on product-related PPMs. There are rules about the process of discrimination, of course, but the principle of discrimination is accepted. Non-product-related PPMs, on the other hand, make no difference to the commercial or practical substitutability of the products. And WTO law does not allow countries to discriminate among like products, whatever their different environmental impacts.

2.2 Environmental standards and competitiveness. In developed countries a key concern of the environmental community is the prospect of a “race to the bottom,”

where countries try to lure investment by lowering or not enforcing their environmental standards.

2.3 Ecolabelling. Environmental labels (or ecolabels) and environmental management system certification programs are touted as a possible solution to the problems with PPMs mentioned earlier.

2.4 Subsidies. Subsidies are one of the clearest areas of shared interest for the trade and environment communities. Both oppose so-called perverse subsidies—subsidies that are harmful to the environment and the economy. And there may also be scope for co-operation on allowing new subsidies that benefit the environment without unduly distorting trade.

ESSENTIALS OF THE ORGANIZATIONAL - ECONOMIC MECHANISM IN THE FIELD OF SOLID DOMESTIC WASTES (SDW) MANAGEMENT

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During last decade the volume of SDW annually grows by 3-6 %, exceeding the rates of the population's growth. This quantitative growth of SDW is the result of changes in people's way of life, the wide spreading of disposables. Various packing materials make up about 30 % the weight and 50 % of the volume of the wastes, most of which do not decay quickly or do not decay at all.

The problem of ecological danger of SDW concerns all the stages of waste management. As for Odessa this problem refers to the most vital, because the mid-annual volume of SDW in the city makes some 1.5 million m³ and by 2005 it will increase up to 2.4 million m³. For the city located on the Black Sea coast and which is suppose to serve as the recreational center, the processing of waste products is the important step on a way to sustainable development.

Ukrainian businessmen could find the secondary processing of SDW as very profitable business. In market economy conditions when a major principle of behavior of the subject of economical activity is an economic feasibility, the choice of priorities of a environmental protection policy in the sphere of the waste management at a microlevel should be based upon the realization of directions ensuring additional incomes. These directions should be: recycling; waste products processing into commodity output; waste products selling with the view of subsequent recycling; recycling methods perfection.

Substantiation the expediency of market technologies application as the tools for salving problems, facing the subjects of economic activities in the sphere of the SDW management seems to be actual. The first step in market technologies adaptation to environmental protection activity should become the revealing of

specific features of market technologies display in environmental protection sphere (table 1).

The great dill of attention is paid to volume minimization and processing of packing materials. In 1994 the Instruction 94/62/EC of the European Council and the European Parliament, aimed on the coordination of national measures for regulation of packing usage and processing of its waste products has been accepted. The key factors, which determine development the strategy of the modern packing industry, are technical and operating characteristics, economical expediency and compatibility of packing with environment. The basic tendencies in the packing materials market are a decrease in weight, creation of new forms and sizes, and also providing of the simplification of the packing waste products separation and recycling. In this connection it is necessary to consider the strategy of improvement of the organizational - economic mechanism of SDW management for Ukraine, in particular for Prichernomorsky region.

Table 1. Specific displays of market technologies in environmental protection activity

Technology	Specificity
<i>Leasing</i>	Long-term rent of nature protection technical equipment.
<i>Selling</i>	Hire purchase of the nature protection equipment and "green" technologies.
<i>Franchising</i>	"Green" technologies and production's promotion.
<i>Factoring</i>	Transfer of requirements on ecological payments or compensation of damage from environmental contamination to financial structures
<i>Tolling</i>	Usage of another enterprise's waste products of manufacturing as raw material.
<i>Diversification</i>	Development of the new market segments due to the production made of the main manufacture's waste products.

THE PLANNING AND ASSESSMENT METHODOLOGY OF THE RENEWABLE ENERGY OBJECTS ALLOCATION

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Last decade views of many scientists, politicians and environmentalists concentrated on the development of renewable energy. Newertheless efficiency of its exploitation is still under question. For instance, the current cost of renewable energy supplies is not competitive with fossil fuels in many areas; this is largely a

function of the lack of finance and effort put into their development and the subsidies given to energy production from oil, coal and natural gas. Given more attention, renewable energy sources could become cost-effective more quickly, and with a number of other advantages in addition to their environmental benefits relative to the burning of fossil fuels. One of the tools of its efficiency increasing is careful and scientifically grounded planning of its allocation. The planning process includes both technical aspects of data gathering, analysis and plan formation, and political dimensions of elaborating goals, assessing feasibility and forming support for implementation.

The aim of the paper is to elucidate scientific part of methodology of planning and assessment of the renewable energy objects allocation at the regional level.

The aim of methodology is to choose the most appropriate territory for allocation of renewable energy objects. The objectives are: to plan allocation of renewable energy objects without significant impairments of land resources; to minimize its negative environmental impacts; to choose land site with maximal nature potential; to reduce costs connected with full scale environmental and socio-economic planning and assessment of renewable energy objects introduction at the whole territory of the region.

The methodology is based on assessment of acceptability of certain land category use for allocation of renewable energy objects. Land is the nature product. Each site has set of different characteristics. Such characteristics composed spontaneously under climate influence and nature processes and only improved or deteriorated under impact of human activity. Therefore combination of land capability and nature conditions does not always favorably for the allocation of renewable objects even if necessary nature potential exists.

The task is to choose land categories which are appropriate for the allocation and then to determine possible environmental impacts that renewable objects will have. In such case land serves as spatial allocation basis. Organization of renewable energy objects allocation inseparably linked with space of using lands. From the location of land sites nature and economic conditions depend strongly that determine process of renewable energy production. Spatial conditions have different impacts on such production. An experience is evidence that productivity, efficiency of techniques usage and energy cost price in many respects depend on land category, square of land tenure, grounds structure etc. In that way land plays a special role in renewable energy introduction and development.

The application of planning and assessment methodology at the regional level allows determine possibility for developing alternative power engineering in the most cost-effective way from both sides environmental as well as socio-economic. In accordance with current situation in environmental and socio-economic sphere one of the most important matters is the choosing of appropriate land site or territory for the renewable energy development.

ORGANIZATION MEANINGS OF THE ENVIRONMENTALLY SUSTAINABLE BUSINESS PATTERNS IN UKRAINE

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“They are sitting the day and the night
and again the day and again the night
and are thinking how to make their loser enterprises
to be profitable without any changes in it”.

M.E. Saltykov - Shedrin

In view of high growth at the production sphere the current formation of the sustainable business pattern is impossible without environmental impact assessment (EIA). Integration of the external effects to the production processes gives a possibility to control it and leads to the environmental condition which is called an environmental safety in Ukrainian legislation. The ways of achievements are determined as an implementation of interconnected system of the political, economical, technical, organizational and other measures. The analysis of the European countries' regulation reveals an efficiency of this method.

Ukrainian regulations base is not implemented in full scale as all-sufficient instrument for environmental safety achievement. Alternative tools which are not in conflict with current system and to be adding it are necessary in Ukraine. For three decades implementation of the principally new approach to business management had being occurred because of development of the Corporative Environmental Management (CEM) system. In the basis of CEM is an application of proactive environmental management which is corresponding to the sustainable environmental safe business. The core of the changes is implementation of the international standards system ISO 14 000.

The elucidation is provided in the frame of the Tempus Joint European Project IB-JEP-23100-2002 “Developing sustainable business patterns in Ukraine”. The author uses the Ukrainian executive legislation, experience of the European countries and European regulation management system, the current regulation base in the field of standardization, certification and accreditation. The EMAS and ISO 14000 standardization system have been analyzed also.

The author relies on the papers published by the next specialists: Pakhomova N.V., Yezhov V.P., Makarov S.V., Patoka I.V., Lozanskiy V.R., Shaldon Ch., Yaxon M., Marcus P.A.

The aim is to highlight features of business-environment formation in Ukraine, on the example of small-business, to show issues of sustainable functioning of enterprises, to determine necessity and perspectives of introduction of the Corporative Environmental Management (CEM) system.

For the aim achievement it is necessary to show the role and an actual state of the small business in Ukraine, to determine an incompleteness of economic

understanding of enterprise's sustainability, to reveal the role of standardization in the frame of ISO 14000 series, as essential tool of CEM implementation, to consider the perspectives of processing approach using for the development of environmentally and economical sustainable structures of enterprises management.

Application of Corporate Environmental Management system taking into account processing approach in manufacturing management opens up new possibilities for the development of small business enterprises in Ukraine.

THE PROBLEM OF HYDRO ENERGY OF THE GLOBE AND ITS SOLVING

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For the global satisfaction of the energy needs of the population of the Earth it is necessary to use World Ocean with its currents.

Technical progress was developing according to the principle - we take whatever comes closer.

Homo sapiens always searched for the ways of using the energy of others in order not to spend his own.

First there were animals, then wind and water resources. When the energy of heat was discovered, everything went into play. People have learned to use what God gave: the resources both on the surface and inside the Earth. This was the normal route of development, probably as seen by the Creator.

Plants, bituminous coal, oil, gas, uranium: these are development stages of the mankind.

Danger for the people and threat to the ecology was growing at each stage in the geometric progression. After reaching the necessary level of technologies for the transfer to the alternative power generation engineering, we still continue to dig, to bore, to obtain and to pump out everything from the earth whatever gives energy.

We are following this route and cannot stop!

This is a deadlock: extensive and dangerous development of power generation engineering. That's the edge!

What the Earth has been accumulating for billions years, we now intend to destroy within a couple of centuries!

During the Creation of our planet there was the separation to the Earth and waters.

Water is constantly accumulating solar energy and sustains life on Earth and cleans it. Three quarters of the surface of Earth are its constantly supplemented energy storage.

A very small portion of the energy of this accumulator can satisfy all the energy needs of the earth.

Five percent of the heat of flow Gulf Stream is heating Europe. This is an obvious fact. It is also clear that colossal energy of this current is not used in any way, nor is the energy of other currents.

Nobel invented dynamite and wanted to see it used as aid to people: for exploding rocks, for building channels and for other good causes, but he could not resist aggressors. Nevertheless he succeeded in directing the results of its work, concentrated in the money, toward the support of the good on Earth. He passed away, but his money still supports creative people.

Now anything valuable invented or developed by people is first of all sniffed by the military so that they could see if those inventions and ideas could be used in their business.

The money earned by people perishes, and so do the minds of people of capable and creative.

Attempts to solve problems by creating various forums - places for windbags - proved to be useless. Beginning the League of Nations, they have not suggested anything that would be useful for humanity in the future.

The Institute of World Observations reports: 26 billion tons of the fertile layer of the arable earth are lost annually, forests over the area of more than 31 million hectares are damaged, thousands of lakes become biologically dead, 25-30 thousand vascular plants are under the threat of disappearance.

The degradation of the environment creates the threat to the LIFE of people!

Scientists do not heed. They do not look back at the results of their deeds. For many years they have been working "on the edge of positive result", not at all considering the consequences of this result.

Those who feed on the reactors and multiply them will never agree that for the EARTH just one reactor will be sufficient - the SUN. They are dependent people. They will not chop the bough on which they sit.

Thermal power generation plants working on the organic matter, coal, the bituminous shale, oil, gas or atom are harmful to people and ecology. Output and transportation of heat-transfer agents is also dangerous and harmful. Their waste is excessively dangerous and not necessary.

Those earning on the mineral wealth of the earth will not support our project either. They are dependent people.

However, here is a paradox. Examining long-term targets, more than others they will be interested in saving the reserves that belong to them. Only mindless people can behave the way they do now.

A lot brain and passion people put into the creation of wind power units. Their deeds are intelligible and they are praiseworthy. Wind power devices are completely suitable for the solution of local problems.

Creating very powerful solar energy stations is also not rational for that simple reason that they are already created in the form of oceans. Energy coming from the sun is already concentrated in their heat and currents.

Both oceans, continuously deriving energy, must let it out in order not to accumulate to the state of explosion. World Ocean spends it on the evaporation, supplying the Earth with moisture. The snake ball of its currents spends it on mutual friction, wasting the energy. The same happens with the Air Ocean with its electrical discharges and typhoons.

In the process of development and realizing of this major project new ideas and the solutions will most certainly be generated.

Now it is possible to create stationary, mobile and autonomous hydroelectric power generation plants on the World Ocean currents, and power plants without dams on the rivers.

After learning how to obtain the supplemented energy from the Creator, people will gradually liquidate technologies that have outlived themselves, created with their mind and pride.

They will stop using the resources of the Earth for power generation and to convert them into waste so that the descendants remember about their deeds in this world!

The plan for the solution of this problem can be substantiated and carried out by competent people in many fields of knowledge. Including those occupied with creating monsters. They are these people in the different countries, but they remain uncalled-for in this direction.

Not less important is to give young the possibility to express themselves in a good deed.

Let's save the World!

We live in big and priceless world
Among the flowers and trees,
Now in warmth, now in cold,
Among the oceans and seas.

We strive for life, for healthy life,
We want to breathe the clear air.
But every day with a sharp knife
We cut this world. It's so unfair!

The nature's begging us to stop.
And not to feed her with these wastes.
She says, she's reached the highest top.
The mankind moved at too high rates.

A man seems to be deaf and blind
To see the consequence of threat

He needs salvation! Will he find
Till all this world's completely dead?
The water, air and the soil
Are very dirty and polluted.
A man creates but then can spoil-
In such a way his life is suited.

And then he speaks about changes,
And ozone holes, radiation,
About drastic, harmful dangers
To every man, to every nation.

So many cars release much gas,
And enterprises do much harm.
That's why the world is in a mess
We must save it from what we'd done.

And only then it'll save us too
From the deceases and the end

HOW TO START WITH ANGLING, BUT NOT TO DISTURB THE NATURE SURROUND

Igor Ved,

Sumy National Agrarian University, Ukraine

I've fished since I was 5 or so. I've always been irresistibly drawn to water. Any little stream or brook calls me to investigate. No bridge can be passed over without my stopping and going back for a peep, hoping for at least a glimpse of the shadowy inhabitants of the pool beneath. Only now I realize I'm not able to breath without peace and beauty of the nature surround, I become a slave of it.

Years have past. Everyone felt there is les and les fish in water. Someone tried to go feather away from civilization centers, someone gave up fishing as a dead sport whenever, but there is at least one person who put a question “why it all happens?”

There is no doubt for now—it all happens because of the human beings bad influence. Then, what we going to do to stop such propagation with no end, with no way into future? Rational Use of Nature! From the economical point of view one should pay for each fish had been caught, for each flower had been weight down... How to get this payments?—this is the question.

- How much and what must be paid?
 - Should taxes be paid per day, fish, kilogram, person, lake or per time a small fish grow to a big one from a hard-roe?
 - How much should be paid if we need to include into calculation not only the number of fish in an area, but and the number of anglers and poachers at the same time.
- An answer to this in England?
 - (They have chosen the club system)
- How one deal with it in Germany?
 - (They prefer governmental system)
- The same in Ukraine
 - (Nothing have been chosen jet)
- What must be changed?

SUSTAINABLE WATER MANAGEMENT IN A MUNICIPAL ECONOMY

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Strong water-supply and efficiency reduce the consumption of water, energy and decrease the environmental pollution from their manufactured and also reduce expenses for municipal services and development of its capacity. Low cost of water resources, absence of up-date methodical, normative and legislative bases delay the sustainable water use in our country. Due to intensive exploitation and inadequate pollution control Ukraine faces with degradation of natural water resources and requires the sufficient water management system.

Sustainable water management system should take into consideration economic, social, environmental, legal, institutional factors. On the beginning powerful water consumers should be recovered for developing water conservation measures.

Dwelling sector is one of the most powerful water consumers on urbanized territories. Every day the big Ukrainian city, like Kharkiv, consumes no less than 200 million of cub. m water per year and 80 % of that for households water supplying. About 40 % of water to supply for needs of domestic sectors loss due to different leakages and unsustainable water consumption.

The aim of the work is to develop a new sustainable strategy of water resource consumption for households on urbanized territory to base on environmental, economic and social aspects of water use in domestic sector.

Economic methods of analysis and principals of environmental engineering have been used for the research work.

After elucidating the consumption of resources different cost-efficiency measures were proposed. Due to implementation of such measures water consumption in household could be reduced on 30%, for example, it is about 200 thousands of cubic m. per day in Kharkiv city. Also the technical and economic indicators were developed for the measures: the value of water saving, municipal payments reduction, capital investments, decrease of operational expenses.

The environmental balances of municipal enterprises to be developed by real data have help to analyze environmental impacts from the infrastructures. After that environmental indicators of water saving in households were developed: reduction of air emissions, wastewater and wastes.

The comparison economic and environment cost-benefit analysis show real positive results of water-saving measures implementation in the municipal economy.

Also research results have shown a low activity of society in environmental problems solving. It connects with no sufficient environmental education to orient on sustainable development. Also promotions of environmental friendly living, like ecoliving, are not developed in our country.

However, it is necessary to develop a social activity in environmental problems solving, including resource conservation. The enthusiasm of citizens can be

transferred into concrete actions and will increase economic growth while minimizing ecological and environmental harm.

Good economics and good environment must go hand in hand, especially in developing countries, where there is a great potential for improving the efficiency of municipal economy.

HEALTH IN SUSTAINABLE DEVELOPMENT

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The millennia brings changes in all aspects of the social life.

Health, environment and development hazards has changed considerably. New environment and development problems have emerged, some of which appear to threaten the entire ecosystem. While factors associated with the development process and the changing use of technology have resulted in considerable gains to people throughout the world, they have also presented additional threats to people's health.

In industrialized countries, typical health and environmental problems include outdoor air pollution, radon in homes and schools, the "sick building" syndrome, toxic chemicals in drinking-water, non-ionizing electromagnetic radiation and pesticide residues in food. In developing countries, health and environmental problems are often related to poverty and arise largely as a result of such factors as rapid, uncontrolled urbanization and agricultural and land-use practices. In addition to hazards related to pollution, vector-borne environmental diseases may be prevalent as well as health and environmental problems associated with a lack of proper shelter, water and sanitation or poor food hygiene.

Factors affecting the health can be divided in several groups:

- Widespread absolute and relative poverty
- Demographic changes: ageing and the growth of cities
- Epidemiological changes: continuing high incidence of infectious diseases, increasing incidence of noncommunicable diseases, injuries and violence
- Global environmental threats to human survival
- New technologies: information and telemedicine services
- Advances in biotechnology
- Partnerships for health between the private and public sectors and civil society
- Globalization of trade, travel and spread of values and ideas.

The problems to be dealt with are often simultaneously global and local. Global economic activities, escalation of travel and trade and the changing use of technology all have significant implications for health and the environment.

ECONOMIC INSTRUMENTS FOR SUSTAINABLE DEVELOPMENT

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Pollution and protecting of environment, rational using of natural resources is the most popular problems of nowadays. The underlying causes of these problems are a mix of market and policy failures. There is a strong need to search for solutions which do not only address the symptoms but focus on the underlying causes for this problems. The most effective way to solve these problems is using of economic mechanism.

Economic mechanism can be viewed as mix of economic instruments. Economic instruments is instruments that affect costs and benefits of alternative actions open to economic agents, with the effect of influencing behavior in a way that is favorable to the environment. These instruments try to close the gap between resource scarcity and resource prices by internalizing costs which are external to the producers and consumers. A lot of different economic instruments are available. According to the classification of OECD we have identified five categories of instruments: 1) charges and taxes, 2) deposit refund systems 3) emission trading schemes, 4) financial enforcement incentives and 5) subsidies.

All of them have their advantages and disadvantages and for imposing them a case by case approach is necessary to select the most appropriate one for a given environmental problem. This makes it necessary to look into economic, political, social and cultural effects in order to make sure that these instruments are target oriented and acceptable by the public as well as the target group concerned.

It is also necessary to involve the private sector in the design and implementation of measures to achieve agreements on environmental quality standards. The private sector should be given the opportunity to come up with its own ideas to achieve established environmental objectives. Simply imposing regulations may stifle industry, whereas a flexible approach is more likely to mobilize sector recommendations and the adaptation of economic instruments.

Furthering the achievement of sustainable development will require an integrated consideration of institutional, economy and industry reform. Economic instruments should play a more important role as part of an integrated bundle of measures. But it is important to expect not too much from the use of economic instruments by themselves if the surroundings do not provide additional assistance from a well defined environmental policy.

INFLUENCE Of The Environment On Human Condition

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As long as people exist their health condition has been formed under influence of natural factors. People were adapting to the environment in the course of evolution. One cannot live without environment as it is connected with the human inner world. From the embryonic stage through the whole life a person is contacting with components of the environment: air, water, soil, food products.

Contaminated environment influences the human's condition in various ways through almost all human's activities. It means that it is unfavourable for people to have any of the components contaminated. Badly affected can be any systems and organs. The atmosphere is of special significance. A person in average inhales 9 kilos of air, drinks approximately 2 litres of water, eats over 1 kilo of food daily. One can live for some time without food but not more than 5 minutes without air. Consequently, a person contacts with harmful substances in the air much more frequently than through water, plants and other components.

Geographic and ecologic features of the environmental contamination are mainly determined by distribution of industries and transport. Contamination causes specific pathology of population.

According to the degree contaminated areas may affect the human's activity we differentiate between relatively clean, moderately contaminated, heavily contaminated, extremely contaminated areas, regions of ecologic disaster and ecologic catastrophes. The region of Chornobyl Atomic Power Plant is contaminated mainly with radiation, other territories with chemicals. In Donbass and industrious cities along the Dnipro river contaminated is atmosphere, in the regions of intensive melioration contaminated are soil and water.

Regions of ecologic disasters and catastrophes are of especially serious concern. These are territories where degradation is seen as irreversible and it is impossible for people to live there. The region of Chornobyl Atomic Power Plant is considered as such.

Every year about 160 thousand people in Ukraine have oncology diseases and about 100 thousand die. These figures were reported on 17 March 2004 during the Parliament session on 'Oncology Diseases in Ukraine'. The following are the regions with the highest number of people having cancer: the Crimea, Odesa, Kherson, Mykolayiv, Kirovograd, Poltava, Kyiv.

Morbidity is the most precise indicator of environmental influence on the human. However the static figures are not always accurate and comparable. Mortality can be viewed as the consequence of the environmental influence. This indicator is the subject to obligatory registration under a unified classification of causes of death. Officially morbidity and mortality are calculated yearly per 100,000 of population.

GLOBALIZATION ISSUES

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Globalization is the process of increasing the connectivity and interdependence of the world's markets and businesses. This process has speeded up dramatically in the last two decades as technological advances make it easier for people to travel, communicate, and do business internationally.

Two major recent driving forces are advances in telecommunications infrastructure and the rise of the internet. In general, as economies become more connected to other economies, they have increased opportunity but also increased competition. Thus, as globalization becomes a more and more common feature of world economics, powerful pro-globalization and anti-globalization lobbies have arisen. The pro-globalization lobby argues that globalization brings about much increased opportunities for almost everyone, and increased competition is a good thing since it makes agents of production more efficient.

The world as its often refer to as a global village shows that the whole world has been made to be as a village with the aid of globalization. Globalization has drastically improved all aspect of human life such as Education , Social, Economy, Environment etc. The importance of globalization can not be over emphasized due to the unlimited improvement it has brought to life as a whole.

EVALUATING ENVIRONMENTAL POLICY INSTRUMENTS

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This chapter sets out the range of costs and benefits which may be relevant in evaluating environmental policy instruments.

A central issue in evaluating the effects of environmental market mechanisms is their environmental impact. Environmental effectiveness is a key issue in evaluating all environmental policy measures and may be considered at a number of levels: the impact on polluting emissions, the impact of reduced emissions on environmental damage and the economic value of reduced damage to the environment.

The administration and compliance costs of market-based and regulatory environmental policy instruments will be an important consideration in evaluating the relative merits of different policy approaches. From the point of view of the

economy as a whole, such costs are a dead-weight cost of the system, in the sense that they absorb potentially-productive resources; other things being equal, environmental policy measures with lower administration and compliance costs are to be preferred.

Some environmental market mechanisms, including user charges, environmental taxes, and certain types of tradable permits, may generate government revenue. In some cases, the revenue generated may be the primary purpose of introducing the measure, in the case of the market mechanisms the revenue may constitute a second source of benefits from their user, over and above their environmental impact.

Wider economic effects is the range of economic costs and benefits associated with different environmental instruments apart from the direct abatement costs, administration and compliance costs, and the costs of charges in tax revenues. They include potential effects on the price level and the rate of inflation, competitiveness, trade patterns, employment, income distribution, economic growth, the rate of innovation. These costs include some which are likely to be predominantly short-term costs of adjustment, and others which may be more durable, or experience over a longer time horizon. Some of the wider economic effects may lead to policy changes which may in turn affect the effectiveness of economic instruments.

Economic instruments are likely to be more effective at stimulating innovation in pollution-abatement technologies than regulations which merely require a given level of compliance. Measuring this innovation effect is likely to be difficult, although some light may be shed by surveying the views of the relevant decision-makers in industry.

Assessing effectiveness of policy instruments in terms of environmental quality should allow for side-effects in other environmental media. The possible transfers of pollutants from one medium to another must be considered explicitly when contemplating use of economic instruments.

Environmental policy instruments do not operate in a national vacuum. As much as domestic instruments may not lead to intended effects as a consequence of foreign influences, national instruments may have international effects. Foreign or international environmental policy is one of the many possible, influential factors relevant in evaluating national policy instruments.

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