## ECO-INNOVATIONS AS THE BASE OF GREEN REGIONAL DEVELOPMENT<sup>1</sup>

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It is known that sustainable development is the basis of effective environmental and economic activity due to the development of innovative techniques and technology. The necessity of creating a sustainable environment requires deep understanding and formation of mechanisms of effective management, taking into account environmental factors. One of the best ways to achieve these goals, to the implement the mechanisms for effective environmental management at the regional level is the creation new forms of development based on eco-innovations. These days, eco-innovation presents interesting growth perspectives for an ever greater number of businesses thanks to a wide variety of niche market opportunities.

Eco-innovation covers a wide range of activities including areas such

as:

- alternative energy, including energy storage and supply infrastructure, energy savings,

- consultancy and innovative project/business engineering and finance services,

- environmental damage remediation, including brown field rehabilitation,
- transport,
- recycling,
- eco-innovative product engineering, i.e. factoring recycling from development,
- new ways of leveraging natural resources,
- construction, eco-construction and urban regeneration,
- new products, processes and business models and even possibly new uses and
- adaptations of existing products and materials (eco-design and ecoproducts), as well as new materials,
  - environment-friendly agriculture, including production and breeding of natural
  - organisms,
  - spatial planning,

- zero-energy housing, intelligent water management housing and housing built with sustainable construction products,

- the wellness industry, which in some regions can also include the development and processing of organic products, eco-tourism and therapeutic tourism as well as preventive medicine and medical care for the elderly.

Such a wide range of activities should theoretically enable all types of regions to

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generate competitive advantages in this sector. From the perspective of regional development, eco-innovation can be the subject of one or more clusters and regional development strategies geared toward either the mainstreaming of green technology into strong regional industries or a niche based approach. There are the different components of the ecoinnovation industry value chain, which actually encompasses five industry clusters, i.e.:

- energy;
- clean technology;
- eco-construction;
- spatial eco-planning and eco-utilisation;
- environmental damage remediation.

The activities associated with these four stages include:

- investigating and developing new energy sources (hydrogen, biofuels, etc.) and products with a small environmental footprint;

- manufacturing eco-innovative products and services;

- infrastructure and logistical systems providing products and services to customers, including alternative energy storage solutions;

- the different market segments of the eco-innovation industry.
- Among the significant benefits offered by the region innovative approach

to ecological specialization of its economic potential , can be described as a gradual conquest of markets for environmental goods and services , increasing the export potential ; conversion of productive capacity in the direction of strengthening the scientific and information capacity and reducing material and energy production; efficient use of capacity research and production complex , reduction of destructive pressure on ecosystems and improvement of the human environment , the creation of conditions for the export of educational and training programs for service of products for environmental purposes , will be produced for export.

In Sumy Region some positive steps are observed in the direction of forming an environmentally attractive image of the region for the development of mass ecotourism promotion of Sumy region as a region, based on environmentally friendly products and environmentally friendly technologies, increasing the number of jobs through the development of environmentally oriented enterprises. The least developed direction turned stimulate recycling industrial and household waste due to lack of economic incentives for such activities in the region.

For successful organizational and economic forming of green industry and long-term development of eco-innovations in particular, need to perform the provisions on granting state support, that include full or partial interestfree crediting, preferential terms of VAT payment of tax bills while importing new equipment, devices and components, stability of a special regime innovative activity, compensation arrangements for industrial parks and

their participants, priority in attracting foreign credits.

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