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**INSTITUTE OF SUSTAINABLE DEVELOPMENT:
BRIEF HISTORY AND NEW CHALLENGES**

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In 2011, the structural unit of Lviv Polytechnic National University was created with the title “~~Institute of Ecology, Environmental Protection and Tourism named after V. Chornovil~~”. The peculiarity of the institute is that it is multidisciplinary and is currently training specialists in five specialties that belong to five different branches of knowledge – natural sciences, production and technology, service sector, management and administration, civil security. In addition, our institute provides comprehensive training for students of all specialties in ecology, occupational safety, life safety and civil protection.

As we know sustainable development has been described in terms of three spheres, or domains, i.e. the environment, economy and society. Therefore the concept of sustainable development combines all the specialties and departments of our institute: ecological domain – specialties 101 “~~Ecology~~” and 183 “~~Environmental protection technologies~~”; economic domain – specialty 076 “~~Entrepreneurship, trade and stock exchange activity~~”; social domain – specialties 263 “~~Civil safety~~” and 242 “~~Tourism~~”.

The development of the institute, the new specialties and training programs, the awareness of the need for changes in the educational paradigm aimed at the sustainable development of society, the economy and the environment have all contributed to changes in the structure and the name of the institute.

In 2017 the institute changed its name to the Institute of Sustainable Development named after V. Chornovil. In this way, the Institute is involved in the implementation of the Strategy for Sustainable Development "Ukraine-2020", in particular such components as the program of environmental protection, the tourism development program, the reform of quality and safety of food products, entrepreneurship development program, innovation development program, etc.

The main goal of the institute is to train skilled personnel for such high-priority areas of science, education and economy of Ukraine as environmental protection, sustainable use of nature resources, technologies of environmental protection, civil security, tourism industry, trade and entrepreneurship. Moreover our institute lecturers have extensive experience in teaching “~~Ecology~~” and “~~Work safety~~” for all specialties of such a major technical university as Lviv Polytechnic. Graduates of our institute (namely, the specialties “~~Ecology~~” and “~~Environmental protection technologies~~”) can work as teachers of ecology in schools and colleges, and accordingly implement the ideas of sustainable development at the level of school education.

Sustainable development is the core of environmental technologies. For students of our institute we conduct various courses related to different aspects of sustainable development, namely: Sustainable development strategy, Environmental safety of production, Environmental impact assessment, General ecology, Natural and sewage treatment

technologies, Management of environmental protection, Environmental engineering, Modelling and forecasting of the environment, Technology of land resources protection, etc.

The scientific work of the scientists of the Institute is related to the development of methods, tools, technologies of environmental protection – a promising direction of scientific research, especially if one considers the goals of sustainable development and takes into account the problems of the development of science in particular. That is, our scientists contribute to sustainable development through their investigations. The relevant researches are published in “Environmental Problems” Scientific Journal (Editor-in-chief Prof. M. Malovanyy).

We cooperate with educational institutions of other countries. For example, in the framework of a bilateral agreement with the Pomeranian Academy in Slupsk (Slupsk, Poland), our students take advantage of international academic mobility: during their study in Poland they get acquainted on a variety of domains of sustainable development and they can observe the realisation of sustainable development principles in another country.

This year our institute for the first time holds the International Scientific Symposium on “Sustainable Development – State and Prospects” (SDEV'2018). The 5th International Congress “Environment protection. Energy saving. Sustainable environmental management” (EPESSEM'2018) will take place in September 2018. These activities are a good platform for meetings of university teachers and scientists from different countries to discuss education and scientific issues which are important for sustainable development.

We believe that the universal nature of sustainable development and relevant international projects and agreements lead to the emergence of a new type of education - Education for Sustainable Development, which is much wider than only environmental education. Education is a basic element of society's transformation towards sustainable development, it needs not only to provide knowledge, but also to provide appropriate motivation, serve as an explanation and provide social support for the formation and use of appropriate skills. The key task of the 21st century education is to develop thinking, motivation and lifestyles necessary to ensure a sustainable future. The documents of the world forums on sustainable development say that qualitative education is a necessary but insufficient condition for ensuring sustainable development of society.

The concept of education for sustainable development has not been elaborated in many respects yet. But it can be noted that, along with professional environmental, economic and other forms of education, there is a transition to a model of learning based on broad interdisciplinary knowledge based on an integrated approach to development of society, economy and preservation of the environment. Our institute makes the efforts to change the curricula aimed at implementation of such model of learning. We have the young, energetic team of teachers and scientists (about 90) and students and postgraduates (about 800) who are ready to work for education for sustainable development.

Another challenge for the institute is to popularize the ideas of sustainable development in Ukraine and to promote the formation of a new type of thinking, in which all socio-economic, socio-ecological processes and phenomena will be considered taking into account the principles of sustainability and preservation of the natural environment.