## Министерство образования Республики Беларусь Полоцкий государственный университет

# УСТОЙЧИВОЕ РАЗВИТИЕ ЭКОНОМИКИ: МЕЖДУНАРОДНЫЕ И НАЦИОНАЛЬНЫЕ АСПЕКТЫ

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Устойчивое развитие экономики: международные и национальные аспекты [Электронный ресурс]: электронный сборник статей III Международной научно-практической online-конференции, Новополоцк, 18—19 апреля 2019 г. / Полоцкий эсударственный университет. — Новополоцк, 2019. — 1 электрон. опт. диск (CD-ROM).

Впервые материалы конференции «Устойчивое развитие экономики: международные и национальные аспекты» были изданы в 2012 году (печатное издание).

Рассмотрены демографические и миграционные процессы в контексте устойчивого развития экономики; обозначены теоретические основы, практические аспекты управления человеческими ресурсами; выявлены и систематизированы драйверы инклюзивного экономического роста в Беларуси и за рубежом; раскрыты актуальные финансовые и экономические аспекты развития отраслей; приведены актуальные проблемы и тенденции развития логистики на современном этапе; отражены современные тенденции совершенствования финансовокредитного механизма; освещены актуальные проблемы учета, анализа, аудита в контексте устойчивого развития национальных и зарубежных экономических систем; представлены новейшие научные исследования различных аспектов функционирования современных коммуникативных технологий.

Для научных работников, докторантов, аспирантов, действующих практиков и студентов учреждений высшего образования, изучающих экономические дисциплины.

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Компьютерный дизайн обложки М. С. Мухоморовой. Технический редактор Т. А. Дарьянова, О. П. Михайлова. Компьютерная верстка И. Н. Чапкевич.

211440, ул. Блохина, 29, г. Новополоцк, Беларусь тел. 8 (0214) 53 05 72, e-mail: a.lavrinenko@psu.by

### NOVOPOLOTSK PETROCHEMICAL CLUSTER AS A "DRIVER" OF INNOVATIVE DEVELOPMENT OF REGIONAL ECONOMIC COMPLEX

**E. Kostuchenko**, Senior Lecturer of the Department of Economics, Polotsk State University, Belarus

Ensuring a sustainable pace of development of the territory, the achievement of strategic goals of regions is impossible without a partnership of the authorities with businesses. Cluster approach in managing regional development is an alternative to traditional brunch industrial policy [1].

Clusters can become the basis for effective economic development of regions, being innovative systems. The cluster approach is a fairly promising basis for creating new forms of combining knowledge, stimulating the emergence of innovative scientific and technical areas and their commercial application, as well as indirectly supporting the field of education, science and business [2].

Many researchers note that all clusters, in a varying degree, contribute to innovative development, acceleration of the innovation process, and some of them are even specialized in this task. This idea underlies the concept of innovation clusters.

Clustering is the primary driver for economic development in many locations. OECD estimated in the beginning of the 21<sup>st</sup> century more than 35 countries had cluster development initiatives underway. These included: Argentina; Australia; Belgium; Canada; Chile; Columbia; Costa Rica; Denmark; El Salvador; England; France; Finland; Germany; Georgia; Guatemala; India; Ireland; Italy; Jordan; Mexico; Morocco; Mauritius; Netherlands; Nicaragua; Norway; Scotland; Slovenia; Singapore; Spain; Sweden; South Africa; Trinidad; Sri Lanka; Wales; USA. All of these countries, at different levels of government, are using cluster development as a primary economic driver. Other areas have also used cluster development to focus their regional economic development activities. Clusters in many of these locations are now seeking to establish international linkages [3, p. 35]. There is a number of successful efficiently functioning clusters in Eastern Europe and on the territory of the Commonwealth of Independent States, too.

One of the main priorities of state policy of the Republic of Belarus is the transition of the economy to an innovative way of development, since the intensification of innovative activity makes it possible to raise the level of competitiveness of national economy, to ensure stable and gradual development of the country.

An innovation-industrial cluster is a set of geographically localized in a certain territory, complementary, competing economic entities (including suppliers, producers, and consumers) connected by cooperative relationships with each other, as well as with state and local governments united around research or educational center on an informal basis, with the aim of creating an enabling environment for the spread of innovation, as well as improving the competitiveness and innovation activity of organizations-subjects of the cluster, regions and national economy [4, p. 57].

The formation and development of cluster formations is one of the important factors for a sustainable business development strategy in the region. For a business, a cluster is a real opportunity to ensure competitiveness in the future, that is, to create a long-term development

strategy for organizations of five to ten years or more. Regional economic development on the basis of creating and stimulating the development of cluster systems involves business initiative and activity, as well as joint efforts of business, executive and legislative authorities. The role that business and government play in creating and developing clusters is different, but complementary. One of the ways to develop clusters is economic and social programs of administrative structures at various levels [2].

In the framework of the analysis carried out in [5, 6], the most promising areas of industry clusterization in Vitebsk region were identified. In general, it is possible to talk about the presence of a sufficient degree of localization of organizations of relevant types of activities to identify potential leather, footwear and textile clusters in the territory of the Vitebsk region, as well as a petrochemical cluster in Novopolotsk.

Now there are acute environmental problems in Novopolotsk, there is a threat to the sustainability of the region's development due to the trends of de-carbonization of production and the transition to a low-carbon economy, a green economy, a circular economy (this is due to the specialization of the region (city-forming industries) in chemistry, petrochemistry and oil refining).

In this regard, the region needs to be reoriented to new technologies, new types of production, to use new resources. The region needs to intensify innovation processes in the development of small and medium businesses. To implement the transformation, an integrated approach is needed, joint efforts of the business (large, medium and small), science (research and development, education), government and infrastructure are needed in order to build a new development strategy and implement it. The tool (organizational form) of such interaction is cluster.

The effective functioning of Novopolotsk petrochemical cluster should become a foundation for achieving the key objectives of the City Development Strategy.

Cluster as one of the "drivers" of economic growth is primarily focused (in the long term) on improving the population's quality of life based on the growth of competitiveness of the economy, attracting investment and innovative development.

The goal of the Novopolotsk petrochemical cluster is to increase the competitiveness of the territory through the growth of innovative activity of cluster entities and the improvement of the mechanisms of their interaction.

- consolidation of production, scientific, educational, innovative, organizational, administrative capacity of cluster entities, aimed at improving the competitiveness of products and the regional economy;
- promoting the development of scientific, industrial, and organizational cooperation within the cluster;
- introduction of technological innovations by ensuring the effective interaction of science, business and government;
  - improving the competitiveness of cluster entities at the national and global levels;
  - transfer of innovative developments under the "science-production" scheme;
- preparation of proposals for state and local authorities in the field of industrial, innovation, scientific, educational, cluster policy;

- assistance in the development of production of related and complementary economic activities;
- promoting employment growth in the region through the development of small and medium-sized businesses;
- increasing the investment attractiveness of the region and ensuring high rates of economic growth.

The results of functioning of Novopolotsk petrochemical cluster as a "driver" of economic growth of the territory should be:

- growth of innovative activity and economic potential of the region;
- increase in the number of employed citizens to newly created jobs, including through due to the creation of new enterprises and industries;
- increase of competitiveness, quality, production volumes and sales of products (works, services);
  - increase in labor productivity;
- increase in the volume of research and development carried out to create new and modernize existing technologies and industries, commercialization of scientific and technical developments;
  - growth in real investment;
- ensuring social stability and economic development of the region, increasing its economic potential, economic attractiveness and competitiveness;
  - development of small and medium businesses.

#### Referens

- Карпова, Д.П. Использование кластерного подхода в управлении региональной экономикой / Д.П. Карпова // Региональная экономика и управление. 2007. №4 (12). [Электронный ресурс]. Режим доступа: http://region.mcnip.ru/modules.php?name=News&file=article&sid=138. Дата доступа: 15.02.2016.
- 2. Шепелев, И.Г. Туристско-рекреационные кластеры механизм инновационного совершенствования системы стратегического управления развитием регионов / И.Г. Шепелев, Ю.А. Маркова // Современные исследования социальных проблем (электронный научный журнал). № 3(11). 2012. [Электронный ресурс]. Режим доступа: http://cyberleninka.ru/article/n/turistsko-rekreatsionnye-klastery-mehanizm-innovatsionnogo-sovershenstvovaniya-sistemy-strategicheskogo-upravleniya-razvitiem. Дата доступа: 03.05.2017.
- 3. Cluster Building: A Toolkit. A Manual for starting and developing local clusters in New Zealand (2001). Cluster Navigators Ltd., 2001. 40 p. Available from Internet: http://www.vaxtarsamningur.is/Files/Skra\_0023777.pdf, cited 26.02.2017.
- 4. Костюченко, Е.А. Теоретические основы кластеров и их роль в повышении конкурентоспособности организаций нефтехимического комплекса Витебского региона / Е.А. Костюченко // Вестник Полоцкого государственного университета. Серия D. Экономические и юридические науки. 2012. Выпуск 5. С. 55-62.

- 5. Костюченко, Е.А. Инновационное развитие социально-экономических систем: условия, результаты и возможности / Е.А. Костюченко // Материалы V Международной научно-практической конференции. Орехово-Зуево. 25 мая 2017 г. Научное издание. Орехово-Зуево, ГГТУ, 2017. 183 с. С. 89-95.
- 6. Костюченко, Е.А. Оценка потенциала кластеризации нефтехимического комплекса Витебской области / Е.А. Костюченко // Потребительская кооперация. 2015. № 1(48). С. 80-84.

### НОВОПОЛОЦКИЙ НЕФТЕХИМИЧЕСКИЙ КЛАСТЕР КАК «ДРАЙВЕРА» ИННОВАЦИОННОГО РАЗВИТИЯ РЕГИОНАЛЬНОГО ХОЗЯЙСТВЕННОГО КОМПЛЕКСА

В статье подчеркивается необходимость для Новополоцкого региона в переориентации на новые технологии, новые виды производств, на использование новых ресурсов. Выявляется необходимость в активизации инновационных процессов, в развитии малого и среднего бизнеса. Для реализации преобразований предлагается комплексный подход, характеризующийся совместными усилиями бизнеса (крупного, среднего и малого), науки (исследования и разработки, образование), органов власти, инфраструктуры, чтобы выстроить новую стратегию развития и претворить ее в жизнь. Инструментом (организационной формой) такого взаимодействия является кластер, рассматриваемый как «драйвера» инновационного развития регионального хозяйственного комплекса. Сформулированы цель и основные подцели функционирования Новополоцкого нефтехимического кластера, а также предполагаемые результаты его работы.