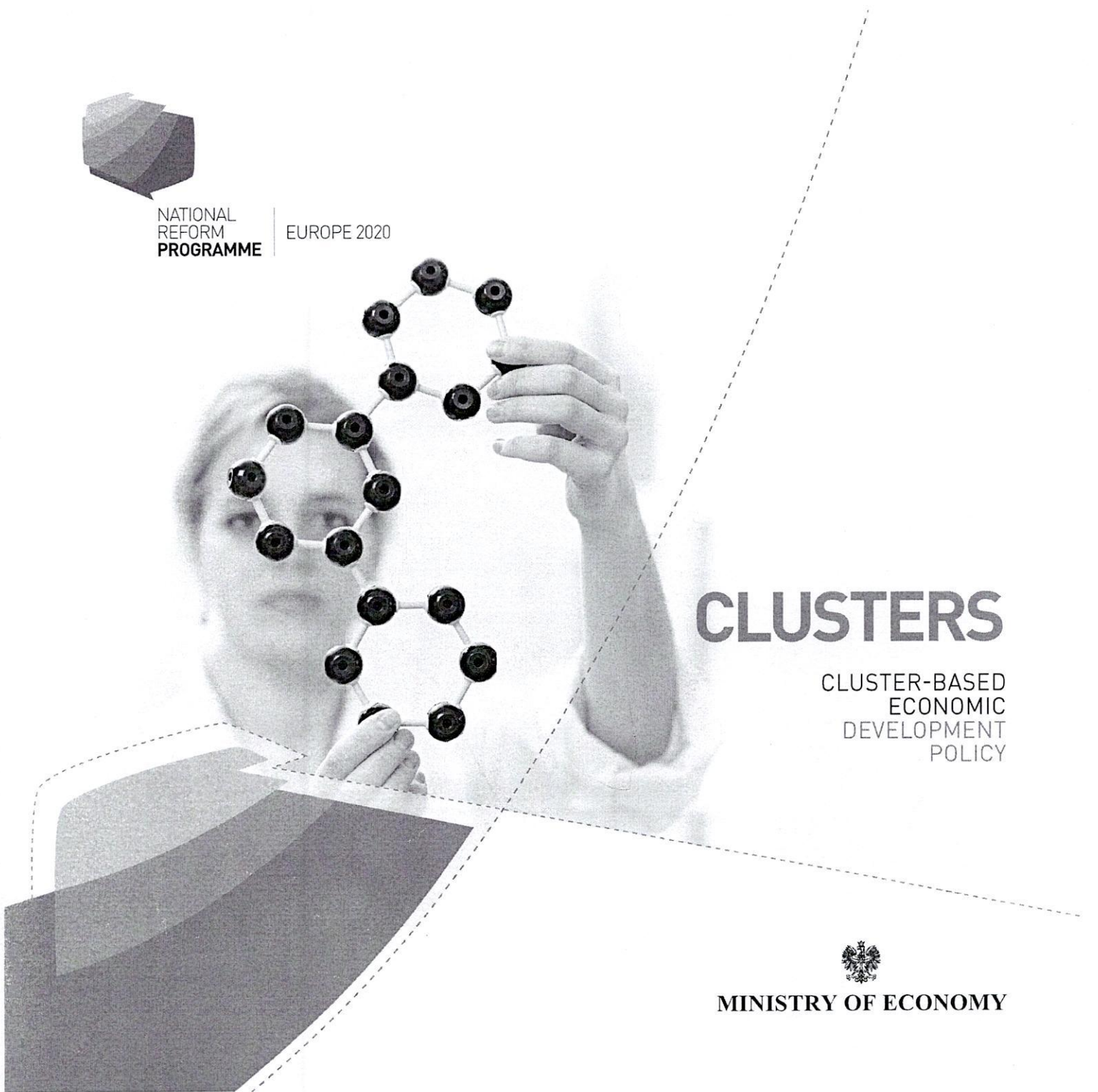


NATIONAL
REFORM
PROGRAMME

EUROPE 2020



CLUSTERS

CLUSTER-BASED
ECONOMIC
DEVELOPMENT
POLICY



MINISTRY OF ECONOMY

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CLUSTER

THE GROWING SIGNIFICANCE AND POPULARITY OF THE CLUSTER CONCEPT AND THE INFLUENCE OF CLUSTERING ON ECONOMIC DEVELOPMENT ARE WHAT HAVE UNDERPINNED A PROGRESSIVE SHAPING OF POLICY IN SUPPORT OF CLUSTERS, A LEADING EXAMPLE HERE BEING THE OECD'S CLUSTER-BASED ECONOMIC DEVELOPMENT POLICY.

THE STIMULATION OF DEVELOPMENT

INDUSTRIALISED AND DEVELOPING COUNTRIES ALIKE HAVE BEEN PURSUING CLUSTER POLICIES UNDER WHICH A WIDE RANGE OF ACTIVITIES HAVE BEEN LAUNCHED TO **STIMULATE REGIONAL DEVELOPMENT** BY SUPPORTING BUSINESS ENTITIES AS THEY SEEK TO IMPROVE THEIR COMPETITIVE POSITIONS. THE CLUSTER CONCEPT IS ALSO BECOMING AN IMPORTANT ELEMENT IN EU ECONOMIC POLICY, BEING AMONG **THE PRIORITIES OF THE EUROPE 2020 STRATEGY** FOR SMART, SUSTAINABLE AND INCLUSIVE GROWTH.

Being horizontal in nature, the policy of supporting clusters is an important component element in several spheres of economic policy, most especially those connected with innovation, regional development and industry. **Clusters have a special role to play in the linking up of businesses, as well as of enterprises on the one hand and scientific/academic entities on the other (this kind of linkage being of key importance to modern models of innovation processes). Representing as they do an effective mechanism of concentrating resources and means, as well as one of the best-diagnosed ways of stimulating horizontal cooperation in the economy, cluster structures are capable of both the generation and the acceleration of development processes, as well as serving as growth poles for the economy at regional or even national level.** Also, of major significance is the way

in which cluster policy links up with the development of **Special Economic Zones**, long-term benefit hopefully being drawn as attractive business conditions are put in place in the Zones, especially those in locations that have seen ongoing branch specialisation.

DEFINITION OF A CLUSTER

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INDUSTRIAL CLUSTER

THE CONCEPT OF THE BUSINESS CLUSTER GAINED ITS FIRST DEFINITION IN THE LATE 1980s AND EARLY 1990s, THANKS TO MICHAEL PORTER, FOR WHOM THIS IS:

"A GEOGRAPHIC CONCENTRATION OF INTERCONNECTED BUSINESSES, SUPPLIERS, AND ASSOCIATED INSTITUTIONS [E.G. UNIVERSITIES, STANDARD-SETTING BODIES AND BRANCH ASSOCIATIONS] IN A PARTICULAR FIELD, COMPETING AND COOPERATING AT THE SAME TIME".

In fact, however, there is no overall agreement as to an unambiguous definition of the cluster, whose **most important characteristic is considered to be the existence of internal relationships and linkages that are systemic in nature, as well as the fact that particular entities are at one and the same time competing and cooperating with one another** – hence the need for the term **coopetition** now made ever fuller use of in the economic literature.

What is being depicted here is the reconfiguration of the model for value creation in respect of an enterprise, this moving from the hitherto-dominant method of the value chain² through to that of the value network model, wherein competitive advantage is determined by the skill entities in given branches demonstrate as regards **the joint use of resources**².

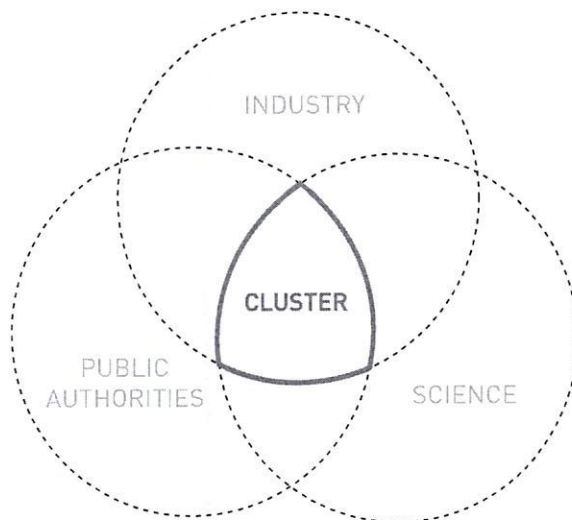
It is important that the idea of the cluster be distinguished from that of the so-called cluster initiative.

COMPETITION COOPERATION COOPETITION



CLUSTER INITIATIVE DEFINITION

THE LATTER IS THE MORE OR LESS INSTITUTIONALISED (FORMALISED) GROUP OF LOCAL ACTORS SEEKING TO BRING A GIVEN CLUSTER INTO OPERATION, OR ELSE TO RESOLVE MAJOR ISSUES FACING A GIVEN CLUSTER ALREADY IN OPERATION. THE LAUNCHING OF A CLUSTER INITIATIVE MAY BE THE RESULT OF **BOTTOM-UP ACTIVITY** ON THE PART OF BUSINESS ENTITIES INTERESTED IN COOPERATION, OR ELSE IT MAY REFLECT **TOP-DOWN ACTIVITY** ENGAGED IN BY PUBLIC AUTHORITIES.



As globalisation progresses, it becomes more and more of a challenge to maintain the competitiveness of an economy internationally, this goal being seen to require root-and-branch modification of both business strategies and economic policy. A new way of engendering business competitiveness does indeed involve the cluster concept, clusters representing an effective way of encapsulating and nurturing synergies capable of arising where there is cooperation among the different entities falling within the so-called "**triple helix**" formed by entrepreneurs, academe and public authorities.

GRAPH 1. CLUSTERS AND THE TRIPLE HELIX CONCEPT

¹ M. Porter, *Porter on competitiveness*, PWN, Warszawa 2001.

² A method developed by M. E. Porter in: M. E. Porter, *Competitive Advantage*, Free Press, New York, 1985.

³ O.D. Fjeldstad, M. Becerra, S. Narayanan, "Strategic Action in Network Industries: An Empirical Analysis of the European Mobile Phone Industry", *Scandinavian Journal of Management*, 2004, Vol. 20, No. 1-2, p. 173-196.

THE ROLE OF CLUSTERS

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INNOVATIVE ECONOMY

THE MOST INTENSIVE INTERACTION AND COOPERATION TAKES PLACE BETWEEN ELEMENTS OF THE INNOVATION SYSTEM AT REGIONAL LEVEL⁴. BASED MAINLY ON KNOWLEDGE TRANSFER, AS MEDIATED BY DIRECT CONTACTS BETWEEN PEOPLE, REGIONAL INNOVATION SYSTEMS CAPITALISE ON GEOGRAPHICAL PROXIMITY ABOVE ALL, AS A KEY ELEMENT IN THE FUNCTIONING OF CLUSTER STRUCTURES.

CLUSTER DEVELOPMENT

The creation and development of clusters in a region links up with a series of phenomena that exert a positive influence on the competitiveness and innovativeness of the local economy. These include:

- 1** **THE DEVELOPMENT** of a market for specialised factors of production (those of greatest importance here being knowledge and high-quality human capital).
- 2** **THE DEVELOPMENT** of scientific infrastructure in a region, as well as business entities' fuller utilisation thereof.
- 3** **THE STIMULATION** of knowledge flow, learning processes and the processes by which innovation is absorbed and generated, thanks to spatial proximity and the interactions pertaining between different entities operating within cluster structures.
- 4** **THE DEVELOPMENT** of sophisticated production networks comprising specialised sub-suppliers and entities engaging
- 5** **THE ENHANCEMENT** of location's attractiveness as seen from the point of view of those seeking to locate FDI.

⁴European Commission, *Innovative Regions? A Comparative Review of Methods of Evaluation of Regional Innovation Potential*, The European Innovation Monitoring System (EIMS) No 21, 1995.

There are currently indications that the role of factors associated with social capital is growing, these being essential if joint activity is to be taken up, most especially where competitive relationships and conflicts of interest are in place.

THE REGIONAL ASPECT TO THE FUNCTIONING OF CLUSTERS LINKS UP WITH THE SENSE OF CULTURAL COMMUNITY, AS WELL AS HIGHER LEVELS OF TRUST AND SOCIAL CAPITAL.

CLUSTERS OPERATING EFFECTIVELY MAY ASSIST BUSINESSES, ESPECIALLY SMEs, AS THEY WORK TO IMPROVE THEIR COMPETITIVE POSITIONS. FIRMS THAT HAVE LINKED UP IN CLUSTERS HAVE GREATER CHANCES OF DEVELOPMENT THAN THOSE ON THEIR OWN, AS WELL AS GREATER ACUITY WHEN IT COMES TO IDENTIFYING PRODUCT NICHES, FULLER ACCESS TO EXPORT MARKETS AND MORE OPPORTUNITY TO PURSUE AN EMPLOYMENT POLICY.

From the point of view of the individual enterprises, the main benefits accruing out of operations within the framework of a cluster include:

RAISED PRODUCTIVITY thanks to access to specialised factors of production and the reductions possible as regards accessing common resources (e.g. a local labour market, research infrastructure, communications infrastructure, etc.),

A GREATER DEGREE OF SPECIALISATION and the opportunity for marketing activity and purchasing to be pursued jointly,

EXTERNAL BENEFITS vis-a-vis the diffusion of technologies and the flow of knowledge arising out of direct contacts between representatives of a cluster, the result being a marked lowering of overall transaction costs in various areas, not least as regards knowledge and technology transfers,

THE OPPORTUNITY FOR BUSINESSES (especially SMEs) to take advantage of the assistance extended to them by cluster coordinators.

THE SUPPORT OF CLUSTERS

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POLICY MEASURES

The need for clusters to be supported and in general to develop was identified in a strategy document entitled "**Strategy for Increasing the Innovativeness of the Economy, 2007-2013**", as adopted by the Government of the Republic of Poland on September 4th 2006. The direction there entitled "Infrastructure for innovation" stressed the importance of supporting joint networking activity on the part of entrepreneurs that were seeking to further their progress with innovative undertakings.

Under the EU's 2007-2013 Financial Perspective, measures in support of clusters were incorporated into both the Operational Programmes being applied nationwide, and the Regional OPs pursued at the level of Poland's 16 voivodships.

Where supra-regional backing for the development of clusters is concerned, the key activity falls under the Innovative Economy OP, and specifically its **Measure 5.1: Support for Cooperative Connections of Supra-Regional Importance**.

UNDER THE IE OP, SUPPORT IS EXTENDED TO SUPRA-REGIONAL CLUSTERS, THIS IN PRACTICE ONLY DENOTING CO-FINANCING WHERE PROJECTS ARE BEING IMPLEMENTED BY FINAL BENEFICIARIES OPERATING ON THE TERRITORY OF TWO OR MORE VOIVOD-

SHIPS. THIS IS THUS POTENTIAL SUPPORT FOR STRONG AND RATHER SPATIALLY-EXTENSIVE CLUSTERS OR CLUSTERING INITIATIVES.

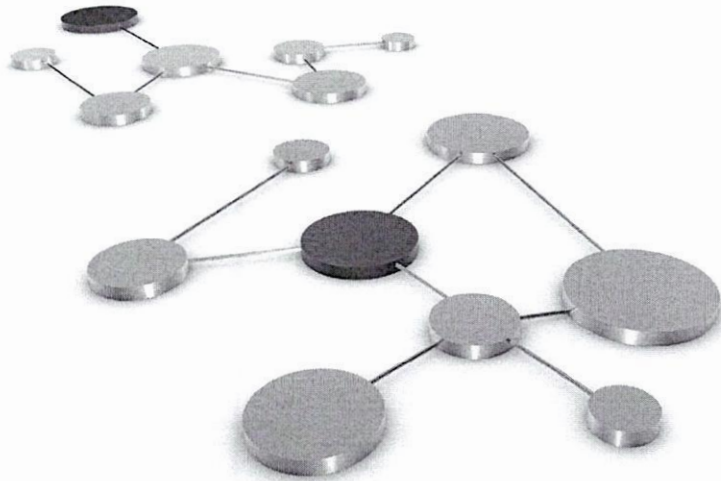
In turn, support for regional-level clusters, i.e. those located on the territory of just one voivodship, comes under the various **Regional OPs**. However, clustering also obtains assistance under **the Development of Eastern Poland OP**, which has been under implementation in the Warmińsko-Mazurskie, Podlaskie, Lubelskie, Świętokrzyskie and Podkarpackie voivodships.

Those seeking assistance with cluster development do so under Measure 1.4 on "Promotion and Cooperation", in which the "Cooperation" component offers match funding where the building of cooperation networks is concerned, not least as regards the identification and development of clusters per se.

An example of a programme directed at the development and enhanced competitiveness of existing cluster structures is that run since 2007 by the Polish Agency for Enterprise Development (PARP) entitled "**The Support for cluster development**".

THIS WAS A PILOT PROJECT THAT WAS TO SERVE IN STIMULATION AND ACTIVATION OF EXISTING CLUSTERS.

WITH A VIEW TO MORE EFFECTIVE AND EFFICIENT USE BEING MADE OF THE CONSIDERABLE FUNDING THE STRUCTURAL FUNDS HAD TO OFFER IN THE YEARS 2007-2013, AS FORESEEN IN THE NATIONAL COHESION STRATEGY.



REPRESENTING
AN IMPORTANT ELEMENT
OF POLICY ON CLUSTERS
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INTERNATIO- NALISATION OF CLUSTER INITIATIVES

REPRESENTING AN IMPORTANT ELEMENT OF POLICY ON CLUSTERS IS ACTION TO INTERNATIONALISE CLUSTER INITIATIVES. THESE LEAD TO EXCHANGES OF EXPERIENCE - AND TO INTENSIFIED TECHNOLOGY TRANSFERS - WITH EUROPE'S MOST IMPORTANT CENTRES OF INNOVATION. SUCH "INTERNATIONALISATION" OF CLUSTER ACTIVITY IS NOT UNNATURALLY ASSUMING EVER GREATER SIGNIFICANCE IN THE LIGHT OF THE TWIN GLOBALISATION AND EUROPEAN INTEGRATION PROCESSES, AS WELL AS THE ATTENDANT IMPROVED CONDITIONS FOR THE MOVEMENT OF RESOURCES AND GREATER SPECIALISATION IN THE VALUE CHAIN BEYOND NATIONAL BORDERS. THE OPENING UP OF NEW MARKETS MAKES IT IMPERATIVE THAT CLUSTER INITIATIVES SHOULD ALSO BE OPEN TO FOREIGN PARTNERS, AND HENCE TO INTERNATIONAL COOPERATION. AN EXAMPLE OF POLISH ACTIVITY IN THIS AREA IS PARTICIPATION WITHIN **THE PRO INNO EUROPEAN CLUSTER ALLIANCE**.

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Clusters may be of major significance when it comes to attracting foreign capital into Poland, the consequence being an increased role of the given state or region in processes whereby production is internationalised. As factors raising the attractiveness of a given location for business activity, cluster structures generate, not only increased influxes of FDI, but also - first and foremost - more permanent linkages between foreign investors and the national economy.

SPECIAL ECONOMIC ZONES

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CLUSTER DEVELOPMENT POLICY

CLUSTER POLICY SHOULD BE MORE CLOSELY AND FULLY LINKED WITH POLICY ON THE DEVELOPMENT OF SPECIAL ECONOMIC ZONES THAN HAS BEEN THE CASE UP TO NOW. THIS REFLECTS THE FAVOURABLE ENVIRONMENT SEZs REPRESENT WHEN IT COMES TO THE EMERGENCE OF COOPERATIVE LINKS BETWEEN ENTERPRISES LOCATED IN GIVEN ZONES.

THE DEVELOPMENT OF CLUSTERS MAY AT THE SAME TIME CONSTITUTE A FACTOR THAT DYNAMISES BUSINESS ACTIVITY IN SEZs, AND THAT ENSURES LONG-TERM BENEFITS FOR THE ENTERPRISES OPERATING UNDER THE ZONE FRAMEWORK, THIS ULTIMATELY TRANSLATING INTO INCREASED REGIONAL COMPETITIVENESS AND INNOVATION.

A feature characteristic of **Special Economic Zones** is their diffuse structure and location within several administrative units simultaneously (be these at the level of the voivodship, powiat, gmina or town/city). In this connection, a given Zone may foster the development of cluster initiatives that group together entities in different regions within the same Zone.

Preliminary analysis suggests that the geographical extents of clusters do not usually coincide with the areas encompassed by Special Economic Zones. However, this need not imply any obstacle to the development of cluster-mediated cooperation within the Zones.



THE INITIATION AND SUPPORTED DEVELOPMENT OF CLUSTERS WITHIN SPECIAL ECONOMIC ZONES MAY LEAD TO THE "FIXING" OF LONG-TERM BENEFITS ACCRUING FROM THE CREATION OF ATTRACTIVE BUSINESS CONDITIONS THERE, THESE BENEFITS EVEN PERSISTING AFTER FORMAL OPERATIONS OF THE ZONES HAVE CEASED.

Among the factors nurturing the development of clusters in Special Economic Zones are the favourable conditions for engagement in economic activity that local authorities and government put in place, together with the companies given charge of the management of the Zones. Of particular significance here is the activity directed at engendering an entrepreneurial atmosphere, as well as cooperation between economic, academic and public-sector entities.

**NOTING
THE
OPPORTUNITIES
FOR SYNERGIES
TO BE OBTAINED
BETWEEN
POLICY
ON CLUSTERS
AND THE MECHANISMS
IN PLACE IN RESPECT
OF SPECIAL ECONOMIC
ZONES,**

it will obviously be helpful to target the instruments supporting clusters in such a way that they strengthen the interactions and cooperation between businesses operating in given regions.

In turn, to inject an international component into the economic activity ongoing thanks to cluster initiatives on the one hand and Special Economic Zones on the other, it is suggested that every effort be made to support the development of transborder networks of clusters, as well as to attract into the Zones the FDI so critical if branch specialisation is to take place.



MINISTRY OF ECONOMY

As globalisation progresses, it becomes more and more of a challenge to maintain the competitiveness of an economy internationally, this goal being seen to require root-and-branch modification of both business strategies and economic policy. Clusters represent an effective way of encapsulating and nurturing synergies capable of arising where there is cooperation among the different entities falling within the so-called "triple helix" formed by entrepreneurs, academe and public authorities. The cluster concept is also becoming an important element in EU economic policy, being among the priorities of the Europe 2020 – A Strategy for Smart, Sustainable and Inclusive Growth. In adopting this Strategy, the Member States have had as their aim the putting in place of stable foundations for economic growth that will allow society's aspirations as regards development to be achieved, while also ensuring the European Union's competitiveness in the circumstances of ongoing globalisation. Poland's National Programme of Reforms seeking to implement Europa 2020 (the KPR in Polish) constitutes an element in the system via which Poland's development policy is being pursued, the reforms it sets out (in combination with the pursuit of the long- and medium-term development strategies and the nine integrated domestic strategies) providing for a focus on priority areas where the country's socioeconomic development is concerned.

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- Stimulating regional economic
growth while also addressing
~~development~~ Development
needs of the citizenry.