CLUSTER AS AN ELEMENT SUPPORTING PASSIVE WOODEN BUILDING DEVELOPMENT
Notions related to the cluster

concentration

social bond

region development

national innovation system

innovation
Social bond: the sociological notion determining the whole of social relations, lasting for the institution and binding individuals into groups and social circles and assuring them centres of the public inspection.
The cluster should be understood as the spatial concentration of enterprises, institutions and organizations, an extensive network of interlocking relationships of formal and informal nature based on a common trajectory development (e.g. technology, common target markets, etc.) simultaneously competing and cooperating in certain aspects of the action.[1]

According to the UNIDO, regional clusters and territorial concentration of companies producing and selling similar or complementary products, and thus forced to overcome similar problems and challenges. As a result, it can cause the formation of specialized suppliers machinery and raw materials and cause the development of specialist competencies and skills, as well as faster development of specialized and personalized services.[1]

Bonds creating in the cluster....

- the institution-coordinator,
- cluster tutor,
- cluster initiative group,
- cluster agreement,
- agreement of cooperation between members of cluster,
- agreements between institutions-coordinators and other institutions cooperating with the cluster,
- business and economic agreements.
Features of the cluster:

- geographical concentration,
- different kinds’ actors (companies, institutions of public administration, financial institutions, R&D institutions),
- specialization,
- cooperation and competition,
- innovations,
- dynamical production structure.
In accordance to OECD there are following types of clusters that can be identified:

• **Clusters based on the knowledge** (specific to the companies belonging to sectors with high **R&D intensity and the intensity of patenting**). Usually they arise around a strong public sector research institutions.

• **Clusters based on economies of scale** (typical for companies having own research on a very small scale, *focusing on production systems on a large scale*). It is characteristic for food processing and other materials processing mass.

• **Clusters depend on the supplier** (companies importing technology, mainly in the form of capital goods and intermediates, their innovative activity depends on a large extent on their *ability to interact with suppliers* and after-sales services. Found in agriculture, forestry and traditional processing industry).

• **Clusters of specialized suppliers** (*based on firms with high R&D intensity*, with emphasis on *product innovation and relationship with the user*). Typical of the companies producing complex production systems, such as equipment and computer software).

• **Intensive clusters in information** (*specific to companies managing complex information processing systems to provide services and goods to meet customer needs*). Typical for financial services, wholesale trade, publishers, travel companies, etc.).
Actions in the cluster and bonds creating...
Cluster activities and its relations

• creating social networks,
• creating enterprises networks,
• innovations and new technologies promoting,
• creating of the region brand,
• support in the business,
• analysis of the technological trends,
• promotion of „other additional” enterprises creating.
Cluster activities and its relations

- supporting enterprises,
- monitoring of the cluster functioning,
- promoting of existing enterprises development,
- supporting of innovation creating,
- attracting of new companies and new tallented workers,
- conducting business intelligence,
- building awareness of entrepreneurs,
- technical trainings,
- encouraging investors to undertake business in the region,
- lobbying of new technical solutions (contact with government),
- Law regulations improvement
  ("passive construction under construction")
- diffusion of new technologies etc.
Clusters are an element of:

- Policy of innovations,
- Regional policy,
- Industrial policy.
Fig. 1. Initiatives of clusters which are financed by European Funds.

NEW CHALLENGES for clusters:

- Globalization and economical integration
  => possible flow of resources and increased specialization in the value chain across national borders

- European Alians of Clusters PRO INNO
  *(PRO INNO European Cluster Alliance)*
  - BSR InnoNET *(Baltic Sea Region Innovation Network)*,
  - INNET => program Innovation Express,
  - CEE-ClusterNetwork.
<table>
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<th>Sector</th>
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<td>Sector</td>
<td>Biotechnology with environmental aspects</td>
<td>Food Sector</td>
<td>ICT sector Information and Communication Technologies</td>
<td>Woodworking and furniture industry</td>
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<td>Polish participants</td>
<td><em>Baltic Eco-Energy Cluster</em></td>
<td>group of enterprises represented by Warsaw University SGGW</td>
<td><em>ICT West Pomeranian Cluster</em></td>
<td><em>Wielkopolńska Furniture Cluster</em></td>
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<tr>
<td>Other countries as participants</td>
<td>Sweden, Finland, Norway</td>
<td>Sweden, Finland, Norway</td>
<td>Sweden, Finland, Norway, Latvia, Denmark</td>
<td>Finland, Latvia, Lithuania, Sweden</td>
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Fig. 2. Scheme of Wielkopolski Furniture Cluster.
Fig. 3. Scheme of the furniture cluster in the Warmia and Mazury region.
Side is an acronym.

**S** means success, **I** – innovation, **D** – wood (drewno), and **E** – ekology.

Those four words describe the most important ideas of that cluster activity since organization establishment in 2008.
SICE – Cluster the leader of enterprise initiative

- Regulation law of local authority (Uchwała Zarządu Województwa Dolnośląskiego nr 619/IV/11, 09.05.2011),
- **Project realization time:** 01.06 – 15.12.2011,
- **Project place:** Lower Silesian province, France (visited place),
- **Project funding amount:** 88 624,00 PLN
Thank you for your attention...