**CLUSTER DEVELOPMENT STRATEGY**

**“SOUTH POLAND CLEANTECH CLUSTER”**

**for the years 2023 - 2028**

**I. CLUSTER STRUCTURE**

**History**

**South Poland Cleantech Cluster** - SPCleantech started its activity on January 28, 2014 on the initiative of NordicHouse Sp. z o. o. by signing the first Letter of Intent. The cluster initiative was registered on February 16, 2015 in the National Court Register (KRS) in the form of Sp. z o. o. non-profit with 26 shareholders.

The General Meeting of Shareholders of the company decided by a resolution of 07/04/2015 that the annual net profits will be used only to finance the company's activities within the scope covered by its subject of operation.

At the Ordinary General Meeting of Shareholders on June 18, 2018, the company's shareholders adopted a Resolution to amend §27 of the Company's Articles of Association as to the distribution of any profits. §27 reads after the change "The Company's profit is not subject to distribution among the shareholders and is intended for the Company's operations". This change gives SPCleantech the opportunity to apply for EU funds of the Regional Operational Program and others as a Business Environment Institution (BEI) on an equal footing with Associations and Foundations.

South Poland Cleantech Cluster has its own secretariat, **Management Board, Supervisory Board** consisting of 3 members with its registered office at NordicHouse, Stedencka 15/2a, 31-116 Kraków (PL).

The SPCleantech organization is divided into 4 departments:

1. Secretariat and administration

2. Coordination of cooperation with cluster members and management of national projects

3. Recruitment of members and management of national and international projects

4. Coordination of international cooperation

**Malopolska, Southern Poland Region**

SPCleantech operates globally based on Cooperation Agreements with clusters, organizations and partners from around the world, but due to its history and facilities, SPCleantech focuses its activities on the Scandinavian countries (Denmark, Sweden, Norway, Finland and Iceland) and other countries of the Sea Region Baltic (Germany, Estonia, Latvia, Lithuania, Russia and Ukraine).

Cluster members are mostly companies and organizations from Małopolska and Silesia, southern Poland and the whole country, but there are also foreign entities (Finland, Ukraine) that have not yet registered their activity in Poland.

The region of Southern Poland is a macroregion consisting of four voivodships: Małopolska, Śląsk, Podkarpacie and Świętokrzyskie. The strategy of the authorities of all 4 regions is characterized by focusing on the development of intellectual capital, science and research, infrastructure (including transport), environment, urban regeneration, cross-border cooperation, cooperation between enterprises and promotion of regions abroad.

Thanks to 12 million. inhabitants, the region is one of the largest industrial regions in the EU.

**Cluster's vision**

SPCleantech operates in the field of the cleantech industry, the largest and fastest growing industry aimed at combating global climate change, using the latest innovative clean technologies and digital solutions. The importance of the cleantech industry is evidenced by the fact that the European Commission allocated 20% of the EU budget in 2014-2020, and plans to allocate 25% under the new financial perspective 2020-27 to counteract global climate change. The main principle of SPCleantech's operation is "Think globally - act locally".

The vision of South Poland Cleantech Cluster is to create a leading cleantech cluster in Central Europe and one of the most competitive clusters in the world by creating an above-average innovation and research environment to introduce cleantech technologies and services to various sectors and value chains.

Today's major global challenges resulting from global warming, urbanization, population growth and increased energy consumption cannot be solved by single technologies. **Rather, a combination of partners' technologies and competencies and expertise**, including water systems, renewable energies, smart grids, smart urban solutions and waste management systems, **is needed to develop new, sustainable multi-industry solutions.**

**Cluster's mission**

The Cluster's mission is to support sustainable and green growth of the region by participating in the creation and implementation of an inclusive green growth policy that can improve the social situation of the inhabitants, promote responsible management of natural resources and respect the delicate balance on our planet.

South Poland Cleantech Cluster also wants to be a strong engine of economic development and promoter of innovation in Małopolska, Southern Poland and Poland by creating an active business environment for enterprises, especially SMEs, to cooperate with research institutions, suppliers, customers and competitors operating in the same geographical area.

**Goals for the next 5 years**

The implementation of the cluster's strategy is based on achieving and monitoring the goals set for the next 5 years, which are:

* constant introduction of new Cleantech technologies and services to the market
* Creation of 500 new jobs
* attracting 10 foreign companies to the cluster
* initiation of 20 new cooperation projects in the field of research and innovation between companies and research institutions, such as start-ups or joint applications/research projects
* initiating cooperation with 15 international Cleantech clusters
* creating a financially independent organization with at least 150 cluster members
* support for the development of 50 entrepreneurs
* organizing at least 50 events
* participation in 10 projects financed by EU funds ERASMUS+, HORIZAN Europe or Visegrad Fund (V4)

The overriding goal of the cluster is to implement the state and regional policy by ensuring faster growth of Cleantech companies existing in the region, creating new ones and attracting foreign companies, investments and talent.

In addition, South Poland Cleantech Cluster, by appearing on various forums and participating in debates on the regional, national, EU and international arena, performs many activities aimed at:

* representing and defending the interests of SPCleantech members on the regional, national and European Union arena
* expressing opinions on behalf of SPCleantech members on draft legal acts relating to the functioning of the economy, participation in the preparation of draft legal regulations on conducting business and scientific and research activities of cluster members
* participation in shaping the economic, industrial and educational policy of the region and supporting initiatives and creating conditions conducive to the economic development of cluster members and the region
* supporting the process of Poland's economic integration with the European Union and facilitating cluster members to establish foreign contacts and economic cooperation with foreign partners

South Poland Cleantech Cluster pursues the above goals, among others by: by stimulating the demand of companies for innovations and research and scientific works, including:

* implementation of projects "from idea to market"
* supporting the creation and development of research and development infrastructure in companies
* supporting the implementation of the results of R&D works
* preparing enterprises to participate in international programmes
* internationalization of innovative companies through intermediation in contacts with joint-venture funds, business angels and equity funds seed
* organizing foreign economic missions, participating in fairs, organizing conferences, symposiums, workshops and trainings
* participation in local, regional and national debates related to sustainable development of the region, country and the European Union

**A new market approach**

SPCleantech resigned from the industry approach in its activities. In order to solve the problems related to global climate change, innovative, multi-industry solutions based on Cleantech (clean technologies) and digital technologies are needed.

To this end, SPCleantech focuses on 9 selected collaboration platforms:

* Industry 4.0
* Smart city / sustainable urban development / e-mobility
* Smart buildings / management systems / ecological building materials
* Energy efficiency
* Smart grid / renewable energies
* Bio-economy and circular economy
* Big Data
* Internet of Things (IoT), Internet of Services (IoS), Internet of Everything (IoE)
* Virtual Reality (VR), Augmented Reality (AR), Mixed Reality (MR)

The activity of the cluster management focuses on building and developing the potential of individual cooperation platforms based on the knowledge of cluster members and inviting companies, organizations, local government units, etc. to cooperate in order to complete the expertise with the hope that external partners will join the cluster as members.

The ultimate goal of these activities is to bring all platforms together, which will help achieve the main goal of the cluster, i.e. counteracting global climate change in local, regional and global dimensions.

**SPCleantech membership structure**

In order to achieve the assumed goals and realize the benefits of being an organization in the form of a cluster, the Founding Members and Ordinary Members of the cluster are partners belonging to the so-called Quadruple Helix:

 ■ by Cleantech - micro, small, medium and large

 ■ Polish

 ■ with foreign capital

 ■ foreign companies

 ■ research and scientific institutions

 ■ universities

 ■ research institutes

 ■ public organizations

 ■ regions

 ■ counties

 ■ cities

 ■ communes, including rural ones

 ■ non-governmental organizations (NGOs)

**Cluster Founding Members**

Shareholders of the Cluster, and at the same time the Founding Members of the Cluster operating in the form of Sp. z o. o. there are 26 entities: SMEs and large companies, universities and research and development units, local government units (LGUs) and non-governmental organizations (NGOs). Shareholders participate in the General and Extraordinary Meetings of Shareholders. The list of Founding Members of the Cluster is available on the Cluster's website.

**Ordinary Members**

Ordinary members of the South Poland Cleantech Cluster can be companies from the Cleantech industry, universities, research and scientific institutions, public organizations and authorities, and NGOs that want to become part of the exclusive club of entities operating in the Cleantech area.

Participation in the cluster is also open to foreign entities that meet the membership conditions.

The cluster's strategy is to gain as many new members as possible, which will strengthen its capabilities in promoting innovative solutions among cluster members and partners and strengthen its negotiating position with municipal and regional authorities in creating a policy of green, sustainable development of cities and regions.

The possibility of implementing the assumptions and strategies of SPCleantech depends on the degree of involvement of cluster members and partners. For this reason, the Management Board tirelessly encourages and convinces cluster members to actively participate in the cluster's undertakings, also in order to derive the greatest benefits from cluster membership.

**Benefits of membership in SPCleantech**

In order to attract new members and retain existing ones, SPCleantech offers a number of benefits of being a member of SPCleantech.

1. Placing the logo and a link to the cluster member's website on the website [www.spcleantech.com](http://www.spcleantech.com) in the "About us" - "Members" category and a short profile of the company or institution

2. Representing and defending the interests of SPCleantech members on the regional, national and European Union arena

3. Expressing opinions on behalf of SPCleantech members on draft legal acts relating to the functioning of the economy, participation in the preparation of draft legal regulations regarding the conduct of business and scientific and research activities of cluster members

4. Participation in shaping the economic, industrial and educational policy of the region and supporting initiatives and creating conditions conducive to the economic development of cluster members and the region

5. Supporting the process of Poland's economic integration with the European Union and facilitating the cluster members to establish foreign contacts and economic cooperation with foreign partners

6. Submitting proposals for joint projects, creating consortia, applications for national programmes, ROP, Horizon 2020, COSME, Interreg and others

7. Developing and coordinating cooperation in the field of R&D with research and development units and universities, especially in the field of creating new technologies

8. Participation in research projects (national and international) regarding innovations in the field of Cleantech and related industries

9. Inviting to meetings with domestic and foreign investors

10. Searching for suitable partners among members and, if necessary, among third parties

11. Access to information about the latest events and trends in the field of Cleantech

12. Finding mentors or sparring partners in matters of interest to a cluster member

13. Intermediating and providing information about projects in which a company, institution, commune or city is involved on the national and international arena through promotional and marketing activities

14. The right to use the SPCleantech logo on its website and in advertising materials of the company, institution, commune or city to show that the member is part of the SPCleantech brand

15. Participation in international contacts, events and cluster projects creating business opportunities for cluster members

16. Creating opportunities to export products or services in the field of innovative Cleantech solutions in the form of participation in fairs, missions, etc. organized by SPCleantech

17. Supporting members in acquiring a qualified workforce

18. Providing access to various types of workshops and trainings organized by SPCleantech and external partners Obligations of Ordinary Members

A member declares readiness and willingness to share its research and scientific facilities, if any, with other members of the cluster as part of joint projects.

Ordinary Members may resign from membership. Notice of resignation must be submitted to the Management Board in writing at least 1 month before the end of the membership period.

**Cluster management**

South Poland Cleantech Cluster is a limited liability company with 26 shareholders. The management bodies of the company are the Management Board and the 3-member Supervisory Board.

**Secretariat**

The cluster secretariat together with the Management Board are responsible for the daily activities of the cluster. Their tasks include, among others:

• Facilitation - communication & coordination

• Running the South Poland Cleantech Cluster secretariat

• Website: www.spcleantech.com

• Recruitment of new members

• Supporting start-ups

• Organization of events (meetings, workshops, conferences, missions, fairs)

• Organization capacity building

• Attracting foreign partners

• Cooperation with universities, research institutions and other clusters

• Applying for EU and other funds

**II. IMPLEMENTATION OF THE CLUSTER'S GOALS**

The cluster pursues its goals through active activities in 5 main areas of activity:

**1. Entrepreneurship, innovation and start-ups**

South Poland Cleantech Cluster catalyzes innovation in Southern Poland by increasing the commercialization of new products and technologies, supporting entrepreneurship and start-ups, and stimulating access to venture capital for enterprises at an early stage of their activity.

SPCleantech combines existing resources and integrates current social resources at all levels to create a solid innovation environment.

Thanks to the integration of the cluster, the possibility of developing cooperation between novice entrepreneurs, small and medium-sized enterprises, scientists and inventors and eliminates the gaps resulting from various aid programs and alternative sources of financing. SPCleantech removes blockages resulting from market imperfections and functioning support systems. Thanks to the support of our partners and members, we are accelerating the transformation of the Małopolska region and southern Poland towards a knowledge-based economy.

Small businesses depend on entrepreneurs - people who have ideas and are willing to take risks necessary in the first phase of the company's development. Southern Poland needs more entrepreneurs and that is why the cluster is constantly trying to find new solutions encouraging the creation of new enterprises.

First, there are cultural factors that discourage too many people from starting a business. The task of the cluster is to promote the concept of entrepreneurship, starting with youth and school education. Another disincentive is the fear of failure.

Secondly, administrative requirements and obstacles are often the main disincentives for potential entrepreneurs. The cluster catalyzes cooperation between entrepreneurs and local and regional administration.

Thirdly, the cluster provides entrepreneurs with easier access to investors, both domestic and foreign.

As part of the SPCleantech Acceleration Point, the cluster organizes a series of workshops and conferences for novice Start-ups under the name "Workshops for Start-ups" on various topics in Polish and English. Workshops are always attended by a national or Scandinavian mentor: Denmark, Sweden and Finland. The workshops are organized in cooperation with the European Commission Agenda, KIC InnoEnergy or other partners.

**2. Matchmaking and B2B networks**

South Poland Cleantech Cluster connects the company with complementary R&D resources, technologies or other strong partners in the process of associating the company with the intention of discovering mutual benefits from R&D&I cooperation or business partnership.

Access to the latest innovative technologies or organized business matching events and related initiatives give innovators the opportunity to collect and exchange information, networking and contacts with potential partners, clients or potential employees, promote their research, organizations or innovations and create the opportunity to talk about cooperation R&D&I or business projects.

For a small business, networking can be an inexpensive way to promote your business. Through networking you can discover new opportunities, build a customer base and find new suppliers or employees. You can also find investors or business partners.

The possibilities for networking are vast and ever changing. SPCleantech shows how to learn about new networking trends in order to choose the most beneficial ones for a given company.

Cluster's activities for associating and networking include:

**1. Conferences and events** SPCleantech helps in regular participation in breakfast meetings, seminars, lectures and lunches, which are conducted by various groups. These events are usually organized by the cluster or by external partners with whom the cluster cooperates. You can also invite other people from your circle and environment to participate.

**2. Business contacts** SPCleantech helps you focus on developing relationships with important people or people who face similar challenges. It also suggests what can be done to help each other.

**3. External partners** SPCleantech helps you join networking groups run by external partners. Joining these groups can help keep you up to date with changes in the industry, and networking events are also welcome.

**4. Network groups** Joining SPCleantech's network groups gave members a chance to meet a wide range of representatives of small and medium-sized companies.

**5. Personal contacts and social events**  Networking through other members of SPCleantech is a great way to strengthen strong business relationships.

At integration events organized by SPCleantech you can meet people who can be helpful in your business or someone you can help and thus offer your own experience.

**3. Coaching and Mentoring**

Coaching and mentoring are a very important part of building a business. South Poland Cleantech Cluster cooperates with a wide group of experienced trainers and mentors who are able to offer their knowledge in order to implement sustainable solutions faster.

Mentoring enables an experienced and highly competent group of cluster members to transfer knowledge to others who need to acquire specialist skills.

Many companies operate for years without realizing their true development potential. Cooperation with a mentor is designed to support these enterprises in their further development through the use of advice and consultations.

While the business is developing, you can afford to hire full-time employees with good substantive knowledge, in the meantime, valuable trainers and mentors are waiting to help guide the business through its early stage of development. We have experienced businessmen who are interested in supporting start-ups. If an entrepreneur is a new entrepreneur who is looking for an experienced advisor, SPCleantech is the right conversation partner.

Companies, trainers and mentors who have benefited from the support of coaching and mentoring have achieved successes such as:

1. Increased profitability

2. Sales increase

3. Increased efficiency

4. Improve employee engagement

5. Acquisition of knowledge and skills

6. Increased self-confidence

7. Getting new customers

8. Increase in the degree of cross-linking

The most important conclusion is that professional development is much more likely to be based on cooperation between cluster members and that effective mentoring and coaching are the key to professional development.

**4. Tests and Demonstrations**

Members of SPCleantech - technical universities, polytechnics and other universities today, thanks to EU funds, have a great technological base for conducting tests and demonstrations at the highest level. Unfortunately, this database is not sufficiently used by enterprises for various reasons.

South Poland Cleantech Cluster facilitates access to state-of-the-art test and demonstration facilities in the region. Start-ups and innovative companies can use these places to conduct R&D, build prototypes or test existing products that meet market needs.

SPCleantech performs the mapping of test and demo installations that are available in the region. Test facilities are defined as installations where companies can test the durability and functionality of a product in the pre-commercialization phase.

Demonstrators are defined as places where companies can demonstrate whether a product can work under real operating conditions or with other technologies.

There are 3 types of test and demonstration installations in southern Poland to which cluster members have access:

1. State test facilities

2. Private sector test facilities

3. Test equipment run by universities, polytechnics and other research and development units

Access to relevant Cleantech test and demonstration facilities is critical to the development of regional Cleantech companies' work. International research among cleantech companies (Oxford research, 2011) showed that testing and demonstrating products or ideas, along with product development, are the most priority tasks for companies.

Companies see the lack of sufficient test and demonstration facilities as a major obstacle to their further development. Without access to installations that can prove the accuracy of new ideas, it will be difficult for new products or services to enter new markets. For this reason, SPCleantech works with external partners to create new test and demonstration installations, both on a small and large scale.

The aim of these initiatives is to create innovative designs and test the reliability and performance of new technologies. Demonstrators in the region drive initiatives towards new and advanced technologies, especially for

sustainable energy consumption and related solutions.

**5. International reach**

South Poland Cleantech Cluster works actively for cooperation with international knowledge centers and networks. The challenges of globalization are forcing a shift towards more open, networked and international ways of organizing innovation processes.

We are constantly developing in order to improve excellence in cluster management and create bridges and new communication channels in the process of internationalization of cluster member companies.

All Cleantech clusters face increasing requirements from cluster members to improve access to business in neighboring markets, i.e. EU member states. For this reason, cooperation between clusters in order to facilitate business-to-business contacts and trade within the EU is very popular among entrepreneurs.

Another starting point for cooperation is benchmarking, which by comparing the best practices of Cleantech clusters in the EU supports cluster organizations in providing better services in the field of business services development. Different clusters have different strengths. Some of them are strong in entrepreneurship, others in the process of matching partners, others in demonstrating and finding new solutions, and still others in research and simulations. The exchange of knowledge and experience between clusters builds the competitiveness of cooperating clusters. SPCleantech has built a network of clusters with which it cooperates and applies for EU funds under various international projects.

SPCleantech has the ability to connect regional Cleantech companies with the global market. By connecting key Cleantech players across multiple sectors, the clusters are driving and facilitating innovation through international partnerships. For this reason, SPCleantech will continue to strengthen its membership in numerous international organizations in order to further strengthen its international presence and thereby create better global market opportunities for our member companies.

The use of SPCleantech's international contacts to open the door to the world simply facilitates international cooperation, investment and export, thus supporting the international involvement of our member companies.

**The role of the cluster in projects**

One of the most important tasks of the cluster is to organize cluster members into consortia carrying out their own projects with the possibility of applying for financial support from various sources, including EU funds.

SPCleantech can play one of the following roles in projects:

**Driver**  SPCleantech drives the processes, the cluster organization plays active executive role in initiatives and projects.

 **The cluster** is responsible for setting up the consortium, preparation

application for co-financing, implementation and settlement of the project. Cluster acts as the project manager and its secretariat, organizes meetings Steering Committee, partnership meetings and planning sessions.

**Partner**  SPCleantech participates in the project creation process and can also participate as a partner in the consortium and initiatives within

 project, but the organization of the cluster is not the primary and main

 partner in the project.

**Facilitator** SPCleantech facilitates contact between potential partners, but

the cluster organization does not actively participate in the implemented ones initiatives / projects.

 Cluster members can get help from key-account manager from

 cluster that can respond to the needs of its members and organize

 partnership meetings, match-making and project network meetings,

 to create new business opportunities between members and

 development of new projects between cluster members.

**III. FINANCIAL RESOURCES OF THE CLUSTER**

The current activity of the Cluster is financed from the cash contribution of the Founding Members of the Cluster, from the contributions of Ordinary Members of the Cluster and services provided to Cluster members and external organizations. This income is entirely allocated to the daily activities of the cluster.

In addition to its own financial resources, the cluster seeks external financing in the form of attracting external investors and financing various types of tasks and projects from public funds, both domestic, EU and other foreign ones.

The structure of the cluster's financial resources comes or can come from the following sources:

**Private funds**

Founding Members and Ordinary Members

External investors

Sponsors

**Public funds**

National

Regional (ROP)

International (EU), Visegrad Fund

**Support programs**

Innotech, Cornet, Scientific Technical Organization (TNO), NCBiR,

Regional Operational Programs (ROP), PARP, Horizon Europe, COSME,

INTERREG, Life or Visegrad Fund.

**V. MONITORING AND EVALUATION OF THE CLUSTER'S ACTIVITIES**

South Poland Cleantech Cluster Sp. z o. o. as an entity operating in the legal form of a limited liability company, operates on the basis of the principles set out in the Code of Commercial Companies (CCC).

At the Ordinary General Meeting of Shareholders, the Management Board presents the "Report of the Management Board on the Company's activities" in a given financial year, which must be approved by the General Meeting of Shareholders.

The Supervisory Board consisting of 3 Founding Members of the Cluster is responsible for the ongoing monitoring and evaluation of the Cluster's activities.

Information about the cluster's activities is posted on an ongoing basis on the Cluster's website www.spcleantech.com, which gives a constant opportunity to monitor the activities and initiatives undertaken by SPCleantech.

In addition, reports are prepared to verify the achievement of the goals set out in the "Goals for the next 5 years". These objectives may be changed depending on the cluster's human and financial resources, regional strategies and plans, and the overall economic situation of the country.

The new "Strategy for the development of the South Poland Cleantech Cluster (SPCleantech)" was developed by the cluster's Management Board and approved on June 22, 2023 at the Ordinary Shareholders' Meeting by the cluster's partners. The current SPCleantech strategy has been approved for the next 5 years and is valid until June 22, 2028.

Kraków, June 22, 2023

Janusz Kahl

Chairman of the Board