green power electronics
innovation via new materials

Interreg
Baltic Sea Region

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EUROPEAN REGIONAL DEVELOPMENT FUND

Green PE –
Power electronics for green energy efficiency

New Materials for advanced power electronics.
Boosting efficiency in conversion, transmission and consumption of energy.

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Agenda

- Challenges
- Our activities
- Our objectives
- Demonstration pilots
- Project data
- Impact on the Baltic Sea Region

Challenges for advanced power electronics

- Technical and economic barriers
- Knowledge gaps
- Little understanding of potential developments

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What we are doing

1. We demonstrate and market the technical and economic opportunities of advanced power electronics to the Baltic Sea Region research and development ecosystem.

2. We support companies in developing their individual technology roadmap to take up advanced power electronics.

3. Thus, we help Baltic Sea Region companies to implement advanced power electronics into their R&D strategies and investment planning.

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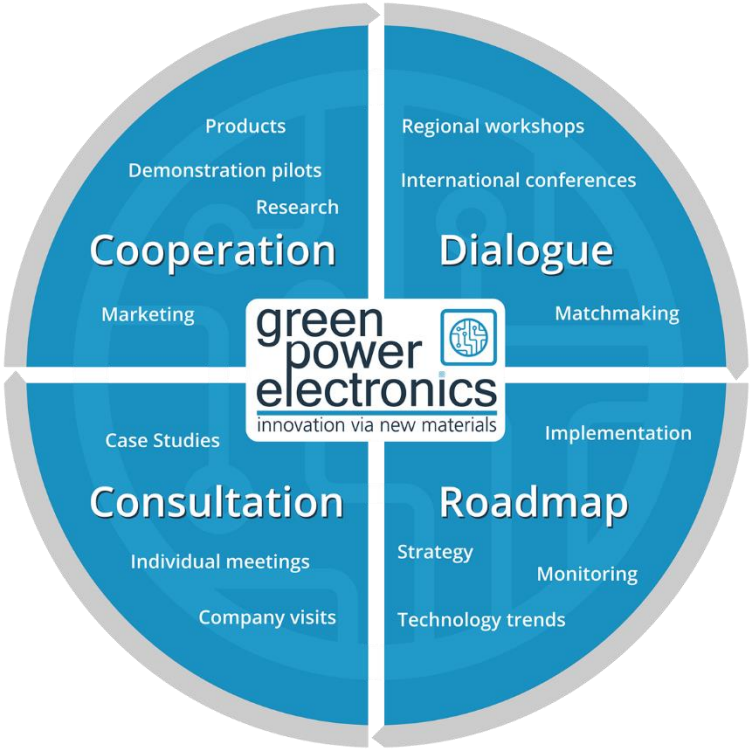
Green PE activities



Our activities

- **Dialogue**
  - Regional workshops, international conferences and workshops, matchmaking, …
- **Roadmap**
  - Strategy development, technology trends, monitoring, implementation, …
- **Consultation**
  - Company visits, individual meetings, case studies, …
- **Cooperation**
  - Demonstration pilots, research , products, marketing, …

Our three demonstration pilots

R&I pilots between companies and research institutions within

- wind energy,
- e-mobility and
- smart houses

demonstrating the technical maturity, reliability and economic feasibility of integrating advanced power electronics

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We address

- **Companies**
  Element and component producers, system providers, consulting and financing companies
- **Public Research Institutions**
  Universities, R&D institutions, technology and science parks
- **Public Authorities**
  Policy administration, regulatory bodies, business incubators, business development agencies

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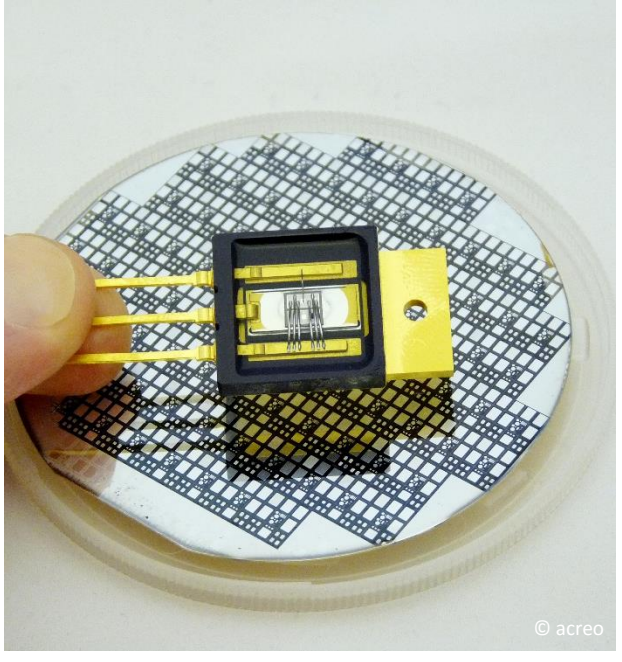
Project in a nutshell



- Partners: 17 research institutions, companies and technology transfer partners from the Baltic Sea Region
- Duration: 36 months (2016 – 2019)
- Budget: EUR 3.1 million
- European Regional Development Fund: Interreg Baltic Sea Region Programme
- Led by University of Southern Denmark

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Project partners

Estonia
- University of Tartu
- Ubik Solutions OÜ

Germany
- Renewable Energy Hamburg
- Kiel University

Latvia
- University of Latvia
- Latvian Technological Center

Lithuania
- Kaunas University of Technology
- Kaunas Science and Technology Park
- Applied Research Institute for Prospective Technologies

Denmark
- University of Southern Denmark
- CLEAN
- Converdan

Poland
- Warsaw University of Technology
- Polish Chamber of Commerce for Electronics and Telecommunications

Sweden
- RISE Research Institutes of Sweden AB
- Sustainable Smart Houses in Småland
- NATEK Power Systems AB

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Work Packages

Project Management

Transnational Technology and Product Roadmap of advanced power electronics

Transnational Industrial Demonstration Pilots

Technology Marketing

Technology consulting enabling SMEs strategy competence

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Impact on the Baltic Sea Region

- The research and market actors benefit from the creation of a critical mass of knowledge, expertise and demonstration activities across borders in the Baltic Sea Region.
- The project provides the necessary transnational knowledge and collaboration platform for research institutions and companies.
- The transnational approach allows one to gain a critical mass of expertise, applied knowledge and collaboration which is a key driver to mature the market for energy efficient advanced PE.

Contact

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Project Management

DSN - Connecting Knowledge

www.balticgreenpower.eu