



PlasTEP

Dissemination and fostering of plasma based environmental technological innovation

Introduction of the PlasTEP project

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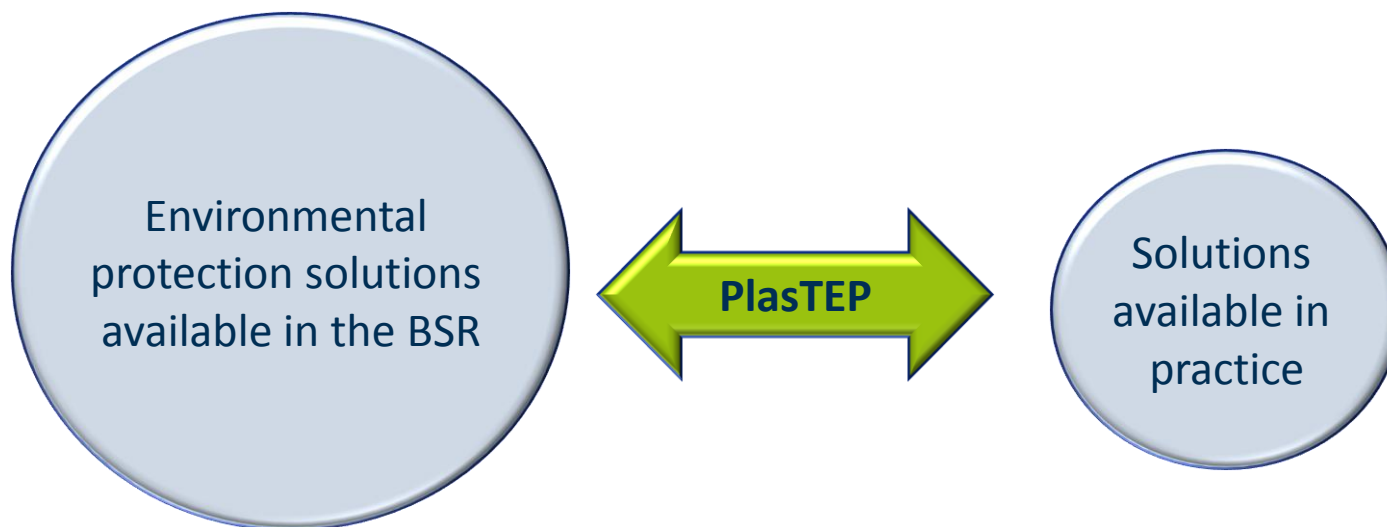


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Background information

PlasTEP in the context...



There is a gap between research results and their implementations. Reasons for this are insufficient perceptions of potentials, particularly of decision makers from industry and public.



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General Objectives

PlasTEP has the following aims:

- Dissemination and fostering of plasma-based technological innovations for environment protection in the Baltic Sea Region (BSR)
- Build up a network with partners from industry, science and policy focused on plasma technology for environment protection
- Offer new possibilities for environment neutral production
- Combining the existing knowledge about plasma technologies in the BSR
- Contribute to a better future by cleaning for example exhaust gases or waste water
- Bring the idea of investing in plasma technology and therewith in future research into the minds of industrial decision makers and politicians and show people: there are new ways!



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Project Partners

01	Technology Centre of Western Pomerania (TZV)	Germany
02	Leibniz Institute for Plasma Science and Technology (INP)	Germany
03	VDI Mecklenburg Western Pomerania (VDI)	Germany
04	Risø National Laboratory for Sustainable Energy, TU of Denmark (Risø)	Denmark
05	Uppsala University, The Ångström Laboratory (UUA)	Sweden
06	Lappeenranta University of Technology, ASTRA (LUT)	Finland
07	Riga Technical University (RTU)	Latvia
08	Lithuanian Energy Institute (LEI)	Lithuania
09	Kaunas University of Technology (KUT)	Lithuania
10	Vilnius Gediminas Technical University (VGTU)	Lithuania
11	Institute of Nuclear Chemistry and Technology (INCT)	Poland
12	The Szwedalski Institute of Fluid Flow Machinery (IMP)	Poland
13	West Pomeranian University of Technology (SUT)	Poland
14	University of Tartu (UT)	Estonia
15	Association of Polish Electrical Engineers, Szczecin Branch (SEP)	Poland



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Structure of PlasTEP

WP 0: Preparation Activities

WP 1: Project Management & Administration

WP 2: Communication & Information

WP 3: Plasma-based technologies sustainability analysis and integration in to the educational process

WP 4: Plasma-based cleaning of exhaust gases of combustion

WP 5: Removal of organic/hazardous compounds and aerosols

WP 6: Plasma technologies for water cleaning



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Key facts

Partnership:	Technology centres and research organisations from Denmark, Estonia, Finland, Germany, Latvia, Lithuania, Poland and Sweden
Number of partners:	15
Lead partner:	Technology Centre Vorpommern, Germany
Total budget:	3.820.000 €
Duration:	17.09.2009 – 16.12.2012



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Dissemination activities

Presentation for politicians

- 6 events: Open Days 2011 (Brussels), Baltic Sea States Subregional Co-operation Conference, Baltic Development Forum, Presentation at the voivodeship Western Pomerania ect.

Presentation to broad public

- Open events: presentation at night of sciences, week of sciences, night of commerce, science festival

Presentation to industry

- Several events: participation at international fairs like Hannover fair, Poleko, Achema, Plasma Surface Engineering
- 4 industrial workshops in Rostock, Riga, Kaunas, St Petersburg



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Materials / Documents

Guideline for standardised test methods

Aim: Realise comparability of the partner's results and possibility to compare different plasma technologies. It should define the model gas mixtures, the measuring conditions (pressure, temperature, mass flow) and measuring methods and will be the basis of a free open standard for future work.

Analysis of main pollution sources

Aim: The analysis of main pollution source of NO_x/SO_x, VOC/odour and waste water in BSR is the basis for cost-benefit analysis and should define main targets for plasma treatment.

Cost-benefit-analysis → Cost model and investment preparation document

Case study by MAN B&W: base model for NO_x reduction of different types of engines used for marine transportation and small district power plants to produce hot water and electricity.



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Thank you for your attention!

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