

BIOGAS PRODUCTION

The most sustainable solution for treatment of food waste



Zabrze, May 25, 2016











Embassy of the Republic of Poland in Stockholm

Swedish-Polish Sustainable Energy Platform

- Established in 2009 by decision of Deputy Prime Ministers of Sweden and Poland
- Supported by the Swedish Energy Agency, Swedish Embassy in Warsaw and Polish Embassy in Stockholm
- One secretariat at IIIEE, Lund University and one at PIMOT, Warsaw







Swedish-Polish Sustainable Energy Platform



Biogas from Waste

A win-win-win solution to many problems, by:

- Reducing biodegradable waste in landfills (EU-directive)
- Reducing odour from landfills
- Facilitating recycling of dry waste fractions (EU-directives)
- Reducing climate impact (Global agreement)
- Reducing low-emissions and related health impacts
- Delivering renewable energy (EU-directive)
- Reducing dependency on natural gas and fossil fuels
- Reducing use of chemical fertilizers





Biogas from Waste in Zabrze

Timeline

- Research on Waste Management 2010
- The conference on Energy from Waste in Warsaw 2011
- Research on Biogas Production in Zabrze 2012 & 2013
- Funding of a feasibility study from the BSAP-Fund 2012
- Several study tours in Sweden
- Conference on Recent Biogas Developments 2013
- Feasibility study, information and application 2012-2016







Biogas from Waste in Zabrze

Obstacles to overcome

- Low environmental awareness
- No source separation tradition
- Ever changing legislative and financial frameworks
- Complicated funding structures
- Restrictions regarding the usage of digestate as fertilizer
- Public procurement procedures







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A Pilot & Demonstration Biogas System in Zabrze

Is in line with the transition of Zabrze from one of Europe's most polluted cities to a green showcase





Will put Zabrze on the map of Green, Innovative, Smart and Attractive Cities in Europe



Related acheivements & plans

- Biogas from wastewater treatment sludge Ο
- **Biogas from landfill** \bigcirc
- Increased source separation and recycling 0
- New CHP-plant partly using biomass \bigcirc
- Nowe Zabrze Smart City District \bigcirc
- Sustainable Mobility Strategy 0





A Pilot & Demonstration Biogas Plant

A proactive first mover advantage

- Creating a new image of Zabrze, from black to green
- Addressing environmental problems and EU legislation
- Attracting visitors, funds, investors and developers
- Supporting local entrepreneurship and green growth





Thank you - Dziękuję





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