

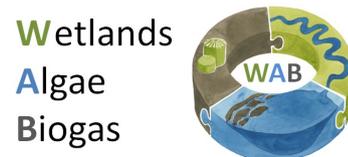
WAB Project Newsletter



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Issue 3

WAB Conference



The first conference to promote the WAB project in the Pomeranian Region was held on March 31, 2011 in Gdansk (Poland) by Pomeranian Agricultural Education Center (PAEC). The aim of the Conference organized by PAEC was to inform the inhabitants of Pomeranian Region, especially farmers, about the benefits of small scale biogas in the region.

Around 100 people participated in the conference. Most of them were Pomeranian farmers interested in the reconstruction of wetlands and biogas production in agricultural areas.

The conference was attended by representatives of Polish and Swedish WAB Partners.

Participants were welcomed by Andrzej Okrój - Deputy Director of PAEC and Ryszard Świński - Deputy Marshal of the Pomorskie Voivodeship, who drew attention to the need to improve the touristic attractiveness of Pomeranian Region and the development of renewable energy sources.

Sten Bjork Councilman of Trelleborg Municipality presented the main objectives of the project, which can serve as a model of sustainable, environmentally friendly management of the coastal zone.

WAB is a kind of "two in one" project as planned activities to improve the water quality of the Baltic Sea at the same time contribute to the increased production of renewable energy in the form of biogas.

Next speaker and moderator of the conference Danuta Makowska – PAEC Coordinator, presented the role of Pomeranian Agricultural Education Center in WAB project.

Teresa Jakubowska from the Pomeranian Marshal's Office spoke of the necessity to increase production of biogas in Pomerania in the light of regional planning documents. Prof. Grazyna Kowalewska – from IOPAS (Sopot) explained what is eutrophication of the Baltic Sea and rural areas. Swedish farmer Sven Norup from Skåne Region presented his own experiences of biogas production and the possibilities for fermenting algae, wetland plants and agricultural waste.

During the Conference participants had an opportunity to ask questions and discuss most interesting issues.

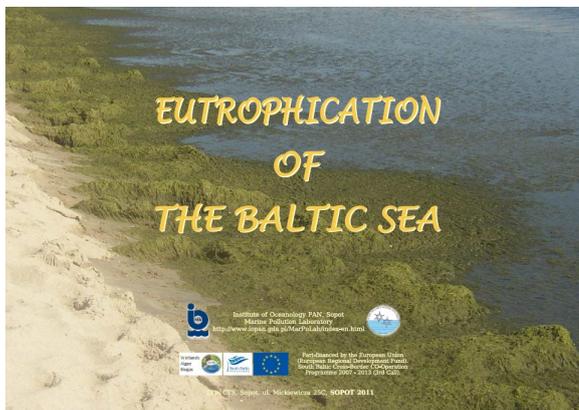
The conference was a success, it turned out to be very popular amongst the media and journalists from TV and radio were present. Radio Gdansk covered the conference under the auspices. TVP Gdansk presented an interesting report in its daily news and a special TV program lasting 15 minutes on the WAB project.

Prof. Grazyna Kowalewska from IOPAS and Danuta Makowska also gave interviews to regional TV Gdansk and Radio Gdansk.

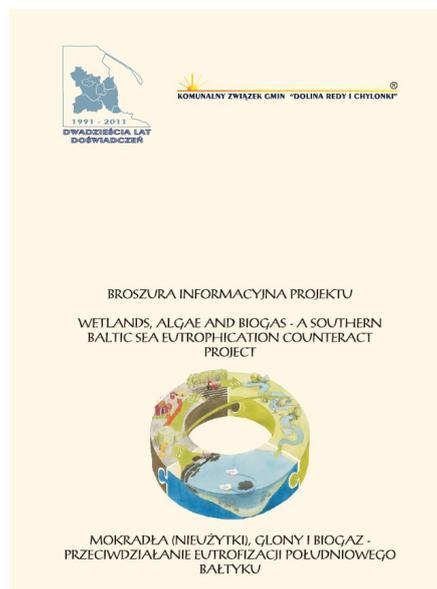
Latest News

Information Brochures by IOPAS - Marine Pollution Laboratory & Community Union 'Dolina Redy i Chylonki'

As part of their activities in the WAB project the Marine Pollution Laboratory of IOPAS (Institute of Oceanology Polish Academy of Science) and Community Union 'Dolina Redy i Chylonki' (KZG) have produced information brochures to accompany the project.



IOPAS (English)



KZG (Polish)

← Please click on the images to view the brochures in full.

Modelling Nitrogen and Phosphorous Retention in Wetlands — Master Thesis By Jan Petersson

As eutrophication is one of the biggest environmental problems in the Baltic Sea the need for measures to reduce Nitrogen (N) and Phosphorous (P) losses from land to water is therefore high. This thesis examines the effect of 22 planned wetlands within a defined catchment area in southern Sweden and by linking existing models for N and P retention in wetlands to a water quality model. The results suggest that a larger and more effective removal of N and P may be obtained by reducing the size of the wetlands while at same time increasing them in number. A presentation report about this thesis can be found in the resources section of the WAB project website. Please click [here](#) to view the presentation.



Latest News

Report on the Testing of Algae Collection Machines in Trelleborg

The report from the machine tests carried out in Autumn 2010 is available in the resources section of the WAB project website.

Please click [here](#) to access the report directly.



Visit to Eko Dolina Waste Management Plant

In connection with the WAB partner meeting in Sopot, Poland on February 2nd/3rd 2011 the participants toured the site of EkoDolina. Community Union 'Dolina Redy i Chylonki' being full partner in the WAB project is a co-owner of the plant. Eko Dolina is a comprehensive waste management plant that serves municipalities and cities associated in the Community Union 'Dolina Redy i Chylonki', including Gdynia and Sopot. The Eko Dolina site includes a Biogas Recovery System and power generation facility, the power generated is used by the site for its own purposes and any surplus energy is sold to the national grid. More information about Eko Dolina can be found at

www.ekodolina.pl

Wetlands
Algae
Biogas



Study of the Effect of Algae Removal on Infauna in Shallow Waters

The aim of the study, to be carried out in August 2011, is to investigate if there is any effect on infauna and oxygen content when great masses of filamentous algae occur along the shoreline during a long term period (5-7 days). When filamentous algae occur at one of four pre-selected locations the area will be divided in two, one half where the algae will be continuously removed and one half where the algae will be left to decompose. Infauna will be sampled in both the "algae free" area and the area where the algae are still present. A sonde that measures oxygen will be placed under/in the mass of algae, in order to continuously measure the consumption and production of oxygen during the study period. The study will provide a better understanding into what happens to the infauna when these shallow habitats are invaded by enormous masses of filamentous algae.

The results of the study will be published on the WAB project website at:

www.wabproject.eu



Linnaeus University Master Thesis



Preliminary title: **Algal biogas production and residual use-a literature review**
Master Thesis in Biology Time Frame: Oct 2010 –March 2011

Student: Kristofer Bergström Supervisor: Catherine Legrand

Aim: A literature review following the process chain of biogas production from algal substrate, with a focus on heavy metal content.

Collection: Potential content of toxic substances?
Storage: Effect on toxicity i.e. degradation?
Fermentation: Will toxicity affect the process?
Residuals: Toxicity, use, volume, waste?

DETOXIFICATION: Case study: use of Willow (*Salix*) Clones, uptake, areal needed, land type, clone availability, optimal fertilization, optimal harvesting considering Cd uptake and energy yield, cost?



Linnæus University



Thank-you for reading about the WAB Project.

- **The next issue of the WAB project newsletter will be published in November 2011.**
- **Previous issues of the WAB project newsletter are available at www.wabproject.eu**
- **For more information please contact:**

Matilda Gradin - matilda.gradin@trelleborg.se

Ellinor Tjernström - ellinor.tjernstrom@trelleborg.se

Patrick Finnis - patrick.finnis@trelleborg.se