

Integrated Sustainable Waste Management Systems decreasing pollution discharges in the South Baltic area

Hello hello!

Nowadays it is difficult for us to meet you in person, but we do everything you need to participate with us in our project activities. We organized educational event during the pandemic. You will also see what our research look like. We invite you to read more!



Educational activity on Bornholm

BOFA has recently started an educational activity with one of the kindergarten schools on Bornholm. One of the WASTEMAN prototypes for waste collection in 11 different fractions, has been installed in the school's playground. This way, children are learning the importance of waste separation for recycling on a fun way, daily.



Photo 1. Workshop with children in one of the kindergarten schools on Bornholm.

Report of using of effective microorganisms (EM) for the efficient decom-position of organic waste

We conduct further research on the use of effective microorganisms (EM) for the efficient decomposition of organic waste. We are waiting for bacteria to do their job and collecting samples for analysis in the meantime. Preparation of samples for analysis is a necessity, without exception.



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Photo 2. The prism treated with EM (left) and Preliminary separation of rocks and glass before grinding the compost sample (right)

Based on the results of previous research, we found that municipal organic waste can be a substrate for the production of methane. We are working on methods for the pretreatment of model municipal waste in order to increase the efficiency of biogas production. Research is still ongoing, moreover biogas yields look very promising. We also plan to investigate real samples from the landfill.

In our studies we often use model organic waste to represent the real waste composition and to enable understanding of complex fermentation processes.

The residue after fermentation of such waste is rich in macro and micronutrients, which are an excellent fertilizer for plants. We convert organic substances into methane, then we will prepare an organic fertilizer from residue, which will be used in our fertilizing experiments.



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Photo 3. Preparation of model organic waste for production of organic fertilizer (left) and waste before methane fermentation (right)



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New TECH for Circular Economy (TECH4CE) centre

Our dear partners at Aalborg University (AAU) has established a new TECH for Circular Economy (TECH4CE) centre. The new centre will act as a lever for the circular agenda. The goal is to develop and lift the circular economy and bring Denmark towards a more sustainable future. Read the full press release <u>here</u> (in Danish) or use our best friend Google Translate.

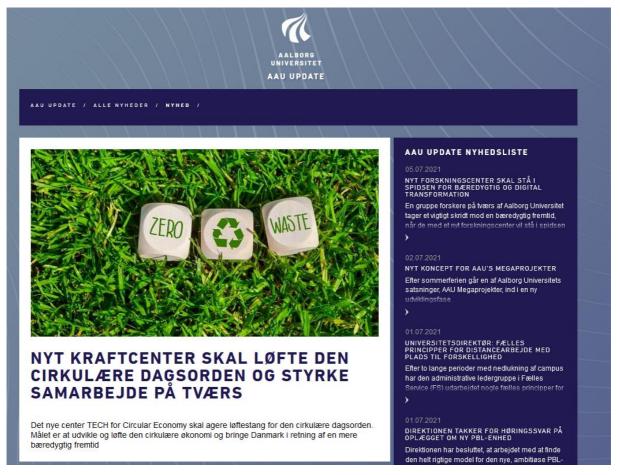


Photo 4. Screen from the AAU website

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