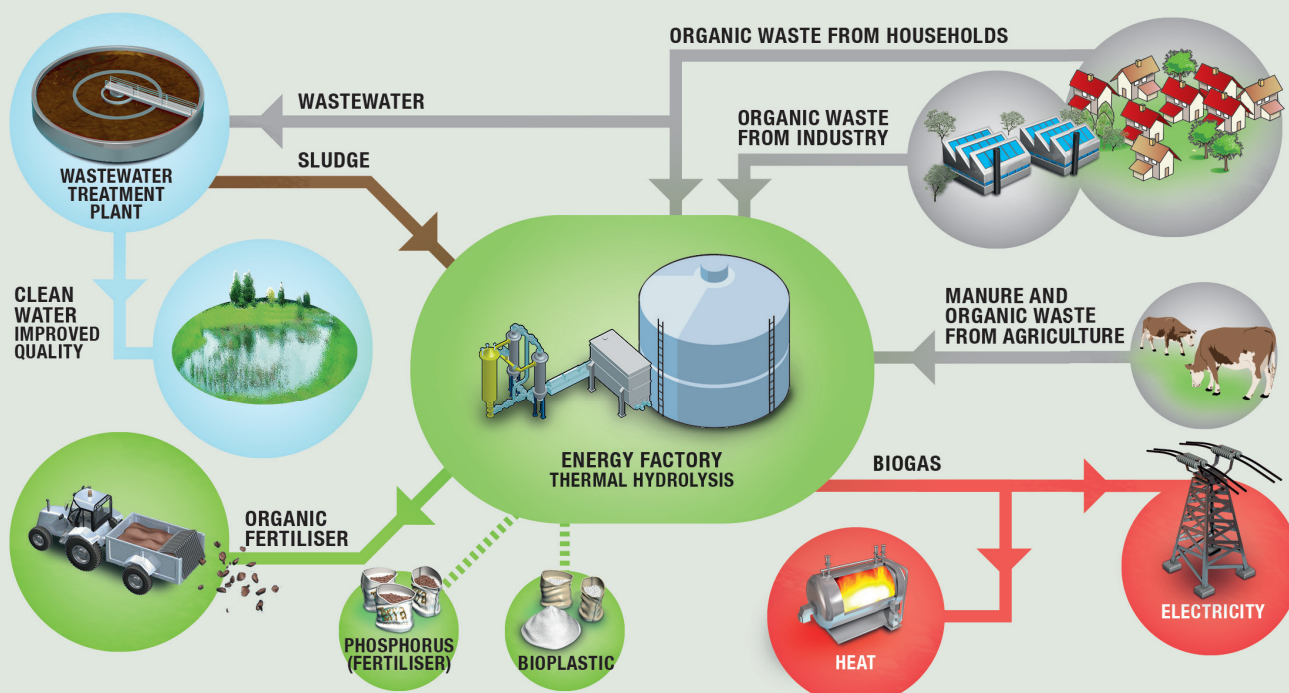


**WASTEWATER
TREATMENT
+ ORGANIC WASTE
= ENERGY FACTORY**



BILLUNDBIOREFINERY.COM



A SUSTAINABLE FLOW OF RESOURCES

Waste and wastewater are not problems – they are resources that offer immense potential for the environment. This is the philosophy behind the Billund BioRefinery that combines the strongest environmental technologies within water treatment and biogas in one significant, full-scale demonstration project.

Billund BioRefinery is a Lighthouse project that is to educate and show the way to a more sustainable cycle with better utilization of the resources.

The result is an even better treatment of the wastewater and utilization of energy and nutrients in wastewater and organic waste. The energy is converted to biogas that may be changed into electricity and heat, and the nutrient is utilized in a very effective and odour-free organic fertilizer. Furthermore, the process opens up utilization possibilities of interesting bi-products such as phosphorus (fertilizer) and biodegradable bioplastics.

The two parties that are to realize the project towards 2017 are both leading within their respective fields:

The environmental company Krüger A/S is a key player in all types of advanced water treatment within drinking water, process water, municipal and industrial wastewater, sludge, sewerage engineering, soil and groundwater as well as sophisticated control systems for water treatment plants.

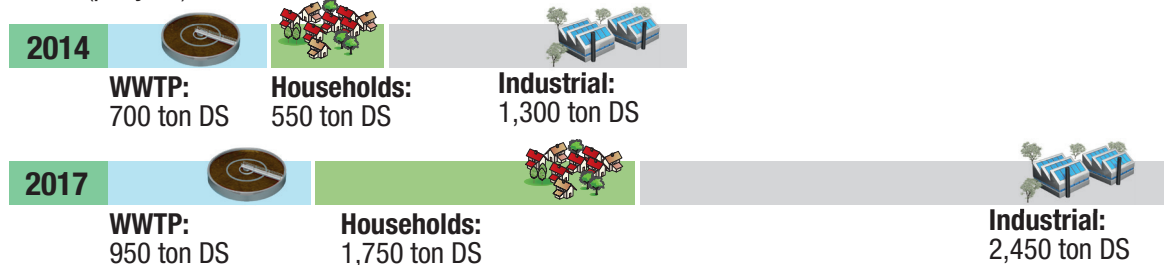
Billund Vand A/S has extensive experience within handling and bio gasification of organic waste from households and industries.

Together with its owner, Billund Municipality, it has for more than 15 years developed and improved Denmark's most well-managed system of collection and bio gasification of organic waste from all households in the entire municipality.

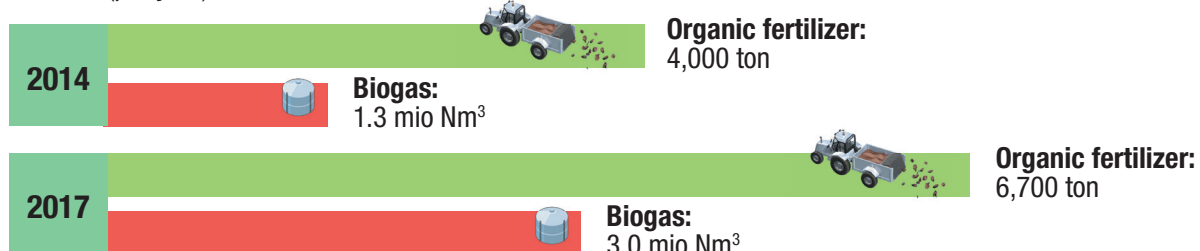
- ⊗ Energy consumption is reduced through more effective control and operation
- ⊗ Energy production is increased through better utilization of the biogas potential
- ⊗ The energy balance between consumption and production has thus increased from factor 1.3 to factor 2.5
- ⊗ Capacity for input of biomass has increased by 40 percent
- ⊗ Increased utilization of the gas potential of the biomass
- ⊗ Markedly improved treatment of wastewater – down to 25 percent of the effluent demands
- ⊗ Higher nutritive value of the organic fertilizer
- ⊗ Increased gas amount from difficultly degradable biomasses
- ⊗ Higher gas potential in biological sludge – from 35 to 60 percent
- ⊗ Reduction of biosludge amounts – up to 50-60 percent.

A NUMBER OF CONVINCING FACTS

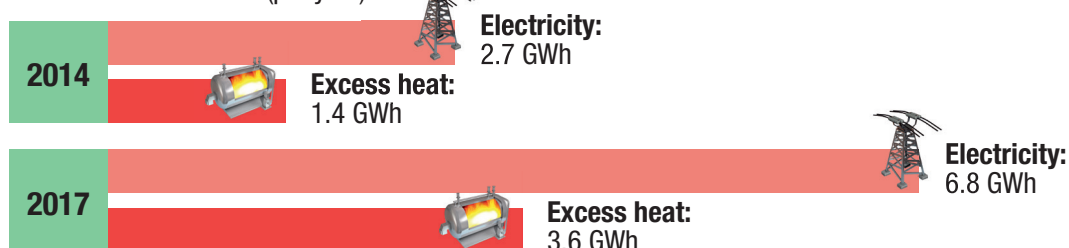
INPUT (per year)



OUTPUT (per year)



ENERGY PRODUCTION (per year)



TAKE PART IN THE ENERGY – JUST ADD YOUR VISION !

The strong partners behind Billund BioRefinery bring all technology and knowhow to the table – all you need is to add your own visions for a sustainable future.

Let us together create the very right solutions for you. Please contact us for further information – or come visit us to take part in the energy !

**The right
solutions for
your vision
– let's fuel
up the future
together !**



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Resource Recovery for the Future

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