

## CESME

### Waste; Energy and recycling

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#### Point of contact

*Organisation, contact data and person*

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#### Brief Description of Good Practice

**Incineration/Energy Plant:** *Producing hot water from waste to district heating, 43 MW equal to consumption from 18.000 Households. Also producing electricity from waste – up to 18 MW equal to consumption from 35.000 households. Water from internal waste water cleaning allow us to lead the water directly to the Limfjord.*

**Sorting plant:** *Will be able to make 95% pure plastic, iron and metal fractions when recycling 85% of potential plastic waste and 95% of metal waste that is source separated in households. Producing new materials from recycled plastic and metal waste reduces energy consumption at least 50% compared to producing from virgin materials, and besides that we save the virgin materials. Furthermore recycling of plastic reduces the emission of CO2 based on fossil oil. This means less CO2 charges for the energy plant.*

#### Problems/challenges and how they were overcome

**Incineration/Energy plant:** *Price for hot water for district heating is very low in Aalborg because of Aalborg Portland and the power plant north of the fjord. This means less income to Reno-Nord.*

**Sorting Plant:** *Price for the sorting plant is high. The more waste through the plant, the better economy. The owners will pay fixed annual contribution based on depreciation of the building and the machinery. This means that we can use a much better price on the waste, which will hopefully lead to better recycling percentages.*

#### Impact from Good Practice

**Incineration/Energy Plant:** *The energy production reduces the oil and coal consumption equal to approximately 50.000.000 liters oil. We reduces the need for landfilling.*

**Sorting Plant:** *We haven't started yet. We hope that it turns out to be good business to recycle. We need to compare price for sorting waste with price for incineration, and it will help a lot on the motivation of waste sorting, if the price for waste sorting ends up to be the lowest!*



**Lessons learnt from the Good Practice**

**Incineration/Energy Plant:** With best technology, you can save oil for district heating and electricity – only by using energy from waste. This also – partly – reduces CO2 emission based on fossil fuels.

**Sorting Plant:** Recycling will save virgin materials and energy – and thereby reduces CO2 emission.

**Recommendation you want to stand**

**For more information**

<http://www.renonord.dk> (in Danish only!)