

# ORNHOJ-GRONBJERG DISTRICT HEATING

**LINKA**<sup>®</sup>  
**ENERGY**

a part of  **LINKA** group

# Claus M. Larsen

Head of Project Sales



 [cml@linka.dk](mailto:cml@linka.dk)

 + 45 2428 5460

# ORNHOJ-GRONBJERG DISTRICT HEATING

Straw plant replaces the use of gas



# Specifications

- **Location:** Ornhøj, Denmark
- **Fuel type:** Straw
- **Plant size:** 2 MW
- **Plant type:** Hot water plant
- **Energy type:** District heating
- **Year:** 2017

# SUSTAINABLE DISTRICT HEATING

In 2017 Linka delivered a new straw system for the heating plant

- The heating plant supplies heat for almost 500 consumers in the area
- It will replace the use of gas with CO<sub>2</sub> neutral biomass

A 2,500 m<sup>3</sup> storage facility will store 600 straw bales

- That means 25 days of heat production
- The plant is expected to use around 4,000 bales every year





# THE HEAT PRODUCTION

The biomass plant was installed as a supplement to the existing solar panels - which cannot supply enough heat during winter seasons

The heat production

- 70 % is biomass
- 20 % is solar heating
- 10 % is gas

# THE PLANT

Complete boiler system with a 1,500 kW Linka H boiler designed for straw combustion

- Two extra passes, in the 5-pass boiler, ensures higher efficiencies and savings on the fuel
- A Linka double shredder is installed in the straw storage
- The 30 m. double conveyor can hold 30 bales, and only needs refilling every other day
- Automatic ash system transports the ash from the boiler to an ash room
- A bag filter is installed, and the flue gases are cleaned, thus reducing dust from the plant and ensuring better values on emission.



# OPERATING DATA FOR 1 YEAR



Production

7885 mW



Power consumption

90685 kW



Spare parts

4.539,29 £ ex. vat.



Daily care

2 hours 5 days a week

incl maintenance, cleaning and filling of straw

# WHO ARE WE

# ABOUT LINKA ENERGY

- Linka Energy was established in 1978
- 50 employees divided into sales, project management, construction, production, assembly, service and administration
- Acquisition of Jernforsen in 2018
- Acquisition of Weiss in 2019
- More than 5,000 plants worldwide

## Operating philosophy

- World patented combustion technology that ensures total combustion of the fuel
- High operational reliability - get unplanned downtime
- Low energy consumption
- Minimum maintenance costs



# VALUES



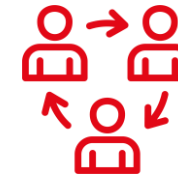
## Responsibility

- We take responsibility for our solutions and for the collaboration with our customers and the dialogue that leads us towards common goals
- Responsible behavior is for us operational and solution-oriented advice, credibility, quick responsiveness and smooth delivery
- As a responsible energy partner, we must be able to provide responsibility at all levels from development to installation and after service



## Credibility

- The foundation for innovation and development of the right solution is always based on honest advice, based on deep professional competence
- We build up to 100 - 150 projects every year
- Long reference list with satisfied customers
- We comply with the warranty data we promise



## Collaboration

- At Linka Energy, we take pride in speaking the customer's language
- Our professionalism is evident through our ability to listen and to answer technical questions at all levels
- For us, the collaboration is the only path towards innovation and the common goal: a future-proof and optimized energy plant

# QUALITY

- The quality standard ISO 9001
- The environmental standard ISO 14001
- Quality plan is prepared for all contracts
- Effective self-control of produced components as well as input control of deliveries



# UN SUSTAINABLE DEVELOPMENT GOALS



We are increasing the share of renewable energy through our energy plants

We are known for our optimized solutions that improve the energy efficiency of each individual plant



We convert waste into energy and thus support the green transition

We innovate and continuously contribute to more efficient energy solutions, so that climate change in the world is reduced



By utilizing local resources, we create global change and reduce the environmental impact per citizen

Our facilities convert resources into energy in local urban communities



We support and inspire green conversion by focusing on waste and biomass as a valuable energy resource



We're helping to create sustainable energy based on maximising exploitation of local resources or waste products