



**INFORSE-Europe - European Sustainable Energy Seminar  
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# Danish Experience with Community Owned Energy

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by Henning Bo Madsen, chair of INFORSE-Europe, Denmark



See Proceedings at: [https://www.inforse.org/europe/seminar\\_2021\\_INFORSE-Europe\\_DK.htm](https://www.inforse.org/europe/seminar_2021_INFORSE-Europe_DK.htm)

# Danish Experiences with Community Ownership

## Once upon a time (20 years ago)

- ✦ All electricity utilities were consumer-owned cooperatives or municipal - both production and supply.
- ✦ All district heating companies were consumer-owned cooperatives or municipal - both production and supply. This still applies to supply and very much to production companies.
- ✦ Virtually all wind turbines were owned by locally based wind turbine cooperatives





**Danish District Heating has a about 400 companies all over Denmark:  
50 are municipally owned district heating companies, which deliver around 66 % of all district heating, the rest of 350 are predominantly consumer owned cooperatives and only a handful are private companies.**

**Members supply 64 % of Danish households (1.7 million) with district heating – the goal is 75 % and District Heating is expanding, and the prices for the consumers are decreasing.**

**Renewable part is increasing now 60% . Mostly biomass, but partly solar at 160 plants (most cover 15-20% of yearly demand, few with seasonal storage 50%)**



## District heating

- around 2/3 of heating, 350 small and medium consumer owned cooperatives 50 municipal, all non-profit companies by law

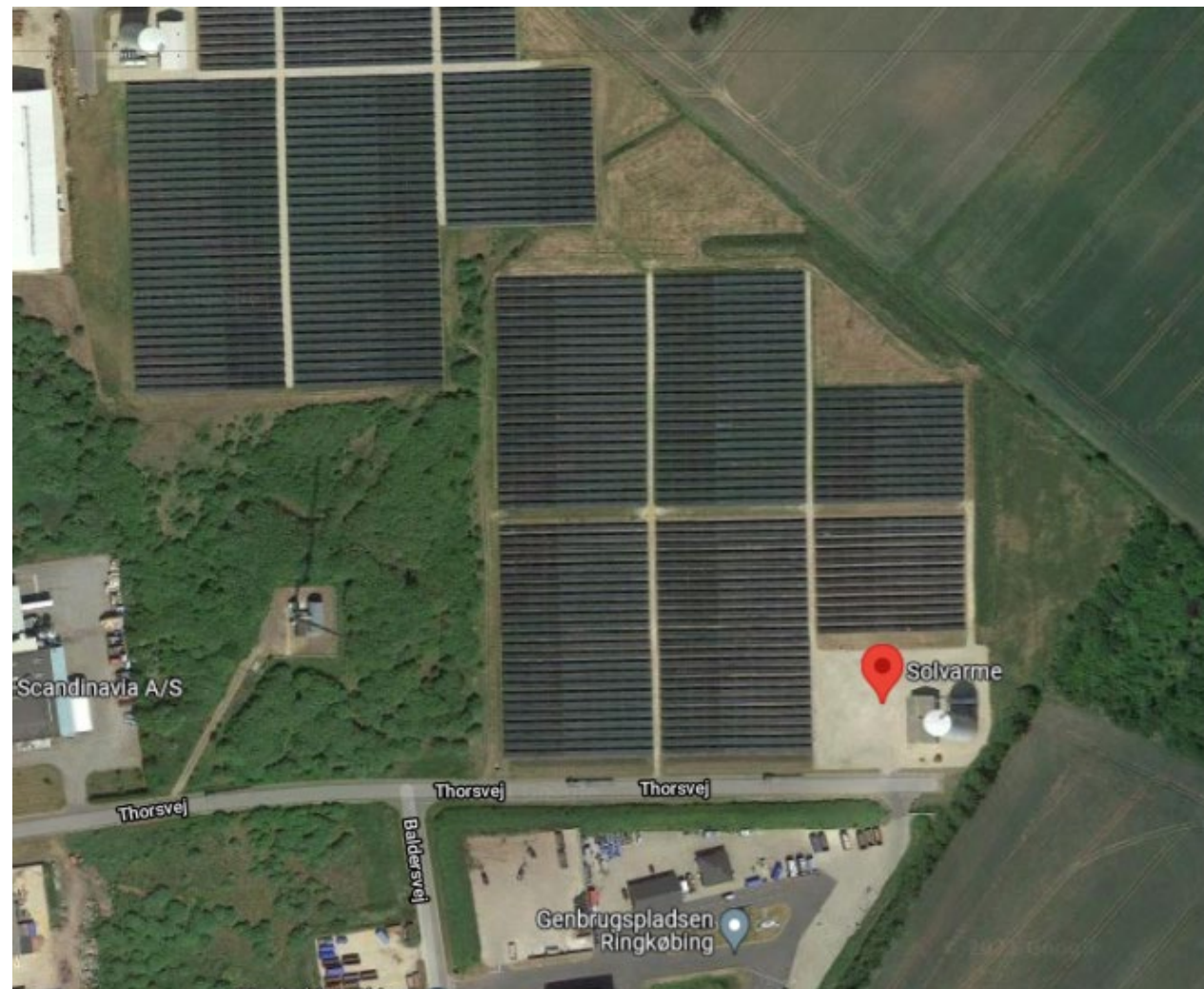
## Electricity

- At least 3.500 MW of 3.800 MW land-based wind power is raised by private / citizens (about 10 million DKK pr. MW),
- Total investment from citizens over 35.000 million DKK (about 5.000 million Euro)



# Ringkøbing Heat Association & Solar Thermal Collector Fields

Hvide Sande Heating Association, 3 Wind Mills, Heat Pump etc  
Lem Heating Association



- [Hvide Sande Fjernvarme A.M.B.A. – Google Maps](#)
- [Ringkøbing Solvarme – Google Maps](#)
- [Lem Varmeværk – Google Maps](#)





## Solar PV Cooperatives

**Copenhagen Cooperative:** The guild was founded in 2004. The guild is built up as a quite ordinary wind turbine guild.

Produktion: [www.solcellelauget.dk/produktion.htm](http://www.solcellelauget.dk/produktion.htm)

Last I / S meeting 2021: 15 March 2021, Copenhagen

**Hvidovre:** Dividends for 2020 have been transferred to the members on 17 March 2021.

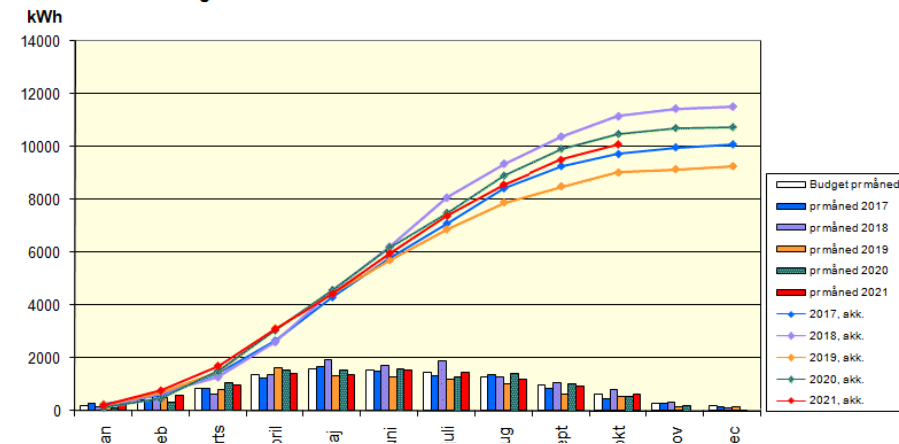
**Valby Hallen:** 195 DKK per share.

Production in 2020: 17,900 kWh, 6.6% higher than budgeted.

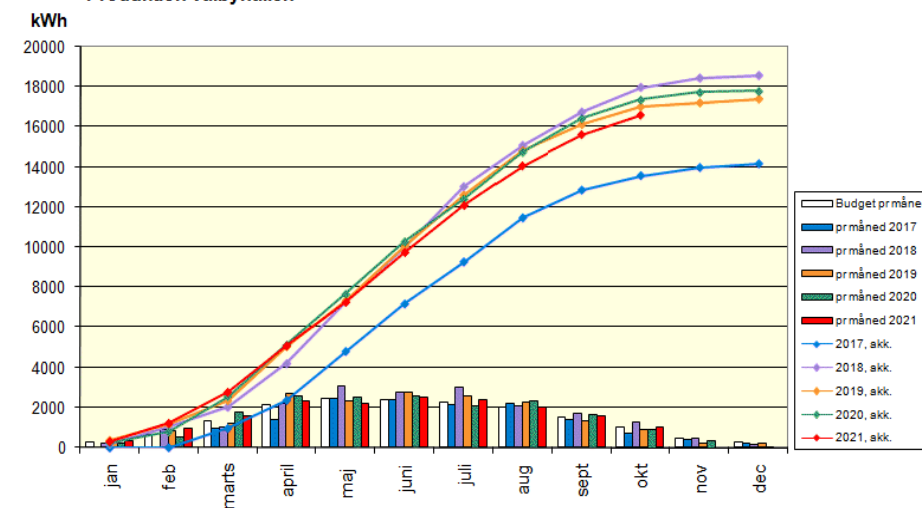
**Vigerslev:** In 2005, **440 shares sold**. 290 DKK per share.

Production in 2020: 10,650 kWh, which is 10.9% higher than budgeted.

Produktion Vigerslev



Produktion Valbyhallen



## Brenderup – Citizen's owned solar park on public shares



A public share in the park costs 10,000 DKK (1300 Euro), and selling 200-300 pieces. The entire solar park will cost around 8 million DKK, but it will also be able to supply green electricity to about a third of Brenderup's citizens.

1 MW – 1.5 football field

# Thanks you



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[www.inforse.org/europe](http://www.inforse.org/europe)

**INFORSE-Europe Seminar:**

[www.inforse.org/europe/seminar\\_2021\\_INFORSE-Europe\\_DK.htm](http://www.inforse.org/europe/seminar_2021_INFORSE-Europe_DK.htm)



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**The Power of the Community Energy Erasmus+ Project in 2019-22**

[https://www.inforse.org/europe/POWER\\_CE.htm](https://www.inforse.org/europe/POWER_CE.htm)