## Seminar: Lokalt drevet energiomstilling i Danmark og EU 9. september 2016, kl. 10 til 16 Christiansborg, København, Danmark

Title in English: Local Driven Energy Transition in Denmark & EU



#### Oplægsholdere / Panelister:

Margrethe Vestager, Europakommissionens kommissær for konkurrence.

Jens Joel (S), Thomas Danielsen (V), Søren Egge Rasmussen (Enh.).

Gunnar Boye Olesen, INFORSE/VedvarendeEnergi; Henning Bo Madsen, NOAH; Preben Maegaard og Leire Gorroño, Nordisk Folkecenter for Vedvarende Energi; Karl Sperling, ass. prof. Aalborg Universitet; Morten V. Petersen, Sdr. Vium, Bjergby.

Dirk Hendricks, EREF, Belgien; José Etcheverry, prof. York University, Canada; James Buchan, Local Energy Scotland, UK.

Organisatorer: International Network for Sustainable Energy (INOFORSE-Europe), Nordisk Folkecenter for Vedvarende Energi, Miljøorganisationerne VedvarendeEnergi og NOAH, Alliancen for Community Power. Arrangementet er støttet af Europa-Nævnet.

Mere information: INFORSE-Europe: http://www.inforse.org/europe/europa-naevnet.htm

# Rapport fra lokale energiprojekter i Sdr. Vium og Bjergby, Mygdal. By Morten V Petersen

Seminar: Lokalt drevet energiomstilling i Danmark og EU 9. september 2016 Christiansborg, København, Danmark

LOKALT P.

# Borgere bakker op om vindmøller

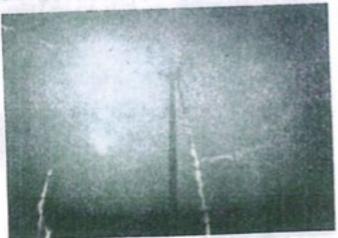
Sdr. Viums særlige mølleprojekt, hvor alle penge bliver i sognet, afventer et nyt regelsæt for at blive rentabel.

#### VINDMOLLER

Af Christian Baadsgaard chba@dagbladetringskjern.dk

SDR. VIUM: Borgergruppen i Sdr. Vium, der har præsenteretetalternativt mølleprojekt, hvor alle pengene fra møllerne bliver i sognet, kunne torsdag aften glæde sig over en enorm opbakning til projektet, da der var indkaldt til borgermøde.

Det gør, at projektgruppen kan arbeide videre på sagen, hvor meningen er at rejse en stribe møller i en højde på 80 meterfra fundament tilvinge-



Planeme om at rejse en stribe 80 meter høje vindmoller mo ler stor opbakning. Arkivfoto: Jorgen Kirk

er en fornøjelse at se så stor en opbakningtildette projekt, og det her må være en øjenåbner for byrådet, som må stoppe medden nuværende planlægning.«siger Niels Rasmussen.

Netop den lokale opbakning er altafgørende for befolkningens syn på vindmøller, hvis man spørger Niels Rasmussen.

»De store projekter, der ligger nu, vil skabe endnu større modstand, og modstanden erstornok i forvejen,« fastslår

At mølleprojektet er in mente i planlægningen, selv om det lige nu afventer en

#### HANDEL

### Bygavel

SKJERN-TARI vel tre år sider ening fik de ei veltorteneert gyldighed.»H gen, så skynd siger bychefi

#### KULTUR

#### Løvfald

RINGKOBINI egn har ind »Folmer og t af Rødding medlemme derholdend tur.som fore

#### MEN TO STATE KULTU

#### Pensic

HVIDE SAN . gerforening ster og efte går til Hors

# Turbines and biogas for Local house Credit Fund

Background for the projects

Solution

**Turbines** 

**Biogas** 

How to organize

**Financing** 

Risk

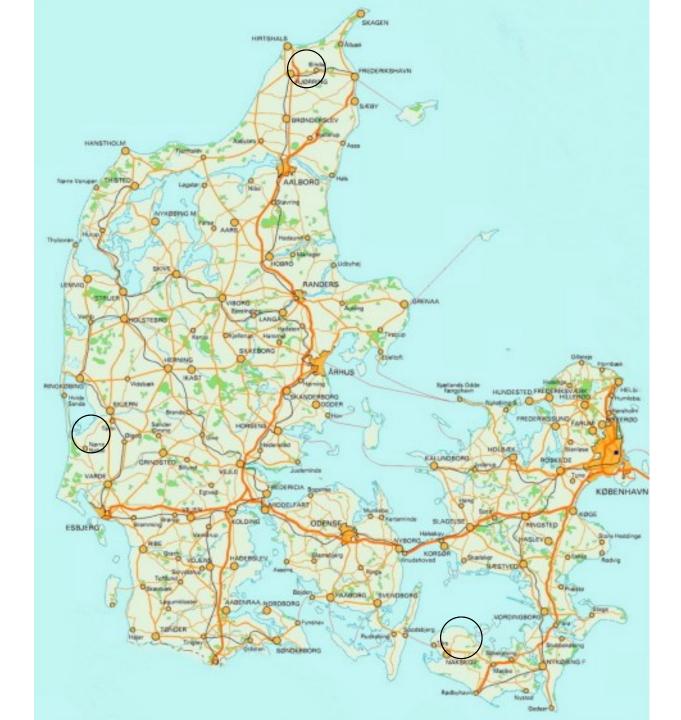
# Background for the projects

Rural areas are in difficult possition caused by placing big windturbines without public acceptance.

Wind ressources are used by others than the locals, and nearly no compensations are given.

Mortgage loans are normally 80%, but decresed to 60%, which means that house trading has more or less stopped. Houseprices has decreased, and houses are now rented out. Small societies ned settlers.

Young families, who deliver children to the school are not able to buy houses, as they cannot get sufficient loans, which is the normal way of financing in Denmark



Banks and Mortgage institutions are often not willing to grant loans in certain areas, especially places where big turbines has been placed without local accept and ownership. These areas are often mentioned as "black areas". This often makes problems between neighbours, and prices of houses are decreasing. Some places up tp 1/3. We have cases where a young man wish to buy a house for about 50.000 USD, but loan are rejected. The young man was told that if he want to buy a car even for more that the 50.000 USD, a loan is no problen.

## Solution

- Citizens of Sdr. Vium and Horslunde have gathered together with the idea of establish a Commercial Trust/Fund financed by sales of electric power from wind turbines, owned by the trust/Fund.
- The loan gap between 60% and 80% for mortgage, can then be guaranteed by the trust, and real estate can then be bought/sold.

## **Turbines**

- -Turbines under 80 m. do not devellop law frequent noise (Aalborg Universitets Center)
- -Turbines under 80 m. costs and produce nearly the same scalewise as "big" turbines
- Turbines under 80 m. are not vissible in the landscape at same level as turbines over 80 m. (about 6,5 km)
- Turbines under 80 m. are easier to get permisions to than these over 80 m.
- Turbines under 80 m. have no messured public resistance
- Energy prices are at the moment historical law, so neither 80 m. turbines nor big turbines are paying

## Biogas

 Biogas plants can work as electricity supplier, gas/methan supplier, heath supplier not at least as storage to balance energy supply.

 Biogas today do not stink, as it is closed systems.

Biogas in Denmark are using vaste, not crops.

## Status

Sdr. Vium: establishment of Commercial fund is going on, Board members are ready, land is ready. Sdr. Vium has allready private district heating and biogas plants.

Horslunde: The citizen association has after prelilminary meetings decided to go on with the project, "Horslunde Hybrid" containeng Solarthermal, Biogas for district heating and wind turbines. The Hybrid shall in the future in principle to be able to make Horslunde 100% selfsuppling.

Bjergby-Mygdal, Hjørring Municipallity has decided that no windturbines shal be erected for a period, so the citizens are in a waiting position.

## How to organize

The Commercial Fund "Sdr. Vium Vindmølle Park", will buy and erect 7 X 800 kW turbines. According to Danish Law 20% of the turbines shall be offered to people living within 4.5 km from the turbines. The parish is a natural unit.

#### Owners are:

Commercial Fund up to 80%

Local Privates from 20%

## **Financing**

Mortgage 60%

Bank loan 40%

Interest in average 4% i 20 years

It is usual bank business in Denmark

## Risk

Change of legislation
Resident resistance
Lack of building permit
Operating loss
Electricity prices
Lack of financing

## Time schedule

Political processing

**Environmental investigations** 

**Building Permit** 

**Erection of turbines** 

Under condition of OK from investor, it is expected to take about 18 mounths.

## **Future**

- PSO now What later?
- Same conditions for medium and large scale turbines, large are offered more than 50% more subsidiries.
- Politicians making frames for future windturbine policy.

# Thanks for your attention