

Denmark's Energy Policy Political framework of the Danish heat market

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Facts on District Heating

- 5.6m people – 2,6m homes
- 60,000 km DH-pipes
- 64% of all homes heated – 98% in Copenhagen
- Ownership: Municipalities or Consumers via Cooperatives.



Principles for the Danish heat sector

- District heating is a natural monopoly – need for political control.
- Long term perspectives for the sector – investments has a 30 years pay back time
- District heating sector is regulated via standardized planning tools and tax on fuels
- The sector is operated under non-profit principles.
- Financing via "Kommune Kredit"^{LA}



Appeal Board for DH - consumers

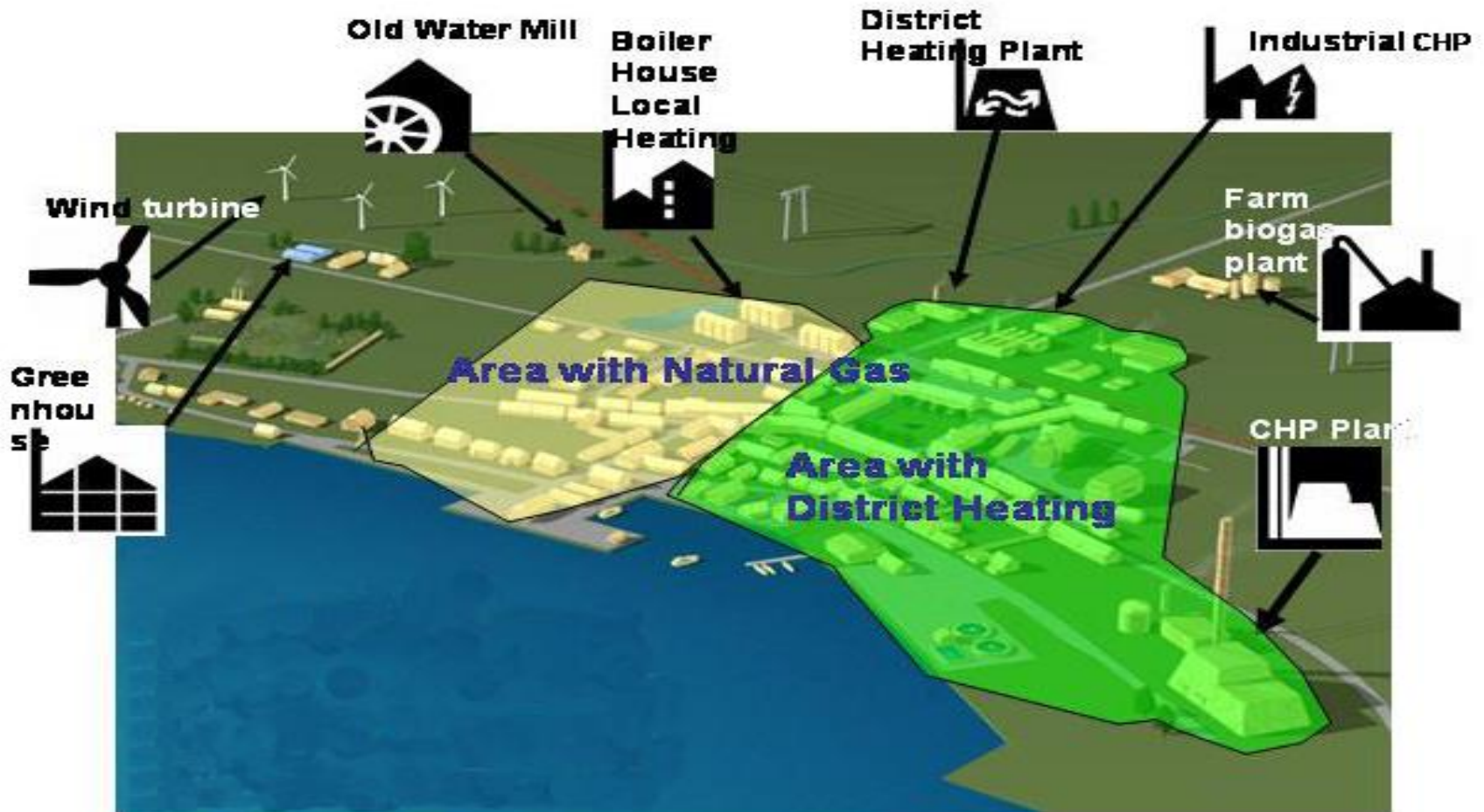
- The Energy Board of Appeal is the final administrative appeal body for decisions by public authorities.
- If you are not satisfied with a decision reached by the Board of Appeal, you can institute legal proceedings against the Board in the courts

Danish Heat planning

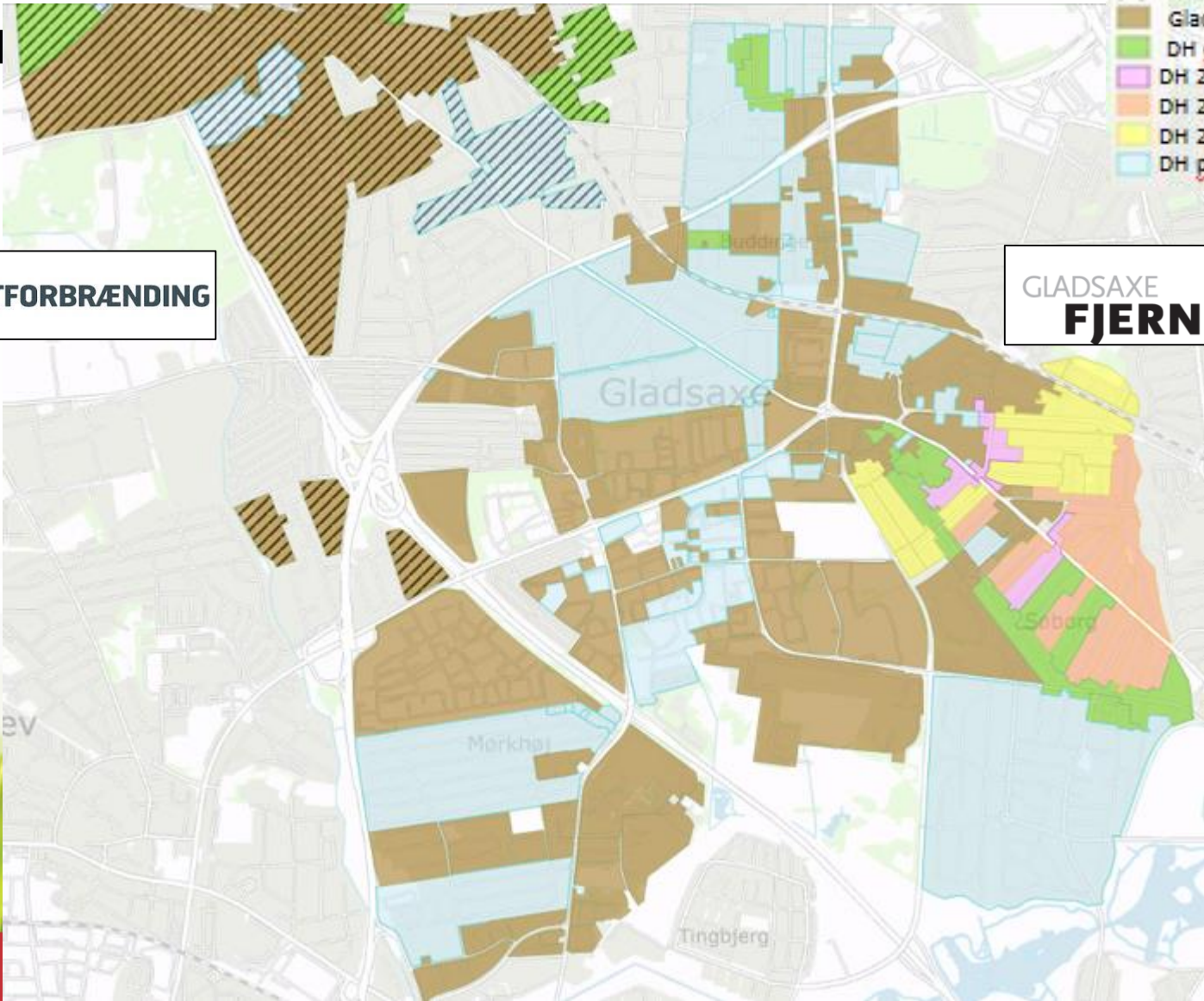
Main principles of the 1979 heat supply act:

- Local authorities are responsible for the approval of new heat supply projects
- The collective heat supply price must offer consumer prices based on the exact “true costs”, hence the heat price should not be higher or lower than the actual heat production costs.

... supply zones Established in 1980-90's



District Heating in Gladsaxe



- VF DH area
- Gladsaxe DH area
- DH current extension
- DH 2015 extension
- DH 2016 extension
- DH 2017 extension
- DH potential extension



Approval of Projects (1)

Approval of projects by City Councils must include:

- Economic net present value of the project must be positive
- Economic analyses should be based on latest guidelines from the Danish Energy Agency & the Ministry of Finance
 - E.g. Discount rate of 4 percent
 - Economic fuel prices & environmental costs (CO₂, SO₂ etc.)
- Financial analyses (DH company & different size of consumers)
- Ensure compliance with other planning

Approval of Projects (2)

Approval of projects by City Council:

- Consider input from public hearing process
- Define which area covered / building owners
- Energy consequences (before and after project)
(natural gas, oil, DH and other fuels)
- CO₂ consequence & energy saving
- Investment costs (DH, Consumers, other Utilities, etc.)
- Commercial consideration
& change of DH tariff by consumer category

WWW.ENS.DK

Facts and figures

- Find the data you need

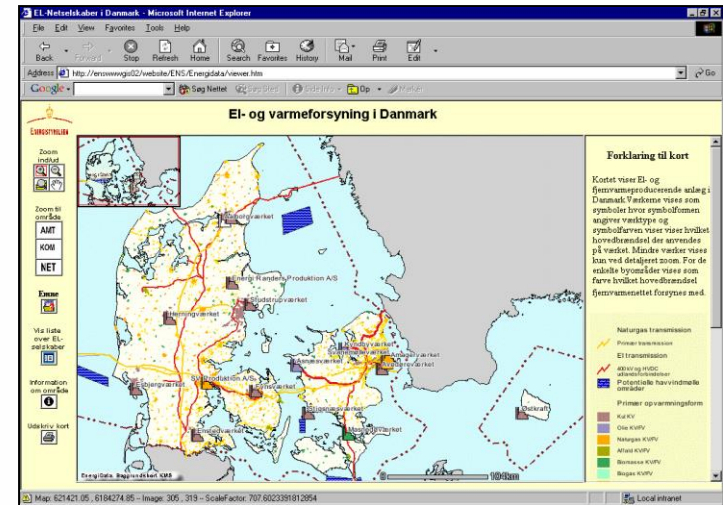
Energy Statistic

- download data

Energibalance 2000									
	1998	1999	2000	2001	2002	2003	2004	2005	2006
Elektricitet									
Produktion	813.438	856.335	11.552	186.511	165.921	90.580	2.394	144	-
Import	609.940	171.638	344.836	-	161.484	1.520	30.300	144	-
Export	923.452	576.732	193.081	120.678	3.054	-	27.906	-	-
Nettoimport	36.508	-	56.008	-	-	-	-	-	-
Nettoexport	467	-	467	-	-	-	-	-	-
Lignesteat	18.970	2.071	16.139	3.106	6.420	-	-	-	-
Statistisk afvigelse	92	240	1.090	-	937	-	-	-	-
Udførselsenergi									
til udlandet	43.343	856.335	339.285	25.026	-	-	968	299	-
til Danmark	354.181	-	354.181	-	-	-	-	-	-
Produktion	397.524	356.335	14.099	25.026	-	-	968	299	-
Nettoimport	109.333	43.717	92.016	153.642	62.316	123.814	117.775	679	-
Nettoexport	81.189	-	30.083	29.832	132.131	0	82.080	35.405	-
Direkteudførelse	8.636	-	132	46.823	1.004	30.340	37.687	32.003	-
Fjernvarmeudførelse	2.459	-	2.354	2.441	40	9.512	590	12.491	-
Private producenter	10.953	-	3.139	12.864	466	22.335	10.073	17.876	-

Energy Data

- print theme maps



Themes

- Heat supply
- RE and Offshore Wind
- Links to background reports