

[Intro]

- Minister, distinguished guests. It is a great pleasure for me to welcome you to this workshop on district energy and energy efficiency solutions.
- I am excited to see so many people who want to share experience and learn from Denmark's lessons on district heating.

[Danmarks grønne omstilling]

- First, I want to tell you a story about the transformation of the energy system in Denmark, and how **district heating played a key role.**
- It all started with the oil crisis in the 1970's:  
Very high oil prices hit Denmark. We were importing 99% of our oil. We even had car free Sundays as energy became a scarce resource.

- This led to a new approach to energy systems:  
We developed large wind turbines, biomass and waste-to-energy boiler technologies to decrease our dependency on oil. Over time Denmark became one of the few European net-exporters of oil and gas.
- Gradually, our electricity generation and heat production became more environmentally friendly. By the 1990'es Denmark had de-coupled GDP-growth from Green House Gas-emissions.

[Fjernvarme er nøglen]

- **District heating** played a key role in this transition as the most energy efficient heat supply for Danish homes.

- Today, district energy is an essential element in the Danish government's plan to become 100% independent of fossil fuels by 2050.
- We believe we can do this and at the same time maintain strong economic growth!
- In short: The key is to supply renewable energy to highly efficient buildings. District energy makes this possible.
- One of the challenges of a green energy transition is to phase-in new sources of energy.
- We work with an energy-mix that includes fluctuating production from wind and solar power and district heating helps us to balance energy production.

- Hot water district heating systems basically don't care how the water is heated!
- They allow different energy sources – fossil or renewable – to be used throughout the system's lifetime. The owner or operator can set their own pace for the transition from fossil to green energy.

**[Relevans for Ottawa]**

- 65 % of Danish households get their heating and hot water from a district energy system. In Copenhagen, a city comparable to Ottawa, that share is 99 %.
- Ottawa's plans for hot water district energy will open up similar opportunities.

**[Innovation]**

- The Danish success in district energy is a story of companies with great technologies.

- It also involves continued innovation in a process that involves government, cities and utilities. Our role is to set challenging emission targets, greening energy sources and building towards better standards.

**[Aktuelle projekter i København]**

- Like Ottawa, Copenhagen is now converting its very last steam system into a hot water system to meet the green ambitions for its heat supply, minimizing heat loss and reducing its carbon footprint.
- Linking highly energy efficient buildings to district energy networks is the next step. In fourth generation district energy systems water at only 50 degrees Celsius supply family homes and low rise buildings.

- These systems can even run on surplus heat from local industry.

**[Fjernvarme skaber jobs og eksport]**

- The beating heart of the Danish economy is our ability to let big ideas and know-how loose in the world. In this room we have some of the finest examples.
- Our companies grow internationally based on the experience they have gained working with our towns and cities and their 400 district energy systems.
- Our national energy related exports amount to approximately 15 billion Canadian dollars (75 billion Danish kroner).
- In Denmark it is estimated that the district energy industry employs 20.000 persons. For every 100 employed in district energy, another 44 related jobs are created.

- “Green business is good business” and they create local growth.

**[Den danske fjernvarmealliance]**

- Our Danish experience is no longer a local thing. The members of the Danish District Energy Alliance are international, export-focused and have invested in local setups in North America.
- The Danish District Energy Alliance is a globalized industry. It is a complete supply chain, offering state-of the-art-technologies.
- And the best thing: It is available right here in Canada!

**[Afslutning]**

- I wish you all an inspiring discussion this afternoon.