





#### **BRITISH-DANISH ENERGY COOPERATION**





# GREEN STRATEGIC COOPERATION BETWEEN DENMARK AND THE UK TO FERTILIZE AMBITIONS ON DISTRICT HEATING AND ENERGY EFFICIENCY

In order to meet its target of net-zero greenhouse gas emissions by 2050 and a goal of 78 percent emission reductions by 2035, the UK must find green alternatives to its current heating supply, as well as deliver substantial energy efficiency upgrades in its building stock. Therefore, the Danish Energy Agency and the Danish Embassy in London provide insight to central political institutions in England and Scotland on how they can create sustainable solutions through the right framework conditions. At the same time, the British authorities share their knowledge and experience with Denmark in a number of other areas relevant for the Danish energy transition.

## The UK challenged by massive fossil based heat supply

The UK was the first major economy to put its "net-zero" emission target for 2050 into law. To achieve the goal, all energy production must be  $\mathrm{CO}_2$ -neutral by 2050. So far, the UK has primarily been successful in transforming the power sector, where more than half of the electricity in 2019 came from renewable energy sources and nuclear power. The heating sector, on the other hand, is dominated by natural gas, which heats approximately 85 percent of the country's households.

From 2025, new houses constructed in the UK will no longer be allowed to connect to the gas network. The biggest challenge, however, lies in the existing building stock. An obvious part of the solution would be to expand the share of district heating, which currently only accounts for approx. 2 percent of the heat supply. According to the Climate Change Committee – the Government's independent climate

advisory body, the share of district heating should more than tenfold by 2050. According to the district heating industry itself, that will require investments of GBP 30-50 billion.

Both the British and Scottish governments have expressed ambitions for district heating expansion in different ways. The biggest barrier to the development of the sector is considered the establishment of a clear strategic political aim and associated framework conditions. The Scottish Government passed a new district heating law in February 2021, while the Government of London recognises the need to regulate the sector and has dedicated considerable financial support to the maturation of the district heating sector.

## Denmark is sharing experiences within district heating and energy efficiency

The cooperation between the Danish and British authorities takes place through the exchange of Danish experiences







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with regulation of heat supply and knowledge sharing about energy efficiency initiatives. For example, the Danish Energy Agency's experts support The Department of Business, Energy & Industrial Strategy so that they can succeed in effective regulation on a large scale. The collaboration includes areas such as:

- The value of district heating and energy efficiency in buildings for society, industry and consumers
- The importance of long-term stable framework conditions
- Visibility of the value of local and municipal planning based on national strategy and priorities
- The possibilities for green transition and recovery through district heating expansion and investments in the building stock.

At the same time, the Danish Energy Agency has a dialogue with British and Scottish authorities on the potential of supporting energy efficiency in buildings. Among other things, these dialogues are centred on opportunities and perspectives within building regulations, digitalisation, supply chain support, consumer protection & engagement, and public sector action.

Knowledge sharing goes both ways and the British authorities have valuable experience in wind, hydrogen and carbon capture and utilisation which can inspire policy development in Denmark.

### Scotland has big climate ambitions and takes inspiration from Denmark

Scotland has one of the world's most ambitious statutory climate goals - 75 percent  $\mathrm{CO}_2$  reduction by 2030 and netzero by 2045. To achieve this ambition, the Scots see, among other things, great potential in district heating and energy efficiency and are keen to learn from Danish experiences. A key Scottish milestone was the adoption of their first district heating law in early 2021. The law includes a specific target to achieve a 20-fold increase in the use of DH by 2030.

Leading up to the introduction of this regulation lays many years of considerations, policy development and sector consultation. Experiences from the Danish case and support from Danish experts played a key role throughout this process. A formalised cooperation agreement was signed in 2017, making dedicated resources available. From the Danish side experts have participated in working groups, held workshops, translated Danish documents and standards, and provided written input to the regulatory process – and maintained a close relationship with the team responsible for drafting the Bill.

#### **FACTS**

- Since 2017, Denmark and the United Kingdom
  has formally cooperated on energy with a focus
  on district heating. In 2019, the Danish Energy
  Agency seconded an energy adviser and employed
  an energy coordinator at the embassy in London.
  In 2020, the cooperation was expanded to also
  include energy efficiency in buildings.
- Until 2024, the energy cooperation with the United Kingdom is financed through the Energy Governance Partnership via funds from the Danish Energy Agreement from 2018.
- Close cooperation partners include The Department of Business, Energy & Industrial Strategy in London and the Scottish Government.
- Denmark has 16 government-to-government collaborations on energy with countries that collectively emit more than 60 percent of the world's CO<sub>2</sub>. By exchanging knowledge and experience with partner countries' national authorities, policy makers are empowered to make sustainable and cost-effective energy policy decisions that support the global green transition.

Today, the cooperation also covers energy efficiency in buildings, where mutual knowledge sharing provides insight into the many opportunities and challenges that exist within the sector. The close relations opens up for valued exchange of experiences and policy inspiration, a series of workshops on building regulations and their role in achieving emissions neutrality, involving policy experts from both Scotland and Denmark. This work culminated in the submission of formal evidence to the Scottish Government's consultation on 'The New Build Heat Standard'.



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