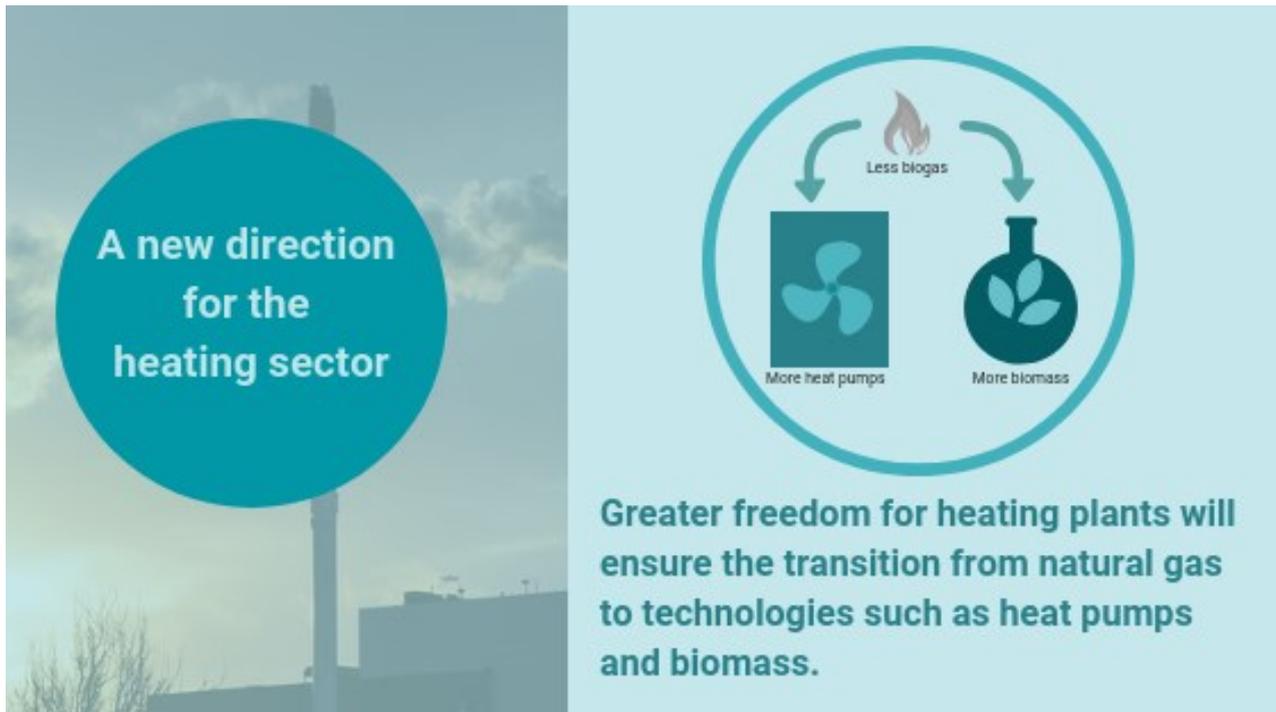


Greener heating



A new direction for the heating sector

Greater freedom for heating plants will ensure the transition from natural gas to technologies such as heat pumps and biomass.

A modern heating sector

The regulations governing our heat production require modernisation. The energy agreement proposes a change of direction, granting greater flexibility and promoting new green solutions and technologies.

Greater freedom for district heating plants

Regulatory constraints on the heat production of district heating plants will be eliminated, giving them the freedom to invest in transitions to greener energy, e.g. heat pumps, biomass and geothermal systems, thus enabling the transition towards a renewable energy system. The regulatory relief for individual district heating plants will depend on the size of their district heating areas. The last constraints are expected to be lifted by 2030 at the latest.

Greater freedom for consumers

The energy agreement gives consumers a greater freedom of heating choice. The power to obligate consumers to be connected to the collective heating system will be abolished. This will allow for investment in other individual heating solutions, e.g. heat pumps for single homes.

Gradual elimination of constraints

No new consumer obligations will be permitted as from January 2019, while the consequences of repealing existing consumer obligations will be analysed before the parties to the agreement make a decision on such repeals.

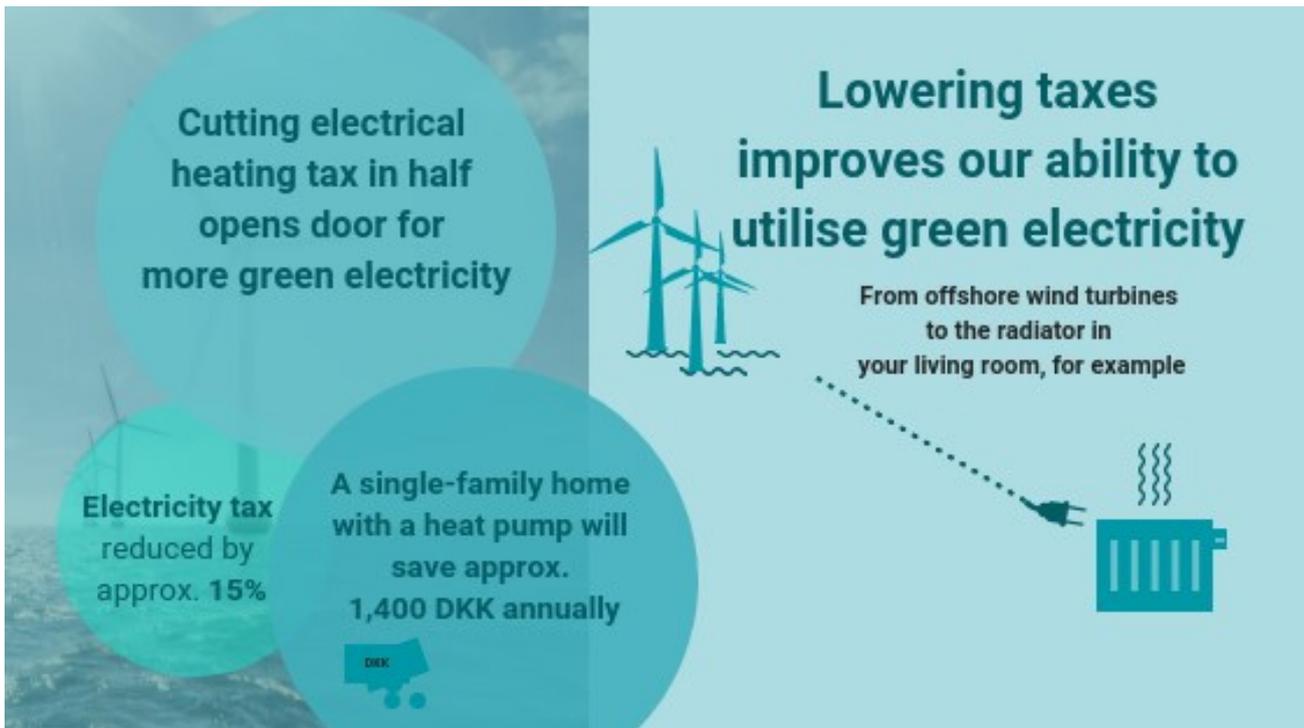
An additional helping hand

The modernisation will ensure that the district heating sector remains viable without public subsidies once the so-called “base subsidy” is phased out. In the short term, the elimination of this base subsidy may cause higher heating bills for some consumers. Therefore, the energy agreement allocates 540m DKK in the period 2018-2023 for targeted efforts to help heating plants and consumers, and to help manage stranded costs.

An improved framework

The energy agreement will improve the legal and regulatory framework for the heating sector, supporting more voluntary investment in green solutions. This will facilitate the breakthrough of new technologies – heat pumps, geothermal solutions, solar PV, etc – in heating plants and in consumers’ homes.

Cheaper green electricity



More electricity in the energy system

Expanding infrastructure powered by renewable energy will be a key component in Denmark's successful green transition.

Increased electrification is essential to harnessing the full potential of green energy, and will enable the integration of fluctuating outputs of wind and solar energy into our energy system. Green electricity can be converted into heat and channelled through district heating systems or into large-scale heat storage facilities – ensuring a flexible energy system and optimum utilisation of green electricity.

Electrification of the energy system is thereby a cornerstone of the green transition.

Denmark has the EU's highest electricity taxes

Despite a steadily growing supply of green electricity, the taxes on electricity in Denmark remain very high. High taxes on energy constrain the use of electricity by Danes, causing significant socioeconomic losses. To address this problem, the energy agreement calls for reductions in the electrical heating tax and electricity tax.

The reduction of taxes is expected to trigger a rise in electricity consumption. Meanwhile, other energy agreement initiatives will ensure that renewable energy output in Denmark matches the country's total electricity consumption by 2030.

Agreed tax reductions:

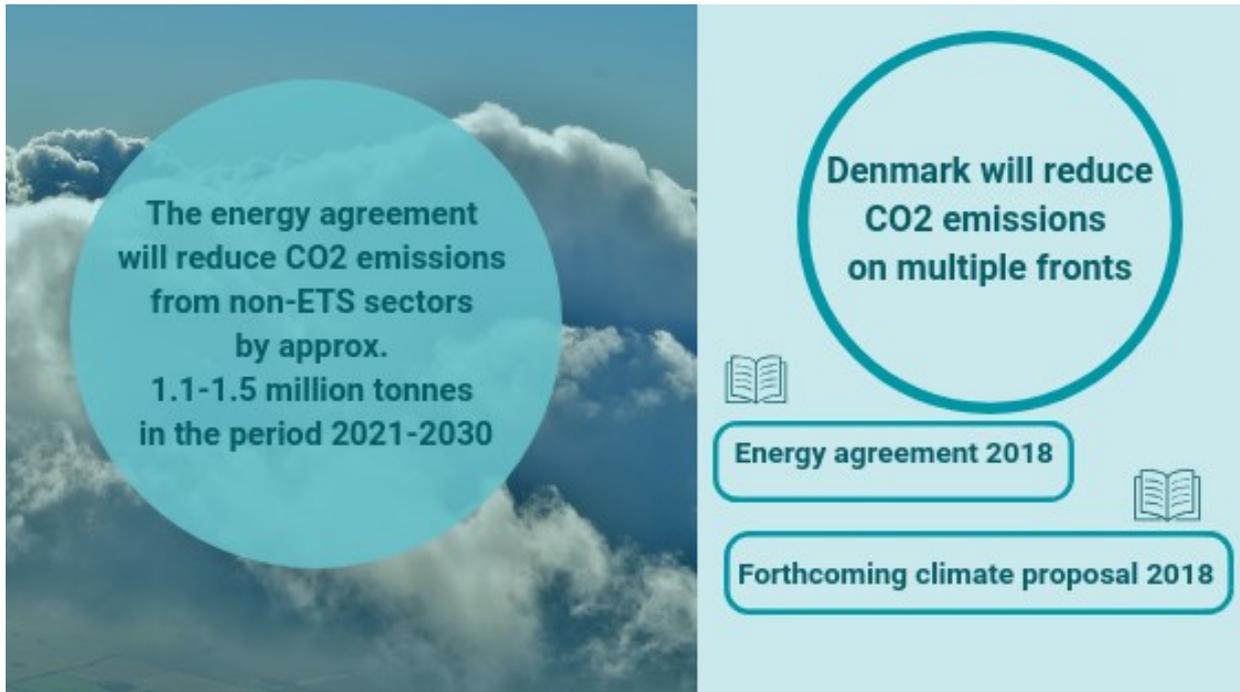
- The electrical heating tax will be reduced from .307 DKK/kWh to .155 DKK/kWh, effective 2021.
- The electricity tax will be reduced from .914 DKK/kWh to .774 DKK/kWh (phased in from 2019-2025).
- The electricity tax for certain liberal professions will be reduced from .914 DKK/kWh to .004 DKK/kWh in 2023.

Beginning in 2020, 100 million DKK will be earmarked annually for revising regulations that govern surplus heat and promoting its utilisation.

A working group will be tasked with exploring electricity tariffs and related issues, including the conditions for certain groups of electricity customers and whether tariffs can be billed in a different and better way. The possibility of a dynamic electricity tax will also be explored.

The tax reductions will equate to lower electricity bills, thus improving the productivity of businesses and the welfare of individual households.

CO₂ impacts



The energy agreement supports fulfilment of non-ETS commitments

The energy agreement's initiatives will reduce carbon emissions from the sectors outside of the EU Emissions Trading System (non-ETS) by approximately 1.1 to 1.5 million tonnes in the period 2021-2030. The largest contributions come from new energy saving subsidies and the reduced electricity heating tax which makes it more attractive to switch to heat pumps. With these and other initiatives, the agreement will help Denmark reach its 39% greenhouse gas emissions reduction target by 2030 in the non-ETS sectors.

Green transition in the Danish energy sector

With other green initiatives – including the planning of new offshore wind farms, 4.2 billion DKK annually for procurement of green energy (solar, wind, etc.), and additional reserves for the promotion of renewable energy – the energy agreement alone will provide a 10-11 million tonne reduction in Denmark's total carbon emissions by 2030. The majority of these reductions will be within sectors covered by the EU's Emissions Trading System.

Climate proposal will ensure further reductions

The energy agreement's contributions to reducing non-ETS emissions will not stand alone. In 2018, the Danish government will introduce a new climate proposal with initiatives for sectors such as transport and agriculture to ensure that Denmark meets its EU reduction commitment for the non-ETS sectors in 2030.

Transport

The energy agreement allocates an additional 500m DKK for green transport solutions over the period 2020-2024. The government will also continue to advocate at the EU level for far more ambitious targets for new passenger and light commercial vehicles with carbon emissions reductions of at least 40% by 2030 compared to 2021 levels as well as ambitious emissions requirements for new heavy duty vehicles.

These measures will contribute to further reducing greenhouse gas emissions in the sectors outside of the EU Emissions Trading system.

Efficient use of energy



Support scheme for replacement of oil-fired boilers.



100m DKK in lending funds for energy renovation of municipal and regional building



Information campaigns on energy savings

Targeted energy saving efforts for maximum outcomes

The energy agreement allows the current energy efficiency obligation scheme to expire in 2021, and replaces it with a new tender-based scheme for energy efficiency improvements in businesses and buildings. This will be combined with a range of energy saving initiatives focusing on specific consumer sectors and target groups.

Lower energy consumption in business and buildings

The energy agreement introduces a new tender-based scheme with subsidies for energy efficiency improvements in businesses and buildings from 2021-2024. These funds will be limited to 500m DKK and there will be an individual subsidy cap.

The tender-based scheme for businesses targets energy consumed in the delivery of services and manufacture of products – also known as “process energy”.

Of the total funding, 200m DKK annually will be earmarked for energy efficiency improvements in buildings. Subsidies from these funds will be prioritised for buildings with the greatest potential for energy savings.

From oil-fired boilers to heat pumps

There are currently 100,000-150,000 oil-fired boilers heating Danish homes. To reduce this number, annual funding of 20m DKK from 2021-2024 will be allocated to promote the replacement of oil-fired boilers with heat pumps.

Loan funds for energy renovation of municipal and regional buildings

Denmark’s municipalities and regions own a total building mass of more than 36 million square metres. The energy efficient operation and renovation of these buildings holds great potential for reducing energy consumption. Therefore, the energy agreement allocates 100m DKK annually in the period 2021-2024 for loans to finance energy renovations in buildings owned or operated by municipalities and regions.

Information on energy savings for citizens

The energy agreement allocates 19m DKK in 2018, 33m DKK in 2019, 34m DKK in 2020, and 44m DKK annually from 2021-2024 for information activities relating to energy savings, primarily via the website Spareenergi.dk. The agreement also earmarks funding for the utilisation of data to promote energy efficiency.

Energy and climate research



Stronger research efforts towards 2030

The parties to the energy agreement intend to phase in additional state funding for energy and climate research, going from 580m DKK in 2020 to a target of 1 billion DKK annually from 2024. These funds will be earmarked for research, development and demonstration of new technology.

Intensifying energy and climate research as we move towards 2030 will ensure continued efforts to develop the technologies that will help Denmark's energy system transition to cleaner and greener solutions. Research and development in new energy and climate technology solutions will also generate new opportunities for growth, jobs and Danish technology exports.

International cooperation

The research funding will support Denmark's commitment to the international collaboration *Mission Innovation*, in which a number of countries have pledged to increase energy research funding by 2020. With an ambitious funding target of 1 billion DKK from 2024 onwards, Denmark further cements its long-term commitment to research, development and demonstration in the field of energy and climate.

Through Danish initiatives such as the Energy Technology Development and Demonstration Program (EUDP) and Innovation Fund Denmark, Denmark is contributing to the global cooperation to develop the energy and climate technologies of tomorrow.

EUDP – development and demonstration

The EUDP funding will support the development and demonstration of Danish energy technology solutions, with a view to subsequent commercialisation. These solutions may range from new floating foundations for offshore wind turbines, to large scale demonstration projects such as Nordhavns Lab, which intelligently integrates various energy technology solutions.

Innovation Fund Denmark – good ideas and entrepreneurship

Strategic and applied energy research is among the many activities supported by Innovation Fund Denmark. This funding is awarded directly to talented researchers, entrepreneurs and companies, as well as to others with strong ideas about energy technology solutions for the benefit of society.

More offshore wind



Denmark leads the way in offshore wind

Denmark is the global leader in offshore wind and is in a unique position to further expand the number of wind turbines in its waters. Energy from offshore wind turbines will help ensure that 55% of the nation's energy needs are met with renewable energy by 2030.

Three new offshore wind farms

The energy agreement includes the establishment of three new offshore wind farms that will supply at least 2,400 MW of green electricity to the energy system – more than the total combined electricity consumption of all Danish households.

Establishment of the offshore wind farms

The offshore wind farms will be built between now and 2030. A variety of factors will be considered before choosing the location of the offshore wind farms, including cost, the surrounding environment, and seabed conditions.

A cost-effective expansion of wind energy is essential. Therefore, a sound procurement process will allow for maximum competition to achieve the lowest possible price.

In recognition of the significant aesthetic impact that offshore wind turbines can have on the coastal landscape, the energy agreement expands the power of municipalities to reject offshore wind turbines from 8 km to 15 km off the shore.

Towards subsidy-free offshore wind

The costs of establishing offshore wind turbines have decreased significantly in recent years. To support the continuation of this trend, the energy agreement will facilitate the creation of a better framework for realising Denmark's offshore wind potential without state subsidies. However, subsidies may remain necessary for the installation of cables that transport green electricity from offshore wind farms to consumers' outlets.