



CLIMATE PLAN 2030

The Danish Municipality with the greenest growth

2030 GOAL: 50% CO₂-REDUCTION
2050 GOAL: NET ZERO



**Høje-Taastrup
Kommune**

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**Høje-Taastrup
Kommune**

**Høje-Taastrup Municipality Climate Plan 2030
DK2020 approved**

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GREEN GROWTH MUNICIPALITY

Høje-Taastrup Municipality plans to reach the government's climate goals without compromising on growth and development. The solutions of the future are green.

Høje-Taastrup Municipality is growing and creating growth while emitting less CO₂. This development must continue and be strengthened by incorporating green transition into all planning of the smart city by applying new knowledge and technology.

Høje-Taastrup Municipality goes all in with the Paris Agreement and the climate goals of the Danish parliament: This means that we must reduce CO₂ emissions by 50% from 2017 to 2030 in order to reach the goal of 70% less CO₂ emissions by 2030 compared to 1990.

The long-term goal is net zero emission by 2050.

This must be achieved in a cost-effective manner:

- Efficient energy consumption
- Fossil free heating by 2030 at the latest
- More solar power plants in Høje-Taastrup Municipality
- Gradual electrification of transport

Climate Plan 2030 describes the way to achieve the ambitious goals, but we cannot as a municipality succeed on our own. We therefore wish to intensify existing co-operations and invite new ones with citizens, enterprises and housing societies in the municipality and across municipal boundaries and with utility companies.

In Høje-Taastrup, climate and energy are not additional aspects or a project but rather a part of a secure and modern life. It is part of everyday life in a municipality with growth, which is why we can say that we are the Municipality in Denmark with the greenest growth.

Yours sincerely,
Michael Ziegler, Mayor



GOALS

2050 goal:

Høje-Taastrup Municipality must achieve net zero CO₂ emission by 2050 at the latest. This goal will be achieved through cost-effective green transition within the electricity, heating and transport areas for the benefit of the climate, the citizens and the enterprises.



NEW TECHNOLOGY IS AN IMPORTANT PART OF THE GREEN TRANSITION.

2030 goal:

- 50% CO₂ reduction by 2030 compared to 2017.

Sub-goals:

- Reduction of heating consumption by 1% annually in existing buildings towards 2030
- No properties heated by oil or natural gas by 2030
- 120 MW installed solar power plant by 2030
- 30% of passenger car transport electrified and 10% of freight and goods transportation uses green fuels by 2030

Sustainability

The Climate Plan 2030 is based on Høje-Taastrup Municipality's Development Strategy towards 2032, in which it is clarified that the municipality is working to create a sustainable municipality inspired by the UN Sustainable Development Goals. The ambition is thus for the implementation of the climate plan initiatives to encompass both environmental, social and economic benefits for the entire Høje-Taastrup Municipality as well as its citizens and enterprises.

The Paris Agreement

The purpose of the initiatives and goals of the Climate Plan 2030 is to boost the implementation by Høje-Taastrup Municipality of the goal of the Paris Agreement to limit the global temperature increase to below 2 degrees Celsius while aiming at a global temperature increase of maximum 1.5 degrees Celsius.



HØJE-TAASTRUP MUNICIPALITY VENTURES INTO A GREEN FUTURE.

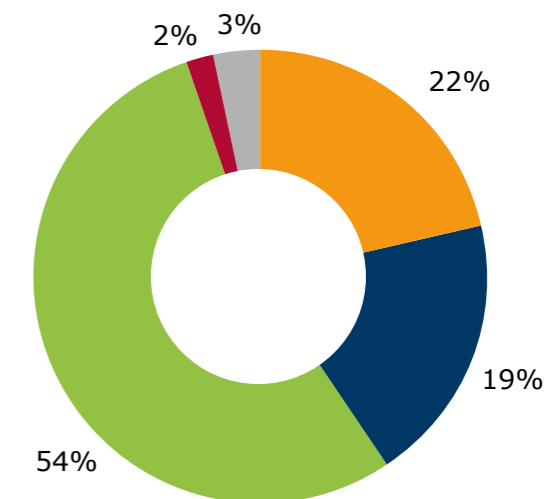
The basis

In 2017, 271,000 tons of CO₂ was emitted in Høje-Taastrup Municipality as a geographical area. In general, CO₂ emissions may be broken down on four main areas: heat supply, electricity supply, transport and the municipality as a commercial enterprise. Climate Plan 2020 is therefore based on these four themes.

In order to reach the 50% reduction goal in a cost-effective manner, the first theme in the Climate Plan 2030 focuses on energy efficiency improvement.

In addition, it is important to create synergy between climate change prevention and climate change adaptation, and therefore the sixth and last theme in the plan concerns climate change adaptation.

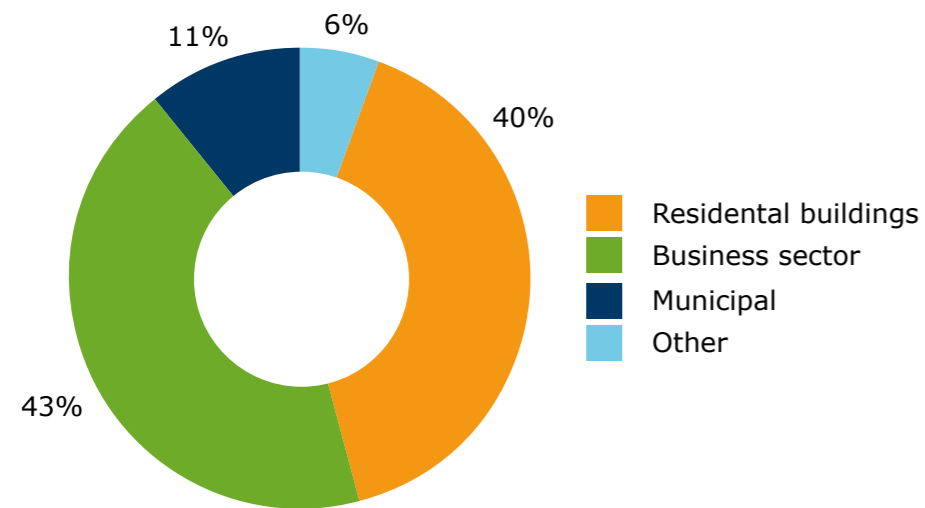
CO₂ emissions broken down on sectors, 2017



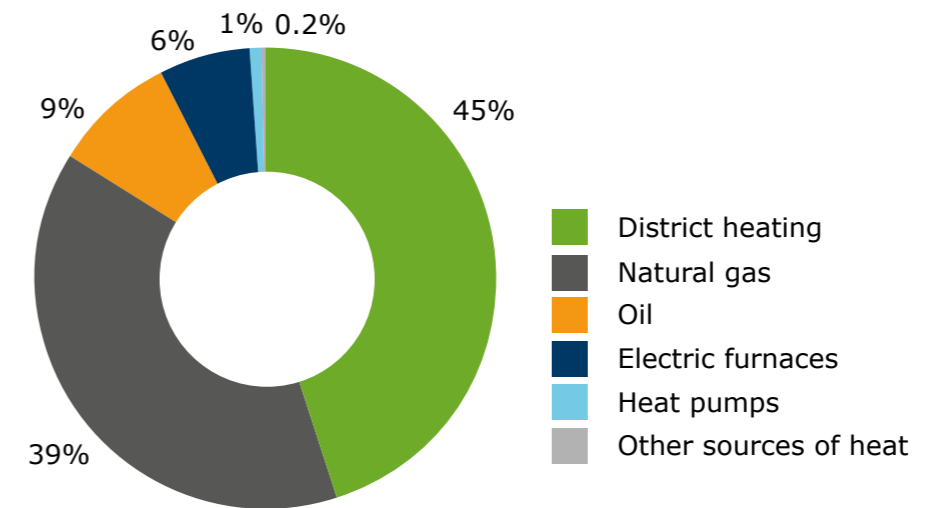
- Heat supply
- Electricity supply
- Transport
- The municipality as a commercial enterprise
- Other

DATA, 2017

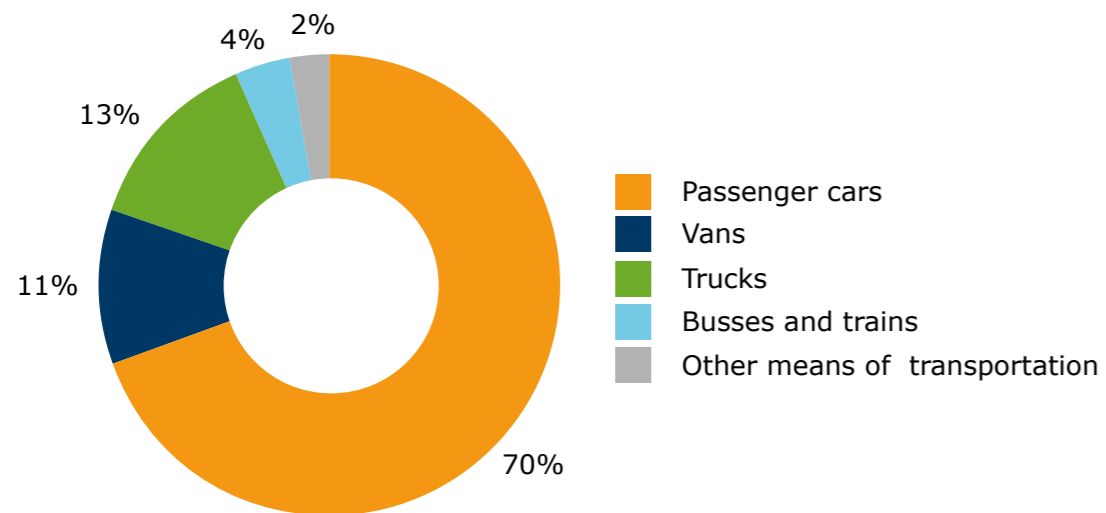
Electricity and heating consumption in buildings broken down on consumption category



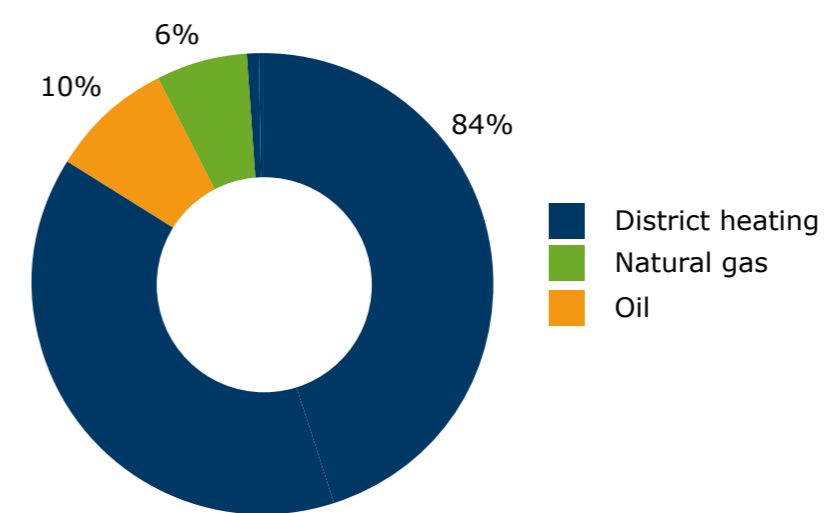
CO₂ emissions from heating broken down on types of heating



CO₂ emissions in the transport sector broken down on means of transportation



CO₂ emissions from heating of municipal properties broken down on types of heating



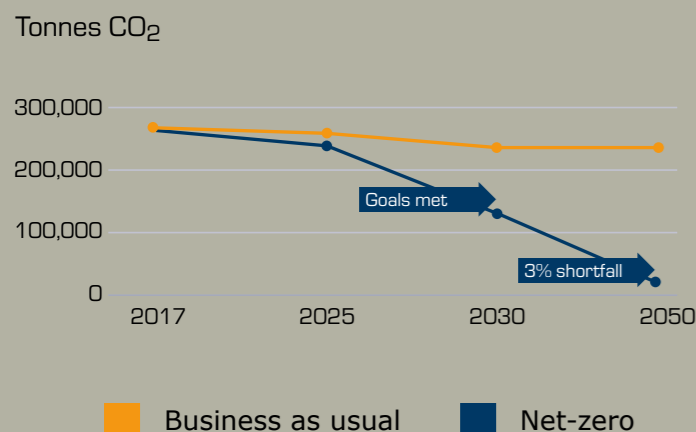
THE ROAD TOWARDS NET ZERO

Scenarios

Towards 2050, the climate plan operates with two scenarios:

The business-as-usual scenario projects the existing energy consumption and the existing transport patterns using the Danish Energy Agency's key figures as well as already adopted national and municipal initiatives. Briefly: If nothing more is done than what has already been decided.

Climate plan operates with two scenarios



The net zero scenario projects the emission associated with the implementation of the climate plan initiatives, takes into account national and international activities and trends which together stimulate the market development and supports technological development. Briefly: If more is decided than has already been implemented or decided.

The period towards 2030 and 50% reduction of CO₂ emissions

Høje-Taastrup Municipality has already demonstrated that a targeted and systematic strategy with specific initiatives produces significant reduction of CO₂ emissions and better utilization of energy. In 2012-2019, CO₂ emissions in Høje-Taastrup Municipality have decreased by 23%. During the same period, approx. 10,000 new jobs have emerged, and the number of citizens has increased by 2,500. For the municipality as a commercial enterprise, CO₂ emissions have decreased by 44%, and energy consumption by 15% during the same period.

With Climate Plan 2030, the goal becomes even more ambitious with the first large step being a reduction of CO₂ emissions by 50% from the baseline year 2017 to 2030. Climate Plan 2030 includes 50 initiatives within the themes of energy efficiency improvement, heat supply, electricity supply and transport, which all contribute significantly to the goal. The initiatives will be supported by a greater focus on the green transition and reduction of CO₂ emissions within municipal planning, land use, municipal procurement, and wastewater management.

Emission from transport is expected to be reduced by 13% in 2030 compared to the baseline year 2017, but at the same time the share of CO₂ emission from transport will increase in the overall result. This is also the trend in other municipalities in Denmark and in the rest of the EU. In Høje-Taastrup Municipality, it is expected that 96% of emissions will originate from the

transport sector by 2030. The initiatives targeting the transport sector will therefore be intensified and expanded on an ongoing basis concurrently with the technological development and market development as well as framework conditions nationally and within the EU.

From 2030 towards net zero

With the initiatives in Climate Plan 2030, the CO₂ emissions are reduced by 97% in 2050. This 3% deficiency compared to the goal of net zero emission corresponds to 7,831 tons of CO₂ in 2050. There are currently no realistic initiatives for making heavy transport 100% fossil free, and minor emission is expected from agriculture and old landfill sites.

With a fossil free electricity and heat supply by 2030 at the latest, the municipality's long-term initiatives, in addition to continued focus on energy efficiency improvement and flexible energy consumption, will primarily be aimed at the transport area. Today, the supply of heavy vehicles that are capable of running on green fuels is very limited. Several manufacturers have announced that they introduce new vehicles on the market in a few years. At the same time, there is a great need for continued research and development of both vehicles and fuels as infrastructure before the green trucks obtain a significant market share. Since Høje-Taastrup Municipality is and will continue to be a traffic hub and since the goal for 2050 is net zero this development will be followed closely.

In Climate Plan 2030, a number of initiatives to increase the share of green vehicles, also after 2030, have been described. They are adjusted and expanded concurrently with new research, technological development of vehicles and fuels as well as new framework conditions.

Assessment

The implementation of Climate Plan 2030 will be monitored annually in connection with the

green accounts. In addition, the plan will be assessed in 2023 and 2028 where initiatives and the road to net zero by 2050 at the latest will be updated and projected based on new knowledge and development. In addition, in connection with the evaluation in 2028, the City Council will ensure that the road towards net zero is continued by 2050 at the latest in an updated Climate Plan and that the municipality's climate effort is continuously assessed and adjusted at least every 5 years towards 2050.

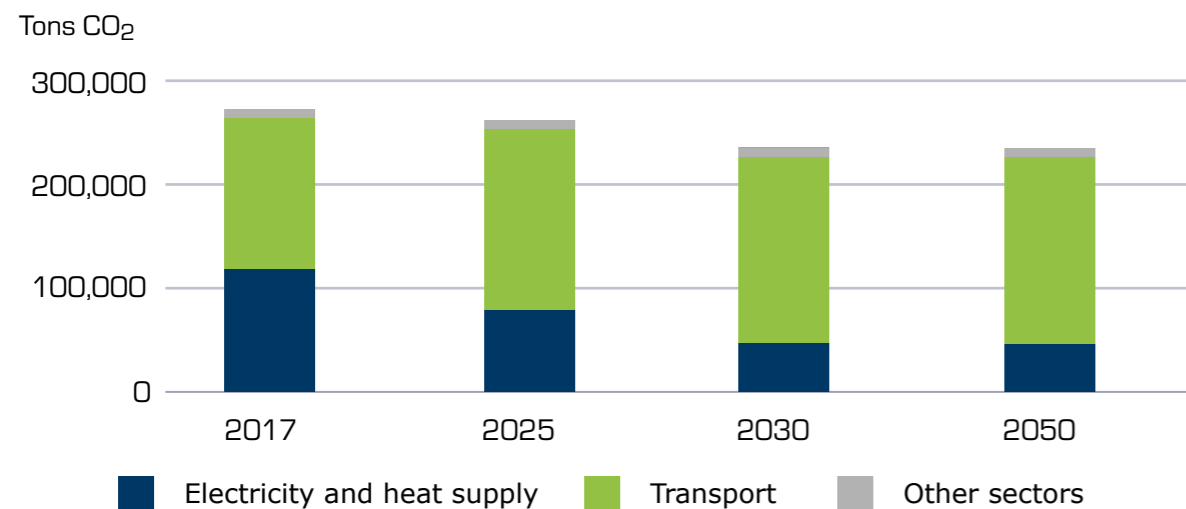
The assessments ensure that the climate plan initiatives reach the goal and that the road towards the net zero goal in 2050 is realistic and feasible based on the technological development. For example, a broad development in the transport area, which is currently still unknown, is expected during the period 2030-2050.



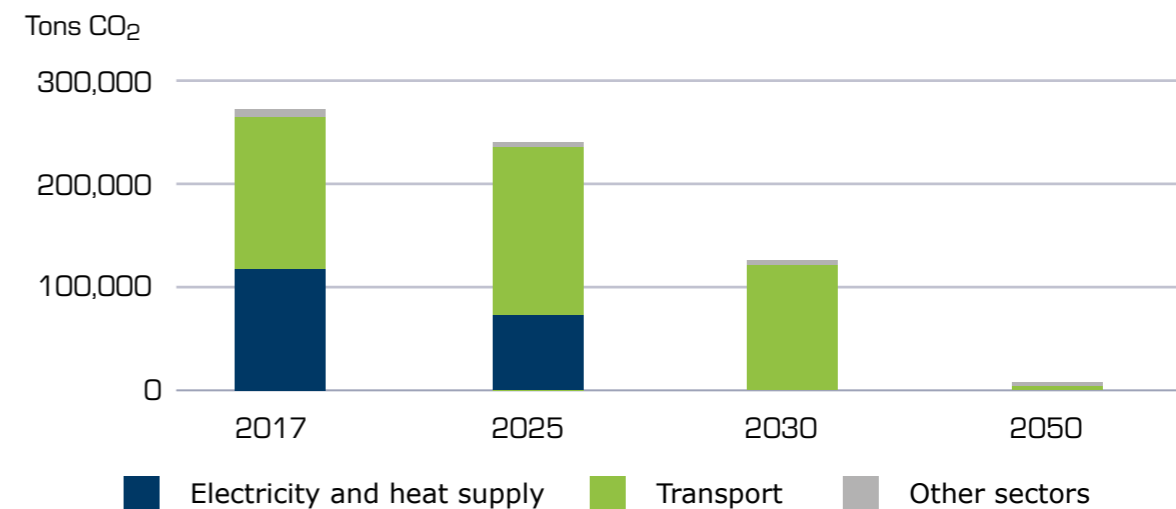
HØJE-TAASTRUP MUNICIPALITY MEASURES THE EFFECT OF THE INITIATIVES ON AN ONGOING BASIS.

SCENARIOS

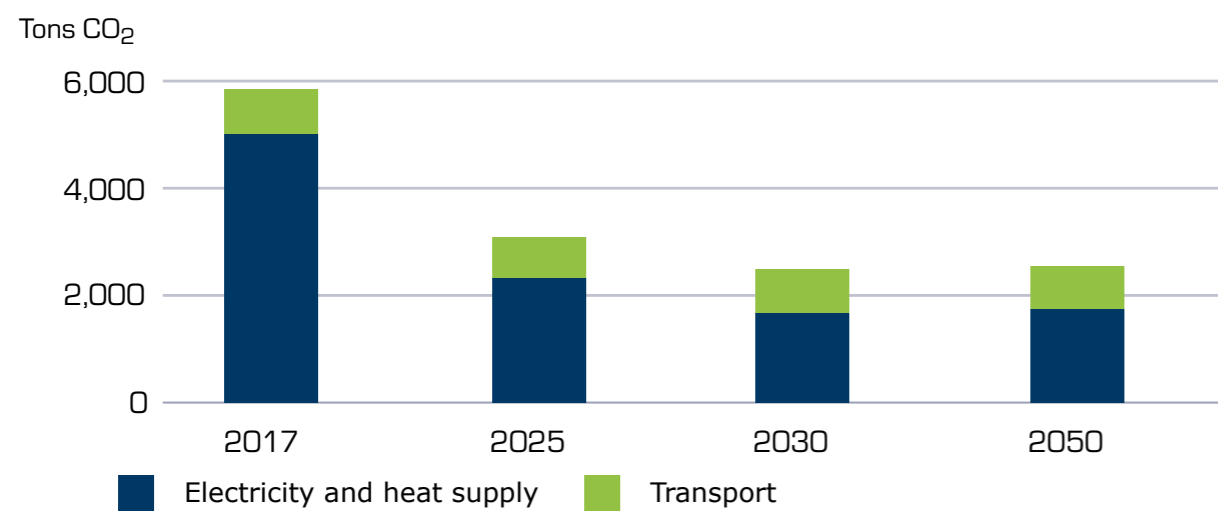
Business-as-usual scenario in Høje-Taastrup Municipality



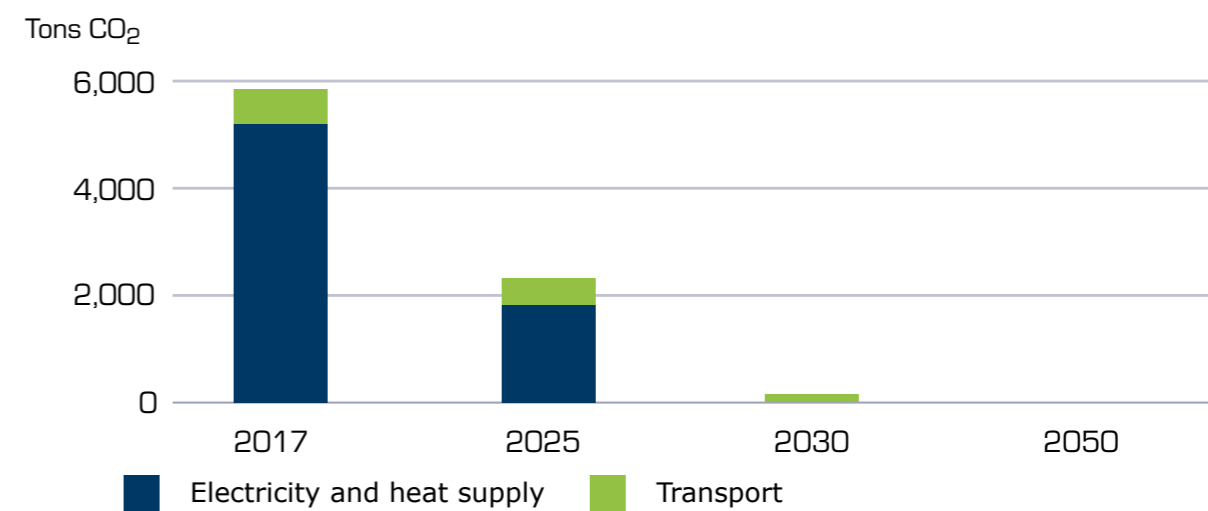
Net zero scenario in Høje-Taastrup Municipality



Business-as-usual scenario for the municipality as a commercial enterprise



Net zero scenario for the municipality as a commercial enterprise





SENSIBLE ENERGY CONSUMPTION

Høje-Taastrup Municipality will increase the energy efficiency in existing buildings by 1% annually towards 2030.

The municipality will contribute to increasing focus on reducing the energy consumption and the CO₂ emission when buildings are established or renovated. Most of today's buildings are from a time with no particular focus on energy efficiency improvement, and most of them will also be in use after 2050.

Even though the energy supply becomes fossil free over time it is necessary to use the energy in buildings as efficiently as possible. A lower energy consumption in buildings contributes to the climate goal in several ways. In addition to saving money on the very operation of the buildings, it will also mean that the transition of the energy system to renewable energy becomes cheaper and that climate-friendly energy is freed up for other sectors that are more difficult and more costly to transition. The cheapest energy is energy

EFFICIENT USE OF ENERGY IS AN IMPORTANT PART OF THE GREEN TRANSITION

not used. Høje-Taastrup Municipality wants to reduce the heat consumption in existing buildings by 1% annually up to 2030 and by 0.5% annually during the period up to 2050. Currently, dwellings account for 55% of the heat consumption, enterprises for 39%, municipal properties for 7% and other properties account for the small remaining part. The initiatives to ensure that the climate plan goals are met are largely implemented in co-operation with housing societies, homeowners, and enterprises etc. With Climate Plan 2030, Høje-Taastrup Municipality wants to facilitate networks, establish co-operations and start new projects on energy efficiency improvement in buildings.

Blocks of flats

Local investigations show promising possibilities for significant energy efficiency im-

provements in blocks of flats in Høje-Taastrup Municipality. Since the preparatory work takes quite a long time, and the decision-making processes can be complex the renovation should be holistic and incorporated into an overall plan. In practice, this could mean renovations with focus on energy efficiency improvements, indoor climate, and operations optimization.

For several years, Høje-Taastrup Municipality has established good co-operations with non-profit housing societies that have housing sections in the municipality. These co-operations are planned to be intensified in order to reach the climate plan goals for energy efficiency improvement in blocks of flats, for example through network creation, energy saving agreements and data exchange.

Single-family houses

For many years, Høje-Taastrup Municipality has focused on energy efficiency improve-



INSULATION IS ONE OF THE MOST EFFECTIVE METHODS FOR ENERGY SAVING.

ment in single-family houses, which has been a success. More homeowners have received guidance or an energy check of their dwelling and have subsequently initiated energy renovation. This does not mean that all the benefits have been reaped, and it is still an area where a lot remains to be done.

In addition to the benefit for the climate, energy renovations often have short repayment periods and support a better indoor climate, especially in old building.

Enterprises

The enterprises that will succeed in the future have adopted the green agenda and need to document their initiatives to use fewer of the world's resources. This is certainly true in a growth municipality like Høje-Taastrup.

The municipality will participate actively in climate partnerships with enterprises and knowledge institutions in order to assist the enterprises with the latest knowledge and technology so that energy may be used as efficiently as possible.



ENERGY EFFICIENCY CREATE NEW WORKPLACES.



Selected INITIATIVES

ENERGY NETWORK for property management clerks. Høje-Taastrup Municipality runs a network for operating staff at blocks of flats. Through this, they receive good advice and exchange ideas for optimization of the day-to-day operation and for energy renovation.

CLIMATE AWARD for an SME (small and medium-sized enterprises). An annual award for a small enterprise that has made a special effort within energy efficiency improvement. Candidates may be nominated through the local paper and the award ceremony will be a public event.

ENERGY CHECK of old dwellings. The municipality offers an energy check of dwellings built before year 2000 with energy label lower than D. If the homeowner carries out energy renovation for at least DKK 35,000 within one year the municipality will pay for the energy check. There may be documentation for the energy saving.

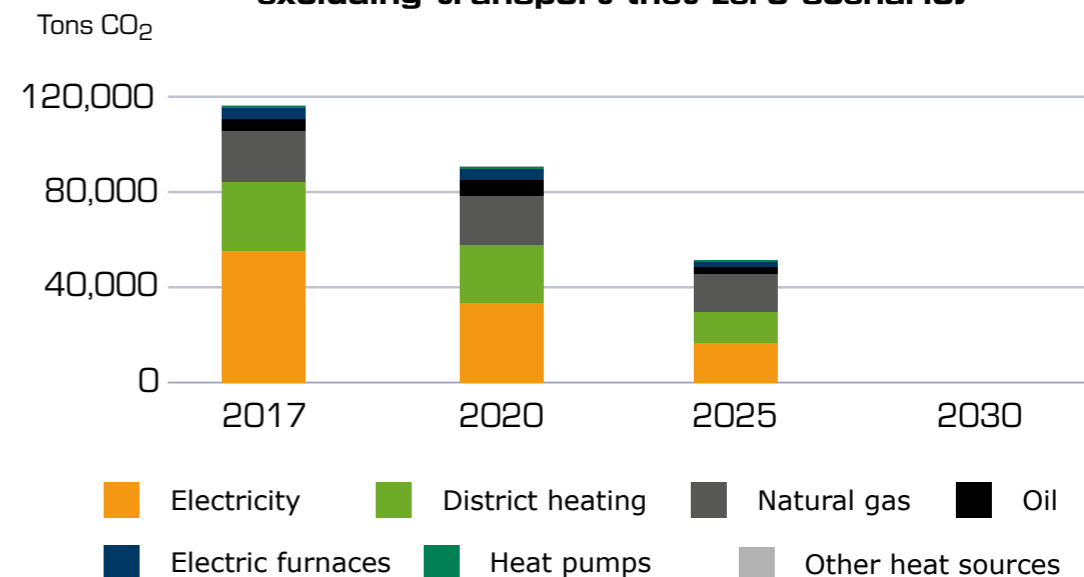
ENERGY PROJECTS with housing societies. The municipality will assist housing societies with participation in projects on energy efficiency, preferably in co-operation with other municipalities and utility companies. The municipality will be able to provide data to create a better overview.

INFO MEETINGS on energy efficiency improvement. Høje-Taastrup Municipality invites homeowners to information meetings to inspire them to make energy efficiency improvements of their dwellings. Energy consultants and workmen offer good advice and demonstrate possible solutions.

NETWORK MEETINGS for enterprises on energy efficiency. Høje-Taastrup Municipality participates in industry and organisation meetings where the theme is energy efficiency. At these meetings, the municipality provides information on the subject, gives good advice and lets the participants inspire each other.

SMART NET for better energy utilization by means of data and control. Høje-Taastrup Municipality will distribute LoRaWAN solutions, which make it easy and inexpensive to connect equipment to the network and to utilize the energy more efficiently by means of data.

CO₂ emission from electricity and heat consumption excluding transport (net zero scenario)





GOODBYE TO OIL AND NATURAL GAS

The objective is for oil and natural gas to be phased out in all buildings in Høje-Taastrup Municipality by 2030.

This means goodbye to oil and natural gas for heating and an expansion of the district heating network and establishment of individual heat pumps in the urban and rural areas where district heating is not feasible.

The conversion from oil and natural gas must be as cost-effective as possible so that fossil free heating becomes less expensive in daily operation than oil and natural gas burners.

Today, 69% of the heat consumption in Høje-Taastrup Municipality is covered by district heating, 23% by natural gas, 4% by oil and the remaining approx. 4% by heat pumps, power heating and other forms of heating. In Høje-Taastrup Municipality, district heating is distributed to the consumers by Høje Taastrup Fjernvarme (Høje-Taastrup District Heating), which forms part of the intercon-

nected district heating system in Greater Copenhagen, which utilizes excess heat from the large CHP plants, incineration plants and major industrial enterprises. The district heating comes from Høje-Taastrup through VEKS' transmission

line, which supplies 19 local district heating companies with heat.

Høje Taastrup Fjernvarme is at the forefront when it comes to utilizing green heat from local sources, and the company has installed large heat pumps that use heat from groundwater, established a heat storage pit, which contributes to better utilization of the energy supply in the interconnected district heating system, reduced heat loss in the pipe system by conversion to low temperature operation in some parts of the municipality and utilized excess heat from enterprises. The company continues to implement

innovative solutions. These are initiatives that promote green and cost-effective heat supply.

District heating supply

The district heating supply will be expanded and concentrated in areas where it is economically advantageous. Major and minor urban areas where buildings that are currently heated by oil or natural gas may be connected to district heating. This takes place strategically and cost-effectively in a collaboration between Høje Taastrup Fjernvarme and the municipality. At the same time, Høje Taastrup Fjernvarme is continuously working to utilize the energy more efficiently within production as well as distribution of heat.

In practice, this means that focus is on reducing the heat loss and applying new technologies that could support the supply of low temperature district heating. In addition, more local excess heat must

GREEN HEATING SHOULD NOT COST CONSUMERS MORE MONEY



GREEN HEATING SHOULD BE USED WITH GOOD CONSCIENCE.

be utilized, for example in cooperation with enterprises in the municipality. At the same time, the goal is also greater flexibility with the consumers to achieve the optimum utilization of the fluctuating wind and solar energy production. The goal is for the consumers to be offered heating that is 100% green at prices that are not higher than they are today. Investments in expansion, new plants and new technology must pay for itself in the not-too-distant future.

Heat pumps

In areas where district heating supply will not be practical and economically advantageous heat pumps will be the alternative in connection with replacement of oil and natural

gas burners. Heat pumps use the energy from the surroundings in the heating system of the building and utilize heat from the air or the soil and transfer it to radiators or underfloor heating or ejects it directly as warm air.

Inter-municipal co-operation

The heat supply in Greater Copenhagen is connected across municipal boundaries, and reaching the goals in Climate Plan 2030 therefore requires co-operation with the neighboring municipalities and other utility companies.

The large heating companies CTR, HOFOR, VEKS and Vestforbrænding are currently undergoing the fourth phase of

the district heating supply in Greater Copenhagen, "Fremtidens fjernvarmeforsyning i hovedstadsområdet 2050" (The future district heating supply in the Greater Copenhagen area 2050), where one of the main purposes is to establish future common paths and options and not least to ensure a future competitive and green district heating supply.

Høje-Taastrup Municipality also participates actively in "Energi på Tværs" (Energy Across), which involves inter-municipal activities to ensure, among other things, the development of the green heat supply of the future.



Selected INITIATIVES

INTER-MUNICIPAL CO-OPERATION

in the Greater Copenhagen area. Høje-Taastrup Municipality participates actively in the preparation of Varmeplan Hovedstaden 4 (Heat Plan for Greater Copenhagen 4) "District heating supply of the future" and in the project "Energi på Tværs" (Energy Across) where municipalities and utility companies co-operate on developing the green and cost-effective district heating of the future.

INFO MEETINGS for the citizens on replacement of oil and natural gas burners. Høje-Taastrup Municipality invites homeowners to information meetings to inspire them to replace their oil and natural gas burners. Energy consultants, workmen and Høje Taastrup Fjernvarme offer good advice and demonstrate possible solutions.

STRATEGIC PLAN for phasing out natural gas and oil. In 2030, the goal is for citizens and enterprises in Høje-Taastrup Municipality not to use natural gas or oil for heating. In co-operation with Høje Taastrup Fjernvarme, the municipality will prepare a plan for transition. Properties in areas where district heating is not possible will have heat pumps.

HEAT LOSS in district heating must be reduced. Low temperature district heating reduces heat loss in the distribution pipe for heat supply and contributes to better utilization of renewable energy sources with lower temperature.

EXCESS HEAT from enterprises must be utilized in district heating. A large data centre is expected to be located in Høje-Taastrup Municipality. Excess heat is expected to be utilized by phased installation of heat pumps up to 50 MW.



Høje-Taastrup Municipality has both energy and surplus.



TURN ON THE SUN

Solar energy may become an important contribution to fossil free electricity production in Høje-Taastrup Municipality.

Phase-out of fossil fuels in electricity production creates an increased demand for renewable energy, not least wind and solar energy. However, the need for new production capacity as well as infrastructure for electricity supply may be reduced by energy efficiency improvements, flexible consumption, and storage of energy.

Targeted planning

In the coming Municipal Plan 2021, Høje-Taastrup Municipality will include a targeted plan for the installation of future PV systems in the municipality. The plan must also designate buildings that may accommodate large plants. The goal is for the installed effect of PV systems to be increased to 120 MW towards 2030 and then 250 MW in 2050.

TECHNOLOGY DEVELOPS WEEK BY WEEK

In Høje-Taastrup Municipality, it will be expansion with solar energy that contributes to the green electricity production. Today, many homeowners, blocks of flats and enterprises have PV systems on the roofs. The municipality currently has 5 MW PV systems plants, but this capacity will be increased towards 2030 and further towards 2050, not least in the form of free-field solar plants, but also on roofs.

The Danish electricity supply

The remaining electricity production takes place outside the municipality, which has no direct influence on this. Danish energy companies also work with climate plans so electricity supply is well on the way to a transition from coal, natural gas and oil to wind, solar and other green technologies.

The share of wind energy in the electricity supply in Denmark is currently close to 50% and it will increase significantly towards 2030. Since Høje-Taastrup Municipality is part of an interconnected Danish electricity supply CO₂ emissions from the electricity supply in the municipality will consequently decrease correspondingly as, for example, offshore wind farms are established.



PV SYSTEMS ON LARGE ROOFS IS ONE OF THE ENERGY SOLUTIONS OF THE FUTURE.



GREEN ELECTRICITY WILL BE BENEFICIAL IN THE ENTIRE MUNICIPALITY.



THE SHARE OF RENEWABLE ENERGY INCREASES YEAR BY YEAR.



Selected INITIATIVES



SOLAR PARKS are the most cost-effective way of producing solar energy due to the benefits of large-scale operation. A solar plant in Kallerup gravel pit of 28 MW is being considered by the authorities. Further applications for installation of solar plants are expected.



BUILDINGS may provide roofs for many square meters of PV systems. Høje-Taastrup Municipality encourages housing societies and enterprises to explore the possibilities for establishing PV systems on large roof surfaces.

Roof areas are very suitable for PV systems.



The sun still produces electricity and heat when it is a bit cloudy.



Green areas create energy.



ELECTRIFY THE CARS

Electric vehicles are one of the green solutions

Høje-Taastrup has a central location and constitutes a traffic hub. Here, Høje-Taastrup Transportcenter is located with a combi terminal for freight transport and many transport and logistics companies. Høje-Taastrup is an important station for many commuters every day, and the municipality has an additional S-train station and a regional train station. Høje-Taastrup Municipality is also intersected by two motorways.

This well-developed infrastructure is an important prerequisite for a large increase in the number of jobs (10,000 from 2012-2019) and a population growth of 5%. It also means that 54% of the CO₂ emission within the municipal boundaries is generated by transport.

Emission from passenger cars constitutes more than 70% of emission from transport, vans and trucks constitute almost

25% and the remaining 5% can be attributed to other modes of transportation.

Towards 2030, the share of the total CO₂ emission coming from transport will increase significantly nationally and in Høje-Taastrup Municipality.

After 2030, this share is expected to be predominant in the municipality since the goal is a fossil free electricity and heat supply by 2030 at the latest. Initiatives to support the market development, stimulate the technological development and push the national framework for fossil free vehicles are therefore necessary.

Furthermore, the municipality will intensify the overall effort to promote sustainable mobility where not only green cars but also bicycling and public transportation account for a larger part of transport.

IN 2021, THE CITY COUNCIL WILL INITIATE INSTALLATION OF CHARGING STATIONS

Electric cars

The graph for the Danes' purchases of electric cars and plug-in hybrids for passenger transport is increasing sharply. The number of electric vans on the market is also increasing. In this connection, taxes and market supply play an important role. Høje-Taastrup Municipality cannot decide what type of car the citizens should have, but the municipality may make it easier to own an electric car, for example by contributing to a well-thought-out charging infrastructure.

The City Council has just decided that in 2021 Høje-Taastrup Municipality will install a number of charging stations at municipal buildings. The installation will also take place in close cooperation with enterprises, shopping centers and housing societies so that the charging stations are utilized to their fullest and the municipality is covered to the greatest possible extent.



BICYCLES ARE GOOD FOR BOTH EXERCISE AND EVERYDAY TRANSPORT.

Freight and goods transport

The municipality has participated in an international project with electric vans and small electric trucks for transport of goods in Greater Copenhagen, which may contribute to pushing the development in a greener direction. Goods delivered by electric vehicles also cause less noise nuisance for the neighbors of the shops and reduce air pollution. A greener heavy road transport is also expected to have a breakthrough, but a significant increase in green large trucks is not expected to take hold until after 2030, and the development is somewhat uncertain, which means that the Climate Plan 2030 has a deficiency in 2050 for heavy transport. However, several of the transport companies in the

municipality have announced that they are ready to receive these vehicles when they are able to fulfill the transport need and the costs of cars and operation are acceptable.

Public transportation

Danish rail transport is becoming fully electrified, and the buses are expected to be running on electricity or biogas within a few years. Høje-Taastrup Municipality has an ongoing dialogue with Movia and is hoping that electric busses will soon be present in the streets.

The municipality will work to ensure that it is advantageous to use public transportation instead of the car. New residential areas are placed near train stations, and at the same time there is now a more restrictive

standard for parking spaces at the dwellings.

Car-pooling and bicycling

Fewer will sit alone in their car. More people must walk, ride their bicycle, use shared cars or public transport. Høje-Taastrup Municipality nudges and makes it easier to choose the green solution.

It launches campaigns for taking the bike over short distances and for electric bicycles, and the network of bicycle paths is being improved continuously. Høje-Taastrup Municipality participates in projects with shared cars and car-pooling and contributes to technological solutions that show the way from A to B using various green modes of transportation.



Selected INITIATIVES



EXPANSION OF THE CHARGING INFRASTRUCTURE starts for real in 2021, and the municipality will contribute to ensuring that the lack of charging infrastructure in the municipality will not prevent citizens, enterprises and their employees from changing to an electric car.



BUSSES must run on electricity, hydrogen or biogas. In connection with new bus agreements between Høje-Taastrup Municipality and Movia, green fuels will be prioritized.



ELECTRIC BIKES for rental. Høje-Taastrup Municipality wants to make it possible to borrow and test an electric bike for a period. Experience shows that an electric bike could replace a second car.



CAR-POOLING is good for the climate, congestion, and the purse. Høje-Taastrup Municipality has entered into a three-year co-operation with NaboGo on car-pooling to and from the workplaces. The goal is to increase the number of passengers in the cars and thus to reduce the number of cars on the roads, especially during rush hour.



GREEN GOODS TRANSPORT in the urban areas. Høje-Taastrup Municipality is a traffic hub for freight and goods transport and an obvious place for testing new concepts with green goods transport for supplies to the urban areas in the Greater Copenhagen area.



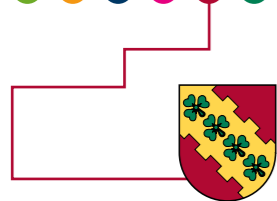
TAKE THE BIKE and arrive in a good mood. Høje-Taastrup Municipality will encourage more people to take the bike by improving and expanding bicycle paths and installing more bicycle stands. In addition, local bicycle campaigns are conducted. The cyclists must have a more central role in urban landscape.



ELECTRIC CARS for passenger transport have in many cases proven to have a better life cycle economy than gasoline cars. The municipality will inform the citizens and minor enterprises of the climate-related and often economic advantages of driving an electric car.

Høje-Taastrup Municipality will be moving to 100% electric cars in the coming years.





The municipality as a commercial enterprise

THE MUNICIPALITY LEADS THE WAY

Høje-Taastrup Municipality gets its own house in order.

Høje-Taastrup Municipality does not only lay down requirements for others to reach ambitious climate goals. It leads the way as an enterprise when it comes to emitting less CO₂ and implementing energy efficiency improvements.

Climate, growth, and economic aspects do not conflict in Høje-Taastrup Municipality. The green solutions are less costly in the long term. By participating in large and small buying groups, the municipality is managed in the most cost-effective and green manner possible.

Energy efficiency improvement

Høje-Taastrup Municipality will reduce its energy consumption by intelligent management, more digitalization, and data usage as well as better utilization of premises and buildings across the day and night. In

addition, the municipality participates in both national and international climate partnerships with access to the latest knowledge and support for testing new technology for production, administration, and consumption of energy. Co-operations with the Technical University of Denmark and other knowledge institutions contribute to developing new solutions that are continuously tested in selected municipal buildings.

Electricity and heat supply

Høje-Taastrup Municipality says goodbye to oil and natural gas burners in municipal buildings. The municipal properties are connected to district heating or have a heat pump installed. This conversion will soon be completed. In addition, Høje-Taastrup Municipality is investigating the possibility of installing PV systems on existing buildings, in connection with

major renovations or municipal construction work.

Transport

Høje-Taastrup Municipality will be dedicated to green transport in the future. Every time a municipal vehicle needs to be replaced the municipality will choose a solution with electricity or another green fuel if it is practical. The municipality will lay down similar requirements in connection with invitations to tender for transport tasks such as taxi service, demand-responsive traffic, and bus routes.

Sustainable municipality

Høje-Taastrup Municipality is involved in several large urban development projects, for example Nærheden and Høje-Taastrup C. It is expected that more than 6,000 new dwellings will be constructed in the municipality during the period 2020-2030, which annually corresponds to 2-3% of the total existing building stock of the municipality - significantly higher than the national a-

HØJE-TAASTRUP MUNICIPALITY PRIORITISES SUSTAINABLE SOLUTIONS



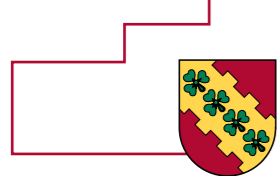
MATERIALS, ENERGY AND TRANSPORTATION WILL BE SUSTAINABLE.

verage of 1-1.5%. Climate is the green thread of the municipal planning. Renewable energy, energy efficiency improvement and green transport are focus points in district plans and in Municipal Plan 2021.

Høje-Taastrup Municipality is an active member of Partnerskab for Offentlige Grønne Indkøb (Partnership for Green Public Procurement), which continuously tightens the requirements for procurement of everything from food products and transport to building and construction. Furthermore, the municipality is involved in several projects with circular economy where, for example, old construction material is reused.



THE MUNICIPALITY IS ACTIVELY WORKING TO ESTABLISH MORE RECHARGING STATIONS FOR ELECTRIC CARS.



The municipality as a commercial enterprise

Selected INITIATIVES



CLIMATE-FRIENDLY FOOD is increased and the fight against food waste is intensified. Together with local operators, Climate Plan 2030 focuses on municipal kitchens and canteens and the possibility of introducing more climate-friendly food and minimizing food waste.



THE CAR FLEET is replaced by vehicles running on green fuels. There is a requirement for green fuels to be used for municipal goods transport tasks and in connection with delivery of municipal good deliveries.



The municipality's car fleet will be replaced on an ongoing basis.



CHARGING STATIONS for the many electric cars of the future. Høje-Taastrup Municipality prepares an overall strategy for charging stations for electric cars. It considers both the parking spaces at the municipality's own buildings and the parking spaces at housing society dwellings and enterprises.



AFFORESTATION By establishing more forest area, more CO₂ is absorbed from the atmosphere. The amount of CO₂ absorption depends on the type and age of the tree. The task committee established in connection with Climate Plan 2030 prepares a plan for afforestation with proposals for new forest areas in co-operation with the Skovrådet (Forest Council). Furthermore, lowland soil is withdrawn from farming. By ceasing to cultivate and drain farmland and instead letting the grass grow, CO₂ emissions are reduced, and CO₂ absorption is increased. The municipality initiates a dialogue with the plot owners.



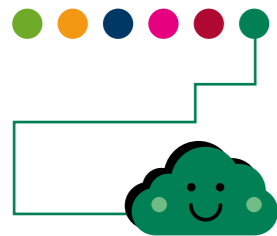
FLEXIBLE ENERGY CONSUMPTION in municipal buildings. Municipal buildings may form part of an intelligent and flexible energy system where energy is purchased when it is inexpensive and climate-friendly, stored in the municipal buildings as heat and used when electricity is expensive. Energy management is also carried out in municipal buildings. This includes real-time monitoring by means of automatic and intelligent electricity, water, and heat meters.



PV SYSTEMS on municipal buildings. In connection with new construction or major renovation of existing municipal buildings, the possibility for installation of PV systems should be further assessed.



INFORMATION FOR BUILDING CONTRACTORS Receive good advice on energy efficiency improvement in connection with construction projects. The municipal administrative employees inform building contractors about the possibility for energy renovation in connection with a construction project and for the possibility of applying for grants.



Climate change adaptation

PROTECTION AGAINST WATER FROM BELOW

Innovative solutions provide protection against high groundwater level.

Even though CO₂ emissions are reduced significantly climate change is a reality. There will be more cloudbursts and more flooding in the coming years. Furthermore, Høje-Taastrup Municipality is affected by closed and future closing of well fields. The municipality's greatest challenge is therefore a high groundwater level in built-up areas.

WATER MUST BE A SOLUTION INSTEAD OF A PROBLEM

Høje-Taastrup Municipality enters into partnerships with private enterprises, utility companies, researchers and other municipalities to develop new knowledge and establish intelligent solutions.

Sewers and streams

The municipality's sewer system is a combination of areas with a common sewer system in the old parts of Taastrup and Hedehusene and separate sewers in the more recent neighborhoods in, for example,

Fløng and Høje-Taastrup. Calculations of the capacity of the sewer systems for future climate change show that there are only few challenges. Some of these have already been solved, and there are plans for solving the rest of them.

Høje-Taastrup Municipality carries out sounding of the groundwater level each year throughout the municipality and prepared a groundwater potential map.

The municipality also takes measurements from selected streams on an ongoing basis to monitor stream flooding. Currently, measurements are taken from Sengeløse Å, Vasby Å, Mølleåen and Spang Å.

High groundwater level and closing of well fields

From the 1990s, groundwater extraction has decreased significantly, and many large

well fields have scaled down or closed altogether. As a result, the groundwater level is currently only a few meters below ground in several places. Many citizens living in the affected areas are already seeing more frequent ground flooding and damper basements due to penetrating ground water.

In the south-eastern part of the municipality, the groundwater level is naturally high and, in some places, just below the ground. In 2014, HOFOR closed the extraction at Store Vejleå Kildeplads (well field), which pumped up approx. 1.2 million m³ of percolate annually. In co-operation with Høje Taastrup Fjernvarme, Høje-Taastrup Municipality initiated a project in 2016-2017 that utilizes the heat in groundwater for heating of dwellings in the area and lower the ground water level so as to prevent problems with water and dampness in the basements of these dwellings.

Høje Taastrup Fjernvarme pumps up the high-level



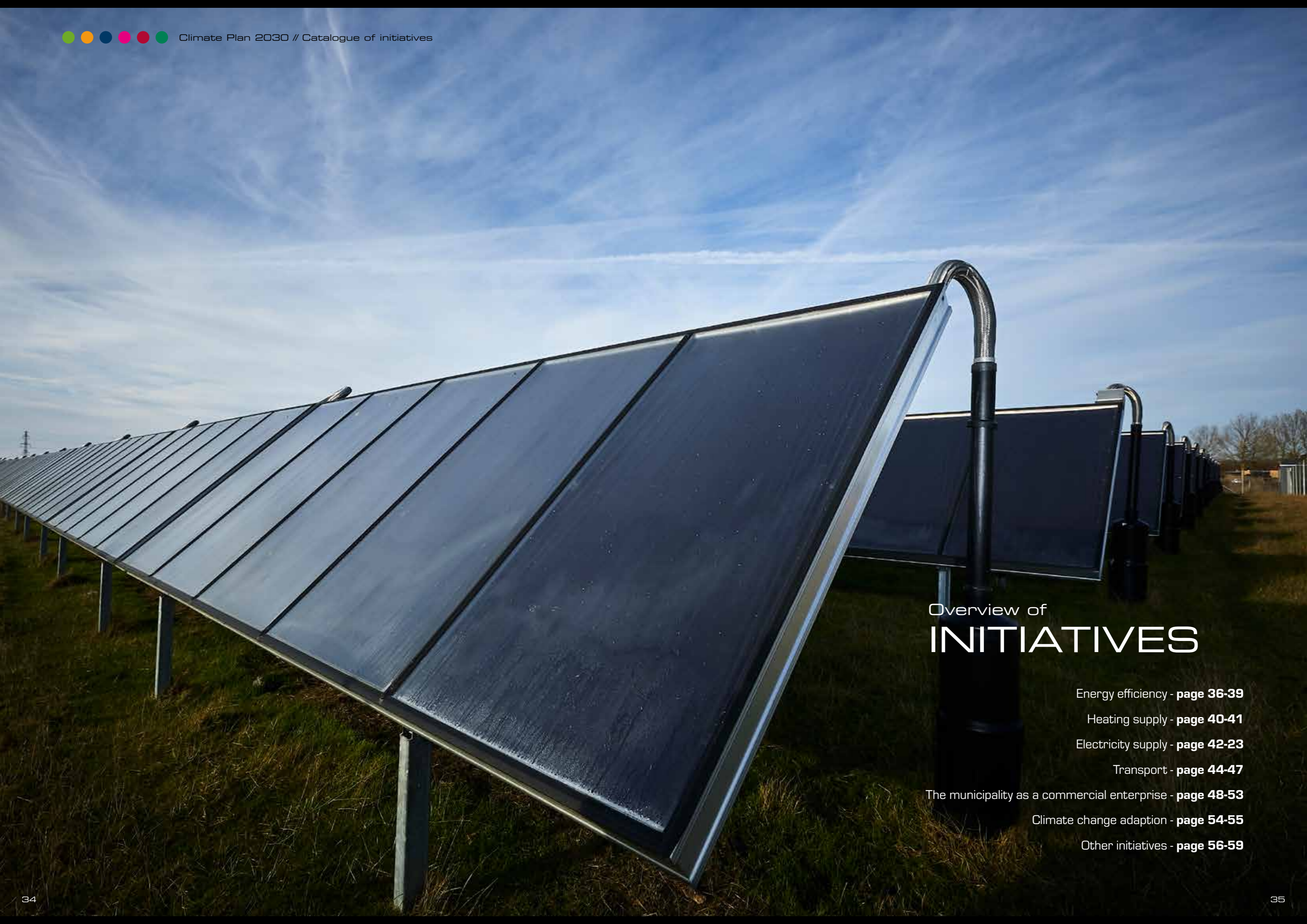
NEW RECREATIONAL AREA CAN BE CREATED BY ADJUSTING THE WATER.

groundwater through two deep bore holes. The water is then led into the newly established, electrically powered heat pump plant at Mølleholmen. When the heat has been utilized in the water the cooled water is discharged into Mølleåen. Approx. 1.4 million m³/year is pumped up. An annual heat production of approx. 13,000 MWh/year is expected to be reached, corresponding to approx. 4% of the district heating consumption in Høje-Taastrup Municipality.

HOFOR has announced that the extraction of groundwater at Taastrup Valby Kildeplads (well field) will stop permanently at the end of 2022 at the latest. As a main rule, the citizens are themselves responsible for protecting their basement against rising groundwater, but in order to initiate preventive measures in time Høje-Taastrup Municipality has started a monitoring project based on, inter alia, experience from the project at Mølleholmen, and has looked at four possible initiatives.



WATER IS NOT A PROBLEM, BUT A SOLUTION.



Overview of **INITIATIVES**

Energy efficiency - **page 36-39**

Heating supply - **page 40-41**

Electricity supply - **page 42-23**

Transport - **page 44-47**

The municipality as a commercial enterprise - **page 48-53**

Climate change adaption - **page 54-55**

Other initiatives - **page 56-59**



ENERGY EFFICIENCY

No.	Initiative	Baseline 2017		Sub-goal 2025	Goal 2030	Goal 2050	Period
1	<p>Information meetings for citizens on energy efficiency improvements</p> <p>Information meetings are held at the town hall or locally at community centres with presentations by experts (such as SparEnergy), Høje Taastrup Fjernvarme and local workmen. The meetings illustrate the advantages of energy efficiency improvement and demonstrate possible solutions.</p>	<p>Heated area in single-family houses (terraced house, agricultural property, detached house): 789,361 m²</p> <p>Heating consumption in single-family houses (terraced house, agricultural property, detached house): 99,653 MWh.</p>		Reduction of heat consumption in existing buildings by 1% annually.	Reduction of heat consumption in existing buildings by 1% annually.	Reduction of heat consumption in existing buildings by 0.5% annually after 2030.	2021-2030
2	<p>Grants for energy review of single-family houses</p> <p>Houses constructed before 2000 and with an energy label lower than D may apply for a "free energy review" (total pool of DKK 125,000 annually in 2022-2025). If the energy renovation to obtain heat saving is initiated for at least DKK 35,000 within one year after the review, the house owner will receive a refund of his costs of max. DKK 5,000 for the energy review refunded by Høje-Taastrup Municipality. The initiative will be implemented in 2022-2025 and assessed at the end of 2025 for possible continuation.</p> <p>To ensure that the energy renovation generates real energy saving, the energy renovation/energy saving must be documented by an expert. For example, insulation of building envelope, replacement of windows and doors, optimization of technical installations in the heating system. A co-operation with real estate agents might be established in connection with change of ownership.</p>	<p>Number of single-family houses constructed before 2000 and with an energy label lower than D: approx. 1,700 (stated in 2020).</p>		Reduction of heat consumption in existing buildings by 1% annually.	Reduction of heat consumption in existing buildings by 1% annually.	Reduction of heat consumption in existing buildings by 0.5% annually after 2030.	2021-2025
3	<p>Energy network for property management clerks at blocks of flats</p> <p>The existing network with property management clerks continues. There is great interest in knowledge sharing with respect to energy efficient operation of major blocks of flats, including discussion of specific conditions, such as inspection and presentation of various initiatives implemented. The network meetings are held in co-operation with Team Affald at Driftsbyen. The network continues towards 2025 with a continuous annual assessment.</p>	<p>Heated area at blocks of flats: 671,631 m²</p> <p>Heat consumption at blocks of flats: 107,181 MWh.</p>		Reduction of heat consumption in existing buildings by 1% annually.	Reduction of heat consumption in existing buildings by 1% annually.	Reduction of heat consumption in existing buildings by 0.5% annually after 2030.	2021-2025
4	<p>Design of courses for operating staff at non-profit housing societies</p> <p>Høje-Taastrup Municipality has previously been successful in designing courses for operating staff at housing societies. The effort explores the possibility of external support for design and conduct of courses for operating staff.</p>	<p>Heated area at blocks of flats: 671,631 m²</p> <p>Heat consumption at blocks of flats: 107,181 MWh.</p>		Reduction of heat consumption in existing buildings by 1% annually.	Reduction of heat consumption in existing buildings by 1% annually.	Reduction of heat consumption in existing buildings by 0.5% annually after 2030.	2021-2030



ENERGY EFFICIENCY

No.	Initiative	Baseline 2017		Sub-goal 2025	Goal 2030	Goal 2050	Period
5	<p>Project co-operations with non-profit housing societies</p> <p>Høje-Taastrup Municipality will focus more on possibilities for externally financed project applications where non-profit housing societies may be included as partner and with energy efficiency improvement as a theme. Specifically, a project application for EU Interreg ÖKS with participation by a non-profit housing society in the municipality has been submitted at the end of 2020.</p> <p>Høje-Taastrup Municipality will support the needs of the housing societies with access to data to make it easier for the housing societies to use data as driver in connection with energy renovations and energy efficiency improvements. In addition, the municipality will establish and facilitate co-operation to realise initiatives from green screenings and green reassessments in connection with renovation support from Landsbyggefonden (National Building Foundation).</p>	<p>Heated area at blocks of flats: 671,631 m²</p> <p>Heat consumption at blocks of flats: 107,181 MWh.</p>		Reduction of heat consumption in existing buildings by 1% annually.	Reduction of heat consumption in existing buildings by 1% annually.	Reduction of heat consumption in existing buildings by 0.5% annually after 2030.	2021-2050
6	<p>Information and network meetings for enterprises on energy efficiency improvements</p> <p>Communicate knowledge about energy efficiency improvements in enterprises through information meetings, including the municipal business networks or in co-operation with trade association, and by participation in meetings for new enterprises in the municipality.</p>	Electricity consumption and heat consumption in industrial properties: 304,791 MWh.		Reduction of heat consumption in existing buildings by 1% annually.	Reduction of heat consumption in existing buildings by 1% annually.	Reduction of energy consumption in existing buildings by 0.5% annually after 2030.	2021-2050
7	<p>Identify possibilities for co-operation projects</p> <p>Including national and external foundations/pools with external support to promote energy efficiency improvement at enterprises.</p>	Electricity consumption and heat consumption in industrial properties: 304,791 MWh.		Reduction of energy consumption in existing buildings by 1% annually.	Reduction of energy consumption in existing buildings by 1% annually.	Reduction of energy consumption in existing buildings by 0.5% annually after 2030.	2021-2050
8	<p>Climate award for energy-efficient SME</p> <p>Annual award for an SME in Høje-Taastrup Municipality that has made an extraordinary effort within energy efficiency improvement. All SMEs may be nominated based on annually changing criteria defined on htk.dk and in the local paper. The effort is assessed in 2025.</p>	Electricity consumption and heat consumption in industrial properties: 304,791 MWh.		Reduction of energy consumption in existing buildings by 1% annually.	Reduction of energy consumption in existing buildings by 1% annually.	Reduction of energy consumption in existing buildings by 0.5% annually after 2030.	2021-2025
9	<p>Dissemination of the narrowband infrastructure LoRaWAN</p> <p>This will support the implementation of green measures within for example mobility, energy efficiency improvement or welfare for Smart City and Internet of Things. The infrastructure is a prerequisite for digitalisation and smarter and more climate-friendly operation.</p>	No narrowband infrastructure disseminated strategically.		National redundant LoRaWAN cover across municipalities.			2021-2025



HEAT SUPPLY

No.	Initiative	Baseline 2017		Sub-goal 2025	Goal 2030	Goal 2050	Period
10	<p>Strategic plan for phase-out of natural gas and oil</p> <p>The goal for 2030 is that citizens and enterprises in Høje-Taastrup Municipality do not use natural gas or oil for heating and process. Høje-Taastrup Municipality will co-operate with Høje Taastrup Fjernvarme to prepare a plan for expected conversion to district heating. Properties in areas that are not expected to have district heating must convert to individual heat pumps. Initial analyses and dialogue have been initiated in 2020.</p>	<p>Number of properties heated by oil: 829</p> <p>Number of properties heated by natural gas: 1,694</p> <p>CO₂ emission from heating and process with oil and natural gas: 28,632 tons of CO₂.</p>		<p>50% fewer properties heated by oil</p> <p>25% fewer properties heated by natural gas</p> <p>Høje-Taastrup Municipality monitors the development of alternatives to natural gas for process in co-operation with relevant companies.</p>	<p>No properties heated by oil and natural gas in Høje-Taastrup Municipality.</p> <p>Alternative to natural gas for process has been established.</p>		2021-2030
11	<p>Information meetings for citizens on replacement of oil and natural gas burners</p> <p>Information meetings are held at the town hall or locally at community centres with presentations by experts such as SparEnergy, Høje Taastrup Fjernvarme and local workmen. The meetings illustrate the advantages of converting from oil and natural gas to, for example, district heating or heat pump.</p>	<p>Number of residential properties heated by oil: approx. 750</p> <p>Number of residential properties heated by natural gas: 1,438</p> <p>CO₂ emission from domestic heating with oil and natural gas: 14,530 tons of CO₂.</p>		<p>50% fewer residential properties heated by oil.</p> <p>25% fewer residential properties heated by natural gas.</p>	<p>No residential properties heated by oil and natural gas in Høje-Taastrup Municipality.</p>		2021-2030
12	<p>Inter-municipal co-operation in "Energi på Tværs" (Energy Across) and new Heat Plan for the Great Copenhagen area</p> <p>"Energi på Tværs" has a strong focus on green joint heating supply. This is a co-operation between municipalities and supply companies with participation by Høje-Taastrup Municipality. At the same time, a new Heat Plan for the Greater Copenhagen area is being prepared where Høje-Taastrup Municipality is a member of the steering committee.</p>	<p>The emission factor for CO₂ in Høje Taastrup Fjernvarme's supply, 79 kg CO₂ per MWh.</p>		<p>CO₂ emission in connection with district heating supply reduced from 79 kg per MWh to 40 kg per MWh.</p>	<p>CO₂ neutral district heating by 2030 at the latest.</p>		2021-2023
13	<p>Projects and initiatives that may reduce heat loss in the district heating supply</p> <p>Low temperature district heating reduces heat loss in the distribution pipe and thus contributes to better utilization of renewable energy sources with lower temperature such as excess heat. COOL-DH is an innovative development project where new materials and procedures are tested. Other similar project applications are under way.</p>	<p>Average heat loss in the distribution in 2017 is 15%.</p>		<p>Heat loss in distribution of district heating is reduced to 14%.</p>	<p>Heat loss in distribution of district heating is reduced to 12%.</p>	<p>Heat loss in distribution of district heating is reduced to 10%.</p>	2021-2050
14	<p>Promotion of the utilization of excess heat in co-operation with enterprises and Høje Taastrup Fjernvarme</p> <p>It is expected that a large data centre will be located in Høje-Taastrup Municipality. Excess heat is expected to be utilized by staged installation of heat pumps up to 50 MW. Of this, approx. 6 MW in Høje Taastrup Fjernvarme's distribution network and the remaining quantity in the VEKS system.</p>	<p>The emission factor for CO₂ in Høje Taastrup Fjernvarme's supply, 79 kg CO₂ per MWh.</p>		<p>6 MW heat pumps are installed. Contributed to lower CO₂ emission in the district heating supply.</p>	<p>50 MW heat pumps are installed. Larger share of excess heat in the district heating supply as the number of CHP stations drop and refuse incineration decreases due to increased recycling. Lower CO₂ emission in district heating supply.</p>	<p>In co-operation with Høje Taastrup Fjernvarme and enterprises, obtain full utilization of local energy resources, including excess heat where this is cost-effective.</p>	2021-2050



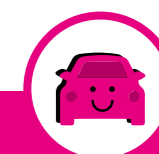
ELECTRICITY SUPPLY

No.	Initiative	Baseline 2017		Sub-goal 2025	Goal 2030	Goal 2050	Period
15	<p>Designate suitable areas for establishment of solar parks</p> <p>A PV plant in Kallerup Grusgrav of 28 MW in the first phase and any further expansion to 50 MW is being considered by the authorities. Further applications for establishment of solar parks can be expected.</p> <p>In connection with the preparation of Municipal Plan 2021, the municipality is screened for locations for solar parks.</p>	0 MW in 2017.		50 MW solar parks.	100 MW solar parks.	200 MW solar parks.	2021-2050
16	<p>Dialogue with enterprises and housing societies on roof-based PV systems</p> <p>Høje-Taastrup Municipality intensifies the dialogue with enterprises and housing societies on the establishment of PV systems on major buildings in connection with reconstruction of existing buildings and new construction.</p>	Total installed effect in enterprises and residential properties in 2017: 5,7 MW.		10 MW roof-based plants.	20 MW roof-based plants.	50 MW roof-based plants.	2021-2050



TRANSPORT

No.	Initiative	Baseline 2017		Sub-goal 2025	Goal 2030	Goal 2050	Period
17	<p>Preparation of framework and action plan for green mobility and implementation and ongoing assessment</p> <p>The goal of mobility planning in Høje-Taastrup Municipality is to develop effective and sustainable transport based on the existing infrastructure and local conditions. The mobility work must contribute to stimulating sustainable mobility in the urban and area development and contribute to a good everyday life for citizens and enterprises, better health and less emission of climate gasses and other pollution.</p>	The transport sector accounts for 54% of the CO ₂ emission within the geographical area of Høje-Taastrup Municipality.		A framework and action plan for sustainable mobility have been prepared.	The action plan is well implemented and has contributed to 30% of the passenger car transport being based on electricity and 25% of freight and goods transport being fossil free, as well as a number of other positive elements for citizens and enterprises.	Continued implementation of green mobility initiatives. 100% of passenger car transport and 100% of freight and goods transport take place with CO ₂ neutral fuels. The share of pedestrians and cyclists has increased significantly.	2021-2050
18	<p>Information activities for citizens and SME on electric vehicles</p> <p>Citizens and small enterprises have insufficient knowledge of the possibility and business case for changing to an electric car. Høje-Taastrup Municipality will be a facilitator for disseminating information and knowledge to citizens and enterprises.</p>	0.34% of passenger cars or hybrid cars and 0.2% of vans (national figures from Statistics Denmark).		5% of passenger car transport is based on electricity. 1% of freight and goods transport and other commercial transport is based on electricity, biogas or green fuel. In addition to the applicable admixture requirements in diesel and gasoline.	30% of passenger car transport is based on electricity, and 25% of freight and goods transport is based on electricity, biogas or other green fuel.	100% of passenger car transport and 100% of freight and goods transport are based on CO ₂ neutral fuels.	2021-2050
19	<p>Contribution to development projects on green freight and goods transport with focus on city logistics</p> <p>Høje-Taastrup Municipality is an important transport hub. Focus on green goods distribution to Copenhagen and other urban areas.</p>	Non-passenger transport accounts for approx. 1/4 of the CO ₂ emission within road transport.		1% of freight and goods transport and other commercial transport is based on electricity, biogas or other green fuel. In addition to the applicable admixture requirements.	25% of freight and goods transport and other commercial transport is based on electricity, biogas or other green fuel.	100% of freight and goods transport is based on CO ₂ neutral fuels.	2021-2050
20	<p>Exploration of the possibility for establishing environmental zones</p> <p>In dialogue and co-operation with other municipalities in the region, Høje-Taastrup Municipality will explore the possibility of establishing environmental zones where traffic and pollution are worst. Environmental zones are geographical areas where heavy diesel vehicles (trucks and buses) must fulfil special requirements for particle emission.</p>	No environmental zones in Høje-Taastrup Municipality.		1% of freight and goods transport and other commercial transport is based on electricity, biogas or other green fuel. In addition to the applicable admixture requirements.	25% of freight and goods transport and other commercial transport is based on electricity, biogas or other green fuel.	100% of freight and goods transport is based on CO ₂ neutral fuels.	2021-2050
21	<p>Intensification of enterprise co-operation on green mobility</p> <p>Høje-Taastrup Municipality will intensify the co-operation with the transport companies in the municipality and assist them in their work with conversion to fossil free freight and goods transport, including green fuels and freight transport on railway. This is accomplished through network creation, information campaigns and inspiration for best practice.</p>	Non-passenger transport accounts for approx. 1/4 of the CO ₂ emission within road transport.		1% of freight and goods transport and other commercial transport is based on electricity, biogas or other green fuel. In addition to the applicable admixture requirements.	25% of freight and goods transport and other commercial transport is based on electricity, biogas or other green fuel.	100% of freight and goods transport is based on CO ₂ neutral fuels.	2021-2050



TRANSPORT

No.	Initiative	Baseline 2017		Sub-goal 2025	Goal 2030	Goal 2050	Period
22	<p>Intensification of national and international co-operation to accelerate green fuels for heavy transport</p> <p>Høje-Taastrup Municipality monitors the technological development within heavy transport, and through national and international co-operations the municipality contributes to driving the development and inspiring relevant operators in their conversion.</p>	Non-passenger transport accounts for approx. 1/4 of the CO ₂ emission within road transport.		1% of freight and goods transport and other commercial transport is based on electricity, biogas or other green fuel. In addition to the applicable admixture requirements.	25% of freight and goods transport and other commercial transport is based on electricity, biogas or other green fuel.	100% of freight and goods transport is based on CO ₂ neutral fuels.	2021-2050
23	<p>Green bus transport and demand-responsive transport in Høje-Taastrup Municipality</p> <p>In connection with new bus agreements and agreement on demand-responsive transport between Høje-Taastrup Municipality and Movia, green fuels will be prioritized.</p>	All buses in service in Høje-Taastrup Municipality are based on fossil fuels.		City bus routes and demand-responsive transport in Høje-Taastrup Municipality run on electricity.	All buses in scheduled service or going through Høje-Taastrup Municipality will be running on fossil free fuels.		2021-2030
24	<p>NaboGo car-pooling co-operation</p> <p>Høje-Taastrup Municipality has decided to enter into a 3-year co-operation with NaboGo on promoting car-pooling to and from workplaces in Høje-Taastrup Municipality and commuting by the citizens outside the municipality. Citizens and employees within the geographical area of the municipality will receive assistance and access to the car-pooling platform. At the end of the co-operation period, the effort will be assessed.</p>	Key figure for commuting is 1.05 person in each passenger car.		Commuting: 1.1 person in each passenger car.	Commuting: 1.15 person in each passenger car.	Commuting: 1.2 person in each passenger car.	2021-2023
25	<p>Cyclists must be prioritized in Høje-Taastrup Municipality</p> <p>Preparation and implementation of a strategy for making Høje-Taastrup Municipality as a bicycle-friendly municipality. The strategy may, for example, include the following: Improvement and expansion of the bicycle paths, passability and safety via traffic planning, bicycle parking facilities and safety at stations, participation in the super-bicycle concept, bicycle partnerships with enterprises, and improvement of the bicycle culture at schools, among children and adolescents.</p>	Passenger transport in Høje-Taastrup Municipality, approx.: Car etc.: 70% Bicycle: 8% Public transport: 22%.		Share of cyclists increases to 10%. Before the end of 2022, a strategy has been prepared and adopted for Høje-Taastrup Municipality as a bicycle-friendly municipality in which data-based targets are defined such as children/adolescents who ride their bicycle to school.	Share of cyclists increases to 12%.	Share of cyclists increases to 20%.	2021-2050
26	<p>Test an electric bicycle</p> <p>Høje-Taastrup Municipality will explore the possibility of participating in or initiating projects that make it possible to lend electric bicycles to citizens and enterprises. During the period 2030-2050, technological alternatives to electric bicycles will be explored.</p>	Passenger transport in Høje-Taastrup Municipality, approx.: Car etc.: 70% Bicycle: 8% Public transport: 22%.		Share of cyclists increases to 10%.	Share of cyclists increases to 12%.	Share of cyclists increases to 20%.	2021-2050



THE MUNICIPALITY AS AN ENTERPRISE

No.	Initiative	Baseline 2017		Sub-goal 2025	Goal 2030	Goal 2050	Period
27	<p>Implementation of data-based energy management</p> <p>Development of a strategic tool to ensure an overview and systematic benchmarking of the municipal properties to localise the greatest effect of initiatives. This includes real-time monitoring by means of automatic and intelligent electricity, water and heat meters. Acceleration of cost-effective energy renovation.</p>	<p>Electricity consumption in municipal properties: 9,730 MWh Heat consumption in municipal properties: 33,132 MWh In 2017, the municipal properties emit: From heating 2,890 tons of CO₂ and from electricity consumption 2,276 tons of CO₂.</p>		Reduction of heat consumption in existing buildings by 1% annually.	Reduction of heat consumption in existing buildings by 1% annually.	Reduction of heat consumption in existing buildings by 0.5% annually after 2030.	2021-2050
28	<p>Flexible energy consumption</p> <p>The energy system of the future is based on renewable sources, and production may therefore vary across the day and night. The energy system will therefore have to be more flexible with respect to sale and storage of the energy and the building stock will have to be capable of providing this flexibility. In Høje-Taastrup Municipality, the municipal buildings may be used for providing flexibility for district heating and electricity supply and thus relieve the pressure during peak periods and purchase any excess of green energy.</p>	No flexibility at this time.		5% of the relevant municipal building stock may provide flexibility for the heat supply.	50% of the relevant municipal building stock may provide flexibility for heat and electricity supply.	All relevant municipal buildings may provide flexibility for electricity and district heating supply.	2021-2050
29	<p>Better utilization of premises</p> <p>Optimized utilization of premises by using sensors and booking system Many meeting rooms and facilities for association are empty even though they are booked. Through digital monitoring, it is possible to optimise the use of the existing building stock and at the same time create better conditions for associations and citizens that need to use the municipal offers.</p>	No digital monitoring of the actual use of premises and facilities.		Digital monitoring of 50% of the relevant premises and facilities.	Complete monitoring of relevant premises and facilities.		2021-2030
30	<p>Conversion of oil and natural gas to district heating and, if district heating is not feasible, heat pump</p> <p>Conversion of oil-powered buildings to district heating or heat pump no later than 2025 (for example Reerslev School and institutions in 2021/2022). Conversion of buildings heated by natural gas to district heating or heat pumps (for example Sengeløse School and institutions and other by 2028 at the latest). A newly created position as energy employee in CEIS is expected to be advertised and filled at the start of 2021.</p>	<p>Number of municipal properties heated by oil: 8 Number of municipal properties heated by natural gas: 15 Total CO₂ emission from municipal buildings heated by oil and natural gas: 765 tons of CO₂.</p>		No municipal properties heated by oil.	No municipal properties heated by oil or natural gas by 2028.		2021-2028
31	<p>PV systems installation on municipal buildings</p> <p>In connection with new construction or major renovation of existing municipal buildings, a proposal for installation of PV systems must be prepared.</p>	In 2017, 0.7 MW has been installed.		1 MW.	2 MW.	4 MW.	2021-2050



THE MUNICIPALITY AS AN ENTERPRISE

No.	Initiative	Baseline 2017		Sub-goal 2025	Goal 2030	Goal 2050	Period
32	Green transition of the municipal vehicle fleet By replacement of municipal vehicles to vehicles running on green fuels.	25% of the municipal vehicles, electricity, or hybrid.		All passenger cars and vans and 50% of minibuses are electric vehicles or based on other fossil free fuel.	All municipal vehicles are electric vehicles or based on other fossil fuel.		2021-2030
33	Green fuels in municipal transport tasks As the green fuels are offered on the market, they will become mandatory in connection with invitations to tender for municipal transport tasks, including taxi service, demand-responsive traffic, bus service (in addition to scheduled service) etc.	No requirement for green fuels in municipal transport tasks.		25% of all municipal transport tasks are carried out by vehicles running on green fuels.	60% of all municipal transport tasks are carried out with green fuels.	All municipal transport tasks are carried out with green fuels.	2021-2050
34	Green fuels in connection with municipal goods delivery Green fuels will continuously be an important parameter in connection with delivery of municipal goods.	No requirement for green fuels in municipal goods delivery.		25% of all municipal transport tasks are carried out by vehicles running on green fuels.	60% of all municipal transport tasks are carried out with green fuels.	All municipal transport tasks are carried out with green fuels.	2021-2050
35	Preparation of charging infrastructure strategy for electric vehicles and its implementation in Høje-Taastrup Municipality Høje-Taastrup Municipality prepares a charging infrastructure strategy with the main focus on municipal buildings and parking spaces, but residential areas, shopping areas and industrial areas will also be dealt with in the strategy. The strategy will subsequently be implemented in accordance with the minimum requirements laid down in executive order adopted in March 2020.	5 municipal public charging stations and non-public charging stations for the municipal electric vehicles.		All municipal buildings with at least 20 parking spaces have installed at least 2 charging stations (4 sockets) and established conduit pipes for 20% of the parking spaces. New municipal construction complies with the executive order.	All municipal buildings with at least 20 parking spaces have installed charging stations at minimum 20% of the parking spaces. Municipal building with less than 20 but more than 5 parking spaces have installed at least 1 charging station (2 sockets) and conduit pipes for 20% of the parking spaces.	All municipal buildings with connected parking spaces have installed charging stations to cover the employees' and visitors' needs.	2021-2050
36	Active membership of Partnerskab for Offentlige Grønne Indkøb (POGI) (Partnership for Green Public Procurement) PPOGI is a group of municipalities that wish to promote sustainable solutions and engage in green procurement by setting procurement targets for, for example, food products, transport and construction. The effort is clarified after adoption of Høje-Taastrup's new procurement strategy.	Not a member of POGI.		Høje-Taastrup Municipality has incorporated 75% of POGI's targets within the 11 existing green focus areas.	Høje-Taastrup Municipality has incorporated all relevant POGI targets within the 11 existing green focus areas.		2021-2030



THE MUNICIPALITY AS AN ENTERPRISE

No.	Initiative	Baseline 2017		Sub-goal 2025	Goal 2030	Goal 2050	Period
37	<p>Increase of the share of intelligent and sustainable procurement</p> <p>Larger and fewer deliveries, i.e. pooling of purchases. For example, a school, before- and after-school care facility, club - with the same address - must be able to have the same "shopping basket". The effort is clarified after adoption of Høje-Taastrup's new procurement strategy.</p>	Høje-Taastrup Municipality has approx. 33,000 invoicings annually for amounts below DKK 500.		Invoice volume with amounts below DKK 500 have been reduced by 10%.	Invoice volume with amounts below DKK 500 have been reduced by 15%.	Invoice quantity reduced by 20%.	2021-2050
38	<p>Increase of the share of climate-friendly food and increased focus on food waste</p> <p>In co-operation with local operators, Climate Plan 2030 focuses on reorganisation of municipal kitchens and canteens by exploring the possibility of introducing more climate-friendly food and activities to minimize food waste.</p>	Since February 2016, organic waste has been collected in the canteen at the town hall and converted to environmentally friendly biogas. In 2016, the canteen sorted approx. 7.5 tons of organic waste.		All major municipal kitchens and canteens have been examined for possible activities for increased focus on climate-friendly food and less food waste.	All major municipal kitchens and canteens have been examined for possible activities for increased focus on climate-friendly food and less food waste.		2021-2030
39	<p>Intensification of work with circular economy</p> <p>It is possible to obtain significant CO₂ saving by recycling materials rather than producing new ones, and CO₂ emission is reduced because of decreased transport of the materials. Høje-Taastrup Municipality therefore wants to intensify its initiatives within circular economy. Sustainability and circular economy are mandatory requirements by the municipality in connection with criteria for awarding tenders. In addition, the possibility for external financing for development projects on recycling of construction material in connection with urban development is explored together with knowledge institutions and enterprises.</p>	A current invitation to tender (2020) for uniforms for the healthcare sector and canteens includes circular clothing.		All invitations to tender include a specific individual assessment of the extent to which circular products and processes can be used. A TCO (total cost of ownership) principles is always applied. Market dialogue introduced as a permanent element with respect to TCO and circular economy.	Circular products are prioritized in municipal tender invitations if possible.	CCircular products and products that are prioritized based on TCO considerations in every offer and invitation to tender, if possible.	2021-2050
40	<p>Innovation group for digital and automated solutions</p> <p>Establishment of a multidisciplinary digital innovation group that may develop digital and automated solutions and/or obtain inspiring cases externally for possible implementation in Høje-Taastrup Municipality. It is necessary to use the expertise of the individual fields and connect it with digital know-how through multidisciplinary organisation in order to utilize the new digital solutions.</p>	No internal organisation across centres.		Innovation group is functional and may support new digital initiatives across centres.			2021-2025
41	<p>Optimization of deicing</p> <p>Development of a digital basis for the purpose of better forecasts for deicing so that the amount of salt or other special means, CO₂ and NO_x are reduced while at the same time optimizing road safety and minimizing operating costs. Deicing must be optimized through a better and larger local data basis and artificial intelligence that connects road temperatures with weather forecasts in an overall forecast tool.</p>	Deicing is based on road weather from DMI and the experience of Driftsbyen.		Better digital basis for planning deicing.			2021-2025



CLIMATE CHANGE ADAPTATION

No.	Initiative	Baseline 2017		Sub-goal 2025	Goal 2030	Goal 2050	Period
42	<p>Closing of Taastrup Valby Kildeplads (well field)</p> <p>As a main rule, the citizens are themselves responsible for protecting their basement against rising groundwater, but in order to make it possible to initiate preventive measures in time Høje-Taastrup Municipality has started a monitoring project based on experience from the project at Mølleholmen and has looked at four possible initiatives.</p>	<p>HOFOR has announced that the extraction of groundwater at Taastrup Valby Kildeplads (well field) will stop permanently at the end of 2022 at the latest.</p>		<p>Solution implemented.</p>			2021-2023



OTHER INITIATIVES

No.	Initiative	Baseline 2017		Sub-goal 2025	Goal 2030	Goal 2050	Period
43	<p>Climate considerations in district planning</p> <p>Considerations for initiatives to prevent effects of climate change, including energy efficiency, renewable energy production, certified sustainable construction, bicycle parking and green transport solutions, in addition to statutory requirements, will be assessed and screened in connection with the preparation of district plans. In the period 2021-2024, models and tools for the most expedient way of implementing this are explored. In the long term, it may become relevant with a form of CO₂ accounts in relation to various possible solutions.</p>	Current practice.		A model or tool showing how climate considerations/ initiatives to prevent effects of climate change should be reflected in district plan proposals.	CO ₂ accounts or the like must be included in district plan proposals.	The sustainability concept is an integral part of district planning.	2021-2050
44	<p>Increased focus on green mobility in municipal planning</p> <p>In connection with preparation of Municipal Plan 2021 and urban development projects etc., sustainable mobility must be promoted and incorporated. In addition, specific solutions that support this will be assessed, for example bicycle paths and bicycle parking, number and location of parking spaces. Initiatives that support electric vehicles, location and design of roads and traffic calming measures etc.</p>	Existing municipal plan.		It is clearly stated in the Municipal Plan or other physical planning that Høje-Taastrup promotes and accelerates green mobility in the municipality.	Municipal plans and other physical planning have contributed to measurable results with respect to promotion of bicycling, other sustainable road transport and reduced car traffic in connection with short trips in the municipality.	100% of passenger car transport and 100% of freight and goods transport are based on CO ₂ neutral fuels.	2021-2050
45	<p>Information for building contractors on energy efficiency improvement and energy renovation in connection with construction case administration</p> <p>In connection with construction case administration, information for building contractors on energy efficiency improvement and energy renovation must be intensified, including the possibility of receiving grants etc.</p>	Applicable construction law and practice.		A procedure has been prepared for increased communication with building contractors on energy efficiency improvement in connection with construction case administration.	The procedure for increased communication with building contractors is implemented and assessed towards 2030.		2021-2030
46	<p>Lowland soil removed from farming</p> <p>In Høje-Taastrup Municipality, approx. 150 ha of lowland soil is mapped where crops are cultivated. By ceasing cultivation and drainage of this soil and instead letting the grass grow, CO₂ emission is reduced/ absorption is increased by an estimated value of approx. 10-15 ton/ha annually. The municipality initiates a dialogue with the plot owners.</p>	150 ha of lowland soil which is included in agricultural emission of 2,714 tons of CO ₂ /year.		20 ha lowland soil is withdrawn from traditional farming.	50 ha lowland soil is withdrawn from traditional farming.	150 ha lowland soil is withdrawn from traditional farming.	2021-2050



OTHER INITIATIVES

No.	Initiative	Baseline 2017		Sub-goal 2025	Goal 2030	Goal 2050	Period
47	<p>Afforestation</p> <p>By establishing more forest area, more CO₂ is absorbed from the atmosphere. The amount of CO₂ absorption depends on the type and age of the tree.</p> <p>A preliminary initiative up to and including 2025 is to plant a tree for each new (net) job or citizen in the municipality from 2022.</p> <p>In addition to municipal areas, the trees may be planted at citizens, enterprises and in residential areas. An annual amount of DKK 200,000 is earmarked for this effort. The initiative is supported by other afforestation.</p> <p>The task committee established in connection with Climate Plan 2030 prepares a plan for afforestation with proposals for new forest areas in co-operation with the Skovrådet (Forest Council).</p>	In 2017, CO ₂ absorption in connection with land use where the forest area is included is stated at 1,500 tons of CO ₂ annually.		50 ha of new forest planted since 2017.	250 ha of new forest planted since 2017.	440 ha of new forest planted since 2017.	2021-2050
48	<p>CO₂ neutral handling and operation of sewerage treatment plant</p> <p>BIOFOS applies a strategy where CO₂ emissions from handling sewage water (i.e. cleaning) are climate positive by 2025.</p> <p>Høje-Taastrup Municipality is part of BIOFOS supply area, but it also has its own sewage treatment plant. The goal of the municipality's own sewage treatment plant must be to be at least CO₂ neutral by 2030. In addition, the municipality will initiate initiatives to reduce the water consumption in municipal institutions, enterprises and by the citizens in general.</p>	CO ₂ emission from sewage water treatment: 512 tons/year.		Reduction of CO ₂ emission from sewage water by 50 %.	No CO ₂ emission from municipal sewage water treatment.		2021-2030
49	<p>Preparation of sustainability strategy</p> <p>There is a greater focus on sustainable development in Høje-Taastrup Municipality and the policies, plans, projects and other activities that are to be prepared and carried out. To promote and structure sustainable development and initiatives in the municipality, a sustainability strategy is prepared across all centres.</p>	There is no broad strategy for sustainable development for Høje-Taastrup Municipality.		A sustainability strategy has been prepared and adopted by the Town Council, and the implementation has been initiated. Goals have been set for reducing the carbon footprint in the municipality.	Effect measurements of all relevant sustainable development goals in relation to the goals in the sustainability strategy and an improvement of the implementation of the sustainable development goals by 2025.	The sustainability strategy is assessed and updated in relation to the UN's work with the sustainable development goals after 2030.	2021-2050
50	<p>Operator participation in sustainable development</p> <p>Høje-Taastrup Municipality will facilitate a process where citizens, associations, enterprises and other operators participate to develop the municipality in a sustainable direction. The process will ensure an added value of the participant effect and create a high degree of ownership of the sustainability agenda in general and the implementation of Climate Plan 2030 in particular. Specific initiatives are developed continuously but may involve Ungeklimaråd (youth climate council), libraries, citizens' meetings, company networks and the like.</p>	No strategic operator involvement.		Continuous development and arrangement of participant-involving activities in connection with effect measurements of the most relevant sustainable development goals.	Continuous development and arrangement of participant-involving activities in connection with effect measurements of all sustainable development goals.	Continuous development and arrangement of participant-involving activities in connection with the UN's work with the sustainable development goals after 2030.	2021-2050



**Høje-Taastrup
Kommune**