

The Capital of Scandinavia





Stockholm

– a fossil fuel free city 2040



Stockholms
stad



Karin Wanngård

Mayor of Stockholm



“ We have set the ambitious goal for the City of Stockholm to be fossil fuel free by 2040. We are fully aware that the city must excel in all aspects to reach our goal. Stockholm is already an acknowledged global climate leader, and our climate impact has decreased over the years. The City of Stockholm has lowered our CO₂-emissions by 44 per cent per capita since 1990 and we are soon to reach our new target of 2.3 tonnes per capita by 2020. These ambitious aims are to be met while Stockholm is the fastest growing capital city in Europe.

Measuring and reporting our progress are very important tools in helping us succeed, and to ensure that Stockholm continues to be a frontrunner when it comes to fighting climate change. Being Compact of Mayors Compliant is a great acknowledgement that our measurement and planning is of excellent quality. ”



Compact of Mayors:

Stockholm was one of eleven global cities in the world to first meet all planning and reporting requirements of the Compact of Mayors. To become Compact of Mayors Compliant, cities must present ambitious climate action plans, and achievements that build on years of local efforts to combat climate change.

Facts & figures

Stockholm has currently just over 900,000 inhabitants but is foreseen to grow to over 1 million by 2021. The city is built on 14 islands connected by 57 bridges, and has 8 protected nature reserves within its borders. Approximately 40% of the city area consists of green space, and in close reach from the city centre lies 30 public beaches. In the Stockholm city centre you find no less than 12,000 trees, and more than 80% of all citizens has a park or green area within 200 meters from their home.



140,000

To meet the current housing needs, Stockholm will build 140,000 new homes by 2030. Energy efficiency and high environmental standards are important requirements. In the City of Stockholm Master Plan we will increase the city density to further facilitate cycling and walking.



80%

80% of Stockholmers use public transport during rush hour.



44%

The 2015 CO₂-emission reduction target for the City of Stockholm, 3.0 ton per capita, was achieved in 2012. This is a reduction of 44% per capita compared to the levels in 1990.

120

Stockholm has earmarked 120 million Euros for climate investments during 2015–2018.



2040

The long term target for the City of Stockholm is to become a fossil fuel free city by 2040.

2.3 tonnes

The City of Stockholm is now making progress towards the new short term reduction target of 2.3 tonnes CO₂ per capita in 2020 – A reduction per capita of 57% compared to the levels in 1990.

Sustainability

– an integrated part of all strategies and city planning

Stockholm has a long tradition of integrating sustainability in all strategies and city planning. As a result, potential conflicting objectives can be eliminated at an early stage and a sustainability perspective is included in all policy areas. Sustainability should be a prerequisite for creating a high quality of life, not an obstacle. The City Budget, the overall steering document, has four sustainability principles; Social, economic, democratic and ecological. A climate-smart Stockholm where priority is given to cyclists, pedestrians and public transport, where an efficient and climate-smart transport system is combined with an increased proportion of renewable energy, where children are guaranteed a life free from harmful chemicals, and where organically grown food is served in the city's operations.



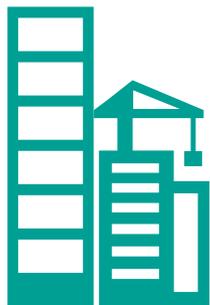
Best practice

One of the main reasons why cities are essential in the fight against climate change, is that city actions require projects that directly decrease emissions and benefit to the life quality of its citizens. The city of Stockholm has a long tradition of ambitious environmental efforts. It is a green economy leader and a global frontrunner when it comes to environmental policies. The City of Stockholm has numerous projects and processes that contribute to our mission to be fossil fuel free by 2040 and adapt to a changing climate.

In this brochure you find a few examples that contribute to the global fight against climate change. We would be more than happy to show you in reality, so welcome to Stockholm!



Green city planning



25,000

Once fully built, Hammarby Sjöstad will accommodate 25,000 people in 11,000 housing units.

Stockholm is the fastest growing capital in Europe. A total of 140,000 new homes are planned until 2030. This entails many challenges to meet the goal of being a long-term sustainably growing city. The City Plan – The Walkable City – describes the development plans and strategies which will result in a more close-knit urban environment. The city plan states that Stockholm should be dense and prevent urban sprawl. New houses should be energy-efficient and built close to public transports. For us, liveability is a keystone in city planning and adapt to climate change.

Ecodistricts/Sustainable Housing

What does a sustainably growing city look like? The ecodistricts of Hammarby Sjöstad and Stockholm Royal Seaport both serve as great examples of green city planning. Hammarby Sjöstad has long served as a symbol for the future Stockholm, and every year thousands of visitors learn what is making the district an international role model. The initial idea was born back in 1990, and most of the district has now been completed. Once fully built, Hammarby Sjöstad will accommodate 25,000 people in 11,000 housing units. Known as the Hammarby model, the



solution is based on a closed eco-cycle in which waste and energy consumption is minimised, and recycling is used whenever possible. The target: environmental impact should be cut by 50 per cent compared to conventional standards.

Now the next generation of eco city districts – the Stockholm Royal Seaport – is being developed in a former industrial and port area. Plans are under way for 12,000 new housing units and 35,000 workplaces that will be combined with modern port operations.

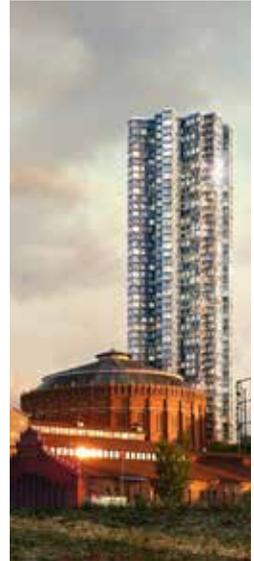
This area has even stricter environmental requirements than Hammarby Sjöstad, and the target is to be fossil-fuel free by 2030 and adapted to a changing climate. Innovative green technology will enable the residents to manage their own energy consumption using smart phones. These high environmental and energy efficiency standards are now common use when building new areas on all city-owned land.

Refurbishment

Existing properties are being renovated and developed with high environmental standards. Properties from the 1960s and 1970s are common in many of Stockholm’s suburbs.

The project Sustainable Järva has tested new models for sustainable refurbishment of city owned housing in the Järva area, built in the 1960s using 350 apartments function as test objects. The Sustainable Järva project has cut energy consumption by 50 per cent for heating. In addition, a 10,000 m² sun cell park has been installed, making it one of Sweden’s largest. The next step is to refurbish 5,200 apartments in the area. Biking and car sharing is also promoted through the Sustainable Järva project. The renovation costs were kept low to enable affordable rentals, and for the residents to be able to live in their apartments after the refurbishments.

The EU funded GrowSmarter project will refurbish housing stock from the 1960s and 1970s in the southern part of Stockholm by using smart technology in a wide variety of sectors. The Grow Smarter project includes advanced information and communication technology, and better connected urban mobility, incorporating renewable energy sources directly into the city’s supply network, smart street lightning and waste collection as well as Smart building shell refurbishment. The project will result in 60 per cent energy reduction, 60 per cent reduction of transport emissions, and 60 per cent reduction of greenhouse gas emission from energy use.



50 %

The Sustainable Järva project has cut energy consumption by 50% for heating.

Sustainable transport



100%

100% of the buses in Stockholm run on fossil free fuel.



76%

Bicycling in the City of Stockholm has increased by 76% during the past 10 years, also during the winter season.

Another challenge Stockholm shares with other cities is to design transport solutions with minimal/reduced effect on the environment. This is a critical factor in order to reach the long-term target. The city's Mobility Strategy is a key to achieving the goal of becoming fossil fuel free. It promotes public transport, walking and cycling all year round instead of taking the car – the starting point in all city, transport and infrastructure planning.

Public transport

In Stockholm, 80 per cent of rush hour travellers use public transport to and from the inner city. 100 per cent of the buses in Stockholm run on fossil free fuel. The City of Stockholm is co-investing in an extensive expansion of the metro system, including additional and extended metro lines. This will result in the largest expansion of the Stockholm metro in modern times, starting in 2016.

Bicycling and walking

Bicycling in the City of Stockholm has increased by 76 per cent during the past 10 years, also during the winter season. A bicycle sharing system has been running for many years and is expanding. The City of Stockholm is investing in bicycle infrastructure including commuter lanes for bicycles.

Congestion charging

Congestion charges were introduced in 2006 and on a permanent basis since 2007. The cost is charged levied on vehicles for passages to and from the inner city. The congestion charging system has decreased traffic volumes by 20–25 per cent on average during peak hour, and is a high tech fully automated system.

Clean vehicles

The Clean Vehicles in Stockholm programme has been running since 1994. The aim is to speed up the transition to clean vehicles and renewable fuels. At present, the programme has helped create a growing market for clean vehicles in Stockholm. Today, approximately 150,000 clean cars and more than 400 clean heavy duty lorries operate in the greater Stockholm area. 17 per cent of the transport fuel used comes from renewable sources. This is one of the important parts in making Stockholm a completely fossil fuel free city by 2040.

Biogas

Stockholm's two wastewater treatment plants turn sewage and food waste into biogas. The upgraded biogas is used as vehicle fuel. However, the demand for biogas is greater than the supply, and plans are underway to further increase production and availability of biogas. In 2020, 70 per cent of all food waste in Stockholm should be used for biogas production.

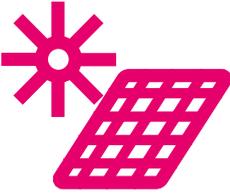


70%

In 2020, 70% of all food waste in Stockholm should be used for biogas production.



Sustainable energy



10,000 m²

Järva in Stockholm is the most sun cell dense area in Sweden with its 10,000 m² sun cell park.

Improving energy efficiency and aiming for 100 per cent clean energy, is a top priority for the City of Stockholm. Stockholm has four distinct seasons and the energy demand covers both heating in winter and cooling in the summer.

Waste-to-energy and District heating

Stockholm has a district heating grid that dates back more than 50 years. This infrastructure is one of the most important aspects of Stockholm's climate mitigation achievements. District heating comprises more than 80 per cent renewable fuel or energy from waste or residual heat. 80 per cent of all buildings are connected to the district heating grid. Europe's largest bioenergy plant is now being built in Stockholm. The goal is that Stockholm will have fossil free heating by 2030 at the latest.

The most sun cell dense area in Sweden

Järva in Stockholm is the most sun cell dense area in Sweden with its 10,000 m² sun cell park, and is currently developing new ways of integrating solar energy in demarcated areas. The project heavily focuses on citizen ownership, both in understanding the process and developing new ways of informing the public.



Engaged citizens

The City of Stockholm strives to incorporate sustainability into every aspect of the city life, but to reach all the way, it is crucial to have the Stockholmers onboard. And they are! The citizens of Stockholm are deeply involved in their city. Seven out of ten are interested in environmental issues, and believe the city should impose strict requirements on its residents when it comes to environmentally friendly living. Eight out of ten use and are satisfied with the public transport system during rush hour. Nine out of ten believe it is important to have a long-term strategy for Stockholm's development. An increasing number of Stockholmers also chose to buy organic and fair trade food.

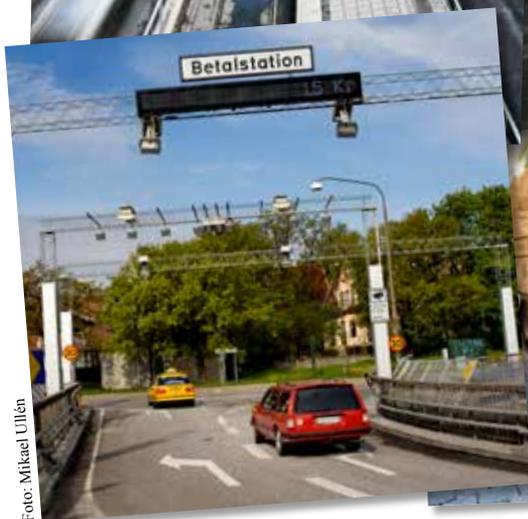


Foto: Mikael Ullén



Stockholm

– The first European Green Capital

In 2010, Stockholm proudly became the first ever European Green Capital. The assessment was based on a number of criteria; climate impact, local transports, green areas and air quality. The jury from the European Commission motivated their choice with the following statement:

“ Stockholm has an outstanding, long historical track record of integrated urban management also confirmed by its on-going credible green credentials. Ambitious plans for the future clearly demonstrate continuity. ”

The European Green Capital Award is given to a city which is noted for achieving high environmental standards, is committed to ambitious goals for further improvement and sustainable development, and act as a role model to inspire others and promote best practices in other cities.

The City of Stockholm is tremendously proud of the European Green Capital Award, while it also carries a great responsibility for Stockholm to be a role model for others.

The city’s strategy is to continue to share best practice models and learn from the successful accomplishments of other cities. The European Green Capital Award has given Stockholm an even stronger position in this context. It is the strongest recognition of the city’s environmental achievements, and it clearly confirmed that the city is on the right track. The award is now clearly an integrated part of our brand.

There are many challenges ahead. It is vital to have a common approach to goals, and a close-knit cooperation with internal and external parties. Together we can make a difference for a sustainably growing world.

The aim for Stockholm is to always be a green capital!



Katarina Luhr

Vice Mayor for Environment



“ The ways cities of the world contribute to the solutions of tomorrow are – and must be – diverse. It is, however, our conviction that intercity co-operation is vital in addressing climate challenges. Climate issues are an illustrative example of the importance of international cooperation and collaboration as effects of a changing climate knows no national- or city boundaries. The City of Stockholm is grateful to be able to take part in sharing experiences and solutions. Cities can – and must – lead the way and we are continuously seeking innovative solutions to make the shift towards a sustainable society. In this work, cities must be as pragmatic and concrete as possible. Learning from each other is a very important ingredient in the recipe for creating green, prosperous cities! ”

