



# THE ROAD TO FOSSIL FREEDOM

Climate Strategy 2020-2030



## **Welcome to Aarhus**

Since the Viking Age, people have been living where Aarhus is situated today. People who have been driving the development of the city forwards. For that reason, Aarhus today lies on a strong foundation of historical anchorage and continuous innovation. Young and old walk about side by side, international students and global enterprises settle in Aarhus. Being located close to forests and beaches and boasting a pulsating inner city milieu, efficient infrastructure, bicycle paths, and a rich cultural scene, Aarhus is the perfect setting for the good life.



### **Ambitious climate strategy**

The good life requires a stable foundation. That foundation is challenged by the global climate crisis. Therefore, Aarhus has been working determinedly to reorganise the city for over a decade. In 2008, the City Council took the lead and adopted an ambitious goal regarding a climate neutral society by 2030. That ambition has turned out to be a motivation for creating the necessary changes. Since then, citizens and businesses in Aarhus have halved their greenhouse gas emissions.

The climate crisis is global, and we can only solve it together. Consequently, Aarhus is also working on reducing emissions in other areas of the world. This for instance happens via requirements for building materials, purchasing and transporting goods – and by showing and sharing the solutions the city is working on. The political ambition for the climate effort in Aarhus is completely clear:

- The green transition requires everyone to reorganise and participate. No one finishes until everyone finishes. Thus cooperation is paramount. Knowledge is to be shared and experiences passed on to others, both locally and internationally.

### **Strengths and opportunities**

Aarhus is only a small part of the world. Hence the direct greenhouse gas emissions coming from the city's energy supply and local production constitute a very small part of the collective direct emissions from all the countries and cities of the world. But precisely because Aarhus is part of the world, the city has ample opportunity to influence greenhouse gas emissions in other places.





By leading the way and showing that it is possible to reorganise society, you can be a part of showing others the way. For that reason, cooperating with other players – both national and international – is a natural part of the effort in Aarhus. Simultaneously, the purchasing volume of Aarhus Municipality is of a rather substantial size. This means that the city with its purchasing strategy alone can influence the market and the supply of goods and services. For example, the City Council has adopted a plan for switching from fossil cars to emission free vehicles. And when the municipality builds and maintains buildings, climate-friendly solutions are typically prioritised as highly as the economy. A large part of the consumption coming from businesses, citizens, and public institutions is produced in other areas of the world. When requirements are established, Aarhus influences the emissions elsewhere in Denmark and the world. This also helps increase the foundation for businesses investing in changes and ensuring a local and global market for green solutions. Additionally, a will to cooperate on the global solutions exists in Aarhus, and a cardinal point in the climate strategy is precisely the interplay between the public, businesses, and the municipality which together make good solutions even better.

### **Partnerships and international collaborations**

For Aarhus, it is a natural part of the climate effort to establish partnerships with cities, industries, and businesses concerning select development projects which can bolster several bottom lines. At the centre resides the wish for value creation in especially three areas:

- The solutions created and tested by the development projects need to be scaleable and usable in other cities and countries.
- The development projects need to create value for the businesses involved in order to strengthen their international competitiveness.
- The development projects and their solutions need to contribute to Aarhus' work on the climate challenges.

Partnerships span locally anchored projects such as 'Energy Leap Aarhus', which is a professional network where private building owners together with AffaldVarme Aarhus and Aarhus Municipality focus on energy savings through shared knowledge and close collaboration. So far, the project consists of 24 partners with a collective building mass of 3.8 million km<sup>2</sup>.

'Energy Leap Aarhus' is a textbook example of how private partners, public utilities, and the municipality work together on a concrete challenge that yields value on many bottom lines.

Besides locally anchored partnerships, Aarhus also works beyond Danish borders. This means partnerships on development projects in diverse countries such as China, India, Germany, and the United States, just to name a few. In the US, Aarhus was invited to collaborate with Pittsburgh on developing the city's CHP system in a more climate-friendly direction. The main purpose of the collaboration is to create a sustainable timetable for Pittsburgh which is to contribute with bringing the city closer to the goal of reducing the city's CO<sub>2</sub> emissions as well as accelerating the city's green transition.



## **Strategic goals**

In order to operationalise working with the climate challenges in Aarhus, the City Council has adopted a climate strategy which will be followed up by 4-year climate plans. Recently, the 5th edition was adopted, which will be in effect up to and including 2024. The climate strategy is to ensure that the city has the long-term strategic perspective and creates climate plans that constantly support those goals. Many roads lead to the goal, and the roads can be very different.

All actions have consequences – not just for the climate, but also for other matters. Aarhus needs to increase efficiency while simultaneously lowering energy consumption. When consumption is reduced, less needs to be reorganised, fewer needs for investments in new technology exist, and less needs to be operated in society.

By increasing efficiency, the city not only saves money, but a better foundation for the green transition and increased competitiveness is also created. This way, Aarhus creates a society which is more effective and more resilient to changes. Through a holistic and opportunity-oriented approach to the green transition, the climate strategy will contribute to the green transition achieving the biggest possible positive derived effects – and thus creating an even better urban society.

On the following pages, you can find select examples of how we in Aarhus work with the green transition of the city.

Enjoy.



# ENERGY

## **COLLABORATION PROJECT CREATES ENERGY SAVINGS IN BUILDINGS**

- ‘Energy Leap’ has the purpose of reducing the energy consumption in Aarhus-based buildings.
- Energy optimisation through collaboration and knowledge sharing.
- Smart use of the energy ensures green opportunities.



‘Energy Leap Aarhus was created as a professional network for energy optimisation among leading building owners in town. Through benchmarking of property and consumption data as well as collaboration on how you can work with the energy consumption, the network strives to lower the collective energy consumption in the registered buildings.’

**Casper Sønnichsen,**  
Project Manager for Energy Leap Aarhus  
at the local district heating company  
AffaldVarme Aarhus



## **LONG-TERM INVESTMENTS IN THE INFRASTRUCTURES OF DISTRICT HEATING AND ELECTRICITY**

- Energy Strategy Aarhus.
- DKK 8.4 billion will be invested in distribution systems, energy plants, and green transition.
- A society without fossil fuels in 2050.



‘Energy Strategy Aarhus is an amazing example of Aarhus Municipality succeeding in reaching out to the surrounding society and garnering the necessary support for the green transition for a carbon neutral Aarhus. Collaborating with the big energy companies can make a huge difference for all of Aarhus and for each citizen’s green routines – whether it comes to using green heating, green electricity, or acquiring an electric car.’

**Bünyamin Simsek,**  
Councilman for the Department of Technology  
and Environment at Aarhus Municipality



# TRANSPORT AND MOBILITY

## FAST CHARGING STATIONS

- The station is available to everyone and does not require a subscription.
- The charging station is scalable and can be expanded as needed.
- The result of collaboration between the Port of Aarhus and the energy company OK.



‘Following a successful collaboration with the Port of Aarhus, we are pleased to now be able to offer the local electric car owners an easily accessible and effective charging solution near the port headquarters. By now, it has been a few years since we launched our first generation of charging stations in the Aarhus area, and we have since experienced a significantly rising demand for different charging solutions from our customers.’

**Thor Folmann Krarup,**  
Product Manager for E-mobility at OK

## CARPOOLING WITH YOUR COLLEAGUES HELPS THE CLIMATE

- Transportation in Aarhus is one of the biggest challenges in becoming a carbon neutral city in 2030.
- Aarhus Municipality has become a carpool partner with the Federation of Danish Motorists (FDM) and is disseminating the app 'Ta'Med'.
- Carpooling as an alternative to private motoring on weekdays.



'The carpool app Ta'Med is a good tool for rethinking our way of transporting ourselves. When Aarhus Municipality chooses to become a carpool partner, it is because we at the municipal level want to encourage our colleagues to think alternatively about daily transportation, e.g. by using carpooling.'

**Katja Kristensen Tøttrup,**  
Development Consultant at Aarhus  
Municipality



# CONSTRUCTION AND URBAN DEVELOPMENT

## DEMOLITION COMPANY REUSES BUILDING MATERIALS

- Material bank: exchanging used building materials.
- Reduction of carbon emissions when reusing.
- Solve the climate challenges together.

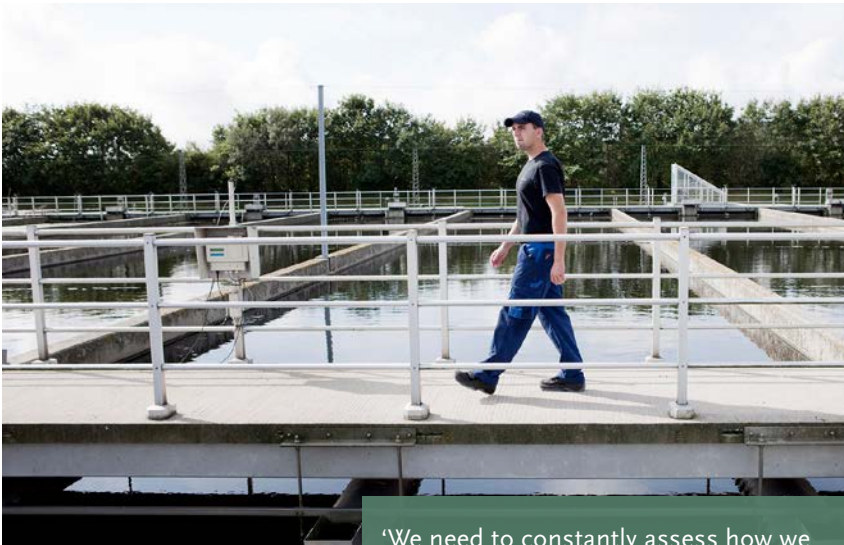


‘It is part of our DNA as a business to reuse the building materials we tear down. It already started back in 1955, when my grandfather made a living by selling used building materials. At the time, nearly all building materials were reused, which is a practice we as a business want to reinstate today.’

**Thomas Kingo Karlsen,**  
Owner of Kingo Karlsen A/S

## TREATMENT PLANT IS ENERGY PRODUCER

- Marselisborg Wastewater Treatment Plant has reduced its power consumption by 25 percent in 10 years.
- The plant can simultaneously produce 50 percent more energy than it consumes.
- According to the UN Global Goals, 60 percent of the world's wastewater must be purified before 2030. This is possible if every new wastewater treatment plant is operated and optimised like Marselisborg Wastewater Treatment Plant.
- This will save 650 TWh of energy worldwide, which amounts to the entire energy production from every coal power plant in the EU.



‘We need to constantly assess how we can smartly use and produce our energy. This way, we cover nearly 100 percent of all the energy we need at our treatment plant in Aarhus.’

**Lars Schrøder,**  
CEO, Aarhus Water



# INDUSTRY AND AGRICULTURE

## EXPERIENCE WITH GREEN TRANSITION HELPS NEWLY QUALIFIED PROFESSIONALS

- Knowledge about green business models, supplier agreements, CO<sub>2</sub> accounts, etc.
- Experience with optimising an already climate-conscious business.
- Broad network of people who wish to work with green transition.



‘Via the Green Academy, we have gained an understanding and an insight into the business and the accompanying language. We need to comprehend the current situation and mindset of the businesses in order to help them going forward.’

**Anna Kirstine Spanggaard Jespersen,**  
Sustainability Consultant from the Green Academy

## SMART ENERGY PORT OF AARHUS

- Focus on circular economy and energy efficiency in the Port of Aarhus.
- Data-based initiatives.
- Starting signal for a long-term collaboration.



‘Smart Energy Port of Aarhus is a platform where we in collaboration with businesses create and obtain important data. The data we gather will shape the foundation for concrete initiatives that focus on circular economy and energy efficiency.’

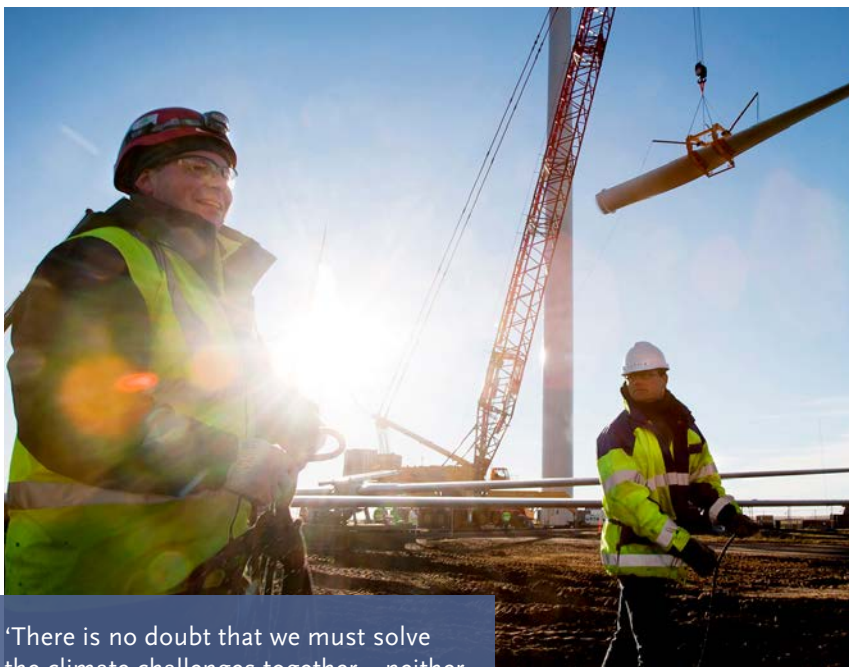
**Uffe Vinther Kristensen,**  
Development Consultant at Aarhus  
Municipality



# TRANSFORMING AARHUS

## MUNICIPALITY AND BUSINESS SECTOR IN ALLIANCE

- Climate Alliance Aarhus: a development forum between businesses, organisations, and the municipality.
- The purpose is working together towards a carbon neutral Aarhus in 2030.
- Vestas is part of Climate Alliance Aarhus and for instance focuses on several charging stations.



‘There is no doubt that we must solve the climate challenges together – neither the municipalities nor the businesses can handle it on their own. But together we can make it. And that is what Climate Alliance Aarhus is to help us achieve.’

**Marianne Gjerløv,**  
Head of Business and Sustainable  
Development at Aarhus Municipality



## THE CLIMATE TORCH

- The climate torch is a baton with the purpose of inspiring others to act greener.
- Task: creating a new green community.
- THE UPCYCL: communities about residual materials.



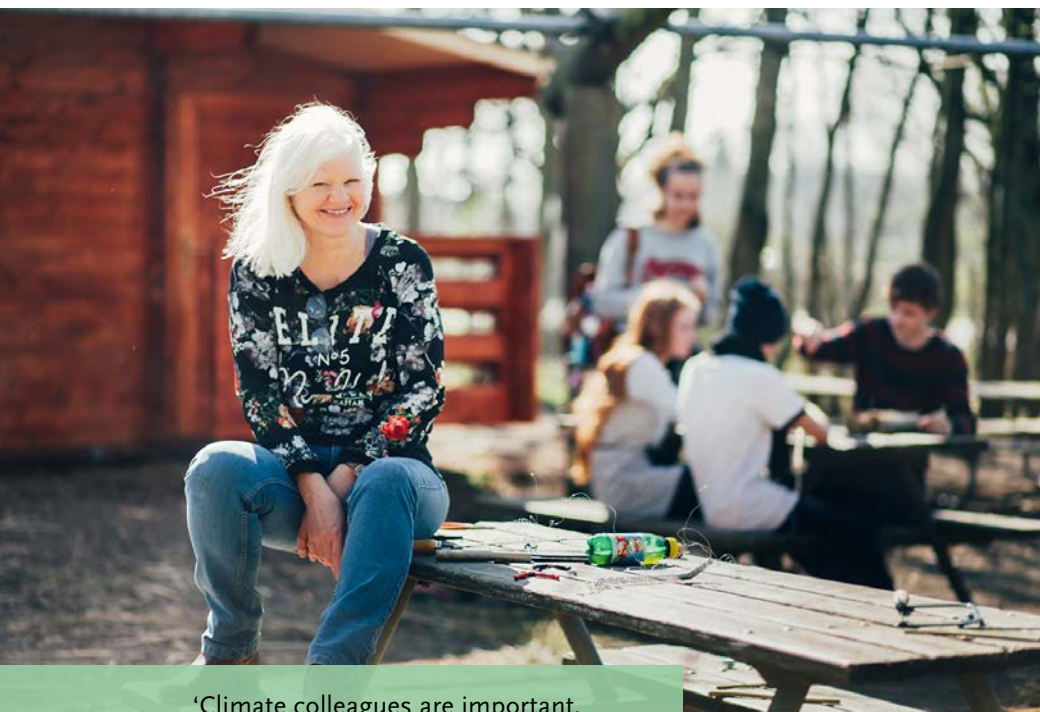
‘Rikke and THE UPCYCL are the obvious choices for the climate torch, because their business model in itself creates sustainable transition. They are proof that the people-planet-profit mentality is a prerequisite for us delivering on this agenda.’

**Per Smedegaard,**  
Director of Teatret Svalegangen

# A GREEN ORGANISATION

## THE CLIMATE COLLEAGUE AWARD

- An extra effort to think green transition into the core tasks.
- Showing the good examples and inspiring colleagues.
- Climate-related efforts across municipal departments.

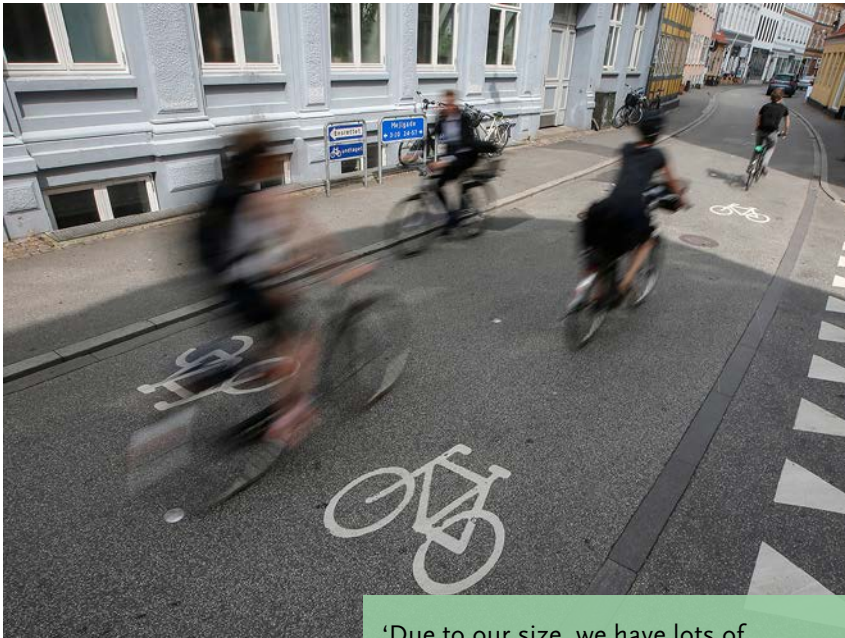


‘Climate colleagues are important, because the climate challenges demand action now. Each of us must do what we can to take care of the planet, and we need to prepare the youth for sustainable behaviour both now and in the future.’

**Birthe Jason,**  
Teacher at Sabro-Korsvejens Skole

## ENERGY CONSULTANTS NEED TO USE E-SCOOTERS

- Demand for climate-friendly transportation from suppliers.
- Municipal purchasing affects the green transition.
- Focus on bottom lines, not just prices, regarding climate and development.



‘Due to our size, we have lots of purchases. When we for instance demand that our suppliers must transport their goods in the most climate-friendly way possible, we contribute to pushing the development in the right direction, because our demands are part of shaping the solutions adopted by the businesses.’

**Jacob Bundsgaard,**  
Mayor, City of Aarhus



13 CLIMATE ACTION



**Technical and  
Environmental  
Administration**

City of Aarhus

Karen Blixens Boulevard 7  
8220 Brabrand

