

# FJORDBUS

Short trip to major change







"Port of Aalborg is investing in the Fjordbus project because it is important for the city to increase mobility across the Limfjord and be a first mover in the development and implementation of technology to enable autonomous ferry operations across the Limfjord in the future".

**CLAUS HOLSTEIN**  
CEO, Port of Aalborg

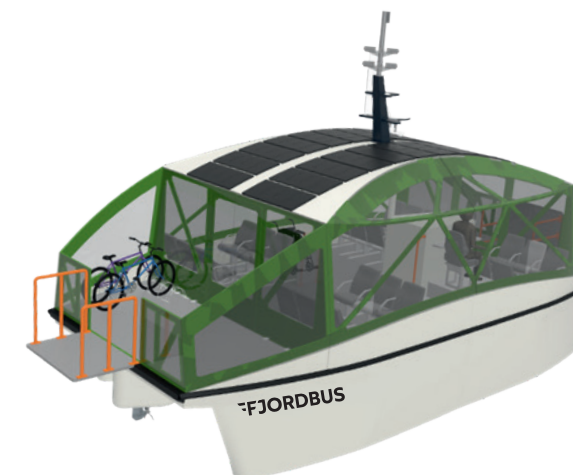
## Link to the future

In recent years, Aalborg has established itself as a city of distinction. A city that takes urban development and sustainability seriously. We remain an attractive destination for a constant stream of students, jobs and tourists. Meanwhile, pressure on the already congested infrastructure in the city centre is mounting. Consequently, we are continuously prioritising sustainability and envisaging mobility-promoting and flexible transport solutions.

### **DRIVERLESS AND FOSSIL-FREE PORT TRANSPORT**

Fjordbus is a project under the Centre for Logistics and Cooperation to establish a fully electric, autonomous ferry link between Aalborg and Nørresundby. A bus on the water, designed to enhance the mobility of the people of North Jutland, bolster Aalborg as a tourist destination and propel us to the forefront of sustainable maritime development. Benefiting Aalborg, North Jutland and Denmark.

Fjordbus, which is due to be implemented in 2022, will become the first emission-free, autonomous ferry link in Denmark and one of first worldwide





# In the heart of the city

Fjordbus will sail between Musikkens Plads immediately east of the House of Music in Aalborg and Stigsborg Waterfront in Nørresundby. It will be easy to hop on and off also by bike and the trip will only take five minutes.

Upon its completion, the Stigsborg Waterfront development is expected to house 7,500 residents, as well as numerous businesses, cafes and public institutions. Stigsborg Waterfront is an ideal stop for Fjordbus, which will become the obvious transport option for people living and working in the area.

On the Aalborg side, passengers will board and disembark in the heart of the city's cultural centre and the trip will afford a unique opportunity to experience Aalborg's House of Music and waterfront from the water.

## CLOSER TOGETHER

Just a few years ago, crossing the Limfjord without a car was no simple matter. The fjord acted like a bottleneck that seemed to stretch the distance between Aalborg and Nørresundby.

Fortunately, this is about to change thanks to such initiatives as the Culture Bridge, which has provided new transport opportunities. Along with the planned bicycle and pedestrian bridge between Aalborg C and Stigsborg Brygge, Fjordbus will help to further unite the two cities and enhance the mobility of the people of North Jutland.

**ROUTE:** Musikkens Plads to Stigsborg Havnefront

**DURATION:** 5-7 minutes

**DEPARTURE:** Every 15 minutes



# Better mobility — better city

Aalborg's infrastructure is under pressure. Consequently, Aalborg Municipality has through its strategy “Mobility 2040” set out a clear direction for the future development of the transport system. We need to improve our movement both sustainably and with greater consideration for the environment, the city and each other. This requires us to think in new ways both figuratively and literally.

Via Fjordbus, we can significantly improve the mobility of the people of North Jutland, providing them a much-needed sustainable transport alternative. It will also afford the individual citizens reduced travel time and greater freedom while positively influencing the current traffic situation in Aalborg.

## SUSTAINABLE URBAN DEVELOPMENT

Sustainable transport is not merely about reducing the CO<sub>2</sub> emissions of our means of transportation. It is about shortening the distances and ensuring flexibility and diversity. About facilitating our unproblematic movement from A to B and providing a more comprehensive array of transport options. In this respect, Fjordbus will clearly be a part of Aalborg's sustainable development.



## Positive impacts

### ALEVIATED CONGESTION ON LIMFJORD BRIDGE

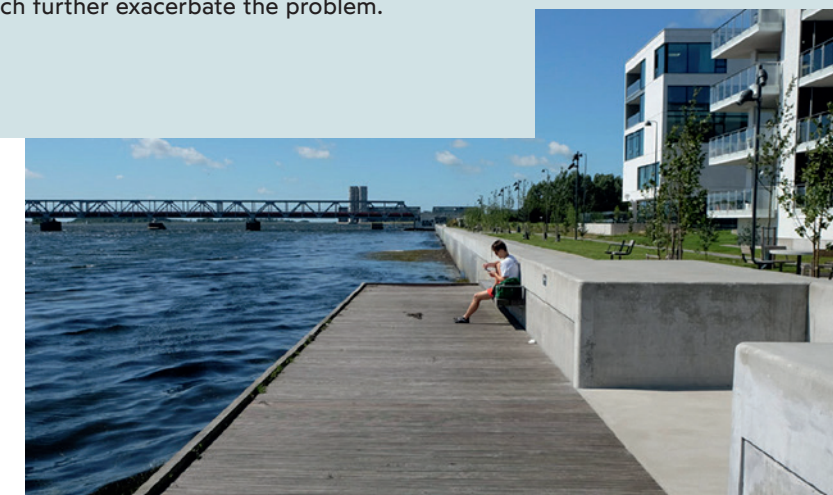
Limfjord Bridge is one the most congested areas in Aalborg Municipality. Fjordbus will constitute an attractive transport alternative for people e.g., commuting to and from work or school.

### REDUCED TRAFFIC IN THE CITY CENTRE

An increasing number of vehicles on the roads and regular traffic jams on Limfjord Bridge have become a common feature in Aalborg. Fjordbus can alleviate the build-up of traffic and reduce congestion in the city centre.

### IMPROVED PARKING CONDITIONS

Issues around the availability of parking in Aalborg will also be alleviated by a car-free transport option, especially during such large events as The Tall Ships Races, which further exacerbate the problem.





## A safe and secure journey

Naturally, Fjordbus will be fitted with all necessary and legally required safety equipment. 24-hour camera monitoring by the North Jutland Emergency Management Agency provides additional security to the passengers.

- Fully autonomous, emission-free fjord bus
- Expected lifetime: 15 years
- Capacity: 20-25 passengers
- Space for prams, bicycles and wheelchairs
- Movable landing facility



## Fjordbus — Yes, please!

To discover more about the significance of Fjordbus for the citizens, we conducted a survey in 2019. The response was unequivocal: The people of North Jutland want a fjord bus.

87%

87% are interested in using Fjordbus as an alternative to the Limfjord Tunnel and Bridge.

64%

64% are willing to pay \$3.5 or more for a trip if their waiting time is 15 minutes or less.

87%

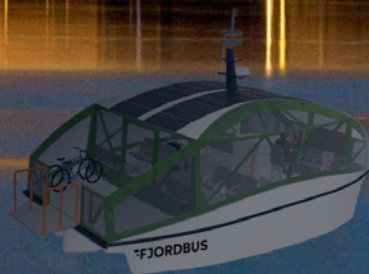
87% believe it is important that Fjordbus becomes an integral part of the public transport system.



# A unique experience on the water

A ferry trip across Limfjord is about much more than simply getting from A to B. It is also about the experience. Fjordbus affords citizens and visitors alike a unique opportunity to come closer to the fjord and discover new vistas of Aalborg and Nørresundby.

FJORDBUS



## A TOURIST ATTRACTION

With boarding centrally at Musikkens Plads, Fjordbus will in all probability become a draw for the thousands of tourists who visit the waterfront area, especially during the summer. Not least in connection with such major events as The Tall Ships Races and the DGI National Sports Convention. Aalborg also hosts thousands of tourists from near and far arriving by cruise ship every year.

FJORDBUS



"The Fjordbus project has everything and represents an absolute win-win for the residents of Aalborg and Nørresundby, as well as the maritime companies of North Jutland. Fjordbus illustrates the scope of our activities in North Jutland, from a highly specialised university to some of the leading Danish maritime companies and a CLS (centre for logistic cooperation) to ensure application of the latest technology." As the national leader in the maritime sector, our collaboration around the autonomous electric fjord bus epitomises the capabilities and environments that North Jutland possesses to share knowledge and create jobs"

## RASMUS HAUGAARD

Chairperson, Erhverv NordDanmark Chamber of commerce





“The Fjordbus project is a key element in documenting Denmark’s leading role in technological development (autonomy) and the blue-green transition. The project will also benefit many maritime companies in North Jutland”.

**TROELS SEVERINSEN**

CEO Logimatic and Chairperson of the Maritime Network in Aalborg

# Out in the blue

Green transition and digitalisation in the maritime sector have gained prominence on the agenda in recent years. Through a pioneering project such as Fjordbus, Denmark can become a forerunner for climate-friendly shipping with enormous potential benefits both locally and globally.

## LOCALLY

### MORE EMPLOYMENT IN THE MARITIME SECTOR

Fjordbus will significantly influence the development of the Danish maritime industry and bolster the competitiveness of both the project’s partners and external stakeholders. The project will create more jobs in the maritime industry and aid green transition within Blue Denmark.

## GLOBALLY

### INCREASED COMPETITIVENESS AND BRAND VALUE

There is as yet no fully autonomous vessel operating anywhere in the world, although several countries are striving to become the first. Consequently, Fjordbus renders us an opportunity to be one of the first countries to introduce a fossil-free, driverless ferry service, just as we led the way in driverless buses, thereby underscoring our leading global position in maritime technology and sustainable development.





# Value all around

Fjordbus will do far more than merely improve the everyday lives of the people of North Jutland right here and now. It has the potential to become hugely profitable, not just for Aalborg but for the whole of Denmark. Besides the significant staffing, fuel, and maintenance savings that will be achieved in the long run, the numerous benefits will collectively constitute a tremendous socio-economic value.



### HEALTH

- Reduced CO<sub>2</sub> emissions
- Reduced air pollution
- More people opting to walk or cycle



### TURISM

- Increased global publicity
- Increased tourist numbers in Aalborg
- Strengthening of Denmark's reputation



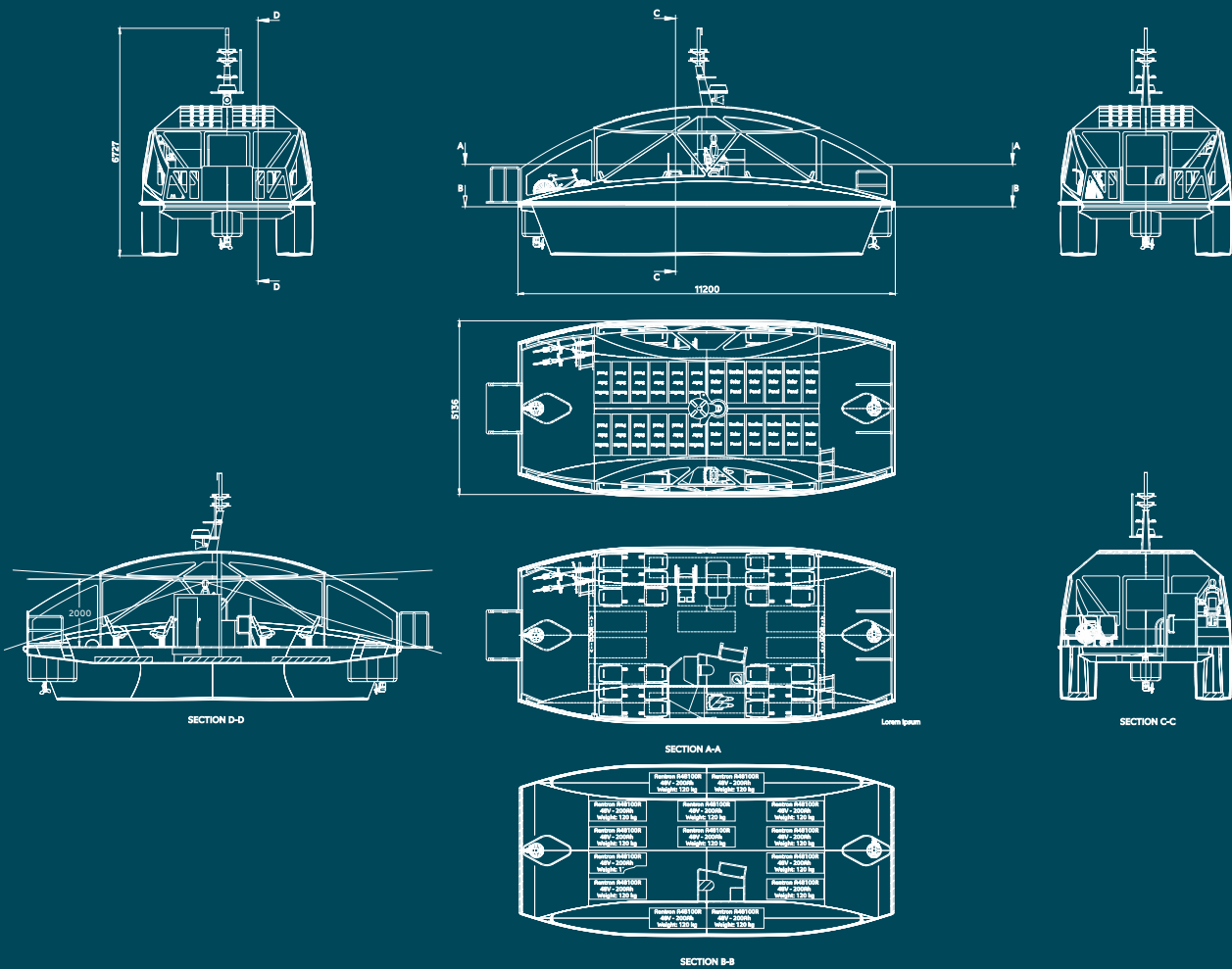
### WELL-BEING

- Reduced traffic noise in the centre
- Improved parking conditions
- More freedom of choice
- Shorter travel time



### DANISH TRADE & MARITIME INDUSTRY

- More employment within Blue Denmark
- Enhanced global competitiveness
- Denmark as a forerunner in maritime innovation



LOGIMATIC

martec

## Estimated budget for the Fjordbus project

Development of the Fjordbus project

Prototype vessel including equipment and passenger fittings

Onshore facility and communication equipment



\*Already financed by Shippinglab and Port of Aalborg

PORT OF AALBORG

ERHVERV NORDDANMARK  
CHAMBER OF COMMERCE

center for  
logistik og  
samarbejde

The Fjordbus project is managed by the Centre for Logistics and Cooperation, a subsidiary of Port of Aalborg. We work closely with ShippingLab / DTU, Port of Aalborg, Logimatic and Aalborg University, as well as a number of other local players in logistics and maritime development.



If you wish to know more  
about Fjordbus, we would  
like to hear from you.

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