



City of
Amsterdam

Clean Air Action Plan

April 2019

**Emission-free
Amsterdam**





Summary

Dirty air is unhealthy air

Air pollution is the third-largest health risk for the people of Amsterdam, after smoking and the combination of a poor diet and too little exercise. The main culprits are nitrogen dioxide (NO₂) and particulate matter (PM₁₀ and PM_{2.5}). Some of these hazardous substances originate elsewhere, but some come from emissions within the city and the region, mainly from traffic, mobile machinery, maritime transport and industry. The city's dirty air reduces the average life expectancy in Amsterdam by just over a year. There are European standards for emissions and air quality, but they do not yet adequately protect public health.

Improving air quality at the source

The aim of the Clean Air Action Plan is to improve the air quality with a view to extending the average life expectancy of Amsterdam's inhabitants by three months in 2030. To achieve this, the Municipality intends to eliminate sources of pollution as far as possible. It will focus its efforts on sources where its measures will have the greatest impact: road traffic, passenger vessels and pleasure craft, mobile machinery and the burning of biomass and wood. The measures envisaged in the action plan are designed to ensure that Amsterdam quickly complies with the EU's air quality standards, but the city's ultimate target is to comply with the World Health Organization's (WHO) guideline for PM_{2.5} by 2030, whereby it would also comply with the WHO's less stringent guideline for PM₁₀. Calculations have shown that implementing the measures relating to traffic will reduce the concentration of atmospheric particulate matter (PM_{2.5}) below the WHO's guideline of 10.0 µg/m³ (microgram per cubic meter) by 2030. The NO₂ concentration will also decline to 14.4 µg/m³. The action plan is also relevant for achieving Amsterdam's climate targets. The combination of traffic-related measures will lead to a quieter, more liveable city and contribute greatly to reducing

CO₂ emissions. Mobility accounts for 9% of CO₂ emissions in Amsterdam and if mobility is entirely electric and electricity production is entirely sustainable CO₂ emissions can be reduced by that 9%. Every year an independent body will analyse the progress being made towards meeting the CO₂ targets for 2030 and 2050. The results will be incorporated in the Road Map for a Climate-Neutral Amsterdam.

Coherent measures are most effective

The approach taken in the Action Plan can be described as 'from the centre out' and 'from business to private'. In 2022, the city centre (see box) will be an emission-free zone for buses and coaches. In 2025, the area within the A10 ring road will be a zero-emission zone for road traffic, with the exception of passenger cars and motorbikes, and pleasure craft. In 2030, only emission-free vehicles will be permitted within the built-up area.

These goals will be achieved with a coherent package of measures designed to motivate Amsterdam's inhabitants to change their lifestyle. The measures fall into four categories: communication (highlighting the need for change); facilitation (ensuring that e-transport is feasible in practice); stimulation (promoting desirable behaviour); and regulation (making rules).

Specific measures make the difference

Communication: a publicity campaign will be launched to raise awareness about the importance of clean air and to inform businesses and residents about e-transport. The municipality will act as a forerunner and role model in making Amsterdam an emission-free city.

Stimulation: there will be subsidies for various target groups and extra privileges, such as parking

permits, for e-drivers. Subsidies will be used to promote actions that reduce emissions and to increase public acceptance of the measures that are being taken. A range of specific measures will be adopted to improve the air quality in the most polluted streets.

Facilitation: the emphasis will be on expanding the network of charging points for electric vehicles. The process will continue to be demand-driven (anyone who buys an electric car will be able to apply for a charging point in their neighbourhood), with more charging points at busy strategic locations. As the technology improves, the role of high-speed charging will grow. The target is to have 62 high-speed chargers by 2026, concentrated as far as possible at multi-functional locations such as load transfer points. A strategy will be formulated to guarantee the reliability of the charging network.

Regulation: the environmental zones will be expanded. This will result in part from the national harmonisation of environmental zones, but Amsterdam will also introduce emission-free zones, specific areas of the city that certain types of vehicle will only be allowed to enter if they have a zero-emission engine.

The principal targets are:

2020 Creation of an environmental zone within the A10 ring road for passenger cars from

emission standard Euro 4 and geographic expansion of environmental zones

2022 Emission-free zone for buses and coaches within the S100 south of the railway line. The emission standard for trucks entering the environmental zone is raised to Euro 6

2025 Entire built-up area is an emission-free zone for mopeds and scooters. Emission-free zone within the A10 ring road for heavy goods vehicles and vans, taxis, buses and coaches. Emission-free zone for passenger vessels, pleasure craft and public ferries

2030 Entire built-up area is an emission-free zone for all modalities

Getting started!

The adoption of the action plan by the city council will initiate a public consultation process during which the measures will be fleshed out. What are the precise criteria for subsidies? What conditions will the charging infrastructure have to meet? What conditions have to be met to secure public acceptance of the emission-free zones? What exceptions can legitimately be made for environmental zones? The action plan provides the framework for the answers to all of these questions. The issues covered in the action plan will be submitted individually for a vote in the city council after the summer.

Definitions

Zone definition: the environmental zones and emission-free zones in this action plan are defined in relation to the 'Centre', which is the central area within the S100. Unless otherwise stated, the zone is always the area within the ring road to the south of the railway line and Central Station.

'Within' means that the zone does not include the S100 itself. The same applies for the A10 ring road: a zone referring to the A10 means the area within the ring road.

Vehicles: vehicles with an electric engine are generally referred to with the prefix e- in this document; an e-car refers to an electric car.

Euro standards: for the sake of convenience, the indicator of the Euro standard for engine

blocks is always given in Arabic numerals: Euro 4 or Euro 6.

Nitrogen: Nitrogen oxides (NO_x) are the compounds of nitrogen and oxygen emitted by a combustion engine. In the air, NO_x are converted into nitrogen dioxide (NO₂). For the sake of convenience, in this action plan all nitrogen oxides are referred to as nitrogen, except in section 1.3 and the two appendices which focus on the technical details.

Particulate matter: PM₁₀ and PM_{2.5} are both particulate matter. The '10' and '2.5' indicate the maximum size of the particles in micrometers. Unless otherwise stated, in this action plan particulate matter means PM_{2.5}.

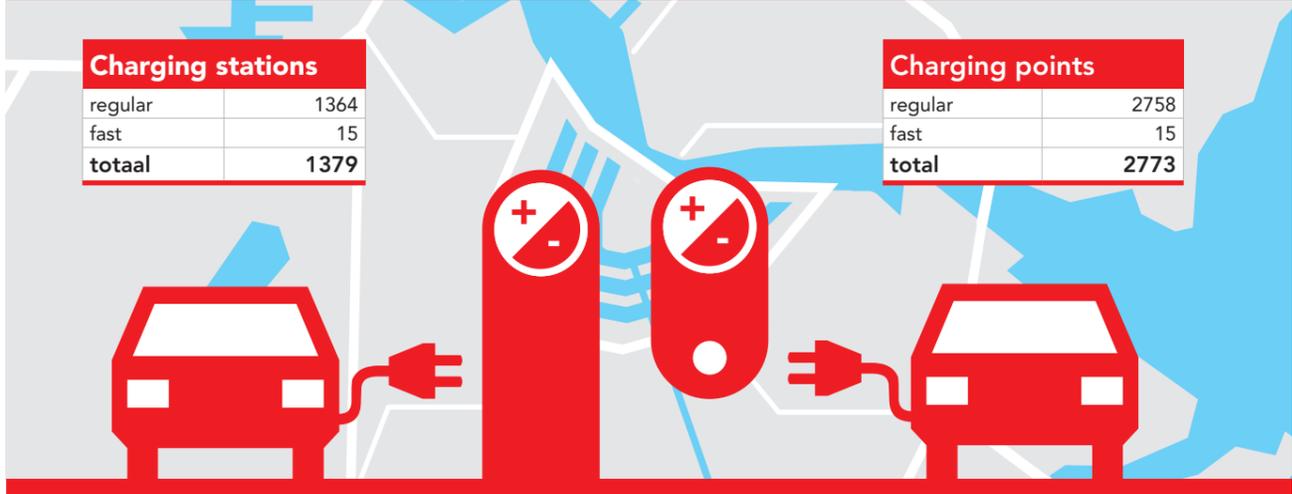


City of Amsterdam

Charge-update Amsterdam 2018

Charging stations	
regular	1364
fast	15
totaal	1379

Charging points	
regular	2758
fast	15
total	2773

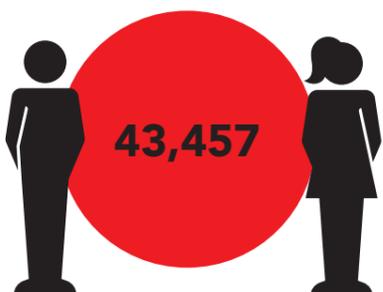


Charged kWh

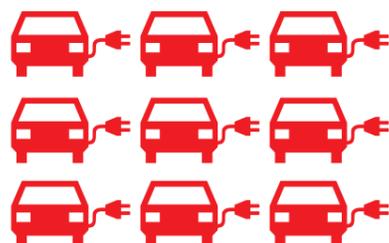


9,707,323 kWh

Number of individual users



Number of charging sessions



980,203

Zero emission kilometers charged

48,536,615 km



City of Amsterdam

Amsterdam emission-free Traffic zones



Emission-free centre in 2022

For buses and coaches



Emission-free zone within the A10 ring road in 2025

For buses, coaches, passenger ships, taxis, vans and heavy goods vehicles, pleasure craft, public ferries (mopeds and scooters in the entire built-up area)



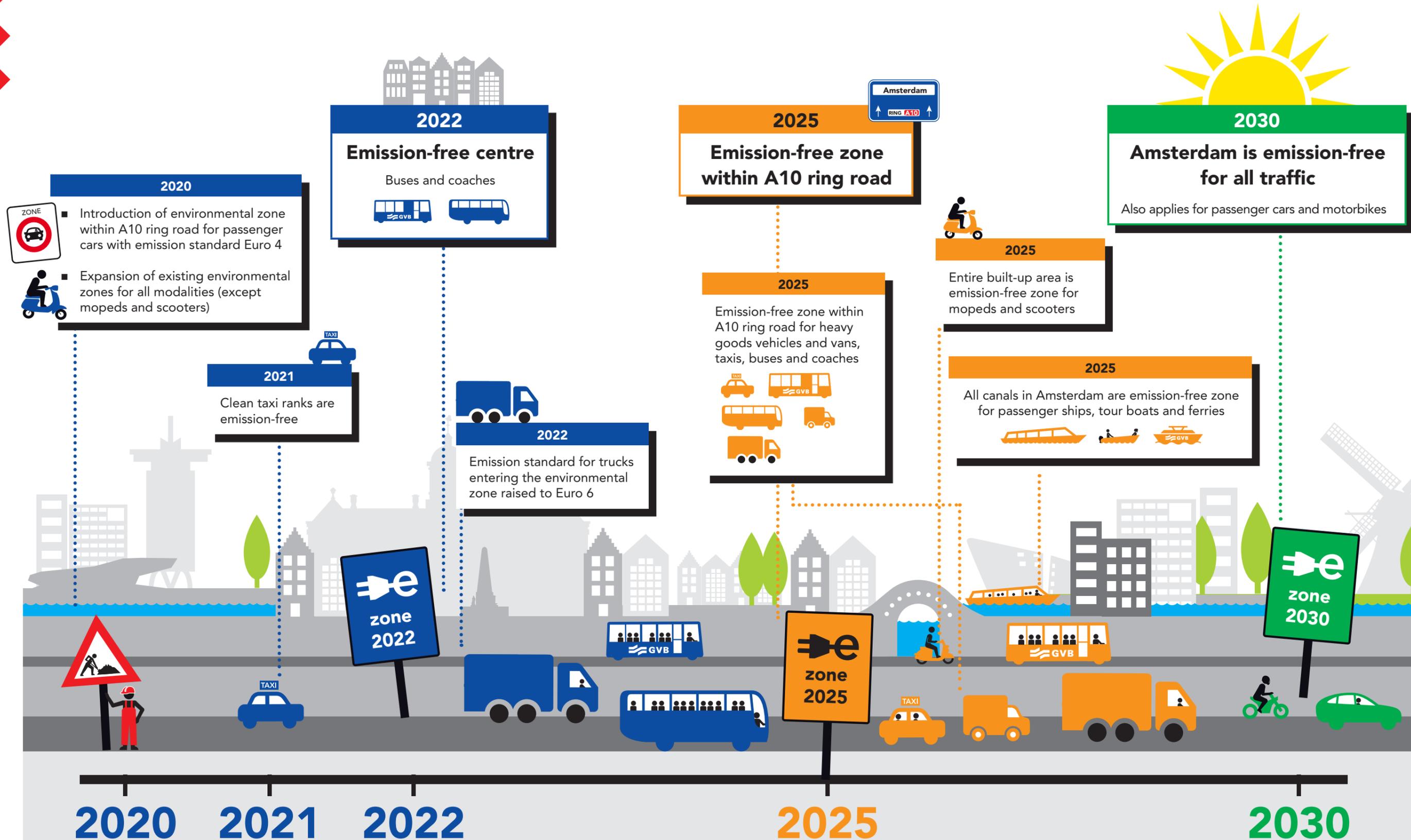
Emission-free Amsterdam in 2030

For buses, coaches, passenger ships, taxis, vans and heavy goods vehicles, pleasure craft, public ferries, mopeds and scooters, passenger cars and motorbikes.



City of Amsterdam

Amsterdam emission-free Phased plans for traffic



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