Gemeente
Amsterdam

The Amsterdam approach

to building a (fast) charging network

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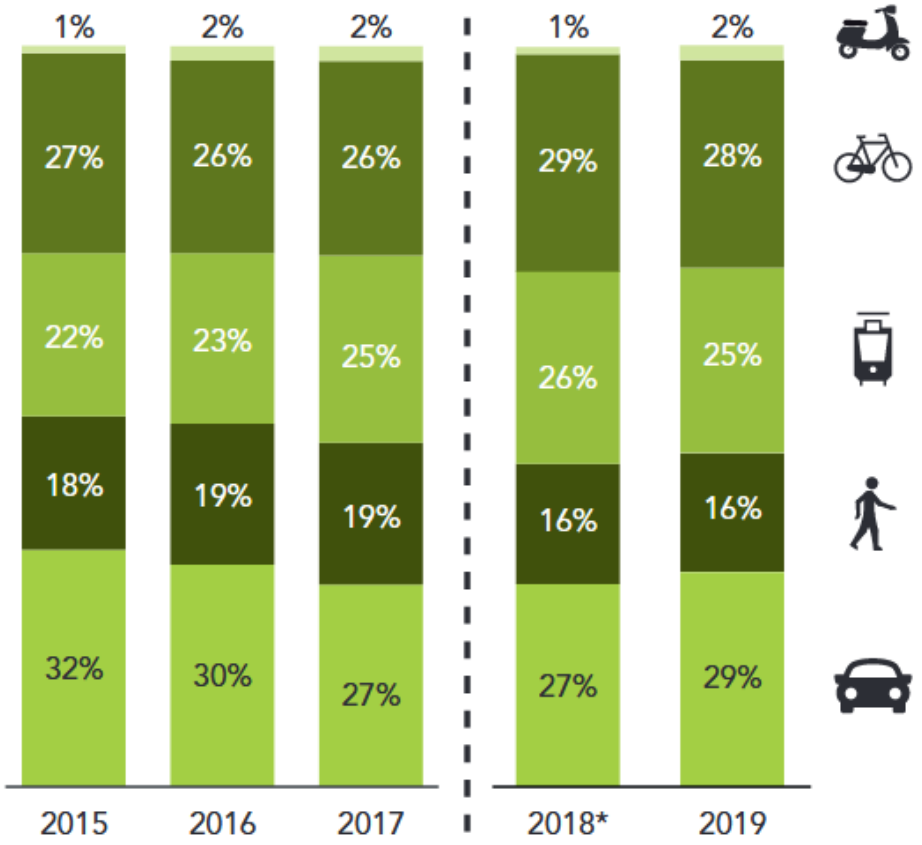
Contents

Amsterdam: a brief introduction

Facts and figures

- City, population of ~870.000
- Urban area, population of ~1.6 million
- Number of bikes ~880.000
- Number of private cars ~240.000
- Number of electric private cars ~10.900



Amsterdam: a brief introduction

Why did we start?

- Commitment to clean air
- Clean Air Action Plan
- -9% CO2 by 2030

- 2025: taxis, delivery vans, lorries and buses emission-free
- 2030: all urban traffic emission-free

Strategic Plan "Recharge me"

The four strategic lines (1)

So far, our approach has followed following strategic lines:

Facilitate

- Rollout strategy for public charging infrastructure
  - A demand-driven roll-out of AC on-street charging
  - Strategic roll-out of DC charging through concessions
  - Focus on target group (taxi)

The four strategic lines (2)

Stimulate

- Subsidies for various target groups (such as taxi drivers)
- Expand privileges for e-drivers (e.g. parking permits)
- Identify 'black spots'
  - Take action in the most highly polluted streets with a package of targeted measures

The four strategic lines (3)

Regulate

- Expand current environmental zones and tighten requirements
- Introduction of environmental zone for cars (1 November 2020)
- Introduce zero-emission zone (2025)
- Commit target groups to the city air quality objectives

The four strategic lines (4)

Communicate

- Public awareness campaigns about clean air and green transportation
- Involve and stimulate business EV market
- City leads by example
- Reach people when they have to make decisions regarding transportation

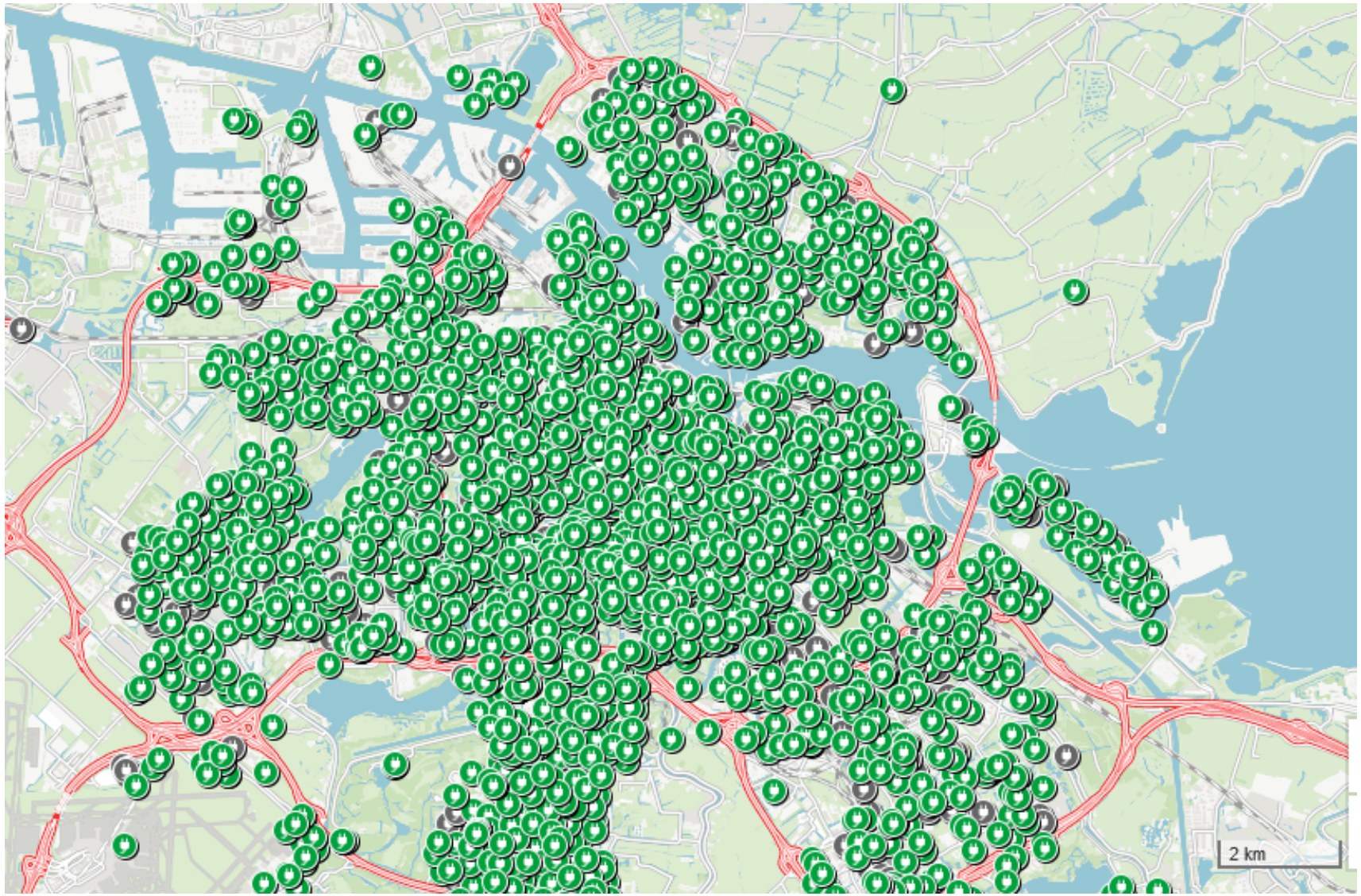
Where we stand today

Currently the city counts

- 32 public fast chargers (of which five up to 150kW) by the City of Amsterdam
- 60+ public fast chargers by commercial parties
- 5.000 regular charging points

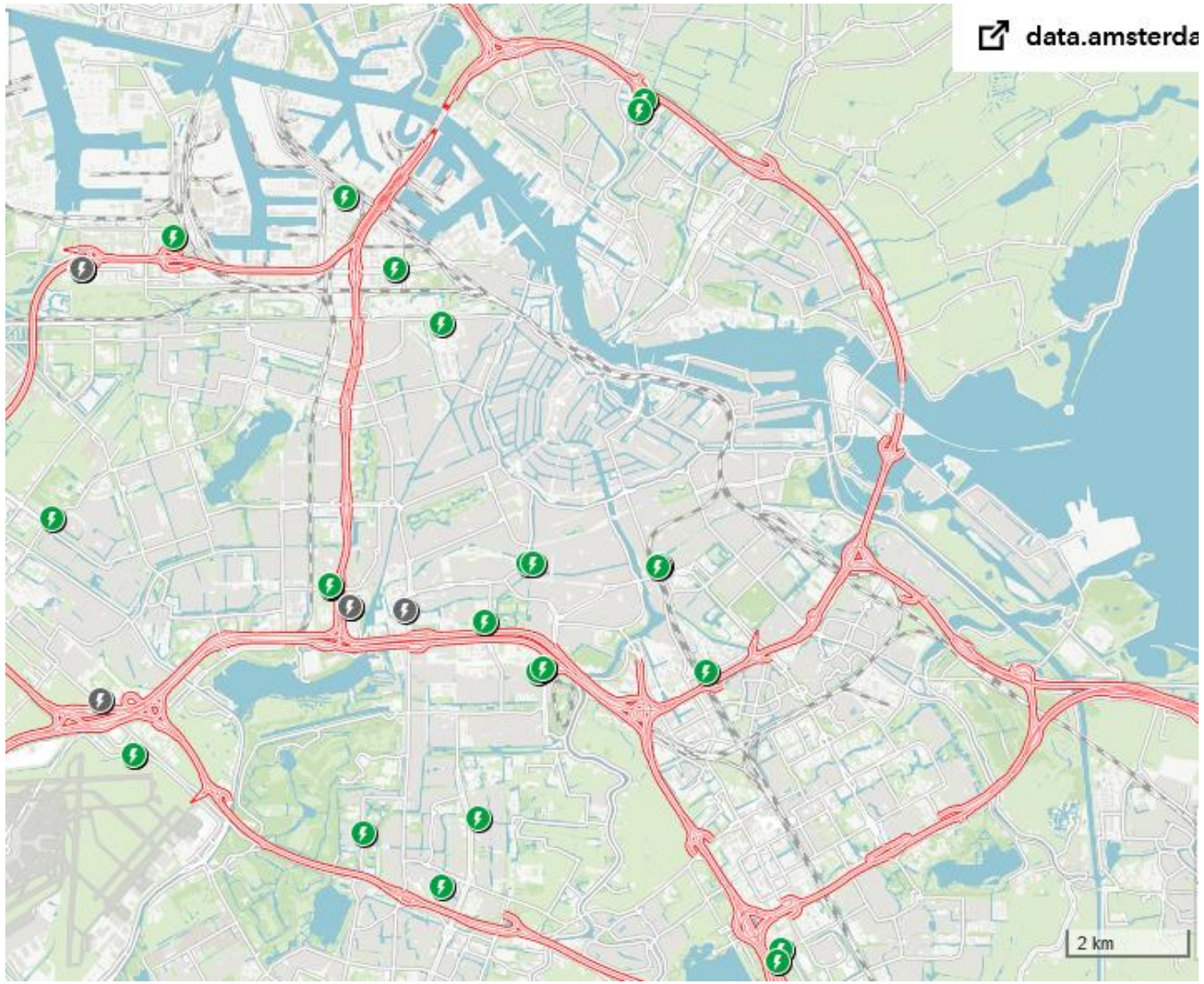
Where we stand today

regular charging points (5.000+)



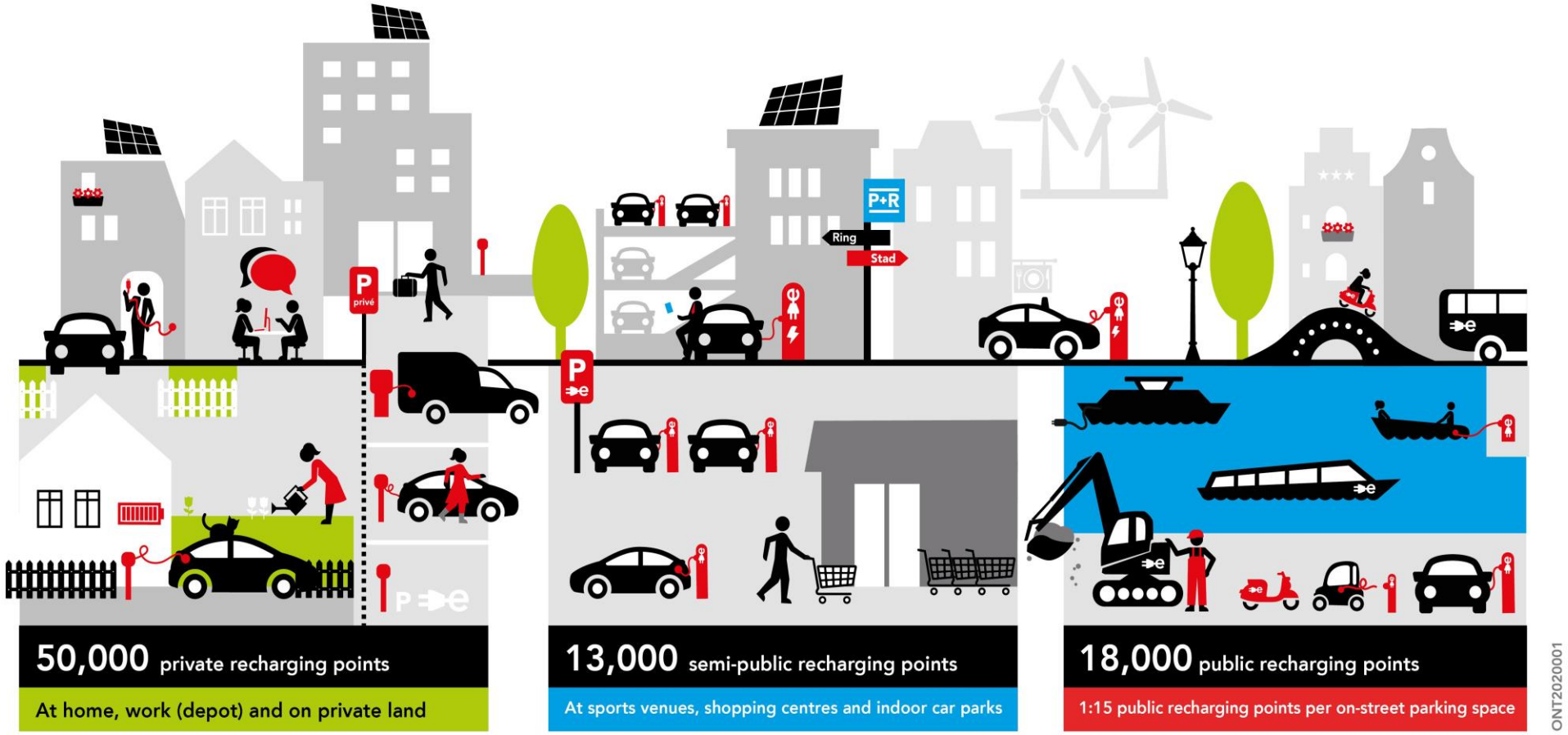
Where we stand today

fast charging points (32 + ~60)



The recharging infrastructure mix in 2030

amsterdam.nl/elektrisch

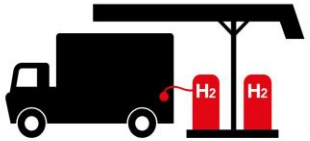


Recharging takes place on private land as far as possible

A public recharging infrastructure spread across the district

We facilitate provision of high-power recharging points at strategic locations

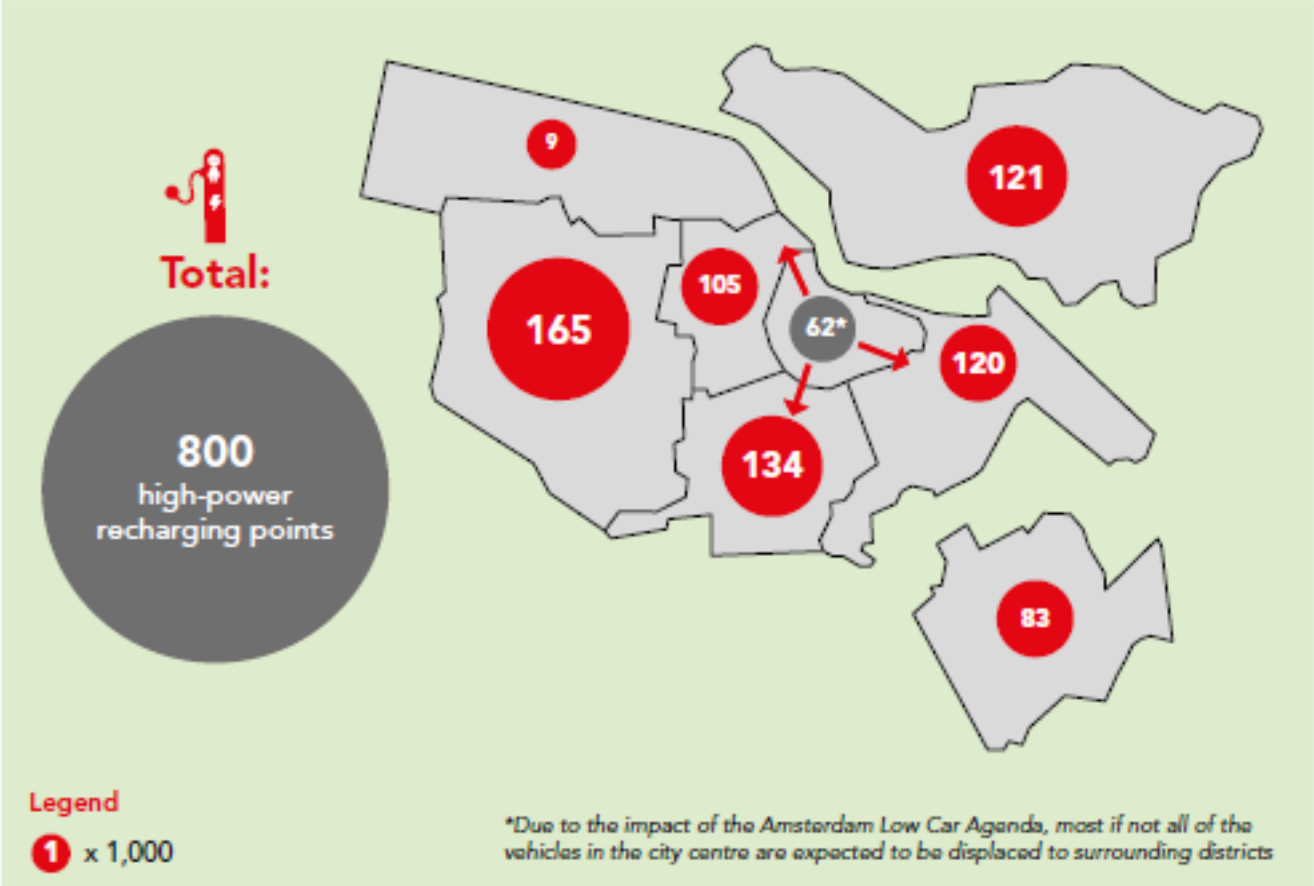
Public recharging infrastructure provided on a strategic and data-driven basis



Working together on a city-wide network of hydrogen refuelling stations

What will we need?

Projections for fast charging points for cars and vans



What are we doing?

Exploring the possibilities of Flexpower

Why?

- Learning how to implement flexible charging speed
- Engaging the EV drivers
- Implication for public charging infrastructure (current & future)
- Possible application on other charging infrastructures

Results?

- Charging takes slightly longer; % not fully charged cars stable
- No significant effect on charged kWh
- EV drivers do not seem to be affected
- 9000 charging sessions, 1 complaint

What are we doing?

What are we doing?

Exploring the possibilities of waterways

Why?

- 2025 and 2030 ZE ambitions
- Our bridges and quays and vulnerable
- Limitation of traffic movement

Results?

- Several construction sites
- Inner city household waste

What are we doing?

What are we doing?

Exploring the transition of logistics

Why?

- 2025 ZE zone
- Smarter
- Lighter
- Less

How?

- Communication, facilitation, regulation
- Estate scaled predictions & plans
- Find & showcase where's the energy

Wrap up (1)

Lessons learned

Follow the user/target group

- Ensuring that public charging infrastructure is installed where users need it and will use it is key to the utilisation of the charging infrastructure
- As well as for the support base for the infrastructure

Communication, information and collaboration is key

- Clear milestones (like "2025") are key to creating commitment and a sense of urgency
- Finding target groups and stakeholders to collaborate with better embeds the infrastructure

Wrap up (2)

Lessons learned

Carrot and stick

- Applying stimulation and facilitation before shifting to regulation has driven stakeholder commitment, with taxi drivers as a main example

- "Just do it!"

Amsterdam started off with ~100 public charging points 12 years ago. Trying this while communicating to the public why the City tried gave way to multiple pilots around Amsterdam.

Wrap up (3)

Challenges for Amsterdam

- High demand for little public space
- Integration into public space, sub surfaces and the energy grid
- Support base for infrastructure roll- out
- Bridging the gap between owner & user
- Numbers and diversity of charging infrastructure
- Vehicle owners' behaviour

Thank you for listening!

https://www.amsterdam.nl/en/policy/sustainability/clean-air/

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