Lessons from Public EV Charging in Rotterdam and Amsterdam.

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evbox.com
Our reach
Focus on building winning position in North America and Europe. Pilot and innovating in new markets, such as South America.

100+ partners
Expansion to new markets via partnerships

EVSE market leader
Largest installed base worldwide

55 countries
75.000+ charging points
750+ fast charging points

75.000 charging points installed worldwide

9 years experience in eMobility

Financial back-up by Engie, €67B revenue, 150k employees

Installation and maintenance in 70 countries

Our offices (10)
- EVBox HQ & NL (Amsterdam)
- EVBox BeLux (Antwerp)
- EVBox France (Paris, Bordeaux)
- EVBox DACH (Munich)
- EVBox Nordics (Copenhagen)
- EVBox Norway (Oslo)
- EVBox Iberica (Madrid)
- EVBox UK & Ireland (London)
- EVBox North America (New York, San Francisco)
City of Amsterdam Goals

- Aims to reduce its CO2 emissions when compared to the emission levels in 1990 by:
  - 25% by 2020
  - 55% by 2030
  - 95% by 2050
- All-electric bus transport by 2025
- All taxis within the city electric by 2025
- Diesel boats now used for tours through the city’s historic canals have to be electric by 2025.
- Ban all but fully electric cars from 2030.
Drive electric, charge everywhere.
evbox.com

City of Amsterdam

- 2000+ charging points
- 40,000 charging sessions / month
- 99.7% uptime
- Scalable: ready for 2000+ in 2018
- Demand-driven deployment
- Remote management from the cloud
- Users pay for charging
- Load balancing to minimize cost
- Self-financed: payback in 2-3 years
City of Rotterdam

Public charging infrastructure  
Since 2012, ongoing until 2023

2,000+ EVBox charging points  
400,000 charging sessions per year  
3M kWh charged per year

• Operates charging network for 7,000+ unique users  
• Focuses on easily accessible / visible locations  
• Grid capacity is placed within 25 meters  
• Charging stations are placed near applicant’s home (max. 250 meters)  
• Placed at locations with a sidewalk that’s at least 1.5 meters wide
Innovation in Amsterdam - Flexpower

- The project of the municipality of Amsterdam, network manager Liander, energy company Vattenfall and ElaadNL

- 456 of the regular EVBox charging points in Amsterdam have been converted into Flexpower charging stations
  - More power during off-peak electricity consumption hours and during sunny weather and less power during peak times.
  - Power adjustment based on a daily neighborhood level demand and supply forecast
  - Optimization for onsite generation to charge faster (some cases car can charge twice as fast)
Rotterdam- Data identifies potential for flexible charging

• 7 year contract to own and operate, up to 4000 ports
  • Flat fee of € 0.25 per kWh
• Self-financed roll-out
• about 70% of transactions are not part of the EVBox network and are roaming transactions with other networks
• Station occupation is about 6-8 hours per port per day on average, however only 25% of that is charging- huge potential for flexible capacity
What works

- City support (subsidies, policies, standardized approach)
- Demand driven rollout
- Interoperability based on open standards
- Clear market model