

AMSTERDAM SMART CITY.

Best & next practices and
Lessons learned from a global village





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*“If you want to change the game, stop
following the rules!”*

Sander Klous



Past

→ Liveable

→ Happiness

→ Concept & context

→ Learning by doing

Next

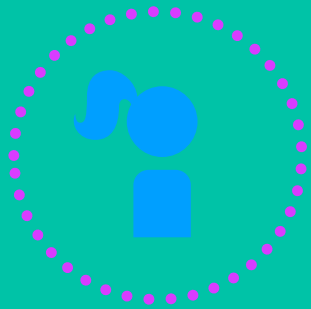
→ Digital *transformation*

→ Social *inclusion*

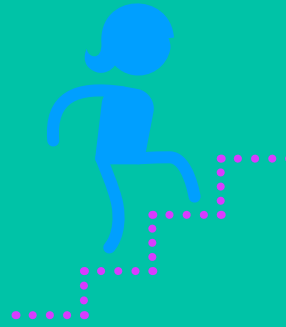
→ *Trust*

→ *Ethics*

Amsterdam Smart City – starting points



→ **Residents central**



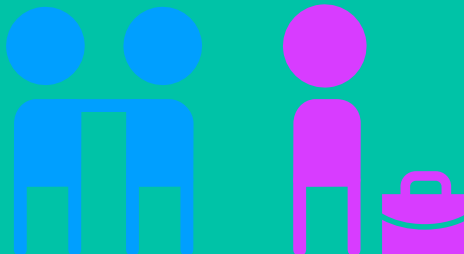
→ **Learning by doing**



→ **Public values**



→ **Conditions and regulations**



→ **Public & private**



→ **Open & transparent**

Program partners

Expertise & citizen involvement



PAKHUIS DE ZWIJGER*



JOHAN CRUIJFF
ARENA



Companies



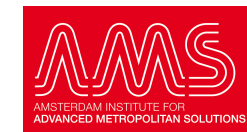
Governments



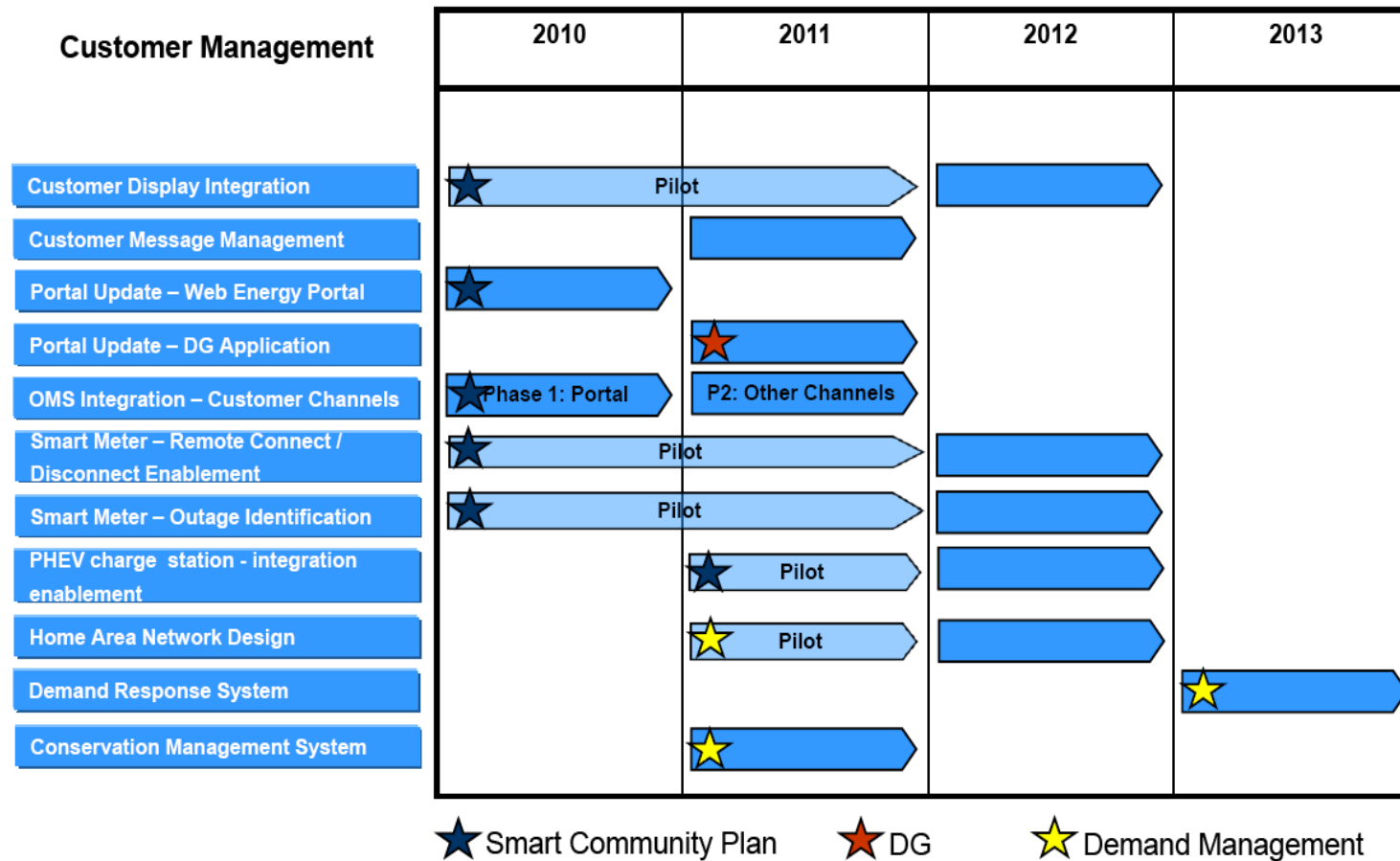
gemeente
Haarlemmermeer



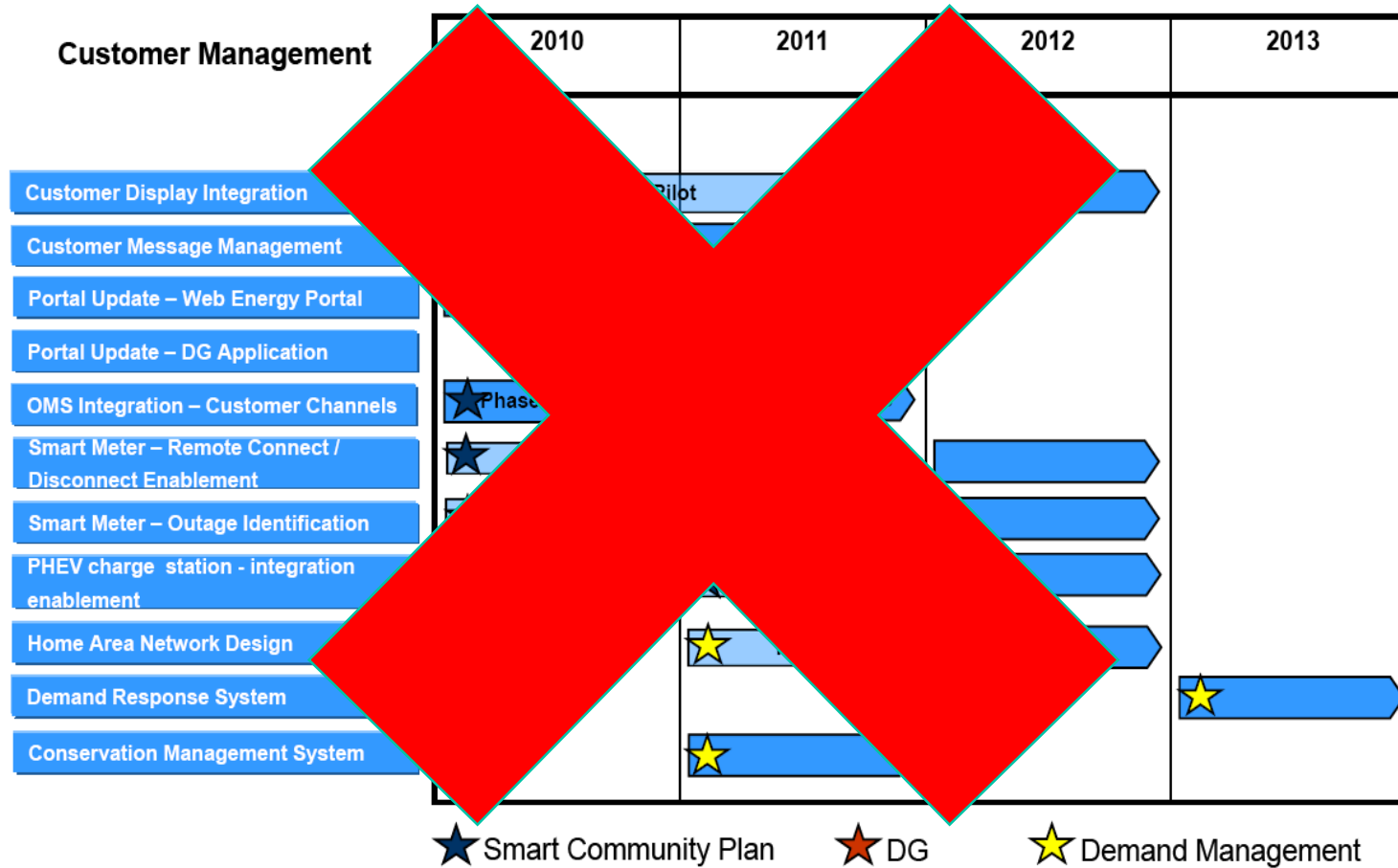
Knowledge institutions



Smart City Strategy: *Stop talking the talk*



Smart City ~~Strategy~~: Start walking the walk !!





Citizen platform

Idea for your neighborhood



Increase citizen participation

Hackathons

Looking at different ways to enhance citizen involvement

Accelerating citizen engagement and bottom-up initiative

What are their wishes / needs?



Combine data and citizen needs

Smart Citizen Kit

marineterrein amsterdam **living lab**



Roboat



Autonomous Bridge

amsterdam
economic
board

AMS
AMSTERDAM INSTITUTE FOR
ADVANCED METROPOLITAN SOLUTIONS

amsterdam
smart
city

NE SCIENCE
MO MUSEUM

marineterrein
amsterdam

Amsterdam brings in 'bizarre' plan to ban all but electrical cars by 2030



World Capital of emissions free mobility

Extend local's life expectancy by three months
(now one year shorter due to air pollution)

Gradually

- 2019
diesel cars < 2005 banned within ring road
- 2022
first evaluation
no busses / touring cars that produce exhaust emissions
- 2025
16,000 - 23,000 electrical charging station
(now 4000 only)

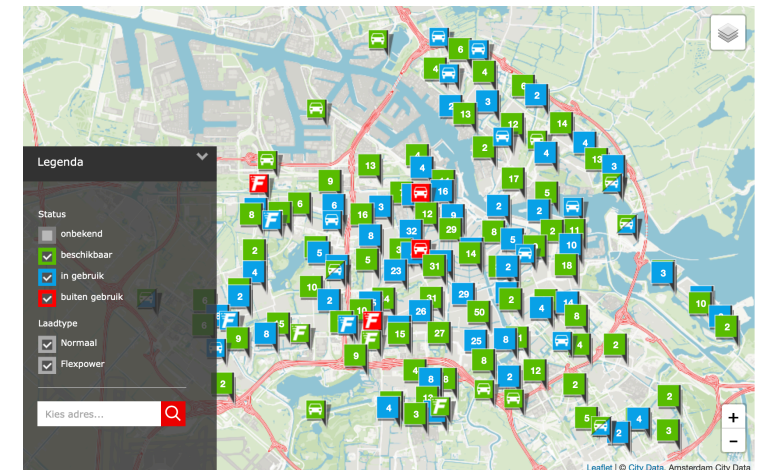
Source: <https://www.dutchnews.nl/news/2019/05/amsterdam-brings-in-bizarre-plan-to-ban-all-but-electric-cars-by-2030/>

Photo: DutchNews.nl

Parking and charging electrical vehicles

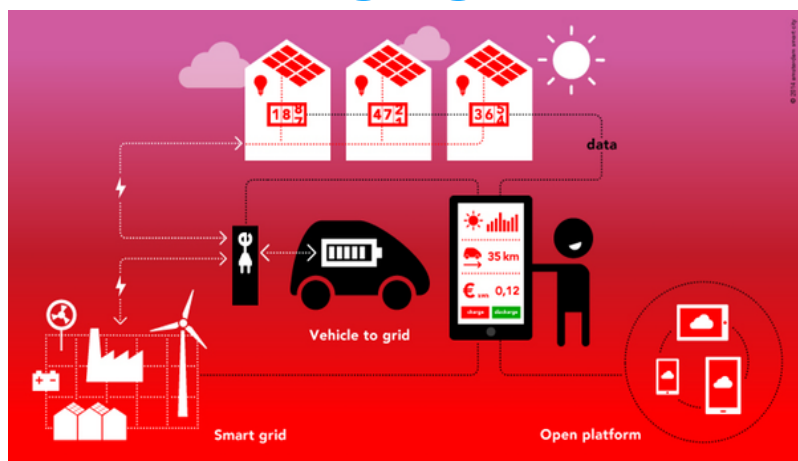


- more power between 21.00 and 06.30 normal power between 06.30 and 18.00, or more in sunny weather
- less power between 18.00 and 21.00
- priority on the waiting list for a parking permit



Energy - Concept V2G

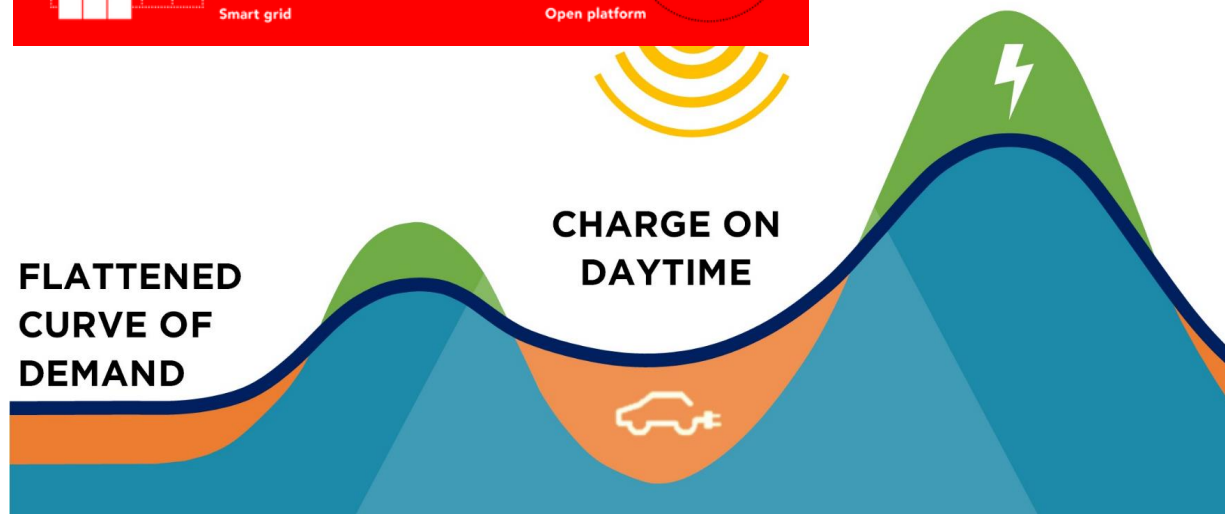
Smart charging and discharging of eV's



**ENERGY RELEASE
ON EVENING**

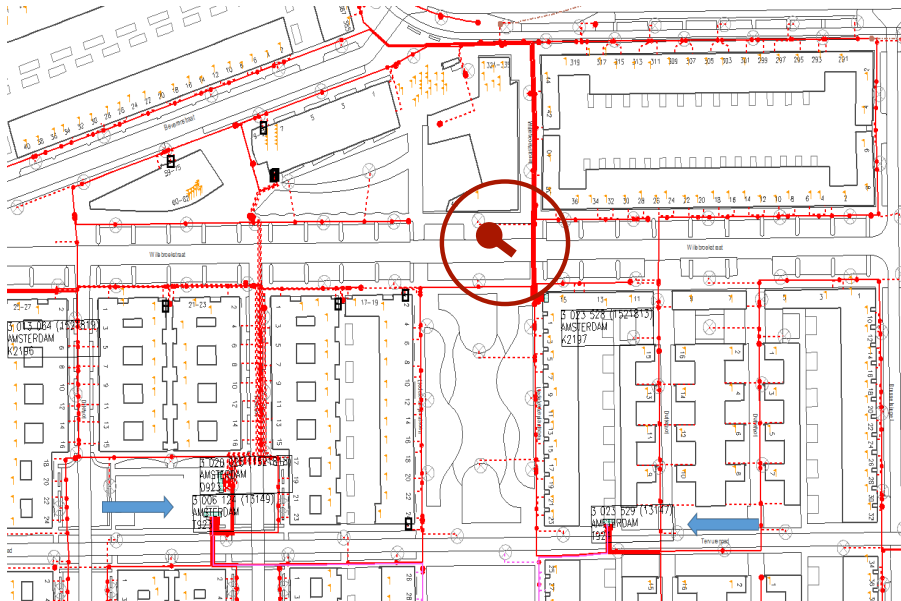
**FLATTENED
CURVE OF
DEMAND**

**CHARGE ON
DAYTIME**

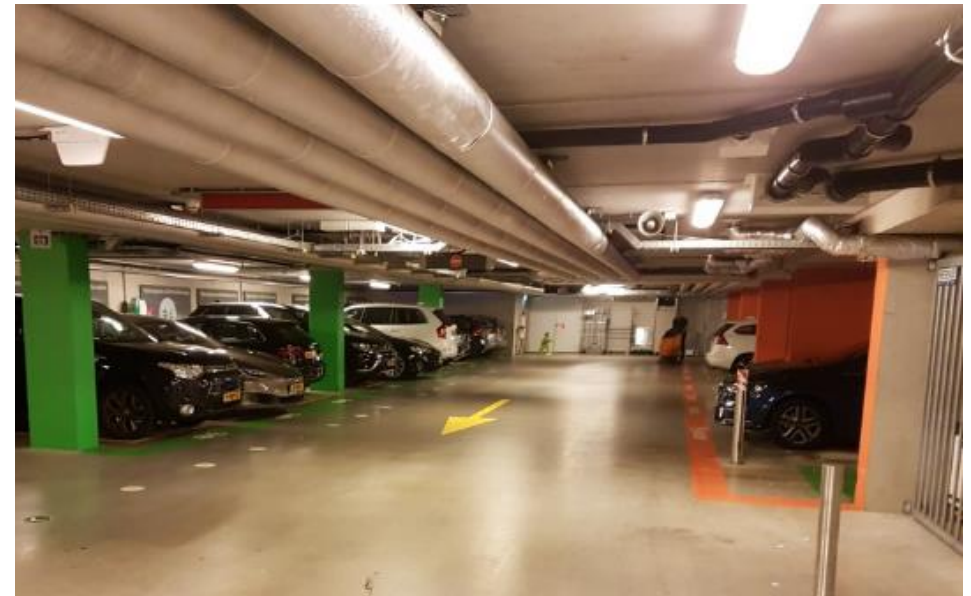


Maturity level:	Implementing & scaling
Scale:	Amsterdam City Centre and selected boroughs and communities in the Amsterdam Metropolitan region
Influence:	both change in mobility and energy consumption
Lessons learned:	think from an end user perspective flexible tariffs - reward use of battery V2G is inferior to travel needs

Lessons learned V2G



Vehicle to Community:
Perfect location with respect to technology and PR, but difficult to find EV user nearby



Vehicle to Office:

- Essential to get parking space near the entrance and other EV charging points
- Grid with PV production is needed for measurements




PUBLIC SPACE
On street charging


SEMI-PUBLIC SPACE
Parking garages


PRIVATE SPACE
Charging at work

PRIVATE SPACE
Charging at home






SUSTAINABLE MOBILITY - ULTRA FAST CHARGING

Testing and use of new technologies that allow quick charging (20 minutes) of electrical vehicle batteries

The municipality of Amsterdam is implementing an extensive public charging network to stimulate electric transport. Ultra fast charging is a promising technology to accelerate the use of electric vehicles. Amsterdam Electric is initiating pilot projects to demonstrate this technology in cooperation with end-users.

PROJECT DESCRIPTION

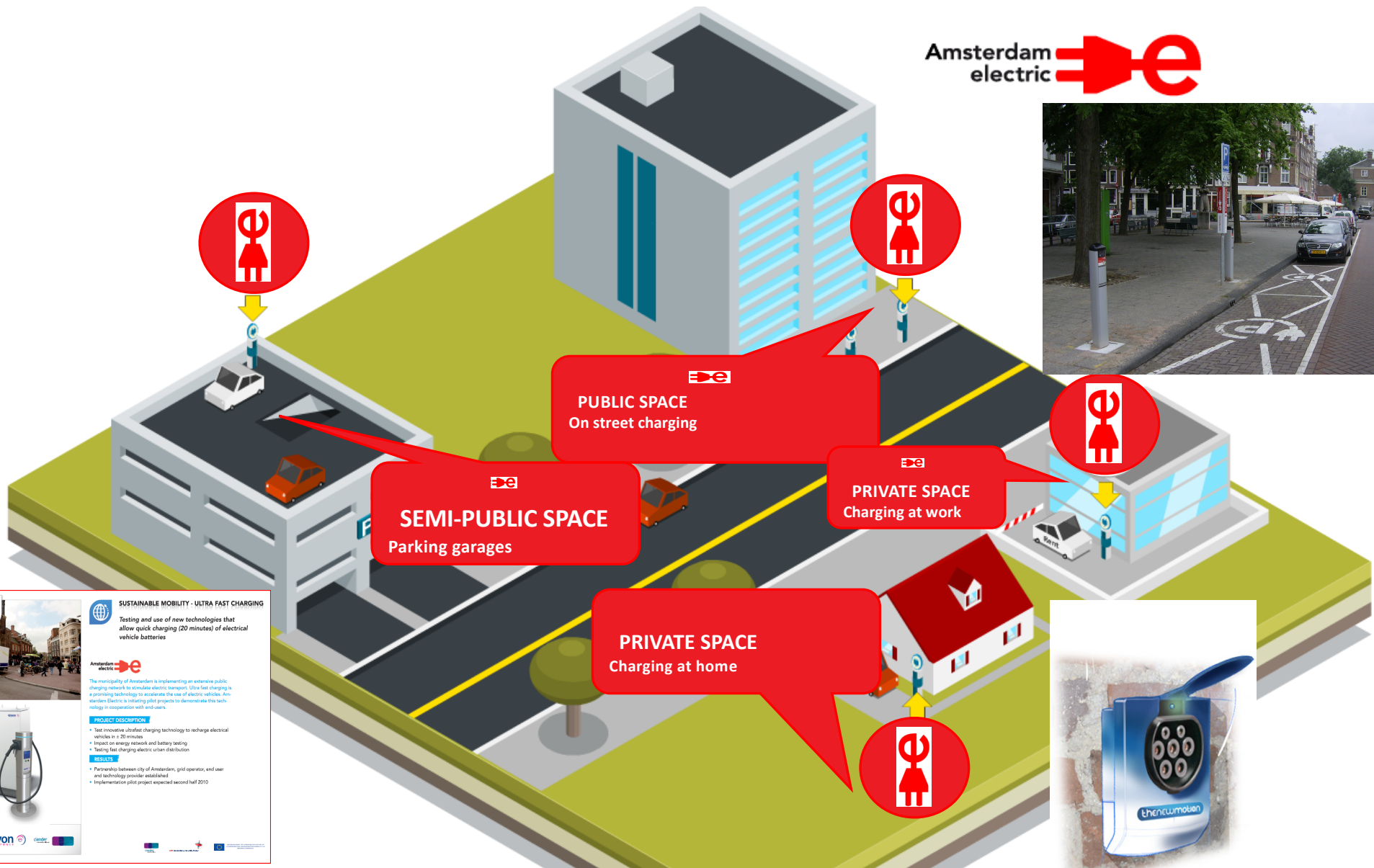
- Test innovative ultrafast charging technology to recharge electrical vehicles in < 20 minutes
- Impact on energy network and battery testing
- Testing fast charging electric urban distribution

RESULTS

- Partnership between city of Amsterdam, grid operator, and user and technology provider established
- Implementation pilot project expected second half 2010







Amsterdam
electric





Amsterdam
electric 

CAR
2GO

THE MOBILITY CONCEPT 2.0

OPERATING AREA

EASE OF PARKING

REGISTRATION

FAVOURABLE FEES

CORPORATE CUSTOMERS

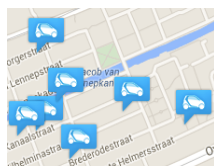
HOW IT WORKS

MY CAR2GO

FAQS

PRESS

CAR2GO FINDER



87-SPJ-4	E-Smart
Address	Eerste Helmersstraat 104, 1054 Amsterdam
Status	😊 😊
interior exterior	
Fuel	87%



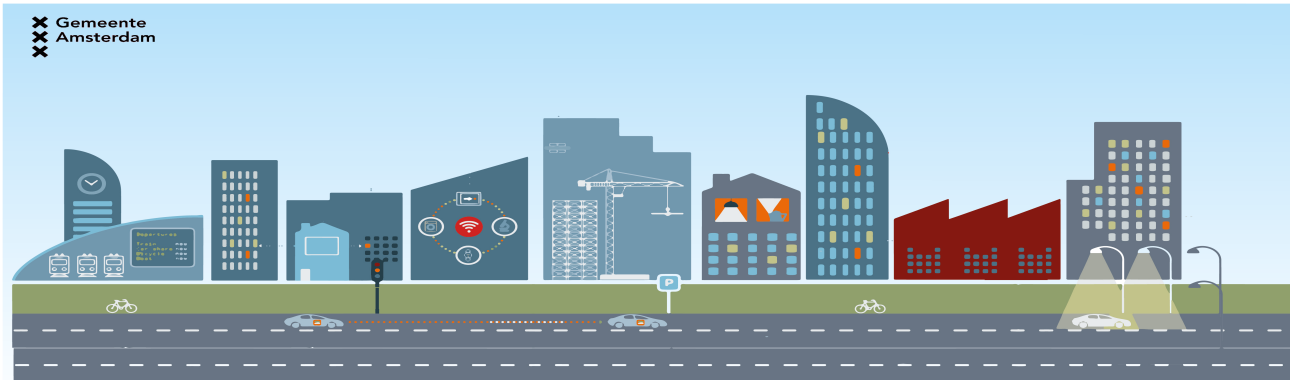
ELECTRICAL AND FLEXIBLE CAR USE IN AMSTERDAM.

It's finally possible! Driving a car inside Amsterdam without the high costs of owning a car or the bother with parking. And with hardly any CO2 discharge.

Electric driving is going to get a big boost in the coming years, partly thanks to 'Amsterdam Elektrisch'. Logical, because it's cleaner, quieter and saves energy. No wonder that Amsterdam is the first city in Europe where 300 car2go [electric smarts](#) are used. Where you can now use them 24/7.



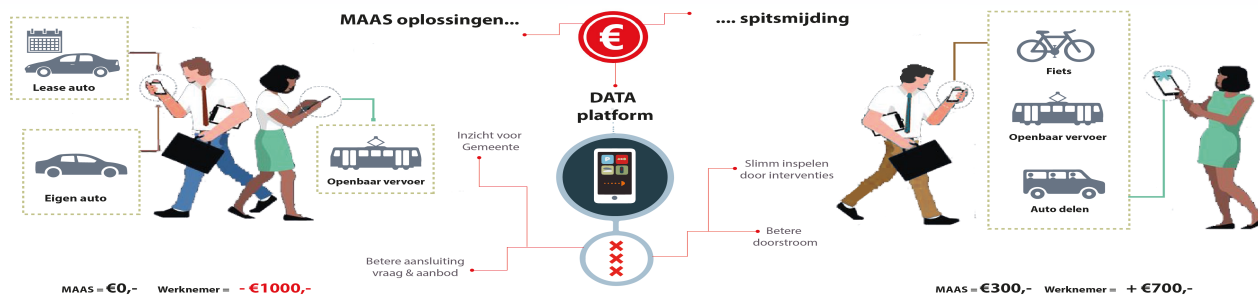
MaaS = €€ + Multinationals + Zuidasdok



Maturity level: second pilot - 1000

Scale: Amsterdam CBD 'Zuidas'

Influence: Alternative ways of transportation
Gamification



Lessons learned: Signing up and signing in should be **more simple** as well as activation
new roles - uncertainty
Main criteria choice of transportation: **comfort, travel time and availability**

Lessons learned



Innovation graveyard



Top ten traits of successful smart *communities*

→ Focussed maverick

→ Dedicated team - SPV

→ Follow the money

→ Benchmark

→ Create
underlying infrastructure

→ Community

→ Find a reason
to be part of the future

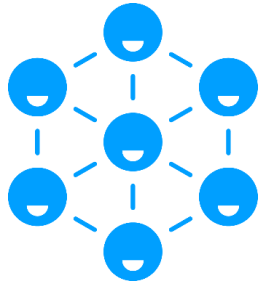
→ Leverage private sector

→ Do something

→ Measure the difference

Courtesy of Joe Dignan

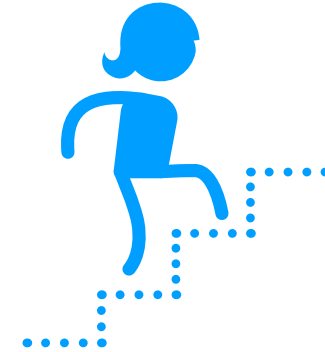
Why Amsterdam Smart City?



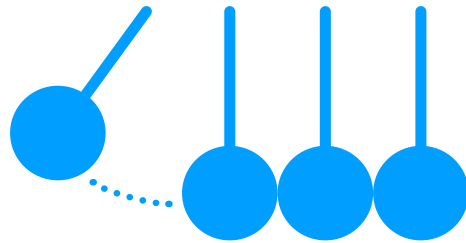
ECO - system
not ego - system



Independent



Learning by doing



Impact



Public values



www.amsterdamsmartcity.com/register