











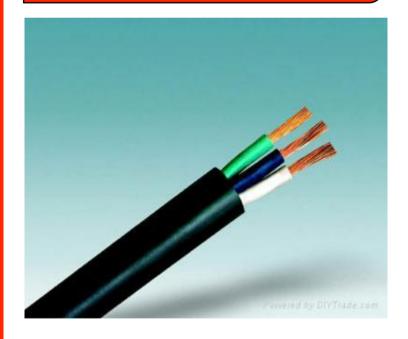




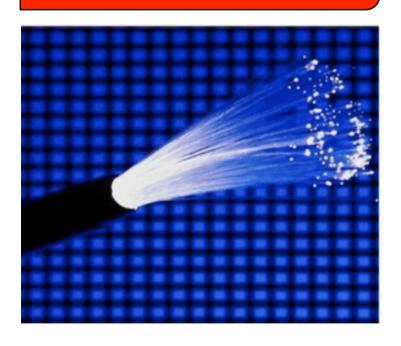


Required for a Smart City

Electricity

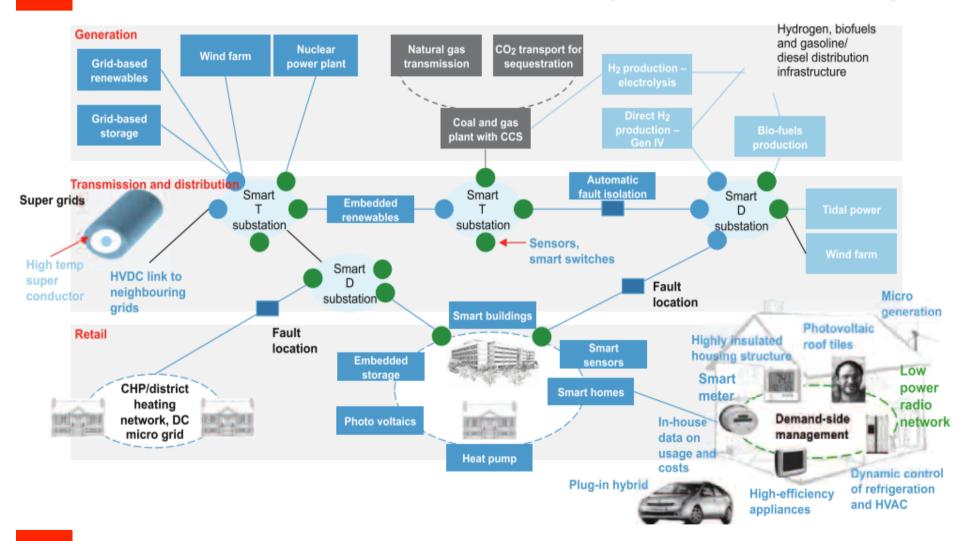


Connectivity





Enabler of a Smart City: a Smart grid





But first find the right things to do...

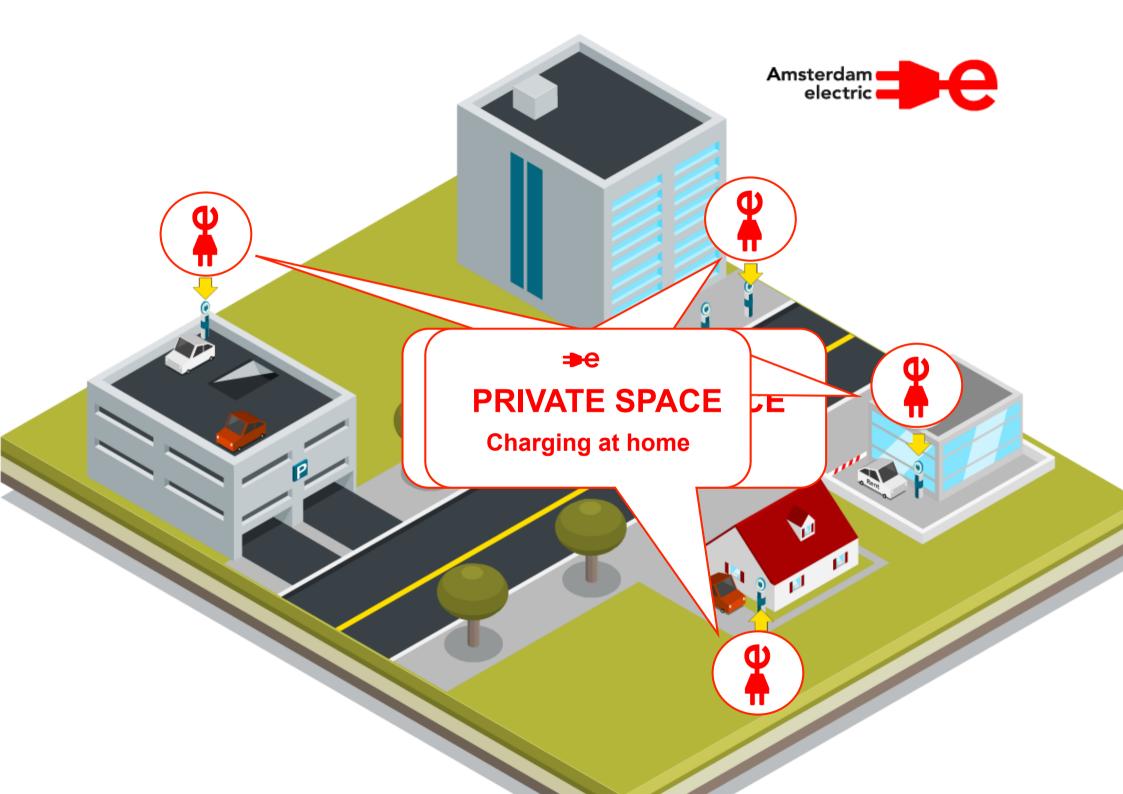
Learn from

- Customer needs & appetite
- Effect on sustainability awareness
- Small scale impact on CO2 reduction
- Coalitions & Cooperation
- Multiple technical solutions
- Innovative funding

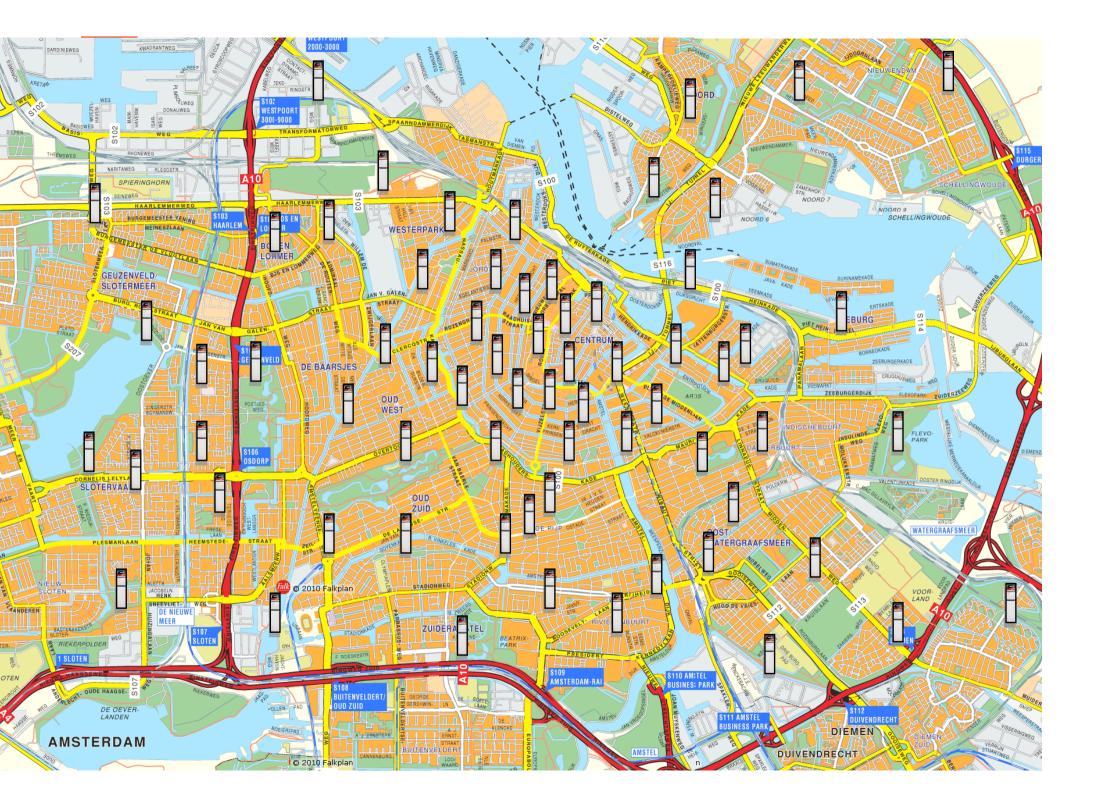
Determine

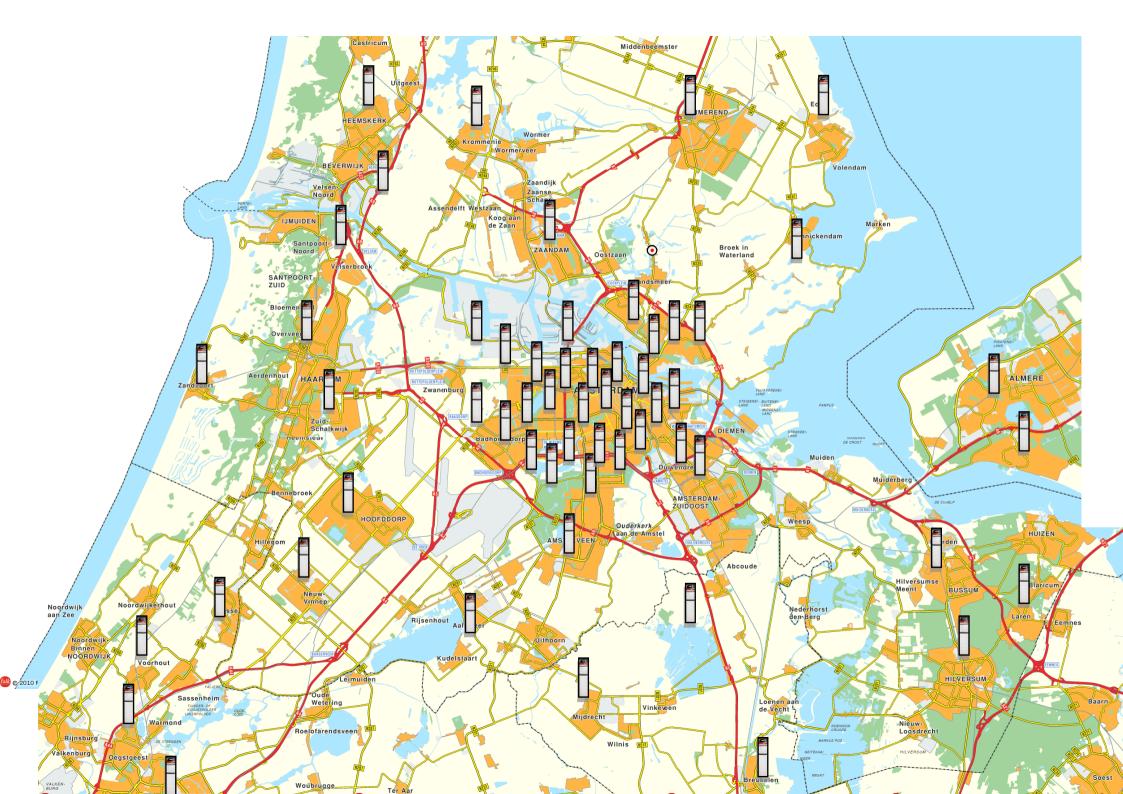
- Customer needs and wishes
- Optimized Customer approach
- Ideal cooperation's
- Scalability characteristics
- Best CO2 cases

























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, end user and technology provider established
- Implementation pilot project expected second half 2010









Sustainable Mobility: Moet je WATT



The New Motion develops a charging point for houses and offices.

Together with grid operator Liander they make home charging easy!









Project description

- Integration of smart meter, grid and 'Moet Je Watt'
- Testing concept with first customers in Amsterdam in collaboration with Liander
- · Impact analysis of EV to electricity grid

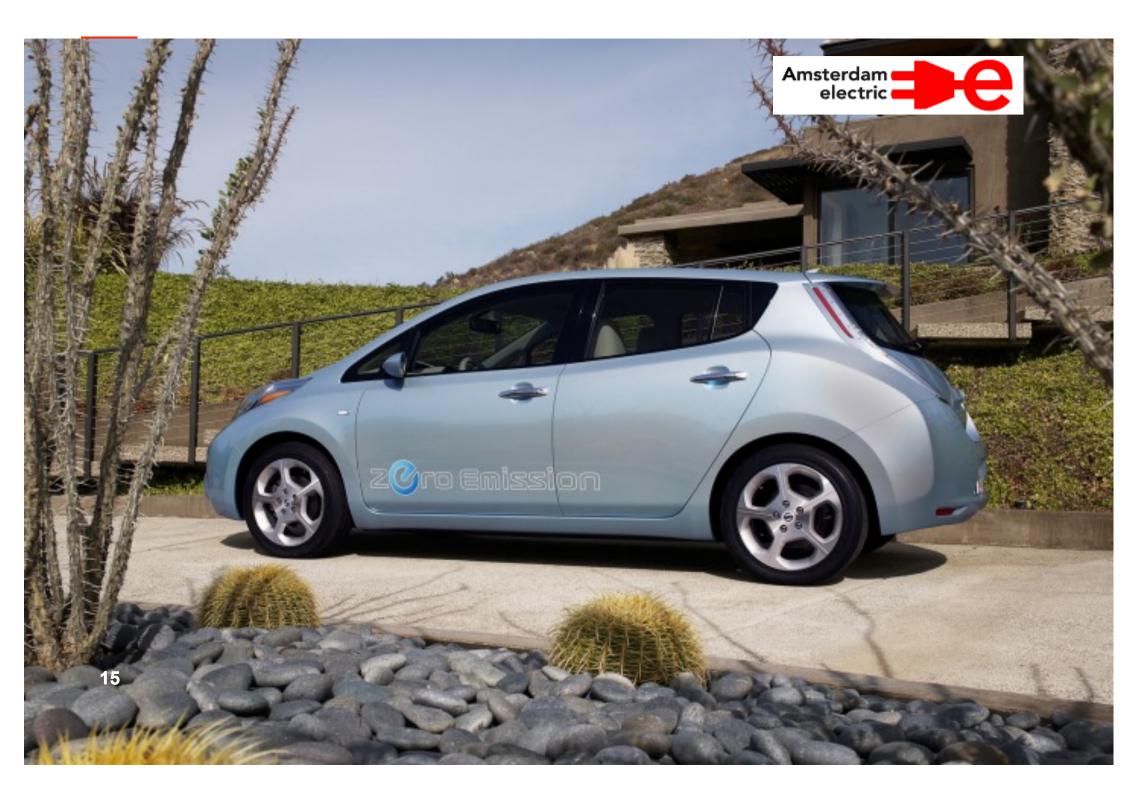
Results

- Safe: according to Dutch regulation (mode 3, type 2)
- No Worries: Charging without tripping the fuse at home & at the office
- Smart Charging: automatically charge multiple cars in turn
- Billing: online and automated via lease company
- Community: charging at all Moet Je Watt charging points









Powered by the people







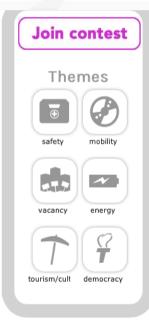




cities provide the data

developers use the tools

citizens use the apps







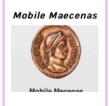




















Apps for Smart Cities: Car2Go

CAR 2GO > CHANGE LOCATION

LOGIN

OF JOIN NOW

THE MOBILITY CONCEPT 2.0
OPERATING AREA
EASE OF PARKING
REGISTRATION
FAVOURABLE FEES
CORPORATE CUSTOMERS
HOW IT WORKS
MY CAR2GO
FAQS
PRESS





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.

Go to the GLIMWORM APPS page to see all of our apps

Other apps by Glimworm

Park Shark Amsterdam is a Glimworm IT BV App powered by the Park Shark API winner Apps for Amsterdam 2012 For more information about Glimworm visit our website







Get the button!

Powered by the Park Shark API- Put the button on your contact page to help your visitors find the cheapest place to park near you.







How ParkShark works:

- ✓ Find the nearest parking meters in Amsterdam
- Filter search results based on:
 - Payment method
 - Location
 - Duration of parking
 - Date & time of parking
- ✓ Calculate the cheapest parking near the desired location.
- FREE





Gratis download voor de iPhone

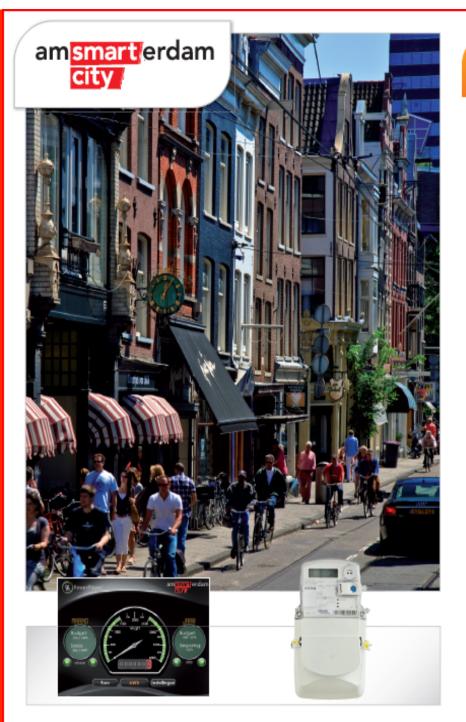
In corporation with:













SUSTAINABLE PUBLIC SPACE - CLIMATE STREET

The Climate street pilot is a holistic concept for urban shopping streets, targeting all aspects: hardware in the public space, logistics in the street and the interiors of shop/bar/restaurant owners

PROJECT DESCRIPTION

- Initiated by 140 SME's
- · Focus on energy saving and behavior
- · Combination of collective effort and individual approach
- · Both in public space and within the shops

INITIATIVES

- Centralised logistics to diminish traffic
- · Waste collection with electrical vehicles
- Dimming of public lighting
- Sustainable tramstops
- Energy scans
- Smart Meter & Energy feedback
- Smart plugs

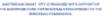
RESULTS

- > 50% of SME's moved to sustainable waste concept
- Succesfull pilot Smart Plugs
- Dimming of public lighting resulted in 10% energy saving, people in the street did not notice the change
- Roll out of 25 Smart Meter & Energy displays
- · Energy Scan will be introduced in september













SUSTAINABLE MOBILITY - SHIP TO GRID

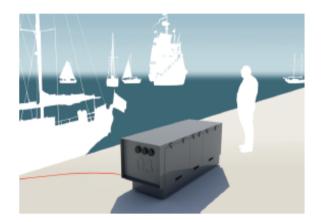
160 Shore power connections will be rolled out saving vast amounts of CO_2 emissions, noise and air pollution

PROJECT DESCRIPTION &

- . Ship to grid for cruise and river transport in order to
- · Reduce noise from diesel generators
- · Port of Amsterdam issues ban on diesel generators
- · Improve air quality in the harbor
- · Reduce CO, emissions

RESULTS

 From August realization of 139 connections for shippers (63A) and 21 connections for river cruisers (400A)









Lessons learned

- Independent Entity hosting public and private players ...
 - ...enabling new partnerships
 - ...and settling proprietary issues on data



- Political Sponsorship
- Governance orchestration











AIM Amsterdamse Innovatie Motor



Opportunities & Challenges for a Smart City

Opportunities

- Attractiveness of the City
- Creation of sustainable region: Economic benefits
- Scale to act and implement

Challenges

- Resources & Financing
- Stakeholder management
- Standardisation
- The right customer approach
- Cooperation takes time



Conclusions

- The City is an Open Platform
- 2. Products and Services are User Centric
- 3. The most liveable cities will be cities with the
 - best Apps
- 4. Paradigm shift: Ownership vs Availability









Visit: www.amsterdamsmartcity.com

