



# V2XSPRINT 2



CREATE A PAPER PROTOTYPE, PREPARE A CO-CREATION SESSION AND RECRUIT PARTICIPANTS FOR IT!

SPRINTGOAL

PARTICIPANTS

CO- CREATION  
SESSION

PAPER  
PROTOTYPE

SPRINTGOAL



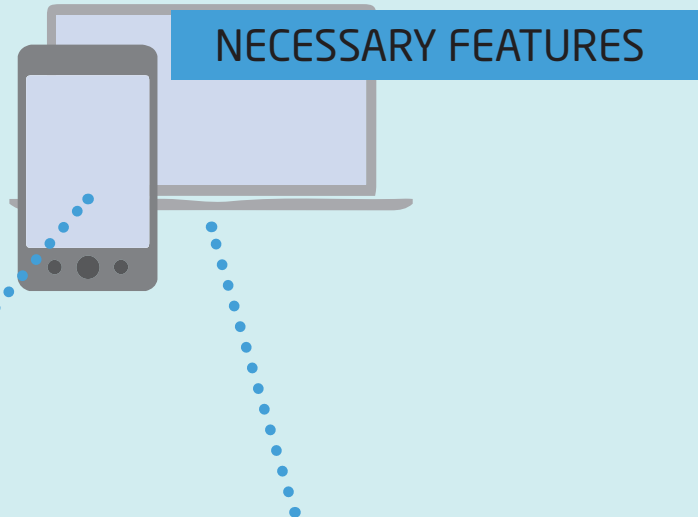
SPRINTGOAL

PARTICIPANTS

CO- CREATION  
SESSION

PAPER  
PROTOTYPE

NECESSARY FEATURES





SPRINTGOAL

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CO- CREATION  
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PAPER  
PROTOTYPE

NECESSARY FEATURES

USER BEHAVIOR

PERSONA'S



INFRASTRUCTURE  
PILOT



# SPRINTGOAL

PARTICIPANTS

CO-CREATION  
SESSION

PAPER  
PROTOTYPE

ADDITIONAL FEATURES

NECESSARY FEATURES

INCENTIVES



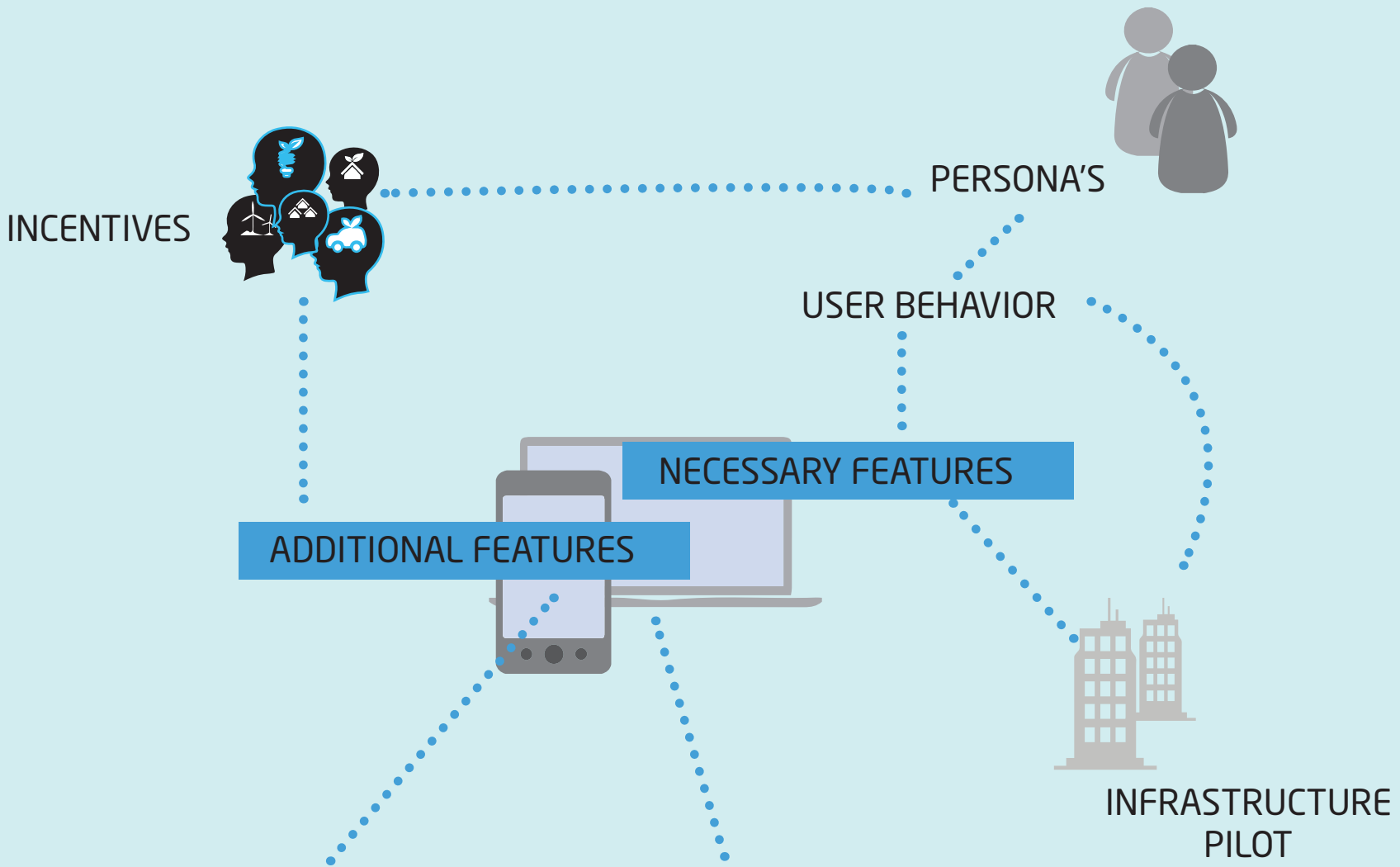
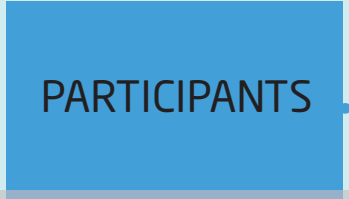
PERSONA'S



USER BEHAVIOR



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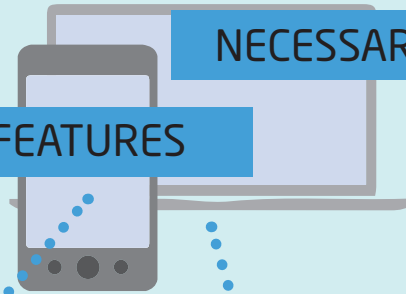
SOCIAL CONTEXT

COMMUNITIES

INCENTIVES



ADDITIONAL FEATURES



NECESSARY FEATURES

USER BEHAVIOR

PERSONA'S



INFRASTRUCTURE  
PILOT



SHARING ECONOMY LECTURE  
ENGAGE ROTTERDAM

TESLA & INDUCTIVE CHARGING  
LECTURE TU DELFT

ENERGY FAIR DEN BOSCH

FIELD RESEARCH





# MAIN FINDINGS

- ENERGY OVERFLOW
- ENERGY SOURCE SELECTION POSSIBLE
- OPEN SOURCE SOLUTIONS
- DRIVING EXPERIENCE

# FIELD RESEARCH





Co-creatie avond 29 oktober

Inbox x

Co-Creation 291015 x



Robert van Gent

Goedenmiddag, Graag meld ik me aan voor de co-creatie avond aankomende



Vehicle to Grid <vehicle2grid.medialab@gmail.com>

to Robert

Beste Robert,

Wat goed om te lezen. We zullen  
Voor de zekerheid: het gaat om

Bedankt en tot de 29e!

Met vriendelijke groet,  
Linda Zieverink

2015-10-19 17:01 GMT+02:00  
Goedenmiddag,

Graag meld ik me aan voor de co-creatie avond aankomende donderdag bet

**CREATE A BETTER SERVICE FOR ELECTRIC CAR USERS**

Are you owning or regularly driving an electric car?  
Would you like to help us improve the circumstances for electric car users in the Netherlands by sharing your experience?

We would like to invite you to a **co-creation evening** in the MediaLAB in Amsterdam where we will test our prototypes and together ideate and create ideas how to create a more sustainable and convenient solution for using electric cars in the Netherlands.

The evening will evolve around the topic **Vehicle to grid!**  
Vehicle to grid means to include the batteries of electric cars in the electric grid. The battery can not only be charged but also provide energy for your household or your neighbours when you don't need your car.  
But how can this work in a smooth way?  
You as a customer know best what you want and can therefore help to improve the situation!

**Why?**  
The growing number of electric cars will have a huge impact on the electric grid. In order to secure a working electricity network and create a sustainable environment we could start sharing our energy within communities and enable EV drivers to control their own energy consumption. Interested?  
Contact us!

vehicle2grid.medialab@gmail.com

mediaLABamsterdam

PARTICIPANTS





INFRASTRUCTURE

# PILOT SETUP

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TALK TO RICK VERMIN  
AMSTERDAM SMART CITY

6 CHARGERS IN AMSTERDAM IN JANUARY  
3 SEMI PUBLIC & 3 PRIVATE

3 PUBLIC CHARGERS ARE PLANNED

NOT IN NIEUW WEST

TEST OF CHARGER IN LOCHEM NOVEMBER  
2015

A hand in a light-colored suit sleeve holds a black pen, drawing a city skyline on an open book. The drawing is a detailed architectural sketch of various skyscrapers and buildings, with several numerical annotations: '700', '60°', '500', '1000', '100', '500', and '1000'. There are also arrows and cloud-like shapes drawn around the buildings. The background is a soft-focus photograph of a real city skyline.

INFRASTRUCTURE



# SLEM

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## DATA PROCESSED:

energy prices, weather, charging status when plugged, peak time predictions, battery capacity when plugged,...

## NO ACCESS TO CAR API

>No battery status when not plugged in!

## SOLUTION?

sensor on charger  
camera in car

# INFRASTRUCTURE





# INCENTIVES BRAINSTORM



# SUSTAINABILITY

## SHARE

Multi-Points  
like in Supermarkets  
then you  
get coins

Share of the Month

See what

Trade

To SAVE THE PLANET

Ecological Conscience

LAMPAIN BASE ON MORALS

TRANSFER TO HOUSE  
→ SAVE ENERGY FOR OTHERS

ORGANIZE YOUR ENERGY YOURSELF

you will have priority some other

IF YOU SHARE TOMORROW HAVE

## BAD CONSCIOUS

ENERGY INSTEAD of POINTS

Discount

## PUNISH/TREAT

MARKET  
MAKE THE CAR NOT WORK

SAY IT DOES NOT WORK OTHER WISE IF YOU DON'T SHARE

TAKE A SYSTEM THAT ONLY WORKS IF SHARE

## BEHAVIOUR

MAKE IT NORMAL TO SHARE

RULES "BOOK"

GAME SIGN UP POINTS ENERGY

## BENEFIT REWARD

Reward

Discount for Sharing

APP Monthly them → Reward

Automatic Payment in a lottery

CREATE FINANCIAL PROBLEMS WITH COLLECTING POINTS

## LAW/FORCE

NO OTHER CHOICE

LAW

Force people else high prices

## SATISFACTION

have fun while you share

MAKE IT FUN people + fun + experiences + feeling

Integrate Community

## COMPETITION

FB get King

## FUN EXPERIENCE

## CAMPAIGN

event to tell people the project

## Information

Inform them the benefit

USE SM TO INFLUENCE OTHER PEOPLE

CONSCIOUS ABOUT THE

Games education

SHOW EXPOSURE

RESULTS



# BRAINSTORMING FINDINGS

## “HOW TO INVOLVE”

## “HOW TO MANAGE”

### BENEFITS

- TRADE
- CREATE PROFILES
- GIVING DISCOUNTS
- POINTS/STARS

### ORGANIZE THE ENERGY YOURSELF

- CAR PRIVILEGES
- OVERVIEW EN. CONSUMPTION

### INFORMATIONS

- CAMPAIGN ON MORALS
- RAISE AWARENESS

### GAMIFICATION

- SUSTAINABILITY EDUCATION
- COMPETITION
- PAIR UP TO COMPETE/SAVE
- UNLOCK BADGES
- PREVENT POLLUTION

### SYSTEM

- IF YOU JOIN YOU DON'T PAY BUT YOU ALWAYS ALLOW TO SHARE
- THE LAST 30%
- BANK MODEL

### EXPOSURE

- COMPETING
- COMPARING
- AREA MAPPING

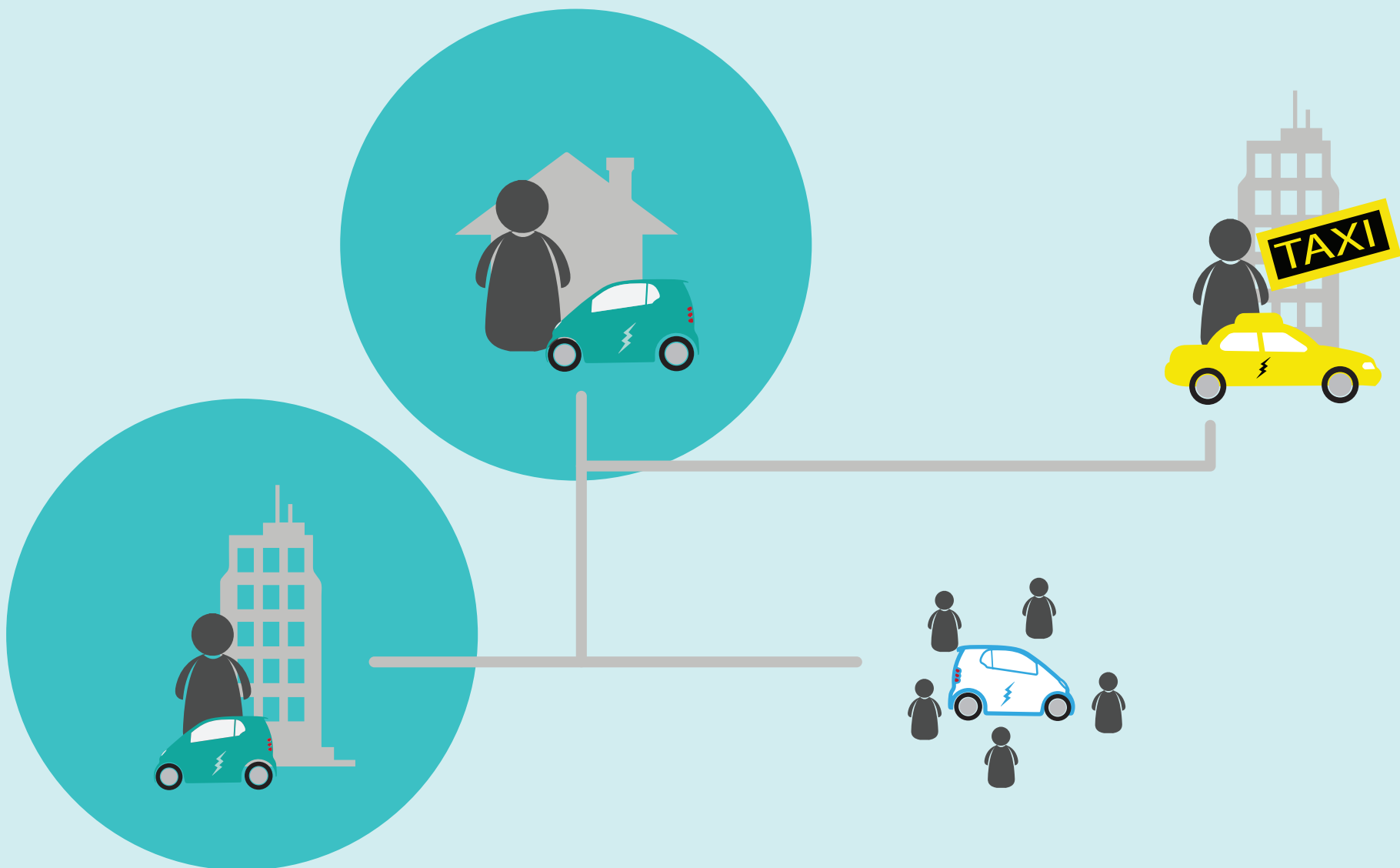
### COMMUNITY

- ECOCHALLENGE
- TRADE WITHIN COMMUNITY
- EARN A CHARGING POINT FOR THE COMMUNITY

## RESULTS







THE USER

RUUD 32  
MANAGER  
EV FROM HIS COMPANY  
SINGLE



PERSONA'S



FLOOR 40  
MARRIED TO GERT 38  
2 SMALL CHILDERN  
WORKS PART TIME



PERSONA'S





# LENA 26

LIVES WITH HER BOYFRIEND

OWN EV BUT CARPOOLING

GRAPHIC DESIGNER

BLOGGER

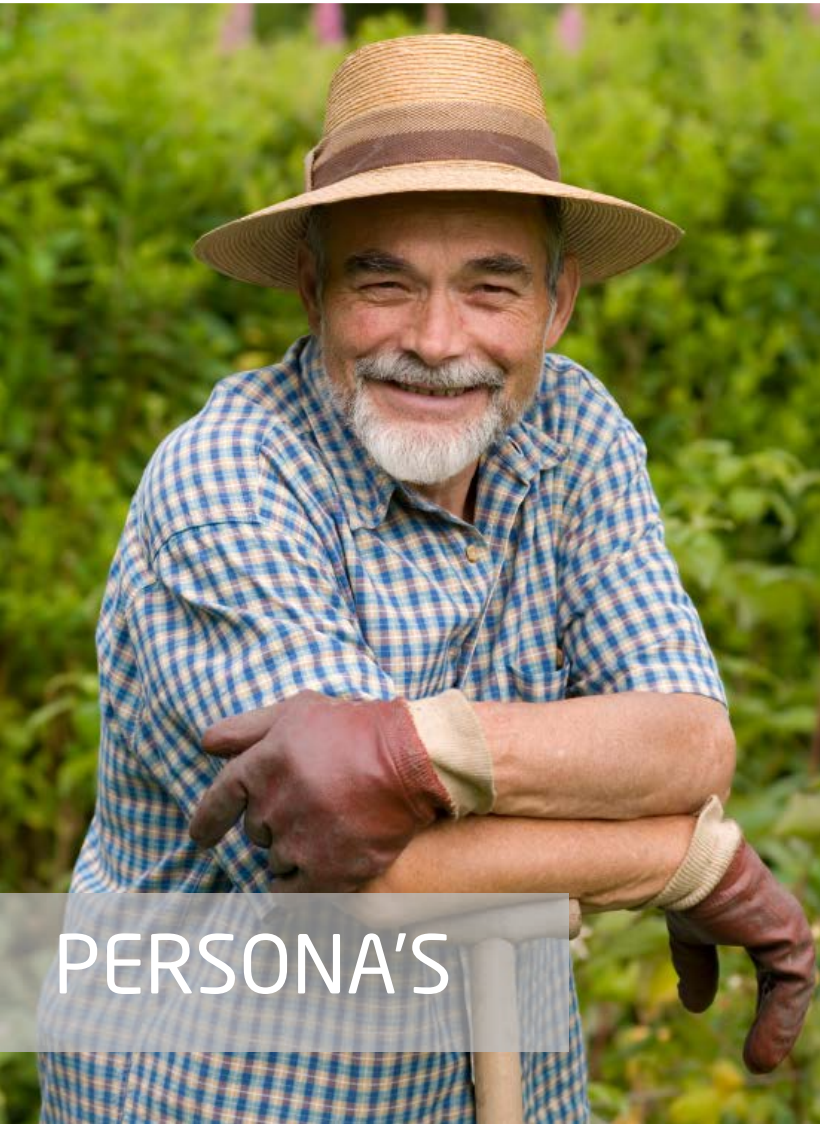
PART OF SHARING PLATFORMS (PEERBY, AIRB&B,...)





# MAARTEN 58

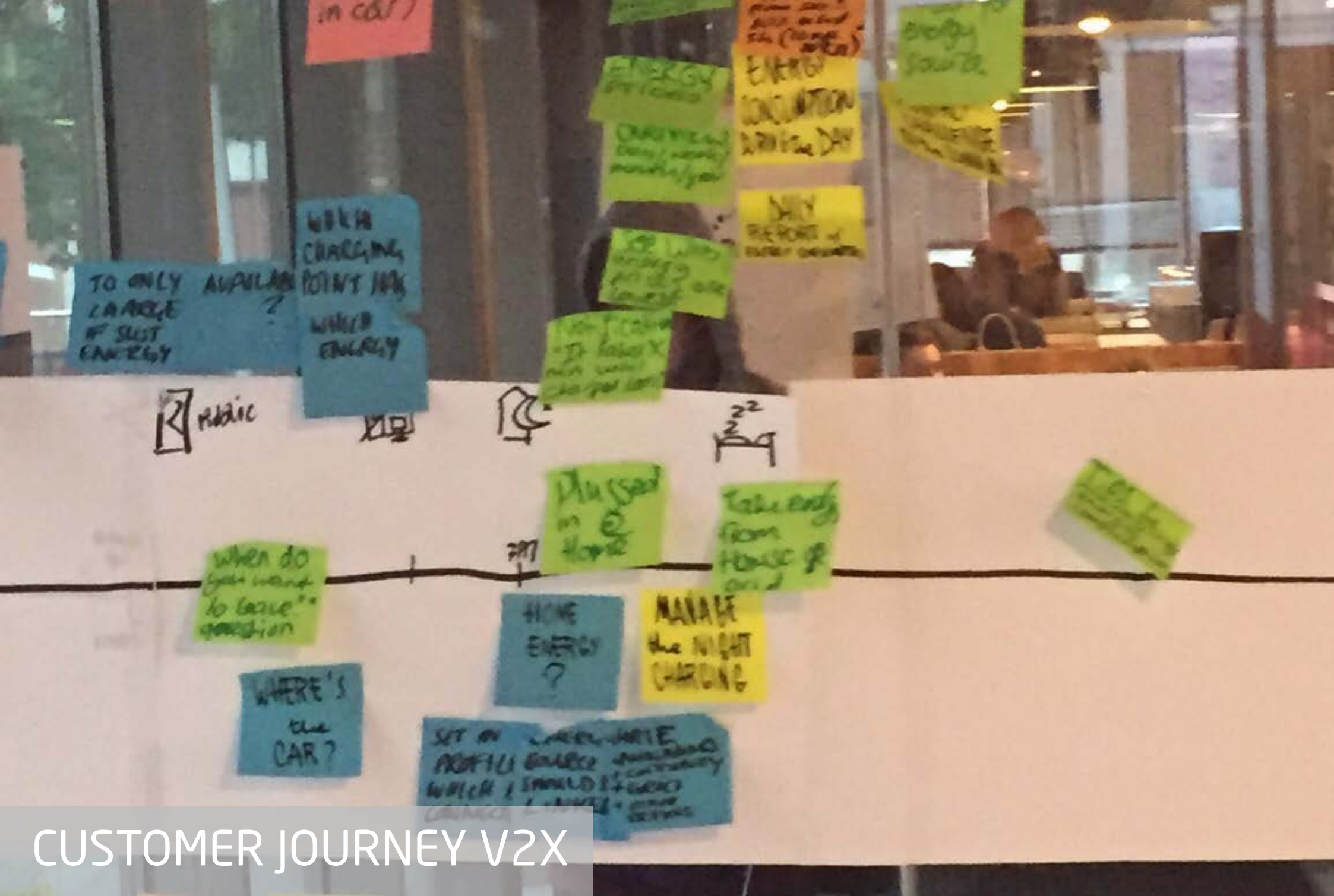
SINGLE  
LANDSCAPE GARDENER  
USES EV FOR WORK  
VOLUNTEERING FOR ENVIRONMENTAL  
ORGANISATIONS



PERSONA'S

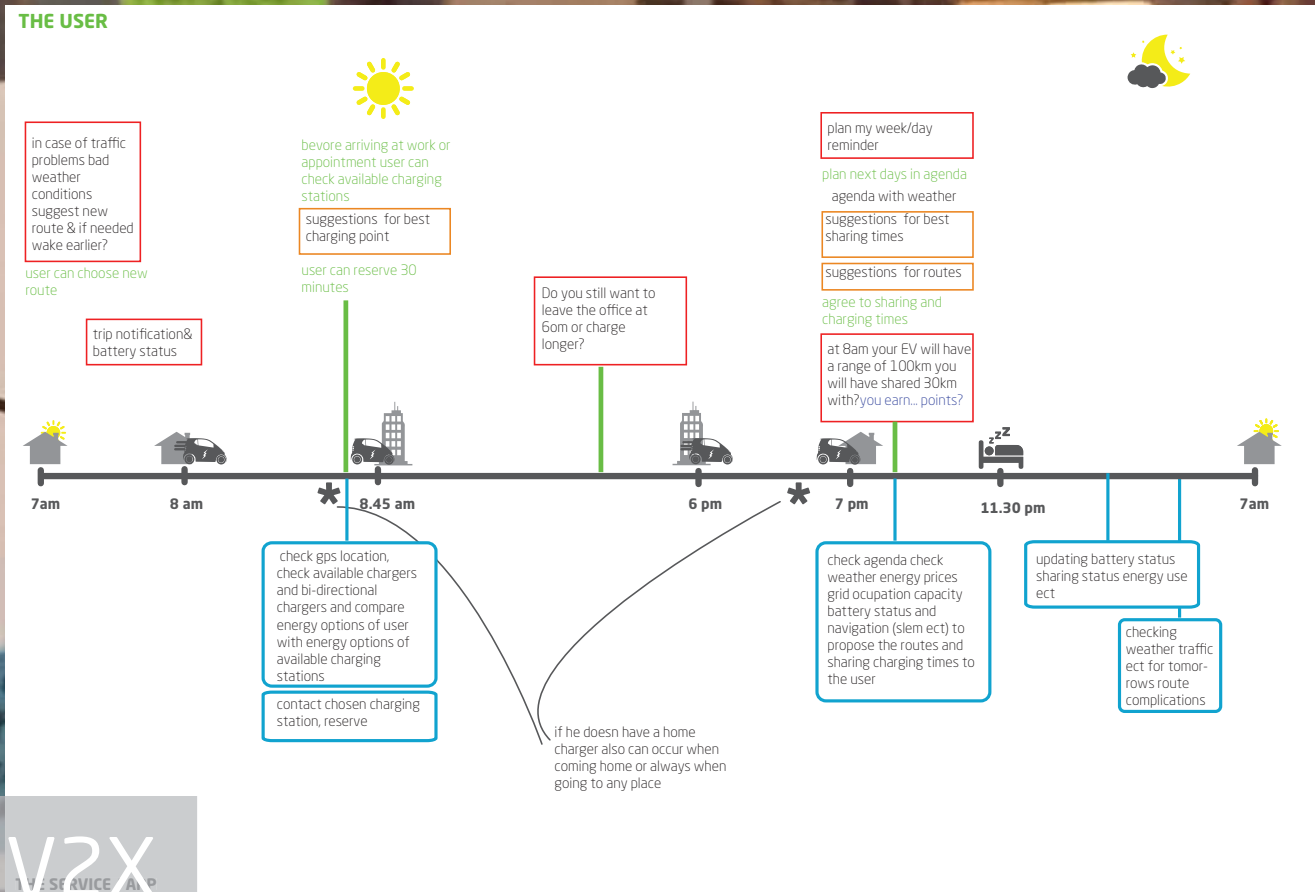






CUSTOMER JOURNEY V2X

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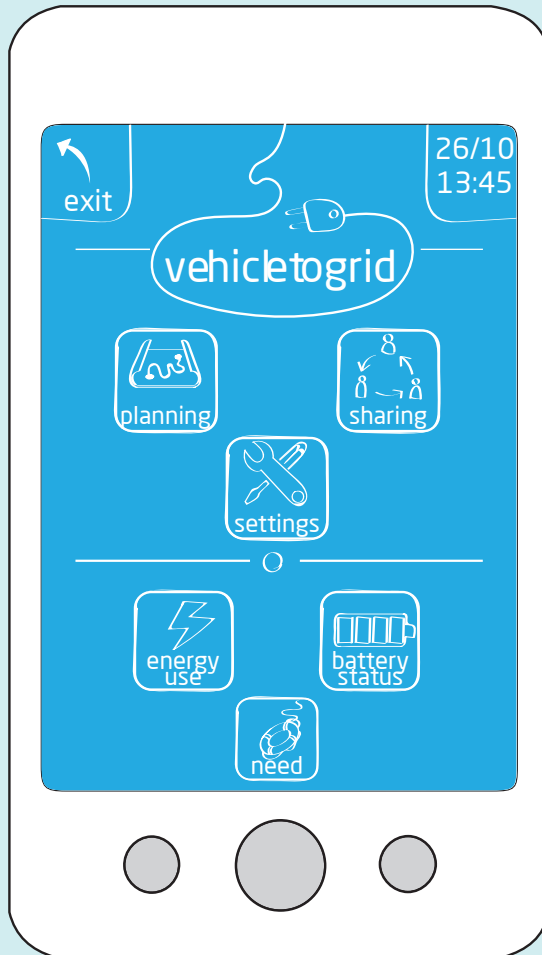




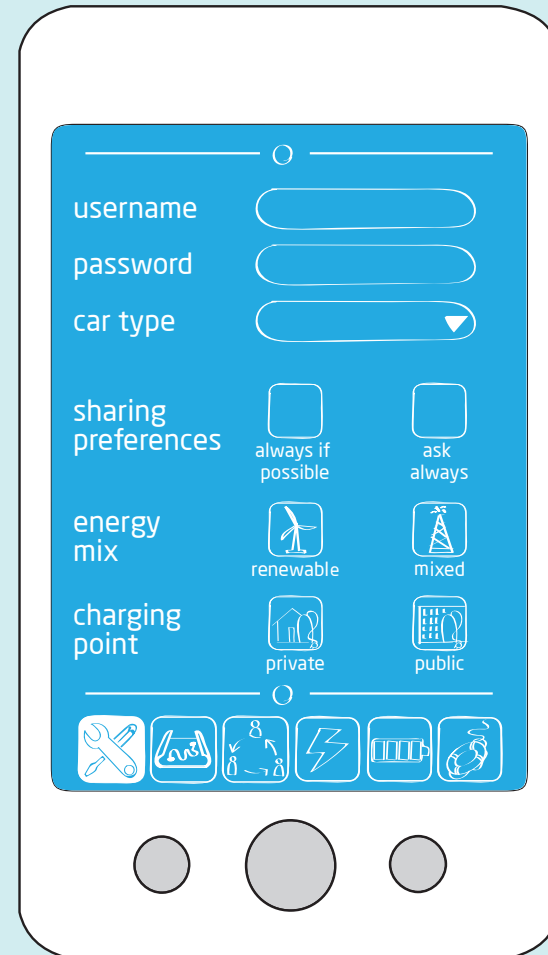


PAPER PROTOTYPE

## HOME SCREEN



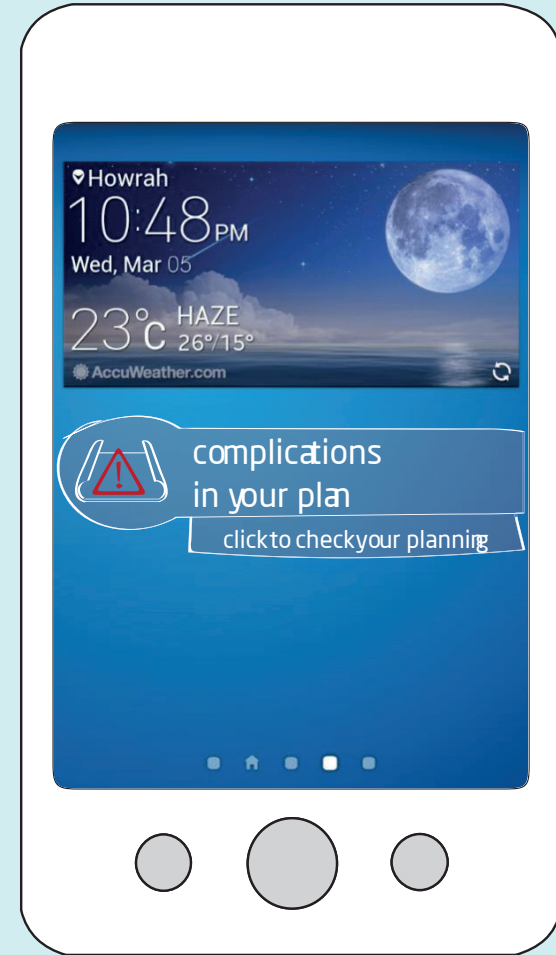
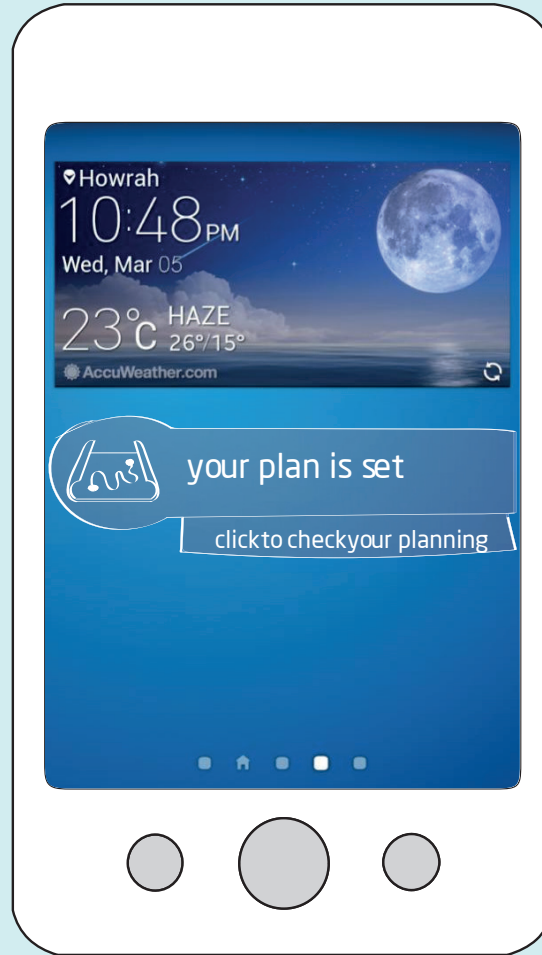
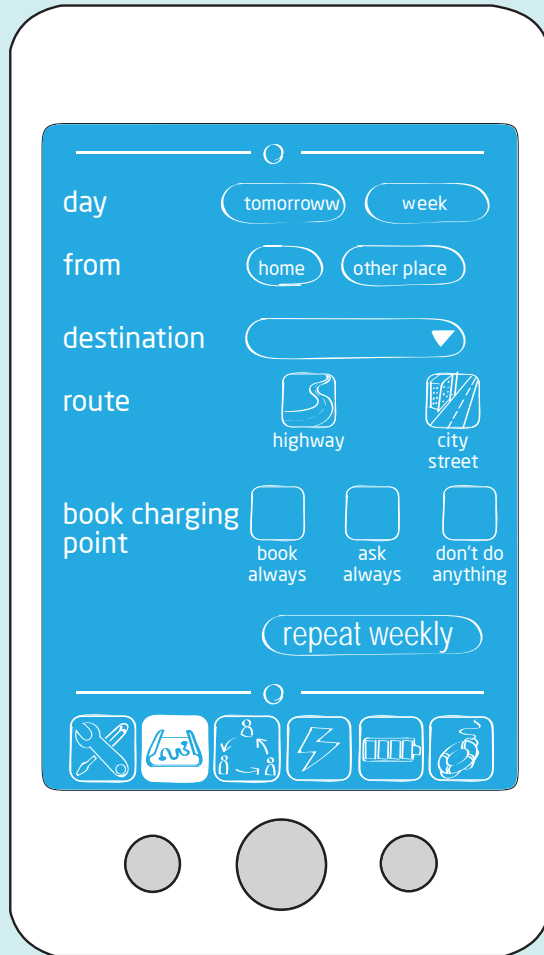
## SET UP PROFILE



PAPER PROTOTYPE

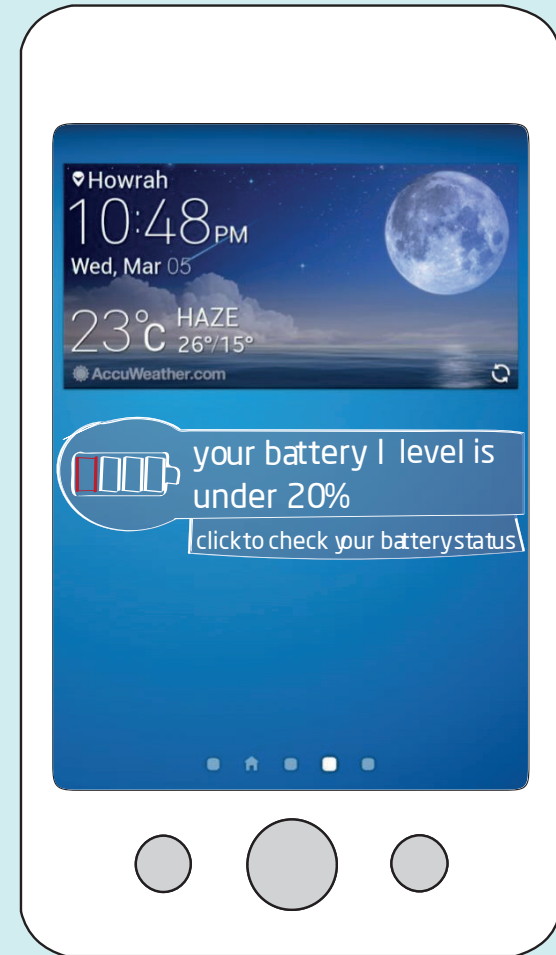
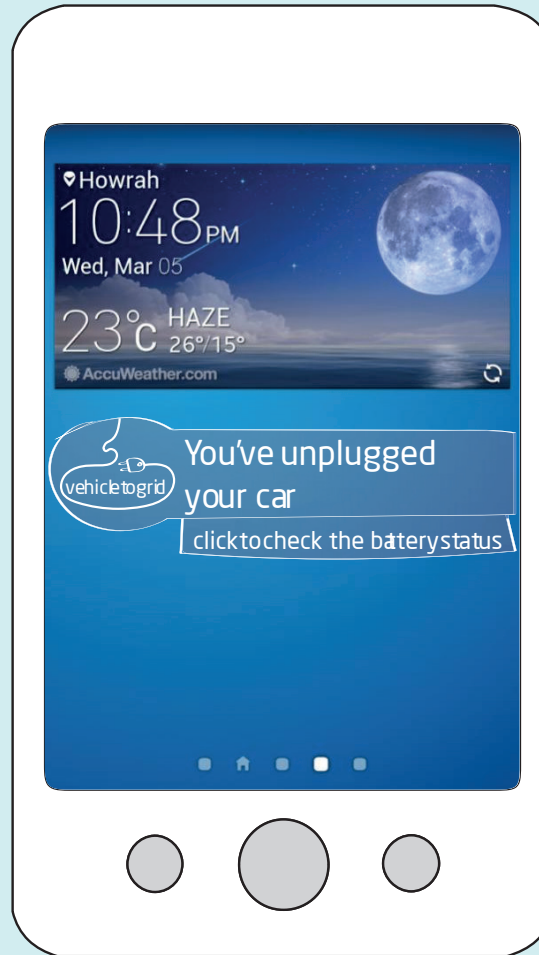
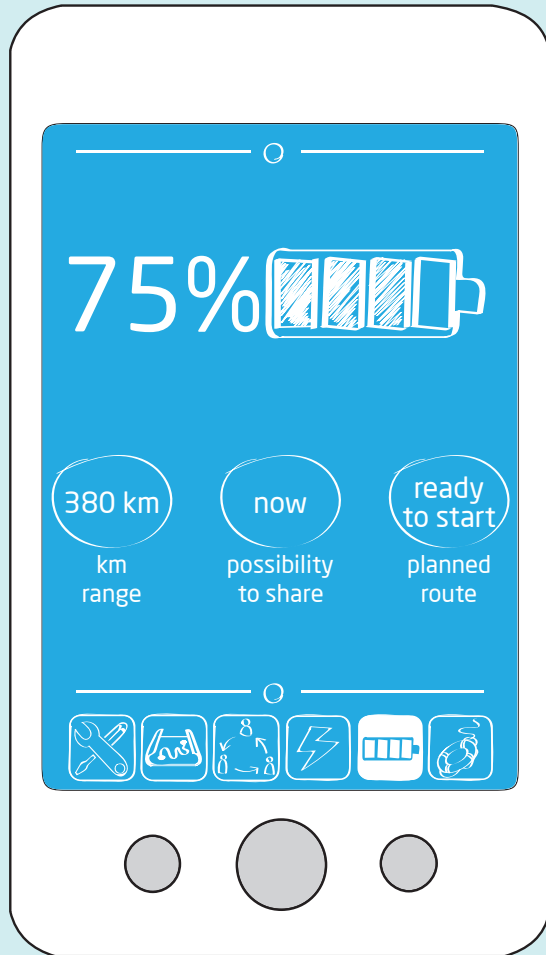


# PLANNING



PAPER PROTOTYPE

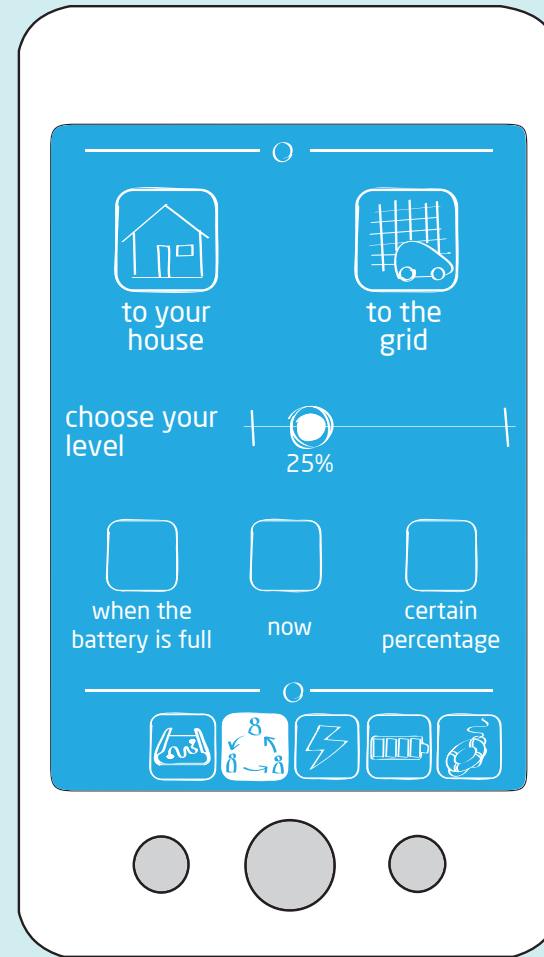
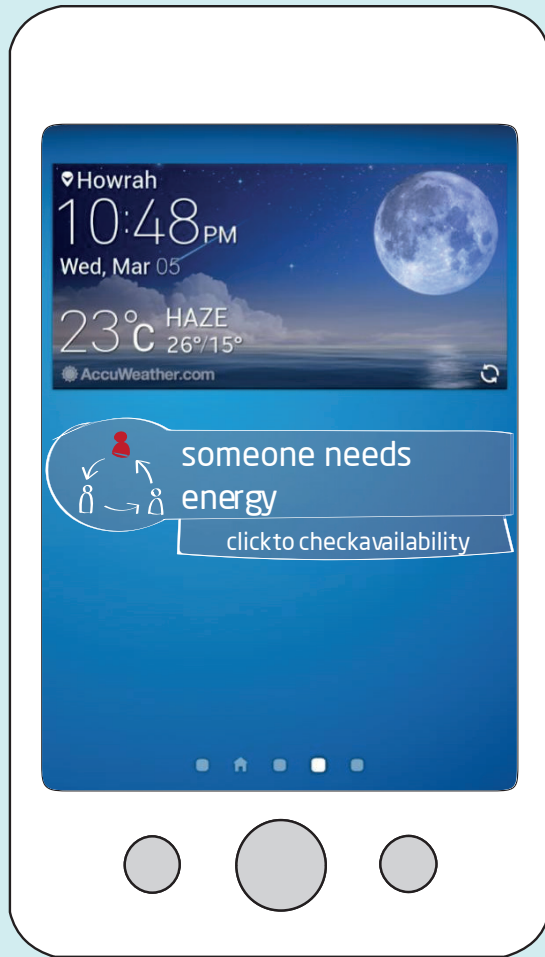
# BATTERY STATUS



PAPER PROTOTYPE

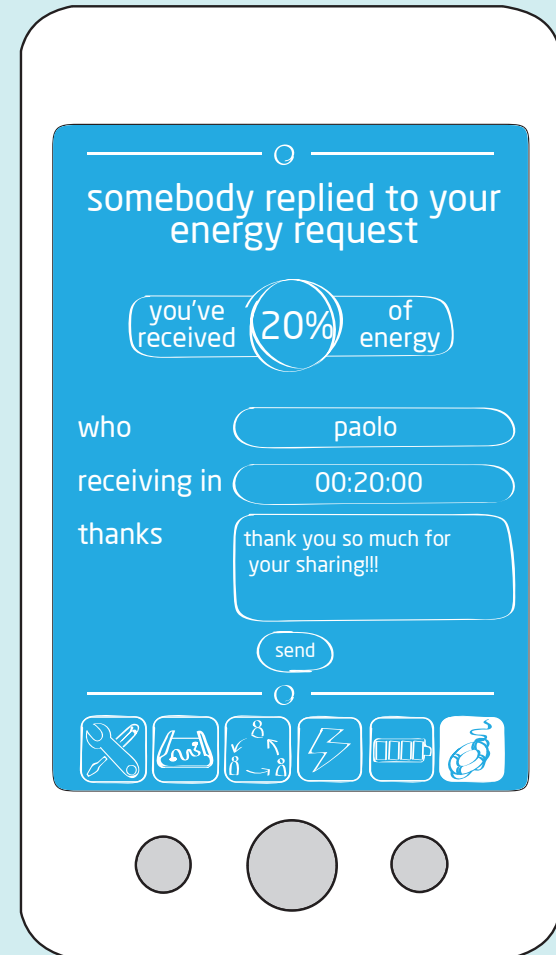
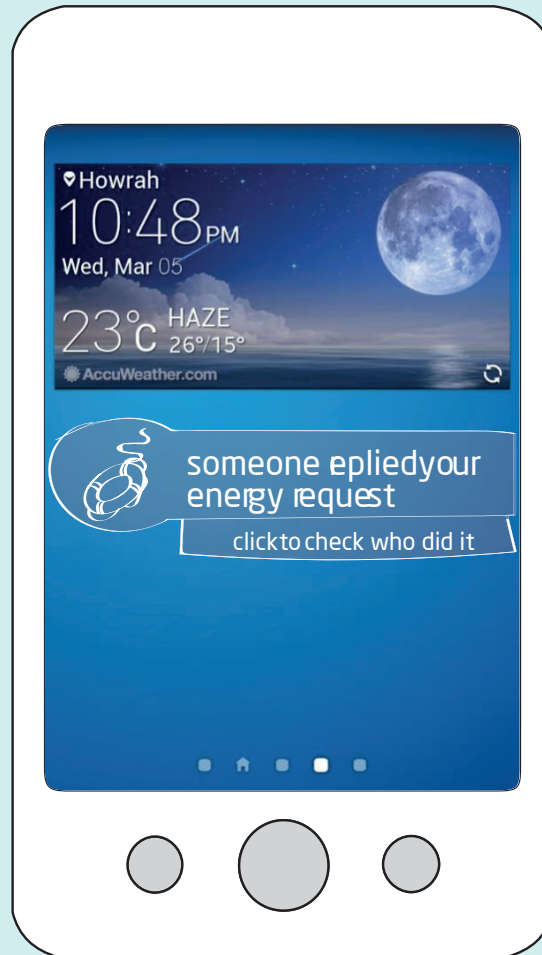
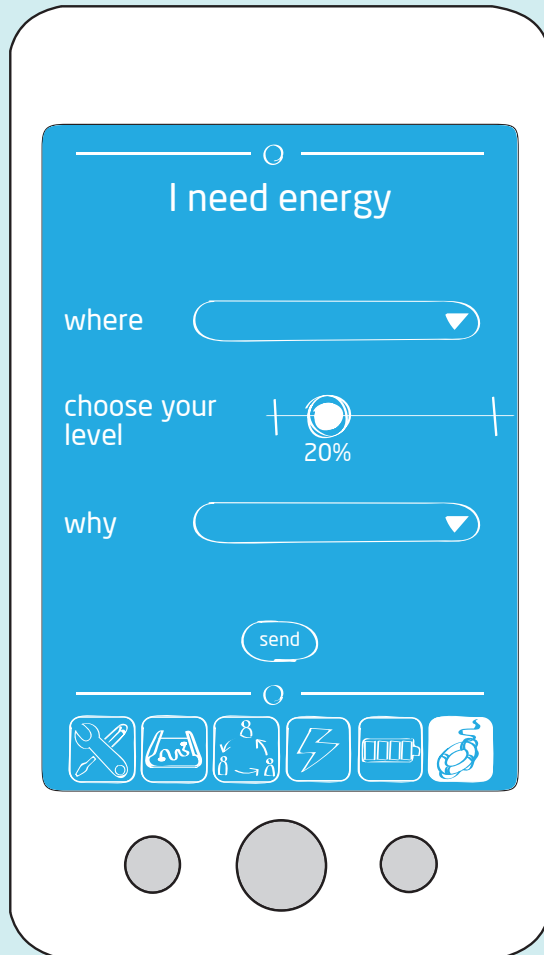


# SHARING OPTIONS



PAPER PROTOTYPE

# NEED OF ENERGY



PAPER PROTOTYPE



- IMPROVE PROFILE
- ADD MEMBERS NETWORK
- REFINE PLANNING
  
- SHARING MORE DEFINED
  
- DONATING / GIFTING ELECTRICITY
  
- ADDED VALUE RETURNING COMMENTING ON EACH OTHER?  
(KARMA POINTS)
  
- EARN GREEN POINTS
- SETTING A SHARING GOAL / ENERGY GOAL
- COMMUNITY GOAL
  
- (INCLUDING THE GRID AS UTILITY?)

ADDITIONAL FEATURES

# WHAT DO WE WANT TO FIND OUT?

- VALIDATE & EXTEND THE PROTOTYPE FUNCTIONS
- SOCIAL CONTEXT (SHARE / HELP) SITUATIONS
- FINDING COMMON DESIGN SPACE
- OTHER SHARING BEHAVIORS OF PARTICIPANTS
  
- VALUES
- RETURN
  
- TRANSPARENCY (USER PROFILE)
- HOW CAN WE MAKE ENERGY SHARING MORE SOCIAL /SOCIAL INTERACTION

CO- CREATION SESSION



- SET UP CO CREATION SESSION
- IMPROVE AND EXTEND PROTOTYPE
- HOST CO-CREATION SESSION
- INTERVIEWS
- USER TESTS
- EVALUATE THE SESSION
- 

WHAT'S NEXT?

THANK YOU!