



GO  ELECTRIC

SERVICE LOGISTICS

International Cargo Bike Festival, Groningen, 2019

Agenda break-out session:

- Introduction
- Interactive group assignment
- Plenary discussion and closing

This research project is partly funded by Regieorgaan SIA, part of the Dutch Organisation for Scientific Research (NWO).



City of
Amsterdam

Clean Air Action Plan

April 2019

Emission-free
Amsterdam



City of
Amsterdam

Amsterdam emission-free
Traffic zones



Emission-free centre in 2022

For buses and coaches



Emission-free zone within the A10 ring road in 2025

For buses, coaches, passenger ships, taxis,
vans and heavy goods vehicles, pleasure
craft, public ferries (mopeds and scooters
in the entire built-up area)



Emission-free Amsterdam in 2030

For buses, coaches, passenger ships, taxis,
vans and heavy goods vehicles, pleasure
craft, public ferries, mopeds and scooters,
passenger cars and motorbikes.



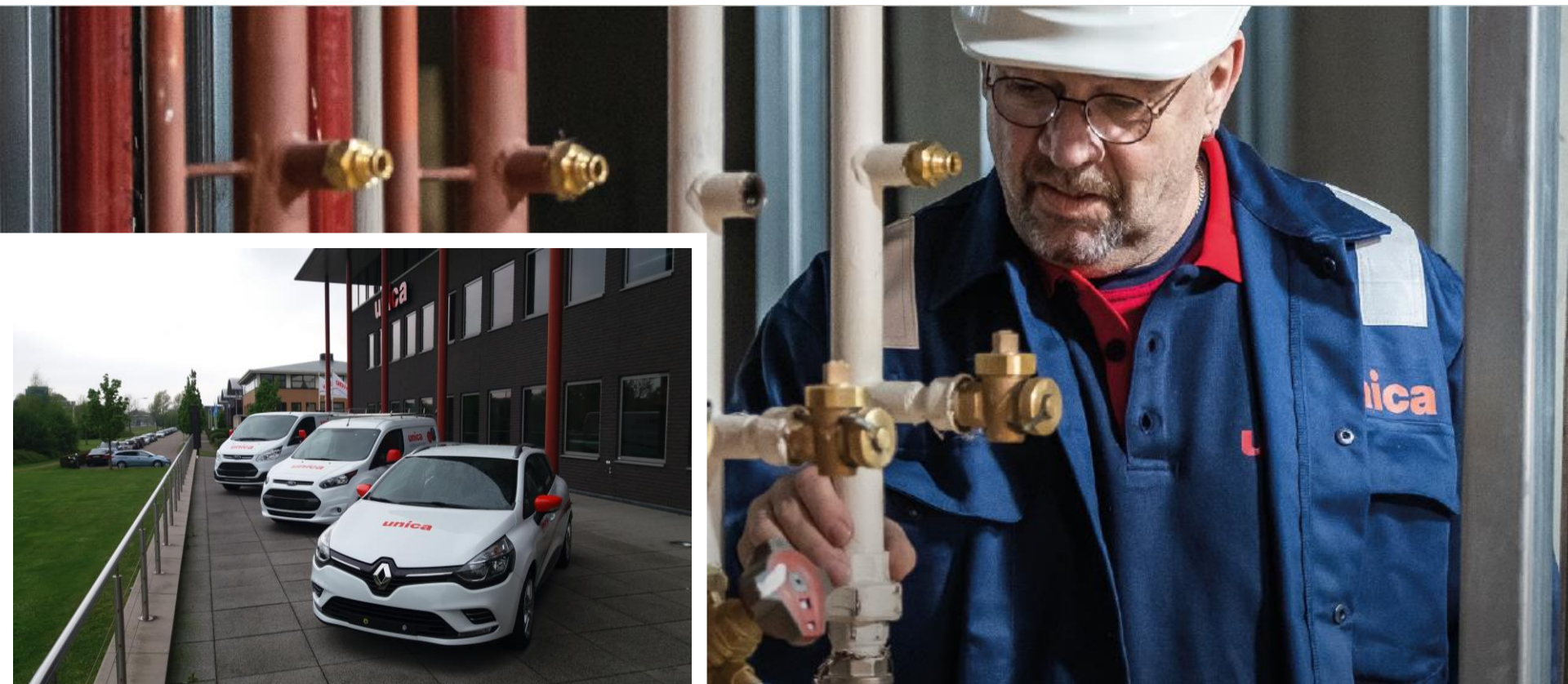
2-YEAR RESEARCH

Which **logistics** concepts, **charging** strategies and **behavioral** interventions are needed to implement electric transport for companies in **service logistics**?



	SOLUTIONS (SME)	SERVICE COMPANIES	ASSOCIATIONS	KNOWLEDGE
Consortium- and casepartners			<p>Dutch Organisation for Electric Transport</p>	
Other partners				

UNICA: TECHNICAL SERVICE PROVIDER



Photo's: Unica

MEET UNICA EMPLOYEES

They all have a different weekly schedule

John



Youssef



Karen



Simon



Photo's: Unica

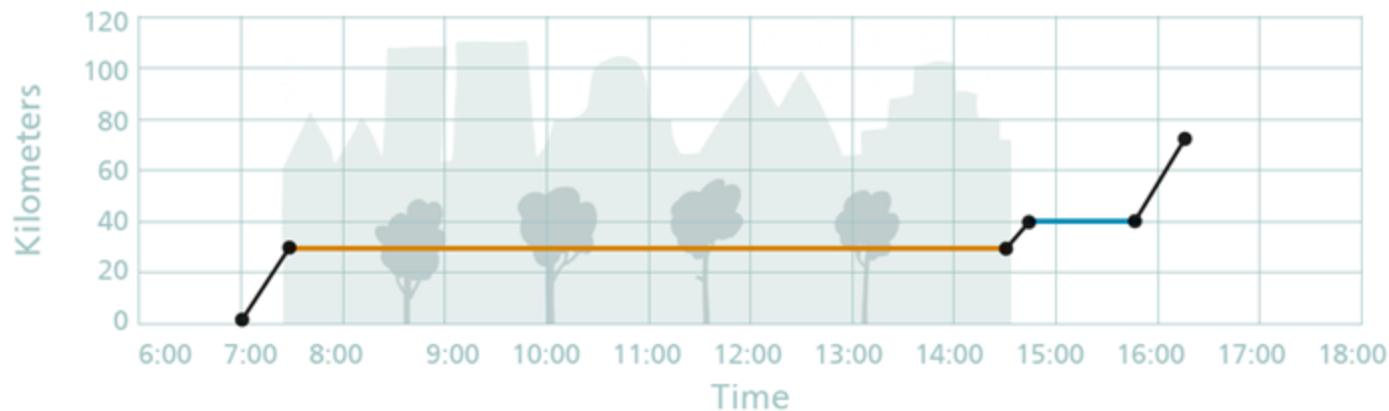


Weekly schedule of John



Ford Transit Connect

Monday



KM	72
	2
	1





Weektotals

KM	407	Kilometers
	19	Number of visits
	6	Zero-emission zone visits

	Visit inside zero-emission zone
	Visit outside zero-emission zone
	Driving time

GROUP ASSIGNMENT

GIVE ADVISE: HOW TO MAKE THE WEEKLY SCHEDULE ZERO-EMISSION?

Electric cargo bike	Electric cargo moped	Small electric distribution vehicle	Electric van
			

! Also consider charging options: home charging, fast charging, swappable batteries, etc.

Jehudi van de Brug

CARGO BIKE

- Healthy
- Zero emission
- Parking near destination
- No parking fee
- Appearance
- Faster
- Fun



Shorty

- Compact
- 150 liter
- 85 kilo



Cargo XL

- Medium
- 620 liter
- 125 kilo



Tender 1300

- Big
- 1300 liter
- 300 kilo



Hans Baars

THE HUB COMPANY: MOBILE HUB SOLUTION



Photo: The Hub Company

Hans Baars

THE HUB COMPANY: MOBILE HUB SOLUTION



Photo: The Hub Company



THE HUB COMPANY

DIVIDE IN GROUPS

Group A. Milan Tamis (AUAS)

Group B. Martijn Altenburg (AUAS)

Group C. Jos Vrieling (HAN)

Group D. Nina Veders (HAN)

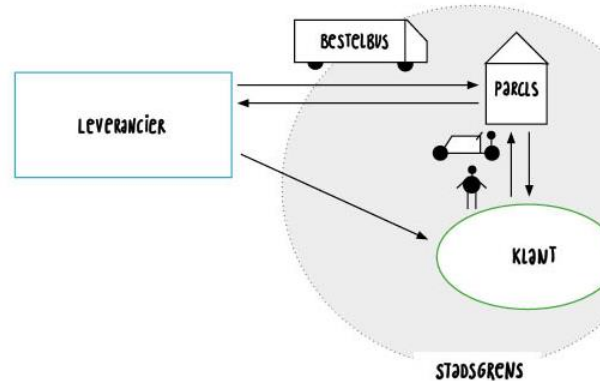
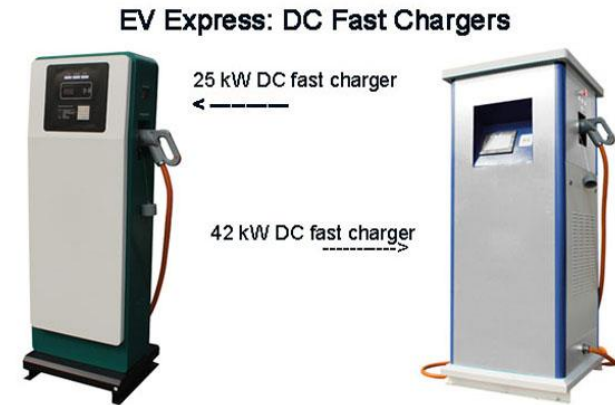
Group E. Susanne Balm (HvA)

Group F. Jehudi van de Brug (Urban Arrow)

Group G. Hans Baars (The Hub Company)

GROUP ASSIGNMENT

GIVE ADVISE: HOW TO MAKE THE WEEKLY SCHEDULE ZERO-EMISSION?



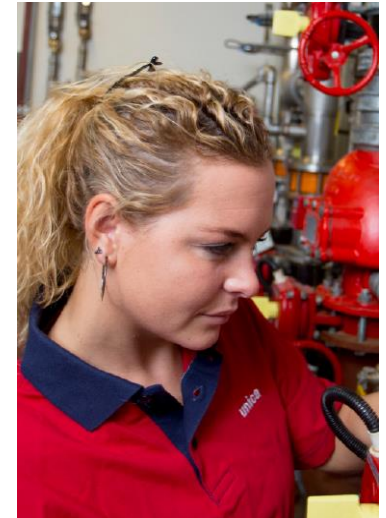
PRESENT SOLUTIONS

*What is your
advise to make the
weekly schedule
zero-emission?*

John



Karen



Photo's: Unica

HUMAN FACTOR: EXAMPLES

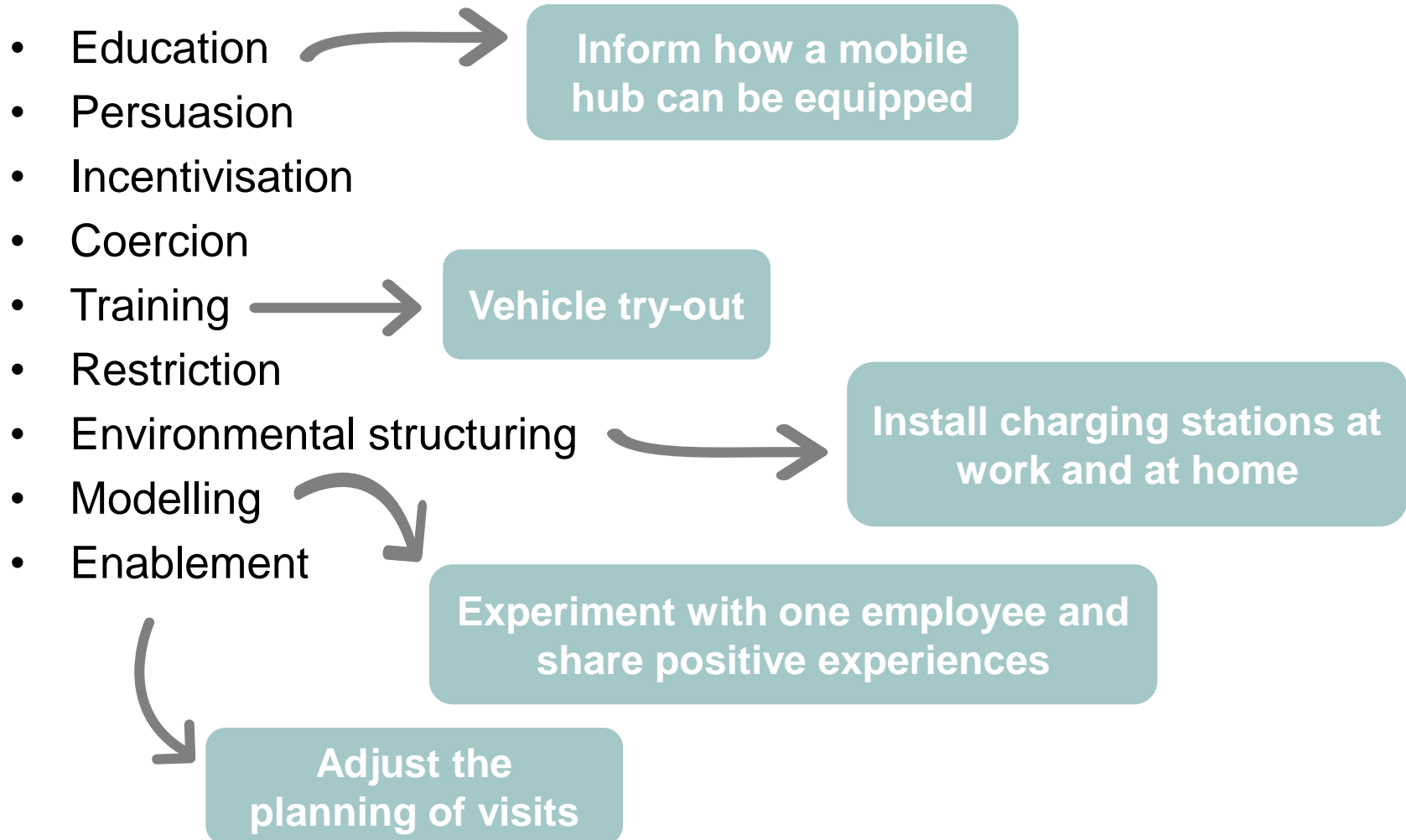
“I need my equipment but the parking place for EV is too far away”

“Because of my unpredictable work activities, I'm not able to drive EV”

“My company should drive EV to show our clients that we care about the environment”

“I've got a charging station next to my house, so I'm ready for EV”

BEHAVIORAL INTERVENTION METHODS



THANK YOU FOR YOUR ATTENTION!

The project will run until February 2021. Want to know more?
Check out the stand of Urban Arrow and The Hub Company at ICBF or
contact us online.

WEBSITE

hva.nl/gasopelektrisch
urbanarrow.com
thehubcompany.eu

EMAIL

gasopelektrisch@hva.nl
jehudi@urbanarrow.com
hans@baarssliedrecht.nl