# Action Plan Utrecht Region

Good Practice event Utrecht – March 30 & 31, 2022



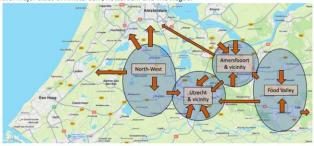






## Policy context

The province of Utrecht is one of the 12 provinces of the Netherlands and centrally located. The province has fairly urbanized areas, but also has extensive forests in the east. The west of the province is characterized by flat meadows, peat bogs and lakes. The province of Utrecht is largely part of the 'Randstad'; the urbanized area in the west of the country, which also includes the three other major cities of Amsterdam, Rotterdam and The Hague



Economics regions in the province of Utrecht

The policy instrument addressed: "Kansen voor West II" (means literally; Opportunities for West part

- · strengthening research, technological development and innovation;
- · supporting the transition to a low-carbon economy in all sectors;
- · stimulating employment and supporting labor mobility; and
- · stimulating social inclusion and fighting poverty.

# Sustainability & circularity

## Zero emission

From 2028 onwards, all the buses in our public transport concessions will be zero emission. Promoting hydrogen as an energy carrier is not a specific aim of the Province of Utrecht, but we are not making it impossible. The expectation is that hydrogen will only become feasible on a (large) scale during the lifetime of this concession.

# Energy and electric power policy

The province of Utrecht wants concession holders to be smart about how they use energy, keep their use (and costs) as low as possible and make the best possible use of the energy network. We prefer that concession holders make use of sustainably generated energy from the region.

As a granter of the concession, the province steers the promotion of circularity in public transport by means of circular award criteria and by offering scope in the Schedule of Requirements.

The current concessions initially ran until December 2023. Because of the Corona crisis and all the uncertainties that this entails, both concessions were extended by two years until December 2025. The province is currently busy with the preparations for the new tenders and is in consultation by the stakeholders, all the private transport companies and with the public.

# Action 1 Monitoring current ZE performance

Based on the good practice:

Hamburg PP2-3 Implementation of data driven process

CROW is annually monitoring the total CO2 footprint, the number of passengerkilometer and the CO2 footprint per passenger-kilometer of all the bus concessions in the Netherlands.

In 2020, the CO2 footprint per passenger km increased dramatically due to drastic decrease in the number of passenger in a COVID-19 period. In both concessions in the province of Utrecht the CO2 emissions per passengerkilometer has doubled.

## Action content

The aim of this action is to draft a monitoring plan to further disclose the existing management & monitoring (data)information on zero emission public transport. In relation to this monitoring plan, monitoring requirements will be drafted to be included in the procurement contracts for new concessions.

## Players involved

- . Province of Utrecht. The role of the province is to develop a monitoring plan containing the type of data, timing of delivery, responsibilities etcetera. And the Province of Utrecht role is to deliver a monthly dashboard with the Key Performance Indicators for the management.
- · Public transport operators U-OV and Syntus. Their role is to carry out the actual monitoring and deliver data.
- . KPVV/DOVA: Drawing up annual monitoring reports for all public transport concessions in the Netherlands.

## Timeframe

Q3 2022: Drafting the monitoring plan 2.0

Q4 2022: Implementation the monitoring plan 2.0

Q1 2023: Presenting first monitoring results in the annual report about public transport in the Utrecht region

Costs Estimated at 20.000 euro & Funding sources Existing provincial budget

Action 2 Performance improvement / training of drivers Based on the good practices:

- . Hamburg PP2-6 Training Program for drivers and technicians
- . Turku LP- 02 E-bus training for whole Staff, separate eco-
- driving training for drivers Utrecht PP6-1 Optimizing driver skills and experiences for

The operation of e-buses requires other skills than driving with conventional fuel buses. The user interface between the driver and the e-bus is crucial for the performance: in availability & maintenance, passenger comfort, safety and energy consumption. It makes the work of the bus drivers also more attractive, if they have the right skills and can tribute to better results.

- Proposal (Business case) for this training program by Qbuzz
- Agreement by Province Utrecht
- Implementation training and Q-drive tool in Utrecht area.
- Operations (end concession 2025)
- Monitoring the action (indicators) & benefits in performance/ savings

# Players involved

- Province Utrecht
- Transport company: Qbuzz (U-OV) -management and busdrivers (about 500 driving with e-buses)

# Timeframe

Start preparing the introduction of the Qdrive tool in Q4 2021: the Utrecht context, optimization with Good Practices eBussed

Q1+2 2022: Start training & implementation

Monitoring

Costs Estimated 2000 euro x 500 (e-)busdrivers= 1,1mln & Funding sources Financed from the savings in energy use during the period 2023-2025 within the regular PT-budget.

# Action 3 Depots-continuation, safety & storage & charging infrastructure Based on the good practices:

Utrecht PP6-PP8-03 New bus depot 'Westraven'

Fire safety is recognized as an important theme concerning electric buses. The good practice initiated zoomed-in on the fire safety aspects of the brand new bus depot Westraven, with a capacity of 160 electric buses.

In general: the storage and charging of electric buses requires different agreements and procedures than housing conventional (diesel powered) buses. A few of them are already affected at 'Westraven' however more agreements must be made and even more safety measures must be implemented. Action content

# · Instruction on safety and charging, map the do's and don'ts,

- . Investigate the acquisition of the needed equipment and tools for V2G
- Agree on permits
- . Consult on the further elaboration of all the procedures necessary to keep the risk of fire manageable
- Map the specific knowledge of the electric parts and elements of the hus
- · Exchange experiences with e.g. the Stuttgart bus depot manager

# Players involved

- The bus depot facility management
- The local fire department and the regional safety board
- The local authorities
- A qualified consultant
- The electric bus manufacturer
- 6. Energy market operators and power grid managers
- Experience experts

# Timeframe

Costs Estimated 27.500,- & Funding sources No applying resources are needed

Action 4 TRIBUS: pilot ride e-bus & Communications & Promotion Based on the good practices-links (further elaboration):

- STRIA PPG 9-05 "The Green Bus Demonstration Pilot Project"
- Gozo PPG3-3 "logbook & monitoring pilot e-bus"

Ambition is to scan the possibilities of using a small electric bus for daily operation. The development of small buses for public transport lags behind that of regular buses. There are technical challenges to combining electric driving with comfort and space.

# Action content

We propose a trial with a small electric bus. This electric bus has been developed by the Dutch manufacturer Tribus, but there is no practical experience with it yet according to public transport operation. The bus will be used during the pilot on a bus line in the city of Utrecht. During the trial period, the use of the bus will be monitored on three fronts:

- Driving a small electric bus in small streets;
- Experiences with the operation;
- Experiences according to passengers.

# Players involved

- Manufacturer Tribus
- Province of Utrecht
- Municipality of Utrecht
- Transport company Qbuzz
- · Passengers representation organization 'Rocov'

# Timeframe

From the moment that the minibus is ready to use and the moment the bus is approved by the authorities:

Preparation: week 1 until week 8

Testing: week 9 until week 12

Evaluation: week 13 until 16

Costs Estimated € 53.000,- & Funding sources Transport company and the mini bus manufacturer