

Nobina).

Maria

TAKING THE NEXT STEP

Martin Atterhall



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Free from local emissions

> Energy efficient

Significantly reduced noise pollution

Reposition PT trademark increase brand value

**** *******

in new areas Increased customer appreciation

Greater acceptance for buses in the city

Facilitates

public transport

Attract more customers to Public Transport

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A CLEARLY VISIBLE TREND



Nobin

TECHNOLOGY HAS REACHED A THRESHOLD

Electric Buses in Cities

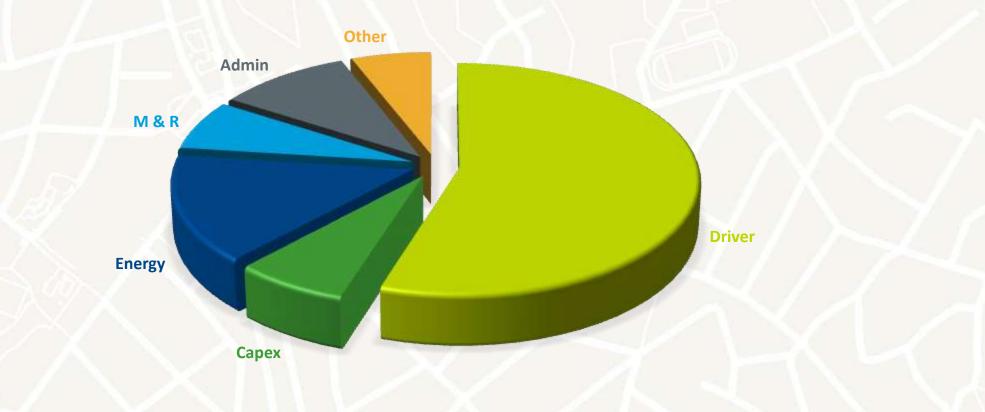
Driving Towards Cleaner Air and Lower CO2

A BEV bus is equal or better compared to conventional in terms of TCO

...but, they didn't count in the drivers (or the passengers)



TYPICAL COST DISTRIBUTION FOR A CITY NETWORK





Station performance drastically reduced

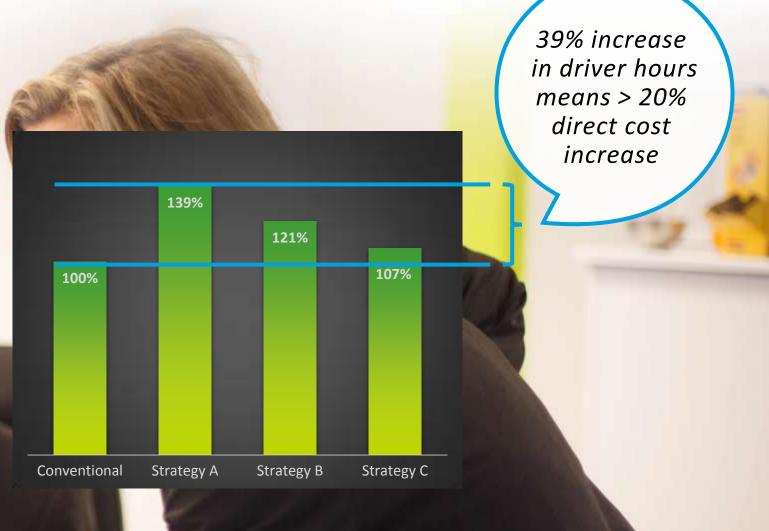






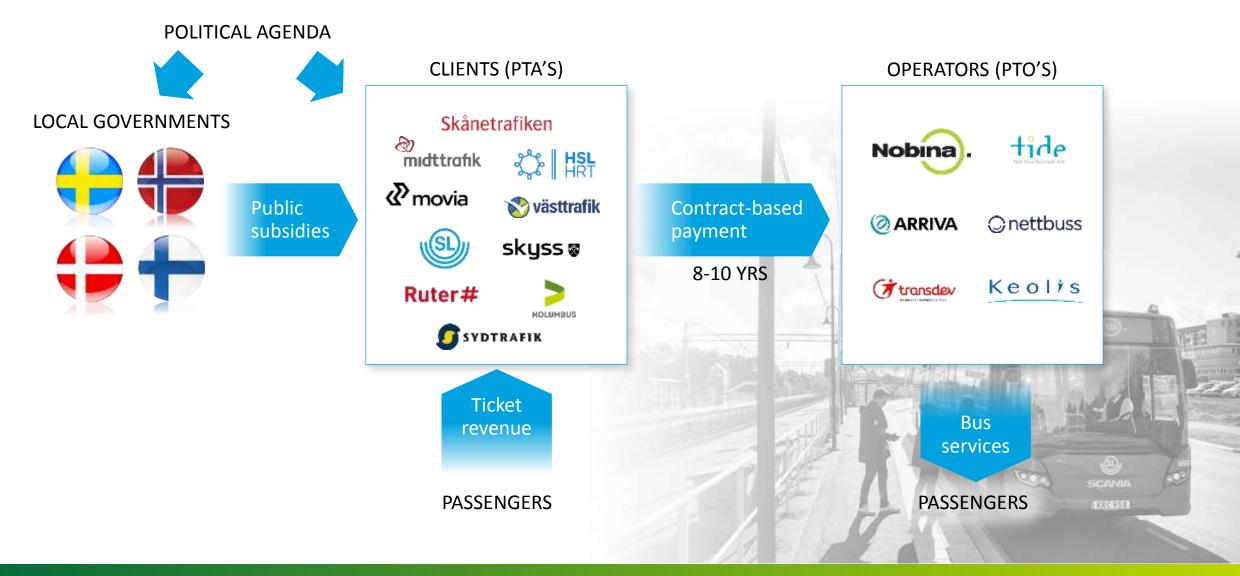
EFFECT OF NETWORK PLANNING DYNAMICS

- Driver hours
- No of buses needed
- Infrastructure investments

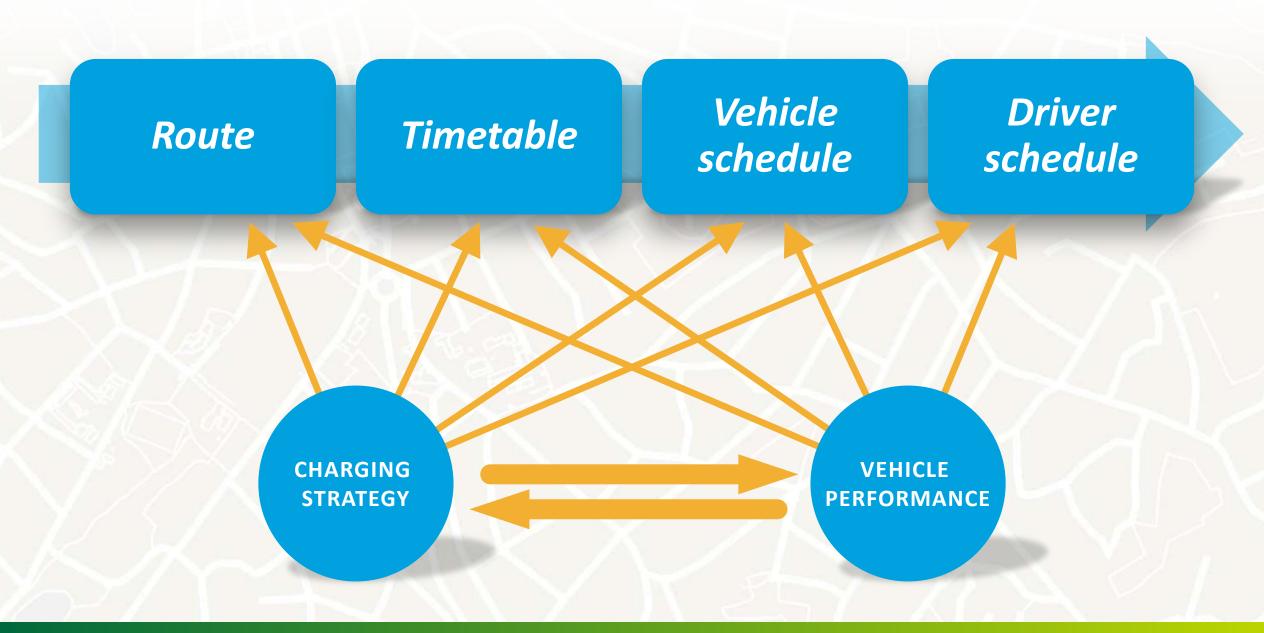




NORDIC PUBLIC BUS TRANSPORT MARKET DYNAMICS

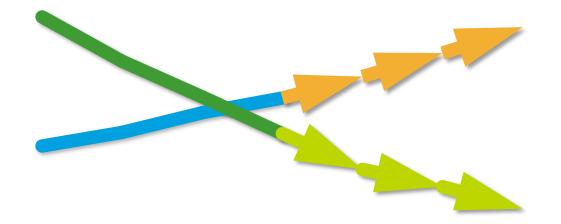








TECHNOLOGY AND INDUSTRY IS DEVELOPING FAST



2015 2016 2017 2018 2019 2020 2021

Ba Today's concepts will tecl probably not be very competitive after one contract period Su

ba



THE FUTURE IS NOW...

- From 15 to almost 100
 e-buses in coming 18 months
- Almost all coming tenders for urban traffic include e-buses





To minimize public spending impact, open for optimization of the complete chain

Denser schedule

Vehicle schedule

Electric bus systems are vital components in developing sustainable cities

The future is now...

Current technology concepts will likely be obsolete in one <mark>gene</mark>ration

ECHNOLOGY AND INDUSTRY IS DEVELOPING FAST

contracts

THE FUTURE IS NOW



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