

Zero emissions city logistics

From the perspective of a
netwerk operator

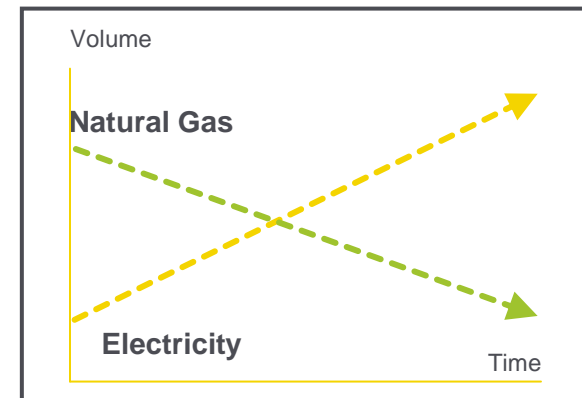
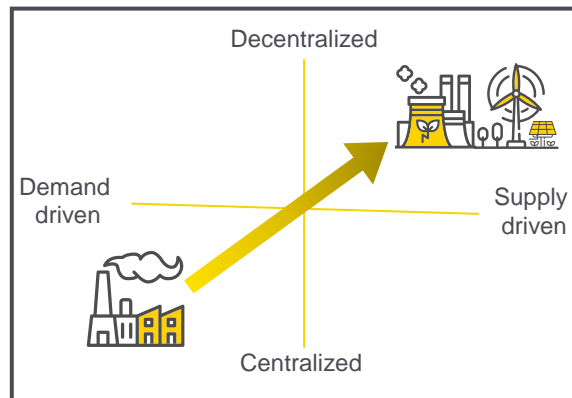
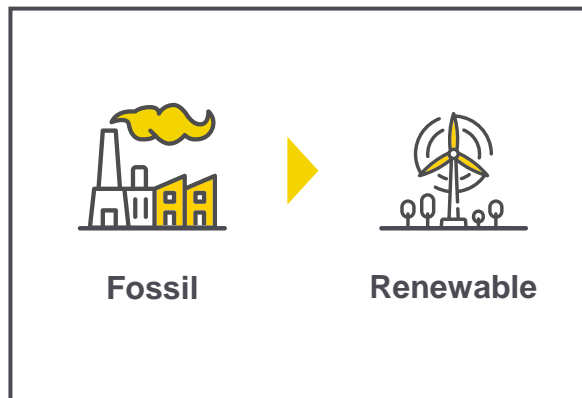
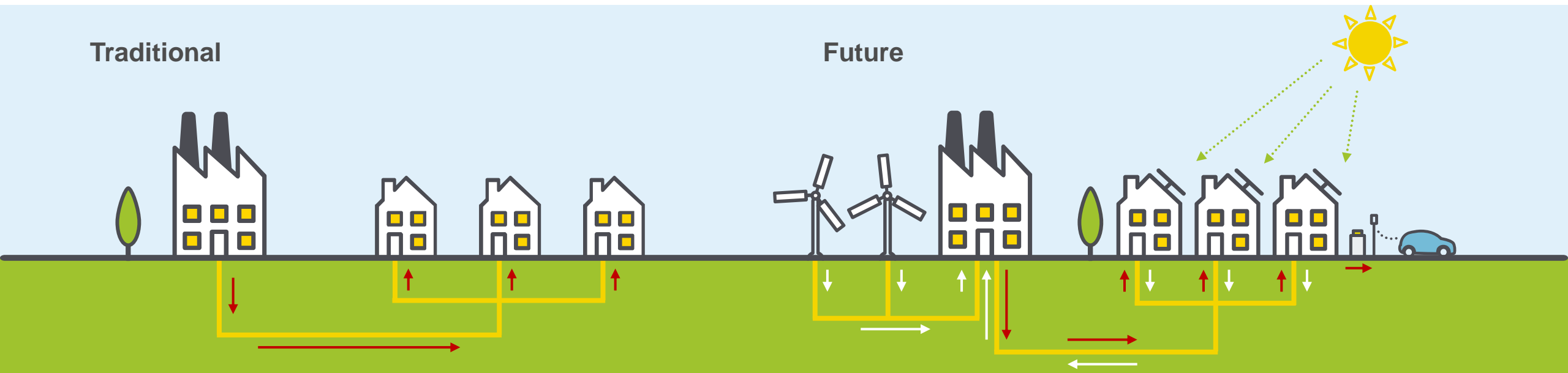
Urbanism Next

Changing landscape for a network operator

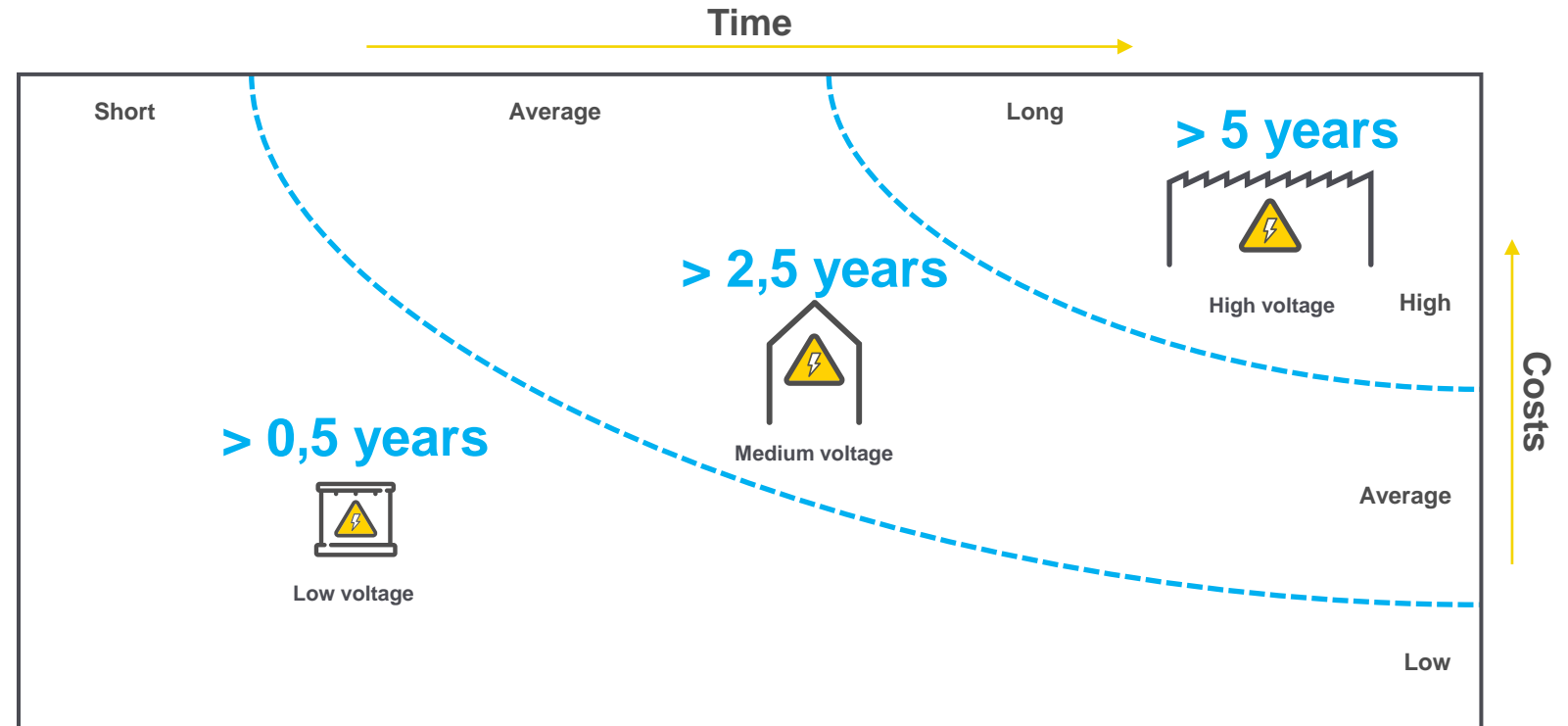
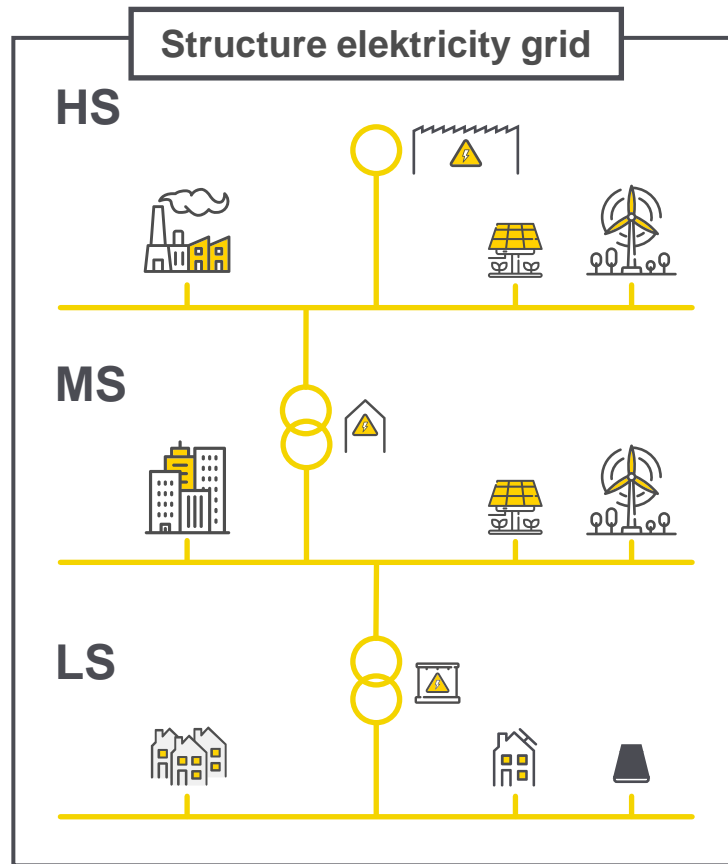
ENERGY TRANSITION

Traditional

Future



ADAPTING THE ELECTRICITY GRID: TIME, SPACE AND MONEY



**BASISDOCUMENT
ENERGIETRANSITIE**

This document contains a detailed analysis of the impact of investment on both gas and electricity.



VISION AND STRATEGY STEDIN

Facilitating the energy transition



Objectives



predictability &
planability



Efficient
investments



promoting
internal interests



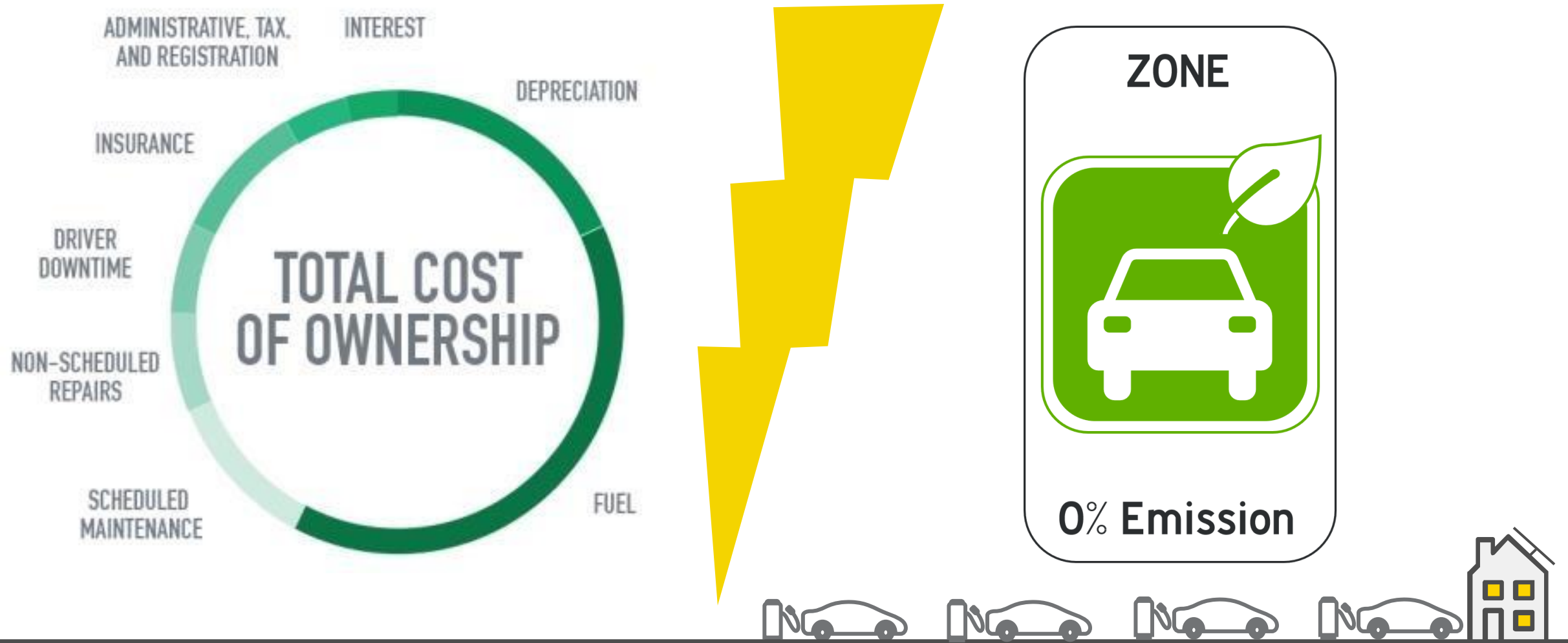
Internal efficiency
& Focus

Image and customer
satisfaction

Grid connections & infrastructure
On time at minimal costs

The impact of the logistical sector on the network operator

ELECTRIFICATION OF THE LOGISTICAL SECTOR



CHALLENGES FOR THE NETWORK OPERATOR

Electrification of the logistical sector causes an increase in the demand for power



To meet this demand, investments in the electricity grid are required



These investments can take multiple years to realize



Therefore it is crucial to provide insight in future demand in order to invest efficiently



LOCATIONS OF CHARGING INFRASTRUCTURE

- Labour costs contribute up to 50% of the Total cost of ownership (TCO) in the logistical sector
- Stops cost money
- Charging infrastructure will be required on locations where the driver is stopping anyway
- As a result the influence of a network operator on these locations is quite limited
- Charging locations can be categorized in public and private locations



PUBLIC VS PRIVATE LOCATIONS



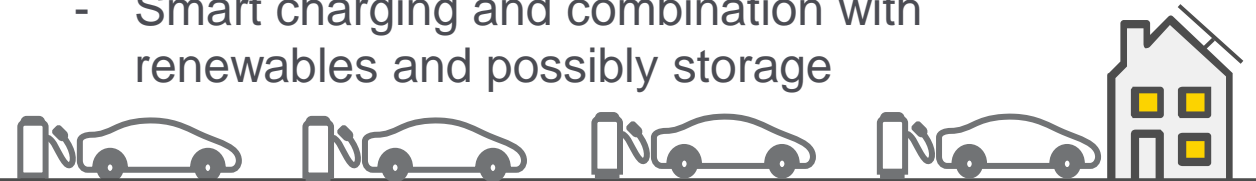
Public:

- Strategic locations for charging infrastructure
- Role for municipalities
- Combination with renewables and storage



Private:

- Multiple charging points on own ground
- Obtaining insight in future energy demand
- Smart charging and combination with renewables and possibly storage



Obtaining insight in future demand

WHO HAVE WE CONTACTED SO FAR

Two business parks as pilot: Delft & Barendrecht

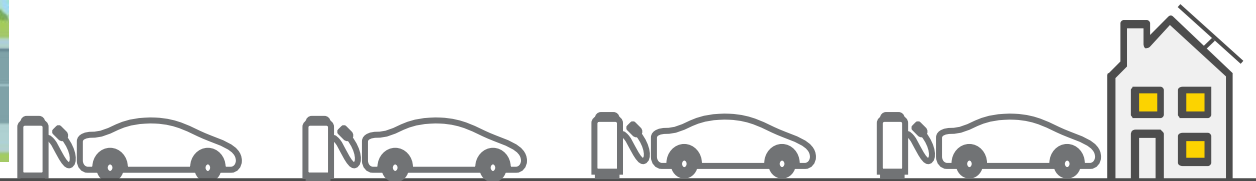


Usual suspects



Sector
association

e:ofenedex



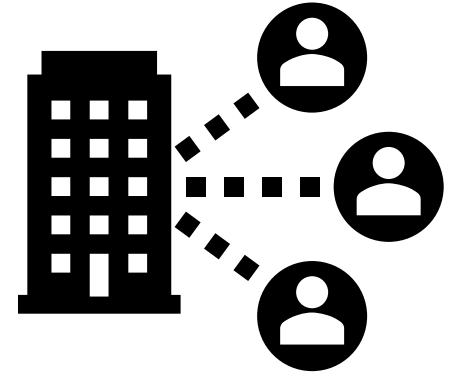
WHAT HAVE WE DONE SO FAR?

Public sector

- Municipalities
- NAL taskforce
- Logistiek 010 (Rotterdam)

Private sector

- Usage key accounts
- Email campaign
- Cold calling
- LinkedIn requests
- Survey Branch association



WHAT HAVE WE LEARNED?



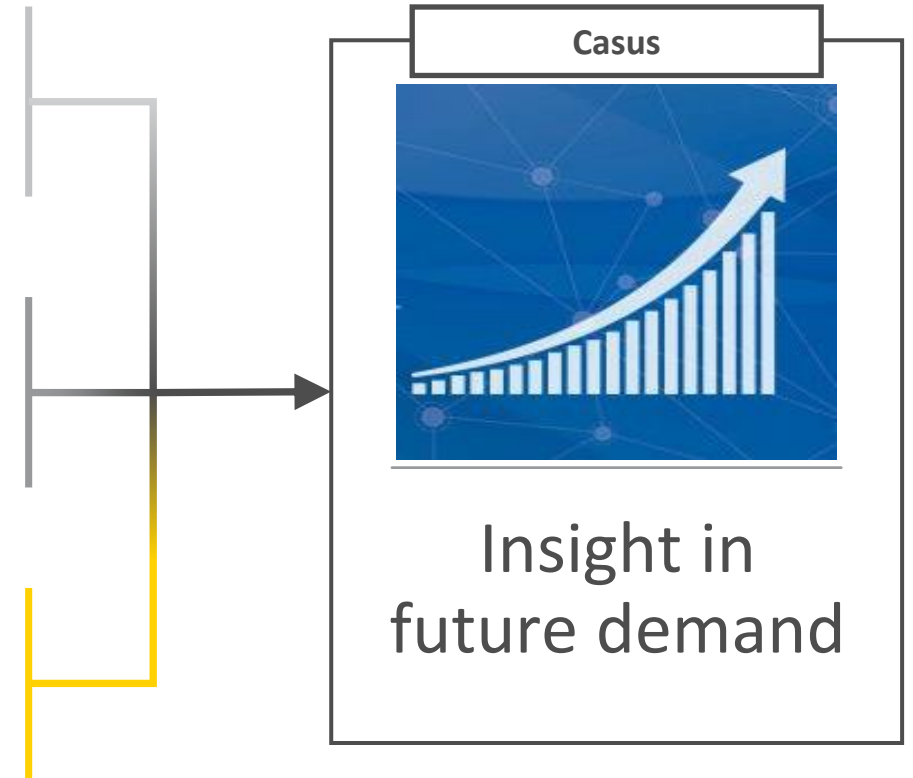
For a network operator it is hard to come in contact with the relative new parties in the logistical sector



At this time Logistical parties are unable to provide detailed insight in their future demand



Simulations based on accessible data are required to provide some insight in future demand



Key takeaways

TAKE AWAYS

From the perspective of a network operator



- 1 The network operator is a crucial stakeholder regarding zero emission city logistics
- 2 Make sure the network operator is involved in an early stage
- 3 Share all the available plans and ideas regarding charging infrastructure, even if they are not definite yet
- 4 Keep in mind long lead times for realizing charging infrastructure, a year is a short time for network operators

