



Pieter van Kerkhof Coordinator Charging Infrastructure March 28th 2023





The Netherlands at a glance

- 17,7 million inhabitants
- 8,9 million passenger cars
- 852.000 medium duty vehicles
- 136.000 heavy duty vehicles









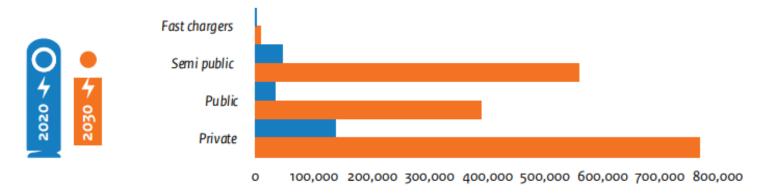


The National Charging Infrastructure Agenda

 An integrated approach to realize fast upscaling of charging infrastructure:

Charging your car: easy, smart and everywhere

Charging point prognoses

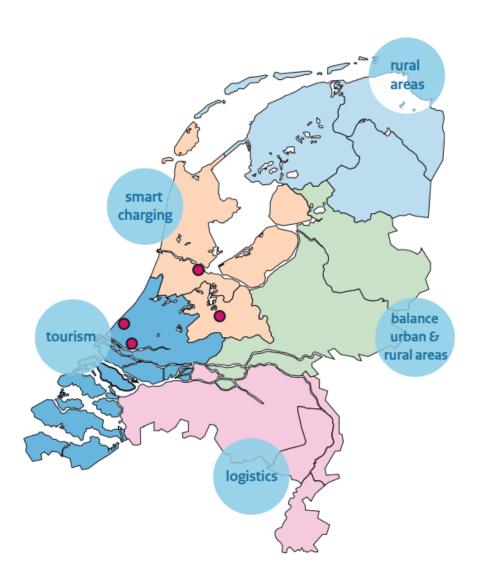






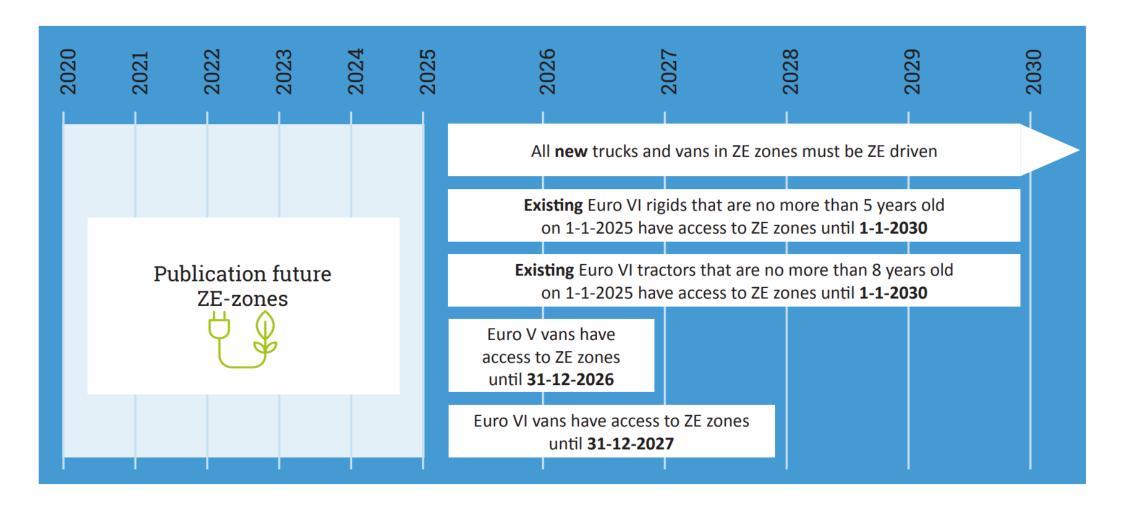
Regional approach

- Six regional project organisations supporting municipalities
- Active collaboration with regional utilities
- Charging on the street, at home and at work
- Fast charging on the road and in the city
- Hand in hand with the energy transition





Zero emission zones in 2025





Logistics fleet in the Netherlands

Туре		Weight	Category	Numbers	Percentage electric (2022)	CO ₂ emission (Mton)
	Delivery vans	<=3,500 kg	N1	852 thousand	~ 1%	4.29 (43%)
	Light-duty trucks	>3,500kg <=12,000kg	N2	62 thousand	~ 0.25 %	1.48 (18%)
	Heavy- duty trucks	>12,000 kg	N3	74 thousand	< 0.1 %	4.15 (42%)

Overview of the Dutch logistics fleet and level of electrification (CBS, 2021)



Growth scenarios electric logistic vehicles

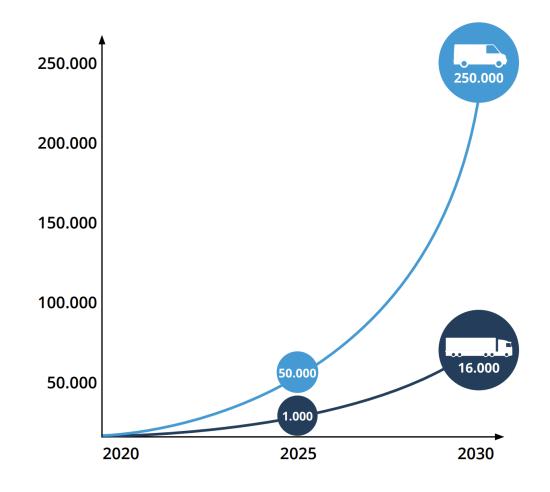
Scenario delivery vans:

• 2025: appr. 50.000

• 2030: appr. 250.000

• 2035: appr. 600.000

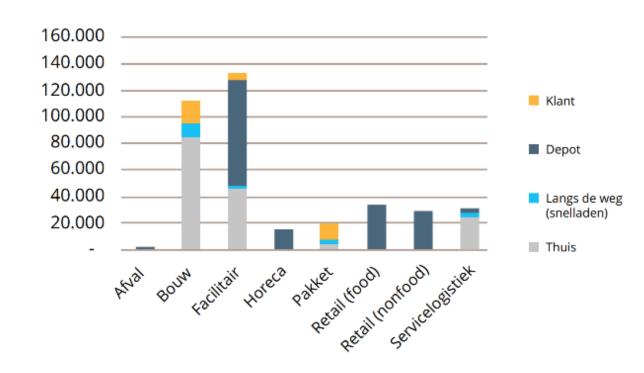
 For N2/N3 similar growth scenarios but later in time





Charging behaviour differs per sector

- Customised charging infrastructure solution per sector
- Delivery vans charge 'at home' in approx. 50% of the cases
- The majority of charging demand is at depots/industrial sites



Charging demand (MWh/y) per sector for electric vans





NAL Working Group Logistics: 5 themes/taskforces

Forecasting logistics charging demand



Public stimulation of logistics charging



Taskforces

Private logistics charging



Basic network (heavy duty logistics)



Charging at construction sites





Forecasting logistics charging demand

Status:

- Largest power concentration on business parks
 - 3700 business parks in the Netherlands
- Grid integration major challenge

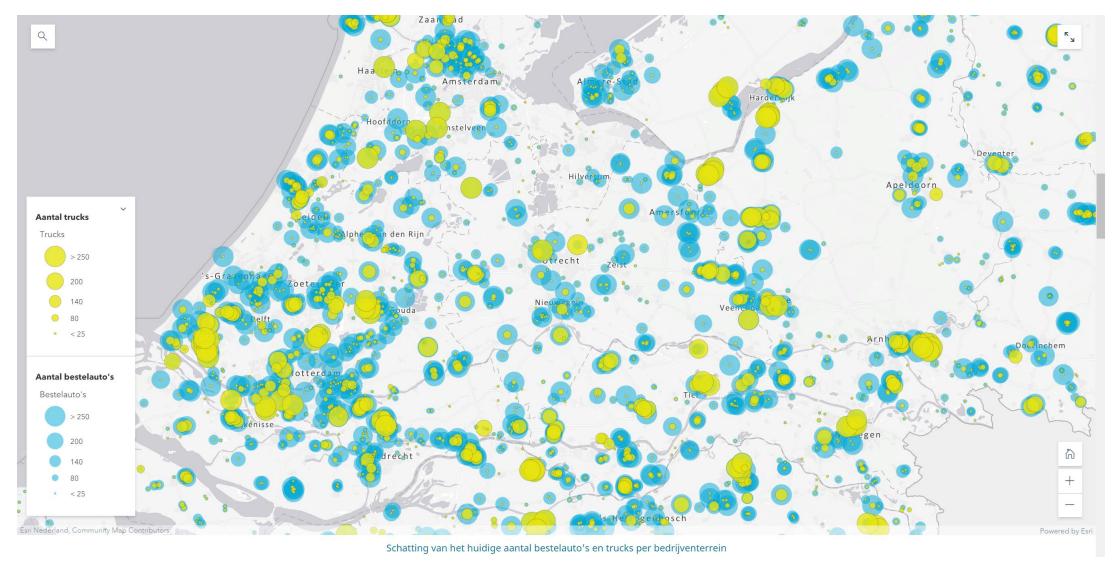
Highlights of current research:

- Outlook Business parks (by ElaadNL)
- 2. Storymap: charging demand per business park
- 3. Dashboard: ranking/prioritization of business parks



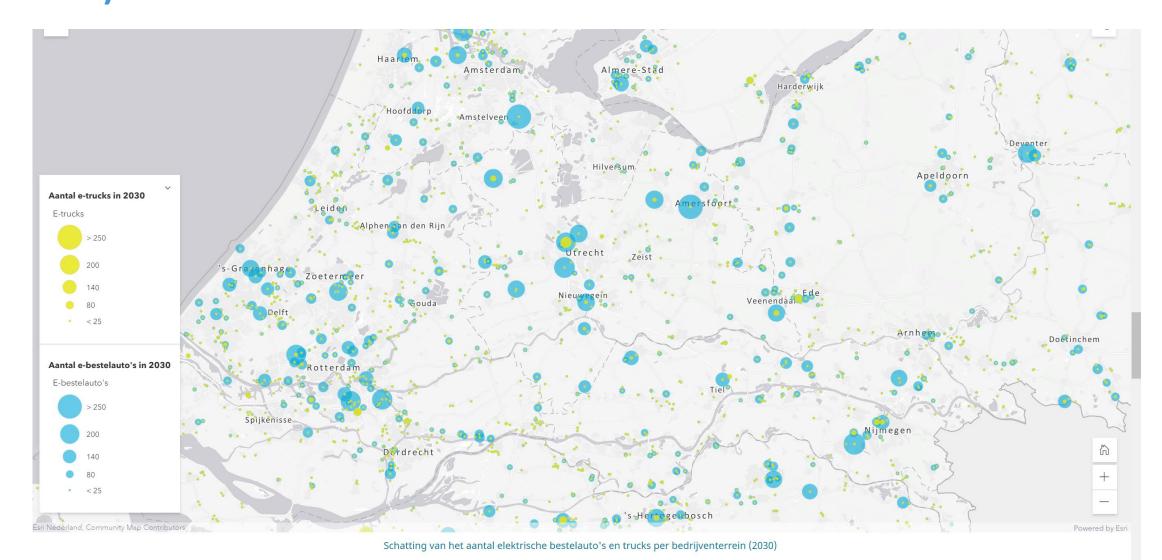


#registered vans and trucks (per business park, 2021)



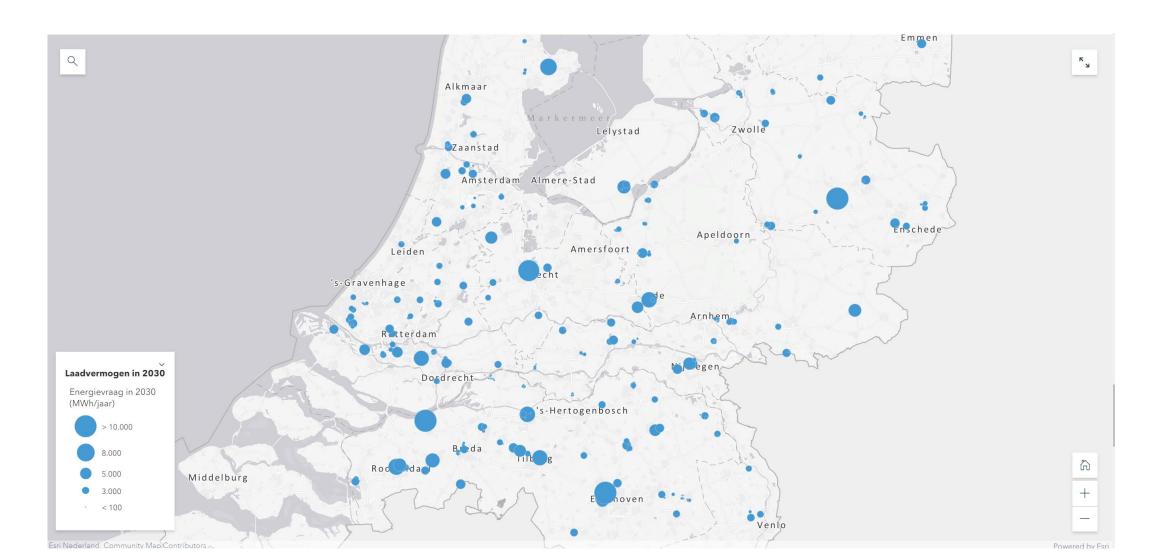


forecasted electric vans / trucks (per business park; 2025, 2030, 2035)



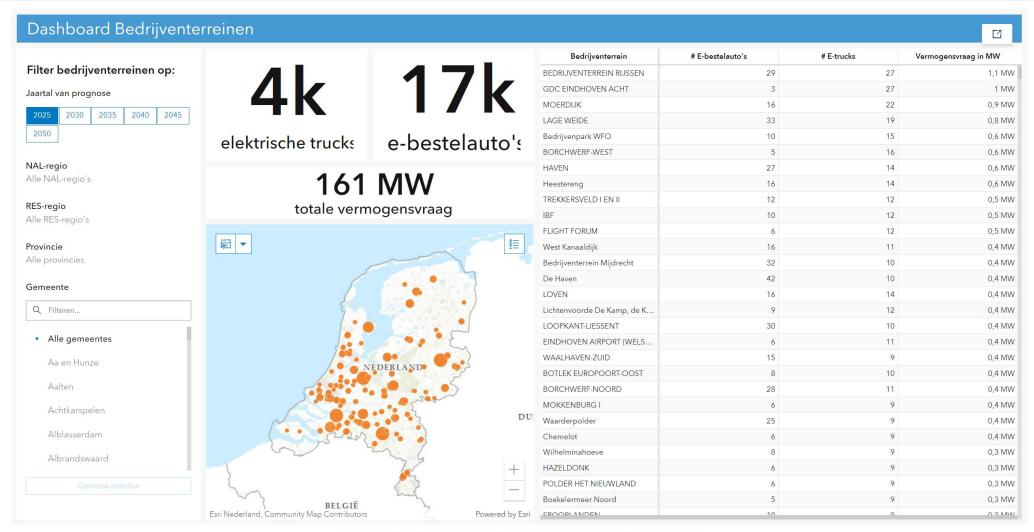


Forecast for charging power demand (per business park 2025, 2030, 2035)



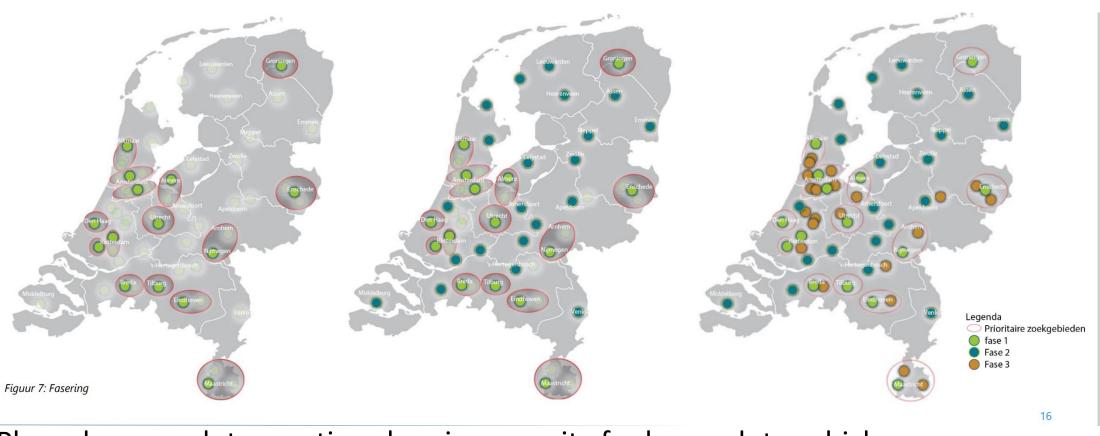


Dashboard: ranking of business parks





Basic network for public heavy duty charging



Phased approach to creating charging security for heavy duty vehicles



Taskforce Heavy Duty Charging Infrastructure

- Support for municipalities and local entrepreneurs
- By sharing knowledge, best practices







Challenges

- Grid capacity
- Awareness
- Employment shortage, particularly with local governments

More information:

factsheet

pieter.vankerkhof@rvo.nl

