



Netherlands Enterprise Agency

NAI Dutch National
Charging Infrastructure
Agenda

The National Charging Infrastructure Agenda

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 **Sluit aan**

The Netherlands at a glance

- 17,7 million inhabitants
- 8,9 million passenger cars
- 991.000 medium duty vehicles
- 144.000 heavy duty vehicles

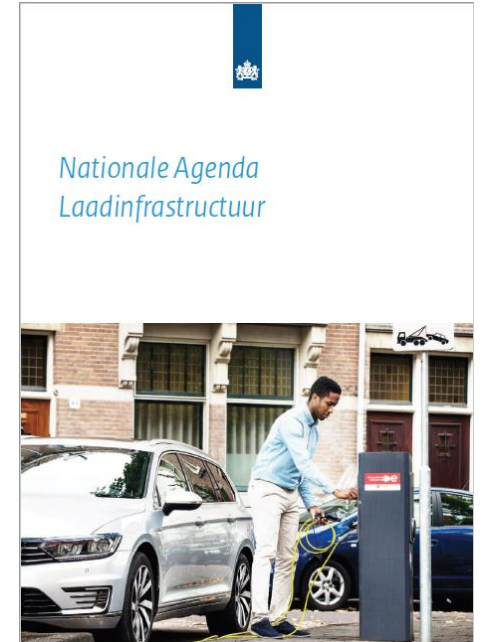
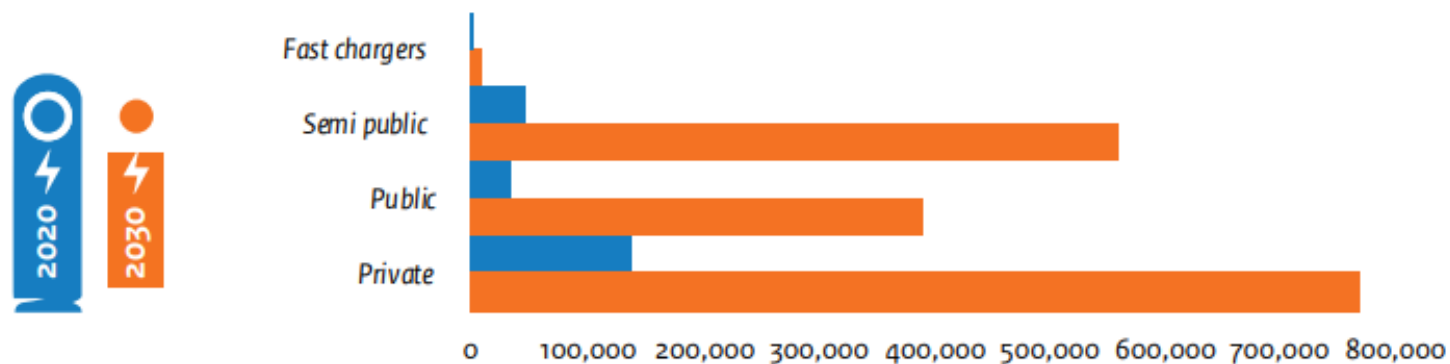


The National Charging Infrastructure Agenda

- An integrated approach to realize fast upscaling of charging infrastructure:

Charging your car: easy, smart and everywhere

Charging point prognoses

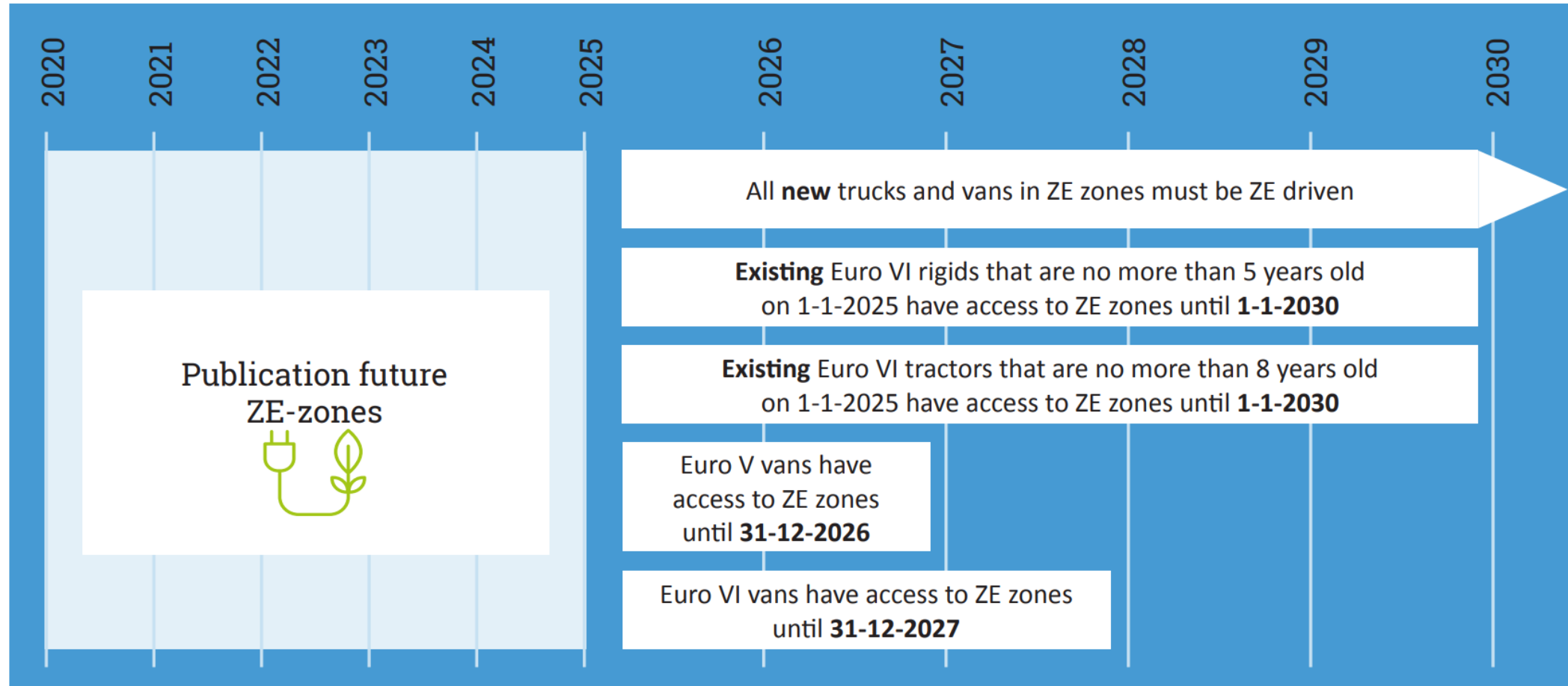


Regional approach




- 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



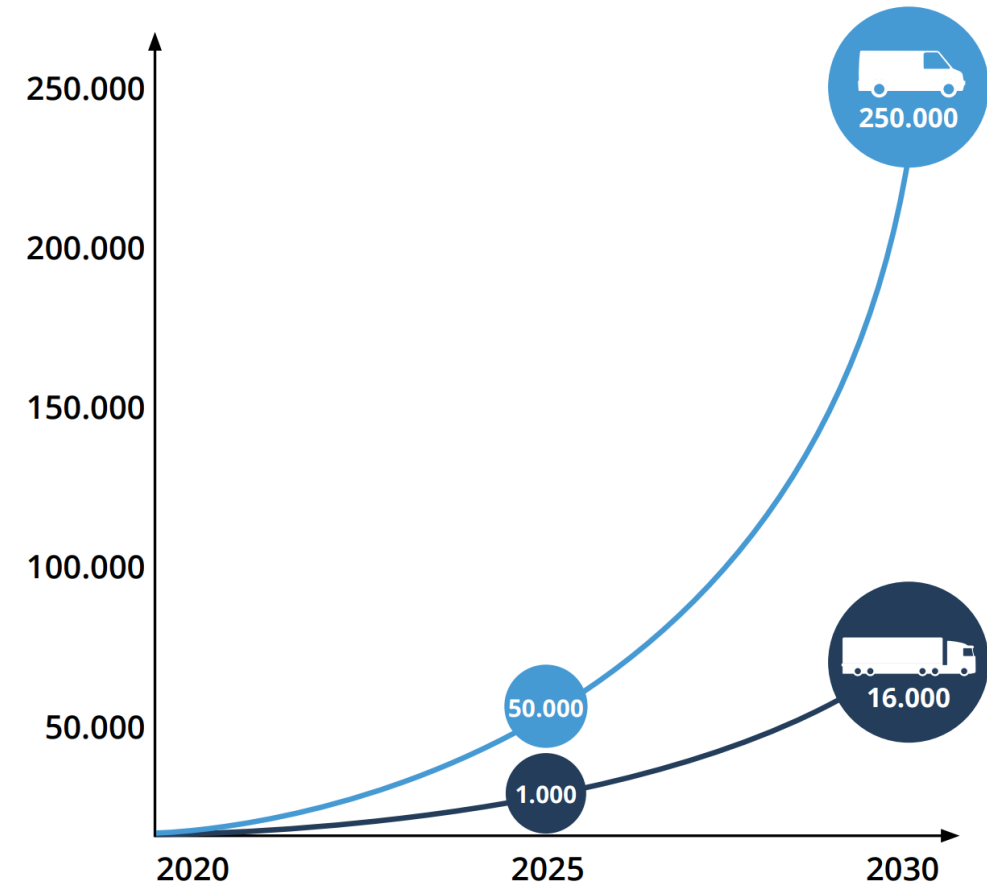
Logistics fleet in the Netherlands

Type	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)

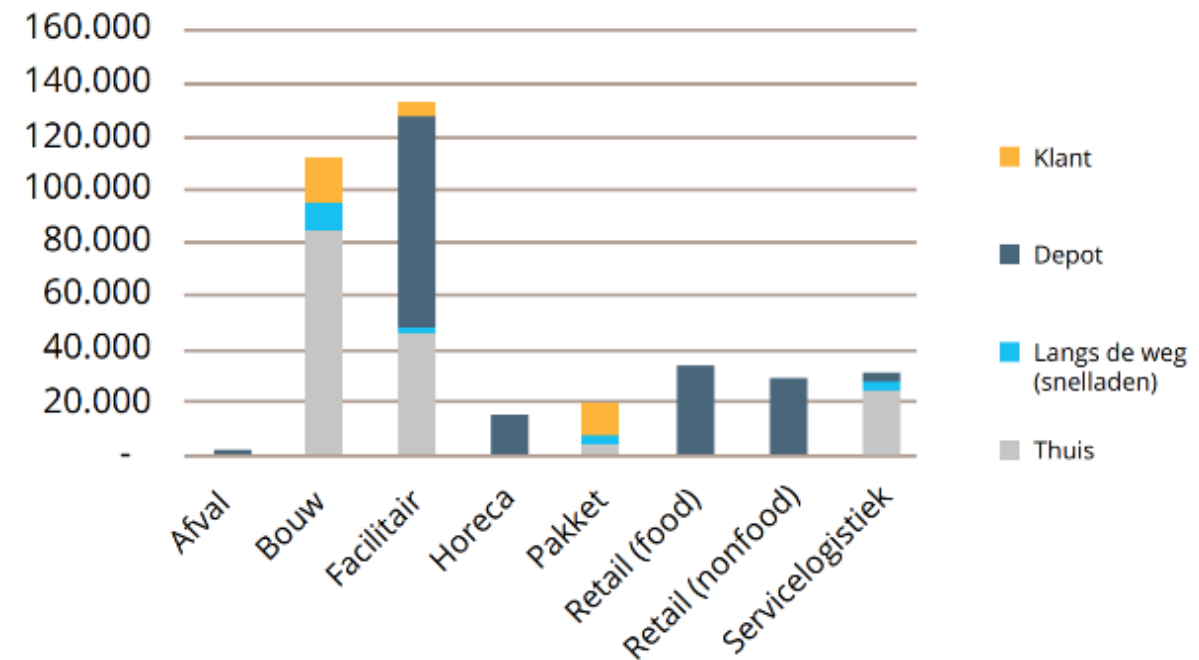
Growth scenarios electric logistic vehicles

- 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

Taskforces

**Forecasting
logistics charging
demand**



**Public
stimulation of
logistics charging**



**Private logistics
charging**



**Basic network
(heavy duty
logistics)**



**Charging at
construction sites**



Forecasting logistics charging demand

Status:

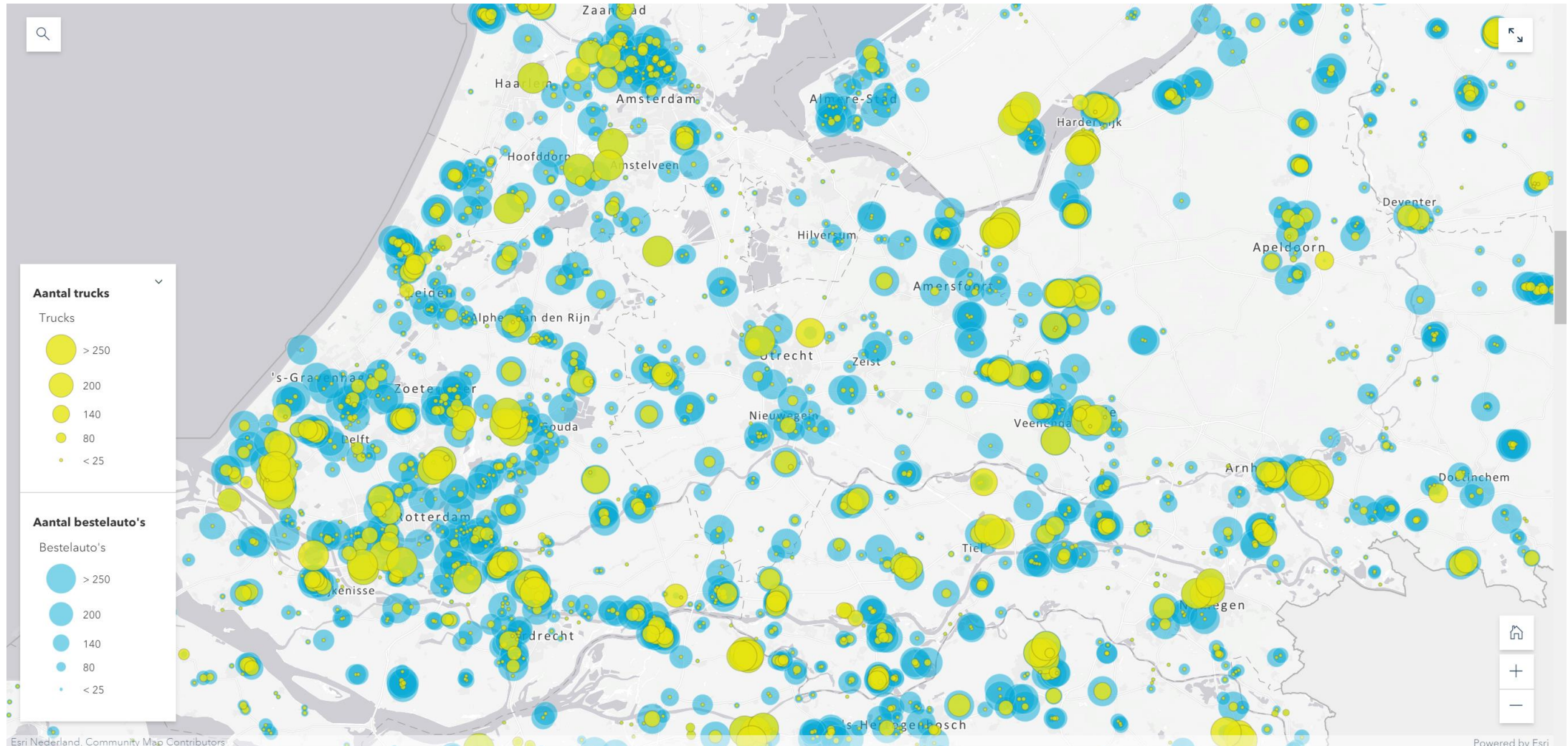
- Largest power concentration on business parks
 - 3700 business parks in the Netherlands
- Grid integration major challenge

Highlights of current research:

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

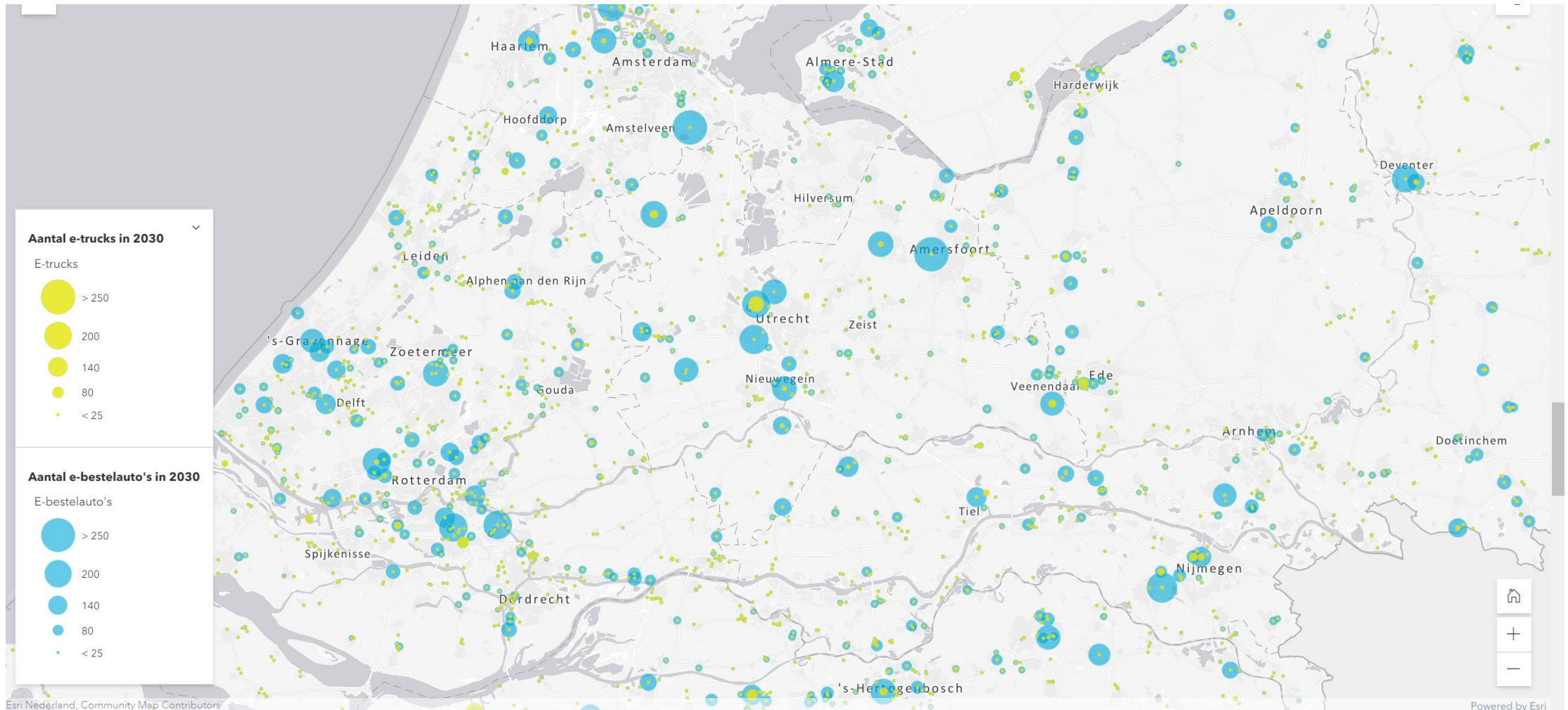


#registered vans and trucks (per business park, 2021)



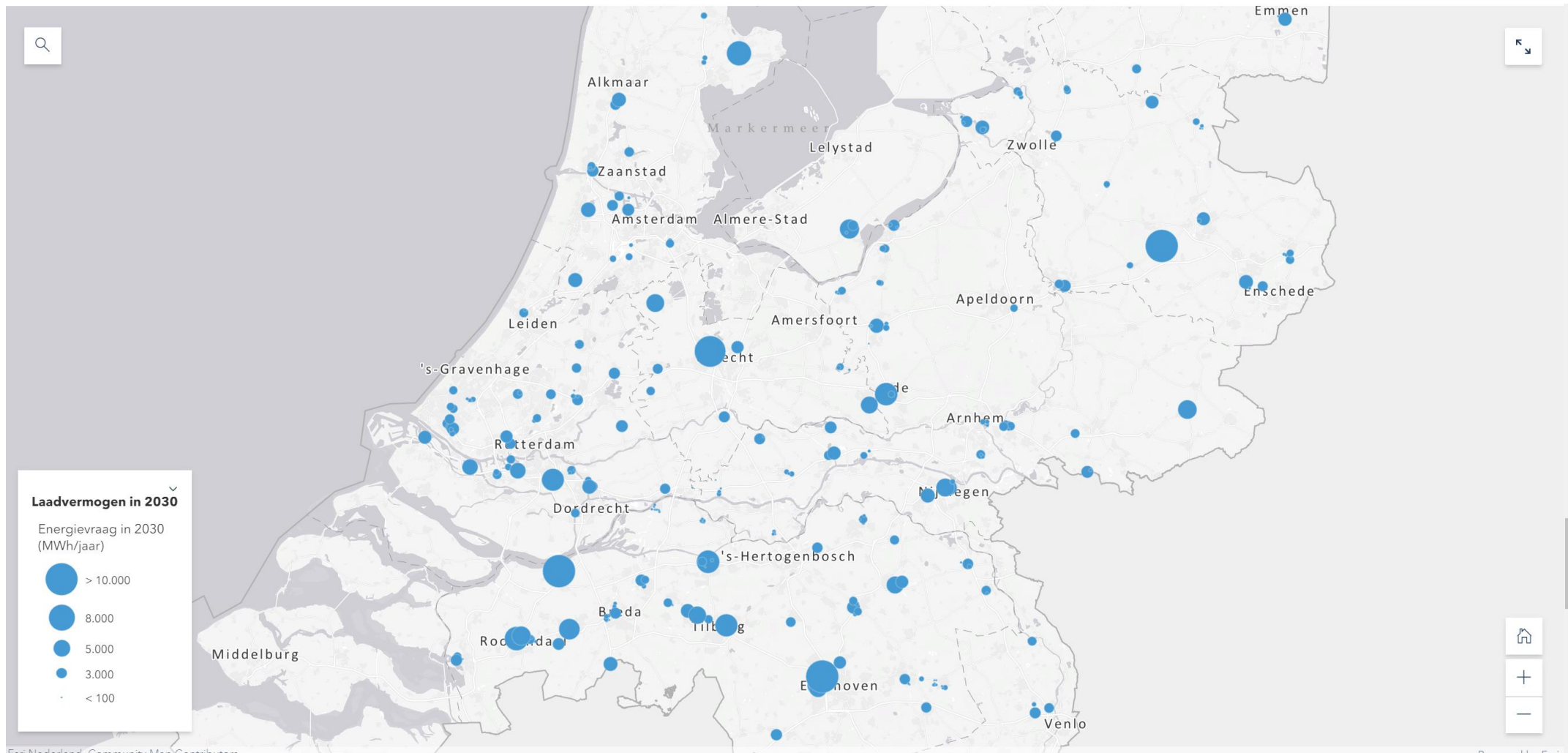
Schatting van het huidige aantal bestelauto's en trucks per bedrijventerrein

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

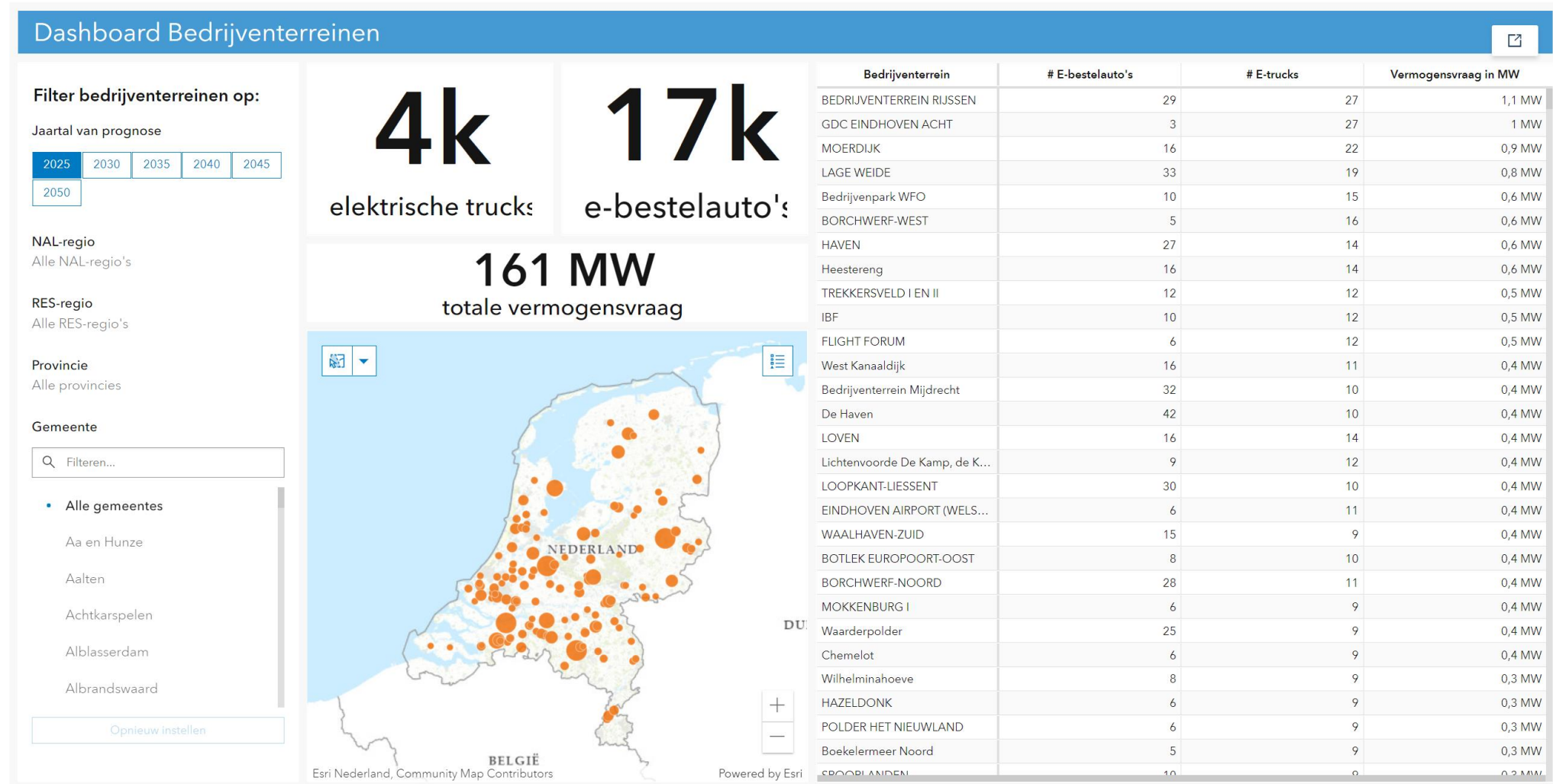


Schatting van het aantal elektrische bestelauto's en trucks per bedrijventerrein (2030)

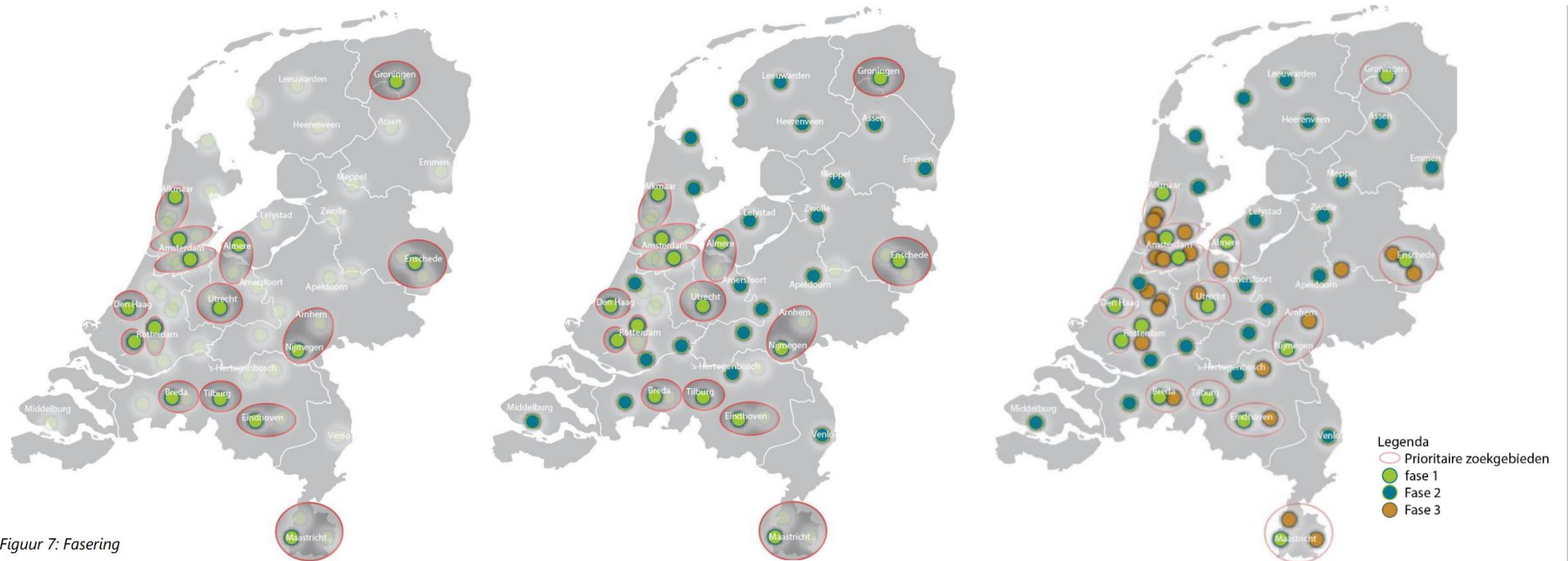
Forecast for charging power demand (per business park 2025, 2030, 2035)



Dashboard: ranking of business parks



Basic network for public heavy duty charging



Figuur 7: Fasering

Phased approach to creating charging security for heavy duty vehicles

Taskforce Heavy Duty Charging Infrastructure

- Support for municipalities and local entrepreneurs
- Share best practices



Challenges

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

