



Cities in control of charging

Organise your data based expansion of
public charging assets

Mechelen, 02.06.2023

ZCI Masterclass





EVtools



About EVtools



Cities' role in the
EV infra market



Taking the lead



Create your plan



Manage realization



Monitor



Safety, privacy,
transparency



Questions &
discussion



Contact



Meet our team

We are EVtools, a fast growing software service partner offering an innovative digital solution accelerating charger rollout and independent asset management

Your independent and experienced partner for software managing charger rollout process from strategy to optimisation



Tim van Beek
CEO



Jochem van Kats
Senior product owner



Bart-Jan Merkx
Customer Success manager



Rowana Legito
Customer Support manager



Robin Matton
Product owner



Kim Bentum
Marketing manager



Maarten Teeuwen
GIS specialist



Jolijn van Dijk
Business Development officer

References

Tried and tested. A selection of our client base which have already preceded:



And many more ..

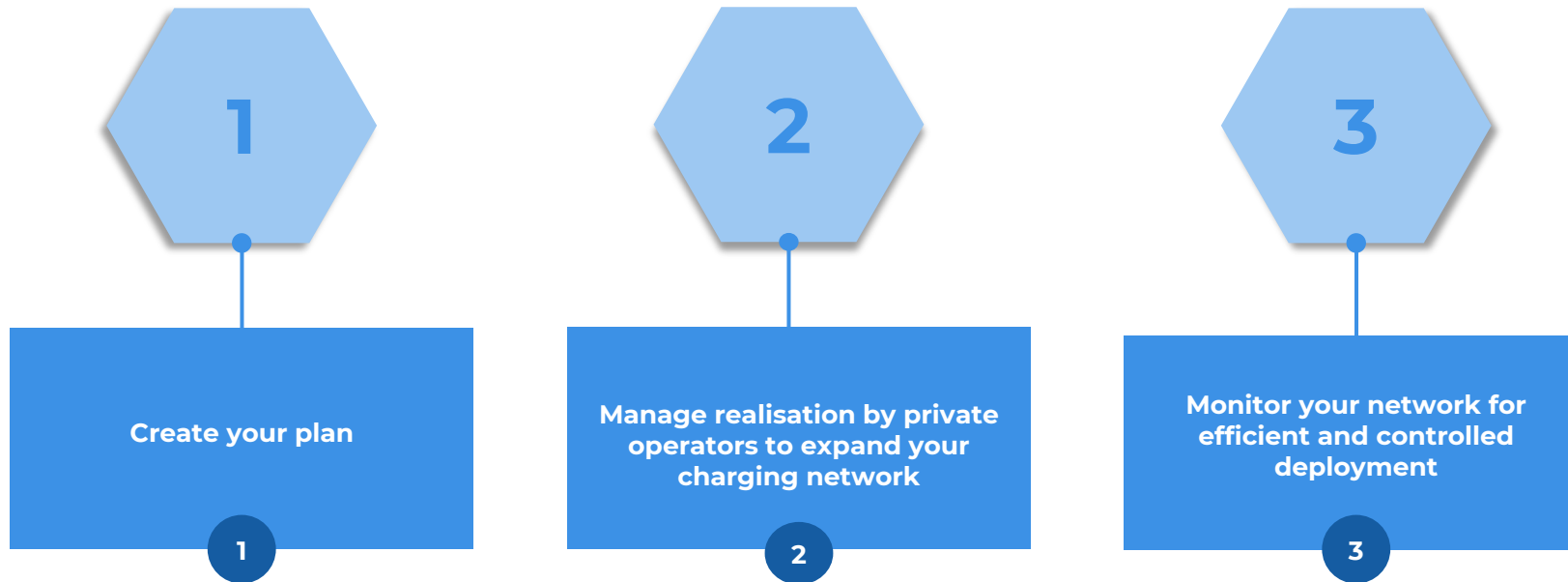
Cities' role in the EV infra market

You want to prepare for the future roll-out of public charging infrastructure for electric vehicles, but face the following challenges:



Taking the lead

Your city's strategy for dealing with an exponentially growing market, without losing control of assets



A complete solution that facilitates a continuous improvement process:
Data-driven insights lead to optimizations of vision, policy, realisation and management

From demand analysis to asset management

Three phases of the roll-out of charging infrastructure for electric mobility



Create your plan



Manage realization



Monitor



1 Demand analysis



Gain **insight** into **EV growth** in your city, region or contract area



2 Planning



Determine ideal **charging locations** now and in the **future**



3 Realisation process management



Manage and **communicate** along every step in realisation, centrally positioned **independent** of charge point operators



4 Asset management & information



Manage and optimize your charging station network **data-driven** operator & grid company independently by **Owning your own data**

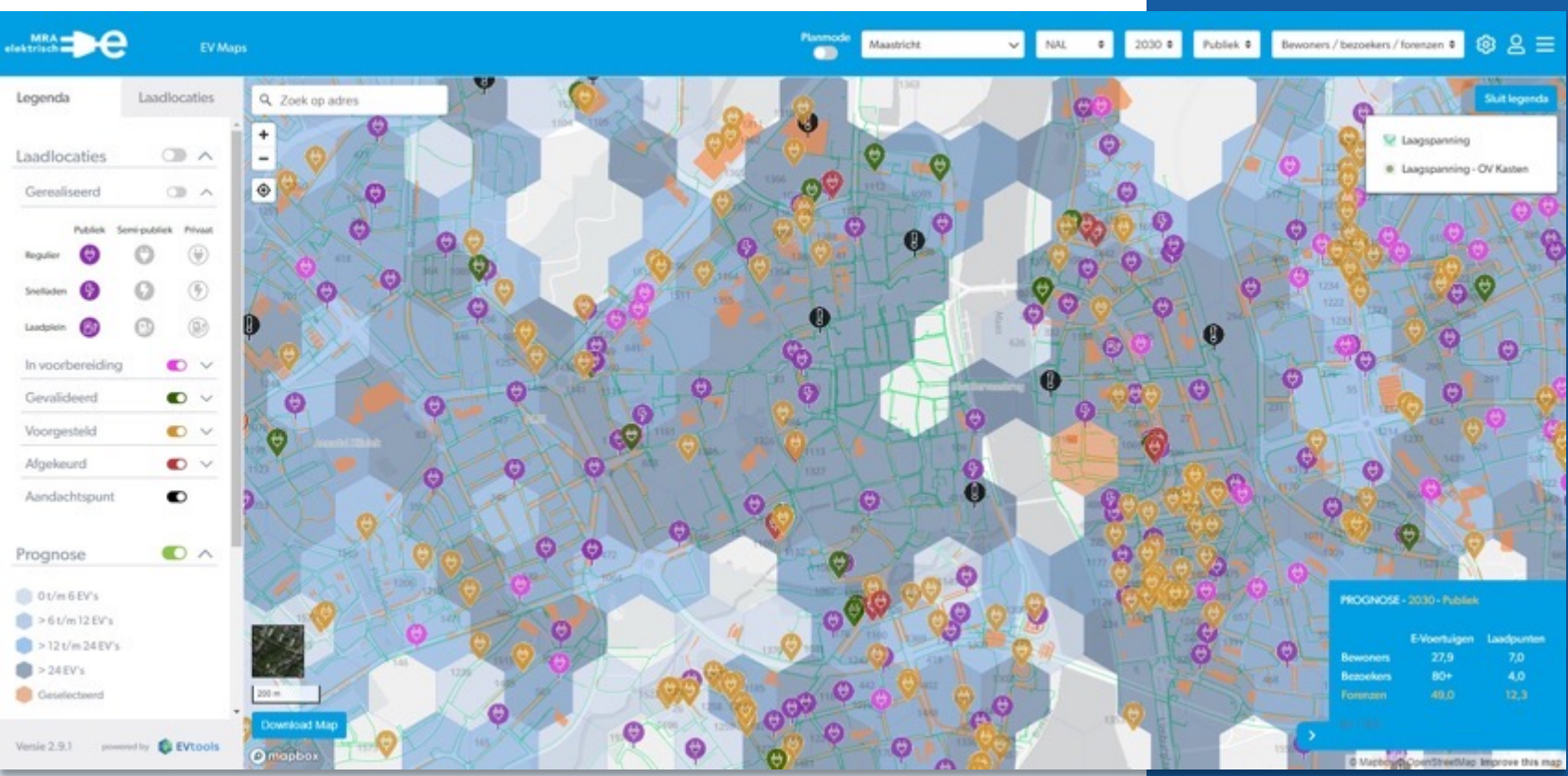


Loop back 

Data-driven insights lead to optimizations of vision, policy, realisation and management



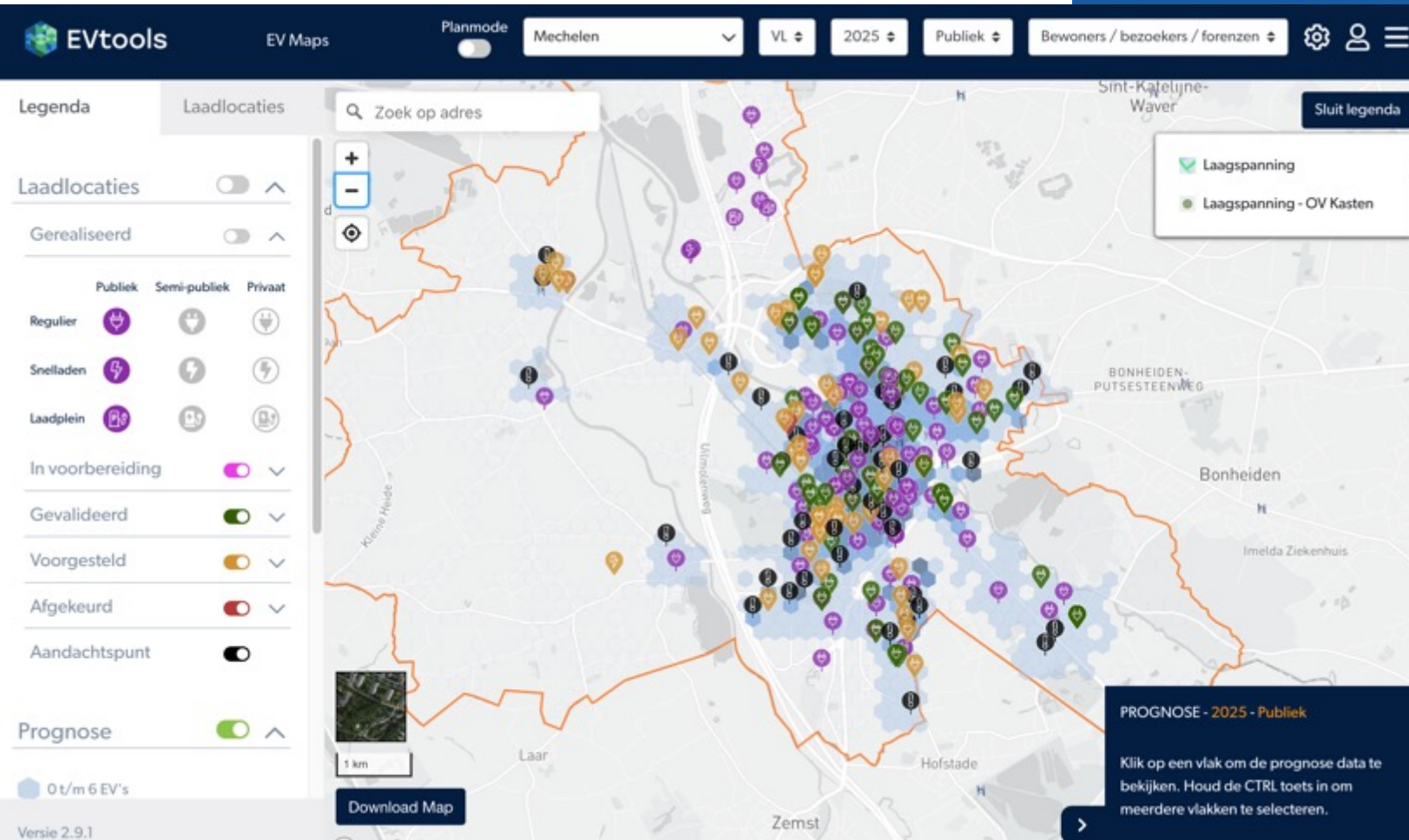
Create your plan



From demand analysis...

- **Create a data based prognosis**
Where does the network need expansion? What type of infrastructure is needed?
- **Cooperate with stakeholders**
Live-action planning, real time feedback
Modifications jointly visible for a constantly accessible plan
- **Keep your rollout policy transparent**
Explain your policy to stakeholders
Have a diverse set of inputs and contributors, internal and external

Create your plan



... to plan

- ▶ **Integrate additional assumptions**
 Usage patterns, existing charging network
- ▶ **Use your own data**
 Parking spots, public space parameters, congestion patterns etc.
- ▶ **Determine ideal charging locations based on criteria**
 Take into account planned works & developments
- ▶ **Have your grid operator and charge point operator contribute to the plan**

Questions:

Mentimeter – Scan QR Code!



- ▶ Does your city have a charger rollout plan?
- ▶ Does your city demand ownership over network data?
- ▶ Do you have a list of location criteria, coordinated with your colleagues?
- ▶ Do you use participatory methods to make decisions on rollout planning, ie with operators, grid company or civilians?

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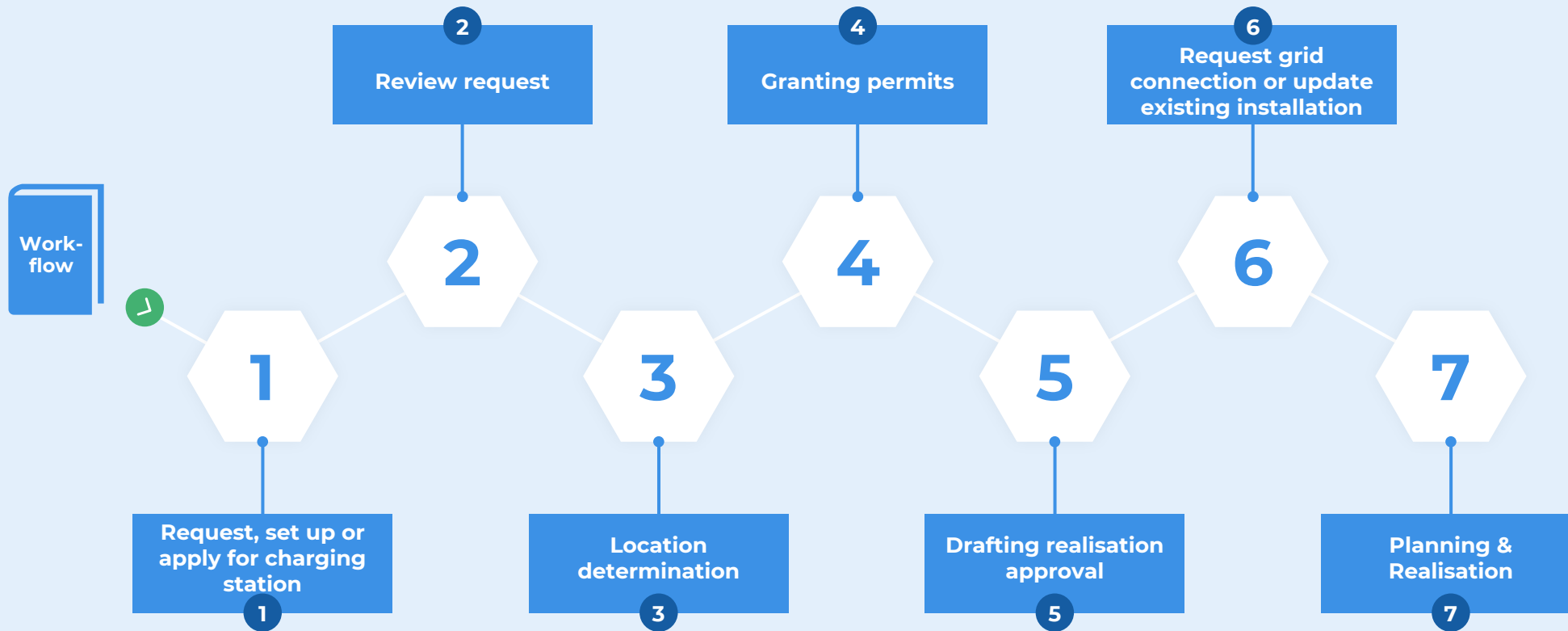


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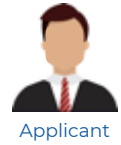
Manage realization

To control the rollout process, design a process with individual steps, to be managed centrally, independently of private operators



By defining clear roles and steps, you will be able to rollout public chargers much faster

From 9 to **3 months** Lead time!



Applicant



Asset / land owner



CPO



Network operator

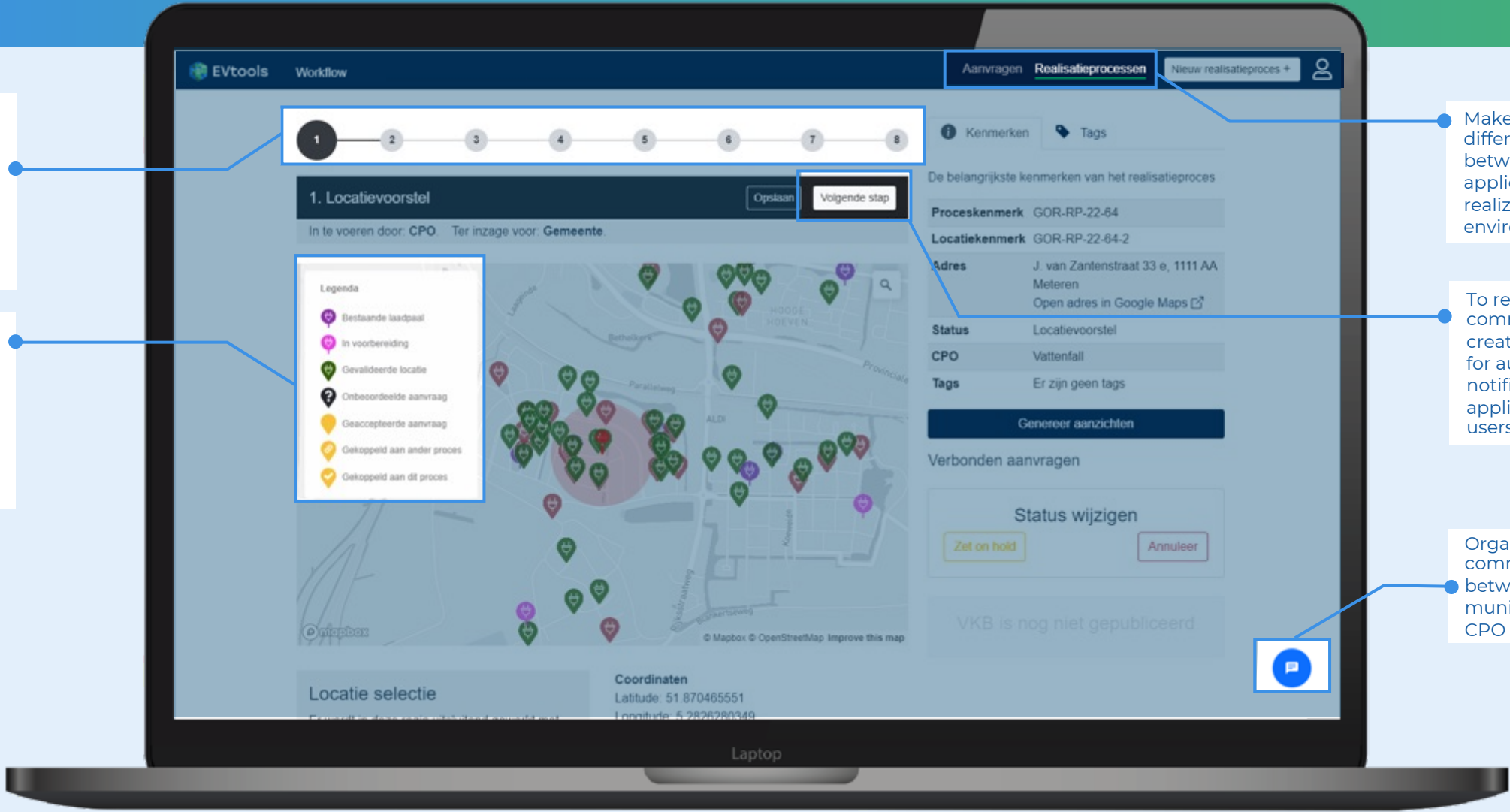
Determine your own rights structure of data subjects

Manage realization

To control the rollout process, design a process with individual steps, to be managed centrally, independently of private operators

Each process is divided into a number of steps.

Publish your charger rollout plan to partners in the process so they can easily follow up



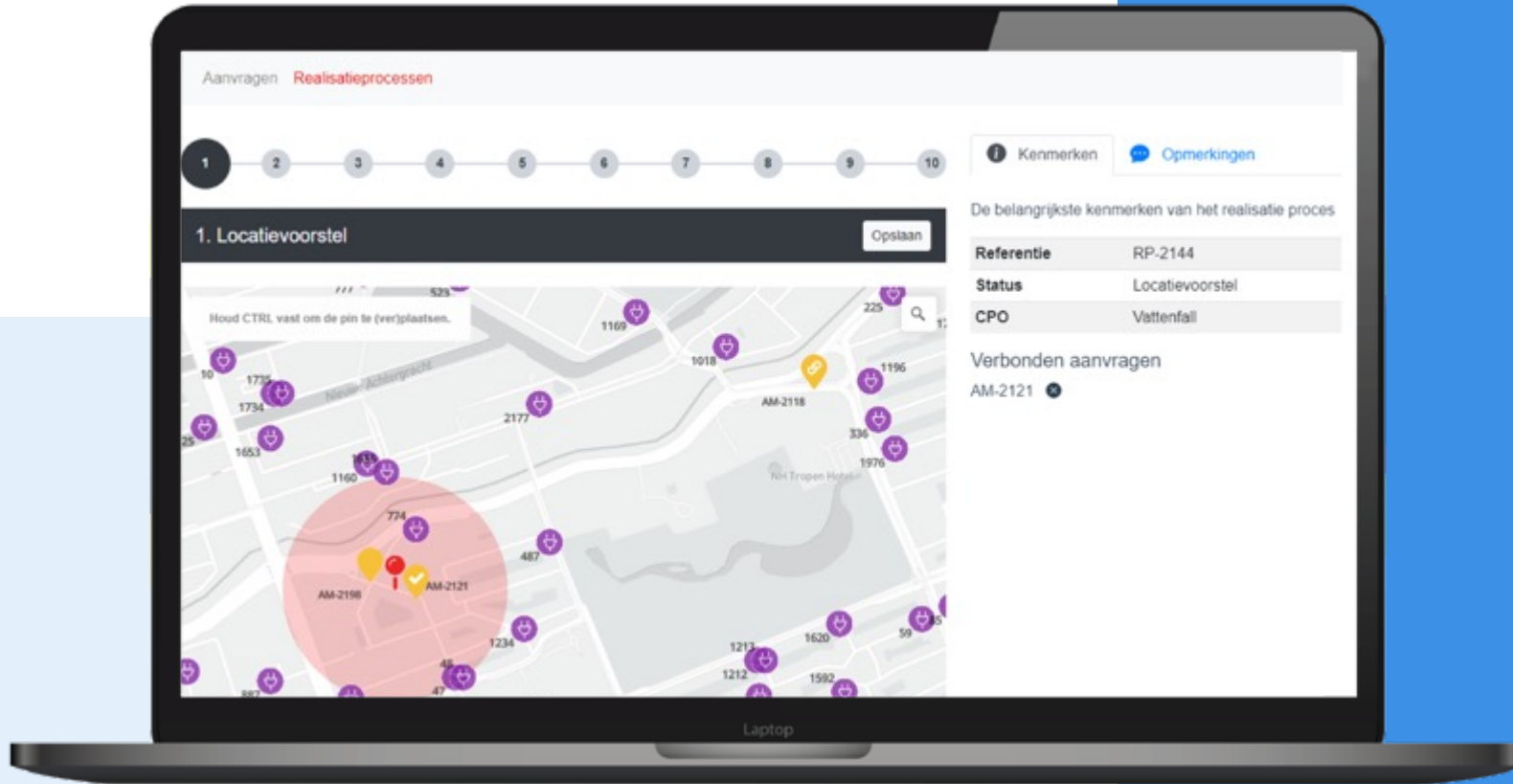
Make sure you differentiate between an application and realization process environment

To reduce communication, create the possibility for automated notification applicants and third users by e-mail

Organise easy communication between municipality and CPO

Manage realization

To control the rollout process, design a process with individual steps, to be managed centrally, independently of private operators



Independence

Independent rollout means:

- Have all types of locations or operators in one process
- Aggregate past and current CPO's in one central overview
- Data ownership – and keep your data with you, even when switching CPO or contract
- Strategically propose additional chargers as indicated by monitoring data
- Clearly indicate responsibilities to stakeholders concerned
- Management reporting incl on lead times

Questions

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- ▶ Do you have a clearly defined rollout process?
- ▶ Did your city define its role and other stakeholders in the process?
- ▶ Did you define an end of contract policy including ownership of assets?



From demand analysis to asset management

Three phases of the roll-out of charging infrastructure for electric mobility

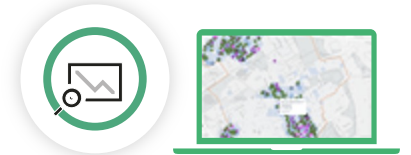
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Manage and optimize your charging station network **data-driven** operator & grid company independently by **owning your own data**

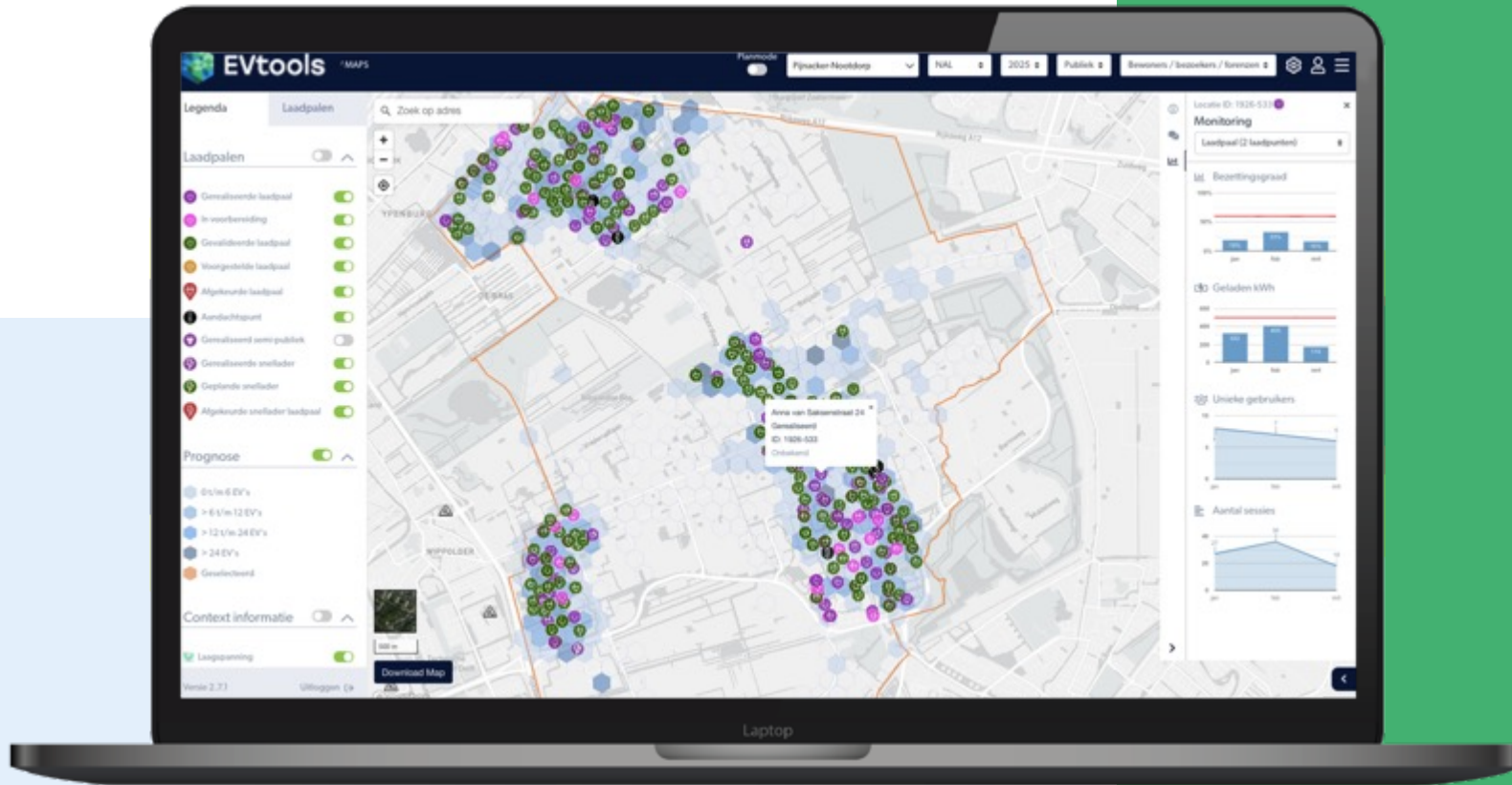


Loop back

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Monitor

Manage and optimize your charging station network data-driven operator & grid company independently by owning your own data



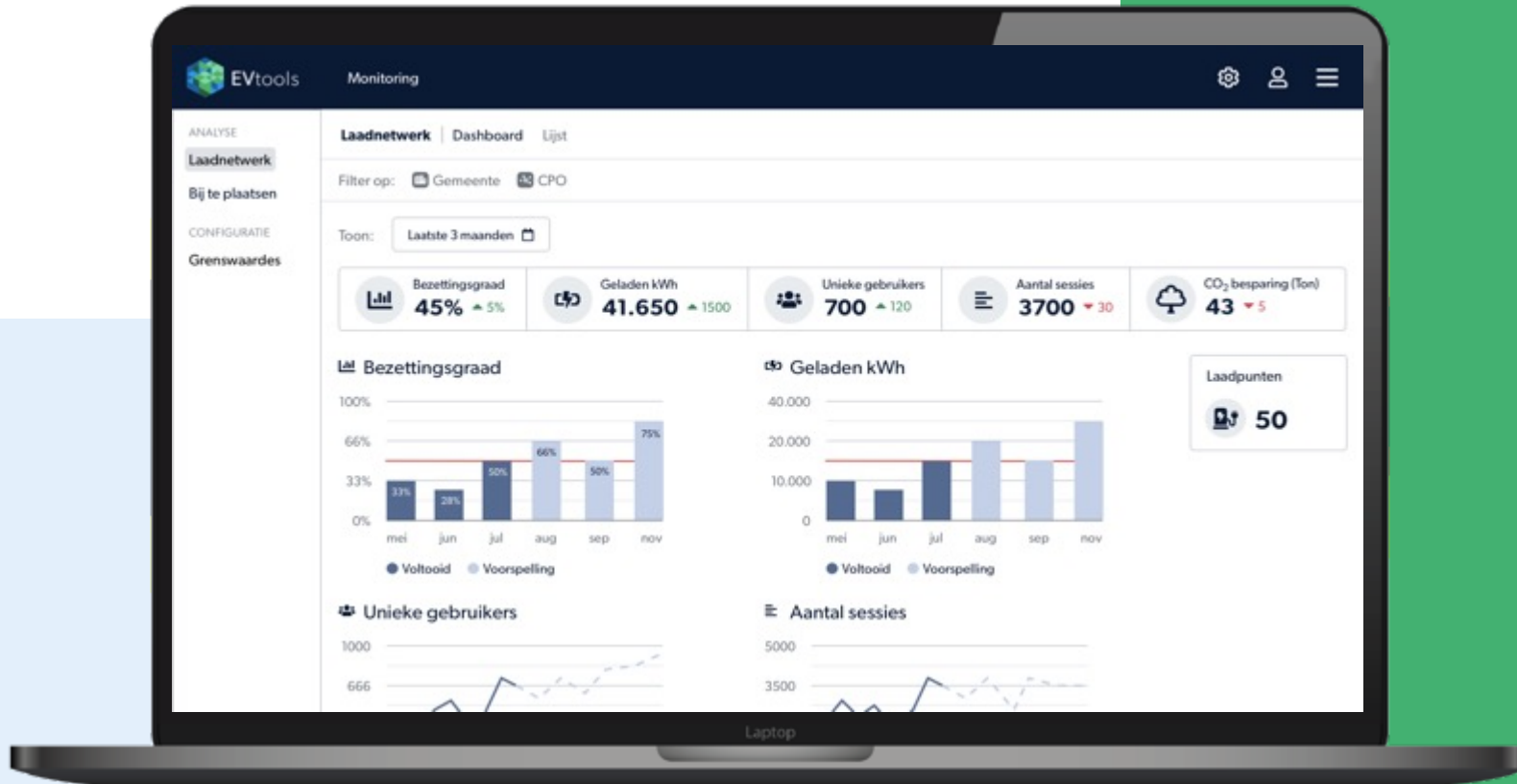
Manage & Rollout

- Contractually enforce **data ownership** and **API compatibility**
- Ensure **real-time insight** in your data
- Use your data to **calculate the value of your network**, ie for return on investment or when tendering new contract
- Report on **CO2 reduction and turnover** through your network
- If publicly accessible operators and the public are constantly **informed** of the situation in their own environment
- Accessibility through API leads to third party using the data in third systems ie useful apps

Monitor

Streamline rollout process by data-driven location suggestions

Define business rules to drive additional location suggestions



- Enforce data-driven decision-making on upscaling and control measures
- Set thresholds based on business rules in contract conditions
- Ensure that 'planned charging stations are swiftly realised based on demand analyses and consumption monitoring

Questions

Mentimeter – Scan QR Code!



Do you know how many kWhs are charged in your city, wholesale prices and turnover?



Does your contract define data ownership?



At what point (ie usage) would you grant your operators to expand the network, reserving more parking space for charging?

Safety, privacy, transparency

In your tenders, always include data security and privacy demands



Stability and safety is key: demand crash tests results of other governmental bodies.



Demand that data and output in / of the system is / remains with you as a government, notwithstanding any IP on external software



Create transparency by granting partners access. Users log in via a secure cloud service

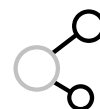


To provide a vendor lock-in, make sure systems are modularly set up and linked using Application Programming Interfaces (APIs)

This makes it possible to link other tools to it at a later stage, and provide a data dump at the end of contract.



Demand hosting in the EU. Share data with stakeholders in (local) markets to create innovation



Open-source technology shall have to be used as much as possible

Contact



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