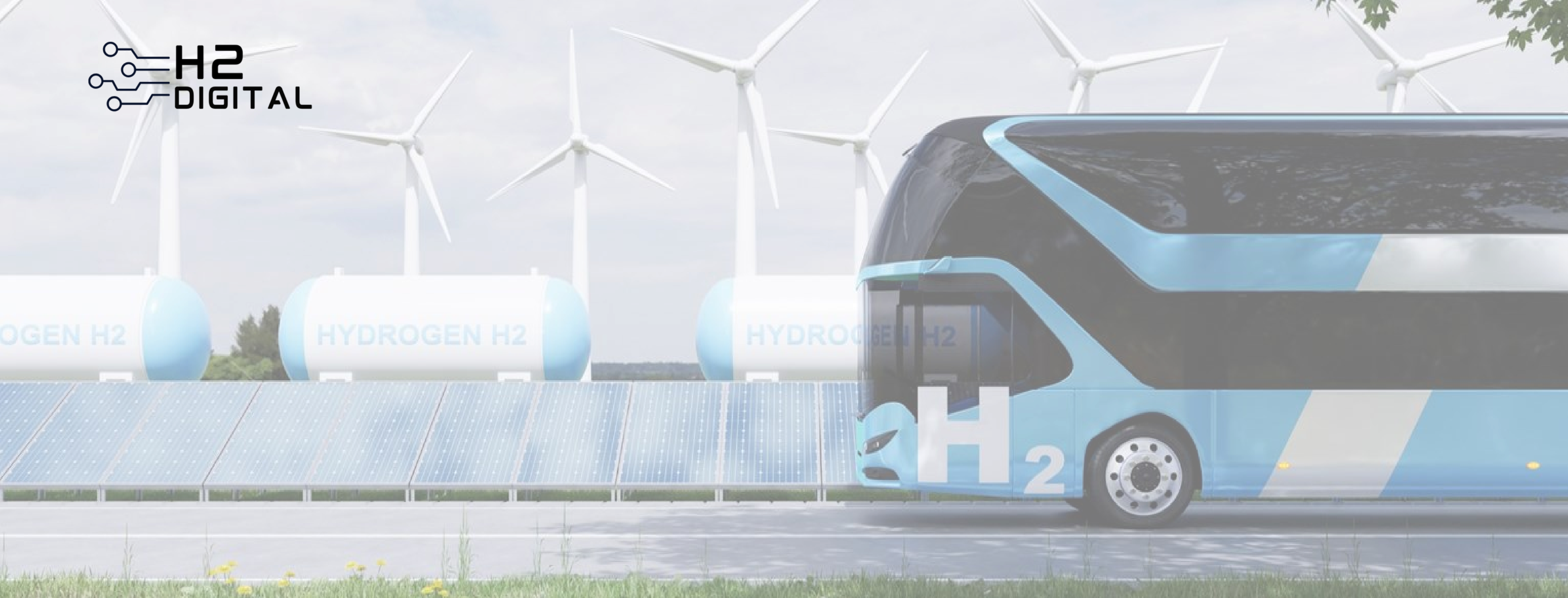




H2
DIGITAL



H2 Digital

The digital backbone for the hydrogen economy

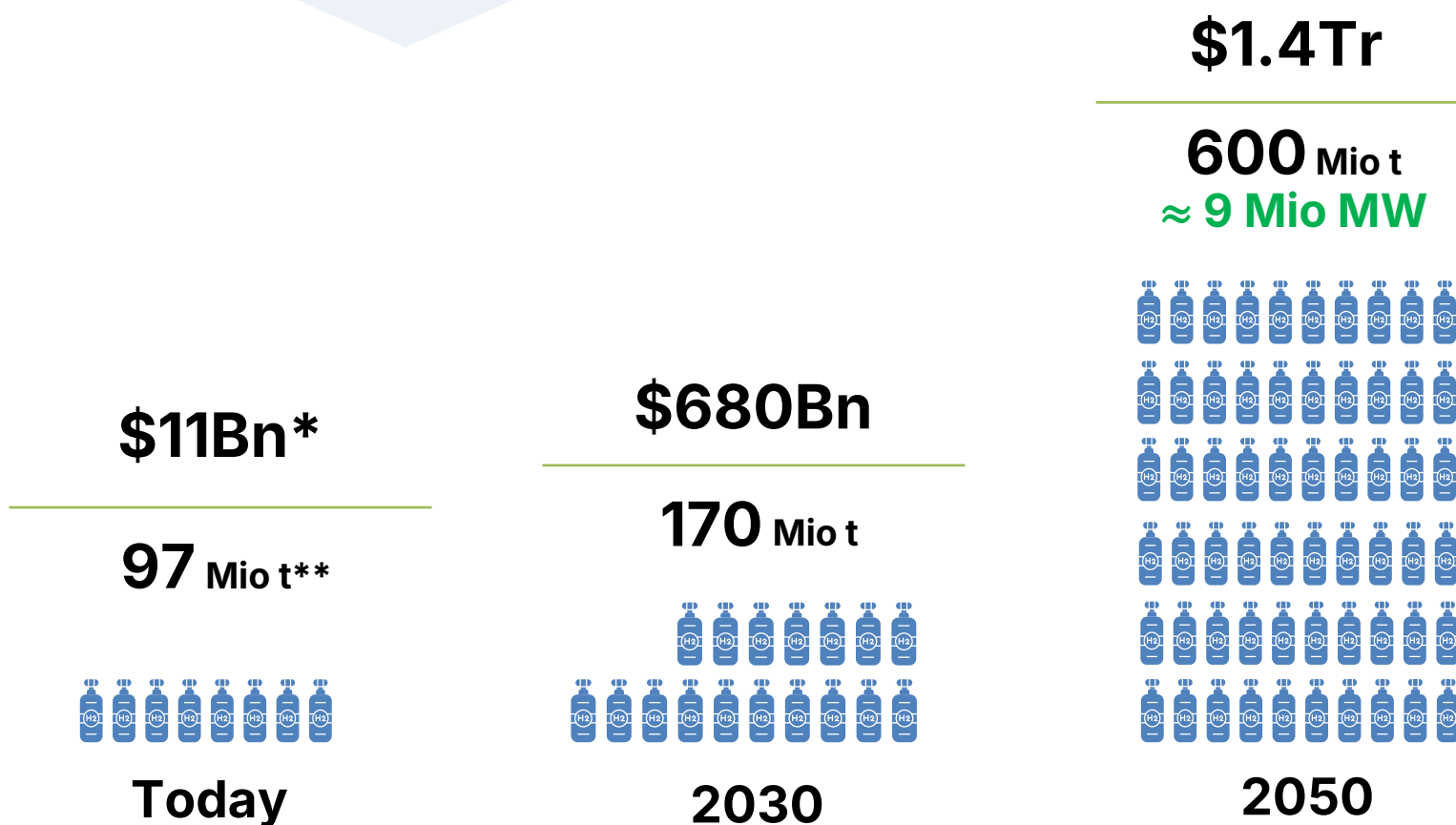
Market Challenges

Hydrogen is in demand...

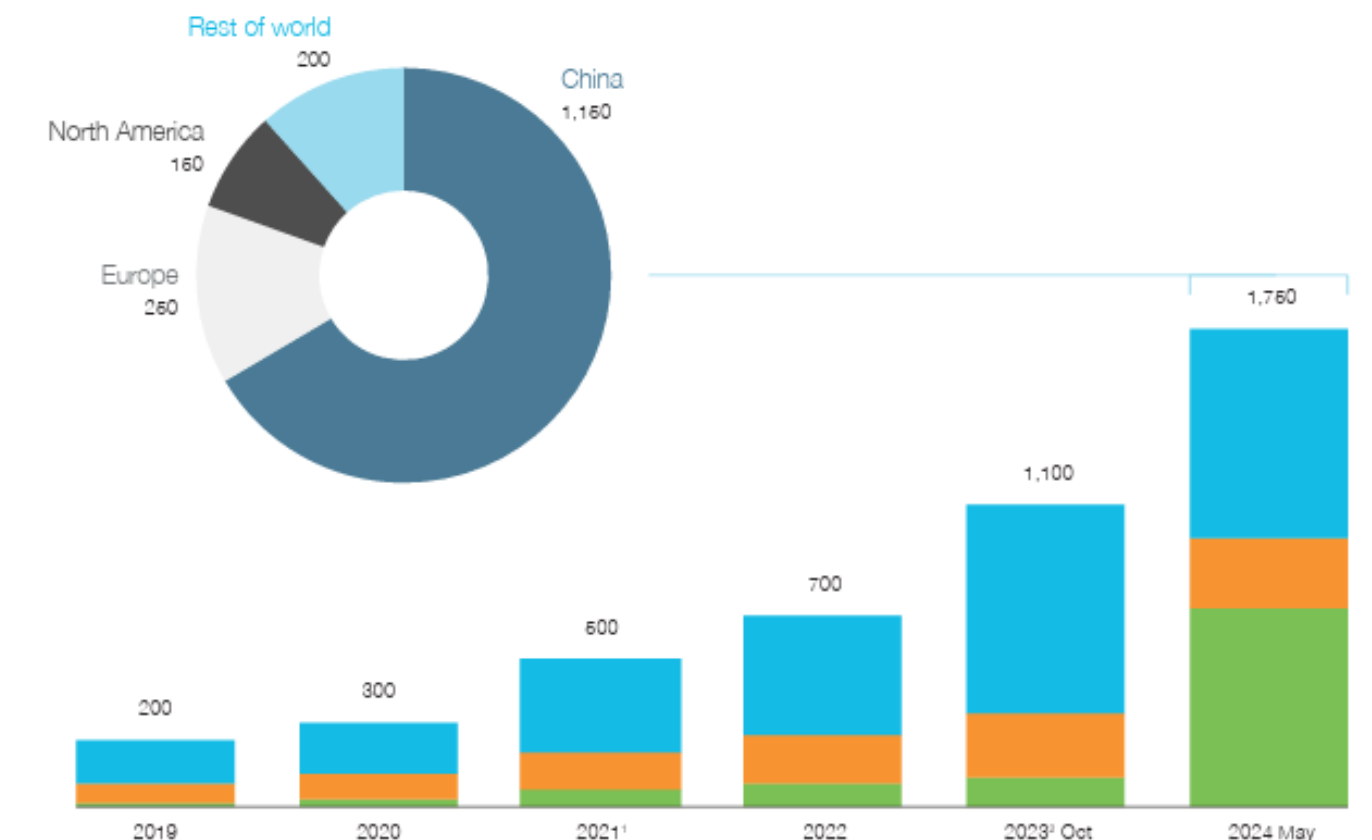
- **Surging Demand:** Hydrogen demand is set to rise sixfold by 2050.
- **Climate Goals:** Connecting largest European economies for hydrogen
- **Global Investments:** \$11bn are being poured into clean hydrogen projects.
- **Clean Production:** Produced sustainably using renewable energy sources.

But market ramp-up of hydrogen is lacking behind - due to lack of commitments for production and consumption

- **No transparency** about H2 supply and demand
- Backbone for hydrogen has to be built
- **No liquid market** yet
- Price corridors **unclear**, restraining business decisions



Global clean hydrogen production (MW), end 2024



* Investment in hydrogen projects **Global hydrogen demand

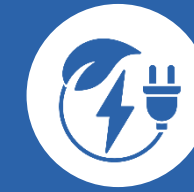
Source: Hydrogen Council (2025)

TSOs

Network Planning/Construction



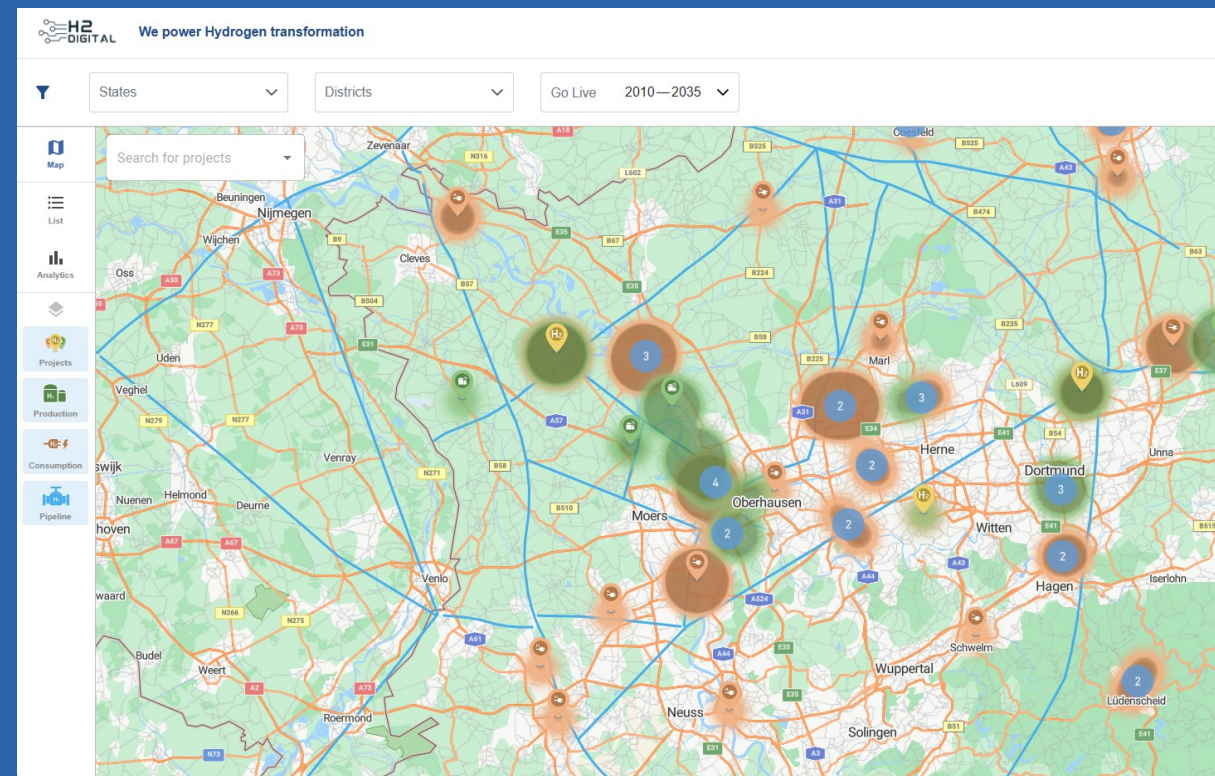
Vision



Large Energy Producers

Dynamic RE/H2 Production

One H2 platform for all



DSOs & Utilities

Market / Network Dev



Certifiers

Tracking of H2 Streams

Industry

H2 Sources & Sinks



Hardware Providers

Visibility & Sales

Traders

Supply & Demand Matching



Politics & Associations

Strategies & Cooperation

H2 Platform for Europe

The emerging hydrogen economy consists of a large number of market participants: Producers, consumers and distributors of green hydrogen. H2 Digital digitalises and controls H2 producers and consumers in Europe. Hydrogen needs teamwork. H2 Digital creates value through sector coupling and business optimisation with maximum data security.

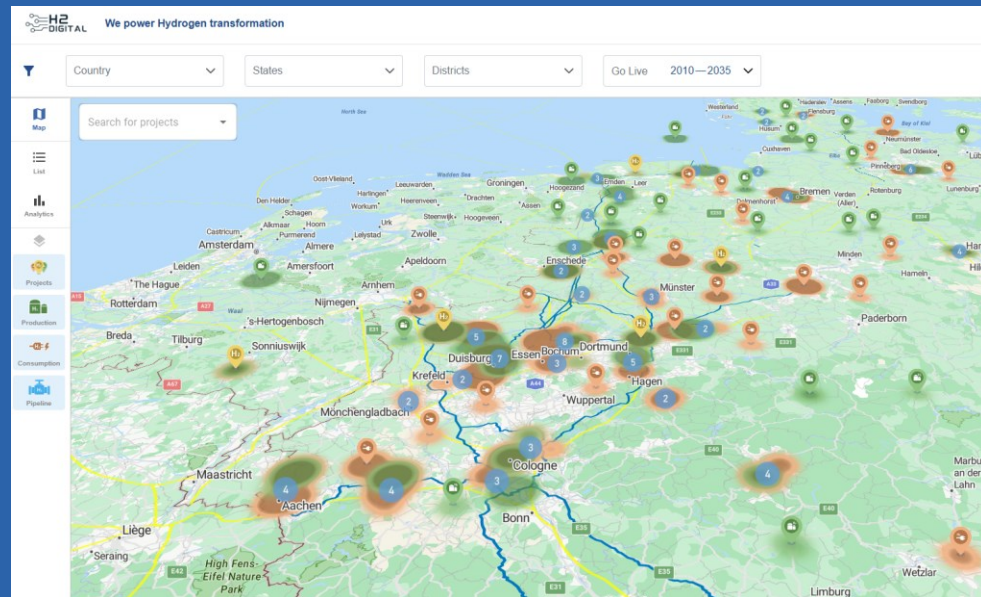
A map of Europe showing the H2 Digital platform's coverage. The map is overlaid with a network of blue lines representing hydrogen infrastructure and several blue circles of varying sizes, each containing a number. A prominent red button with the text 'Explore H2 DIGITAL' is centered over the map. The map shows major cities and countries like the Netherlands, Germany, and Poland.

Explore
H2 DIGITAL

Overview H2 Digital

Existing solutions & added values of the platform

Custom visibility of data on the platform

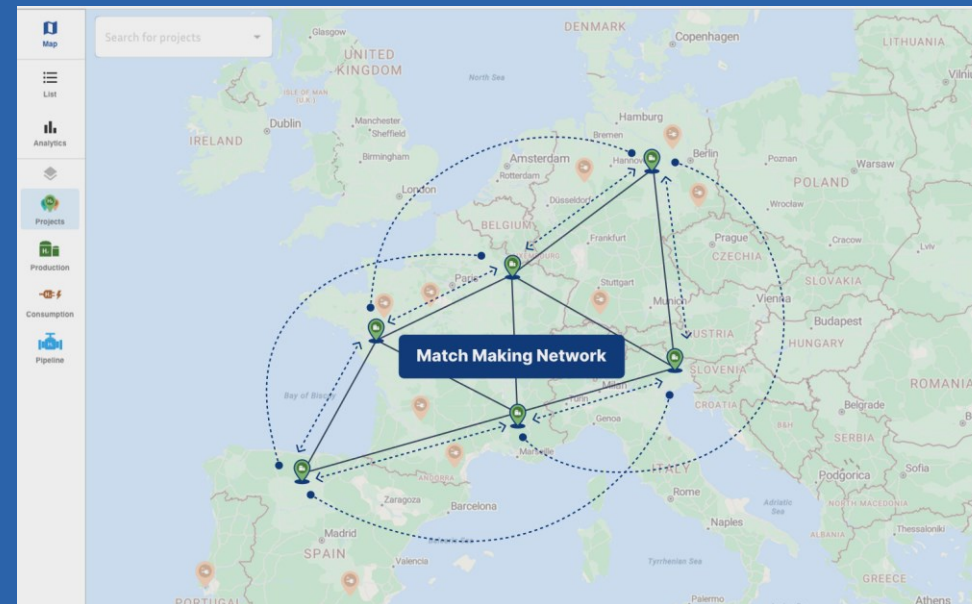


Public

Graphical overview of publicly registered H2 projects and pipelines over time.

Analytical evaluations of data on H2 production and consumption.

Filters and dynamic views of projects.

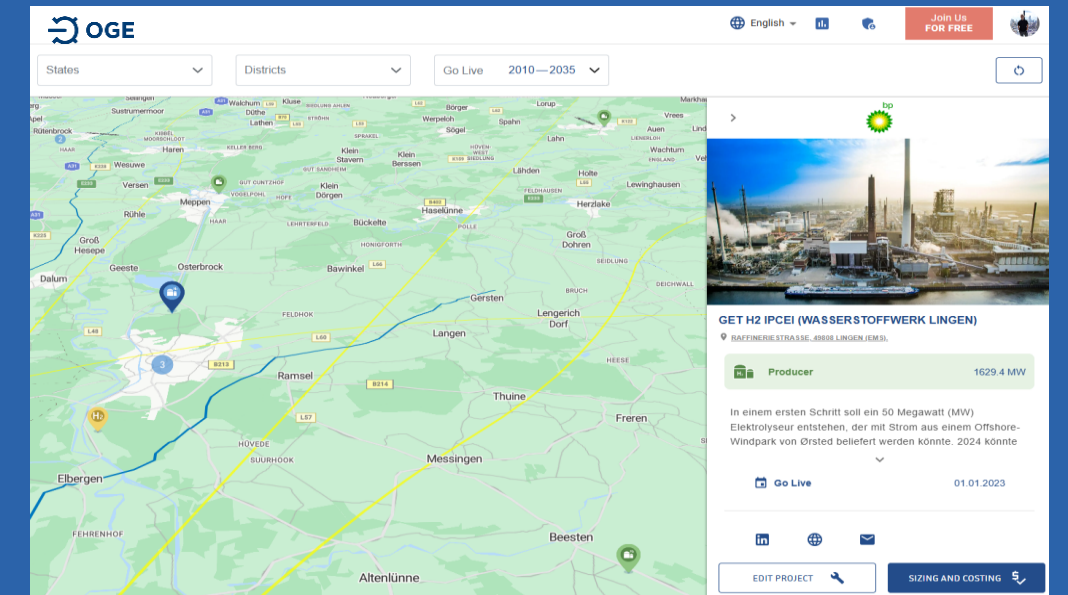


Shared

Integration of market data from different supply areas.

Custom data sharing between network operators, e.g. from DSO to responsible TSO.

Highest security and compliance due to data sharing architecture on lowest level.



Private

Secure access via Microsoft User Management.

Access to your own database and services used: demand queries, analytics, network planning, content management, sales connectivity.

Optional: whitelabelling of the platform with embedding on your own website.

Willkommen bei H2 Digital!

Um Ihr Projekt hinzuzufügen, geben Sie bitte die folgenden Details ein.

Vorname * Nachname *

OGE H2 Marktabfrage und Netzplanung Powered by: H2 Digital

627
OGE-Kunden insgesamt

101
Aktive Kunden Netzplanung

3
Neue Projekte diesen Monat

8
Projekte in Planung

Top-H2-Produzenten

| | | |
|--------------------------|-----------------|-----------|
| Energiepark Herzogenrath | Grüner Elekt... | Techn... |
| 13,40 Mio. | 6,70 Mio. | 3,94 M... |
| SpeicherStadtKerpen | Wasserstoff... | REFHY... |
| 13,40 Mio. | 3,71 Mio. | 2,63 Mio. |

Top-H2-Verbraucher

| | | |
|-------------------------------|-------------------|--------------|
| Hüttenwerke Krupp Mannesma... | Energiepark He... | Grüner El... |
| 19,89 Mio. | 19,89 Mio. | 17,08 Mio. |
| SpeicherStadtK... | Wass... | |
| 74,37 Mio. | 19,89 Mio. | 7,42 ... |

Monatliche Kennzahlen rund um H2 im Versorgungsgebiet - Letztes Update : 21.09.2023 10:23:49

Units in Kg

Legend: H2 Produced (blue), H2 Consumed (green), CO2 Reduced (purple)

Neueste 3 Projekten NEW

- Project Speyer
- Wasserstoff Mannheim
- Windwasserstoff Heidelberg

Neueste 3 Projekte in Planung NEW

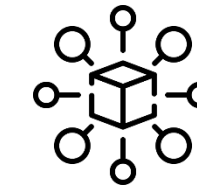
- Praise test
- Praise test
- Praise test

3,85 Mio.
▼ -1,38%
Produzierte Menge H2(t)

11,76 Mio.
▼ -1,75%
Verbrauchte Menge H2(t)

4,00
▲
Elektrolyse- Leistung(MW)

33,05 Mio.
▼ -1,38%
CO2- Reduktion (t)



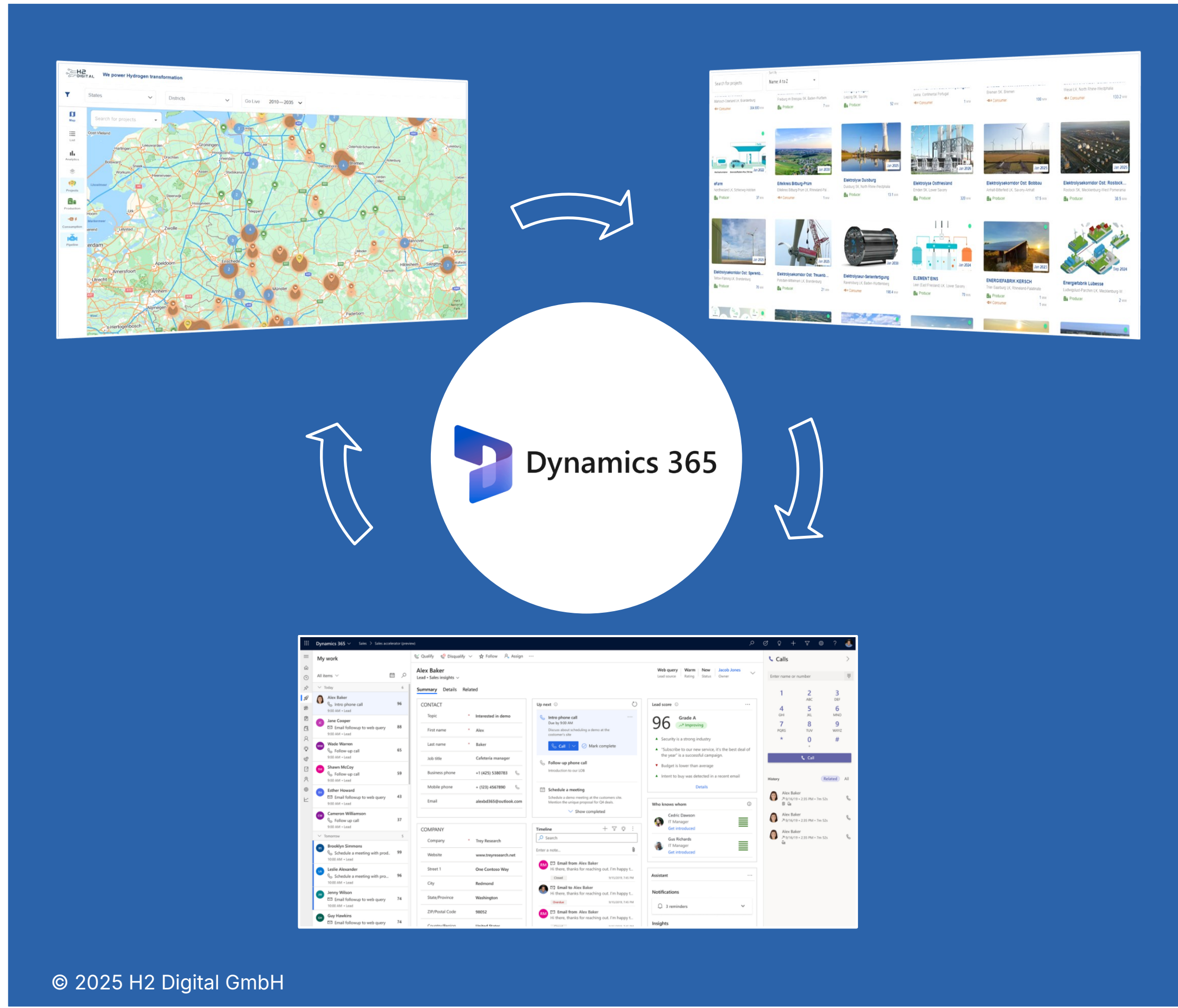
Use of the platform to centralize market data of providers and their customers

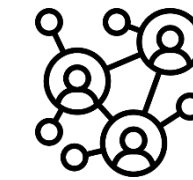
- Digital workflow for querying your customers in hydrogen.
- Replace existing separate queries and bundle them into one platform.
- Central data management by a neutral service provider.
- Control over the input and updating of the queried data by energy/infrastructure providers.



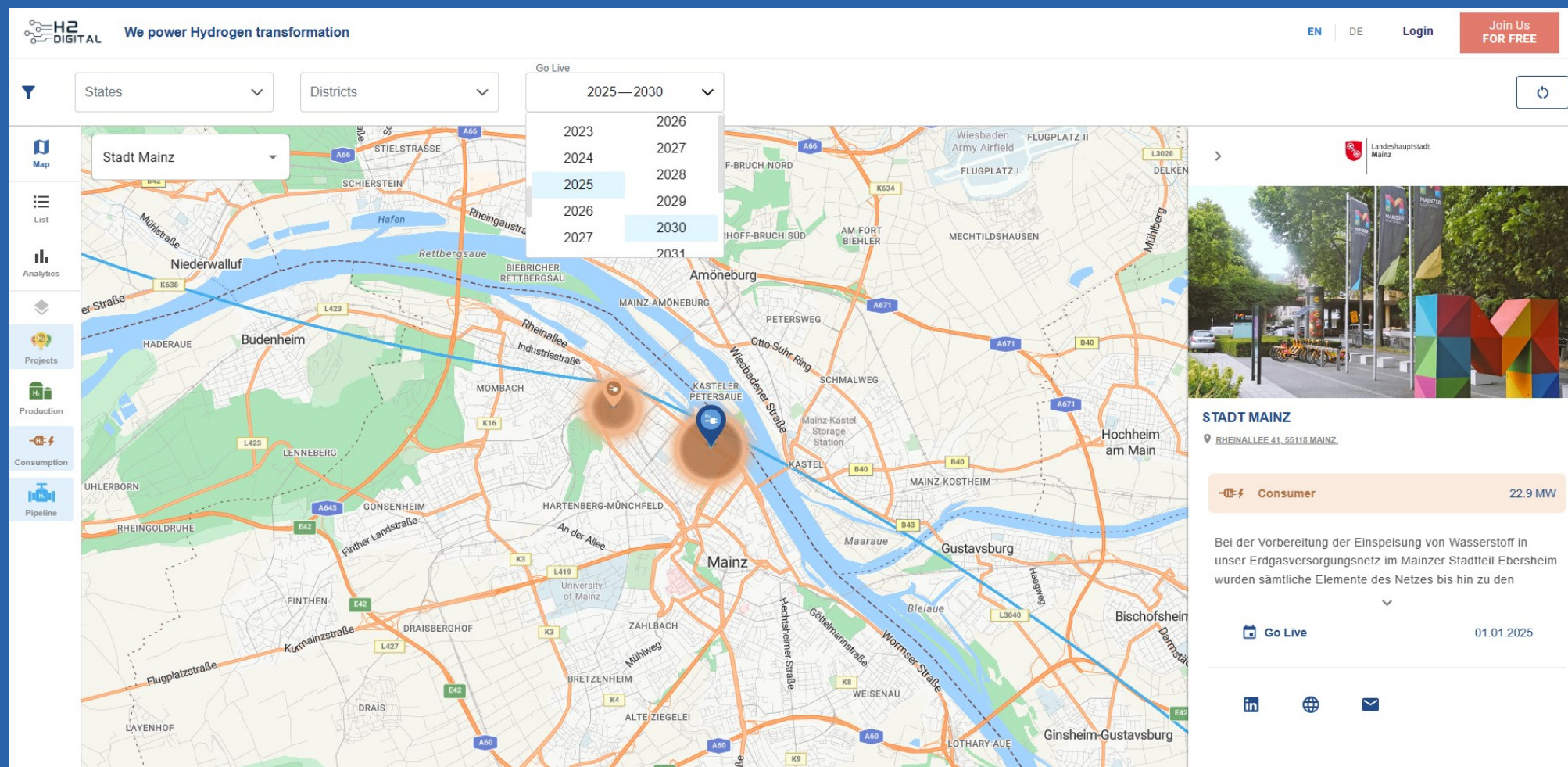
Targeted use of data for business development

- Support for transport customers in the transformation to hydrogen.
- Advice on grid connection planning.
- Synchronization of grid connections for hydrogen with network planning.
- Interface to your own CRM for seamless sales support.

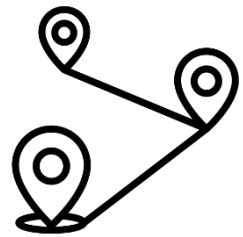




H2 Network Development and Planning

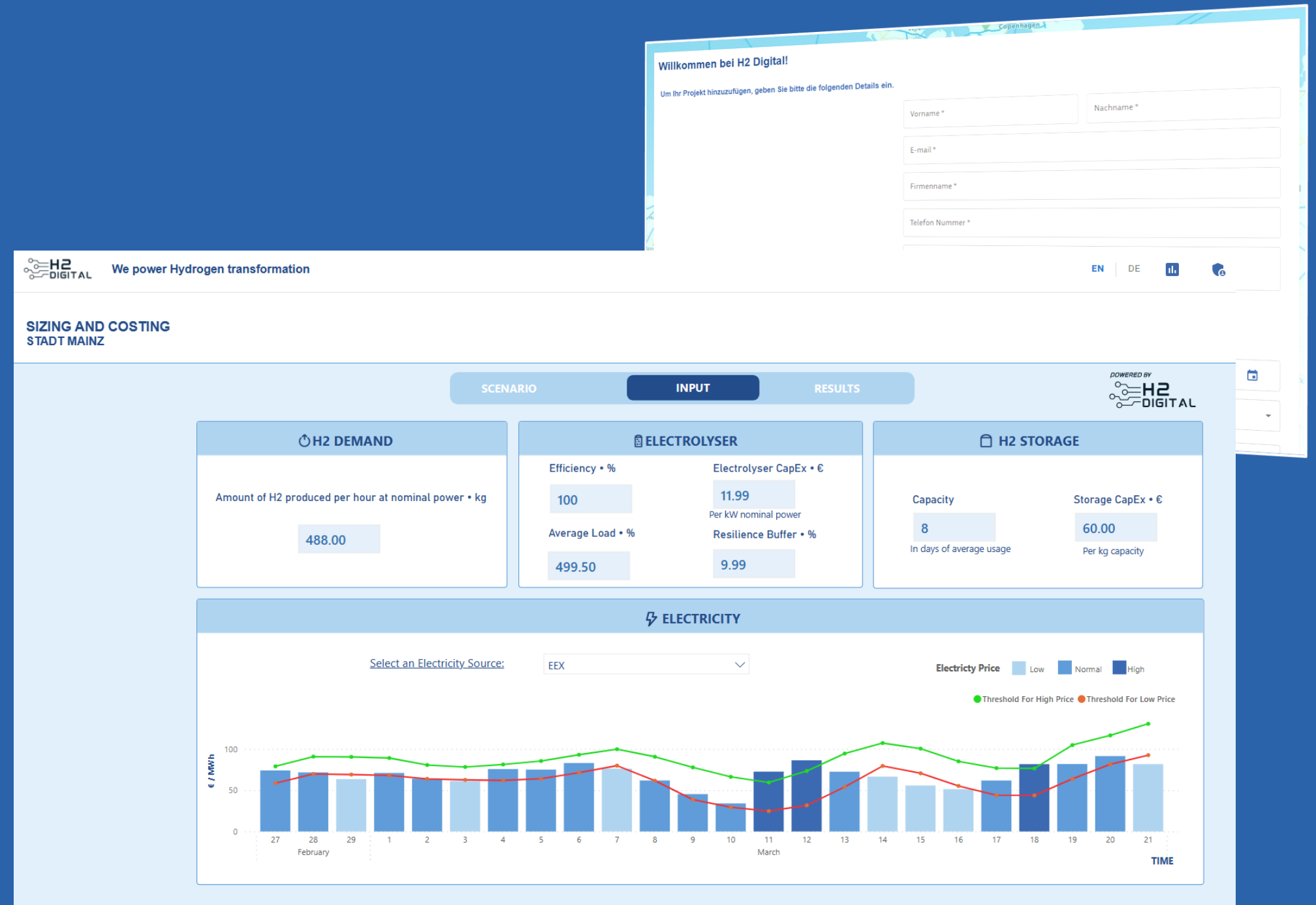


- Overview of your own network development over time.
- Targeted sales planning of grid connections for efficient business development.
- Different views of network planning for stakeholders.
- Synchronization of aggregated hydrogen supply and demand data between energy/infrastructure providers, if needed.



Planning and derisking of H2 projects for your customers

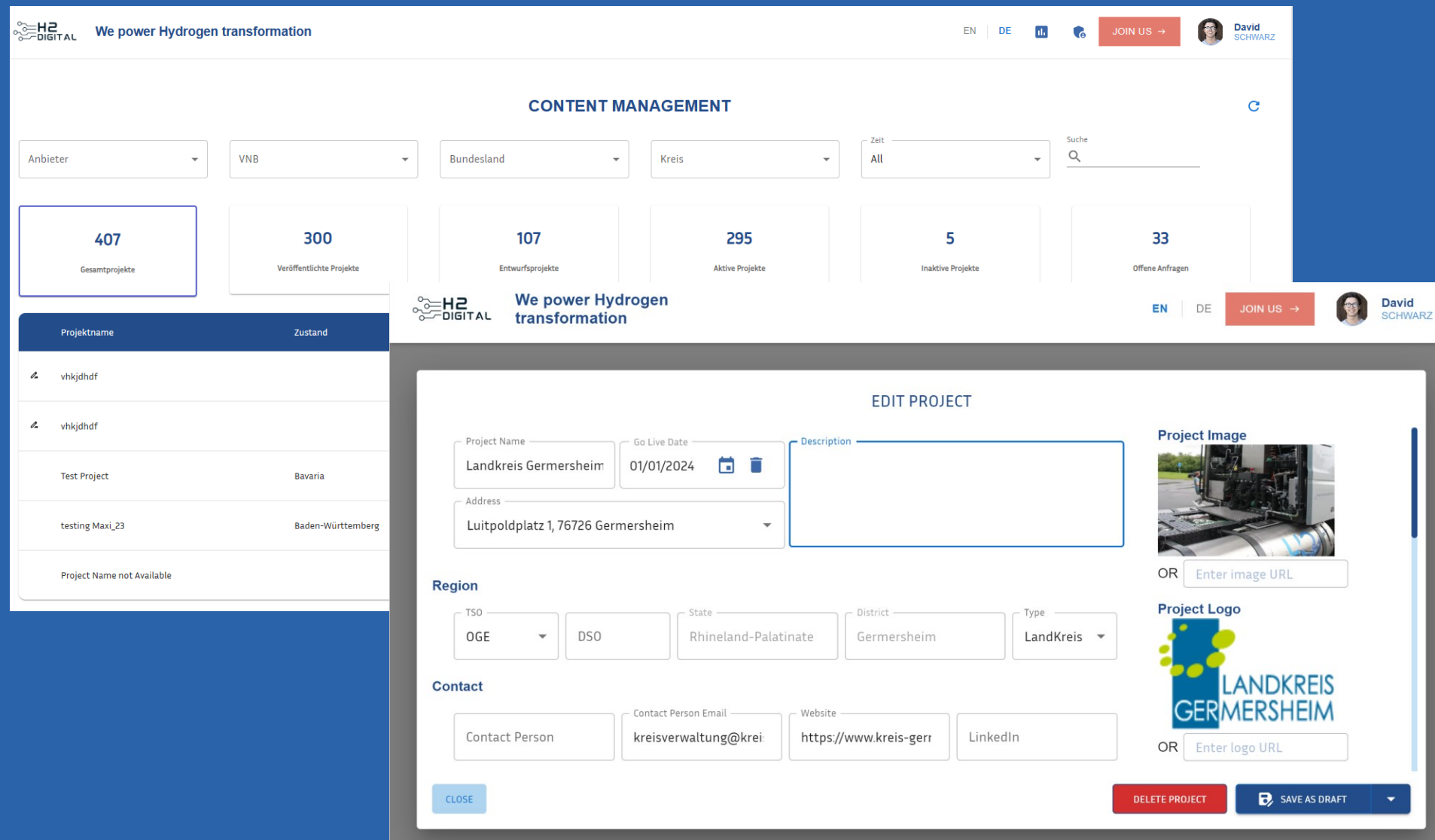
- Support in planning the transition to H2.
- Site investigation for suitability for H2 supply.
- Cost planning of connections based on real consumption and generation data.
- Integration of an enquiry portal for grid connection for hydrogen.



The screenshot displays the H2 Digital platform interface. At the top, there is a registration form titled "Willkommen bei H2 Digital!" with fields for "Vorname", "Nachname", "E-mail", "Firmenname", and "Telefon Nummer". Below this is the main dashboard for a project named "SIZING AND COSTING STADT MAINZ". The dashboard is divided into three main sections: "H2 DEMAND", "ELECTROLYSER", and "H2 STORAGE".

| Category | Parameter | Value |
|--------------|--|--------|
| H2 DEMAND | Amount of H2 produced per hour at nominal power • kg | 488.00 |
| | Average Load • % | 499.50 |
| ELECTROLYSER | Efficiency • % | 100 |
| | Average Load • % | 499.50 |
| ELECTROLYSER | Electrolyser CapEx • € | 11.99 |
| | Resilience Buffer • % | 9.99 |
| H2 STORAGE | Capacity | 8 |
| | Storage CapEx • € | 60.00 |

Below these sections is an "ELECTRICITY" chart showing electricity prices in €/MWh over time (February 27 to March 21). The chart includes a legend for "Electricity Price" (Low, Normal, High) and "Threshold For High Price" (green line) and "Threshold For Low Price" (red line). The price is currently set to "EEX".

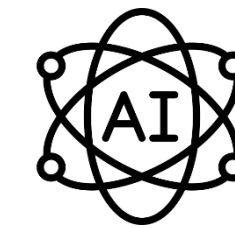
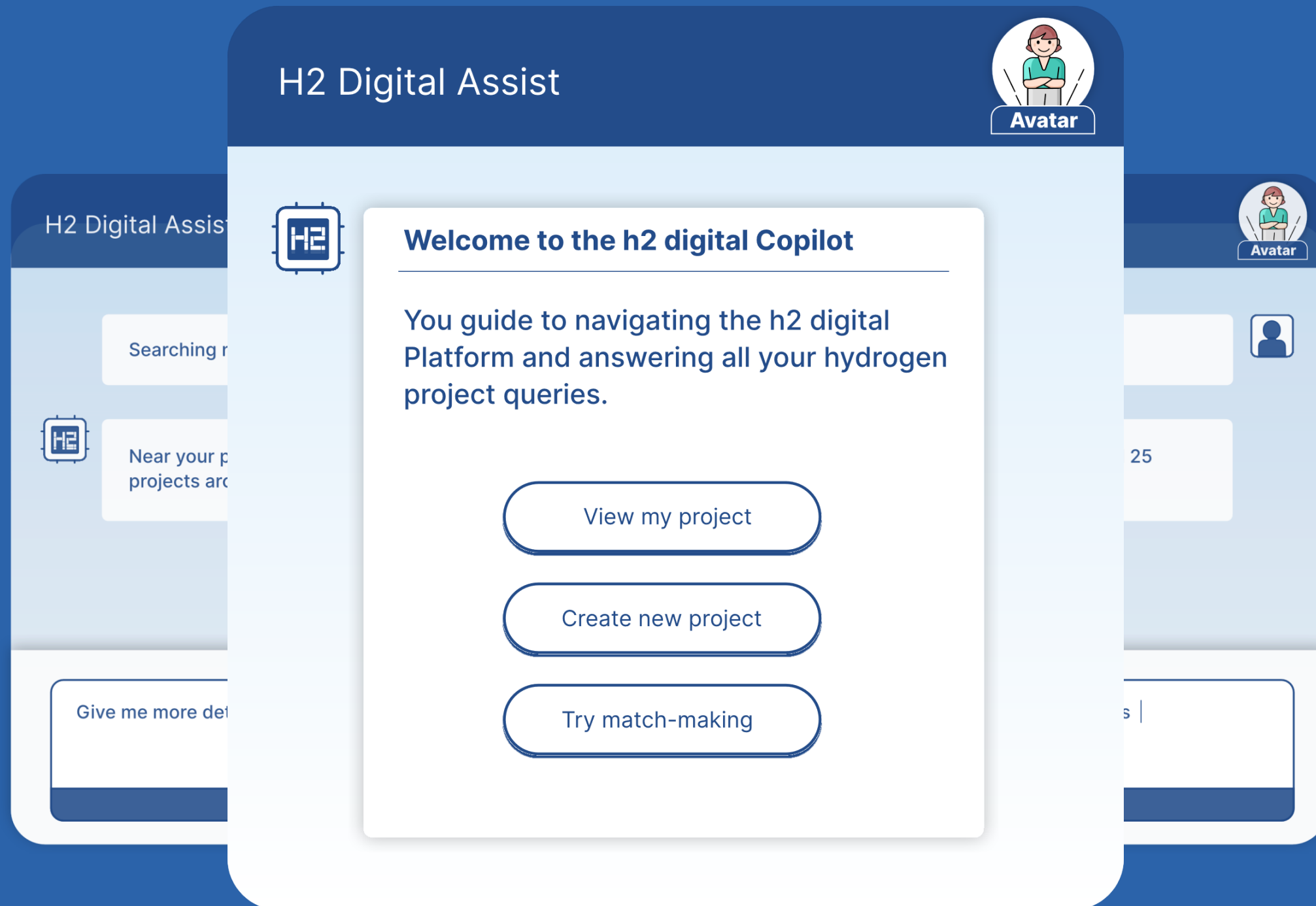


State-of-the-art content management for all users



Easy user guidance to collect and modify data – without training effort

- No more separate isolated solutions necessary for business development in H2
- One central platform instead of many individual systems
- Intuitive self-service access to your customers, to keep data always up-to-date.



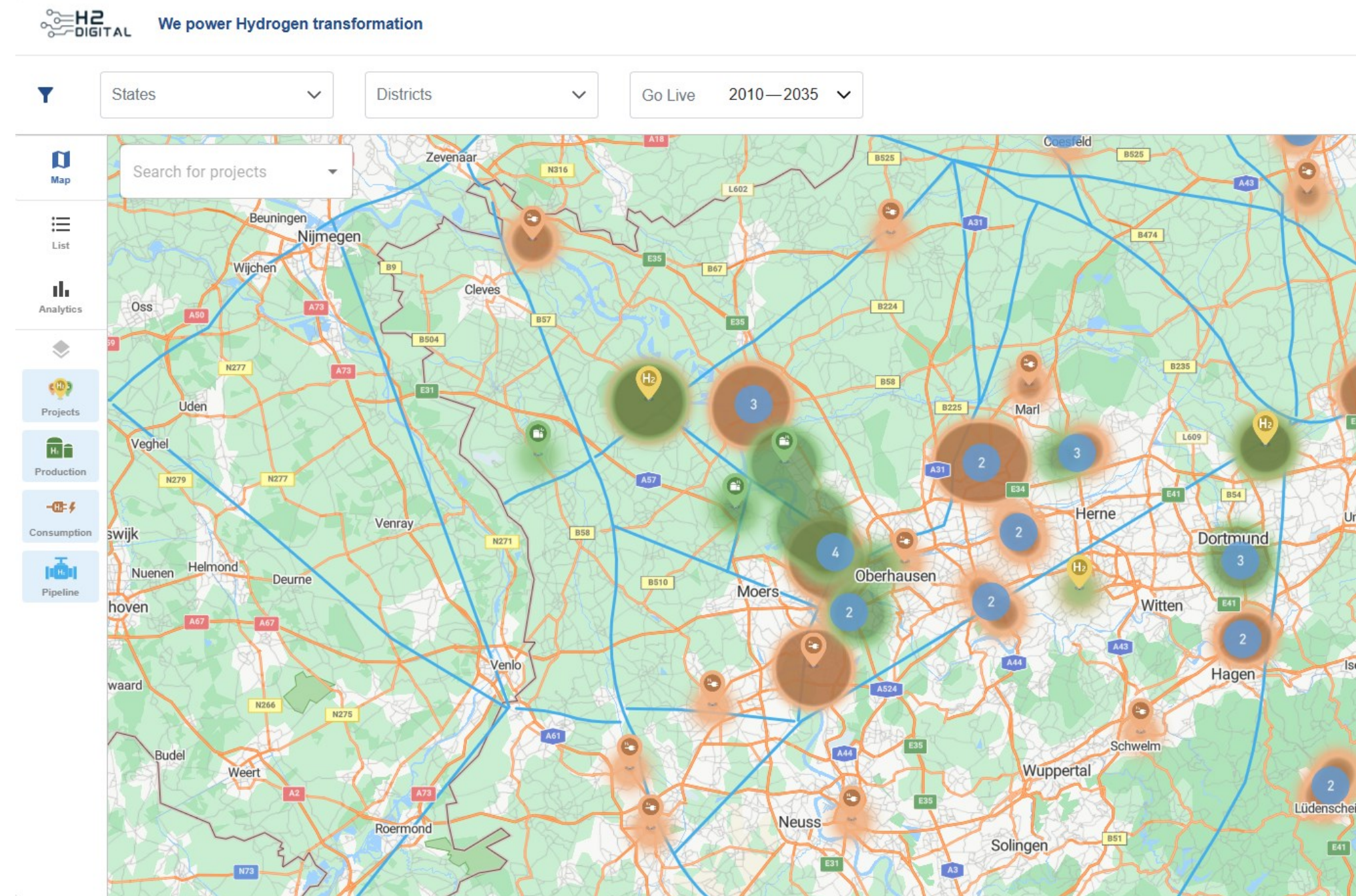
Integrated AI solution for optimal usability

- First step to an AI-first hydrogen platform: **AI-powered hydrogen assistant**
- Ability to process natural language in a wide range of applications
- Support **match-making** between hydrogen producers and consumers
- Deliver highly precise answers to business relevant questions in hydrogen



Your digital backbone for market development in hydrogen

Be part of the story





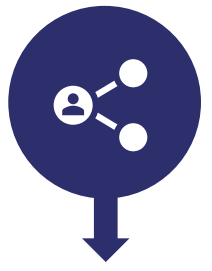
How to start building YOUR digital H2 platform



We set up a system for you



We integrate your existing customer data on all aspects of hydrogen for you



Start sending invitations to your customers to join the platform



Additionally, we can integrate access to the platform into your website

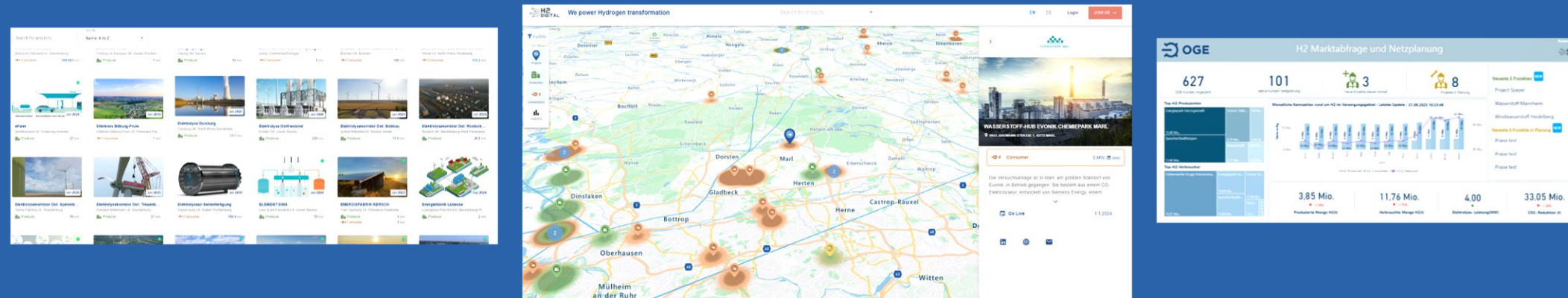


Collaborate with your registered customers and develop the H2 market together

Integration & visualization of existing data from H2 demand queries

- 1 Appealing visualization of relevant customer data with dynamic display in a map and filter options
- 2 Individual customer profiles in the platform to further support customers with digital services
- 3 Later: Connection of H2 Digital to e.g. the CRM system for the integration of customer data on H2 into business processes

Add value for the customer



Inputs

- Customer data from existing query processes, e.g. from the Gas Network Transformation Plan (GTP) or National Network Development Plan (NEP)
- Locations of customers with H2 demand & generation over time

Roles

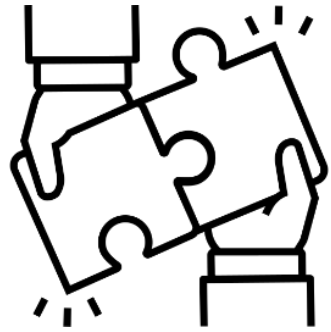
- **Customer:** Provision of customer data
- **H2 Digital:** Setting up a system for the customer with access control & integration of customer data into the system as well as development of an analytical dashboard to illustrate the data

Timeline

- Provision of customer data and clarification of the data format for integration into H2 Digital: 3 weeks
- Setup of the system and integration of the data incl. visualization: 3 weeks
- **Total: 6 weeks**

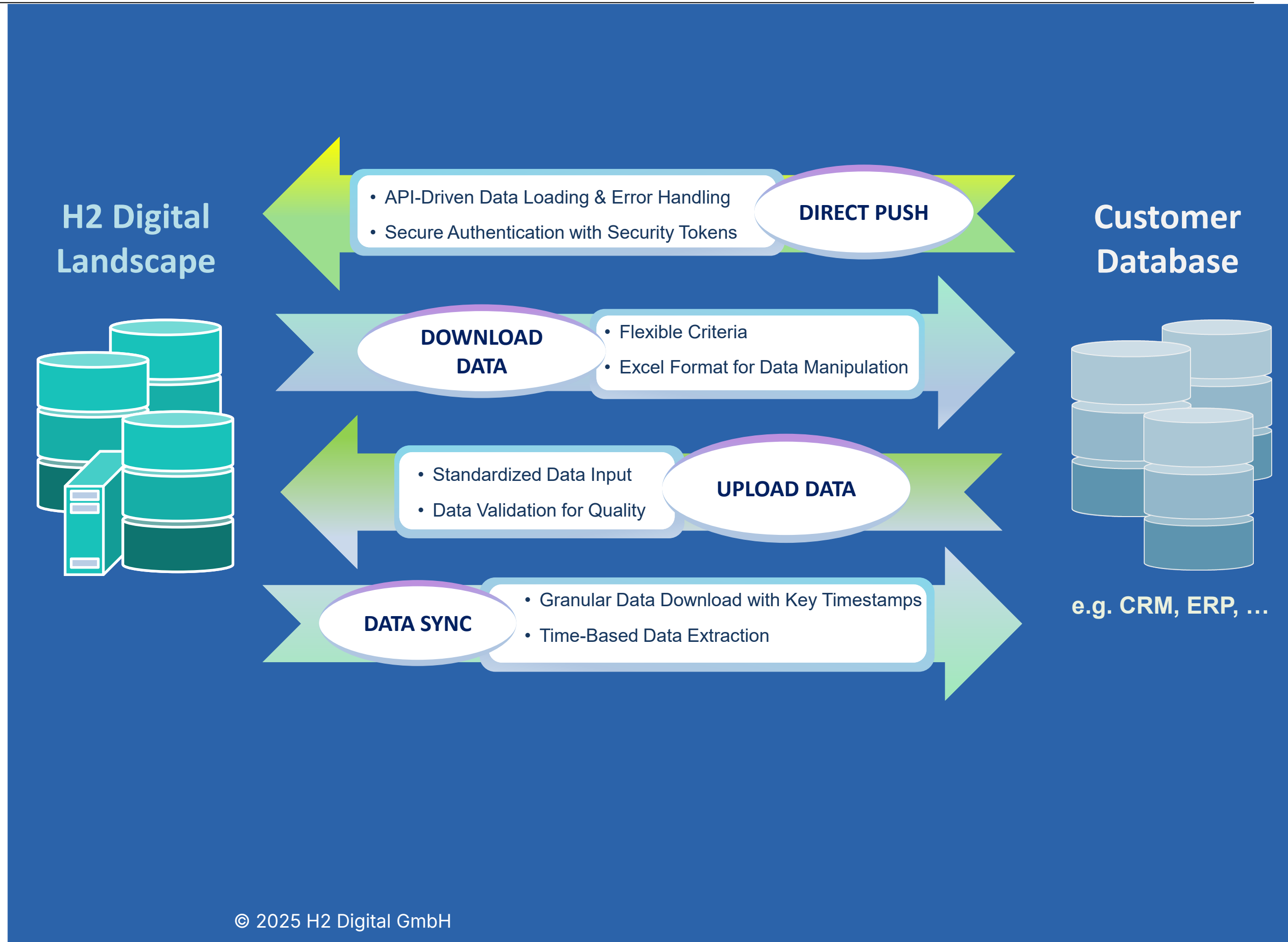
Scope & Effort

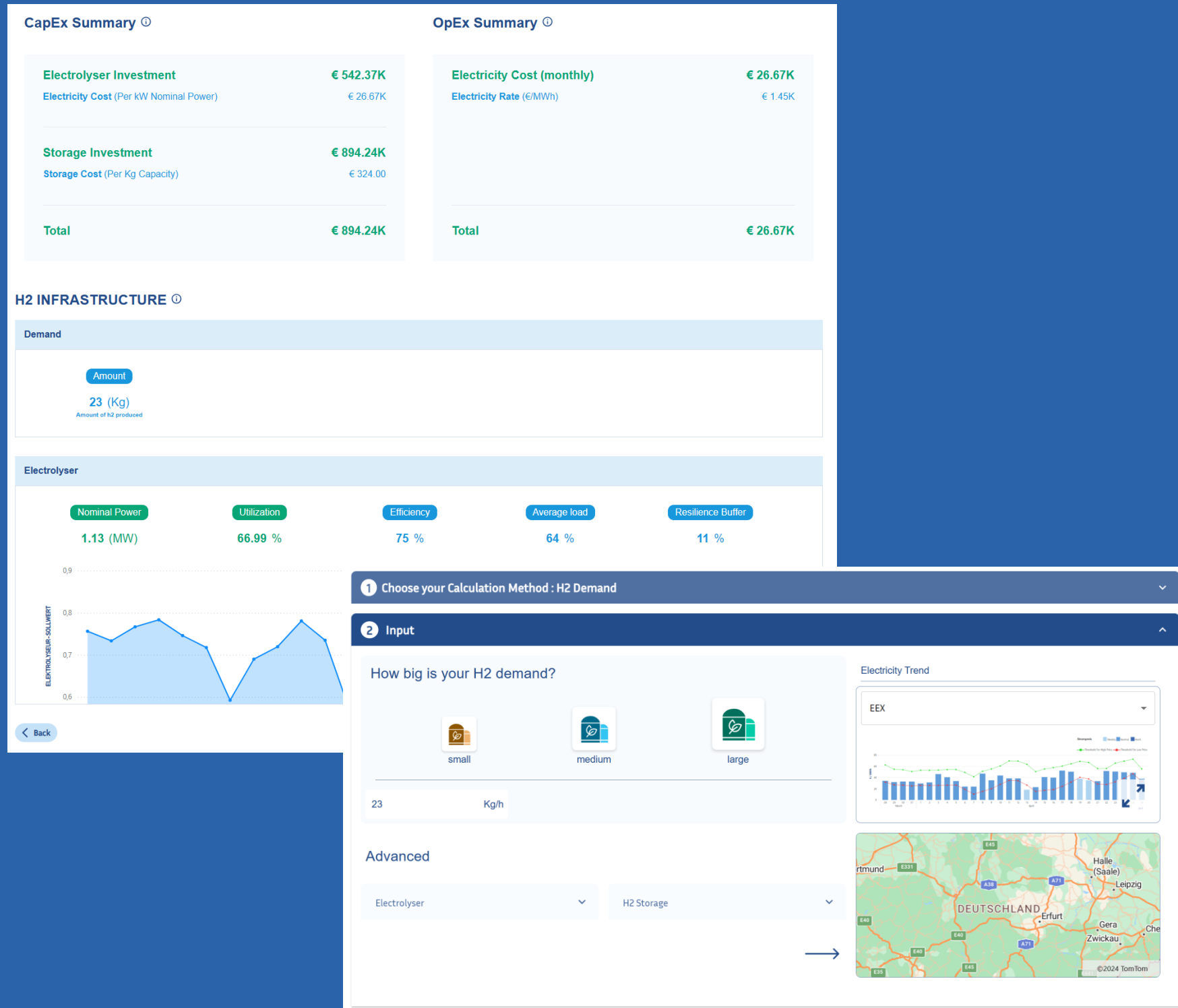
- Development and project management of H2 Digital for the implementation of the development effort and for the clarification of technical questions: billing based on daily rate, according to experience ~7 person-days
- Provision of the platform and access for unlimited customer users for a pilot phase of 6 months



The platform can easily integrate all relevant data sources from your previous activities in hydrogen

- Project databases based on previous market studies
- CRM data about H2 in your service area
- Publicly available market data or content from commercial databases





Optional: Use of the Sizing Tool for further customer support

In addition to visualizing customer data, you can also offer a digital consulting approach for your customers via H2 Digital.

Sizing & Costing on H2 Digital:

- Calculation of hydrogen requirements based on existing energy requirements
- Design of an electrolysis including H2 storage in a digital tool
- Intuitive process for entering relevant framework conditions
- Transparent results of the dimensioning of electrolysis and storage including CapEx and OpEx

The "Sizing & Costing" tool can be booked as an additional software option. An offer for this is made with a rough estimate of the number of customers for whom such a consulting service is to be created.

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