

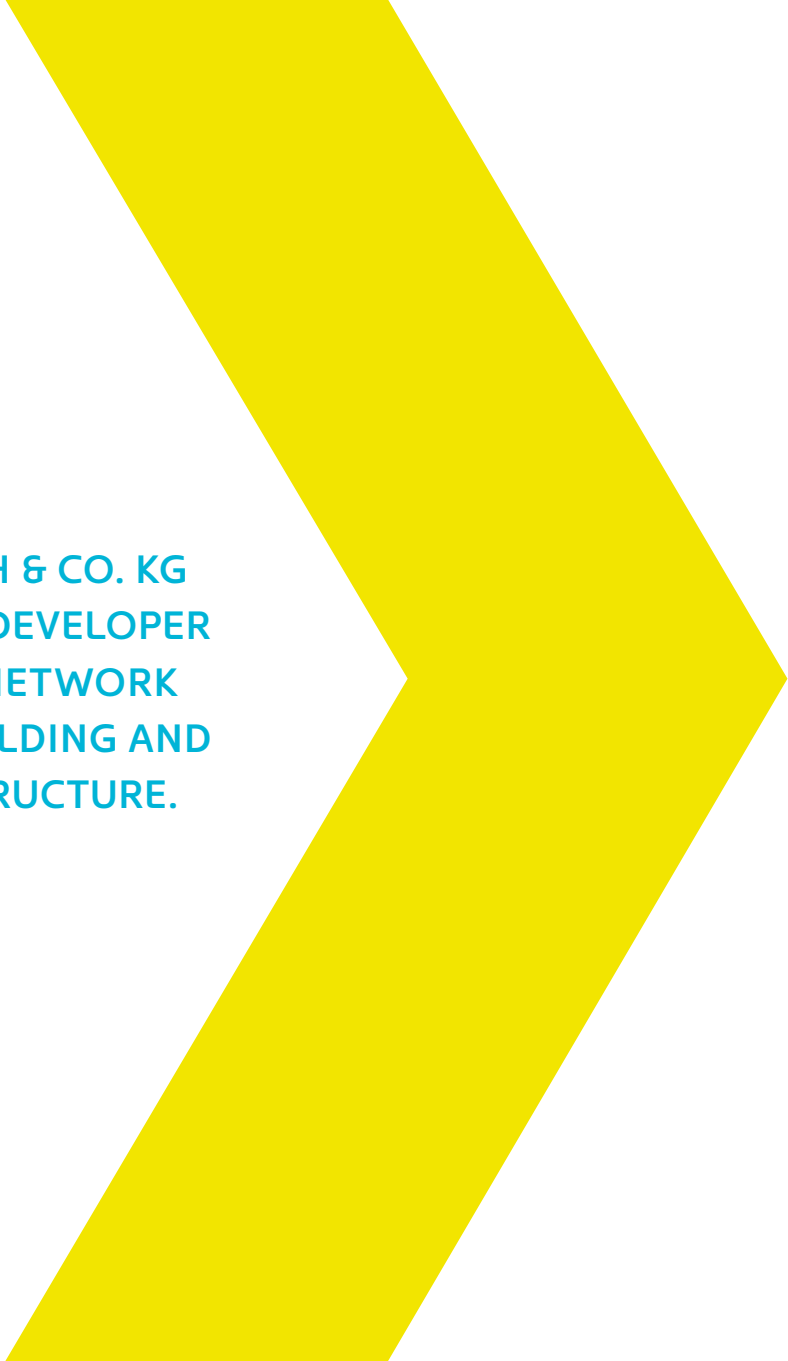
 H2MOBILITY



Annual Report 2020

For optimum use
of the interactive
features, please use
the Acrobat Reader.

#FuellingProgress

A large, bright yellow chevron graphic pointing to the right, positioned on the right side of the slide.

H2 MOBILITY DEUTSCHLAND GMBH & CO. KG
ASPIRES TO BE A LEADING INITIAL DEVELOPER
OF A HYDROGEN (H₂) REFUELLING NETWORK
AND FOR H₂ ECOSYSTEMS FOR BUILDING AND
OPERATING H₂ REFUELING INFRASTRUCTURE.

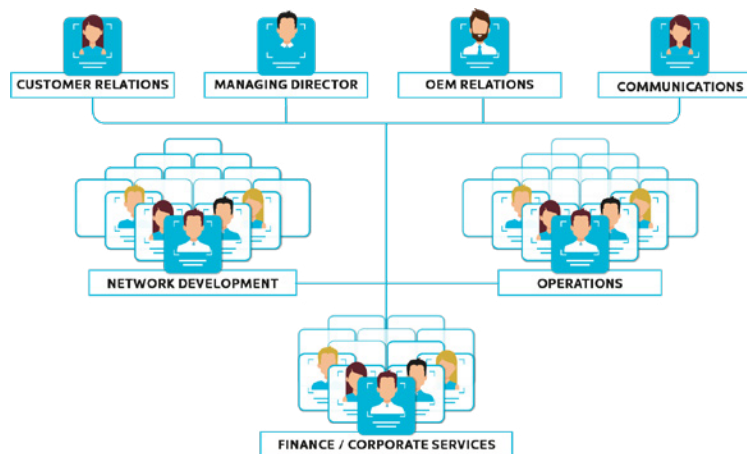


2020 Hydrogen for trucks - first Hyundai trucks on their way to Europe

H2 MOBILITY plans, builds and operates hydrogen refuelling stations.

In 2021 H2 MOBILITY is going to enter phase II. The first phase was to deliver a foundational network: building up infrastructure in seven major regions in Germany and along the connecting routes, irrespective of vehicle numbers. Now, after having completed nearly 100 stations with a total capacity for fuelling 40,000 fuel-cell passenger or light duty cars, we will build where there is additional demand, especially from light- and medium-duty vehicles like buses and garbage collection trucks, and where a public filling station makes sense for a growing network of passenger cars as well.

Most stations in our network today are 'small' with 200 kg of storage, one dispenser, and one 700 bar compressor. At nine stations we additionally offer 350 bar to serve buses. In the second phase, the hydrogen refuelling stations will be larger, with more H2 storage capacity, more dispensers, and with two pressure levels each (700 bar and 350 bar).



January	February	March	April	May	June	July	August	September	October	November	December
Opening event HRS Bielefeld	Opening event Heidelberg	CORONA SHUT DOWN		Press event Hydrogen Bavaria H2.B			Stakeholder Dialogue on the EEG reform	Press event with Minister Aiwanger, topic heavy duty		Opening HRS Braunschweig	Opening HRS Irschenberg
Opening HRS Frankfurt Niederräder Ufer			Opening event HRS Dortmund	Opening HRS Bonn	Nationale Wasserstoff-strategie		Press event H2				
				Opening HRS Rastatt	WOCHE DES WASSERSTOFFS NORD		Opening HRS Meerane	Exhibit with FAUN	Press event HRS Saarbrücken (groundbreaking)	Opening HRS Hamburg Airport	Opening HRS Munich Wilhelm-Hale-Str.



2020 Final sprint Phase I



Demand at H2 MOBILITY stations increased by 20 %
without shutdown phase estimated demand increase approx. 50 %



10 new stations built



9 stations opened to customers
10th station to be opened Jan./Feb. 2021



Average availability stable at 94 %
technical issues at new stations during the first months



More than 40 people now work for H2 MOBILITY
and 24 FCEV are in our fleet



Growths in usage of H2.LIVE
3,742 registered users of app



€ 18.6 m
in approved funding received

**2020 The H2 MOBILITY fleet
notches up more than
5,000,000 km hydrogen**



Mercedes-Benz GLC F-CELL with new branding

The Covid-19 pandemic, the elections in America, Brexit – many longed for the end of 2020 and an end to the year's uncertainties. What was 2020 like from a hydrogen perspective?

To be honest, the past year wasn't so bad for hydrogen. And of course, this is an opportunistic view, since the Covid-19 induced crisis brought tough challenges for many. But crises also act as catalysts. And in the case of hydrogen, a number of positive aspects came together: in the context of the National Hydrogen Strategy (NWS) of the Federal Republic of Germany and its European counterpart, the European Green Deal, hydrogen was upgraded to a central component of economic, energy and transport policy. Financial aid in the Corona crisis was bound to environmental standards. So now hydrogen is not only 'set' as an energy carrier. There is great interest in hydrogen as a fuel with a shift to commercial vehicles in addition to fuel cell cars. This is also in line with the H2 MOBILITY Deutschland strategy, which we underscored in November 2019 with the declaration of intent signed with Federal Minister Scheuer. In addition, the NWS supports the development of a hydrogen economy and this also creates the conditions needed for a market ramp-up in the mobility sector. Increasing unit numbers in the fuel cell

sector, for example, will have a positive impact on vehicle costs and thus on sales. Green hydrogen will become available and affordable.

What obstacles and risks do you see in the development of a hydrogen economy in Germany?

We very much welcome the positive momentum for hydrogen. But of course, a national strategy is only a directional document. It is now a matter of following up the announcement with action. One focus of the national strategy is on hydrogen production. For the transport sector, it is important that manufacturers of cars, buses and trucks now follow suit! There are many customers, but way too few vehicles on offer. Here, the NWS can only send signals – the decisive course is set in the industry. So far, Asian manufacturers are clearly frontrunners – Hyundai and Toyota are ramping up their production volume to well above 10,000 FC systems in 2021, and they put them in what we need: trucks, buses and cars! We very much hope that German vehicle manufacturers will follow fast. And some have already begun, e.g. Daimler with its bold initiative to form a JV with Volvo. Or FAUN, with its first truck in regular operations in Bremen.



»I am proud that we are building one of the world's most advanced hydrogen refuelling infrastructure.«
Nikolas Iwan, CEO H2 MOBILITY Deutschland

In 2021, H2 MOBILITY is preparing the next phase. The first phase was to deliver a foundational nationwide network: building up infrastructure in seven major regions in Germany and along the connecting highways, irrespective of vehicle numbers. Now, after having completed nearly 100 stations, what are the next focus points?

100 stations give us the capacity for the annual refuelling needs of 40,000 fuel-cell passenger or light-duty cars. Most stations in our network today are 'small' with 200 kg of hydrogen storage, one dispenser and a compressor for 700 bar, usually

integrated into existing Shell, Total and OMV sites. We are in the middle of preparing the ramp-up of commercial vehicles such as buses and garbage collection trucks, and going forward also heavy-duty vehicles, we will start building bigger stations, offering more capacity and additional 350 bar dispensers where there is demand. And we will expand the capacities and offer of existing sites. Today buses and light duty vehicles can already refuel with 350 bar at nine stations. For the refuelling of hydrogen garbage collection trucks and sweepers with 700 bar, we are collaborating closely with the special truck manufacturer FAUN to enable stations near customer sites. While the first phase was not conditional on vehicle numbers, the second phase is demand driven. It will become more important for cities, regions, waste management companies, and public transport operators to make a commitment.

If hydrogen is to make a real difference for the environment, the H2 used must be produced from renewables. What is the status today, and what are your plans?

Currently, the average share of carbon-free or neutral hydrogen sold to customers from our network is 28 %. It comes from electrolysis of

water and from biomethane and bio methanol and is TÜV certified. Our goal is to gradually increase this share. 30 % of the H2 offered by H2 MOBILITY is by-product from the chemical industry, which would otherwise remain unused. However, the remaining 42 % is still obtained from natural gas. And even if hydrogen from natural gas saves about 1/3 CO2 emissions compared to conventional fuels, our clear goal remains: green hydrogen produced with electrolysis from renewable energies. And for this “most sustainable” category of hydrogen the market is just about to start. It is not yet available for delivery to our stations, but a market will soon evolve – with production assets onshore, like the recently announced facility in Leuna (Linde) or the one being built by Shell in Cologne. But imports will also start to play an increasingly important role.

Did Corona have an influence on your work?

Despite the lockdowns and limited travel possibilities H2 MOBILITY managed to build ten new stations in 2020. But the pandemic has slowed down our roll-out. The 100-station mark we planned to reach at the end of the year will now be reached in summer/autumn 2021. We also saw a 70 % drop in hydrogen consumption during the

lockdown in March and November/December, as most hydrogen vehicles in Germany belong to fleets. Luckily it picked up fast and we are back on track – if the trend continues, demand will double in 2021. In 2020, H2 MOBILITY launched a new offer: H2 MOBILITY SERVICES. Here we offer third parties our expertise in planning, building, and operating hydrogen stations. Surprisingly, Corona did not affect our launch at all. We are very proud that we now also operate five hydrogen refuelling stations in Austria and that we will be assisting the roll-out of hydrogen stations in Israel. So, given the circumstances, 2020 was an altogether successful year.



2020 Nine new stations launch
trial operation despite Corona

10

**HRS built, of which 9
opened for customers**

10

**HRS projects
in planning or being built**

> 20

**regions identified for
2021/22, talks about
demand concepts ongoing**

€8.2 m

**ordered
work volume**

opened	Jan	1	Frankfurt Niederräder Ufer
	Mar	2	Dortmund
	May	3	Bonn
	Aug	4	Meerane
	Sep	5	Erfurt
	Nov	6	Braunschweig
	Nov	7	Hamburg Airport
	Dec	8	Munich Wilhelm-Hale
	Dec	9	Irschenberg
Under construction		10	Saarbrücken (already built, will be opened soon)
		11	Oldenburg
		12	Landshut
		13	Cologne-Wesseling
		14	Erlangen
		15	Kirchheim
		16	Freiburg
		17	Bremerhaven
		18	Berlin Ost
		19	Düren
		20	Berlin Tempelhof



Opening Heidelberg

The H2 MOBILITY Deutschland Development Team has unrivalled experience and expertise, is highly motivated, and enjoys its work – all necessary prerequisites that made it possible to put nine new hydrogen filling stations into trial operation in 2020 despite Corona.

With the first hydrogen commercial vehicles reaching market readiness, however, demands on the construction and operation of hydrogen filling stations have changed, and will continue to change. To ensure that the systems being built today can meet the requirements of tomorrow, Network Development must integrate different system concepts and react to changing demands. One example is the hydrogen filling station in Oldenburg, which is still in the approval phase and will now be able to serve hydrogen buses as well as cars. The hydrogen stations in Cologne-Bonn and Herten were retrofitted with a 350 bar pressure stage. In addition to the provision of a

second pressure stage, new requisites also included the integration of alternative sources, such as LOHC storage or onsite electrolysis, and the associated changes in safety assessments, applications, suppliers and trades. Even though co-investors were successfully recruited for projects, in 2020 the investment costs per station increased from approx. € 1.5 million to € 1.6 million.

In 2020, Network Development also ...

- » created a Network Development guide,
.....
- » eased and fine-tuned the project
Controlling & Reporting process,
.....
- » optimised interfaces, documents
and processes.
.....



Setting up a hydrogen storage tank

One of the biggest challenges for Network Delivery in 2021 will be the still controversially discussed different refuelling concepts for commercial vehicles. 700 bar, 350 bar, cryogenic – each concept changes the design and requires different technology. Larger stations will be able to serve hydrogen cars as well as H2 buses, garbage collection vehicles and trucks.

Beyond this, the team seeks to ...

- » commence operations at first larger plant (Erlangen),
- » integrate necessary technology and dimensions for commercial vehicles,
- » participate in the development of new refuelling standards for commercial vehicles,
- » win new offers in the area of planning and construction for H2 MOBILITY SERVICES.



From left to right: Lorenz Jung (Chief Projects Officer) in discussion with Tuan Huynh (Financial Controller) and Martin Jüngel (Chief Financial Officer)



2020 More than **40,000** refuellings
at H2 MOBILITY hydrogen stations

20%

increase in demand*

(120 t/a in 2020 vs. 100 t/a in 2019)

92%

performance**

(approx.)

94%

availability***

40,000

refuellings per year

(approx.)

88

**number of
operated stations**

28%

green hydrogen

(TÜV certified)

16

**staff safety trainings on
site and at training centres**

More than

1,500

errors solved

More than

1,200

Performed checksp and tests

More than

3,000

**customer support calls
received via hotline**

* Without shutdown phase estimated demand increase approx. 50 %

** Uninterrupted refuelling processes

*** Time the station is available to customers for refuelling compared during opening hours

STATIONS OF THE YEAR 2020

individual stations

AP-Index*

Metzingen 99.8 %

Pforzheim 97.6 %

Flensburg (Handewitt) 97.5 %

Wendlingen 97.2 %

Demand and Covid-19

2020 started with a record surge in demand for H2. In February, more than 11 tons of hydrogen were dispensed at H2 MOBILITY Deutschland stations, following a constant increase over the preceding months. With the start of the global restrictions during the ongoing Covid-19 pandemic in March 2020, in March, April and May, demand at H2 MOBILITY stations dropped to around a third of the month before.

In addition, the highest-grossing customer before the Covid-19 pandemic, 'CleverShuttle', ceased operation in all cities with a FCEV fleet on duty, leaving a sales gap of nearly 15 %.

Over the following summer months, demand recovered steadily and more strongly than expected. September 2020 saw a new demand record at H2 MOBILITY stations as well as all hydrogen stations combined. Main growth drivers were the broad deployment of FCEV Passenger Vehicles that had faced limitations for new vehicle registration due to Covid-19 regulations. In 2020, more than 400 new FCEV Passenger vehicles were newly registered, mainly in the second half of the year.

Now that renewed Covid-19 restrictions are in place for the end of the year, a slight downturn in demand is anticipated again. With around 120 tons sold in 2020, H2 MOBILITY forfeited around 30 % of total demand vs. the originally anticipated demand volumes in 2020, due to Covid-19. Compared with the losses seen in other mobility and alternative fuel sectors, this is an average figure, evidence of the broad customer base that now uses the H2 MOBILITY infrastructure.

Performance and Availability

Despite rising hydrogen sales figures in 2020, Network Operations was able to increase both the performance (92 %) and availability (94 %) of H2 MOBILITY hydrogen stations. This was also

achieved by the implementation of a new monitoring and maintenance system at all stations: HRS Connect. HRS Connect currently provides data from 88 stations and can be used to analyse and manage all maintenance activities, including automatic feedback and log archiving. HRS Connect is an important building block for a Europe-wide availability system. Real-time information from many European hydrogen stations can already be displayed in this way.

As repeatedly requested by customers, Network Operations was able to increase the proportion of 'green' hydrogen (TÜV certificated) in the overall portfolio from 20 % to 28 %.

In 2020, Network Operations established a regional structure, dividing Germany into four regions with leads and regional teams making it possible to respond faster to malfunctions.

During the Corona lockdown in March, maintenance and repair of stations was challenging especially because the service companies from France and Austria, usually an important part of the system, were unable to enter Germany. This loss had to be compensated by the H2 MOBILITY Deutschland team. With success: there was only one single outage; both availability and performance were maintained at the previous month's levels.

Other successes:

- » A leakage monitoring was installed at all stations.
- » A uniform, cross-plant compressed air and drying system was developed.
- » A maintenance tracking system was put into operation and made available to suppliers as well as a repair ticket system.

» First truck refuelling tested and evaluated for further optimisation in 2021.

» Safety checks carried out at all plants.

» The H2 MOBILITY Service Hotline was expanded for commercial and technical topics.

In 2021, H2 MOBILITY's customer structure will change: hydrogen car drivers will be joined by waste disposal companies, public transport, and the first logistics companies. Timetables, cost pressure, and route cycles make high availability indispensable. In addition to the 700 bar technology, Operations also needs to keep 350 bar available at more and more stations. The number of cryogenic stations will grow to ten. The stations are becoming larger, with more vehicles refuelling simultaneously.



H2 MOBILITY operations team



**2020 H₂ buses from
different manufacturers
are becoming available**



12–19 kg

**demand per business
customer***
(per month / on average)

120 t

demand
(H2 MOBILITY stations only)

4,500

refuellings
(per month/on average)

12–14 kg

**demand per
private customer**
(per month / on average)

20–25 kg

**demand per H2 business
customer****
(per month / on average)

* Demand per customer from the group of business pioneers from independent businesses

** Demand per customer from the group of business pioneers from hydrogen industries / with hydrogen industry background

2020 was the year in which the basis for all new projects of Phase II was laid. Precise demand and cooperation conditions not only required the re-evaluation of old projects but also provided orientation for cooperation partners.

More than 120 H2.BOOSTERs participated and pre-ordered hydrogen credits for each of the regions. As a result Mannheim and Freiburg are now on the path to a new refuelling station. The credit will be booked as soon as the building process starts. Chemnitz also reached the required level of commitment but had to be withdrawn due to new requirements.

Overall, the campaign was well received and successful. It showed that there is a high interest and demand for hydrogen in the private and small commercial vehicle sector.

Focusing on demand

In recent years, the first demand targets for new locations have already been formulated and tested by means of tender calls. Thus, locations such as Brunsbüttel, Halle, and Meerane were able to enjoy the benefits of an H₂ filling station alongside the original strategy of building in metropolitan areas and along freeways.

However, it emerged that the number of letters of intent for hydrogen vehicle purchases is not sufficient to provide certainty. For this reason, at the beginning of the year we decided not only to set

demand targets of 25,000 kg in the first year and 50,000 kg in the third year, but also to secure these targets with cooperation agreements.



From left to right: Martin Jüngel (Financial Controller) in discussion with Falk Schulte-Wintrop (Strategic Business Development) and Sarah Kassem (Assistant to the CEO)

H2 MOBILITY Deutschland has projects in the pipeline to unlock 441 tons p.a. in year one and 772 tons p.a. in year three. Twelve projects are mature and ready to be launched.

H2. BOOSTER

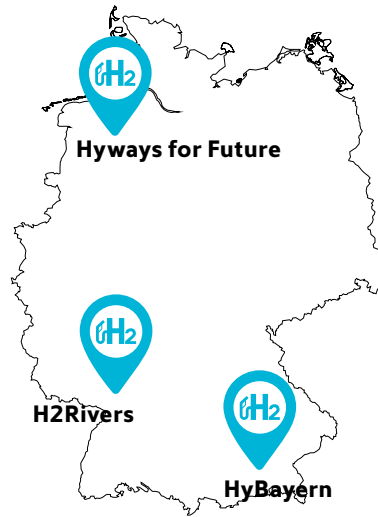
In the first quarter of 2020, the initiated H2. BOOSTER campaign gave customers in three regions (Mannheim, Chemnitz and Freiburg) the chance to underline their intention of purchasing a hydrogen vehicle by pre-ordering hydrogen credits at one of the possible upcoming stations. The regions were selected based on the high number of letters of intent signed beforehand.

HyPerformer

H2 MOBILITY Deutschland has been heavily involved in the German 'HyLand' funding project. In addition to many signed Letters of Intent in the 'HyStarter' and 'HyExperts' categories, H2 MOBILITY qualified as an infrastructure partner in all three 'HyPerformer' regions (HyBayern, H2Rivers and Hyways for Future). In total, H2 MOBILITY has received the potential funding for ten 'specification M' hydrogen filling stations.

Over the course of many project meetings, it became clear that H2 MOBILITY would focus on H2Rivers and Hyways for Future and only be available as a service partner in the HyBayern project. The reason is that the locations in the HyBayern project offer demand perspectives, but did not meet H2 MOBILITY's criteria for an expansion of the public network.

One positive side effect of our participation in the HyPerformer projects was that a further state-funded project (H2RheinNeckar) emerged from the H2Rivers project consortium. In the course of this project, H2 MOBILITY will build two additional filling stations to supply a total of 40 buses.



**2020 FAUN introduces
first H2 garbage collectors
and sweepers**



The focus for Automotive Relations was to aggregate the upcoming variety of the Fuel Cell Electric Vehicle (FCEV) market across all vehicle classes, and the deployment plans for Germany and Europe for the next decade. Personal interviews with key industry leaders, academic researchers, and the constant exchange with H2 MOBILITY Deutschland's network and partners served to provide a clear picture of the future FCEV market. The results served as the basis for the overarching restrategising process within H2 MOBILITY and emphasised its mission to become the initiator of a public hydrogen infrastructure in Germany and Europe.

Light/Heavy-duty vehicles and buses gain traction in 2020

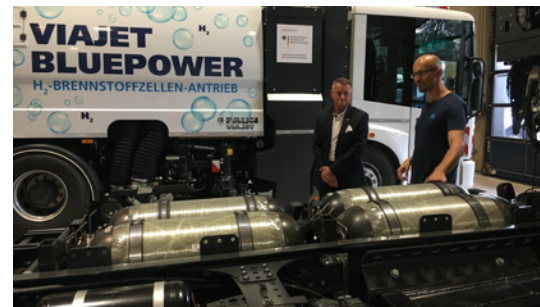
With European regulations like the Clean Vehicle Directive ahead, public transportation agencies are looking intensively into methods to shift their fleets to zero emission vehicles (ZEV). FCEV buses serve an important role for daily tours over 150 km within public transportation, with limited access to charging infrastructure or tight time schedules for refuelling the fleet. Many public transportation operators are looking into ZEV and testing hydrogen buses from manufacturers, such as

Caetano, Solaris and Van Hool. H2 MOBILITY serves as a partner for hydrogen infrastructure in various projects and therefore enables locally emissions-free public transportation in cities and surrounding areas.

FAUN and H2 MOBILITY partnership in 2020

In 2020, business development with FAUN intensified as first customer deliveries were planned. A unified approach between the 700-bar infrastructure and FAUN's 700 bar refuelling garbage truck is important for a successful launch among customers – which is why the technical teams at FAUN and H2 MOBILITY are exchanging necessary details, performing test campaigns at various H2 MOBILITY stations, and planning the coordinated roll-out of the vehicles from 2021 onwards.

More than 150 municipalities and private garbage companies participated in the most recent funding call for garbage trucks in Germany in late 2020, demonstrating that they are willing to shift their fleet to a locally emissions-free solution that serves their sustainable city needs. We will continue our close relationship with FAUN to make hydrogen mobility easy to use.



FAUN H2 sweepster



Hydrogen buses enjoy growing popularity

2021 Passenger Vehicles

The new MIRAI II has been officially unveiled at the end of 2020 and will be a significant improvement on the old model. It will be 30 % cheaper while also delivering 30 % more range and comes with a clear upgrade in vehicle class, quality and features.

Hyundai is expected to increase sales with the latest upgrade of the NEXO, the larger sales quota for Germany and a reduction in delivery time.

H2 MOBILITY maintains a very close and trustful relationship with the leading manufacturers of FCEV vehicles, and will continue to collaborate closely on the successful deployment of FCEV in Germany.

2021 Light and heavy duty ahead

Numerous manufacturers agree on the importance of hydrogen for duty vehicles, and accordingly, the development of FCEV duty vehicles has accelerated strongly. The first vehicles will enter the German market in 2021, across all [duty] categories of vehicles (light, medium, and heavy duty). H2 MOBILITY is in constant exchange with vehicle manufactures to align the technical details and deployment plans with the demand for public hydrogen infrastructure in 2021 and the following years. This will be a key priority in its work in 2021.



Toyota Mirai II ready for market

2020 New offer launched: H2 MOBILITY SERVICES



Selected

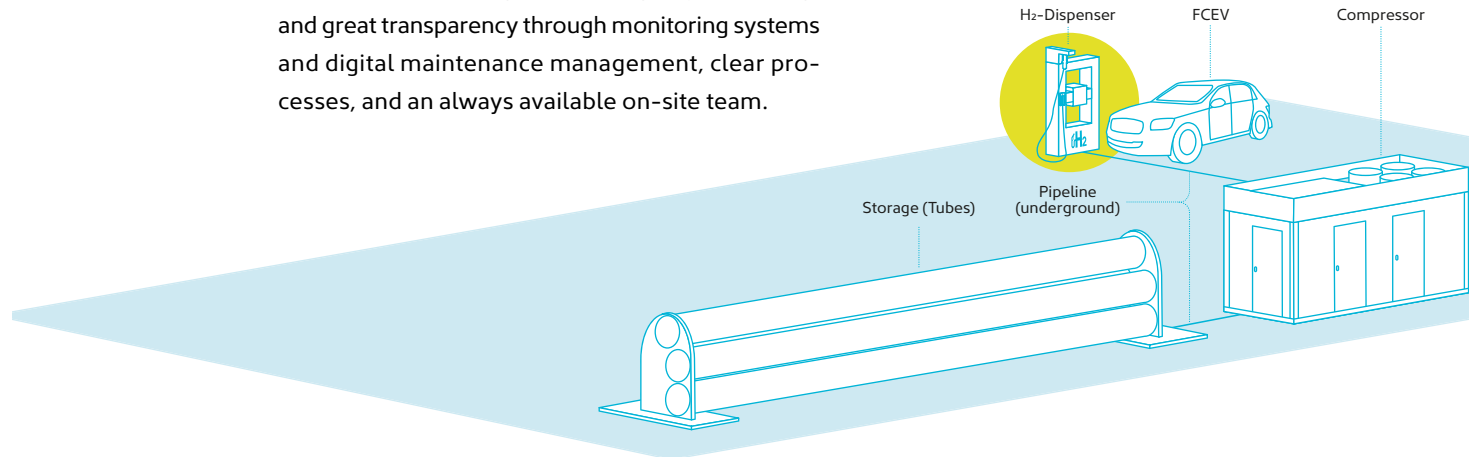
Volker	
Ullrich	
Alex	
Ann	
Anne	
Thomas	
Thomas	
Alex	
Alex	X
Anne	X
Volker	X
Mario	X
Volker	
Thomas	
Alex	
Mike	
Mare	

»Hydrogen is a true all-rounder: the smallest element in our universe can move cars, buses, small and large commercial vehicles, or even trains. This is why there are a variety of different hydrogen filling stations: They can be open to the public or located in a depot, integrated into existing filling stations, or exist as standalone solutions. They can store a few hundred kilograms or a few tons, under pressure or cryogenic conditions, in horizontal bundles or high tanks, or on exchangeable trailers. Anyone planning or wanting to operate a hydrogen filling station should know their options.«

Extract from the H2 MOBILITY website

H2 MOBILITY SERVICES has begun its acquisition efforts – and successfully so: feedback from AGR has been very positive following the completion of the first SERVICES DEVELOPMENT projects. SERVICES was awarded the contract for the first Plug Power HRS in Israel. Potential infrastructure investors are interested in H2 MOBILITY Deutschland's know-ledge, experience, and team of engineers to offer consulting, planning, construction and the complete operation of hydrogen stations.

As the largest hydrogen filling station operator worldwide, H2 MOBILITY SERVICES OPERATIONS stands for plant safety and security, high reliability, and great transparency through monitoring systems and digital maintenance management, clear processes, and an always available on-site team.



5,903

outgoing invoices

€ 18.5 m

in funding granted

(12 HRS NIP + 2 HyPerformer + 2 HzRivers)

»Good«

credit rating confirmed
by Creditreform

In 2020, H2 MOBILITY Deutschland received funding approval totalling € 12.4 million for twelve hydrogen filling stations, from the National Innovation Program for Hydrogen and Fuel Cell Technology (NIP). Approx. € 2.5 million were approved for two additional locations in the Hy-Land (H2Rivers) project, as a selected region in the HyPerformer program. The state of Baden-Württemberg agreed to support the construction of two H2Rivers hydrogen stations in H2Rhein-Neckar with € 3.6 million from state funds. H2 MOBILITY was able to acquire total subsidies of € 18.5 million in 2020.

Throughout the year 2020, the H2 MOBILITY Finance and Administration team further optimised and strengthened internal processes in order to drive forward automatisation, avoidance of manual errors, and higher data reliability, i.e.:

» the implementation of a platform to automatically process incoming invoices,

» the elaboration of an ERP/ MS Navision roadmap with first optimisation measures already realised:

» an automated accounts receivable management,

» a more robust asset accounting process,

» an optimised inventory tracking process.

Furthermore, the share of electronic invoices to our customers as well as the amount of SEPA direct debit mandates were further increased during the year, which contributes to the reduction of administrative workload and frees up resources to work on finance and accounting analyses and improvements to strengthen the quality and compliance of our work and database:

» A detailed cost analysis was performed based on the 2019 results, generating valuable findings for future controlling and business planning activities.

» A task force was set up between the Finance and Operations teams to analyse and optimise the stock losses of our HRS.

» A new procurement manual and a compliance policy were drawn up and published.

» The Finance team is fully involved in the strategy preparation and business planning activities to define the future scope and structure of the company.

In 2021, the focus will be on continuing and deepening our administration and compliance processes (in 2020, we already started paving the way for implementing a CRM system, optimising our IT landscape, and introducing alternative payment solutions). Furthermore, cash management will be a focus topic that is closely linked to the funding activities. Participation in H2 MOBILITY's strategy and business planning work will also continue.

55.4%

rowth in registered users

5.1 K

user activity over time
(30 days)

47

interviews

Our aim with the H2.LIVE app is to provide real-time information on the status of all public hydrogen stations. Starting with a strong focus on Germany, H2.LIVE has developed into a European platform that integrates the hydrogen refuelling stations (HRS) of many different operators.

Europe

In 2020, H2.LIVE focused on broadening its network of operators and station providers to enhance the static and dynamic station information as well as optimising their quality all over Europe. We also established a direct feedback channel between customers and operators.

Mobile Authorisation

We finished our solution for mobile authorisation, made it robust by running two beta user groups on iOS and Android and are now ready for roll-out to all customers.

Data Product B2B

We developed our own API offering and delivered static and dynamic HRS data to the public and to partners.

User activity over time

B2B customers

We closed two deals with major OEMs, selling our data for in-car and third-party app integration.

Active users

Customer and User Research

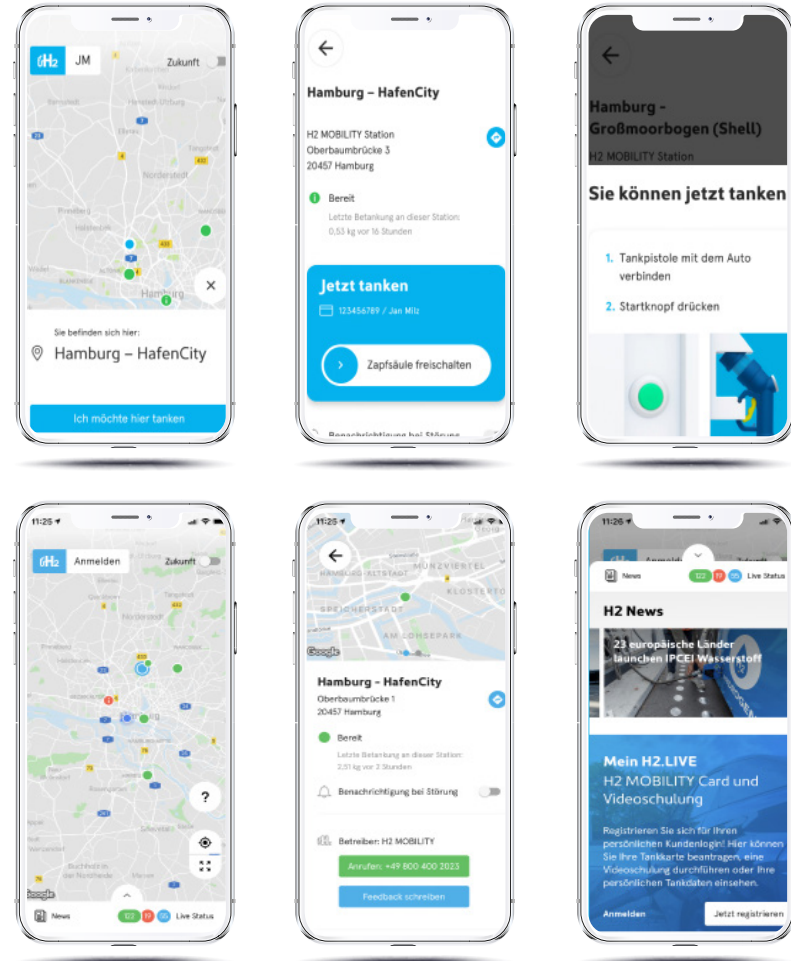
We did several research projects with FCEV drivers and users of H2.LIVE to understand demand continuously. Our research activities are the foundation for customer-oriented product development.

Hydrogen refuelling stations (HRS) for duty vehicles

Hydrogen refuelling stations for duty vehicles will become a significant pillar in the hydrogen-powered mobility market. The main focus from 2021 onward will be a customer-oriented approach of showing locations, real-time availability, and future openings of HRS for duty vehicles eligibility on 350 bar or 700 bar pressure levels. H2.LIVE will continue to focus on publicly accessible stations, but will also work on the inclusion of semi-public HRS, if there is a foreseeable benefit for customers and operators.

Use of H2.LIVE data

The data service behind H2.LIVE can be useful for many other purposes beyond mapping information in a front-end app or website. Usage-focused information channels, e.g. directly in navigation systems or individual logistic or mobility systems, can help to increase the ease of using the hydrogen refuelling infrastructure. A focus on B2B cooperations for offering API services to access relevant data for customers will therefore be targeted.



2020 Rising interest
despite fewer events



2020 was a communicative challenge: live events such as the Hannover Messe, network meetings, public presentations, and station openings were cancelled due to the Covid-19 pandemic. At the same time, various ministries, associations and industrial companies fought publicly and in the press about the national hydrogen strategy, the 'right colour' of hydrogen and reforms of the 'Erneuerbare Energien Gesetz' (EEG) and 'Renewable Energy Directive' RED II.

With the announcement of the National Hydrogen Strategy (NWS) of the Federal Republic of Germany and its European counterpart, the European Green Deal, hydrogen was upgraded to a central component of economic, energy and transport policy.

All in all, interest in and knowledge about hydrogen increased significantly in 2020. This was also confirmed by an AUTO MOTOR UND SPORT survey: Since 2013, the AUTO MOTOR UND SPORT-Verlag Motor Presse Stuttgart has been asking readers in its 'Best Cars Survey' which engine will prevail. Every year, more than 100,000 people respond. In 2020, 62 % of respondents answered that they would opt for a vehicle with a hydrogen fuel cell drive (FCEV).

Design relaunch H2 MOBILITY

No company has more experience in building and operating hydrogen refuelling stations than H2 MOBILITY Deutschland. As the main protagonist in hydrogen mobility, and building up a new business division that also sells SERVICES, H2 MOBILITY needed a more self-confident brand, including the well-known 'Fuelling-H2' signet. The inclusion of the speaking sign helps to easily identify the H2.LIVE app and website as H2 MOBILITY proof points.



The hydrogen refuelling signet is now part of the H2 MOBILITY logo



ARD Tagesschau

AUTO MOTOR UND SPORT survey

WOCHE DES WASSERSTOFFS 2020 NORD (HYDROGEN WEEK) and H2 MOBILITY films

As part of delivering on our claim to communicate the topic of hydrogen to the public in a credible and vivid way, H2 MOBILITY Deutschland decided to go digital with the WOCHE DES WASSERSTOFFS NORD (WDWN), which was also threatened by cancellation. Instead of the more than 20 planned live events, twelve hydrogen films were produced and shown from 6 to 14 June, 2020. They included an interview by Nikolas Iwan with Germany's Minister of Transport Andreas Scheuer, statements by five senators and ministers, and insights into different regions and companies. The blue H2 MOBILITY hydrogen sofa was a recurring element, and served as a venue for experts, opinion leaders, and pioneers to present insights, explanations, and H2 anecdotes. After the WDWN, further films followed, e.g. at the garbage collection



Filming with Senator Vogt in Bremen.

vehicle manufacturer FAUN. The films are aimed at non-experts, are easy to understand, and have a 'human interest' approach. Protagonists speak into the camera, addressing viewers directly. A dynamic editing style makes it possible to easily change locations and themes. Graphics are displayed to show correlations; text, key words and numbers underline important statements.

The films run mainly on YouTube but are also used on other channels in H2 MOBILITY's ongoing social media relations.

H2 MOBILITY was able to use the digital WDWN and the other films to, among other things:

- » strengthen its partnerships with companies, networks and politics,
- » position / sharpen its brand identity,
- » create relevant content for H2 MOBILITY social media channels,
- » generate interaction and followers.

2021 will also be challenging in terms of communications. Corona will continue to make binding event planning difficult. The Hannover Messe, for example, is to be held as a live event on larger grounds – or may be cancelled. However, who will be able to travel, and whether overnight stays will be possible, is still uncertain. We are therefore also preparing for digital formats and streaming offers.

In addition, it is expected that attention for hydrogen as a storage medium will increase in 2021 and will be strongly politicised in the super election year: In 2021, Germany will not only have the Bundestag elections, but also five state and three local elections. Hydrogen is already being discussed across political parties and federal states.

» Hannover Messe 2021 Joint exhibition and big hydrogen vehicle presentation, including (tbd) Hyundai Truck xient, FAUN garbage truck, H2 bus from EvoBus, H2 forklift and all available H2 car models including Toyota Mirai II. The exhibition is also being promoted by Hannover Messe AG as a highlight of the H2/fc hall.

» WOCHE DES WASSERSTOFFS NORD live from 12 to 20 June, 2021 including an International H2 Summit in Hamburg, international press trip as part of a North German communications campaign on hydrogen by the five federal states, opening of the H2 MOBILITY Deutschland filling station in Braunschweig with Minister Althusmann, opening of the GP Joule hydrogen stations in Husum and Niebüll and citizen days in Bremen, Bremerhaven and Heide.

» Social media activities and H2 MOBILITY movies focusing on the H2 MOBILITY Facebook and LinkedIn channels.



Filming with Federal Minister of Transport Andreas Scheuer in Berlin.

This is a report on the activities of H2 MOBILITY Deutschland GmbH & Co. KG in 2020. It has been prepared for the associated partners from the automotive sector who together form the Industry Advisory Committee (IAC).

The Industry Advisory Committee meets quarterly to assess the progress being made on the infrastructure and advise the Managing Director of H2 MOBILITY Deutschland on matters concerning the customer value proposition.

This report is based on non-confidential information only and can be shared without restrictions.

Air Liquide, Daimler, Linde, OMV, Shell and TOTAL joined forces in 2015 to set up the joint venture H2 MOBILITY Deutschland GmbH & Co. KG. Its mission: swift, efficient development of the hydrogen infrastructure needed to provide nation-wide coverage for fuel cell vehicles.

Shareholders



Associated Partners



Funding





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