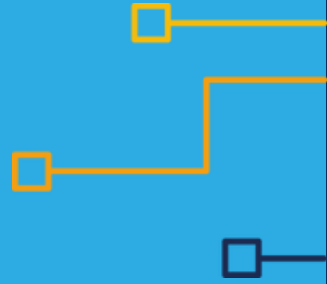


The proper management of information flows keeps the focus on the goal

Projectportfolio management at VDL Hydrogen Systems



“Being able to link the different projects and make the different cross-sections for our subsidiaries, that's the strength of Fortes.”

Wilbert Heffels
VDL Hydrogen Systems



About VDL Hydrogen Systems

VDL Group consists of more than 100 operating companies in 20 countries. These operating companies operate autonomously, making them agile and decisive. Within VDL Group, VDL Hydrogen Systems is a startup and one of the smaller companies, one with an important role. VDL Hydrogen Systems wants to play an important role in the energy transition and contribute to a more carbon free world. VDL Hydrogen Systems focuses on producing hydrogen, which is seen by many as one of the most important energy carriers of the future. VDL Group started doing this 3 years ago, but 2 years ago VDL Hydrogen Systems was established as an independent operating company to get more focus on the objectives.

Hydrogen production of the future

There are several ways to produce hydrogen. You can produce it using fossil fuels such as petroleum or natural gas. That production method is called Steam Methane Reforming (SMR). Besides SMR, you can also produce hydrogen by electrolysis. If you couple electrolysis with a green energy source, such as wind or solar energy, you speak of green hydrogen. There are different forms of electrolysis:

- Alkaline Water Electrolysis (AWE), with over 100 years the oldest method.
- Solid Oxide Electrolysis (SOE)
- Proton Exchange Membrane (PEM)

The problem with all these methods is that the cost of hydrogen production per kilo of hydrogen is still higher than that of hydrogen production using fossil fuels, the 'gray hydrogen'. Although there are already quite a few companies in the Netherlands that use hydrogen, there is only a limited pipeline network for the transportation of hydrogen. This limited network is currently still filled with gray hydrogen.



VDL HYDROGEN SYSTEMS



Industry



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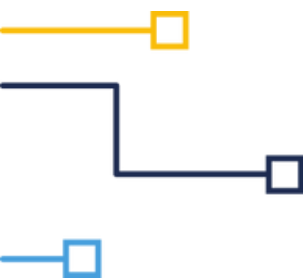
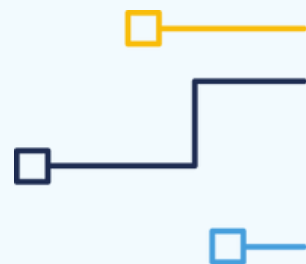
Eindhoven, Nederland

Small-scale production and storage of hydrogen is inefficient and very costly. Therefore, the main focus is to find ways to produce hydrogen on a very large scale and efficiently using green energy. You can then produce large quantities of hydrogen in places where lots of green energy is available and transport it to individual users.

VDL Hydrogen Systems is developing electrolyzers, the hydrogen-producing machines, that can do this cheaply enough that green hydrogen is a feasible and affordable alternative to fossil fuel and gray hydrogen.

VDL Hydrogen Systems develops machines that produce hydrogen at the lowest possible cost. In addition they strive to create them as circular and sustainable as possible.

VDL Hydrogen Systems has several pilot projects underway. They are building test setups for the electrolyzers. The test setups are being developed to generate a certain output of hydrogen with an input of (green) energy. A 50kW test setup has been built. They are now working on a 500kW setup. The end goal is a 15 MW product.



VDL Hydrogen Systems' current hydrogen testing setup.

Source: VDL Hydrogen Systems



Investment

Developing such an innovative product requires a huge investment. Specialists are working day in and day out to further develop the prototypes. High-end material is needed to manufacture the prototypes, which also requires the cooperation of other parties. VDL provides much of that investment itself. The reason is twofold:

1. VDL Hydrogen Systems creates the design, and also wants to take on production when the product is mature. This creates employment.
2. VDL wants to contribute to the energy transition with this development.

In addition to a substantial investment from VDL, VDL Hydrogen Systems receives grants.

The project layout

At VDL Group there are several operating companies that use Fortes. At the start of VDL Hydrogen Systems, Fortes Change Cloud was suggested from within the group as best practices for supporting

- project portfolio management
- project administration
- time registration

VDL Hydrogen Systems has a unique project layout.

VDL Hydrogen Systems converted their objectives to **3 major programs**. they work on. These have multi-year objectives, related to the product to be developed. Steps have been determined for these objectives. **Projects** have been set up for them. These are the projects that employees work on and within which they are assigned tasks. This year it was decided to define the projects per calendar year to keep the project portfolio more manageable.



Portfolio



Reporting methods



The VDL headquarters

In addition, several **grant projects** are underway. Grant projects run for approximately 1.5 to 4 years. For each grant, goals are also set, milestones to be achieved. This also requires tasks to be carried out. All those tasks, of course, have a place within the bigger picture.

VDL Hydrogen Systems has set up FCC so that tasks within VDL projects can be **linked** to grant projects. In this way, reporting can be done for specific delineated subsidy projects, without requiring an extra administrative burden from employees. That employee only experiences the bigger picture, the progress on the objective of VDL Hydrogen Systems.

The **third variant** is a cross-section based on the **WBSO**. The WBSO, a special national tax scheme to promote the development of new products, processes or software. It is granted on the basis of man hours spent on Research & Development and is calculated as a percentage over labor costs. A special cross-section is also used to report for the WBSO on which VDL Hydrogen Systems is able to claim.

Through the various reports, the administrative burden for VDL Hydrogen Systems remains minimal, making the organization efficient. It is essential that the administration is complete and correct. Employees must therefore submit a balanced timesheet once a week. This is actively monitored by managers.

The portfolio is evaluated and balanced once a quarter to achieve maximum results.

Always put your own end goal first

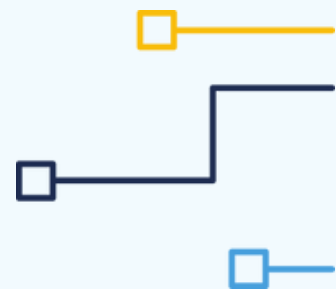
We ask Wilbert Heffels, Operations Manager at VDL Hydrogen Systems, what he would recommend to other companies with a focus on innovation. He doesn't have to think long about the answer: 'Always put your own end goal first, that's leading. That's what your people are working on'. Making progress on the main goal keeps people motivated. Grants are nice because they complement your own investment and can therefore accelerate things. Unfortunately there is a degree of bureaucracy involved. 'Don't bother the people actually working on your product with that. Organize it well administratively, then you can reduce the administrative burden and keep your people working on the real goal.'

The Future

No profit is made by the innovation company yet. The goal is to develop an attractive product that enables their clients to make a difference. It will take several years before they can mass produce such a product. 'VDL is a true development and manufacturing company. Production is really in our DNA. So we continuously take into account that we will also have to produce our design later on and consider what is important for that'.

"I really enjoyed the guidance from Fortes. They are easily accessible, approachable and think along in solutions that can work for us."

Wilbert Heffels
VDL Hydrogen Systems



ABOUT FORTES

Fortes has been developing solutions for effective management of projects and project portfolios for more than 20 years. Fortes Change Cloud is number one in local and central Dutch government for Strategic Portfolio Management. Fortes supports programs, projects, agile teams and Strategic Resource Management, matching available manpower to current and future demand.

Fortes Change Cloud stands out for its great ease of use, flexibility and scalability. It supports from a small department with a handful of projects to a large ministry with dozens of portfolios and more than 1,000 initiatives.

Want to know how Fortes can help you get a better grip on your strategic direction get a better grip on your strategic steering? Then request a demo today.

PLAN A DEMO

One platform to connect the dots

Fortes Change Cloud

