

H2 Hollandia – H2 Drive



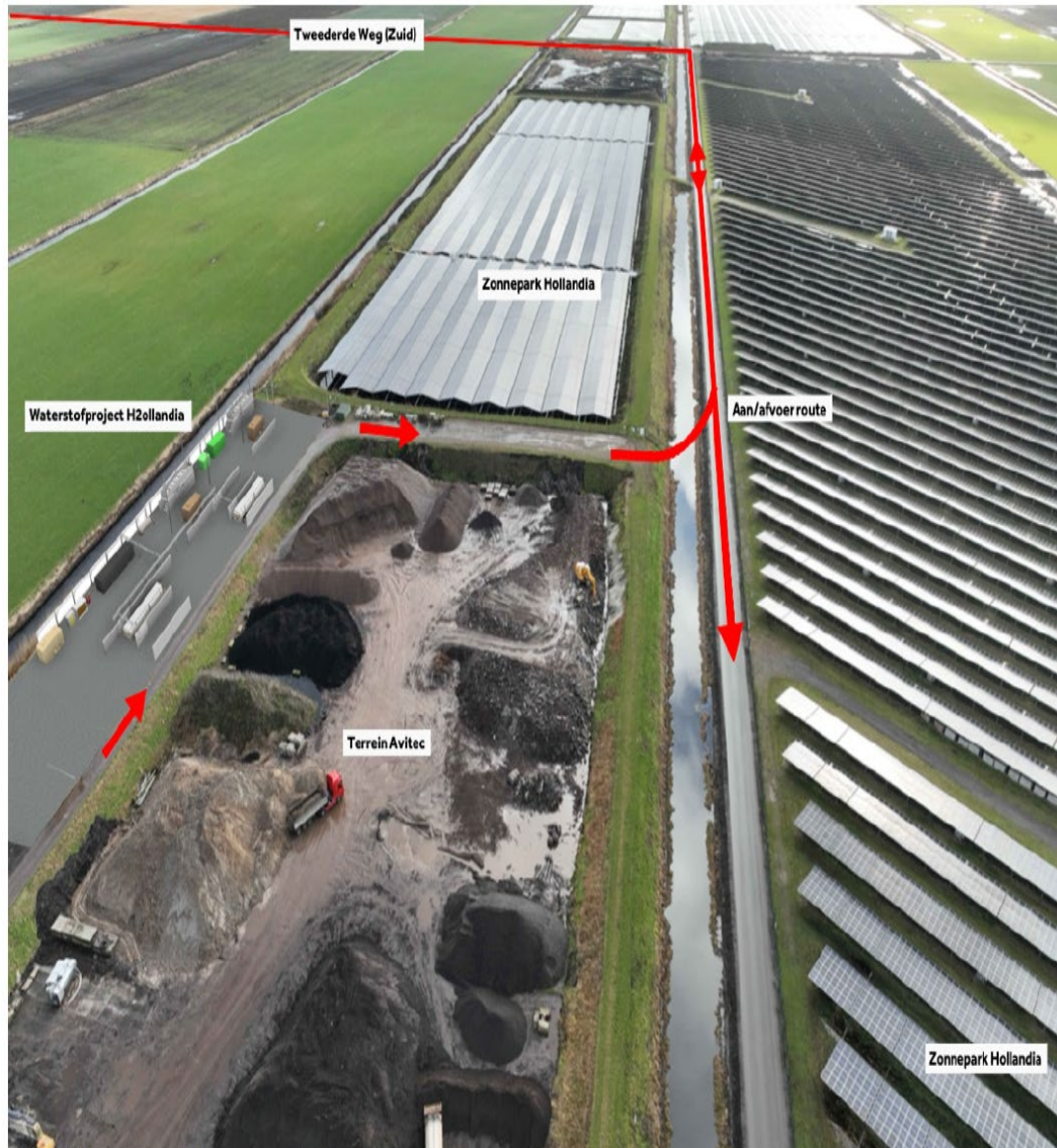
H2 Hollandia – H2 Drive: Why



- This is the H2 Solarpark in Nieuw-Buinen (located in the province of Drenthe)
- When this 115 MwP solar park was planned Net congest wasn't the big problem it is today in the Netherlands.
- Due to **net congestion** the solar park couldn't get connected to the grid.



H2 Hollandia – H2 Drive: How



- Energy from the solar park will be used to produce Green Hydrogen (300 tonnes/year) with a 5 MW Electrolyser.
- Green Hydrogen will be used in Heavy Duty Hydrogen trucks which will transport the potato starch from the nearby Potato factory and in the heavy-duty fleet of Avitec.
- On the former gas extraction location from NAM (Shell) a Hydrogen refuelling station will be built. This location will be transformed from fossil (natural gas) to renewable energy (hydrogen)



H2 Hollandia – H2 Drive: Who

Consortium

Project partners

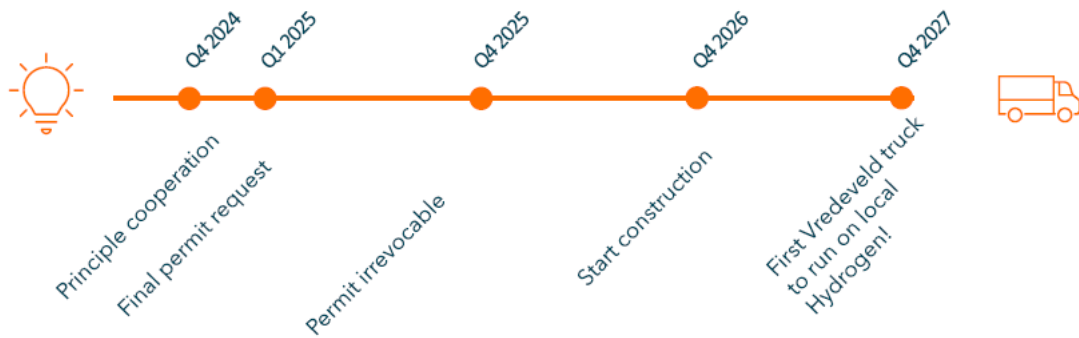


- 3 founders: Avitec, Novar and Wollerich
Avitec; infrastructure company and owner of H2 Hollandia solar park
Novar; developer
Wollerich; investor
- Vredeveld; transport company which transports the potatoe starch for Avebe
- Avebe; Potatoe starch factory
- Resato; builder of the hydrogen refuelling station
- Municipalities; Aa en Hunze & Borger Odoorn
- Province of Drenthe
- National Government
- Rabobank; loan provider



H2 Hollandia – H2 Drive: When

Planning H2 Drive



This is the expected planning, this scheme is still actual

If hydrogen production starts earlier it will be sold in tubetrailers or by pipeline to the chemical industry (GETEC) in Emmen.



H2 Hollandia – H2 Drive: How Much?



H2ignite

Interreg
North Sea



Co-funded by
the European Union



Rijksdienst voor Ondernemend
Nederland

- As province we support this project in different ways one of them is financially. Not only on local level (limited financial resources) but also on national and European level.
- National service for entrepreneurs (RVO) together with Groenvermogen NL (innovation engine for the green hydrogen economy) has provided a subsidy of:
DEI+ subsidy: € 6.6 mln
- Province of Drenthe wants to be a front runner, as the first Hydrogen Valley.
herefor the province has provided a subsidy of € 1 mln
- By participating in the H2IGNITE Interreg project a subsidy will be available to lease/buy a Hydrogen Truck.
(subsidy yet to be determined)
- Result: FID is signed in January 2025!



H2 Hollandia – H2 Drive: Impact



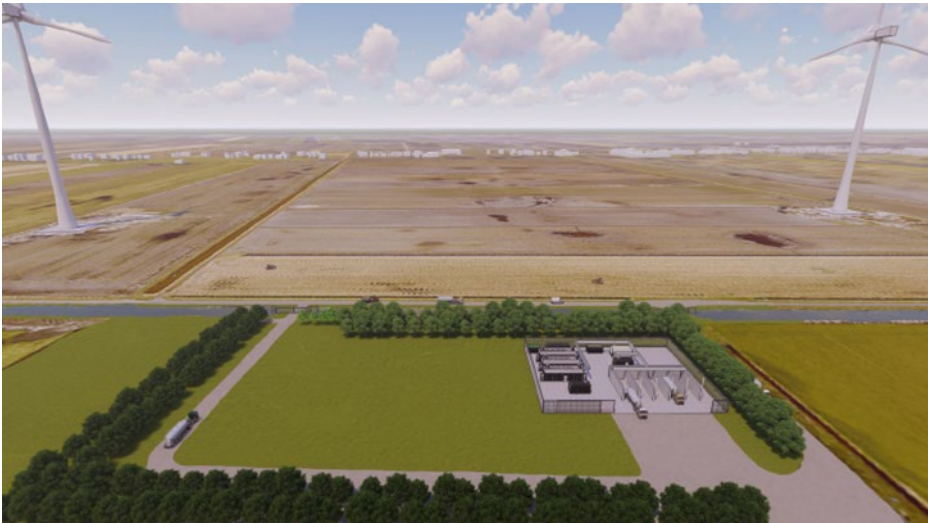
- As province we support this project in different ways. In my role as project leader hydrogen, it's my job to bring these projects further. For example, provide support with the permitting procedure, help with finding (new) subsidy opportunities and promote this case in other projects.
- We organized a meeting with the deputies from the Province of Drenthe together with the aldermen of the municipalities involved, to speed up the permitting process.
- We presented this project at the COP29 last year in Baku. We were here at the invitation of H2IGNITE partner STRING and took part in their panel discussion about how to implement green hydrogen in heavy duty transport
- Province of Drenthe organized a Masterclass Hydrogen at our Provincial government building for anyone involved (or interested in) in green hydrogen.
- In October we visited with the GH2M partners the H2 Hollandia – H2 Drive project in Nieuw-Buinen. We had a presentation and tour and the opportunity to ask questions to learn from each other.



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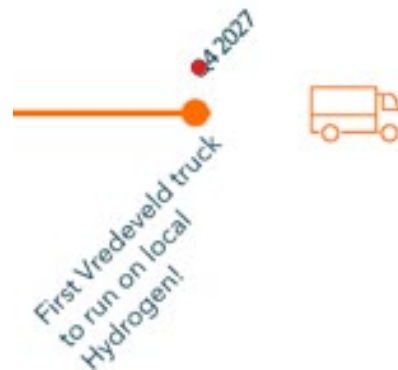


H2 Hollandia – H2 Drive: Ambition



- Q4 2027: start with the first hydrogen truck on local hydrogen
- Gaining experience with this first truck (these trucks drive 24/7) great opportunity to share knowledge
- Final ambition: 10 hydrogen trucks

* surplus of hydrogen will be sold to other local initiatives (by tubetrailers) and the chemical industry (using the pipeline from the former NAM gas extraction site which has a connection to the Getec chemical park) because the market is still developing.





H2 Hollandia – H2 Drive: Recommendations

- Involve stakeholders from the permitting process from the start of the project. Hydrogen is relatively new; legislation lags the market.
- As (local) government you can also contribute in other ways, e.g. by purchasing guarantees for the own vehicle fleet.
- Be visible! Tell others about “your” project





Any question?

