

# Energy Valley Region



### Legend

- Gasfield
- Gas Transmission Network
- Main Roads
- Gas Transfer Points

### Conventional Energy Activities

- Optimal Use Natural Resources
- Gas Transmission Grid (gas roundabout)
- Electricity Activities
- ICT & Energy
- Business Ventures

### Energy Transitions

- Sustainable Gas
- Bio-energy
- Biomass
- Sustainable Mobility
- Wind Energy
- Smart Energy Systems
- Business Ventures

### Energy Knowledge & Innovation

- Research & Education
- Innovation & Information
- Wind Energy

○ = developing   ● = operational

- ### Delfzijl and Eemshaven
- Kollo Sic - 11 MWe (www.kollosic.nl)
  - Advanced Power - 1.220 MWe
  - Delesto - 570 MWe (www.akzonobel.nl)
  - Eemscentrale - 2.400 MWe (www.electrabel.nl)
  - LNG - Terminal (www.eemshaven-ing.nl)
  - NonNed cable - 700 MWe (www.zarnet.nl)
  - NUON Magnum - 1.300 MWe (www.nuon.nl)
  - RWE - 1.600 MWe (www.rwe.nl)
  - Energy Park Eemshaven (www.groningen-seaports.com)
  - Bio Power Plant - 50 MWe (www.biox.nl)
  - Bio Power Plant - 100 MWe (www.evelop.nl)
  - Windpark Millenergy - 60 MWe (www.windparkdelfzijlhoord.nl)
  - Waste to energy plant - 50 MWe (www.bkb.de)
  - Hydrogen Power Plant - 120 KW (www.akzonobel.nl)
  - Pyrolyse fuel plant (www.bio-oil-holding.eu)
  - Bio Methanol Plant - 1 billion litre/year (www.biomcm.eu)
  - Pure Plant Oil plant - 3.5 million litre/year
  - Kollo Sic - 35 MWe (www.kollosic.nl)
  - CO2 capture NUON Magnum (www.nuon.nl)
  - Wind park - 63 MWe (www.growind.nl)
  - Biodiesel Plant Biovalve - 240 million litre/year (www.biovalve.nl)
  - Energy Transition Park Eemsdelta
  - CO2 capture and re-use Chemiepark
  - CO2 capture RWE
  - Eemsdelta Green (www.costa-due.nl)
- ### Groningen
- Gasterra (www.gasterra.nl)
  - Gasunie (www.gasunie.nl)
  - SakerUnie - 16 MWe
  - Biomass Conversion Reactor
  - Biogas Production StankoeIn - 25 million m3/year (www.stankoeIn.nl)
  - CNG station
  - E85 fuel station
  - Sustainable City Groningen (www.duurzaamstestad.groningen.nl)
  - Biogas Public Transport
  - Smart Proofs (www.smartpowersystem.nl)
  - Energy Delta Institute (www.energydelta.nl)
  - Energy Delta Research Centre University of Groningen (www.edrec.nl)
  - Energy Knowledge Centre Hanzehogeschool (www.hanze.nl)
  - Smart Power Foundation (www.smartpowerfoundation.nl)
  - Value in the Valley (www.vivv.nl)
  - Saudac (www.saudac.nl)
  - Bio Energy North (www.bioenergienoord.nl)
  - Energy Valley Foundation (www.energyvalley.nl)
  - Energyconvenant Groningen (www.energieconvenantgroningen.nl)
  - Energy Business Plaza
  - NaturalHy (www.naturalhy.net)
  - Gasunie Engineering & Technology (www.getgasunie.nl)
  - Innovation Centre for Energy Systems
- ### Leeuwarden
- Gas exploration
  - Heat Pumps De Hoven/Vegelsluis
  - Biogas Plant Bareau
  - Bioenergy Zuidlanden (www.dezuulanden.nl)
  - Biogas - 0,35 MWe
  - CNG station
  - Biogas Mobility Coalition
  - Advanced Photovoltaic Applications (www.apabv.com)
  - Sustainable Fuel Station (www.delta-oil.nl)
  - Energy efficiency Walegalle
  - Frisian Solar Challenge (www.frisiansolarchallenge.nl)
  - Fryseps (www.fryseps.nl)
  - Catalyst Centre Sustainable Mobility
  - Hydrogen boat
  - MicroCHP experiment
  - Biogas - 1 MWe
  - Biogas - 1,5 MWe
  - Cartesius Institute for sustainable development (www.cartesiusinstitute.org)
  - Biogas Centre Nij Bosma Zathe (www.nijbosmazathe.nl)
  - Wetsus (www.wetsus.nl)
  - Sustainable Energy Knowledge Campus (www.kenniscampus.nl)
- ### Den Helder
- Direct Drive wind energy (www.darwind.nl)
  - Tidel energy (www.tocardo.com)
  - Maintenance Offshore Windfarms
  - Wind energy cluster
  - ATO NH (www.ato-nh.nl)
- ### Emmen
- Biogas - 10 MWe
  - Sunoli Biodiesel - 80 million litre/year (www.sunoli-biodiesel.com)
  - 10 x Biogas - 50 MWe
  - Energy Park Emmitec (www.emmtec.nl)
  - Urban Heat Network
  - Emmtec - 70 MWe
- ### Coevorden
- Bio Power Plant - 10 MWe (www.ecos.nl)
  - Biogas - 2,5 MWe
  - Energy Transition Park Europark (www.eu-park.nl)
  - Wood pallet production (www.eclair-e.nl)
  - Waste to energy plant - 80 MWe (www.ev-europark.de)
  - Wind park - 15 MWe
  - BioCoal (www.eclair-e.nl)
- ### Harlingen
- Frisia Salt - 18 MWe - (www.frisiazout.nl)
  - CNG station
  - PPD fuel plant
  - Waste to energy - 50 MWe (www.omrin.nl)
  - Ecopark Harlingen (www.ecopark-harlingen.nl)
  - Blue Energy Pilot (www.redstack.nl)
- ### Assen
- NAM B.V.
  - Biogas - 1,5 MWe
  - CNG station
  - Domestic Energy Efficiency (TEU)
  - Solar Power Lighting
  - Geothermal Heating
  - Solar Power at Schools
  - Petroleum Academy
  - Sensor Universe (www.sensoruniverse.com)
- ### Wieringermeer
- Biogas - 1 MWe (www.evelop.nl)
  - Biogas - 10 MWe
  - Biogas Power Plant
  - Wind park Wieringermeer - 25 MWe
  - Agriport A7 (www.agriporta7.nl)
  - Biogas Power Plant
  - MultiMega Watt test area
  - Wind Knowledge Centre (www.kc-wrinc.nl)
  - Bio Energy Knowledge Centre (www.oostvaardhoeve.nl)