

# SME GROWTH NEEDS REPORT

## NETHERLANDS

**SME**  
CLUSTER  
GROWTH  
EMPOWERED ENGINEERING



Role of  
**ENGINEERING  
SMES**

within the Regions



**CLUSTERS**  
IN THE REGION



THREATS TO  
**DUTCH SMES**



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# INTRODUCTION TO THE REGION

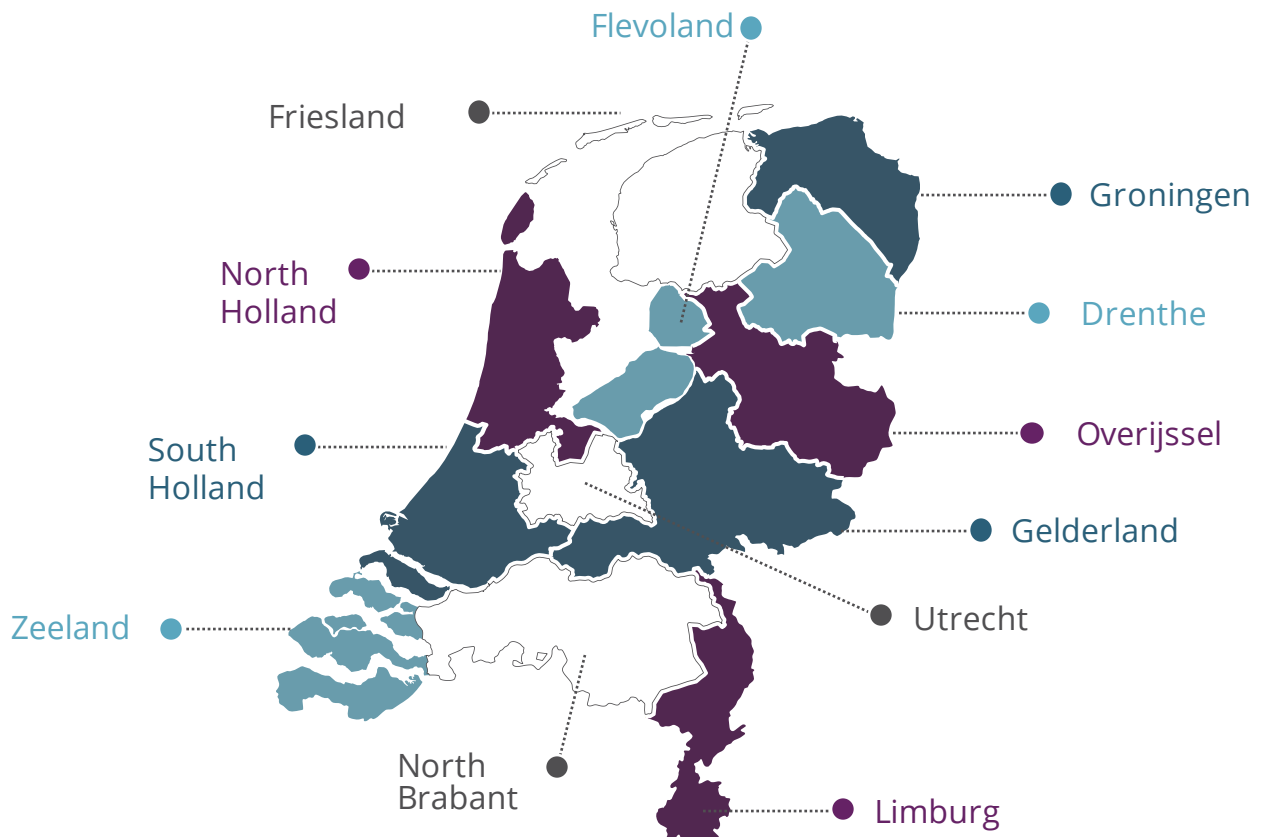
## NORTH HOLLAND INDUSTRIES

This review will look deeper at the Region of North-Holland, which includes Amsterdam, the largest city in the Netherlands and the Dutch capital. The province can be roughly divided into two economic areas: the 'North', with a focus on innovative agriculture and horticulture, maritime and offshore industries, energy, life science, health, and water. The 'South' (the metropolitan area of Amsterdam) is specialised in IT & media, creative industry, logistics, food and flowers, and finance. The province is also a tourist hot spot due to Amsterdam (Province Noord Holland).

North Holland Region North of Amsterdam is the leading vegetable garden of Northwest Europe and

is known internationally for its innovative agriculture. The region also leads the way in the Netherlands in the field of knowledge development and the application of sustainable energy. Next to offshore wind, wave and tidal energy, the region is a forerunner in the field of green gas and bio gasification.

There is, furthermore, an entire ecosystem created around the metropolitan area of Amsterdam, including key industries such as IT, Trade & logistics, Creative Industry, Financial Services, Flowers & Food and Life Sciences.



North Holland Region Source: (WDC, 2019)

## NATIONAL CONTEXT

Although a small country, the Netherlands is among the most innovative countries in the world, ranking in the top five of the Global Innovation Index 2020 (GII 2020) and second in the European Union. The country scores consistently well for regulatory quality, online participation, intensity of local competition, cluster development and university/industry research collaboration.



Industrial activity generates around 17.7% of the Dutch GDP (World Bank 2019), mainly through food-processing, the petrochemical industry, metallurgy, and the transport equipment industry. The petrochemical and chemical industry is home to some of the world's leading multinational chemical companies, including Royal Dutch Shell, DSM, and AkzoNobel. The Netherlands is the fourth largest chemical producer in Europe and tenth worldwide (VNCI, 2021). With multiple ports and five chemistry clusters, it focuses on developing smart materials and solutions in five areas: health care, energy, food security, and many more. The Netherlands is also one of the largest producers and distributors of oil and natural gas. As estimated, 25% of natural gas reserves in the European Union are in the Netherlands. The Oil & Gas sector employs 16% of the workforce. The World Bank estimates that the manufacturing sector alone accounts for 11% of the country's GDP.

Accounting for 17.5% of total Dutch exports and for 10% of the Dutch economy and employment, the

agricultural and horticultural sectors play a crucial role (Rijksoverheid, 2021). It produces high yields and makes the Netherlands the second-largest exporter of agricultural products in the world (after the U.S.). This is possible due in part to the highly mechanised and intensive farming of arable land usage (Santander Trade Markets, 2021).

Finally, the services sector is focused mainly on transportation, distribution, logistics, banking and insurance, water engineering and new technologies. It accounts for over 69.8% of national revenue and employs 82% of the workforce (World Bank, 2019). The country is also Europe's leading service provider in ocean freight, which is not surprising as the Dutch economy largely depends upon exports and the Netherlands is also the logistics port of Europe (Santander Trade Markets, 2021). The Port of Rotterdam is one of the largest transshipment ports in the world. The logistics chain is optimised to transport goods to further destinations by water, road, rail and air transport. Engineering is thus at the heart of the Dutch economy.



## SMES IN THE NETHERLANDS

In the Netherlands, all microbusinesses, small and medium-sized businesses are classified as MKB: Midden- en Kleinbedrijf, or Small and Medium-sized Enterprises (Rijksoverheid, 2021). When determining if a business is eligible for an SME grant or subsidy scheme, the Netherlands Enterprise Agency uses the EU criteria (Rijksoverheid, 2021).

Dutch SMEs account for 62.3% of value added, above the EU average of 56.4%. Between 2014 and 2018, the value added of Dutch SMEs rose by 23.6%, slightly above the 20.7% growth of large firms (EC, 2019). In 2017-2018, SME value added rose by 7%, up from an average annual growth of 5.1% in 2013-2017. To a large extent, the recent growth of the Dutch SME sector is the result of major government support for innovation in the nine most innovative sectors in the Netherlands (EC, 2019) (see 1.1 below). COVID-19 has impacted SMEs, particularly the very small businesses. The government has developed an emergency package of support measures.



# ROLE OF THE ENGINEERING SMES IN THE REGION

## GROWTH MANAGEMENT

At a national level, engineering SMEs working in the nine national top sectors can gather and strengthen their innovation and growth efforts as part of the Top Sector Alliances for Knowledge and Innovation (TKIs). At the regional level, top sector initiatives are reinforced through regional development agencies

funds. SMEs can participate in cluster and network initiatives which aims to reinforce cooperation, knowledge exchange and innovative project development to ensure competitiveness of the region and sector.

## STRUCTURES AND SUPPORT

### Key Engineering Valleys

#### Greenport North Holland North

is the alliance of entrepreneurs, government and knowledge institutions that stands for strengthening agribusiness in the region. With more than 6,500 companies and with a production worth more than €3 billion per year, agribusiness is one of the economic pillars of the region.

#### Seed Valley

Seed Valley in the northwest of the Netherlands is the world's leading centre of plant and seed technology. It is home to dozens of innovative companies that work on the development of new seeds, vegetable, and flower varieties. 70% of seed used in the world originated from the Seed Valley.

#### Smart Industry Hub Northwest

is part of the national Smart Industry programme. This programme stimulates companies to apply smart technology (through access to finances, projects and network) and digitalisation to create new business opportunities. Smart Industry was founded in November 2014 by the Ministry of Economic Affairs and has been implementing the Implementation Agenda 2018-2021 since early 2018. According to this agenda, by 2021 the Netherlands should have the most flexible and the best digitally connected production network in Europe, with which manufacturing companies also realise substantial energy and material savings.

#### TechValley

is the North Holland regional field lab from the Smart Industry and is a partnership between over 35 innovative mostly machine-building companies, the Research & Innovation Centre for Technology, Design and Informatics (RIC-TOI) of Inholland Alkmaar and the government/Noord Holland region. Participating companies receive a knowledge injection on relevant selected Smart Industry themes (Data, Robotics & Vision and Smart Materials) while working on Research & development projects is smart design & engineering. Other fieldlab partnerships from the Smart Industry in the region North Holland are the Smart Maintenance Techport and The Construction Lab (BouwLab R&Do).

Maritime Emerging Technologies Innovation Park Noord-Holland (METIP) is a four-year (2021-2024) marine technology innovation support project organized by NHN where the government, companies, and research institutes aim to strengthen human capital, stimulate innovation in the maritime sector and exploit the opportunities offered by the hydrogen economy (NHN, 2021).

## Collaboration Between Stakeholders

The Netherlands is an extremely well organised, connected country with a long history of Public-Private Partnerships (PPP), dating back to 1602 and the foundation of the VOC (United East Indian Company), financed by private merchants and the municipality of Amsterdam to undertake trade and shipping activities in the Far East (E.H. Klijn, 2009). More recently, PPP re-emerged in the Netherlands in the 1980s as an instrument for stimulating private investment in area development and large-scale infrastructure projects. The underlying assumption was that such private investment would benefit economic development. Over the last decade, partnerships with the private sector have become a key aspect of the Dutch development cooperation policy, as they are often presented as good vehicles for realizing public goals.

### In the Netherlands, PPP is based on two main principles:

1. both parties invest in the project in a financial sense (manpower, materials budget) and in an expertise-related sense (knowledge, networks),
2. the parties contribute to a societal and often also commercial purpose (Rijksoverheid, 2021).

Besides the top sectors all being organised as triple helix, PPP, regions follow the same triple helix models to connect industries, universities, and regional agencies around local competitive sectors (e.g., in North Holland, agri-food, water and maritime, and energy) to ensure the competitiveness of the region and innovation, as well as the implementation of national goals and missions.

## Agencies Responsible for SME growth

### Regional Agencies

The development agency [Holland North \(NHN\)](#) shapes the economic future of the region Noord-Holland North. The agency works on behalf of its stakeholders and in close cooperation with governments, companies, entrepreneurs, educational institutions, and non-profit organizations. The development agency is the point of contact in the region Noord-Holland North for economic and spatial development and has a special focus on the clusters Agribusiness, Maritime & Offshore, Energy & Sustainability, Tourism & Leisure. It helps companies to get established, innovate, and invest in the future.

[PIM Noord Holland](#) (Investeringsgereed Innovatief MKB Noord Holland) is an initiative of the province of North Holland implemented by KplusV (Dutch Chamber of Commerce), Innovate Today (regional

The government has linked in 2020 the Dutch societal challenges (a climate-proof, water-robust, sustainable, healthy and safe Netherlands) to the nine top sectors business community and knowledge institutions resulting in 25 national concrete missions within

### four mission-driven agendas - namely

1. Energy Transition and Sustainability,
2. Agriculture Water Food,
3. Health and Care,
4. Safety.

Those form the Knowledge and Innovation Agendas (KIAs) which also considers international earning opportunities and human capital priorities (EZK, 2021). The nine selected national top sectors and the 25 missions and agendas are the framework for all (national and regional) public-private partnerships, innovation networks, practice-driven research, and regional and SME collaborations.

Although innovation and digitisation are important features of the Dutch SME policymaking environment, in addition to providing substantial support for technology-related sectors, other SME sectors merit policy action. The Netherlands has taken steps to bring innovative practices into its public tendering procedures, but larger-scale initiatives may be needed to foster a higher share of SME participation (EC, 2019).

incubator) and Amsterdam Center for Entrepreneurship (ACE). PIM helps SME entrepreneurs from the so-called mission-driven sectors (Energy Transition & Sustainability, Agriculture, Water & Food, Health & Care or Safety) by providing tailored advice, insights into financing opportunities and offering master classes and information meetings. PIM also connects entrepreneurs to its unique network, which consists of funders, other companies, and potential customers. Soon, the PIM Academy will also go live so that entrepreneurs can leapfrog themselves online. In the past three years, PIM has reached 30,000 SMEs and assisted 385 innovative and sustainable entrepreneurs with tailored advice to achieve growth. In doing so, PIM has facilitated €45 million in funding for entrepreneurs. In the next 3 years, PIM wants to help almost 400 entrepreneurs and facilitate €60 million in financing.

# STRUCTURAL RESOURCES

## REGIONAL SCIENCE AND TECHNOLOGY PARK

### Amsterdam Science Park:

Amsterdam Science Park has one of the largest concentrations of academic education and research facilities in Europe. It was developed jointly by the University of Amsterdam, the City of Amsterdam, the Netherlands Organisation for Scientific Research (NWO) and shareholders including internationally operating companies. Around 3,000 researchers are currently working at Amsterdam Science Park, with around 900 people working in the 170 companies located there. The Matrix Innovation Center buildings offer high-value flexible office space and laboratories for approximately 120 of the 130 companies at Amsterdam Science Park. The Park emphasises research in the natural sciences, particularly in the areas of Digital Innovation, Artificial Intelligence and ICT, High-Tech Systems & New Materials, sustainability and life sciences.

### Chemical Park – Port of Amsterdam:

The Innovation Lab Chemistry Amsterdam makes connections between the port of Amsterdam, chemical industry, science, spin-offs and start-ups. The center is initiated by Shell, Avantium, Kraton, Asahi Glass, and ChainCraft. Port of Amsterdam's ambition is to be a leading European hub for recycling and upgrading waste streams into chemical building blocks for the industry. It is also built using the resources and facilities of the Amsterdam Science Park.

### Alkmaar Energy Innovation Park:

Energy Innovation Park offers companies active in the traditional, green, and other innovative energy sectors the space to grow. Companies can capitalise directly from the economic spin-off of Gas Storage Bergermeer, a multi-million Euro project in the Alkmaar region where the gas treatment facility resides at the Park. The cross-fertilisation between SMEs and international players from the energy sector (such as TAQA) offers a range of synergies and is the place to turn innovative ideas into commercial products.

Located within the Energy Innovation Park Alkmaar, the **Investa Expertise Centrum** is a triple helix partnership working together on sustainable and innovative green gas initiatives in the North Holland business cluster. The focus is on technological developments in the field of biomass gasification and broad application of the gases produced. This partnership is further reinforced by the Ministry of Economic Affairs and Climate Policy as part of the InVesta Green Deal.





## ENGINEERING INCUBATORS, ACCELERATORS AND VC IN THE REGION OF NORTH HOLLAND

### GO!-NH

is a growth acceleration program of the province of North Holland. These specially developed programs support start-ups and SMEs in bringing innovative products and services in the field of sustainability to the market and scaling them up. These are designed to stimulate the economy in North Holland with a focus on the sectors: construction, concrete, chemicals, fashion, agriculture & food, packaging, trade and hospitality. The GO!-NH Growth program is for start-ups and SMEs who are in a further phase. They already have traction through turnover from (a few) customers and/or current pilots. During this program, the company is prepared for growth by focusing on repeatability and scalability.

### ACE Incubator

is an Amsterdam-based incubator and accelerator for science and technology start-ups.

### AI Start-up Lab

is an initiative powered by Amsterdam Centre for Entrepreneurship (ACE) and Innovation Centre for Artificial Intelligence (ICAI) with the goal to connect companies, students, and start-ups around various AI innovation challenges.

### The Arcadis City of 2030

powered by Techstars, is an accelerator that supports start-ups in their development of pioneering technologies to revolutionise the construction and engineering industries.

### Startupbootcamp Smart City & IoT

is an accelerator that aims to improve the smart city and living ecosystem by supporting high-potential start-ups in Amsterdam.

### WaiACCELERATE

an acceleration programme aimed at woman innovators in the fields of artificial intelligence (AI), machine learning and data science, who are ready to start a venture.

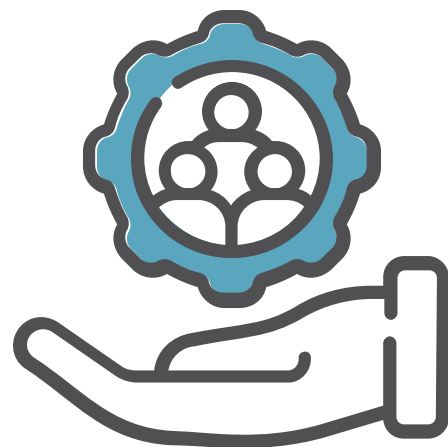
### Invest-NL

is a new private company financed with public funds with a share capital of EUR 1.7 billion. Their shareholder is the Ministry of Finance. Invest-NL focuses on energy transition and scale-ups, in the field of electrification and energy, circularity, agri-food and the built environment. Invest-NL wants to broaden the market and make what seems unfindable fundable. Besides taking high risks, Invest-NL uses long term projects and can invest large amounts.

## INDUSTRIAL RESOURCES

Engineering is a well-developed field in the Netherlands, with branches from robotics to building design, from sustainable development to aeronautics. Major multinationals have headquarters in the Netherlands, including Royal Dutch Shell, Airbus, Philips, AkzoNobel, DSM, Yandex, VEON. Other large engineering companies include Arcadis, Royal BAM Group, Allseas, Heerema, Ballast Nedam, Heijmans, VolkerWessels. Most worldwide oil and gas companies also have their offices in the Netherlands such as Aramco Overseas, CBI, Lucoil, Gazprom and Taqa in North Holland.

While Noord Holland is home to important engineering activities in the field of agro-food, energy, water and maritime, chemicals and electronics, it does not count major international companies. Nevertheless, larger companies such as Akzo Nobel (chemical) and ASM international, a Dutch semiconductor company, TomTom (electronics) and Royal Dutch Shell research centre are in North Holland.





## POLICY AND FINANCING

### Government Financing

**In 2011, the Dutch government launched a new enterprise and industrial policy with two pillars (MEZ 2011):**

- Generic instruments: framework conditions for all enterprises (focusing on strengthening innovation framework, reducing red tape, improving access to finance, and ensuring a better match between education system and labour market)
- Sector specific: Top sector approach (comprehensive sector agendas through Public Private Partnerships: knowledge, industry, and government)

The main goals of this policy had three main objectives: to put the Netherlands in the top five knowledge economies in the world (by 2020); to raise the Dutch R&D effort to 2.5% of GDP (by 2020); to establish Top Consortia for Knowledge and Innovation (TKI) with more than 500 million euros in public and private funding, and at least 40% by the private sector by 2015 (MEZ, 2016).

The Dutch government, industries, universities and research centres have been working together since 2011 to innovate and remain highly competitive internationally in nine of their selected “top sectors”, including engineering sectors. Those nine top

sectors are horticulture and propagation materials, agri-food, water and marine, life sciences and health, chemicals, high tech systems and materials (HTSM), energy, logistics and creative industries. Those nine top sectors are organised in Top Sector Alliances for Knowledge and Innovation (TKIs) which provide knowledge exchange, mentoring and networking for all stakeholders. More than 90% of the top sectors are innovative entrepreneurs from small and medium-sized companies (EZK, 2021) The TKI scheme has been in force since 2012 and is part of the top sector policy of the Ministry of Economic Affairs. Public-Private Partnerships between the government, business community, research institutions and end-users lie at the heart of all the initiatives. They also provide the foundation for national and regional innovation and growth development efforts.

The Knowledge and Innovation Covenant (KIC) 2020-2023 contains agreements with more than 2,200 companies, knowledge institutions and governments to jointly invest €4.9 billion in economic opportunities for societal challenges and key technologies. Of that amount, €2.05 billion comes from companies and €2.85 billion from public funds (EZK,2021).

## Government Policy

The Dutch government launched an SME action agenda (MKB 2018) in 2018. Its aim is to help SMEs address the challenges of the future. It comprises specific measures in a number of areas, such as human capital, financing, innovation, internationalisation, digitalisation and regional collaboration.

The government offers a lot of support possibilities to SMEs (EZK, 2020) through trainings, funds, or public-private partnerships network. The government is encouraging innovative SMEs through tax benefits, innovation loans, microcredit, and grants. Here are some instruments, to name a few:

- **'SME Idea' (MKB!dee)**, which started in 2018 with plans to be scaled up by 2021, is an experimental subsidy scheme. Its aim is to stimulate SMEs to invest more in training and development. SMEs are asked to come up with solutions for barriers encountered when investing in human capital, through a grant subsidy, covering the full amount of eligible costs.
- **The WBSO (R&D tax credit)** is a Dutch Government tax incentive scheme that offers compensation for part of the SME research and development (R&D) wage costs, other costs and expenditures. In practice the scheme reduces the company payroll tax burden. Self-employed persons are granted a fixed tax-deductible item for their R&D. In addition, start-up entrepreneurs benefit from a supplementary credit (EZK, 2020).
- **The Innovation Fund for SMEs (MKB+)**: All companies, whether start-ups or well-known companies, can apply for the Innovation Credit. Innovation Credit will

help companies become more innovative and help the Dutch economy become more sustainable. The maximum credit per company depends on the size of the company. For clinical development projects, there is a maximum of €5 million and for technical projects, it is €10 million (business.gov.nl).

- **Government guarantee for part of SME loan**: this SME loan scheme has been specially developed for SMEs that do not have enough collateral– in the form of property or machines– for banks to give them a loan. Under the scheme, the central government may act as guarantor for part of the loan (Rijksoverheid 2021).
- Furthermore, the Dutch government has stimulated public-private partnerships in vocational education and universities of applied science since 2011, with success. Over 150 such public-private partnerships existed in 2018. More than 50,000 students, 4,000 teachers and 6,000 companies (most of which are SMEs) have participated in these partnerships (EC, 2019).

Top Sectors Initiative and their respective Top Sector Alliance for Knowledge and Innovation (TKIs)

## Policy Resources

Entrepreneurs can make use of various schemes promoting innovation and entrepreneurship through the top sectors such as tax instruments (reduction of wage tax for research and development (WBSO)), financing and guarantees and advisory services. Here are some important financial schemes that stimulate innovation through top sectors:

PPP allowance increases investment by companies in research and development. For every euro that a company invests in research and development at a knowledge institution, the Ministry of Economic Affairs and Climate adds €0.30 on top. The supplement must be used by the company for research and development.

- **SME innovation stimulation Region and Top Sectors (MIT)**, which stimulates innovation in SMEs across regional boundaries. More than four thousand Dutch companies have made use of the MIT scheme in the past four years. The MIT stimulates innovation in SMEs both regionally and nationally and ensures that SME projects are better aligned with the innovation agendas. The MIT has five instruments: knowledge vouchers, subsidy for feasibility projects, subsidy for R&D cooperation projects, subsidy for the TKI's to organize network activities and for the services of network activities and for the services of innovation brokers.
- Furthermore, the government is encouraging innovation in top sectors in many ways, (MEZ, 2020) through multiple instruments, including but not limited to:
- **National Icons Competition:** Every two years, the government selects several

projects or products as winners of the National Icons Competition. These projects and products show how Dutch innovations are among the world's best. The winning entries all address major social issues.

- **Innovation Expo:** Taking innovations further, realising breakthroughs, and thus contributing to the social challenges we are facing in our country and in the world. That is the ambition of the Innovation Expo. The event takes place every two years to solve major social challenges in the fields of the circular economy, energy, water, mobility, the built-up environment, health, and food, as well as the required enabling technologies.

Additionally, each top sector agency provides SMEs with [innovation brokers'](#) support for innovation processes. The innovation brokers can be used for helping analyse innovative opportunities for a specific company, process guidance from idea to business or for expanding the network. Every innovation broker has a large network in business and knowledge institutions segments. They can connect businesses that have an innovative idea with the right expert or business partner (EZK, 2021).

## TNO, the independent Netherlands Organisation for applied scientific research,

was founded by law in 1932 to enable business and government to apply knowledge. The organisation conducts contract research, offers specialist consulting services, and grants licences for patents and specialist software. Moreover, TNO sets up new companies to market innovations. TNO's strategy is

based on technological advances and trends in society. The work of TNO is focused on 10 domains which are in line with the challenges and goals of the national economic policy, based on so-called Top Sectors, and with social issues relevant to The Netherlands and Europe.

## GO INTERNATIONAL



### SUPPORT FOR INTERNATIONAL GROWTH

The Netherlands Enterprise Agency (RVO – Rijksdienst voor Ondernemend Nederland) is part of the Dutch Ministry of Economic Affairs and aims to help Dutch entrepreneurs to achieve success in their international operations by providing financial support (e.g., incentives to participate to trade mission's subsidy for feasibility and investment studies, tax credits, loans and guarantees) personal advice, and access to networks and events. The Agency works at the instigation of ministries and the European Union and acts as financial intermediary for EU programmes as well (RSI/RSFF Horizon 2020, Eurostars, Joint Programming, Interreg) (RVO, 2021).

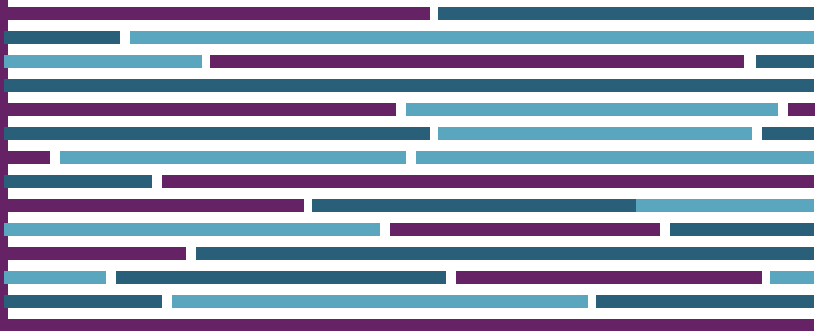


## KNOWLEDGE MANAGEMENT

The region is home to many diverse scientific assets. To name a few:

**Advanced Research Center for Nanolithography (ARCNL)**, located at the Amsterdam Science Park, created in January 2014 after ASML had issued a tender for proposals for a research center that would feed the company with new, fundamental knowledge. ASML is the world leader in the production of lithography machines. Novel insights from research by excellent academics in the relevant fields will enable them to continue making big leaps.

**The Netherlands eScience Center**, also located within the Science Park, is the national centre for the development and application of research software. Their software and tools enhance the use of digital methods in academic research, empowering researchers across all disciplines.



## HUMAN RESOURCES

Despite the Netherlands being home to renowned Technology and engineering universities such as Delft University and the Eindhoven University of Technology, many Dutch industries are currently facing a shortage of mechanics and engineers (Wortel E, 2019) caused by a lack of graduates in these professions. Research showed that the number of school-leavers who choose an engineering and technology degree is 50% lower in Noord-Holland than in regions where there is a university of technology. To address the skills gaps, the University of Twente and Free University of Amsterdam (VU) started in 2018 a broad-based engineering programme at a bachelor's level and an extensive range of Master's programmes, with VU Amsterdam primarily offering options in the exact

sciences and the University of Twente offering options in the engineering sciences. National industrial organizations, the local business community and the City of Amsterdam are actively involved in this joint educational innovation (VUA, 2018).

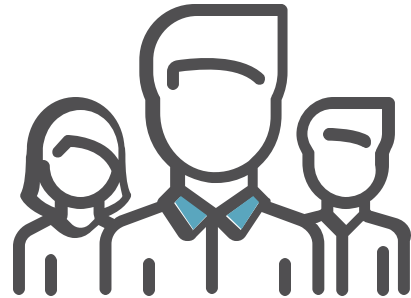
Nevertheless, the University of Amsterdam and its Science Park, as well as the VU and the University of Applied Sciences offer excellent degrees and facilities in the field of technology and engineering. In Holland University of Applied Sciences Alkmaar also offers a lot of programs in engineering, design and computing, as well as in agri-food and life sciences technology.



## CHALLENGES/ BARRIERS

### Internationalisation

O’Cass and Weerawardena (2009) observed that SMEs, and in particular small SMEs, typically have limited financial and physical resources, which in turn creates barriers to internationalisation. Bakker, D. (2017) observes the relevance of a firm’s regional origin and the stimulating role of networks for internationalisation. In the region of North Holland, networks are especially stimulated in the regional “Top Sectors”. However, outside of these specific top sectors, effective network forming is less stimulating (SER, 2014a).



### Commercialisation and innovation

Meijer, L. L. J., and co (2019), who researched barriers and drivers for technology commercialization and innovation by SMEs in the Dutch sustainable energy sector, identified four barriers to be highly disadvantageous to an SME's technology commercialization effort: limited financial resources, risk-averseness, short-term planning, technological complexity of energy solutions, high market competition caused by

incumbent players, and low legitimacy of renewable energy solutions. By contrast, several drivers may improve an SME's position: external financial investment, management having strong entrepreneurial abilities, early-stage prototyping and piloting, and legitimizing sources such as an official ‘stamp’ for product quality.

## KEY SUCCESS FACTORS

Limited literature review was available specific to engineering SMEs in the Netherlands, however an actor-based analysis of SME barriers and drivers conducted by Meijer, L. L. J. and co further highlights the critical role of policy makers, industry partners and end-users for SME's growth and innovation success. His findings suggest that investment by either private or public agents is a key driver of technology development. These financial resources serve several purposes such as start capital, product development, liquidity, risk investment, commercialization, or patent protection.





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