

...in the TopDutch region

TopDutch is the economic region of the three provinces at the top of the Netherlands:

Groningen, Friesland and Drenthe. We're leading key, system-level transitions by building smart and sustainable solutions for global challenges, and inviting ambitious talent and business to join us. Because we believe the best way to predict the future is to create it together.

# 1.WHYINVEST 4 2. KEYINDUSTRIES 28 3. SERVICES 54

# TO WHY INVEST

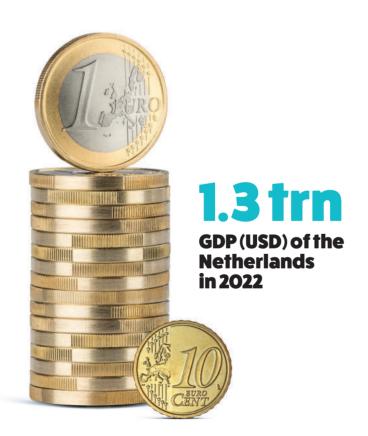
Our rich history of international trading led us to the healthy, open and stable economy we are today. We are a small country, but the Netherlands is a great place for doing business. We have the most competitive economy in Western Europe and the sixth best globally. We are the world's most connected country, offer excellent education on different levels, have one of the best healthcare systems in the world, are an innovation powerhouse, and we know our languages. In the TopDutch region, we are ready to welcome you and show you the advantages of living and doing business here.

**4**/67 **5**/72

# SNAPSHOT OF TODAY'S ECONOMY

#### **GDP & prosperity**

In the Netherlands we have a high GDP per capita compared to our fellow EU countries. And furthermore, here in the TopDutch region we exhibit the same growth trends as the country as a whole, while having a lower cost of living. We're in a very healthy place!



#### **Our demographics**

The TopDutch region's population has a good mix of experience and youth. From fresh young graduates to established professionals, and everybody in between; businesses have a broad spectrum of talent to work with. Anybody who comes to join us here will feel right at home in our vibrant, all-inclusive region.



Groningen's large student population makes it the youngest city in the Netherlands, with an average age of just 36.4.

#### **EU** membership

The Netherlands - including the TopDutch region - is a full member of the EU, which means all businesses registered here benefit from the international access and trade agreements that comes with EU membership.

Netherlands-based businesses enjoy direct access to the 447 million inhabitant EU market, unimpeded by geopolitical borders. Not just that, but there are also no barriers to employing citizens of any member state. We also have numerous trade agreements with countries from outside the EU, providing ease to our companies when doing business with the rest of the world.

Here in the Netherlands, we're particularly efficient when it comes to customs processing of goods being imported into the EU. Our country has a number of speedy entry points, many of which are either within or very close to the TopDutch region.

#### **Regional economy in transition**

**170** million consumers

within 500 km

The TopDutch region has naturally become a hotbed for industries that thrive on our inherent resources.

An abundance of space, pure water and naturally occurring minerals have been the catalyst for the six key industries that have established here.

Added to this, we're filled with related research facilities and complemented by world-class academic institutions: Resulting in interconnected ecosystems that are rich in knowledge and expertise.

#### An economy in transition

Our global economy is undergoing a large-scale transition. Old industries need deep restructuring and new industries are constantly arising. In the TopDutch region, we believe the future economy will be smart and sustainable, where talent is key to unlocking and developing the future. That's why we're committed to making smart and sustainable solutions to global economic, social and ecological challenges. And there's plenty of room to join us.

# 244 million consumers within 1,000 km

Proximity of European demand to the TopDutch region

# **INFRASTRUCTURE**

#### Good place, great connections

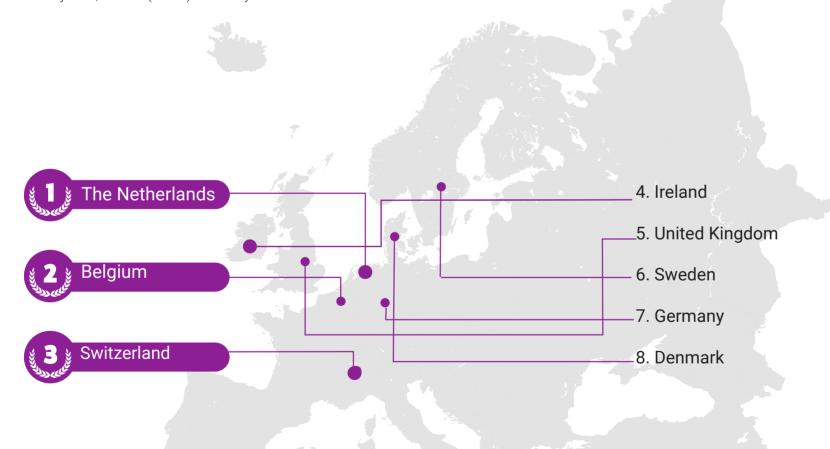
#### A strategic location

The TopDutch region benefits from being a part of transport, communications and energy networks which are among the best in the world. Excellent physical connections by road, rail and (inland) waterways means the rest of

our country and our European neighbors are easily accessible. As are the air- and seaports which put the whole world within reach. We enjoy fast and reliable online communications, along with a plentiful supply of energy to keep everything running.

#### The world's most connected country

The Netherlands is the world's most logistically connected country. DHL's 2022 Global Connectedness Index ranked the Netherlands number one. In fact, with the exception of 2020, the Netherlands has ranked first every year since their analysis began in 2001.



**Europe's most connected countries** 

#### **Physical infrastructure**

#### Road

Uncongested, well maintained highways connect the TopDutch region with the rest of the Netherlands and Germany.

#### Rail

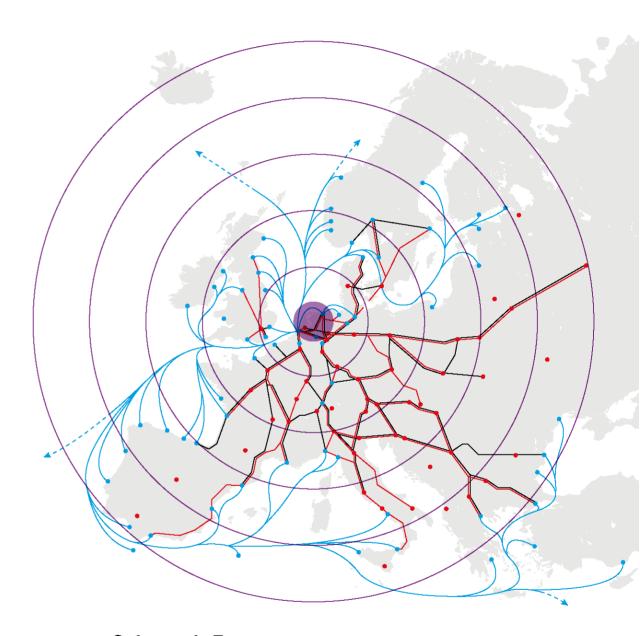
The TopDutch region has direct rail connections to Amsterdam Schiphol Airport, the Port of Rotterdam and to the Euroterminal rail terminal (business park border crossing with Germany), Groningen Railport and Friesland Rail Terminal.

#### **Waterways**

The Port of Rotterdam, Europe's largest seaport, is easily accessible from the TopDutch region. And because we're situated on the Netherlands' North Sea coast, we're home to three more of our country's biggest seaports: Eemshaven, Delfzijl and Harlingen. We also have a main inland port in Meppel which directly connects to Amsterdam and Rotterdam.

#### Air travel

Amsterdam Schiphol Airport, one of Europe's biggest business hubs, is only a couple of hours from the TopDutch region. We also have our own regional airport: The international Groningen Eelde Airport.



#### **Gateway to Europe**

—— Seaway —— Highway —— Railway

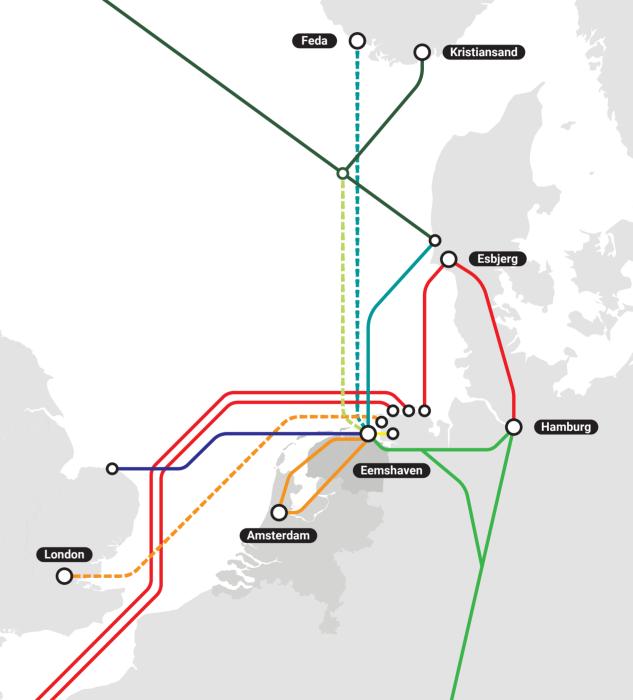
#### **Digital infrastructure**

#### **Online connectivity**

The TopDutch region enjoys outstanding high speed internet. This is largely thanks to having Dataport Eemshaven in our midst, which hosts a landing station for a worldwide undersea fiber optic network, a dark fiber connection with the Hamburg Internet Exchange, a hub for broadband connectivity, direct peering and interconnection.

### **TopDutch Digital infrastructure**

# Glass fiber connections AMS IX DE-CIX / German connections Linx Gasunie Dix Other Havfrue Nix - Norned 2 Neuconnect Havfrue



# **WORKFORCE**

#### **Excellent talent & knowledge development**

Companies in the TopDutch region have a broad spectrum of educated talent to choose from. From fresh young graduates, of all educational levels and in a range of subjects, to highly experienced professionals. The wide use of English in the Dutch educational system means our workforce is well-equipped and comfortable communicating in international environments.

The Netherlands has the world's third most appealing features for a strong talent pool. Our high quality of life, broad international experience, excellent educational system, university education and language skills make TopDutch employees stand out.

#### **Education**

With 14 research universities, 34 universities of applied sciences and a variety of specialized training facilities, the Netherlands occupies a top 10 worldwide position when it comes to education systems.

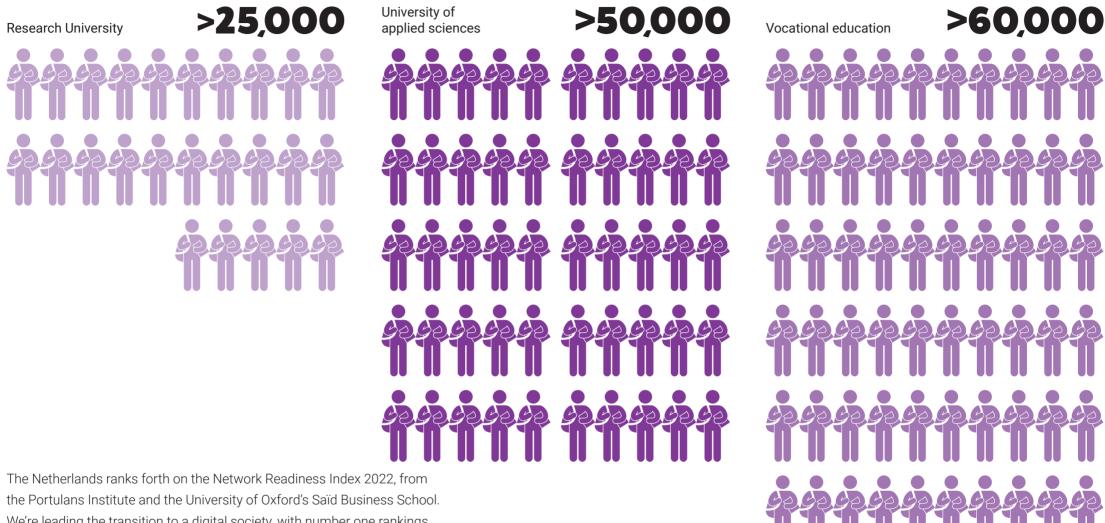
Much of this high quality education takes place in the TopDutch region at renowned establishments such as the University of Groningen and the Hanze and NHL Stenden universities of applied sciences. This high level and diversity of education also attracts many international students, whilst our internationalized culture and working opportunities keeps them here.

#### **Technical skills**

The TopDutch region is home to 60,000 IT-skilled people over a wide age range, 35% of whom have over 10 years of working experience in this field. Nearly 100,000 of our residents have technical competences, with over half of them having more than 10 years of experience working in a technical job.



#### The number of students in the TopDutch region



the Portulans Institute and the University of Oxford's Saïd Business School. We're leading the transition to a digital society, with number one rankings in the adoption of emerging technologies, internet access in schools, and mobile apps development.

#### A culture of multilingualism

Because Dutch is not widely spoken internationally, Dutch children start learning different languages in school from a very young age. 90% of Dutch people are fluent in English and many also speak German, French, Spanish or another language. The Netherlands has the world's most proficient

non-native English speakers among non-English-speaking countries.

Regulators accept English documentation and disputes are settled in the English-speaking Netherlands Commercial Court.

#### **Quality labor, lower costs**

The relatively low cost of living in the TopDutch region means labor costs can be lower, without foregoing quality in the workforce.

# **INCENTIVES & TAXES**

#### Competitive finance & investment climate

The Netherlands ranked 14<sup>th</sup> in the 2022 International Tax Competitiveness Index. TopDutch businesses benefit from competitive corporate income tax rates, a wide tax treaty network and a number of attractive incentive programs, including special provisions for highly skilled expatriate workers.

The Netherlands offers a healthy business environment, which sustains the competitiveness of our enterprises.

#### **Corporate tax**

At 25.8% (and 19% on the first €200,000), the Netherlands has one of Europe's most competitive statutory corporate income tax rates. Certainty in assessments relating to future tax positions also helps multinational companies to thrive here.

The Netherlands has a well-structured tax code, which is easy for taxpayers to comply with and which promotes economic development while raising sufficient revenue for the government's priorities.



# 30% ruling in the Netherlands



#### **Provisions for relocated employees**

The Netherlands assists companies who need to bring employees in from other countries through a number of tax provisions. These include a sizeable limited-time tax break and tax-free ability to reimburse international school fees, relocation expenses and moving allowances.

The 30% ruling is a Dutch tax exemption for employees who were hired abroad to work in the Netherlands. If a number of conditions are met, the employer is allowed to pay 30% of their salary as a tax-free allowance. The tax-free allowance is considered a compensation for the expenses that the employee has by working outside his or her home country.

# **BUSINESS CULTURE**

#### **Open culture of innovation**

Our government, educational systems and business know they share a common aim: supporting innovation. Therefore there is a focussed culture of collaboration between them.

The Dutch economy scores fifth best in terms of innovation performance worldwide, according to the Global Innovation Index 2022 published by WIPO, INSEAD, and Cornell University.

#### A different business culture

A can-do mentality and pro-business attitude is deep-rooted throughout the Netherlands' culture. With 50% of the country's GDP being derived internationally, the presence of internationals is generally viewed as positive. This is particularly true of the TopDutch region city of Groningen, where 71% of people agreeing with this statement puts it in the top 5 in European cities according to research commissioned by the European Commission.

The Netherlands excels on the Global Innovation Index with a number 1 ranking in Intellectual property trade., number 2 ranking in intangible asset intensity and number 3 ranking in finance for start-ups and scale-ups.

on Global Innovation Index 2020



# **QUALITY OF LIFE**

#### High quality of life, happy society

Here in the TopDutch region, our landscape is a great mix of dynamic cities and tranquil countryside. Our residents can enjoy all the benefits of city life, whilst still being surrounded by vibrant natural environments. We're also less crowded than the western part of the Netherlands: Which means less traffic, cleaner air, lower costs of living and less pressure. We're a seriously good place to live - proven by the fact that our city of Groningen is ranked as the 5th happiest place on earth by the World Happiness Report!

The Netherlands as a whole has also moved up the ladder in terms of 'happiest countries in the world', now taking on the 5<sup>th</sup> position worldwide.

#### Life in balance

The TopDutch region has always had a healthy attitude to work/life balance. We know that quality down-time is an important contributor to better productivity.

happiest country in the world:)
on UN World Happiness
Report 2022

work/life balance
on the OECD's
Better Life Index

Global adult wealth
on Credit Suisse's 2022
Global Wealth Report

Our inherently open-minded culture, cosmopolitan cities and stable economy has made our country a welcoming and comfortable place to live and work. The city of Groningen, in the TopDutch region, continuously ranks among the top cities worldwide for quality of living.

We're very successful in combining work, family commitments and personal life. In the Netherlands, moms or dads often work part-time, facilitating both parents to take on a dual role, and contributing to the overall well-being of all household members. Employment rates, parental education rates, and fertility rates are higher than OECD averages. In terms of children and youth, the Dutch have very low rates of youth unemployment, high reading literacy levels, below average levels of child income poverty, and high levels of life satisfaction in childhood.

#### **Cost of living**

Lower property prices in the TopDutch region, compared to other parts of the Netherlands, mean base expenditure is lower so people enjoy a higher ratio of disposable income. And because there are plenty of recreational activities and good shopping facilities here, they get to make the most of it!



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The Northern Netherlands offers a wide range of affordable housing options in each segment: from low-income housing to authentic canal buildings; from short-stay studios to long-term rentals. Average housing prices are the lowest in the country, with prices per square meter 25 percent lower than in central Amsterdam.

#### Leisure & entertainment

We're filled with a wide range of restaurants, cinemas, theaters, museums and all sorts of other recreational facilities. We also host numerous world-class music and arts festivals around the year. And, just as in the rest of the Netherlands, a wide range of English language TV shows and movies are shown in their original language. We never dub into Dutch, we just add Dutch subtitles.

#### **Sports**

TopDutch citizens love their sports. Almost all of us take advantage of the broad range of indoor and outdoor fitness and sporting facilities in the region, and the TopDutch region's healthy competitive spirit sees our athletes compete with the best. We are also proud to host world-famous sporting events such as the Assen TT motorcycle races.

The Assen TT motorcycle races



#### Schools and colleges

In the TopDutch region, government subsidized English language education is available for pupils from 5 to 19. Most university education is taught in English, with a broad range of courses offered at renowned establishments such as the University of Groningen and the Hanze and NHL Stenden universities of applied sciences. The University of Groningen is proud to be among the global elite with a classification in the top 100 of the Shanghai ARWU and the THE World University Rankings.



#### Healthcare

Like everyone else in the Netherlands, residents of the TopDutch region have access to excellent healthcare via the Dutch healthcare insurance system.

The Commonwealth Fund ranked our healthcare system as the second best in its index of comparative economies. In particular, we have the best access to healthcare of the countries in the rankings.



# 22. KEYINDUSTRIES

The TopDutch region is a collection of interconnected, purpose-driven and people-powered ecosystems that are committed to finding green and digital solutions for global economic, social and ecological challenges. We're focused on 6 key industries: Green Chemistry, WaterTech, AgriFood, Digital Innovation, Life Sciences & Health, and Energy. Read about our key industries in detail, and find out more about the innovative projects we're working on.

# **AGRIFOOD**

our offer:

Dairy Capital of Europe

Healthy Ageing Capital of Europe

Feeding a healthy and sustainable economy

World-class knowledge & innovation communities

5.
Gateway
to EU market
& access to
talent

# How our AgriFood industry is growing a healthy future

#### 1. Dairy Capital of Europe

We're building the most innovative, sustainable, remunerative and animal-friendly dairy chain in the world.

- Dairy Campus, part of AgriFood university Wageningen (WUR), spurs innovation with education and R&D.
- The Dutch physical environment has led to the optimal density of healthy cows.
- Our healthy cows produce exceptional nutrient-rich milk and have a high lifetime yield of optimized pregnancies and lactations.

#### 2. Healthy Ageing Capital of Europe

We're performing groundbreaking research to increase human lifespan with healthy years through a healthy diet and lifestyle.

- Lifelines research cohort and biobank provides insight into the effects of lifestyle on health.
- Our R&D and innovation communities extract dietary building blocks for advanced nutrition.
- Our dedication to sustainable farming; protecting biodiversity; land, seed and crop quality and circularity keeps our environment, and us, healthy.

#### 3. Feeding a healthy and sustainable economy

We're dedicated to feed-linking industries with sustainable building blocks for a healthy economy, and providing nutrients for the protein transition.

 AgriFood crosses over with: Green Chemistry by growing crops used as bio-based building blocks; Energy by using agricultural waste as feedstock for green fuels; Digital Innovation by developing smart tech to optimize performance; WaterTech by working together to develop agricultural water solutions; Life Sciences & Health by researching protein structures and healthy nutrition.

• As demand for plant-based protein is increasing, we're leading the **protein transition** by extracting valuable proteins from crops.

#### 4. World-class knowledge and R&D communities

We have the best knowledge institutes and communities for cutting edge AgriFood innovation R&D.

- Our AgriFood ecosystem is home to major research campuses, innovation communities and pilot facilities.
- 12 of the 40 largest AgriFood companies have Dutch R&D facilities, and the Netherlands has the 3<sup>rd</sup> highest private AgriFood R&D investments in Europe.

#### 5. Gateway to European market and access to talent

The Netherlands is the ideal gateway to the EU market and provides access to AgriFood talent at all levels.

- Our strong location provides direct access to 244M consumers within 1,000 km via our dense transport network.
- The Netherlands is the 2<sup>nd</sup> biggest agricultural exporter globally, aided by our excellent trade facilitation and fiscal environment.
- The TopDutch region provides access to AgriFood talent by providing world-class education at all levels, and attracting international talent with our innovation communities.





Are you interested in exploring what your business possibilities could be?

Connect with Reinder de Jong,

ourAgriFood expert.

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### **GREEN CHEMISTRY**

our offer:

Cohesive ecosystem for

2.

Cohesive Access to ecosystem for green feedstock Green Chemistry & energy

3

First CO₂ negative, fossil-free & circular cluster 4.

Hydrogen capital of Europe

5.

Reliable government & fast business development **6**.

World-class knowledge & access to talent

# How we're changing the nature of Green Chemistry

#### 1. Complete and cohesive ecosystem for Green Chemistry

We offer the most complete and cohesive Green Chemistry ecosystem in Europe.

- Entrepreneurs, government and knowledge institutions collaborate in Chemport Europe, consisting of Chemport Emmen and Heerenveen for polymer/ polymer applications and Chemport Delfzijl for intermediate chemicals, to make chemistry green.
- Companies in Chemport Europe integrate chains and collaborate to close the loop, accelerating the circular economy.

#### 2. Direct access to green feedstock and green energy

We're rich in our own green resources, and also well-connected to Germany and Scandinavia.

- We offer access to green feedstock and building blocks via our regional natural gas reserve; regional reserve of sodium chloride, regional reserve of magnesium chloride, biomass and biorefined chemical building blocks, or easy imports via our seaports.
- We offer access to green energy including our own supply of solar, wind and biomass energy, and imported green energy via the NorNed and COBRA cable.

#### 3. Most ambitious ecosystem

We will be the first fossil-free,  ${\rm CO_2}$  negative and circular chemical cluster in the world.

 Chemport Delfzijl will be the first fossil-free and CO<sub>2</sub> negative chemical cluster by using only green chemical building blocks; optimizing all processes; reusing CO<sub>2</sub> and collaborating and investing together.

 Chemport Europe is leading the New Plastics Economy by focusing on 100% circularity; making 100% green products; designing plastic products for easy recycling and developing systems to collect, recapture, filter and recycle all plastics.

#### 4. Hydrogen Capital of Europe

We are dedicated to producing 100% green hydrogen, one of the most used and basic chemicals in the chemistry industry.

- We decided to close our large natural gas reserve in 2022, spurring us to transition from gray hydrogen to green hydrogen production (via blue hydrogen).
- We'll first transition our no.1 in Europe gas infrastructure to an integrated hydrogen transmission network. By 2025, the TopDutch region will be home to 169km of hydrogen pipelines.
- After switching to a hydrogen transmission pipeline network, we will transition the hydrogen mix from blue to green, with a green hydrogen production capacity of 100PJ p.a. by 2030.

#### 5. Reliable government and fastest business development

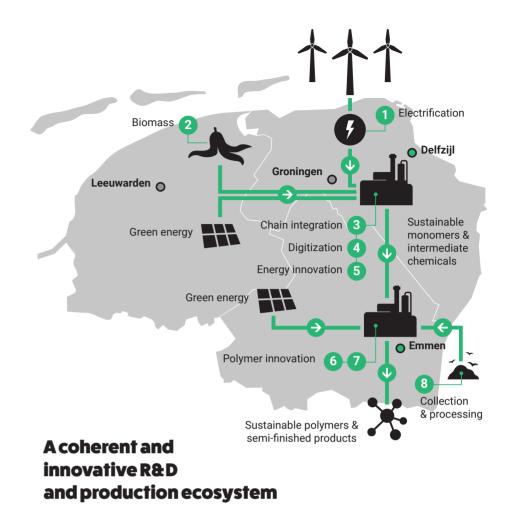
We offer one of the most attractive business establishment procedures for new companies in Europe.

- TopDutch government is willing to co-invest in Green Chemistry.
- TopDutch has the fastest business development in Europe.

#### 6. World-class knowledge development and access to talent

We have a highly skilled workforce that knows green chemistry and offer leading R&D facilities.

- The University of Groningen has the largest chemistry facility in the Netherlands, and is home to Nobel Laureate Ben Feringa.
- We have an extensive ecosystem of leading R&D facilities, crossing over with our other key industries.



- 1. 1 MW Test Centre
- 2. Zernike Advanced Processing (ZAP)
- 3. Chemport Industry Campus (CIC)
- 4. Smart Industry Hub

- 5. EnTranCe
- 6. Sustainable Polymer Innovation Cluster (SPIC)
- 7. Green PAC Polymer Application Centre
- 8. Knowledge Centre Recycling



Are you interested in exploring what your business possibilities could be? Connect with Sil Faber, our Green Chemistry expert.

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## WATERTECH

our offer:

WaterTech
Capital of
Europe

Complete chain of innovation

Access to EU & international markets

Breeding ground for technological partnerships

Access to talent & highly skilled labor

#### How we test the waters in WaterTech

#### 1. WaterTech Capital of Europe

Our city of Leeuwarden is globally recognized as the WaterTech Capital of Europe.

- It is home to the WaterCampus, which drives innovation in WaterTech both internally and externally.
- WaterCampus is home to five education/training institutes and 25 companies.
- WaterCampus has direct connections to 23 European universities and research institutes and over 200 companies.

#### 2. Complete chain of innovation

WaterCampus facilitates, supports and connects every single step in the innovation chain.

- Science partner Wetsus supports ideation and fundamental research through world-class educational institutes, securing pre-seed funding and patent applications.
- Applied Research partner Center of Expertise Water Technology (CEW) supports from applied science to market-ready product development with the Water Application Center, 4 demo sites and acts as launching customer.
- Business partner Water Alliance accelerates worldwide business development through cooperation, offering matchmaking services and identifying export opportunities.

#### 3. Access to European and international markets

We have the best international networks to provide access to global markets.

- Water Alliance is part of Enterprise Europe Network (EEN), which connects tens of thousands of European SMEs for partnerships.
- Water Alliance is part of Global WaterTech Hub Alliance, which provides

direct access to industry networks in the USA, Singapore, China, Israel and Korea.

• Water Alliance organizes, supports or highlights international conferences and matchmaking events.

#### 4. A breeding ground for new technological partnerships

Our partners facilitate technological partnerships across a range of projects.

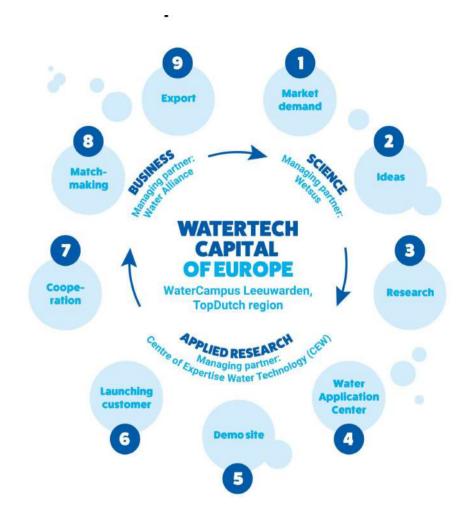
- Partner with Wetsus for groundbreaking scientific research with leading researchers from multiple universities.
- Partner with CEW to develop your first prototype, set up a pilot, accelerate the innovation cycle or shorten your time to market.
- Partner with international or local technology partners for turn-key water management solutions through Water Alliance's business network.

#### 5. Access to talent and highly skilled labor

The TopDutch region offers a highly skilled, specialized and internationalized workforce.

- Lifelong WaterTech learning program from primary school to PHD and MBA level.
- Wetsus graduates on average 40 highly and uniquely skilled WaterTech specialists a year.
- Water Alliance supports growth ambitions by connecting industry to talent.

#### **Chain of innovation**





Are you interested in exploring what your business possibilities could be?

Connect with Reinder de Jong,
our WaterTech expert.

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# **DIGITAL INNOVATION**

our offer:

Strong in data science, deep learning & Al

**Z.** Test group

Test ground for autonomous systems

3.

Digitalizing key system transitions

4.

Digital society & ideal testmarket

5.

Access to pioneering talent & skilled labor

6.

Natural choice for smart- and data-intensive business

# How we're accelerating the transition with Digital Innovation

# 1. Foundational research in big data, machine learning & Al and facilitating environment for deeptech

We host a number of leading research institutes, and support science spin-off with business development programs, networks and financing.

- We're home to ASTRON, a hub of expertise, leading in radio astronomy discoveries.
- Companies such as IBM and our research institutions are leading in High Performance Computing and solving large problems in science, engineering and business.
- Our University of Groningen collaborates with business and public sector, including global tech firms like Google and Facebook, to perform groundbreaking research and find new solutions in multi-disciplinary centers
- Al Hub Northern Netherlands is developing Al applications via high impact public-private partnerships.

#### 2. Europe's leading test ground for autonomous systems

With a technologically-ready workforce and ambitious businesses, our key industries are digitalizing at warp speed.

- European Digital Innovation Hub Northern Netherlands is accelerating digitalization in our key industries, and establishing the TopDutch region as Europe's leading testing ground for autonomous systems.
- Our unique culture of collaboration shares knowledge and facilities for high-tech solutions.

#### 3. Digitalizing key system transitions

We're accelerating key societal transitions by making systems smarter.

 Our green chemistry and energy ecosystems are leading the sustainable transitions with CleanTech. Our expertise in Big Data optimize biotechnical, chemical and energy-intensive processes.

- Our life sciences & health ecosystem is applying HealthTech to lead the transition to healthy ageing with big data labs and e-health applications.
- Our WaterTech and AgriFood ecosystems apply expertise in sensor technology works to make food and water systems smarter and more sustainable.

#### 4. Digital society and ideal test market

The TopDutch culture encourages innovation and technological adoption, making the our population an ideal test market.

- Our Noorden Digitaal Coalition shares knowledge, facilitates and educates our citizens to realize a 'spiral of innovation'.
- Several cyber cooperatives are jointly developing cyber resilience in all the region's companies and civil society. We were the birthplace of ethical hacker 'unicorn' HackerOne.

#### 5. Access to pioneering talent and skilled labor

We're home to an ever-increasing number of scientific and entrepreneurial talent.

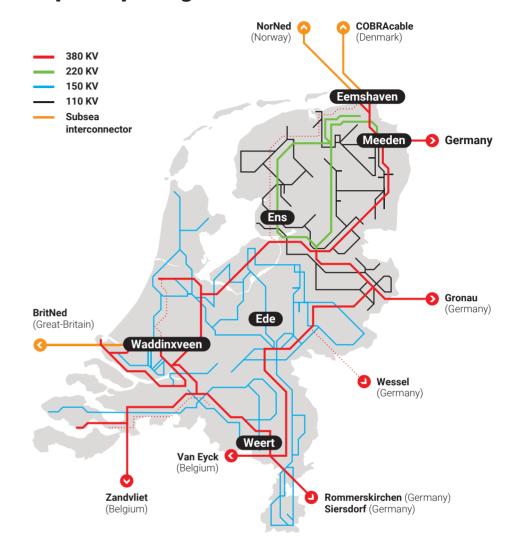
 Our institutions offer education to more than 75,000 students including in some 60 IT-related education courses, from research university level to vocational level. Our workforce includes large numbers of technologically and digitally skilled people.

#### 6. The natural choice for smart- and data-intensive business

With a reliable and flexible green grid, the best digital infrastructure and the fastest set-up, we're the natural choice for smart- and data-intensive business.

- The North Sea will be Europe's green power plant. Off the TopDutch coast, we currently host 600 MW capacity wind parks, with plans for another three sites totaling 4,700 MW.
- With TopDutch as the key energy port, the Dutch high voltage grid connects across borders and seas.
- Google chose TopDutch for their first data center to run entirely on green energy.

#### **TopDutch power grid**





Are you interested in exploring what your business possibilities could be?

Connect with Wubbo Everts,

our Digital Innovation expert.

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# **LIFE SCIENCES** & HEALTH

our offer:

**Europe's** reference region Capital of for healthy ageing

**BioAnalysis Europe** 

**Hub of** knowledge and R&D

**Smart and** sustainable ecosystem for MedTech

**Networks and opportunities** for partnerships

**World-class** education & highly skilled labor

#### Why Life Science & Health is in our blood

#### 1. Europe's reference region for healthy ageing

TopDutch is an EC four-star reference region for Active and Healthy Ageing. We are leading Europe's transition to sustainable healthcare.

- We host more fundamental and applied healthy ageing research than any other region.
- Our open and cooperative industry networks accelerates the development and implementation of healthy ageing solutions.
- Our e-health cluster is leveraging our region's expertise in Big Data, Al, and sensor technology to create new applications.

#### 2. BioAnalysis Capital of Europe

We have the largest BioAnalytical capacity and diversity in Europe.

- Over 100 LC-MS/MS machines are operational in the region.
- Largest biobank available from Lifelines longitudinal research cohort, making biodata available not only during, but also in the build-up to the emergence of diseases.
- Biomarker Bay, a consortium dedicated to the research, development and application of biomarkers, is supercharging development of tailored diagnostic methods and drugs.

#### 3. Hub of knowledge and R&D

We support knowledge to market-ready products with a supportive mix of research programs, shared innovation infrastructure and access to capital.

- We offer access to a complete R&D chain; from fundamental research to product validation.
- Our unique research programs, including Biomarker Bay, ERIBA and Lifelines, feed developments in pharma and medical technology.
- Our innovation programs including in the Open Diagnostics Ecosystem and PharmaNL - and the €500 million Campus Community Fund support

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innovative products to market and offer opportunities for expansion.

#### 4. Smart and sustainable ecosystem for MedTech

Innovation and product development are supported via our cross-linked green and digital ecosystem.

- Together with our green chemistry industry, TopDutch leads in the development of medical devices, medical and polymer solutions.
- Cross-linking with our digital innovation ecosystem, we offer advanced data capabilities, supporting the development of ground-breaking MedTech with sensor tech and AI.
- Cross-linked with our High Tech and Smart Materials cluster, we are particularly strong in revolutionary lens and catheter technologies.

#### 5. Networks and opportunities for partnerships

Our open business culture supports knowledge-sharing, welcomes newcomers, and supports innovative start-ups to reach their potential.

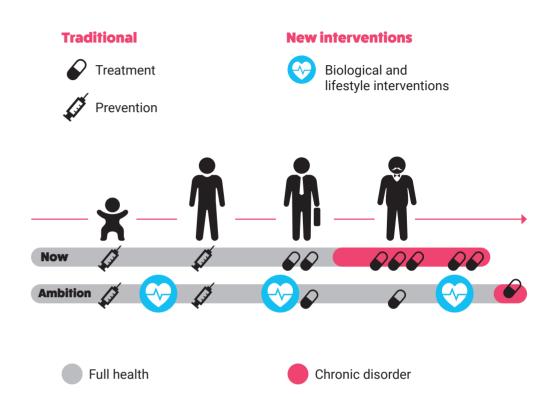
- Our tight-knit business networks support knowledge-sharing, cooperation, and development in pharma, MedTech and e-health.
- Large international companies have the opportunity to acquire unique knowledge via M&A.
- From pre-seed to scale-up, our services and programs support entrepreneurial talent to take the first step, inviting promising internationals to join us, and facilitating their development via incubators and training.

#### 6. World-class education and highly skilled labor

Our world-class knowledge institutes educate the health and medical professionals of the future.

- Home to 75,000 students, including 4,000 medical students in our top 100 University Medical Center Groningen.
- Healthy Ageing Campus offers research and business facilities to spin-offs and start-ups.

#### **Biological and lifestyle interventions**





Are you interested in exploring what your business possibilities could be?

Connect with Gerard Lenstra,

our Life Science & Health expert.

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# **ENERGY**

our offer:

1.

Natural gas legacy & switch to green gases 2.

The heart of the North Sea green power plant

3.

Hydrogen Capital of Europe 4.

Smart students, researchers & talent

**5**.

System-level sustainable transition

**6**.

Unique triplehelix collaboration

# How our Energy industry is powering a sustainable future

#### 1. Natural gas legacy & switch to green gases

Built on Europe's largest natural gas reserve, we're now investing in infrastructure, education and innovation for green energy.

• We're transitioning our extensive natural gas transmission network and upskilling our 15,000 experienced workers from the domestic natural gas industry.

# 2. The heart of Europe's largest future proof energy sourcing area

Located on the North Sea coast, we will power Europe's energy transition.

- The North Sea will be Europe's biggest green power plant, with 120GW capacity by 2030.
- The TopDutch region will be a leading powerhouse, scaling our on- and off-shore wind energy production to 12.2 TwH by 2030, including plans for three offshore sites totaling 4,700 MW.
- With TopDutch as the key energy port, the Dutch high voltage grid transports electricity across borders and seas through 24,500km of pipeline.

#### 3. Leading the transition to a hydrogen economy

TopDutch is Europe's first and only fully-integrated hydrogen valley. We will continue to lead Europe's hydrogen economy by fulfilling a \$10 billion joint investment agenda by 2030.

- Our inherent natural resources including salt caverns for storage and existing energy infrastructure make us the natural business location for a green hydrogen economy. By 2025, we will host 169km of hydrogen pipelines, which will connect to a further 6,800km of pipelines across Europe by 2030.
- HEAVENN is a large-scale demo program creating a fully-integrated and

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functioning 'H2 valley'. It now acts as a blueprint for replication.

• Our \$10 billion hydrogen investment agenda will allow us to power Europe's future economy with 100PJ of hydrogen p.a. by 2030.

#### 4. Smart researchers, students and talent

TopDutch offers an energizing environment for innovation in CleanTech.

- TopDutch has a culture of open innovation, with a network of knowledgesharing initiatives, living labs, shared testing facilities and innovation centers.
- We're creating a generation of new energy-skilled talent via our world-leading higher education system.
- We offer access to talent & skilled labor from the extensive natural gas industry existent in the region.

#### 5. Ambitious complimentary industries fueling a systemlevel energy transition

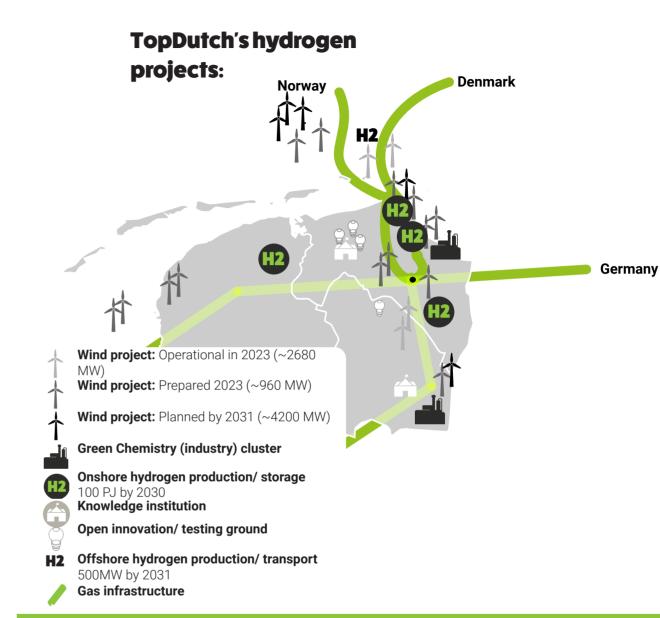
We're not only generating the energy needed to fuel the sustainable transition, but also the technologies and applications

- Our Green Chemistry ecosystem, Chemport Europe, will be the first fossil-free and carbon dioxide-negative chemical cluster.
- Our Digital Innovation Cluster is making the New Energy System smarter with AI.
- We have one of the most developed green mobility markets, and are super-charging innovation in 6 key competencies of battery technology.

#### 6 Unique triple helix collaboration

We develop breakthrough knowledge, innovation, applications, processes and leadership with and within the New Energy Coalition.

- We're home to the best knowledge cluster for Energy Transition in Europe
- TopDutch's entrepreneurial mindset extends to its government, with a state willing to co-invest and offer supply- and demand- side incentives.





Are you interested in exploring what your business possibilities could be? Connect with Wim A,B., our Energy expert.

T: +31 270 871 72 E: ab@nom.nl

# SERVICES

Setting up business in a foreign country can bring about great benefits. But it also means taking on a host of new challenges. Our professionals in finance, location, business development and networking are here to give businesses from around the world a helping hand. Welcome to the TopDutch region!

## **NV NOM**

Everyone needs a little helping hand now and again. Through NV NOM, we're ready to help you with every stage of the process in (re)locating your business to the TopDutch region. Whether that be that you'd just like to know a little more about the TopDutch opportunities for your specific industry, all the way to finding and helping you set up your new site. Setting up business in a foreign country can bring about great benefits. But it also means taking on a host of new challenges. Our professionals in finance, location/acquisition, business development and networking are here to give businesses from around the world a helping hand. We know the TopDutch region inside out, and TopDutch industries know us. We know the best business locations, which permits you need to have and who the best energy suppliers are. We can help you or know who to connect you with. How we can help your business?

# Giving international businesses a helping hand through every stage of the (re)location process.

#### **Discovery package**

From general bidbooks about our key industries to a tailor-made introduction to everything your business needs to know about operating in the Northern Netherlands. You can think of it as us answering your tender request, as we'll include all the information you need regarding locations, the Dutch national and regional business climates, the labor market and how to acquire talent, taxation, legal & financial matters, housing, visa & permits, incentives and government related issues.

#### Site selection

Whether you're new to the Netherlands or just looking for the right place to expand, we'll help you find a perfect location within our region. We'll facilitate

and organize your fact finding trip to potential new locations, assist you with preparation and investigations, arrange meetings and personally guide you through all the procedures associated with selecting your site and getting set up.

#### Network

To help you quickly establish essential contacts, we'll introduce you to relevant people in all kinds of public and private sector organizations. These include:

- Government
- Licensing authorities
- Utilities (energy, water etc.)
- Local networks

- Knowledge institutes
- Schools & international schools
- Suppliers
- Service providers

#### **Advice**

NOM is your first port of call for everything you need to know and is here to provide initial advice on everything that's relevant to setting up your business in the Northern Netherlands.

Including:

- Financial
- Taxation
- Subsidies
- Funding opportunities
- Regulatory
- Customs regulations

- National and regional laws
- Regulations and permits
- Market
- Workforce
- Finding talent
- Visa requirements

#### **Investor Relations, our aftercare**

Found your place? Our services doesn't end when you have found your place in the TopDutch region. We will continue to support you as your business moves through all phases of growth, expansion or relocation.

# **OUR PROCESS**









#### **Get in touch**

Through our TopDutch contact page, by email or direct to your dedicated industry project manager, get in touch to start the conversation.

#### **Receive industry bidbook**

Once you've confirmed you are interested in more information about investment in the region, we'll be happy to send our industry specific bidbook to you.





# 4



#### **Alignment meeting**

We'll schedule a meeting with your team and our regional dedicated project team to identify your needs and align objectives.

# Receive company-specific bidbook

Now we understand your objectives, we'll provide you with a bidbook tailored to your company's needs.





We'll schedule a fact-finding trip

introduce you to relevant useful

contacts in both the private and

public sector and organize visits

in our region for your team to

**Fact-finding trip** 

for site locations.

# 6



#### **Investor roundtable**

For investments requiring partnerships and co-investment, we'll organize an investor roundtable with relevant key decision-makers.





# Kick-start business development

Once you've confirmed you've reached a decision to invest in our region, we'll kickstart your business development process so you'll fully benefit from our fast procedures.

# **GET IN TOUCH**



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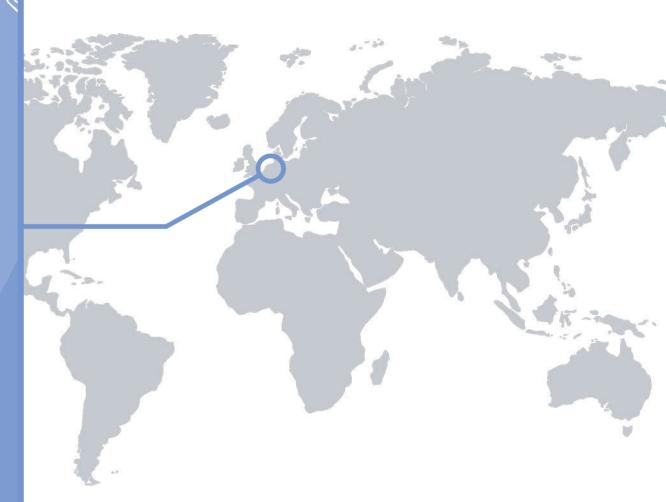


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# WELCOME TO THE TOPDUTCH REGION! **TOPDUTCH** The Netherlands Germany **Belgium**

#### **TopDutch: the ideal location in Europe**

Are you looking for the right place to locate your innovative company? Whether you're in need of specific R&D activities, or ready to springboard into the European market, TopDutch is the green, talented and digital region for your next business development.



# A WARM WELCOME TO HELP FOREIGN EMPLOYEES FEEL AT HOME QUICKLY



More information?

www.iwcn.nl

Because international organizations often bring employees in from other countries, the TopDutch region wants to contribute to a warm welcome and a pleasant time for new inhabitants.

The International Welcome Center North (IWCN) is a one-stop shop for international people living or coming to live in the provinces of Groningen, Friesland and Drenthe and offers service and information in three areas:

Official Matters
The IWCN efficiently arranges government formalities for international employees, such as residence permits (for non EU/EEA Citizens) and municipal registration (required for all residents).

Practical Information
From finding the right house, opening bank accounts, signing up for health insurance to selecting the right school for the children, the IWCN is happy to provide everyone living in the region with referrals to reliable service providers and detailed information on all kinds of practical matters.

Social & Leisure

The IWCN organizes multiple events and activities that help people with building a strong social and/or business network and becoming familiar with the Dutch culture.

### **JOIN TOPDUTCH**

Want to find out more about how the TopDutch region is naturally leading the transition, or view the digital edition? Head over to our website www.topdutch.com

#### The TopDutch collective:

#### **Economic region**





provincie Drenthe

#### **Executive partners**







Netherlands Foreign Investment Agency

#### **Regional partners**









#### **Knowledge partners**













# TOPDUTCH.COM

A good place to be great