

### TOPDUTCH

# ISTHIS REGIONON YOURRADAR?

10 reasons to recommend TopDutch to your clients

The Netherlands, Holland, the Dutch and, now the latest addition on this list... TopDutch. TopDutch as an economic region is located at the top of the Netherlands, bringing together the provinces of Groningen, Friesland and Drenthe. And on top of that, TopDutch also represents top ambitions, achievements, solutions and 'capital' positions in the game of solving global challenges.

### **IS THIS REGION ON YOUR RADAR? IO REASONS TO RECOMMEND TOPDUTCH TO YOUR CLIENTS**

# TOPDUTCH



#### Welcome to the TopDutch region

The TopDutch region is home to 1.7 million people. It hosts many small and medium-sized businesses and intelligent start-ups, alongside large international companies such as Google, IBM and Shell. Regional partnerships, integrated talent development and the expanding number of strategic international alliances are key to the region's rapid transition to becoming the green and digital region of the future.

TopDutch is a mid-sized region, but it's making big waves. And considering their current large-scale investments in green energy, green chemistry, smart factories and materials, AI and new technologies, we think you'll want TopDutch on your radar.

# TOP10 REASONS

Here you'll find the top 10 reasons to invest in - and recommend the TopDutch region

### 1. HYDROGEN CAPITAL OF EUROPE

In 2017 TopDutch developed and presented the first and most extensive **regional roadmap** for the Green Hydrogen Economy. Following this roadmap, the TopDutch Green Hydrogen Alliance was founded, in commitment to building the **number one ecosystem** for green hydrogen in Europe. A coalition of industry and governmental partners developed the **Investment Agenda**, totaling €2.8 billion, of co-investment for 33 hydrogen projects.

TopDutch is also home to Hydrogen Valley, powered by the Fuel Cells and Hydrogen Joint Undertaking (FCH JU), developing the first fully functioning green hydrogen value chain.

#### Considering investment in emission-free hydrogen?

Read our story about TopDutch's transition to hydrogen: Developing the Hydrogen Capital of Europe, get yourself familiar with our Regional Roadmap or check out our Regional Hydrogen Investment Agenda. The TopDutch region realized the opportunities in clean hydrogen at an early stage, and started investing heavily in production, distribution and applications. As they're rapidly transitioning away from natural gas, they also have a strong starting point with the well-connected gas grid which they've already started converting for the distribution of clean hydrogen across Europe. Truly the Hydrogen Capital of Europe.

> **Noé van Hulst** Hydrogen Envoy for the Dutch Ministry for Economic and Climate Policy



### 2. AMBITIOUS AND MOST COMPLETE ECOSYSTEM FOR GREEN CHEMISTRY

The chemical industry makes the building blocks for almost every modern product. Developing truly green value chains means starting at the source. This is done at Chemport Europe, one of Europe's most complete and cohesive green chemical ecosystems.

Innovation leaders in chemical-intermediates are working towards the first CO<sub>2</sub> neutral, fossil-free chemical clusters in the world. Polymer producers are switching to green building blocks. Polymer application specialists are designing and engineering truly circular supply chains: It's exciting times in Chemport Europe.

The TopDutch region is rich in green resources, with direct access to green feedstock and building blocks including clean hydrogen, sodium chloride, the purest magnesium chloride in the world and unlimited green energy. What's more, the region has a historic expertise in agriculture, and the ecosystems cross-over to complete value chains: From agricultural feedstock, to biomass, to green chemicals, to bio-based products such as food packaging.

### Curious how TopDutch's green ambitions are becoming reality in the chemical industry?

- 10 ways of cutting CO<sub>2</sub> emissions in the chemical industry
- How TopDutch is taking the lead in closing the plastics loop
- Green building blocks for green chemistry

For a sustainable entrepreneur, it's great to end up in an ecosystem where sustainability and becoming green is widely supported. We don't need to convince anyone here of our ambition. This saves time when applying for permits. Not only that, there are all kinds of financial incentives to aid sustainable entrepreneurs. The region has a clear ambition to boost green chemistry and is investing in it.

> Véronique de Bruijn CEO of Photanol



### **3. ENERGY TRANSITION CAPITAL OF EUROPE**

The TopDutch region is leading in its green energy ambitions. For example, they'll be the first to proactively quit natural gas production and switch to green gases (like emission-free hydrogen) and will have the first fossil-free and CO<sub>2</sub> neutral chemical cluster in Chemport Europe.

### How will this region will achieve its ambitions and make the transition?

Well, they've already developed the best knowledge cluster for the energy transition in Europe. A cluster of highly specialized knowledge institutions, research centers and incubators, working intensively together with government and industry, organized in the New Energy Coalition. Together, they are able to support large energy projects across Europe.

The TopDutch region's ambitions are aligned with the national ambitions laid out in the Dutch Climate Agreement. One such target is 80% of electricity demand being met by renewable sources in 2030. To help achieve that, the TopDutch region are planning a massive scale-up to 22GW of offshore wind energy.

### Curious about more of their projects? Check some of their energy stories:

- Developing the Hydrogen Capital of Europe
- A sustainable energy drive is sweeping over the Northern Netherlands
- Inside the race to zero-emission public transport

The energy transition is a transformation of an entire chain. In the TopDutch region the best knowledge institutions, the most ambitious industries and a willing government are brought together to make a difference and lead the transition in Europe.

> Gertjan Lankhorst Former Director of New Energy Coalition



### 4. A HEALTHY ECOSYSTEM FOR LIFE SCIENCES

The TopDutch region has a long-established focus on healthy ageing and performs more research into genetic implications and lifestyle interventions to increase humans' lifespan than any other region.

#### What sort of research is going on in the region?

The European Research Institute for the Biology of Ageing (ERIBA) is located in the region, offering pioneering fundamental research into the genetic aspects of ageing. Lifelines research and biobank is completing the longest and largest multigenerational cohort study; collecting data from 167,000 TopDutch citizens for use by researchers and companies. In recent weeks, Lifelines have expanded their research to explore the **possible effects genetics** have on COVID-19 symptoms, and what effects the societal changes have on mental wellbeing. Lifelines is also one of a number of agencies in the region studying the **impact** of the microbiome on health.

Added to this, together with partners from the AgriFood ecosystem, the TopDutch region researches healthy nutrition - such as the effects of known and potential new prebiotics on human intestinal flora, and the effects of antibiotics, prebiotics and probiotics on stability and recovery of microbiota in the gastrointestinal tract - from the Carbohydrate Competence Center (CCC).

The TopDutch region is home to the Center for Sustainable Antimicrobials (CeSAM), which is dedicated to creating new – and limiting resistance against existing – antibiotics via multidisciplinary clinical and scientific methods.

Being surrounded by scientific and clinical medical expertise, has also led to a booming green and digital MedTech industry in the region. Home to big names like Johnson & Johnson Vision as well as highly-specialized SMEs such as inhaler technology firm PureIMS, or Polyganics who develop stateof-the-art bioresorbable medical devices.  The TopDutch location means short lines between experts in the field of healthy ageing; between well-established global corporations, boundary pushing start-ups and up-and-coming talent in the universities.
On Campus Groningen, you can find the healthiest Bio-Analysis ecosystem in Europe within a square mile.

> Edward van der Meer Director of Campus Groningen



Moreover, the region is also considered the BioAnalysis Capital of Europe. The consortium Biomarker Bay can be found in the TopDutch region, busy researching, developing and applying biomarkers in order to supercharge the development of tailored diagnostic methods and drugs. And, with over 100 LC-MS/MS machines operational, the TopDutch region has the largest BioAnalytical capacity and diversity in Europe. Plus, the region is building the smartest labs to facilitate all this as part of their Smart Factories sector: Think homegrown organization BD Kiestra, who develops and produces innovative lab systems for medical bacteriological laboratories.

#### Want to know what TopDutch is working on today? Check out the key stories:

- More healthy years and a healthy society in 2040
- From head to toe with TopDutch's MedTech toolkit
- Personalized medicine: From 'one size fits all' to 'tailored suit'
- The DNA of TopDutch's Life Science & Health Industry
- How to stay young and healthy, even when you're growing old

### **5. AT THE CUTTING EDGE OF WATERTECH AND SMART INDUSTRY**

The Netherlands ranked no.1 in the Global Expansion Tech Index, as the best country for tech firms looking to expand internationally. Think of Dutch high-tech and think of Brainport? Think again! The TopDutch region is leading in developing and implementing the cutting edge of industrial technologies.

The city of Leeuwarden is globally recognized as the the WaterTech Capital of Europe. It is home to the WaterCampus, which drives innovation for WaterTech in the Netherlands, Europe and beyond. WaterCampus is home to five education/training institutes (including Wetsus) and 25 companies, including CES award-winning Hydraloop systems. The WaterTech Capital of Europe is also well-connected: It has direct connections to 21 European universities and research institutes in Wetsus, to 200 companies connected in the Water Alliance and to 5 global hubs in the Global WaterTech Hub Alliance. Learn more about TopDutch's WaterTech offer here.

Dubbed the Region of Smart Factories as a result of the rapid development of high-tech production facilities, the TopDutch region has been investing and educating for Industry 4.0 across all ecosystems. In order to accelerate industrial digitalization, their Digital Innovation Hub has been set up, which offers opportunities for the business community to develop their competences, share knowledge and grow the Industry 4.0 community even more. This includes provincial subsidies being made available for innovative companies who want their production facility to join the growing region of smart factories. One of the TopDutch region's strong points is the collaboration between scientific research, knowledge institutes and the business community. A facilitating government that is willing to create testing grounds and pilot projects is very empowering. This makes the TopDutch region a powerful ecosystem for innovative water technology that can be marketed worldwide.

> Hein Molenkamp Managing Director of Water Alliance



### 6. DIGITAL PIONEERS POWERED BY THE UNIVERSITY OF GRONINGEN

Leading in education, research and development for digital innovation, the TopDutch region is quickly becoming one of the smartest regions in the world. They collect and process astronomical amounts of data daily, not least in ASTRON - a global hub of expertise in radio astronomy. The top-100 University of Groningen united with Hanze and NHL Stenden universities of applied sciences as the University of the North, is world-renowned for their research centers focusing on Big Data, High Performance Computing and Deep Learning. These research centers work with global tech giants such as Google, Facebook, IBM, and also SME business partners to support business operations in the region.

The TopDutch region has also laid the foundations for some of the world's most exciting tech start-ups and scale-ups. Take, for example, HackerOne – recently ranked number 5 in Fast Company's Most Innovative Companies – which was born in Groningen and now has branches across the world. Or Catawiki, who was Europe's fastest-growing tech company when it scaled-up by 45000% in a year. The region is also home to Odyssey Hackathon, the world's largest blockchain, Al and emerging technologies hackathon, which has led to some of the most exciting solutions for future world products.

#### Got a data issue that needs solving?

Discover the Digital Innovation research networks in the industry proposition.

C Every day, I'm amazed by the amount of tech talent in the Northern Netherlands, I've worked in very many places - from across the US to across the globe - and the concentration and diversity here is very high. The people here love this region - with good reason! It's a fantastic place to live and work, and they're really proud of their city and culture. Their passion for this region makes them more likely to stay here than in other areas.

> Heather Devereaux Head of Marketing and Business Owner - Science at Slimmer Al



### 7. BEST CONNECTED GATEWAY TO EUROPE

A greenfield location in DHL's best connected country from where you can access 170 million European customers through a dense network of waterways, highways and railways, all for a relatively competitive cost? No, you're not asking too much. The TopDutch region is unique in the Netherlands in being very well connected yet relatively spacious. This means there are well-priced, large greenfield locations available, and direct access to major logistics centers such as the best cargo airport in the world, Schiphol Airport, the port of Rotterdam, as well as the local Groningen Seaports Port of Harlingen and Groningen Airport Eelde. Alongside this, doing business in the Netherlands is simple, being number 1 worldwide in terms of trade facilitation according to the United Nations, as well as giving the cash-flow advantage of the best VAT system in the EU in the opinion of Deloitte.

#### Ready to springboard into the European market?

Discover our whole logistics offer, and connect with our team of advisors who can help you find your place in TopDutch.

In the TopDutch region everything comes together. Greenfield locations, access to green energy, waterways, highways, airports and a lot of international fiber cables. It's the best gateway to Europe.

> Cas König CEO Groningen Seaports



### 8. BEST DIGITAL, ENERGY AND LOGISTIC INFRASTRUCTURES

As Google knows, the TopDutch region is the ideal location for internationally trading, energy- and data-intensive businesses, looking for a location in Europe. Why? The Netherlands, with TopDutch as the key starting point, has the most reliable power grid globally and optimal fiber connectivity in the EU. Added to that is the direct access to the largest offshore wind park in Europe, which is ideal for energy-intensive firms with a desire to improve sustainability. And their stunning hinterland also provides a large offering of greenfield locations and an ideal climate for cooling, in what is, elsewhere, a very densely populated country. Data centers, look no further.

The exceptional TopDutch infrastructure is not limited to digital companies, however. Those in the Energy field may be intrigued by the fact that the region will convert its extensive natural gas pipe network into a world-leading green hydrogen infrastructure, they are Hydrogen Capital of Europe after all!

And the TopDutch region is also investing in the physical infrastructure of the future: Green and digital mobility. It was recently announced they will be home to the European Test Center for Elon Musk's brainchild technology of Hyperloop transport, which will see the most innovative transport and mobility entrepreneurs finding a home in the TopDutch region.

### Want to know more about why TopDutch is a good place to be great?

Read why Google, Hardt Hyperloop and sustainable chemical companies Avantium and Photanol chose to expand in the Northern Netherlands. When we brought up Groningen we had an opportunity to start day one powered by 100% renewable energy. In this case wind. The talented workforce, the favorable economics, all of these came into play...

> **Jim Miller** Former Vice President of Worldwide Operations at Google



### **9. EXCELLENT EDUCATION, TOP TALENTS AND FLEXIBLE WORKFORCE**

With 75,000 students across the region, in some of the best institutes in the Netherlands and worldwide, TopDutch is developing some of the best fresh scientific and entrepreneurial minds. And good talent gets better with age, with their experienced workforce constantly developing their skills. A significant proportion are technologically and digitally skilled. Moreover, the extensive ecosystem of leading R&D facilities and transformative and integrative research programs are attracting the best international talent.

### Want to get a taste of the entrepreneurial thinking and scientific minds from TopDutch talents?

Check out their talent platform, that shines a light on some of the most inspiring stories from the region. Some of our favorites?

- Margryt Fennema and Louis Zantema, who are improving the lives of patients with chronic pain through their VR start-up Reducept
- Marleen Kamperman, the young professor who became inspired by nature to develop biomedical glues
- Bakschik Martirosian, who made the most of the entrepreneurial opportunities in the TopDutch region to achieve his dream of building an internationally exporting production company.

We are a university with a global mindset and reputation as well as a university which supports our regional ecosystems with international talent and fundamental research.

> **Prof. dr. Jouke de Vries** President of the Board of the University of Groningen



### 10. REGIONALLY COLLABORATIVE AND INTERNATIONALLY COMPETITIVE GREEN & DIGITAL ECOSYSTEM

One of the most refreshing aspects of this region is their business culture. Businesses, government and knowledge institutions all share a common focus and a collaborative culture; turning the region into one big, internationally competitive, green and digital ecosystem. Players in the key industries work with each other to develop sustainable solutions and smart tech applications for a green and digital future.

#### Thinking about starting your TopDutch adventure?

Discover more of the culture in our **international guide**. Or get a better insight into how the collaborative business culture works in different industries in the deep-dive stories:

- The DNA of TopDutch's Life Science and Health industry
- Sustainable relationships for sustainable chemistry
- The great Dutch cooperative: Pushing innovation in AgriFood

**C** The TopDutch approach to collaboration really sets us apart. Entrepreneurs, universities and governments work closely together to create a healthy, thriving environment. Our cross-over industries have formed a strong green and digital ecosystem.

Dina Boonstra Managing Director of the TopDutch Investment and Development Agency (NOM)



### **ABOVE ALL: SUPPORTING GOVERNMENT, EXCELLENT FISCAL CLIMATE AND SUPER-FAST BUSINESS DEVELOPMENT**

When it comes down to it, though, hard factors such as fiscal climate and business policies will always play a large role in choosing a location for your innovative company. The Netherlands, but even more so the TopDutch region, offers some of the most attractive business establishment procedures for new companies. And for those innovative companies accelerating Green Chemistry, the TopDutch regional government is willing to co-invest. Then once you've arrived at your decision to invest: TopDutch has the fastest business development in Europe. No wasted time waiting for permits or procedures!

#### Want to know what TopDutch can do for your company or client?

Browse the Why Invest page to discover all the most important benefits of investing in the region, or start a conversation with the TopDutch team to discuss a tailor-made location strategy.

The Dutch have a great history in entrepreneurial culture. That's not exclusive to our businesses, you'll also find that passion in our governmental organizations. In TopDutch, we know that there are challenges that come with relocation. But as a government we see it as our responsibility to support businesses to thrive: creating the best business climate for our companies.

> Sander de Rouwe Regional Minister of Economic Affairs for the Province of Friesland



## TOPDUTCH

# A good place to be great



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Want to find out more about what makes the TopDutch region a good place to be great, or view the web edition? Head over to our website www.topdutch.com



Are you interested in exploring what your business possibilities could be? Connect with Sander Oosterhof, our Foreign Direct Investment.

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