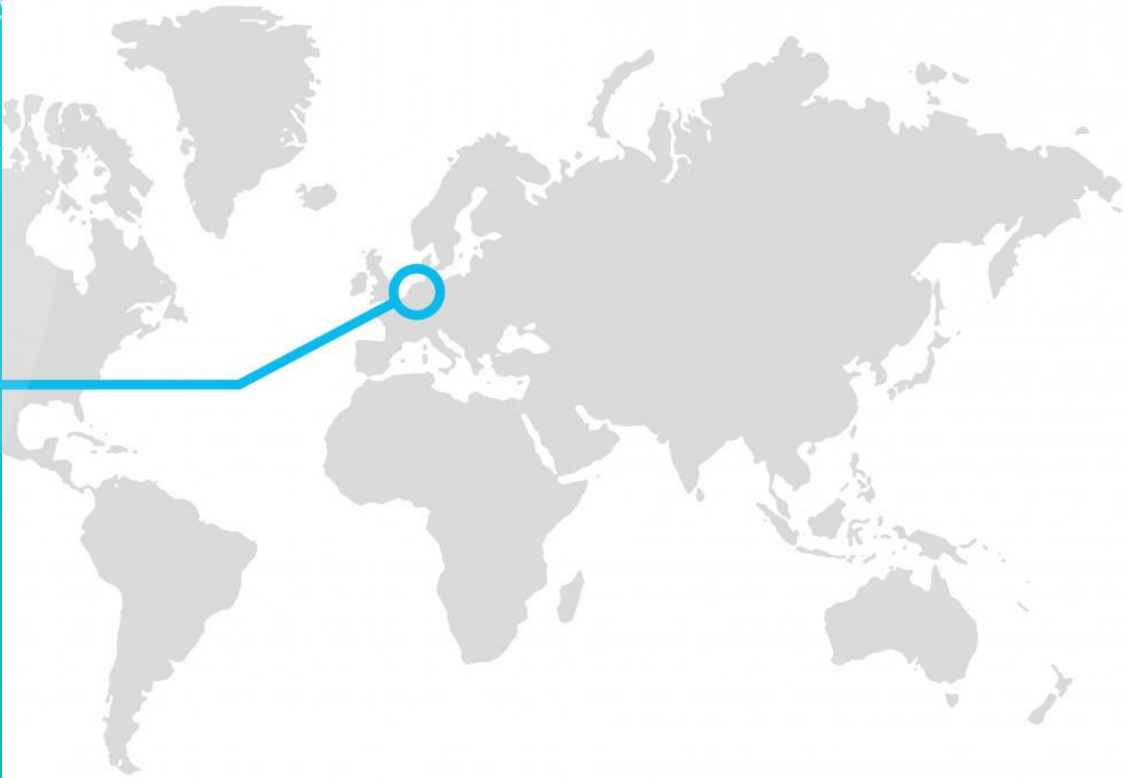


**TOP
DUTCH**

Naturally leading
the transition



GREEN CHEMISTRY



GREEN CHEMISTRY

In 1959, TopDutch discovered **Europe's largest natural gas field** right under their feet. Together with naturally large reserves of **sodium and natrium chloride and a flourishing agricultural hinterland**, it didn't take long before the TopDutch developed a mature chemical industry. Today's focus is fully on becoming the greenest chemical cluster in the world: fossil-free, CO2 negative, fuelled with green building blocks and closing the loop. United in **Chemport Europe**, the entire chemical ecosystem collaborates towards their shared vision and goals. **Here, we change the nature of chemistry.**

1.

**Complete
Ecosystem for
Green Chemistry**

2.

**Access to Green
Feedstock and
Green Energy**

3.

**The First Fossil-
free, Co2 Negative
and Circular
Chemical Cluster
in the World**

4.

**Hydrogen Capital
of Europe**

5.

**Knowledge
Development &
Talent**

An aerial photograph showing a large industrial chemical plant complex on the left, with various buildings, pipes, and storage tanks. To the right, a large body of water, possibly a bay or estuary, is visible. Several white wind turbines are positioned along a narrow strip of land or dike separating the plant from the water. The sky is clear and blue.

**TOP
DUTCH**
Naturally leading
the transition

1. COMPLETE ECOSYSTEM FOR GREEN CHEMISTRY



COMPLETE ECOSYSTEM

Home to Chemport Europe. Entrepreneurs, government and knowledge institutions collaborate in Chemport Europe. From feedstock to end-product; Chemport Europe is determined make chemistry green.

- Chemport Delfzijl is focused on intermediate chemicals.
- Chemport Emmen is focused on polymers and polymer applications.



COMPLETE ECOSYSTEM

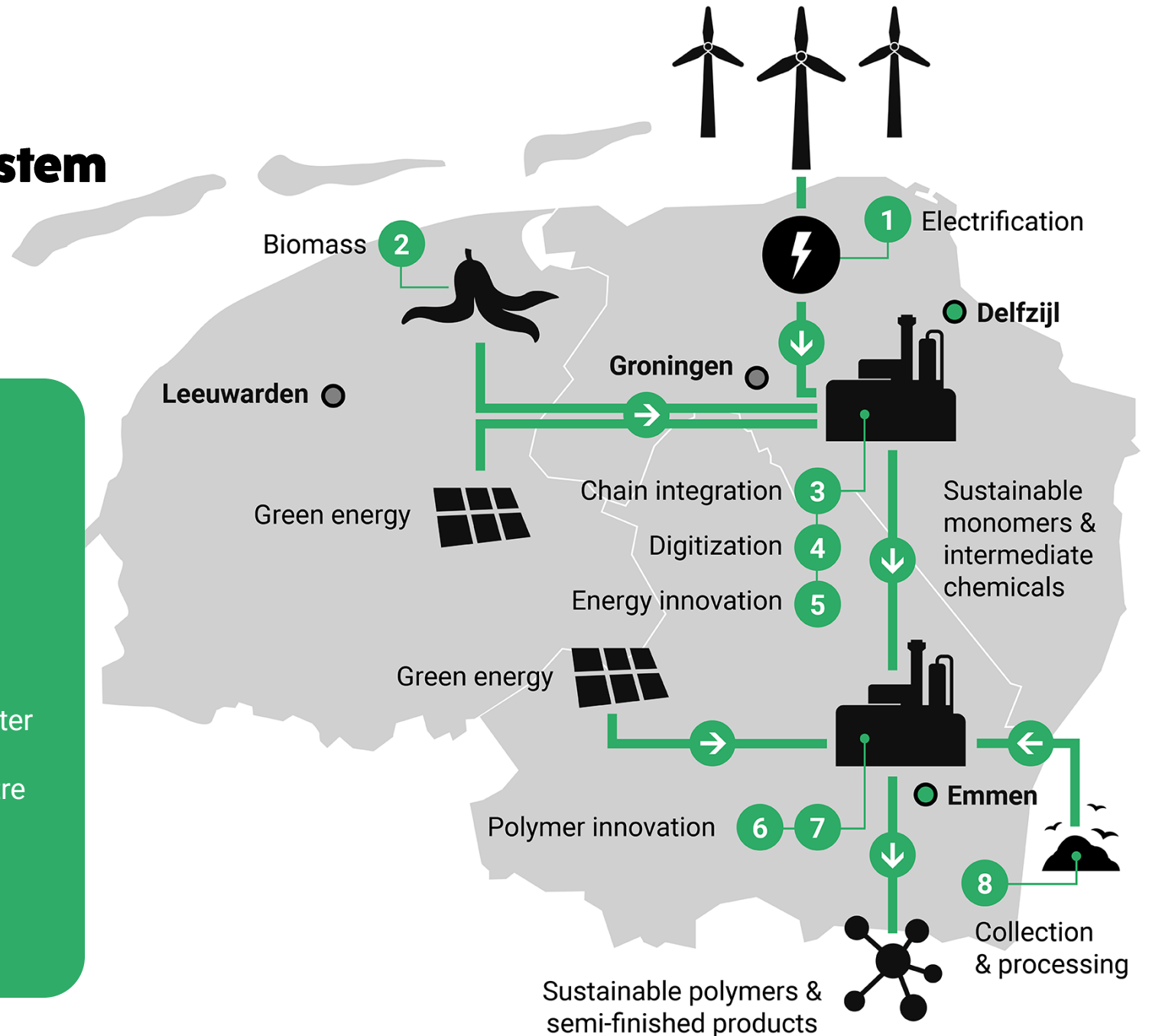
Home to Chemport Europe. Entrepreneurs, government and knowledge institutions collaborate in Chemport Europe. From feedstock to end-product; Chemport Europe is determined make chemistry green.

- Developing breakthrough technologies.
- A large knowledge cluster
- No petrochemical industry

A coherent and innovative R&D and production ecosystem

Related Research & Development

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. Kenniscentrum Recycling



2. ACCESS TO GREEN FEEDSTOCK AND GREEN ENERGY



GREEN FEEDSTOCK & ENERGY

Green feedstock & building blocks

- The TopDutch region offers direct access to hydrogen, carbon dioxide and basic chemicals like ethylene and propylene from our natural gas reserves.
- Access to regional reserve of sodium chloride. We produce intermediates in organic chemistry, such as chlorine and carbon chloride compounds
- The TopDutch region has a reserve of the purest magnesium chloride on the planet



GREEN FEEDSTOCK & ENERGY

Access to green energy

- Solar energy
- Wind energy
- Biomass energy
- Imported green energy

3. THE FIRST FOSSIL-FREE, CO₂ NEGATIVE AND CIRCULAR CHEMICAL CLUSTER IN THE WORLD



CARBON- NEGATIVE CLUSTER

Chemport Delfzijl will be the first fossil-free, CO₂ negative and circular chemical cluster in the world. We will succeed by:

- Using only green building blocks and therefore also be 100% fossil-free.
- Optimizing all processes.
- Reusing CO₂.
- Collaborating and investing together.



PLASTICS/ CIRCULAR

Chemport Europe is determined to close the plastic loop. The TopDutch region is leading the **New Plastics Economy**, by having a strong focus on:

- Becoming 100% circular.
- Making 100% green products.
- Designing plastic products that can (easily) be recycled.
- Developing technologies and establishing systems to collect, recapture, filter and recycle all types of plastics.

A man in a yellow safety jacket and helmet is using a walkie-talkie. He is standing in an industrial setting with pipes and machinery in the background. The jacket has a logo on the sleeve and the name 'gas' on the chest. The helmet has 'Fehrman' written on it.

**TOP
DUTCH**
Naturally leading
the transition

4. HYDROGEN CAPITAL OF EUROPE



HYDROGEN CAPITAL

We will be the first region to proactively conclude natural gas extraction, incentivizing a transition to green hydrogen.

- By 2025, the TopDutch region will be home to 169km of hydrogen pipelines. These will connect to a further 6,800km of pipelines Europe by 2030.
- We will continue to power Europe's economy with 100 PJ of hydrogen p.a. by fulfilling a \$10 billion joint investment agenda by 2030.

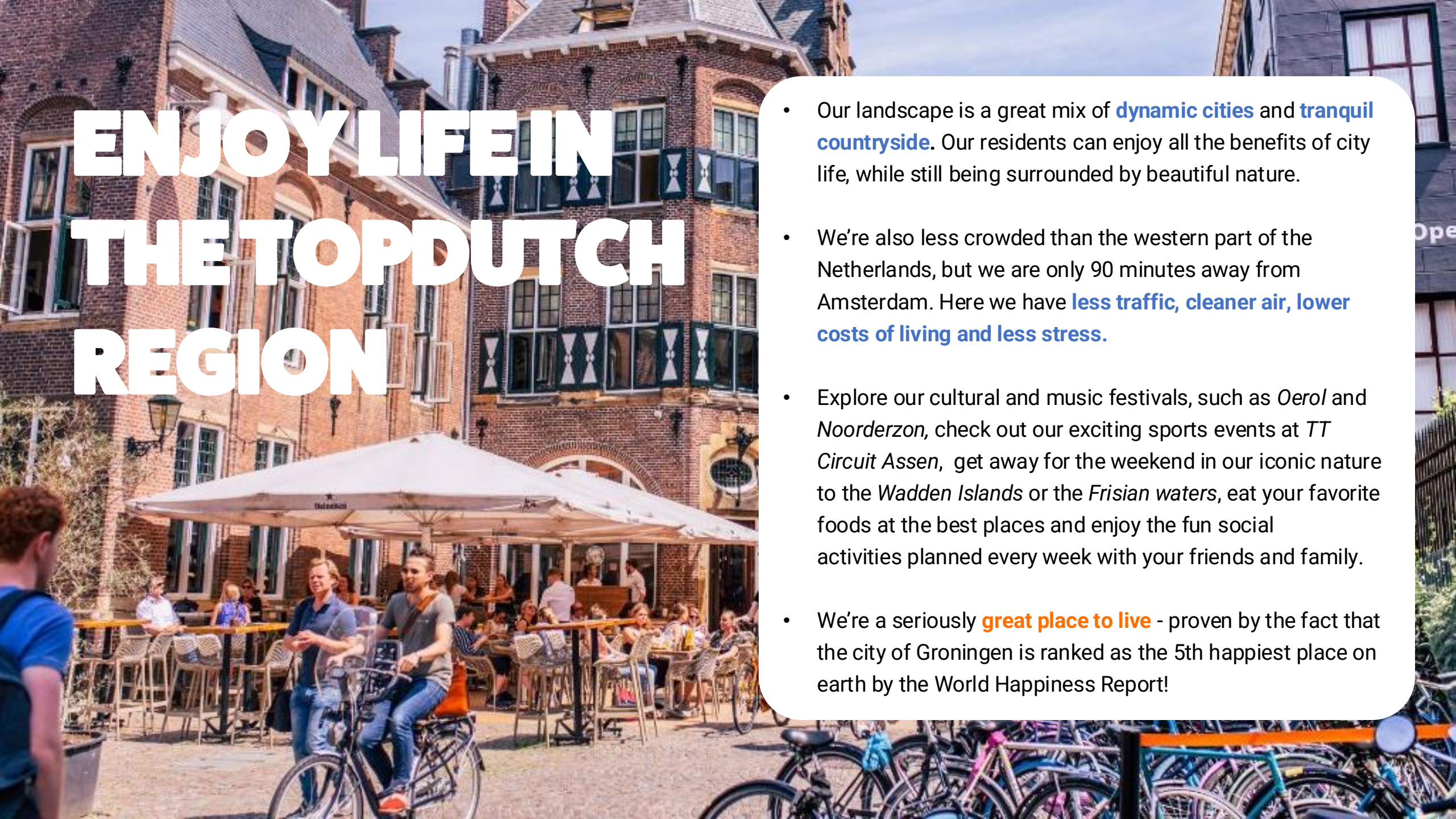
5. KNOWLEDGE DEVELOPMENT & TALENT



KNOWLEDGE & TALENT

We have a **highly skilled** and well trained workforce that knows green chemistry and offer leading **research and development facilities**.

- The largest chemistry faculty in the Netherlands belongs to the University of Groningen.
- The TopDutch region is home to an extensive ecosystem of leading R&D facilities, stretching the innovation and applications of our knowledge far beyond the chemical industry.



ENJOY LIFE IN THE TOP DUTCH REGION

- Our landscape is a great mix of **dynamic cities** and **tranquil countryside**. Our residents can enjoy all the benefits of city life, while still being surrounded by beautiful nature.
- We're also less crowded than the western part of the Netherlands, but we are only 90 minutes away from Amsterdam. Here we have **less traffic, cleaner air, lower costs of living and less stress**.
- Explore our cultural and music festivals, such as *Oerol* and *Noorderzon*, check out our exciting sports events at *TT Circuit Assen*, get away for the weekend in our iconic nature to the *Wadden Islands* or the *Frisian waters*, eat your favorite foods at the best places and enjoy the fun social activities planned every week with your friends and family.
- We're a seriously **great place to live** - proven by the fact that the city of Groningen is ranked as the 5th happiest place on earth by the World Happiness Report!



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

Wim A.B.

Energy expert

ab@nom.nl

+31 6 270 871 72

JOIN TOPDUTCH

Want to find out more **how the TopDutch**
region is naturally leading the transition?
Head over to our website: www.topdutch.com

TOPDUTCH.com

Naturally leading the transition