



Netherlands

Low Country, high innovator

The Netherlands made a strong showing in a number of categories and earned a top spot among as an Innovation Champion.

The startup sector has continued to expand, pushing the country’s annual new business entry rate to 5.34 per 1,000 people. The Netherlands also has six unicorns.

The Dutch workforce is also highly skilled, with more than 47 percent in that category, and roughly a fifth of all Dutch graduates having earned degrees in STEM fields.

The Dutch government supports developing self-driving vehicles well beyond what most other countries have done, citing the potential for tech to reduce traffic and improve safety. Government leaders opened public roads to test self-driving vehicles without a driver present, as long as a human can take control remotely.

This year, Dutch startup Amber hopes to make Eindhoven the first city with a large-scale deployment of self-driving vehicles. The company was founded by students at the Eindhoven University of Technology and also has plans to launch a B2B ridesharing service there using self-driving vehicles by mid-2018.

Sources: (Netherlands Government) (Netherlands Government) (TechCrunch) (VentureBeat)

WHAT DID WE DO RIGHT?

The Netherlands allows testing of self-driving vehicles and opened a new testing facility for self-driving cars as part of a collaboration with the Technical University in Delft. The country also offers average broadband speeds that far excel those of most other countries, including av-

erage fixed internet speeds of 17.4 mbps. The short-term rental market is also flourishing in an environment with few federal restrictions.

WHAT CAN WE DO BETTER NEXT YEAR?

The Netherlands can eliminate barriers — such as expensive certificates requirements — to recreational drone use. Current policies only support commercial drone operations. Lift taxes on streaming services and remove licensing requirements and other limits on the growth of the ridesharing industry.

Diversity	B
Freedom	A+
Broadband	A-
Human Capital	B
Tax Friendliness	C
R&D Investment	B+
Entrepreneurial Activity	B+
Drones	C
Ridesharing	C
Short-Term Rentals	B
Self-Driving Vehicles	A
Environment	A-



R&D Investment

The Netherlands outspends many other countries on research and development activities, devoting 2.01 percent of its GDP to R&D.



Short-Term Rentals

The number of people who booked a short-term rental in Amsterdam grew by 125 percent between 2015 and 2016. Despite growth in that city, the sharing economy platform still faces some restrictions there and in other localities.



Broadband

Impressive average internet speeds place the Netherlands above most other countries on the list, earning high marks despite a relatively high monthly average internet cost of \$20.83.



Freedom

The Netherlands offers some of the highest levels of personal and political freedom in the world.

AMSTERDAM

Named the European Capital of Innovation in 2016 by the European Commission, Amsterdam has developed cutting-edge solutions, from self-driving vehicles to the Internet of Things, for a wide range of city-wide problems.

With water covering 50 percent of the cityscape, a self-driving boat system known as the ROBOAT aims to bring a fully automated fleet of boats roaming the canals of Amsterdam.

The project was developed with an eye to solving delivery and transportation issues in the capital city. The boats are designed to deliver packages and people and will eventually function as infrastructure to create on-demand, temporary bridges to bring people from one side of a canal to another.

In and out of city waterways, The Things Network project, launched in 2015, will connect the city and its citizens via a low-bandwidth web of sensors throughout Amsterdam. A pilot project to test the network placed sensors in boats around the city. If the vessel began taking on water, the sensor notified a boat maintenance company to repair the leak.

The network's supporters believe the project's technology could also be applied to the city sanitation systems and as a bicycle location network.

Sources: [\(Europa\)](#) [\(De Zee\)](#) [\(Forbes\)](#) [\(The Next Web\)](#) [\(The Verge\)](#)



Amsterdam was named the European Capital of Innovation in 2016 and took the title to heart with technological solutions to citywide problems. The Things Network, a project to install low-bandwidth sensors around the city, was put to the test in a pilot program that connected to boat sensors and notified a repair company if the vessel began taking on water.