

INNOVATION



LEADER

# Spain

## *Revvng up for disruptive tech on Spanish roads*

Spain’s legislative and regulatory track record on encouraging emerging tech is mixed. Drone rules are relatively flexible for recreational users, but commercial drone operators face strict restrictions due to a 2014 law that imposes licensing and flight requirements on professional drone operations out of misguided fears about security risks. Still, hopes are high in Spain that these restrictions will soon be relaxed.

Short-term rentals can technically operate free from national restrictions, but in practice, regional tourism laws make it difficult. In cities like Barcelona, authorities have reportedly dispatched inspectors to find unauthorized short-term rentals and fine their owners as much as €60,000.

Spain is among Europe’s leaders in developing self-driving vehicle technology. In 2015, after signing the Declaration of Amsterdam — a pledge to allow unencumbered testing of self-driving vehicles — in 2015, Spain has continued to support development of self-driving tech. As early as 2012, a convoy of self-driving vehicles was tested on Spanish roads as part of a multinational research project funded in part by the European Commission.

Spain’s corporate tax rate of 25 percent is lower than several other European countries, and on the lower end of rates in the Scorecard. The country levies taxes on streaming services, however, which notches down its overall grade in Tax Friendliness.

Sources: (El Pais) (Boe) (Lexology) (BBC) (The Guardian)

## WHAT DID WE DO RIGHT?

Spain welcomes self-driving vehicles by allowing companies to test without undue government intrusion.

## WHAT CAN WE DO BETTER NEXT YEAR?

Spain can roll back licensing requirements and the caps on the number of ridesharing licenses issued. The country should also relax tourism laws that put limitations on short-term rental operations and lift regulations that restrict drone use.

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



### Entrepreneurial Activity

An annual new business entry rate of nearly 3 per 1,000 people is on par with most other countries, and the Spanish startup sector has produced one unicorn.



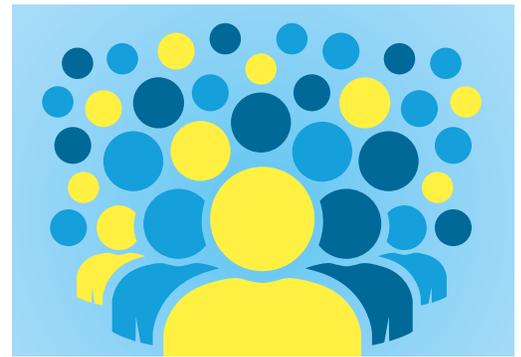
### Broadband

With fiber optic cables installed in the country more than two decades ago, Spain's average internet speeds are 14.7 mbps and cost relatively little per month at \$19.57, on aver-



### Human Capital

More than a quarter of all degrees awarded in Spain come from STEM programs, and more than a third of its workforce is in highly-skilled jobs.



### Diversity

Immigrants constitute more than 12 percent of Spain's population, and the country has one of the higher scores for gender parity.

## BARCELONA

Barcelona is home to a host of creative efforts to cultivate innovation in a range of sectors.

FC Barcelona, the city's soccer team, unveiled the Barça Innovation Hub, a project to spark collaboration between brands, researchers, athletes and others to foster new, sport-centric innovation.

In the former industrial district of Poble nou, fiber optic cables installed before Barcelona hosted the Olympics in 1992, as well as continued improvements after the games transformed the neighborhood into a breeding ground for new ideas.

Then in 2000, the neighborhood hosted 22@District, a government plan to revamp the industrial center as a hub for technology in the Catalan capital. The program clusters businesses in information and communications technology, media, biomedical, energy and design industries to bolster cross-pollination of ideas. Within the district, the 22@ Staying in Company program pairs local university students with companies to keep talent within the center.

Amazon also has plans to open a research and development center in the district, and the company announced that it expects to hire more than 100 scientists and engineers to staff the facility.

Sources: (Science Business) (Barça Innovation Hub) (Industry Drive)



Building on infrastructure groundwork laid ahead of the 1992 Olympics, Barcelona has launched a neighborhood dedicated to fostering innovation. Housed in the former industrial district of Poble nou, the 22@ neighborhood now houses clusters of businesses in a range of fields, from biomedical and media to energy and design.