



# SCIENCE, RESEARCH AND INNOVATION PERFORMANCE THE EU (SRIP) OF **2024 REPORT**

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# **R&D** SPENDING

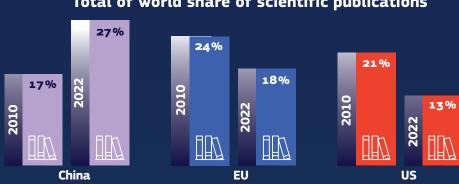
Although the EU's R&D investments have increased over the past two decades. its main competitors have shown stronger growth.



# SCIENTIFIC PERFORMANCE AND EXCELLENCE

#### SCIENTIFIC PERFORMANCE

The EU has a strong research base and ranks second globally in share of scientific publications.



#### Total of world share of scientific publications

#### SCIENTIFIC EXCELLENCE

The EU's ranking has improved relative to its competitors over the past 2 decades.

Publications that belong to the top 1% of the most-cited publications worldwide



## **HIGH-PERFORMING UNIVERSITIES**

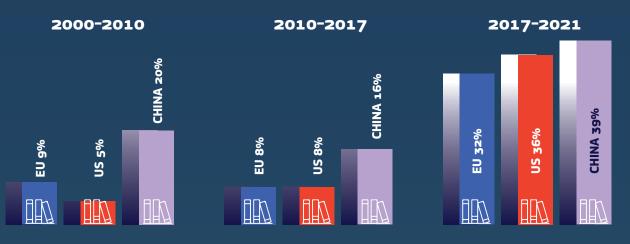
#### THE EU IS A STRONG ACADEMIC PERFORMER

The number of universities in the top 200 of the 2024 QS World Ranking.



# PUBLICATIONS ABOUT AI APPLICATIONS IN SCIENCE

The EU's performance has increased over the past 2 decades, but it lags behind its main competitors



### FINANCING GAP

The US and China finance more start-ups than the EU.



The US (724) has 8 times, and China 3 times (287) more unicorns than the EU (89)\* \*as at November 2023

# The innovation divide



A persistent innovation divide within and between EU Member States.

Stronger performers are clustered in Northern

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and Central Europe, weaker ones in Southern and Eastern Europe.

# **R&I COLLABORATION IN THE EU**

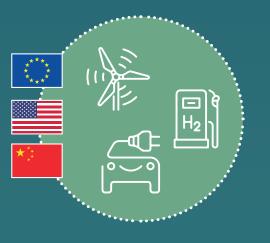
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The EU FP for R&I went from supporting about 20000 international collaborations through its 2002–2006 edition (FP6) to more than 35000 ..... through its 2014-2020 edition (Horizon 2020).



# **TECHNOLOGICAL GAP**

The EU is a world leader in green power and clean energy technology.



The EU lags behind the US and China in development of complex technologies like AI, IoT, cybersecurity and cloud computing.



### **R&D** DISTRIBUTION BY SECTOR

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Europe leads the US in R&D spending in the automotive sector: **33%** of total business R&D vs **6%** 



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The US leads the EU in R&D spending in health (26% vs 20%)





# THE GENDER GAP IN STEM SUBJECT GRADUATES

In the EU, the number of women and men graduating in Science, Technology, Engineering and Mathematics subjects increased between 2014-2021.



For men: From 24 to 29 graduates per 1000 population between 2014-2021 (2.4% to 2.9%)

For women: From 12 to 15 graduates per 1000 population between 2014-2021 (1.2% to 1.5%)

# WORLD SHARE OF RESEARCHERS

The size of the EU's research workforce is second only to China's



(from 2020, bas

# **INVESTMENT IN DEFENCE**

The EU invested EUR 61 bn on defence in 2022, with a focus on the later stages of technological development.

