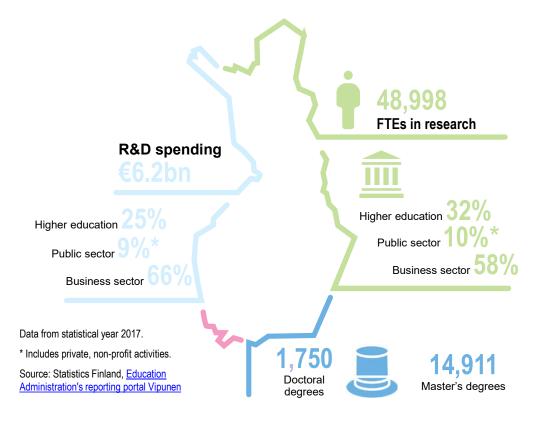


Illustrative example from Finland:
The embedding challenge – the
quest for the perfect fit between
the overall national STI strategy
and the strategic STI
internationalisation dimension

Hanna Vuorinen, Ministry of Economic Affairs and Employment Tiina Vihma-Purovaara, Ministry of Education, Science and Culture

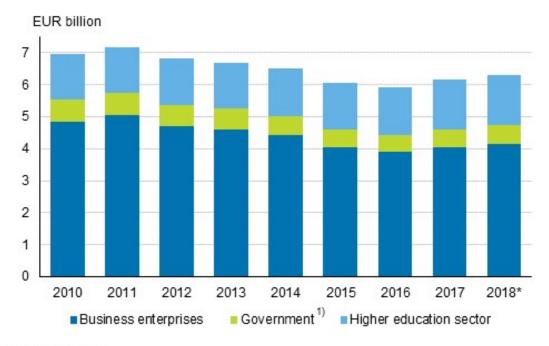
MINISTRY OF EDUCATION AND CULTURE

R&D in Finland



The GDP share of R&D expenditure in 2017 was 2.76 per cent, in other words in practice on level with 2016. Research and development expenditure is estimated to grow in 2018 by about EUR 140 million and the GDP share is estimated to be 2.70 per cent.

Research and development expenditure by sector in 2010 to 2018*



- * Preliminary data
- 1) Incl. private non-profit sector



Home All levels and sectors Pre-primary and basic education General upper secondary education Vocational education and training University of applied sciences (UAS) education University education

Population, educational and vocational structures

APPLICANTS AND SELECTED CANDIDATES

HUMAN RESOURCES IN RESEARCH AND DEVELOPMENT

RESEARCH AND DEVELOPMENT

PUBLICATIONS

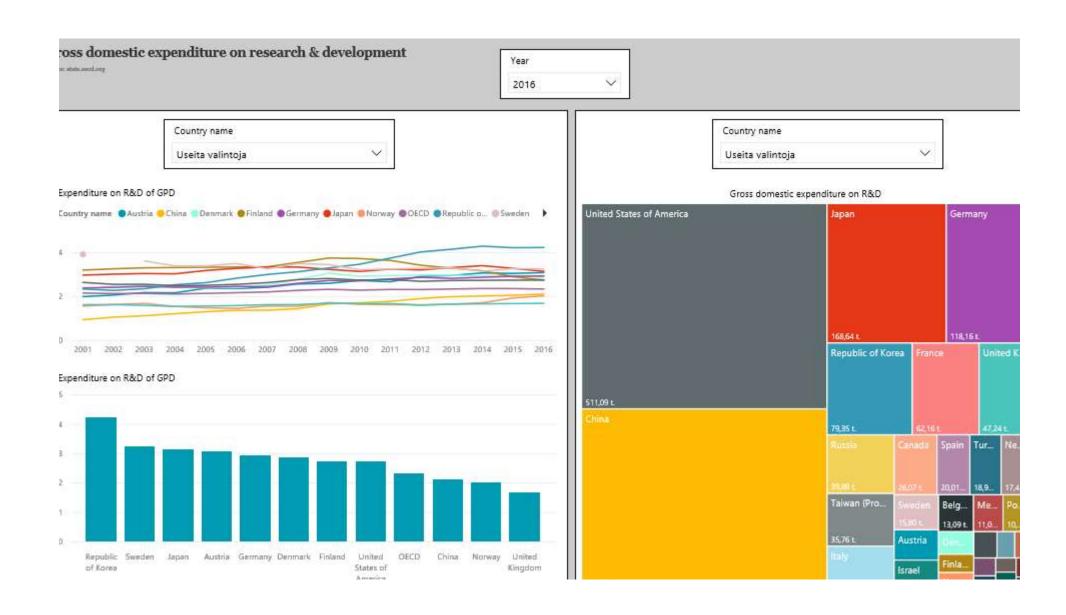
Education Statistics Finland > Higher education and r&d activity

Higher education and r&d activity

Higher education and r&d activity gathers together indicators and reports about the higher education system and research and development in higher education institutions and government research institutes.

Higher education and r&d activity contains reports about universities, universities of applied sciences and government research institutes.





Government programme

II SV en

Agreement reached on the Government Programme

Inclusive and competent Finland – a socially, economically and ecologically sustainable society

Sovernment Communications Department ② 3.6.2019 15.0 PRESS RELEASE 283/2019

Government Communications Department ② 3.6.2019 10.47 PRESS RELEASE 282







Climate change, globalisation, urbanisation, the ageing of the population and technological development may be transforming Finland and the world faster than ever before. This transformation offers great opportunities for the development of our country, but it also creates insecurity and concerns about what lies ahead. To face this transformation, we need policy measures that offer people a sense of security and hope for

a better future.

The aim of the first Government of the new decade is a socially, economically and ecologically sustainable Finland by 2030. The Nordic welfare state and its key pillars, income security, well-functioning health and social services and solid education as well as high expertise create a robust and just platform for the work on reforms.







Policies on promoting internationality in Finnish higher education, research and innovation

Objectives

4% RTI of GDP 50% higher educated young people Renewal and internationalisation of HE, research and businesses

Improving the quality and impact of research and RDI funding Attractive education, research, experimentation and innovation environments

Dynamic markets and higher-quality, more productive public services

Methods

Vision2030 for HE and research

New sources of value creation and disruptive innovations

Utilising knowledge and research Networks, ecosystems and new operating methods

Accelerating the demand for innovations

Tools and resources

Education all levels, lifelong learning

Research by HEIs, RPOs Research and innovation funding and programmes

Strategic programmes

Flagships

Horizon
2020 and P
Horizon ec

os Europe

Promoting F ecosystems N

Team Innovative public Network, incl. TFK

public procurement Innovation-friendly regulation

Vision for Higher Education and Research 2030

Proposal for Finland: Finland 100+





EDUCATION AND LEARNING, KNOWLEDGE, SCIENCE AND TECHNOLOGY FOR THE BENEFIT OF PEOPLE AND SOCIETY

Over 50% of all young people complete a higher education degree

Development of higher education and expertise in different life situations

4% of GDP allocated to research and development: new creative power of science, sustainable growth, more wellbeing



INNOVATIVE UNIVERSITIES AND UNIVERSITIES OF ENABLING STEERING, **APPLIED SCIENCES**

More pre-emptive and able to react

Strong internationally attractive knowledge clusters

Actively involved in the world's most interesting networks

Open, international and globally responsible

Robust RDI activities and versatile higher education as engines for change in the economic structure and society

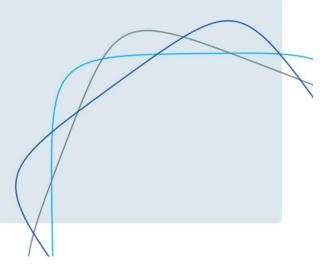
The world's most competent labour force brings a competitive edge and promotes wellbeing

Ethical and socially responsible



RESOURCES AND STRUCTURES

Creativity, dynamics and potential for action!



Policies on promoting internationality in Finnish higher education and research

Policies on promoting internationality in Finnish higher education and research





- 1. Ongoing: Flagship programme
- 2. Ongoing: reforms in the higher education sector (VISION2030)
- 3. Ongoing: actions taken
- 4. Ongoing: Talent Boost -programme
- Ongoing: International Forum for higher education and research established and working
- Ongoing: Team Finland Knowledge network in Beijing, Gulf region (Abu Dhabi), Latin America (Buenos Aires and Sao Paolo), Moscow, New Delhi SEA (Singapore), Southern Africa and (Pretoria)Washington. + Team Finland innovation counsellors
- 7. Starting in 8/2019

Flagships

THE NORTHERN FLEET OF EXCELLENT SCIENCE, SUCCESSFUL COLLABORATION AND SOLUTIONS FOR TOMORROW

The Finnish Flagship Programme provides a new, unique way of doing R&D&I in Finland. Substantial, long-term funding is granted for **six large ecosystems**, **Flagships**, each operating in their specific field.

The Programme promotes active collaboration between research, business and society in the field of each Flagship. This supports future knowledge and know-how, and helps to create solutions to societal challenges, develop new business opportunities, and contribute to sustainable growth.



FLAGSHIPS – High-impact competence clusters

- Six flagships selected
- Each flagship has a long-term plan for eight years
- Flagship term: 2019–2026
- Collaborators include large
 corporations, SMEs and startups, educational institutions, hospitals and other public organisations

8 years of activity within the flagships areas, with an estimated total worth of 9 billion euros.

Most of this is financed by business companies.





FLAGSHIP PROGRAMME



FLAGSHIP HOST ORGANISATIONS

- 6Genesis 6G-Enabled Wireless Smart Society & Ecosystem | University of Oulu
- FCAI Finnish Centre for Artificial Intelligence | Aalto University, University of Helsinki & VTT
- FinnCERES Competence Centre for the Materials Bioeconomy | Aalto University & VTT
- iCAN Digital Precision Cancer Medicine Platform | University of Helsinki & Helsinki University Hospital
- INVEST Inequalities, Interventions and New Welfare State | University of Turku & National Institute for Health and Welfare
- PREIN Photonics Research and Innovation | University of Tampere, Aalto University, VTT & University of Eastern Finland





More information:

Hanna.Vuorinen@tem.fi
Tiina.Vihma-Purovaara@minedu.fi

MINISTRY OF EDUCATION AND CULTURE