Aalto University

Shaping a sustainable future.

Aalto-yliopisto Aalto-universitetet Aalto University llkka Niemelä President





Universal and National Mission

A societally embedded and innovative research university for a better world.

A national mission to strengthen Finland's innovative capacity through first-class research, art and education.





Aalto after 10 years

- We have successfully brought together science, art, technology, and business to become a forerunner in our key areas
- Our campus has rapidly grown into a world-class collaboration hub
- We have transformed into one of Europe's most international universities





Role of Universities of Technology and National Economy: Case of Finland

In a country such as Finland, universities of technology are major engines of the productivity of labour, economic growth and, thereby, material well-being of humans.

•Economic growth requires that either we work more, or that the work we do is more productive.

 In Finland, economic growth was until the 1960s driven partly by the growing amount of labour carried out in Finland.

- Since the 1960s, economic growth in Finland has been driven almost exclusively ٠ by increases in the productivity of labour.
- Hours worked per capita have continued to decrease. ٠
- With the aging population, also in the future economic growth will be driven • primarily by increasing productivity.



Role of Universities (of Technology) and National Economy: Case of Finland

- Productivity during 1865-2015 in Finland ٠
- 67 % of the increases in the productivity of labour were based on new ideas, innovations and ٠ new technology
- 29 % was based on human capital (to be cultivated by education striving for increased ٠ productivity)
- Less than 5% was based on fixed capital (production infrastructure) ٠
- Ergo: Our economic and material wellbeing depends on the engines of new • technologies, innovations and new ideas. These are nurtured at the universities of technology.
- **BUT NOW** not just any growth will do. ٠
- We are facing an extensive sustainability crisis. •
- We need sustainable growth. This is the challenge we must meet.



Aalto University strategy 2021-



Excellence in key research areas



Aalto-universitetet Aalto University **THE:** Most international universities in the world 40 **QS:** Top 50 under 50 (young universities) 9 **Leiden:** University-industry collaboration 21



The Aalto Way of Working

attracts growing international recognition.

•In 2014, a report commissioned by MIT identified the Aalto University E&I ecosystem as one of the five emerging world leaders.

•In 2017, a report by JRC portrayed the Aalto-driven Espoo E&I ecosystem as a possible role model for Europe.

•In 2019, a study by EUA highlighted Aalto University as an example of the role of universities in pioneering regional innovation ecosystems.

•In 2021, a JRC report on the innovation impact of universities portrayed Aalto University as an example of a novel, innovative university.





- Open and low-hierarchy co-creation with external partners in research, art, education and impact.
- Multidisciplinary, academically ambitious approach to relevance-driven questions.
- Putting **students in focus** – trusting students and empowering
- them to take a central role in the university community and beyond.



Advancing entrepreneurial mindset

- We foster an entrepreneurial mindset across the university.
- We want to inspire our students to think and learn like an entrepreneur by integrating entrepreneurial courses into all fields of study.
- Support student-driven activities by providing spaces and funding.
- In 2021, Aalto University was the third most active organisation in Finland to file patent applications





Top 10 Institutions in Europe for deep tech funding for spinouts (2021)

University of Oxford	1.8 bn €
Mainz Universität	1.3 bn €
Technische Universität München	1.3 bn €
University of Dundee	610 M€
University of Cambridge	449 M€
Aalto University	283 M€
Commissariat a l'energie Atomique, CEA	237 M€
ETH Zürich	228 M€
Zürich Universität	160 M€
• VTT	
VII	151 M€

Source: NewCo Helsinki, helsinki.dealroom.co/lists







Strategic corporate partners

With our strategic corporate partners, we strive for a sustainable future by investing in mutually beneficial, long-term collaboration in research, education and innovation.

Shaping a sustainable future. (f (in) (in)

aalto.fi



Aalto-yliopisto Aalto-universitetet Aalto University