



Assistant or Associate Professor, Sustainable Large- Scale Implementation of Wind and Solar Power (tenure track)

**Department of Energy and
Mechanical Engineering**



Aalto University



Aalto University

Aalto University is a multidisciplinary community of bold thinkers where science and art meet technology and business.

Aalto University is a university where research, art and education are promoted hand in hand. We are committed to **identifying and solving grand societal challenges** and building an innovative future.

With high-quality research we aim at creating significant impact on the international scientific community, industry and business, as well as the society at large. Disciplinary excellence is combined with **multidisciplinary** activities, engaging both students and the local innovation ecosystem.

Aalto has over 13 000 students and **six schools** with more than 400 professors. We are an international community: more than 45% of our academic personnel have an international background.

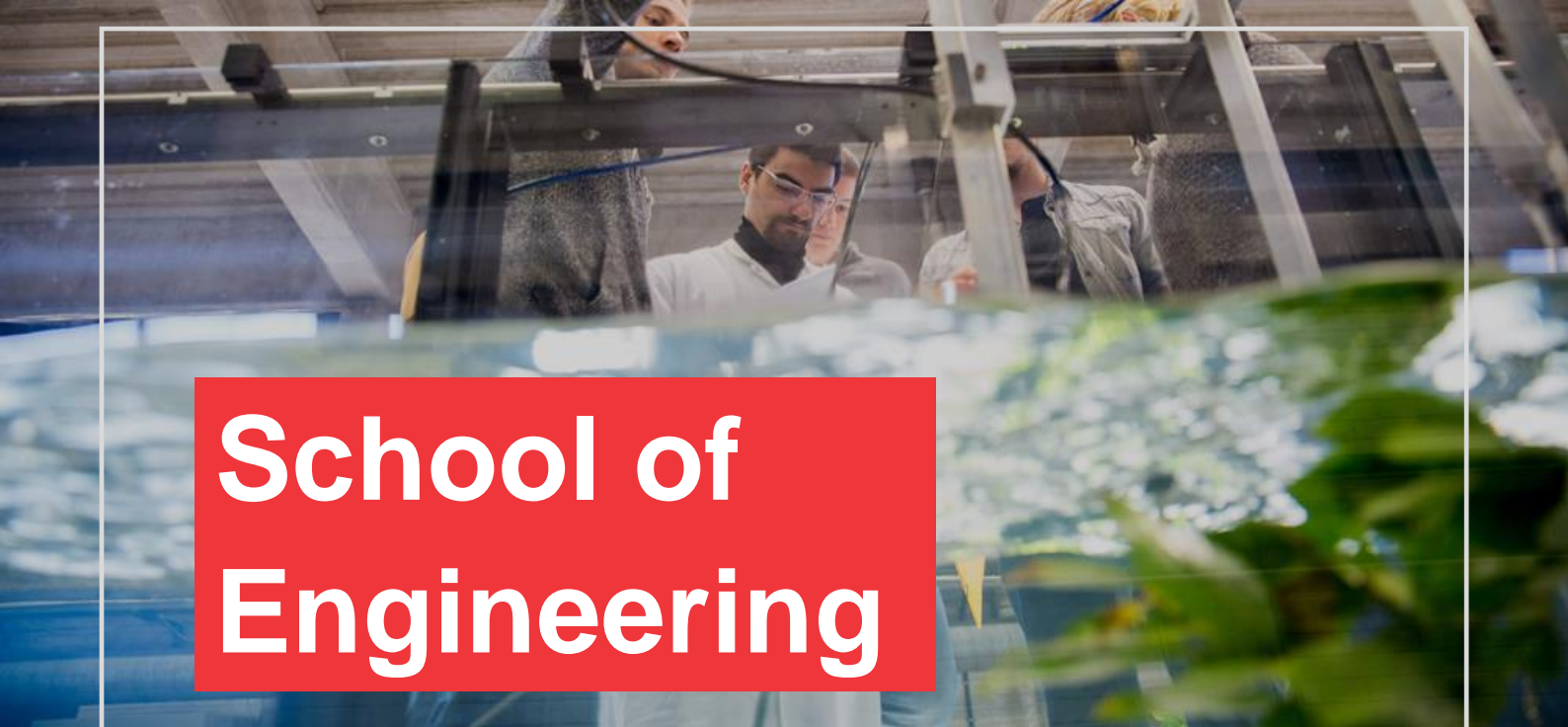
Aalto University was **founded in 2010** as three leading Finnish universities, Helsinki University of Technology, the Helsinki School of Economics and the University of Art and Design Helsinki, were merged. Our campuses are located in Espoo and Helsinki, Finland.

The University campus in Espoo is developing into a unique, open innovation hub and a center of collaboration that attracts partners from all around the world. It encourages sharing of ideas, inter-disciplinary encounters, creativity, growth and entrepreneurship. The core of the campus will be a vibrant city with versatile services and attractive places to meet.



Aalto University

More info at
aalto.fi



School of Engineering

Building a sustainable society

At the School of Engineering, sustainable development is a central part of research, education and impact. The focus areas of the research are multidisciplinary energy technologies, mechanics and materials, sustainable built environment, marine and Arctic technology, and system design and production. International top-level research is supported by an excellent infrastructure.

Our strengths are solution-oriented systems expertise and a tradition of experimental research, social interaction and effectiveness, and technical expertise.


We formulate new information and technological concepts that are verified through experimentation and analysis, and we promote and demonstrate enabling technologies for industry and the built environment.

The School of Engineering has three departments: the Department of Mechanical Engineering, Department of Civil Engineering and Department of Built Environment. Our multidisciplinary and ambitious community has 580 employees, 70 professors and 140 full-time doctoral researchers, and 3,300 students. More information at eng.aalto.fi



Aalto University
School of Engineering

More info at
eng.aalto.fi



Department of Energy and Mechanical Engineering

About our Department

Aalto University Department of Energy and Mechanical Engineering is a community of around 300 staff members – including 30 tenure track professors – assembled to research, teach, create, and develop solutions for society's needs. Key research areas include marine and arctic technology; energy technologies and systems; mechanical systems and mechatronics; and materials, manufacturing, and product development. We have strong links to industry, creating lasting impact in both business and society. (See <https://www.aalto.fi/en/departement-of-energy-and-mechanical-engineering>)

About our Research Group

The position will be filled in the Energy Conversion and Systems research group of the Department of Energy and Mechanical Engineering. <https://www.aalto.fi/en/departement-of-energy-and-mechanical-engineering/energy-conversion-and-systems> .

The group works on energy conversion technologies and energy systems research with focus on renewable energy, carbon neutrality and low environmental impact of energy technologies. We have an active team of 10 Tenure Track professors (will increase with this position to 11 by 2025), 4 Professors of Practice, 4 Lecturers, 19 Post-Docs, and more than 50 doctoral students focusing on various applications in energy conversion, including P2X2P applications, combustion applications, CCUS solutions, HVAC

energy storage, sustainable and carbon free systems, optimization, energy systems and markets and advanced CFD methods with topics including clean combustion and multiphase flows. The Energy Conversion and Systems Research Group collaborates extensively with industrial and academic partners in research projects and participates in many international collaboration projects, see some examples below.

<https://www.aalto.fi/en/news/joint-project-seeks-low-emission-industrial-solutions> ,
<https://www.aalto.fi/en/news/bjorn-savens-donation-to-aalto-university-makes-a-significant-contribution-to-hydrogen>
<https://circularfuels.eu/>

The Energy Conversion and Systems research group has an active role in offering several courses in energy engineering. Everyone in the group is participating both in teaching and in research. The research group is in charge of the Aalto wide Master's Programme Advanced Energy Solutions and an active partner Environmental Pathways for Sustainable Energy Systems Master's programs and Nordic5Tech's Innovative Sustainable Energy Engineering Master's Program. As a member of our team, you will also be an important member of our teaching community. <https://www.aalto.fi/en/study-options/masters-programme-in-advanced-energy-solutions-sustainable-energy-conversion> .

More info at
eme.aalto.fi



Applying

Assistant or Associate Professor, Sustainable Large-Scale Implementation of Wind and Solar Power

We are looking for applicants with We offer

- A positive, solution based “We can engineer it!” attitude.
- A doctorate in the scientific area of **energy engineering**, with focus on the sustainable **integration of renewable energy technologies into society and energy system** with one, or more, of the following fields: **land-use analysis, large-scale data processing, multi-criteria optimisation, geography, impact on nature including ecology, environmental impact assessment, LCA-analysis, circularity and sustainability analysis.**
- As possible tools, we value experience in modeling, simulation and optimization, or the experience in GIScience- or AI-based tools in your research.
- A proven ability and passion to carry out high-quality research and publish in top venues of the discipline.
- Potential to attract research funding and build up your own research team.
- An interest and capability to collaborate with industry.
- Already existing (or a proven ability to build) high-level multidisciplinary (including, e.g., engineering-ecology-social sciences-economics) international collaboration network.
- Motivation to teach at undergraduate and/or graduate levels.
- an extremely active and motivated research group and inspiring working environment
- a competitive benefits package including occupational healthcare
- start-up funding and grant writing support to help you establish your own team
- excellent multi-disciplinary collaboration possibilities within the university
- great future in one of the happiest, cleanest and safest countries in the world, with comprehensive social security system and free education up to university level

How to apply?

Apply and get more information:

[Job advertisement](#)

Application deadline

20 May 2025

For further questions, you may contact

PROFESSOR MIKA JÄRVINEN

E-mail: mika.jarvinen@aalto.fi

HEAD OF DEPARTMENT PEDRO VILACA

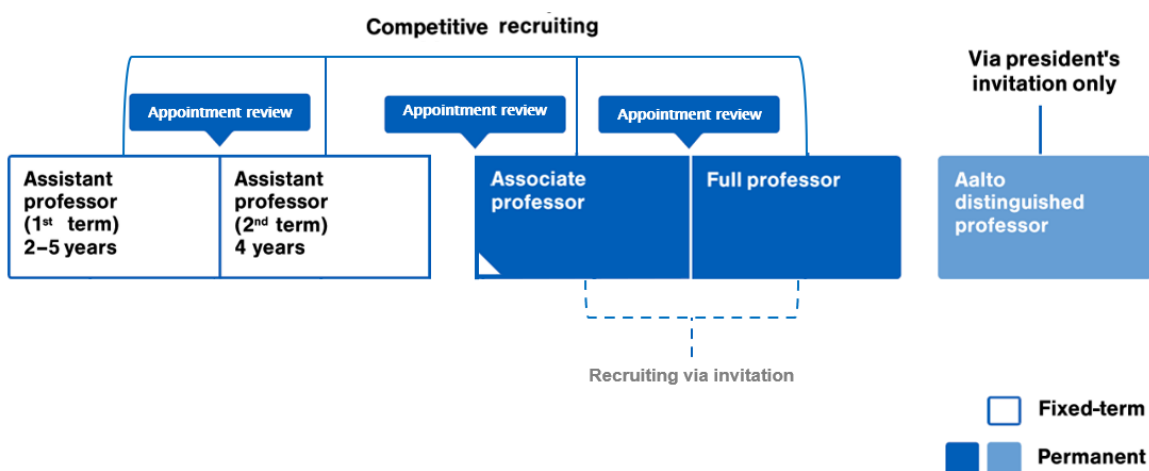
E-mail pedro.vilaca@aalto.fi



Tenure Track Career

Aalto University's tenure track career system offers a well-supported and clear career path.

- **Clear and transparent** criteria and processes for recruitment, evaluation, and promotion.
- **Compensation of success** – Adequate salary and compensation to motivate towards Aalto's vision and objectives.
- **Equal opportunity to succeed** – Motivation and cooperation increase as people in tenure track compete only with themselves, not against one another.



More info at
aalto.fi/tenuretrack

Tenure Track

General time allocation for tenure track professors

	Assistant Professor (1)	Assistant Professor (2)	Associate Professor	Full Professor	Aalto Distinguished Professor
<input type="checkbox"/> Fixed term					
<input checked="" type="checkbox"/> Permanent					
Research/ artistic/ professional work	65% +/-10%	60% +/-10%	50% +/-10%	40% +/-15%	Negotiable
Teaching	30% +/-10%	30% +/-10%	30% +/-10%	30% +/-15%	30% +/-15%
Service	5% +5%	10% +/-5%	20% +/-10%	30% +/-15%	Negotiable

Key principles

- Research emphasis high in the beginning to obtain research portfolio.
- Teaching relatively constant to maintain required teaching scale and senior professors in touch with students.
- Contribution for academic leadership and collaboration in research and artistic community increase with seniority through increased leadership, committee membership and societal interaction.
- Mandatory teaching for Distinguished Professors, otherwise work profile negotiated.

More info at
aalto.fi/tenuretrack



Working at Aalto University

Why join us?

Established in 2010 as a merger of three leading Finnish Universities, we are both **challenger of the old, and traditional with strong history** and legacy.

Our unique combination of fields in **art and design, technology and business** **enable multi-disciplinarity** and finding clever solutions for the world's most wicked problems in the interfaces of these fields.

We aim for **societal impact**, educating game changers to drive sustainability.

We enjoy working at our evolving **collaborative campus close to the heart of Helsinki**, with good connections, great architecture and amazing nature.

We are **international and diverse**: more than 40 % of our faculty comes from outside of Finland. Our working environment is multi-cultural, widely English-speaking and its easy to settle in, despite of wherever you come from.

We have strong [academic standing and reputation in our key fields](#) – Aalto University is among top 10 of New Universities in the world (QS ranking).

Our **well-functioning and fair Tenure Track career system** enables building a successful academic career, providing support for fulfilling your professional ambitions.

Culture that inspires and includes everyone. It's the people that create Aalto, now and in the future. We want to be an open community where equality and inclusion enable curiosity, innovation, collaboration and wellbeing. We constantly keep learning to find the most impactful ways to empower – and invest in – our people.

A wide-angle photograph of the Aalto University Otaniemi campus interior. The space is a large, modern atrium with a high ceiling featuring a complex network of white structural beams and large glass skylights. On the left, a wide staircase with a glass railing leads to an upper level. In the foreground, a young woman with glasses and a colorful beanie, and a young man with blonde hair, are smiling and looking towards the right. The background shows multiple levels of the building with glass railings and various indoor plants.

What do we offer?

Meaningful and inspiring environment

We are proud of our purpose to shape a sustainable future. We spark the game changers of tomorrow, and renew society with research-based knowledge, creativity and an entrepreneurial mindset.

Culture that inspires and includes everyone

All our work is guided by the values of the university: responsibility, courage, and collaboration. It's the people that create Aalto, now and in the future. We want to be an open community where equality and inclusion enable curiosity, innovation, collaboration and wellbeing.

Collaboration reimaged

At Aalto University, a unique combination of science, art, tech, and business brings talent together. We have over 12 000 students and 4 000 employees joining forces to shape a sustainable future. Together with the surrounding companies, startups and technology parks at the Otaniemi campus, we are committed to driving ground-breaking research, educating the game changers of tomorrow, and renewing society.

Vibrant campus at a central location

The vibrant Otaniemi campus, only 10 km away from Helsinki city centre, is the home of a bold and curious community, where science and art meet technology, business and innovation. Finland is famous for being the Happiest Country in the World, and having the world's best education system, world class academic freedom*, cleanest air, high trust, and a low hierarchy – themes also important to Aalto.



Aalto University



Living in Finland

Finland is [among the best countries in the world](#) according to many quality of life indicators, including being the [happiest country in the world \(UN study 2023\)](#).

We are humble people, but dare to say we have **one of the most advanced education systems in the world**.

The Nordic values of **equality and co-operation** are rooted deeply into our society. We are one of the world's top countries in press freedom and consider the many voices in our society a strength.

With high investments in R&D, a strong innovation culture, open data and advanced state of digitalization, we are a nation of **innovation and entrepreneurship**.

Gender equality, flexibility and low hierarchy are at the core of our **Nordic working environment**. Professional ambitions can be combined with a fulfilling personal life.

We are one of the world's most **reliable and stable** nations with low levels of corruption and high level of safety. We are proud to provide exceptionally high standards of social security and healthcare, financed by the state.

Having four distinct seasons, clean air and thousands of lakes, we are some nature-loving people and take good care of our **unique environment**. We enjoy our midnight sun in the summer and northern lights in the winter.

Finnish language is known to be a bit on the complicated side, but don't worry, we Finns are fluent in English, and have an **international mindset**.

We have **wide and reliable transport networks**, with Helsinki airport serving over 100 direct destinations. The comprehensive public transport makes it easy to commute. Our campus is situated within a 10 minute metro ride from the heart of Helsinki.

Want to live in the best country in the world?

More about [Helsinki](#)

More about [Espoo](#)

More about [Finland](#)

More about [working at Aalto](#)



Recruitment process





**We want *you* to be part of our
community – join us in shaping
the sustainable future!**

Pedro Vilaca

Head of Department

pedro.vilaca@aalto.fi

+358 503652110

Mika Järvinen

Professor

mika.jarvinen@aalto.fi

+358 504142593



Aalto University

**Aalto University –
a community of
game changers**
aalto.fi



Aalto University