

Towards net zero and beyond

For pioneering energy technologies

We are facing immense challenges: climate change and its extensive impacts are affecting many parts of the world, pollution is reaching critical levels, and biodiversity is in steady decline. Concurrently, a significant increase in energy demand is projected for the coming decades.

In light of this, the need for viable solutions has never been greater – solutions that encompass energy supply and storage as well as the sustainable use of materials and resources. Through targeted initiatives, ETH aims to provide key impulses towards a more sustainable energy future.



For a sustainable energy future

Make a gift

Our goal

In 2023, ETH, in collaboration with EPFL, Empa, and the Paul Scherrer Institute, launched an ambitious initiative: the Coalition for Green Energy and Storage (CGES). This coalition operates at the nexus of science, industry, and politics, to swiftly develop innovative solutions that ensure a secure, resilient, and climate-neutral energy supply in Switzerland.

Additionally, a significant expansion of research in the fields of energy, materials, digitization, and automation at ETH Zurich is planned. The focus is on bringing innovations in these areas to application. Together with industrial partners, researchers will work on forward-looking solutions to contribute to achieving the net zero goal.

Your support enables

- enhanced collaboration between science, politics, and industry, bringing us a crucial step closer to the net zero goal;
- seed funding for eight professorships at the intersections of energy, materials, digitization, and automation;
- contributions towards a climate-neutral future.

Solar Energy Engineering

This professorship will provide valuable insights into solar energy and will develop related technologies, for instance for climate-neutral aviation.

[learn more](#)

Interface/Surface Engineering for Energy and Process Engineering

This professorship will research the interplay between surface structures and material function and create possibilities for turning these surfaces into more efficient vehicles for transporting energy and materials.

[learn more](#)

Sustainable Materials and Devices

This professorship addresses the sustainability of both the materials themselves and how they are produced – by optimising processes to reduce the consumption of resources and energy.

[learn more](#)

Sustainable Structures

This professorship will deploy innovative material systems to develop lightweight structures for transportation, machine tools and robots as well as manufacturing processes that are energy efficient and environmentally friendly.

[learn more](#)

Circular Materials for Sustainable Future Infrastructures

This professorship focuses on construction materials with a particular emphasis on infrastructure that uses fewer resources and on the recycling of construction materials.

[learn more](#)

Algorithmic Systems Theory

This professorship will research and optimise novel algorithms, focusing on the software side of automation.

[learn more](#)

Embodied Intelligence

This professorship will focus on the hardware side of automation: the control, regulation and dynamics of systems that directly interact with the physical world, such as robots, autonomous vehicles and manufacturing and energy systems.

[learn more](#)

Management Information Systems

Digitalisation and artificial intelligence (AI) are making enormous inroads around the world, which is why integrating and using these technologies will be key to the success of businesses in the future. This professorship will focus on business issues surrounding digitalisation.

[learn more](#)



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