

Series of seminars for energy efficiency and renewable energy in the industry and service sector

# «Technology and innovation for the high-potential wind energy market»

### 18th and 19th May 2022

There is an enormous untapped potential for Swiss innovation and technology to contribute to the rapidly growing wind energy market. The interdisciplinary nature of wind energy means that there are countless application possibilities for technology and innovations developed in Switzerland – from AI to Big Data to Data Analytics to Smart Composites to Microelectronics to Smart Sensors to Control Solutions and many more. In this seminar you will not only learn about the technology behind wind turbine and wind farm design, but you will come away understanding the key technological challenges and how interdisciplinary projects can provide innovative solutions in this high-potential market.

## These are the seminar contents:

# DAY 1

### Introduction:

- > Facts and figures.
- > How wind turbines work.
- > Basic concepts.
- > Exercises and group work.

## Wind turbine design:

- > Introduction to wind turbine desgin and standarts.
- > Electrical concepts and examples.
- > Composites and blade design.

# Wind farm design:

- > Introduction to wind farm desgin and standarts.
- > Monitoring of wind farms.

# DAY 2

Technological challenges and solutions:

- > State-of-the-art wind energy technology.
- > Technological trends: challenges and solutions.
- > Group work.

Innovation insights from the wind energy community:

- > Wind energy asset management.
- > Wind farm planning.
- > Wind project financing.
- > The future of wind energy in Brazil.
- > Trends in the global wind energy.

This Seminar supports the following SDGs:







# Information and registration

### Lecturers

- > Dr. Sarah Barber, Programme Leader Wind Energy, IET/OST
- > Dr. Imad Abdallah, Senior Scientist, Chair of Structural Mechanics and Monitoring, ETH Zurich
- > Dr. Anastasios Vassilopoulos, Senior Scientist, EPFL
- > Guest speakers from the Swiss and global wind energy industry

### **Daily Programme**

08:00 - 08:30 Arrival and coffee

08:30 - 12:00 Seminar (with coffee break)

12:00 - 13:00 Lunch break

13:00 - 16:30 Seminar (with coffee break)

### **Target audience**

This seminar is suitable for all people and organisations who are active in the Swiss and global wind energy industry or want to get involved in the high-potential wind energy market.

### Costs

CHF 1'300 (CHF 300 for students).

### Location

Zurich

### Registration

Please register by April 15th 2022 at the latest. www.ost.ch\werz>Bildung>Seminare

### Organiser

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