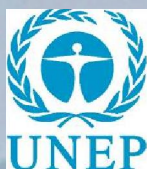


WIND

of change

The Youth Encounter
on Sustainability *presents:*
**YES special course on smart
renewable energy systems**



Europäische Union
„Investition in Ihre Zukunft“
Europäischer Fonds für
regionale Entwicklung

Bremerhavener Gesellschaft
für Investitionsförderung
und Stadtentwicklung mbH



Bremerhaven / Gut Ankelohe / Bad Bederkesa / Germany
September 8th – September 19th 2013

Program Overview

The Energy challenge – a paradigm shift towards a resilient energy system

Transforming our energy future is one of our most important challenges in sustainable development. While our current focus is primarily driven by the "energy mix agenda" - shifting from fossil to renewable energy sources - we are obliged to redesign the structures of our energy system as a whole. This requires both technological and political agenda shifts from cheap energy quantities to energy services for buildings, mobility and production. This course will provide deep insight into design principles, guided by a systems approach. While the energy challenge is global, answers need to be found regionally in distributed energy resources and cascading use structures. This will pave our way into a sustainable energy era.

Course Overview

The course is organized into fully interlinked thematic modules, including case study work and onsite company visits. Leading experts from academia, public and industrial sectors will present and discuss their experience, innovations and business models.

Introduction & course layout: Systems thinking & design principles; learning goals, case study planning; reflections on participant's pre-assignments.

Sustainability and the role of smart energy systems: The big picture - global energy demand & use; the challenge climate and peaking resource; risks and opportunities; transformation agendas for low carbon structures.

Stakeholder perspectives - the bottom line: Socio-economic regional/local agendas; regional transformation – the case of Bremerhaven; economic & business views; governance and policy agendas; development cooperation & technology transfer

Fundamentals on renewable energy systems: Generation, distribution, storage, smart grids; resilient energy structures with new types of technology; the special role of wind energy

Inside the renewable energy business: game changing drivers; innovation & business models for the new energy area; financing & funding solutions; case studies from entrepreneurs



The Learning Model

The YES Special course on **smart renewable energy systems** aims to provide participants with knowledge, tools, perspectives, and frameworks to design and implement integrated solutions to sustainable energy systems, combining practical experience with academic rigor. It will be facilitated by well selected faculty as well as experts from the industrial, economic and public sector. Teaching methods include lectures, cases, field trips in the Bremerhaven industry parks, as well as cultural and social activities. The course builds on the YES teaching style, where participants are actively involved in the delivery of content. The learning model includes an in-depth team project with a focus on where the regional participants originate from, creating a unique opportunity to implement real impact in close collaboration with an international, multicultural, and multi-disciplinary group of peers.

Live, work, discuss, debate and learn in an inspiring natural setting some 20 km outside of Bremerhaven. "Gut Ankelohe", is beautifully located close to a small village in the middle of agricultural farmland. The estate consists of different fully renovated old buildings with comfortable accommodation and fully equipped seminar facilities.

Discuss challenges, opportunities, solutions, and innovations in the energy value chain with a focus on wind energy, in a global and regional context, with experts from leading research institutes, industry partners and political organizations.

Reflect critically on today's and future energy challenges, in the context of socio-economic and political pre-conditions, decision making processes, business and community strategies.

Get creative and innovative whilst visiting Europe's largest wind park area, which has given an amazing uplift and brought socio-economic industrial development to the Bremerhaven area – an impressive example of how the spirit of the solar age has transformed an entire region that suffered in the 1980s from extreme economic and social decline.



Organization & Applications

The Youth Encounter on Sustainability (YES)

YES is a multidisciplinary and multicultural academic education initiative created in 2000 by the AGS (Alliance of Global Sustainability: a partnership between ETH Zürich, MIT-Cambridge, the University of Tokyo and TU Chalmers, Gothenburg). In the past 13 years over 1400 scholars from 140 different countries and all fields of studies have been trained in YES courses, forming the core of a strong active network of YES alumni located around the world. While the basic 17 day courses introduce the concept of sustainability in its broad approach (food & water, energy & climate, land use, economy, policy and consumer behavior), the YES special courses (10-12 days) concentrate on a specific sustainability theme. In 2009, the founding partners created a self standing ETH spin-off organization under the name of ACTIS – *Activating Talent in Sustainability* with the aim, to further this educational movement by including new partners from the academia, public and private institutions. Further information about YES can be found at: www.actis-education.ch

Eligibility – who should apply

The YES Special course on **smart renewable energy systems** in Bremerhaven is designed for YES Alumni, upper level undergraduate (3rd year minimum), and graduate students (Master and PhD), as well as young professionals from all regions and the private, public and NGO sector. Participants from any country and any field of study should demonstrate a high dedication to sustainability. The full program will be conducted in English and applicants must demonstrate a working proficiency in the language.

Application Process

To apply for this YES course, complete the separate application form and return it via email with the requested attachments to: **Dr. Roger Baud:** roger.baud@actis-education.ch

Please enclose the following supporting documents along with your application form:

1. Your CV / Resume (max. 3 pages)
2. A short statement of motivation to attend the course (max. 400 words)
3. (if available) an outline of an initiative/organization you are already working with or plan to create or become involved with after the course (max. 400 words)

Participation fee:

EUR 650.- for students / **EUR 950.-** for young professionals (already graduated from university).

YES Alumni benefit from a 15% and participants from a non-OECD country from a 20% discount

The course fee covers cost for board, lodging, local travel, and all activities during the program.

Participants are responsible to June **15th 2013**

