

Consultation on the EU Strategy for the Danube Region

Statement of the Donauhochschule Ulm

Energy is certainly the main driver of economic growth in any country or region. However, since the energy sector is facing serious challenges like disturbed security of supply and growing adverse environmental impacts, it is crucial to find sustainable solutions.

All energy technologies and their applications require profound scientific and technical knowledge. Universities and research institutes must accept their role as leaders and coordinators. Only they are able to train the scientists and engineers required for this structural change of the energy supply and the use of energy.

The DHU (Donauhochschule Ulm) is a trans-regional, voluntary partnership between Danube universities which aims to build a trans-regional network that opens new avenues to the partners in the field of renewable energy and efficient use of energy. The DHU also opens new doors of opportunity to the universities located along the Danube itself. Production, trade and industry for renewable energies and fuel cells can now develop at these locations.



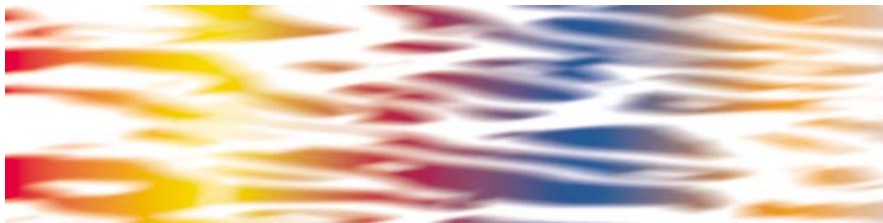
The DHU started to join forces from universities along the Danube River for the development of sustainable energy systems and efficient use of energy already in 2005. During the first Symposium the 14 participating universities from 7 countries evaluated five action items:

- Biomass/Biogas/Geothermal
- Efficient Energy Usage
- Solar Energy
- Fuel Cells
- Joint BSc/MSc Course on Renewable Energy

Project of the EDA (Europäische Donau-Akademie)

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With this statement the DHU confirms the readiness to take actively part in the EU Strategy for the Danube Region. The DHU sees a chance for the implementation of cooperation and common projects.

Main challenges and opportunities in the Danube Region

The region is a complex area. It results not only from the different status of the members, but the major economical, cultural disparities. The cultural disparities appear in the education in the regions as well. There are numerous research programs, institutions with different results, contributions of knowledge. It is very important to harmonize these activities and to vitalize the exchange of experiences. The region has a chance to combine the disparities and resources and to complement one another as the European motto says: "Unity in diversity".

The new economic strategy – Europe 2020 – aims a sustainable, smart and inclusive growth in many fields: innovation, education, digital society, climate and energy, competitiveness, employment. The headline target aims the reduction of greenhouse gas emissions by at least 20% compared to 1990 levels or by 30% if the conditions are right, increase the share of renewable energy in our final energy consumption to 20%, and achieve a 20% increase in energy efficiency. There are many challenges for the EU energy policy, which could be resolved with the support of the Danube Region. Principal objective is to meet the targets. Key of the cooperation is a well functioning platform for dialogue on energy issues in the region at all level. It means that this process have to begin already in the education.

Suggested Actions

Action 1. Stimulation of Knowledge Exchange on Renewable Energy Education

Possible forms of cooperation among partnering universities have been already discussed on two symposia at Ulm and on working group level. The following list is the to date outcome of these discussions and the proposed actions items for a further stimulation of the knowledge exchange on renewable energy education among interested universities in the Danube Region.

- Exchange of experiences
- Joint use of existing local lab facilities for renewable energy education
- Development of a common curriculum for Bachelor and Master courses on Renewable Energy
- Exchange among students during their studies as well as for internship in companies and institutes
- Exchange of teachers/professors

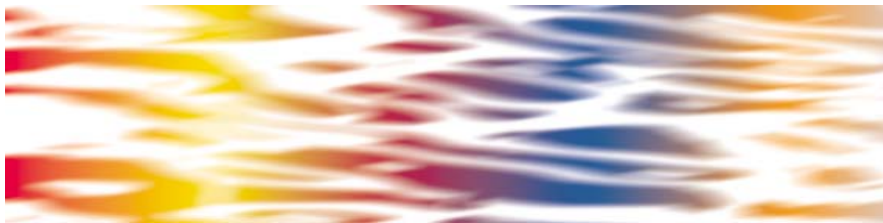
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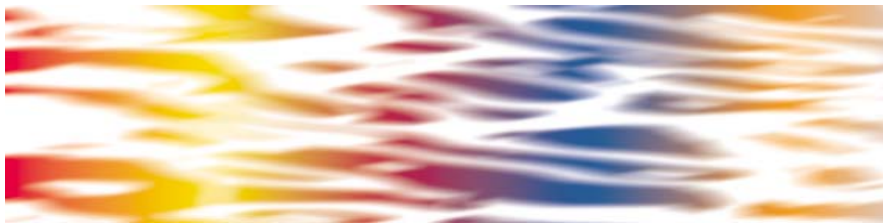
- Summer schools for sustainable energy management and special themes
- Know-how transfer
- Common projects

An appealing, and advertising medium for the new era of solar energy could be a Danube ship equipped and operated with 100 % regenerative energy – the „Ulmer Schachtel“. This could serve both as a research and a demonstration object for 20 to 30 persons and as a conference or meeting centre.

The Ulm University of applied Sciences already offers a Masters degree in cooperation with the University of Zilina in Slovakia. Those studying there can gain a certificate from the Ulm University of Applied Sciences by studying in their own language. Ulm also offers partner universities within the Danube states access to its energy-technical courses. Partners can therefore be created who one day will work and teach, research, develop and construct our energy future.

2. Enforce Networking between Universities

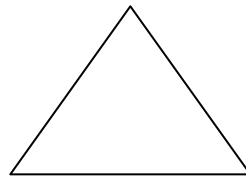
Some basic steps are needed to enforce and guarantee continuity in a network of universities on renewable energy education and research. Every university should have one responsible employee who locally coordinates the activities, assists the involved Professors and communicates with the local students. Similar to the successful established relationships through the network of “Danube-Offices” on the municipality level, this network of partnering Danube Universities will be able to further develop and make effective use of already existing European funding schemes for the activities described in Action 1.



3. Strengthening of Local Innovation Potential

Universities offer

- Know how
- Leadership



Municipalities and local authorities

- Natural sources
- Jobs and workplaces

Industry

- Implementation

As state already in the introduction Universities and research institutes must accept their role as leaders and coordinators. Only they are able to train the scientists and engineers required for this structural change of the energy system.

The Universities are able to stimulate the local innovation potential. In close cooperation between the local municipalities and the local industry the development of a sustainable energy system based on local resources and strong know how to make use of these local potential will also enable future sustainable economic growth of the Danube Region and many new workplaces. Important steps for this strategic cooperation between Universities, municipalities and industry are:

- Achieving synergy between science and industry through stronger cooperation between universities and industrial companies including SMEs
- Close cooperation with the local authorities
- Development of the capacity of Europe's rural economies to access and profit from education.
- Link to the Industry sector, i.e. local SME/regional actors to encourage local actors to work in the direction of sustainable energies and environment.
- Stimulation of local energy analysis and development of sustainable energy and environmental concepts.

Donauhochschule: Ulm – Krems – Wien – Trnava – Zilina – Bratislava – Győr – Kosice – Budapest – Baja – Szeged – Osijek – Zagreb - Novi Sad – Belgrad – Cluj-Napoca – Sibiu – Craiova – Rousse- Sofia – Galati – Ljubjana

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