



## WHO IS IN THE FOCUS?

Mechanical Engineers  
Industrial Engineers  
Production Engineers  
Civil Engineers  
Environmental Engineers  
Chemical Engineers



More information can be found on:  
<http://clean-kwat.com/index.php>

Project Promoter: Giresun University  
Contact: Prof. Dr Basak Taseli,  
basak.taseli@giresun.edu.tr  
[www.giresun.edu.tr](http://www.giresun.edu.tr)



## PARTNERS:



Promoter:  
GIRESUN UNIVERSITY (Turkey)

Coordinator:  
ORKON INTERNATIONAL  
ENGINEERING TRAINING  
CONSULTING (Turkey)

GAZI UNIVERSITY (Turkey)

KALI ENERGY (Turkey)

ASOCACION AMIGOS DE  
EUROPA LEONARDO DA  
VINCI (Spain)

UNIVERSITY OF BELGRADE  
(Serbia)

ENERGIAKLUB (Hungary)

RENEWABLES ACADEMY  
(Germany)



**CLEAN kWAT**  
Integrating Environmental  
Considerations into Energy  
Systems Development

**ERASMUS+ KA2**  
Cooperation and Innovation  
for Good Practices



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## RATIONALE



In Turkey and in Europe, a number of legal elements of environmental reform have been put on the agenda as part of the environmental planning and education. In this process the development of energy systems that protect the environment is an important part.

Since energy systems, especially fossil fuel based, lead to global warming, future energy systems must be designed according to the rules of environmental and climate protection.

In the energy departments in many universities in Turkey there are no obligatory courses related to environmental impacts of energy systems. Since the interest in departments for energy systems engineering shows increasing trend in recent years, there is a need for supporting education with training materials, especially with innovative ones.

Therefore, the main target group of this project are energy systems designers and engineering students in related departments, mainly in energy systems engineering.



The European Qualification Framework (EQF) aims to make National Qualifications Framework (NQF) understandable in Europe to allow the mobility of workers between countries and to establish common learning system.

It is necessary to enhance the quality and performance of Vocational Education Systems (VET) by improving guidance systems, promoting creativity, innovation and sharing EU experience.

The CLEAN-kWAT project will address these issues by developing Learning Outcomes based training systems and redefinition of competence standards for selected professions. It will highlight required skills and competences for jobs in the energy sector, adapt and develop courses in accordance with this and use information communication technologies (ICT) in teaching and learning activities.

The main focus is to develop Strategic Partnership and share knowledge and experience between partners that are recognized to be national experts in the environmental and energy sectors.

## PROJECT RESULTS

- Training Book on "Integrating Environmental Considerations into Energy System Development"

The book covers technological and environmental aspects of conventional energy production systems and renewable energy sources (wind, wave and tidal, geothermal, hydrogen gas, biomass).

- Documentaries (visual training materials)

They will be produced for each chapter of the Training Book and distributed on DVD and YouTube.

- Elaboration of Learning Objectives

It contains the description of knowledge, skills and competences for selected professions in the field of sustainable energy system design.

- E-learning Portal

This knowledge data base will provide competence based carrier development. It will have interactive e-learning environment with training courses

