For Immediate Release



AUB joins Mediterranean consortium in EU-funded research study on producing biodiesel from algae

Beirut, Lebanon- 24/02/2012 - The American University of Beirut and ALMEE (Lebanese Association for Energy Saving and for Environment) are partnering with researchers from five other Mediterranean countries to study the possibility of producing biodiesel from algae.

In addition to Lebanon, organizations from Cyprus, Greece, Italy, Malta, and Egypt have formed a partnership which is coordinated by the Agricultural Research Institute of Cyprus in collaboration with the Cyprus Energy Agency and is expected to implement successfully the ENPI MED Algae project.

The project, "Production of biofuels from microalgae in selected Mediterranean Countries ENPI MED ALGAE" is funded by the Programme ENPI European Neighbourhood and Partnership Instrument (ENPI) - Mediterranean Sea Basin Joint Operational Programme. The consortium consists of 12 organisations -- research organizations, academic institutions, energy agencies, private organizations-- from the six Mediterranean countries.

Project leaders explained that this new technology project can contribute to the goals of the EU strategy on climate change and energy.

"AUB will play an active role in all these research activities," said Yusuf Abou Jawdah, principal investigator from AUB. "This project provides a unique opportunity to establish a strong biotechnology unit and create the expertise and knowledge for a future market of liquid biofuels in Lebanon.

"Producing biofuels from algae may create new job opportunities in Lebanon and help in reducing complete reliance on fuel import," he added.

Abou Jawdah added that the cooperation will contribute to the production of renewable energy, based on local human and natural renewable resources, leading to sustainable development.

Unlike other crops used for producing biofuels, microalgae do not compete with conventional agricultural production, noted Abou Jawdah. Moreover, microalgae may serve as a potential source of clean biofuel, because unlike fossil fuels, whatever CO2 is produced in the process is taken out of the atmosphere by the growing microalgae.

Project researchers note that the search for alternative fuels to replace petroleum products and reduce greenhouse gas emissions has long been on the minds of both policy-makers and scientists.

But one obstacle that presents itself is finding enough raw material to produce biofuel. Microalgae may prove to be the solution as they are abundant in seawater and wastewater.

Microalgae have a higher yield for biodiesel production in relation to energy crops, note researchers.

The study methodology will cover all stages in the production of biodiesel from microalgae: sampling of seawater or freshwater, the selection of microalgae, species identification, cultivation of microalgae, harvesting and extraction of biodiesel and determination of properties of biodiesel produced in accordance with Standard EN14214 and its testing. A pilot will be established in each of the following five participating countries: Cyprus, Italy, Malta, Lebanon and Egypt.

Furthermore, the project aims to collect all available data on microalgae in the participating countries (literature review and studies), to conduct a study on the available state-of-the-art technologies and also to provide feasibility studies, after implementation of research activities.

Researchers expect that the project will create a new value chain for the production of renewable liquid fuels based on microalgae, targeting the transport sector and production of valuable by-products such as omega 3 polyunsaturated fatty acids, protein, polysaccharides, pigments,...

The goal will be achieved through local and regional collaboration between research institutions, enterprises (SMEs) and public and private sectors.

For more information about the study please contact:

- Dr. Polycarpos Polycarpou (project coordinator), Agricultural Research Institute, Tel +357 22403117or email <u>p.polycarpou@arinet.ari.gov.cy</u> or Mrs Anthi Charalambous, Director of the Cyprus Energy Agency, email <u>Anthi.charalambous@cea.org.cy</u>
- Dr. Yusuf Abou Jawdah (AUB Principal investigator), Faculty of Agricultural and Food Sciences, American University of Beirut, Lebanon, Tel + 961 1374374 extension 14483 or email abujawyf@aub.edu.lb
- Dr. Adel Mourtada, (ALMEE project coordinator), Tel: 961 3 607590, email: adel.mourtada@yahoo.fr

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For more information please contact:

Maha Al-Azar, Assistant Director for Media Relations, <u>ma110@aub.edu.lb</u>, 01-353 228

Note to Editors

About AUB

Founded in 1866, the American University of Beirut bases its educational philosophy, standards, and practices on the American liberal arts model of higher education. A teaching-centered research university, AUB has more than 600 full-time faculty members and a student body of about 8,000 students. AUB currently offers more than 100 programs leading to the bachelor's, master's, MD, and PhD degrees. It provides medical education and training to students from throughout the region at its Medical Center that includes a full service 420-bed hospital.

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