



Issam Fares Institute for Public
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العامة والشؤون الدولية



Water-Energy nexus workshop

Overcoming challenges for power supply of water and wastewater services: Alternative energy supply solutions

This two-sessions workshop, organized in collaboration between LEWAP, IFI and Oxfam, aims at addressing the Water-Energy nexus by building capacities of sector's stakeholders to implement alternative solutions to fuel-powered water systems.

The first session will introduce different aspects of the water-energy nexus and formulate recommendations for renewable energy supply of water and wastewater services, with a focus on solar pumping. The second session will aim at collectively identifying potential intervention sites beyond the ones currently targeted by projects; and discussing the most appropriate solutions.

The workshop will be held on March 2nd and 3rd, from 10AM to 12PM, via Zoom. To register and receive the Zoom link, please fill in the form: <https://forms.gle/eqsFFMck9CxFq5NY8>.

DAY 1. ALTERNATIVE ENERGY SUPPLY SOLUTIONS FOR WATER AND WASTEWATER: RECOMMENDATIONS AND LESSONS LEARNED – MARCH 2ND, 10:00-12:00

During the first session, Dr Nadim Farajalla from AUB-Issam Fares Institute will build upon results from the water-energy nexus study and the study on wastewater hydropower to 1) introduce the interlinkages between water and energy; 2) present existing solutions for to improve energy supply; and 3) formulates recommendations for the implementation of projects which consider energy aspect for the water and wastewater sector. Then, Jihad AbdulGhani from Oxfam Lebanon will present two solarization projects, in Kfarzabad pumping station and Saghbine pumping station, implemented in 2021 in the Bekaa. He will discuss in particular outcomes, lessons learnt and recommendations from these projects. Both interventions will be followed by questions and discussion with the audience, where feedback from other experiences could be shared.

Through this first session, participants will learn about the existing technologies, and their adaptability to different type of infrastructures; they will get recommendations from theory and practice. The session targets in particular implementing stakeholders, from NGOs to public institutions.

- Introduction of the water-energy nexus, study results and recommendations for project implementations – Nadim Farajalla, AUB-Issam Fares Institute (20 minutes)



Questions and discussions (20 minutes)

- Feedback, lessons learnt and recommendations from two solar pumping installations – Jihad AbdulGhani, Oxfam Lebanon (20 minutes)

Questions, discussions, and feedback from other experiences (30 minutes)

DAY 2. SITUATION ANALYSIS OF ONGOING PROJECTS AND IDENTIFICATION OF SITES FOR INTERVENTIONS – MARCH 3RD, 10:00-12:00

The second session will aim at identifying potential sites and the solutions which could be adapted to such sites. To do so, an overview of the recent, ongoing or planned project targeting energy for water will be showcased, to point out gaps and avoid duplications. This session will then focus on discussions so that participants can come with their field knowledge of needs and facilities that could be targeted by projects. It will be organized through roundtables for regions, to identify and prioritize potential sites and discuss solutions to improve energy supply and efficiency, including but not limited to solar-powered systems. Sites where feasibility studies have been conducted will also be included in the discussion. Water and wastewater facilities identified during the roundtables and the proposed solutions, will be presented and discussed in plenary session.

This session targets stakeholders with a good knowledge of the needs, interested in designing new projects; donors willing to partner on such initiative are strongly invited to participate to enrich the discussions and propose steps forward.

- Overview of the ongoing or planned projects addressing alternative energy supply solutions for water and wastewater services – Juliette Samman, LEWAP (15 minutes)
- Roundtables by region to identify sites with needs of alternative energy supply, and discuss the most adequate solutions (45 minutes)
- Feedback from each roundtable and steps forward (30 minutes)