



Advanced Teaching and training on  
Smart grid and Grid Integration of  
Renewable Energy Systems



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## Advanced Teaching and training on Smart grid and Grid Integration of Renewable Energy Systems/AT-SGIRES

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# AT-SGIRES Newsletter



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[Website: meu.edu.jo/sites/atsgires/](http://meu.edu.jo/sites/atsgires/)



## What's New

Currently, ATSGIRES Committee is organizing for closing conference “2021 12th International Renewable Engineering Conference IREC, which will be held on the 14th – 15th of April, 2021.

### Special Training Session for the Syrian Partners

#### • German Jordanian University - Jordan February 24<sup>th</sup> – 28<sup>th</sup> 2020

As part of the AT-SGIREs project activities, German Jordanian University (GJU) organized a special training session for the Syrian partners for 5 days.

The training was targeting the academic staff and the students from Syrian partner universities (Damascus University and Albaath University) and it aimed to learn more about smart grid and grid integration of renewable energy. It also aimed to spread the knowledge of smart grid technology in the MENA and increasing the awareness of its benefits.

The training was rich in presentations and activities related to smart grid technology and new teaching techniques. It included a workshop that covered topics such as methods for creating networks of three-phase harmonic generators, and how such systems will be replacing the traditional power grid infrastructure that exists in the MENA region today.

The experts from Newcastle University (UNEW) and German Jordanian University (GJU) led the training effectively and informatively, and they enthusiastically taught the trainees more about the future of renewable energy and how it will be integrated efficiently to the electrical networks in the MENA region. Finally, the training was finished by delivering the certificates for the attendees.







## The Project in Press - Jordan

### • The project in Press - Jordan

March 5<sup>th</sup> 2020

The workshop of AT-SGIREs project that was held at Middle East University in cooperation with German Jordanian University during the special training session for the Syrian Partners from 24<sup>th</sup> – 28<sup>th</sup> of February 2020 has been covered by media: Newspaper.



## The Sixth Plenary Meeting

### • German Jordanian University - Jordan

March 2<sup>nd</sup> – 4<sup>th</sup> 2020

In March 2<sup>nd</sup> 2020, the sixth plenary meeting of the AT-SGIREs project was held at German Jordanian University (GJU) in Jordan.

On behalf of German Jordanian University, Prof. Alaaldeen Al-Halhouli welcomed the attendees from the partners, then Dr. Adib Allahham discussed the financial statement of the project and presented an overview about the status of each Work Package (WP). Further, the WP leaders reported about the progress achieved through their Work Packages. Finally, the Dissemination Committee (DC) meeting was held at GJU.

In March 4<sup>th</sup>, the Quality Committee (QC), Steering Committee (StC), and Scientific and Technical Committee (STeC) meetings were held at GJU to discuss the main issues of the project. The meeting focused on equipment purchased, financial issues, and E-learning platform implementation. Finally, the virtual meetings of StC, QC, STeC, and DC were scheduled accordingly.





## Virtual Monitoring Meeting

### • German Jordanian University - Jordan

April 1<sup>st</sup> 2020

The virtual monitoring meeting for AT-SGIREs Project was held on 1st of April 2020 via Zoom Application. The purpose of the monitoring meeting is to learn about the activities realized and products developed so far, as well as to observe if the project has encountered any problems in operational and/or financial implementation that can be discussed and solved. It was attended by 14 representatives from TTU, GJU and MEU.

During the meeting, Prof. Alaaldeem Al-Halhouli presented an overview of AT-SGIREs status, Project work packages and activities. Dr. Reem mentioned that the technical implementation report of the project was good according to the feedback from Brussels. This is a good achievement, and after a long discussed, the representatives who attend the meeting agreed on the following points:

- 90% of the project deliverables are done and the remaining actions are to complete courses translation in Arabic, labs setup and training.
- E-learning Platform is ready but it still needs to be implemented
- The courses are available and have implemented
- There are eight courses developed, all of them are accredited and recognized
- Each university should implement the basic course, the course that they developed in addition to another course that was developed in another university.





## Virtual Meeting of Steering Committee (StC), and Scientific and Technical Committee (STeC)

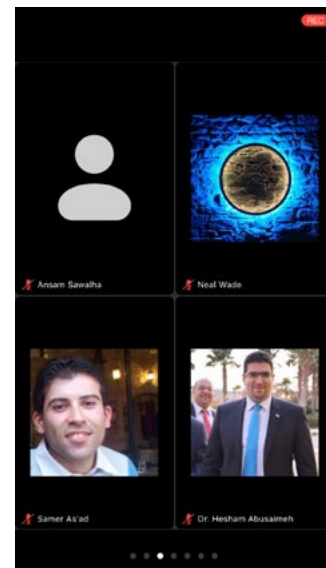
### • Newcastle University - United Kingdom

June 10<sup>th</sup> 2020

The online seventh Steering Committee (StC), and Scientific and Technical Committee (STeC) meeting of the AT-SGIREs Project was held on 10th June 2020 via Zoom Application. It was hosted by Newcastle University and attended by 16 representatives from different project partners including Jordan, Morocco, United Kingdom, Syria, Germany, and Cyprus.

The StC and STeC committees discussed the actual status and the work plan of the project activities. The meeting focused on discussing the progress of modules development and modules implementation.

The StC and STeC committees also discussed the tailored modules, the E-learning platform implementation, the on-line workshop, the closing conference, and lastly the workshops for the industrial stakeholders to implement the short and tailored modules, which will take place at DU, EMI and GJU.



## Online Workshop on Energy Trading / Exchange in a Neighborhood/Digitization

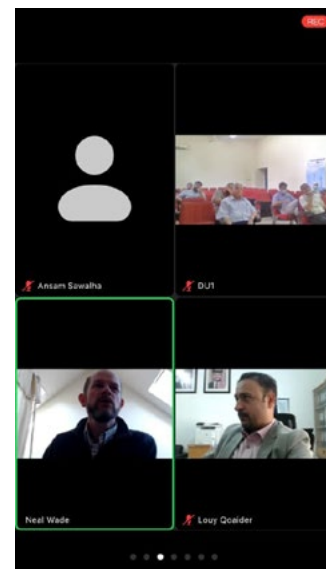
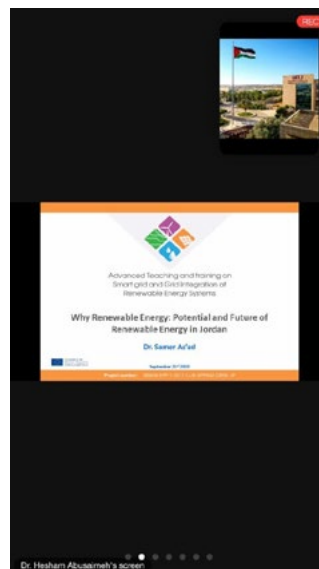
### • Middle East University - Jordan

September 14<sup>th</sup>, 21<sup>st</sup> 2020

The Online Workshop on Energy Trading / Exchange in a Neighborhood/Digitization was held on the 14th and 21st of September 2020 via Zoom Application. This workshop was organized by Middle East University in collaboration with the University of Newcastle.

The workshop is targeting stakeholders from all partner countries in the project. On the 14th of September 2020, the president of the Middle East University Prof. Alaaldeen Alhalhouli welcomed the attendees, then Mr. Spyros Theocharides presented the presentation about "PV energy forecasting which is used for energy trading" and Dr. Adib Allahham presented the presentation about "peer to peer distributed energy trading in smart grids and the role of the hardware-in-the-loop for testing new algorithms". Finally, Dr. Iyad Alsartawi presented the presentation about "the transforming the grid: artificial intelligence, renewables, storage, and electric vehicles".

On the 21st of September 2020, this session was covered several topics, including the trading energy in smart grid neighborhoods, potential and future of renewable energy in Jordan, modelling, and simulation of multi-energy smart local energy systems: methods and applications, and lastly energy management in the Jordanian water sector. Finally, the workshop was finished by delivering the certificates for the attendees.





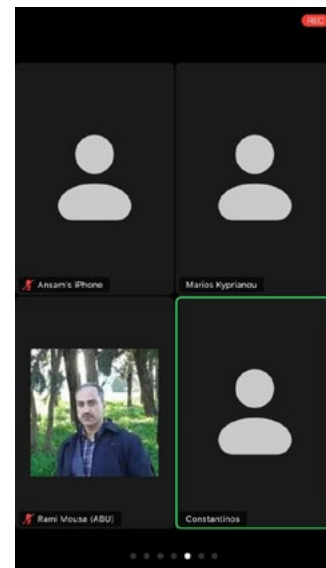
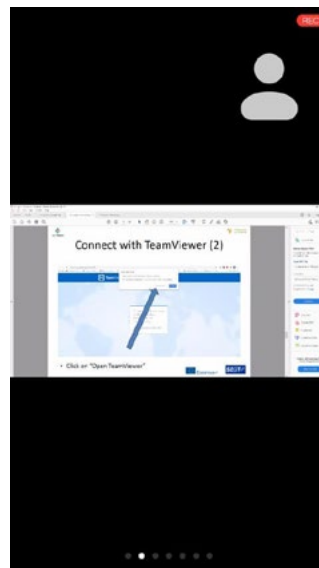
## The Training Session on the Use of E-learning Platform

### • University of Cyprus – Cyprus

September 28<sup>th</sup> 2020

The University of Cyprus (UCY) organized the training session on the use of the e-learning platform. The training session attended by 26 representatives from different project partners including Jordan, Morocco, United Kingdom, Syria, Germany, and Cyprus.

The training session addressed several topics including setting up and using the AT-SGIREs Moodle courses, connecting AT-SGIREs Moodle to the remote lab, and lastly live teaching sessions in AT-SGIREs Moodle.



## Virtual Meeting of Steering Committee (StC), and Scientific and Technical Committee

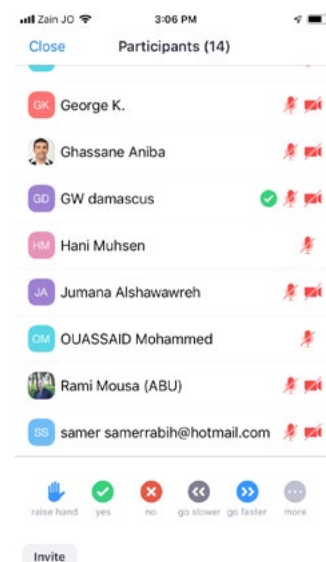
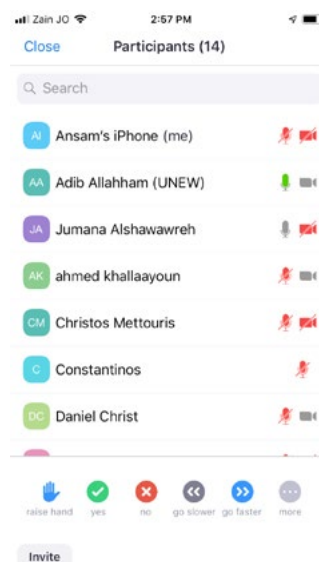
### • Newcastle University - United Kingdom

October 5<sup>th</sup> 2020

The online eighth Steering Committee (StC), and Scientific and Technical Committee (STeC) meeting of the AT-SGIREs Project was held on 5th October 2020 via Zoom Application. It was hosted by Newcastle University and attended by 15 representatives from different project partners including Jordan, Morocco, United Kingdom, Syria, Germany, and Cyprus.

The StC and STeC committees presented an update about the progress of the different work packages and gave brief about all action points agreed in the last virtual StC meeting, which was held on the 10th June 2021

The StC and STeC committees also discussed the progress of modules development and implementation (WP3 & WP6), and the implementation of e-learning platform. Finally, the StC and STeC committees gave an update about the equipment purchase and the sustainability plan of the training center.







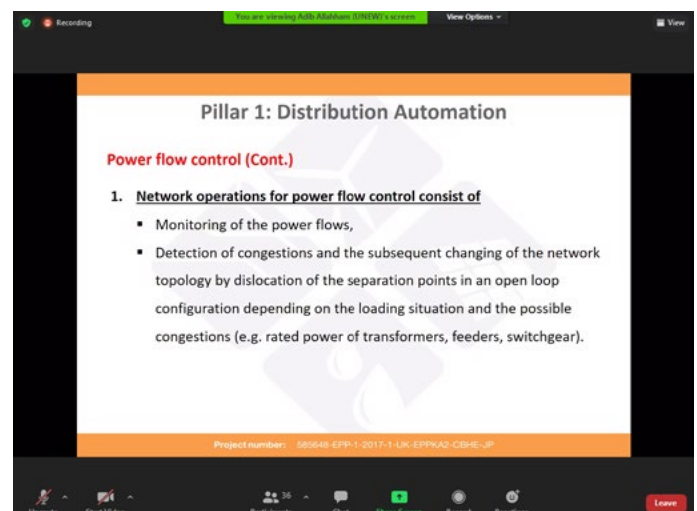
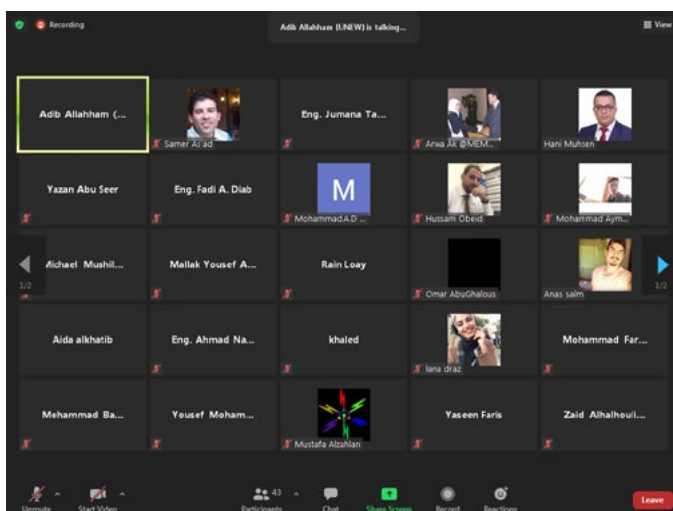
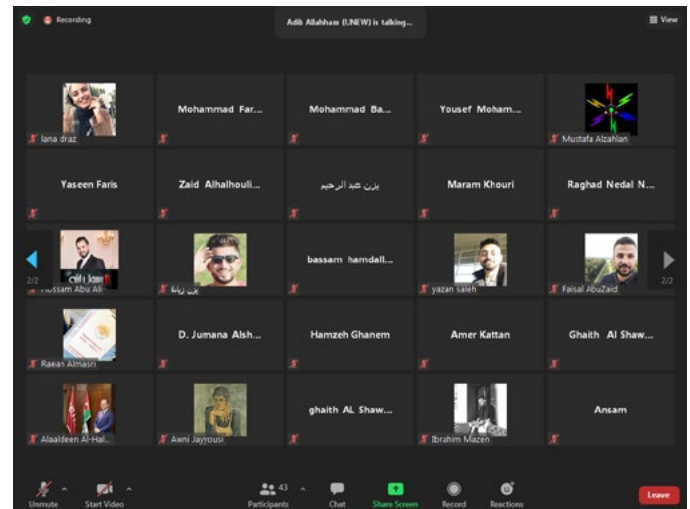
## The Stakeholders Training Session to Implement the Short and Tailored Modules

### • German Jordanian University – Jordan

November 12<sup>th</sup> 2020

The German Jordanian University-GJU in cooperation with Middle East University and Tafila Technical University are organizing a series of training courses targeting different groups of stakeholders to achieve the project objectives in the key aspects of smart grid concept with the emphasis on its application and technology, therefore enabling them to take responsible, creative, challenging and stimulating posts in policy making, industry or research in this targeted field.

The training covered technical characteristics of the smart grid, developing smart grids for a low-carbon future, micro grids and distributed energy future. Finally, the workshop ended by delivering the certificates for the attendees.





## Smart Grid and Integration of Renewable Energy Workshop

### • Albaath University – Syria

November 16<sup>th</sup> 2020

The Albaath University organized a workshop entitled “smart grid and integration of renewable energy” that was held on 16<sup>th</sup> of November 2020. The workshop started by welcoming the participants and presenting an overview about the ATSGIRES project.

The workshop covered several topics including, the importance and tools of smart grid, energy storage (heat pumps and molten salt), cyber security, renewable energy and storage, and lastly connection PV to grid by using MMC.



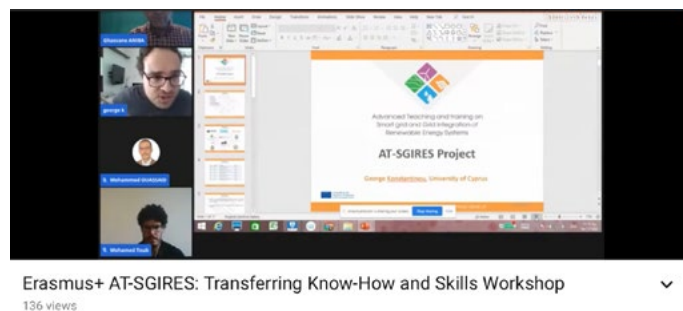
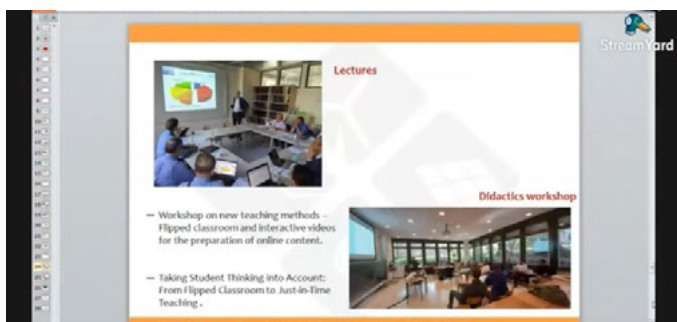
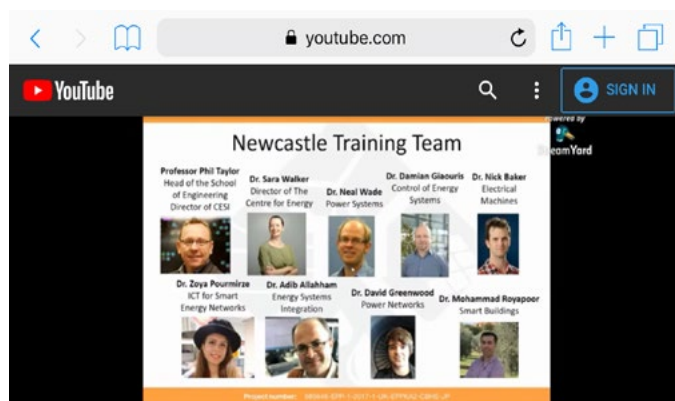
## Transferring Know-How and Skills Workshop

### • Mohammadia School of Engineering – Morocco

November 16<sup>th</sup> 2020

The Mohammadia School of Engineering – EMI organized a transferring know-how and skills workshop that was held on 16<sup>th</sup> of November 2020. The workshop started by welcoming the participants and presented an overview about the ATSGIRES project and developed modules.

The workshop discussed several topics such as the information and communication technology for smart grid module, the training sessions at University of Cyprus and Newcastle University and many more.







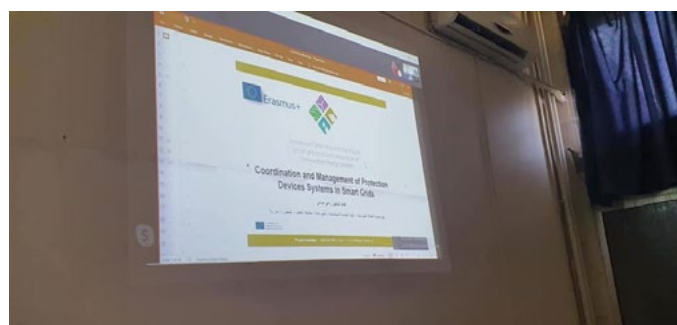
## The Stakeholders Training Session to Implement the Short and Tailored Modules

### • Damascus University – Syria

November 30<sup>th</sup> 2020 and December 1<sup>st</sup> 2020

The Department of Electrical Power Engineering at the Faculty of Mechanical and Electrical Engineering at the Damascus University in cooperation with Albaath University are organizing a series of training courses targeting different groups of stakeholders. This training was held in the hall Postgraduate studies in the department on 30<sup>th</sup> of November, 2020 and 1<sup>st</sup> of December 2020. The training started by welcoming the participants and presented an overview about the ATSGIRES project. The training covered smart grid concepts, pillars of smart distribution, innovative renewable energy sources and energy storage, integrated of renewable energies (photovoltaic systems, wind and fuel cells) in smart grids, substations in smart grids and active network management.

Finally, the workshop was finished by delivering the certificates for the attendees.



## Upcoming Events:

- The dissemination activities for the e-learning platform that will be held by early of January 2021.
- The AT-SGIRES Closing Conference "2021 12th International Renewable Engineering Conference IREC that will be held on the 14th – 15th of April, 2021.

Project Partners:

