

# **ERASMUS+ PROGRAMME Project Number: 618509-EPP-1-2020-1-JO-EPPKA2-CBHE-JP**

#### **ECO-CAR:**

**Vocational Training Diploma on Electrical and Hybrid Vehicles** 

Minutes of 5<sup>th</sup> Steering and Scientific Committees Meeting

September 5<sup>th</sup> – 6<sup>th</sup> 2023 Tuesday – Wednesday

**RWTH Aachen University - Germany** 

Location: Day 1: Campus-Boulevard 89, 52074 Aachen Day 2: Mathieustraße 10, 52074 Aachen

## **ZOOM Link:**

https://zoom.us/j/97390843943?pwd=RjJTZW1hTjl5OER6cjhoS2Z1bTNOdz09





Participants List		
Name	Institution	
Prof. Ahmed Al-Salaymeh	The University of Jordan	
Eng. Dania Sreihin	The University of Jordan	
Eng. Maram AlHijaj	The University of Jordan	
Eng. Salaheddin Abu Yahya	Jordan University of Science and Technology	
Prof. Omer Maaitah	Mutah University	
Dr. Wa'el Adaileh	Tafila Technical University	
Prof. Farhan ElEbeisat	Tafila Technical University	
Prof. Rebhi Damseh	Al- Balqa' Applied University	
Dr. Mamoun Al-Smadi (Online)	Al- Balqa' Applied University	
Prof. Moahmmad Hamdan	Applied Science Private University	
Dr. Hanan Saleet (Online)	Applied Science Private University	
Prof. Tarek Tutunji	Al-Hussein bin Abdullah II Technical University	
Eng. Eman AbdulHafez	Al-Zaytoonah University of Jordan	
Dr. Loai Dabbour (Online)	Al-Zaytoonah University of Jordan	
Prof. Salman Ajib	Technische Hochschule Ostwestfalen-LIPPE (TH-OWL)	
Prof. Dirk Uwe Sauer	Rheinisch-Westfaelische Technische Hochschule Aachen (RWTH-Aachen)	
Dr. Florian Ringbeck	Rheinisch-Westfaelische Technische Hochschule Aachen (RWTH-Aachen)	
Mr. Stephan Bihn	Rheinisch-Westfaelische Technische Hochschule Aachen (RWTH-Aachen)	
Prof. Michele Anatone	Universita of L'Aquila (UNIVAQ)	
Dr. Ivan Dyukarev	University of Deusto (UD)	
Dr. Mate Zoldy	Budapest University of Technology and Economics (BME)	
Dr. Clio Vossou	National Technical University of Athens (NTUA)	





# Minutes of the Meeting

The 5<sup>th</sup> Steering and Scientific Committees Meeting was conducted in Rheinisch-Westfaelische Technische Hochschule Aachen (RWTH-Aachen) in Aachen, Germany on September 5<sup>th</sup> - 6<sup>th</sup>, 2023. In addition, ZOOM video conferencing has been launched in parallel for whom could not attend the meeting physically.

The meeting started by a welcome speech by the project local coordinator at RWTH-AACHEN University Prof. Dirk Uwe Sauer, introducing the university in brief to the participants. Then, a welcome speech by the project general coordinator Prof. Ahmed Al-Salaymeh and viewing the agenda of the meeting to the participants.

Dr. Florian Ringbeck presented to the participants some logistics information to help them during their staying in Aachen.

## **ECO-CAR Project in Brief**

Prof. Ahmed Al-Salaymeh presented ECO-CAR project in brief. He outlined the project objectives, indicators, progress of work packages, underlined the achievements of each WP up to date and what is expected from each WP to be achieved in the upcoming months.

After which, sessions started where each contact person from the Jordanian partners has presented the implementation of the diplomas along with all implemented ECO-CAR activities in their university and their upcoming activities as follows.

University	Presenter	Highlights	Comments
UJ	Prof. Ahmed Al- Salaymeh Eng. Dania Sreihin	<ul> <li>ECO-CAR Center is fully equipped and now is open.</li> <li>Vocational diploma (1<sup>st</sup> batch graduated on 2 July 2023 and 2<sup>nd</sup> Batch started 2 September 2023).</li> <li>Students enrolled are registered on the E-learning platform.</li> <li>Several online workshops were conducted.</li> <li>Several Info-days were conducted.</li> <li>3 MoUs were signed.</li> <li>Institutional commitment letters from 3 departments were sent (Electrical, Mechanical and Mechatronics Engineering).</li> </ul>	- 2 <sup>nd</sup> batch students to be registered on the E-learning platform In-house training workshops for BME, RWTH-Aachen, UD, TH-OWL, UNIVAQ and NTUA workshops to be conducted Curriculum development excel sheet to be filled Start of the Professional diploma.



JUST	Eng. Salaheddin Abuyahya	<ul> <li>Vocational diploma (1st batch will graduate on 27 September 2023 and 2nd Batch will start on 17 September 2023).</li> <li>Online workshop was conducted.</li> <li>Info-day was conducted.</li> <li>1 MoU was signed.</li> <li>Institutional commitment letters from 2 departments were sent (Electrical and Mechanical Engineering).</li> </ul>	- ECO-CAR Center to be fully equipped (PC and signboard to be collected from UJ) and opening ceremony to be conducted Accreditation for the 2nd batch in the vocational diploma Students to be registered on the E-learning platform Send a report on the conducted info-day In-house training workshops for BME, RWTH-Aachen, UD, TH-OWL, UNIVAQ and NTUA workshops to be conducted Curriculum development excel sheet to be filled Start of the Professional diploma.
MU	Prof. Omer Maaiteh	<ul> <li>Hosted the monitoring visit.</li> <li>ECO-CAR Center is fully equipped and now is open.</li> <li>Vocational diploma (1st batch will graduated on May 2023 and 2nd Batch will start on October 2023).</li> <li>Online workshop was conducted.</li> <li>Info-day was conducted.</li> <li>Students enrolled are registered on the E-learning platform.</li> <li>Institutional commitment letter was sent from Mechanical Engineering department.</li> <li>Hosted RWTH-AACHEN visit to Jordan.</li> </ul>	- 1 MoU to be signed In-house training workshops for BME, RWTH-Aachen, UD, TH-OWL, UNIVAQ and NTUA workshops to be conducted Accreditation for the 2nd batch in the vocational diploma 2 <sup>nd</sup> batch students to be registered on the E-learning platform Curriculum development excel sheet to be filled Start of the Professional diploma.
TTU	Dr. Wail Adaileh	<ul> <li>ECO-CAR Center is fully equipped and now is open.</li> <li>Vocational diploma (1st batch started on 26 March 2023 with 15 students).</li> <li>Community college diploma (1st batch started on 2022/2023 academic year with 32 students).</li> <li>Online workshop was conducted.</li> <li>Info-day was conducted.</li> <li>I MoU was signed.</li> <li>In-house training for BME, UD and RWTH-AACHEN workshops were conducted.</li> <li>Institutional commitment letter was sent from Mechanical Engineering department.</li> </ul>	- Students to be registered on the E-learning platform In-house training workshop for TH-OWL, UNIVAQ and NTUA workshops to be conducted Curriculum development excel sheet to be filled Start of the 2 <sup>nd</sup> batch of Community college diploma.



BAU	Prof. Rebhi Damseh	<ul> <li>ECO-CAR Center is fully equipped and now is open.</li> <li>Vocational diploma (1st batch started on 26 February 2023 with 7 students).</li> <li>Community college diploma (1st batch started on 2022/2023 academic year with 56 students).</li> <li>Online workshop was conducted.</li> <li>Info-day was conducted.</li> <li>2 MoUs were signed.</li> <li>In-house training for BME workshop was conducted.</li> <li>Institutional commitment letter was sent from Electrical Engineering department.</li> </ul>	- Students to be registered on the E-learning platform In-house training workshops for RWTH-Aachen, UD, TH-OWL, UNIVAQ and NTUA workshops to be conducted Curriculum development excel sheet to be filled Start of the 2 <sup>nd</sup> batch of Community college diploma.
нти	Prof. Tarek Tutunji	<ul> <li>ECO-CAR Center is fully equipped and now is open.</li> <li>Vocational diploma with Hakama (1st batch started on 11 September 2022 with 26 students).</li> <li>Online workshop was conducted.</li> <li>Info-day was conducted.</li> <li>2 MoUs were signed.</li> <li>Institutional commitment letter was sent from Energy Engineering department.</li> <li>Several workshops with stakeholders were conducted to students.</li> <li>Hosted RWTH-AACHEN visit to Jordan.</li> </ul>	- In-house training workshops for BME, RWTH-Aachen, UD, TH-OWL, UNIVAQ and NTUA workshops to be conducted Curriculum development excel sheet to be filled.
ASU	Dr. Hanan Saleet	<ul> <li>ECO-CAR Center is fully equipped and now is open.</li> <li>Vocational diploma (1st batch started on 15 November 2022 with 15 students).</li> <li>Online workshop was conducted.</li> <li>Institutional commitment letter was sent from Electrical and Mechanical Engineering departments.</li> <li>Hosted RWTH-AACHEN visit to Jordan.</li> </ul>	<ul> <li>Info-day to be conducted.</li> <li>1 MoU to be signed.</li> <li>In-house training workshops for BME, RWTH-Aachen, UD, TH-OWL, UNIVAQ and NTUA workshops to be conducted.</li> <li>Curriculum development excel sheet to be filled.</li> <li>Start of the Professional diploma.</li> <li>Students to be registered on the E-learning platform.</li> </ul>
ZUJ	Dr. Loai Dabbour	- ECO-CAR Center is fully equipped and now is open Vocational diploma (1st batch started on 8 January 2023 with 15 students) Institutional commitment letter was sent from the Faculty of Engineering Hosted RWTH-AACHEN visit to Jordan.	<ul> <li>Info-day to be conducted.</li> <li>In-house training workshops for UD, TH-OWL, UNIVAQ and NTUA workshops to be conducted.</li> <li>Online workshop to be conducted.</li> <li>1 MoU to be signed.</li> <li>Curriculum development excel sheet to be filled.</li> <li>Students to be registered on the E-learning platform.</li> </ul>





# **ECO-CAR Work packages (WPs)**

WP1: Establishing university-enterprise cooperation

**Duration: M1 to M36** 

Lead University: Jordan University of Science and Technology (JUST)

Co-Lead University: Mutah University (MU), Al-Hussein bin Abdullah II Technical University

(HTU) & Universidad de la Iglesia de Deusto Entidad Religiosa (UD)

#### **Overall Plan:**

Number	Plan	Duration
1	Proactively identify and seek out network members from different locations.	M1
2	Provide the network members with the needed information about the project aims and activities.	M1
3	Prepare a registration form.	M1
4	Creating a Network of Community Support professionals, potential funders and investors and other stakeholders. The Network members will be involved in different activities of the project.	M5
5	Conduct meetings with enterprises to include them in the design and implementation of the project, to understand stakeholders' interests, concerns and culture.	M5
6	Organise workshops and seminars to exchange information.	M6-M36
7	Sign collaboration agreements with enterprises and training centres to let the students make their internships.	M6

**Eng. Salaheddin Abu Yahya (JUST)** presented the progress of this work package, registration form as two versions are prepared (Arabic and English) to accommodate with the mother language of the target sector, and the number of registered members in the network since the collected responses are stated below:

Jordanian Partners	Number of network members registered	Remained number of network members to be registered	European Partners	Number of network members registered	Remained number of network members to be registered
UJ	13	0	TH-OWL	2	0
JUST	13	0	UD	3	0
TTU	10	0	NTUA	5	0





BAU	8	2	RWTH-	1	1
			Aachen		
MU	9	1	UNIVAQ	2	0
HTU	9	1	ВМЕ	1	1
ASU	7	3	Total	14 members	2 members
ZUJ	9	1			
Total	78 members	8 members	1		

#### Notes:

- Add one stakeholder to the google sheet (For Eng. Salaheddin) <a href="https://docs.google.com/spreadsheets/d/1wbNbIhBEGS7ZtUPJZOEA4wwlv620SzZ7/edit#gid=1639146612">https://docs.google.com/spreadsheets/d/1wbNbIhBEGS7ZtUPJZOEA4wwlv620SzZ7/edit#gid=1639146612</a>

#### And agreed on the following:

No.	Task	Responsibility	Deadline
1.	ASU have to provide at least 2 members for ECO-CAR Network.	ASU	31 Oct 2023
3.	Organise workshops and seminars to exchange information 4 workshops were conducted Each university to conduct one workshop.	All partners	Continous progress
4.	Sign collaboration agreements with enterprises and training centres to let the students make their internships.  - 5 partners (UJ, HTU, JUST, TTU and BAU) have signed agreements.  - 1 agreement should be signed by these partners (ZUJ, ASU and MU).	JO partners	31 Oct 2023
5.	To invite one stakeholder to give lecture in their university and Meeting with stakeholders to manage the students training.	JO partners	Continous progress
6.	5 <sup>th</sup> Newsletter to be circulated to stakeholders.	HTU with JUST	30 Sep 2023

## **WP 2: Baseline Study**

**Duration: M1 to M6** 

**Lead University: Applied Science University (ASU)** 

Co-Lead University: Tafila Technical University (TTU), Al-Balqa Applied University (BAU) &

Universita Degli Studi Dell'Aquila (UNIVAQ)

Number	Plan	Duration
1	WP leader will set a detailed plan for the WP.	M1





2	WP leader will design the four surveys in coordination with WP5 leader and submit them to be approved by Technical Committee.	M2
3	Partners will circulate the surveys to the target groups.	M2
4	Co-leaders will analyze the responses under the leader supervision and generate one report.	M4
5	Other WP's will be based on generated results of this surveys.	M5
6	Progress report to be provided by WP leader every 6 months based on collected feedback from Co-Leaders.	M6

**Dr. Hanan Saleet (ASU)** presented the progress of this work package and the action plan, and agreed on the following:

No	Task	Responsibility	Deadline
1	Final version of the report has been submitted and approved by all partners and stakeholders	WP leader and scientific committee	submitted
2	The scientific paper has been published.	UJ, ASU, BAU, TTU	submitted
3	<ul> <li>Distribute tasks among participants for preparing the 2<sup>nd</sup> research paper.</li> <li>Suggested topic "The outputs from the sustainability WP for the ECO-CAR project"</li> </ul>	ASU	30 Sep 2023

# **WP 3: Capacity Building**

**Duration: M5 to M33** 

**Lead University: National Technical University of Athens (NTUA)** 

Co-Lead University: Applied Science University (ASU), Rheinisch-Westfaelische Technische Hochschule Aachen (RWTH Aachen) & Budapesti Muszaki es Gazdasagtudomanyi Egyetem

(BME)

Number	Plan	Duration
1	WP leader will set a detailed plan for the WP.	M5
2	WP leader will set selection criteria for the workshops.	M5
3	Workshop topics will be matching the hosting university expertise (Topics in electrical and hybrid vehicles and how to prepare and teach e-courses):  a. (6) Training workshops in 5 EU countries for (90) academic and technical staff, (M7, M10, M13, M16, M19, M21).	M7-M33





	<ul> <li>b. (1 or 2) Training workshop in 3 or 4 EU countries for (24) students in Europe, (M30-M33).</li> <li>c. (8) Technology-enhanced (In-house) teacher training for (600) staff member.</li> </ul>	
4	Progress report to be provided by WP leader every 6 months based on collected feedback from Co-Leaders.	

**Dr. Clio Vossou (NTUA)** presented the progress of Capacity Building Plan work package and the action plan. Also, upcoming trainings and EU visits were discussed as follows:

# TOT Workshops by EU:

University	Presenter	Details
Technische Hochschule Ostwestfalen-LIPPE (TH-OWL) - Staff	Prof. Salman Ajib	Only Outcomes
National Technical University of Athens (NTUA)	Prof. Dimitri Koulocheris Dr. Clio Vossou	Upcoming workshop Agenda (25-29 Sep 2023)
Universita of L'Aquila – Staff	Prof. Michele Anatone	Upcoming workshop Agenda (11-15 Sep 2023)

#### - EU visits:

Universities	Proposed Dates	
RWTH	Conducted on 22-24 <sup>th</sup> August 2023	
TH-OWL	TH-OWL Oct 2023 / Jan 2024	
BME 10-14 December 2023		
UD	14-15 November 2023	
UNIVAQ	Jan 2024	
NTUA	Nov/Dec 2023 As well as Jan 2024	





#### Student training:

University	Date	Details
TH-OWL	12-23 June 2023	Prof. Salman Ajib has presented the Outcomes of the workshop at TH-OWL.
UNIVAQ	11-22 September 2023	Prof. Michele Anatone presented the agenda of the upcoming workshop.
BME	16-27 October 2023	Dr. Mate Zoldy presented the agenda of the upcoming workshop.

# Following were agreed on:

N	о.	Task	Due Date
	1.	Next online workshops will be by ZUJ.	31 October, 2023
	2.	Update the "Capacity Building Plan" report to include the physical training workshops for the students, and EU visits to Jordan.	31 October, 2023
	3.	EU visits to Jordan and to be confirmed via email.	30 September, 2023
	4.	All training materials to be submitted by email to WP leader	30 September, 2023

# WP 4: Establishment of EV/HEV labs

**Duration: M6 to M21** 

Lead University: Al-Balqa Applied University (BAU)

Co-Lead University: The University of Jordan (UJ), Jordan University of Science and Technology

(JUST) & National Technical University of Athens (NTUA)

Number	Plan	Duration
1	WP leader will set a detailed plan for the WP.	M2
2	Prepare a list of main components in ECO-CAR centers.	M2
3	WP leader and co-leaders will set the list of needed equipment based on WP2.	M4
4	Central Tender is published.	M10





5	Center is fully equipped and operational.	M18
6	Center establishment.	M21
7	Progress report to be provided by WP leader every 6 months based on collected feedback from Co-Leaders.	

**Dr. Ma'moun Al-Smadi (BAU)** presented the progress of this work package and the action plan, all equipment received by the universities to be received soon.

# And was agreed on:

No.	Task	Responsibility	Due Date
1.	Receive rest of Equipment by Jordanian Partners.	JUST	30 Sep 2023
2.	Setup equipment in center/Lab in the relevant department, and stick EU stickers to all equipment and conduct an opening ceremony.  - 5 partners (UJ, ZUJ, MU, TTU, BAU) have conducted the Lab opening.  - TTU to send the lab opening report.  - Lab Opening ceremony from these partners (ASU, JUST, HTU).	JO partners	31 Oct 2023
3.	Prepare reports in each university for the lab and equipment to be sent to WP leader and JU, 1 final report to be sent by WP leader.	JO partners	31 Oct 2023
4.	Entry and Exit bonds to be ready	JO partners	15 Oct 2023

### WP5: Developing ECO-CAR Professional Diploma

**Duration: M4 to M34** 

Lead University: Budapesti Muszaki es Gazdasagtudomanyi Egyetem (BME)

Co-Lead University: The University of Jordan (UJ), Technische Hochschule Ostwestfalen-LIPPE (TH-OWL), Rheinisch-Westfaelische Technische Hochschule Aachen (RWTH Aachen) & Universita Degli Studi Dell'aquila (UNIVAQ)

Number	Plan	Duration
1	WP leader will set a detailed plan for the WP with due dates.	M4-M6
2	Courses selection based on WP2 results.	M7
3	WP leader will prepare a course outline template with learning outcomes.	M8
4	Creation of committees responsible to develop the selected courses.	M9
5	Diploma accreditation.	M12





6	Tuning Workshop.	M15
7	Courses are developed.	M20
8	Piloting phase.	M16-M34
9	Progress report to be provided by WP leader every 6 months based on collected feedback from Co-Leaders.	

**Prof. Ahmed Al-Salaymeh** has briefly discussed the progress of this work package and its tasks.

First session: each cluster leader presented the cluster courses:

University	Presenter	Status
Cluster 1: Hybrid and Electric Vehicle Basics	Dr. Ma'moun Al-Smadi	Done
Cluster 2: Battery Storage Technology, Charging systems, and Recharging Infrastructure	Eng. Florian Ringbeck	ZUJ to update the course upon the reviewer's comments.
Cluster 3: Electric and Hybrid Vehicles Diagnosis for Maintenance and Repair	Dr. Wael Adaileh	Done
Cluster 4: Internal Combustion Engines in Hybrid Vehicles	Eng. Adam Nyerges	Done
Cluster 5: Automotive Electricity, Electronics, Sensors, and Actuators	Dr. Muhannad Al-Tarifi	Done
Cluster 6: Vehicle Dynamics	Dr. Hanan Saleet	Done
Cluster 7: Health and Safety	Dr. Mohammad Almajali	Done
Cluster 8: Electrical Machines and Drives	Prof. Salman Ajib	Done
Cluster 9: Labs & Workshops	Dr. Ma'moun Al-Smadi	Done

# And agreed on the following:

No.	Task			Responsibility	Deadline
1	1 All recordings for FG3 courses				30 Sep 2023
	Course title	Responsibility	Status	diploma	
	Safety in Hybrid and Electric	MU	Not submitted	committee	
	Vehicles				
	Basic of Electricity and	UJ	Submitted		
	Electronics				
	Hybrid and Electric Vehicles	TTU	Submitted		
	Systems				
	Internal Combustion Engine	MU	Submitted		
	Cooling & Lubrication Systems	HTU	Submitted		
	Powertrain system	ASU	Submitted		





Steering & Suspension Systems	ASU	Not submitted
Braking and Air bag System	ASU	Not submitted
Control Systems	JUST	Not submitted
Sensors	ZUJ	Not submitted
Diagnostics and troubleshooting	BAU	Not submitted

Second session: each university presented the Diplomas implementation:

University	Starting date	Students enrolled
The University of Jordan (UJ)	Vocational Diploma 1 <sup>st</sup> batch (2/10/2022) 2 <sup>nd</sup> batch (3/9/2023)	1 <sup>st</sup> batch: 23 students 2 <sup>nd</sup> batch: 17 students
Jordan University of Science and Technology (JUST)	Vocational Diploma 1 <sup>st</sup> batch (27/12/2022) 2 <sup>nd</sup> batch	1 <sup>st</sup> batch: 11 students 2 <sup>nd</sup> batch
Mutah University (MU)	Vocational Diplomas (1/9/2022)	13 students
Tafila Technical University	Community College Diploma (2/10/2022)	17 students
(TTU)	Vocational Diploma (26/3/2023)	15 students
Al-Balqa Applied University	Community College Diploma (9/10/2022)	56 students
(BAU)	Vocational Diploma (26/2/2023)	7 students
Al-Hussein bin Abdullah II Technical University (HTU)	Vocational Diploma (11/9/2022)	22 students
Applied Science University (ASU)	Vocational Diploma 1 <sup>st</sup> batch (15/10/2022) 2 <sup>nd</sup> batch (5/3/2023)	1 <sup>st</sup> batch: 15 students 2 <sup>nd</sup> batch: 13 students
Al-Zaytoonah University of Jordan (ZUJ)	Vocational Diploma (8/1/2023)	15 students





University	Diplomas to be launched
The University of Jordan (UJ)	Professional Diploma
Mutah University (MU)	Professional Diploma

# **WP6: Quality and Impact Evaluation**

**Duration: M1 to M36** 

Lead University: Universidad de la Iglesia de Deusto Entidad Religiosa (UD)

Co-Lead University: Tafila Technical University (TTU), Al-Zaytoonah University of Jordan (ZUJ) &

Budapesti Muszaki es Gazdasagtudomanyi Egyetem (BME)

#### **Overall Plan:**

Number	Plan	Duration
1	Quality committee will be formed during the kick off meeting.	M1
2	WP leader will set a detailed plan for the WP with due dates.	M2
3	WP leader will prepare online evaluation links for all meetings, workshops and circulate them to partners after each event, and the results will be analyzed by the co-leaders.	M2
4	WP leader will prepare the Quality assurance tools.	M5
5	WP leader will prepare online evaluation links for all piloted courses, and circulate them to partners, and the results will be analyzed by the partners.	M10
6	Courses will be peer reviewed against a developed checklist.	M12
7	External evaluator will be appointed by WP leader.	M12
8	Progress report to be provided by WP leader every 6 months based on collected feedback from Co-Leaders.	

**Dr. Ivan Dyukarev** presented the progress of Quality and Impact Evaluation Plan work package and the action plan for the next stages, and following were agreed on:

No	Task	Responsibili	Due Date
		ty	
1.	Evaluate the meeting	UJ	During the meeting
2.	The project performance survey will be delivered to partners by the QM within 10 days after the end of corresponding period. Partners must respond within 1 week after receiving the survey. If after a week the participation percentage is <50%, a reminder will	UD	Continuous process



nt, allowing 1 week after the uploading of the survey to ete it.		
And the state and a state of the FFL within 40 days often the		
(M) (with the support of the EE) within 10 days after the ine of the surveys, will collect all the answers from the ers, perform a statistical analysis and integrate them into a to which will reflect the views of the consortium on its ess, including any suggestions for changes and evements. The results of this measurement will be part of the sponding Quality and Monitoring report.	UD	Continuous process
each measurement, a Short Quality and Monitoring report e drawn up. The meeting is considered approved if the ted average for the percentage of agreement is more than than 70% of answers. Scores less than this will require tive actions by the partnership, led by the Project inator (PC).	UD	Continuous process
6 months, a global analysis is made of all the <b>Short Quality Ionitoring</b> reports carried out in that period, which will form f the <b>Quality and Monitoring report</b> .	UD	Continuous process
the end of the training/workshop/course, each participant asked to rate several aspects of the training; evaluations will me on the spot. The questionnaires include closed questions and stions. All attendees are expected to fill the survey before g. If after the meeting the participation percentage is <50%, inder will be sent allowing 1 week after the uploading of the y to complete it.	UD	Continuous process
ct performance evaluation (within 10 days after the end of sponding period) rst evaluation done in May 2022 econd evaluation: period deadline 15/06/2022, evaluation ate 25/06/2022 nird evaluation: period deadline 15/12/2022, evaluation date 5/12/2022 ourth evaluation: period deadline 15/06/2023, evaluation ate 25/06/2023 fth evaluation: period deadline 15/12/2023, evaluation date 5/12/2023	UD	Quality and Monitoring reports First report: 30/06/2022 Second report: 25/07/2022 Third report: 25/01/2023 Fourth report: 25/07/2023 Fifth report: 25/01/2024
eteries to the contract of the	ers, perform a statistical analysis and integrate them into a which will reflect the views of the consortium on its ess, including any suggestions for changes and vements. The results of this measurement will be part of the ponding Quality and Monitoring report.  Each measurement, a Short Quality and Monitoring report of drawn up. The meeting is considered approved if the red average for the percentage of agreement is more than than 70% of answers. Scores less than this will require tive actions by the partnership, led by the Project inator (PC).  6 months, a global analysis is made of all the Short Quality onitoring reports carried out in that period, which will form the Quality and Monitoring report.  The end of the training/workshop/course, each participant asked to rate several aspects of the training; evaluations will be on the spot. The questionnaires include closed questions and stions. All attendees are expected to fill the survey before as If after the meeting the participation percentage is <50%, ander will be sent allowing 1 week after the uploading of the to complete it.  It performance evaluation (within 10 days after the end of ponding period)  The reformance evaluation (within 10 days after the end of ponding period)  The reformance evaluation (within 15/06/2022, evaluation the 25/06/2022 cond evaluation: period deadline 15/12/2022, evaluation date //12/2022 urth evaluation: period deadline 15/06/2023, evaluation the 25/06/2023  The evaluation: period deadline 15/12/2023, evaluation date //12/2022	which will reflect the views of the consortium on its which will reflect the views of the consortium on its which will reflect the views of the consortium on its iss, including any suggestions for changes and vements. The results of this measurement will be part of the ponding Quality and Monitoring report.  Each measurement, a Short Quality and Monitoring report is drawn up. The meeting is considered approved if the red average for the percentage of agreement is more than than 70% of answers. Scores less than this will require tive actions by the partnership, led by the Project mator (PC).  The months, a global analysis is made of all the Short Quality onitoring reports carried out in that period, which will form the Quality and Monitoring report.  The end of the training/workshop/course, each participant asked to rate several aspects of the training; evaluations will see on the spot. The questionnaires include closed questions and stions. All attendees are expected to fill the survey before g. If after the meeting the participation percentage is <50%, ander will be sent allowing 1 week after the uploading of the rocomplete it.  It performance evaluation (within 10 days after the end of ponding period)  The valuation done in May 2022  The evaluation period deadline 15/06/2022, evaluation date (12/2/2022)  The evaluation: period deadline 15/06/2023, evaluation the 25/06/2023  The evaluation: period deadline 15/06/2023, evaluation date (12/2/2022)





8.	Course impact evaluation			UD and JO partners	Deadline October 2023	31		
9.	Key project deliver	rables peer review			All partners	Deadline	31	
	Deliverable	Reviewer 1	Reviewer 2	Reviewer 3 Octo	October 2023	r		
	D2.1 Key competencies needed by employers in Jordan in the field of EV/HEV	Mutah University LTD - Omer Maaitah	- Technische Hochschule External Ostwestfalen-LIPPE - Salman Ajib Sandra Marcos					
	D3.1 Capacity Building Plan	Al-Balqa Applied University - Rebhi Damseh	Rheinisch-Westfaelische Technische Hochschule Aachen - Dirk Uwe Sauer	External evaluator - Sandra Marcos				
	D5.2 Virtual Learning Portal	Al-Hussein bin Abdullah II Technical University - Amjed Al Fahoum	Budapesti Muszaki es Gazdasagtudomanyi Egyetem - Máté Zöldy	External evaluator - Sandra Marcos				
	D7.1 Dissemination and sustainability plan	Tafila Technical University - Ahmad Mustafa	National Technical University of Athens – NTUA - Clio Vossou	External evaluator - Sandra Marcos				
	D7.2 Project Website and Social Networks	Applied Science University - Hanan Saleet	Universita Degli Studi Dell'aquila - Anna Tozzi	External evaluator - Sandra Marcos				
10.	Third External Eva	luator report			UD	Deadline February 2023	10	

# WP7: Dissemination and Sustainability

**Duration: M1 to M36** 

Lead University: Al-Hussein bin Abdullah II Technical University (HTU)

Co-Lead University: Mutah University (MU), Al-Zaytoonah University of Jordan (ZUJ) &

Technische Hochschule Ostwestfalen-LIPPE (TH-OWL)

Number	Plan	Duration
1	Dissemination committee will be formed during the kick off meeting.	M1
2	Project website will be designed, hosted and managed by University of Jordan.	M1
3	Facebook page will be created and managed by University of Jordan.	M1
4	Promotional Materials will be designed by Work Package leader.	M2
5	WP leader will set a detailed plan it will include plans for Dissemination, Sustainability and Networking.	M3





6	E-Learning platform will be created and managed by University of Jordan.	M12
7	Tester courses workshops and will be organized in Jordan.	M18
8	A two-day Final dissemination conference will be held at University of Jordan.	M35
9	Progress report to be provided by WP leader every 6 months based on collected feedback from Co-Leaders, the report will cover all Work packages.	

**Prof. Tarek Tutunji** discussed the progress of Dissemination and Sustainability Plan work package and the action plan for the next stages. Following were agreed on:

No.	Task	Responsibility	Due Date
1.	WP leader has approved the final version of the Dissemination and Sustainability Plan with the steering committee.	HTU	Accomplished
2.	HTU prepared the 5 <sup>th</sup> newsletter and will distribute it to the partners to collect their feedback.	нти	Waiting for partners feedback
3.	Each partner has to conduct an info day per year.	JO partners	One Info Day per JO University per year
4.	Tester Course Workshop.	JO partners	Accomplished at UJ on 22.9.2022
5.	HTU Prepared the marketing plan for ECO-CAR diploma.	HTU and Co- leaders	Accomplished
6.	One video to be created about ECO-CAR by those working on it.	HTU with All partners	Oct 2023
7.	WP leader has to develop a Sustainability Plan.	JO Partners	Oct 2023
8.	All partners are to share the social media links and website with their students.	All partners	Continuous task
9.	Sustainability form to be submitted by MU and JUST.	MU and JUST	21 Sep 2023
10.	Sustainability Feasibility Excel file to be submitted by MU, JUST, UJ, ZUJ and BAU.	MU, JUST, UJ, ZUJ and BAU	21 Sep 2023
11.	Info day to be conducted by ASU and ZUJ	ASU and ZUJ	30 Sep 2023

The following link is for the WP drive to upload the supplement documents: <a href="https://drive.google.com/drive/folders/1sg9BxYMmd3004tJp">https://drive.google.com/drive/folders/1sg9BxYMmd3004tJp</a> 9cxtBrAbgNdoB5V?usp=sharing

The following link has the feasibility study and sustainability plan excel sheets and their instructions: <a href="https://fisjo-my.sharepoint.com/:f:/g/personal/eco-car-ju-edu-jo/EpfqwC6phz5FjWl0TxohYtMBlrF1A1DiHUfYxCC04QSjEw?e=78n1ZE">https://fisjo-my.sharepoint.com/:f:/g/personal/eco-car-ju-edu-jo/EpfqwC6phz5FjWl0TxohYtMBlrF1A1DiHUfYxCC04QSjEw?e=78n1ZE</a>





**ECO-CAR Website:** 

http://sites.ju.edu.jo/en/ECO-CAR/Home.aspx

ECO-CAR Facebook Page:

https://www.facebook.com/Eco-Car-100321388735706

ECO-CAR LinkedIn:

https://www.linkedin.com/in/eco-car-a650ab214/

**ECO-CAR YouTube:** 

https://www.youtube.com/channel/UC5Oj5CoWQHDuOMySLGgoF6Q

**WP8: Project Management** 

**Duration: M1 to M36** 

**Lead University: The University of Jordan (UJ)** 

#### **Overall Plan:**

Number	Plan	Duration
1	A Steering Committee (SC) will be established during the kick-off meeting part 2 with 1 representative from each partner.	M1-M36
2	A Technical and Scientific Committee (TSC) will be established during the kick-off meeting part 2.	M1-M36
3	6 coordination meetings will be conducted in Amman (KOM), Budapest, Aachen, Athens, Deusto and Amman (FC).	M1-M36
4	Monthly virtual status meetings via web-conferencing.	M1-M36
5	Regular communication will be conducted by e-mail and shared electronic database.	M1-M36
6	Progress report will be prepared every six months.	M1-M36

**Prof. Ahmed Al-Salaymeh** presented the progress of each work package and what is needed from partners, as tasks and activities of Project Management work package and the action plan for the next stages, and was agreed on:

No.	Task	Responsibility	Due Date
1.	Regular communication will be conducted by e-mail and shared electronic database.	UJ	Continuous Progress
2.	5 <sup>th</sup> Progress reports were submitted by each WP leader.	WPs leaders	Submitted
3.	The next Online Management Meeting	UJ	30 Oct 2023 (2-4 pm CET)





## **Steering Committee Meetings Schedule**

#	Meeting	Destination	Date
1	Kick off Meeting	Amman – (Online)	January / February, 2021
2	2 <sup>nd</sup> Steering Committee Meeting	Athens	10 <sup>th</sup> – 12 <sup>th</sup> March ,2022
3	3 <sup>rd</sup> Steering Committee Meeting	TH-OWL	30 <sup>th</sup> of June – 1 <sup>st</sup> of July, 2022
4	4 <sup>th</sup> Steering Committee Meeting	UD	15 <sup>th</sup> – 17 <sup>th</sup> March, 2023
5	5 <sup>th</sup> Steering Committee Meeting	Aachen	5 <sup>th</sup> – 6 <sup>th</sup> September 2023
7	Final Conference	Amman	9-10 January 2024

Finally, Prof. Ahmed has presented the conclusion of the 2 days meeting and got the final confirmation for the resulted tasks and decisions. Prof. Ahmed thanked the participants for their attendance and thanked the host partner for their efforts in conducting the meeting.

## **Meeting Evaluation Link:**

5th Steering Committee Meeting in AACHEN (google.com)

#### **Photos**

The meeting photos can be reached via this link:

https://drive.google.com/drive/folders/1IGtMnN1562frLu50sp0L088w-VHQH-c3?usp=drive link