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**NEWSLETTER 4:
The INNOMED-UP Project
NEWS, 2021**

promoting UPcycling in
circular economy through
INNOvation and education
for creative industries in
MEDiterranean cities



training activity with Art Shedia, NTUA, GR



training activities by BZU, Hebron/ Nablus, Palestine



testing the smart tools, Municipality of Tunis, Tunisia



NEWSLETTER 4
**The INNOMED-UP Project NEWS,
 2021**

INNOMED-UP

Dear readers of INNOMED-UP Newsletter,

As our INNOMED-UP Project is going through its third year of implementation, I am delighted to present you our 4th Newsletter. After completing the second year, we are pleased and inspired from the creation of knowledge, practices and experiences through the clustering roadmaps, synthesized with the smart tools development, educational processes and socio-urban engagement. Despite the difficulties Covid19- is still bringing to all of us, we have dynamically entered the third and last year of INNOMED-UP Project with the exciting mission of establishing the Pilot Clusters of CCI SMEs in each INNOMED-UP city.

During the second year of INNOMED-UP project all participating cities, through the Clustering Roadmaps, have structured the necessary steps to create networks of circularity within the urban environments. The smart tools i.e. the smart bin and smart bicycle system developed and all the instructions for their reproduction are available on the official website of the program. The training educational seminars and socio-urban workshops were organized with great success and participation. Find out more about all the activities in the following pages of this newsletter.

The second year closed during the double event of the 4th Steering Committee and the 2nd INNOMED-UP Conference, which was organized jointly by the Municipality of Tunis (Tunisia) and the Lead Beneficiary of the INNOMED-UP Project National Technical University of Athens (Greece). It was hosted at the Tunis Municipal Palace

for the local project members and guests and via teleconference for the rest of INNOMED-UP partnership. Distinguished figures of Tunisia, such as Mrs. Souad Ben Abdelrahim, Mayor of Tunis and Mr. Hedi Chbili, representative of the ministry of local affairs and the environment opened the conference. ENI CBC MED Managing Authority and JTS officers Mr. Khaled ElSaadany and Mr. Zied Kbaier also participated in the conference sessions.

In the coming months, we have exciting work to do, as we are now getting ready for the establishment of Pilot Clusters. The overall purpose is to test the smart tools in real case clusters, to involve selected CCI SMEs in networking operations and finally support them to design and produce innovative and up-cycled products. The clusters will have a geographic focus in specific city areas and waste material from CCI SMEs will be collected through the use of smart tools and redistributed to other CCI SMEs as secondary raw materials.

I would like to wish you all Happy and Creative New Year! Enjoy our newsletter and stay tuned for all that to follow through our official website (<http://www.enicbcmmed.eu/projects/innomed-up>) and social media.

Kind Regards,

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physical & online presence during the 2nd INNOMED-UP Conference

2nd INNOMED-UP Conference

Up-cycling challenges & opportunities

preparing the smart tools, NTUA, GR



The 2nd INNOMED-UP Conference took place on Monday 27 September 2021, jointly organized by the Municipality of Tunis (Tunisia) and the Lead Beneficiary of the INNOMED-UP Project National Technical University of Athens (Greece). The event was organized in a hybrid manner, hosted at the Tunis Municipal Palace but also via teleconference. Mrs. Souad Ben Abdelrahim, Mayor of Tunis welcomed all the partners, ENI CBCMED Managing Authority and JTS officers, prominent speakers as well as other guests and invite them to actively participate so that INNOMED-UP project makes a difference, and prove the ability of all the involved parties to be creative and find effective and innovative solutions. Mr. Hedi Chbili, representative of the ministry of local affairs and the environment opened the conference and highlighted the importance of INNOMED-UP project which offers cross-border exchange between cities and learning from the best practices, in order to contribute to pressing environmental issues and waste management challenges. Key note speaker of the conference was Mr. Mounir

Majdoub, environmental expert and former Minister of the environment, who gave an inspiring lecture on Circular Economy challenges and Waste Management practices.

The 2nd INNOMED-UP conference presented all the work and hard efforts of all the partners during the 2nd year. Especially the INNOMED-UP pilot integration action, strategy and implementation, where each project partner was faced with concrete local up-cycling market reality, which includes economic challenges, and enabling ecosystems and city dynamic trends, impacting SME resilience. Shared experiences between project partners during this conference, helped present new approaches and techniques for more resilient ecosystems for SMEs in circular economy, in each city. The conference concluded with the brief presentation of the work of local circular economy start-ups and the wrapping up session by Ms. Aida Robbana, representing the UN Habitat.



the mayor of Tunis opens the 2nd INNOMED-UP Conference



INNOMED-UP

The INNOMED-UP Living Lab

All actions taken during the 2nd year of implementation, the involvement and the interaction with local communities are composing a Living Lab, the INNOMED-UP Living Lab.

Through the Clustering Roadmaps, Athens, Prato, Palermo, Tunis, Hebron, Nablus & Irbid have structured all the necessary steps to create networks of circularity within the urban environments. More than 200 SMEs participated in the field research from all participating cities across Mediterranean.

Socio-urban workshops were organized in four INNOMED UP cities. Partners from the University of Birzeit and the National Technical University of Athens targeted mainly architecture students and creative freelancers, while the NGO's partners - Future Pioneers from Jordan and CRESM from Palermo, Italy - engaged mostly marginalized groups and especially women. More than 200 participants attended the workshops, addressing cutting-edge topics, such as national policies and practices to be adopted or to be updated.

As far as the smart tools are concerned the design process for the smart bin was subjected to the requirements of an easy reproduction by all partners. All the instructions are available on the official website of the program. Regarding the Smart Bike Application, an Android/IOS application able to provide quantitative information of the Smart Bin has been developed as an intermediate tool for sufficient communication.

Special training for CCI SMEs was provided to enhance their capacity on Circular Economy and to offer benefits for their business. More than 1.000 people and 88 SMEs took part in the training seminars, gaining useful and innovative knowledge on cutting edge issues, such as 3D printing, digital design, circular practices and policies. It is crucial for the project objectives to have the engagement of so many creative professionals bringing multiplier effects to urban centers for the future.

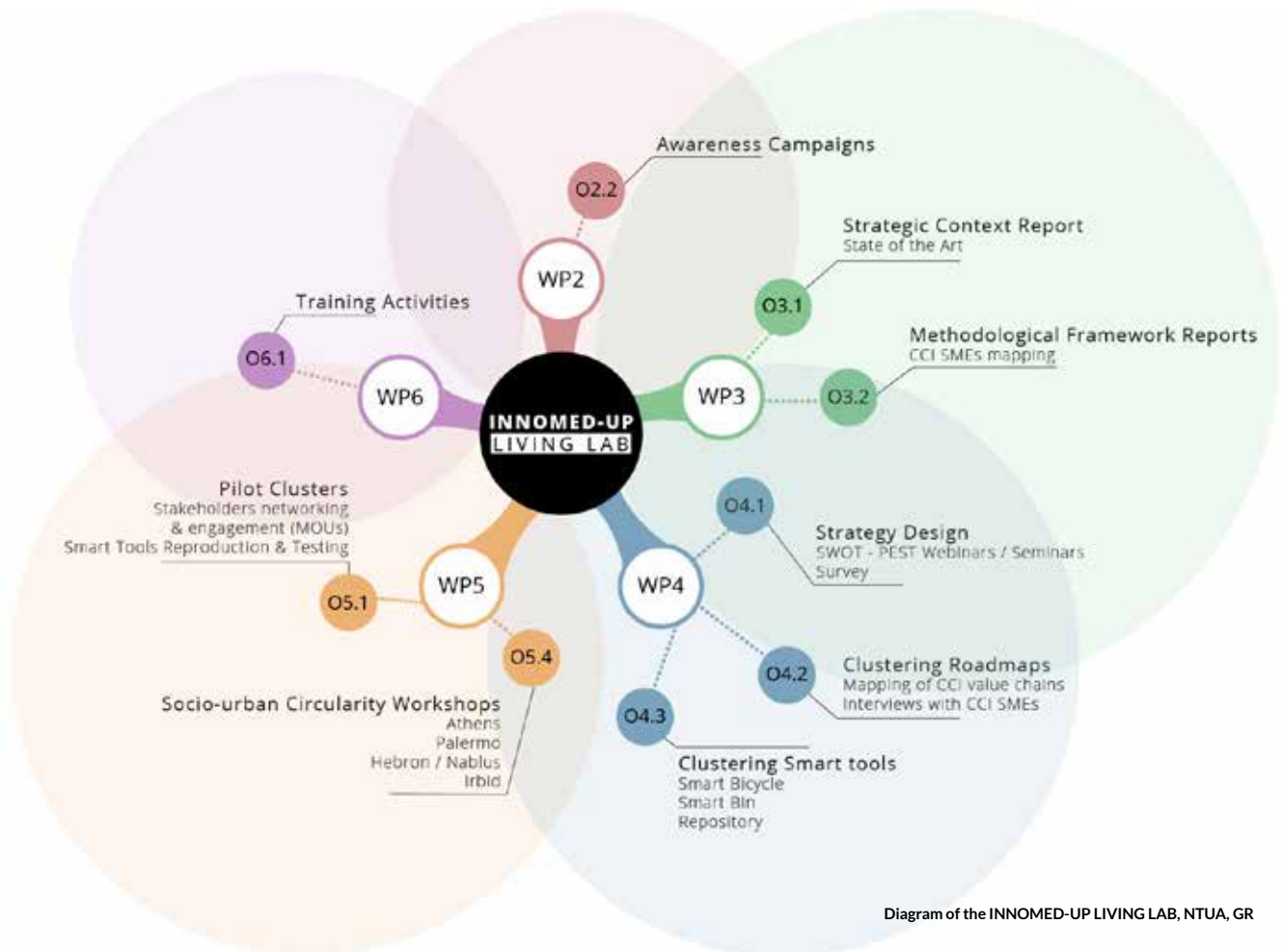


Diagram of the INNOMED-UP LIVING LAB, NTUA, GR



INNOMED-UP

Maintenance, strengthening, support and networking of CCI SMEs

by ben NTUA, Athens, Greece

CCI SMEs located in the historical center of Athens constitute a dynamic economic activity and a pole of attraction, despite the adverse conditions such as the socio-economic crisis and the pandemic. INNOMED-UP survey conducted in Athens has identified both traditional creative activities in the historical city center (or around the historical center), such as jewelry, clothing, textile, leather and accessories, and younger creatives, such as designers, architects, artists, makers etc. NTUA Research Team has proceeded with a survey, involving 30 CCI SMEs, which belong in three main categories: 18 Crafts SMEs, 10 Design SMEs and 2 Makerspaces.

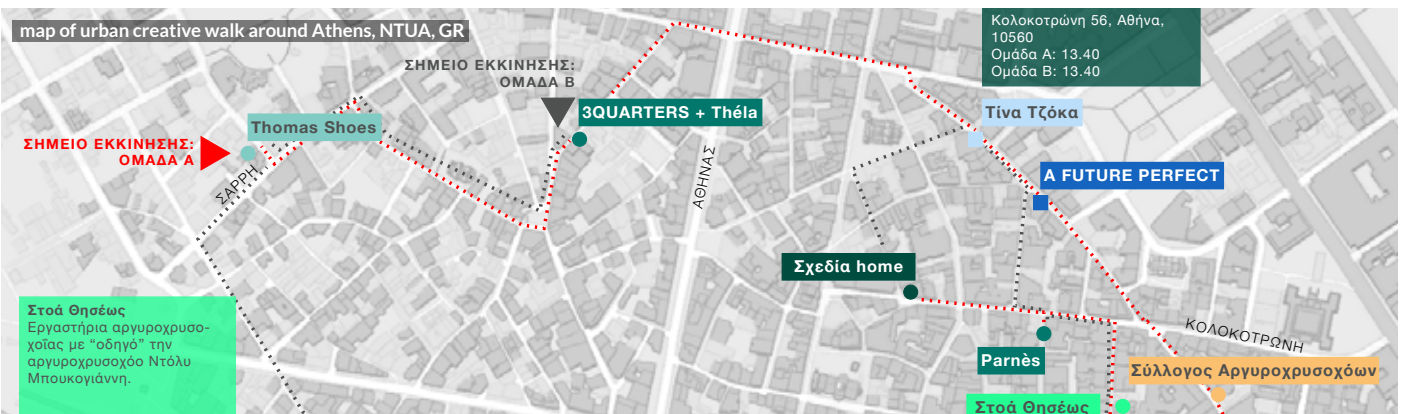
'Athens circles of creativity'

A two-day workshop was organized in Athens in June 2021. Its aim was to bring together some of

the creative entrepreneurs located in the historical center of Athens, several key stakeholders of the INNOMED-UP program as well as postgraduate architecture students. During the 1st day, online lectures and presentations were held in order to present the main concept of the INNOMED-UP program as well as its current research achievements. Key stakeholders also participated and contributed. During the 2nd day, the participants along with the research team visited eight selected creative SMEs, which produce different products, such as leather shoes, bags and design objects and already apply circular economy practices or have a strong potential to move towards circularity principles. The total number of distinct participants who attended was twenty eight: 4 stakeholders, 8 SMEs and 16 postgraduate architecture students.

Eco-sustainable design through training activities in Athens

NTUA & EPDM co-organized a 20 hour blended face to face and online training program during July 2021. The training consisted of five four-hour sessions which conducted in situ at Athens Municipal Maker Space or remotely via live streaming. The topics of the seminars focused on Eco-design, Digital Design, Digital Fabrication and 3D Printing, Eco-sustainable design, Circular design techniques, and Circular economy policies and entrepreneurship. 15 distinct SMEs participated and the total number of participants exceeded 55.





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Sustainability, Circularity for Innovation & Entrepreneurship

by pp1 EPEM, Athens, Greece

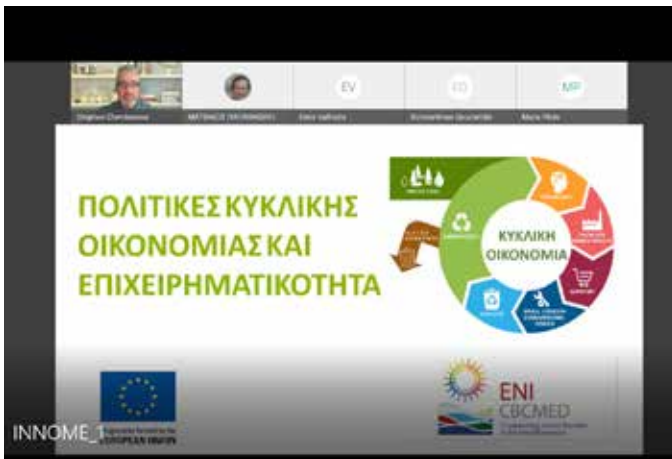
In the framework of the compilation of Circularity Workshops, EPEM SA team in collaboration with Lead Beneficiary (NTUA) coordinated an online workshop for the role of CCIs in the revitalization of Med Urban Centers and promotion of Circular Economy (CE) in local scale in Athens.

In this workshop, the CEO of D-Waste, presented Circular Economy (CE) and Industry 4.0 (I4.0), and in the light of the foregoing, the most important challenges for Greece. In particular, in this workshop were analyzed the latest tools and systems in solid waste management and recycling (sensors, smart locks, material scanners, GPS trackers, RFID/mobile readers, smart trucks, smart containers, reverse

vending machines, robotic sorting plants etc), how the 4th Industrial Revolution is diversifying raw materials and the very concept of waste, new emerging business models and the future of the circular economy. The main conclusion of the whole presentation was that the Circular Economy (CE) is organically linked to the ongoing 4th Industrial Revolution, which is already transforming the planet.

In the scope of Training Activities for SMEs in each participating city, EPEM SA in collaboration with NTUA Research Team (BEN) organized an online workshop about Sustainability, Circularity for Innovation & Entrepreneurship.

The objectives of this seminar were firstly, to gain an understanding of the concepts of Sustainability, Circularity and Zero Waste and secondly, to dive deeper into three sections: Circular Strategies, Sustainable Processes and Case studies. The director of IDSA, with comprehensive global experience in areas of digital design, innovation management, and holistic closed looped systems thinking for end-to-end product development, initiated the audience into the principles of green design philosophy, eco design, and different eco-conscious manufacturing and prototyping processes.



online training by EPEM, Athens, GR

Planting the seeds of a more sustainable future in Prato
The INNOMED-UP Circular Economy Course in Prato, Training Activities for SMEs

by pp2 Municipality of Prato, Italy

The city of Prato has held ten online training workshops between the end of June and the beginning of September – the final one took place on the 6th September 2021. The WS provided a full introductory course to the Circular Economy, its concepts, its trends, its issues, and the way ahead, at the urban and wider scales. A total of 40 training hours were delivered to around 25-15 stakeholders each time.

The course enjoyed an enthusiastic receptivity by the participants, as they were able to achieve the following objectives:

- To be able to understand Circular economy principles
- To know and understand innovative new business models and digital revolution
- To be able to seek the circular advantage developing new business models
- To be able to understand and practice circular

economy processes

- To be able to understand how to drive the circular advantage
- To be able to understand and practice design thinking principles
- To be able to deal with main challenges in New-Product Development
- To be able to understand principles and strategies for a durable and circular design

On the other hand, the course evidenced that for developing the Circular Economy within a city, several challenges must be faced, e.g., pertaining to:

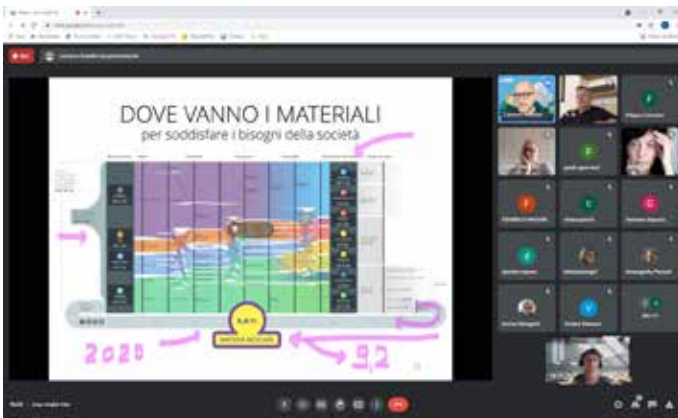
- Understanding framework and instruments involved in the transition
- Understanding circular economy business models
- Understanding the roots of the circular economy
- Knowing how to gain the circular advantage
- Knowing how circular supply-chain management works

- Driving the technology and digital edge in circular advantage
- How to develop main circular capabilities for driving value
- Defining new ideas for gaining the circular advantage

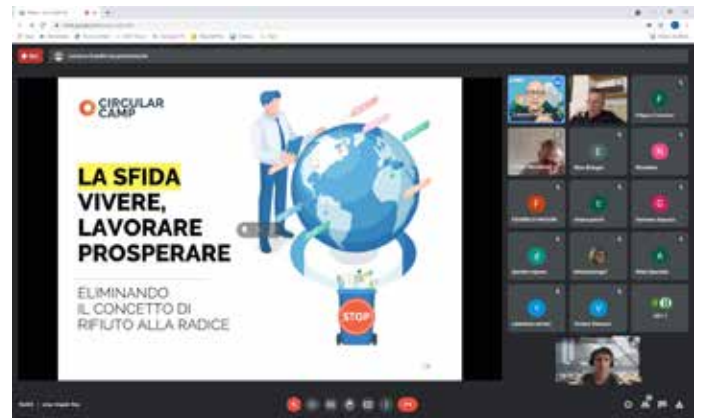
We conclude that the varied composition of the learning group favored a creative exchange of knowledge and ideas among the course participants, which were able to conceive novel opportunities to apply the CE to urban waste disposal issues. Their project ideas will be further developed to participate in the call for projects that will be launched shortly, and possibly funded by vouchers - innovative financial tools that will be the object of an ad-hoc communication campaign through the communication channels of the city of Prato.



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online training by the Municipality of Prato, IT



Co-working with the Civil Society in Palermo

by pp3 CRESM, Palermo, Italy

On 15 June 2021 at the Cresm Nuove Officine Zisa-NOZ space in Palermo a public event was organized to present the training activities. Representatives of companies, associations, cooperatives and artisans who participated in the interviews conducted by Cresm and who were included in the Innomed Up project reports were invited to participate. The meeting was open to all citizens, about 200 people participated.

In parallel to the event that took place inside the NOZ space, the Open Workshop for Civil society took place in the external area in front. The Workshop was organized by recovering vegetable waste.

Almost 100 reeds were therefore used for the participatory construction of a temporary bio-architecture construction. Two political refugees residing

in a reception center of the Municipality of Palermo collaborated as conductors of the workshop.

From June to September 2021, training activities were held focused on the principles of the Circular Economy, on the opportunities given by innovation and on the new possibilities of waste recycling, on more specific issues related to Ecodesign, Bio-architecture and Digital Manufacturing. 40 hours of training were carried out in which 10 representatives or workers of small businesses took part, especially in the field of art and crafts. At the end of the training course a demonstration workshop was held open to citizens and focused on the possibilities of reuse of Posidonia Oceanica. During the workshop some artifacts were made demonstrating the possibilities of reuse of Posidonia.



hands-on workshop by CRESM, Palermo, IT





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Launch new distinctive products : 'Ecole de la Propreté' for Medina's circular economy

by pp4 Municipality of Tunis, Tunisia

INNOMED-Up training activities in Tunis, took place at 'ecole de la proprete'. Training was very interactive, and allowed for as much sharing and learning as possible, to allow all participants to come out with the best possible pilot scenario for their creative circular economy ideas. The majority of participants are in the ideation phase, which presents an advantage of flexibility compared to the context of the INNOMED-UP project, with focus on Cultural and Creative Industries sector, within the defined geographical area -the Medina of Tunis-. The training program was designed with an active pedagogical perspective; hence it was important to sensitize participants to the participatory aspect and active engagement in the discussions. The objective was to

reinforce from the outset the notion of 'cluster' where group dynamics are essential.

The training also involved field visits, where the participants, met with waste collectors in the Medina, and followed the important waste path. They also got a chance to interact with artisans, and ask about their waste type and how they manage workshops leftovers.

During the training, discussions revolved around the economic viability of circular economy business, and how to integrate the important informal waste picker's community within Medina's circular economy cluster. Discussions also revolved around the balance

between social impact the business profitability, and how the customers create the economic value to financially sustain the business.

To minimize business risks, the collection of accurate reliable data is key, in order to answer the questions and develop the social business model. Participants were encouraged to gather data first-hand from the field and to observe existing products as well as companies that offer similar products, and make sure to fully understand customers' needs and/or beneficiaries. A business model needs to be flexible and interdependent, which will need to adapt and change as the business ideas mature and learn from the market or customer behavior.



training activities in Tunis, Tunisia



Socio-Urban Circularity and Community Awareness in Nablus & Hebron

by pp5 Birzeit University, Hebron, Nablus, Palestine

NABLUS CITY, Birzeit University (BZU) has executed different activities through the past period. A Training Workshop was delivered in Nablus with a total of 60 training hours for CCI SMEs on topics covering innovation management and prototyping, innovation and circular design, design and photography, marketing, recycling and other topics. 14 CCI SMEs attended face to face the training workshops in the period June 14th - July 14th. More than 10 new innovative CCI and CE products were proposed so far.

It's worth noting that BZU will make an announcement for grants for the innovative products. Also, it will work on the construction of (5) bins and (1) smart bicycle for Nablus city, and seek for the MOU's signing with some main stakeholders of the national bodies, like: Engineers Union, Municipality and three Ministries, and create a bridge of cooperation with local community, decision-makers and media to ensure that these steps are carried out properly.

On the other hand, preparation work has been done regarding the implementation of Socio-Urban Circularity Workshops including a field visit to one public square in the old-town of Nablus city, and other urban workshop for

community awareness at BZU. In the meanwhile, Project researchers met with the Joint Services Council in Nablus to discuss the status of landfills and their distribution, which would support the implementation of Roadmaps and Smart tools in Nablus city.

To promote the Circular Economy in Palestine, a number of SMEs benefiting from the project in Nablus participated in two exhibitions one in Bieta and another in Asira El-Shamaliah to promote handicrafts and Palestinian culture and identity. This participation was part of the Public Awareness to disseminate the culture of recycling and the Circular Economy in Palestine.

HEBRON CITY, Birzeit University (BZU) has also implemented various activities within the project phase. A Training Workshop was delivered in Hebron with a total of 60 training hours in 10 days for CCI SMEs on topics covering Innovation management and prototyping, innovation and circular design, design and photography, marketing, recycling and other topics. 17 CCI SMEs attended face to face the training workshops in the period June 8th - July 13th. More than 10 new innovative CCI and CE products were proposed so far. And before that,

preliminary training was carried out for some SMEs in computer skills at a rate of 6 meetings.

Coincidentally, Birzeit University (BZU) has held many meetings with stakeholders to develop future visions of cooperation and to determine a public urban space to apply innovative ideas and works on it in order to improve and promote the CCI by SMEs and Architecture students. On the other hand, the Socio-Urban Circularity activities has been initiated, firstly by selecting the public urban space (Badran Plaza) in coordination with the Palestine Polytechnic University in Hebron. Then the BZU team organized a field visit and held a workshop in Hebron Old Town for SMEs owners and Architecture Students from Birzeit university (4 students) and Palestine Polytechnic University (2 students).The conducted Tour was aimed to evaluate and survey the chosen public spaces/ Badran Plaza in order to implement their own ideas and Design interventions for Developing the Urban Space and Building Façades of the Badran Plaza. Also, The Architectural Students Visit's the SMEs Workshops to explore their own designs and products for embedding them in the proposed drawings and designs for the Plaza.



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training activities by BZU , Hebron/ Nablus, Palestine

Draft clustering roadmap for Irbid city

by pp6 FEPC, Irbid, Jordan

Future Pioneers (FPEC) has implemented various actions including the completion of (33) Surveys by SMEs which facilitated the development of the draft clustering roadmap for Irbid city. In addition, PP6 was capable to complete the Strategy design for Specialization of the INNOMED-UP Holistic Approach at Jordan level and achieved an outstanding progress in conducting the circular economy training for two groups with a total number of (30) SMEs over 12 days for each group. FPEC specialized trainers prepared the relevant training materials, interactive exercises, and pre/post questionnaires. A group of trainers with diverse backgrounds participated in the training to ensure delivering comprehensive knowledge that will help these SMEs to improve their circular products

to be innovative one. The training resulted with several innovative products.

Regarding community engagement, FEPC was capable to conduct community workshop to engage the local community to be part of the clusters. Ten SMEs were selected to host the (10) smart bins. (23) People attended this workshop. Simple MOUs will be signed with these people. The first Smart Bin has been constructed benefiting from NTUA platform, and the smart bicycle is under progress benefiting from local resources. A MOU was signed with municipality of Irbid, Irbid Chamber of commerce, Irbid Chamber of Trade in order to facilitate the communication with relevant SMEs, facilitate adoption

of circular economy practices, and ensure proper support at the decision makers' level. Lastly, Info point has been established and there was a proper media coverage.

FPEC will ensure announcing for grants for the innovation products & innovative products, and it will complete the construction of the (10) bins and the smart bicycles. Also, it will lead launching of the third awareness campaign focusing on clusters, innovation and mentorship. An update for the communication and visibility plan will be conducted as well.



training activities by FEPC, in Irbid, Jordan

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