Cities on both sides of the Mediterranean face important environmental challenges and increasing costs to collect and treat waste, including expensive investments in landfills or incinerators. The MED-InA project proposes to develop and roll out a methodology for a “Zero Waste” public policy adapted to Mediterranean cities as an exemplary and participatory approach for waste reduction, reuse and recycling. It involves 5 countries: France, Jordan, Lebanon, Spain and Tunisia.

As pandemic-related restrictions eased through 2021, MED-InA activities could resume in the 3 pilot cities of Irbid (Jordan), Carcaixent (Spain) and La Marsa (Tunisia): revising/drafting municipal waste management plans, supporting citizens with their behavioural change, and fostering innovative projects through incubators.
Involving the private sector is key to achieve waste reduction at local level and move towards circular economy, which is why the American University of Beirut (MED-InA partner) selected one incubator in each pilot country (Jordan, Spain and Tunisia), to pick the most promising local initiatives.

This is how the process took place:

**Autumn 2021**

- The incubators launched calls for applications along with communication and information events, to shortlist a number of start-ups and ideas with promising potential in the field of circular economy.

**Winter 2021-22**

- Collective coaching sessions were offered to the shortlisted candidates, to enhance their proposals and prepare them for the final pitching event.
- Pitching events took place in the 3 countries, each one selecting 2 start-up projects and 2 ideas.
- Prizes from 5,000 euros to 10,000 euros and 3 months of incubation in early 2022.

You may retrieve written interviews of the winners and their projects in the MED-InA website News section, and video portraits of the Tunisian ones in the MED-InA website Library/Video section!

Tapping on local innovation and stimulating the development of services and products that complement the public and citizen efforts is a vital step towards Zero Waste. Networking is another aspect of this support, which is being implemented at local level to connect start-ups with the municipality, and international level, with AUB organising a Jordanian-Tunisian online networking event on 10 March 2022 for example. More details in the “What comes next?” section of this Newsletter!
About 2,000 households in each pilot city (Carcaixent–Spain, Irbid–Jordan, La Marsa–Tunisia) were recruited in spring 2021 to be supported in changing their behaviour towards less domestic waste production, and overall more eco-responsibility. This process is implemented through the deployment of E3D-Environnement’s GD6D (“I’ve decided”) support solution (see detailed article): during an initial door-to-door campaign including short interviews, inhabitants were invited to commit to 3 actions and 90% accepted to get involved. 8 weeks later, they were phone-called to enquire about their commitment to such actions, see if they needed help or change their choice, or if they could take on additional challenges in their daily behaviours, and so on. This coaching is still ongoing!

After a year of coaching, and despite some difficulties related to coronavirus uncertainty, project leader E3D-Environnement could assess a few intermediate results, as of spring 2022:

### Number of households who received coaching

<table>
<thead>
<tr>
<th>Country</th>
<th>Households Received at Least 1 Coaching</th>
<th>Percentage of Which Received 2 or More</th>
</tr>
</thead>
<tbody>
<tr>
<td>Jordan</td>
<td>1,800</td>
<td>35%</td>
</tr>
<tr>
<td>Spain</td>
<td>1,700</td>
<td>95%</td>
</tr>
<tr>
<td>Tunisia</td>
<td>750</td>
<td>35%</td>
</tr>
</tbody>
</table>

### Most common behavioural progress commitments picked by inhabitants

- **Refusing bags in shops**
- **Buying dish soap in larger formats**
- **Sorting glass**
- **Bringing expired drugs to the pharmacy**
- **Avoiding food waste while shopping**
- **Reusing coffee grounds or tea leaves as plant fertilisers**

The second part of 2022 will provide E3D-Environnement and the teams at municipal level with data on the persistence of such behaviours over time, to assess whether the coaching has produced durable change in the habits of citizens regarding waste production and eco-responsibility.
Public management of waste prevention, collection and sorting is among the 3 levers activated by the MED-InA project. This is why the 3 pilot municipalities were supported by waste management experts and the Jordan University of Science and Technology (JUST) to formulate their new integrated waste management plan (ISWMP). These plans have been finalised early 2022 and are under review by each municipal council before adoption and dissemination among local technicians.

The inhabitants were included in the process, particularly in Spain, through information and exchange events and an online survey to identify the priority actions expected. The feedback was very valuable, in the various subcategories of waste management:

- **Awareness & communication actions**: participants wish for greater transparency and information regarding the waste treatment track, the cost for every step of waste treatment, waste sorting data, and generally more information on waste management targets (sorting/reduction/disposal…) to motivate citizens.

- **Waste management planning (resources)**: besides the several proposals for setting up the polluter pays principle, participants suggested to place the adapted types of bins in public spaces (parks, public facilities…) to allow citizens to correctly dispose of. This is a recurrent issue in the talks between municipality and citizens in Jordan and in Tunisia, especially the dilemma between individual and collective composters.

- **Waste management planning (collection)**: participants expressed the need to increase the frequency of collection of plastic packaging in areas of the municipality with temporary containers.

- **Waste management planning (reduction & reuse)**: in Spain, participants underlined the need to promote the quality of tap water and push for its consumption instead of bottled water, and called for waste prevention measures in local public events.

- **Waste management planning (citizenship)**: linking the payment of the “waste treatment tax” to individual behaviour and the correct or incorrect waste sorting, including large producers and companies, is a convincing option that came up.

- **Stakeholders to involve in improving the waste management model**: in addition to the general public, participants highlighted schools and other educational centres as key to tackle the current waste generation issue.

**New Integrated Solid Waste Management Plans for pilot cities**

Check out the actions of Greater Irbid Municipality and the Jordan University of Science and Technology to reduce waste generation and improve waste management, in this video!
WHAT COMES NEXT?

2021 saw project activities resume on the ground, and by the end of 2022 it will be time to assess their impact on the advancement of Zero Waste approaches in the 3 pilot cities. Over the next year, the main actions planned are the following:

- **Adoption of the proposed ISWMPs at municipal level** (both as a policy decision and in consultation with citizens regarding the deployment details and logistics of waste management equipment)
- **Continuation of citizen coaching and organisation of social events** (collective challenges and clean-up days, through local communication channels and the GD6D app used by households involved in behavioural change)
- **Mentoring sessions and field visit for the pilot city staff to get advice and inspiration from advanced Zero Waste communities in the Mediterranean**
- **Connecting the MED-InA prize winner start-ups with the municipalities and with international partners for collaboration, scaling up and mutual inspiration**

![Image of a man in a generation station]
To give momentum to the local efforts around waste reduction and management, the MED-InA project is planning to involve local shopkeepers and inhabitants in community services and events.

**On the one hand,**

the 3 pilot cities are currently identifying local shops to propose them to host recycling services such as containers for batteries or lightbulbs in their premises. This will give them visibility, access to specific advertising via the GD6D coaching app announcing these shops offer this service, and the shopkeepers will receive guidance to answer customer questions. This action serves a double purpose of expanding awareness on the issue of waste, and actually contributing to solving the problem by providing visible and identified collection spots.

**On the other hand,**

collective events will be organised with the support of the municipality to make the efforts of the pilot actions visible and highlight that numerous inhabitants and the municipality itself are involved in a positive process. The social norm is recognised as a powerful lever to trigger behavioural change, so giving citizens a sense of pertaining to a wider push for less waste should boost their commitment.

These collective challenges will be organised in each country, starting autumn 2022, aiming to create links between citizens and local stakeholders, and promote local initiatives. Specifically in La Marsa and Irbid, a clean-up day will be organised in the pilot neighbourhood, to show citizens that their efforts are supported by the municipalities and encourage them to sustain their personal actions embedded in collective progress.
4 start-ups in each of the 3 pilot countries won financial prizes and an incubation period, ensured by the incubators selected by the American University of Beirut’s Nature Conservation Center. As they develop their products and services, the next step for the MED-InA project is to facilitate networking and opportunities for them, at local level (between them, in partnership with the municipality and other stakeholders) and international level (with the other countries’ MED-InA winners, for scaling up, replicating, finding new markets...).

Helping local start-ups expand their horizons

This is why local incubators and municipalities are in touch at local level, to try finding solutions to help the selected start-ups consolidate and develop their activity, whether it is through discounted land fees or local taxes, eased administrative authorisations or advertising through local media outlets.

At the international level, the AUB Nature Conservation Center, who coordinates the actions of the 3 incubators, organised an online networking forum between Jordanian and Tunisian winners on 10 March 2022. This was a good opportunity for project holders to exchange experience and inspiration, identify potential synergies and expand their network and opportunities in a different country, when applicable (depending on the service or product they provide).

For instance, Hortikos Farm (Tunisia) and Ivvest (Jordan) both work on hydroponics and hyperlocal farming, and although Hortikos focuses more on the social economy aspect of it while Ivvest is more of a tech-oriented business, these two initiatives have interesting expertise and promising perspectives to share.

There are synergies to be found as well between Laüd Recycled, Miachella (both from Spain) and Teenah (Jordan), whose projects are dedicated to producing clothing (textile or footwear) from recycled product!
After inviting partners in Miramas (France) for Zero Waste capacity building workshops and a study visit in early 2020, and after pilot cities got back to action once the pandemic situation stabilised, it is now time to resume the mentoring process to support the pilot municipalities in implementing their new Integrated Solid Waste Management plans!

Therefore, 3 mentoring sessions and a field visit are in preparation for late 2022 and early 2023, possibly in France, Italy or Spain. The objective is to provide pilot cities with experience, lessons learned, and good practices in terms of infrastructures or services that were successful in a Zero Waste perspective. The visited municipalities, but also potential NGOs, companies and/or local stakeholders will explain how they managed the transition towards less waste production and better management...

Topics, to be discussed with all partners, may include (as per the MED-InA Zero Waste Guidebook):

- Governance of a Zero Waste strategy at municipal level
- Plastic and organic waste management
- Involvement and communication with citizens
- Economic and social incentives
- Economic models of waste collection and treatment at the local scale
- Residual waste assessment
Further information on the MED-InA project:

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MED-InA is an EU-funded cooperation project that aims to develop and deploy a Zero Waste methodology fostering the reduction, reuse and recycling of waste in Mediterranean cities. The project involves 7 partners from 5 countries (France, Jordan, Lebanon, Spain, Tunisia) and has a total budget of €2.3 million, of which €2.1 million (90%) is funded by the EU’s ENI CBC Med Programme.