**NAME OF PARTNERS INVOLVED:**

Consorcio Valencia Interior and Diputación de Valencia were in charge to implement this regional Training event in Valencia.

DV and Consorcio were responsible to define the topic, select audience and the format of event. In order to promote the active participation we the proposed some initial actions to be analyze in the event to implement Urbanrec project and the templates to work in the dynamic tables and establish a system to select the most useful actions for the participants. Different good practice guides (collection and management in C.A.S) were presented, also practical cases to improve the C.A.S in bulky waste were presented by Consorcio.

During the conclusion part of the training event were evaluated all the results and selection the actions to be implanted to try to improve bulky waste at local level.

The general design and activities to be done were supervised by leader of the project AIMPLAS and panther ACR+.

Diputación de Valencia and Consorcio Valencia interior, as organizers of the Training event, presented the session and general result of project Urbanrec before the technical session.

Technical partner from Urbanrec project, Blue Plasma power, Ecofrag and Colchones delax, presented the innovations developed in the frame of the project in bulky waste management and valorization. The main objective to transfer the knowledge produced in the project and increase understanding of potential users of the project outcomes and technologies and of their benefits.

A total of 28 assistants from 20 different organizations participated in the “training Event, theses assistants represent industry, municipalities and policy makers. All these organizations are involve in bulky waste management, from management companies for bulky waste, Collections Company, produces, valorizations companies, this was really important to analyze the actions proposed and to guaranty the final implementation of the actions selected during the training.

At municipalities level it is important to remark the assistance of three consortium’s municipal waste (CVI, CRiV and EMTRE) participate in this training event. These waste consortium represent more than 75% of total domestic waste management in the province of Valencia and it is responsible for the collection and treatment of Bulky waste in more than 150 municipalities. Consortium is a public organization created for the joint management of waste in several municipalities in the region of Valencia.

Also al local level two waste public companies Nemasa and ESMASA participate in the training Event. NEMASA is responsible of the management of Bulky waste in the municipality of Mislata, Valencia; with 46.920 inhabitants and ESMASA is responsible of the management of Bulky waste in the municipality of Alcorcon (Madrid) 169.502 inhabitants both of them give us a real picture of the integral bulky waste management at local level and how complicate it is to involve citizens in the correct disposal of bulky waste.

In order to connect with participants and demonstrate the applicability of project Urbanrec the partner Consorcio Valencia Interior, presented first result in bulky waste management developed in six civic amenity sites to increase material recycled from mix bulky waste.
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To implement this innovation in C.A.S, it has been developed a new section materials protocol of plastic materials that can be recycled and new containers installed, this measure can increase the total volume of bulky waste recycled a total of 10% and reduce the total of mix bulky waste the use to go to landfill.

This figures were showed using the interactive tool to demonstrate how can increase bulky waste recycled with new flow developed in Civic Amenities sites, according with Consorcio experience.

Consorcio Valencia Interior also presented a pilot experience called RECIRCULA, which consists of collecting and separating in C.A.S those bulky items suitable for reuse and are transferred to a non-profit entity to carry out the preparation for reuse, avoiding to be treated as a waste and giving it a second life.

TRAINING LOCATION: Valencia. (Spain)

TRAINING DATE: 24/07/2019


In the region of Valencia Bulky waste is one of the most important fractions in weight between that make household wastes. It is situated behind the mixed household waste. The waste from construction and demolition (RCD) and, garden waste are really important but they have a very efficient treatment and final applications, unlike what happens with the bulky waste.

Therefore, it is essential to establish policies to improve a fraction as important as bulky waste, if we want to increase the rates of recycling and recovery of domestic waste generated in our municipalities.

Target audience: bulky waste management companies, companies in charge of management of Civic Amenities Sites, companies responsible of collection bulky on street, producers of urban furniture can use recycled raw materials, consortium of waste organization, public companies involve in the management bulky waste, nonprofit organization focused in reuse equipment.

Agenda / structure of the training:

- 10:00-10:10- Welcome to the attendees and presentation of the current management of bulky waste in the Valencia.
- 10: 10-10: 20.- Introduction to the Urbanrec Project
- 10:20 -10: 30.- Presentation of the session and work dynamics and good practices.
- 10: 30-12: 30.- Development the work tables.
- 12: 30- 13: 00.- Coffee break.
- 13: 00- 13: 20.- Organization of relevant aspects by the moderators. Results presentation.
- 13: 20- 14: 30.- Final Intergroup meeting, selection of best actions to be implemented sharing results and debate. Conclusions.
STRUCTURE OF THE TRAINING:

The idea of the training event was to put in contact all different agents involved in the management of bulky waste (waste consortiums, collection companies, responsible of Civic Amenities Sites (C.A.S), waste management companies, responsible for the preparation for reuse and treatment) in order to exchange knowledge and present the initial results of the project.

In order to promote the exchange of ideas and the dialogue between different positions and points of view, it is developed an adaptation of the World Cafe dynamic. This dynamic is aimed at enhancing the processes of reflection and participation of attendees around a specific topic. It is about the attendees contributing their own perspective on the subject to be discussed and listening to those of other people to know and connect with other ways of thinking, thus expanding their vision and creating a collaborative dialogue, where knowledge is shared.

This dynamic was structured in four thematic tables, theses tables will analyse all the processes that affect the in the integral management of bulk waste.

- Table 1: Collection and transport, selective process.
- Table 2: Civic Amenities Sites new selection Process.
- Table 3: Valorisation: preparation for reuse and treatment.
- Table 4: Communication and citizen service.

Each of these tables, in its thematic field, worked to:

- Identify the problems and opportunities that agents face to reduce the amount of bulky waste destined for landfill.
- Identify and define the lines of action and / or concrete projects that, to face the identified challenges.
- Comment on the improvement proposals and the protocols/guides indicated in the project, as well as their applicability.

The purpose of the event is to identify the main problems, weaknesses, opportunities and challenges in the management of bulky waste. In order to motivate participants the activity was designed not to be raised only in the negative sense of bulky waste management but also should be approached from the positive point of view, identifying trends or potentialities that are not exploited. Likewise, this event will be used to gather the opinions of the participants about proposals for improvement and the protocols indicated in the project.
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Therefore, at each of the tables participants should be able to answer the following questions:

- What are the main problems and opportunities in the different phases of bulky waste management?
- Are there any untapped potentialities in the bulky waste management?
- What trends in the different phases of management have been observed?
- Regarding the improvement options proposed in the Urbanrec project, do I consider that they are viable and otherwise what are the limitations?

Number of participants\(^1\): 28

<table>
<thead>
<tr>
<th>GROUP 1</th>
<th>GROUP 2</th>
<th>GROUP 3</th>
<th>GROUP 4</th>
</tr>
</thead>
<tbody>
<tr>
<td>EVA FORNES (CRiV)</td>
<td>EDUARDO RAMOS (EMTRE)</td>
<td>EUGENIO CAMERA (EMTRE)</td>
<td>ANGEL RODRÍGUEZ (CVI)</td>
</tr>
<tr>
<td>JORDI BELDA (TETMA)</td>
<td>IGNACIO GÓMEZ (URBASER)</td>
<td>FRANCISCO JESÚS (CMPLASTIC)</td>
<td>MAREK DIAZ (TETMA)</td>
</tr>
<tr>
<td>CARLOS MARTÍNEZ (CMPLASTIC)</td>
<td>TOMÁS ZAMORA (DELAX MATTRESSES)</td>
<td>RUBÉN BENITO (URBASER)</td>
<td>EMMANUEL MARQUES (TOTS UNITS)</td>
</tr>
<tr>
<td>CHARO CASTELLÓ (TOTS UNITS)</td>
<td>DAVID CEBOLLA (GIRSA)</td>
<td>OSCAR BIANCHI (ESMASA)</td>
<td>JESÚS SANTOS (ESMASA)</td>
</tr>
<tr>
<td>Mª JOSÉ BASCUÑANA (NEMASA)</td>
<td>LUIGI PUGLIANO (BLUEPLASMA)</td>
<td>JOSE EGEA (GIRSA)</td>
<td>FRANCISCO ALMENAR (SAV)</td>
</tr>
<tr>
<td>ANTONIO FERRERO (ECOFRAG)</td>
<td>LUIS ORERO (RECYCLES)</td>
<td>MARIO ARAYA (BLUEPLASMA)</td>
<td>RICARDO GARCÍA (ECOCIDI)</td>
</tr>
<tr>
<td>LUIS MAS (RECYCLES)</td>
<td>JJ SANTOS (RECYCLING, CONSULTING &amp; SERVICES)</td>
<td>JAVIER FERRER (DIPUTACION DE VALENCIA)</td>
<td>VICENT MARTÍ (ACTECO)</td>
</tr>
<tr>
<td>LUIS MARTÍNEZ (E NUSA-FOBESA-AZA AMBIENTE UTE)</td>
<td>DANIEL FERNÁNDEZ (ESMASA)</td>
<td>MARIANELA MARTÍNEZ (BLUEPLASMA)</td>
<td></td>
</tr>
</tbody>
</table>

\(^1\) In case of several target audiences, please provide percentages of each audience type among the total (e.g. 50% public authorities, 30% private companies, 20% others)
STATISTICS ABOUT THE PARTICIPANTS’ FEEDBACK ON THE QUALITY OF THE TRAINING²

- **Overall satisfaction**: All attendees showed their satisfaction about the event, it has been the first time that all organizations involved in the management of bulky waste work together and exchange experiences. This event was a great opportunity to make networking and learn about the challenges of bulky waste management.

- **Location and material**: The place was perfect for the presentation and for the working tables.

- **Exercises and Practical approach**: The dynamic chosen is based in model work cafe, it was really useful to get the participation of all participants. We get the active participation of the participants thanks rotation through in the thematic tables, theses tables will analyse all the processes that affect the management bulky.

- **Additional (site visit, etc.)**: The results of training event was published in different digital press.

  ✓ [https://www.retema.es/noticia/la-diputacion-de-valencia-analiza-nuevos-retos-en-la-gestion-de-residuos-voluminosos-SlkM6](https://www.retema.es/noticia/la-diputacion-de-valencia-analiza-nuevos-retos-en-la-gestion-de-residuos-voluminosos-SlkM6)


  ✓ [http://www.dival.es/es/sala-prensa/content/la-diputacio-analiza-nuevos-retos-en-la-gestion-de-residuos-voluminosos](http://www.dival.es/es/sala-prensa/content/la-diputacio-analiza-nuevos-retos-en-la-gestion-de-residuos-voluminosos)


WHAT WAS CONSIDERED AS MOST USEFUL?³

The most useful action was the working table model, this work meeting model has allowed all attendees to participate in all the thematic areas giving their experiences and assessing the real possibility of applying the proposed measures.

In each of the tables several questions / actions are posed, linked to the theme of the table, and a round of conversation is created between the occupants of about 20 minutes.

The ideas and reflections discussed during the round are reflected by the participants in a on the templates / sheet.

Once the first round is over, the occupants of each of the initial groups changed tables and partners, favoring cooperative dialogue and the presentation of ideas in a flexible and communication space. Rotations will be based on the 28 people participating in the day.

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² For each of the points listed, provide some statistics about the participants’ satisfaction (cumulating “very satisfied” + “satisfied”) on the basis of the feedback forms that participants had to fill in. For example: “overall satisfaction”: 75% satisfied

³ Please provide 1-2 examples (non-exhaustive list)
In each one of the tables the figure of the moderator is established, who remains in the same table during all the dynamics. The moderator was responsible for energizing the group, raising the questions and updating the new occupants of the table of the arguments raised previously.

At the end the sharing was done by the moderators. These was expose, sequentially, the most relevant aspects that have been collected in a conclusions sheet. The objective is that all participants know the arguments that appear in each of the tables, to answer each of the question and action to improve bulky waste management raised.

Is was a great opportunity to know the real problems in bulky waste management, thanks to the participation of the different organizations represented, from collection to recovery and reuse.

The way that the training session was organized in four thematic tables, where all attendees were able to evaluate and select the final the proposals to improve management of bulky waste. This information it will be use to improve the final guides, for collection and management bulky waste in C.A.S.

The thematic tables were defined before the event to get all the sectors/ organizations be include in each table including at least one person from each organization (waste consortiums, collection companies, responsible of Civic Amenities Sites (C.A.S), waste management companies, responsible for the preparation for reuse and treatment, thanks this design all measures will analyzed for the main stakeholders.

To promote the active participation of the participants, the four thematic tables were coordinated and promote by one moderator.

The moderators of each table were the responsible to raise the issue and questions of the table, energize her group, to encourage the participation of all the as assistants and present the conclusions of his table at the end of the dynamic.

The thematic of tables are related with most important phases in management of Bulky waste.

- Table 1: Collection and transport, selective process.
- Table 2: Civic Amenities Sites new selection Process.
- Table 3: Valorisation: preparation for reuse and treatment.
- Table 4: Communication and citizen service.
Each of these tables, in its thematic area, will work to:

- Identify the problems and opportunities that agents face to reduce the amount of waste destined for landfill.
- Identify and define the lines of action and/or concrete projects to face the challenges identified.
- Comment on the improvement proposals and the protocols indicated in the project, as well as their applicability.
- The contributions and conclusions of the Conference will be studied for possible inclusion in the Urbanrec project.

WHAT WAS CONSIDERED AS LEAST USEFUL?  

During the session, with the main objective to improve the collection and transportation bulky waste, it was proposed to develop a separation in flow material using different fix compartments in the truck.

All the assistants indicated that is not useful because each collection of the street is different and the type/size of bulky waste changes and in this way it is not possible the truck could not render a good service.

It is considered difficult to apply because, in most cases, there is no information on the waste that will be found during collection, which makes it difficult to compartmentalize the vehicle.

\[4\] idem
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Other action that was not really useful was to promote the selective collection on street to promote the possibility or not final reuse of the material.

It is considered complicated to carry out a collection taking into account the possibility to reuse it, normally there is no time to study the possible reuse of the collected elements on street.

The great variety in the type of bulky waste and the disinformation on the waste that the citizens deposit, complicate the management of the space needed in the vehicles for their correct collection.

HOW DID THE PARTICIPANTS EXPECT TO CHANGE THEIR PRACTICE AS A RESULT OF THE TRAINING?

The purpose of the Conference is to identify the main problems, weaknesses, opportunities and challenges in the management of bulky waste. The question should not be raised only in the negative sense but also should be approached from the positive point of view, identifying trends or potentialities that are not exploited. Likewise, this Conference will be used to gather the opinions of the participants about proposals for improvement and the protocols indicated in the project.

During the working tables all the participants participated in all thematic areas, thanks to that they give the experience and real vision about the present situation.

1.- Introduction and state of the art (problems and opportunities identified)

During the activity each participants introduced themselves, the reasons that brought them there, and what they expect from the training, and the real situation of the bulky waste management, problems detected and opportunities.

In the course of the state of art the local responsible municipality of Alcorcon present new action done in the municipality, the use to published the local penalties related with incorrect disposal of bulky waste, as a awareness campaign for citizens and the have detected less abandon in the municipality.

2.- Proposals for improvement

During the table working time we propose, as a starting situation, a total of 15 actions to improve the different phases of bulky waste management. These actions were presented to be analyzed and discussed. Thanks to the participation and collaboration of participants this action increased to a total of 38 proposal.

3- Selection and prioritizations of the action.

The way they change practice is trying to implement the actions proposal during the session, all these actions were analyzed and evaluated the real application and limitations. During the session was selected 38 actions to improve bulky waste management.

Finally all the participants/organizations selected the most useful actions in each thematic area and the got the compromise to try to carry out, with the main objective to reduce the mix bulky waste manage in Civic Amenities Sites.
Example of list of actions selected in working table 1: Collection and transport, selective process.

<table>
<thead>
<tr>
<th>Action name</th>
<th>No. of votes</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 Proposal No. 9. Training and education at all levels taking into account citizens and also institutions.</td>
<td>14</td>
</tr>
<tr>
<td>2 Proposal No. 2. Remove in a segregated manner the bulky waste (truck / compartmentalized van).</td>
<td>13</td>
</tr>
<tr>
<td>3 Proposal No. 8. Organization of the service according to the final destination of the different fractions, taking into account those types of waste that can be reused, those that must be segregated and those that, due to their final destination, do not need to segregate at source.</td>
<td>6</td>
</tr>
<tr>
<td>4 Proposal No. 10. Provide more resources to improve the development times of the service, as well as the human and material resources to perform a segregation at source, taking into account the final destination and the reuse of materials.</td>
<td>6</td>
</tr>
<tr>
<td>5 Proposal No. 7. Encourage collection in C.A.S , to avoid the problem of street collection and make a segregation at source from the ecopark itself.</td>
<td>5</td>
</tr>
<tr>
<td>6 Proposal No. 5. Prevent transport processes from damaging materials or mixing components that cannot be separated later</td>
<td>4</td>
</tr>
<tr>
<td>7 Proposal No. 4. Avoid the removal of bulky ones along with other incompatible flows such as pruning or debris.</td>
<td>3</td>
</tr>
<tr>
<td>8 Proposal No. Avoid means of compaction for the removal of materials.</td>
<td>2</td>
</tr>
<tr>
<td>9 Proposal No. 6. Inform / train the operators in charge of street and ecopark collection on the correct removal of waste.</td>
<td>2</td>
</tr>
<tr>
<td>10 Proposal No. 1. Properly remove bulky waste to promote proper management.</td>
<td>1</td>
</tr>
</tbody>
</table>

Final results about the most useful actions proposal, in the four thematic tables will be included in the last version of two different technical guides the collection model and the management in Civic Amenities Sites.
MATERIALS EDITED FOR THE EACH THEMATIC TABLES.

Templates / work sheets.

It was design and distribute 112 templates for all the 28 participant to carry out the working dynamic. This template was divided;

1- Introduction of the training
2- Introduction of the work cafe dynamic.
3- List of actions proposed to be analyzed.
4- Applicability of actions proposed.
5- List of new actions proposed.

This document was used to introduce the general dynamic of table work, collect information about initial state of art in each organization and present some actions to improve bulky waste management and to get the feedback from participants.

We use this document to collect information about the real experiences of participants, to ask them how to implement the actions proposed and opportunities and applicability for improvement of Bulky waste management.

Finally all these information collected in four thematic tables was analyze at the end of the training event and all of the participants. A total of 38 actions waste selected the most useful action to be done in the future.

(Model of tame table distributed during the training event.)
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LIST OF PICTURES.

Introduction event.

Work dynamic.

Conclusion part; selection of best actions to be implemented sharing results and debate.