

Iceland Liechtenstein Norway grants

(De)construct for Circular Economy
(Des)construir para a Economia Circular

WP 7 – Information, awareness and training

Activity 7.1 – Methodology for stakeholders' consultation (participatory actions)

Final report

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1. Introduction

The main objective of the **(De)construct for Circular Economy [in Portuguese: (Des)construir para a Economia Circular]** project is to promote a regional strategy for the reuse of building products and components as well as the recycling of construction and demolition waste (CDW), thus reducing the environmental impact of the construction sector and promoting its circularity.

Specifically, the work package (WP) 7 – Information, awareness and training –, with the leadership of NOVA School of Science and Technology (FCT NOVA), has the main goal to address information gathering, as well listen and work on solutions with the stakeholders. For this, it will encompass the stakeholders' consensus about the strategic action for the *Baixo Alentejo* region, in Portugal. It will also promote the involvement of the European project partners ID Norway (Norway - NO), CNPCD (Romania – RO) and ENVIROS (Czech Republic – CZ), in exchanging experiences and improving solutions. Additionally, participatory actions will be used to diffuse knowledge among municipalities and construction companies on CDW, namely management, best practices and legal framework. Apart from that, a consultation process for documents and actions related to other WPs will be conducted during the project. Having this in mind, the WP 7 is supported by three specific activities, namely:

- Activity 7.1 – Methodology for stakeholders' consultation (participatory actions);
- Activity 7.2 – Participatory actions for municipalities and construction companies;
- Activity 7.3 – Project partners capacitation.

This document intends to present the methodology that will be followed in WP 7 during the project (Activity 7.1). In this context, this report is structured in the following chapters:

- Introduction (present chapter 1);
- Theoretical approach (chapter 2);
- Description of the activities, contents and criteria (chapter 3);
- Project partners involvement and responsibilities (chapter 4);
- Schedule and deliverables (chapter 5);
- References.

This is the final version of the report, after been evaluated by the project partners in order to obtain feedback for readjustments and taking into account the project objectives.

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2. Theoretical approach

2.1. Collaborative and participative processes

Today there is a growing participation demand in order to assure interventive and responsible collaboration of interested stakeholders. In this context, collaborative and participative processes have gained grounds by assuring means to address complex issues related to environment and sustainability, to democratize decision making settings and to make the most out of the contributions of stakeholders. All this is widely supported by a set of legislation that established legal requirements, calling for a more democratic decision-making in environment and sustainability multiple areas.

Therefore, environmental co-management has become a must relevant to a growing number of specialists, and it has been issued an increasing number of legal frameworks that directly or indirectly aim to promote it. Within this, the direct involvement of stakeholders and the engagement of the civil society are encouraged to assure a long-term sustainability. The basic idea is that in order to achieve sustainability an effective and active engagement of all stakeholders is necessary as a way to promote a responsible citizenship of all.

However, there is a great amount of controversy in public decision making, frequently resulting from the difficulty in effectively and timely integrate in the decision process the concerns and interests of those who would be directly affected by those decisions. This contributes frequently to feed the conflict and to radicalize positions, making the implementation sometimes close to impossible.

There are other difficulties reported by stakeholders, namely, i) the public decision process does not comply to the direct involvement of the potentially affected populations – stakeholders involvement – since the early phases; and ii) there is a technical staff resistance that see this interference – public participation – as a challenge to their technical expertise, while politicians consider it a sharing of their invested power. The process transversality requires new ways to work that does not comply with the traditional ways of working within the technical-scientific sector. This generates a handful of myths (Vasconcelos, 2007) that prevail in political and/or technical sectors and make it difficult to integrate in the process the social decision component, restraining the possibilities to ameliorate the controversy. At stake is the confrontation of two operation models – the rational instrumental model and the interactive participatory model – displaying distinct roles and rules.

The claims to adopt the participatory process – expanded involvement of the stakeholders – are justified by the need to involve the users in the decision-making process in order to assure that the proposed policies respond more adequately to the needs, account for the different types of knowledge and assure an efficient and effective implementation.

Moreover, in the interface areas– policy and management – the problems are frequently high complex, what Rittel and Weber (1973) called “wicked”. These problems have a multiplicity of solutions depending on the definition adopted for them, thus, the problem definition itself requires some process of consensus building. In fact, the literature suggests that the scientific model is inadequate in these cases, because it offers rules to solve problems and not to define problems, what is at stake in the decision-making process (Innes, 2000;

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Dryzek, 2000). Besides, one of the frequently ignored aspects, in the decision-making process in complex contexts, is that it is not exclusively technical, but includes several political options and value judgment that when not timely taken into account generates later a lot of controversy (Lake, 1987).

2.1. Processual capital building

A new challenge arises in terms of shaping the adequacy of institutionally defined processes for a participation and development of shared responsibility among the different stakeholders. This calls for opening the operational contexts, using new forms of informed and expanded stakeholders' involvement, allowing for the integration of their values and interests, right from the beginning of the decision-making processes, with new formats of participation. This represents a constructivist perspective, assuming that *"knowledge utilization is best viewed as a process of constructing, deconstructing, and reconstructing beliefs about the truth and utility of research findings"* (Dunn, 1989). These new formats, while providing the opportunity to generate social (in the sense of contributing to networking and partnership development), intellectual (building up of new knowledge, the collective knowledge), and political (in the sense of the working group emerging out of the process besides having consolidated the identity and achieved maturity, becomes more influential within the decision making process) capital (Innes *et al.*, 1994; Gruber, 1994).

Intellectual capital

The idea is to mobilize and involve all stakeholders in a dynamic collaborative process of co-construction (jointly searching and development of joint solutions) generating collective knowledge. This departs from the idea that imposition without broad consensus leads to failure (Christie and White 2007) and that the use of a bottom-up informal approach has greater chance to lead to success (Ansell and Gash, 2008). It, therefore, recognizes the stakeholder's key role in the process (Berkes, 2009).

Social capital

This growing demand for greater involvement of stakeholders is supported by two main ideas – the "Social Exchange" and the "Network Approach". In fact, the concept of collaboration is proven to contribute to long term social relationships, essential for a long-term sustainability (Nkhata *et al.* 2008). The central idea is to enhance relational change contributing to two types of capital: "relational capital" and "connectedness". The amount of relational capital refers to the socio-psychological attributes level of social relationships, integrating two attributes: "trust" and "commitment". The degree of connectedness refers to the social relationships and the strength of those links that mediate change in social relationships, which may be settled through bonds, activities, and resources. Growing social relationships have a crucial role, namely within socio-ecological systems, because it "gives way to conservation as relational connectedness expand and relational capital is consolidated" contributing for change from conflict-based relationships to cooperative interactions – the collaborative state (Nkhata *et al.* 2008). This can easily be extrapolated to other areas of potential conflict such as CDW management.

Political capital

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These collaborative processes if soundly supported by a genuine dialogue (Habermas, 1991; 1970) contribute to assure active learning and to “amplify the diminished voices” (Detroit collaborative center). While doing so, and with the contributions of the other two capitals, it leads to the empowerment of the most fragile ones and to the maturity of the group creating the “communities of practices” (Lave and Wenger 1991; Wenger, 1998) which means groups that can take their future into their hands and operate autonomously in specific areas of knowledge.

These new participatory settings privileging co-construction strategies allows the adjustment of the participants perspective, often generating innovative solutions. If successful, the building up of these three types of capital, lead to institutional capital, creating communities of practice and new rules and roles and contributing to societal sustainability.

2.2. Stakeholders involvement

To achieve this, it is important to promote the adequate stakeholders’ engagement in the process. Stakeholders engagement represents a way of opening these decision-making processes towards those who are positively or negatively affected by it, contributing to the design and implementation of participatory public policies. Stakeholder engagement activities brings a large palette of positive effects, since is a two-way process, aimed to bring additional experiences and perspectives in the decision-making process, which is an important mean of local actors to be more accountable and take responsibility for actions that influence long term policies, otherwise known as social responsibility. According to the international standard ISO 26 000 “Guidance on Social Responsibility”, the stakeholder engagement represents an *“activity undertaken to create opportunities for dialogue between an organization and one or more of its stakeholders, with the aim of providing an informed basis for the organization's decisions”*.

Their engagement through participatory processes offers the opportunity for their opinions and public suggestions to be considered throughout the public policy life cycle. This process leads to a greater understanding of the values advocated by different parties.

This is extremely important in processes and policies dealing with environmental problems such as CDW management, an area that is by definition complex, interdisciplinary and that will be confronted with ever-increasing challenges. By incorporating public values and suggestions into political decisions, there is a better chance to contribute to the growth of the sensation of power and the sense of empowerment , opening the door for the development of holistic solutions to environmental problems (Lee *et al.*, 2013 in Wan, Shen and Choi, 2018).

Therefore, interactive participatory approaches might be the best way to expand stakeholder involvement in this new context allowing an interactive, structured, and facilitated meeting, where stakeholder participation is inclusive, creative, and based on true dialogue (Vasconcelos, 2000).

To promote the correct involvement of stakeholders, the present document reports the strategy for the establishment of a participatory and consultative process with the previously identified key stakeholders. This

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strategy will privilege the face-to-face process, however due to the covid-19 pandemic situation it may become inevitable to conduct it *online*.

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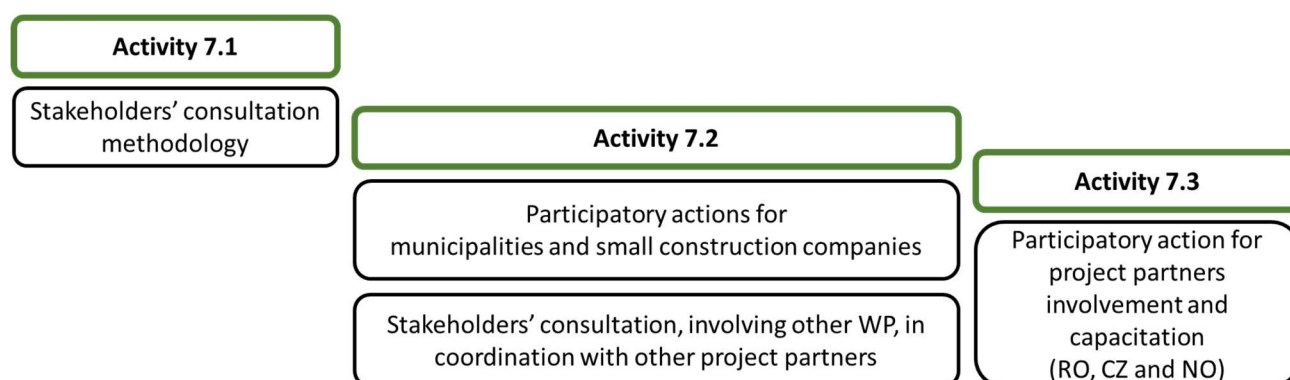


3. Description of the activities, contents and criteria

3.1. Activities

The tasks related to WP 7 will be implemented considering three activities, represented in Figure 1. First, this report addresses the methodology for the stakeholders' consultation (Activity 7.1). The other two activities (Activities 7.2 and 7.3) include tasks which have two different natures, according to the actions that will be implemented, to gather the stakeholders' opinions and to adapt/adjust the outputs of the project, namely:

- Participatory actions, included in WP 7 (subchapter 3.2); and a
- Stakeholders' consultation process, for documents and actions related to other WPs (subchapter 3.3).



Legend: RO – Romania; CZ – Czech Republic; NO – Norway

Figure 1. WP 7 activities.

On one hand, the **participatory actions** will be implemented considering the FCT NOVA experience, since 2012, in what regards the coordination and participation in CDW related projects (FCT NOVA & 3Drivers, 2020; Paiva, 2019; Ramos & Martinho, 2017; Deloitte *et al.*, 2017; Martinho *et al.*, 2013), where municipalities and small construction companies have been identified as players who have a major role in CDW management at a regional and local scale. This is the main reason why these two types of stakeholders have been chosen to integrate the specific participatory actions. These actions aim at listen and bring together the vision of these participants about constraints and about regional and local issues related to CDW management, characteristics and regulatory framework challenges, best practices (WP 2), as well at considering a regional strategic action (WP 6) with a consensus about it. Through training, these actions also aim at capacitate the participants in selected topics about CDW management, considering waste hierarchy principles.

Additionally, the experience resulting from the Portuguese participatory actions with municipalities and small construction companies, as well as the preliminary results from the *Baixo Alentejo* region strategic action (WP 6) will be used to involve and capacitate the European project partners, namely CNPCD (RO), ENVIROS (CZ), and ID Norway (NO). A specific participatory action, jointly decided along the project, will be developed within these countries, in order to understand how the Portuguese results can be applied or adapted to other

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realities and/or scales and vice versa and how the experiences from those countries will contribute to improve the Portuguese strategy.

On the other hand, WP 7 will address an active **stakeholders' consultation process** of documents produced or actions developed in other WPs, namely WP 3 (materials passport), WP 4 (pre-demolition audits), WP 5 (model) and WP 6 (proposal for strategic action). This process will be conducted through specific entities consultation, that will be selected in order to comment and to give their inputs on the documents and actions to be implemented, in specific times along the project.

The detailed tasks, criteria and schedule related to the participatory actions and the active stakeholder' consultation process are presented in Table 1, and are organized in three activities, as mentioned before. The next two subchapters will present information about participatory actions and the consultation process, respectively.

Table 1. Tasks and schedule for the tasks of each WP 7 activities.

Activity ID / Description		Tasks and main criteria	Schedule (month-year)
7.1	Methodology for stakeholders' consultation (participatory actions)	– Methodological report with criteria for stakeholders' consultation: participatory actions with municipalities and small construction companies, and consultation processes regarding WP 3, WP 4, WP 5 and WP 6.	Present task (until January 2021).
7.2	Participatory actions for municipalities and construction companies	– Participatory actions for municipalities (3 sessions): 13 municipalities from <i>Baixo Alentejo</i> region (CIMBAL).	April 2021, August 2021, and January 2022.
		– Participatory actions for small construction companies from <i>Baixo Alentejo</i> region (3 sessions): 20 participants.	April 2021, August 2021, and January 2022.
		– Analysis and consideration of other realities, contexts and examples of actions and good practices (from other project partners) to involve in the training process dedicated to municipalities and small construction companies.	1 to 2 months prior to August 2021 and January 2022 participatory actions.
	Stakeholder's consultation processes for other documents produced in other WPs (WP 3, WP 4, WP 5 and WP 6)		During the project (until August 2022).
7.3	Project partners capacitation	– Presentation of the Portuguese results to the European project partners – ID Norway (NO), CNPCD (RO) and ENVIROS (CZ) –, including the capacitation and the exchange of experiences, regarding the adaptation/adjustment of the results to other realities and contexts, according to what was discussed along the project development.	April 2022.

Legend: WP 3 – Materials passport; WP 4 – Pre-demolition audits; WP 5 – Model; WP 6 – Proposal for strategic action

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3.2. Participatory actions from WP 7

Regarding the participatory actions, Table 2 presents the contents to be implemented. Each participatory action will be organized in two parts, specifically:

- The first part, where the main objective is to present results and to collect relevant information from the stakeholders involved, about constraints and how to improve the project outputs;
- The second part aiming to promote stakeholders awareness and training in order to involve them in the selected subjects which will be chosen in conjunction with the actions stakeholders; in this part, it will be important to collect, prior to the actions (one or two months before), experiences/examples from other realities and contexts (from other project partners) in order to integrate these contents in the training process.

Each action will have the duration of approximately 4 hours, of which the first 2 hours will be dedicated to present and collect information/data, and the other 2 hours dedicated to awareness and training. The duration of the participatory actions will be tested in the first action and will be rethought, if necessary, for the next actions. It will be evaluated, for example, the complementary training courses implementation, according to the knowledge gaps identified and the interest of the participants.

The awareness and training programs contents will be made available for the project partners of ID Norway (NO), CNPCD (RO) and ENVIROS (CZ).

Table 2. Contents for the participatory actions, regarding information, awareness and training.

Participatory actions	Session (month-Year) and duration	Contents	
		Information (2h)	Awareness and training (2h)
7.2. Participatory actions for municipalities	1 st session (April 2021) <i>Main goals:</i> to identify constraints and knowledge gaps about CDW management.	<ul style="list-style-type: none"> – Presentation of the main objectives of the project, as well the main contributions expected from municipalities and the possible achievements to improve CDW management; – Constraints analysis about municipal CDW management in public and private construction works. 	<ul style="list-style-type: none"> – Presentation of general topics about CDW management; – Identification (and hierarchy) of knowledge gaps about CDW management (e.g. legal framework, legal procedures control, best practices, <i>in situ</i> supervision of construction works, recycled materials certification, communication).
	2 nd session (August 2021) <i>Main goals:</i> to discuss the common legal framework; training about CDW management topics	<ul style="list-style-type: none"> – Common legal framework presentation (related to WP 2); – Discussion about the common legal framework proposed and the need to adapt the practices and the main needs of municipalities to national regulation. 	<ul style="list-style-type: none"> – Training on raising awareness about the main knowledge gaps identified in the 1st session, including the presentation of practical examples (from Portugal and other countries – NO, CZ and RO) how the knowledge gaps were tackled and overcome;

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Participatory actions	Session (month-Year) and duration	Contents	
		Information (2h)	Awareness and training (2h)
			– Consolidation and identification (and hierarchyization) of other knowledge gaps.
	3 rd session (January 2022) <i>Main goals:</i> to discuss the action plan for <i>Baixo Alentejo</i> region; training about CDW management topics	– Presentation of the main results obtained in the project (related to WP 3, WP 4, and WP 5); – Discussion about the vision and the identification of the strategic lines for the proposal of a strategic action for CDW management in <i>Baixo Alentejo</i> region (related to WP 6).	– Training about other knowledge gaps identified in the 1 st and 2 nd sessions, including the presentation of practical examples (from Portugal and other countries – NO, CZ and RO) how the knowledge gaps were tackled and overcome.
7.2. Participatory actions for construction companies	1 st session (April 2021) <i>Main goals:</i> to identify constraints, the determining factors, and knowledge gaps about CDW management.	– Presentation of the main objectives of the project, as well the main contributions expected from small construction companies and the possible achievements to improve CDW management; – Identification of the constraints and the determining factors for behavior change about CDW management, considering the Behavior Change Wheel theoretical model (Michie <i>et al.</i> , 2011).	– Presentation of general topics about CDW management; – Identification (and hierarchy) of knowledge gaps about CDW management (e.g. legal framework, legal procedures control, best practices, information about licensed waste management operators and facilities, recycled materials certification).
	2 nd session (August 2021) <i>Main goals:</i> to discuss the action plan for <i>Baixo Alentejo</i> region; training about CDW management topics	– Discussion with small construction companies, for example about materials/messages for an effective communication in terms of CDW management, including CDW illegal dumping discourage; – Discussion about the role and the proper use of channels of communication for topics related to CDW management.	– Training about the main knowledge gaps identified in the 1 st session, including the presentation of practical examples (from Portugal and other countries – NO, CZ and RO) how the knowledge gaps were tackled and overcome. – Consolidation and identification (and hierarchy) of other knowledge gaps.
	3 rd session (January 2022)	– Presentation of the main results obtained in the project (related to WP 3, WP 4, and WP 5), adapted to	– Training about other knowledge gaps identified in the 1 st and 2 nd sessions, including the presentation of

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Participatory actions	Session (month-Year) and duration	Contents	
		Information (2h)	Awareness and training (2h)
	<i>Main goals:</i> to discuss the action plan for Baixo Alentejo region; training about CDW management topics	small construction companies' reality; – Discussion about the vision for CDW management in <i>Baixo Alentejo</i> region (related to WP 6).	practical examples (from Portugal and other countries – NO, CZ and RO) how the knowledge gaps were tackled and overcome.
7.3. Project partners capacitation	Session (April 2022) <i>Main goals:</i> involvement of the partners; exchange of experiences	– Presentation of the Portuguese results to the European project partners: ID Norway (NO), CNPCD (RO) and ENVIROS (CZ).	– Exchange of experiences, regarding the adaptation of the results to other realities and contexts.

Legend: WP 3 – Materials passport; WP 4 – Pre-demolition audits; WP 5 - Model; WP 6 – Proposal for strategic action

A specific information and awareness funded program applied in Alentejo region can be used to the training process, namely: *Programa Operacional Regional do Alentejo – Formação dos Trabalhadores da Administração Pública – Alentejo* (process ALT20-09-5763-FSE-000002) (in English: *Alentejo Regional Operational Program – Public Administration Workers Training – Alentejo*). This is a national funded program applied in Alentejo region and, therefore, funds can be used to finance information and awareness campaigns. In this context, it is possible to use it to finance specific training programs for public administration workers, namely from municipalities, including for example those in respect to the (De)construct project.

Additionally, and in a complementary way to the participatory actions for municipalities, a free *e-learning* CDW course (in Portuguese), promoted by Smart Waste Portugal and the Faculty of Engineering of the University of Porto, will take place before the first participatory action dedicated to these entities, as a tool to help operational human resources to engage with the main topics related to the project.

Due to the covid-19 pandemic, it will be necessary to assess whether the actions can be carried out face to face or *online*. Although actions face to face are a priority, due to the present situation it is not possible to make this decision beforehand.

3.3. Consultation process related with other WPs

In parallel, the consultation process will be applied to WP 3 (materials passport), WP 4 (pre-demolition audits), WP 5 (model) and WP 6 (proposal for strategic action) because there are specific documents and actions for which it is important to consider the exchange of experiences and the revision of the documents and strategies from other stakeholders, including other partners, namely, ID Norway (NO), CNPCD (RO) and ENVIROS (CZ), as showed in Table 3. In the two cases, the recommendations will be analysed and will be included, whenever relevant and applicable, to the project objectives.

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For the active stakeholders' consultation process, this will be developed in two moments: the first one with a brief presentation of the documents/actions to the entities involved in the consultation, with a debate (questions and answers); followed by a second moment where the entities will have time to analyse and comment the documents/actions and also have time to suggest changes, if necessary, in order to improve the output.

Table 3. Consultation process for WP 3, WP 4, WP 5 and WP 6 and expected schedule.

Work package	Tasks	Expected schedule for consultation (month-year)
WP 3 – Materials passport	Materials passport model.	Two moments: May and November 2021.
WP 4 – Pre-demolition audits	Pre-demolition Audits Guide.	(to be define later, for each WP or in conjunction)
WP 5 - Model	Mathematical model results.	
WP 6 – Proposal for strategic action	Stakeholders consultation regarding the strategic lines to be defined for the strategic action for CDW management in <i>Baixo Alentejo</i> region proposal.	January 2022.
	Stakeholders consultation regarding the guidelines for the institutional model for the strategic action for CDW management in <i>Baixo Alentejo</i> region proposal.	Between April and May 2021.

The first approach to the entities that will be consulted in WP 3 (materials passport), WP 4 (pre-demolition audits), WP 5 (model) and WP 6 (proposal for strategic action) is presented in Table 4. These entities include waste management national and regional authorities, local authorities (municipalities), representatives of project and representatives of the construction activities, as well as other relevant representatives related to the main problematic underlined by the project, such as architects, designers and developers/investors. Nevertheless, other entities are expected to be consulted and to be proposed by other partners during the project development, accordingly to the obtained specific results.

Table 4. Entities to be consulted in the consultation processes for WP3, WP4, WP5 and WP6.

Origin	Entities to be consulted	Work Package			
		WP 3	WP 4	WP 5	WP 6
Portuguese entities	– Portuguese Environmental Agency (in Portuguese: <i>Agência Portuguesa do Ambiente</i>).	X	X	X	X
	– <i>Alentejo</i> Regional Coordination and Development Commission (in Portuguese: <i>Comissão de Coordenação e Desenvolvimento Regional do Alentejo</i>).	X	X	X	X
	– Municipalities (<i>Baixo Alentejo</i> region).	X	X	X	X

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Origin	Entities to be consulted	Work Package			
		WP 3	WP 4	WP 5	WP 6
	– Portuguese National Laboratory of Civil Engineering (in Portuguese: <i>Laboratório Nacional de Engenharia Civil</i>).	X	X	X	X
	– Waste management operators (<i>Baixo Alentejo</i> region).	X	X	X	X
	– Architecture and construction sector associations or representatives.	X	X	X	X
	– Architects and construction companies (and individual representations).	X	X	X	
	– Sustainable Habitat Cluster (in Portuguese: <i>Plataforma Centro Habitat de Construção Sustentável</i>).	X	X	X	
	– Technological Center of Ceramics and Glass (in Portuguese: <i>Centro Tecnológico da Cerâmica e do Vidro</i>)	X	X	X	
	– ITeCONS – Institute for Research and Technological Development for Construction, Energy, Environment and Sustainability (in Portuguese: <i>Instituto de Investigação e Desenvolvimento Tecnológico para a Construção, Energia, Ambiente e Sustentabilidade</i>).	X	X	X	
	– Built CoLab – Collaborative Laboratory for the Future Built Environment of the Future	X	X	X	
	– CECOLAB – Collaborative Laboratory Towards Circular Economy	X	X	X	
Other European entities (project partners from NO, RO and CZ)	– ID Norway (NO) or entities to be consulted (to be suggested by ID Norway).	X	X	X	X
	– CNPCD (RO) or entities to be consulted (to be suggested by CNPCD)	X	X	X	X
	– ENVIROS (CZ) or entities to be consulted (to be suggested by ENVIROS)	X	X	X	X

Legend: WP 3 – Materials passport; WP 4 – Pre-demolition audits; WP 5 – Model; WP 6 – Proposal for strategic action

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4. Project partners involvement and responsibilities

In the first approach, it is important that each partner understands the tasks they must performed in WP 7. In this context, Table 5 shows the activity and, for the tasks of that activity, the type of involvement of each partner in general.

Table 5. Involvement of each project partner in WP 7 activities.

Activity ID/ Description		Tasks	Partners involved
7.1	Methodology for stakeholders' consultation (participatory actions)	– Methodological report with criteria for stakeholders' consultation and consultation process of documents produced in other WPs (WP 3, WP 4, WP 5 and WP 6).	FCT NOVA (leader of WP 7)
7.2	Participatory actions for municipalities and construction companies	– Participatory actions for municipalities (3 sessions).	FCT NOVA CIMBAL Resialentejo
		– Participatory actions for small construction companies (3 sessions).	IP Portalegre Smart Waste Portugal RDF Construções CERCIBEJA
		– Analysis and consideration of other realities, contexts and examples of actions and good practices.	Smart Waste Portugal ID Norway (NO) CNPCD (RO) ENVIROS (CZ)
	Stakeholders' consultation processes regarding other WPs (WP 3, WP 4, WP 5 and WP 6).		LNEG Resialentejo ID Norway (NO) CNPCD (RO) ENVIROS (CZ)
7.3	Project partners capacitation	– Portuguese results presentation to the European project partners from RO, CZ and NO, including the exchange of experiences and regarding the results adaptation to other realities and contexts.	FCT NOVA CIMBAL LNEG Resialentejo ID Norway (NO) CNPCD (RO) ENVIROS (CZ)

Legend: WP 3 – Materials passport; WP 4 – Pre-demolition audits; WP 5 - Model; WP 6 – Proposal for strategic action

In a more specific and descriptive approach, Table 6 mention the contribution of each partner to WP 7, in terms of responsibilities, in order to assure that the project can make the most of the activities developed, in a joint effort to promote synergies. These responsibilities may be adapted during the project, if necessary, after the agreement of the partners involved.

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Table 6. WP 7 responsibilities of each project partner involved.

Partner	Responsibilities
FCT NOVA	<ul style="list-style-type: none"> – WP 7 leadership, coordinating the activities to be developed; – Development and implementation of WP 7 methodological report ; – Coordination, organization, implementation, and participation in the participatory actions (municipalities and small construction companies); – Coordination and organization of the consultation processes for WP 3, WP 4, WP 5 and WP 6.
CIMBAL	<ul style="list-style-type: none"> – Organization and participation in the participatory actions; – Involvement/reinforcement of the participation of <i>Baixo Alentejo</i> municipalities in the participatory actions and consultation process; – Involvement/reinforcement of the participation of <i>Baixo Alentejo</i> small construction companies, through the municipalities, in the participatory actions; – Involvement in the training process for municipalities and small construction companies.
LNEG	<ul style="list-style-type: none"> – Development of consultation process documents/outputs (WP 3, WP 4 and WP 5); – Participation in the participatory actions and consultation process.
IP Portalegre	<ul style="list-style-type: none"> – Participation in the participatory actions.
Resialentejo	<ul style="list-style-type: none"> – Development of consultation process documents/outputs (WP 6). – Participation in the participatory actions and consultation process.
Smart Waste Portugal Association	<ul style="list-style-type: none"> – <i>e-learning</i> CDW course (in Portuguese); – Involvement in the participatory actions (and/or specifically in the training process) for municipalities and small construction companies, itself or through its associates, sharing relevant examples of experiences regarding similar processes and realities in Portugal.
RDF Construções	<ul style="list-style-type: none"> – Involvement in the participatory actions (and/or specifically in the training process) for municipalities and small construction companies, sharing relevant examples regarding the Portuguese construction sector.
Cercibeja	<ul style="list-style-type: none"> – Involvement in the participatory actions (and/or specifically in the training process) for municipalities and small construction companies, sharing experiences about materials reuse or preparation for reuse, sharing the social component of the actions developed.
ID Norway (NO)	<ul style="list-style-type: none"> – Involvement in the participatory actions for municipalities and small construction companies, prior (1 to 2 months) to the second and third participatory actions, sharing relevant examples of experiences regarding similar processes and realities in Norway; – Participation in the participatory action for the project partners involvement and capacitation (to be defined later).
CNPCD (RO)	<ul style="list-style-type: none"> – Involvement in the participatory actions for municipalities and small construction companies, prior (1 to 2 months) to the second and third participatory actions, sharing relevant examples of experiences regarding similar processes and realities in Romania; – Organization, implementation, and/or participation in the participatory action for the project partners involvement and capacitation (to be defined later).
ENVIROS (CZ)	<ul style="list-style-type: none"> – Involvement in the participatory actions for municipalities and small construction companies, prior (1 to 2 months) to the second and third participatory actions, sharing relevant examples of experiences regarding similar processes and realities in Czech Republic;

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Partner	Responsibilities
	– Organization, implementation, and/or participation in the participatory action for the project partners involvement and capacitation (to be defined later).

Legend: WP 3 – Materials passport; WP 4 – Pre-demolition audits; WP 5 - Model; WP 6 – Proposal for strategic action

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
5. Schedule and deliverables

Table 7 shows the planned schedule for WP7 three activities. The specific schedule for the consultation process depends from other WP, being this the reason why it is not registered in this section (see subchapter 3.3 for more details).

Table 7. Schedule for WP 7 activities.

Activities ID / Description		Year (months)																							
		2020				2021												2022							
		9	10	11	12	1	2	3	4	5	6	7	8	9	10	11	12	1	2	3	4	5	6	7	8
7.1	Methodology for stakeholders' consultation (participatory actions)																								
7.2	Participatory actions for municipalities and construction companies																								
7.3	Project partners capacitation																								

 Main tasks

 Complementary tasks regarding the participatory actions' preparation (involvement of the project partners)

The schedule referring to the deliverables planned for each of the WP 7 three activities, as well the respective deadlines, are presented in Table 8.

Table 8. Deliverables related to WP 7 activities.

Activity ID / Description		Deliverables	Deadline (month-year)
7.1	Methodology for stakeholders' consultation (participatory actions)	– Report regarding the stakeholders' consultation methodology.	January 2021.
7.2	Participatory actions for municipalities and construction companies	– Stakeholders' consultation results report (one report after each period), focused on municipalities and construction companies' participatory actions, but also reporting the main results of the consultation process of the documents produced in other WPs.	April 2021, August 2021, and January 2022.
7.3	Project partners capacitation	– European project partners capacitation and involvement for exchange of experiences results report: CNPCD (RO), ENVIROS (CZ) and ID Norway (NO).	April 2022.

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References

- Ansell, C., Gash, A., 2008. Collaborative governance in Theory and practice. *Journal of Public Administration Research and Theory Advance*, 18, 543e571.
- Berkes, F., 2009. Evolution of co-management: role of knowledge generation, bridging organizations and social learning. *Journal of Environmental Management*, 90, 1692e1702.
- Christie P, White A (2007). *Best practices in governance and enforcement of marine protected areas: an overview*. FAO Expert Workshop on Marine Protected Areas and Fisheries Management: Review of Issues and Considerations. FAO, Rome.
- Deloitte, BRE, ICEDD, RPS, VTT, FCT NOVA (2017). *Construction and demolition waste in Portugal. Resource-efficient use of mixed wastes. Improving management of construction and demolition waste*. Tender ENV.A.2/ETU/2014/0049. Environment Directorate General of the European Commission. Consortium led by Deloitte, with the participation of BRE, ICEDD, RPS, VTT, FCT NOVA (Nova School of Science and Technology, Laboratory waste@NOVA, from MARE - Marine and Environmental Sciences Centre). Available at: http://ec.europa.eu/environment/waste/studies/deliverables/CDW_Portugal_Final.pdf
- Dryzek, John S. (2000). *Deliberative Democracy and Beyond. Liberals, Critics, Contestations*. Cambridge University Press, Cambridge, England.
- Dunn, William (1989). *Reconciling Divergent Models of Research Utilization*. Knowledge in Society: *The International Journal of Knowledge Transfer*, vol 2:3, Fall 1989, pp.3-5.
- FCT NOVA & 3Drivers (2020). *Demonstrator projects for construction and demolition waste (CDW) in Porto Metropolitan Area (PMA), within the Plan of action for the sustainable management of CDW in PMA* (in Portuguese: *Projetos demonstradores para os resíduos de construção e demolição (RCD) na Área Metropolitana do Porto (AMP)*, no âmbito do Plano de Ação para a Gestão Sustentável dos RCD na AMP). Project component led by FCT NOVA (Nova School of Science and Technology, Laboratory waste@NOVA, from MARE - Marine and Environmental Sciences Centre), in consortium with 3Drivers. Developed for PMA (with the collaboration of Lipor and Smart Waste Portugal Association). Lisbon. Available at: http://portal.amp.pt/media/documents/2020/09/21/5_PD_GuiasPD_jun2020.pdf
- Gruber, Judith (1994). *Coordinating Growth Management through Consensus Building: Incentives and Generation of Social, Intellectual and Political Capital*. Working paper 617. April 1994. Institute of Urban and regional Development, University of California at Berkeley, USA.
- Habermas, Jürgen (1991). 'A reply', in Axel Honneth and Hans Joas, eds., *Communicative Action: Essays on Jürgen Habermas's The Theory of Communicative Action*, translated by Jeremy Gaines and Doris L. Jones, Cambridge, Massachusetts: MIT Press, pp. 214-264 (first published in German in 1986).
- Habermas, Jürgen. 1970. 'Towards a theory of communicative competence', *Inquiry*, 13 (1-4), 360-375.
- Innes, Judith; Booher, David (2000). Collaborative Policy Making: Governance through Dialogue. In *Deliberative Policy Analysis: Understanding Governance in the Network Society*, edited by M. Hajer and H. Wagenaar. Cambridge, MA: Cambridge University Press.
- Innes, Judith; Gruber, Judith; Neuman, Michael; Thompson, Robert (1994). *Coordinating Growth and Environmental Management through Consensus Building*. Policy Research Program Report, California Policy Seminar, University of California, USA.

Operador do Programa:



Promotor:



Parceiros:



- Lake, Robert W. (Ed.) (1987). *Resolving Locational Conflict*. Center for Urban Policy Research, Rutgers - The State University of New Jersey, USA.
- Lave, J., & Wenger, E. (1991). *Situated Learning: Legitimate Peripheral Participation*. Cambridge: Cambridge University Press. <http://dx.doi.org/10.1017/CBO9780511815355>
- Martinho, G.; Ramos, M.; Pires, A.; Santos, P.; Gomes, A.; Moura, E. (2013). *Study for the sustainable management of construction and demolition waste in the North Interior Region of Portugal*. (in Portuguese: *Estudo para a Conceção Sustentável de Modelo de Gestão de Resíduos de Construção e Demolição na Região Norte Interior*). Project funded and developed for North Regional Coordination and Development Commission. FCT NOVA (Nova School of Science and Technology, Laboratory waste@NOVA, from MARE - Marine and Environmental Sciences Centre). Monte de Caparica. Available at: <https://www.ccdr-n.pt/noticia/servicos/estudo-da-ccdr-n-propoe-reciclagem-dos-residuos-de-construcao-e-demolicao-159>
- Michie, S., van Stralen, M. M., & Wests, R. (2011). The behaviour change wheel. A new method for characterizing and designing behaviour change interventions. *Implementation Science*, 6. doi 10.1186/1748-5908-6-42.
- Nkhata AB, Breen CM, Freimund WA (2008). Resilient social relationships and collaboration in the management of social-ecological systems. *Ecology and Society*, 13:2
- Paiva, A. (2019). *Selective demolition: the concept and the perception of the stakeholders* (in Portuguese: *Demolição seletiva: o conceito e a percepção dos intervenientes*). Master Thesis report in Environmental Engineering. FCT NOVA – Nova School of Science and Technology. Monte de Caparica. Thesis supervision: Professor Graça Martinho and MSc. Mário Ramos.
- Ramos, M. & Martinho, G. (2017). *Study about the practices adopted in the construction and demolition waste management and the use of recycled materials by Portuguese construction companies* (in Portuguese: *Estudo sobre as práticas adotadas na gestão dos RCD e a utilização de materiais reciclados pelas empresas de construção portuguesas*). FCT NOVA (Nova School of Science and Technology, Laboratory waste@NOVA, from MARE - Marine and Environmental Sciences Centre). Monte de Caparica.
- Rittel, Horst W.J.; Webber, Melvin M. (1973). Dilemmas in a General Theory of Planning. *Policy Sciences*. 4: 15a5-169.
- Vasconcelos, L.T. (2007). Participatory governance in complex projects. In M. Sobral & G. Gunkel (eds.), *Reservoir and River Basin Management* (pp. 114-124). Berlin: Technical University of Berlin. ISBN: 978-3-798-32056-7.
- Vasconcelos, L. T. (2000). *New Ways in Shaping Local Agendas – the Experience in Implementing Sustainability at the Municipal Level*. In American Collegiate Schools of Planning Annual Conference, Nov 2-5, 2000, Atlanta, Georgia, USA.
- Wan, Calvin, Geoffrey Qiping Shen, e Stella Choi. «Understanding Public Support for Recycling Policy: To Unveil the Political Side of Influence and Implications». *Environmental Science & Policy* 82 (Abril de 2018): 30–43. <https://doi.org/10.1016/j.envsci.2018.01.005>.
- Wenger, E. (1998). Communities of practice: Learning, meaning and identity. *Journal of Mathematics Teacher Education*. 6. 185-194. 10.1023/A:1023947624004.

Operador do Programa:



Promotor:



Parceiros:

