

Iceland Liechtenstein Norway grants

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

WP 3 – Material passports

3.2 – Scoring of the developed MP model by partners and stakeholders (1-4)

WP4 - Pre-demolition Audits

4.3 – Scoring of the developed pre-demolition audit guide by partners and stakeholders (1-4)

Final Report

June 2022

Operador do Programa:



Promotor:



Parceiros:



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1. Introduction and Objectives

This report is part of the (De)construct for a Circular Economy project, promoted by CIMBAL, and concerns the scoring carried out by the project's stakeholders and partners. This report is part of the work package (WP)3, activity 3.2 – Scoring of the developed MP model by partners and stakeholders (1-4) and of WP 4, activity 4.3 – Scoring of the developed pre-demolition audit guide by partners and stakeholders (1-4).

This report aims to present the results of the scoring carried out to stakeholders and partners, and is structured in the following chapters:

- Introduction (current chapter)
- Objectives (chapter 2)
- Methodology (chapter 3)
- Results (chapter 4)
- Recommendations and conclusions (chapter 5)

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2. Methodology

To perform the scoring, a questionnaire was carried out in Portuguese and in English (Annexes 1 and 2), individually for the Materials Passport and for the Guide for Pre-Demolition Audits, which was sent to all 13 municipalities in Baixo Alentejo (Table 1), to 21 companies also from the Baixo Alentejo region (Table 2), as well as to 6 national partners and to the 3 European partners (Norway, Czech Republic, and Romania).

This questionnaire consists of closed questions and an open question, with a score between 1 to 4, with the following classification: 1 - Strongly Disagree, 2 - Disagree, 3 - Agree and 4 - Totally Agree. Both questionnaires addressed the following topics:

- Utility of the tool
- Relevance of information
- Ease of filling/following up the different phases
- Graphic arrangement

Table 1 – Municipalities of the Baixo Alentejo Region that were contacted

Municipality
Aljustrel
Almodôvar
Alvito
Barrancos
Beja
Castro Verde
Cuba
Ferreira do Alentejo
Mértola
Moura
Ourique
Serpa
Vidigueira

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Table 2 – Construction companies in the Baixo Alentejo region that were contacted.

Construction Companies	License
CONSDEP	License 6
EPDM empresa de perfuração e desenvolvimento mineiro	License 6
Francisco Charneca, Lda.	License 5
Canudo Lança, Lda.	License 5
RDF construções, sociedade imobiliária	License 5
Moreira & Serrano. Lda	License 5
Alcance legível construções UNIP, Lda	License 5
Pinto Caeiro – sociedade de construções, Lda.	License 4
IMOSERPA	License 4
Seleiro Dias	License 4
José Picareta	License 4
Betão e Taipa	License 4
J. Santos Rodrigues	License 4
Edmar Pereira	License 4
J B SOC IMOBILIARIA LDA	License 4
MORAIS MACHADO - PROJECTOS FISCALIZACAO E OBRAS LDA	License 4
Construções Parreira e Ramos	License 2
André F.L Brás Unipessoal Lda	License 2
João Brás e Joaquim Brás Construções Lda	License2
GRUPO NORMA	design company
Empresa Calculaocubo	design company

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3. Scoring Results

Out of the total 43 requests, 7 replies were obtained (16,3%), and the distribution per stakeholder type was as follows: 2 construction companies, 1 central administration organization and 4 partners (FCT/Nova, CIMBAL, ASWP e ENVIROS) (Fig. 1).

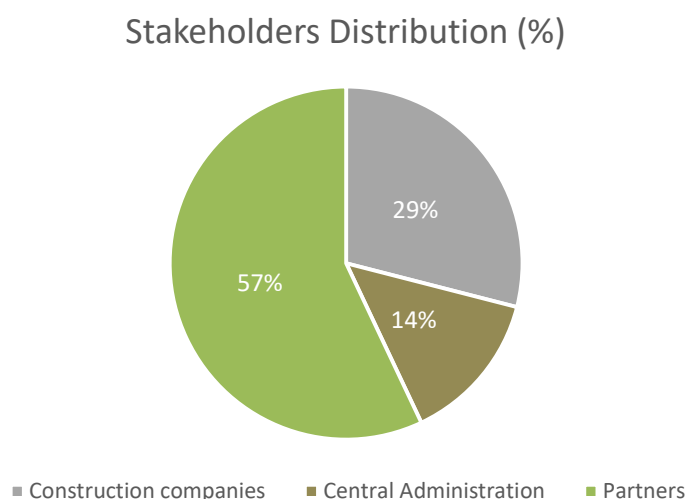


Figure 1 – Distribution of answers per stakeholder.

3.1. Material passports

In terms of closed questions, the average score obtained for each of the questions is presented in Fig. 2.

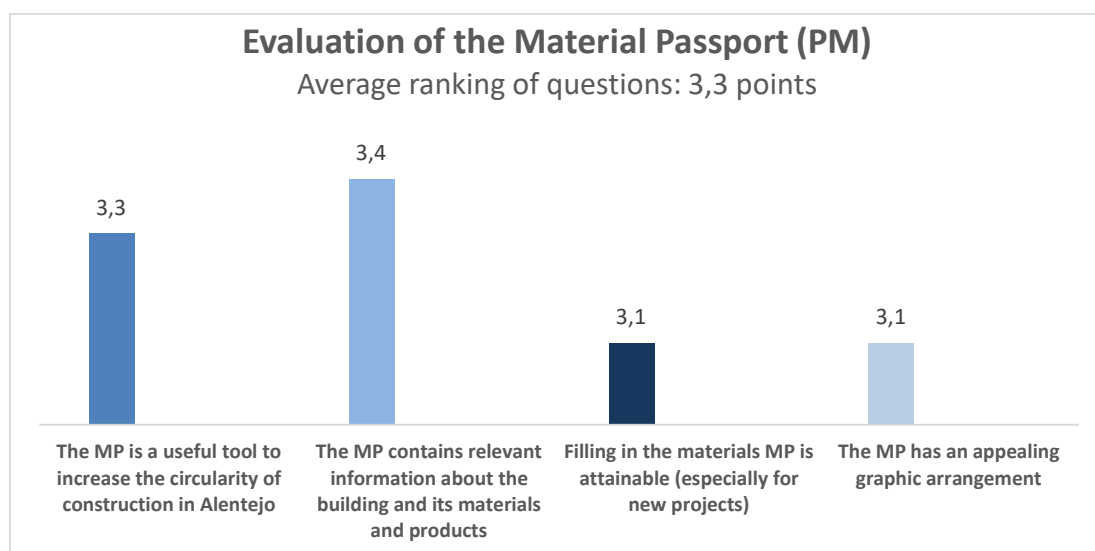


Figure 2 - Average score obtained for each of the questions.
Caption: Strongly Disagree -1; Disagree – 2; Agree - 3; Totally agree – 4.

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In terms of the open question, the following comment was indicated:

Comment: It is not always easy to obtain all the information requested in the PM of the materials to be used, the product sheets of some materials provide little information.

The comment was analyzed, in agreement with our findings.

In summary and as can be seen in table 3, a final average score of 3.3 was obtained for the Materials Passport, having achieved the project objectives (target: score = 3).

Table 3 – Summary of the Materials Passport evaluation.

Evaluation of the materials passport								
	Answers							total
	1	2	3	4	5	6	7	
The MP is a useful tool to increase the circularity of construction in Alentejo	3	3	3	3	4	4	3	3,3
The MP contains relevant information about the building and its materials and products	4	3	3	3	4	4	3	3,4
Filling in the materials MP is attainable (especially for new projects)	3	3	4	3	3	4	3	3,3
The MP has an appealing graphic arrangement	2	3	3	3	3	4	4	3,1
								3,3

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3.2. Pre-demolition Audits Guide

In terms of closed questions, in Fig. 3 the average score obtained for each of the questions can be found.

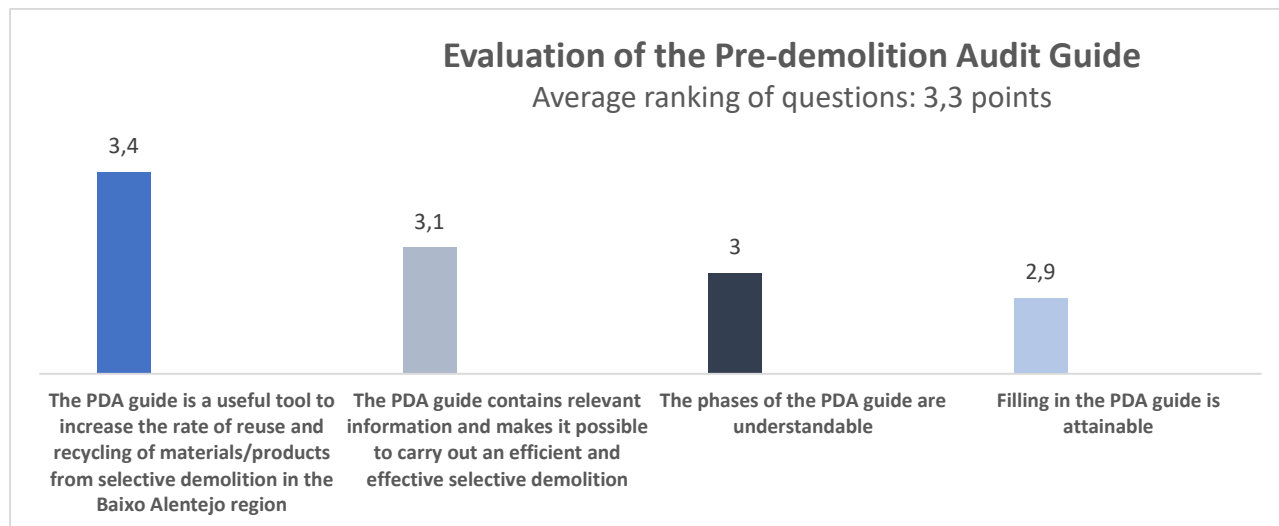


Figure 3 - Average score obtained for each of the questions.
Caption: Strongly Disagree -1; Disagree – 2; Agree - 3; Totally agree – 4.

In terms of the open question, some suggestions for improvement and a comment were indicated:

Comment: It may be difficult to fill in the Documentary Study of the oldest buildings, this is a situation that could compromise the good performance of the pre-demolition Audit.

Improvement suggestions:

In “Desk study”:

1. History of the building – this box is very comprehensive for one field, might benefit from skipping some required data or splitting the box. Quantitative data could be put in specific boxes.

In “Inventory”:

Unit (m, m², m³, kg) – not clear whether this column should contain a number or a name of the unit?

Estimated quantity by weight (kg) – should this be calculated automatically with the conversion factor?

Overall, these 3 columns are a bit confusing, maybe it would be enough just the ask for weight in kg...

In “Is there an environmental analysis? (ecological footprint; certifications, EPD)”. There is missing qualitative information about the concrete analysis/certification if available. Information Yes/no is not very informative.

“Product/material identification” – while choosing the material the mini-window does not show the full name of the material making it hard to pick. How to proceed if an product has more components and some are reusable/recyclable and some are not?

“Recommended Destination (auditor)” here in case of offsite use like reuse or recycling the document would benefit from adding also concrete suggestions, where it could be transported (such places are identified in “Desk Study” point 6. Local facilities and existing waste management systems) (also the following sheet

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“Hazardous waste management” has such a box named “Identification of local waste management facilities”, services column J)
The structure of collected information for the Passport is different to information to the Pre-demolition guide. Better coherence of these two documents could make it easier to use the Passport as a basis for Pre-demolition guide.
Some of the “next page” buttons are not working.

All the suggestions indicated have been analyzed and will, whenever possible, be considered in the final tool.

In summary, as can be seen in table 4, a final average score of 3.1 was obtained for the pre-demolition audit guide, having achieved the project objectives (target: score = 3).

Table 4 – Summary of the Pre-Demolition Audit Guide (PDA) evaluation.

Evaluation of the Pre-demolition Audit Guide (PDA)								
	Answers							
	1	2	3	4	5	6	7	total
The PDA guide is a useful tool to increase the rate of reuse and recycling of materials/products from selective demolition in the Baixo Alentejo region	4	2	4	3	4	4	3	3,4
The PDA guide contains relevant information and makes it possible to carry out an efficient and effective selective demolition	3	2	4	3	3	4	3	3,1
The phases of the PDA guide are understandable	3	2	3	3	3	4	3	3,0
Filling in the PDA guide is attainable	3	2	3	3	3	4	2	2,9
								3,1

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4. Final Considerations

Although we had a low response rate, it was considered that the responses were representative, as in addition to this questionnaire we had several other contacts with stakeholders and partners, since the workshops were held, which confirm that the scores obtained were in line with the assessments and considerations indicated by all.

Thus, in summary, and as previously indicated, the project objectives were achieved, both in relation to the Materials Passport and for the Pre-Demolition Audit Guide, with the goal of a minimum 3 scoring having been achieved in both cases.

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Annex 1 – Questionnaire template sent in PT





(Des)Construir para a Economia Circular - Avaliação de Ferramentas

Este formulário tem o objetivo de avaliar as ferramentas desenvolvidas no âmbito do projeto (Des)Construir para a Economia Circular:

- 1 - Passaportes de Materiais
- 2 - Guias de Auditorias de pré-demolição

No que respeita à proteção das pessoas singulares quanto ao tratamento de dados pessoais, as informações fornecidas serão tratadas apenas para fins do projeto, e de forma agregada, garantindo assim o completo anonimato.

 david.camocho@gmail.com (not shared) [Switch account](#) 

*** Required**

Identificação (Facultativo)

Your answer _____

Identificação do tipo de Stakeholder *

☐ Empresa do setor da construção

☒ Município

☐ Other: _____

Entidade

Indique a entidade que representa (Facultativo)

Your answer _____

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Passaporte de Materiais

Avaliação do Passaporte de Materiais (PM)

	Discordo totalmente	Discordo	Concordo	Concordo totalmente
O PM é uma ferramenta útil para aumentar a circularidade da construção no Alentejo	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
O PM contém informação relevante sobre o edifício e os materiais e produtos que o compõem (sobretudo para novos projetos)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
O preenchimento do PM de materiais é acessível (sobretudo para novos projetos)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
O PM tem um arranjo gráfico apelativo	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

Comentários adicionais

Partilhe com a parceria do projeto a sua opinião e sugestões de melhoria do passaporte de materiais

Your answer

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Guia de Auditorias de pré-demolição

Avaliação do Guia de Auditorias de Pré-Demolição (APD)

	Discordo totalmente	Discordo	Concordo	Concordo totalmente
O guia APD é uma ferramenta útil para aumentar a taxa de reutilização e reciclagem dos materiais/produtos provenientes de uma demolição seletiva na região do Baixo Alentejo	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
O guia APD contém informação relevante e permite efetuar uma demolição seletiva eficiente e eficaz	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
As fases do guia APD são compreensíveis	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
O preenchimento do guia APD é acessível	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

Comentários adicionais

Partilhe com a parceria do projeto a sua opinião e sugestões de melhoria do Guia de auditorias de pré-demolição

Your answer

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Annex 2 – Questionnaire template sent in En





(De)Construct for Circular Economy - Tools assessment

This form aims to evaluate the tools developed within the scope of the ((De)construct for Circular Economy project:

- 1 - Materials Passports
- 2 - Pre-demolition Audit Guides

On what concerns the protection of individuals regarding the processing of personal data, the information provided will be treated only for the purposes of the project, and in an aggregated way, thus guaranteeing complete anonymity.

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*** Required**

Identification (Optional)

Your answer

Identification of the Stakeholder type *

☒ Company from the construction sector

☐ Municipality

☐ Other:

Entity

Indicate the entity you represent (Optional)

Your answer

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(De)Construct for Circular Economy - Tools assessment

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Materials passport

Assessment of the Materials Passport (MP)

	Totally disagree	Disagree	Agree	Totally agree
The MP is a useful tool to increase the circularity of construction in Alentejo	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
The MP contains relevant information about the building and its materials and products	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Filling in the materials MP is attainable (especially for new projects)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
The MP has an appealing graphic arrangement	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

Additional comments

Share your opinion and suggestions for improving the materials passport with the project partners

Your answer

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Parceiros:



(De)Construct for Circular Economy - Tools assessment

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Pre-Demolition Audit Guide

Assessment of the Pre-Demolition Audit Guide (PDA)

	Totally disagree	Disagree	Agree	Totally agree
The PDA guide is a useful tool to increase the rate of reuse and recycling of materials/products from selective demolition in the Baixo Alentejo region	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
The PDA guide contains relevant information and makes it possible to carry out an efficient and effective selective demolition	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
The phases of the PDA guide are understandable	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Filling in the PDA guide is attainable	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

Additional comments

Share your opinion and suggestions for improving the Pre-Demolition Audit Guide with the project partners

Your answer

Operador do Programa:



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