

O1-A3. REPORT ON THE RESULTS ON FIRST WORKSHOP IN ROMANIA



# **INTELLECTUAL OUTPUT 1**

# TASK 01-A3 Report on the results of First Workshop in Romania

Presentation of Methodology for reinstatement of building materials in the industrial value chain



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Universitatea Transilvania din Brașov













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## 1. INTRODUCTION

The "Circular Economy of Buildings" event was organized within the CircularBIM project, namely the first workshop in Bucharest (Romania), a task assumed by the deliverable identified as O1/A3 "Report on the results of First Workshop in Bucharest (Romania). Presentation of Methodology for reinstatement of building materials in the industrial value chain".

This task is included in Intellectual Output 1 "Establishment of common learning outcomes on placing methods based on circular economy criteria, Life Cycle Assessment (LCA) and relative regulations" of the CircularBIM project.

The main purpose of this workshop was to present various technical and theoretical aspects, case studies, but especially methods of reintegration of construction materials into the industrial value chain, better said reintegration into the natural life cycle.

Specialists from various sectors related to the construction industry or construction materials were invited, including architects, engineers, teachers, representatives of some material manufacturers. The event took place in the headquarters of one of the most important real estate developers in Romania, which promotes buildings that include certified products or solutions, controlled in terms of environmental impact.

The agenda of the event was divided into two types of actions: in the first part, theoretical or technical lectures regarding solutions, examples of good practice, working methods; the second part was intended to be more interactive, organized in the format of a round table.

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### 2. THE EVENT AGENDA

# 2.1. Program content

# **Event name - Circular Economy of buildings**

# 15:30 - 16:00 - Participants' reception and registration

# 16:00 - Official event opening

Andrei Botis, RoGBC President.

# 16:05 - Presentation of CircularBIM Erasmus+ project

Juana Torrecilla, CT Marmol / University of Seville, Spain.

# 16:30 - The circular economy in green buildings and sustainable communities / Implementation of CircularBIM project in Romania

Lect. PhD arch. Daniel N. Armenciu, RoGBC / "Ion Mincu" University of Architecture and Urban Planning.

# 17:00 - Case study: Green Homes and circular economy

Beatrice Dumitrascu, ONE United Properties.

# 17:20 - Stakeholders' statement / Debate on the theme of circular economy and EPDs importance

Ciprian Sipos, Ciprian Sipos Green Interiors (moderator).

Gabriel Golumbeanu, Saint-Gobain Romania.

Alina Alexandru, Knauf Insulation.

Razvan Copoiu, Signify.

Oana Diaconescu, FAI Dean, "Ion Mincu" University of Architecture and Urban Planning.

## 19:00 - Cocktail dinner







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# 2.2. Description of program interventions

According to the agenda of the event, the following interventions were carried out:

- a. The reception of the participants by the host organization (RoGBC) at the ONE United properties headquarters in Bucharest and the presentation of the RoGBC activity by Mr. Andrei Botiş, the President of the Romania Green Building Council (RoGBC) Association.
- b. Presentation of the objectives and results of the CircularBIM project, by Juana Torrecilla, (CT Marmol / University of Seville, Spain). The lecture was held online and, in addition to general descriptive aspects of the project, also included a presentation of how the University of Seville, Spain operates in the circular economy.
- c. Mr. Daniel N. Armenciu, as an architect, member and employee of the Romania Green Building Council Association (RoGBC) and at the same time Lecturer at the "Ion Mincu" University of Architecture and Urbanism presented the mission that RoGBC has on a national level, to promote the principles of sustainability and implicitly those of the circular economy in the field of construction. Afterwards, the lecture also covered aspects of theory and ways of implementing the mentioned principles in the practice of designing and evaluating the sustainability of buildings.
- d. Beatrice Dumitrascu, representative of ONE United Properties, presented a suite of projects completed or in progress, emphasizing the circular economy aspects that are taken into account in the design and execution phases, certified through systems such as GreenHomes or Green Building Restore.
- e. The interactive part of the workshop materialized through the round table moderated by interior designer Ciprian Sipos, attended by Gabriel Golumbeanu (Saint-Gobain Romania), Alina Alexandru (Knauf Insulation), Razvan Copoiu (Signify) and Oana Diaconescu (Dean of the Faculty of Interior Architecture, UAUIM).

The seminar was attended by professionals and students, who demonstrated an increased interest in the treated subject and its novelty in the national context, showing awareness of the fact that the circular economy is significant for the improvement of the construction sector.

The presentations and interventions of the CircularBIM project in this Workshop will be posted on the project website in the OER section, available in English.

To publicize the event, the organizing association, RoGBC, designed and printed posters, brochures, sent out newsletters and posted on its website.

The following images show some of these dissemination actions:



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Poster dedicated to the "Circular Economy of Buildings" Workshop, within the framework of the CircularBIM project from Bucharest.



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Poster with the agenda, dedicated to the "Circular Economy of Buildings" Workshop, within the framework of the CircularBIM project from Bucharest.



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Announcement on the RoGBC website regarding the "Circular Economy of Buildings" Workshop program, within the framework of the CircularBIM project from Bucharest.



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Newsletter sent by e-mail, regarding the Workshop program "Circular Economy of buildings", within the framework of the CircularBIM project from Bucharest.

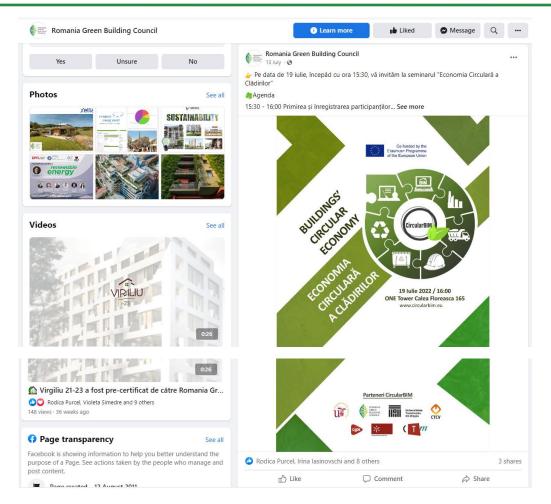




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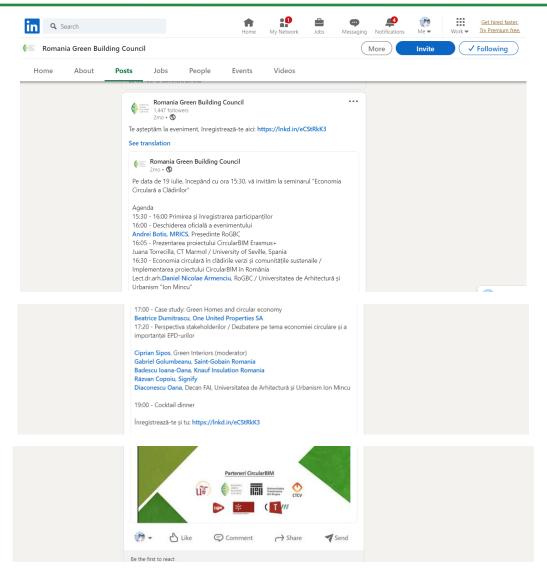
Post on the RoGBC Facebook page, regarding the Workshop program "Circular Economy of buildings", within the framework of the CircularBIM project from Bucharest.



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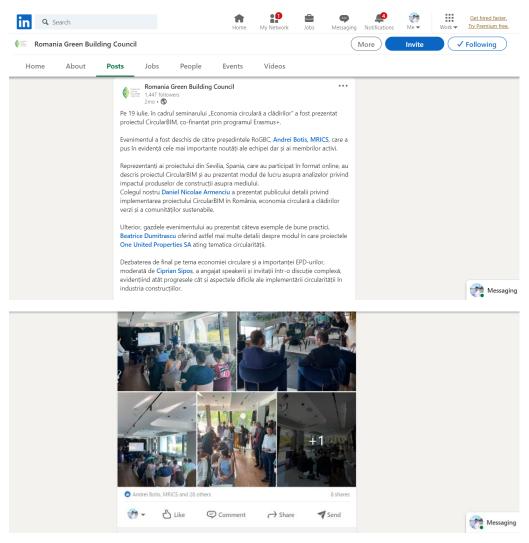


Post on RoGBC's LinkedIn profile, regarding the Workshop program "Circular Economy of buildings", within the framework of the CircularBIM project from Bucharest.

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Post on RoGBC's LinkedIn profile, regarding the fact that the Workshop took place "Circular Economy of buildings", within the framework of the CircularBIM project from Bucharest.



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→Pe 19 iulie, în cadrul seminarului "Economia circulară a clădirilor" a fost prezentat proiectul

CircularBIM, co-finanțat prin programul Erasmus+.

🦀 Evenimentul a fost deschis de către președintele RoGBC, Andrei Botiș, care a pus în evidență cele mai importante noutăți ale echipei dar și ai membrilor activi.

Reprezentanți ai proiectului din Sevilia, Spania, care au participat în format online, au descris proiectul CircularBIM și au prezentat modul de lucru asupra analizelor privind impactul produselor de construcții asupra mediului.

\*\*Colegul nostru Daniel Nicolae Armenciu a prezentat publicului detalii privind implementarea proiectului CircularBIM în România, economia circulară a clădirilor verzi și a comunităților

🛖 Ulterior, gazdele evenimentului au prezentat câteva exemple de bune practici, Beatrice Dumitrascu oferind astfel mai multe detalii despre modul în care proiectele One United Properties ating tematica circularității.

Dezbaterea de final pe tema economiei circulare și a importanței EPD-urilor, moderată de Ciprian Sipos, a angajat speakerii și invitații într-o discuție complexă, evidențiind atât progresele cât și aspectele dificile ale implementării circularității în industria construcțiilor.

Knauf Insulation Romania Saint-Gobain Signify



Post on the Facebook page of RoGBC, regarding the fact that the "Circular Economy of buildings" Workshop took place, within the framework of the CircularBIM project from Bucharest.



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https://www.one.ro/en/blog/one-united-properties-green-houses-case-study-at-the-buildings-circular-economy-seminar/



Post on the ONE United Properties website, regarding participation in the Workshop "Circular Economy of buildings", within the framework of the CircularBIM project from Bucharest.



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### 3. EVENT DEVELOPMENT

# 3.1. Presentation of the objectives and results of the CircularBIM project

In the first part of the event, there was a presentation given by Juana Torrecilla, (CT Marmol / University of Seville, Spain). On this occasion, the CircularBIM project was described, emphasizing its important elements, such as objectives, methodology, implementation, curricula, etc..

In the second half of the presentation, the lecture of PhD. Eng. Madelyn Marrero, professor at the Escuala Tecnica Superior de Ingenieria de Edificacion of the University of Seville, Spain, took place. It expressed the importance of the circular economy for the construction field and how it works in the Andalusia region of Spain with the regionally recognized databases.

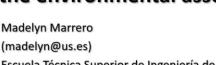








# **Experiences from Spain:** Andalusia Construction Cost Database as an instrument for the environmental assessment

















Extract from the lecture during the "Circular Economy of Buildings" Workshop, within the framework of the CircularBIM project from Bucharest.

# 3.2. Presentation by RoGBC and application of circular economy principles

On behalf of RoGBC, speeches were given by Mr. Andrei Botis, President of RoGBC, who opened the event and emphasized the role that the organization he leads has on the national level, respectively by Mr. Daniel N. Armenciu, architect and Senior Lecturer, actively involved in the CircularBIM project.



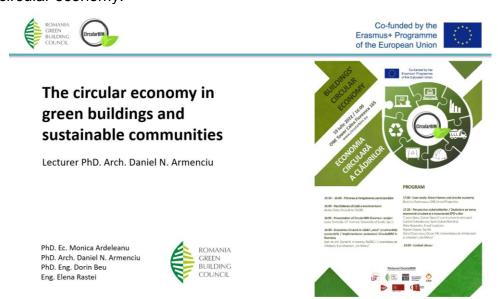
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The opening lecture of the "Circular Economy of Buildings" Workshop, within the framework of the CircularBIM project from Bucharest.

Daniel N. Armenciu's presentation focused on two main directions, as follows:

- Theoretical aspects regarding the circular economy, Cradle-to-Cradle vs. Cradle-to-Grave / Cradle-to-Gate, operating methods with these concepts throughout the life cycle of materials, products, buildings.
- b. General aspects and case studies, related to RoGBC's building sustainability certification activity, extracted from its own portfolio of GreenHomes or GreenSchools certified projects, but also other types of involvement with interest in the circular economy.



Extract from the lecture during the "Circular Economy of Buildings" Workshop, within the framework of the CircularBIM project from Bucharest.



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# 3.3. Presentation of real estate developments as examples of good practice.

ONE United Properties representative, Ms. Beatrice Dumitraşcu, in her capacity as CEO of the Residential Division, presented the general course of the company and the quality and sustainability orientation of the projects it develops. Completed or ongoing projects that have achieved or are in the process of achieving GreenHomes certification or other certifications designed to demonstrate even carbon neutrality have been illustrated.



The lecture of Ms. Beatrice Dumitraşcu, CEO of the Residential Division, Workshop "Circular Economy of buildings", within the framework of the CircularBIM project from Bucharest.

# 3.4. Round table

The most dynamic component of the workshop was the final section, constituted as a round table, moderated by the designer Ciprian Sipos. The partners in the discussion, Gabriel Golumbeanu (Saint-Gobain Romania), Alina Alexandru (Knauf Insulation), Razvan Copoiu (Signify) and Oana Diaconescu (Dean of the Faculty of Interior Architecture, UAUIM), commented on the importance of the circular economy and how it approaches this topic in their field of activity.

Thus, the representative of Saint-Gobain Romania exposed the company's strategy for implementing its own circularity policies, as well as the latest technological innovations that contribute to reducing the carbon footprint during the production process. Equally, he presented the efforts regarding the collection of glass, in increasingly larger quantities annually.

The Knauf insulation representative also highlighted strategic elements that the company is implementing to reduce its CO2 footprint. At the same time, the determining role of quality mineral wool products was also achieved, which bring a special contribution to the thermal insulation of new or existing buildings, thus generating







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significant energy savings at a global level, and implicitly notable effects on a cleaner environment.

The Signify company was represented by the general manager, who made arguments regarding the need to implement circularity measures, due to the fact that the efforts and results of recent years are evident. Smart technology is on the rise in usage, with companies or home owners realizing that implementing it brings significant savings in paying bills. The effect is positive, as in this way the consumption of conventional resources is also reduced.

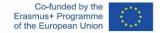




Images from the round table of the Workshop
"Circular Economy of buildings",
within the framework of the CircularBIM project from Bucharest.







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The fourth participant at the round table, the representative of architecture education in this workshop, presented some actions that the Ion Mincu University of Architecture and Urbanism has done in recent years, in order to prepare graduates for the realities of the economy, having varied knowledge about the role circular economy for society, economy and environment.

## 4. CONCLUSIONS

The most relevant questions raised at this workshop were mainly addressed to the invited specialists, the participants of the event, who come from the areas of architecture, engineering, manufacturers of construction products, university education, who are facing a relatively new topic for the Romanian context, namely the implementation of a circular economy. The main questions raised were:

- Implementation of circular economy principles, in the business and educational network
- The use of CO2 footprint evaluation systems, at a professional level, in different fields.
- Diversification of the range of certified products for the realization of green buildings.
- Sustainability considerations in real estate projects and developments.

# 5. NUMBER OF PARTICIPANTS

The total attendance at the Workshop organized in Bucharest was 31 external people and 3 people from RoGBC, in addition to the project participants described below:

Due to the Data Protection Act, the list of participants is not available for public use.

# Asociatia Romania Green Building Council (RoGBC)

- Andrei Botis, President.
- Rodica Purcel.
- Daniel Nicolae Armenciu.

Asociación Empresarial de Investigación Centro Tecnológico del Mármol, Piedra y Materiales (CTM)

Juana Torrecilla.



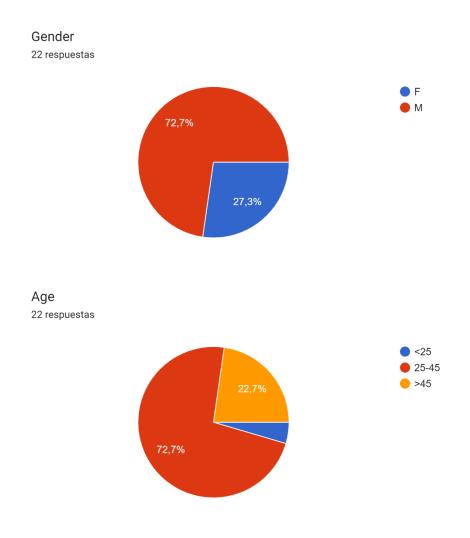


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# 6. RESULTS

After the workshop, attendees were asked to complete a survey in order to evaluate its impacts and collect feedback from industry professionals on key aspects of the project.

The reception was very satisfactory by the attendees and the main results are reflected below:



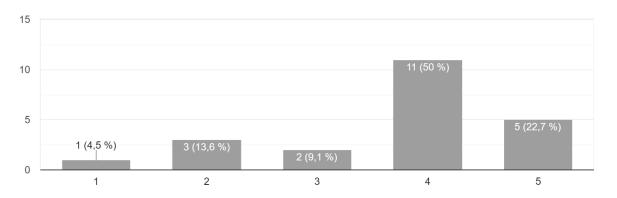
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# 3. Before my participation in this activity:

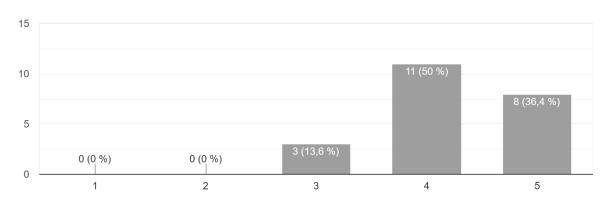
# I had been familiar with construction sector

### 22 respuestas



# I had heard about the circular economy model applied to the construction sector.

## 22 respuestas

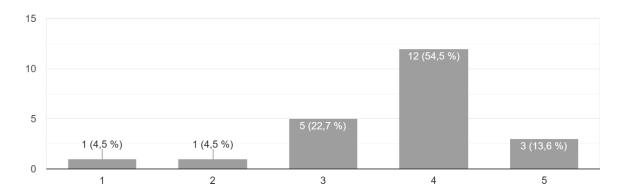


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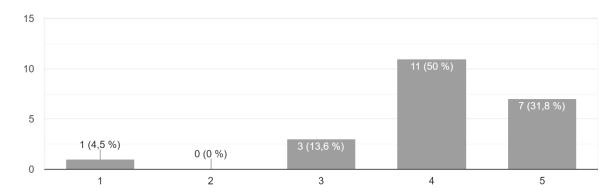
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I had been involved in similar activities concerning circular economy (not for the construction sector)

22 respuestas



I had participated in another similar activity concerning the construction sector in the past <sup>22</sup> respuestas

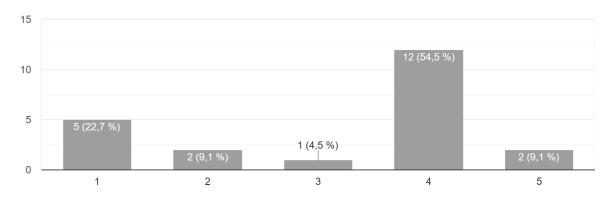


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I did not see the need to make use of the circular economy in the construction sector.

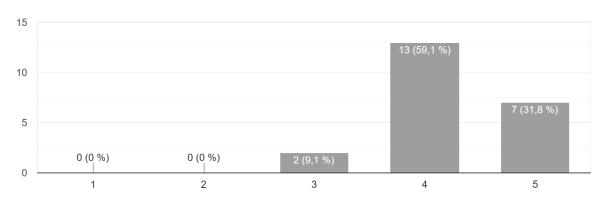
#### 22 respuestas



# 4. After my participation in this activity:

## I am more familiar with the construction sector

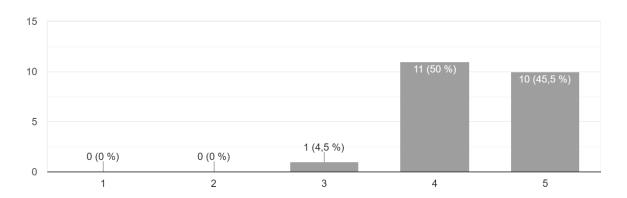
### 22 respuestas



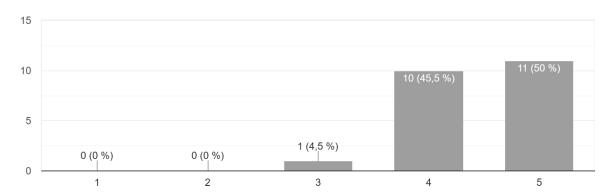
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I would like to learn more about circular economy in the construction sector. 22 respuestas



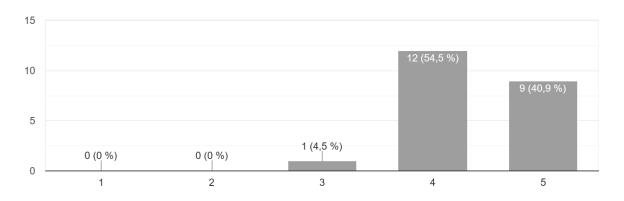
I am interested in participating in other construction sector-oriented activities in the future <sup>22</sup> respuestas





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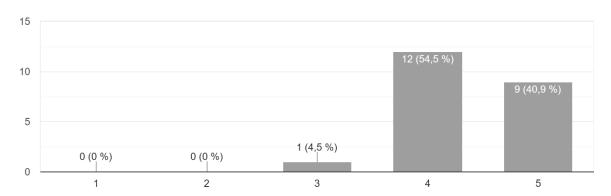
I have a more positive view on the use of the circular economy in the construction sector. <sup>22 respuestas</sup>



# Evaluate your experience at this event:

# The information and advice provided was useful

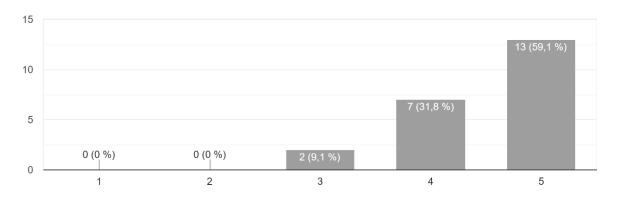
22 respuestas



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# The information was communicated in an understandable manner 22 respuestas



# I was provided the opportunity to ask questions and these were satisfactorily answered <sup>22 respuestas</sup>

