Transitioning towards a circular economy: opportunities and steps for Latin America

FINAL REPORT

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KONRAD ADENAUER STIFTUNG

Centro de Innovación y Economía Circular CIEC

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TABLE OF CONTENTS

TABLES

FIGURES

GREETINGS
EKLA KAS

Konrad-Adenauer-Stiftung (KAS) is a political foundation linked to the Christian Democratic Union of Germany party (CDU). From Germany and abroad, the purpose of our civic education programmes is to promote freedom, peace, and justice. Besides, we focus on the consolidation of democracy, the unification of Europe, and the strengthening of transatlantic relations, as well as on development cooperation.

For KAS, energy security and climate change became an important part for the structure and maintenance of a democratic social order. In the face of this, the Regional Programme for Energy Security and Climate Change in Latin America (EKLA) of KAS was designed as a dialogue platform, aimed at promoting political decision-making processes in these issues.

One of these fundamental processes, is the take-off of Circular Economy as an instrument of sustainable development. Since the beginning of this line of work within EKLA, we have witnessed decisions and changes carried out by the public sector of the different countries in the region, either with national strategies or with the adoption of circular roadmaps.

On this opportunity, we decided to go further and find out about the perception of the protagonists behind these changes and about the main players promoting circular economy, so that we can get to know their perception about the most significant progress and challenges when transitioning towards circularity in the Latin American region. We would like to thank the Innovation and Circular Economy Centre (CIEC, in Spanish) for being a partner in achieving this goal.

Nicole Stopfer
Director of the Regional Programme for Energy Security and Climate
Change in Latin America (EKLA), of Konrad Adenauer Foundation (KAS)

GREETINGS
CIEC TEAM

This report arises in a unique moment. A little over a year ago, humanity was able to move freely around the planet and asserted its sense of "dominance" over it. But the tiniest of beings has been enough to make our reality change drastically, plunging our species in an unprecedented crisis that has impacted every area and causing the loss of millions of lives.

It is in this particular context that the need to rethink our development model has become more relevant, not only for a small group of specialists, but for the population as a whole. In this search, the Circular Economy model presents itself as a great opportunity for the future generations and, in the specific case of Latin America, as a road to achieve sustainable development.

But how to move forwards? It is a valid question for our countries; therefore, the present study seeks to provide evidence for decision-making. Acknowledging the advancements, identifying the barriers and threats to the process and, above all, building a common narrative based on the opportunities Circular Economy offers to the region.

From the Innovation and Circular Economy Centre (CIEC, in Spanish), we believe that only collective and systematic work based on evidence will allow us to transition from the current lineal model to a circular one, contributing to triple value generation. For this reason, we greatly appreciate the contribution of all the people in each of the countries in Latin America to this work. To each one of them, thanks a lot.

Team
Innovation and Circular Economy, Chile 2021

PRESENTATION

Humanity is at a crossroads. While the challenge remains for a significant part of our planet to achieve greater well-being for its population, which in many cases means moving out of extreme poverty only, we have overstepped all planetary boundaries to achieve this, leading our planet to an environmental emergency with potential catastrophic effects. Ironically, it will be the world's poorest who will experience first-hand the effects of the imbalance produced between consumption-production-resources if we are unable to reverse it.

From the above, the obligation arises to think and implement solutions, not only for the future generations, but also for the human species survival. We have realised in this process, that the traditional model of taking-producing-disposing is not viable any longer and requires to be urgently replaced by one that ensures the generation of economic, social, and environmental value for all the population, solving the crossroads; or, at least, contributing to its solution. Thus, Circular Economy has emerged stealthily as an alternative achieving an increasing consensus at the international level, as a viable, and mostly, an applicable way to replace the characteristic lineal model of the industrial revolution.

Latin America is taking its first steps to transition to this model, which aims at reaching sustainable development, but how much do we know about its progress, the barriers to promote the transition, the threats that are imminent, the opportunities it offers? These are precisely the questions we seek to answer from this study entitled,

Circular Economy: Progress, Barriers, Threats, and Opportunities in Latin America, 2020, being a seminal work for the region.

This joint work between the Regional Programme of Energy Security and Climate Change in Latin America (EKLA) of the Konrad Adenauer Stiftung' Foundation, the Innovation and Circular Economy Centre (CIEC), the Innovation Observatory of the Faculty of Economics and Business at the University of Chile and the Latin American Centre for Relations with Europe (CELARE), has as its main objective to provide all those who feel called to keep promoting Circular Economy, with an evidence-based input for dialogue among the players and decision-making in the public, private, academic, non-governmental areas, among others.

Both, the interviews to regional experts and the survey, from which the results presented in this report are derived, have been carried out in one of the worst global scenarios in living memory in the last century, which has evidenced in multiple ways the need to move towards sustainable development in the hands of Circular Economy.

In the midst of the Covid-19 pandemic, we have felt the generosity of 50 referents, men and women from the region, who made time in their schedules to be interviewed and to share their knowledge with the research team, many times from their homes. Also, the 971 people who answered the survey sent to all the countries in Latin America. To them, our most cordial thanks, because a social researcher can only find the

patterns in the knowledge others are willing to share.

In what follows, the document is divided into the following chapters:

1. Study Methodology: it presents the main methodological aspects considered for the qualitative-quantitative research.

2. Respondent characteristics: it provides detailed information about demographic characteristics of the quantitative study participants (survey).

3. Knowledge about Circular Economy: it presents main results regarding the level of knowledge existing in the region about Circular Economy in theoretical and practical terms.

4. The concept of Circular Economy and its positioning: it provides results referred to the respondents' perception concerning the positioning of the concept and the model in different sectors.

5. Drivers of the Circular Economy: it provides results related to which have been the main sectors that have boosted Circular Economy, and which would be their role in the future.

6. Progress to Circular Economy: it presents the main developments in the region according to the respondents.

7. Barriers to progress to Circular Economy: it shows the main barriers being faced to keep transitioning towards circularity. From financial aspects to human capital.

8. Threats to progress to Circular Economy: it provides an overview of what factors may constitute a hazard to move forward to the transition.

9. Opportunities for Latin America from Circular Economy: it offers an analysis of the main contributions this model can provide the region, from overcoming poverty to technological innovation.

10. Conclusions: Main conclusions of the study are presented here.

2

STUDY
METHODOLOGY

STUDY METHODOLOGY

To ensure validity and reliability of results, the study considered four stages in its elaboration, as follows:

a. State of the Art Review: A bibliometric review in Web of Science (main data base of international scientific articles) was carried out, and at a general level to identify similar work aimed at getting to know the progress, barriers, threats, and opportunities Circular Economy provides at regional, national, and sub-national levels.

    The main conclusions of this stage were:

    ▪ It became evident that at the Latin America and Caribbean level, there was no publicly available work that made a common measurement for all the countries in the region.

    ▪ There is partial work in some countries: Chile, Paraguay, Argentina y Peru, but none of them with common conceptual and/or methodological frameworks.

    ▪ At the international level, the European Union has similar work but decontextualised to the Latin America and Caribbean reality.

    ▪ Scientific articles did not provide specific information for Latin America and the Caribbean, since most of the publications are focused on Europe and other regions of the world.

b. In-depth Interviews: A total of 50 in-depth interviews were carried out with Latin American referents from business (large, medium, and small), governmental, and academic sectors, from international cooperation organisms and Circular Economy promotional organisations. This interview group provided content validity to the questionnaire designed for the quantitative phase (see table 1).

TABLE 1: TOTAL RESPONDENTS BY COUNTRY

Countries	Total	Countries	Total
Argentina	3	Guatemala	3
Bolivia	3	Mexico	3
Chile	5	Nicaragua	3
Colombia	4	Panama	4
Costa Rica	3	Paraguay	4
Ecuador	5	Peru	4
El Salvador	3	Uruguay	3

Total	50

SOURCE: Own Elaboration

Based on the Grounded Theory approach, it was possible to establish the main categories and subcategories relating to the Circular Economy progress, barriers, threats, and opportunities in the region, which allowed for the design of the survey instrument. Both, codification, and information analysis were carried out in NVIVO, and the results will be published in a separate document in the following months.

c. Pilot test: To establish validity, this was peer-reviewed by 3 experts, two in the Circular Economy area, and one in the psychometric instrument design. Subsequently, a pilot test was performed with 80 university students from Chile, Guatemala, Colombia, and Mexico, of undergraduate programmes in the areas of natural resources, sustainable development, and business.

With the information obtained, the respective factor analysis and reliability analysis were carried out with Cronbach's Alpha (all higher than 0.8), which allowed items to be eliminated and to improve the final implementation of the survey.

d. Final instrument: The final instrument included a total of 27 multi-item demographic and content-based questions. In addition, 5-point Likert-type scales were used, so that the analysis and comparison of results were more expeditious.

e. Sample: The sampling of this survey is non-probabilistic, due to the type and conditions of the study. Snowballing was used to cover as many respondents as possible with knowledge on Circular Economy, Cleaner Production and/or on aspects concerning Sustainable Development in Latin America.

f. Application: The application of the instrument was performed through Qualtrics.com platform during the months of November and December 2020.

3

RESPONDENT
CHARACTERISTICS

RESPONDENT CHARACTERISTICS

During data collection phase, 971 surveys of 18 countries from the region were obtained. Following its review, 696 fully answered were selected to perform all the analyses of this report. As for its distribution, Chile is the country with the highest number of fully answered surveys (30.3%), followed by Colombia (11.9%), Uruguay (10.6%), Bolivia (7.5%), Peru (7%), Mexico (6.2%), Argentina (5.3%), Ecuador (5%) and Brazil (4.9%). Table 2 shows the participation percentage of each country.

TABLE 2: PLEASE, TELL US YOUR COUNTRY OF RESIDENCE (%)

Country	%	Country	%
Chile	30,3	Brazil	4,9
Colombia	11,9	Costa Rica	3,4
Uruguay	10,6	Panama	1,7
Bolivia	7,5	Paraguay	1,6
Peru	7,0	El Salvador	1,3
Mexico	6,2	Guatemala	1,3
Argentina	5,3	Other countries*	1,9
Ecuador	5,0		

*countries with less than 1% participation

SOURCE: Own elaboration

Regarding gender, the sample obtained consisted of 52% men and 48% women. In addition, within the answer options the category "other" was included, which had 2 answers, representing 0.3% (see figure 1)

FIGURE 1: COULD YOU INDICATE YOUR GENDER? (%)

Man
52%

Other
0,3%

Woman
47,7%
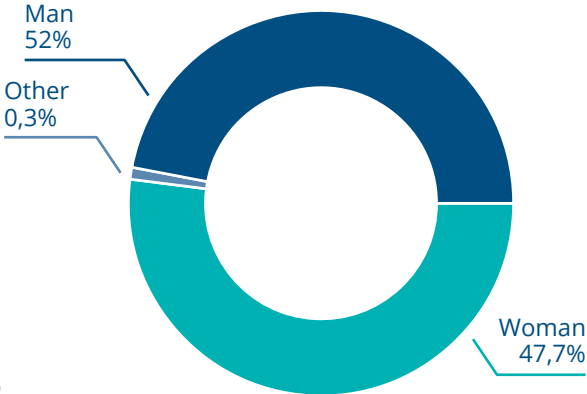
SOURCE: Own elaboration

Regarding age, figure 2 shows that a significant proportion of respondents are in the 27-39 age bracket (36.5%), followed by 40-51 (30.2%) and 52-71 (22.7%). Likewise, it is worth noting that the age brackets used in the survey, can be linked to demographic cohorts or "generations".

In the case of respondents aged between 27 and 39 years old, they correspond to those individuals born between 1981 and 1993, called "Millenials". The second age bracket is associated to individuals born between 1969 and 1980, or "Generation X", and the last segment corresponds to those individuals born between 1949 and 1968, who are called "Baby Boomers". Very few respondents belong to "Generation Z" (between 18 and 26 years old; 8.3%) or to "Post-war" (older than 72 years old; 2.3%)

FIGURE 2: COULD YOU INDICATE YOUR AGE GROUP? (%)

Legend:
- 18 to 26 years
- 27 to 39 years
- 40 to 51 years
- 52 to 71 years
- 72 years and over

Values: 8,3 — 36,5 — 30,2 — 22,7 — 2,3
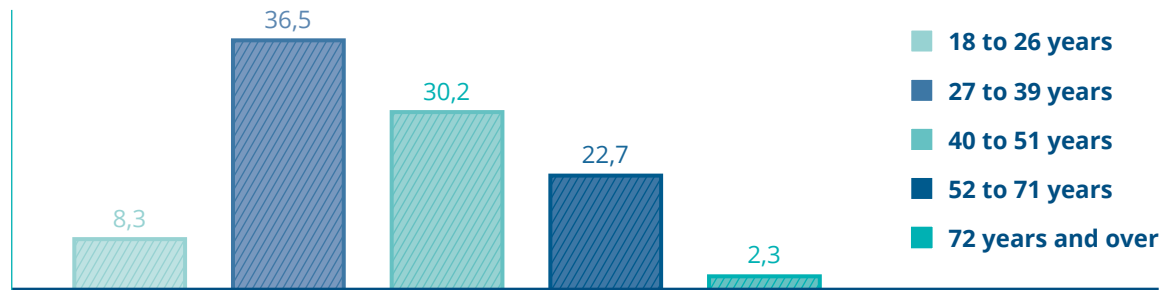
SOURCE: Own elaboration

Respondents were asked where they performed most of their working activity (see figure 3). The data obtained showed that 35% belong to the business sector, 18% to consutancy firms, followed by government and academy with 15%, NGOs or foundations with 8% and international cooperation with 2%.

FIGURE 3: COULD YOU TELL US IN WHICH OF THE FOLLOWING SECTORS YOU PERFORM ALL OR MOST OF YOUR ACTIVITY? (%)

Other 7%
Government 15%
Academy (Universities and Research Centres) 15%
Consultancy firms 18%
Business 35%
International Cooperation 2%
NGOs/Foundations 8%
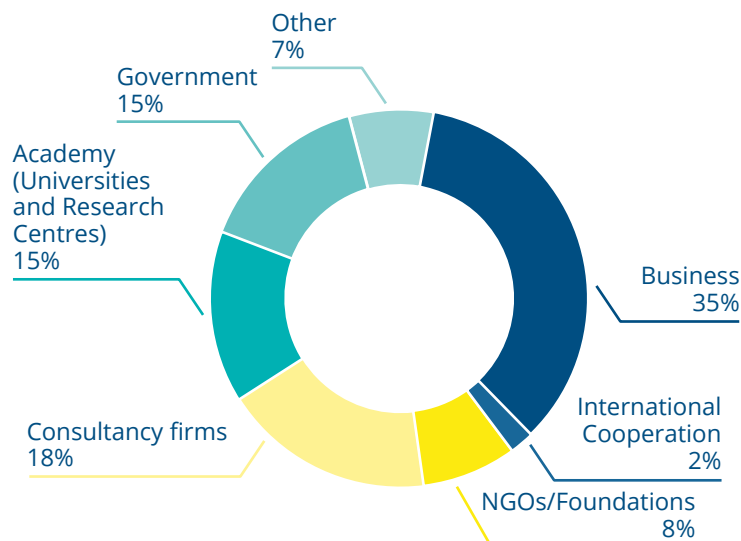
SOURCE: Own elaboration

When looking more deeply into the business sector by company size (see figure 4), it can be seen that respondents belong to national micro-enterprises (22.9%), small national enterprises (22.5%), medium-sized enterprises (19.6%) and multinational corporations (19.2%).

FIGURE 4: IN WHAT TYPE OF COMPANY DO YOU WORK? (%)

Legend:
- Multinational Corporation
- Large National Enterprise
- Medium-sized National Enterprise
- Small National Enterprise
- National Micro-Enterprise

| 19,2 | 15,8 | 19,6 | 22,5 | 22,9 |

0% 10% 20% 30% 40% 50% 60% 70% 80% 90% 100%
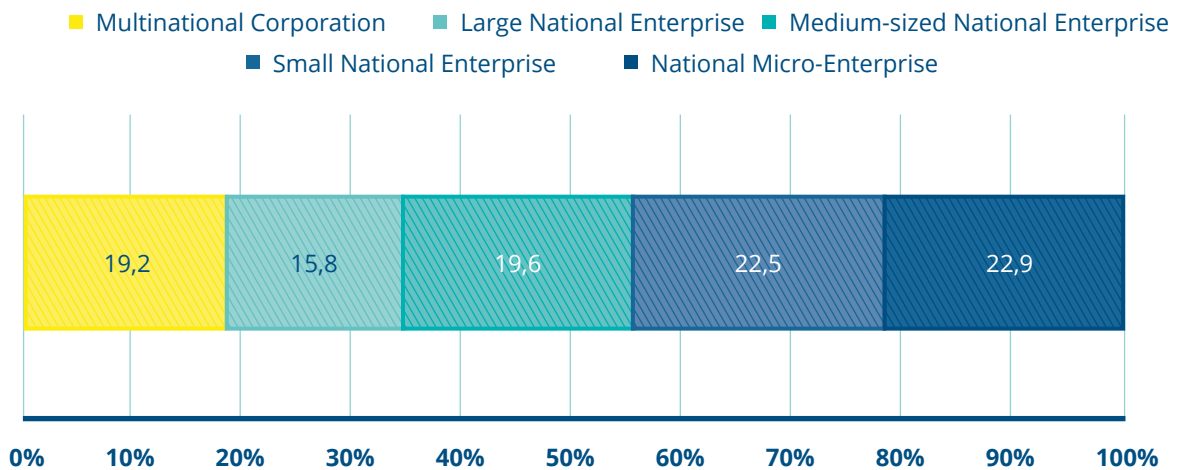
SOURCE: Own elaboration

Concerning the position of the respondents of the business sector, figure 5 shows that the director/owners/shareholders category accounted for 36% of the total, followed by middle management (24%), technical staff (20%), line managers (15%), and in a very small percentage, general managers (5%).

FIGURE 5: WHAT IS YOUR POSITION IN THE COMPANY? (%)

Technical Staff 20%

Line Manager 15%

Middle Management 24%

General Manager 5%

Director/ Owner/ Shareholder 36%
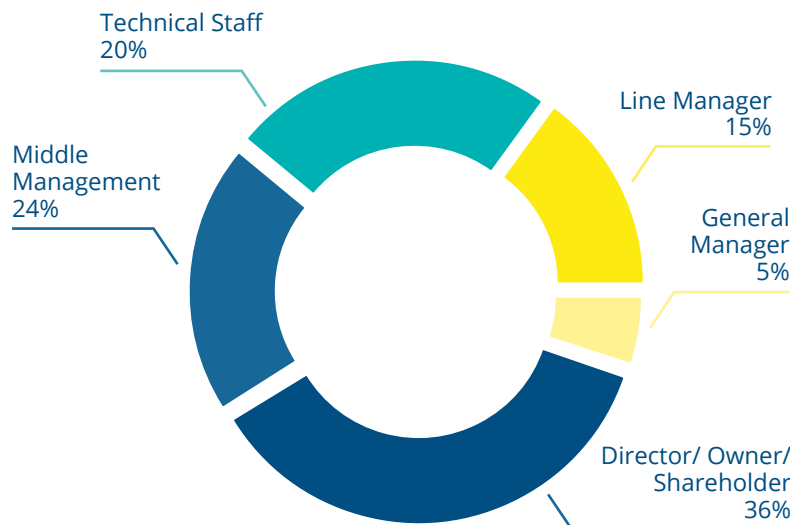
SOURCE: Own elaboration

In the case of respondents working in public institutions, figure 6 shows that most of them work in activities linked to central government (64.8%), and lower percentages in functions associated with regional, federal, departmental, or provincial governments (23.1%), and local or communal governments (12%).

FIGURE 6: IN WHICH TYPE OF PUBLIC INSTITUTION DO YOU WORK? (%)

- Central Government
- Regional/Federal/Departmental /Provincial Government
- Local Government/Communal Government / City Council / Mayor's Office

| 64,8 | 23,1 | 12,0 |
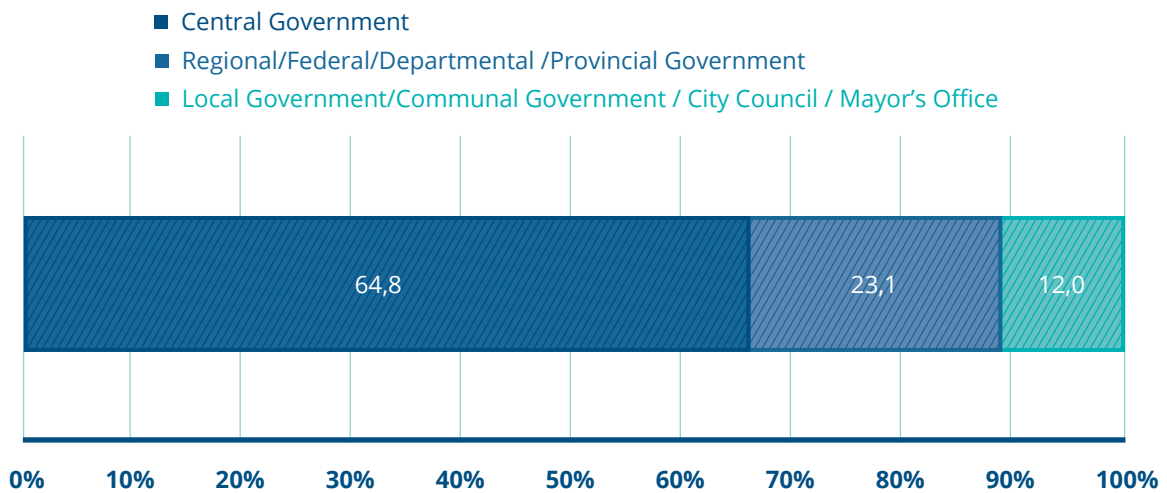
SOURCE: Own elaboration

Regarding the positions held by the respondents working in public institutions (see figure 7), most of them belong to the technical staff category (60%), followed by middle management (17%), division directors or equivalent (15%), and to a lesser degree, senior management (8%).

FIGURE 7: WHAT IS YOUR POSITION IN THE PUBLIC INSTITUTION WHERE YOU WORK? (%)

Division Director or Equivalent 15%

Middle Management 17%

Technical Staff 60%

Senior Management 8%
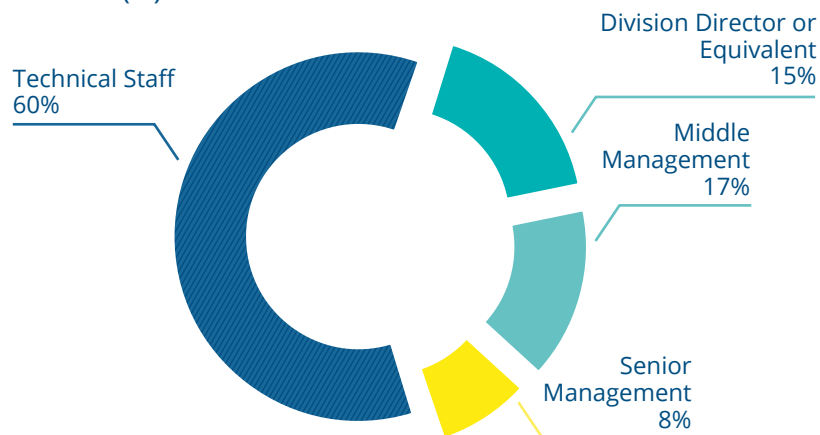
SOURCE: Own elaboration

In general terms, the sample obtained was diverse with the participation of both private and public sector players from Latin American countries. There was a balanced response between men (52%) and women (48%), with ages corresponding to the demographic cohorts known as "Millennials" and "Generation X".

4
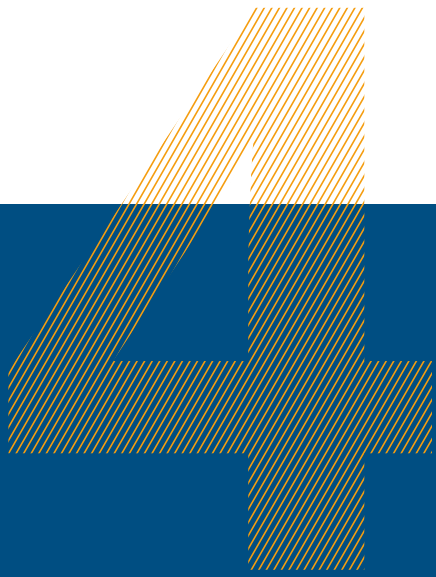
KNOWLEDGE ON CIRCULAR ECONOMY IN LATIN AMERICA

KNOWLEDGE ON CIRCULAR ECONOMY

KNOWLEDGE ON RESPONDENTS

A first dimension studied related to the respondents' knowledge on Circular Economy in Latin America. They were asked to self-assess their level of theoretical and practical knowledge. On a theoretical level, most of them evaluated their knowledge between "moderate" and "high", with both categories accumulating more than 80% of the answers (see figure 8).

FIGURE 8: HOW WOULD YOU RATE YOUR DEGREE OF KNOWLEDGE ON CIRCULAR ECONOMY – THEORETICAL KNOWLEDGE (%)

Very High
9%

High
37%

Very Low
2%

Low
9%
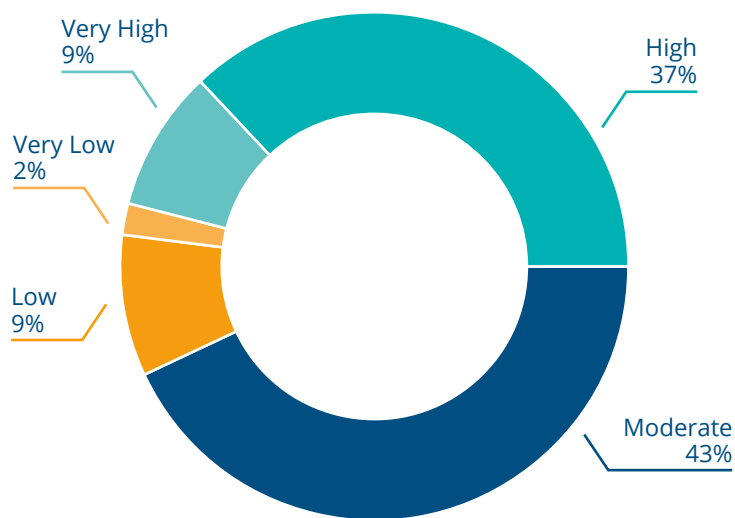
Moderate
43%

SOURCE: Own elaboration

However, when the question focused on the degree of practical knowledge, respondents stated that their degree of knowledge is "Moderate" and "Low", both categories account for 67% of the answers, approximately (see figure 9).

The above, provides evidence on the distance perceived by respondents about their conceptual knowledge about Circular Economy and the practical experience of its implementation, which constitutes a challenge for the transformational process of the region. Likewise, the result obtained in terms of theoretical knowledge was expected, since the survey was sent to people who "*have some knowledge on Circular Economy issues, Cleaner Production and/or other aspects related to Sustainable Development*" (informed consent to the survey).

FIGURE 9: HOW WOULD YOU RATE YOUR DEGREE OF KNOWLEDGE ON CIRCULAR ECONOMY – PRACTICAL KNOWLEDGE (%)
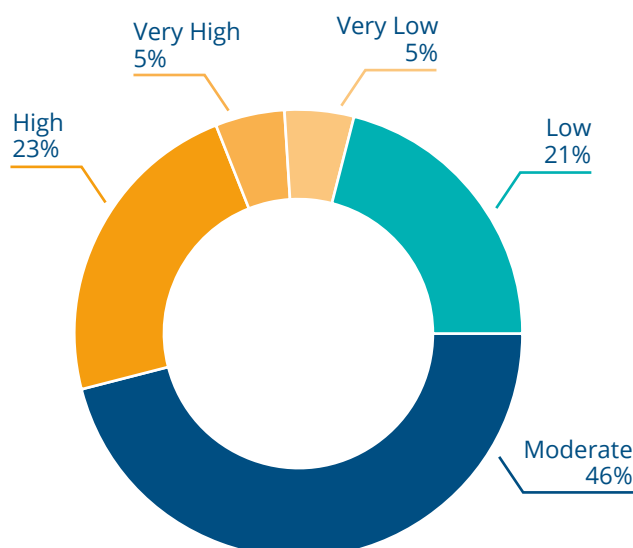
SOURCE: Own elaboration

When performing the cross-analysis between the level of theoretical knowledge and the sectors where respondents work, it can be observed that the "Moderate" and "High" categories of knowledge account for, on average, more than 80% of preferences for each of the working sectors. In the case of International Cooperation, it is worth noting that no responses were recorded for the "Very Low" or "Low" levels of knowledge. Below you can see the results in detail. (See table 3).

TABLE 3: CROSS TABLE, HOW WOULD YOU RATE YOUR DEGREE OF KNOWLEDGE ON CIRCULAR ECONOMY (THEORETICAL KNOWLEDGE) * COULD YOU INDICATE IN WHICH OF THE FOLLOWING SECTORS YOU PERFORM ALL OR MOST OF YOUR ACTIVITY? (%)

		Activity							
		Government	Business	NGOs	Academy	International Cooperation	Consultancy	Other	Total
Theoretical Knowledge	Very Low	0,9%	2,1%				0,8%	6,5%	1,4%
	Low	10,2%	7,5%	12,5%	12,3%		6,3%	10,9%	8,9%
	Moderate	41,7%	41,3%	51,8%	43,4%	23,1%	43,3%	50,0%	43,1%
	High	41,7%	39,6%	28,6%	35,8%	61,5%	34,6%	30,4%	37,4%
	Very High	5,6%	9,6%	7,1%	8,5%	15,4%	15,0%	2,2%	9,2%
	Total	100,0%	100,0%	100,0%	100,0%	100,0%	100,0%	100,0%	100,0%

SOURCE: Own elaboration

When rotating the cross tabulation to analyse results by level of knowledge (see figure 10), for those who claimed to have a "Very Low" knowledge, 50% were in the Business Sector, same situation if the "Low" category is considered, where the same sector reaches 29%, followed by Academy with 21%. When considering the knowledge category "Very High", once again the Business Sector leads with 35.9%, followed by the Consultancy Sector with 39.9%

In general terms, the cross analysis shows stability in the results for each of the levels of knowledge surveyed for the sector.

FIGURE 10: CROSS TABLE, HOW WOULD YOU RATE YOUR DEGREE OF KNOWLEDGE ABOUT CIRCULAR ECONOMY? (THEORETICAL KNOWLEDGE) * COULD YOU TELL US IN WHICH OF THE FOLLOWING SECTORS YOU PERFORM ALL OR MOST OF YOUR ACTIVITIES? (%)

	Very Low	Low	Moderate	High	Very High
■ **Other**	30,0%	8,1%	7,7%	5,4%	1,6%
■ **Consultancy**	10,0%	12,9%	18,3%	16,9%	29,7%
■ **International Cooperation**	0,0%	0,0%	1,0%	3,1%	3,1%
■ **Academy (universities and research centres)**	0,0%	21,0%	15,3%	14,6%	14,1%
■ **NGOs/Foundations**	0,0%	11,3%	9,7%	6,2%	6,3%
■ **Business**	50,0%	29,0%	33,0%	36,5%	35,9%
■ **Government**	10,0%	17,7%	15,0%	17,3%	9,4%
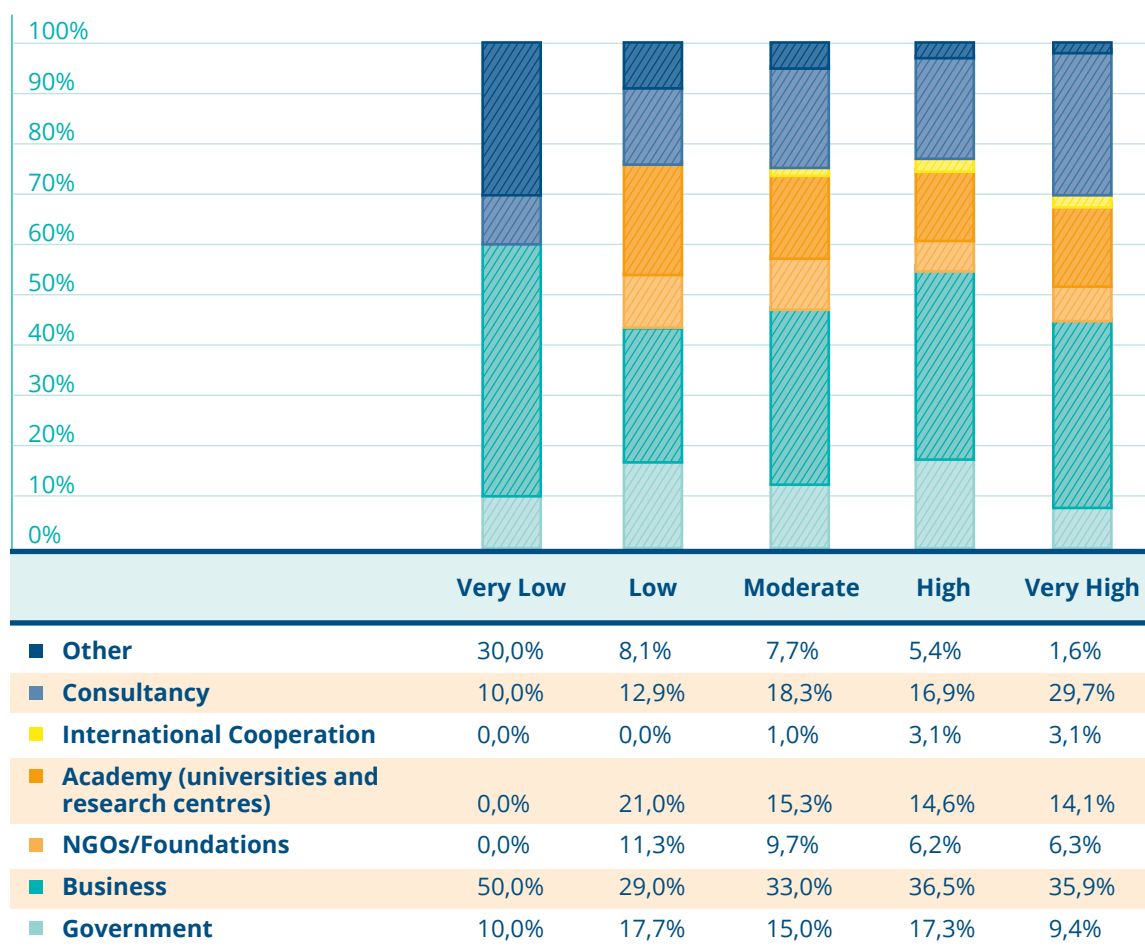
SOURCE: Own elaboration

Like the previous analysis, but using the question related to practical knowledge (see table 4), a significant drop was observed for each activity in levels "Very High" (average 5.1%) and "High" (average 18.5%), mainly compensated by an increase in the respondents who selected the "Moderate" option, which had a 12.2% increase on average of the activities. This change is consistent with the overall knowledge result, where there was a greater perception of having theoretical knowledge than practical one.

TABLE 4: CROSS TABLE, HOW WOULD YOU RATE YOUR DEGREE OF KNOWLEDGE ABOUT CIRCULAR ECONOMY? (PRACTICAL KNOWLEDGE) * COULD YOU TELL US IN WHICH OF THE FOLLOWING SECTORS YOU PERFORM ALL OR MOST OF YOUR ACTIVITY (%)

		Activity							
		Government	**Business**	**ONGs**	**Academy**	**International Cooperation**	**Consultancy**	**Other**	**Total**
Practical Knowledge	Very Low	4,6%	5,0%	1,8%	5,7%		5,5%	8,7%	5,0%
	Low	27,8%	17,9%	26,8%	23,6%	15,4%	20,5%	13,0%	21,1%
	Moderate	38,0%	43,3%	53,6%	50,9%	69,2%	41,7%	56,5%	45,5%
	High	25,0%	26,3%	12,5%	16,0%	15,4%	26,0%	21,7%	22,8%
	Very High	4,6%	7,5%	5,4%	3,8%		6,3%		5,5%
	Total	100,0%	100,0%	100,0%	100,0%	100,0%	100,0%	100,0%	100,0%

SOURCE: Own elaboration

When rotating the previous table, the pattern of results from the theoretical knowledge analysis is maintained (see figure 11), where for each level of knowledge, respondents claiming they belong to the Business Sector, are the ones showing the highest percentages of knowledge, followed by Consultancy.

FIGURE 11: CROSS BETWEEN HOW WOULD YOU RATE YOUR DEGREE OF KNOWLEDGE ABOUT CIRCULAR ECONOMY? – (PRACTICAL KNOWLEDGE) (%) * COULD YOU TELL US IN WHICH OF THE FOLLOWING SECTORS YOU PERFORM ALL OR MOST OF YOUR ACTIVITIES? (%)

	Very Low	**Low**	**Moderate**	**High**	**Very High**
■ **Other**	11,4%	4,1%	8,2%	6,3%	0,0%
■ **Consultancy**	20,0%	17,7%	16,7%	20,8%	21,1%
■ **International Cooperation**	0,0%	1,4%	2,8%	1,3%	0,0%
■ **Academy (universities and research centres)**	17,1%	17,0%	17,0%	10,7%	10,5%
■ **NGOs/Foundations**	2,9%	10,2%	9,5%	4,4%	7,9%
■ **Business**	34,3%	29,3%	32,8%	39,4%	47,4%
■ **Government**	14,3%	20,4%	12,9%	17,0%	13,2%

SOURCE: Own elaboration

When incorporating the gender variable to the analysis, it could be observed that there are differences in the level of theoretical knowledge in favour of men for the options "High" (53.1% - 46.5%) and "Very High" (62.5% - 37.5%), a gap which increases if practical knowledge is considered, where the same options reach 59.7% and 71.1% for men. Specific differences can be seen below (see figure 12 and 13).

FIGURE 12: CROSS TABLE, HOW WOULD YOU RATE YOUR DEGREE OF KNOWLEDGE ABOUT CIRCULAR ECONOMY? (THEORETICAL KNOWLEDGE) * COULD YOU INDICATE YOUR GENDER? (%)

■ Man ■ Women

	Very Low	Low	Moderate	High	Very High
Women	50,0%	46,8%	51,0%	46,5%	37,5%
Man	50,0%	53,2%	48,7%	53,1%	62,5%
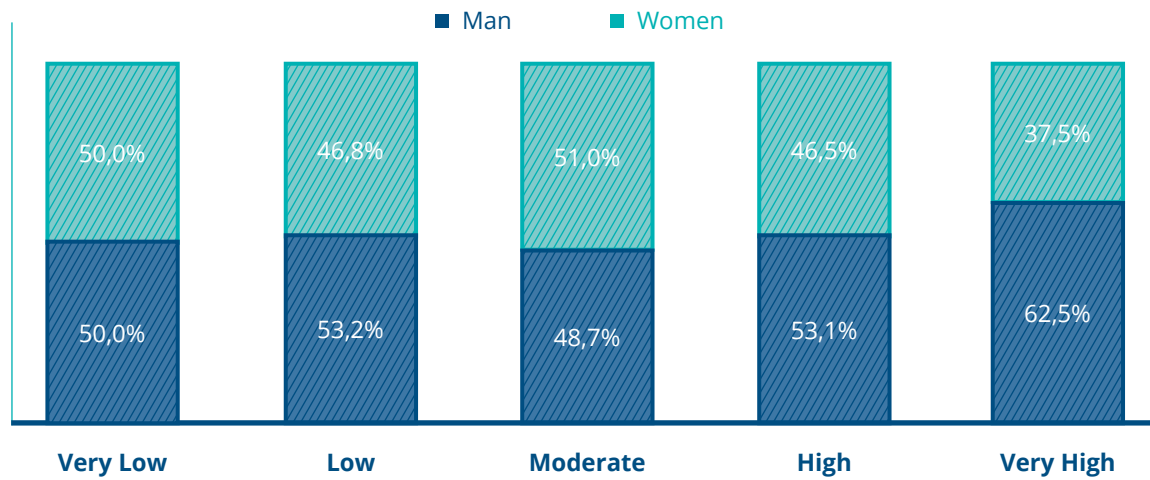
SOURCE: Own elaboration

FIGURE 13: CROSS TABLE, HOW WOULD YOU RATE YOUR DEGREE OF KNOWLEDGE ABOUT CIRCULAR ECONOMY? – (PRACTICAL KNOWLEDGE) (%) * COULD YOU INDICATE YOUR GENDER? (%)

■ Man ■ Women

	Very Low	Low	Moderate	High	Very High
Women	68,6%	48,3%	51,4%	39,6%	28,9%
Man	31,4%	51,7%	48,3%	59,7%	71,1%
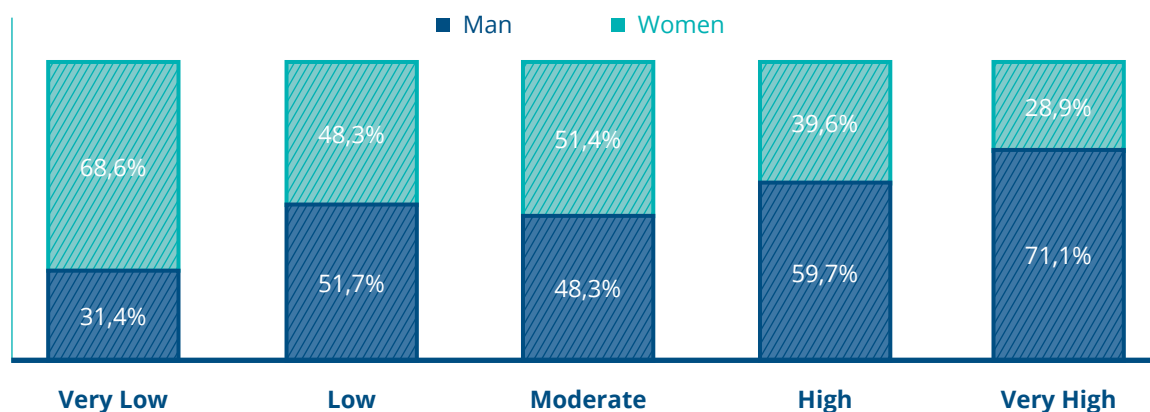
SOURCE: Own elaboration

Regarding age groups and the degree of theoretical knowledge, Table 5 shows that respondents aged 72+ or "Post-War" have the highest percentage of "Very Low" levels (6.3%) and "Low" levels (12.5%), compared to the other groups. On the other hand, all age groups account for more than 35% of their preferences in the "Moderate" and "High" level of knowledge.

It is worth noting that when adding "Very High" and "High" levels for each of the age brackets (except from 18 to 26), a decrease is observed as one moves towards the 72+ age group.

TABLE 5: CROSS TABLE HOW WOULD YOU RATE YOUR DEGREE OF KNOWLEDGE ABOUT CIRCULAR ECONOMY? (THEORETICAL KNOWLEDGE) * PLEASE TELL US YOUR AGE RANGE (%)

		From 18 to 26 years	From 27 to 39 years	From 40 to 51 years	From 52 to 71 years	72+ years	Total
Theoretical knowledge	Very Low	1,7%	1,2%	1,4%	1,3%	6,3%	1,4%
	Low	5,2%	9,4%	9,0%	8,9%	12,5%	8,9%
	Moderate	48,3%	35,4%	46,2%	47,5%	62,5%	43,1%
	High	37,9%	43,3%	31,4%	37,3%	18,8%	37,4%
	Very High	6,9%	10,6%	11,9%	5,1%		9,2%
	Total	100,0%	100,0%	100,0%	100,0%	100,0%	100,0%

SOURCE: Own elaboration

Regarding practical knowledge, table 6 shows there is a decrease in the "High" knowledge option for all age brackets of 14.2% on average, which is compensated by an increase in the "Low" knowledge option with a 13.2%. These results are consistent with the overall data where theoretical knowledge is higher than practical knowledge in all age groups.

TABLE 6: CROSS TABLE, HOW WOULD YOU RATE YOUR DEGREE OF KNOWLEDGE ABOUT CIRCULAR ECONOMY? (PRACTICAL KNOWLEDGE) * PLEASE TELL US YOUR AGE RANGE (%)

		From 18 to 26 years	From 27 to 39 years	From 40 to 51 years	From 52 to 71 years	72+ years	Total
Theoretical knowledge	Very Low	6,9%	5,1%	5,7%	3,2%	6,3%	5,0%
	Low	24,1%	24,8%	14,8%	22,2%	25,0%	21,1%
	Moderate	46,6%	41,7%	49,0%	44,9%	62,5%	45,5%
	High	20,7%	23,6%	22,4%	24,7%	6,3%	22,8%
	Very High	1,7%	4,7%	8,1%	5,1%		5,5%
	Total	100,0%	100,0%	100,0%	100,0%	100,0%	100,0%

SOURCE: Own elaboration

KNOWLEDGE ON CIRCULAR ECONOMY IN THE COUNTRY

Respondents were asked about their perception of the degree of knowledge on Circular Economy in their country of residence. The results in Figure 14 show, in general, a negative view where the options "Low" knowledge predominate with 53%, followed by "Moderate" with 36%.

FIGURE 14: HOW WOULD YOU RATE THE AVERAGE KNOWLEDGE ABOUT CIRCULAR ECONOMY IN YOUR COUNTRY OF RESIDENCE? (%)
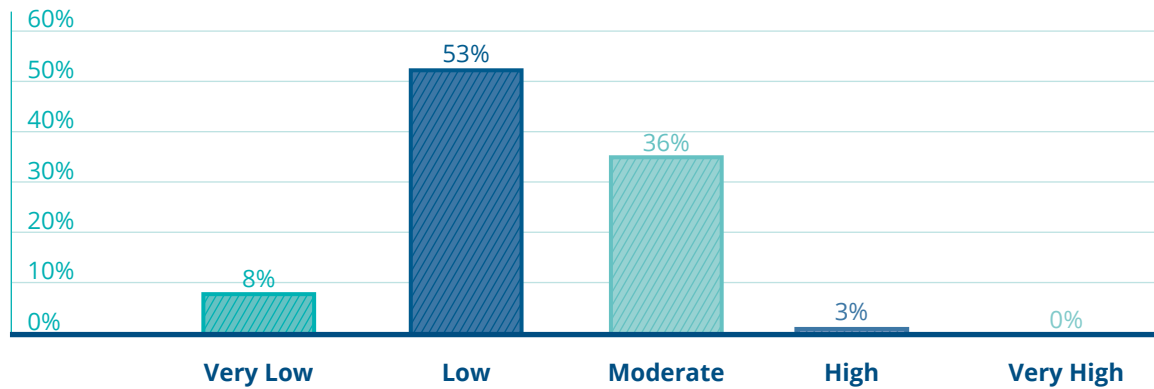
SOURCE: Own elaboration

In addition, they were requested to evaluate the knowledge on Circular Economy that several groups in their country of residence might have. Figure 15 shows that none of the 8 groups is perceived as having "Very High" knowledge on Circular Economy. Only at level "High" is International Cooperation present (39.1%), followed by Academy (27.3%), Consultancies (21.6), NGOs (19.7%), Government (1.5%), Media (2.7%) y Consumers (1.3%).

If "Very Low" levels of knowledge are considered, Consumers (43.7%) and Media (33.8%) are the worst evaluated. Same happens when considering level "Low", with 45.4% and 47.3% for the same groups. Finally, it highlights that 44% of respondents consider the business sector has only a low knowledge on Circular Economy.

FIGURE 15: HOW WOULD YOU RATE THE LEVEL OF KNOWLWDGE ABOUT CIRCULAR ECONOMY OF THE FOLLOWING GROUPS IN YOUR COUNTRY OF RESIDENCE? (%)
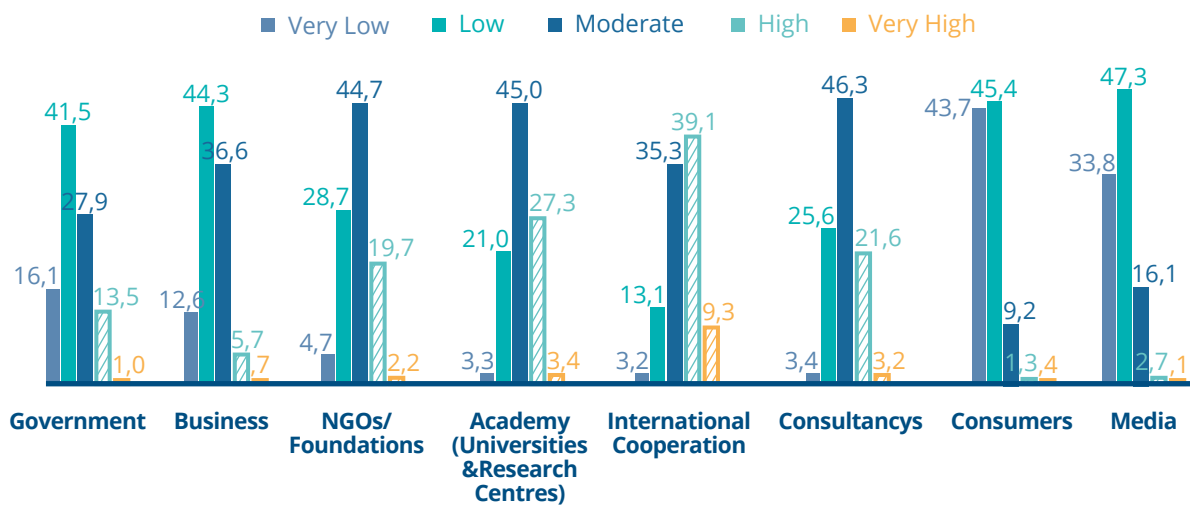
SOURCE: Own elaboration

A cross-analysis between the respondents' degree of theoretical knowledge and the average knowledge on Circular Economy in their countries of residence, shows that they systematically evaluate the average knowledge of their country for any level as "Low" (53%) and y "Moderate" (36,4%). Besides, category "Very High" had no response for the 696 surveys considered in the study (see Table 7).
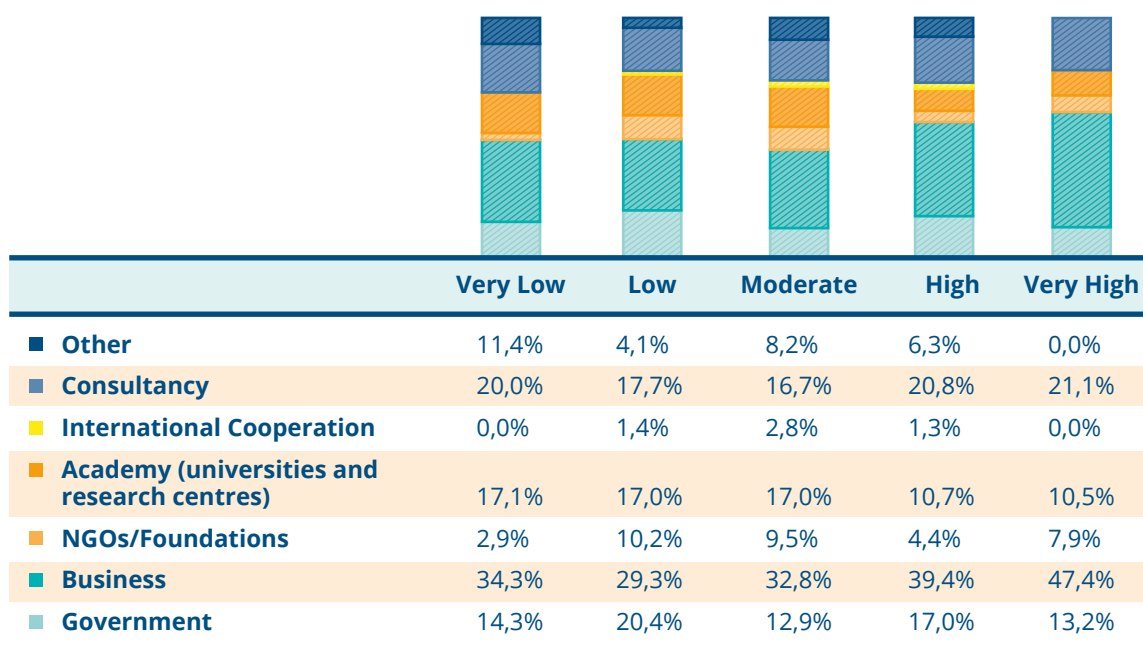
TABLE 7: CROSS TABLE, HOW WOULD YOU RATE YOUR DEGREE OF KNOWLEDGE ABOUT CIRCULAR ECONOMY? (THEORETICAL KNOWLEDGE) * HOW WOULD YOU RATE THE AVERAGE KNOWLEDGE ABOUT CIRCULAR ECONOMY IN YOUR COUNTRY OF RESIDENCE (%))*¿CÓMO CALIFICARÍA USTED EL CONOCIMIENTO PROMEDIO SOBRE ECONOMÍA CIRCULAR EN EL PAÍS DONDE RESIDE? (%)

		Average Knowledge country of residence					
		Very Low	**Low**	**Moderate**	**High**	**Very High**	**Total**
Theoretical knowledge	Very Low	60,0%	20,0%	20,0%	0%	0,0%	100,0%
	Low	16,1%	62,9%	19,4%	1,6%	0,0%	100,0%
	Moderate	7,7%	58,3%	32,0%	2,0%	0,0%	100,0%
	High	4,6%	46,2%	44,2%	5,0%	0,0%	100,0%
	Very High	3,1%	51,6%	43,8%	1,6%	0,0%	100,0%
	Total	7,6%	53,0%	36,4%	3,0%	0,0%	100,0%

SOURCE: Own elaboration

The pattern of previous results is repeated when crossing the level of practical knowledge with the average knowledge on Circular Economy in their country of residence. The results obtained reaffirm for all levels of knowledge, that their countries of residence have low knowledge on Circular Economy.

5

THE CONCEPT OF CIRCULAR ECONOMY AND ITS POSITIONING IN LATIN AMERICA

THE CONCEPT OF CIRCULAR ECONOMY AND ITS POSITIONING

THE CONCEPT

Respondents were requested to evaluate a list of concepts adapted from Kirchherr, Reike and Hekkert (2017) to determine their degree of association with the Circular Economy model. Table 8 shows that for categories "A lot" and "Quite a lot", the strongest link is with the concept of *recycling* (24.1% and 35.1%), followed by *reusing* which for the same categories reached 14.1% and 30.3%. On the other hand, the least associated concepts are *remanufacturing* with 41.4% and *redesigning* with 38.9% under "A little" category, while *rethinking* with 22.3% is under "Nothing" category.

TABLE 8: IN YOUR OPINION, TO WHAT DEGREE ARE THE FOLLOWING CONCEPTS ASSOCIATED TO CIRCULAR ECONOMY IN YOUR COUNTRY OF RESIDENCE? (%)

	Nothing	A little	Something	Quite a lot	A lot	Total
Rediseñar	13,5%	38,9%	28,6%	12,9%	6,0%	100%
Remanufacturar	12,9%	41,4%	27,4%	12,6%	5,6%	100%
Reciclar	1,1%	11,6%	28,0%	35,1%	24,1%	100%
Reparar	6,6%	28,6%	35,3%	23,1%	6,3%	100%
Revalorizar	7,3%	31,6%	34,6%	17,5%	8,9%	100%
Recuperar	4,9%	23,7%	36,9%	23,7%	10,8%	100%
Repensar	22,3%	36,9%	22,3%	11,8%	6,8%	100%
Reutilizar	2,2%	19,4%	34,1%	30,3%	14,1%	100%
Reacondicionar	9,3%	36,6%	33,6%	14,2%	6,2%	100%
Reusar	2,7%	24,7%	32,8%	28,2%	11,6%	100%

SOURCE: Own elaboration

The results above show that the perception about the countries where respondents live is that Circular Economy is still strongly dominated by *recycling economy* concepts. As a result, this is expected since the greatest efforts in public policy and private action have been focused on this area. However, in a long-term view, it is to be expected that *redesigning*, *remanufacturing* and *rethinking* issues will take on greater importance when understanding the Circular Economy Model.Next, you can see a graph with the aggregated results, which simplifies its presentation (see figure 16).

FIGURE 16: IN YOUR OPINION, TO WHAT DEGREE ARE THE FOLLOWING CONCEPTS ASSOCIATED TO CIRCULAR ECONOMY IN YOUR COUNTRY OF RESIDENCE? (AGGREGATE DATA) (%)
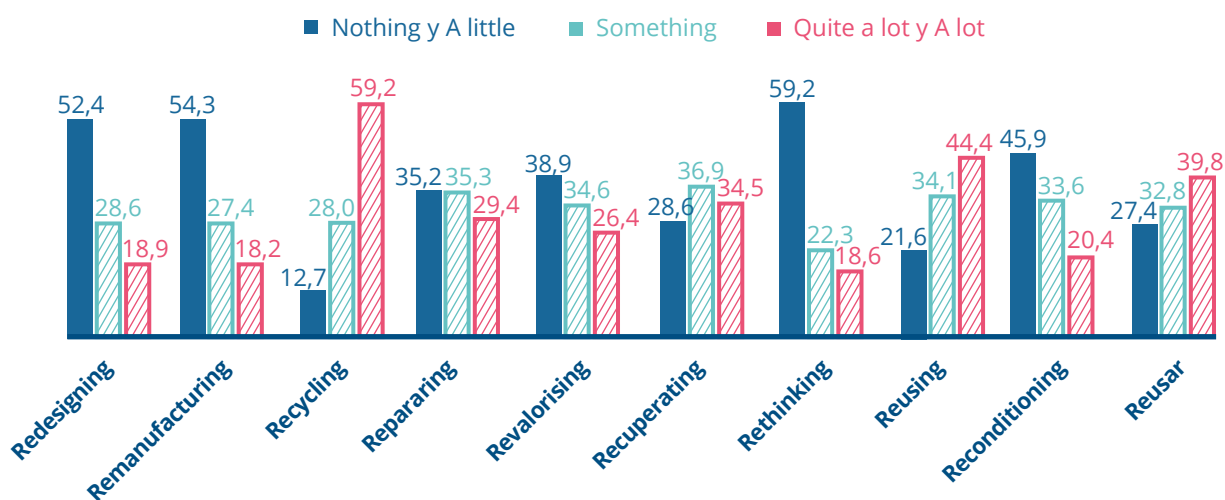
SOURCE: Own elaboration

POSITIONING OF THE CONCEPT

Respondents were asked how well the Circular Economy concept has been positioned in their country of residence. In Table 9, it can be seen the concept has been positioned as "A lot" and "Quite a lot" in International Organisations (10.6% and 38.5%), followed by the Academy (4.5% and 30.5%) and NGOs/Foundations (4.5% and 26.9%). On the other hand, there is a critical view concerning "Consumers" and "The Media", which are at the top of the results for "Nothing" or "Little" knowledge categories.

TABLE 9: IN YOUR OPINION, HOW WELL HAS THE CONCEPT OF CIRCULAR ECONOMY BEEN POSITIONED IN THE FOLLOWING GROUPS OF YOUR COUNTRY OF RESIDENCE? (%)

	Nothing	A little	Something	Quite a lot	A lot	Total
Government	10,5%	32,5%	34,2%	20,7%	2,2%	100,0%
Business	5,3%	32,5%	45,5%	15,9%	0,7%	100,0%
NGOs/Foundations	2,6%	21,8%	44,3%	26,9%	4,5%	100,0%
Academy	2,2%	21,3%	41,7%	30,5%	4,5%	100,0%
International Cooperation	2,6%	15,1%	33,2%	38,5%	10,6%	100,0%
Consultancies	3,9%	27,0%	44,5%	20,7%	3,9%	100,0%
Consumers	21,7%	53,4%	21,4%	3,2%	0,3%	100,0%
Media	23,6%	47,8%	23,0%	5,0%	0,6%	100,0%

SOURCE: Own elaboration

Perception regarding Business and Government shows the Circular Economy concept has been positioned as "A Little" or "Something". When adding both categories, it can be observed that for the Business group, it amounts 78%, while for the Government it reaches 66.7%. Figure 17 shows the aggregate data for all the groups.

FIGURE 17: IN YOUR OPINION, HOW WELL HAS THE CONCEPT OF CIRCULAR ECONOMY BEEN POSITIONED IN THE FOLLOWING GROUPS IN YOUR COUNTRY OF RESIDENCE? (AGGREGATE DATA) (%)
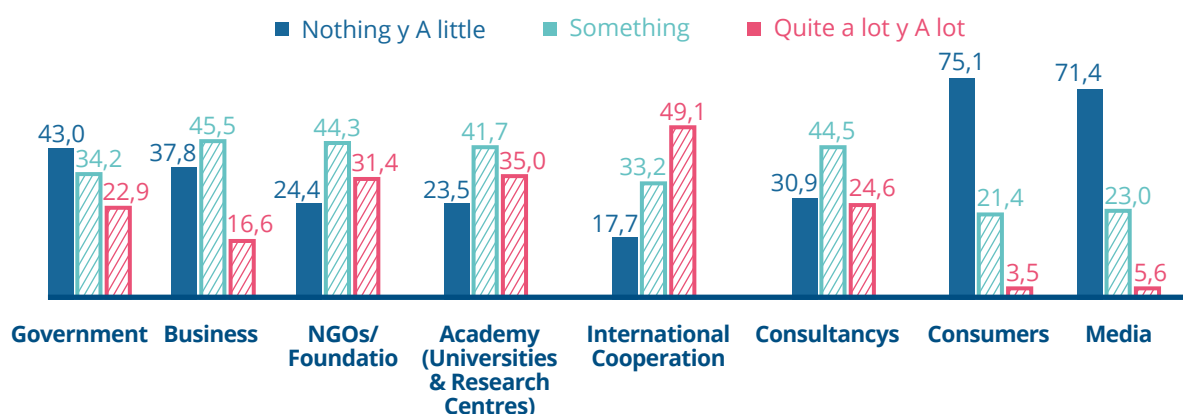
SOURCE: Own elaboration

A cross-analysis between the concepts of positioning and average knowledge of Circular Economy in the country of residence (see table 10) shows that those respondents rating the average knowledge of their country of residence as "Very Low", at the same time consider that positioning in the Government group has been "Nothing" (37.7%) and "A Little" (47.2%). On the other hand, as the level of knowledge increases, positioning also shows progress, but only up to the ratio "High" level of Knowledge/"A lot" positioning.

TABLE 10: CROSS TABLE, IN YOUR OPINION, HOW WELL HAS THE CONCEPT OF CIRCULAR ECONOMY BEEN POSITIONED IN THE FOLLOWING GROUPS OF YOUR COUNTRY OF RESIDENCE? (GOVERNMENT)* HOW WOULD YOU RATE THE AVERAGE KNOWLEDGE ABOUT CIRCULAR ECONOMY IN YOUR COUNTRY OF RESIDENCE? – LEVEL OF KNOWLEDGE (%)

		Average knowledge on Circular Economy in your country of residence					
		Very Low	**Low**	**Moderate**	**High**	**Very High**	**Total**
Positioning of the concept in the Government	Nothing	37,7%	10,6%	5,5%	0	0%	10,5%
	A little	47,2%	38,8%	21,3%	19,0%	0%	32,5%
	Something	7,5%	37,1%	35,6%	33,3%	0%	34,2%
	Quite a lot	7,5%	12,5%	33,6%	42,9%	0%	20,7%
	A lot		1,1%	4,0%	4,8%	0,0%	2,2%
	Total	100,0%	100,0%	100,0%	100,0%	0,0%	100,0%

SOURCE: Own elaboration

Based on this pattern of relationship between questions, a correlation analysis was carried out to measure the relationship strength between knowledge of the country and positioning. The results were statistically significant without exception, with a Pearson bilateral correlation at 99% confidence level. As a result, correlations for each group are small, but positive and significant at 1%.

In other words, the degree of knowledge on Circular Economy shows a direct association with the degree of positioning, i.e., if the knowledge on Circular Economy in a country increases, the greater should be the positioning of the concept among the different groups, such as: Government, Business, NGOs and foundations, Academy (Universities and Research Centres), International Cooperation, Consultancies, Consumers, and the Media. This invites further studies to contrast the hypothesis that the degree of knowledge on Circular Economy increases its positioning. Table 11 shows the results for each group.

TABLE 11: CORRELATION BETWEEN YOUR 0PINION, HOW WELL HAS THE CONCEPT OF CIRCULAR ECONOMY BEEN POSITIONED IN THE FOLLOWING GROUPS OF YOUR COUNTRY OF RESIDENCE? HOW WOULD YOU RATE THE AVERAGE KNOWLEDGE ABOUT CIRCULAR ECONOMY IN YOUR COUNTRY OF RESIDENCE? – LEVEL OF KNOWLEDGE

Groups	Pearson Correlation	Significance (Bilateral)	N
Government	0,370***	0,000	696
Business	0,390***	0,000	
NGOs/Foundations	0,278***	0,000	
Academy (Universities and Research Centres)	0,314***	0,000	
International Cooperation	0,258***	0,000	
Consultancys	0,275***	0,000	
Consumers	0,334***	0,000	
Media	0,351***	0,000	

***Correlation is significant at level 0.01 (Bilateral)

SOURCE: Own elaboration

The results above must be analysed cautiously since they represent initial estimates for the degree of association between knowledge and positioning of Circular Economy. In addition, it must be considered that the amount of data each group held varied from group to group, which led to smaller and more modest correlations. Thus, what is presented here are preliminary calculations referred to the respondents' context but cannot be directly extrapolated to other realities.

6

DRIVERS OF THE CIRCULAR ECONOMY IN LATIN AMERICA

DRIVERS OF A CIRCULAR ECONOMY

Focusing on the *present*, respondents were asked about the institutions that have had the greatest relevance in the promotion of Circular Economy in their countries of residence. In general, they claim the players linked to international cooperation are those who have given the biggest boost to development and to the adoption of circular proposals in Latin American nations. This may be evidence of the increase in recent years of projects and funds provided by these institutions to deepen and generate knowledge about Circular Economy (see figure 18).

Also, it is worth noting that players like the Government and Business are currently perceived as agents of little change. In other words, given the results obtained, respondents feel such institutions have not played a central role in promoting Circular Economy in their countries.

FIGURE 18: THINKING ABOUT THE PRESENT, WHICH OF THE FOLLOWING INSTITUTIONS HAVE HAD THE GREATEST IMPACT IN PROMOTING CIRCULAR ECONOMY IN YOUR COUNTRY? (%)

Institution	1 (Nothing)	2	3	4	5 (A lot)
Consultancys	13,5	36,1	32,8	14,5	3,2
International Cooperation	5,9	16,7	35,3	30,2	11,9
Academy (Universities and Research Centres)	8,0	28,9	36,2	21,8	5,0
NGOs/Foundations	8,0	27,6	38,1	20,7	5,6
Business	10,9	41,4	33,8	11,9	2,0
Government	17,0	37,6	23,6	17,7	4,2
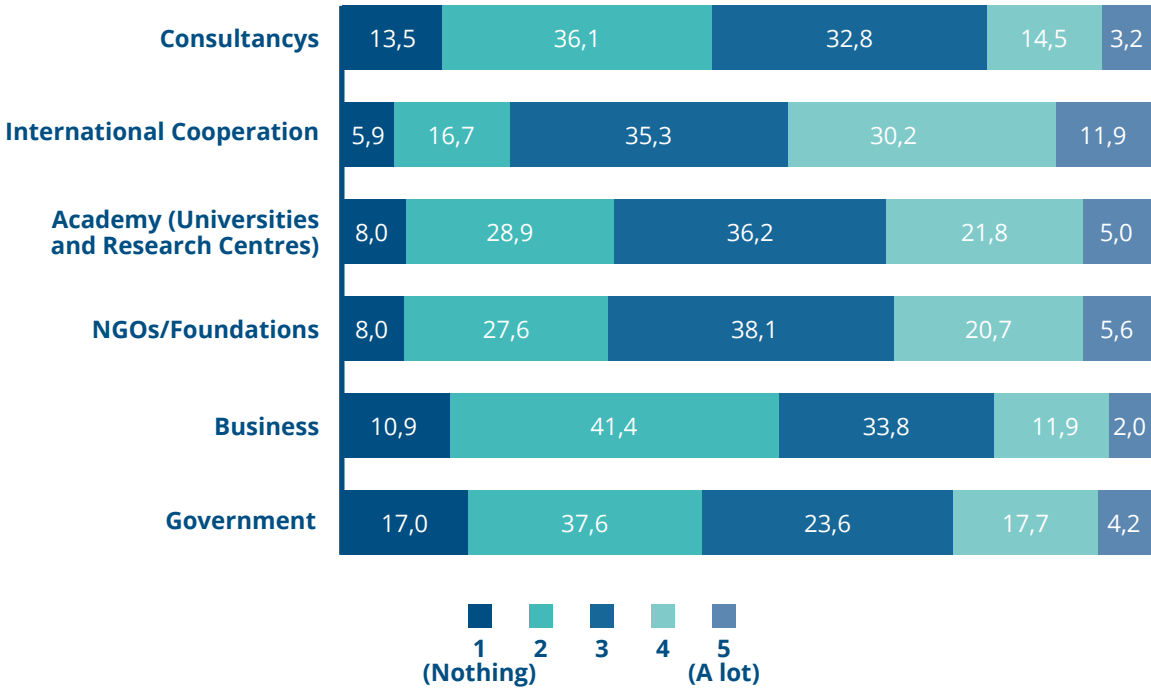
SOURCE: Own elaboration

Thinking ahead, when asking about the level of responsibility such institutions should have to promote Circular Economy in their countries, the situation changes to what was mentioned some lines above, as when observing figure 19, respondents perceive the actors who should have the most responsibility for promoting Circular Economy and achieving structural changes in the current productive system are, precisely, the Government and the Business Sector. These are followed by the Academy (universities and research centres), International Cooperation, Consultancies, and NGOs or Foundations.

FIGURE 19: THINKING AHEAD, WHAT DEGREE OF RESPONSIBILITY SHOULD THE FOLLOWING INSTITUTIONS HAVE IN PROMOTING CIRCULAR ECONOMY IN YOUR COUNTRY? (%)

SOURCE: Own elaboration

7
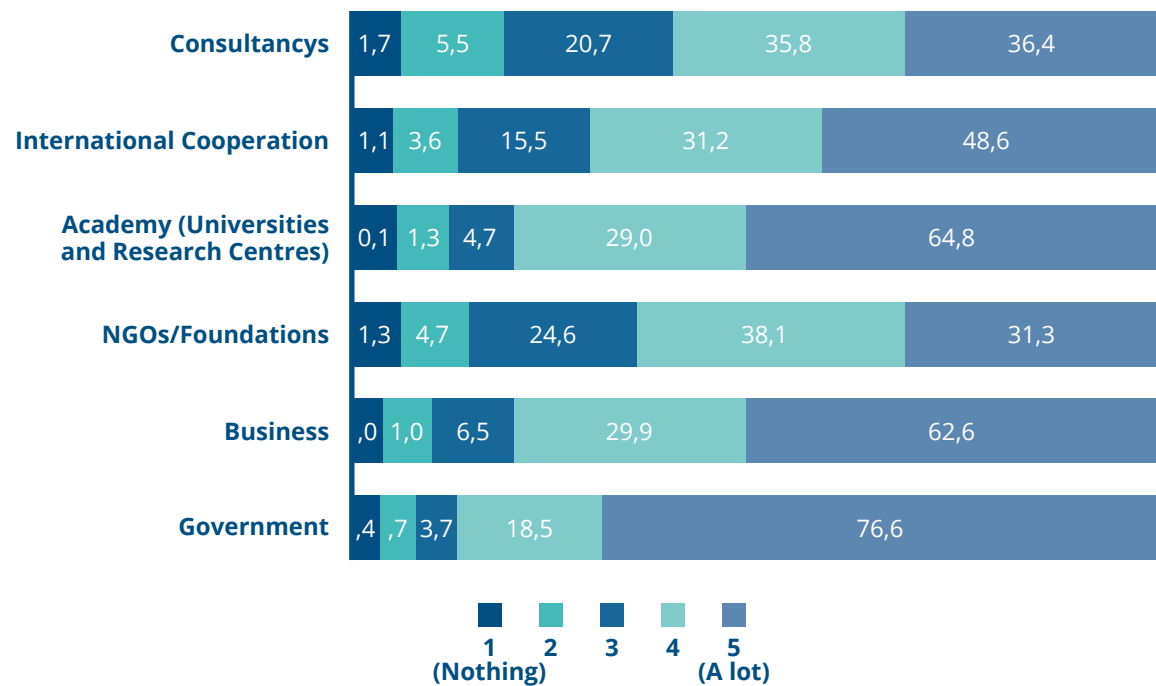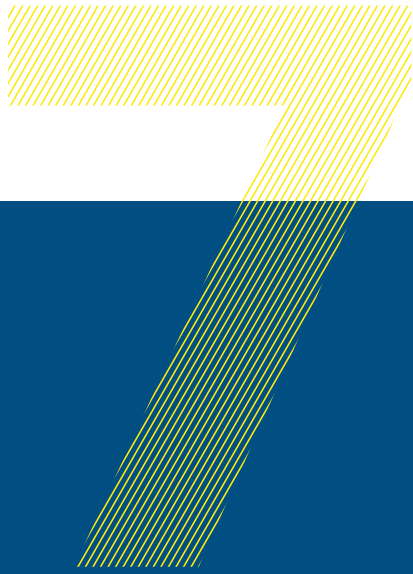
PROGRESS TOWARDS CIRCULAR ECONOMY IN LATIN AMERICA

PROGRESS TOWARDS CIRCULAR ECONOMY

The aim was to determine the progress the region has had in Circular Economy issues. To do this, respondents were given 8 topics to be assessed in a scale from "Nothing=1" to "A lot=5" the degree of progress in their countries. The first two issues consulted were the "existence of regulations (or laws) to promote circular economy" and the "capacity to implement the rules and laws created". In both cases, the results seen in figure 20 show the progress in the existence of regulatory frameworks is higher than the capacity to implement them in each of the grades on the scale (1-5). For both cases, it is noted that progress is considered moderate (rating 3) downwards.

FIGURE 20: IN YOUR OPINION, HOW MUCH PROGRESS HAS YOUR COUNTRY OF RESIDENCE MADE IN THE FOLLOWING CIRCULAR ECONOMY ISSUES? (%)

- Existence of regulations (laws) to promote Circular Economy
- Capacity to implement regulations and laws created
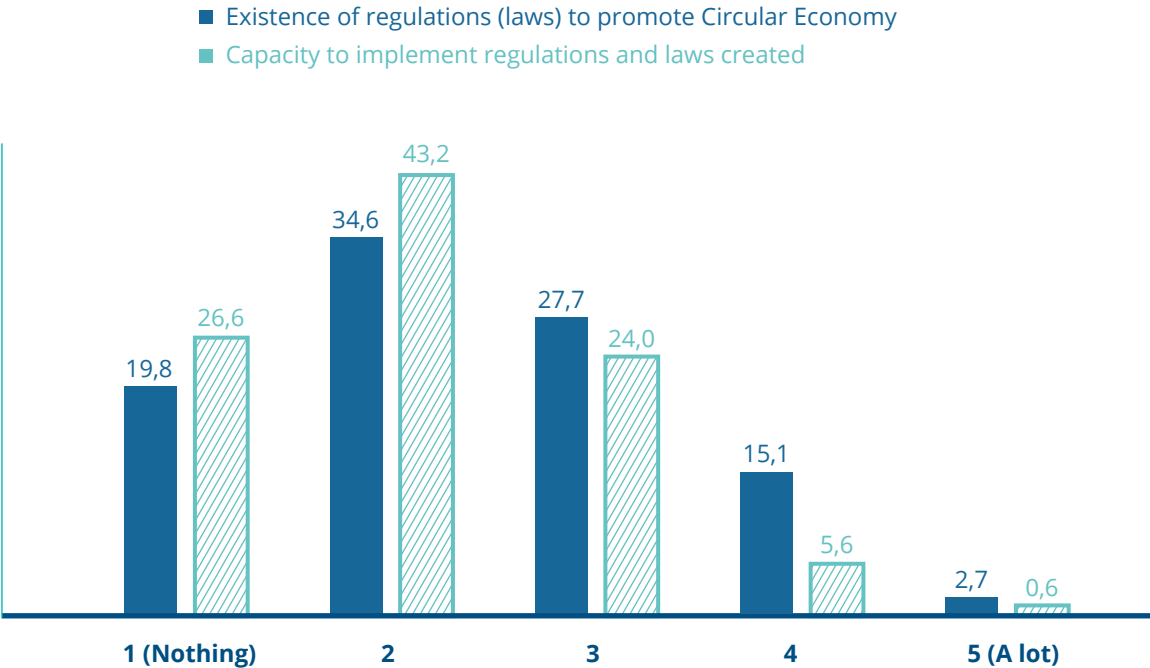
SOURCE: Own elaboration

When asking about tax incentives for companies to transition towards Circular Economy, 47% of respondents point out that "No progress" has been made, which would be showing the Latin American region has a significant weakness in one of the central aspects of an ecosystem allowing transition towards business circularity (see figure 21).

FIGURE 21: IN YOUR OPINION, HOW MUCH PROGRESS HAS YOUR COUNTRY OF RESIDENCE MADE IN THE FOLLOWING CIRCULAR ECONOMY ISSUES? - TAX INCENTIVES FOR COMPANIES TO TRANSITION TO CIRCULAR ECONOMY (%)

SOURCE: Own elaboration

When crossing the above result by type of economic sector (see table 12), it can be seen that the Government Sector tends to assess more highly the progress in tax incentive issues than the rest of the groups ("Other" being the exception). On the other hand, International Cooperation (61.5%) and NGOs (57.1%) are the most negatively assessed, with "Nothing" in progress.

TABLE 12: CROSS TABLE, COULD YOU TELL US IN WHICH OF THE FOLLOWING SECTORS YOU PERFORM ALL OR MOST OF YOUR ACTIVITY? IN YOUR OPINION, HOW MUCH PROGRESS HAS YOUR COUNTRY OF RESIDENCE MADE IN THE FOLLOWING CIRCULAR ECONOMY ISSUES? - TAX INCENTIVES FOR COMPANIES TO TRANSITION TO CIRCULAR ECONOMY (%)

		In your opinion, how much progress has your country of residence made in the following circular economy issues? – Tax incentives for companies to transition to Circular Economy					
		1 (Nothing)	2	3	4	5 (A lot)	Total
Could you tell us in which of the following sectors you perform all or most of your activity?	Government	41,7%	27,8%	21,3%	9,3%		100,0%
	Business	49,2%	37,5%	10,4%	2,9%		100,0%
	NGOs/Foundation	57,1%	32,1%	10,7%			100,0%
	Academy	38,7%	41,5%	15,1%	3,8%	0,9%	100,0%
	International Cooperation	61,5%	30,8%	7,7%			100,0%
	Consultancy	49,6%	38,6%	11,0%	0,8%		100,0%
	Other	39,1%	37,0%	21,7%		2,2%	100,0%
	Total	46,7%	36,2%	13,6%	3,2%	0,3%	100,0%

SOURCE: Own elaboration

When asked about progress on issues related to accessing private financing for circular projects, figure 22 shows that respondents report relatively little progress, with 33% rating their country's progress as 1="Nothing". If we add the percentage obtained by the valuation =2 to the above, the percentage reaches 73.7% of the total.

FIGURE 22: IN YOUR OPINION, HOW MUCH PROGRESS HAS YOUR COUNTRY OF RESIDENCE MADE IN - ACCESS TO PRIVATE FINANCING FOR CIRCULAR ECONOMY PROJECTS (BANKS AND FINANCIAL INSTITUTIONS) (%)

- 1 (Nothing)
- 2
- 3
- 4
- 5 (A lot)
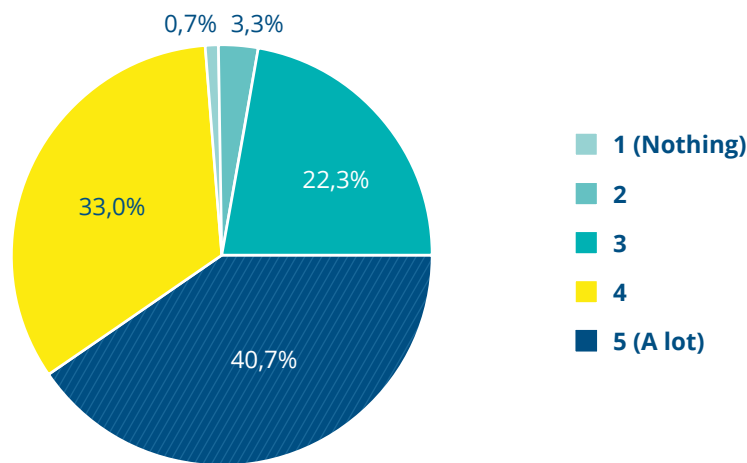
SOURCE: Own elaboration

Along the same lines as above, respondents were asked about access to public financing for circular projects, showing results like those related to private financing. 30% of respondents thought there has been no progress at all on this issue (valuation=1) and 40% rated progress as valuation=2. Details of the results can be seen in figure 23.

FIGURE 23: IN YOUR OPINION, HOW MUCH PROGRESS HAS YOUR COUNTRY OF RESIDENCE MADE IN – ACCESS TO PUBLIC FINANCING FOR CIRCULAR ECONOMY PROJECTS (BANKS AND FINANCIAL INSTITUTIONS) (%)

- 1 (Nothing)
- 2
- 3
- 4
- 5 (A lot)
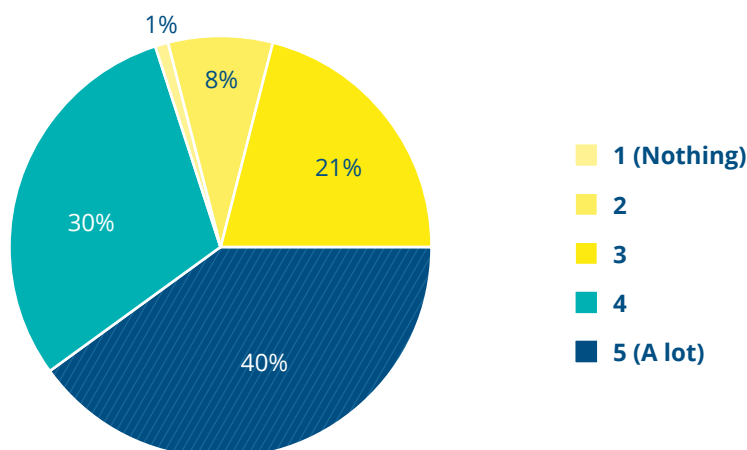
SOURCE: Own elaboration

Access to professionals with knowledge on Circular Economy is a critical factor due to its importance when building institutional capacities to move forward in the design and implementation of strategies in several economic areas. Figure 24 shows that respondents perceive that little progress has been made in this area in the countries of the region, with 46.4 giving this aspect a rating of 2.

FIGURE 24: IN YOUR OPINION, HOW MUCH PROGRESS HAS YOUR COUNTRY OF RESIDENCE MADE IN THE FOLLOWING CIRCULAR ECONOMY ISSUES? – ACCESS TO KNOWLEDGEABLE PROFFESIONALS TO IMPLEMENT CIRCULARITY TRANSITION PROCESSES. (%)
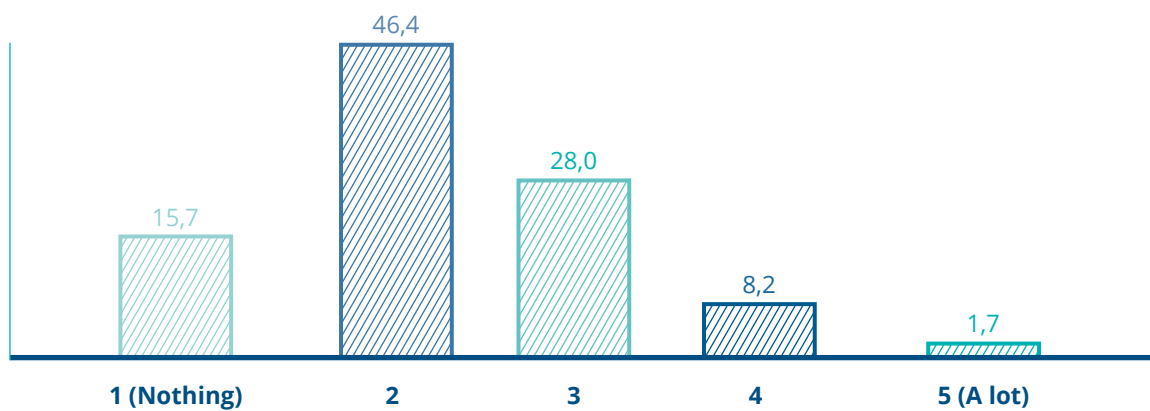
SOURCE: Own elaboration

On the other hand, the availability of public information to identify circular business opportunities (usually categorised as public goods) was consulted. It was observed that the general opinion emphasises the scarce availability of such information in national ecosystems, as shown in figure 25.

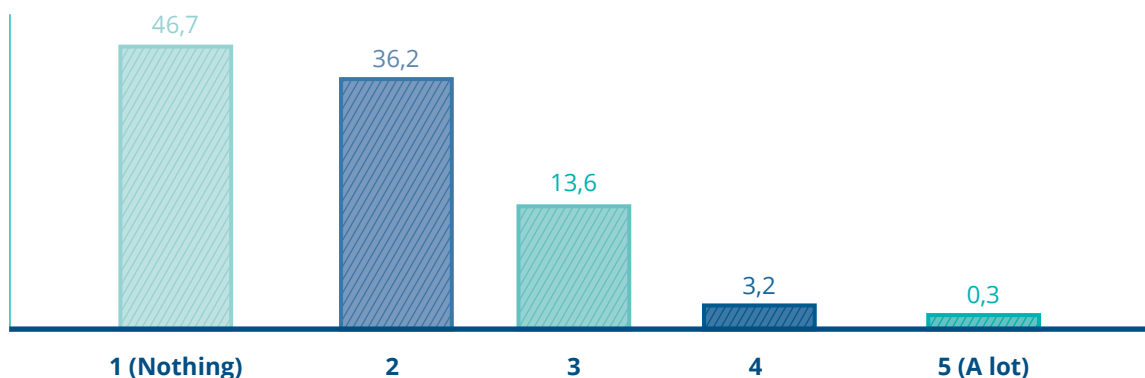**FIGURE 25:** IN YOUR OPINION, HOW MUCH PROGRESS HAS YOUR COUNTRY OF RESIDENCE MADE IN THE FOLLOWING CIRCULAR ECONOMY ISSUES? – AVAILABILITY OF PUBLIC INFORMATION ENABLING THE ACCESS TO NEW CIRCULAR BUSINESS OPPORTUNITIES. (%)
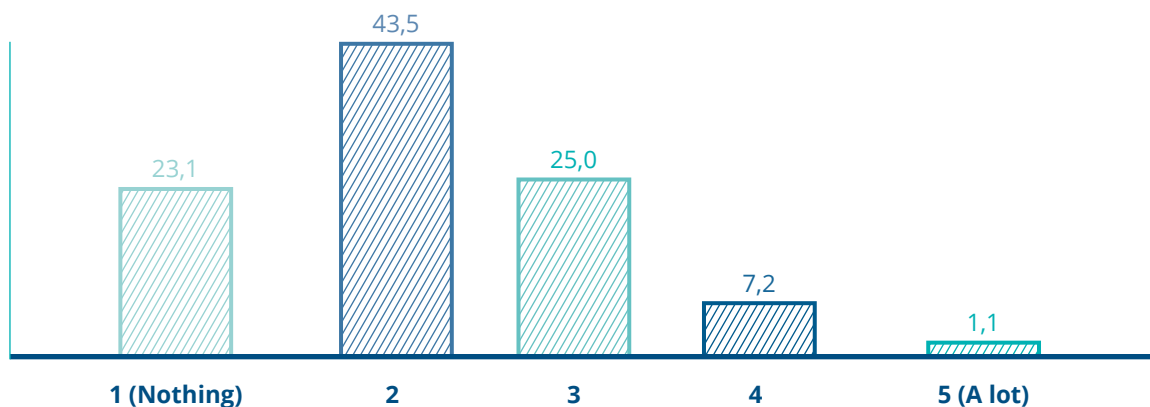
SOURCE: Own elaboration

Crossing this information per sectors, although a common opinion of little progress is observed in every case, those respondents belonging to the Government sector consider there is progress (13.9%) which might be considered significant (rating 4), if compared with the low percentages assigned by the rest of the groups.

TABLE 13: CROSS TABLE, COULD YOU TELL US IN WHICH OF THE FOLLOWING SECTORS YOU PERFORM ALL OR MOST OF YOUR ACTIVITY? IN YOUR OPINION, HOW MUCH PROGRESS HAS YOUR COUNTRY OF RESIDENCE MADE IN THE FOLLOWING CIRCULAR ECONOMY ISSUES?- AVAILABILITY OF PUBLIC INFORMATION ENABLING THE ACCESS TO NEW CIRCULAR BUSINESS OPPORTUNITIES. (%)

		Availability of public information enabling the access to new circular business opportunities					
		1 (Nothing)	2	3	4	5 (A lot)	Total
Could you tell us in which of the following sectors you perform all or most of your activity?	Government	16,7%	39,8%	29,6%	13,9%		100,0%
	Business	24,2%	47,1%	20,4%	6,3%	2,1%	100,0%
	NGOs/Foundations	32,1%	41,1%	17,9%	7,1%	1,8%	100,0%
	Academy	21,7%	40,6%	32,1%	5,7%		100,0%
	International Cooperation	7,7%	38,5%	46,2%	7,7%		100,0%
	Consultancy	28,3%	43,3%	22,0%	5,5%	0,8%	100,0%
	Other	15,2%	45,7%	32,6%	4,3%	2,2%	100,0%
	Total	23,1%	43,5%	25,0%	7,2%	1,1%	100,0%

SOURCE: Own elaboration

The existence of business networks is another critical element in the transition process. As one can see in figure 26, 58% (adding ratings 1 and 2) consider there has been "very little" or "no" progress whatsoever in this issue. However, 12% perceive there have been changes that can be considered relevant.

When going deeper into the groups that have considered progress with valuation=4, the most relevant have been Business (29.9%), followed by Government (22%) and Academy (15.9%).

FIGURE 26: IN YOUR OPINION, HOW MUCH PROGRESS HAS YOUR COUNTRY OF RESIDENCE MADE IN THE FOLLOWING CIRCULAR ECONOMY ISSUES? – EXISTENCE OF BUSINESS COOPERATION NETWORKS TO SUPPORT TRANSITION TOWARDS CIRCULAR ECONOMY. (%)

1%
12%
29%
18%
40%

- 1 (Nothing)
- 2
- 3
- 4
- 5 (A lot)
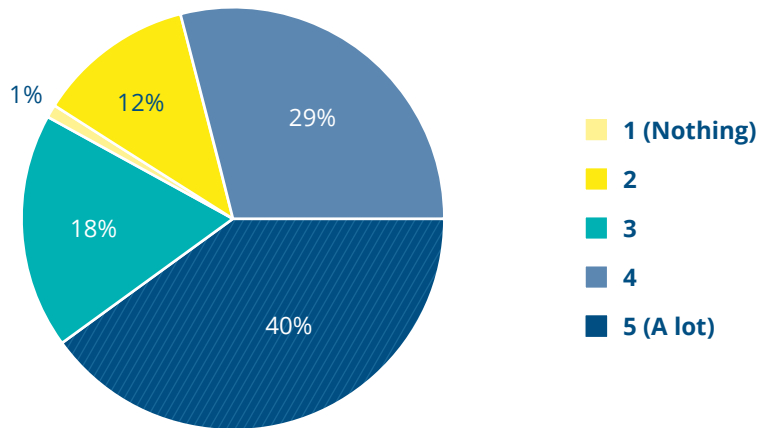
SOURCE: Own elaboration

FIGURE 27: IN YOUR OPINION, HOW MUCH PROGRESS HAS YOUR COUNTRY OF RESIDENCE MADE IN THE FOLLOWING CIRCULAR ECONOMY ISSUES? – KNOWLEDGE OF THE CONCEPT AND PRACTICE OF THE CIRCULAR ECONOMY IN THE COUNTRY. (%)

51.9
0.9
6.0
12.2
29.0

- 1 (Nothing)
- 2
- 3
- 4
- 5 (A lot)
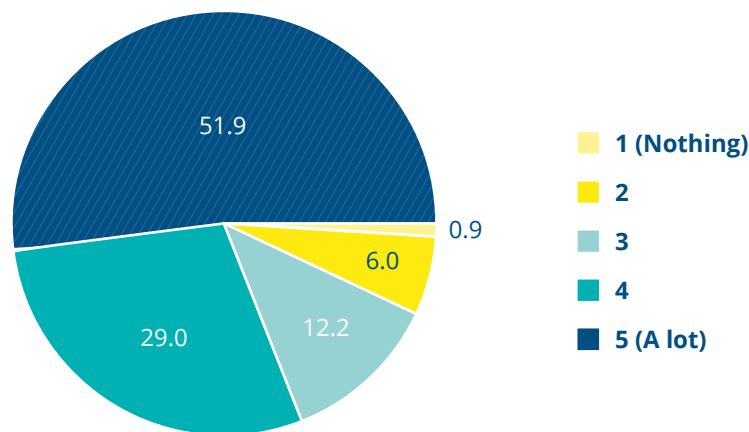
SOURCE: Own elaboration

All the above, generates a weakness in the development and deepening of the Circular Economy concept and practice in the region (see figure 27), an aspect that must be tackled by the different players involved, such as the Government, Business, NGOs, Foundations, and International Cooperation, so as to transition towards more sustainable development models that do not depend on the intensive use of natural resources or highly polluting energy sources.
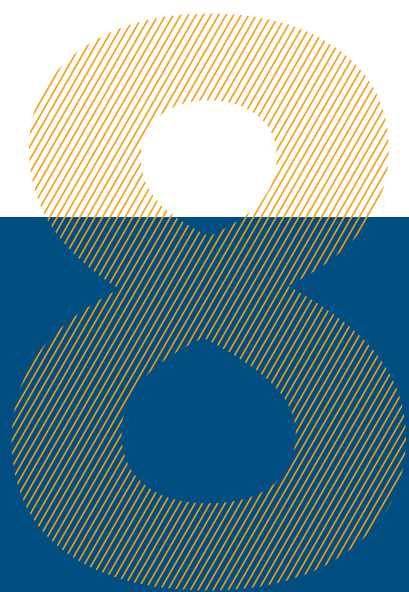
BARRIERS TO MOVING TOWARDS CIRCULAR ECONOMY IN LATIN AMERICA

BARRIERS TO MOVING TOWARDS CIRCULAR ECONOMY

Based on 10 questions, we sought to establish which were the main barriers to the progress of Circular Economy in Latin America, using a Likert scale with score from 1 to 5 (1="Nothing", 5="A lot").

First question addressed the business community high-risk aversion in the respondents' country of residence (see figure 28), since Circular Economy requires to assume transformations at the business model level, strategies, and technologies, among others, for its implementation, which may be perceived as highly risky. Results showed 37.5% of respondents claim this is a significant barrier (valuation=5), followed by 32.9% (valuation=4)

FIGURE 28: IN YOUR OPINION, TO WHAT DEGREE ARE THE FOLLOWING ISSUES A BARRIER FOR CIRCULAR ECONOMY IN YOUR COUNTRY OF RESIDENCE? - HIGH RISK AVERSION OF THE NATIONAL BUSINESS COMMUNITY. (%)

Legend:
- 1 (Nothing)
- 2
- 3
- 4
- 5 (A lot)
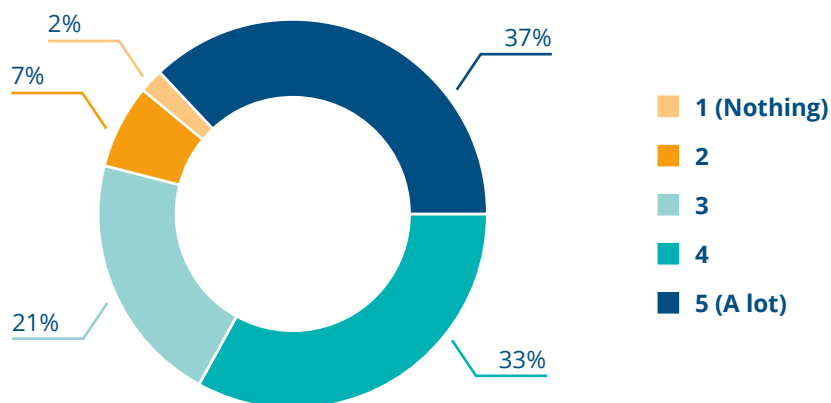
SOURCE: Own elaboration

When cross-checking the above result by sectors, it can be observed that high-risk aversion remains a relevant element for all the groups. Table 14 shows that the only group that does not evaluate above 30% in the valuation=5 to high-risk aversion are NGOs/Foundations, the rest present relevant scores, being even the Business sector itself the second highest in the list with 40.4%.

TABLE 14: CROSS TABLE, COULD YOU TELL US IN WHICH OF THE FOLLOWING SECTORS YOU PERFORM ALL OR MOST OF YOUR ACTIVITY? * IN YOUR OPINION, TO WHAT DEGREE ARE THE FOLLOWING ISSUES A BARRIER TO CIRCULAR ECONOMY IN YOUR COUNTRY OF RESIDENCE? – HIGH RISK AVERSION OF THE NATIONAL BUSINESS COMMUNITY (%)

		High-risk aversion of the national business community					
		1 (Nothing)	2	3	4	5 (A lot)	Total
Could you tell us in which of the following sectors you perform all or most of your activity	Government	1,9%	2,8%	21,3%	43,5%	30,6%	100,0%
	Business	2,1%	8,3%	22,5%	26,7%	40,4%	100,0%
	NGOs/Foundations		10,7%	25,0%	37,5%	26,8%	100,0%
	Academy	0,9%	8,5%	17,9%	34,9%	37,7%	100,0%
	International Cooperation		7,7%	23,1%	30,8%	38,5%	100,0%
	Consultancy	2,4%	4,7%	17,3%	32,3%	43,3%	100,0%
	Other		4,3%	28,3%	32,6%	34,8%	100,0%
	Total	1,6%	6,8%	21,3%	32,9%	37,5%	100,0%

SOURCE: Own elaboration

When asked about the importance of the level of knowledge and practice of Circular Economy in their country of residence as a barrier to transition, 40% considers this aspect is highly important, followed by 38% that chose valuation=4. These results are coherent with 93.1% of respondents who rated progress in this issue with score 3 and below (see chapter on progress in this document). Below, figure 29 shows result details.

FIGURE 29: IN YOUR OPINION, TO WHAT DEGREE ARE THE FOLLOWING ISSUES A BARRIER FOR CIRCULAR ECONOMY IN YOUR COUNTRY OF RESIDENCE? - LOW AWARENESS OF THE CONCEPT AND PRACTICE OF THE CIRCULAR ECONOMY IN THE COUNTRY. (%)
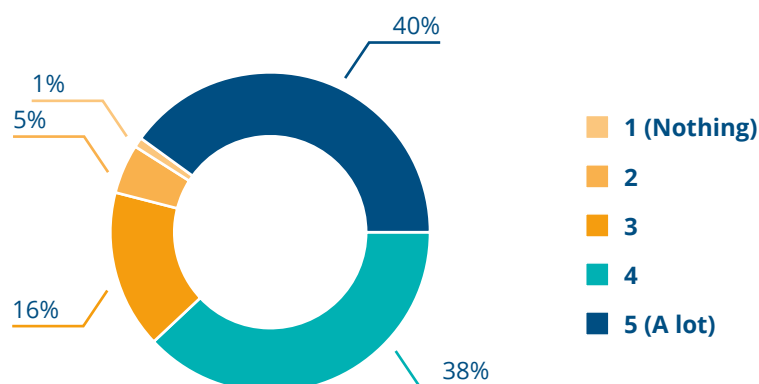
SOURCE: Own elaboration

Regarding the existence of regulations and laws, and the capacity to implement them, similar results are observed for each of the scores, but emphasising they are mostly considered as a significant barrier to move forward in the transition towards Circular Economy.

FIGURE 30: IN YOUR OPINION, TO WHAT DEGREE ARE THE FOLLOWING ISSUES A BARRIER FOR CIRCULAR ECONOMY IN YOUR COUNTRY OF RESIDENCE? – WEAK CAPACITY TO IMPLEMENT THE RULES AND LAWS THAT HAVE BEEN CREATED – LACK OF RULES (LAWS) TO BOOST CIRCULAR ECONOMY. (%)
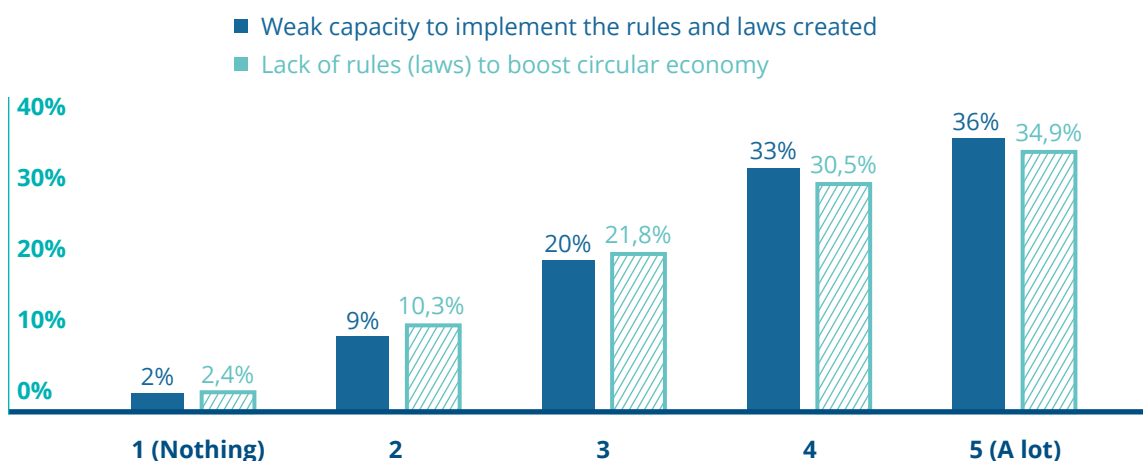
SOURCE: Own elaboration

Public and private financing has been considered another significant barrier to progress towards circularity in Latin America. As it can be seen in table 15, respondents establish equivalent percentages on the scale for both questions, with 34% rating it "Very" important. This is consistent with results obtained in the section *progress in the region*, where more than 90% had set that Latin America presented low access to finance from private banking and public sector sources.

TABLE 15: IN YOUR OPINION, TO WHAT DEGREE ARE THE FOLLOWING ISSUES A BARRIER TO CIRCULAR ECONOMY IN YOUR COUNTRY OF RESIDENCE? (%)

Scale	Lack of access to public financing for circular economy projects	Low access to private financing for circular economy projects (banks and financial institutions
1 (Nothing)	1,3%	1,1%
2	8,0%	6,6%
3	19,0%	21,0%
4	37,6%	36,8%
5 (A lot)	34,1%	34,5%
Total	100,0%	100,0%

SOURCE: Own elaboration

Along the same lines of access to financing, results related to a lack of tax incentives for companies to transition to Circular Economy in the region proved to be relevant for respondents, 42% rated it as 5, followed by 36% with a rating of 4 (see figure 31)

FIGURE 31: LACK OF TAX INCENTIVES FOR COMPANIES
TO TRANSITION TOWARDS CIRCULAR ECONOMY

Legend:
- 1 (Nothing)
- 2
- 3
- 4
- 5 (A lot)

42%
2%
4%
16%
36%
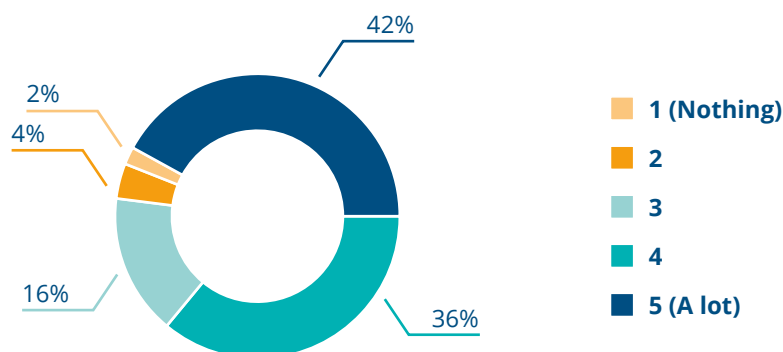
SOURCE: Own elaboration

In an overview of the barriers assessed, the low knowledge on the concept and practice, the lack of tax incentives and the financing access are four of the barriers with the highest percentage of responses, if we consider ratings 4 and 5 added together. Even when the psychological distance in a Likert scale is not equivalent among levels, observing the response pattern throughout the survey is an interesting exercise to observe. Table 16 shows the results in detail.

TABLE 16: AGGREGATION OF SCORE RESULTS
4 - 5 FOR ALL BARRIER QUESTIONS (%)

Questions	Rating 4	Rating 5	Total
Low awareness of the concept and practice of circular economy in the country.	37,9	40,2	78,2
Lack of tax incentives for companies to transition towards circular economy.	35,8	42,1	77,9
Lack of access to public financing for circular economy projects.	37,6	34,1	71,7
Low access to private financing for circular economy projects (banks and financial institutions)	36,8	34,5	71,3
High-risk aversion of the national business community	32,9	37,5	70,4
Weak capacity to implement rules and laws created	32,8	36,5	69,3
Lack of rules (laws) to boost circular economy	30,5	34,9	65,4
Low public information availability enabling access to new circular business opportunities	33,9	31,2	65,1
Scarce business cooperation networks supporting transition to circular economy	36,1	27,3	63,4
Little access to knowledgeable professionals to implement transition processes towards circularity	36,1	26,4	62,5

SOURCE: Own elaboration

9
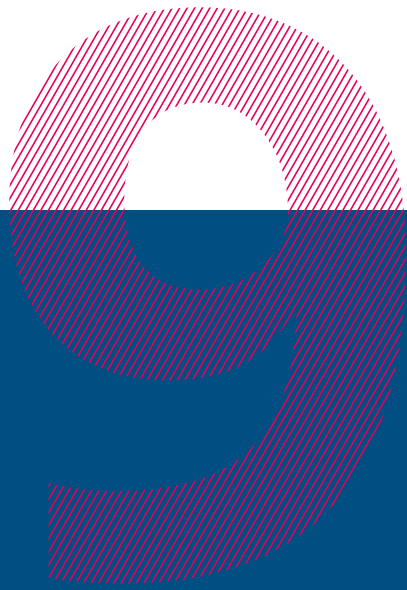
THREATS TO PROGRESS TOWARDS CIRCULAR ECONOMY IN LATIN AMERICA

THREATS TO PROGRESS IN CIRCULAR ECONOMY

A total of 7 questions were submitted to find out the degree of perception regarding a group of issues that may become threats to Circular Economy progress in Latin America and the Caribbean. One of the initial concerns was the bias that the global pandemic situation could produce on the results, which in the end did not happen. When asking to what degree Covid-19 pandemic is a threat to progress towards Circular Economy in their country of residence, results showed a distribution that does not place it as a clear threat to the transition process.

If percentages equal to or less than 3 are taken, it concentrates 67% of the answers, as it can be seen in figure 32. This dismissed fears of a negative bias because of the pandemic, or the general conditions Latin American countries were undergoing at the moment the survey was applied.

FIGURE 32: TO WHAT EXTENT IS THE COVID-19 PANDEMIC A THREAT TO PROGRESS IN CIRCULAR ECONOMY IN YOUR COUNTRY OF RESIDENCE. (%)

Legend:
- 1 (Nothing)
- 2
- 3
- 4
- 5 (A lot)
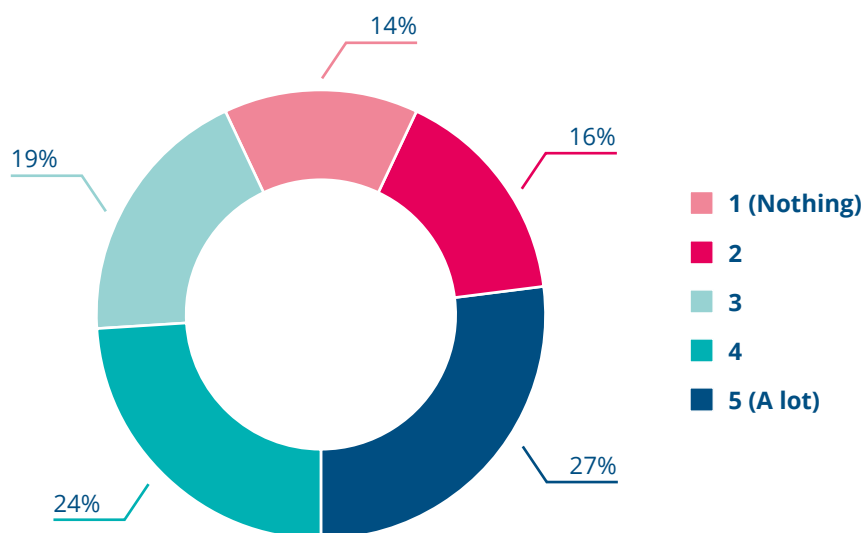
SOURCE: Own elaboration

If these results are crossed with the respondents' activity sectors, it can be observed that the Academy, with 17%, considers COVID-19 as a major threat to the advancement of Circular Economy (rating 5), followed by the Government with 15.7% and Business with 14.6%. At the same time, it is worth noting that the Business sector gets the highest percentage in rating 1, considering COVID-19 "No" important (20.4%) as a threat to the transition process.

TABLE 17: CROSS TABLE, COULD YOU TELL US IN WHICH OF THE FOLLOWING SECTORS YOU PERFORM ALL OR MOST OF YOUR ACTIVITY? * IN YOUR OPINION, TO WHAT EXTENSION ARE THE FOLLOWING ISSUES THREATS TO PROGRESS IN THE CIRCULAR ECONOMY IN YOUR COUNTRY OF RESIDENCE? - COVID-19 PANDEMIC (%)

		COVID-19 Pandemic					
		1 (Nothing)	2	3	4	5 (A lot)	Total
Could you tell us in which of the following sectors you perform all or most of your activity?	Government	13,0%	25,0%	19,4%	26,9%	15,7%	100,0%
	Business	20,4%	26,7%	25,4%	12,9%	14,6%	100,0%
	NGOs/Foundations	10,7%	30,4%	21,4%	28,6%	8,9%	100,0%
	Academy	14,2%	20,8%	20,8%	27,4%	17,0%	100,0%
	International Cooperation	15,4%	15,4%	30,8%	30,8%	7,7%	100,0%
	Consultancy	16,5%	30,7%	28,3%	14,2%	10,2%	100,0%
	Other	15,2%	32,6%	21,7%	13,0%	17,4%	100,0%
	Total	16,4%	26,7%	23,9%	19,1%	13,9%	100,0%

SOURCE: Own elaboration

A second aspect consulted was the effect of the political and social instability in the region on this process. As in the case of the Pandemic, it is necessary to emphasise that especially the last 24 months have been marked by political instabilities of all sorts in the region. Results in figure 33 show this is a significant threat with 56% rating it as 4 or higher.

FIGURE 33: IN YOUR OPINION, TO WHAT EXTENT ARE THE FOLLOWING ISSUES THREATS TO PROGRESS IN CIRCULAR ECONOMY IN YOUR COUNTRY OF RESIDENCE? SOCIO-POLITICAL INSTABILITY
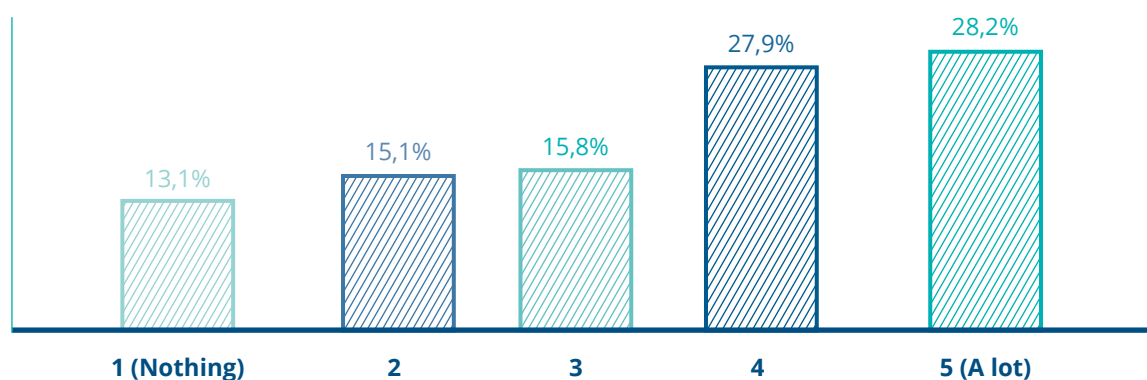
SOURCE: Own elaboration

The above shows a contextual dimension in the transition process, in a region where the degrees of political stability are still fragile compared to Europe, where Circular Economy is even addressed at a regional policy level.

Similarly, corruption has been another of the threats consulted. Figure 34 shows that 43% of respondents consider it a significant threat to transition, followed by 25% rating it as 4. This is consistent with the "poor" performance on corruption issues assigned by Transparency International to the region in its 2020 report (https://www.transparency.org/en/news/cpi-2020-americas)

FIGURE 34: IN YOUR OPINION, TO WHAT EXTENT ARE THE FOLLOWING ISSUES THREATS TO PROGRESS IN CIRCULAR ECONOMY IN YOUR COUNTRY OF RESIDENCE? - CORRUPTION (%)

- 1 (Nothing)
- 2
- 3
- 4
- 5 (A lot)

SOURCE: Own elaboration

Regarding Business performance, respondents were consulted on how *greenwashing* could be a threat to the Circular Economy in the region (see figure 35). Faced with this, data show it is considered a significant threat with 27.4% rating it as 5 and 27.6% in valuation=4. This reveals the critical importance business behaviour has, probably, to give legitimacy to the transition process.

FIGURE 35: IN YOUR OPINION, TO WHAT EXTENT ARE THE FOLLOWING ISSUES THREATS TO PROGRESS IN CIRCULAR ECONOMY IN YOUR COUNTRY OF RESIDENCE? GREENWHASING (%)

SOURCE: Own elaboration

Cross-analysis between the former results and the economic sector shows that Academy is the sector that considers this element as a threat in the highest percentage (37.7), followed by Business (27.9), and Consultancies (27.6%). It should be noted that 30.8% of International Cooperation respondents consider this issue as not relevant enough when rating it as 2 (see table 18).

TABLE 18: CROSS TABLE, COULD YOU TELL US IN WHICH OF THE FOLLOWING SECTORS YOU PERFORM ALL OR MOST OF YOUR ACTIVITY? * IN YOUR OPINION, TO WHAT EXTENSION ARE THE FOLLOWING ISSUES THREATS TO PROGRESS IN THE CIRCULAR ECONOMY IN YOUR COUNTRY OF RESIDENCE. - GREENWASHING (%)

		Greenwashing					
		1 (Nothing)	2	3	4	5 (A lot)	Total
Could you tell us in which of the following sectors you perform all or most of your activity?	Government	7,4%	16,7%	29,6%	29,6%	16,7%	100,0%
	Business	5,0%	13,3%	28,8%	25,0%	27,9%	100,0%
	NGOs/Foundations	3,6%	10,7%	28,6%	30,4%	26,8%	100,0%
	Academy	1,9%	12,3%	19,8%	28,3%	37,7%	100,0%
	International Cooperation	7,7%	30,8%	30,8%	15,4%	15,4%	100,0%
	Consultancy	6,3%	9,4%	27,6%	29,1%	27,6%	100,0%
	Other	4,3%	19,6%	15,2%	30,4%	30,4%	100,0%
	Total	5,0%	13,5%	26,4%	27,6%	27,4%	100,0%

SOURCE: Own elaboration

Potential drop in International Cooperation for the region was consulted due to the significance it has had in the implementation of projects, at different national and sub-national levels to boost Circular Economy. Figure 36 confirms this is an important threat to the transition process for 16% of respondents, followed by 31%.

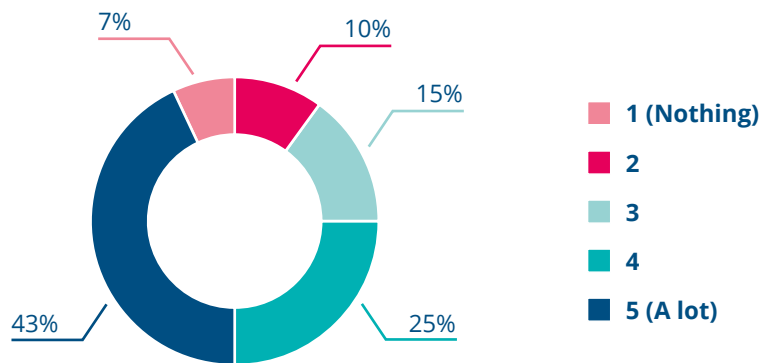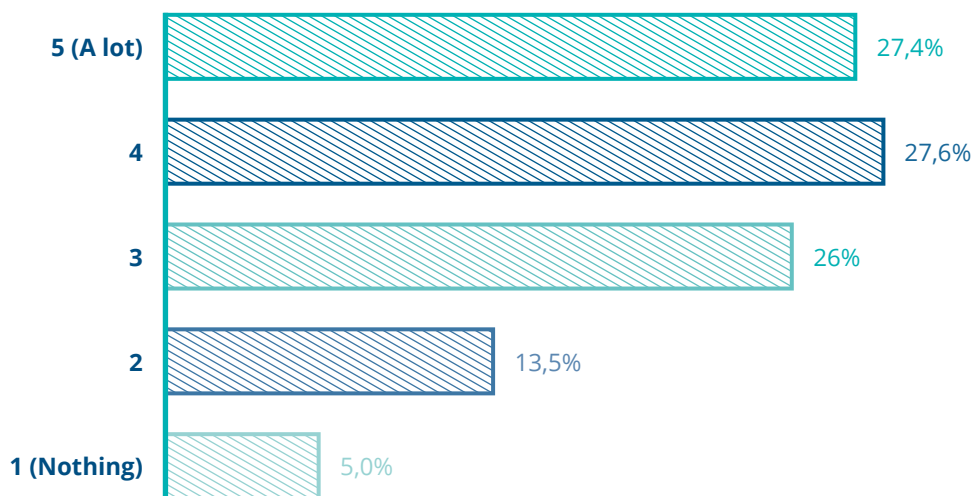**FIGURE 36:** IN YOUR OPINION, TO WHAT EXTENT ARE THE FOLLOWING ISSUES THREATS TO PROGRESS IN CIRCULAR ECONOMY IN YOUR COUNTRY OF RESIDENCE? POTENTIAL DROP IN INTERNATIONAL COOPERATION. (%)

Legend:
- 1 (Nothing)
- 2
- 3
- 4
- 5 (A lot)

Values: 15%, 6%, 16%, 31%, 32%

SOURCE: Own elaboration

It is interesting to note that the sectors most likely to see the potential decline in international cooperation as a threat are NGOs/Foundations (23.2%) and Consultancies (21.3%), which probably reflects the level of dependence on cooperation resources for its own development. Details of the results can be seen in table 19.
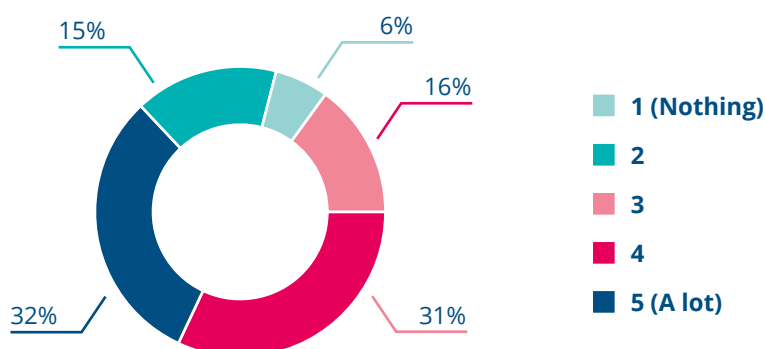
TABLE 19: CROSS TABLE, COULD YOU TELL US IN WHICH OF THE FOLLOWING SECTORS YOU PERFORM ALL OR MOST OF YOUR ACTIVITY? * IN YOUR OPINION, TO WHAT EXTENT ARE THE FOLLOWING ISSUES THREATS TO PROGRESS IN THE CIRCULAR ECONOMY IN YOUR COUNTRY OF RESIDENCE- POTENTIAL DROP IN INTERNATIONAL COOPERATION (%)

		Potential drop in international cooperation					
		1 (Nothing)	2	3	4	5 (A lot)	Total
Could you tell us in which of the following sectors you perform all or most of your activity?	Government	0,9%	12,0%	33,3%	37,0%	16,7%	100,0%
	Business	6,7%	19,6%	29,2%	30,4%	14,2%	100,0%
	NGOs/Foundations	12,5%	7,1%	28,6%	28,6%	23,2%	100,0%
	Academy	2,8%	15,1%	35,8%	31,1%	15,1%	100,0%
	International Cooperation	7,7%	15,4%	38,5%	23,1%	15,4%	100,0%
	Consultancy	11,0%	11,8%	29,9%	26,0%	21,3%	100,0%
	Other	4,3%	17,4%	41,3%	30,4%	6,5%	100,0%
	Total	6,3%	15,1%	31,9%	30,5%	16,2%	100,0%

SOURCE: Own elaboration

From the consumers' perspective, it was asked to what degree *unconscious consumption* is a threat to progress to Circular Economy. Figure 37 shows 53.3% considers this is a significant threat, being the question, among all others, getting the highest percentage in the rating=5.

FIGURE 37: IN YOUR OPINION, TO WHAT EXTENT ARE THE FOLLOWING ISSUES THREATS TO PROGRESS IN CIRCULAR ECONOMY IN YOUR COUNTRY OF RESIDENCE? – UNCONSCIOUS CONSUMPTION (%)
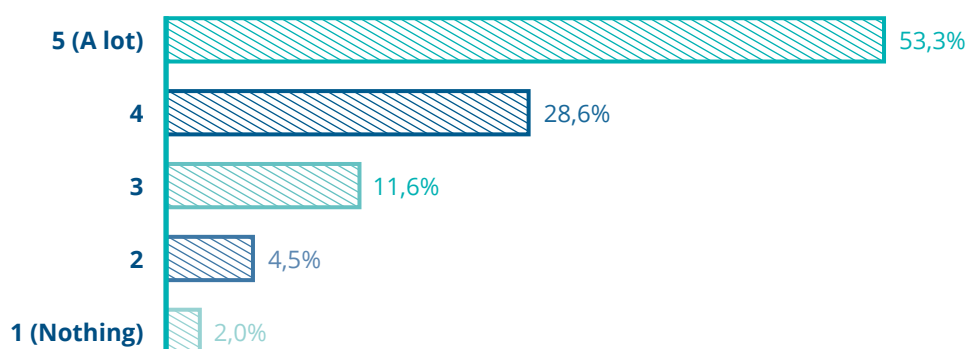
SOURCE: Own elaboration

Finally, the lack of metrics to measure Circular Economy as a threat to its progress, was addressed. As figure 38 shows, 61% rated this issue with rating 4 or higher.

FIGURE 38: IN YOUR OPINION, TO WHAT EXTENT ARE THE FOLLOWING ISSUES THREATS TO PROGRESS IN CIRCULAR ECONOMY IN YOUR COUNTRY OF RESIDENCE? – LACK OF INTERNATIONAL METRICS TO MEASURE CIRCULAR ECONOMY. (%)
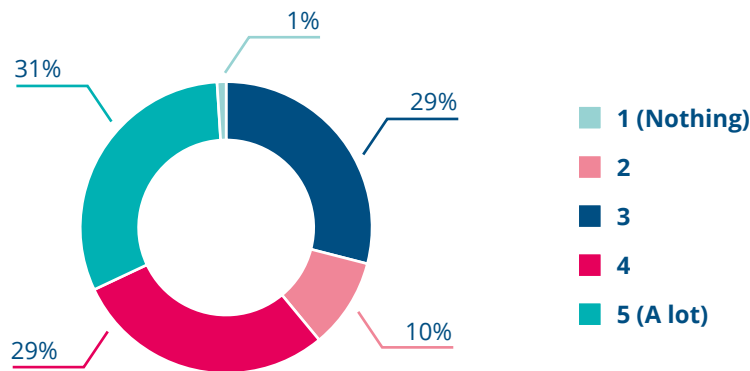
SOURCE: Own elaboration

A summary table (see table 20) with the results in descending order is presented below, whereby adding alternatives 4 and 5 used for each question, Unconscious Consumption is considered the main threat to progress towards Circular Economy. Nonetheless, it must be remembered that the psychological distance within a Likert scale is not necessarily equivalent, so caution should be exercised in its interpretation.

TABLE 20: SUMMARY TABLE RATING 4 - 5 FOR EACH QUESTION ABOUT THREATS TO PROGRESS IN CIRCULAR ECONOMY IN LATIN AMERICA (%)

Question	4	5	Total
Unconscious consumption	29%	53%	82%
Corruption	25%	43%	68%
Lack of international metrics to measure Circular Economy	29%	31%	60%
Political and Social Instability	28%	28%	56%
Greenwashing	28%	27%	55%
Potential drop in International cooperation	31%	16%	47%
COVID-19 Pandemic	19%	14%	33%

SOURCE: Own elaboration

10

OPPORTUNITIES FOR LATIN AMERICA FROM CIRCULAR ECONOMY

OPPORTUNITIES FOR LATIN AMERICA

A total of 8 questions were presented to find out the perception concerning the opportunities Circular Economy provides Latin America, keeping the same 5-point Likert scale used in the previous chapters of this report.

First question asked referred to the opportunities generated by Circular Economy to make progress in poverty reduction. Results in figure 39 establish that 37.1% (rating= 5) perceive Circular Economy as a great opportunity in this issue, followed by 33.6% with rating=4.

FIGURE 39: IN YOUR OPINION, TO WHAT EXTENT IS CIRCULAR ECONOMY AN OPPORTUNITY FOR THE FOLLOWING ISSUES IN YOUR COUNTRY OF RESIDENCE? – POVERTY REDUCTION. (%)

5 (A lot)	37,1%
4	33,6%
3	20,8%
2	6,6%
1 (Nothing)	1,9%
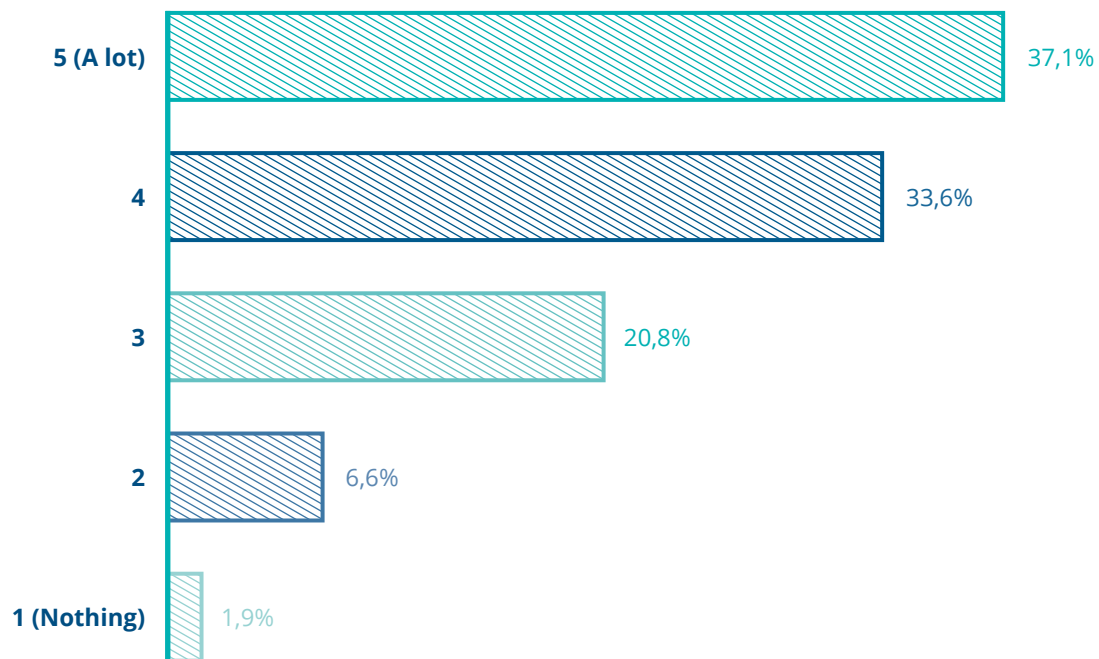
SOURCE: Own elaboration

A second aspect examined was the contribution Circular Economy can make to increase entrepreneurship. Results in figure 40 show 54% consider this model can be a significant opportunity in this matter, followed by 33.3%. A point to be highlighted through the cross-analysis in table 21 is that International Cooperation is the one that mostly claims that opportunities in entrepreneurship are relevant, since it concentrates 100% of the answers rated 4 and 5.

FIGURE 40: IN YOUR OPINION, TO WHAT EXTENT IS CIRCULAR ECONOMY AN OPPORTUNITY FOR THE FOLLOWING ISSUES IN YOUR COUNTRY OF RESIDENCE? – INCREASING ENTREPRENEURSHIP. (%)

SOURCE: Own elaboration

TABLE 21: CROSS TABLE, COULD YOU TELL US IN WHICH OF THE FOLLOWING SECTORS YOU PERFORM ALL OR MOST OF YOUR ACTIVITIES? * IN YOUR OPINION, TO WHAT EXTENT IS CIRCULAR ECONOMY AN OPPORTUNITY FOR THE FOLLOWING ISSUES IN YOUR COUNTRY OF RESIDENCE? – INCREASING ENTREPRENEURSHIP (%)

		Increasing Entrepreneurship					
		1 (Nothing)	2	3	4	5 (A lot)	Total
Could you tell us in which of the following sectors you perform all or most or your activities	Government	0,9%	1,9%	7,4%	36,1%	53,7%	100,0%
	Business	0,4%	2,1%	10,4%	34,2%	52,9%	100,0%
	NGOs/Foundations			7,1%	44,6%	48,2%	100,0%
	Academy		0,9%	12,3%	29,2%	57,5%	100,0%
	International Cooperation				53,8%	46,2%	100,0%
	Consultancy	0,8%	1,6%	7,9%	30,7%	59,1%	100,0%
	Other		2,2%	10,9%	19,6%	67,4%	100,0%
	Total	0,4%	1,6%	9,3%	33,3%	55,3%	100,0%

SOURCE: Own elaboration

Additionally, Opportunities for technological innovation from the Circular Economy model are thought to be high by respondents. 56.5% of the responses concentrated in rating=5, followed by 34.5% in rating=4. Details of these results can be seen in figure 41.

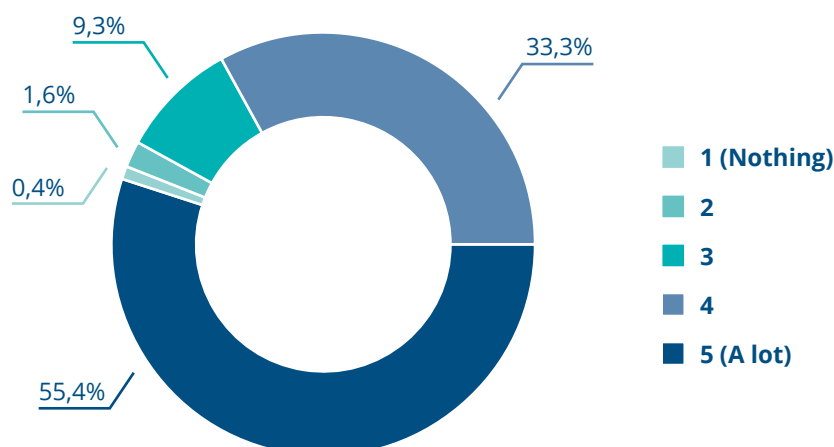**FIGURE 41:** IN YOUR OPINION, TO WHAT EXTENT IS CIRCULAR ECONOMY AN OPPORTUNITY FOR THE FOLLOWING ISSUES IN YOUR COUNTRY OF RESIDENCE? – INCREASING TECHNOLOGICAL INNOVATION. (%)
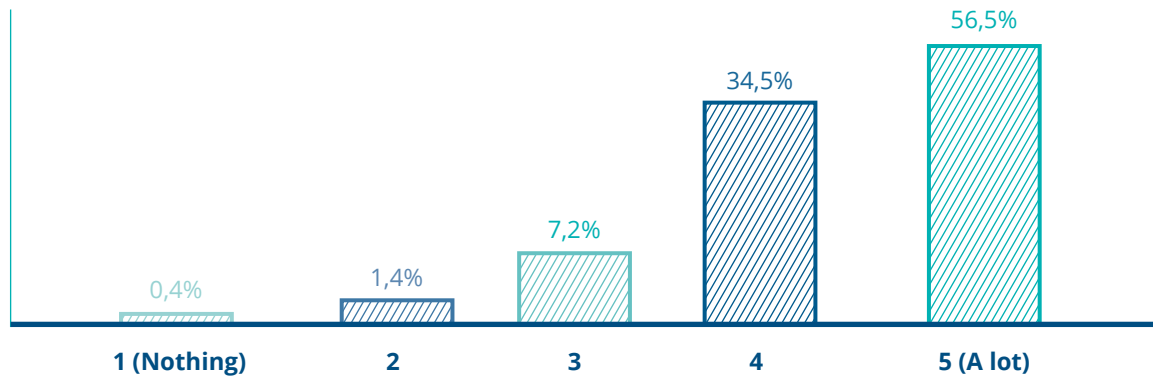
SOURCE: Own elaboration

In addition, respondents were consulted whether Circular Economy represented an opportunity for the industrialisation of Latin American countries. The results obtained confirm the importance on this point, though a bit more moderate than previous ones. 32.8% claimed this is a significant opportunity, followed by 37.1% who chose rating=4. Figure 42 shows the results in detail.

FIGURE 42: IN YOUR OPINION, TO WHAT EXTENT IS CIRCULAR ECONOMY AN OPPORTUNITY FOR THE FOLLOWING ISSUES IN YOUR COUNTRY OF RESIDENCE? – FURTHER INDUSTRIALISATION (%)

SOURCE: Own elaboration

A cross-analysis between the former result and the sectors show that NGOs/Foundations (41.1%) and Consultancies (34.6%) are the ones which mostly selected ratings round 5, while the Government and the Business sectors were the lowest within the same level. Besides, there are significant percentages in each sector that evaluated this opportunity with a medium rating (3). This can be observed in table 22.

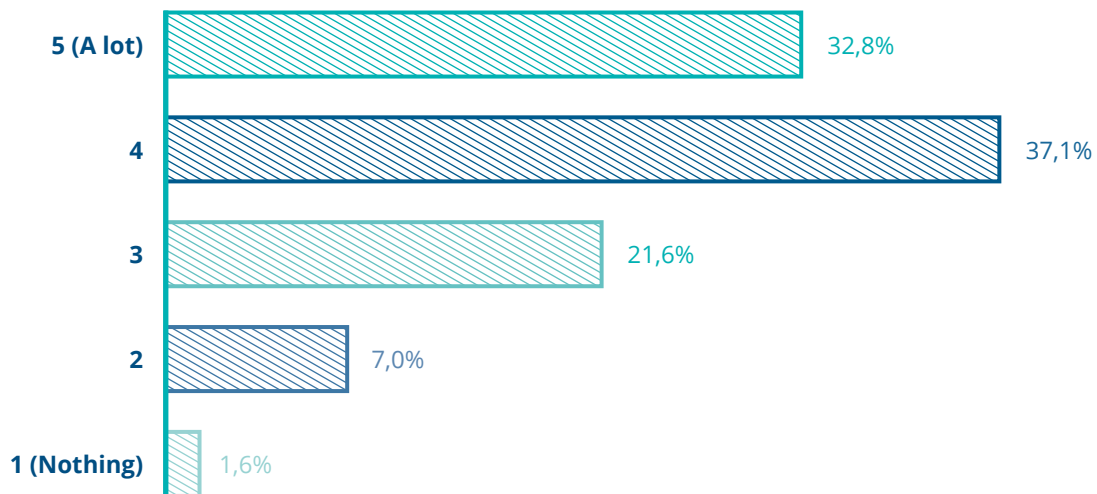**TABLE 22:** CROSS TABLE, COULD YOU TELL US IN WHICH OF THE FOLLOWING SECTORS YOU PERFORM ALL OR MOST OF YOUR ACTIVITIES? * IN YOUR OPINION, TO WHAT EXTENT IS CIRCULAR ECONOMY AN OPPORTUNITY FOR THE FOLLOWING ISSUES IN YOUR COUNTRY OF RESIDENCE? – FURTHER INDUSTRIALISATION (%)

		Further Industrialisation					
		1 (Nothing)	2	3	4	5 (A lot)	Total
Could you tell us in which of the following sectors you perform all or most of your activities?	Government	0,9%	4,6%	22,2%	42,6%	29,6%	100,0%
	Business	2,9%	7,1%	20,8%	37,5%	31,7%	100,0%
	NGOs/Foundations		7,1%	14,3%	37,5%	41,1%	100,0%
	Academy	0,9%	7,5%	30,2%	32,1%	29,2%	100,0%
	International Cooperation			23,1%	53,8%	23,1%	100,0%
	Consultancy	0,8%	11,0%	19,7%	33,9%	34,6%	100,0%
	Other	2,2%	2,2%	17,4%	37,0%	41,3%	100,0%
Total		1,6%	7,0%	21,6%	37,1%	32,8%	100,0%

SOURCE: Own elaboration

An aspect to be noted due to its concentration of the highest scores, was the opportunity Circular Economy presents for the conservation of natural resources, perhaps one of the most outstanding of the conceptual model. As it can be seen in figure 43, 73% of respondents consider this as a significant possibility for the region. If the percentage of valuation=4 is added to the above, we find that 93.7% of the total number of responses are concentrated in the two highest points of the scale.

FIGURE 43: IN YOUR OPINION, TO WHAT EXTENT IS CIRCULAR ECONOMY AN OPPORTUNITY FOR THE FOLLOWING ISSUES IN YOUR COUNTRY OF RESIDENCE? – CONSERVATION OF NATURAL RESOURCES. (%)

0,3%   1,1%   4,9%   21,4%   72,3%

- 1 (Nothing)
- 2
- 3
- 4
- 5 (A lot)
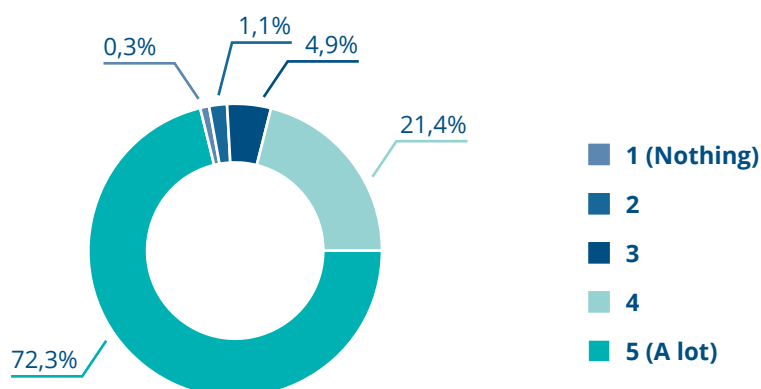
SOURCE: Own elaboration

As for employment generation, Circular Economy is considered an opportunity for the region. As shown in figure 44, ratings 4 and 5 on the scale account for 85.6% of preferences.

FIGURE 44: IN YOUR OPINION, TO WHAT EXTENT IS CIRCULAR ECONOMY AN OPPORTUNITY FOR THE FOLLOWING ISSUES IN YOUR COUNTRY OF RESIDENCE? – EMPLOYMENT GENERATION (%)

SOURCE: Own elaboration

Lastly, two of the final aspects addressed by the survey, presented comparatively lower values than the rest of the questions in opportunities. Both, the reduction in community-business conflict and the increase in exports scored up to 30% lower in the highest levels (valuation=5)

As observed in figure 45, 33.8% of respondents consider Circular Economy as an opportunity to reduce community-business conflicts. It is worth noting that 22.1% gave an intermediate score of 3 for this item.
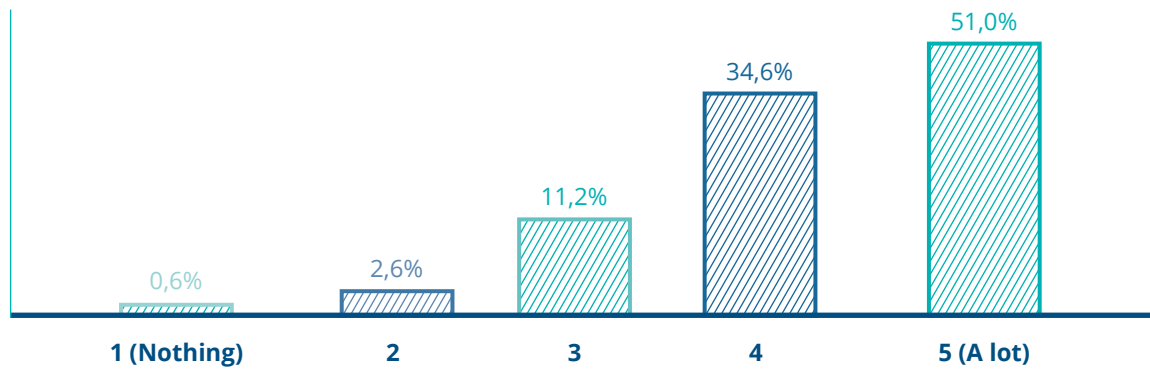
FIGURE 45: IN YOUR OPINION, TO WHAT EXTENT IS CIRCULAR ECONOMY AN OPPORTUNITY FOR THE FOLLOWING ISSUES IN YOUR COUNTRY OF RESIDENCE? - REDUCTION OF COMMUNITY-COMPANY CONFLICTS. (%)

SOURCE: Own elaboration

On the other hand, figure 46 shows that 34.5% consider there is an opportunity to increase exports in the region. Probably in line with the idea that, more than increasing, the model will allow to maintain entry to increasingly more demanding markets in terms of sustainability.

FIGURE 46: IN YOUR OPINION, TO WHAT EXTENT IS CIRCULAR ECONOMY AN OPPORTUNITY FOR THE FOLLOWING ISSUES IN YOUR COUNTRY OF RESIDENCE? - INCREASE IN EXPORTS. (%)

SOURCE: Own elaboration

Table 23 shows that Consultancies have a slightly more optimistic view than the rest of the sectors (29.1% rating 5), being International Cooperation the most conservative with 15.4%. It is worth noting that no preferences for the highest score of the table were found in the Government sector.

TABLE 23: CROSS TABLE, COULD YOU TELL US IN WHICH OF THE FOLLOWING SECTORS YOU PERFORM ALL OR MOST OF YOUR ACTIVITIES? * IN YOUR OPINION, TO WHAT EXTENT IS CIRCULAR ECONOMY AN OPPORTUNITY FOR THE FOLLOWING ISSUES IN YOUR COUNTRY OF RESIDENCE? – INCREASE IN EXPORTS (%).
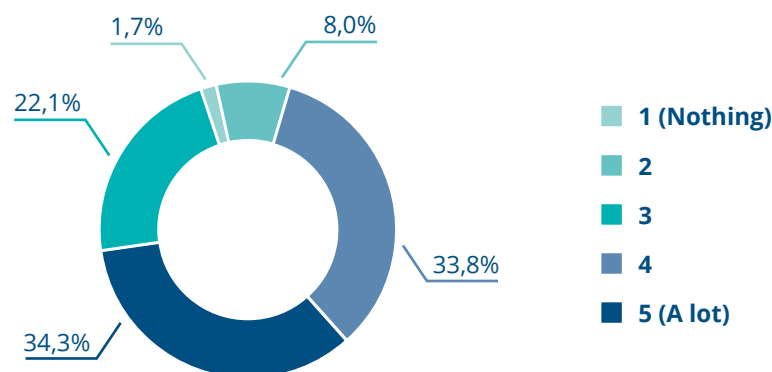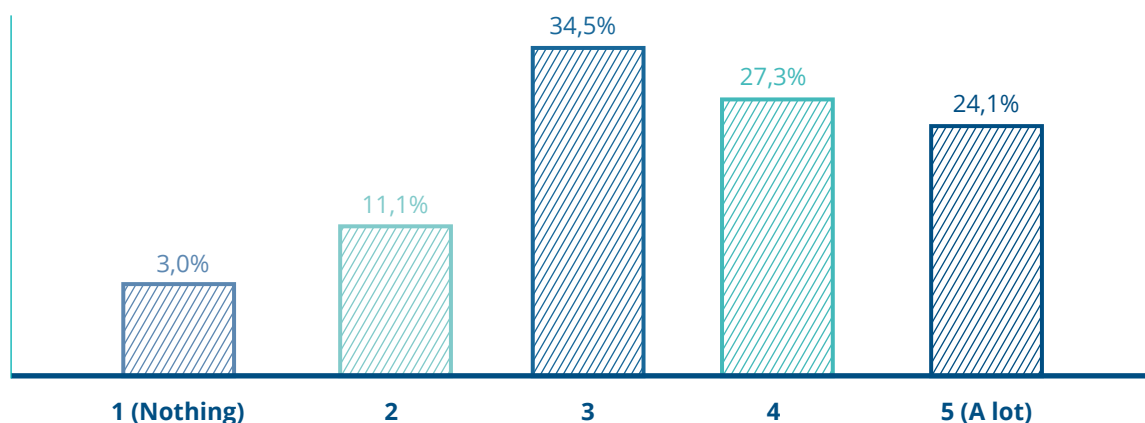
|		Increase in exports					
		1 (Nothing)	2	3	4	5 (A lot)	Total
Could you tell us in which of the following sectors you perform all or most of your activities?	Government	1,9%	11,1%	36,1%	32,4%		100,0%
	Business	3,3%	12,1%	32,5%	27,1%	25,0%	100,0%
	NGOs/Foundations	7,1%	10,7%	33,9%	19,6%	28,6%	100,0%
	Academy	0,9%	11,3%	32,1%	36,8%	18,9%	100,0%
	Cooperación Internacional	7,7%	7,7%	38,5%	30,8%	15,4%	100,0%
	Consultancy	2,4%	10,2%	37,8%	20,5%	29,1%	100,0%
	Other	4,3%	8,7%	37,0%	21,7%	28,3%	100,0%
	Total	3,0%	11,1%	34,5%	27,3%	24,1%	100,0%

SOURCE: Own elaboration

Finally, a summary table with results in descending order is presented, whereby adding alternatives 4 and 5 used for each question (see table 24), *Conservation of natural resources and increasing technological innovation* stand out with the highest percentages, while reduction of conflicts and increase in exports show significantly lower percentages. Nonetheless, it must be remembered that the psychological distance within a Likert scale is not necessarily equivalent, so caution should be exercised in its interpretation.

TABLE 24: SUMMARY TABLE RATING 4 - 5 FOR EACH QUESTION ABOUT CIRCULAR ECONOMY OPPORTUNITIES FOR LATIN AMERICA (%)

Question	4	5 (A lot)	Total
Conservation of natural resources	21,4%	72,3%	93,7%
Increasing technological innovation	34,5%	56,5%	90,9%
Increasing entrepreneurship	33,3%	55,4%	88,7%
Employment generation	34,6%	51,0%	85,6%
Poverty reduction	33,6%	37,1%	70,7%
Further industrialisation	37,1%	32,8%	69,8%
Reduction of community-business conflicts	34,3%	33,8%	68,1%
Increase in exports	27,3%	24,1%	51,4%

SOURCE: Own elaboration

11
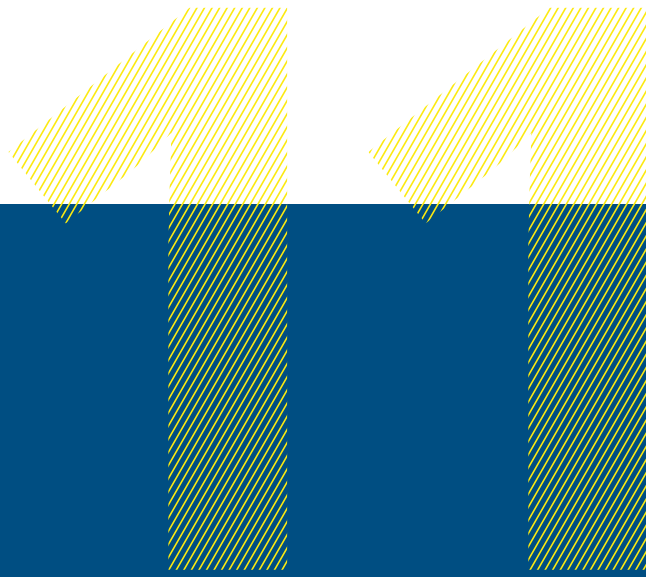
GENERAL
CONCLUSIONES

GENERAL CONCLUSIONS

The results obtained in this study provide a snapshot of the current state of progress, barriers, threats, and opportunities that Circular Economy brings to Latin America. Besides, they can become an important input for dialogue and decision-making based on evidence.

A first element to be concluded is that the region is giving its first steps in the transition from a lineal model to a circular one. Even though a high percentage of respondents consider progress is not yet significant, they do perceive some changes at the level of policies, awareness, financing instruments, among others. Although emergent, they have formerly been mentioned by institutions like CEPAL, ONUDI and EKLA-KAS, during 2020 in various publications, what should encourage us to maintain an active position to continue deepening and expanding the scope for the Circular Economy implementation.

Throughout this process, international organisations, the academy, and the NGOs have been essential, perceived as the main drivers of the process in the region. However, respondents expect business and the government to reach a higher level of commitment towards transition in the future. This is totally coherent with what Circular Economy seeks, which is to overcome the linearity of take-make-dispose, rethinking from the business model to innovations, the decoupling between economic growth and resource use.

However, these advancements cannot even be considered sufficient for the challenge being faced. The significance of the appropriate understanding of what Circular Economy means, is an unavoidable starting point. The data provided are eloquent and call for an active agenda in the region to educate, in different levels, about this model and its potential. Similarly, practical experience will be a determining factor for human capital who can be able to think, act and assess circularity; all of this from a gender approach addressing the inequalities expressed in this research.

On the other hand, dealing with structural barriers as the existence of regulations, financing, and tax incentives to implement circular projects is an essential factor in Latin America. This was shown by the response percentages of each of these issues, which add up to a critical and concerning view of the capacity of countries which, despite having regulations, are not able to implement them, resulting in legal white elephants with no real enforcement.

Moving forward also requires recognising threats. Against the research team's expectations, referred to Covid-19 pandemic reaching a crucial importance in the results, they actually provided an interesting look on how the social-political processes in the region are more relevant for the transition. How not to appreciate that corruption has been identified as the second most risky factor, echoing a problem still present in each of the countries of the region and that looms as danger, not only for Circular Economy, but for all the fragile democracy of the continent.

Together with the above, unconscious consumption is identified as the first threat for the process. But, how to educate? how to raise awareness? How to do it from and for our region? These are questions that need to be responded to overcome the threats identified by every and each of the study participants.

But Circular Economy also provides opportunities to Latin America. Respondents have considered that this model means a significant contribution to the conservation of natural resources, what demonstrates its present and future importance, in a continent that has lived from their extraction since colonial times, but which urgently needs to think about their conservation and regeneration.

For this reason, the contribution Circular Economy can make to the increase in technological innovation is so relevant to the results. Transitioning from linearity to this new model requires searching for innovations to enhance dematerialisation, industrial development 4.0, looking for disruptive technological innovations, as well as the generation of new business models, but in order to achieve this, the continent needs to overcome the limited average investment of 0.75% in Research and Development[1], there are no secrets or shortcuts in this, science and technology require time, commitment, and risk-taking.

Lastly, Circular Economy is identified as an important opportunity for employment generation and poverty reduction. Both have always been central issues in Latin America for decades but have taken on greater importance because of the pandemic and the 209 million poor people who, according to CEPAl[2] data, have been reached in the continent. Why not transition towards Circular Economy, if all the evidence shows our development model is exhausted? This is the question that needs to find a quick and joint answer for the welfare of the present and future generations of the region.

[1]   (https://datos.bancomundial.org/indicator/GB.XPD.RSDV.GD.ZS)
[2]   https://www.cepal.org/es/comunicados/pandemia-provoca-aumento-niveles-pobreza-sin-precedentes-ultimas-decadas-impacta

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