

The Impact of Environmental Training on Employee Motivation and Corporate Sustainability in Spanish Companies

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Abstract. *This study examines how green training, employee motivation, and sustainability integration influence corporate environmental behavior. Specifically, it aims to understand how green training impacts employee engagement in eco-friendly actions and how this affects the overall sustainability efforts within the organization. Using qualitative insights from five focus groups, the findings reveal that green training significantly boosts employee participation in sustainable practices, with green motivation playing a critical mediating role. Most participants reported a stronger commitment to environmentally responsible behavior following the training, although individual efforts alone are insufficient. This research contributes to the understanding of green training's role in fostering sustainable organizational practices and emphasizes the need to integrate it into corporate sustainability strategies while aligning employee motivation with environmental goals.*

Keywords: Green training, green motivation, sustainable performance, company green behaviour, business behaviour, green education.

1 Introduction

Sustainability has become a priority for companies as they face increasing pressure to address environmental challenges and adopt more responsible practices (Garcia-Cruz et al., 2024). Companies are integrating sustainability into their strategies to comply with regulations, enhance their competitive edge, and improve their long-term viability.

Green Human Resource Management (GHRM) has emerged as a key strategy to incorporate sustainable practices into workforce management (De Stefano et al., 2018). Among GHRM practices, green training stands out as an effective and cost-efficient method to foster environmental responsibility, aligning

employees' skills with environmental management goals (Teixeira et al., 2016). Green training helps overcome barriers to environmental protection, promotes acceptance of sustainable practices, and integrates environmental objectives into daily operations (Yusoff et al., 2020). This practice significantly enhances awareness, boosts engagement in sustainability efforts, and shifts companies toward greener behavior (Yafi et al., 2021). However, many organizations focus on employees' capabilities without addressing the need to motivate them to sustain a green work culture.

Research suggests that combining green training with motivation can strengthen an organization's commitment to sustainability, yet the role among these variables (green training, green motivation, integration to sustainability and Company green behaviour) needs further exploration. Existing studies have examined the link between green training and company behavior in various countries (Daily et al., 2007; Mishra & Rath, 2024), but these have overlooked the context of Spain. This gap in the literature has been covered in the present research, which aims to explore which green training practices influences company green behavior in Spanish SMEs, with a focus on role of green motivation (GM). Grounded in the resource-based view (RBV) and the ability-motivation-opportunity (AMO) framework, this research addresses this area that have raised many interests for academics and practitioners.

2 Theoretical foundations

This research examines the impact of green training on employee green motivation, organizational sustainability, and environmental behavior. Green training programs aim to integrate environmental values and develop competencies that align employees with the organization's sustainability objectives (Pham

et al., 2019). Companies with a strong environmental focus implement such programs to foster pro-environmental behaviors that contribute to organizational performance (Pham et al., 2020). Through green training, employees acquire the knowledge and skills necessary to address environmental challenges and make more sustainable decisions (Memon et al., 2022).

The integration of sustainability within organizations goes beyond the adoption of responsible practices; it also involves embedding these principles into organizational culture and strategic decision-making processes. This integration is crucial to ensure that environmental goals are aligned with the company's overall objectives, which, in turn, strengthens the organization's commitment to sustainability.

From the perspective of the Resource-Based View (RBV) theory, green training acts as a strategic resource that enhances human capital and improves environmental performance. According to this theory, an organization's ability to achieve a sustainable competitive advantage relies on managing valuable, inimitable, and non-substitutable resources, such as the competencies developed through green training (Barney, 2001; Arulrajah & Opatha, 2014). Various studies have shown that green training not only increases pro-environmental behaviors but also improves productivity in key areas such as waste reduction and energy conservation (Singh et al., 2020; Seman et al., 2020). However, it is important to note that training alone is insufficient to generate significant behavioral changes without solid organizational support and adequate motivation (Bissing-Olson et al., 2013).

One of the key aspects of green training is its ability to significantly enhance employee green motivation by instilling environmental responsibility and a clear sense of purpose (Yafi et al., 2021; Pinzone et al., 2019). However, the long-term impact of training on motivation is not fully understood, and further research is needed to explore the mechanisms through which green training influences employee motivation (Mohamad et al., 2023). In this regard, green behavior within organizations reflects how companies manage their natural resources and internal processes sustainably, which not only helps reduce costs but also improves environmental performance.

Green motivation, defined as the drive for employees to adopt environmentally responsible behaviors, is essential for the success of sustainability initiatives. According to the Ability-Motivation-Opportunity (AMO) theory, performance in green initiatives depends on three key factors: employees' ability, motivation, and the opportunities provided by the organization (Renwick et al., 2013). Effective green motivation systems, such as incentives, play a crucial role in improving participation in sustainability efforts and achieving positive organizational outcomes (Anwar et al., 2020). Thus, creating a motivating and

supportive environment is essential for ensuring that employees engage with the company's environmental goals, yielding both organizational and environmental benefits.

3 Method

This study consisted of five focus groups (3 participants in the all of them and 2 in the last one, as detailed in Table 1). Participants received the interview protocol with 11 questions and a detailed description of the aim of this current investigation. Participants were divided into five focus groups to ensure a rich, multi-sectoral perspective on sustainability. The first group included strategic leaders from regulated and infrastructure-intensive sectors, offering high-level insights into complex, large-scale sustainability challenges. The second brought together experts in environmental and social governance, focusing on stakeholder engagement and the integration of sustainability into corporate practices. The third group, composed of professionals in operational excellence and compliance, contributed practical knowledge from industrial environments, emphasizing quality, efficiency, and environmental standards. The fourth group consisted of specialists in data-driven sustainability, sharing experiences on embedding sustainability into business strategies and decision-making processes in large organizations. Finally, the fifth group included academic representatives, providing an educational perspective on preparing future professionals and promoting social responsibility. This composition enabled focused and diverse discussions aligned with the study's objectives.

The focus groups were recorded and a transcription software was used, and it produced a total of 41,866 words. The focus group were conducted online during June-July 2024. ATLASTI 14.0 was used to analyze the data.

The coding of empirical data refers to the process of symbolically grouping information to facilitate analysis, identify patterns, categorize, and construct theories, following the approach proposed by Saldaña (2021). In this study, most codes were generated through a deductive approach, derived from interview scripts and pre-existing categories, using the "IA Intentional Coding" tool in Atlas.ti. Although this function initially identified relevant segments, a

The analytical strategy and the coding strategy are considered two interrelated components of a unified process for identifying thematic patterns within qualitative data. This study adopts a thematic analysis approach, understood as the identification and analysis of thematic patterns in qualitative data (Braun & Clarke, 2006). The objective of this analysis is to uncover themes related to sustainability training within organizations. This approach is particularly suitable as it enables a comprehensive examination of how sustainability training is conceptualized and

implemented, as well as its broader implications, grouped under the umbrella of sustainable practices. Such an analytical framework provides a solid foundation for in-depth exploration of both sustainability training and its influence on organizational practices. In alignment with the research objectives, the use of multiple methods is warranted (Saldaña, 2021). Accordingly, thematic analysis is complemented by frequency analysis to enhance the depth and rigor of the findings.

4 Results

The results suggest that while sustainability training is a key driver in fostering individual motivation, its impact on structural changes within the organization depends on additional factors, such as internal policies, leadership, and corporate strategies that facilitate the large-scale implementation of sustainable practices.

First, during the coding process, a total of 9 inductive codes related to the category “Education” were identified. This category refers to aspects related to sustainability training programs and their implementation, including decision-making processes and the role of executive management in determining how the training is conducted and how it should be conducted. It also involves employees’ knowledge of these training programs. The absolute frequency along with the percentages is presented in Table 2.

Table 2. Green training categories

Code	#	%
Education	21	37.50
Executive Teams	9	16.07
Awareness	6	10.71
Orientation to action	6	10.71
Decision-making	5	8.93
New forms of educations	4	7.14
Good practices	2	3.57

Realism and objective data	2	3.57
Positive messages	1	1.79
TOTAL	56	100.00

Fig. 1 identifies three main areas related to green training: decision-making processes around sustainability training, the role of executive teams, and the content of the training programs. A recurring theme is the responsibility of management to implement training, with workers acknowledging their role in promoting it but recognizing that the final decision lies with the company’s leadership. As one participant stated, “The company’s leadership must take responsibility for integrating sustainability into the agenda” (2024, F2, 3:70). Additionally, there is a focus on the need for training content to evolve toward more modern, action-oriented approaches.

In the coding process, 11 inductive codes were found referring to the category “motivation strategies”. This category is based on the motivations that lead companies to conduct sustainability training, whether due to the influence of their environment, the company’s own beliefs, or economic benefits. Table 3 contains the absolute coding figures and their respective percentages.

Table 3. Green motivations categories

Code	#	%
Employee incentives	20	19.80
Employees’ motivations	12	11.88
Education	11	10.89
Interacting with the business environment	11	10.89
Legal and normative obligations	11	10.89
Sustainability practices	11	10.89
Economic benefits	10	9.90
Certifications & audits (C2)	8	7.92
Pride of belonging	3	2.97
Social responsibility	3	2.97
Public administration support	1	0.99
TOTAL	101	100.00

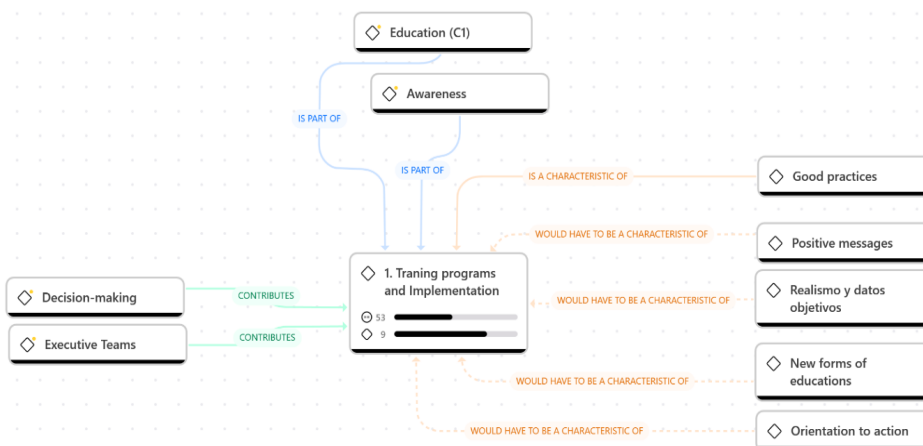


Figure 1. Green training relationships

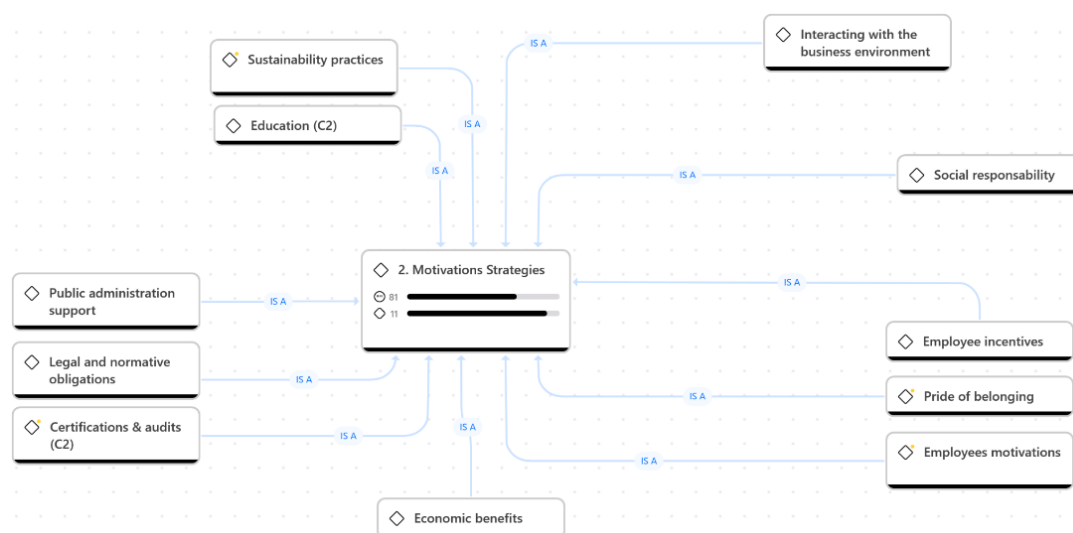


Figure 2. Company green behaviour relationships

This category (green motivation) identifies six main motivations areas related to motivation strategies (see Fig. 2): legal responsibilities, knowledge of sustainable practices, interaction with the business environment, social responsibility, employee sense of belonging, and economic benefits. Legal responsibilities are linked to public administration support, mandatory legal regulations, and certifications. As one participant stated, “Sustainability must be integrated into company objectives, whether motivated by regulations or market demands” (2024, F3, 4:16). Knowledge of sustainable practices enables companies to transform their operations, and interaction with the environment drives companies to differentiate from competitors. As noted, “Sustainability is collective; companies need to advance together” (2024, F3, 4:14). Additionally, sustainability is seen as a strategy for attracting talent, as young workers often align their values with sustainability (2024, F5, 7:28). Economic benefits are also a key motivator, as companies recognize that sustainability can lead to both environmental and financial gains, resulting in a “win-win” scenario (2024, F1, 2:89).

Finally, 7 codes were found inductively under the category “integration of sustainability” (Table 4). This category refers to how sustainability is materialized within the dynamics of the company. The most relevant topics include the business model, the alignment of sustainability within the company's dynamics, and the internal campaigns carried out as examples of the integration of sustainability in companies. The frequencies of occurrence in quotes and their percentages are shown below:

Table 4. Integration of sustainability categories

Code	#	%
Business model	31	22.63
Sustainability alignment	23	16.79
Internal campaigns	21	15.33
Integration of sustainability	17	12.41
Education	16	11.68
Strategy to integrate sustainability	16	11.68
Comprehension at all levels	13	9.49
TOTAL	137	100.00

This category highlights the strong connection between sustainable practices and sustainability training, which together represent the integration of sustainability into company operations (see Fig. 3). The business model is central to this integration, as sustainability adds both environmental value and business value: “Developing business through sustainability means not only respecting the environment, society, and workers, but also finding business value in it” (2024, F1, 2:76). Aligning company values with sustainability motivates employee retention, as one participant shared: “The company being aligned with your values and doing things for the environment is motivating for retention” (2024, F5, 7:30). Sustainability is also integrated into the company’s goals, as seen in Nestlé’s approach to embedding sustainability into its DNA (2024, F3, 4:31). Strategies for integrating sustainability, such as environmental practices and internal campaigns to promote sustainable values, are essential for creating a sustainable business culture (2024, F5, 7:23; 2024, F3, 4:17).

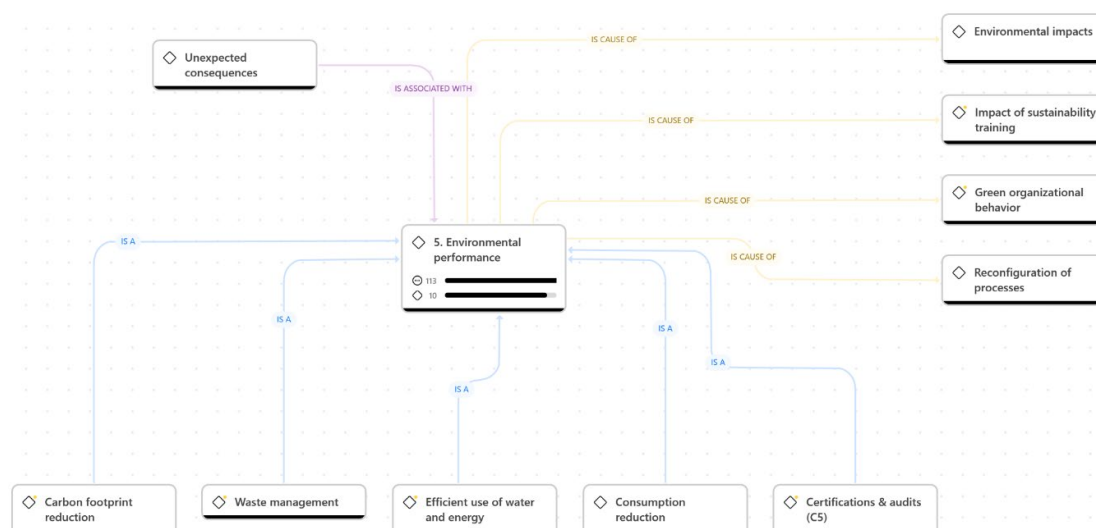


Figure 3. Integration to sustainability relationships

The last category refers to the sustainable practices carried out within the company, beyond training. As mentioned earlier, there is a very close link between sustainable practices and sustainability training. Therefore, this category reflects the practices implemented that allow for a sustainable transformation of companies, whether in their organizational structure or in their procedures. Table 5 contains the absolute frequency of the 10 codes found, along with their percentage representation within the category:

Table 5. Company green behaviour categories

Code	#	%
Efficient use of water and energy	33	20.50
Green organizational behaviour	29	18.01
Carbon footprint reduction	19	11.80
Reconfiguration of processes	19	11.80
Waste management	19	11.80
Consumption reduction	13	8.07

Impact of sustainability training	12	7.45
Certifications & audits	10	6.21
Environmental impacts	5	3.11
Unexpected consequences	2	1.24
TOTAL	161	100

A recurring theme has been the relationship between sustainable practices and sustainability training. In this regard as is shown in Fig. 4, the current category presents examples of sustainable practices implemented by companies. These include: reducing the carbon footprint, waste management, efficient use of water and energy, consumption reduction, and certifications and audits (understood as accreditations that differentiate companies). Sustainable practices, in turn, lead to favorable environmental impacts, influence sustainability training (creating a constant feedback loop), drive changes in organizational behaviour, and result in the reconfiguration of internal production processes.

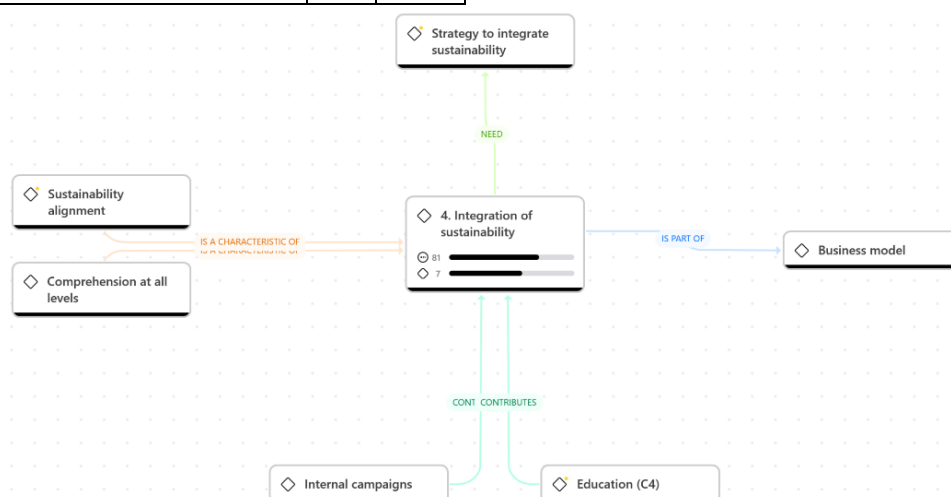


Figure 4. Integration to sustainability relationships

5 Discussion, contribution and limitations

The findings of this study underscore the critical role of sustainability training in driving sustainable practices within organizations. A strong relationship between training and sustainable practices emerges, with companies recognizing that integrating sustainability into both their operations and corporate culture is essential for long-term success. The integration of sustainability into the business model, as evidenced by the examples provided, reflects a growing commitment to sustainability that transcends environmental concerns and extends to economic and social dimensions.

One of the key insights is that sustainability training does not operate in isolation. Instead, it works as part of a broader system where sustainable practices, such as carbon footprint reduction, waste management, and resource efficiency, reinforce and drive the continuous improvement of training programs. The feedback loop between sustainable practices and training highlights the dynamic nature of sustainability efforts within organizations. As employees become more informed and motivated by sustainability training, they are more likely to implement environmentally responsible behaviors, which in turn, enhances the need for further training to keep up with evolving environmental standards.

Moreover, the study indicates that the alignment of sustainable values with organizational goals is a powerful motivator for employees. As organizations integrate sustainability into their strategic objectives, employees are more likely to see their own values reflected in the company's practices, leading to increased retention and job satisfaction. However, the integration of sustainability within organizational dynamics is not solely driven by internal factors; external pressures, such as legal regulations, market competition, and stakeholder expectations, also play a significant role in shaping the sustainability agenda.

The impact of sustainable practices on organizational behavior is noteworthy. Companies are not only making environmental strides but are also reconfiguring their internal processes, demonstrating that sustainability can lead to operational efficiencies. These changes are particularly evident in areas like waste management and energy use, where companies are implementing innovative solutions that align with broader sustainability goals.

Additionally, this study provides insights for managers to identify the most effective ways to promote sustainable environmental behavior: for example, effective training strategies for sustainability include a focus on green skills development, such as energy efficiency practices, waste reduction, and environmental regulations. Motivational strategies like recognizing employees' contributions to sustainability efforts, offering incentives, and aligning sustainability goals with organizational values are also key. For

SMEs with limited resources, implementing such programs can be achieved by utilizing cost-effective online training platforms, partnering with industry associations for shared resources, and encouraging employee-led initiatives that integrate sustainability into everyday practices without significant financial investment.

As shown in Fig. 5, the study suggests that the relationship between sustainability training and sustainable practices is integral to the success of corporate sustainability efforts. Companies that view sustainability as a strategic priority, align it with their core values, and continuously invest in training and internal processes are better positioned to achieve both environmental and business success.

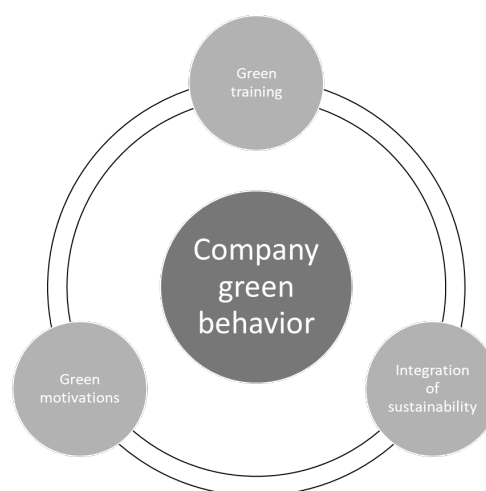


Figure 5. Relationships that emerge from the research

This study makes some theoretical contributions. First, it strengthens the RBV perspective by showing how green training, as a firm-specific, valuable, and strategically important resource, enhances organizational human capital and develops environmental capabilities, positioning sustainability-oriented HR practices as key drivers of competitive advantage. Second, the study extends the AMO framework by empirically validating the mediating role of green motivation, introducing it as a distinct mechanism that complements employee competencies and drives behavioral outcomes, thus addressing a gap in existing models that have predominantly focused on ability.

A limitation of the study is its relatively small sample size and geographic focus, which may not represent the diversity of industries or regions. Expanding the sample to include more sectors and regions would provide a more comprehensive understanding of sustainability training's impact. Additionally, the study's cross-sectional nature limits its ability to capture long-term effects, and the reliance on self-reported data introduces potential biases. The limitations section should also address the generalizability of the findings, considering the possible response bias in the focus groups and the

specific contextual constraints of conducting the study in Spain. Future research should explore these limitations by comparing organizations with and without sustainability initiatives, investigating cultural and institutional differences, and focusing on sector-specific challenges to provide a more holistic view of sustainability practices across various contexts. Also, further research should explore the long-term impacts of sustainability training on organizational culture and the persistence of sustainable practices across different industries.

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Appendix

Appendix 1 1. Focus Group composition

Table 1. Focus Group composition

Focus group	Participant	Job position/Industry	Date	Duration	N° words
1	JG	Director of the Pharmacy and Medicines at the Consortium of Health and Social Care of Catalonia/Pharma	10/6/2024	53:02	6,536
	JS	Consultant/ Energy consultancy (gas and electricity)			
	CP	Chief Business and Strategy Officer/Shipping and logistic industry			
2	RL	Environmental Products Production Specialist /Consumer Goods	11/6/2024	1:11:06	8,837
	ML	Consultant in Social Responsibility and Quality of Life for businesses, educators, and Public Administration/Consultancy			
	SG	CEO/ International project portfolio management & IT integration or separation during large M&A projects			
3	CC	Business Manager/ Testing, inspection, and certification industry	11/6/2024	1:11:12	9,204
	JL	CMO & CSO/Logistic			
	NM	Director of Occupational Risk Prevention and Environment/Manufacturing			
4	JS	Data & Information Director/Furniture company	17/7/2024	1:03:18	9,124
	AC	Project Manager/Facility Services,			
	PF	Sustainable Development & People Global Director Promoting sustainability, social commitment and good governance/Paper Manufacturing (Large company)			
5	NG	Director of the Career Guidance and Employment Service and the Expert Degree in Sustainability Management and Social Responsibility /HEIs	17/7/2024	54:34	8,165
	MB	Architect lecturer/HEIs			
Total	14				41,866