

# GENDER EQUALITY IN THE BLUE ECONOMY: ATLANTIC AREA SEA BASIN REPORT

Sea Basin Report



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# Executive Summary

## NAVIGATING THE TIDES OF INEQUALITY: Women in the Atlantic Blue Economy



### WOMEN IN THE WORKFORCE

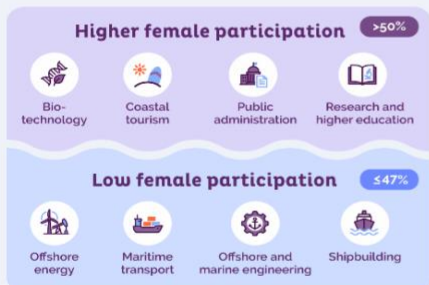


\* France, Ireland, Portugal, Spain, United Kingdom

### EU BLUE ECONOMY LABOUR FORCE

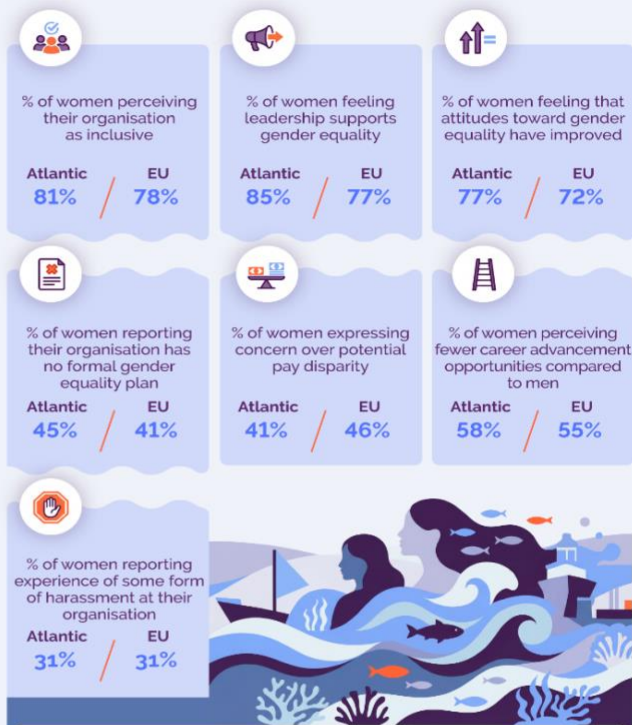
EU	Atlantic Basin
Female 2,941,850	Female 1,385,233
Male 4,130,743	Male 1,907,834
Total 7,072,593	Total 3,293,067

### Sectoral participation is highly polarised



Women report less access to training (57% vs 76% of men)

### WORKPLACE REALITY FOR WOMEN: ATLANTIC VS EU



### KEY INSIGHT

A contradictory experience:  
Women in the Atlantic sea basin are more positive about culture but see fewer career opportunities.



### CHARTING THE COURSE: POLICY RECOMMENDATIONS FOR EQUALITY

- **Gender-disaggregated data:** Mandate harmonised EU-wide reporting on employment, pay, and career progression by gender across blue economy sectors. Use the data to track progress and inform targeted policy action.
- **Pay and promotion transparency:** Introduce mandatory transparency in pay structures and promotion criteria. Use audits and reporting to address gender pay gaps and unequal advancement.
- **Gender equality plans:** Require organisations to adopt formal gender equality plans with measurable targets, timelines, and accountability mechanisms. Link implementation to monitoring and compliance frameworks.
- **Training and mentorship in STEM and offshore sectors:** Invest in targeted training, upskilling, and mentorship for women in STEM-intensive and offshore industries. Prioritise pathways into technical and leadership roles in high-growth blue sectors.
- **Zero tolerance for harassment:** Enforce zero-tolerance standards through clear reporting channels, independent procedures, and protection for complainants. Make safe workplaces a non-negotiable condition for sector growth.
- **Inclusive education and awareness:** Strengthen education and awareness campaigns highlighting the economic and innovation benefits of gender parity.



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## Introduction

The goal of the WIN-BIG project is to advance our understanding of existing gender issues and capacity needs across the EU's blue economy, with a particular focus on emerging and high-tech related industries. Three major challenges have been identified by WIN-BIG: a lack of gender disaggregated statistics, the underrepresentation of women in certain blue economy sectors, and insufficient opportunities for women. Such challenges can act as barriers to female empowerment and limit their access to career advancement and leadership roles.

The WIN-BIG project strives to shed light on gender inequalities in the blue economy sectors within six different Sea Basins in Europe, using data collected from a bespoke survey designed for this project. The survey results are used to identify institutional and industry factors that impact female career advancement. The research also produces estimates of the labour force in the blue economy disaggregated by sex. The following report provides a first set of data on the current gender status for the Atlantic Area Sea Basin -comprising France, Ireland, Portugal, Spain and the United Kingdom. The project has also produced separate reports for: the Arctic, the Baltic Sea, the Black Sea, the Mediterranean and the North Sea Basins.

## Methodology

The methodology of the WIN-BIG Survey combined both quantitative and qualitative research approaches to assess gender inequalities across the EU blue economy. A multilingual online survey was developed through an iterative process informed by desk research, focus groups, and stakeholder consultations, ensuring cultural and linguistic clarity across seven languages. The final questionnaire included seven sections covering respondents' industry characteristics, work arrangements, gender culture, career progression, gender policies, and personal demographics, with one section dedicated to female respondents only.

The survey was distributed between March 2024 and November 2025 via email, social media, and events, collecting 1,084 responses (647 from the Atlantic Area). To ensure the survey captures issues that affect women differently compared to men, responses from both males and females were collected. Data were processed in compliance with GDPR, analysed using Excel and STATA, and weighted post-stratification techniques were applied to adjust for representativeness across industries, countries, and gender. Additionally, official EU data sources were used to estimate total employment and gender distribution across blue economy sectors, with proxy estimates applied when direct data were unavailable.

## Results for the Atlantic Sea Basin

In the Atlantic Sea Basin:

- Females represent **42% of the total blue economy labour force** across France, Ireland, Portugal, Spain, and the United Kingdom.

Notable sectoral disparities exist, with



- Female participation highest in **biotechnology, coastal tourism, public administration, and research and higher education** sectors where women comprise **47% or more** of the workforce.
- Female representation falling below **30%** in traditionally male-dominated fields such as **offshore energy, maritime transport, offshore/marine engineering, and shipbuilding**.

These patterns mirror global findings from the **World Economic Forum's 2025 Global Gender Gap Report**, which notes that gender parity remains uneven across STEM-intensive and leadership roles, with Europe still requiring nearly **eight decades to close the gap at current rates**.

## Workplace Culture

The findings from the WIN-BIG survey present a mixed picture for the Atlantic Sea Basin with:

- **81%** of female respondents perceiving their **organisations as inclusive** and **85%** believing **leadership supports gender equality**.
- However, **21%** of female respondents report direct experiences of **gender discrimination** and
- **46%** have suffered some form of **harassment within their organisations**—more than double the rate of male respondents.
- Despite widespread access to flexible working arrangements reported, nearly **18%** of female respondents find it **difficult to achieve work-life balance**.
- Female respondents report **less access to training** than males (57% female vs. 76% males) and perceive **fewer career advancement opportunities** (58% of female respondents feel they have fewer promotion opportunities than males).

These findings align with global gender gap research showing that women's underrepresentation in leadership stems from systemic barriers in career progression, mentorship, and equal pay.

The perception gap between male and female respondents is also notable:

- while **57% of male respondents** believe gender balance policies exist in hiring, only **36%** of female respondents agree, and **nearly half** of females (**45%**) say their **organisations lack a formal gender plan**.
- **41%** of female respondents **suspect or are unsure they are paid less than male colleagues** doing the same job. Despite **77%** of women **acknowledging that attitudes**





toward gender equality have improved, half believe it will take **more than 10 years to reach parity within their industries.**

These results echo global findings by the **OECD (2025)** and **UN Women (2024)**, which emphasize that while legislative progress and awareness have advanced gender equality frameworks, persistent structural and cultural barriers—particularly around pay transparency, career progression, and representation in STEM—continue to slow real parity in the workforce.

### How the Atlantic area compares with the total sample (including all sea-basins listed above).

In total, WIN-BIG estimates that 7,072,593 people are working in the EU blue economy sectors, out of which 42% are female. In the Atlantic Sea Basin, a total of 3,293,067 people work in the blue economy, out of which 1,385,233 (42%) are women.

EU Blue Economy Labour Force				
	Female	Male	Total	% Female
Blue Economy EU Total	2,941,850	4,130,743	7,072,593	42%
Blue Economy Atlantic Basin	1,385,233	1,907,834	3,293,067	42%

The Atlantic Sea Basin results often mirror the overall proportions of the total sample. Specifically concerning organizational culture, **Atlantic women are more positive than the total female sample.** Conversely, women in the Atlantic report a **lower satisfaction rate regarding the availability of career and training opportunities.**

- **81%** of female respondents in the **Atlantic region** report their **organizations are friendly and inclusive**, compared to **78% in the total sample.**
- In the **Atlantic sample**, **85%** of female respondents believe leadership supports **gender equality**, compared to **77%** of females across the **total sample.**
- Approximately **15%** of the **total sample** and the **Atlantic sample** reported having experienced **gender discrimination** at work.
- Both in the **Atlantic sample** and the **total sample**, **31%** of respondents reported experience of some form of **harassment at their organization**; almost **half of females** in both samples have experienced **harassment.**





- Among **females, 55% of total sample** perceive **fewer career advancement opportunities** compared to men. In the **Atlantic Basin, 58% of females** share this view.
- **41% of females in the total sample** and **45% of females** in the **Atlantic Basin** noted their organisations **do not** have a formal **gender plan**.
- A significant percentage of women in the Blue Economy express concern over **potential pay disparity: 46% of females** in the **total sample** compared to **41% females** in the **Atlantic Basin (41%)**.

Across the **total sample, 72% of female respondents** feel that **attitudes** toward gender equality have **improved**, this compares to **77%** in the **Atlantic Sea Basin**.

## Conclusions

The findings indicate:

- Progress in promoting gender equality within the Atlantic blue economy; however, persistent significant structural and perceptual barriers remaining that continue to impede parity.
- Women are prominently represented in service-oriented and academic sectors; however, they remain **underrepresented in STEM-intensive and offshore industries**, where **advancement opportunities are often limited**.
- Despite overall positive perceptions of inclusivity and leadership commitment to equality, **many women continue to experience discrimination, harassment, and unequal access** to training and promotion pathways.

These findings suggest that gender equality strategies in the **blue economy must evolve beyond policy adoption** towards active implementation, monitoring, and **accountability** to ensure measurable progress in representation, pay, and leadership equity.

## Policy Recommendations

This report also provides guidance on potential policy frameworks aimed at further narrowing the gender gap within the Atlantic Sea Basin blue economy. Suggested policy recommendations at European level call for:



- the **systematic collection of gender-disaggregated data** across blue economy sectors, supported by a harmonised and mandatory EU-wide reporting framework, to track workforce composition and career outcomes more accurately.
- the introduction or strengthening of **formal gender equality plans** in organisations.
- enforcing **zero-tolerance policies toward harassment**.
- enhancing **transparency in pay and promotion criteria**.
- expanding **training initiatives and mentorship programmes for women**, particularly in STEM and **emerging blue sectors** like marine renewable energy and biotechnology, to improve women's access to technical and leadership roles.
- expanding **inclusive education and awareness campaigns** that target both men and women to highlight the economic and innovation benefits of gender parity.

Ultimately, accelerating equality in the blue economy will require sustained political commitment, evidence-based policy design, and coordinated action across EU institutions, member states, and industry partners to close the remaining gender gaps within a generation.



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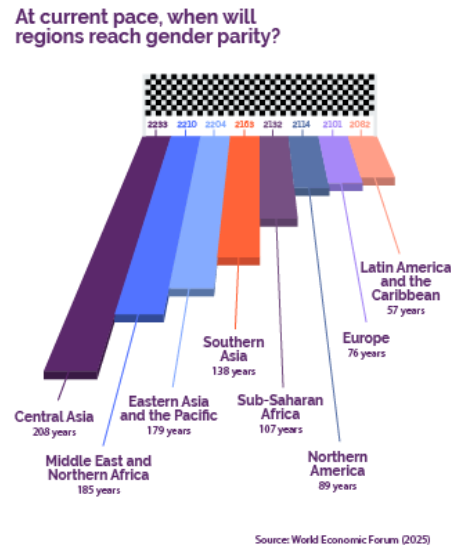
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# Introduction

The WIN-BIG project addresses the lack of knowledge on the role women play in the EU Blue Economy sectors. It provides data on women's status and skill gaps that prevent women from entering or progressing up the career ladder. In addition to data gathering, the project provides capacity building, focusing on the EU three emergent sectors, blue bioeconomy, blue sports and coastal tourism and marine renewable energy and robotics. The WIN-BIG project also champions blue female role models using innovative media format. These objectives are in line with the EU goals.

Gender equality and advancing women's rights are normative values of the EU and have been recognized as economic and strategic investments. (European Commission, 2025; OECD, 2025). Various pieces of legislation have been adopted in recent years, such as the Directives on Work-Life Balance, Pay Transparency, and Gender Balance on Corporate Boards (European Commission, 2024). However, bridging existing gender disparities remains a slow process and data shows that in Europe alone another eight decades are needed at current speed to reach parity (Figure 1).

Figure 1 Current estimate of years needed to close the Gender Gap across the world (adapted from the World Gender Gap Report 2025).



Women are still overrepresented in low-paid jobs, carry a disproportionate share of household duties and care responsibilities, have less opportunities for training in such sectors as science, technology, engineering and mathematics (STEM) and face higher risks of violence (European Commission, 2025).

## The EU Blue Economy and Gender Inequalities

The EU's blue economy is multisectoral, encompassing a wide range of traditional and emerging sectors - from maritime transport, fisheries to blue biotechnology and marine renewable energy. In 2023, the EU blue economy's gross value added (GVA) reached EUR 263 billion, and it employed 4.89 million people in the EU (European Commission, 2025). It is a segment of economy characterized by continued growth, energy and digital transition, and new job opportunities. The EU Blue Economy observatory estimates that a total of 1,831,974 people are employed in the Atlantic Sea Basin<sup>1</sup>.

Certain sectors of the EU blue economy face not only the challenge of underrepresentation of females, but also a gendered division of labour by occupation. In fisheries, research shows that women are more often in charge of selling or processing the catch, while men are involved in the fishing activities and the preparation of fishing gear (Salmi and Sonck-Rautio (2018)). The existing horizontal gender segregation (the concentration of women in certain fields) is paired with vertical gender segregation. Research in areas such as ocean science illustrates this dual gap, noting not only overall lower representation of women but also their significant underrepresentation in senior and decision-making roles. (Katsanevakis et al., 2020 and Kamm, Schelten and Braker, 2020).

Gender inequalities also manifest in terms of access to opportunities. Studies note that limited access to training and mentorship opportunities hinders women's career advancement and ability to reach managerial positions (Croucher and Økland, 2021; Johannesen et al, 2023; Shellock et al., 2022; Zhao et al. 2013).

## WIN-BIG Objectives

The WIN-BIG project, funded by the European Commission, aims to deepen understanding of gender issues in the Blue Economy and support women's career entry and advancement within the sector. Specifically, WIN-BIG is gathering comprehensive data on gender representation, the roles women play, and the barriers they face across all six EU Sea Basins.

The project's three core objectives are:

1. **Establish a comprehensive dataset** detailing the gender status and roles of women across all **six EU Sea Basins** (Atlantic, Mediterranean, Baltic, North, Arctic, and Black Sea) within the Blue Economy (BuE).
2. **Identify critical skill gaps** that hinder women's entry into or progression up the career ladder in BuE sectors.
3. **Implement targeted capacity-building programs**, including female- and sea basin-specific **learning labs, acceleration programs, and networking events**.

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<sup>1</sup> Note: The Blue economy sectors of the EU Blue Economy Observatory are maritime transport, coastal tourism, living resources, non-living resources, port activities, renewable energy, shipbuilding and repair. The Observatory does not include estimates for the United Kingdom. Also, the Observatory does not include the workforce in the research related sectors of the blue economy. The EU Blue Economy Observatory website is available at: [https://blue-economy-observatory.ec.europa.eu/blue-economy-indicators\\_en](https://blue-economy-observatory.ec.europa.eu/blue-economy-indicators_en)

For this report, academic and policy research was reviewed to define the EU blue economy industries. For instance, previous studies on blue economy concepts - such as the harvesting of living resources, extraction of non-living resources, and ecosystem protection and management - helped guide the classification adopted in this study (e.g. Smith Godfrey, 2016; Voyer et al, 2018).

Figure 2 presents the blue economy sectors and industries. Final sector and industry grouping were based on the EU Blue Economy sectors specifications with some minor differences<sup>2</sup>.

Figure 2 Blue economy sectors and industries adopted in this study.

SECTOR	INDUSTRY
 Living resources	Aquaculture   Sea fisheries   Seafood processing
 Blue biotechnology	Blue bioeconomy/biotechnology
 Coastal tourism	Blue sports   Coastal tourism   Cruise tourism
 Marine renewable energy and offshore exploration (oil and gas)	Marine renewable energy   offshore exploration (gas and oil)
 Ports and shipping	Maritime transport   Port activities   Shipbuilding
 Public administration related to the marine	Public Administration related to the marine
 Engineering and technology	Marine engineering   Marine robotics   Desalination   Maritime defence
 R&D related to the marine	Marine research and development
 Research and marine education (third level)	Marine Education/Training/Research (Third level)   Marine Conservation and Advocacy
 Market services	Marine Environmental Consulting Services   Marine Retail Services   Business and finance

<sup>2</sup> European Commission, EU Blue Economy Observatory, EU Blue Economy Sectors: [https://blue-economy-observatory.ec.europa.eu/eu-blue-economy-sectors\\_en](https://blue-economy-observatory.ec.europa.eu/eu-blue-economy-sectors_en)

### EU Sea Basin-Level Analysis

This report is one of six sea basin reports of the WIN-BIG project. The analysis includes EU member states and countries that are part of the European Economic Area, bordering an ocean or sea. The research also covers the United Kingdom, due to the UK-EU Trade and Cooperation Agreement. Table 1 lists the EU Sea Basins and its bordering countries. The EU sea basin countries in each report are defined according to the geographic delineation as established in the EU Baseline studies for the implementation of the lighthouse for the Mission “Restore our Ocean and Waters by 2030” (Chanou Zoulfath et al., 2023; Goba et al., 2023)<sup>3</sup>.

Table 1 EU Sea Basins (according to EU Baseline Studies for the Ocean and Waters Mission).

EU Sea Basins	
Arctic Basin	Iceland, Finland, Norway, Sweden
Atlantic Basin	Ireland, United Kingdom, France, Portugal, Spain
Baltic Sea	Germany, Poland, Estonia, Latvia, Lithuania, Denmark, Sweden, Finland
Black Sea	Bulgaria, Romania
Mediterranean Sea	Croatia, Cyprus, France, Greece, Italy, Malta, Slovenia, Spain
North Sea	United Kingdom, Belgium, France, Germany, Netherlands, Denmark, Sweden, Norway

### Atlantic Basin Industries

The blue economy industries of the Atlantic Basin are of significant economic importance and contribute to the ongoing green transition. Among the traditional sectors, living resources clearly demonstrate market scale — particularly in Spain, which has one of the largest fishing industries in the EU (Eurofish, 2023)<sup>4</sup>.

<sup>3</sup> Two reports were used to define the EU sea basin countries: Chanou Zoulfath, A. et al. (2023) Baseline study for the implementation of lighthouses of the Mission ‘Restore our ocean and waters by 2030’: Atlantic, Arctic, Danube and Mediterranean lighthouses. Luxembourg: Publications Office of the European Union; Goba, V. et al. (2023) Baseline study for the implementation of the lighthouse in the Baltic and North Sea basins for the Mission ‘Restore our Ocean and Waters by 2030’. Luxembourg: Publications Office of the European Union. Following this approach, countries not bordering an ocean and sea are excluded. In line with the lighthouse studies, where a country borders more than one sea basin they are duplicated in each relevant report. Spain borders the Atlantic and Mediterranean so is included in both sea basin reports. Similarly, United Kingdom borders the Atlantic and North, while France borders the Atlantic, Mediterranean and North.

<sup>4</sup> Eurofish (2023), Spain: <https://eurofish.dk/member-countries/spain/>



In the area of shipbuilding and repair, France is the EU's leading contributor in terms of gross value added (GVA)<sup>5</sup>. Ireland's ports primarily handle bulk cargo, roll-on/roll-off (Ro-Ro) traffic, and general cargo. Ireland's passenger transport services connect with both the United Kingdom and mainland Europe<sup>6</sup>. This industry represents the highest share of direct turnover in Ireland (over 34% of total ocean economy turnover) (Flynn et al., 2024).

Atlantic Basin countries also play a vital role in the green transition. For example, one of the first commercial-scale offshore wind projects in France became fully operational along its Atlantic coast in 2022<sup>7</sup>, while Spain is currently in the piloting stage and working toward the certification of offshore safety standards<sup>8</sup>.

## Gender Breakdown

This report presents estimates of total employment in the Blue Economy in the Atlantic Area by industry and gender. To establish a baseline estimate of total employment by Blue Economy industry and gender, WIN-BIG analysed officially published data and statistics.

The analysis estimates that a total of 3.3 million people is employed across the EU Blue Economy industries in the Atlantic Sea Basin. **Overall, WIN-BIG estimate women account for approximately 42% of the total workforce in the blue economy in the Atlantic Sea Basin.** Table 2 presents the gender breakdown of the workforce in each industry<sup>9</sup>.

Acknowledging the scale and importance of the traditional industries, and recognising the growth of emerging industries, this report also provides information about the organisational and industry wide factors impacting male and female employees in the Atlantic Sea Basin using data from a survey developed as part of the WIN-BIG project.

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<sup>5</sup> EU Blue Economy Observatory, Country Profiles, France: [https://blue-economy-observatory.ec.europa.eu/country-profiles/france\\_en](https://blue-economy-observatory.ec.europa.eu/country-profiles/france_en)

<sup>6</sup> EU Blue Economy Observatory, Country Profiles, Ireland: [https://blue-economy-observatory.ec.europa.eu/country-profiles/ireland\\_en](https://blue-economy-observatory.ec.europa.eu/country-profiles/ireland_en)

<sup>7</sup> EDF (2022) EDF Renewables, Enbridge and CPP Investments announce France's first offshore wind project, Saint-Nazaire, is now fully operational: <https://www.edf.fr/en/the-edf-group/dedicated-sections/journalists/all-press-releases/frances-first-offshore-wind-project-saint-nazaire-is-now-fully-operational>

<sup>8</sup> Further details about the offshore project in Spain available at: <https://saitec-offshore.com/en/projects/demosath/>

<sup>9</sup> Data on the total workforce per sector was sourced from the EU Blue economy observatory. The breakdown of gender per sector was established using Eurostat, EU STECF reports, national statistics, national reports and news sources. For further discussion on how these estimates of total employment by industry and gender were derived see [Annex 1](#).





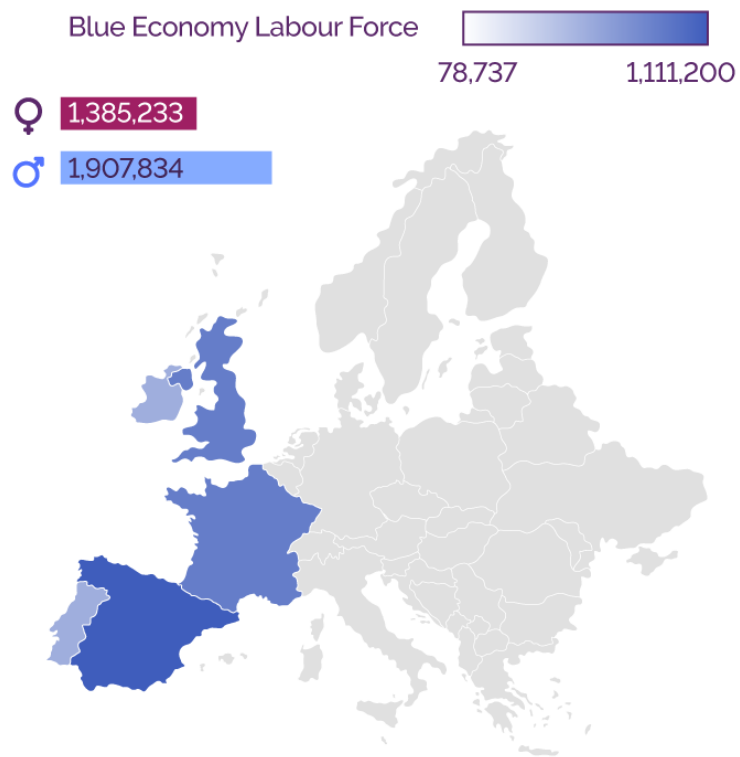
Table 2 Number of employees across the Blue Economy sectors, broken down by gender

Labour force of the Atlantic Basin			
Blue Economy Sector	Female	Male	% Female
Living resources	52,535	131,486	29%
Blue biotechnology	880	919	49%
Coastal tourism	836,445	758,350	52%
Marine renewable energy and offshore exploration (oil and gas)	16,621	40,426	29%
Engineering and technology	69,535	225,668	24%
Ports and shipping	116,016	395,454	23%
Research and marine education (third level)	14,025	15,880	47%
R&D related to the marine	55,215	100,263	55%
Public administration related to the marine	41,411	40,732	50%
Market & Services	182,550	198,656	48%
<b>Total</b>	<b>1,385,233</b>	<b>1,907,834</b>	<b>42%</b>

Figure 3 illustrates the employment breakdown across the Atlantic Sea Basin countries. Spain has the highest number of blue economy employees, followed by the United Kingdom, France, Portugal, and Ireland.



Figure 3 Distribution of the workforce across the Atlantic Basin countries



	Total	Female	Male
Ireland	78,737	35,519	43,218
Spain	1,111,200	532,639	578,561
France	803,366	306,976	496,390
Portugal	340,934	173,544	167,390
United Kingdom	958,830	336,555	622,275

# Methodology

To capture both the quantitative and qualitative data required for WIN-BIG, a comprehensive survey was designed, tested and data was collected between June 2023 and November 2025. The survey was translated into seven languages to for inclusivity and accessibility for respondents across different countries.

The methodology involved a desk review stage to design the survey sections and its questions. Following the design and testing of the survey, the survey was launched, and data was collected from the employees of the blue economy sectors. Following the data collection, post stratification weights were generated to make the sample representative of the true marine workforce population.

Figure 4 Stepwise methodology followed in this study.



## Questionnaire Design

Prior to designing the questionnaire, a focused desk review was undertaken to inform the design. Previous surveys on gender inequalities in the workplace were consulted. For example, surveys related to institutional culture used to inform *Athena Swan* accreditation in higher education were useful to design Likert Scale questionnaire questions on topics related to work culture, promotion and work-life balance<sup>10</sup>. A survey by *Equileap*<sup>11</sup> on gender representation at the corporate level and its Gender Equality Scorecard were reviewed to understand concepts around equal compensation, gender equality policies and employee protection. Other surveys, such as *Women in Tech*, conducted in 2023<sup>12</sup> were also utilised to inform relevant topics and questions.

Early versions of the questionnaire were tested using focus groups. Further discussions across the WIN-BIG consortium and at a special session of the conference *1<sup>st</sup> Mission Ocean Arena: Blue Mission BANOS - Supporting the EU Mission "Restore our Ocean and Waters* in the Baltic and North Sea in

<sup>10</sup> The Athena Swan Charter is a framework which is used across the globe to support and transform gender equality within higher education (HE) and research, <https://www.advance-he.ac.uk/equality-charters/athena-swan-charter>

<sup>11</sup> Equileap, Social Equality Data: <https://equileap.com/data/>

<sup>12</sup> Women in Tech Survey 2023: <https://www.womenintech.co.uk/wp-content/uploads/2022/12/Women-in-Tech-Survey-2023.pdf>

November 2023 led to some further refinements of the survey instrument. The focus group discussions ensured that the questions were similarly interpreted and understandable across different countries and languages.

The final questionnaire was divided into seven sections described below:

**1. Industry and firm:** This section collected data on the respondent's blue economy sector, type of organisation, country of operation, number of employees, and the percentage of female employees within the organisation.

**2. Working arrangements and culture:** This section collected data on respondents' employment level, employment status, and years in their current role. It also included questions about whether respondents had taken any periods of carer's leave, as well as questions on workplace culture and work-life balance.

**3. Gender culture and treatment within organisation/firm:** This section aimed to assess respondents' perceptions of gender discrimination, whether they had encountered any forms of harassment, and whether the organisation's leadership was committed to gender equality, diversity, and inclusion.

**4. Perception of opportunities for career progression:** This section collected information on the transparency of internal vacancy applications, access to career growth opportunities, and the challenges respondents have faced in pursuing a career in the blue economy sector.

**4. Women in the work force:** This section collected data on whether the respondent's firm has gender equality policies, the presence of female managers and role models, and whether there are barriers preventing women from being promoted to senior positions. This section also includes a qualitative question asking why women might not have the opportunity to advance in their industry.

**6. Female only section:** This section collected information from female respondents only. It collected data on the gender pay gap, their perceptions of whether they are treated equally to men in the workplace, and whether they have the same promotion opportunities as their male counterparts. This section also includes qualitative questions to collect recommendations from females on how to achieve more gender equality.

**7. Personal demographics:** This section collected demographic data such as respondents' age, country of residence, ethnicity, marital status, caring responsibilities and level of education.

## Data collection

The online WIN-BIG survey was launched on March 8<sup>th</sup>, 2024, and remained open until 17<sup>th</sup> of November, 2025. It was conducted online via the Qualtrics surveying platform and was available in seven languages: English, Spanish, Portuguese, French, German, Italian, and Irish. A link to the survey was disseminated to various blue economy organisations via email, social media, paid advertising and during national and international events by the Consortium partners. A total of 1,244 responses were collected. Out of this number, 59 responses were from non-European countries and 7 were from European countries that do not have access to ocean or sea. The 59 non-European and 7 non-ocean responses were removed from the analysed sample reducing the number to 1,178 which covered the EU sea basins. Following further cleaning of the dataset, a further 94 responses were removed from the final analysis: 20 responses were completed by students, and 74 respondents completed only section one of the survey which covered basic information about their gender and the sector they belonged to, so they were removed from the main analysis. As a result, 1,084 responses are analysed. The data sample for Atlantic Sea area include 647 responses, which is the data used for this report. All data was handled in compliance with confidentiality requirements and the General Data Protection Regulation (GDPR). The data was analysed using Microsoft Excel and the statistical software package STATA.

## Weighting and analysis

Given this was a voluntary opt-in survey it was important to generate post stratification weights to make the sample representative of the true marine workforce population. The estimated population totals by blue economy industry, country and gender facilitated the creation of a multidimensional weighting scheme. All results presented use the generated post stratification weights, unless otherwise stated.

There is a lack of gendered statistics in the EU blue economy. Furthermore, while the EU blue economy observatory provides information about total workforce in certain sectors (e.g. living resources, coastal tourism, ports and shipping) there is no data about the workforce in such industries as marine robotics, higher education and research related to marine, environment consulting, marine conservation and advocacy. For the blue economy sectors, where no data was available, the number of employees in a broader industry category was collected, followed by an estimate of the marine share. For example, there is not data about the total workforce in the *marine robotics*. To estimate its labour force, several indicators were used. Based on the number of employees in the *Equipment and machinery subcategory* published by the EU Blue Economy Observatory<sup>13</sup> and the total number of employees in *Manufacturing of machinery and equipment* from Eurostat, the marine share was estimated in engineering. Next, this estimated marine share was applied to the total number of employees in *Science, technology and digital society* category from Eurostat, to estimate the number of employees in marine robotics. In terms of the gender

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<sup>13</sup> Note: there were some countries where no data was provided in the Blue Economy Observatory. Individual country reports or other sources were consulted to provide an estimate of the workforce.

breakdown, data was collected where sector-specific gender information was directly available. This was only available for the living resources and maritime defence. In cases where there was no gender breakdown at the blue economy industry level, gender distribution of the broader sector which the industry was contained in was used as a proxy. For example, while no gender specific information was publicly available for coastal tourism across countries, Eurostat does provide estimates for gender at the national level for NACE industries such as accommodation and restaurant activities. Similarly, *Public administration related to marine* used the parent sector *Public administration* to generate a proxy for gender shares. [Annex 1](#) provides detailed information about the data.





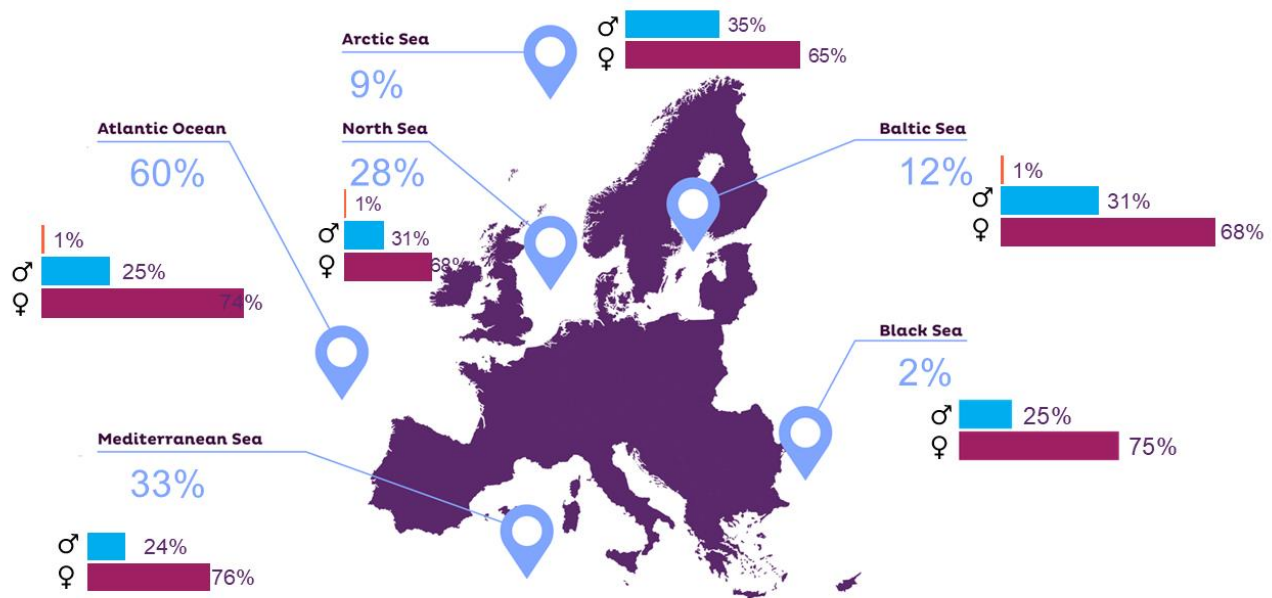
# Survey Results

## SUMMARY OF WIN-BIG SURVEY RESPONDENTS DEMOGRAPHIC STATISTICS

This next section describes in detail the obtained results and statistics derived from the WIN-BIG survey data.

Figure 5 presents the gender distribution of respondents across the sea basins. The percentages shown are based on the unweighted survey sample. Across all basins, women accounted for more than 68% of the respondents within the Mediterranean, Atlantic, and Black Sea basins showing the highest proportions of female respondents.

*Figure 5 Distribution of gender of respondents across the sea basins (unweighted)*



### Atlantic Sea Basin

As shown in **Figure 5**, **60% of the respondents to the WIN-BIG survey were from the Atlantic Sea Basin countries**, with 74% female respondents and 25% male. This Basin contains the largest data sample.

Table 3 presents the unweighted percentage of respondents by EU Blue Economy sector across all the EU sea basins.

In the Atlantic basin, the largest shares of respondents are in research and marine education (tertiary level) (19%) and marine-related R&D (15%). In emerging sectors within this basin, blue biotechnology comprises 6% of the same and marine renewable energy, comprises 5% of the sample. Engineering and technology account for 7% of respondents, with another 7% in ports and shipping.

*Table 3 Survey sample per sector (unweighted) across the EU sea basins*

Survey sample per sector (unweighted)						
Blue Economy Sector	Arctic Basin	Atlantic Basin	Baltic Sea	Black Sea	Mediterranean Sea	North sea
Living resources	17%	<b>12%</b>	10%	8%	7%	12%
Blue biotechnology	11%	<b>7%</b>	13%	0%	6%	11%
Coastal tourism	0%	<b>9%</b>	1%	4%	6%	2%
Marine renewable energy and offshore exploration (oil and gas)	2%	<b>5%</b>	4%	0%	2%	6%
Engineering and technology	9%	<b>7%</b>	0%	13%	6%	7%
Ports and shipping	6%	<b>7%</b>	26%	8%	10%	15%
Research and marine education (third level)	21%	<b>18%</b>	16%	29%	21%	17%
R&D related to the marine	20%	<b>15%</b>	23%	17%	16%	15%
Public administration related to the marine	6%	<b>11%</b>	4%	4%	13%	9%
Market & Services	0%	<b>5%</b>	1%	8%	8%	2%
Not specified	8%	<b>4%</b>	2%	8%	5%	4%

Table 4 presents the demographic information for the total sample and Atlantic Basin Respondents, with the post-stratification weights assigned. The percentage of female respondents (54%) is slightly higher compared to male respondents in the weighted Atlantic sample and female respondents comprise 50% of the full sample.

Table 4 Personal demographic information of respondents the percentage for the total sample and the Atlantic Sea Basin

Background of respondents		
Gender of respondents	Total Sample %	Atlantic Basin %
Gender female	50%	54%
Gender male	50%	46%
Age	Percent	Percent
18-25	4%	1%
26-35	13%	12%
36-45	22%	28%
46-55	36%	33%
56-65	23%	25%
65 +	2%	1%
Ethnicity	Percent	Percent
White (Caucasian)	95%	95%
Black	<1%	1%
Asian	<1%	<1%
Mixed ethnicity	4%	3%
Other	<1%	<1%
Marital status	Percent	Percent
Married	51%	54%
Cohabiting	16%	13%
Single	25%	23%
Separated/Divorced/Widowed	8%	10%
Caring responsibilities (e.g. caregiver to children, child with disability, elderly parents, etc.)	Percent	Percent
Yes	40%	39%
No	59%	59%
Prefer not to say	1%	2%

Education level	Percent	Percent
Primary level, or equivalent	<1%	<1%
Secondary level, or equivalent	6%	2%
Bachelor's, or equivalent third level	15%	12%
Master's, or equivalent third level	60%	67%
Doctoral or equivalent third level	18%	18%
Other industry specific qualification	1%	<1%
Prefer not to say	<1%	<1%

Over 60% of the Atlantic basin sample consists of employees aged between 36–55. The sample was largely homogeneous in terms of ethnicity, with the majority of respondents identifying as white Caucasian (95%). In terms of household composition, over 60% of the sample are married or cohabiting and approximately 39% of respondents have some type of caring responsibilities. A high proportion of respondents are also highly educated: -67% of respondents have a Master's degree, and 19% have a Doctoral degree.



## GEOGRAPHICAL DISTRIBUTION OF WIN-BIG SURVEYED INDUSTRIES AND FIRMS

To contextualize the respondents' professional settings, this section reports findings on industry and firm characteristics, including the blue economy sector, organizational type, country of operation, firm size, and the share of female employees within organizations.

Table 5 displays the breakdown of the Atlantic Sea Basin respondents' country they are based and industry they work in. A large proportion of respondents (38%) work in Spain, followed by France (25%) and the United Kingdom (24%). The survey involves a smaller sample of organisations operating in Portugal (10%) and Ireland (3%), reflecting their smaller country sizes.

*Table 5 Country and Industry where the respondents' work: Atlantic Sea Basin*

Respondents country and Industry: Atlantic Sea Basin	
Country where respondents' organisation is based	Percentage
France	25%
Ireland	3%
Portugal	10%
Spain	38%
United Kingdom	24%
BE sector <sup>14</sup>	Percentage
Living resources	12%
Blue biotechnology	6%
Coastal tourism	9%
Marine renewable energy and offshore exploration (oil and gas)	5%
Engineering and technology	7%
Port and shipping	7%
Research and marine education (third level)	19%
R&D related to the marine	15%
Public administration related to the marine	11%
Market & services	5%
Unspecified Blue Economy Industry	4%

<sup>14</sup> The percentages for the blue economy sectors are not weighted.

The highest percentage of the survey sample is comprised of respondents working in research and higher education (19%), R&D (15%), living resources (12%), and public administration (11%). The representation of the remaining industries - coastal tourism, blue biotechnology, Marine Renewable Energy and offshore exploration, Marine engineering and high tech, Maritime transport/ports/shipbuilding, Market & Services, ranges from 5% to 9%.

Figure 6 illustrates gender distribution across the Atlantic Basin countries: there is a higher percentage of female respondents in France and the United Kingdom.

Figure 6 Atlantic Sea Basin responses to the WIN-BIG Survey question: Gender distribution across the Atlantic Basin countries (weighed)

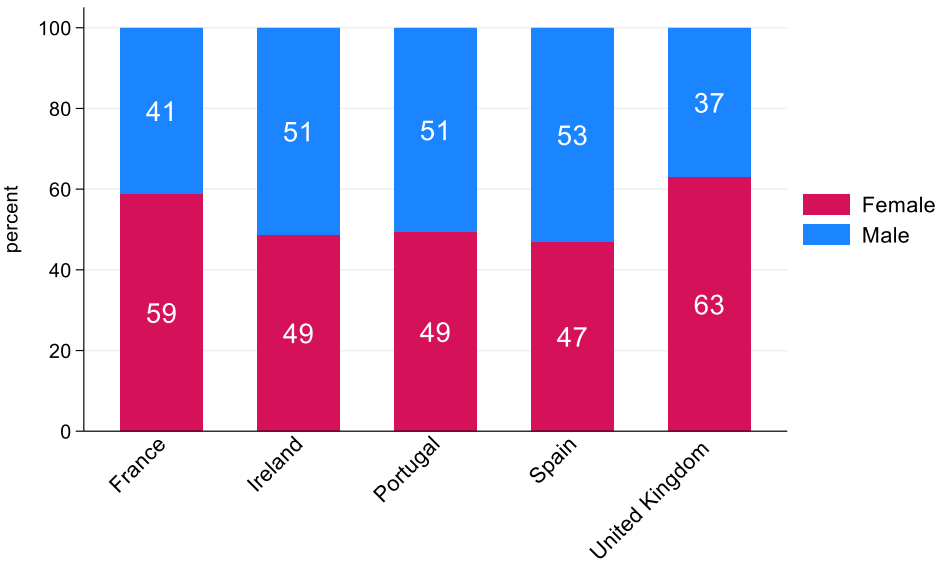
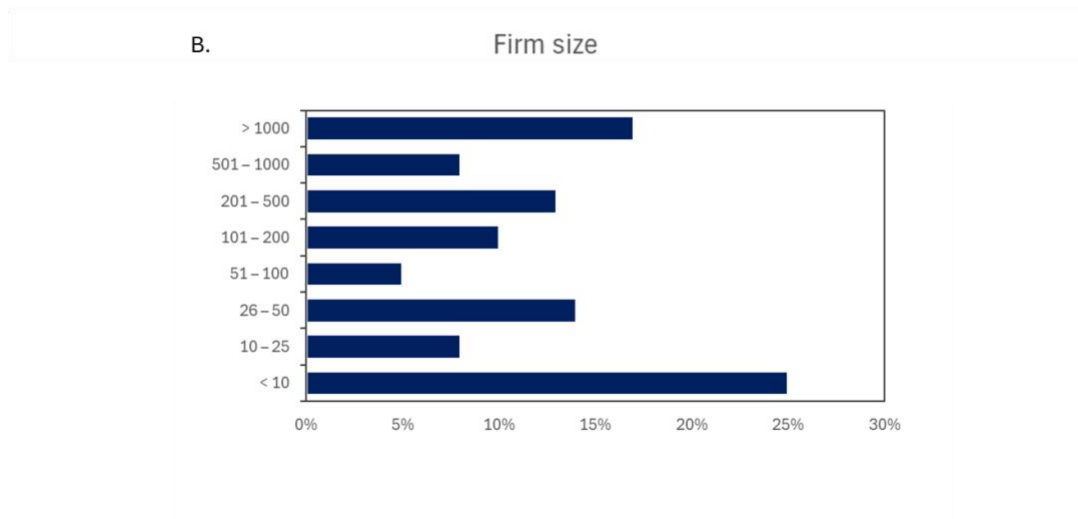
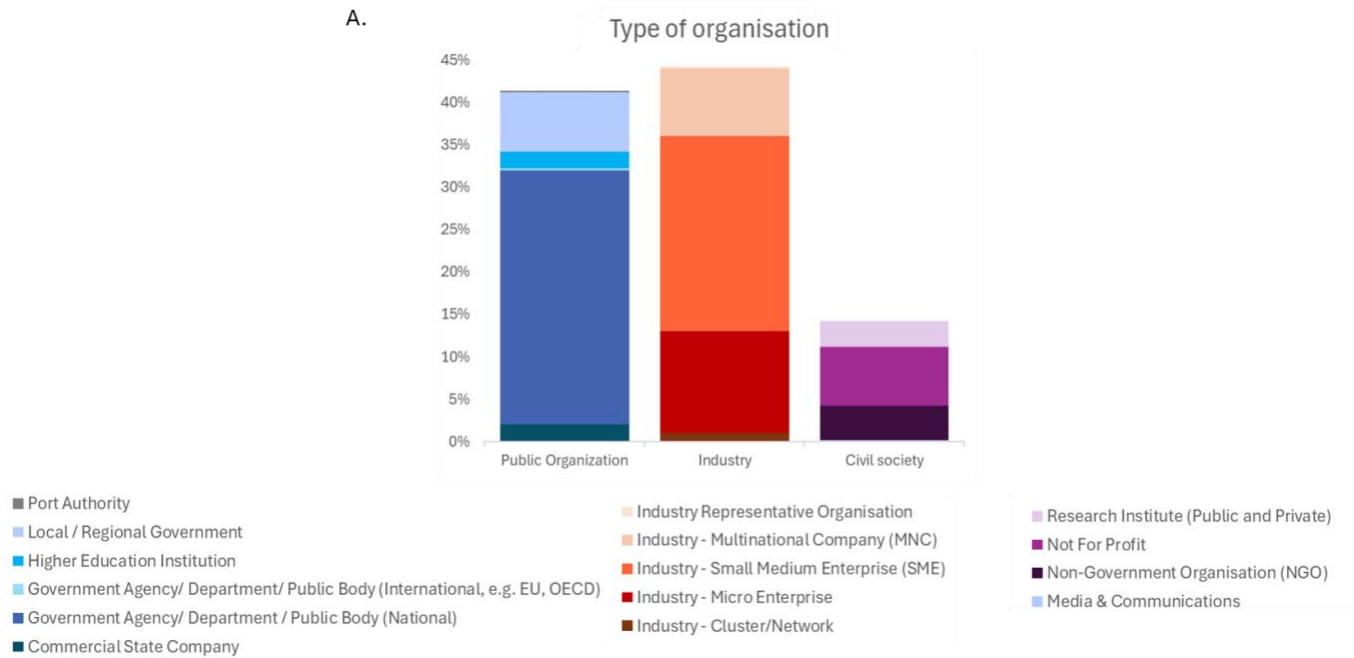


Figure 7 displays data about the type of organisation, in particular, whether Atlantic Sea Basin respondents work in a public institution, industry or in a non-governmental entity. It also includes information about the size of the organisation given by the total number of employees.

Figure 7 Information on the organization type (A) and size (B) among respondents



In terms of the type of organisation, the largest portion of Atlantic Sea Basin respondents work in Small and Medium Enterprises (SMEs) (23%), micro-enterprises (12%), and multinational corporations (MNCs) (8%). Another significant group comprises respondents employed by government agencies (30%) and local/regional governments (7%). The remaining respondents work in the not-for-profit sector (7%), NGOs (4%), research institutes (public or private) (3%), higher education institutions (2%), and commercial state-owned companies (2%).

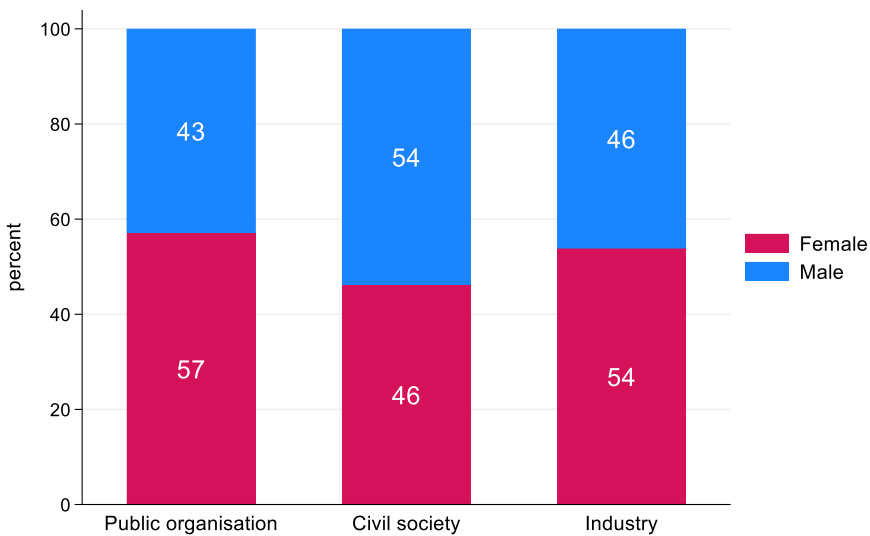
The survey captured data from respondents employed in a diverse range of organisational sizes, reflecting varying levels of operational scale. A significant portion of the sample are employed in small enterprises with fewer than 10 employees (25%). Approximately, 14% of respondents are



employed in organisations with 26–50 employees and 13% of respondents are employed in companies with 201–500 employees, highlighting representation from medium-sized enterprises. Meanwhile, 17% of respondents are employed in large organisations with over 1,000 employees, highlighting the inclusion of major enterprises or institutions with substantial workforce capacities.

Regarding the gender breakdown by type of organization, the highest proportion of respondents in public organization and industry were women (57% and 54%, respectively), whereas in civil society the opposite pattern was observed, with 54% of respondents being men (Figure 8). The categorisation industry includes the respondents from the following types of organisations: Industry - Cluster/Network, Industry - micro enterprise, Industry - SMEs, Industry - MNCs, Industry Representative Organisation.

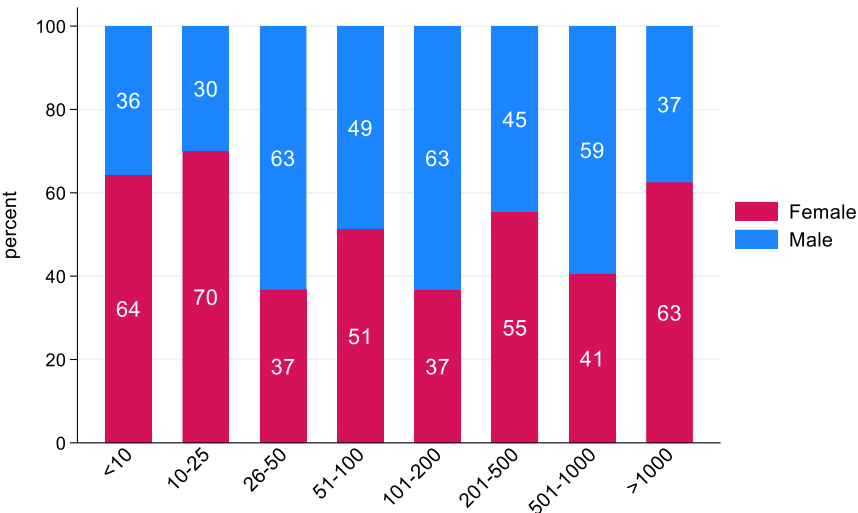
Figure 8 Atlantic Sea Basin responses to the WIN-BIG Survey question: Gender breakdown by organisation type



The category 'Civil society' includes: Media & Communications, Non-Government Organisation (NGO), Not For Profit and Research Institutes (Public and Private). The category public organisations includes: Commercial State Company, Higher Education Institution, Government Agency/ Department / Public Body (National), Government Agency/ Department/ Public Body (International, e.g. EU, OECD), Local / Regional Government and Port Authority.

The percentage of female and male respondents across different organization sizes is illustrated in Figure 9.

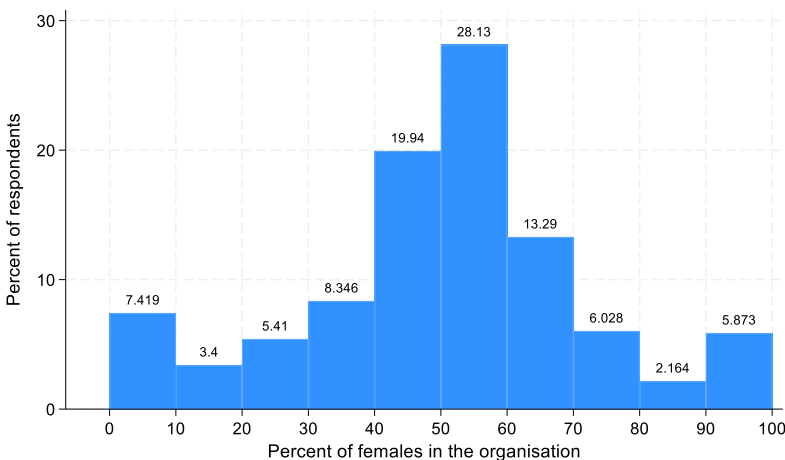
Figure 9 Atlantic Sea Basin responses to the WIN-BIG Survey question: Gender breakdown by size of organisation



The results revealed a higher female representation in both small firms (less than 10 employees and between 10 to 25 people). and very large companies, that have more than 1000 employees.

In addition, the respondents were asked to indicate an approximate percentage of female employees in their organization, and this result is illustrated in Figure 10.

Figure 10 Atlantic Sea Basin responses to the WIN-BIG Survey question: "Approximately what percentage (0 – 100) of the persons employed are female?"<sup>15</sup>



Approximately 60% of the respondents indicated that between 40% to 70% of the employees in their firm are female. About 11% of respondents answered that up to 20% of employees in the

<sup>15</sup> This histogram is based on the unweighted results.

organisations is female, while 13% indicated that the percentage of female workers at their workplace is from 20% to 40%.

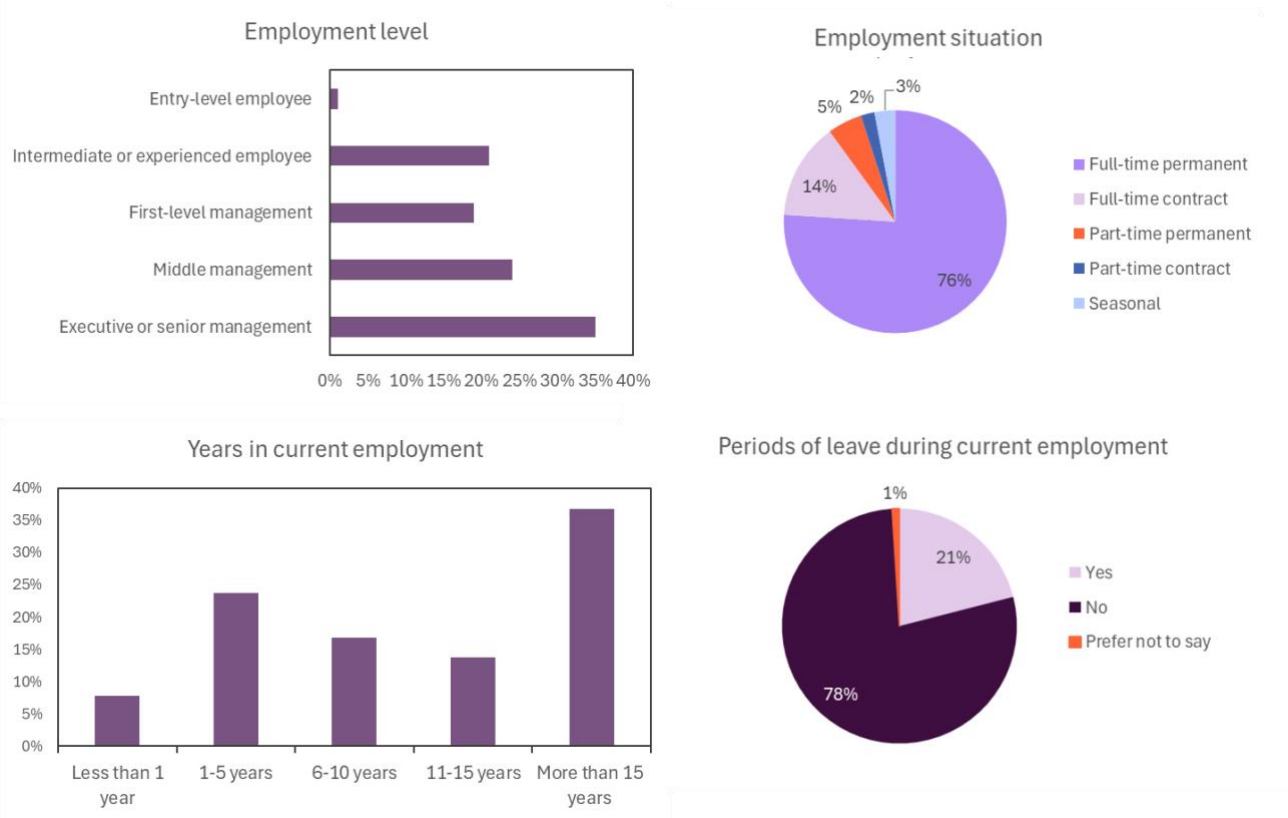
## WORKING ARRANGEMENTS AND CULTURE

The wider literature on gender inequalities refers to the problem of underrepresentation of women in managerial and supervisory positions, especially in male-dominated sectors (Alonso Gallo and Gutiérrez López, 2023; Macarie and Moldovan, 2012). Studies highlight that flexible work hours and work-life balance are important for females to be able to reach senior positions (Carrasco-Santos, Cristófol Rodríguez and Royo Rodríguez, 2020; Carvalho, 2018). Furthermore, studies note that gender inequalities can be exacerbated due to the effect of taking carer’s leave on the promotion to senior positions and on subsequent wage increases (Evertsson, 2016; Matysiak and Cukrowska-Torzewska, 2021).

To investigate some of these issues, this section presents the Atlantic Sea Basin survey responses related to the employment level of the respondents, working arrangements and organisational culture surrounding gender equality.

Figure 11 outlines data on respondents’ employment characteristics related to the position, contract, and years of experience in current employment.

Figure 11 Employment characteristics of respondents

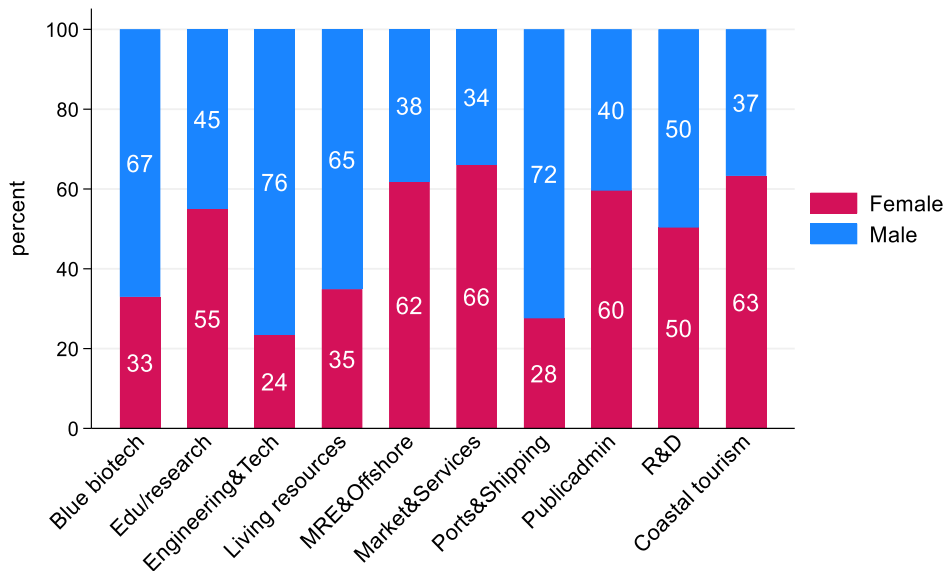


Generally, Atlantic Sea Basin respondents are well represented from intermediate to executive levels, however entry-level employees are underrepresented in this data (approximately 1% of survey respondents). In total, 90% of respondents work full-time, in either permanent (76%) or contract (14%) positions. Over 50% of respondents have worked at their current employers for more than 11 years and 8% of respondents have been employed for less than one year at their current employment. In addition, the survey elicited replies regarding periods of extended leave (such as maternity, paternity or carer's leave) and 21% of respondents had taken a period of extended leave at their current employment.

The percentage of female and male employees is relatively equally distributed across all levels, except for middle management which have a higher proportion of females than male representation in the data. The total sample of respondents in the entry-level classifications was small.

A higher percentage of male respondents have worked in their current company for more than 15 years (69% vs. 31%). In contrast, a higher percentage of female respondents (82% vs. 18%) have worked in their current company for 11 to 15 years. Similarly, a larger share of female respondents is represented among employees who have worked in their current company for less than a year or for 1 to 5 years (see Figure 11).

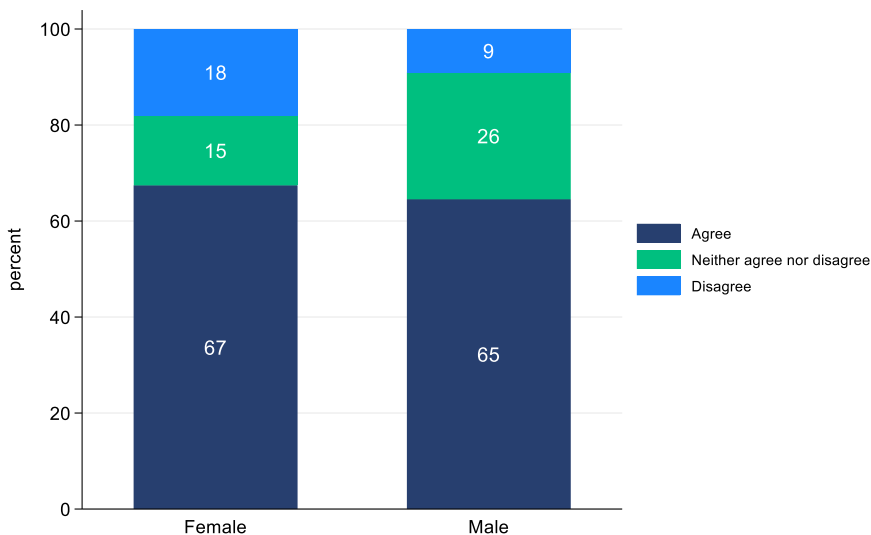
Figure 12 Atlantic Sea Basin responses to the WIN-BIG Survey question: Gender breakdown by sector



In relation to the gender breakdown across sectors Figure 12 shows a higher percentage of female respondents are in market and services (66%), coastal tourism (63%), marine renewable energy (62%) and in public administration related to the marine (60%). On the other hand, a higher number

of male respondents are in engineering and technology (76%), living resources (65%) and ports and shipping (72%) – sectors that are traditionally occupied by men.

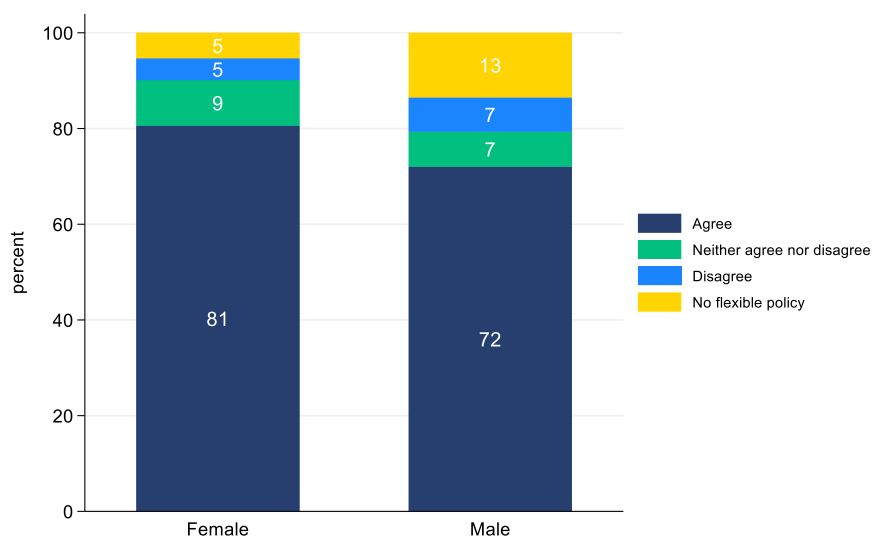
Figure 13 Atlantic Sea Basin responses to the WIN-BIG Survey question: “It is possible to strike an appropriate balance between my work and home life”



As illustrated in Figure 13, overall, 66% of respondents indicate that they can strike an appropriate work-life balance with similar responses between female and male respondents. Despite this, female respondents are twice as likely to disagree with this statement (18% versus 9%), while a higher percentage of men neither agree nor disagree.

Flexible working arrangements with fully remote or hybrid work options have become more common since the Covid-19 pandemic, to support work-life balance and operational flexibility. Figure 14 depicts responses regarding the availability of flexible working arrangements.

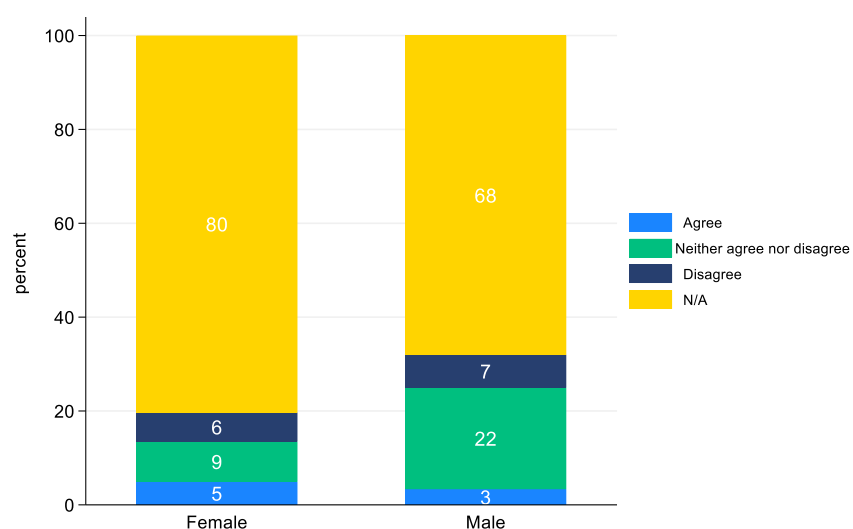
Figure 14 Atlantic Sea Basin responses to the WIN-BIG Survey question: “At my work, there are flexible working arrangements available that are suitable to my needs.”



As shown, a higher proportion of male respondents (13% male versus 5% female) work in organisations with no flexible working policy. This result suggests that flexible working arrangements may be a more important factor for females when choosing employers in these sectors. Overall, there are high levels of agreement and low levels of disagreement regarding access to flexible working arrangements.

WIN-BIG also investigated the perceived impact of carer’s leave periods on career progression. Figure 15 highlights these results, illustrating clear differences between female and male responses.

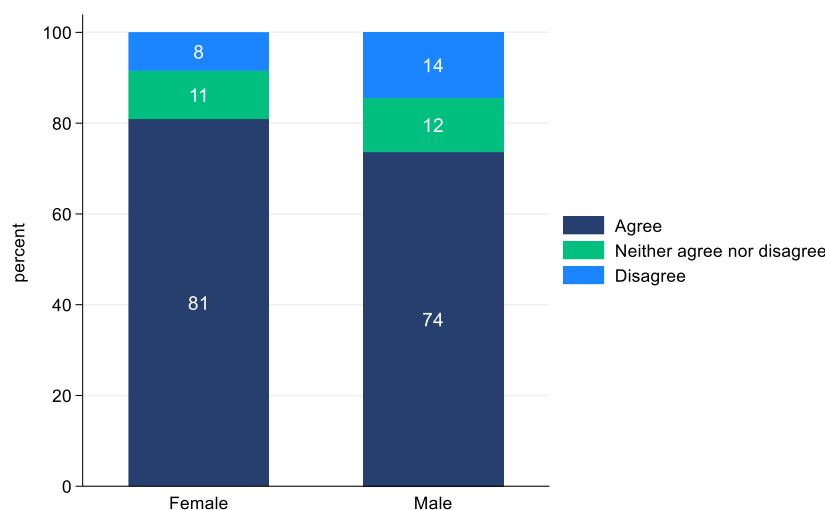
Figure 15 Atlantic Sea Basin responses to the WIN-BIG Survey question: “If you have taken carer’s leave do you believe it has had a negative impact on your career progression?”



As evident, a large proportion of male and female respondents have not taken carer's leave. Of respondents who have, only 5% of females and 3% of male respondents believe it has negatively impacted their career progression, which is positive. However, 22% of male respondents and 9% of female respondents neither agree nor disagree with this statement, which suggests that they may not know the impacts of the carer's leave on their career progression.

When investigating the prevailing Blue Economy organisational culture within the Atlantic Sea Basin the respondents report mainly positive views on the inclusivity of their organisations (shown in Figure 16).

Figure 16 Atlantic Sea Basin responses to the WIN-BIG Survey question: "The prevailing culture and atmosphere in my organisation/firm is inclusive and friendly to all."



Of note, female respondents report higher levels of agreement (81% female versus 74% male) and lower levels of disagreement (8% versus 14% male) regarding the inclusivity of their workplace. While it is speculative, it may be the case the females are more likely to seek employment in organisations that have a positive work culture.

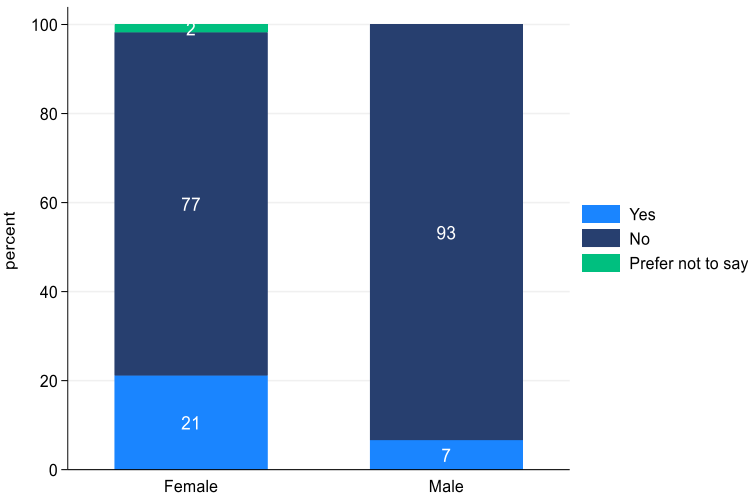
# GENDER CULTURE OF THE ORGANISATION

The WIN-BIG survey also assessed the respondents' perceived experiences of gender discrimination and harassment in the industry and sector. The perception of gender discrimination in the workplace is described as a perception of being deprived of opportunities at an employee's workplace and is distinct from sexual harassment (del Carmen Triana et al., 2019). Discrimination refers to any systematic unfair treatment of an individual or group based on personal or social circumstances and characteristics (Ramos Martín, 2014). In addition, studies refer to mobbing, bullying and harassment that need to be tackled at the societal and institutional level as these can negatively affect individual's work performance, and may result in women quitting their jobs (Dogg and Jonsdottir *et al.*, 2022; Lorient, Dassisti, and Grattagliano, 2020).

Gender-based harassment in maritime transport and seagoing oceanography has been acknowledged as a issue that acts as a barrier to women's participation in these industries (Dragomir, 2019; European Parliament, 2023; Boström and Österman, 2022; Legg *et al.*, 2023). Studies note that through understanding the value and meaning of diversity, equity and inclusion, leaders of organisations can create an environment where all people feel recognized, have access to resources and opportunities and can create new innovations and solutions (Ashikali and Groeneveld, 2015; Coleman and Taylor, 2023).

The results obtained about the perception of gender discrimination, experience of harassment and leadership commitment to diversity, equity and inclusion are depicted in the next figures.

Figure 17 Atlantic Sea Basin responses to the WIN-BIG Survey question: "I have experienced gender discrimination within my organisation/firm."



As illustrated in Figure 17, a much higher percentage of female respondents (21% female versus 7% male) have experienced gender discrimination within their organisation suggesting that gender inequality is still an issue in EU Blue Economy organisational culture and practices.



Figure 18 also shows a much higher percentage of female employees having witnessed gender discrimination compared to male respondents (37% female versus 16% male).

Figure 18 Atlantic Sea Basin responses to the WIN-BIG Survey question: “I have witnessed gender discrimination within my organisation/firm.”

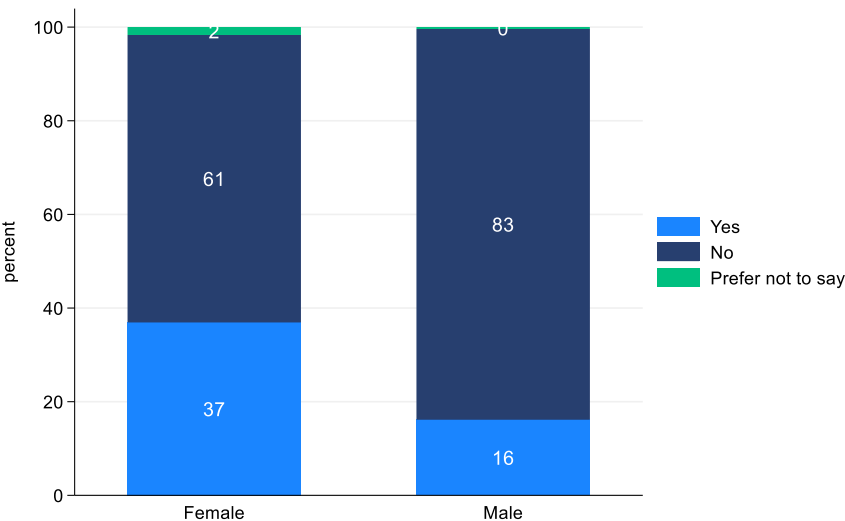


Table 6 Atlantic Sea Basin responses to the WIN-BIG Survey question: “Experience of harassment at organisation and industry levels”

Experience of Harassment			
	Yes <sup>16</sup>	% Female	% Male
Have you suffered any of the following forms of harassment in your firm/organisation?	31%	46%	15%
Have you suffered any of the following forms of harassment in your industry more generally? <sup>17</sup>	38%	42%	35%

Table 6 shows that a relatively high proportion of Atlantic Sea Basin respondents have suffered some form of harassment. For instance, one-third of all respondents have been harassed within their own organisation and almost 40% of respondents report having experienced harassment in the wider industry. A much higher percentage of female respondents (46% female versus 15% male) have suffered some form of harassment within their firms/organisation. However, regarding the sector more generally, while more female respondents have been subjected to harassment, a sizeable

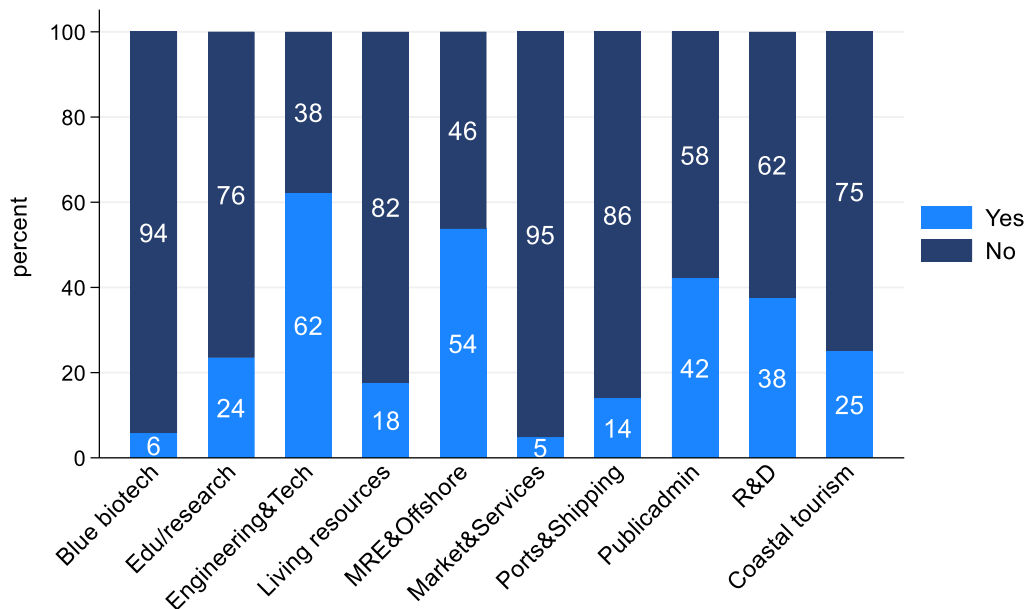
<sup>16</sup> Respondents could choose the following forms of harassment (tick all that are relevant): Offensive jokes or slurs, Physical assaults or threats, sexual assaults or threats, intimidation, insults or put-downs, stalking, other (please state).

<sup>17</sup> the question on forms of harassment in industry more generally was introduced in the survey 3 months later from the launch. Therefore, the sample for this question is smaller and equals to 328.

portion of men have likewise been subjected to it, suggesting that harassment in the industry is an issue affecting both genders, though women are more affected (42% female versus 35% male).

Figure 19 presents the breakdown of the proportion of the respondents who answered that they have experienced harassment at organisation level. The highest proportion can be observed in engineering and technology (62%), marine renewable energy and offshore exploration (54%), public administration related to the marine (42%) and in R&D related to the marine (38%).

Figure 19 Atlantic Sea Basin responses to the WIN-BIG Survey question: “Experience of harassment at organisation level” broken down by sector



On the industry level, the distribution of the percentage of respondents who experienced harassment across the sectors is somewhat different from the organisation level (see Figure 22). The highest percentage of harassment is observed among the respondents in marine renewable energy and offshore exploration (70%), followed by research and marine education (69%) and engineering and technology (61%).

Figure 20 Atlantic Sea Basin responses to the WIN-BIG Survey question: “Experience of harassment at industry level” broken down by sector

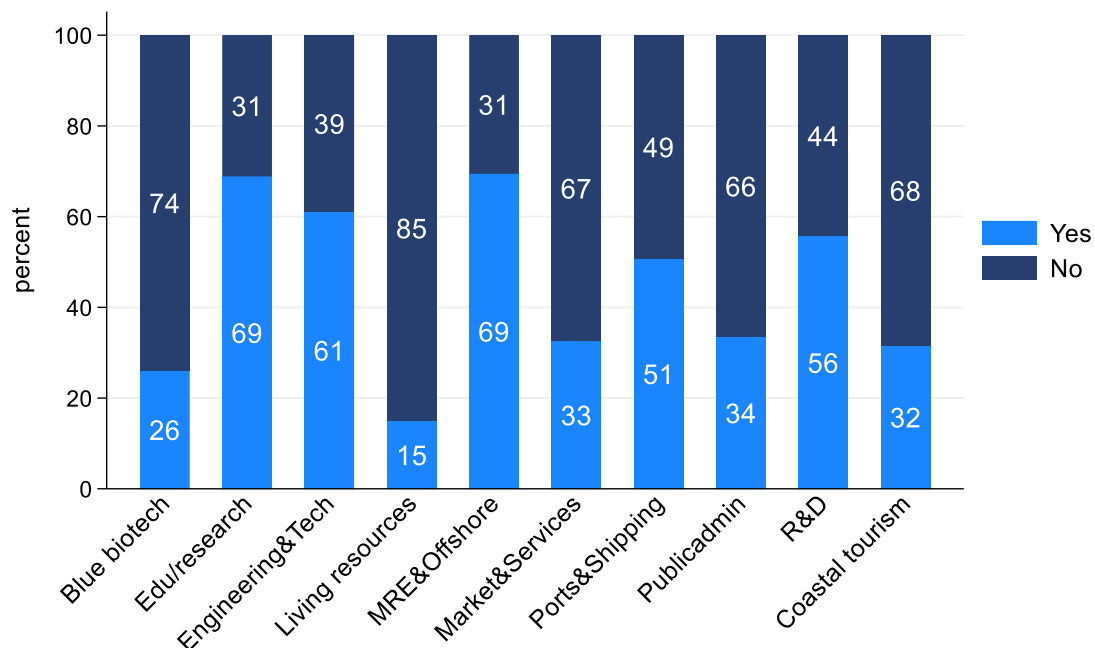
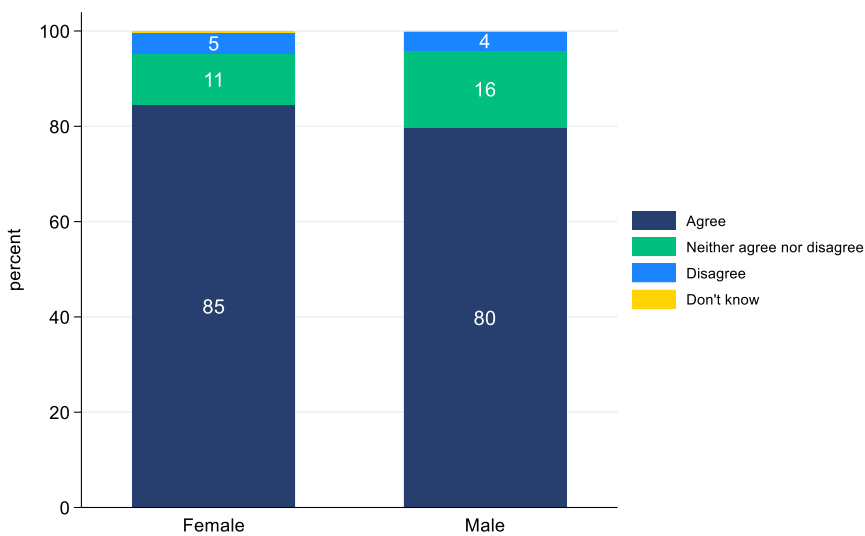


Figure 21 displays Atlantic Sea Basin respondents’ views on internal leadership commitments to gender equality, diversity and inclusion (EDI), within their organisation. Generally, both male and female respondents report that leadership within their organisation is committed to gender EDI with 5% or less of respondents disagreeing with this statement.

Figure 21 Atlantic Sea Basin responses to the WIN-BIG Survey question: “Leadership in my organisation/firm is committed to Gender Equality, Diversity and Inclusion”



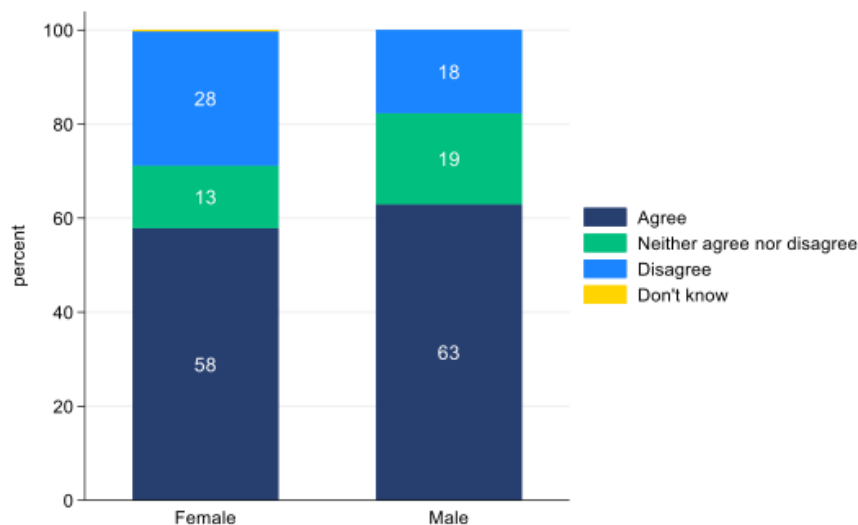
## PERCEPTION OF OPPORTUNITIES

In this section the results about the perception of available opportunities at respondents' workplace are presented. The survey included questions on the availability of career growth opportunities, such as access to training and mentorship.

Previous studies note that training and mentorship programmes fill the gap between knowledge and action and play a positive role on career outcomes (Martini and Cavenago, 2016; Wikström et al., 2023). Workplace training is also acknowledged as a lifelong learning process that realises the potential for skills development, especially in light of the need of new skills due to technology change and digitalisation (Lucas, Pinnington, Cabeza, 2018; Tikkanen, Hovdhaugen and Støren, 2018). The existing literature also refers to the importance of training and mentorship to ensure gender equality. First, studies note that women face multiple obstacles such as lack of networks, support from colleagues, non-transparent rules of promotion and recruitment and work-family conflicts, and thus training and mentoring programs are important to close the skills gap between men and women (Górska and Burlakova, 2025; Holzinger et al., 2019; Roosmaa and Saar, 2023). Second, the literature argues that in certain sectors of economy, such as for example in STEM, women face stereotypes and, thus mentorship programs are important as they empower women and create an environment where women are given equal opportunity to men to develop as leaders (Barabino et al., 2020). Shellock et al. (2022) find that encouragement and support from superiors, mentorship, training and coaching are important enablers to overcome gendered barriers, such as lack of trust, leading to the acceptance of women leaders. Mentoring programs are important, especially in masculine fields, as such programs can guide and train all the across—gender workforce to accept women to senior positions or on corporate boards (Varriale, Buonocore and Ferrara, 2016). Finally, the literature from the EU blue economy argues that to bridge the gender gap in sectors such as marine renewable energy and maritime transport that is in its transition towards technological advancements and automation, training is necessary in energy-related areas and technical skills (Clancy, and Feenstra, 2019; Di Vaio, 2023; Kim et al, 2019).

Given these factors, this section of the report documents respondents' views related to training, mentorship and career opportunities. Figure 22 shows the survey results for the broad question on access to the opportunities.

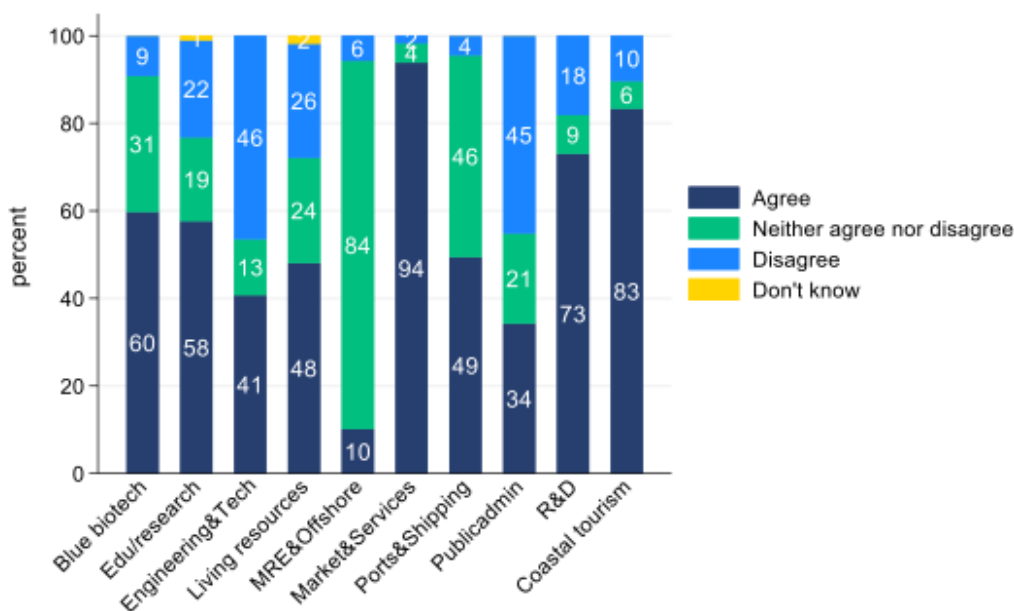
Figure 22 Atlantic Sea Basin responses to the WIN-BIG Survey question: "I have access to the opportunities I need to support my career's aspirations."



More than half of respondents (60%) believe these have opportunities available to support their career aspirations. The percentage of positive responses is slightly lower among female respondents (58% of females), compared with male respondents (63%).

Across the blue economy industries (see Figure 23), there is more variation. For example, there is a high percentage of negative responses in engineering and technology (46%), public administration (45%) and in living resources (26%).

Figure 23 Atlantic Sea Basin responses to the WIN-BIG Survey question: "I have access to the opportunities I need to support my career aspirations: broken down by sectors."



When studying the emerging sectors, we can observe that 84% of respondents in the marine renewable energy sector chose “neither agree nor disagree” and 6% chose “strongly disagree/disagree” option. It is possible that the emerging sector of marine renewable energy is still perceived to be in development, and the employees are unsure about opportunities for their career growth. In the emerging sector of blue biotechnology, a significant percentage (31%) of respondents chose “neither agree nor disagree”. A similar high percentage of a neutral response is observable in the traditional sector of ports and shipping (46%). It is possible that apart from the lack of opportunities, employees might also not be aware of the availability of existing opportunities.

In marine public administration, 46% disagreed and 21% gave a neutral response. In research and marine education (third level), 22% chose “strongly disagree/disagree” options and 19% chose the neutral option

*Figure 24 Atlantic Sea Basin responses to the WIN-BIG Survey question: “I have access to the opportunities I need to support my career aspirations: breakdown of responses across types of organization.”*

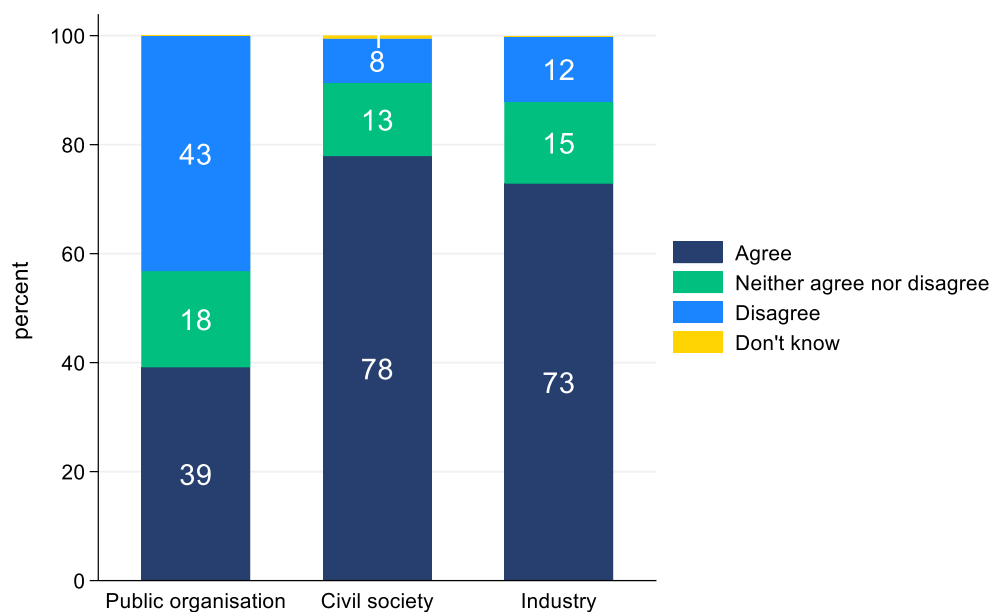
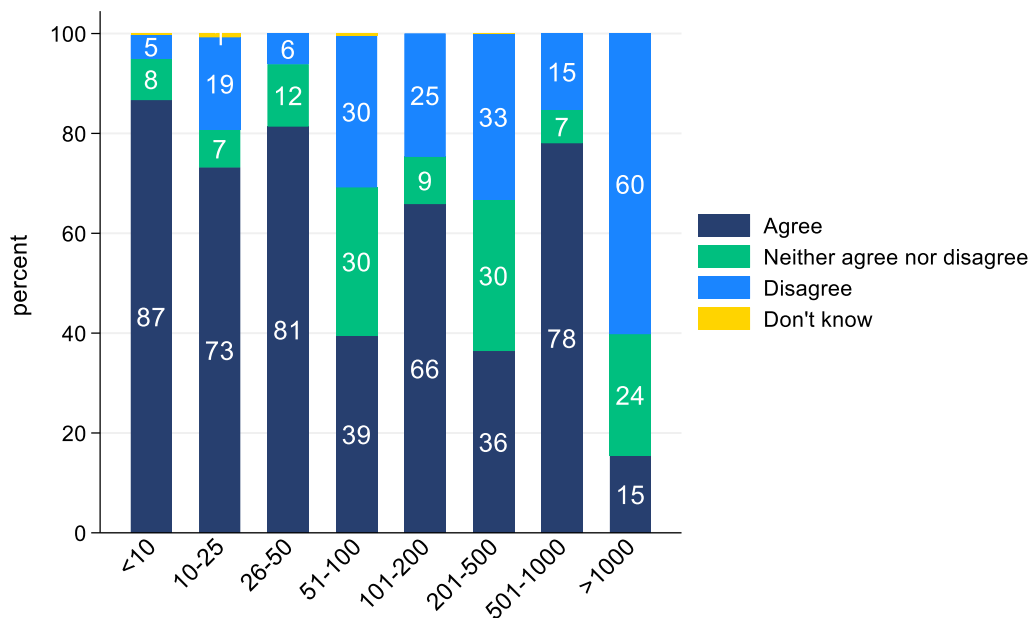


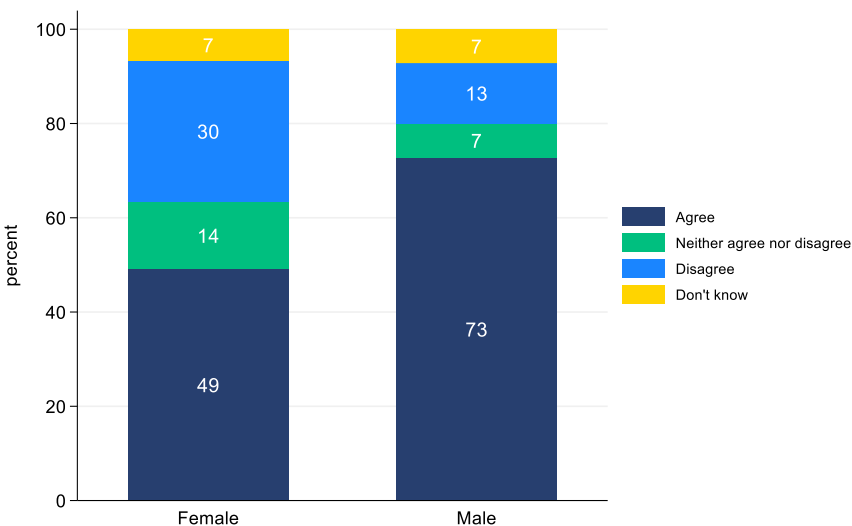
Figure 24 illustrates the availability of access to opportunities across the types of organisations. A higher percentage of negative responses is observed in public organisations (43%).

Figure 25 Atlantic Sea Basin responses to the WIN-BIG Survey question: “I have access to the opportunities I need to support my career aspirations: breakdown of responses across organisations of different size.”



Across organisations of different sizes (see Figure 25), a lower percentage of negative responses is observed in organisations with fewer than 10 employees, between 10 and 25 employees, or between 25 and 50 employees. In organisations with more than 1,000 employees, 60% of employees disagreed that they had opportunities to support their career aspirations.

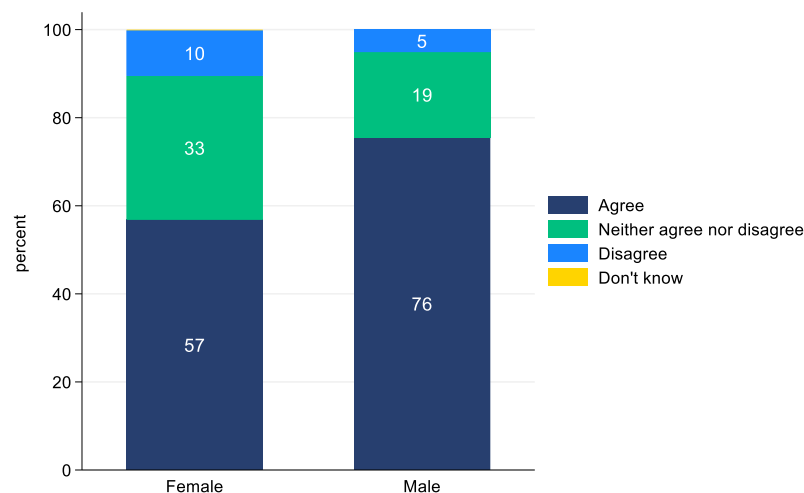
Figure 26 Atlantic Sea Basin responses to the WIN-BIG Survey question: “The process of applying for an internal vacancy is fair and transparent?”



As shown in Figure 26, 60% of respondents agreed to the statement “The process of applying for an internal vacancy is fair and transparent”. Men are far more positive about fairness and transparency

in internal hiring processes. Women express higher levels of disagreement and neutrality, suggesting possible differences in experiences and perceptions of internal hiring across genders.

Figure 27 Atlantic Sea Basin responses to the WIN-BIG Survey question: “I have access to the training I need to support my career aspirations.”



In total, 65% of respondents agree with the statement “I have access to the training I need to support my career aspirations” (Figure 27). Men perceive stronger support for their career development than women do (almost 20% higher agreement). A third of women remain neutral, which reveals that they might not be aware of available training opportunities. Twice the percentage of women disagree that training access exists (10% females versus 5% males).

On the other hand, regarding the assertion, “I have access to the mentoring (formal or informal) I need to support my career aspiration”, the majority of respondents (65%) affirmed this view with small gender differences. Males show more neutrality (22%) than females (19%), indicating slightly more uncertainty about mentoring availability or effectiveness. However, the difference between male and female responses is very small (Figure 28).



Figure 28 Atlantic Sea Basin responses to the WIN-BIG Survey question: “I have access to the mentoring (formal or informal) I need to support my career aspirations.”

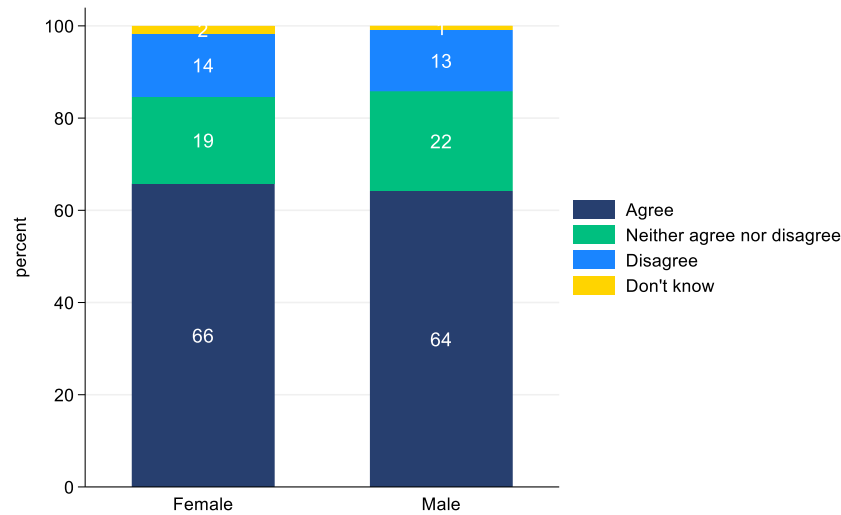
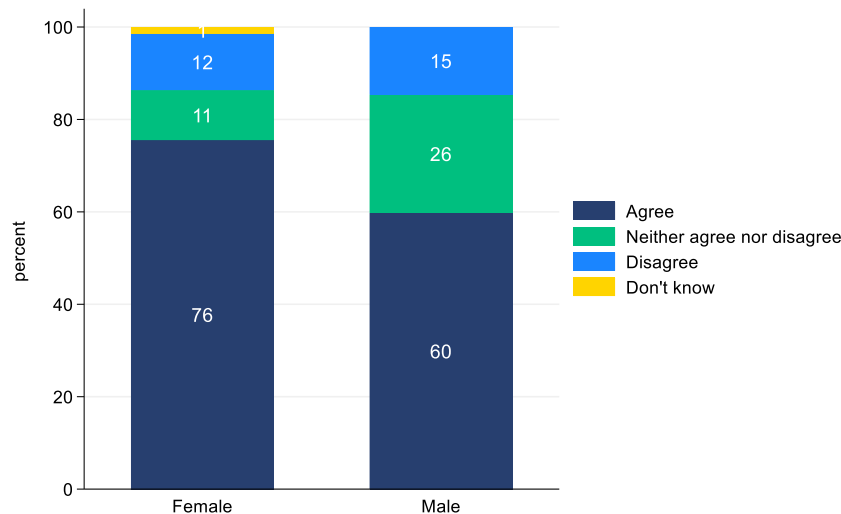


Figure 29 Atlantic Sea Basin responses to the WIN-BIG Survey question: “My direct supervisor supports my career aspirations.”



As shown in Figure 29, more than half of respondents (68%) reported agreement with the statement “My direct supervisor supports my career aspirations”. A notably higher percentage of female respondents (76%) feel more supported than male respondents (60%). On the other hand, 26% of males selected “Neither agree nor disagree” - more than double the percentage of females (11%). This could reflect uncertainty, inconsistency, or a lack of communication between male respondents and their supervisors regarding their career aspirations. The slightly higher disagreement among males additionally shows more dissatisfaction.

Table 7 summarizes the biggest challenges to progression respondents have faced in pursuing a career in their industry as indicated by respondents in the survey. Respondents were asked to rank the top four where one is/was the biggest challenge and four is/was the fourth biggest<sup>18</sup>.

Table 7 Atlantic Sea Basin responses to the WIN-BIG Survey question: “What are/were the biggest challenges to progression you have faced in pursuing?”

Challenges			
			Percentage
Ranked 1 <sup>st</sup> :	Lack of promotion opportunities		69%
Ranked 2 <sup>nd</sup> :	Position requires travel		55%
Ranked 3 <sup>rd</sup> :	Work-life balance		34%
Ranked 4 <sup>th</sup> :	Lack of organisational support		17%

Nearly 70% of respondents identified a lack of promotion opportunities as the primary barrier to their career progression. Interestingly, travel requirements were ranked as the second biggest challenge. Followed by work-life balance and then lack of support (17%).

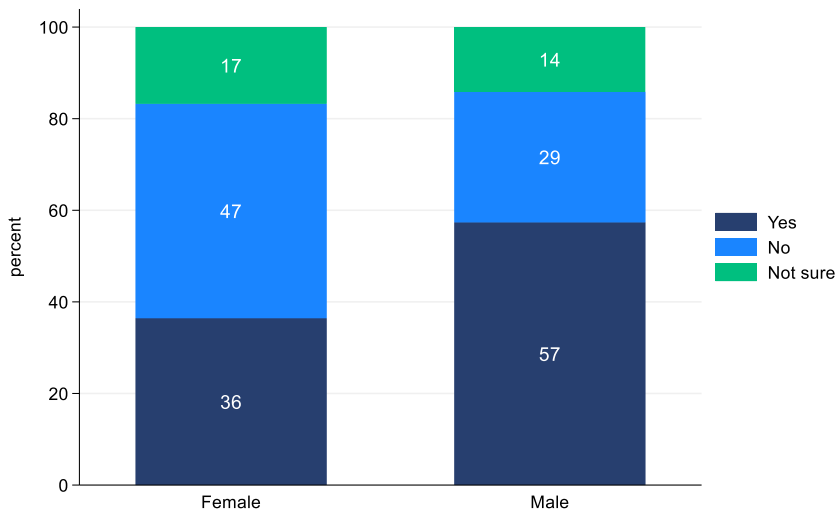
<sup>18</sup> Following choices were available in the survey: lack of education/training, lack of support, lack of promotion opportunities, position requires travel, gender discrimination, family commitment, lack of relevant experience, work-life balance, market forces & competition, other reason (please state).

# GENDER BIAS POLICIES AND FRAMEWORKS IN THE WORKFORCE

To identify the prevalence and use of policies that might support gender equality, the survey also asked respondents about the existence of formal organization/firm policies and rules for gender balance in hiring and career promotion, or the existence of internal gender plans at their workplaces. Gender parity laws on Boards of Directors, incorporation of gender mainstreaming into policies, policies on work-life balance are recognized factors that can promote gender equality (Alonso Gallo and Gutiérrez López, 2023; Casey, Skibnes and Pringle, 2011).

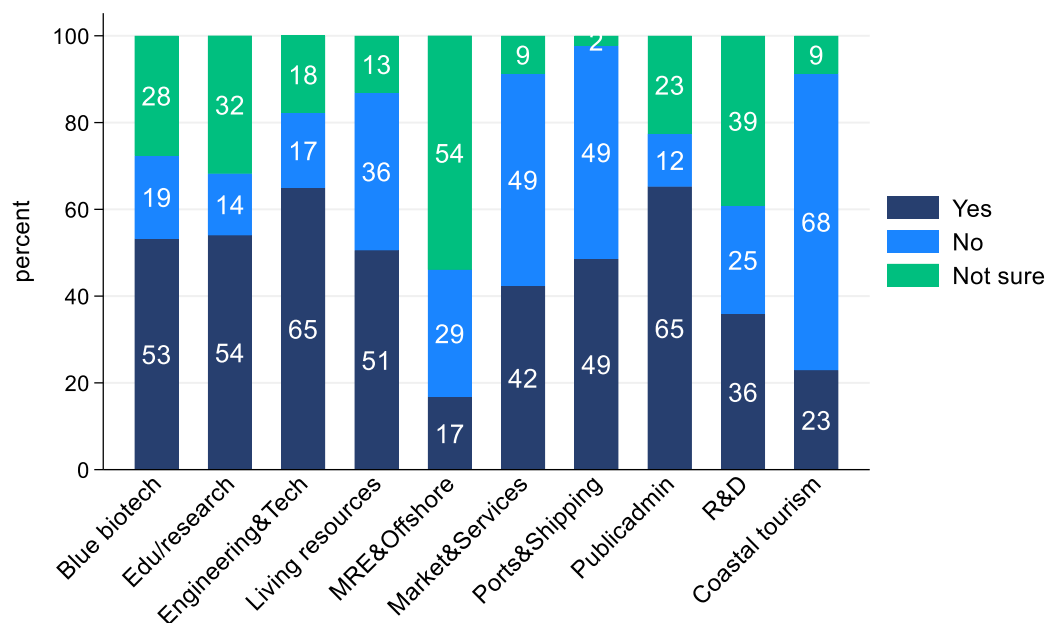
Figure 30 shows that regarding formal strategies or policies related to gender balance in hiring, 45% of the total respondents answered positively, 39% negatively and 16% were not sure.

Figure 30 Atlantic Sea Basin responses to the WIN-BIG Survey question: “Does your firm/organisation has a strategy or formal policy related to gender balance in hiring processes?”



There is a difference in the responses among female and male respondents. Almost half of the female respondents (47%) answered that their organisation does not have a policy/strategy related to gender balance in hiring processes compared to 29% of male respondents. A high percentage of negative responses by female respondents indicates that the hiring process remains less equitable.

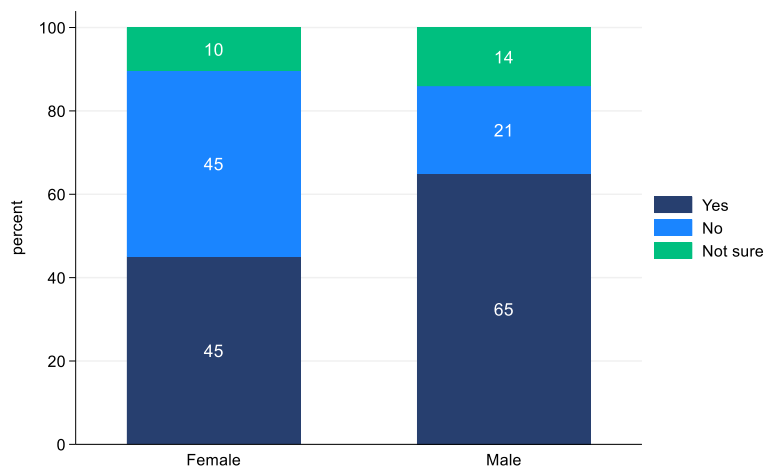
Figure 31 Atlantic Sea Basin responses to the WIN-BIG Survey question: “Does your firm/organisation has a strategy or formal policy related to gender balance in hiring processes? (Broken down by sector)”



Across the blue economy sectors (see Figure 31), a high percentage of employees working in coastal tourism (68%), living resources, ports and shipping (49%), markets and services (49%) and living resources (36%) answered that their organisation does not have a policy related to gender balance in hiring. The percentage of respondents who chose “not sure” option is high in marine renewable energy (54%), R&D (39%), education and research (third level) (32%) and in blue biotechnology (28%).

Figure 32 displays the results on whether respondents’ organisations had a formal gender policy/plan.

Figure 32 Atlantic Sea Basin responses to the WIN-BIG Survey question: “Does your firm/organisation have a formal gender policy/plan?”



In total, 35% of respondents reported that their organisation does not have a formal gender policy or plan. There is a noticeable variation in responses by gender: almost half of female respondents (45%) indicated that their organisation lacks a gender policy, compared to only 21% of male respondents. Two possible explanations can be considered. First, men may be less aware of existing gender inequalities and therefore assume that appropriate gender policies are in place. Second, men might perceive that women are more favourably treated than how they actually are in reality.

Across the blue economy industries (see Figure 33), 57% in coastal tourism, 47% of respondents in ports and shipping, 45% in market and services reported that their organisation does not have a formal gender policy plan. Uncertainty about its existence is found in marine renewable energy (71%), blue biotechnology (31%) and in living resources (29%). The absence of gender policies may have a negative impact on the career growth of female employees.

Figure 33 Atlantic Sea Basin responses to the WIN-BIG Survey question: “Does your firm/organisation have a formal gender policy/plan? (broken down by sector)”

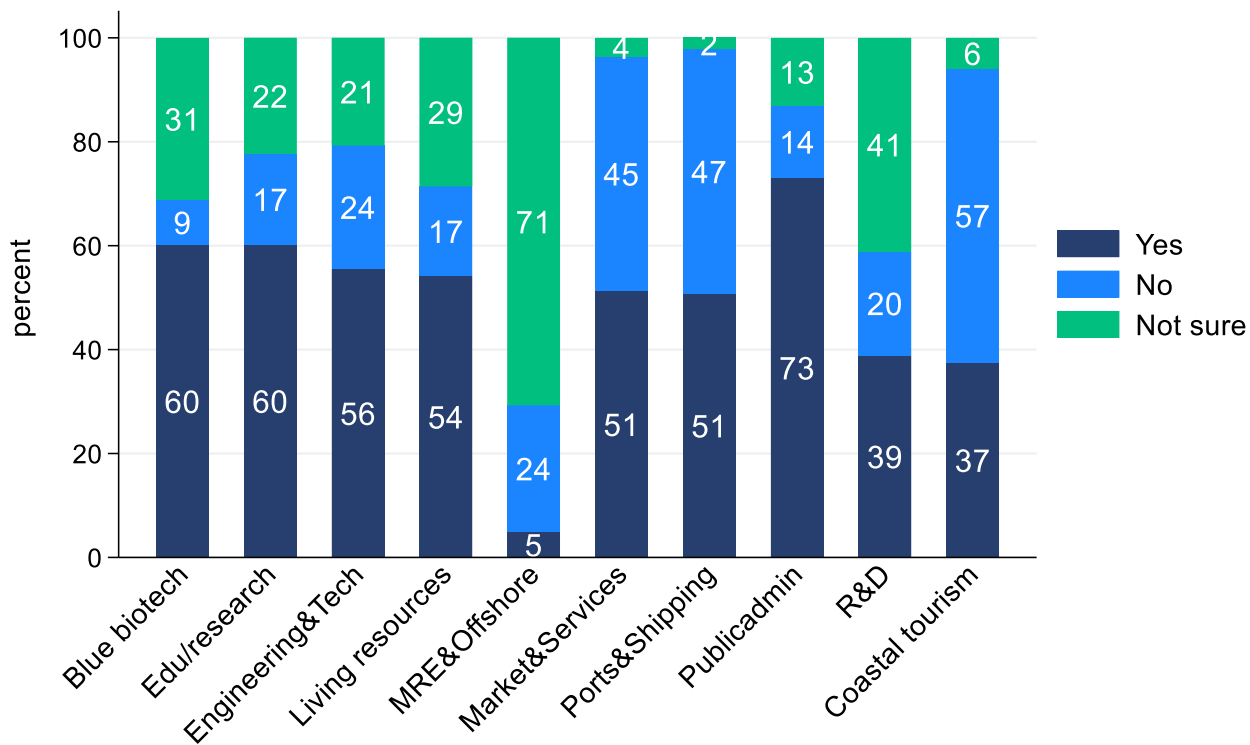
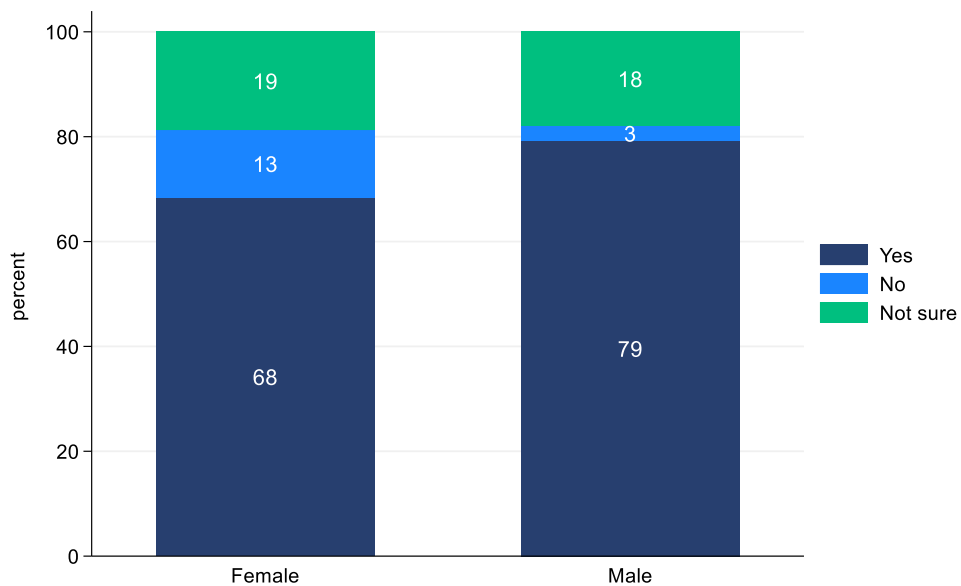


Figure 34 Atlantic Sea Basin responses to the WIN-BIG Survey question: “Does your firm/organisation formally or informally support the promotion and advancement of women?”

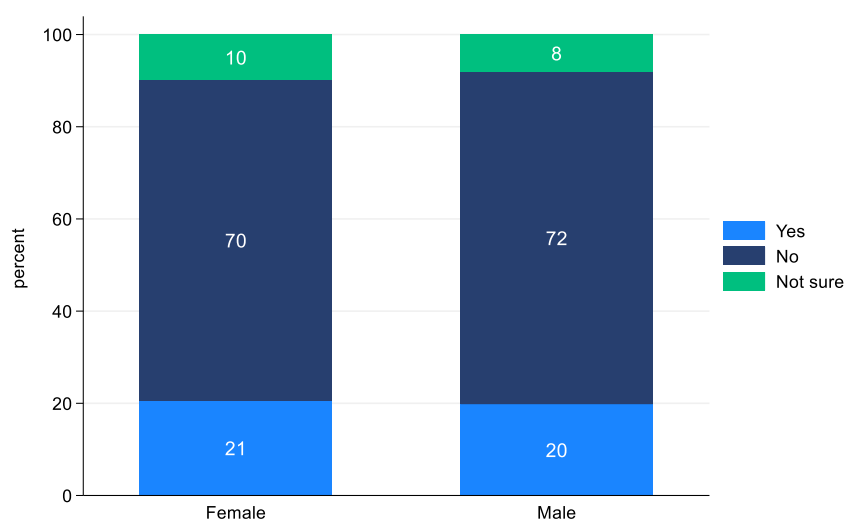


When questioned about the existence of formal or informal support to the promotion of women, responses were somewhat different across genders. As shown in Figure 34, 68% of female respondents and 79% of male respondents perceive their organisation as supportive of women's career growth. Only 3% of men said "No", compared to 13% of women. This disparity suggests that some women may not fully trust the organisation's commitment to their advancement. Uncertainty from nearly 18% of respondents (both male and female) also suggests a lack of clarity or visibility around what specific support exists and how it is applied in practice for these respondents.

## PERCEPTION OF BARRIERS

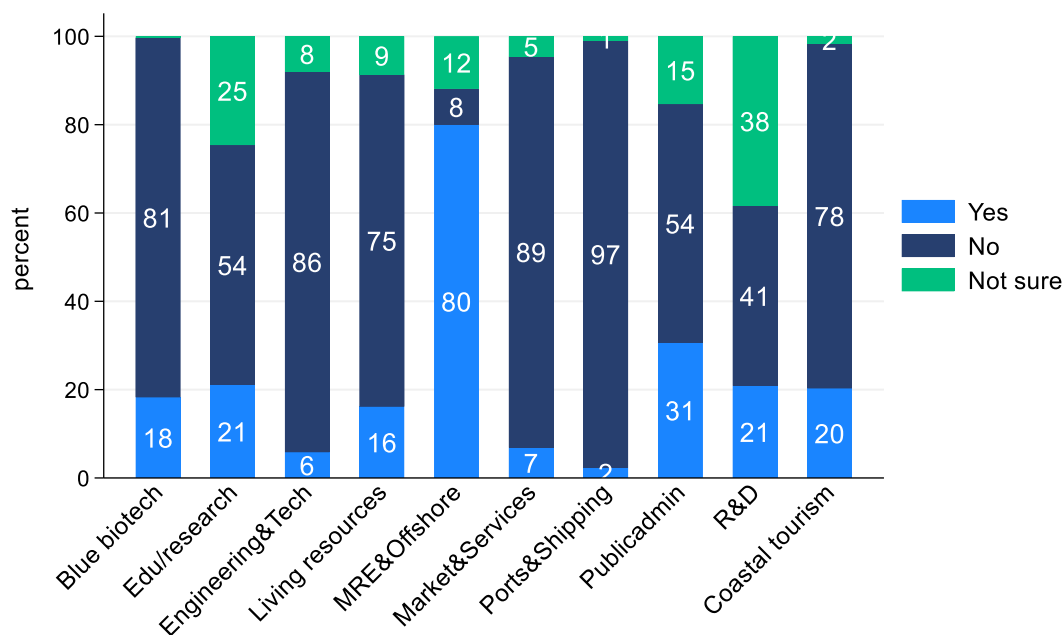
Similarly to the analysis of perceived opportunities, the WIN-BIG survey also asked respondents about their perception of barriers to career progression within their organisations/firms and across industries and sector. This section also presents the results on whether the respondents' companies have female managers and role models. According to Turesky and Warner (2020) companies with female-managers have greater gender sensitivity, more flexible work-life benefits and perceived equal opportunities. An increased of share of female top managers is also associated with subsequent increases in the share of women in midlevel management positions (Kurtulus and Tomaskovic-Devey, 2012). Studies also find that female role models reduce stereotype threat and positively impact women's career-related engagement (Cortland and Kinias, 2019; Sealy and Singh, 2010).

*Figure 35 Atlantic Sea Basin responses to the WIN-BIG Survey question: "In your opinion, do barriers exist preventing women being promoted to senior positions in your firm/organisation?"*



As shown in Figure 35, approximately 20% of respondents answered that there are barriers preventing women being promoted to senior positions. In this particular question, both genders have similar perceptions.

Figure 36 Atlantic Sea Basin responses to the WIN-BIG Survey question: “In your opinion, do barriers exist preventing women being promoted to senior positions in your firm/organisation? (broken down by sector)”

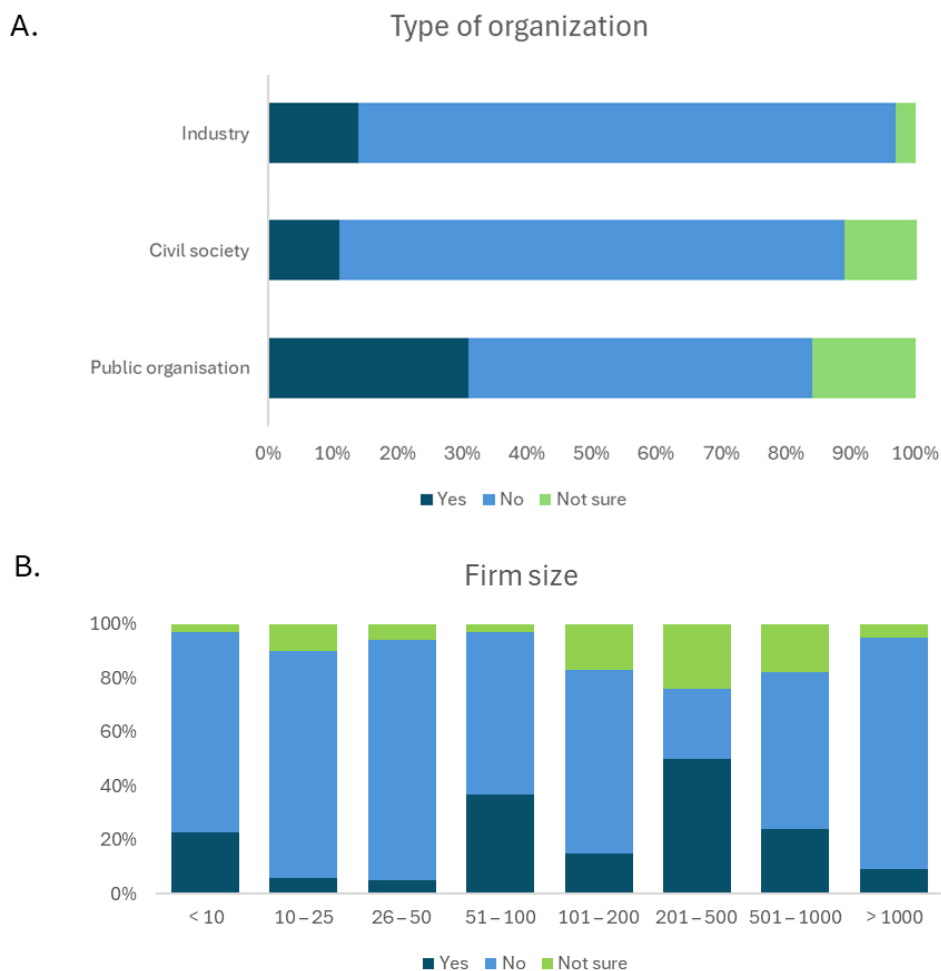


When studying the question across the blue economy sectors, we can observe that a large proportion of respondents in the marine renewable energy sector (80%) reported that barriers exist preventing women from being promoted to senior positions. This was followed by 31% in marine-related public administration, 21% in research and higher (third-level) marine education, and 21% in marine-related R&D. In the emerging biotechnology sector, 18% of respondents shared this view, while in coastal tourism the figure was 20% (Figure 36).

Figure 37 presents the breakdown of the question on barriers by the type of organisation and firm size. Across the types of organisations, a higher percentage (31%) of employees in public administration think that there are barriers for females being promoted to senior positions, compared to employees in civil society and industry.



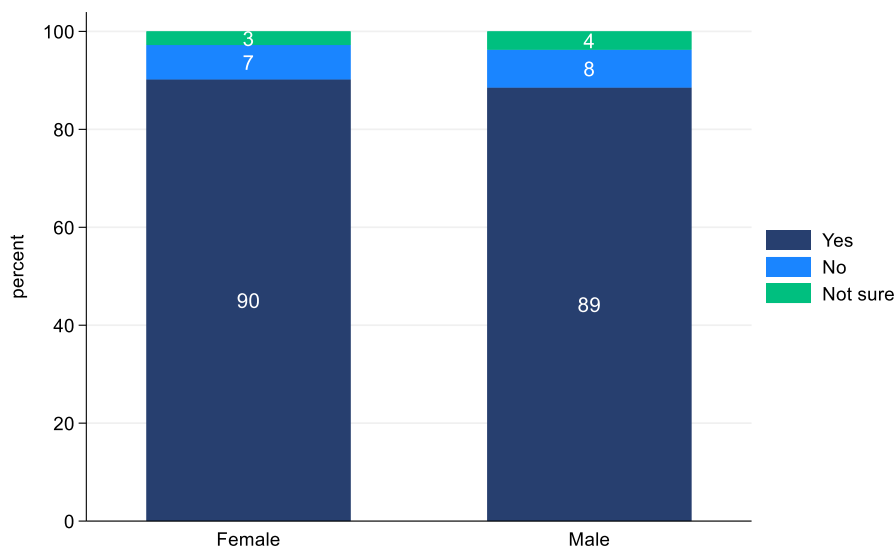
Figure 37 Atlantic Sea Basin responses to the WIN-BIG Survey question: “In your opinion, do barriers exist preventing women being promoted to senior positions in your firm/organisation?” (broken down by type of organisation (A) and firm size (B))



When studying the size of the organisations, we can observe that in firms that have 201-500 or 501-1000 employees, the percentage of negative responses is 50% and 24% respectively. Approximately 37% of respondents who work in firms between the sizes of 51-100 employees think there are barriers.

When assessed from a different perspective, on whether respondents' organisations include women in managerial positions, approximately, 90% of respondents mentioned that they have a woman manager in their organisations (with almost no gender difference in responses). Figure 38 illustrates this result.

Figure 38 Atlantic Sea Basin responses to the WIN-BIG Survey question: “Do you have any women managers in the firm/organisation?”



This is an interesting result, given that women are underrepresented in certain blue economy industries, especially at senior levels. Figure 39 shows that the lowest percentage of those who answered that they have female managers work in ports and shipping (24%), market and services (14%) and in living resources (11%).

Figure 39 Atlantic Sea Basin responses to the WIN-BIG Survey question: “Do you have any women managers in the firm/organisation? (broken down by sector)”

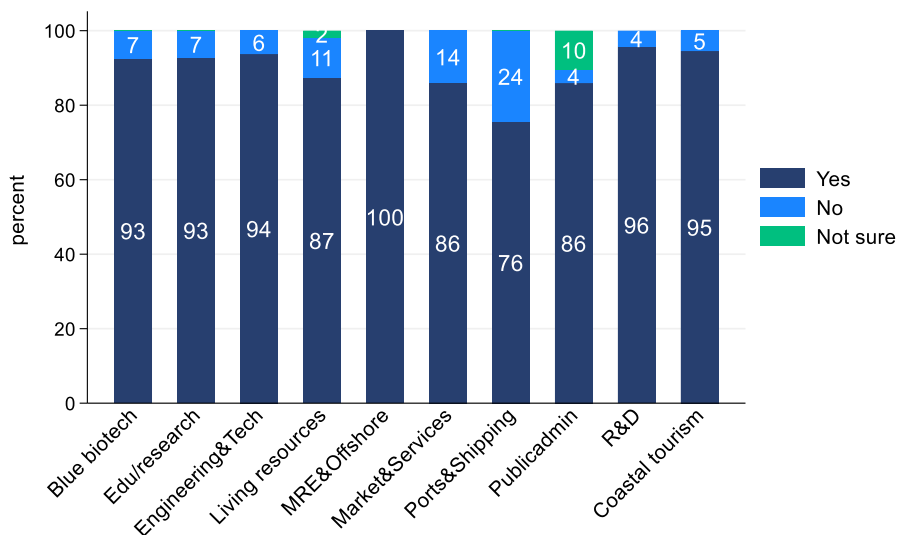


Figure 40 presents the question on whether the employees have women managers broken down by type of organisation and firm size. Across the type of organisation, the percentage of employees who said that they do not have female managers is the highest (25%) among those working in civil society organisations. The variation is not high across the firm sizes. The lowest percentage of those

who answered that they have a female manager is in firms with less than 10 employees (83%) and in firms with 201-500 employees (77%).

Figure 40 Atlantic Sea Basin responses to the WIN-BIG Survey question: “Do you have any women managers in the firm/organisation?” (broken down by organisation type (A) and firm size (B))

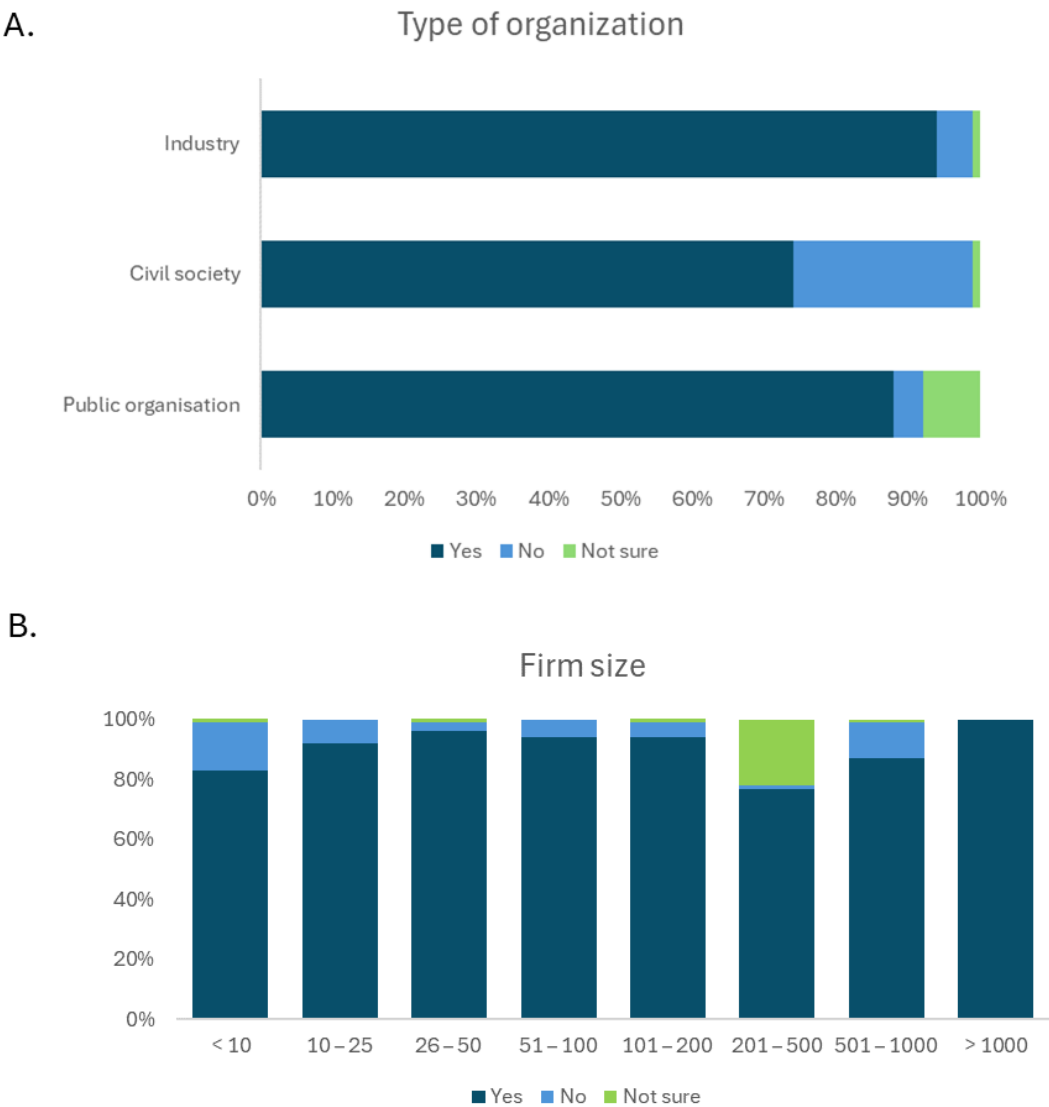
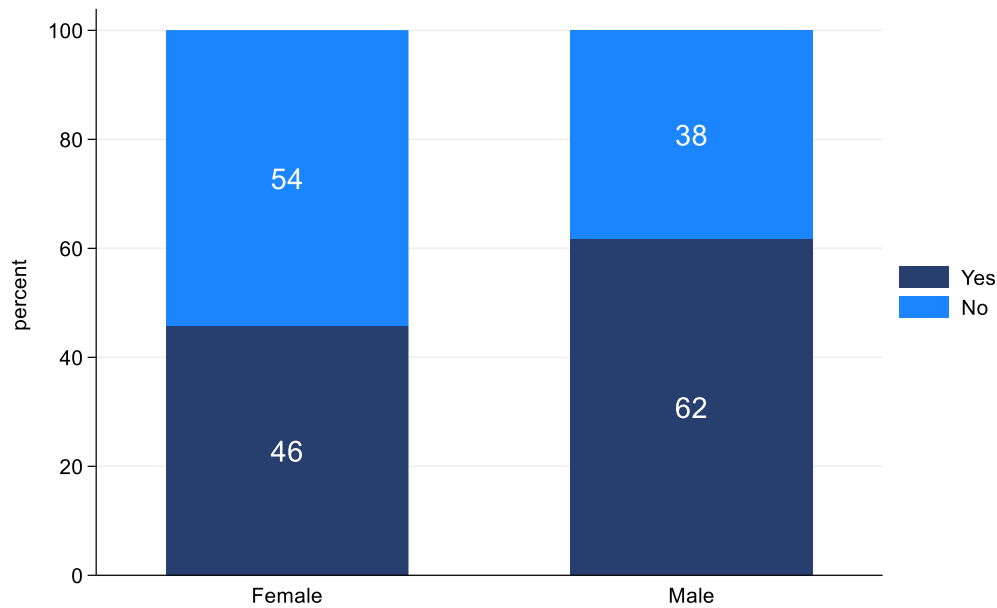


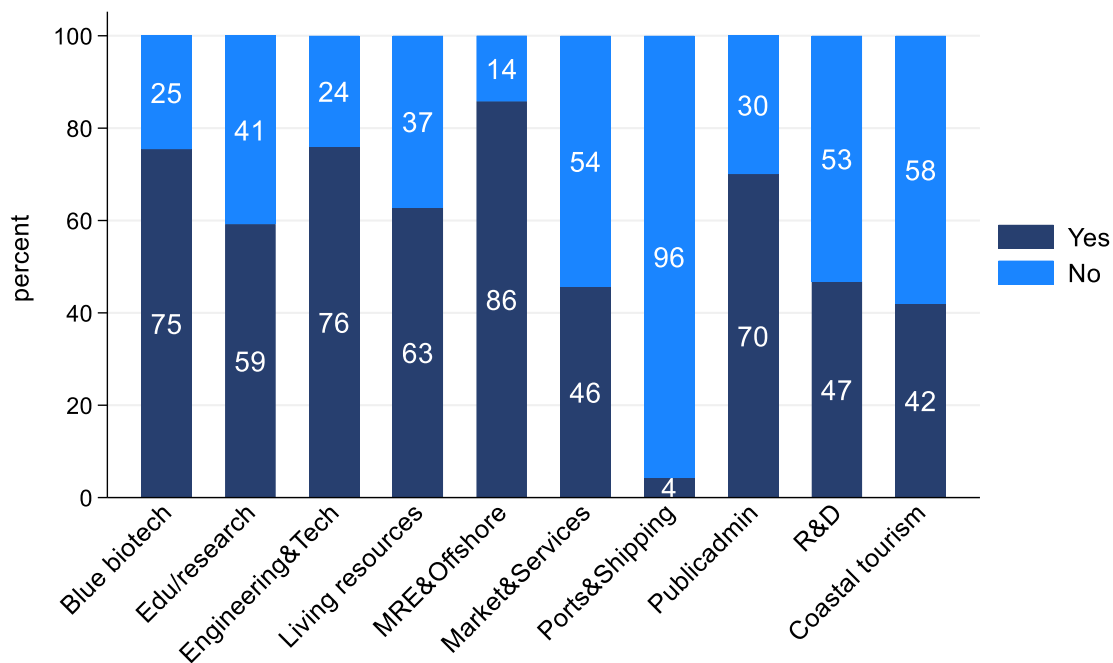
Figure 41 Atlantic Sea Basin responses to the WIN-BIG Survey question: “Do you personally have any women role models in the firm/organisation?”



Compared to the question on female managers, a more negative responses are observable when it comes to the presence of female role models across organisations (Figure 41). Only 46% of women compared to 62% of men reported having female role models within their organisations. This is most likely due to the underrepresentation of women in blue economy organisations. It may be the case that while some female managers exist within the organisations, they may not actively act as role-models to employees or there may be too few to play this role.

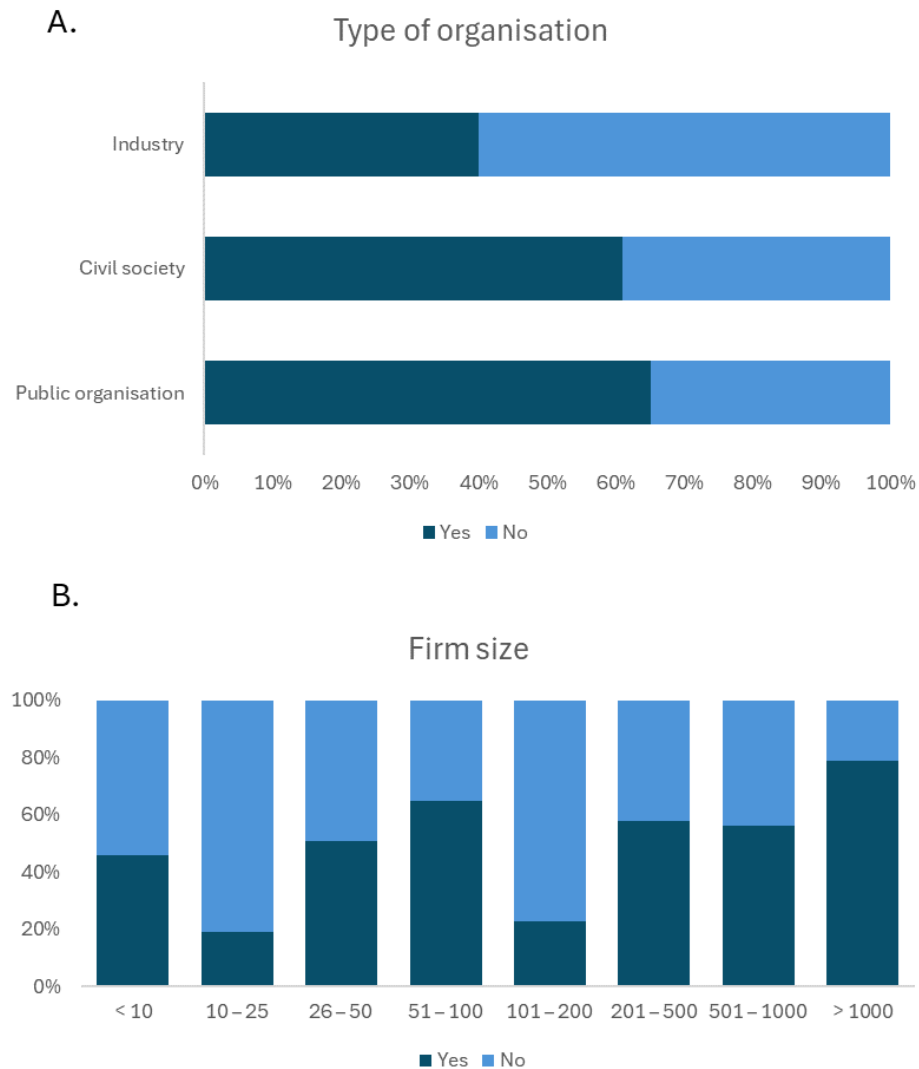
As shown in Figure 42, 96% of respondents in ports and shipping answered that they do not have a female role model. This percentage is also high among the employees in coastal tourism (58%) and in market services (54%) and R&D (53%)

Figure 42 Atlantic Sea Basin responses to the WIN-BIG Survey question: “Do you personally have any women role models in the firm/organisation? (broken down by sector)”



Across the types of organisations, a higher percentage (60%) of employees answered negatively compared to those working in public organisations or civil society (Figure 43).

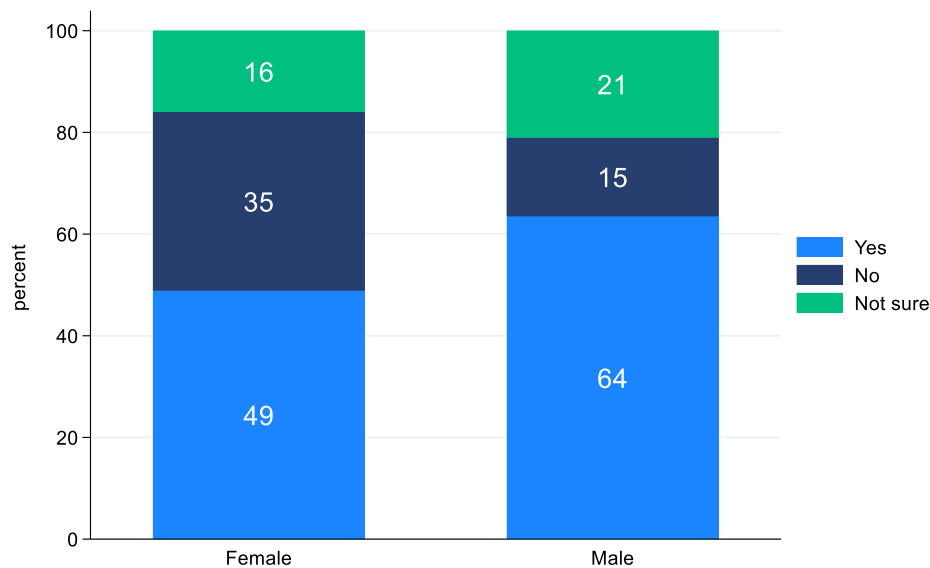
Figure 43 Atlantic Sea Basin responses to the WIN-BIG Survey question: “Do you personally have any women role models in the firm/organisation?” (broken down by organisation type (A) and firm size (B))



By studying the answers across the different firm sizes, a higher percentage of employees in larger organisations seem to have female role models. For example, in organisations with over 1000 employees, 79% of respondents answered they have a women role model, while in smaller companies with less than 10 employees or between 10 to 25 employees, the percentage of respondents who have women role models was 46% and 19% respectively

WIN-BIG investigated whether the social structures in place in each member state are perceived to impact the progress of gender equality.

Figure 44 Atlantic Sea Basin responses to the WIN-BIG Survey question: “Does the social structures in the country where your firm is based (the norms/patterns of relations between family, religion, economic, political and education institutions of the society) impact on the achievement of gender equality in your industry?”



Over half (55%) of the respondents believe that social structures in the country where their firm is based (the norms and patterns of relations between family, religion, economic, political and education institutions of the society) impact the achievement of gender equality in their industry. Of note, a higher percentage of male respondents indicated that social structures impact gender equality: 64% of men versus 49% of women (Figure 44). This variation suggests that men may perceive that societal norms have a greater impact in shaping gender inequalities. However, it is also possible that female employees are more focused on barriers at the organisational level rather than those at societal level and, therefore, place greater expectations on their organisations to address these issues.

Respondents were also given opportunities to provide qualitative feedback regarding their experiences. One question related to factors that they perceived hindered career progression. Across all the sectors, the most frequent observation was the lack of work-life balance, lack of childcare facilities and family commitments. While the lack of work-life balance may have negative impacts on career progression, it impacts differently in sectors that operate onshore and offshore. Under the onshore sectors, we included such sectors as research and education (third level), public administration, as well as the WIN-BIG target sector blue biotechnology. As part of the offshore sectors, responses of employees from ports and shipping and the WIN-BIG target industry marine robotics were included.

Figure 45 Issues raised by Atlantic Sea Basin respondents that effect promotion in offshore and onshore industries

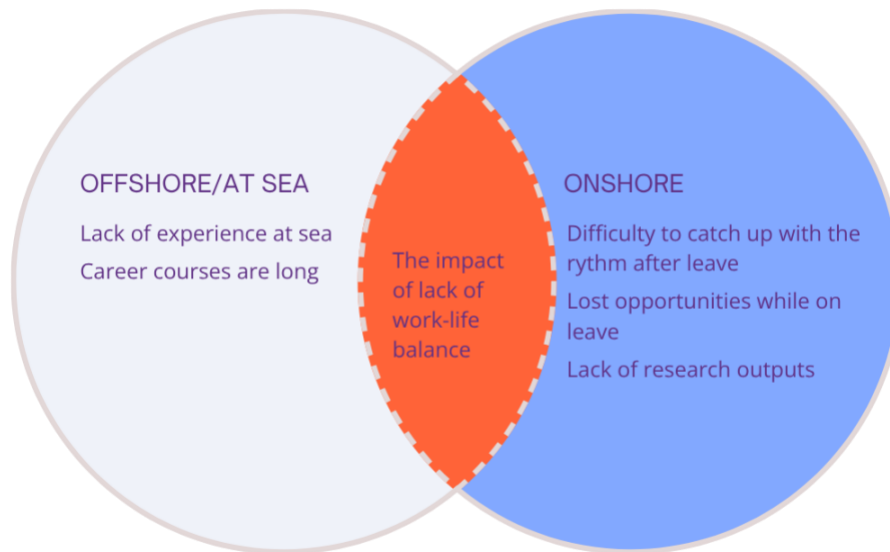


Figure 45 presents the impact of lack of work-life balance for career progression and lost opportunities due to lack of work-life balance or due to taking leave, comparing the offshore industries and industries primarily operating onshore.

Respondents in the emerging sector of blue biotechnology, research and education (third level) and public administration noted that after maternity leave, they were not able to sustain their previous effort levels at work, as it required several months to return to the same level as before the leave. This impacted research outputs and opportunities, which hindered career progression.

In offshore related industries and high-tech careers, such as for example marine robotics and shipping, respondents noted that due to leave periods women lost the necessary experience at sea, and usually training courses require a long time away from home, which creates difficulties in managing alongside family commitments.

Similarly, when discussing factors that may prevent women from progressing up the career ladder, some respondents mentioned existing stereotypes within societies and institutions.

Acknowledging the campaign #EndGenderStereotypes by the EU<sup>19</sup>, Table 8 lists the common stereotypes noted by female responses broken down by offshore/high tech and onshore sectors. Some sectors such as, maritime and technology-related sectors are often described as occupations where women face stereotypes as hindering factors for career progression (see e.g. Grimett, 2024; Lechman and Popowska, 2022).

<sup>19</sup> Further details about the campaign are available at: [https://end-gender-stereotypes.campaign.europa.eu/index\\_en](https://end-gender-stereotypes.campaign.europa.eu/index_en)



While the specific descriptions of these stereotypes varied across offshore/tech and onshore sectors, several common themes still emerged.

Table 8 Stereotypes as hindering factors for progression, comparing offshore and onshore sectors

Stereotypes as hindering factors for progression	
Offshore/High tech sectors	Onshore sectors
Strength is needed (when it is not necessary)	Men think that women can't be as knowledgeable
Discriminatory jokes and remarks	Patriarchal society
Seen as an industry for men	Bias by hiring team
Stereotypical views about the "industry leader"	Men have advantage/structures favouring men

For instance, in sectors such as living resources or shipping and ports, respondents often mentioned that physical strength was perceived as necessary—even when it was not. A similar view was expressed in the onshore sectors, where respondents noted that men often assume women are less knowledgeable.

While respondents in maritime and high-tech industries frequently pointed out that the image of the "industry leader" remains male, traditional and conservative, those in onshore fields also observed that employers often hold biased views during the hiring process.

## FEMALE PERCEPTIONS OF GENDER INEQUALITIES

In this section of the survey, female only respondents were invited to respond to questions related to the gender pay gap, their perceptions of whether they are treated equally to men in the workplace and whether they have the same promotion opportunities as men. Equal treatment at work, equal pay and opportunities are fundamental principles of EU law (Guerrero Padrón, Kovačević, and Ribes Moreno, 2023). Most EU countries prohibit gender discrimination by law and have enacted specific equal treatment legislation (Böök, 2021). Nevertheless, studies note that the gender wage gap still remains a problem (Hedija, 2017; Lausi *et al.*, 2021; Segovia-Pérez, 2019, Landmesser, Orłowski and Rusek, 2019).



Figure 46 Atlantic Sea Basin responses to the WIN-BIG Survey question: “Do you feel you are treated the same as men in your workplace?”

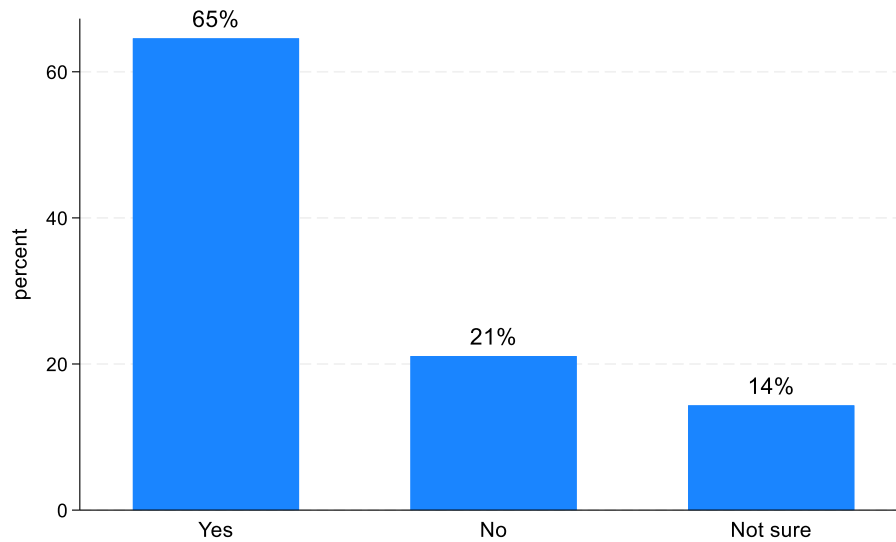


Figure 46 shows female respondents’ perceptions of whether they feel they are treated the same as men in their workplace. In total, 35% of female respondents reported that they do not feel (21%) or are unsure (14%) they receive the same treatment as their male colleagues in the workplace. Respondents who gave a negative answer were able to explain why they felt that way and similar patterns emerged within certain industries. For instance, in the living resources sector, several respondents noted that women are not involved in decision-making processes, and that men’s opinions are generally prioritized. Additionally, in marine-related R&D and public administration, respondents often reported being downgraded—despite holding equal positions or being of similar age to their male colleagues. They mentioned being assigned a disproportionate amount of administrative work and not being taken seriously. Finally, in higher education sector related to marine sciences, respondents noted that women have to work much harder to prove themselves.

Figure 47 Atlantic Sea Basin responses to the WIN-BIG Survey question: "If you are treated differently, how often does this happen?"

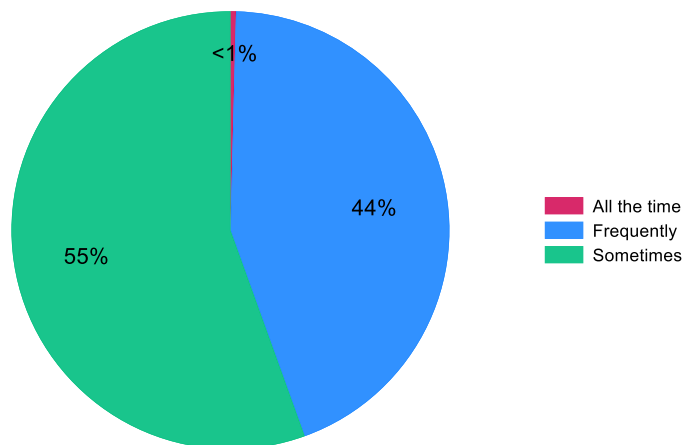
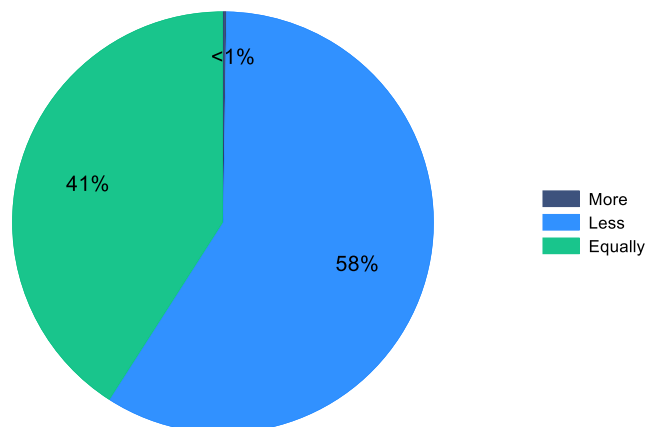


Figure 47 is an extension of the question regarding the perception of being treated the same as men. This question was not mandatory and includes a sample of 174 responses (26% of respondents in the sample). It illustrates the frequency with which women perceive being treated differently: of the 174 respondents, 56% of females reported experiencing occasional unequal treatment, while a bit less than half (44%) expressed that it occurs frequently. The high combined share (99%) indicates that such experiences are not isolated occurrences but rather recurring aspects of workplace interactions for the share of women who answered this question.

Figure 48 Atlantic Sea Basin responses to the WIN-BIG Survey question: "In comparison with your male counterparts do you feel that you have more, less, or equal promotion opportunities in your industry?"

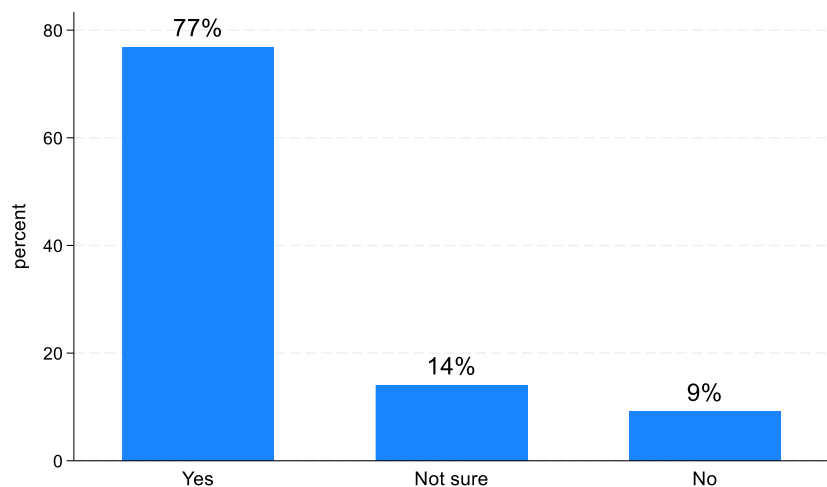


Examining the promotion opportunities available to females, 58% think they have less opportunities in their industry, while only 41% feel that they have equal promotion opportunities compared to their male counterparts (Figure 48). This high percentage of female respondents who feel they have less opportunities shows that female employees might be in a disadvantaged position. Imbalanced

opportunities between genders may slow down their career progression and lead to a lower number of females progressing to senior roles.

Of note that despite a negative perception of opportunities for females, respondents are more positive about the change over time in the attitudes and behaviour towards females in their industry.

*Figure 49 Atlantic Sea Basin responses to the WIN-BIG Survey question: “Do you feel that attitudes and behaviour towards women in your industry have changed for the better during your career?”*

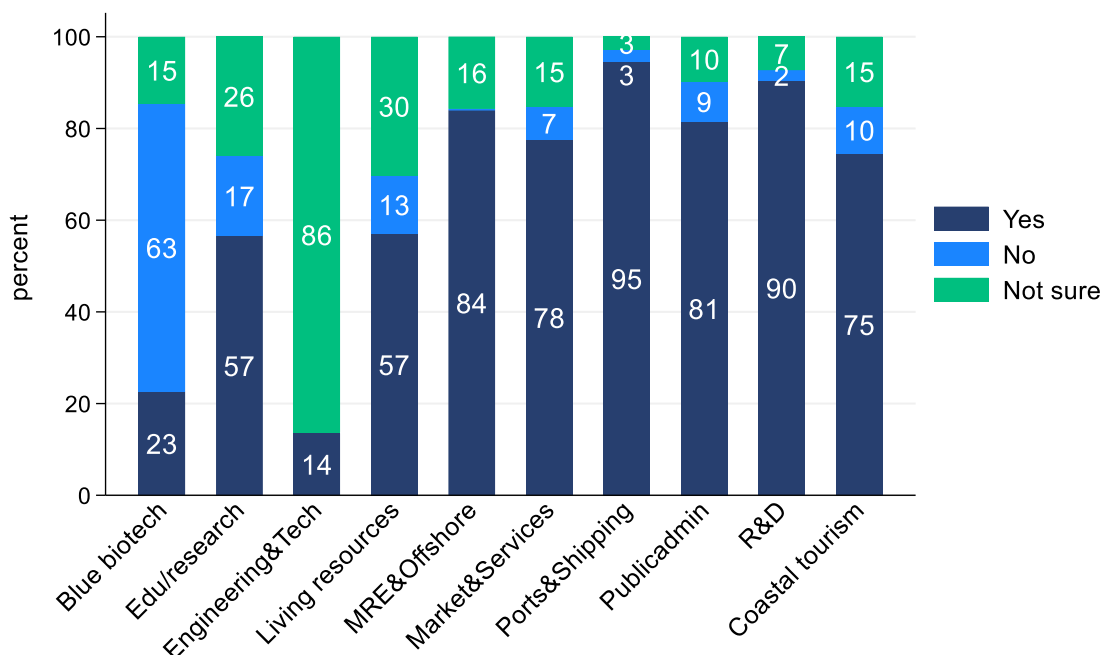


Overall, 77% of female respondents think that attitudes and behaviour towards women in their industry have changed for the better during their career. However, 14% of female employees answered that they are not sure and 9% stated that attitudes and behaviour towards females in their industry have not changed for the better during their career (Figure 49). This suggests that while most female respondents perceive progress in gender-related attitudes, some female respondents remain uncertain about the extent of this change or do not see it in their particular industry.

In the blue biotechnology sector, the highest percentage of female employees (63%) answered that they do not think that attitudes and behaviour towards females in their industry have change for the better during their career. However, this is a emerging sector that might have younger employees, which could explain some of this difference. In engineering and technology sector, 86% of female employees chose the option “not sure” to this question. While overall, females provided a positive response to the changes of attitudes and behaviour in most sectors, the example of the emerging sector of biotechnology shows that change is not easy. The high percentage of “not sure” in the engineering and technology sector also shows that it might be difficult to observe positive changes in technology-related industries. There is also variation across industries. A lower percentage of female respondents in coastal tourism (75%), market and services (78%) and public

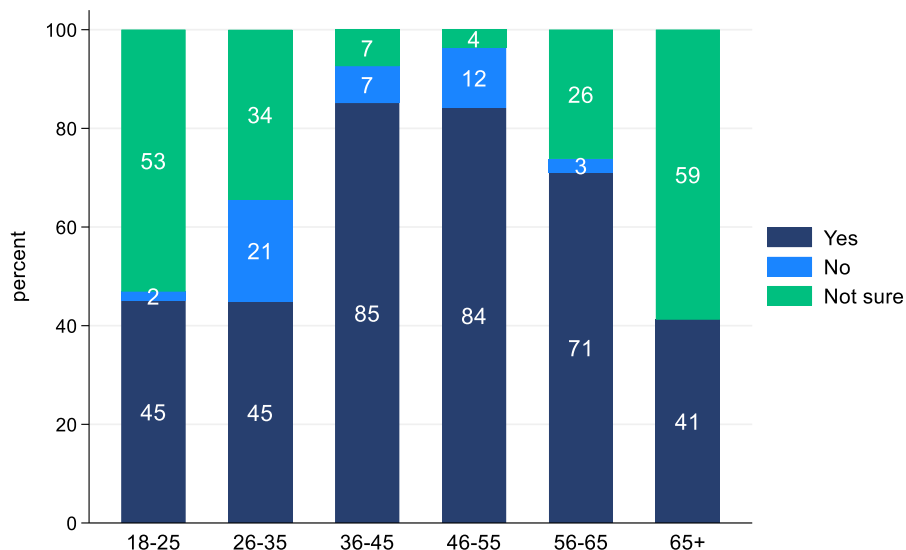
administration (81%) said “yes”, the attitudes and behaviour have changed for the better, compared to 90% in R&D and 95% in ports and shipping (Figure 50).

Figure 50 Atlantic Sea Basin responses to the WIN-BIG Survey question: “Do you feel that attitudes and behaviour towards women in your industry have changed for the better during your career? (broken down by sector)”



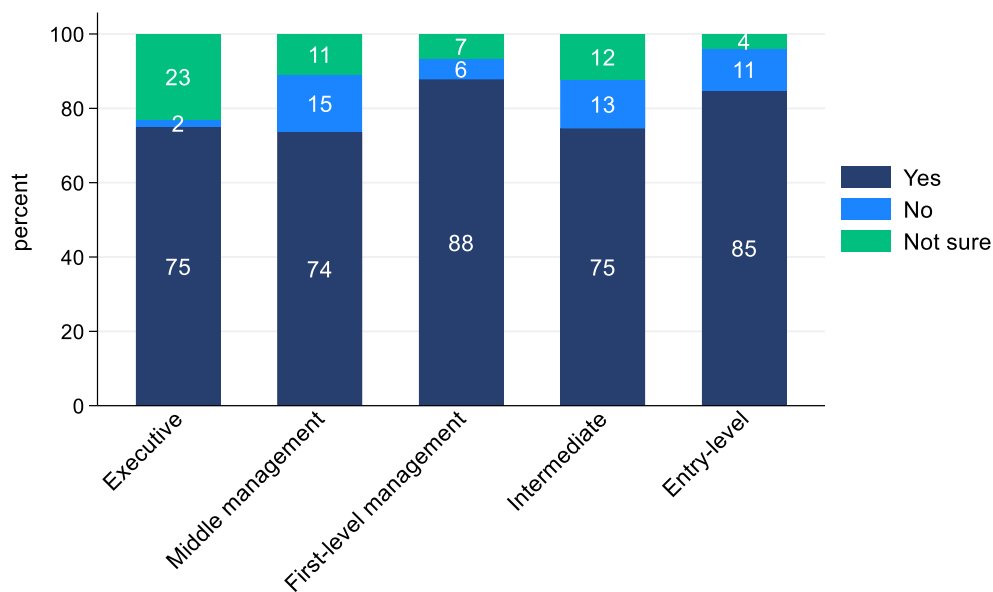
When studying the personal background of the respondents and the question on the change in the attitudes (Figure 51), 53% of female employees aged between 18-25 were unsure about the positive change towards females in their industry. Among female respondents aged between 26-35, 21% of respondents answered that attitudes have not changed for the better and 35% were not sure. This result illustrates that the percentage of respondents who were unsure or chose the negative answer is high among younger employees who had less time to observe change during their career. By contrast, 7% of employees aged between 36-45 and 12% between 46-55% answered that they do not feel that the attitudes and behaviour towards women in their industry have improved. The sample of female employees aged 65 or higher was small.

Figure 51 Atlantic Sea Basin responses to the WIN-BIG Survey question: “Do you feel that attitudes and behaviour towards women in your industry have changed for the better during your career? (broken down by age)”



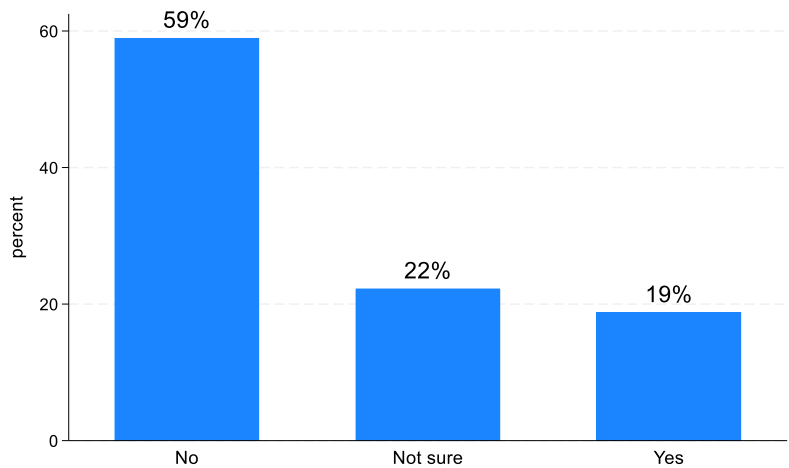
Across the female respondents according to their employment level (Figure 52), a slightly lower percentage of females occupying executive or senior management positions (75%) and middle management (74%) think that the attitudes and behaviour towards women have improved during their career compared to first-level management (88%).

Figure 52 Atlantic Sea Basin responses to the WIN-BIG Survey question: “Do you feel that attitudes and behaviour towards women in your industry have changed for the better during your career? (broken down by employment level)”



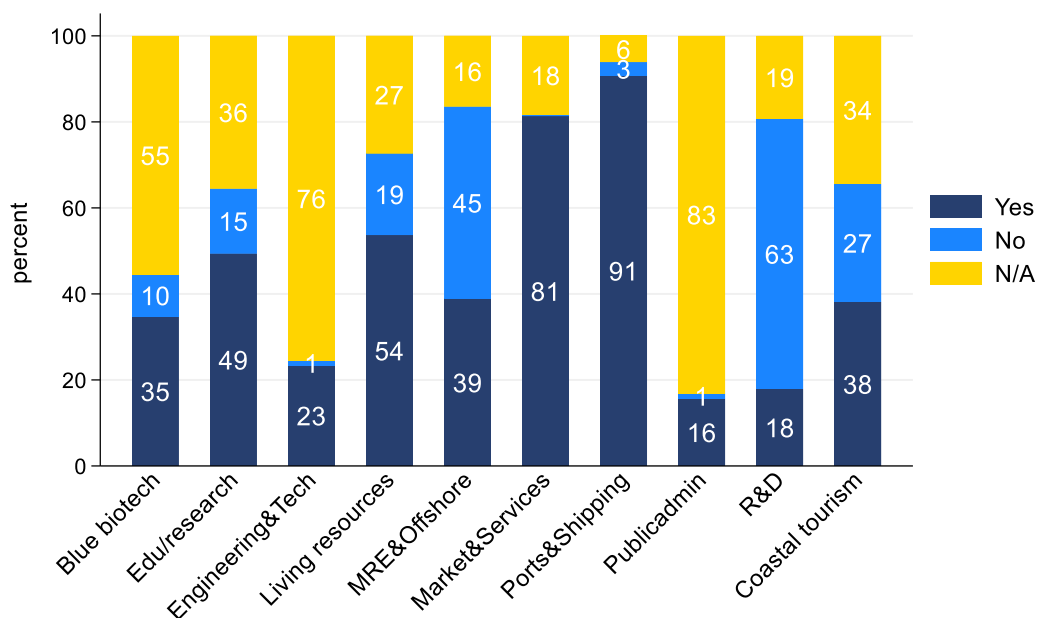
In terms of a pay-gap between males/females, approximately, 41% of female respondents are unsure or believe they are paid less than their male colleagues doing the same job (Figure 53). The 19% negative responses illustrate the ongoing gender pay gap, a topic frequently debated in the scholarship and by policymakers. At the same time, the 22% of unsure responses suggests that salary and payment information is likely non-transparent or undisclosed at the company level.

Figure 53 Atlantic Sea Basin responses to the WIN-BIG Survey question: “Do you think you are currently being paid less than your male colleagues, doing the same job, in your industry?”



The survey also addressed the question about the provision of right equipment for female employees across the blue economy sectors (see Figure 54). The highest percentage of negative responses is observable in R&D (63%), marine renewable energy (45%), coastal tourism (27%) and living resources (19%). Overall, the results suggest that sectors traditionally dominated by technical, laboratory, or field-based work are less equipped to meet gender-specific requirements

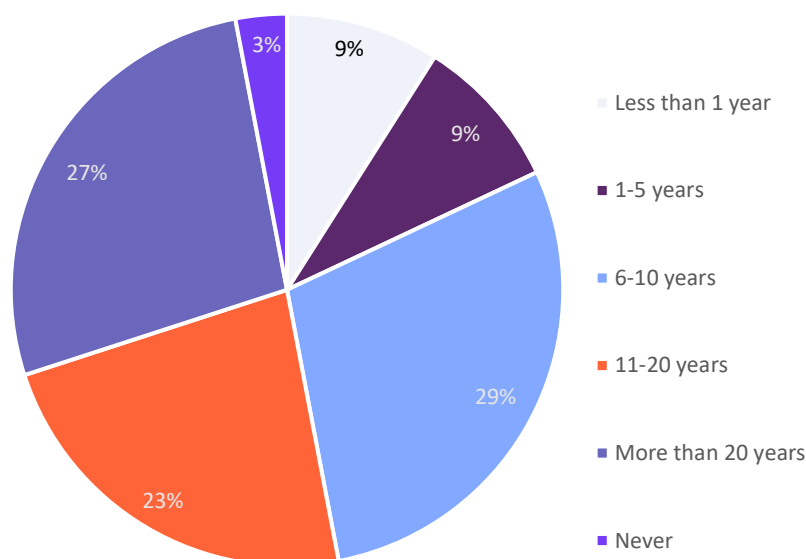
Figure 54 Atlantic Sea Basin responses to the WIN-BIG Survey question: “If required for your work, are you provided with the right equipment (including the right size/fit) to carry out your role, including Personal Protective Equipment (PPE) (by sector) ?”



Finally, the survey asks female respondents their views on how long in years it will take to reach gender equality in their industry (Figure 55).



Figure 55 Atlantic Sea Basin responses to the WIN-BIG Survey question: “How long do you think it will be until gender diversity in your industry is equal?: female responses only”



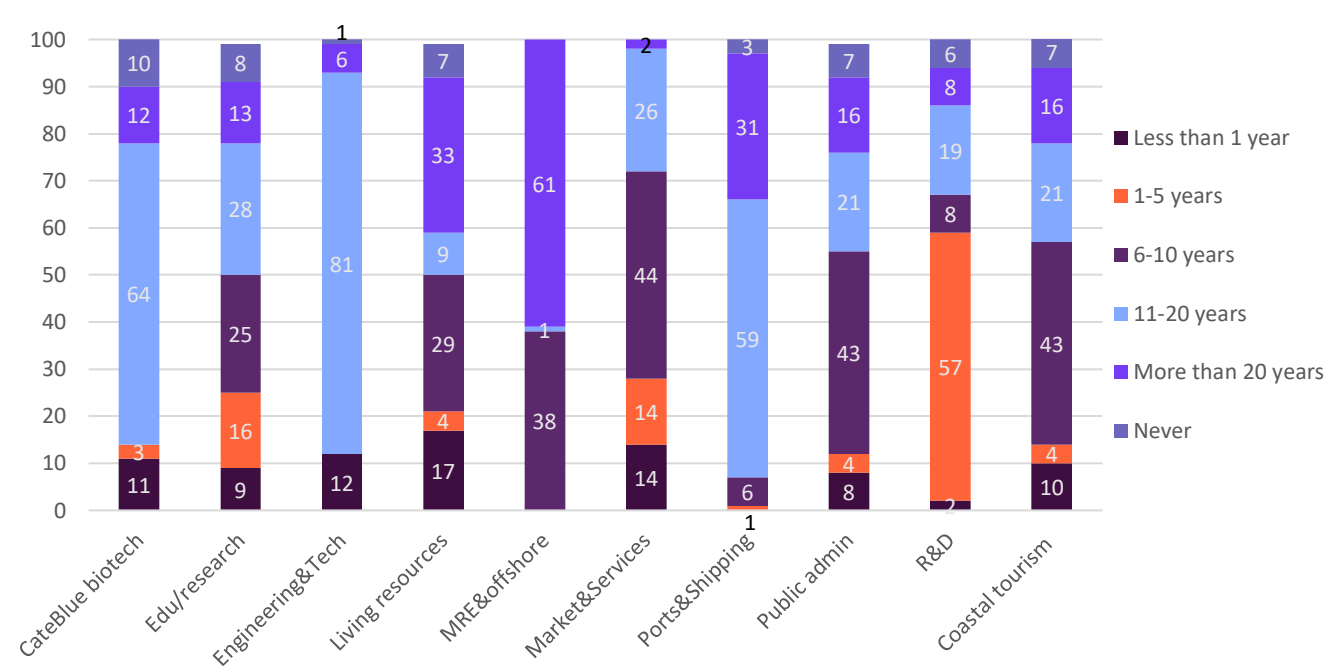
Among female respondents, 29%, believe that gender diversity in their industry will be equal in 6-10 years, while 27% think it will take more than 20 years and 23% think that gender equality will be achieved in 11-20 years. Only 18% of respondents think it will be achieved in less than 5 years and 3% think that their industries won't ever achieve gender equality.

Table 9 presents a comparison of data across the countries. In organisations based in France, a total of 44% of respondents indicated that achieving gender equality would require either 11-20 years (24%) or more than 20 years (24%), while another 39% selected 6-10 years. In Ireland, a higher proportion of respondents chose shorter timeframes: 34% believe gender equality will be achieved within 1-5 years, and 36% selected the 6-10 years option. Similarly, in Portugal, the percentage of respondents who selected options indicating less than 20 years is relatively high. Notably, respondents from organisations based in the United Kingdom had the highest share (48%) who believe that more than 20 years will be needed to achieve gender equality in their industry.

Table 9 Atlantic Sea Basin responses to the WIN-BIG Survey question: “How long do you think it will be until gender diversity in your industry is equal? (comparison across countries)”

Comparison across countries					
Years required	France	Ireland	Portugal	Spain	United Kingdom
Leas than 1 year	5%	1%	23%	17%	<1%
1-5 years	11%	34%	20%	3%	7%
6-10 years	39%	36%	15%	24%	28%
11-20 years	24%	16%	16%	31%	16%
More than 20 years	20%	5%	25%	15%	48%
Never	1%	8%	<1%	10%	<1%

Figure 56 Atlantic Sea Basin responses to the WIN-BIG Survey question: “How long do you think it will be until gender diversity in your industry is equal?: female responses only (broken down by sector)



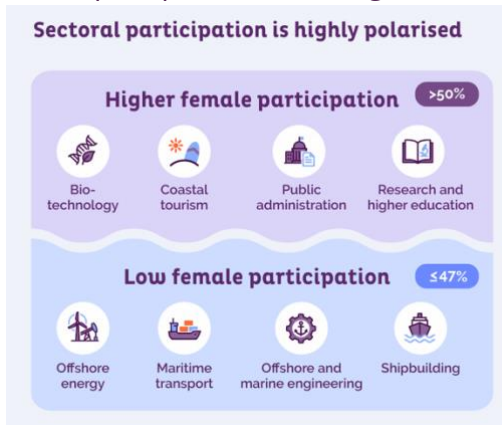
Among the blue economy sectors, a high percentage of respondents who work in blue biotechnology, engineering and technology, marine renewable energy, ports and shipping, and in living resources chose the option of 11-20 or more than 20 years as a required time span to achieve gender equality. For instance, 61% of respondents in marine renewable energy chose the option of more than 20 years. In ports and shipping, 59% of respondents answered that 11-20 years will be required until gender diversity is equal, and 31% chose more than 20 years. In blue biotechnology,

64% of the respondents chose 11-20 years and 12% of the respondents chose more than 20 years. In engineering and technology, 81% of the respondents think that 11-20 years are required until gender equality is achieved (Figure 56).

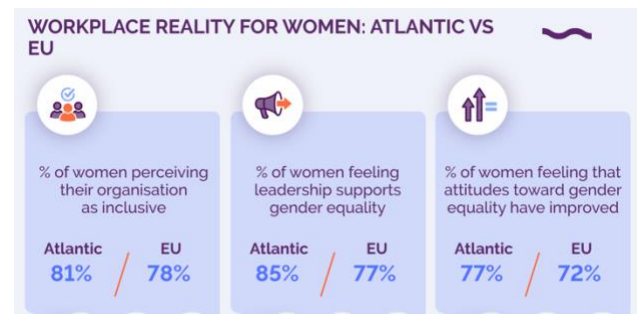


# Conclusions

This report presents findings from a survey that was conducted as part of the WIN-BIG project to map the gender status of the blue economy across six Sea Basins within Europe. The Atlantic Area has an estimated 3.3 million people employed in the blue economy, and **females comprise 42% of the total labour force**. Women are well represented in sectors such as Biotechnology, Coastal Tourism, Public Administration and Research and Higher Education. However, female representation is lower in sectors related to Offshore, Engineering, Transport and Energy related sectors, which may reflect wider trends of lower female representation in STEM intensive fields.



Generally, the results show a mixed picture with respect to gender equality in the blue economy sectors of the Atlantic Area. In terms of **working arrangements and general culture within organisations the picture is relatively positive**. Most female respondents report access to flexible working arrangements, which have become more prevalent since the Covid-19 Pandemic. Although, a higher share of female respondents (18% females versus 9% males) finds it difficult to strike an appropriate work-life balance. Overall, respondents are positive regarding the inclusivity of their work culture, with female respondents having higher levels of agreement (81% females versus 74% males). A slightly higher proportion of female respondents also report that leadership within their organisation is committed to gender EDI, compared to male respondents (85% female versus 80% male).



On the other hand, female respondents report higher levels of abusive, inappropriate or negative behaviour – more females have experienced **gender discrimination within their organisations (21% female versus 7% male)**. More women have witnessed discrimination (37% female versus 16% male) and a **much higher proportion of women have suffered some form of harassment within their organisations (46% female versus 15% male) and the wider industry (42% female versus 35% male)**.



The views on **career progression** are also somewhat mixed. For example, **women are less likely to view processes within their organisation as fair**. Much fewer women report access to training

to support their career aspirations (57% women versus 76% of men). More female respondents disagree they have opportunities to support their career aspirations (28% female respondents disagree compared to 18% male respondents). On the other hand, **female respondents are slightly more likely to have access to mentoring in their careers** (66% female versus 64% male) and a higher share of women report that their direct supervisor supports their career aspirations (76% female versus 60% male).

With respect to **policies directly related to advancing equality in the workplace**, there is quite a divergence between male and female respondents. Interestingly, **women are much less likely to report that their organisations have formal policies related to gender balance** in hiring (36% female versus 57% male) and **women are less likely to report that their organisations formally support the promotion and advancement of women** (68% female versus 79% male). Also, women are less likely to report they have female role models compared to males (46% female versus 62% male). Less than half of female respondents (45%) report their firm has a formal gender policy compared to 65% of male respondents. On the other hand, it appears that an equal share of female and male respondents (approximately 20% of both female and male respondents) agree that **barriers exist preventing women being promoted to senior positions**. Male respondents are more likely to state that social structures in their country impact the achievement of gender equality in their industry (64% male versus 49% female).

For the questions asked solely of female respondents, **35% females report they are unsure or not treated the same as men**. Nearly **60% of women feel they have less promotion opportunities in their industry compared to men**. Nearly **one-fifth of women believe they are being paid less than men** with a further 22% females uncertain about pay differences. Still, surprisingly nowadays, **14% females report they are not given the right equipment to carry out their job**. While 77% females believe that attitudes and behaviour have improved towards women during their career, **50% females believe it will take more than 10 years to achieve gender equality**.

While overall, **77% of female respondents answered that attitudes and behaviour towards women in their industry have changed for the better during their career**, there were differences in the answers across the blue economy sectors. **In engineering and technology, only 14% of females, 23% in blue biotechnology, and 57% in living resources provided a positive response**. While a high percentage of positive responses was observable in R&D (90%), ports and shipping (95%), it should be noted that **the percentage of positive responses was slightly lower in coastal tourism (75%), market and services (78%) and in marine renewable energy (84%)**.

Among the blue economy sectors, **in the blue biotechnology, 64% of females** think that **11-20 years** will be required to reach gender diversity and **12%** think that more than **20 years** will be required. Among the respondents in **marine renewable energy, 61%** thought that more than **20 years** is required to gender diversity. **In engineering and technology, 81%** of the female employees think that **11-20 years** will be required until gender diversity. **In ports and shipping, 11-20 years** option was chosen by **59%** and **more than 20 years** was chosen by **31%** of female employees.

# Policy recommendations

It is encouraging that gender equality has been recognized by the EU as a strategic and relevant aspect for a just and fair transition, not only through its EU Gender Equality Strategy 2026-2030, but also through the adoption of various cross-cutting directives and action plans. The EU Gender Equality Strategy 2026-2030 introduces its roadmap principles, covering issues related to equal pay and economic empowerment, work-life balance and gender equality in care, equal employment opportunities and adequate working conditions, inclusive education and training, active and safe participation in public and political life, physical and mental health, freedom from gender-based violence, and institutional mechanisms that deliver on gender equality. At the same time, the next step should be the consistent tracking of progress on gender equality by both the EU and its Member States, through systematic data collection. This will help prevent a slowdown in progress and ensure that reforms and implementation of gender equality policies stay on track.

Despite significant efforts made within the framework of the EU Blue Economy Observatory and the EU STECF to collect data on the labour force across EU blue economy, there is **still a lack of data on gender breakdown in certain sectors across the industries**. The EU should develop a **harmonised approach to collating such gender specific workforce data for each blue economy industry**. This would help ensure that Member States report employment figures in a consistent manner. Additionally, the **reporting process should be made mandatory**. Also, tracking progress around experiences in the workplace for both male and female employees would help identify general trends and progress, identify issues and barriers and support the design of policies or solutions that might address barriers.

Generally, it **appears that there has been real and perceived progress in gender-related issues**. Most respondents report positively on organisational culture and perceive improvements over time. It appears in the **context of career progression, women perceive barriers related to training and opportunities, including promotion opportunities**, rather than a lack of support by leadership within their organisations. Somewhat striking in the findings, is that men are much more likely to state that there are policies and supports in place to promote women's career advancement, compared to women themselves. This suggests that while men may perceive that women are being more supported in career advancement, this may not be the real experience of many women in these sectors. **Identification of evidence-based policies that support female enhancement and training for staff** on how such policies benefits the organisation may be useful for all employees and potentially reduce gaps between men and women. While trying not to speculate, given that men report lower levels of agreement regarding inclusivity and poor organisational culture and are more likely than women to perceive that organisations support women, **it is important that men do not view policies promoting women's advancement as having a negative impact on them**. Hence, **training on the benefits of gender parity policies for all employees is warranted**.



In addition, more than half of women believe it will take ten years or more to achieve full equality, which suggests that faster progress may be needed and more targeted actions and supports to advance equality. Of the current workforce, **approximately one-third has experienced some form of harassment within their own organisation and almost 40% have experienced this within their own industry.** This points to the **need of policies, training and legislation that support rights within the workplace and promote a cross-cutting industry zero tolerance policy towards harassment and discrimination.** Such measures would benefit female employees in particular at the firm level, and men and women at the industry level (given high levels of reported harassment at the industry level reported by both genders).

### Blue Economy Emerging Sectors

Finally, the **emerging sectors of the blue economy require** greater visibility and **more information** about how they operate, as well as the types of skills they require.

Sectors such as **marine renewable energy, desalination, and blue biotechnology** are relatively new and at different stages of development. **Raising awareness about these sectors is essential.** This will encourage women, particularly those at the early stages of their careers, to consider pursuing opportunities in these fields.

While in **blue biotechnology 18%** of the respondents think that **there are barriers preventing women being promoted to senior positions,** the percentage **in marine renewable energy is much higher (80%).**

In terms of the **access to opportunities** necessary for career growth, **only 10%** of respondents in **marine renewable energy provided positive answers,** and 84% provided a neutral response. In **blue biotechnology,** while **more than half (60%) of the respondents answered positively** to the access of opportunities, 31% provided a neutral response.

Notably, blue biotechnology has a low percentage of respondents (6%) who reported experiencing harassment. In contrast, **in marine renewable energy 54% reported that they have experienced harassment.**

The two sectors should raise awareness about available opportunities among the population. The low level of positive responses about available opportunities and the high percentage of neutral responses in marine renewable energy indicates that the employees do not have sufficient information about the existing opportunities. It is also necessary to share information about the success stories and mechanisms used to prevent harassment in blue biotechnology companies. This could positively influence other emerging sectors, such as marine renewable energy.

### Caveats

Overall, the survey was weighted to ensure better representativeness at the sectoral level. Nevertheless, the respondents may not be represented of the full suite of blue economy industries in the survey. Respondents were more likely to be highly educated and represent more senior grades, compared to what would be expected in the wider industries. For example, only 1% of

respondents were at entry level grade and over **80% of respondents had a Masters or PhD level degree**. Higher educated respondents may have more opportunities to work in sectors that promote better treatment of women. This suggests that **responses may be skewed towards more positive responses** than we may have observed if the data was more representative.

In terms of future research, systematic data collection ensuring a representative sample is collected across the blue economy is needed. Without better data, it will continue to be difficult to understand what barriers exist for women and identify areas of progress and areas that need further work and supportive or incentive policies. While future research is needed, the current report provides the first evidence identifying the status and barriers that exist for women in the Blue Economy in the EU Atlantic Sea Basin.





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