

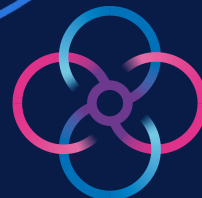
**KEY FINDINGS:**

**THE UK**

**NUCLEAR INDUSTRY**

**GENDER PAY GAP**

**2017 - 2025**



# GLOSSARY AND

# CONTENTS

## Equality

The state of being equal in rights, opportunities, or treatment. In the context of pay, equality means that all individuals should receive the same pay for the same work, regardless of their gender or other factors.

## Equity

The state of being fair and impartial, especially in relation to opportunity, treatment, or outcome. In the context of pay, equity means that individuals should receive pay that is commensurate with the value of their work, regardless of their gender or other factors.

## Gender

Gender refers to the characteristics of women, men, girls and boys that are socially constructed. This includes norms, behaviours, and roles associated with being a woman, man, girl or boy, as well as relationships with each other. As a social construct, gender varies from society to society and can change over time. (World Health Organization)

## Mean

The average value of a data set is calculated by adding all the values and dividing them by the number of values. For example, {1,2,3,4,6} is  $1+2+3+4+6=16$ , 16 divided by 5 is 3.2 resulting in the mean being 3.2.

## Median

The middle value in a data set when the values are arranged in order. For example, in a dataset of {1,2,3,4,6}, the median is 3.

## Pay Gap

The difference in average earnings between different groups in a particular industry, occupation, or company.

## Pay Quarters

The four equal divisions of a population or data set based on their income or earnings. For example, the bottom quarter represents the lowest 25% of earners.

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## THANK YOU

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# FOREWORD

Discussions about gender equity, gender equality and the gender pay gap have become more and more prominent in recent years. In 2017 the UK was one of the first countries in the world to mandate that employers with 250 or more employees (on the 'snapshot date'), publish their gender pay gaps.

The gender pay gap is not about equal pay. Equal pay is covered by the Equality Act 2010, and requires employers to pay men and women the same for work of equal value.<sup>1</sup>

## What can Gender Pay Gap data tell us?

It helps us understand what women are earning in comparison to men.

It provides insight into gender representation across an organisation, helping identify if there are e.g. potential progression issues, and thus it can shine a light on structural inequalities. It can also help identify organisational success stories, aid investment decisions and the effective deployment of resources.

## Why this report and why now?

By undertaking this research Inclusion and Diversity in Nuclear (IDN) has strengthened our evidence base which is of utmost importance.

### Why is it important?

Personally, I kept seeing the individual gender pay gap reports from various organisations and I was curious as to what the nuclear industry gender pay gap looked like. What was the year on year trend? Was the gap closing or widening? Are the changes and the drivers of said change understood? So, we set off as a team to investigate, resulting in this report.

As you read this document, you will see that we have analysed publicly available data, to ascertain: median nuclear industry hourly pay gap, mean nuclear industry hourly pay gap and pay quarters for the nuclear industry.

In addition, we have also examined the year on year number of women working in the nuclear industry, based on the data gleaned from the source pay gap reports.

We have compared these findings to either relevant Office for National Statistics data, or to the National Average for the Average UK company (calculated using the UK Government Gender Pay Gap Service) enabling benchmarking against broader society. Our research identified a stark contrast between the national average pay gap and pay gap in the nuclear industry. At a time when the sector needs to attract and recruit in vast numbers, a high pay gap does not show nuclear as an enticing option for attracting and retaining the talent needed for innovation, growth and sustainability.

We hope you view our findings as an acknowledgment of progress to date, and an indicator of potential future progress that can be made too.

## Monica Mwanje

FOUNDER, MANAGING DIRECTOR  
INCLUSION AND DIVERSITY IN NUCLEAR



<sup>1</sup> <https://www.gov.uk/government/publications/gender-pay-gap-reporting-guidance-for-employers/overview>

# INTRODUCTION

## What is the 'Gender Pay Gap'?

There is a common misconception that the gender pay gap is about equal pay for equal work. Whilst this is certainly a factor, it tells us so much more. It also helps us understand the more complex picture of how and why men and women are paid within a company/sector, and the contributory factors.

**Technically speaking, the gender pay gap is the difference between the median earnings of men and women, expressed relative to men's earnings.**

Statutory guidance means that any UK employer with 250 or more employees must report their gender pay gap data to the UK Government's Gender Pay Gap Service.

It is important to note at this stage, that the gender pay gap data reported by the UK Government's Gender Pay Gap Service is binary, focusing on the difference between male and female employees. It doesn't account for the experiences of non-binary individuals.

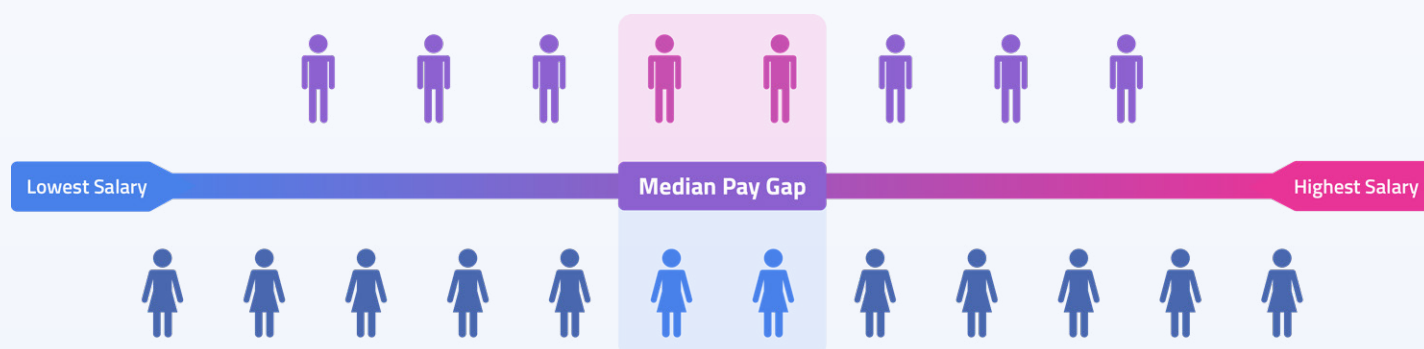
## Understanding the Gender Pay Gap

The gender pay gap is a complex issue with multiple facets. So, let's try and break it down.

When discussing / exploring the gender pay gap, at the highest level, there are 3 facets which are the most commonly used data/reference points: **Median Pay Gap**, **Mean Pay Gap**, and **Pay Quarters**.

Let's take each one in turn.

### Median Pay Gap

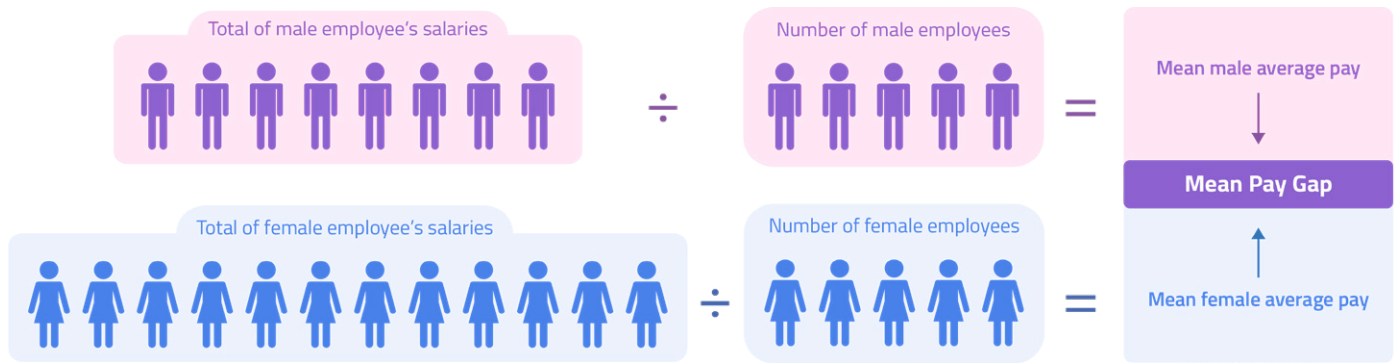


**Diagram 1:** Median gender pay gap

Imagine a company's employees lined up in order of their salaries, from lowest to highest. The median pay gap represents the difference in pay between the middle-earning woman and the middle-earning man, as illustrated in Diagram 1. The median pay gap is the most commonly used statistic in gender pay gap reporting because it is less sensitive to outliers.

For example, a median pay gap might reveal that a woman at the median earns 94p for every £1 earned by her male counterpart at the same median position.

# Mean Pay Gap



**Diagram 2:** Mean gender pay gap

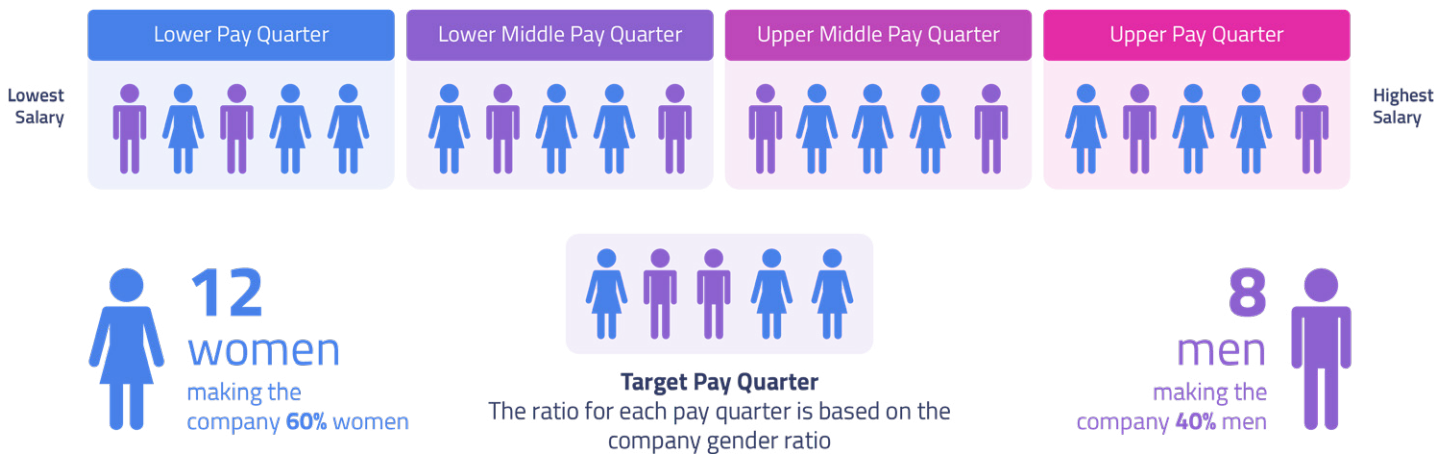
The mean pay gap, represented by Diagram 2, is the total of the salaries of all employees divided by the number of employees.

It provides a broader view of pay inequality, as it can be influenced by both the distribution of salaries and the overall number of men and women.

Note: the mean gender pay gap is more susceptible to being skewed by extreme values at either end of the pay scale.

# Pay Quarters

One of the key components of gender pay gap reporting is analysing ‘pay quarters.’ This means we divide employees into four equal groups based on their earnings.



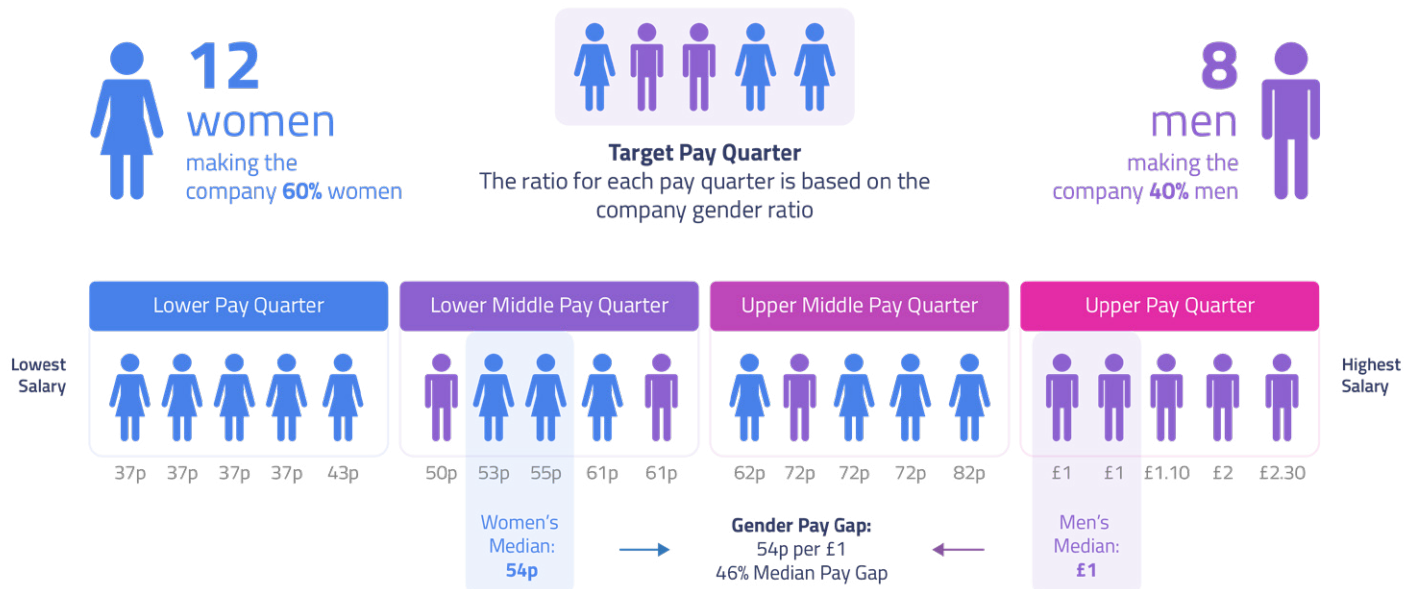
**Diagram 3:** Target Pay Quarter Demonstration

The aim of examining these quarters, is to identify any imbalance in the distribution of men and women across different salary levels. We do this by looking at the Target Pay Quarter as demonstrated above.

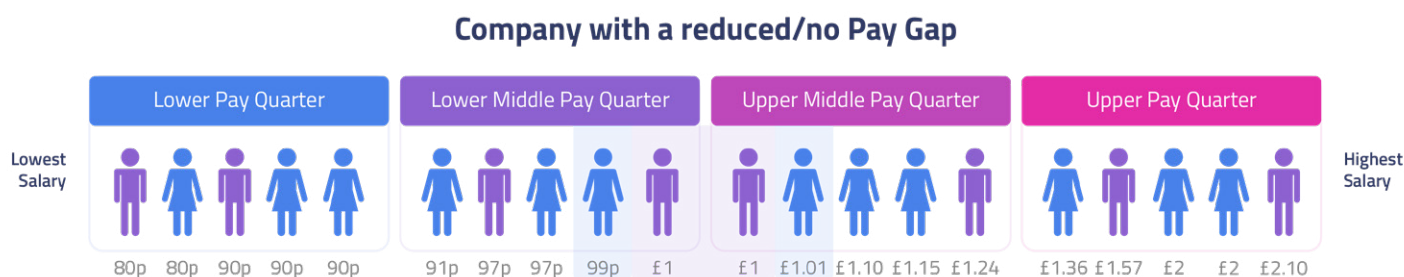
# Understanding Pay Quarters

In the example, Diagram 4, the organisation has 20 personnel comprising 12 women and 8 men. Thus, the company is 60% women and 40% men. The aim is that each pay quarter should reflect this ratio as illustrated in Diagram 3, i.e. no pay gap. This indicates that pay is distributed fairly, regardless of gender.

Below, in Diagram 4, we have illustrated what a significant pay gap would look like in that same organisation.

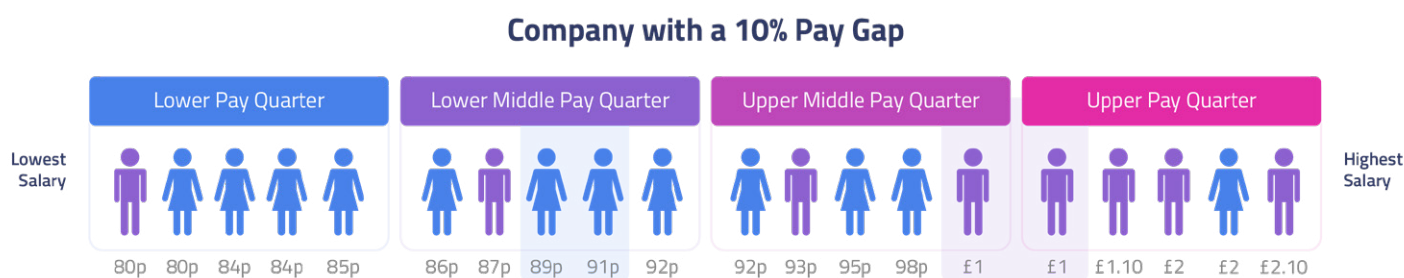


**Diagram 4:** An example of how to read Pay Quarters/Gaps



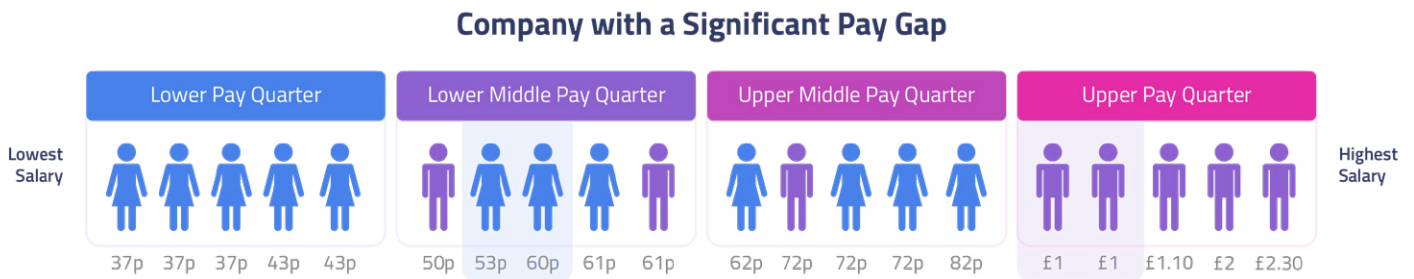
**Diagram 5:** Company with Reduced/no Pay Gap

Next, we see how a pay gap is formulating. Despite women being in the majority of the workforce in the example organisation, their pay is presenting around 10% below their male colleagues.



**Diagram 6:** Company with 10% Pay Gap

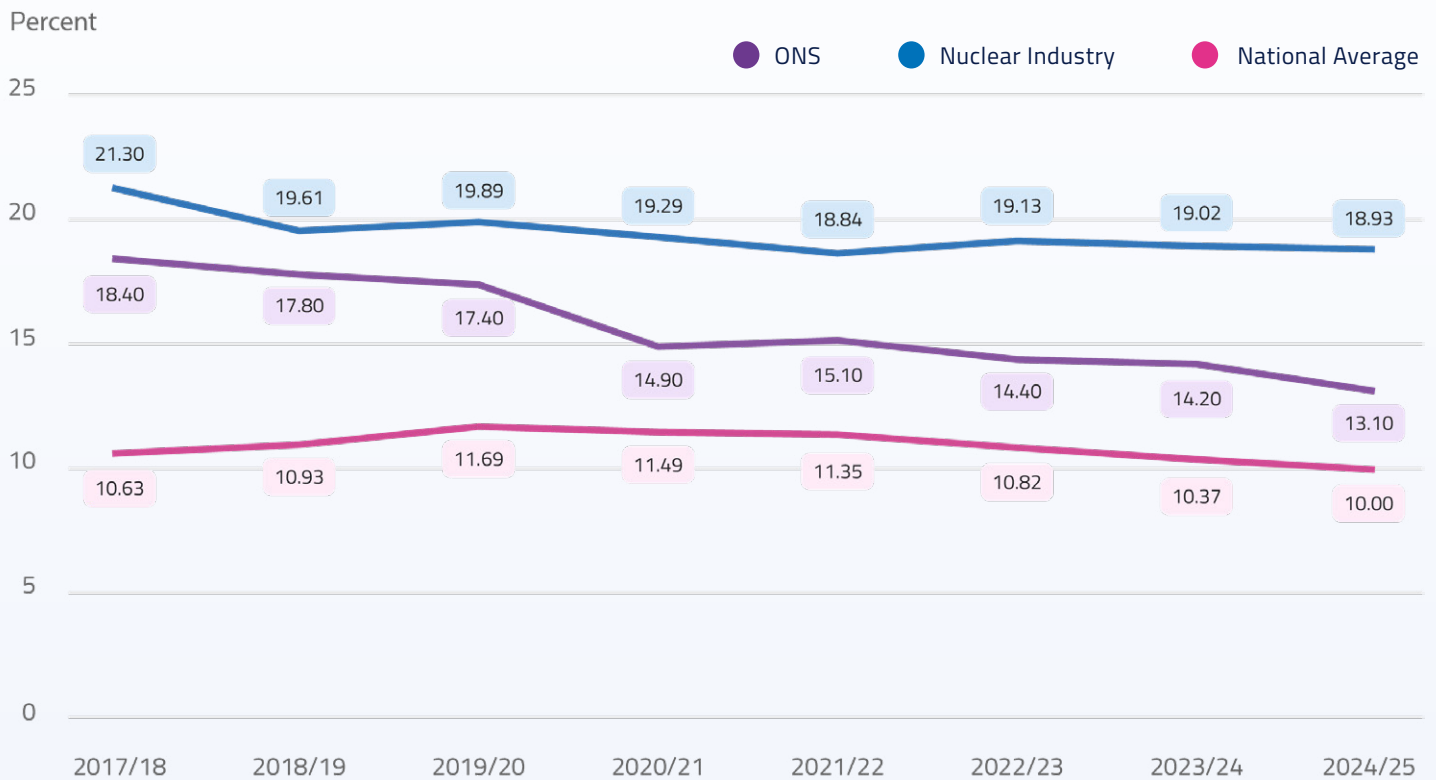
In Diagram 7 we see how the gap widens when the distribution of men and women is not evenly distributed across the pay quarters. For example, despite less men being employed by the company, men dominate in the highest pay quarter.



**Diagram 7:** Company with a Significant Pay Gap (43.5%)

## How Nuclear compares to Office for National Statistics Data

### ONS, Nuclear and National Average Median Hourly Pay Gap Percentage Comparisons



**Graph 1:** Office for National Statistics<sup>2</sup> v. our calculated Nuclear v. Calculated National Average

Graph 1 illustrates the gender pay gap in the nuclear industry and compares it to data from the Office for National Statistics (ONS) as well as the calculated national averages. Notably, the median hourly pay percentage is used as the primary metric, offering a more robust measure than the mean. **While both the nuclear industry and the National/ONS data exhibit a downward trend, it is clear that the nuclear industry's gap remains significantly higher.**

<sup>2</sup> ONS data ranges Jan-Dec per reporting year whilst our calculated Nuclear & National data ranges from April to April of the following year. The ONS data includes full-time and part-time workers (using the "All" statistic found in "Total Table 1.12 Gender pay gap" for the most updated report for each respective year available at: <https://www.ons.gov.uk/employmentandlabourmarket/peopleinwork/earningsandworkinghours/datasets/annualsurveyofhoursandearningsasgenderpaygaptables>

# OUR APPROACH TO CALCULATING

# THE NUCLEAR GENDER PAY GAP

## The Nuclear Industry and Pay Gap Reporting

Inclusion and Diversity in Nuclear (IDN) aims to provide practical support at all organisational levels throughout the nuclear industry. We recently published our inaugural workforce Equity, Diversity and Inclusion (EDI) survey to help us better understand the present state of inclusion and diversity across the sector. Undertaking this gender pay gap research work enables us to dig deeper to understand some of the contributory factors to the current nuclear sector EDI experiences and perceptions. Additionally it helps to facilitate the identification of targeted solutions.

## Methodology

The data for this report was collected from the UK Government's Pay Gap Service<sup>3</sup>. Companies operating in nuclear were identified.

The gender pay gap data for each company was extracted from their individual reports.

We accounted for missing values and implemented checks and measures to ensure we were using the most accurate value possible.

From our data collection, we found that information from **113 companies was available and subsequently used** in our gender pay gap Report.

Analysis and calculations were performed using Excel and our proprietary approach which did include weighted averages for each reported statistic.

The Target Pay Quarter was determined by averaging the percentage of women in each pay quarter for each company.

The data was visualised using line and doughnut graphs/charts to illustrate trends and comparisons.

## Limitation of Methodology

From the mandatory data, we are unable to determine larger organisations that might have multiple departments across several sectors with a different gender balance. This limits the ability to determine a representative percentage of women working in nuclear which is consistent with other analysis. For example, the Nuclear Workforce Assessment<sup>4</sup> 2023 estimates the percentage of women to be 21.4% in 2023 whilst our calculations estimate this value to be 28.0%.

We also recognise that an industry cannot be accurately reflected with the (weighted) average of several companies, we implore that individuals and companies reflect and look at their own data, as we look to increase the number of nuclear related companies with a gender pay gap report.

<sup>3</sup> Gender Pay Gap Service: <https://gender-pay-gap.service.gov.uk/>

<sup>4</sup> Nuclear Workforce Assessment 2023 – Nuclear Skills Delivery Group  
<https://nuclearskillsdeliverygroup.com/nuclear-workforce-assessment/>



# THE HEADLINES

Despite the limitations on some of our data collection, this does not significantly impact on the headline findings.

- **There is a substantial gap in Median Hourly Pay between the Nuclear Industry and the National Average. If we continue at this rate, and simply do nothing, it is estimated that the Nuclear Industry will require an additional 55 years to catch up with the calculated National Average.**
- **There is a significant gender imbalance with regards to the percentage of women employed - this was 28.0% for the Nuclear Industry compared to 51.4% for the National Average, in reporting year 2023/24.**
- **Furthermore, from the examined data, many of the women in the Nuclear Industry, are shown to be in the lower pay quarters. This highlights that the majority (~60-70%) of women are paid less than the median employee in the average Nuclear Company and that the pay quarters are significantly unbalanced.**

Whilst these are quite stark headlines, the purpose of highlighting these is not to shock or 'call-out' companies, rather, we hope this report is seen as a springboard to drive positive change. Additionally, it can aid decision making on where to focus efforts and budgets.

We will further explain these findings in the next section.

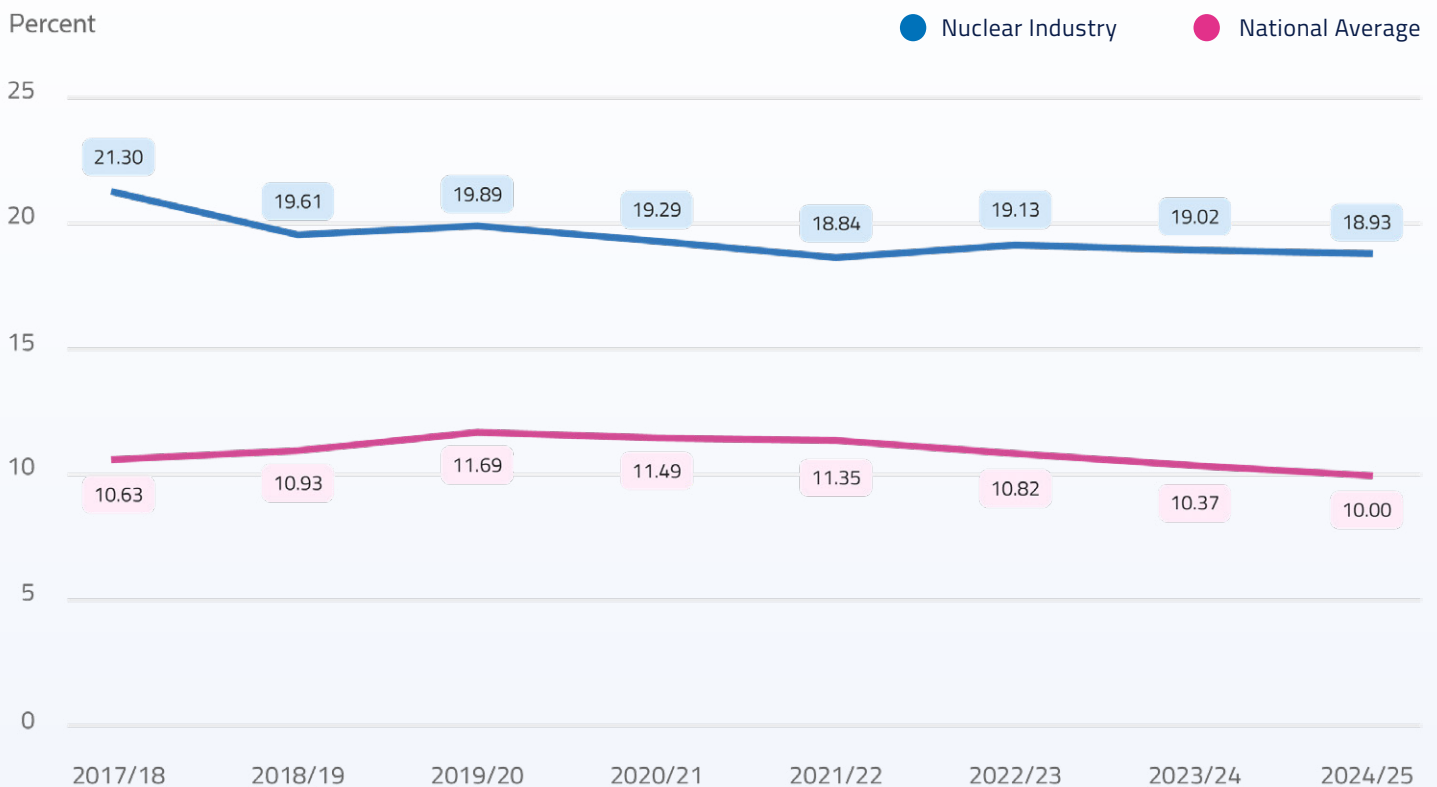
# HOW DOES THE NUCLEAR INDUSTRY

# COMPARE TO THE NATIONAL AVERAGE?

To provide our comprehensive understanding of the gender pay gap within the nuclear industry, we have compared key metrics data from the Office for National Statistics to the national average for the average UK company (calculated using the UK Government Gender Pay Gap Service).

Graph 1, illustrated the disparity between the 3, whilst Graph 2 below shows the disparity between the nuclear industry and national average.

## Median Hourly Pay

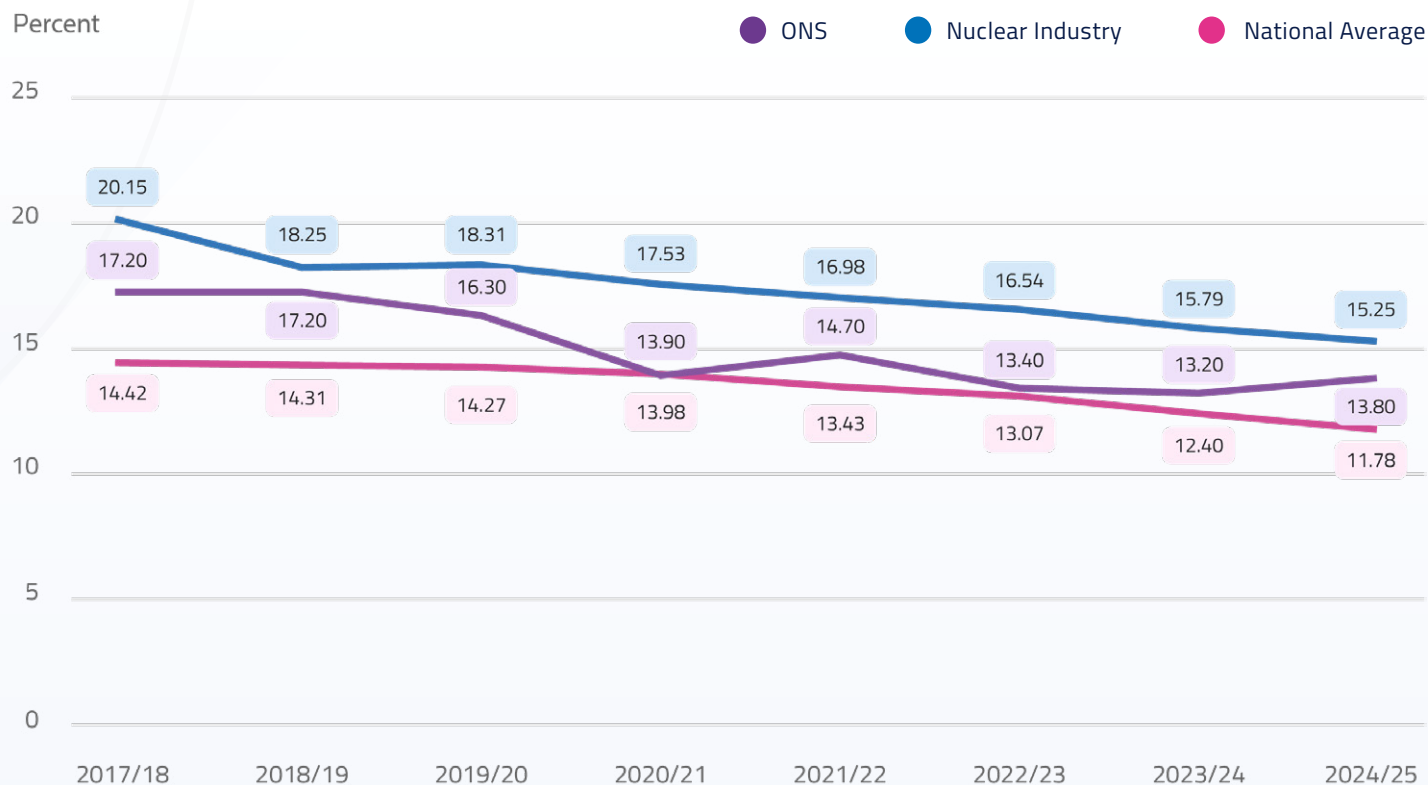


**Graph 2:** Median Hourly Pay Gap Percentage for the Nuclear Industry & the calculated National Average

Graph 2 demonstrates a substantial gap in Median Hourly Pay between the Nuclear Industry and the National Average. While the Nuclear Industry is shown to be decreasing at a faster rate, than the much lower percentage National Average, it is estimated that if both are to decrease at the current rate, it would take an **additional 55 years for the Nuclear Industry to catch up** to the National Average.

## Mean Hourly Pay

Mean Hourly Pay, as previously stated, is used to understand broader pay inequality. While this statistic is not often used as a benchmark for gender pay gap reporting, it is still useful because the mean can be affected by those at the higher and lower ends of the averages. This can show larger differences and provide context for the averages. For example, the mean average may show a larger pay gap if there are more men in senior, higher-paid roles and more women in junior, lower-paid roles. The mean being calculated by adding up everyone's pay and dividing it by the number of people means extreme values can have a big impact.

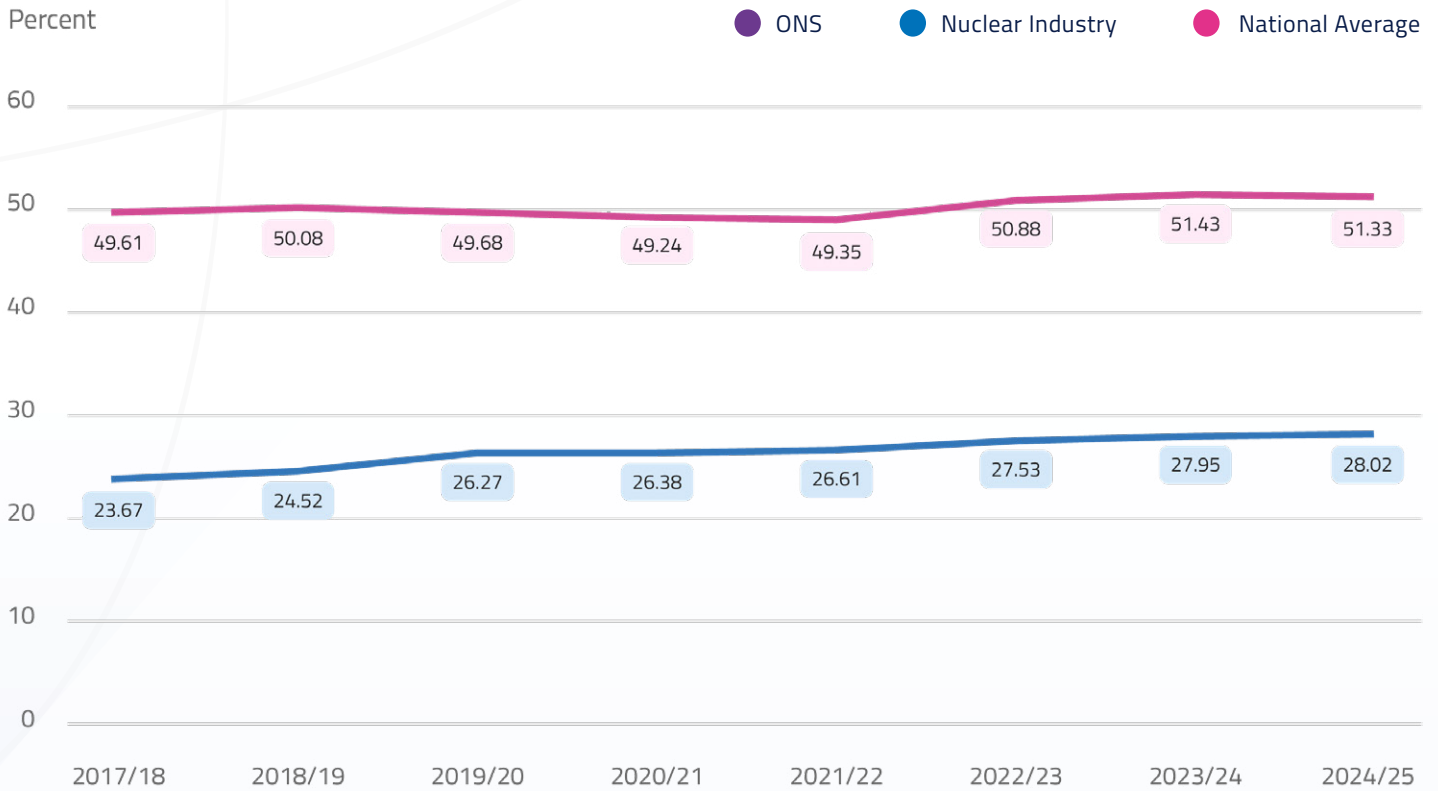


**Graph 3:** Mean Hourly Pay Gap Percentage

Graph 3 illustrates the gender pay gap in the nuclear industry and compares it to data from the Office for National Statistics (ONS) as well as our calculated National Average for the mean hourly pay percentage. It is shown again that whilst they all exhibit a downwards trend, the nuclear industry remains significantly above the national average and the ONS data.

## Percentage of Women in the Workforce

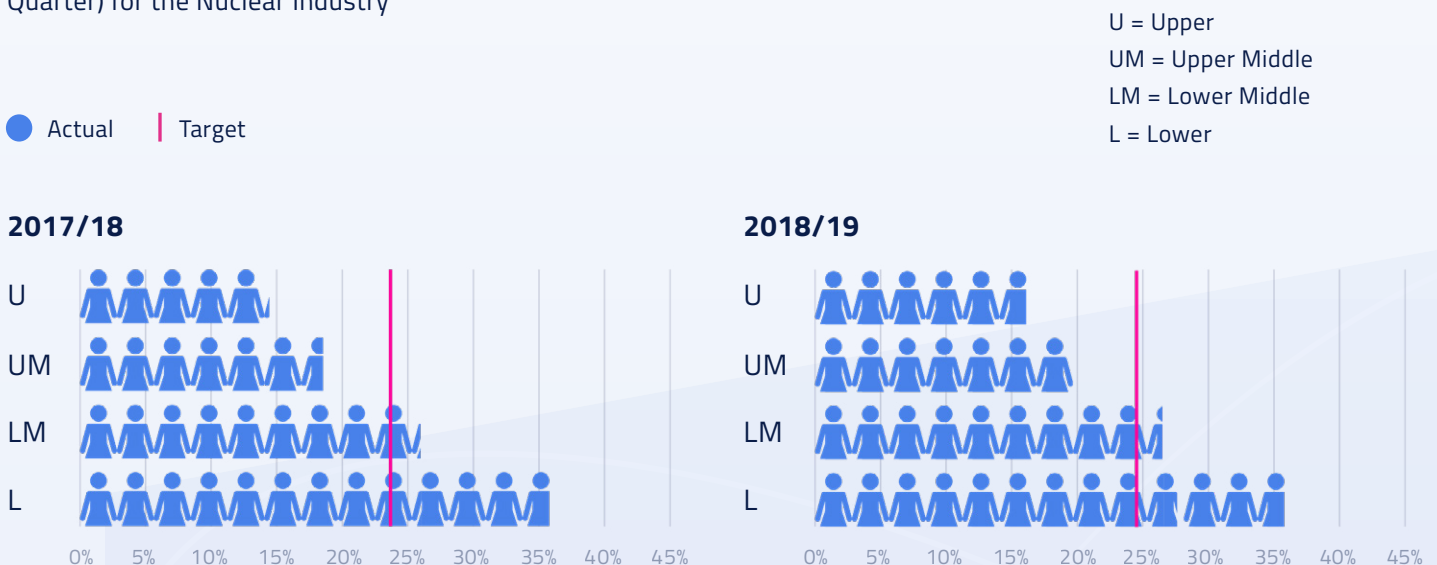
Graph 4 reveals a significant gender imbalance within the Nuclear Industry, with a considerably lower percentage of women compared to the National Average. The Nuclear Industry has seen a gradual increase from 23.67% to 28.02% over the past 8 years. This indicates a slow but steady improvement in gender representation within the industry. Despite this improvement, it is crucial to now investigate the pay quarters to get a better understanding of the imbalance in pay.



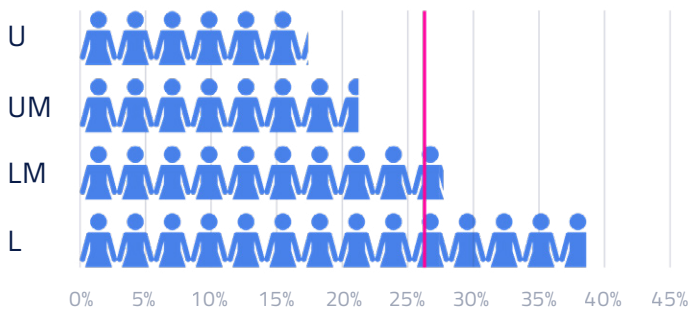
**Graph 4:** Percentage of Women in the Workforce for the Nuclear Industry & the National Average

Graph 5 illustrates that many of the women employed in the Nuclear Industry are found in the lower pay quarters with 35-40% of women being in the lowest pay quarter and 25-30% being in the lower middle pay quarter. **This shows that the majority (60-70%) of women are being paid less than the median employee in the average Nuclear Company and that the pay quarters are imbalanced.** From this, we deduce that this is an area that requires further attention and investigation of the industry’s pay quarters as it seemingly highlights a lack of career progression.

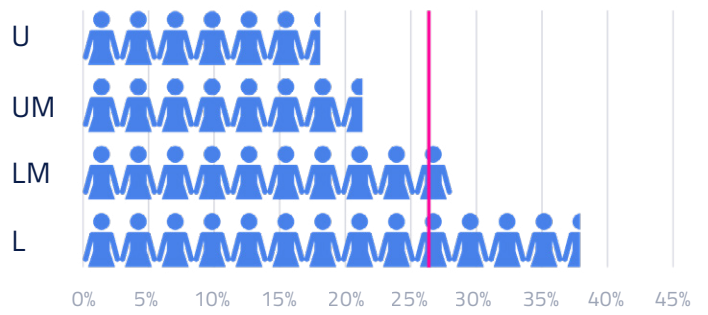
**Graph 5:** Female Representation of Pay Quarters (including Target Pay Quarter) for the Nuclear Industry



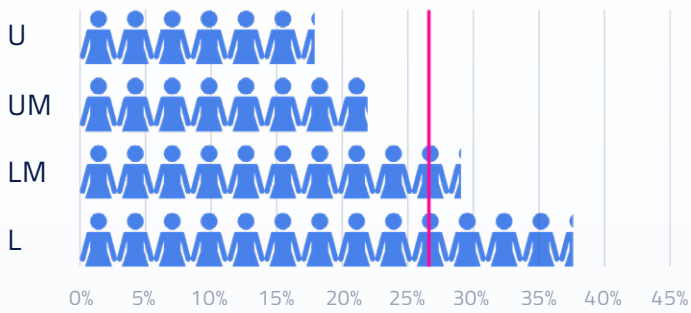
## 2019/20



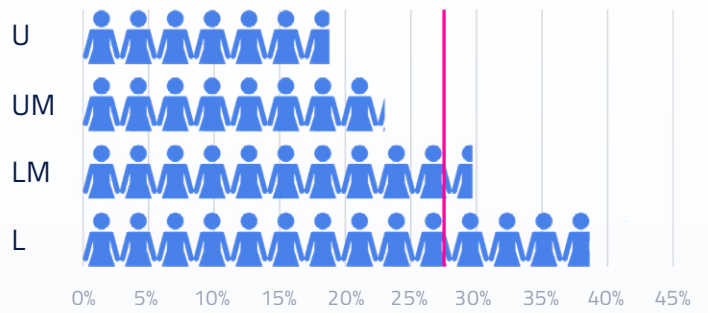
## 2020/21



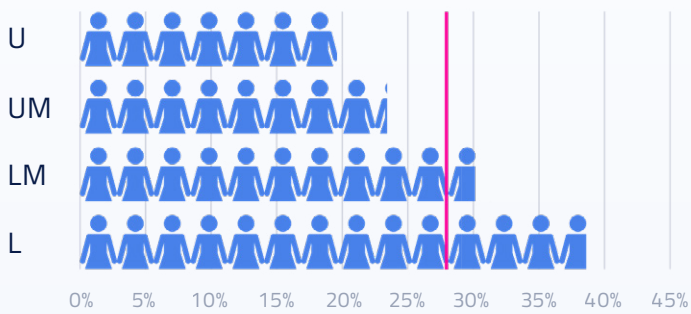
## 2021/22



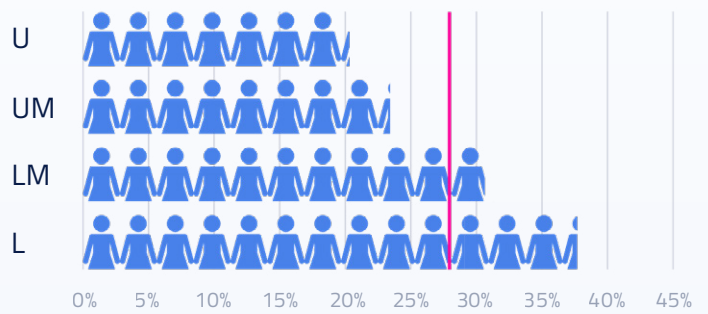
## 2022/23



## 2023/24



## 2024/25



Whilst there are many reasons why this representation may be appearing in the workplace, each organisation is different and therefore each effort towards narrowing the gap will need to be tailored. A well-documented theory however, particularly in engineering sectors is alluded to below in excerpts from the article "The extra shift": The unpaid emotional labour expected of women at work<sup>5</sup>, and is an area to address.

In other words, women also must be confident and competent, plus considerate and compassionate. But ironically, while women will be left behind if they don't do the extra work, it doesn't do much to help them rise to the top.

**"In an engineering firm, say, to get ahead, a male engineer has to be two things: confident and competent . . . For a female engineer to get ahead, she has to display the same attributes, and then she also has to be kind and reassuring and a team player." — Rose Hackman**

**"All the extra services women perform at work – raising money for things, planning events, remembering occasions – that sort of stuff doesn't count . . . It takes a lot of organisation and multitasking; there's some solid skill sets in that kind of labour. But then when it comes time to be promoted, none of that work is part of the equation." — E Michele Ramsey**

<sup>5</sup> BBC Worklife - 'The extra shift': <https://www.bbc.com/worklife/article/20240313-invisible-emotional-labour-women-in-workplace>

# KEY TAKEAWAYS AND CONSIDERATIONS

The stark contrast between the National Average Gender Pay Gap and the persistently higher gap within the Nuclear Industry, reflects a deep-rooted issue of gender inequality within the industry.

Whilst the data indicates a gradual narrowing of the gap over time, the current pace of progress is insufficient to achieve substantial change before the end of this decade.

At a time when the sector needs to attract and recruit in vast numbers, a high pay gap does not show nuclear as an enticing option to the talent we need to hire and to retain, and not least for the reasons outlined in the article cited below:

Two-thirds (61%) of generation Z professionals value company ethics as much as their pay packet according to research. While the research found that generation Z's priorities are a good work-life balance and wages, cited by 63% and 62% respectively, they also want to work for employers that tackle the gender pay gap (29%), are honest and have integrity (28%), and take positive action within the community (20%).<sup>6</sup>

A deeper understanding of the issues surrounding women's experiences at work is crucial for developing effective solutions. The following items underscore the need for further investigation into the factors contributing to these disparities.

## Workplace Support...

Young Women's Trust – Work and money worries: 2024 annual survey snapshot<sup>7</sup> reported that: 56% of young women responded that they have the support they need to progress in their careers, compared to 64% of young men. 41% of young women are worried about not having the support they need in their job, compared to 36% of young men.

## Spike in Women aged 35 – 44 leaving Engineering

Workforce data released in 2024 by EngineeringUK reveals the proportion of women working in engineering and technology roles has declined in the past year from 16.5% to 15.7%. In contrast, women make up more than half of the rest of the UK workforce (56.1%).

Further analysis shows the drop is concentrated among women aged 35 to 44. The finding is consistent with registration data published by the Engineering Council which shows the average age of women leaving the profession is 43, in contrast to 60 for men. EngineeringUK Chief Executive Hilary Leever, commented, "We are taking this small but significant decline very seriously. Behind the percentages, are professional women with real lives and careers. The sector as a whole needs to better understand why women are leaving and work harder to improve their retention, including creating opportunities for those who have left the profession to return. The various government skills taskforces must also ensure retention is core to the strategies they are working on."<sup>8</sup>

<sup>6</sup> Personnel Today - Most Gen Z workers value company ethics as much as pay:  
<https://www.personneltoday.com/hr/most-gen-z-workers-value-company-ethics-as-much-as-pay/>

<sup>7</sup> Young Women's Trust - Work and money worries: [https://www.youngwomenstrust.org/our-research/work-and-money-worries-2024-annual-survey-snapshot/?utm\\_campaign=annual\\_survey\\_snapshot&utm\\_medium=referral&utm\\_source=press](https://www.youngwomenstrust.org/our-research/work-and-money-worries-2024-annual-survey-snapshot/?utm_campaign=annual_survey_snapshot&utm_medium=referral&utm_source=press)

<sup>8</sup> Engineering UK - Spike in women aged 35 to 44 leave engineering:  
<https://www.engineeringuk.com/latest-news/press-releases/spike-in-women-aged-35-to-44-leaving-engineering/>

## The 'Motherhood Penalty'...

"The analysis – which compares ONS data from January to March 2023 with the same period in 2020 – found that the median hourly pay was £18.48 for fathers compared with £14.04 for mothers."<sup>9</sup>

Waiting for the gender pay gap to close organically or even at its recent pace, is no longer an option. **We need to address this now.**

## RECOMMENDATIONS

To address this disparity, nuclear companies must first prioritise their understanding of gender inequality and the intricacies of pay gaps. Proactive steps can include:

- Consulting with experts: Seeking guidance from professionals specialising in gender equality and pay gap analysis.
- Enact learning and good practices gained from attending pay gap conferences and events where experiences and insights are shared.
- Engaging with employees: Fostering open dialogue with employees at all levels to gather insights, address concerns and identify opportunities.
- Reviewing current recruitment processes and practices to understand the current impact on the gender pay gap and what changes may be required.
- Reviewing current career progression and retention pathways, understanding the barriers and enablers at play.

With this underway, companies can then start to take targeted action to rectify the inequalities. Whilst we value all positive actions, we, as a sector, need to recognise that activities such as Employee Resource Groups (ERGs) and networks, whilst making a positive and valued contribution, are not enough to fix the problem. This requires long-term, sustainable interventions.

Inclusion and Diversity in Nuclear would be happy to discuss how we can help your organisation. Through our industry partnerships and consultancy work we have reviewed pay and progression data, identified action points, reviewed and updated policies, provided implementation steps and coaching support to clients.

## WHERE DO WE GO FROM HERE?

At Inclusion and Diversity in Nuclear, we are committed to advancing our research into gender pay gaps and expanding our focus to include ethnicity pay gaps, disability pay gaps, gender pay gap inclusive of non-binary and transgender, and other forms of pay disparity.

We consider our inaugural report as setting a benchmark to improve. We plan to repeat this research annually, with the hope that we see a much-improved upward trajectory towards closing the existing gap.

We want to collaborate with nuclear companies to drive positive change and create a more equitable workplace for all.

<sup>9</sup> <https://www.theguardian.com/world/2024/mar/08/uk-mothers-earned-444-less-an-hour-than-fathers-in-2023-finds-analysis>

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Thank you to Nicole Lee and Marcia Ore for checking this report.

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