

# Climate Concerns Stakeholder Insights

May 2023

## Contents

|   |    |
|---|----|
| SECTION 1 – Introduction.....   | 3  |
| What is climate change? .....   | 4  |
| What is the relationship between climate change and the sector? ..... | 5  |
| How can we address the issue of climate change? .....                 | 6  |
| What was the aim of this research? .....                              | 7  |
| What is the purpose of this report? .....                             | 7  |
| How did we approach this research? .....                              | 7  |
| SECTION 2 – Key Findings .....  | 8  |
| Concerns and Impacts.....   | 9  |
| Familiarity with climate change concepts .....                        | 11 |
| Sources of information .....  | 11 |
| Adaptation and mitigation work .....                                  | 12 |
| The Role of CIWM.....   | 13 |
| SECTION 3 – Conclusions and Recommendations .....                     | 15 |
| Conclusions .....   | 16 |
| Recommendations .....   | 17 |
| SECTION 4 – Appendices .....  | 18 |
| Appendix 1 – About Respondents.....                                   | 19 |
| Appendix 2 – Reference List.....                                      | 20 |

# SECTION 1 – Introduction

## What is climate change?

The United Nations (UN) define climate change as long-term shifts in temperatures and weather patterns<sup>1</sup>. These long-term shifts can be caused by natural events and sources, such as variations in the solar cycle, volcanic activity, carbon dioxide (CO<sub>2</sub>) from ocean outgassing, decomposing vegetation, naturally occurring wildfires, and emissions from ruminant animals.

However, extensive scientific understanding of the Earth's climate (from ice cores) shows the current changes in climate have been driven beyond natural shifts in temperatures and weather patterns by human activities, mainly through the burning of fossil fuels – coal, oil, and gas, which represent 75% of global greenhouse emissions and nearly 90% of all carbon dioxide emissions according to the UN<sup>2</sup>.



In 2019, the level of CO<sub>2</sub> in the atmosphere was higher than at any time in at least 2 million years. Since the Industrial Revolution, the average temperature of the planet has risen by around 1°C. Whilst this may not sound a lot, it is a rapid change in terms of our global climate system. Previous natural global changes are understood to have happened over much longer periods of time – thousands of years. It is also important to remember that the world is not warming evenly, so the temperature increase is higher than 1°C in some countries.

In relation to the UK, the Met Office Climate Projections model predicted that, if emissions remained as they were, the UK could experience warmer and wetter winters, hotter and drier summers, and more frequent and intense weather extremes. Projections for 2070 show big potential changes that could have a significant impact upon how we live our lives, including winters between 1 and 4.5°C warmer and up to 30% wetter, and summers between 1°C and 6°C warmer and up to 60% drier.

## What is the relationship between climate change and the sector?

The resource and waste management sector currently contributes between 2-3% of total global Green House Gas (GHG) emissions, and 8% in the UK. The sector plays a vital role in climate mitigation through a multitude of actions, including reducing emissions from improperly managed landfills, preventing open burning, the adoption of technological solutions to waste management (e.g., energy from waste, anaerobic digestion, and composting), and a greater emphasis on waste prevention and reduction.



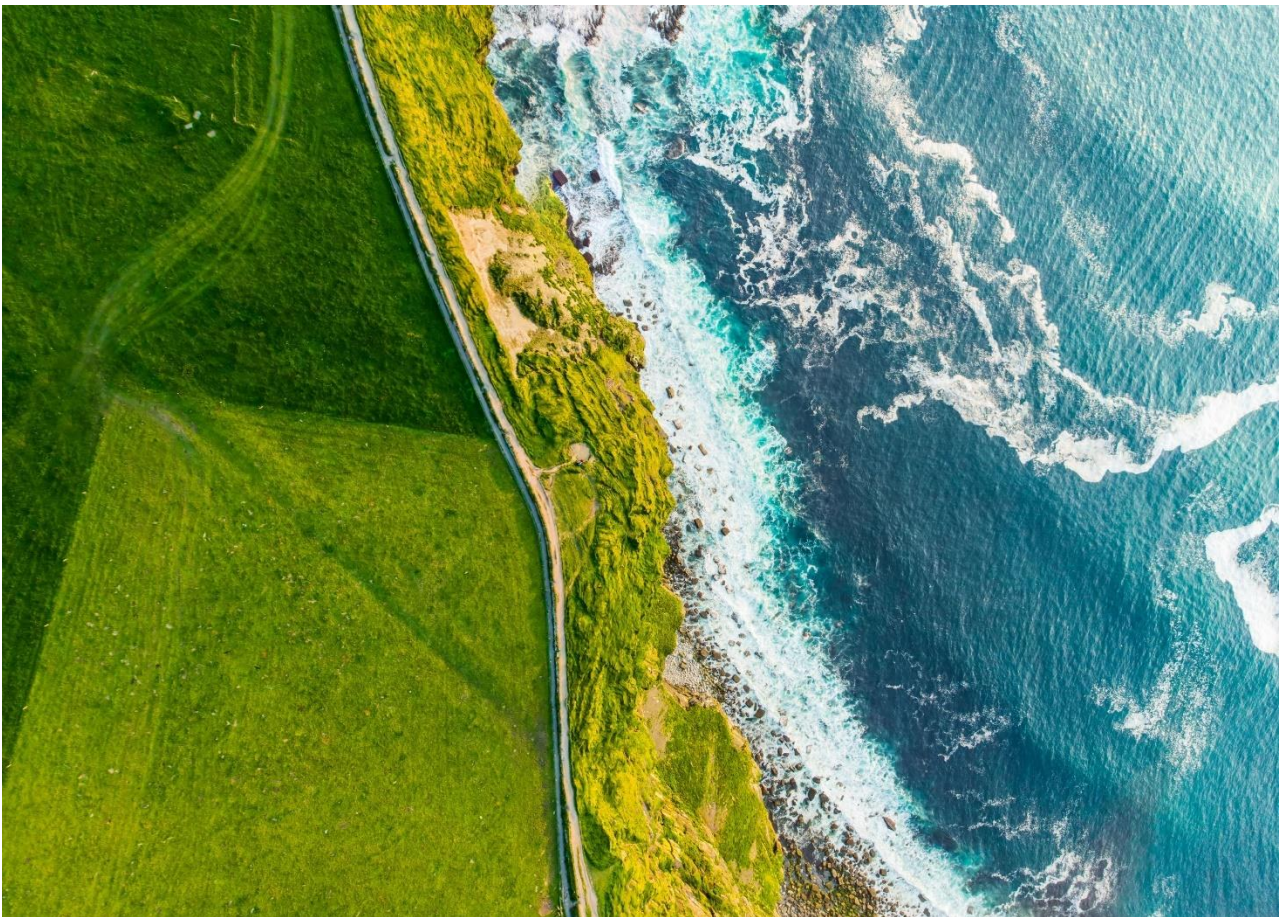
According to the ISWA report on 'the Future of the Waste Management Sector (Trends, Opportunities and Challenges for the Decade)', the effects of waste prevention, recycling and replacement of fossil fuels and virgin raw materials through use of secondary raw materials from waste streams offer potential GHG reductions in the magnitude of up to

20% of the global emissions. This is a significant reduction and frames the importance of the work of the resource and waste management sector in mitigating climate change.

## How can we address the issue of climate change?

The issue of climate change is one that we face collectively and we therefore all have a role to play in reversing the impact human activities have had on our planet. To support the resource and waste management sector in adapting to and taking action to reverse climate change, CIWM has set up a Climate Emergency Strategic Expert Group.

This group will provide leadership for CIWM, the resource and waste management sector, and beyond on tackling the climate emergency, including preventing/mitigating against climate change, and ensuring the sector is able to adapt to the impacts of climate change.



At their first meeting, this group identified that more information was needed to establish what support the sector required in relation to climate change and requested that research be undertaken to explore this issue in greater detail.

## What was the aim of this research?

The aim of this research project was to identify key concerns, existing understanding, and appetite for information from CIWM in relation to climate change amongst CIWM members and other key stakeholders within the resource and waste management sector.

## What is the purpose of this report?

This report will outline:

- The approach to research.
- The key findings and analysis of the research.
- The recommendations based on the research findings.

## How did we approach this research?

To facilitate this research, the CIWM Climate Emergency Strategic Expert Group set up a sub working group to agree the questions and route to market for a discreet online survey designed to:

- Identify key concerns in relation to climate change.
- Determine existing levels of understanding regarding climate change.
- Establish if there is appetite for information from CIWM in relation to climate change from CIWM members and other sector stakeholders.

The survey used a combination of closed and open questions to illicit a range of responses from respondents. The survey was administered between 23<sup>rd</sup> January and 10<sup>th</sup> February 2023. The survey link was emailed directly to CIWM members, published on CIWM Connect and CIWM social media platforms – allowing both members and non-members of CIWM to participate.

Over the three-week research period, 192 responses were received. Responses were anonymous, although those that participated were given the option to provide email to engage in further research.

## SECTION 2 – Key Findings

## Concerns and Impacts

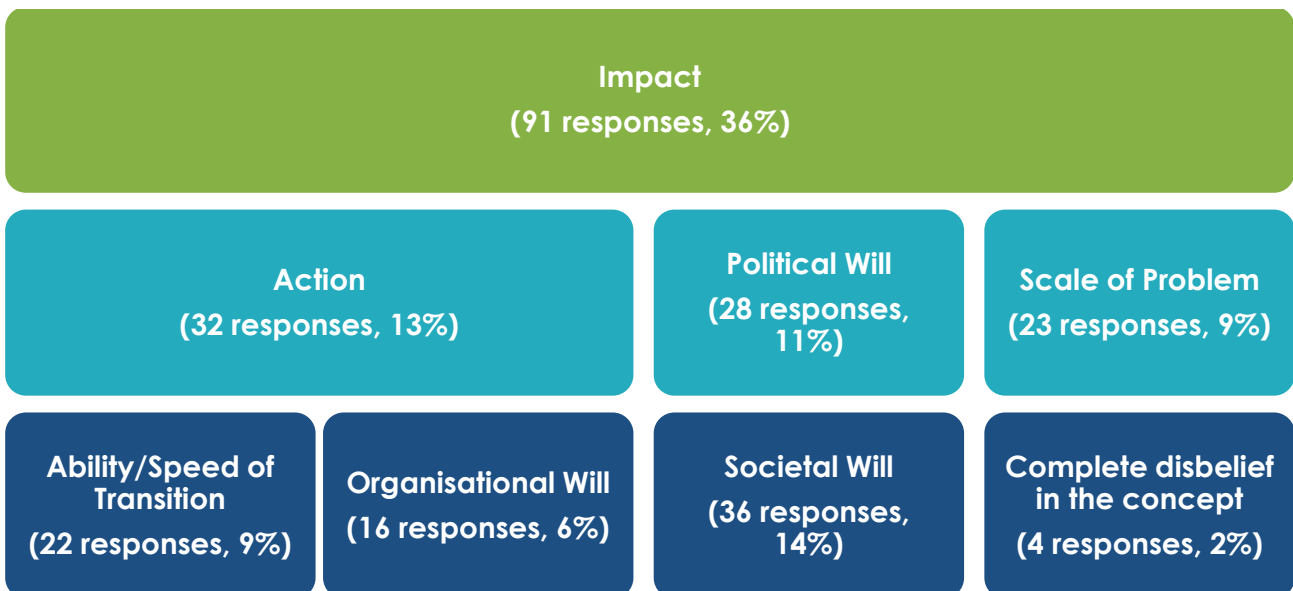
When it came to how concerned respondents are about climate change, on a scale of 1 (not concerned) to 10 (very concerned), the average score was 8.1, showing members and other key stakeholders have a high level of concern about climate change.

When asked how much respondents felt they were currently being impacted by climate change in their daily work, on a scale of 1 (not impacted) to 10 (significantly impacted), the average score was 5. This compared to a score of 4.9 for the impact of climate change in their daily life. This indicates that, although people are concerned about the issue of climate change, it is not something they feel is significantly impacting their day-to-day lives at work and home currently.

However, when asked how much impact they thought climate change will have on them over the next 10 to 15 years, on a scale of 1 (no impact) to 10 (significant impact), respondents indicated that they recognised that the impacts of climate change would become more prominent with a score of 7.3.

We asked respondents to tell us about their main concern regarding climate change. Their responses fell into the following eight categories with some respondents providing more than one concern (Figure 1).

**Figure 1: Main concerns about climate change**



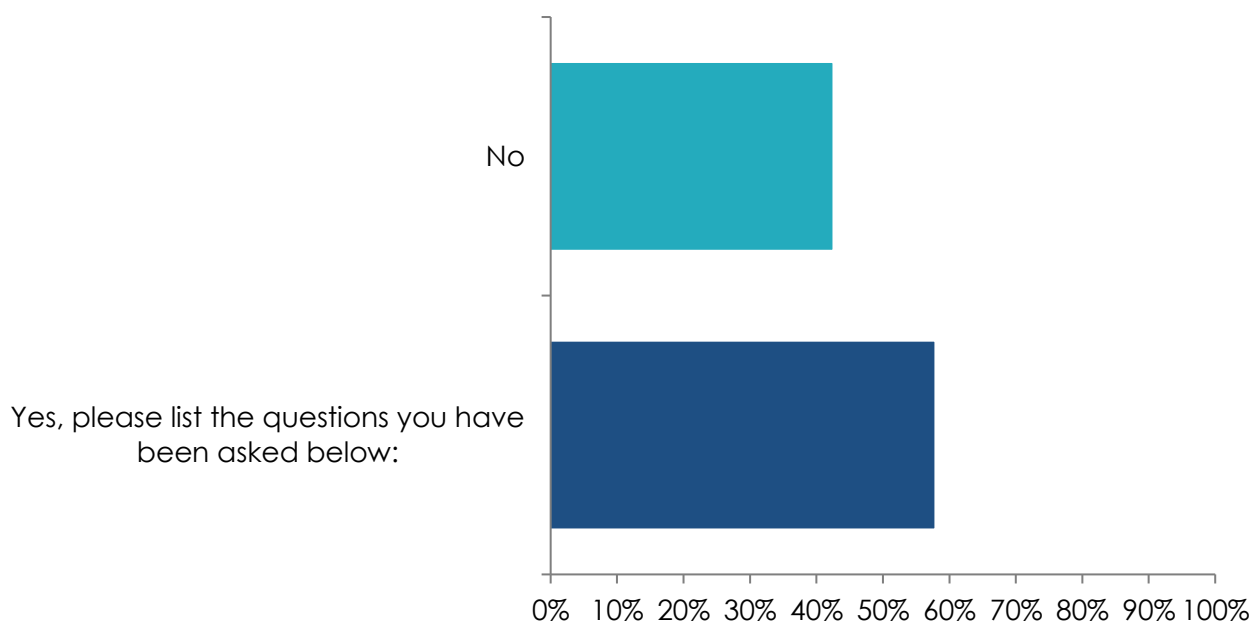
36% of responses focused on concerns about the impacts of climate change. Some of the concerns highlighted by respondents included impacts on:

- Society, particularly the poorest and most vulnerable.
- Biodiversity.
- Geopolitical stability.
- Sea levels and localised flooding.

- Food and water availability.
- Migration and displacement of people.
- Weather and extreme weather events.
- Non-renewable resource depletion.
- Increasing commodity prices.
- Deforestation.
- Extinction.

We also asked respondents if they had ever been asked about climate change by family, friends, or colleagues (Figure 2).

**Figure 2: Encountering questions from family, friends, and colleagues.**



Based on the responses to other questions in this section, it is likely that CIWM members and other key stakeholders will encounter more questions over the next 10-15 years on climate change, such as:

- Is it real/true? Do you believe in it?
- How much of a problem is it really? Is it a real concern or media hype?
- What can we do to help mitigate against it?
- How can I make a difference?
- What is the real impact to me/the planet?
- What are UK emissions compared to other countries? Why isn't the government doing more?
- How can we do anything if not all countries are willing to change?
- Why is it cold in winter if climate change exists?
- How does recycling contribute to tackling it?

## Familiarity with climate change concepts

CIWM members and other key stakeholders were asked how familiar they were, on a scale of 1 (not familiar) to 10 (very familiar), with a variety of concepts related to climate change (Table 1). The highest proportion of respondents were familiar with the concept of sustainability (64.74%) followed by climate change (58.42%), zero waste (52.91%) and circular economy (52.38%).

**Table 1: Familiarity with Climate Change concepts**

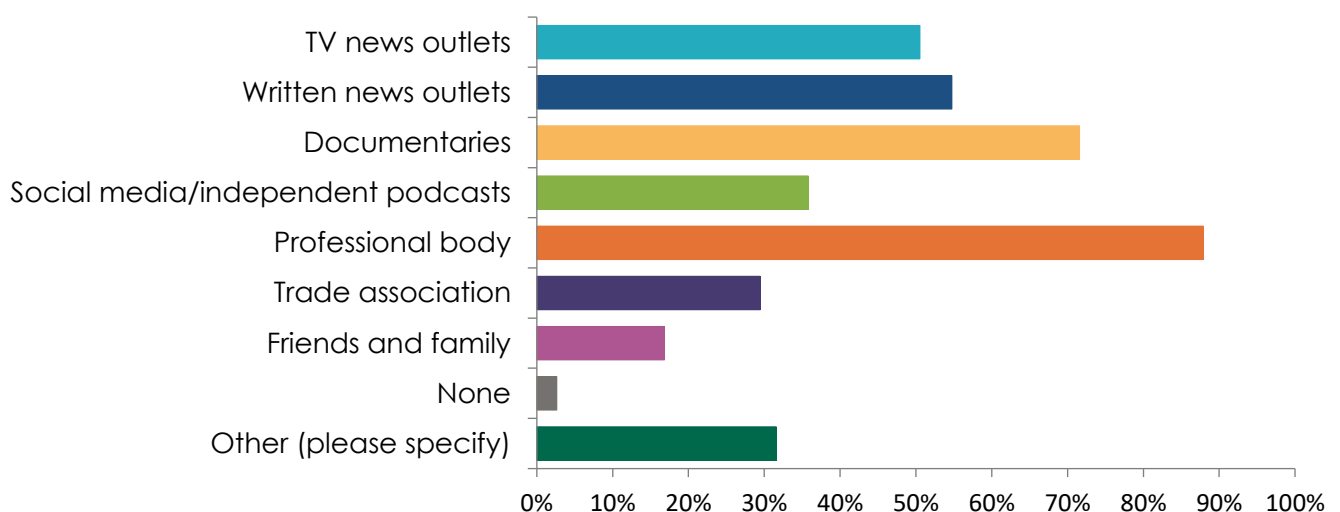
| Concept                | Familiarity |
|------------------------|-------------|
| Sustainability         | 64.74%      |
| Climate change         | 58.42%      |
| Zero waste             | 52.91%      |
| Circular economy       | 52.38%      |
| Net zero               | 39.47%      |
| Carbon neutrality      | 33.86%      |
| Off setting            | 25.93%      |
| Nature based solutions | 20.53%      |

However, responses indicate that CIWM members and other key stakeholders are not as comfortable with net zero (39.47%) and other terminology linked to reducing the emissions that cause climate change.

## Sources of information

CIWM members and other key stakeholders were asked where they source up to date and trusted climate change information (Figure 3).

**Figure 3: Sources of up to date and trusted Climate Change information**



Most respondents stated that they used professional bodies, documentaries, and written news outlets to access information about climate change, indicating respondents may access further content from CIWM regarding tackling the climate emergency.

## Adaptation and mitigation work

We also asked respondents what climate adaptation or mitigation they had started at work. The responses suggest that respondents are looking at their existing systems and procedures, as well as their products and services to see where adaptations and mitigations can be made.

**Figure 4: Climate adaptations and mitigations**

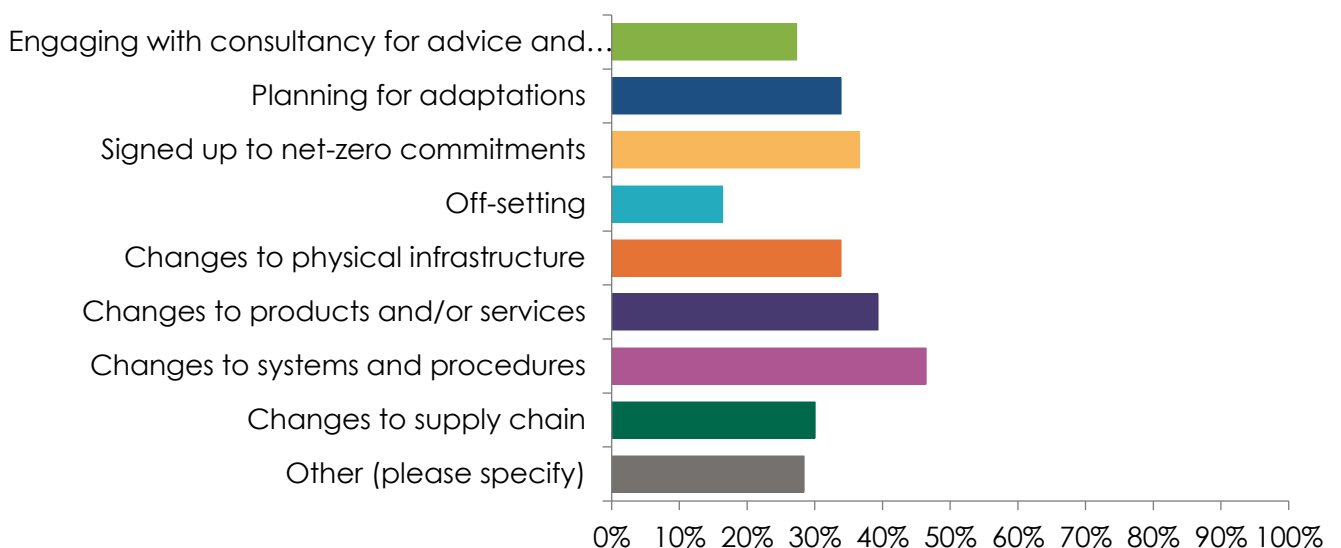
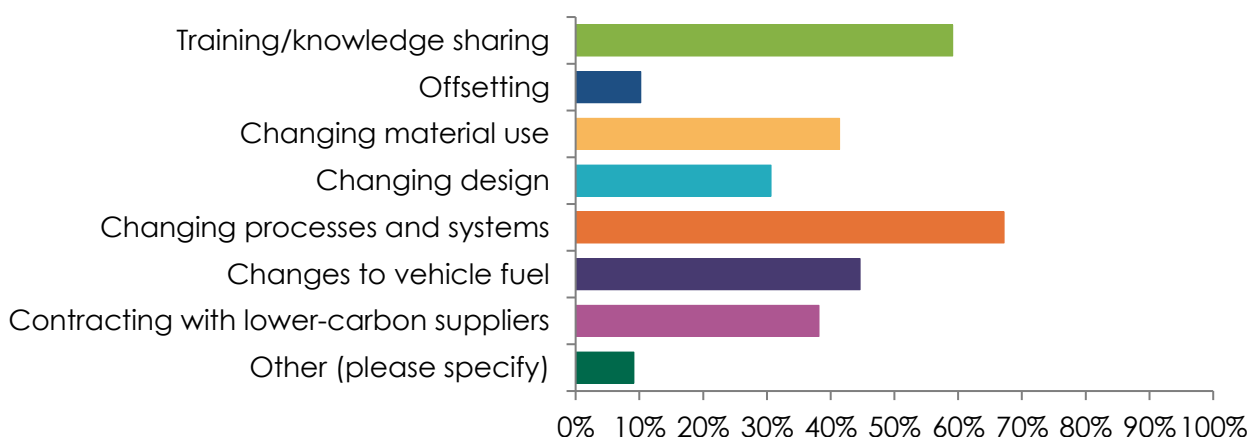


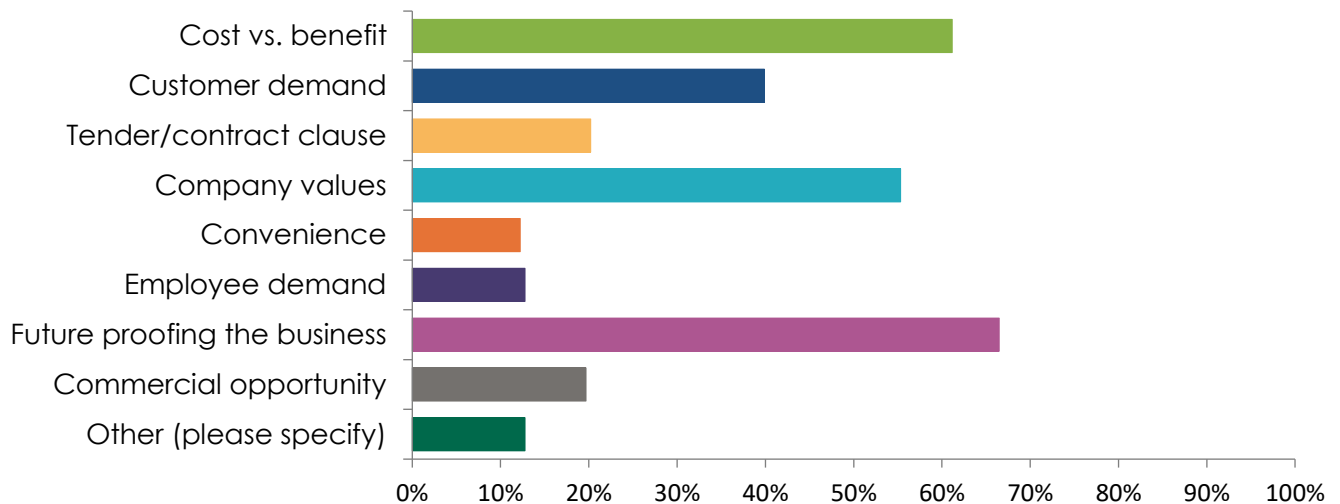
Figure 5 supports this conclusion as respondents indicated that, when making climate change adaptations and mitigations, they would prioritise changing systems and processes, as well as training/knowledge sharing.

**Figure 5: Top priorities when making climate change adaptations and mitigations**



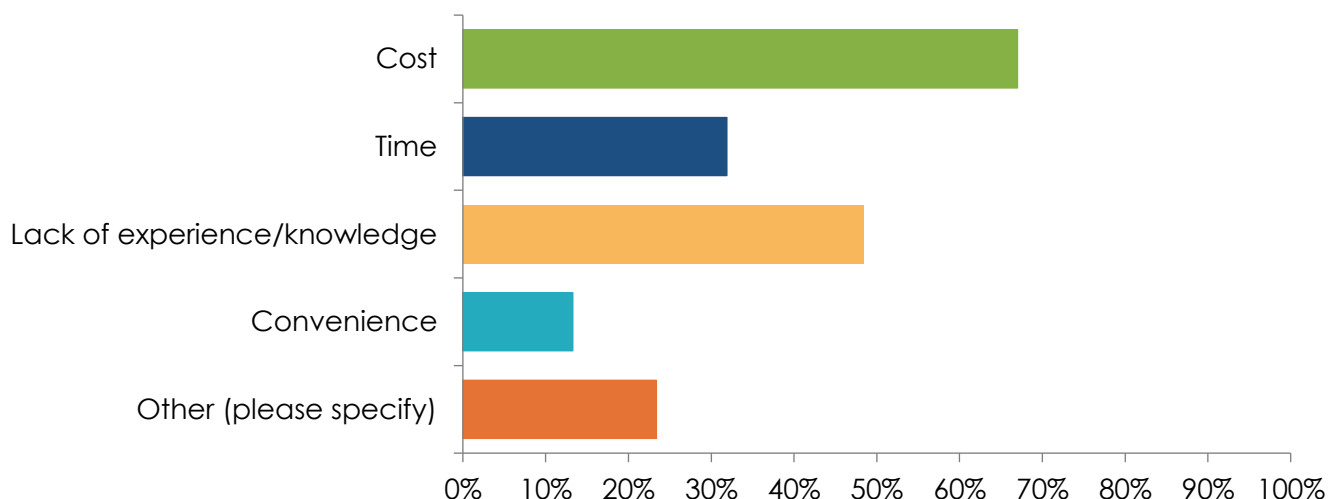
This reflects respondents' top priorities for making decisions in relation to climate change adaptations (Figure 6) as adaptations to current business practice will help to future proof the business.

**Figure 6: Factors that impact Climate Change adaption decisions**



However, respondents identified barriers for those in the resource and waste management sector looking at climate change adaption and mitigation (Figure 7), particularly in terms of cost and lack of experience/ knowledge.

**Figure 7: Barriers to Climate Change adaption and mitigation**

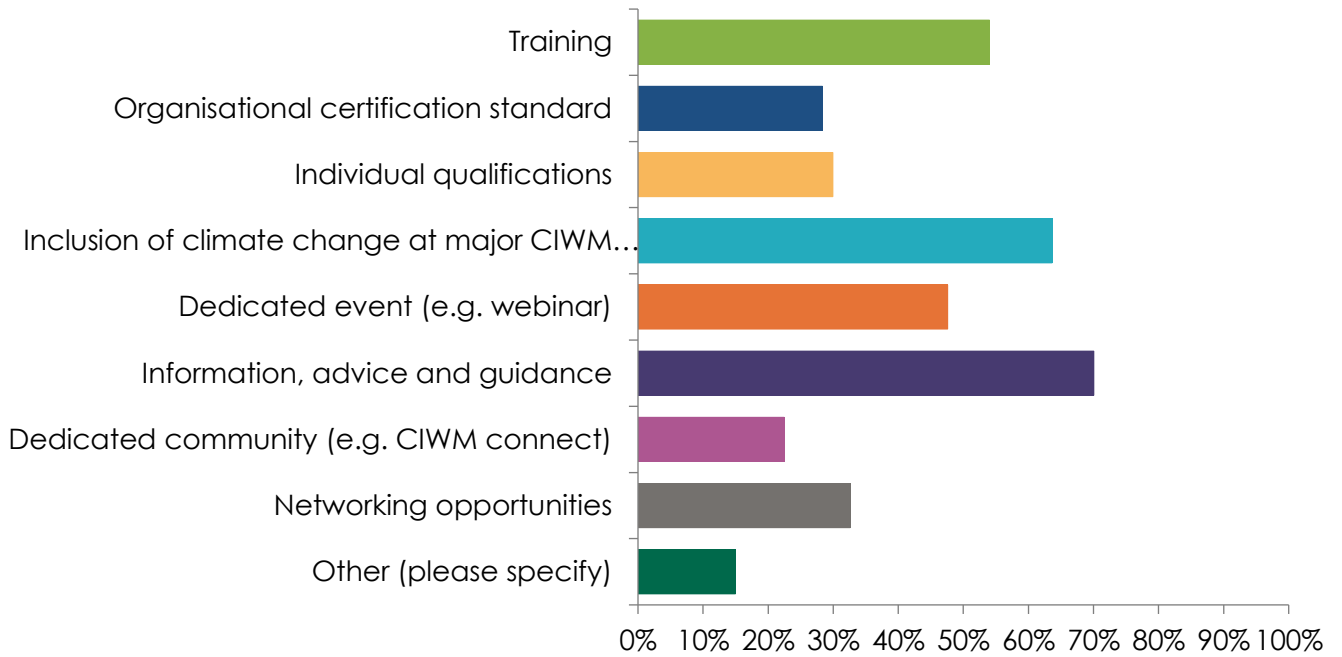


## The Role of CIWM

We asked CIWM members and other key stakeholders what they'd like to see from CIWM in relation to climate change. A significant proportion of respondents indicated that they felt CIWM should:

- Provide information, advice, and guidance.
- Start covering climate change at major CIWM events.
- Deliver training in relation to climate change.

**Figure 8: What CIWM should provide in relation to Climate Change**



## SECTION 3 – Conclusions and Recommendations

## Conclusions

Current changes in climate have been driven beyond natural shifts in temperatures and weather patterns by human activities. The resource and waste management sector plays a vital role in climate mitigation through a multitude of actions.



CIWM members and other key stakeholders that participated in our research indicated that they were concerned about climate change, and particularly the impacts it would have on society, politics, and the environment. However, they did not feel they were significantly experiencing the impacts of climate change in their day-to-day lives at home and work.

Despite this, respondents felt that over the next 10 to 15 years they would experience more impacts from the climate emergency and had started to encounter questions from family, friends, and colleagues on the topic. They also reported starting to explore options for climate change mitigation and adaption which would help to future proof their business.

However, respondents identified barriers for those in the resource and waste management sector looking at climate change adaption and mitigation, particularly in terms of cost and lack of experience/ knowledge.

## Recommendations

Based on this research, we make the following recommendations to address these barriers and support the sector to adapt/mitigate for climate change:

1. Clearly set out how the waste and resource management sector can support efforts to minimise climate change.
2. Research/report/educate on the key risks to businesses in our sector due to climate change.
3. Provide education (e.g., training), information, advice and guidance on mitigations and adaptations which can reduce the impact or likelihood of these risks, with practical steps for businesses to take.
4. Signpost for further advice, guidance, support for members concerned about climate change and/or experiencing climate anxiety.

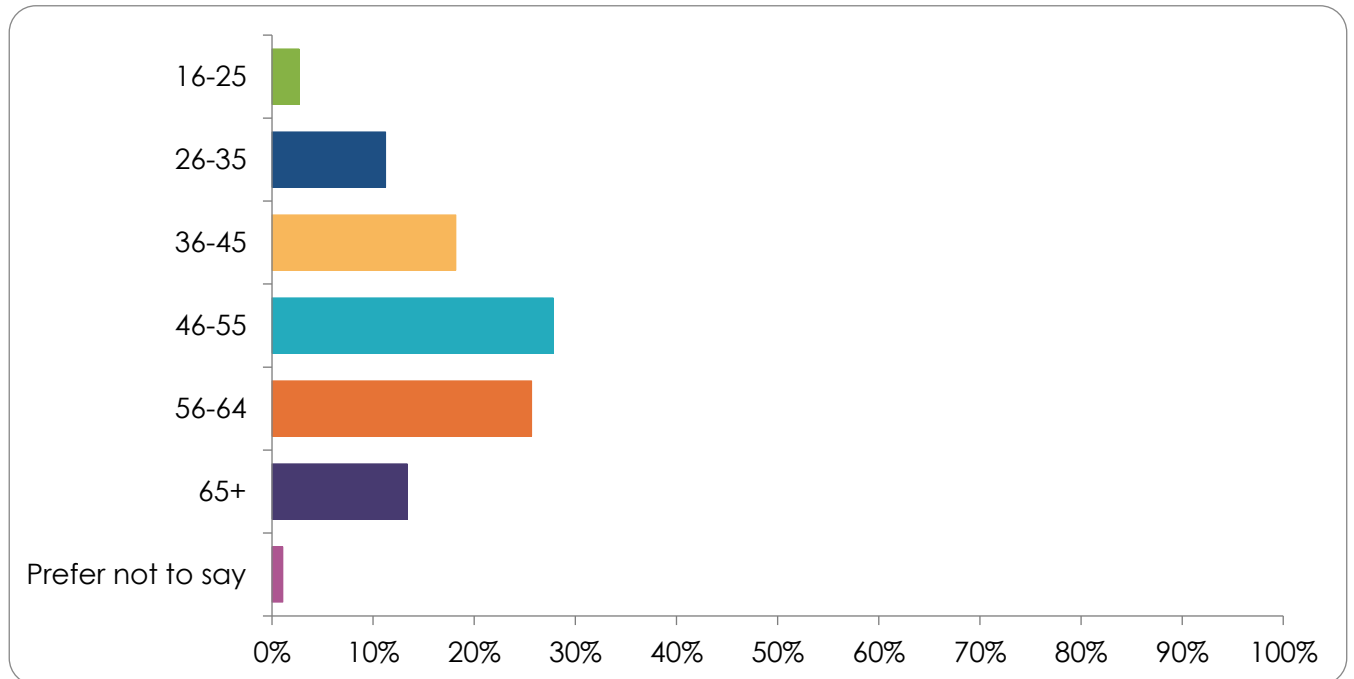
## SECTION 4 – Appendices

## Appendix 1 – About Respondents

### Overall Responses

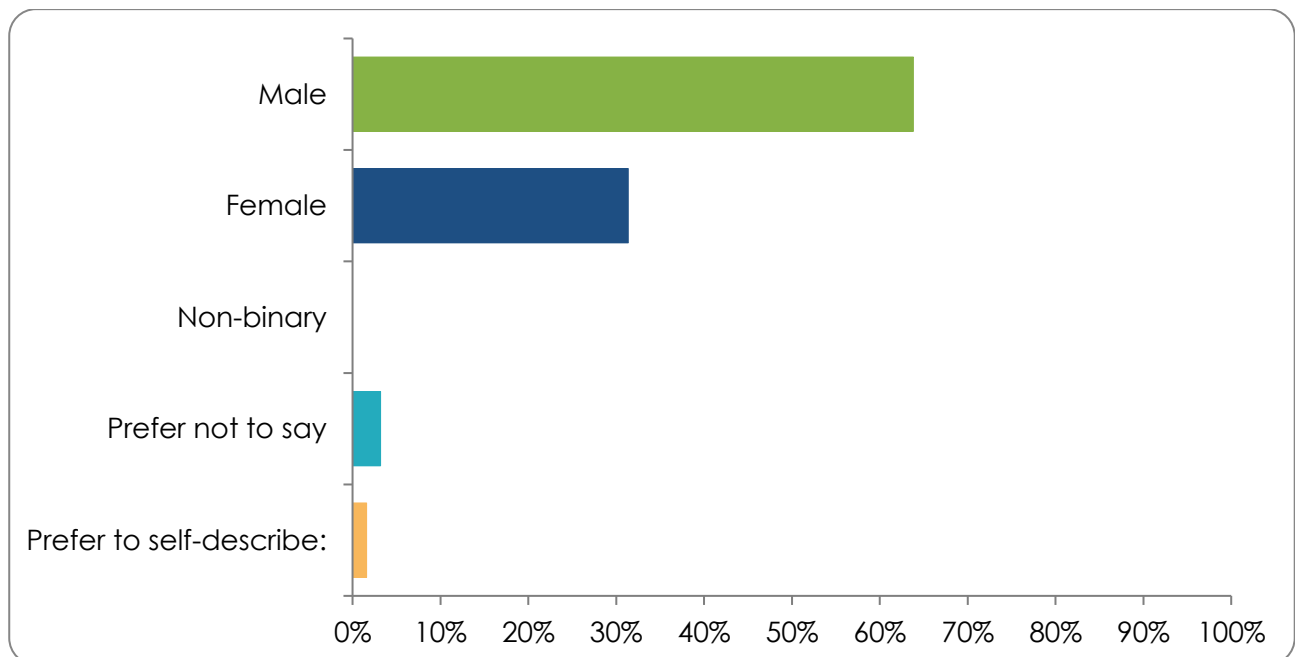
192 responses were received.

### Respondents Profile - Age



(Answered: 187, Skipped: 5)

### Respondents Profile – Gender



(Answered: 188, Skipped: 4)

## Appendix 2 – Reference List

1. [United Nations article: What Is Climate Change?](#)
2. [United Nations article: Causes and Effects of Climate Change](#)
3. [United Nations article: Methane emissions are driving climate change. Here's how to reduce them](#)
4. [ISWA report: The Future of the Waste Management Sector Trends, Opportunities and Challenges For The Decade](#)

Copyright ©2023 CIWM

Copyright in this document is owned by CIWM. Any person viewing, printing, and distributing this document is subject to the following conditions:

- The document may be used for informational purposes only.
- The document may be used for non-commercial purposes only.
- Anyone using information provided in this document should acknowledge CIWM.
- Reproduction and copying of these materials are not allowed.

For further information on Intellectual Property matters contact [info.admin@ciwm.co.uk](mailto:info.admin@ciwm.co.uk).

Please note that all images have been sourced from i-stock.

### Disclaimer

Every effort has been made to ensure that the information contained in this publication is accurate at the time of going to press. The information in this document is for guidance only and CIWM cannot be held responsible for any inaccuracies.



Together, we stand for  
a world beyond waste

## **Our purpose is to move the world beyond waste.**

Help us protect the environment by only printing this document if absolutely necessary and, where possible, please only print the pages you need.

This document has been designed to use minimal ink when printed.

## **More for professional life**

Our mission is to unite, equip and mobilise our professional community to lead, influence and deliver the science, strategies, businesses and policies for the sustainable management of resources and waste.

For more information about how we can support you, visit **[ciwm.co.uk](https://ciwm.co.uk)**.

CIWM  
Quadra  
500 Pavilion Drive  
Northampton Business Park  
Northampton  
NN4 7YJ

Tel: 01604 620426  
Email: [ciwm@ciwm.co.uk](mailto:ciwm@ciwm.co.uk)