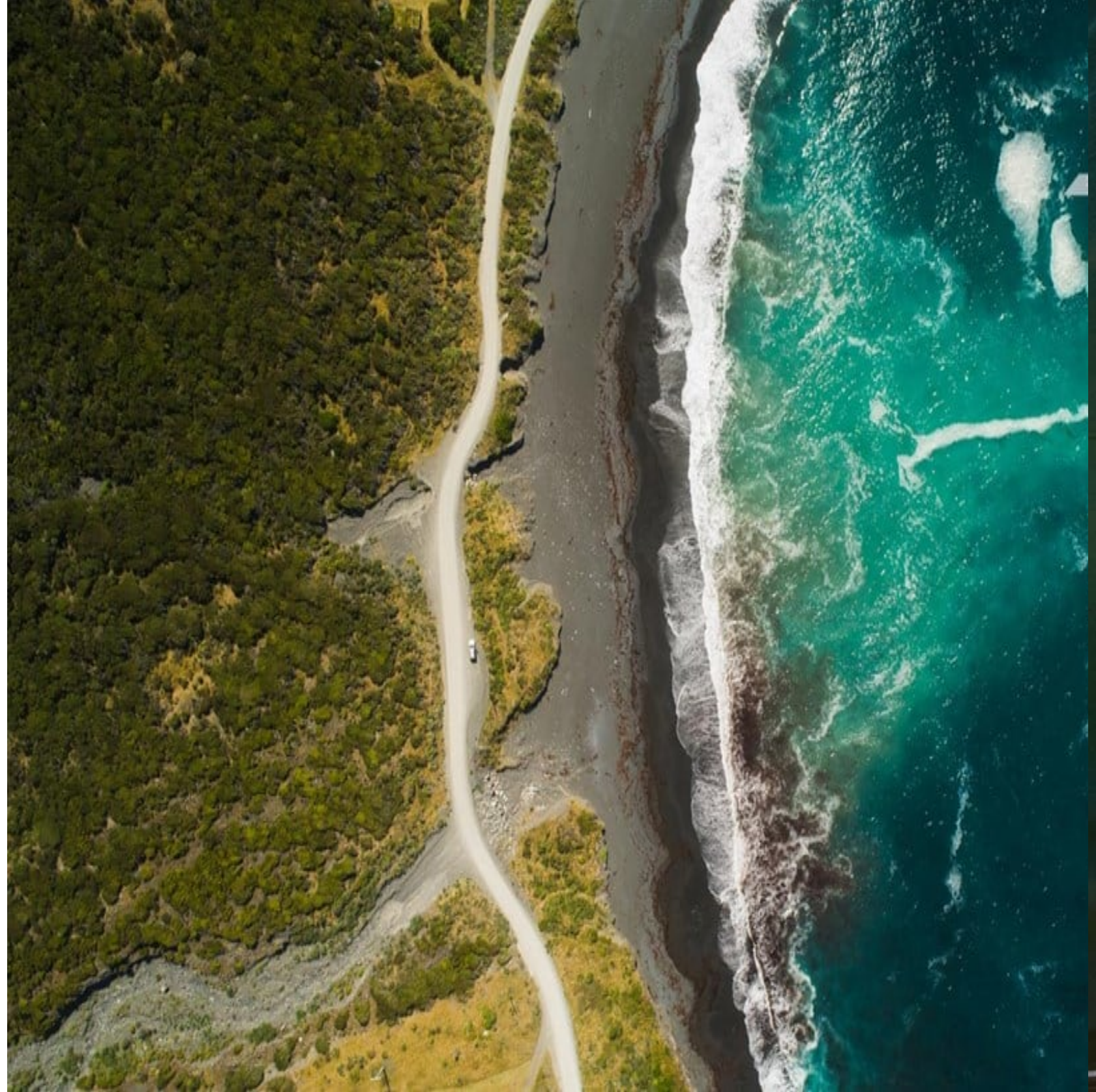


# Technology Is the Fast Track to Net Zero

**CO2 Sakks Tech**

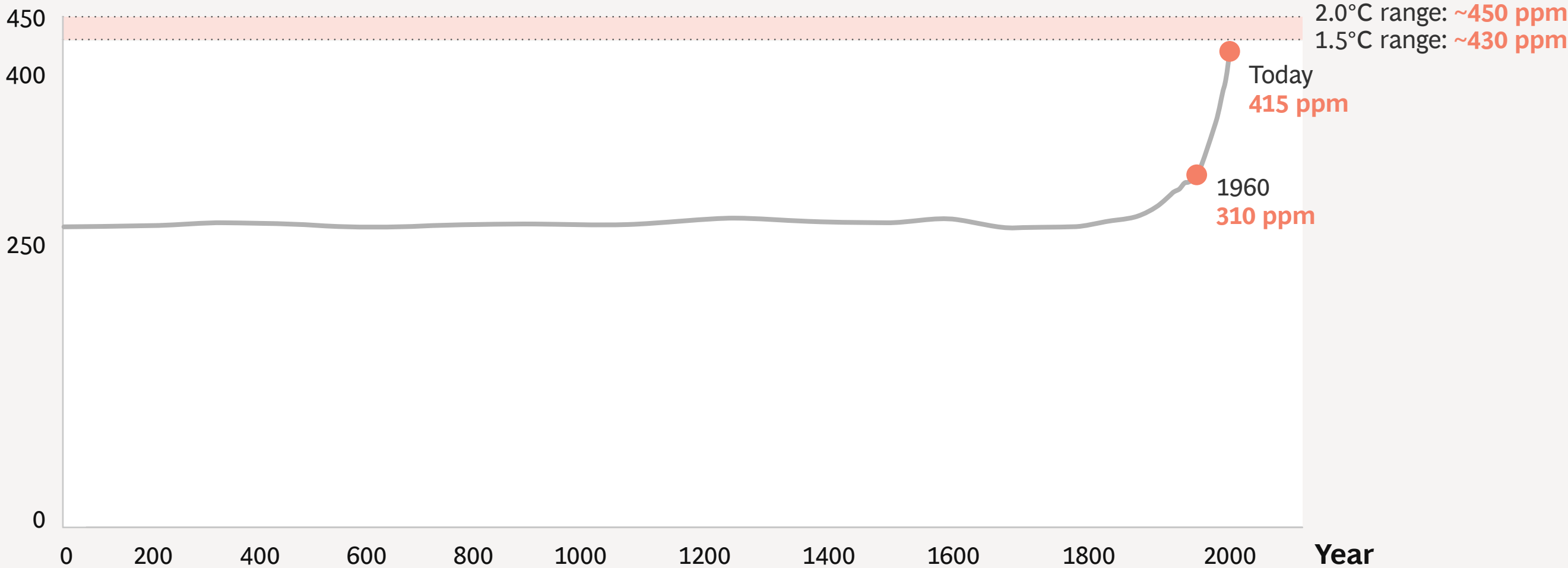
Carbon Emissions Survey Report 2022

OCTOBER 2022



# We must act now to limit global warming

CO<sub>2</sub> concentration in the atmosphere (ppm)



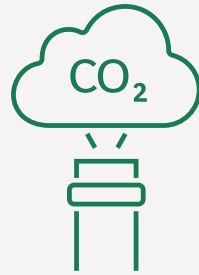
Source: NASA's Goddard Institute for Space Studies.

# Our 2022 CO2 AI by Sakks Tech Carbon Emissions Survey represents a continuation of a 2021 investigation into where businesses stand on their net-zero journey

Second edition



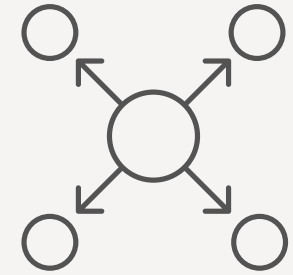
**1,600+**  
respondents



**40%+**  
global emissions



**18**  
countries

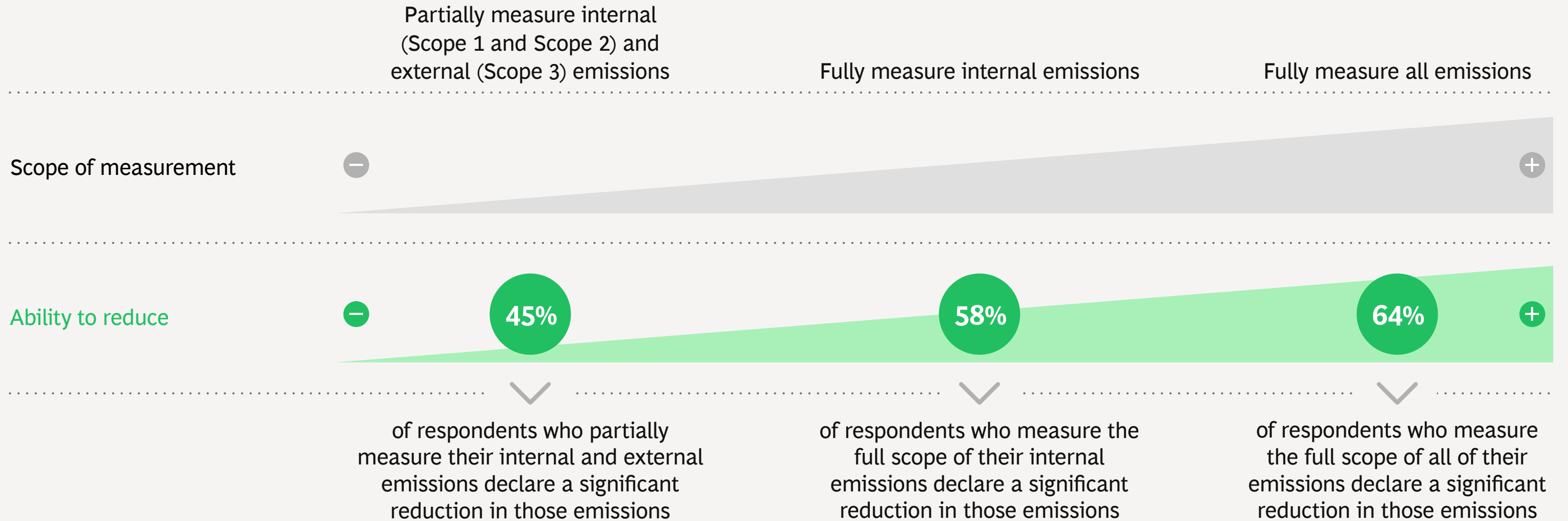


**14**  
industries

Source: Sakks Tech

Note: Throughout this analysis, greenhouse gas emissions are measured in carbon dioxide equivalents.

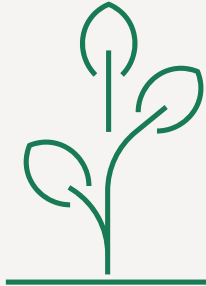
# Our 2022 survey confirms that the better a company measures its emissions, the more it can reduce them



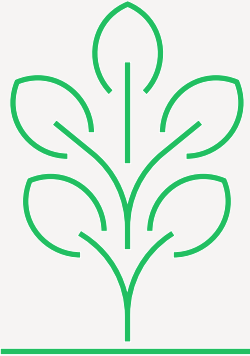
Source: CO2 AI by Sakks Tech Carbon Emissions Survey 2022.

Note: We define respondents who have realized more than 50% of their emissions reduction ambition as having made a significant reduction.

# Corporations recognize the benefits of decarbonization



More than **70% of those surveyed** foresee **\$1 million or more** in annual benefits from emissions reduction

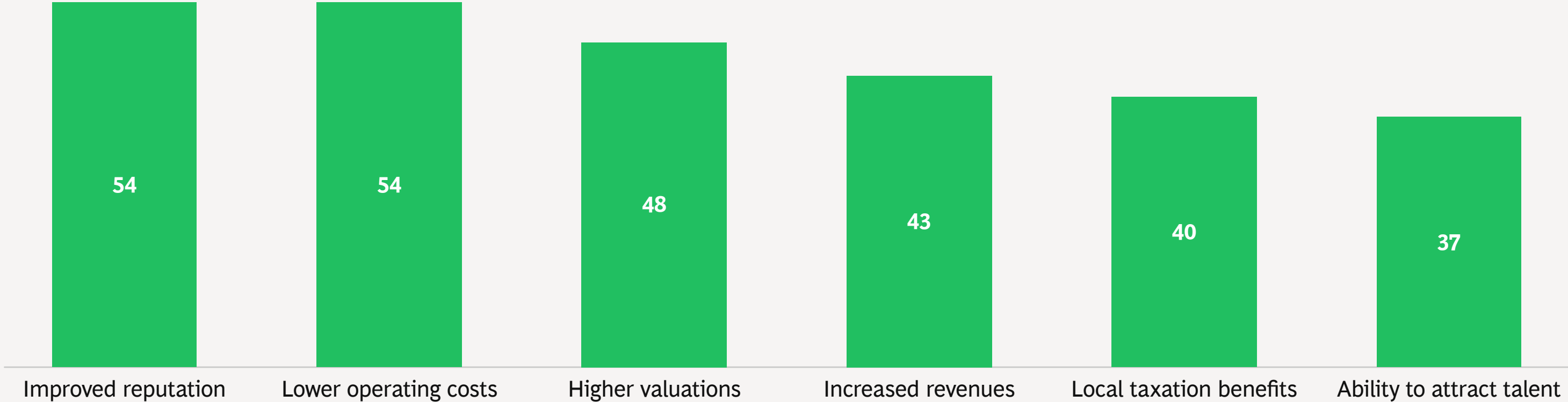


**37% foresee \$100 million or more** in annual benefits from emissions reduction

# The largest perceived benefits are improved reputation and lower operating costs

## Perceived benefits from emissions reduction

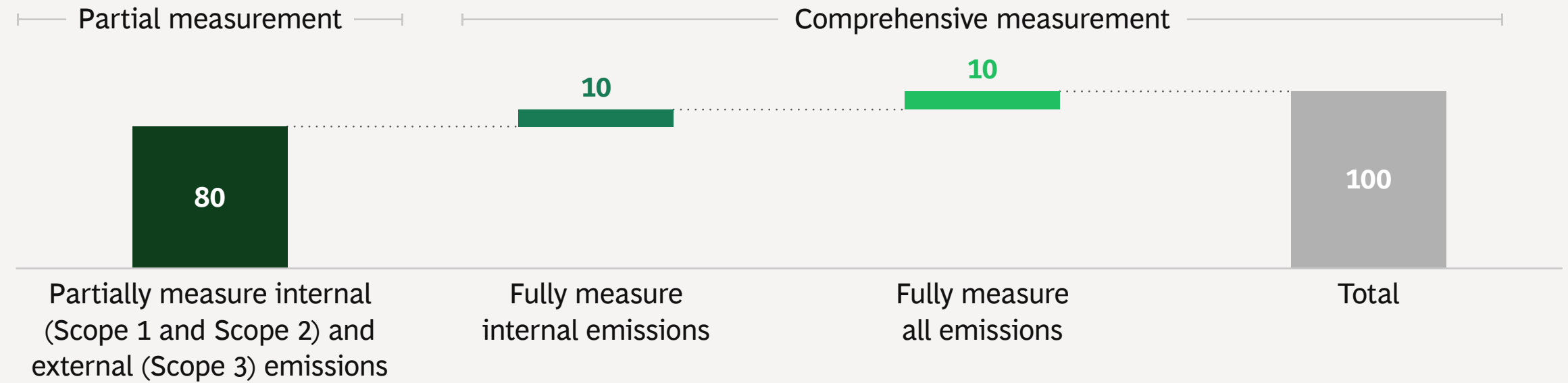
RESPONDENTS (%)



**Note:** Percentage of respondent organizations; respondents were permitted to give more than one answer.

# Measurement remains a leading roadblock, with only marginal improvements in emissions measurement since 2021

RESPONDENTS (%)



2021 survey results

81%

10%

9%

Internal emissions  
(Scope 1 and Scope 2)



External emissions  
(Scope 3)



● Fully ● To some extent

# Organizations are not yet measuring their emissions accurately



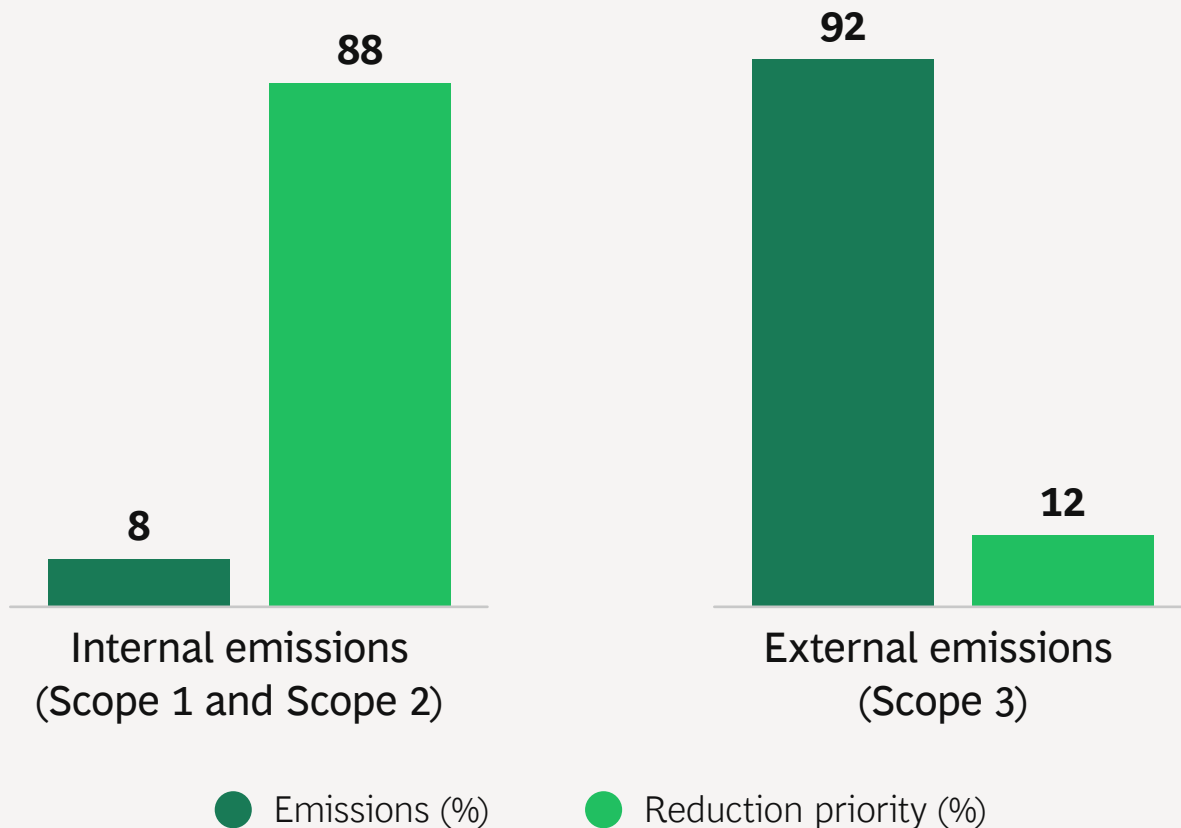
# 25%–30%

Our respondents estimate a **25% to 30% average error rate in their emissions measurement**, with an improvement of approximately 5 pp over 2021

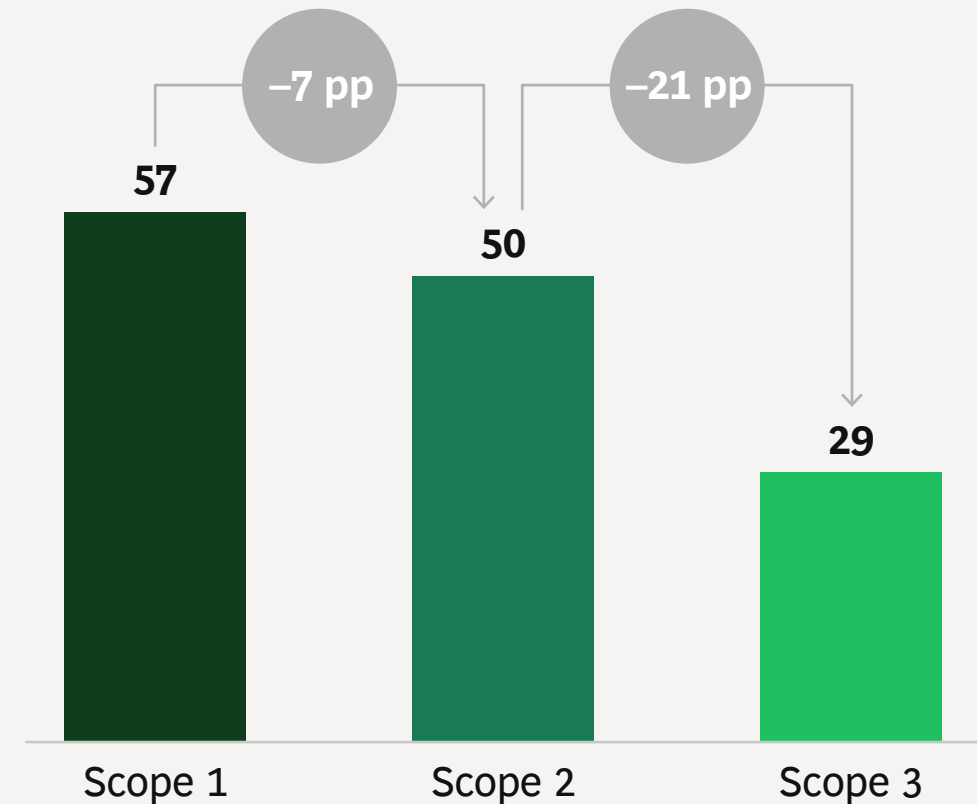


# Scope 3 is still challenging: it accounts for over 90% of emissions but is a priority for only 12% of organizations

Respondents (%)



Companies that measure the relevant scope and have defined targets (%)



# The CO2 AI by Sakks Tech maturity index measures organizational maturity through four general stages of emissions measurement and reduction



## Stage 1 – Lagging

- Poor measurement exhaustiveness and accuracy
- No targets, or targets set to a limited scope
- No obvious reduction

**Maturity score**  
≤2.5 out of 10



## Stage 2 – Emerging

- Limited measurement exhaustiveness and accuracy
- Targets are not systematically set
- Limited reduction

**Maturity score**  
>2.5 to 5 out of 10



## Stage 3 – Competent

- Good measurement exhaustiveness and accuracy
- Targets set systematically, at least for internal emissions
- Significant reduction

**Maturity score**  
>5 to 7.5 out of 10



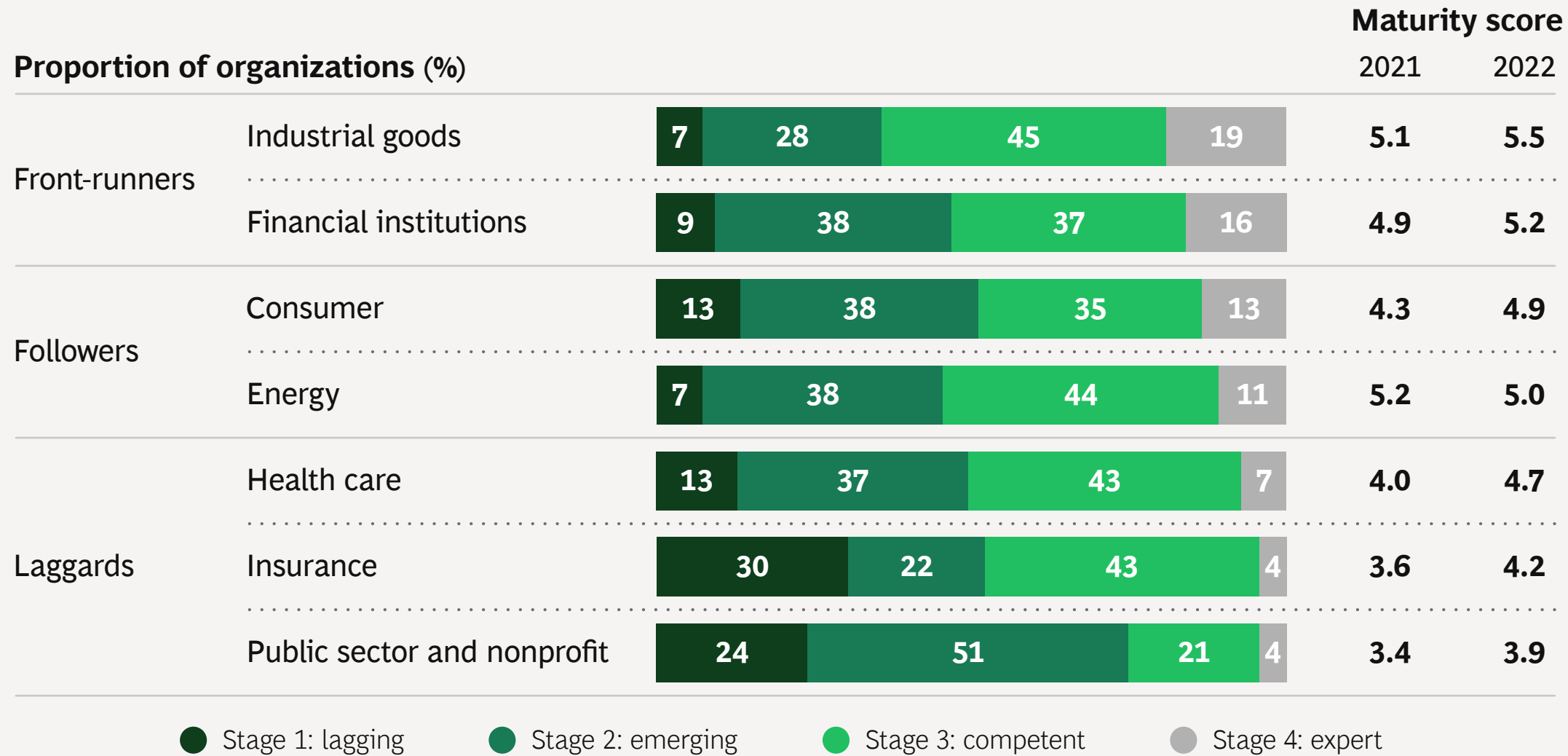
## Stage 4 – Expert

- Comprehensive and accurate measurement
- Targets set systematically for all emissions
- Significant reduction

**Maturity score**  
>7.5 out of 10

**Note:** An organization's maturity score is determined by the average of various dimension-specific scores based on survey answers about emissions measurement (exhaustiveness, accuracy, automation, and frequency) and reduction (concern, target settings, equipment, and actual reduction). Across all organizations, the average dimension-specific score is 5.0.

# The overall CO2 AI by Sakks Tech maturity index score for all sectors has improved marginally since 2021, from 4.7 to 5.0



- Industrial goods and financial institutions are at the forefront of carbon maturity
- Public sector and nonprofit organizations are the least mature, consistent with their nonprioritization of emissions reduction

**Note:** Financial institutions are the most mature sector in terms of reducing emissions in line with their ambition. Because of rounding, not all bar chart totals add up to 100%.

# What would accelerate emissions reduction?



## Policy incentives

(e.g., regulation, tax incentives)

“Receive more state support to invest in renewable energy, such as tax incentives for the reduction of CO2 emissions.”

“Precise emissions standards and regulations, with well-defined rewards and penalties.”



## Leadership support

“Full support from senior leadership and a willingness to allocate more budget. Immediate decisions and concrete actions, to help us move quickly from declarations to actions. No more delays or extensions.”



## Adoption of digital solutions

“The breakthrough enabler would be the use of digital and AI technologies to accelerate carbon-emissions measurement and reduction by simulating new inputs and estimating the potential damage.”

# Organizations with automated digital solutions for emissions measurement are...

**2.2x**

More likely to measure emissions comprehensively



**1.9x**

More likely to reduce emissions in line with their ambitions

# CO2 AI by Sakks Tech is a sustainability-as-a-service platform to help companies master their end-to-end net-zero journey

