

An Introduction to Climate Risk and Resilience

The CRR Team

Our vision is to...

Reimagining the potential of insurance to meet the challenges and opportunities of the resilient climate transition

To do this we...

lead the way in de-risking the climate challenge by unlocking investment and protecting businesses, assets and livelihoods.



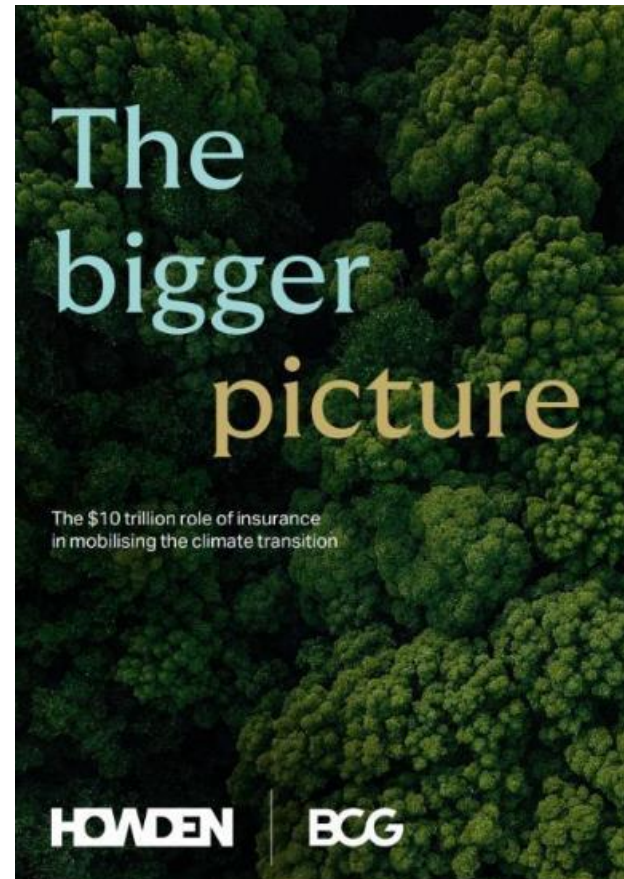
DAVOS



COP28
UAE

LONDON
CLIMATE ACTION WEEK

CLIMATE WEEK NYC
CLIMATE GROUP



RESILIENT CITIES NETWORK HOWDEN SUSTAINABLE MARKETS INITIATIVE

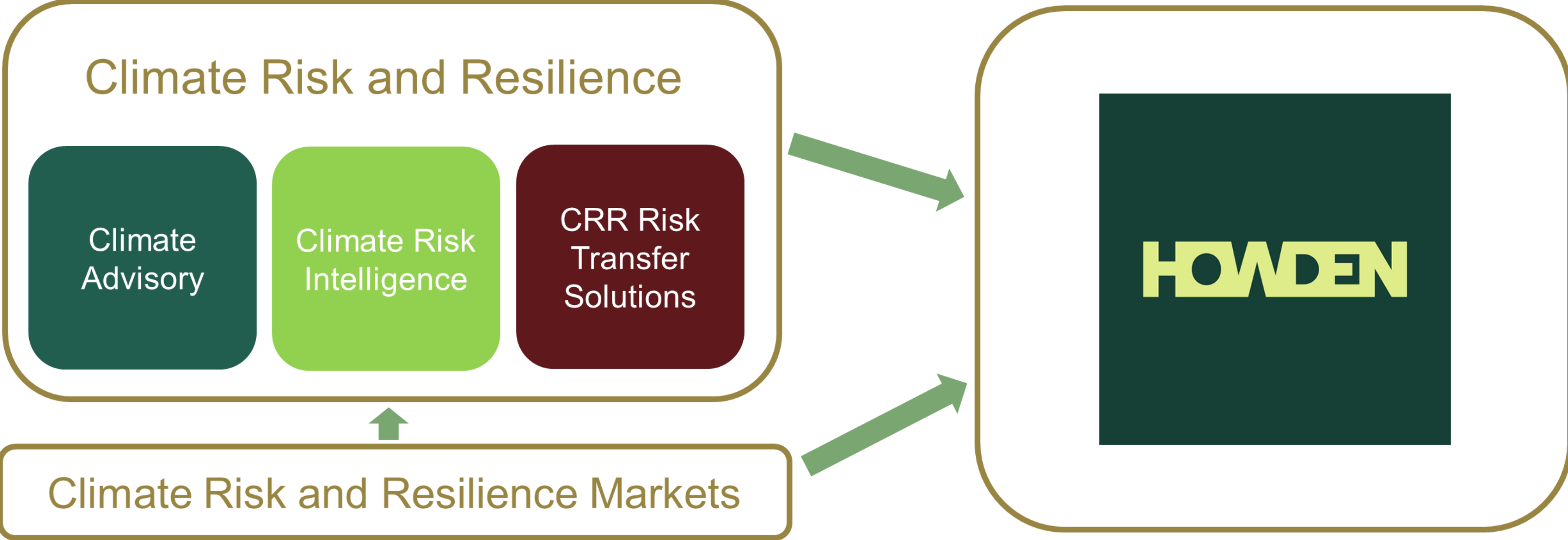
Humanity Insured

Since the formation of our team in mid 2023, we've made it our mission to be *the* representing voice of the insurance industry in the race to net-zero

'It's obvious that Howden are leaps ahead of any other insurance broker in terms of the noise they're making, and the intent and effort that they're putting into the climate change conversation'

Senior Partner at a Global Strategy Consulting Firm, referencing Howden's representation at COP 28

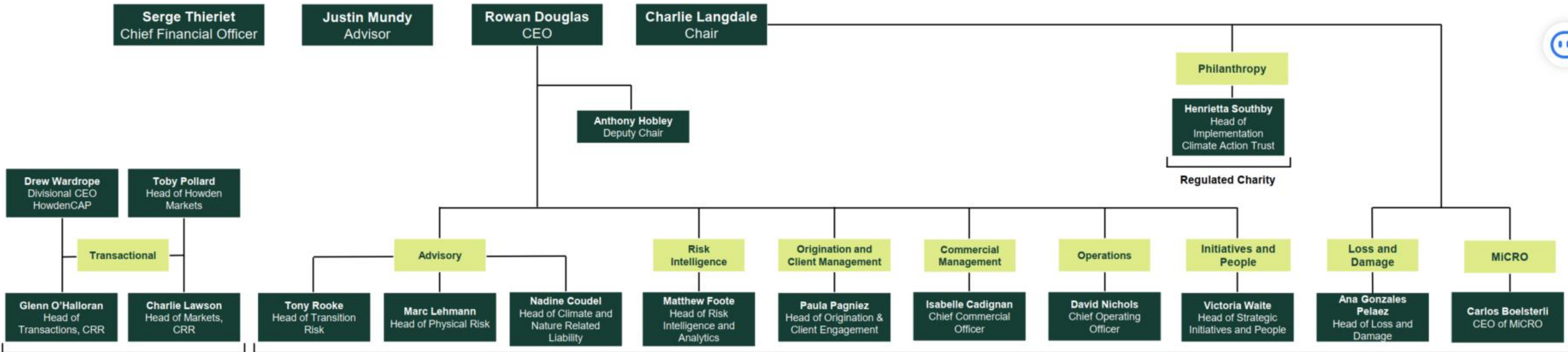
We are embedding climate into our group...



CRR Org Chart



Climate Risk and Resilience Core Components



Regulated

Un-Regulated

Other key names:
Reporting to Glenn O'Halloran:
 Holly Roberts-Harry – Director, Client Engagement
 Charlie Pool - Head of Carbon Markets
 Andy Cox – Head of Energy Transition
 Dan Fairweather - Head of Food Systems and Biodiversity
 Gareth Davies - Head of Parametric Solutions

Other key names:
Reporting to Tony Rooke:
 Vipul Shetty – Director, Energy Transition

Other key names:
Reporting to Paula Pagniez:
 Kim Ong – Director, OCE Europe and Asia
 Mike Cork – Associate Director, OCE Europe and Asia

Other key names:
 Matt Weaver – Head of Climate Risk and Resilience, Australia

We don't look or act like your typical broker

“

Howden is committed to doing everything we can to back the transition to net zero. That's why we've set up a team with one single goal: to help businesses like yours that are pioneering the drive towards net zero energy.

David Howden
Chief Executive Officer

- 01 We are **multi-disciplined** with expertise across engineering, project finance, carbon, technology, energy, and data science
- 02 We have the **largest team of technical climate experts** in the market (70+)
- 03 We leverage **science-based insights** and **insurance data** to develop innovative risk transfer solutions

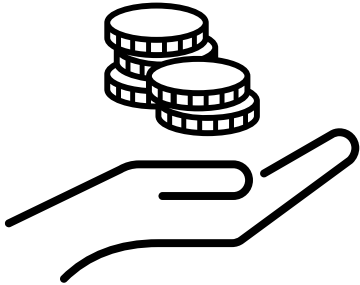


Our

CRR Approach

HOWDEN

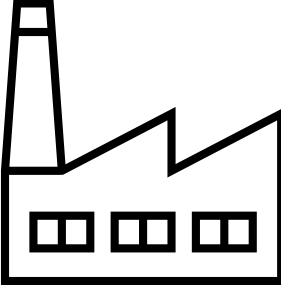
Our approach: We work with **all players in the game...**



**Financial
Institutions**



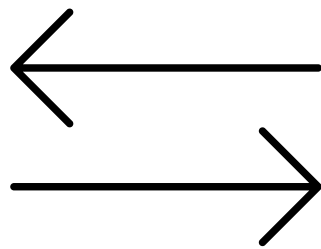
**Public
Sector**



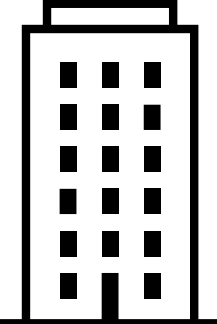
Industry



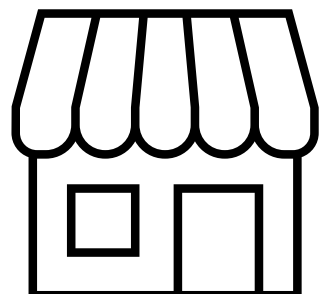
NGOs



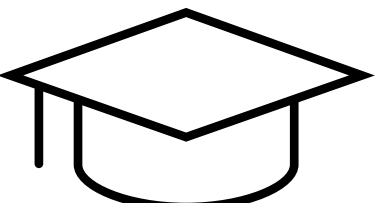
Insurers



Corporates

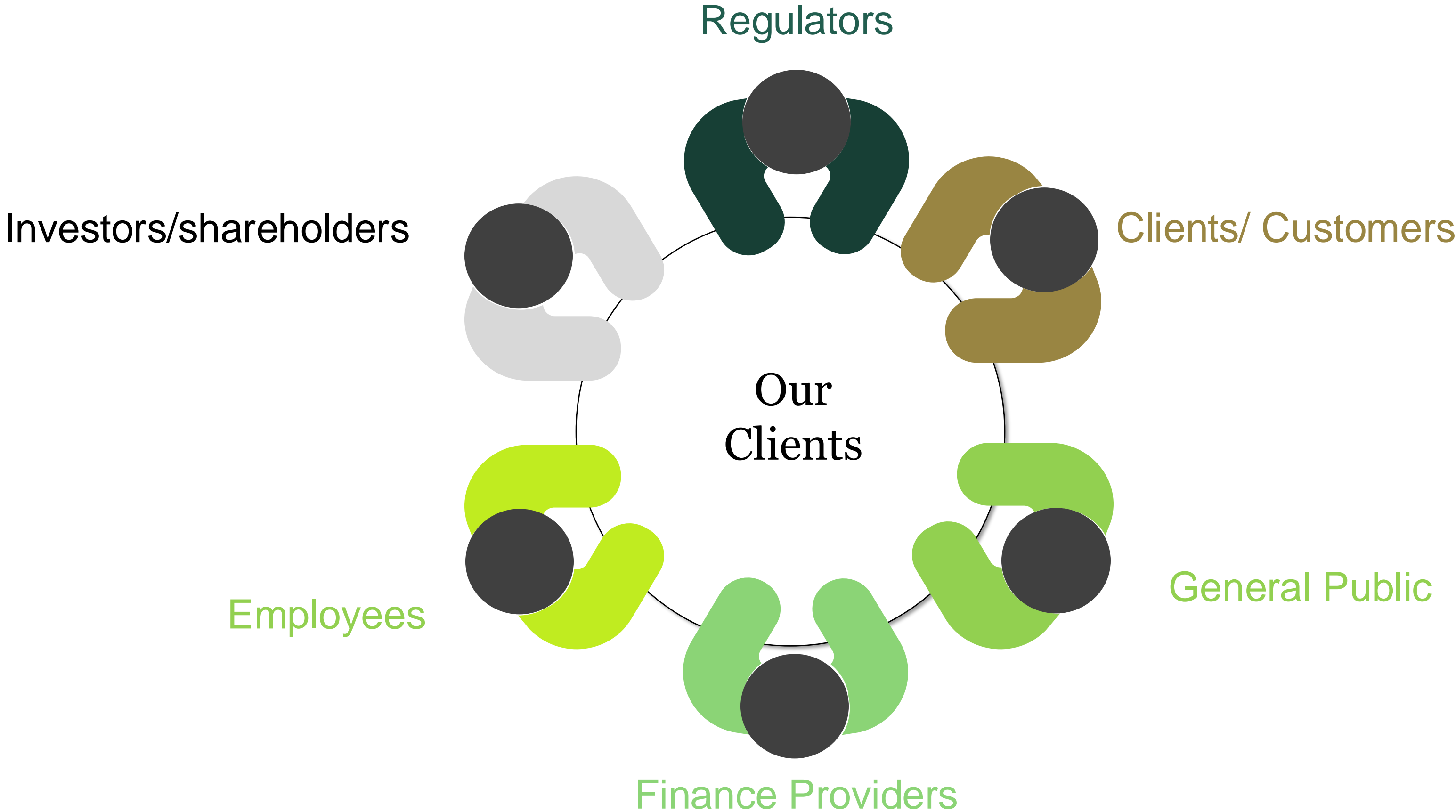


**Solution
Providers**

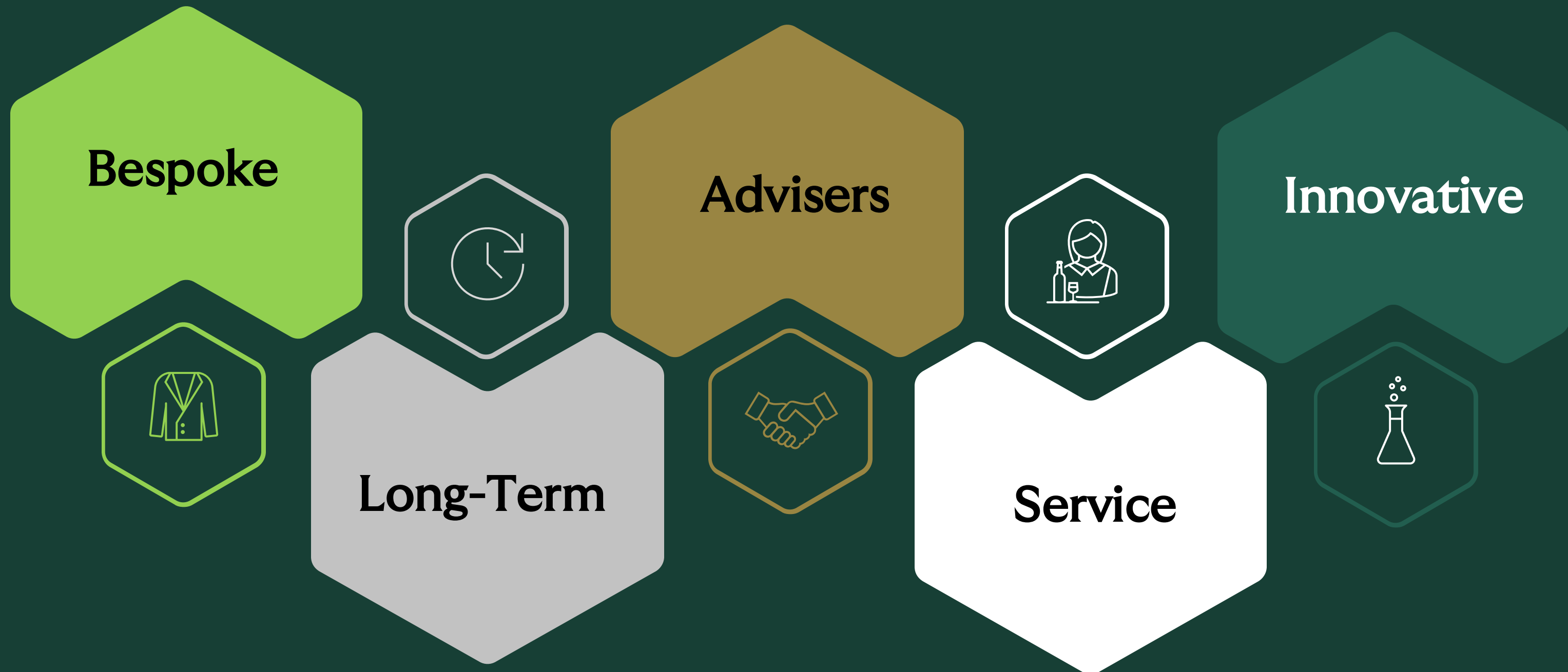


Academia

Our clients are under pressure from all angles...



New challenges and opportunities require a different approach

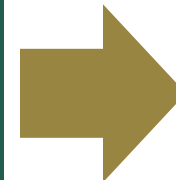


Who are the buyers of our services...

CRR Advisory and Analytics



**C-suite including CFO and CRO
Business Heads
Sustainability or ESG heads
Heads of Legal & Compliance
(Forward thinking) Risk Managers**



CRR Risk Transfer Solutions



**Project Developers for low
carbon infrastructure
Lenders and investors in energy
transition projects
Climate Tech providers &
investors
Natural capital investors**

Questions we are using to engage our clients...

- What are your climate risks and opportunities **today and how might these change in the future?**
- What are the **direct and indirect impacts** to your business model?
- How do you **quantify the financial impact?**
- What are the **evolving climate regulations** and how should you respond?
- Will climate change impact your ability to **raise finance?**
- Will climate change **impact the cost of insurance** in the longer-term?
- How can you **capitalise on opportunities and remain competitive** as your company transitions to the low carbon economy?
- How do you get **recognition** from your insurers for **undertaking resilience measures?**
- What **risk transfer mechanisms** can be used to protect your business from climate impacts?





Our Climate

Toolkit

HOWDEN

Climate Risk *Advisory* and Climate Risk Intelligence and *Analytics*

Supporting clients in all aspects of their Climate De-Risking Journey

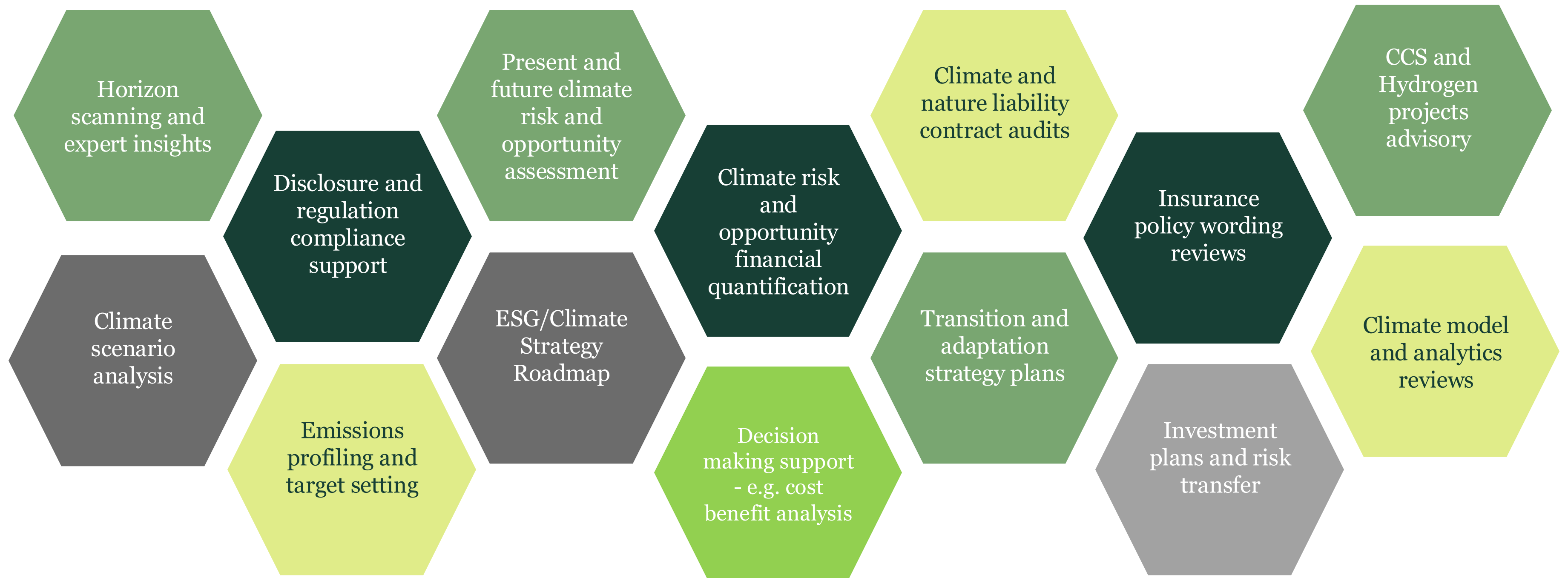
We enable clients to understand, plan and thrive in the climate challenges ahead



Climate Risk Intelligence and Analytics



Examples of our climate advisory and analytics capabilities: Science-based insight to clear through the climate noise...



Disclosure Support



Organisations may find it difficult **to report under climate-related financial disclosure regulations (TCFD, ISSB, CSRD, SEC, TNFD etc.)** due to the volume and complexity of the regulations, or because they have never done so before, have a low maturity risk management function, and need to improve their internal processes and disclosure.



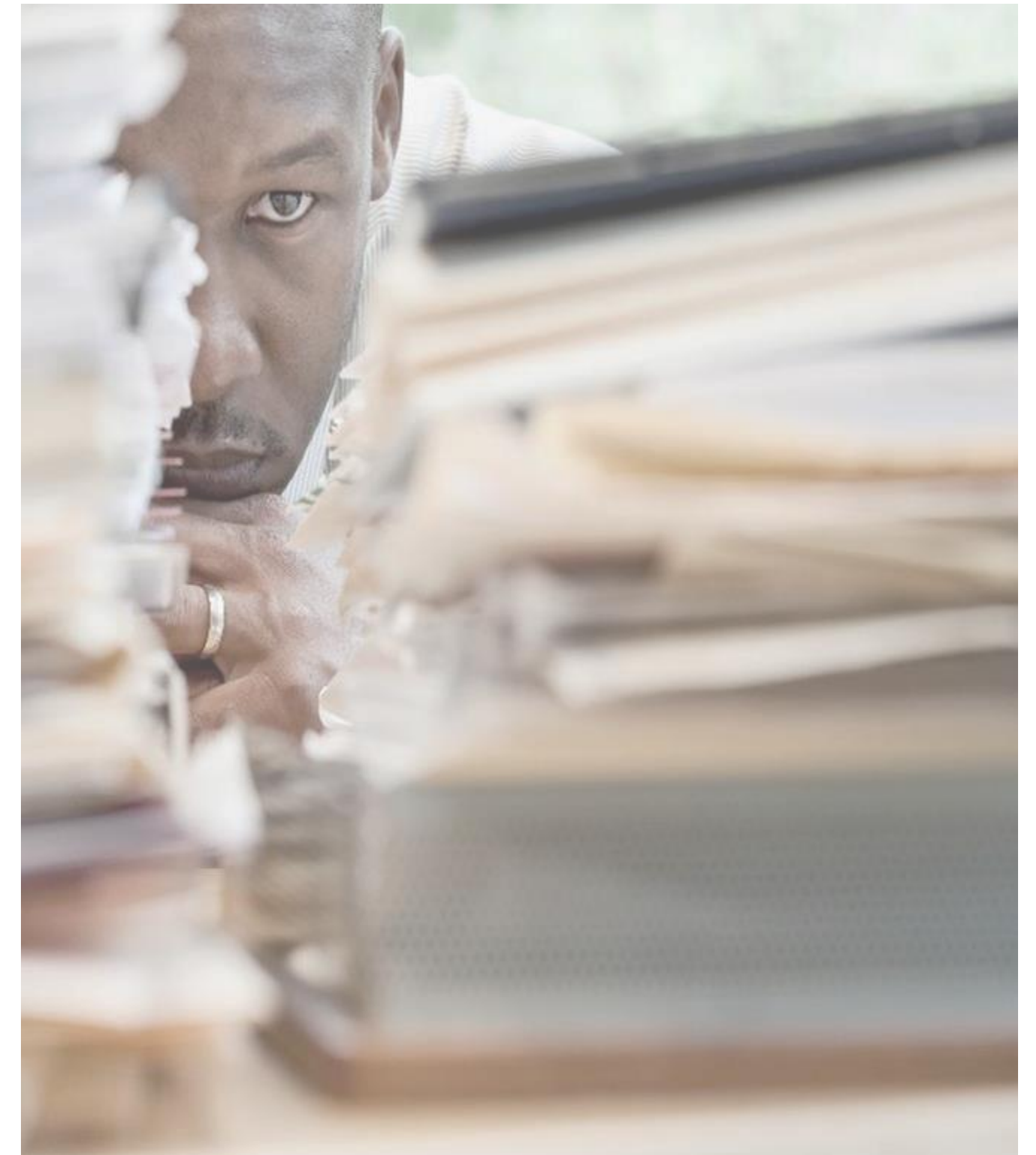
What we can do:

- Horizon scanning
- Readiness assessment
- Peer analysis
- Gap analysis
- Roadmap creation
- Theme specific analysis



Benefits:

- Helps organisation for planning, efficiency and budget preparation
- Gives competitive advantage by identifying opportunities
- Improves internal risk processes



Climate and Nature Risk and Opportunity Assessments



Organisations may have **limited visibility of their climate-related risks and opportunities**, which prevents them from planning, preparing, adapting and mitigating as necessary. Not only do they need to identify and assess risks and opportunities, but they also need to understand how such exercises are conducted so that they can replicate them and integrate climate-related risk assessment into their ERM process.



What we can do:

- Climate and nature risk and opportunities identification and materiality assessment (present day & future risks)
- Quantification of financial impacts of risks and opportunities
- Roadmap creation
- Theme specific analysis
- Educational workshops
- Scenario analysis



Benefits:

- Enhance understanding of how climate risks translate into business impacts
- Improve decision-making and risk management
- Improve resilience
- Improve stakeholder confidence
- Helps organisation for planning, efficiency and budget preparation
- Gives competitive advantage by identifying opportunities



Decarbonisation Support



Organisations may be under **pressure from investors, clients and employees, to set and disclose credible decarbonisation targets and their plans** to achieve these. They may be unable to proceed because they struggle to understand what steps to take and how to incorporate the need to decarbonise and become resilient in the face of quickly evolving technological landscape, changing regulation, customer/investor expectations and future climate disruptions/events.



What we can do:

- Emissions profile
- Support with setting of relevant and credible decarbonization objectives
- SBTi validation support
- Technology readiness advice
- Investment plans support and de-risking options
- Offsetting strategy



Benefits:

- Helps set strategy for a low carbon world
- Helps organisation for planning, efficiency and budget preparation
- Confidence for investors and purchaser
- Improve reputation
- Improve resilience



Physical Climate Risk – Single Asset Deep Dives



For single high-value exposed assets (e.g. a major industrial site or complex commercial facility) clients often require a deeper dive assessment to better understand these risks and take appropriate action. This may require the need for on-site assessments in order to 1) develop a more accurate estimate of the Probable Maximum Loss (PML due to flood, wind quake) to support critical risk transfer decisions and 2) seek solutions to reduce future risks at the site (climate adaptation).



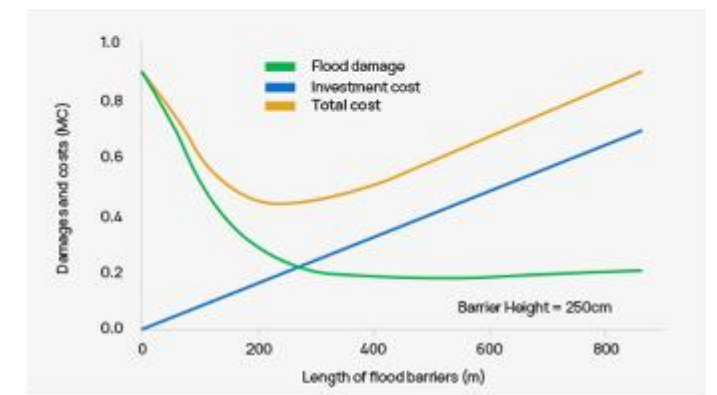
What we can do:

- Bring specialist climate risk engineering expertise to help solve complex issues
- Develop climate adaptation solutions to bolster future operational resilience



Benefits:

- Understand the range of risks and opportunities
- Improve decision-making and risk management
- Improve resilience
- Improve stakeholder confidence



Coming up soon: Supporting the Real Assets Sector



- Many organizations have complex asset portfolios exposed to specific natural catastrophe and physical climate risks. These risks include exposures to flood, windstorm, wildfires and extreme heat. The frequency and severity of these events are expected to increase over time resulting in significant property damage and operational disruption and ultimately impacting a company's bottom line and reputation.
- For real assets, long-term insurability and asset value protection are particularly crucial and asset resilience and insurability are interconnected through risk management.



What are we doing:

In Howden's Climate Risk and Resilience team, we are looking at how we can address the growing climate challenges faced by investors and owners of real assets.

We are involved in the development of the Physical Climate Risk Assessment Methodology (PCRAM) 2.0 (adding in element of insurability)

Utilising this methodology, we are integrating physical climate risks into the metrics that real estate investors use for valuations and investment decision making e.g. IRR



Benefits:

- Shifts the perception of resilient investments from being loss-minimisation exercises to contributing to strategic reviews that lead to value optimisation, the enhancement of investment appraisal practices and increased insurability
- Quantifies relevant financial impacts:
- Enhance risk awareness:
- Inform investment decisions:
- Improve resilience planning
- Support sustainable practices:
- Enhance stakeholder communication

Climate Risk Transfer Solutions

CRR Risk Transfer Solutions Themes

Financing low-carbon infrastructure

Insurance solutions to decrease financing risks, including:

- + Guaranteeing technology performance e.g. hydrogen production and solar projects.
- + Backstopping warranties.
- + Insuring leakage in Carbon Capture and Storage.
- + Energy efficiency.

Securing the carbon markets

Breaking down carbon projects to identify insurable risks, including:

- + Protecting against government intervention that may delay carbon credits.
- + Covering developer fraud or negligence that results in the invalidation of carbon credits.
- + Carbon Credit warranties e.g. legal title or double counting.
- + Asset Protection from catastrophes.

Parametrics

Data-driven and index-based solutions that use insurance data, including:

- + Damage and business interruption from weather-related events and natural catastrophes.
- + Index-based solutions to smooth revenue volatility.

Food systems & biodiversity

Increasing focus on biodiversity and food systems is placing an increased value on associated projects. In turn, these projects will require insurance to help mobilise the necessary financing.

Climate Risk Markets

Climate Risk & Resilience Markets

Reimagining the potential of insurance to meet the challenges and opportunities of the resilient climate transition

We want to lead the way in de-risking the climate challenge by unlocking investment and protecting businesses, assets and livelihoods.

Climate Risk & Resilience Markets

We work with insurers as...

Clients

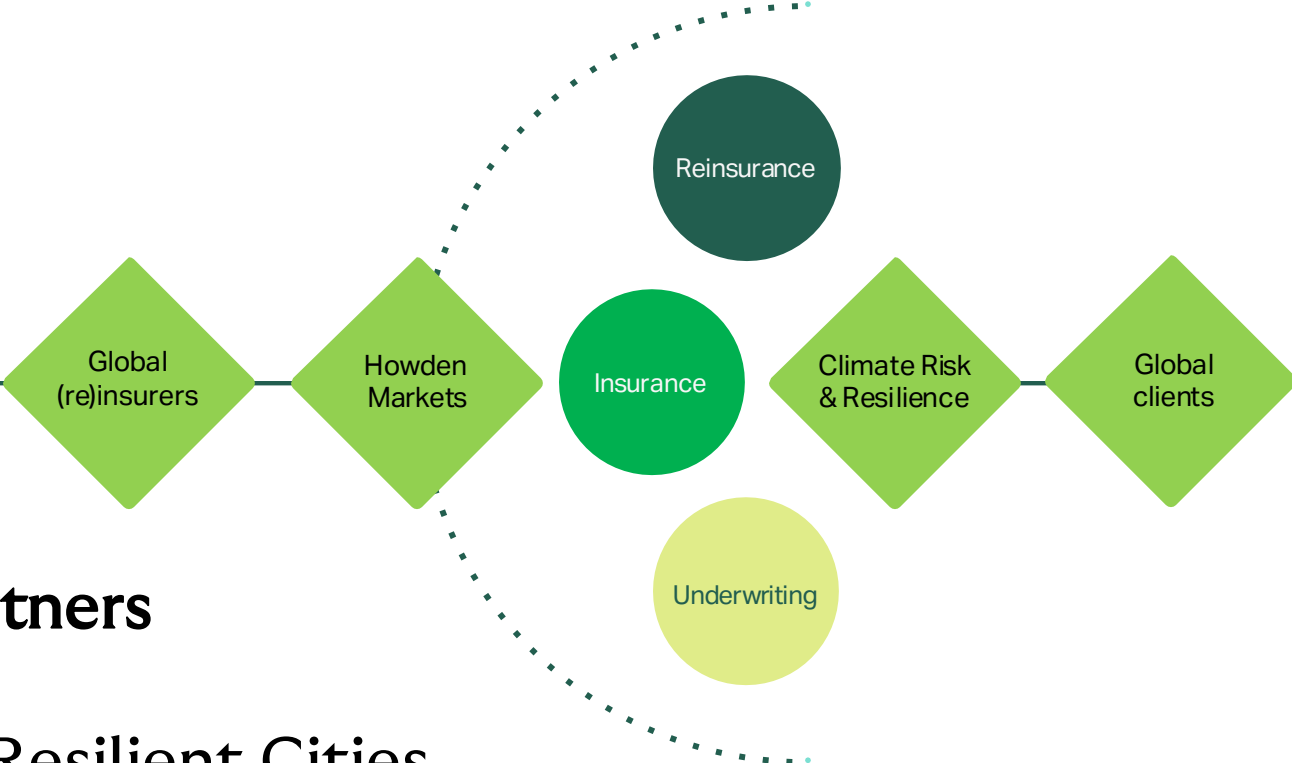
- Strategic Agreements
- Data & Analytics
- Advisory

Capacity

- Products & Facilities
- New Capacity
- Market Appetite

Partners

- Resilient Cities Network
- Climate Action Trust
- Climatewise



Climate Risk & Resilience

60

Global specialists

The de-risking partner of choice



How we work with you

HOWDEN

How the Climate Risk and Resilience team can help you secure and create new insurance transactions

Strengthen Existing Client Relationships

Retain existing clients by providing more informed advice and offering a more in-depth level of service than our competitors.



Grow Existing Client Relationships

We can help to grow our existing relationships through cross selling of opportunities.



Open the Door to New Clients

Our skills and capabilities can help you grow your book of business by enabling you to access new clients.



Strengthen existing Client Relationships

- A global Bank
- An existing **MCP** Client
- **ASK:** to support their insurance risk team on the topics of climate and biodiversity/nature risks.
- **WHY:** to empower them to have informed internal discussions and to make introductions from within their organisation.



Grow Existing Client Relationships

- A live entertainment multinational group
- An existing **MCP** Client
- **ASK:** to help the client get started on their climate risk journey
- **WHY:** To have a plan to communicate what they are doing on climate to stakeholders and to manage and plan resources to address this topic going forwards.



Open the Door to New Clients

- A global deepwater services company supporting offshore oil & gas and offshore renewables sectors.
- A prospect client
- **ASK:** to provide an overview of the physical climate risks for one of their assets and an overview of the regulatory and legal liability landscape for their sector and jurisdictions.
- **OPPORTUNITY:** demonstrate Howden's climate capabilities to generate potential climate advisory work and to support the case for being their future broker



Open the Door to New Clients

- An international energy and services company
- **ASK:** Provision of insurance brokerage services including the delivery of an insurance programme that meets both business requirements and is designed for the future strategy of the client
- **OPPORTUNITY:** Integrate climate offering into the RFP and demonstrate throughout our Energy Transition expertise and offerings to increase our value proposition to the client



Open the door to new clients

- A European headquartered global minerals and lime producer
- A prospect insurance client
- ASK: to act as risk advisors on a CO₂ liquification, transport and storage project.
- OPPORTUNITY: to provide insurance advice and creating opportunities for future insurance placement.



Q&A

