

# EDM Webinar

## Climate Risk Masterclass: Use GenAI for Climate Resilience, ESG Disclosures & Innovation

*A conversation with*



**Levent Ergin**  
Chief Strategist for  
ESG Sustainability,  
Informatica



**Jason Lindauer**  
Head of ESG  
Products,  
Dun & Bradstreet



**Meredith Kalman**  
ESG Data Lead,  
Strategy & Analytics,  
Deloitte



# Join EDM Council and our membership community of companies...



The screenshot shows the EDM Council website homepage. The header includes the EDM Council logo and navigation links: Membership, Frameworks, Training, Engage, Innovation, About, Sign in, and Join now. The main content area features a large heading: "Global Advocates for Data & Analytics Management". Below this is a sub-heading: "The leading global trade association providing best practices, standards and education to data and business professionals in our data-driven world." A "What we do" button is visible. On the right side, there is a "TODAY'S HIGHLIGHTS" section with three items: "Bank of Valletta becomes the newest member to join the EDM Council", "EDM Council welcomes Webber Wentzel as its newest member", and "Lion Group joins EDM Council as its newest member". At the bottom, there is a banner with the text: "Join a vibrant community of 25,000+ business leaders, CDOs, and data and analytics professionals across all industries." Below the banner are logos for Bank of England, NOVARTIS, HSBC, AWS, Schneider Electric, Microsoft, Google, and AEGON. Two buttons are present: "Explore membership" and "See all 350+ member organizations".



**350+ Member Firms**

Cross-industry,  
including Regulators



**25,000+**

Professionals



**Worldwide**

Americas, Europe,  
Africa, Asia, Australia

[edmcouncil.org](https://edmcouncil.org)



# Today's panel

Moderator



**Jim Halcomb**

Head of Product  
Management  
EDM Council



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Chief Strategist for  
ESG Sustainability &  
ESG Partnerships,  
Informatica



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# Background on ESG Disclosure Requirements

ESG Reporting covers integrating **Environmental, Social and Governance (ESG)**, to measure the sustainability and societal impact of a business and/or investment decision.



Carbon Emissions, Energy Use, Pollution, Waste disposal, Water usage, deforestation, Conservation, land contamination, treatment of animals



Labour standards, community support, product quality & safety, training, ethics, discrimination, working conditions, social capital, supplier relations



Anti-corruption, Shareholder Rights, Exec remuneration, Political Independence, Audits & Accountability, Transparency, Conflict of Interest

**The majority of this data is “non-financial”**



# Why the focus on Environment?

## The Global Governmental Push

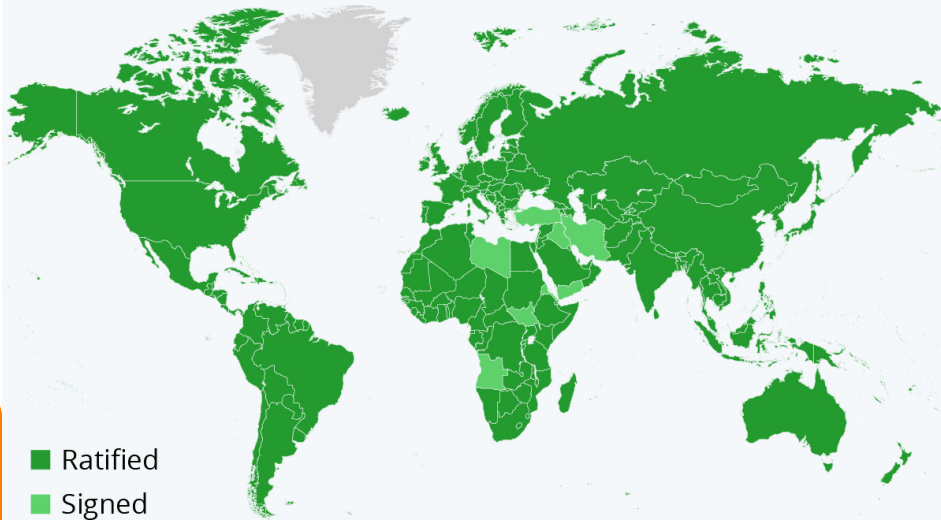
One of the first major drivers for the global pivot was the 2015 Paris Agreement, where hundreds of countries from around the world created a framework focused on fighting climate change.

✓ 191 countries have signed the legally-binding 2015 Paris Agreement.

These countries together represent 97% of global carbon emissions

## The State of the Paris Agreement

Countries by their participation in the Paris Agreement  
(as of April 21, 2021)

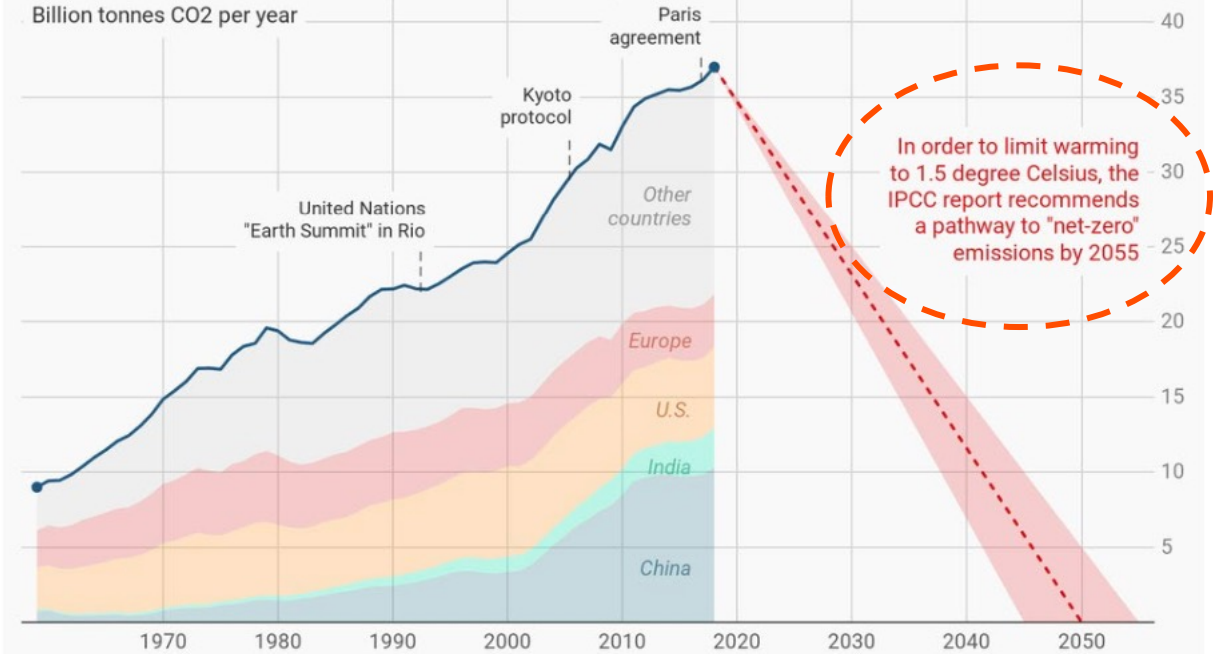


Source: UNFCC



## Global Carbon Emissions

Billion tonnes CO2 per year



Source: Global Carbon Budget 2018 · Get the data

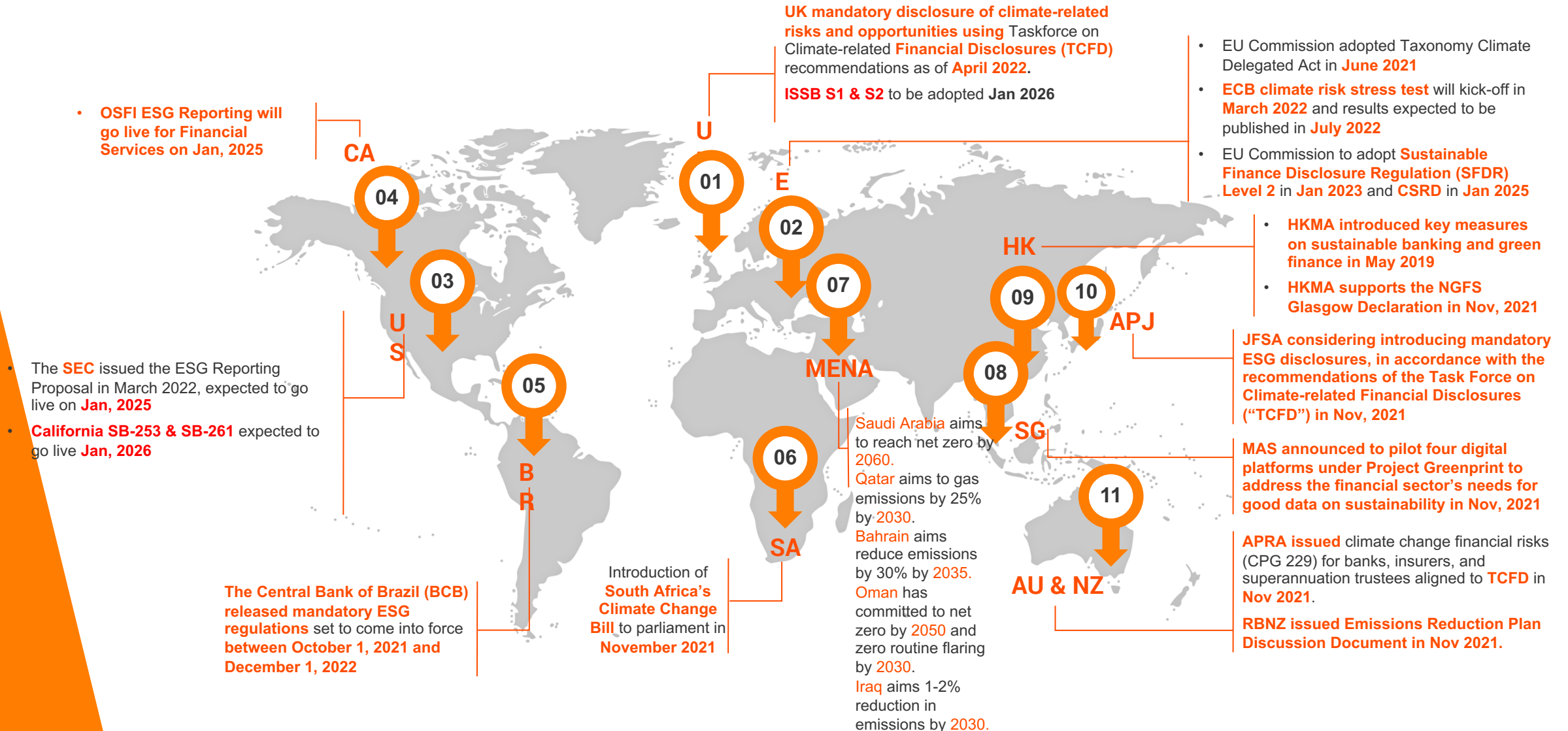
On top of this, 44 nations including the European Union have declared that they will go to "Net Zero", where they will be reducing carbon emissions by the same amount they emit.

Their motivation is two-fold:

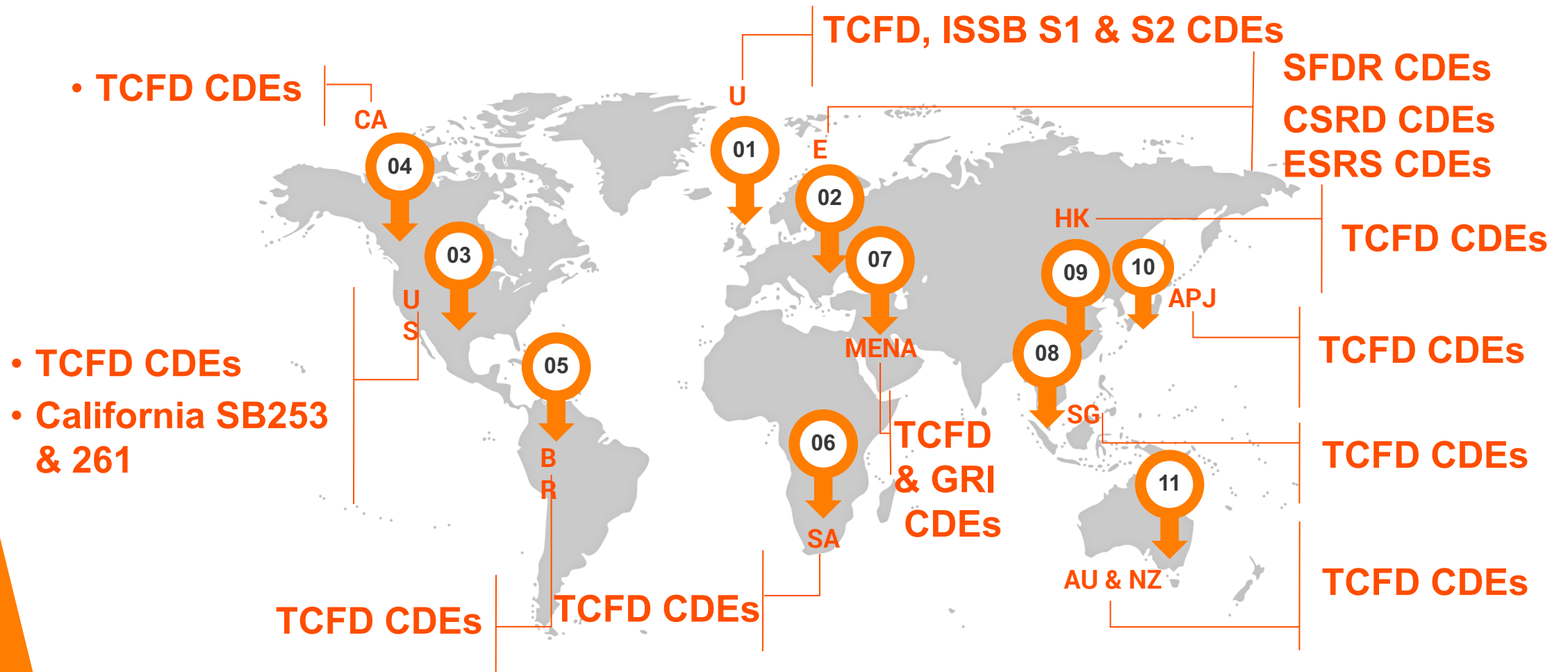
- 1) Save the world
- 2) Save their economies

The health of the planet isn't the only thing at stake here. If we fail to act on climate change, it's estimated that global GDP could fall by 13% due to the changes in regional weather patterns, effects of pollution and other factors.

# Global ESG Disclosures Data Governance Highlights



# Global ESG Disclosures Data Governance Highlights





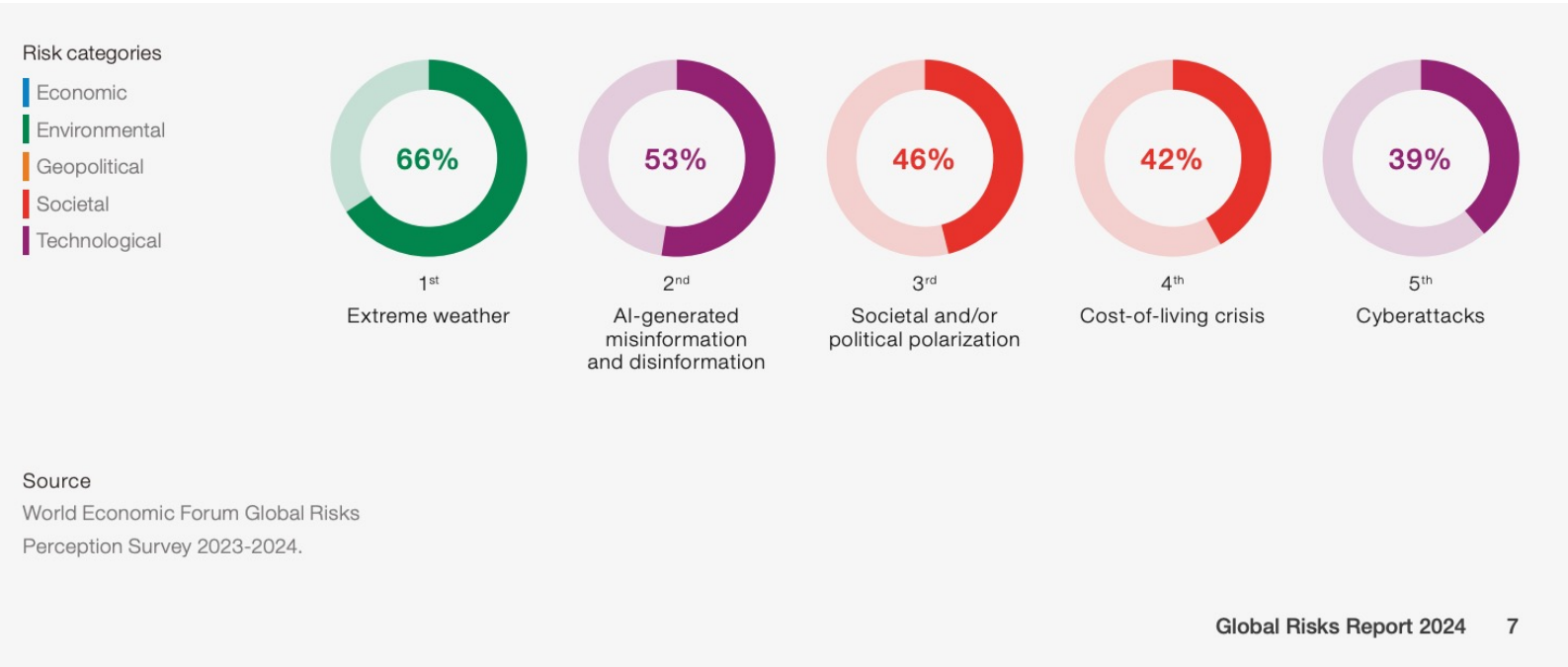
# The Cost of Climate-Related Disaster is Higher Than Ever Before

Over the past 5 years, the numbers are astonishing:

- 102** Confirmed weather/climate disaster events in the U.S. costing \$1B+ in damages each
- \$609B+** Economic damages caused by climate disasters.

Source: [NOAA's billion-dollar disaster data](#)

In World Economic Forum's 2024 Global Risks Report, Extreme Weather Events has taken the No 1 risks for businesses:



Source: [WEF Global Risks Report 2024](#)

# Climate Risk Insights available in IDMC for Sustainability

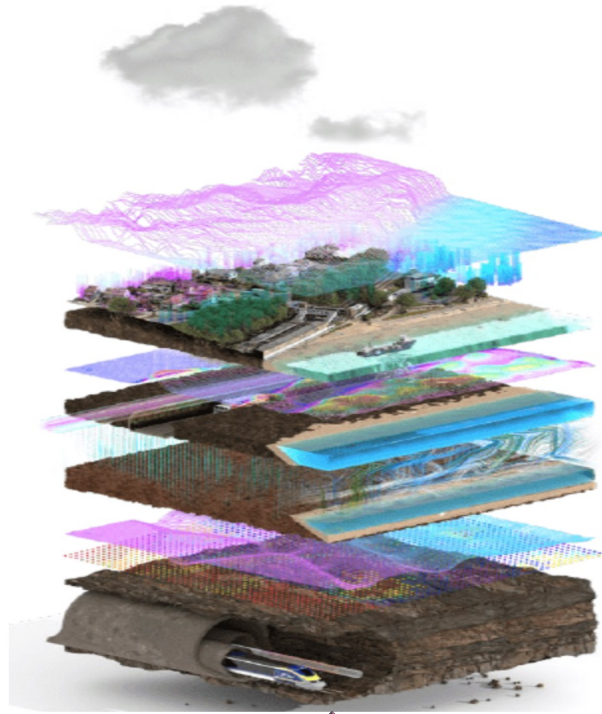
Geospatial Satellite  
Climate Data

+

Location  
Data

+

D&B Financial &  
Firmographic Data



**270M+**

Coverage of private  
and public companies

**30-Day**

Data updated  
every 30 days

**9+**

Perils covered

**Climate Risk  
Insights on:**

Flood  
Wildfire  
Drought  
Hurricane  
Extreme Cold  
Extreme Heat  
Extreme Precipitation  
Wind  
Sea Level Rise

**80+**

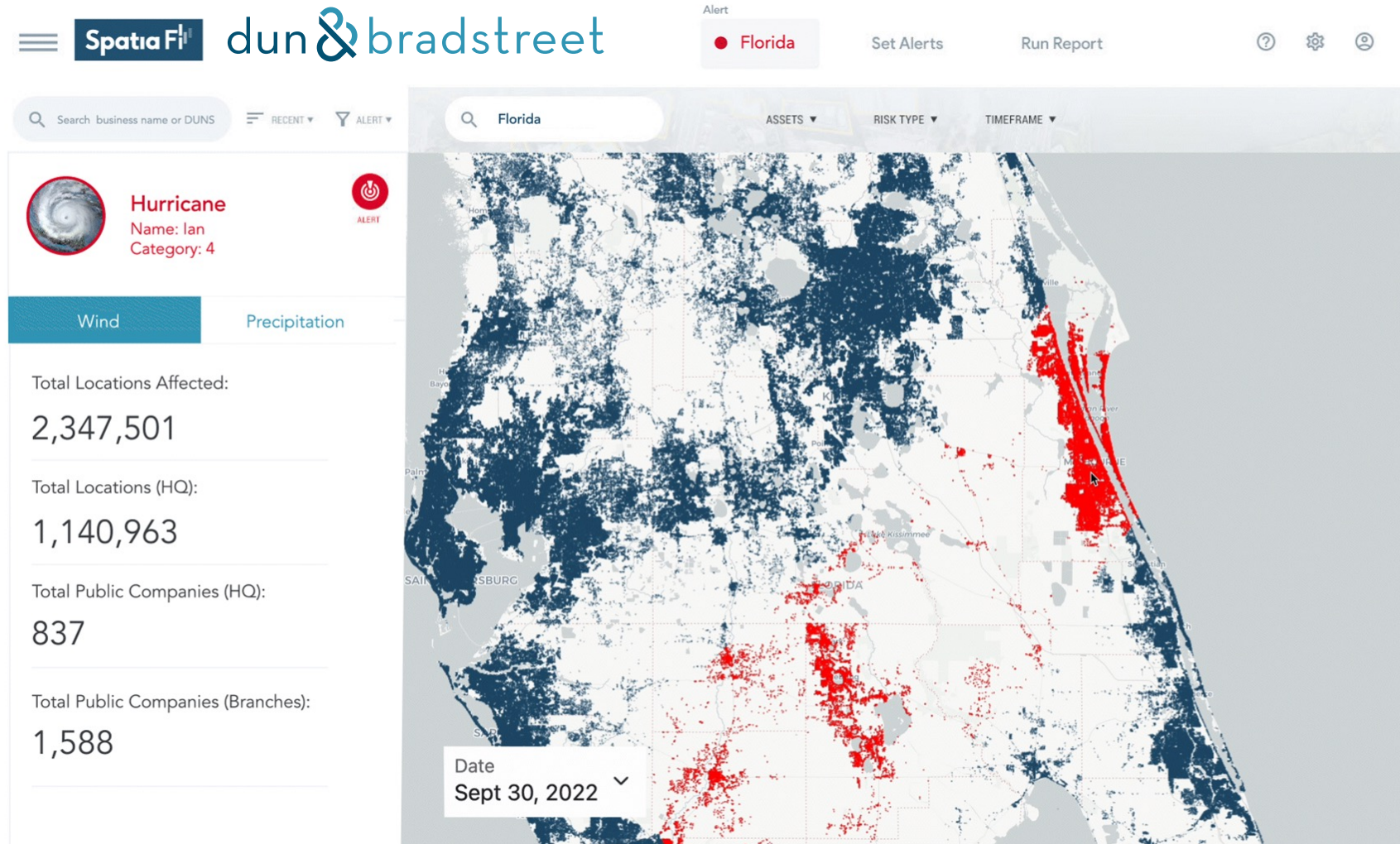
Climate and  
Economic Insights

D&B Climate Risk Insights

IDMC

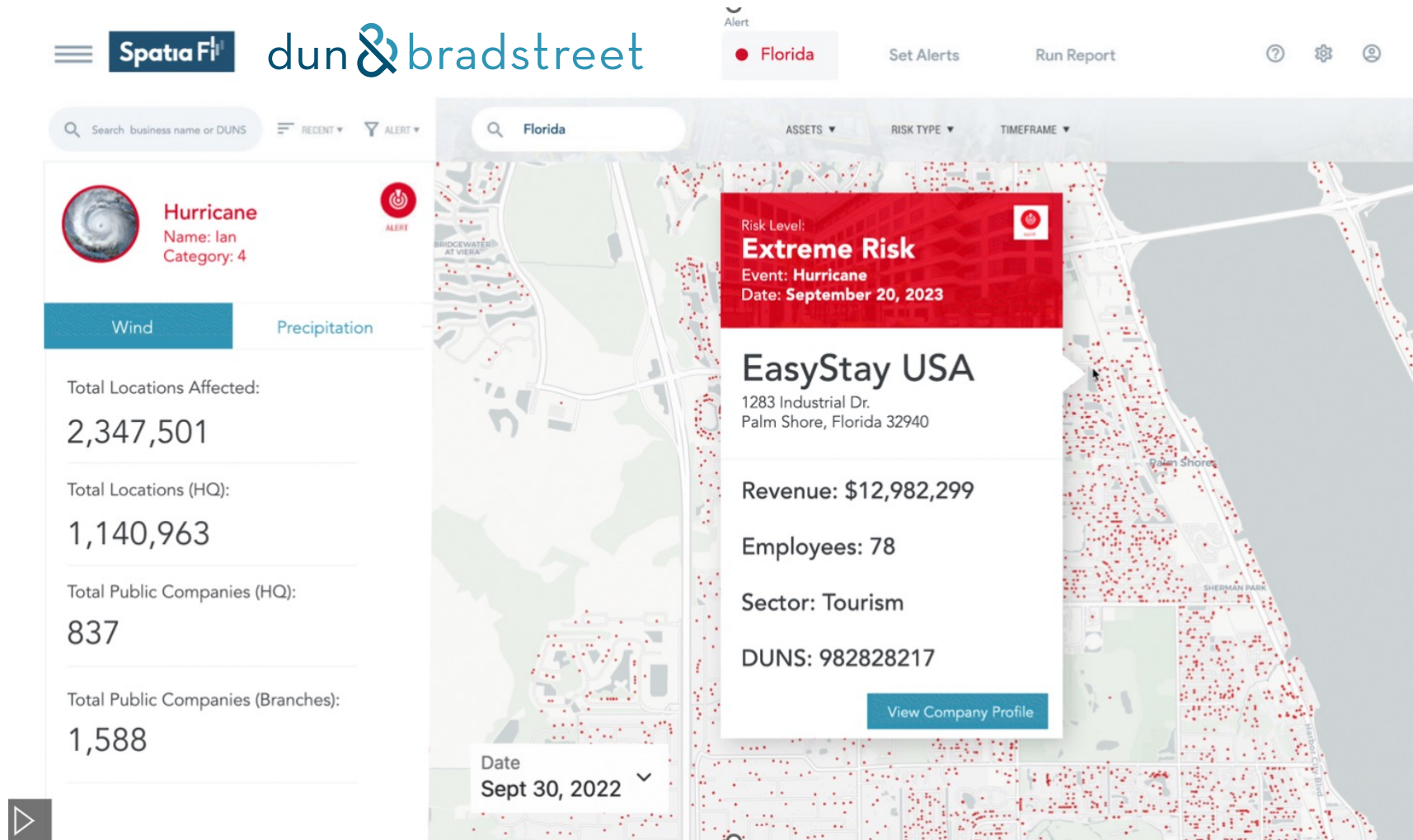
IDMC now offers Climate Risk Insights, using Dun & Bradstreet combining frequently updated climate data via geospatial satellite imagery, with location, financial, economic, and firmographic risk intelligence from the Dun & Bradstreet Data Cloud to provide **unparalleled understanding of physical climate risks and resiliency.**

# Impact of Climate Risks are Challenging to Predict

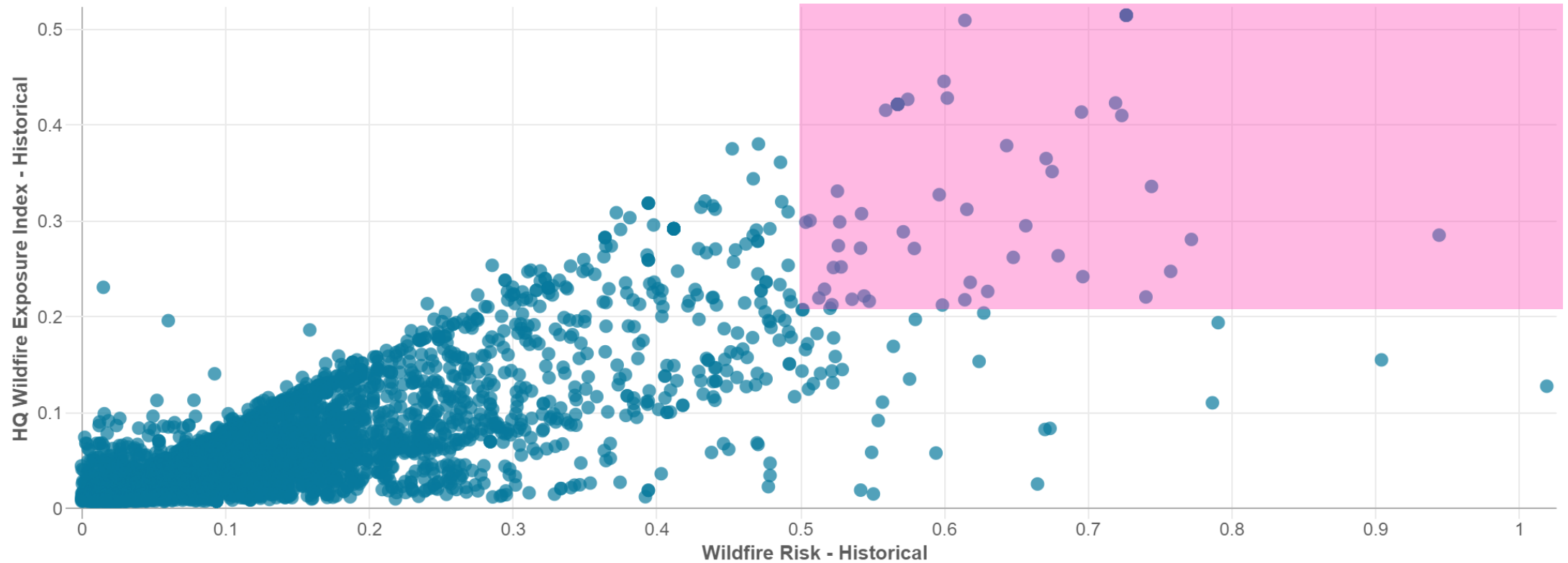




# Leveraging AI/ML Assists in Assessing Climate Risks



# D&B Wildfire Exposure Index – Portfolio Analysis



Source: Dun & Bradstreet, SpatiaFi

# D&B ESG Intelligence

Intelligent third-party sustainability analytics to help companies manage risk, increase supply chain resiliency, and drive entity performance.

## D&B ESG Intelligence provides:

- Deep data coverage of over 80+ million public and private companies
- ESG data updated monthly helps support regular reviews
- Scoring built around trusted sustainability frameworks
- ESG data synthesized into meaningful metrics for supplier risk prioritization and informed decision making
- Data depth scores identifying areas where you may want to engage with your suppliers for more insight

## ONE SOURCE OF TRUSTED ESG DATA

### ESG RATINGS BUILT FROM TOP STANDARDS

CDP  
GRI  
SASB  
TCFD  
UN PRI  
UN SDGS



### DATA GATHERED FROM MILLIONS OF SOURCES

Financial Filings  
Sanctions & Blacklists  
Dun & Bradstreet Data  
News Media  
Regulatory Agencies  
Excluded Parties Lists  
Financials Enforcement Agencies  
NGO Databases  
Certifications



### GRANULAR ESG RANKINGS

**31** ESG Topic Rankings

**13** ESG Topics

### DEEP DATA COVERAGE



**80+ Million**

Public & Private Businesses Across the Globe



# Five Sustainable Insurance Use Cases

## Strategy supported by Informatica and Dun & Bradstreet

### Insurance specific use cases



#### Climate Risk Integration in Underwriting & Premium decision making

Understand and monitor Climate risks and claims propensity.

Integrate Climate risk into pricing and actuarial models to help inform underwriting decisions.



#### Climate Enabled Product Innovation

Develop new operations and products based on understanding and integrating ESG data into policyholder portfolio.

i.e. develop climate risk insurance protection for SMEs, package insureds into side car arrangements and reinsure.

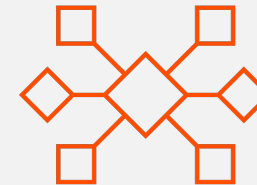


#### Premium Discounts for Physical Risk Mitigation Actions

Develop new Climate Risk Premium Discounts for insured that have implemented Physical Risk Mitigation Actions.

Advise insureds on how to improve Climate Resilience of Physical Assets for premium discounts.

### General use cases (all industries)



#### Climate Risk Enabled Supply Chain Resilience

Monitor and assess Climate risks & ESG performance over large network of suppliers to generate actionable insights.

Help identify and manage Climate and ESG-related reputational, regulatory, and physical risks associated with suppliers.



#### Insurance Associated Emissions & ESG Disclosures

Understand Insurance Associated Emissions, indirect impacts associated with suppliers' operations – such as emerging and previously unknown supply chain risks.

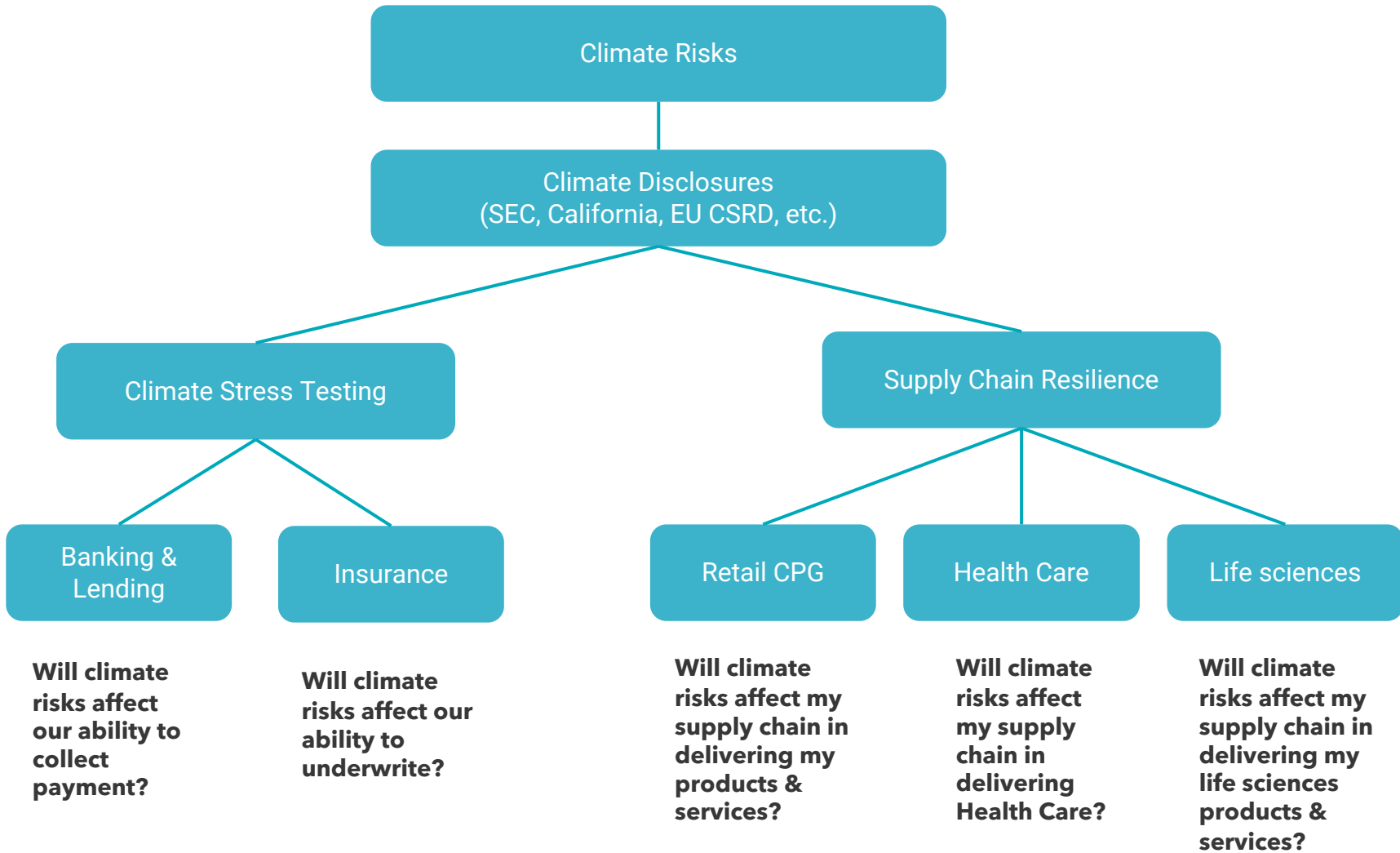
Comply with ESG disclosure reporting requirements.

# IDMC Climate Risk Insights by Industry Verticals

Where data & AI come to **LIFE**



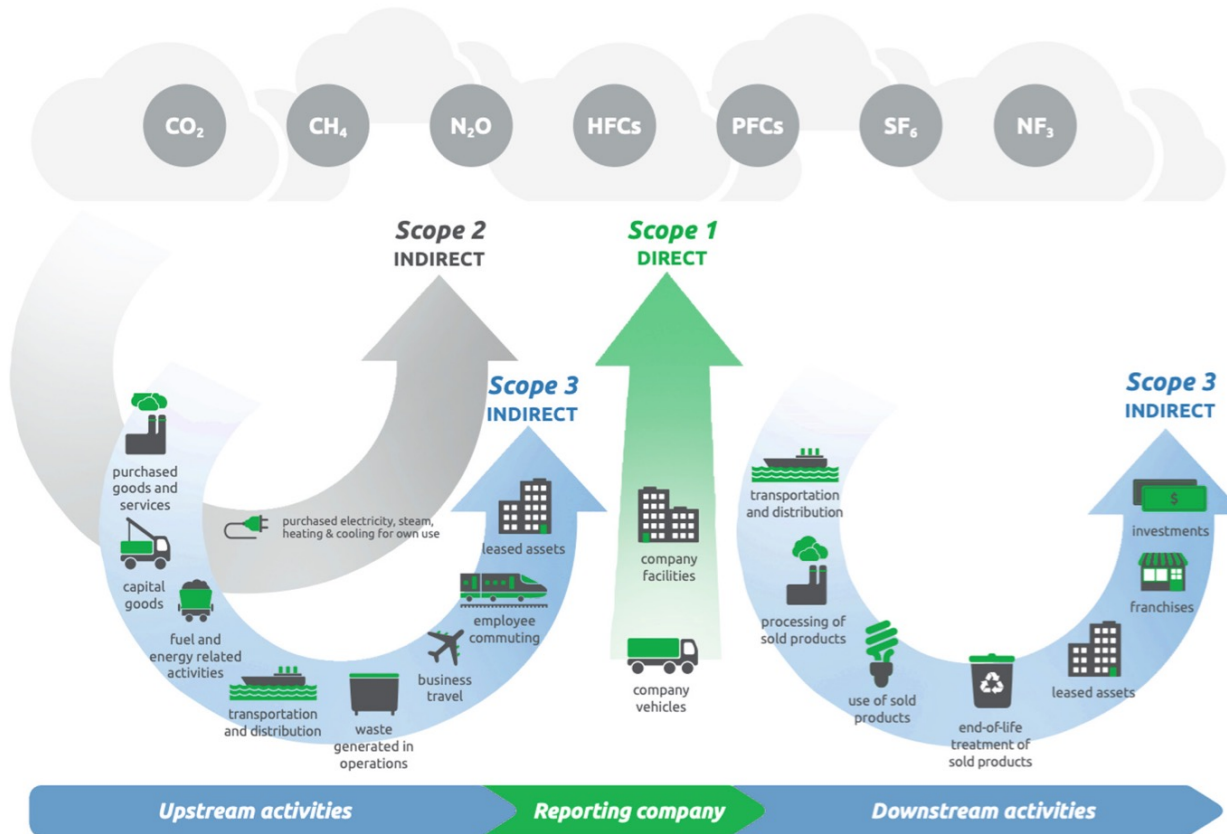
# Climate Risk Use Cases Summary Across Industries





# Greenhouse Gas (GHG) Protocol used in TCFD Reporting

## OVERVIEW OF GHG PROTOCOL SCOPES AND EMISSIONS ACROSS THE VALUE CHAIN



The leading approach for carbon accounting is the [Greenhouse Gas Protocol](#), a joint initiative of the non-profits WRI (World Resources Institute) and WBCSD (World Business Council for Sustainable Development). The GHG Protocol defines three “Scopes” of emissions for GHG accounting and reporting purposes (also see Figure 1):

- **SCOPE 1:** Direct emissions that result from an organization’s activities, such as fuel combustion from facilities (e.g., burning natural gas for space heating) and vehicles that your company owns or controls (e.g., burning gasoline or diesel for company automobiles or trucks).
- **SCOPE 2:** Indirect emissions associated with an organization’s activities, often from the generation of purchased electricity consumed by your company (e.g., emissions from natural gas power plants that supply electricity to your local power grid).
- **SCOPE 3:** Other indirect emissions from an organization’s supply chain, rather than its primary operations (e.g., embodied emissions in purchased raw goods, distribution and transportation, employee commuting, use of sold products, and end-of-life treatment).

Source: Greenhouse Gas Protocol Technical Guidance for Calculating Scope 3 Emission <https://ghgprotocol.org/scope-3-technical-calculation-guidance>

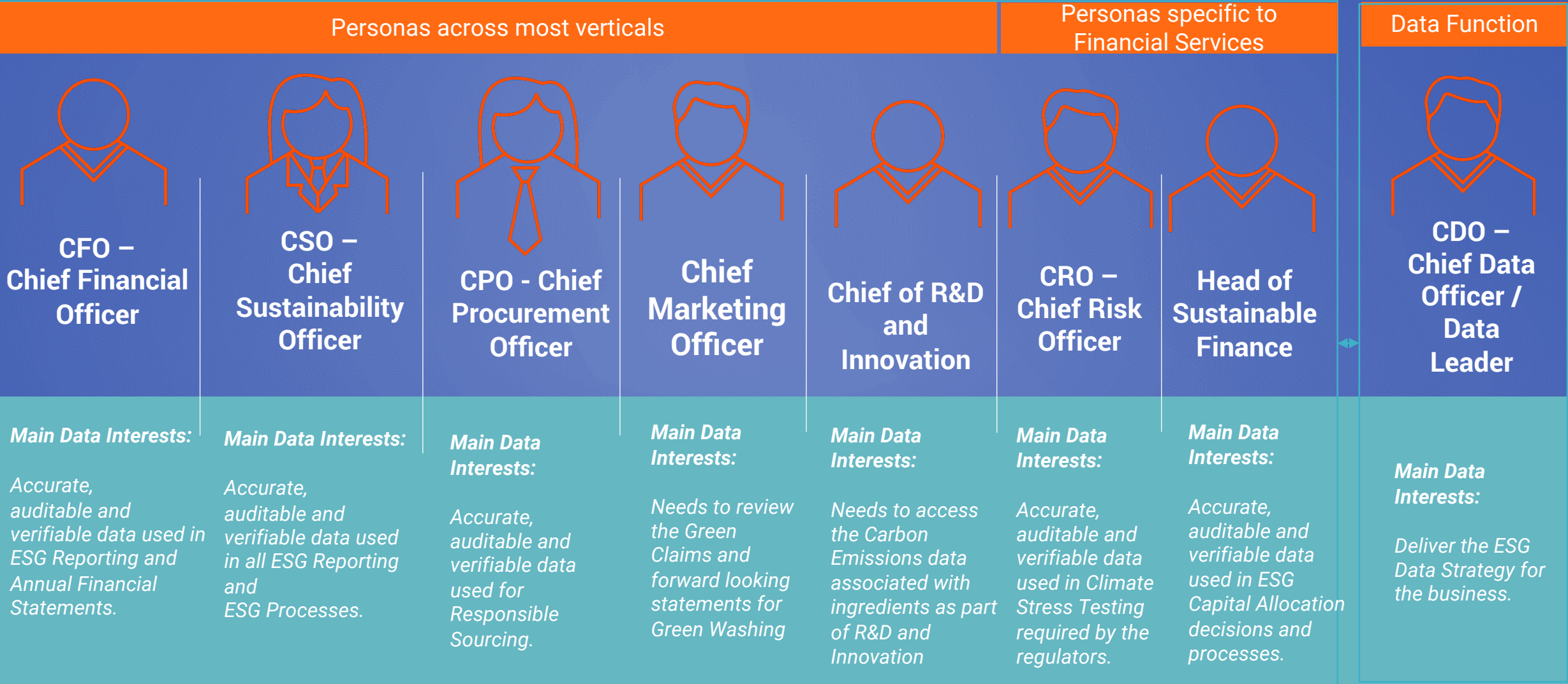
# Challenges with Scope 3 Data in your Supply Chain

## **CATEGORIES**



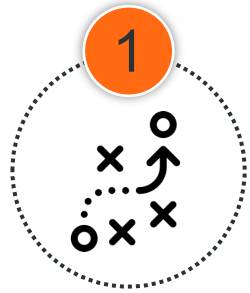
<b>1: Purchased Goods and Services</b>	20
<b>2: Capital Goods</b>	36
<b>3: Fuel- and Energy-Related Activities Not Included in Scope 1 or Scope 2</b>	38
<b>4: Upstream Transportation and Distribution</b>	49
<b>5: Waste Generated in Operations</b>	72
<b>6: Business Travel</b>	81
<b>7: Employee Commuting</b>	87
<b>8: Upstream Leased Assets</b>	94
<b>9: Downstream Transportation and Distribution</b>	102
<b>10: Processing of Sold Products</b>	106
<b>11: Use of Sold Products</b>	113
<b>12: End-of-Life Treatment of Sold Products</b>	125
<b>13: Downstream Leased Assets</b>	128
<b>14: Franchises</b>	130
<b>15: Investments</b>	136

# It's Critical for CDO's & Data Leaders to Identify & Engage ESG Stakeholders Early and Incorporate Their Data Requirements into the Data Strategy





# What are the ESG Data Challenges?



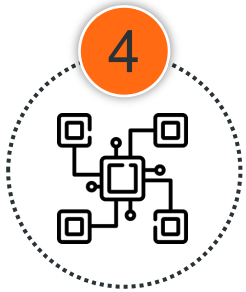
ESG strategies / frameworks evolve during data journeys



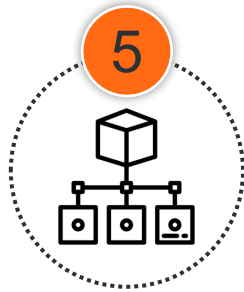
Unknown ESG data quality with data quality metrics not currently captured



Majority of new ESG data is not subject to existing controls



Disaggregation of ESG data across internal systems



Huge number of data vendors offering different ESG data variations



ESG Integration - Large scale of change required to support ESG requirements across LOBs and Group Functions



Complex reporting requirements with varying standards



# INTELLIGENT DATA MANAGEMENT CLOUD for ESG SUSTAINABILITY



**Levent Ergin**

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Mobile: +44 7443 278 265

## Intelligent Data Management Cloud



DATA CATALOG



DATA INTEGRATION & ENGINEERING



API & APP INTEGRATION



DATA QUALITY & OBSERVABILITY



MDM & 360 APPLICATIONS



DATA GOVERNANCE



DATA MARKETPLACE

**CLAIRE**<sup>®</sup>

AI-Powered Metadata Intelligence & Automation

**Connectivity**

Metadata System of Record



RETAIL & CPG



HEALTHCARE & LIFE SCIENCES



FINANCIAL SERVICES



STATE & LOCAL GOVERNMENT



HIGHER EDUCATION



ESG Sustainability

# Company's Proposed ESG Sustainability Data Hub using Informatica's Intelligent Data Management Cloud

20%  
of the effort

## EXAMPLES OF COMPANY'S USE CASES



Sustainability Compliance & ESG Reporting



Supply Chain Due Diligence & Product Traceability



Emissions Tracking & Carbon Accounting



Waste Control

Examples of ESG Reporting Solutions compatible with Informatica



## Examples of Third-Party ESG Sustainability Data



Earth observation systems Data



Product Emissions & Nutrition Data



Supply Chain & Product Data



ESG Rating Agency Data



Child Labour & Modern Slavery Data

80%  
of the effort

## ESG SUSTAINABILITY DATA HUB

### Environmental Data Democratisation and Collaboration

Then the final step is to get the clean, trusted Environmental Data into a Common Data Model for reporting. This data can then also be democratized using Informatica's self-service Cloud Data Marketplace to unlock collaboration at scale.

### Single View of ESG Data / MDM

The fifth step in maturity is to get a single version of the truth, the golden record, the most up-to-date record for your Environmental Sustainability data or Master Data Management (MDM).

### ESG Data Quality

The fourth step in maturity is to bring 'Trust' to your data through cleaning up the quality of the data.

### ESG Data Governance

The third step in maturity is to assign the appropriate ownership, stewardship and business definitions of the logical data, then link it to the technical data.

### ESG Data Catalogue

The second step in maturity is to build a Data Catalogue of all your technical data assets, using data lineage, data profiling, etc. for the Data Lake.

### ESG Data Integration, Collection & Automation

The first step in maturity is to integrate all ESG Sustainability Data into a centralized Sustainability Data Lake to manage this data.

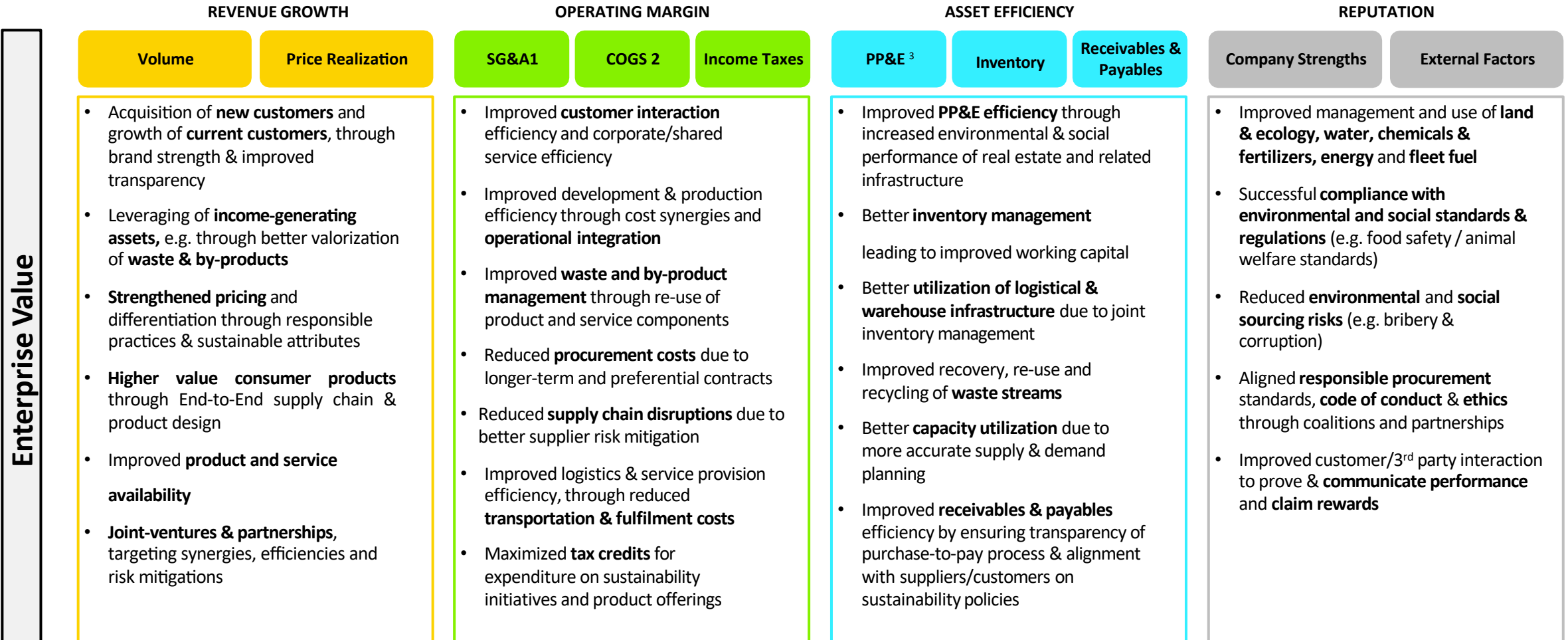
## ESG Sustainability Data Hub coverage by



using Cloud Eco-system Partnerships with



Businesses strive to drive sustainability across their E2E value chains is not only the right thing to do, but it is also **good for business**



... while not addressing it can pose **substantial risks**

<sup>1</sup>Sales, General & Administrative <sup>2</sup>Cost of Goods Sold <sup>3</sup>Product, Plant & Equipment

Many ESG topics impact our clients, and we are starting to see distinct journeys by our clients as they shift from compliance towards transformation, with sustainability as an increasingly relevant topic for all client domains

**Business Transformation**  
Businesses strive to drive sustainability across their E2E value chains, not only the right thing to do, but it is also good for business

Enterprise Value	REVENUE GROWTH		OPERATING MARGIN		ASSET EFFICIENCY		REPUTATION	
	Volume	Price Realization	SG&A	COGS %	PP&E	Inventory	Operational & People	Company Strength
<ul style="list-style-type: none"> <li>Acquisition of new customers and growth of current customers, through brand strength &amp; improved transparency</li> <li>Marketing of revenue-generating assets, e.g. through better valuation of waste &amp; by-products</li> <li>Streamlined pricing and differentiation through responsible products &amp; sustainable attributes</li> <li>Higher value consumer products through optimized supply chain &amp; production</li> <li>Improved product and service availability</li> <li>Inter-ventures &amp; partnerships, targeting synergies, efficiencies and risk mitigation</li> </ul>	<ul style="list-style-type: none"> <li>Improved customer interaction efficiency and corporate/citizen service efficiency</li> <li>Improved development &amp; production efficiency through cost synergies and operational integration</li> <li>Improved waste and by-product management through reuse of product and service components</li> <li>Reduce procurement costs due to longer-term and preferred contracts</li> <li>Reduced supply chain disruptions due to better supplier risk mitigation</li> <li>Improved logistics &amp; service provision efficiency through reduced transportation &amp; fulfillment costs</li> <li>Material cost savings for expenditure on sustainability initiatives and product offerings</li> </ul>	<ul style="list-style-type: none"> <li>Improved PPE efficiency through increased environmental &amp; social performance of equipment and related infrastructure</li> <li>Better inventory management leading to improved working capital</li> <li>Better utilization of logistical &amp; warehouse infrastructure due to joint inventory management</li> <li>Improved recovery, reuse and recycling of water streams</li> <li>Better capacity utilization due to more accurate supply &amp; demand planning</li> <li>Improved maintainability &amp; availability efficiency by ensuring transparency of purchase to pay process &amp; alignment with supplier/customer own sustainability policies</li> </ul>	<ul style="list-style-type: none"> <li>Improved management and use of land &amp; energy, water, chemicals &amp; fertilizers, metals and non-ferrous</li> <li>Successful compliance with environmental and social standards &amp; regulations (e.g. food safety / animal welfare standards)</li> <li>Reduced environmental and social reporting risks (e.g. bribery &amp; corruption)</li> <li>Strong responsible procurement standards, under all contract &amp; risks through conditions and performance planning</li> <li>Improved customer/partner interaction to drive &amp; communicate performance and outcomes</li> </ul>					

... while not addressing it can pose substantial risks

**REGULAR**

Sales, General & Administrative | Cost of Goods Sold | Product, Plant & Equipment



**DEVELOPING A SUSTAINABLE FOOD SYSTEM**



**NATURE POSITIVE BUSINESS & SOCIETY**



**Example Required Client Capabilities:**

- Strategy & innovation
- Finance
- Ops & Supply chain
- IT & data
- Marketing & comms
- HR, Change and people
- Compliance Risk & Assurance

**Example ESG topics:**

- Climate change
- Biodiversity
- Waste
- Human rights
- DEI
- ...

**Example journeys that we can support our clients with:**

- Support new business models**  
Innovating existing business models and launching new future innovations
- Enhance transparent stakeholder communications**  
Reliable and compliant reporting and enhanced equity story, including impact measurement
- Support the decarbonization journey**  
Emission analysis, climate risk assessment, targets assessment and projects prioritization
- Improve data use & operationalization**  
Traceability, data architecture and system optimization
- More sustainable supply chain**  
Resilient supply chain strategy supported by supplier strategy and planning, sourcing and procurement
- ...and many others!**

**Supported by all of Deloitte's business units**

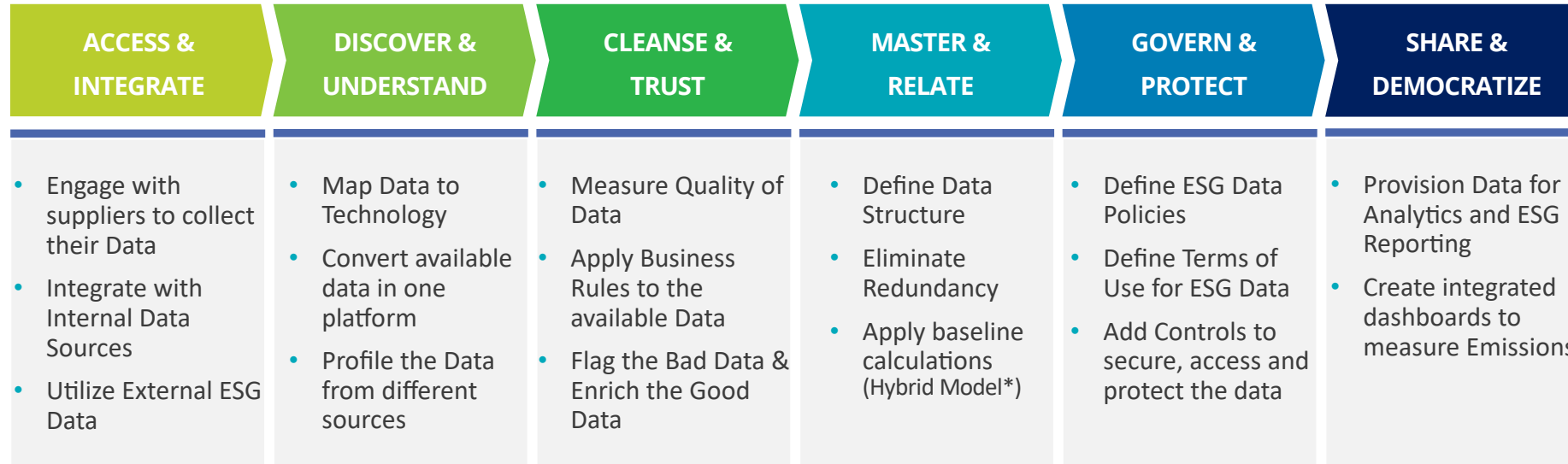


Designing processes with the end in mind involves strategic planning to achieve desired outcomes, and leveraging technology elements; where appropriate enhances efficiency and effectiveness in implementation

  
Enterprise  
ESG Data

  
Supplier  
Emissions

  
3rd Party  
ESG Data



ESG  
Reporting



Reduce  
Emissions



Supply Chain  
Optimization



Customer  
Engagement

**Value Proposition**



**Ease of Data Collection**

Improved data collection efficiencies that reduces the time and frustration of tracking down needed data collection points



**Optimal Reporting**

Deloitte ESG data schema and framework makes organizing for downstream reporting easy and configurable



**Reduced Risk Through Governance & Controls**

Strengthening ESG reporting and helps reduce companies' risk of adverse government action through creating structure to be SEC-compliant

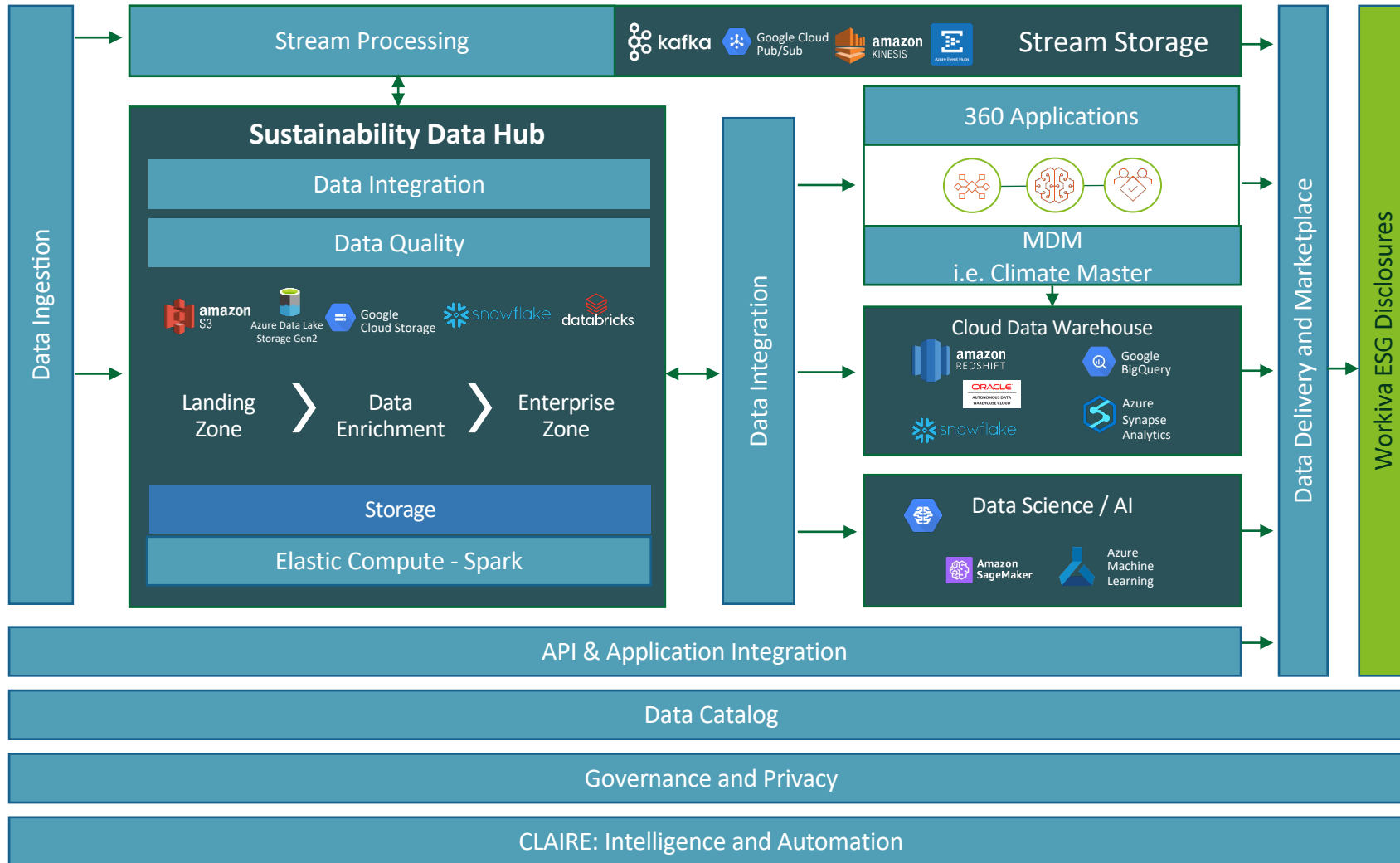


**Audit Ready**

Repository of data and artifacts facilitates future audits of ESG metrics by having identified data points and respective data captured

Hybrid Model\*: The emission calculation model with a mix Supplier based calculations, Quantity Based calculations, Monetary based calculations

# ESG Enterprise Data Architecture with Informatica & Workiva



## USE CASES

(Non-Exhaustive List)

- Sustainability Compliance Reporting Disclosures
- Emissions Tracking & Carbon Accounting
- Supply Chain Optimization
- Transitioning towards Sustainable business operating model

Informatica

Workiva

# Questions?



dun & bradstreet

**Deloitte.**

EDM Webinar 

## What's Next – Upcoming GenAI, Climate & ESG Executive Roundtable



Save your seat at our upcoming GenAI, Climate & ESG Executive Roundtable – To apply, email [ESG@informatica.com](mailto:ESG@informatica.com).



**EDM Webinar** 

**Thank you!**

**FOR MORE INFORMATION,  
CONTACT:  
[ESG@informatica.com](mailto:ESG@informatica.com)**

