ESG Reporting Update

September 13, 2023

pwc

Sections/Time

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Section 1

Global Environment Update

The ESG landscape continues to shift fast

The landscape of active and proposed ESG regulation is broad and covers many topics*

Within next month --> A final SEC rule is expected on climate-related disclosures and draft human capital proposal

July --> CSRD finalized standards on July 31. Reporting required on 2024 or 2025 data (see later slides)

July --> SEC adopted final cybersecurity rules on disclosure of material cybersecurity incidents and risk management, strategy, and governance

June --> ISSB released general sustainability and climate-related standards, likely to be adopted in UK, Canada, Singapore, Japan, Malaysia, and others

- SEC Climate-Related Disclosure
- SEC Human Capital Disclosure
- SEC Cybersecurity Disclosure
- CA Transparency in Supply Chains Act
- CA Climate Corporate Data Accountability Act
- Canada Climate-Related Disclosure Rule

- EU Corporate Sustainability Reporting Directive (CSRD)
- EU Corporate Sustainability Due Diligence Directive (CSDDD)
- EU Sustainable Finance Disclosure Regulation (SFDR)
- EU Energy Efficiency Directive (EED)
- EU Taxonomy
- EU Pay Transparency Directive
- Dutch Corporate Governance Code
- France Grenelle II Act
- German Supply Chain Due Diligence Act
- Norway Transparency Act
- Switzerland Ordinance on Climate Change
- UK Sustainability Disclosure Requirements (SDR)
- UK Streamlined Energy and Carbon Reporting
- UK Modern Slavery Act
- UK and EU Member States – Extended Producer Responsibility

Illustrative list

- Australia Modern Slavery Act
- India Companies Act (CSR)
- Japan Corporate Climate Disclosures
- Japan Gender Pay Gap Disclosure

*This represents an illustrative sample of active and pending regulatory considerations covering a range of topics for informational purposes only. The application and impact of laws can vary widely based on the specific facts involved. Determining applicability is often complex and may require legal assistance to consider the specific applicability criteria and thresholds, including at the legal entity and holding company level.

Regulation will require various cuts of reporting

Environmental				Social				Governance	
Climate change	Natural resources	Pollution and waste	Environmental opportunities	Human capital	Product liability	Stakeholder opposition	Social opportunities	Corporate governance	Corporate behavior
Carbon emissions	Water stress	Toxic emissions and waste	Opportunities in clean tech	Labor management	Product safety and quality	Controversial sourcing	Access to communication	Board	Business ethics
Product carbon footprint	Biodiversity and land use	Packaging material and waste	Opportunities in green building	Health and safety	Chemical safety	Community relations	Access to finance	Pay	Tax transparency
Financing environmental impact	Raw material sourcing	Electronic waste	Opportunities in renewable energy	Human capital development	Consumer financial protection		Access to healthcare	Ownership	
Climate change vulnerability				Supply chain labor standards	Privacy and data security		Opportunities in nutrition and health	Accounting	
					Responsible investment				
					Health and demographic risk				

Source: MSCI ESG Ratings Key Issue Framework

Common Disclosure Elements in Current and Proposed Regulations

Climate-Related

- TCFD Reporting
- Greenhouse Gas Emissions
  - Scope 1
  - Scope 2
  - Scope 3
- Greenhouse Gas Reduction Targets
- Carbon intensity of investment portfolio
- Sustainable investments
- Exposure to carbon-intensive industries
- Underwriting exposure
- Losses from severe weather events
- Costs associated with physical & transition risk

Other (Not Climate)

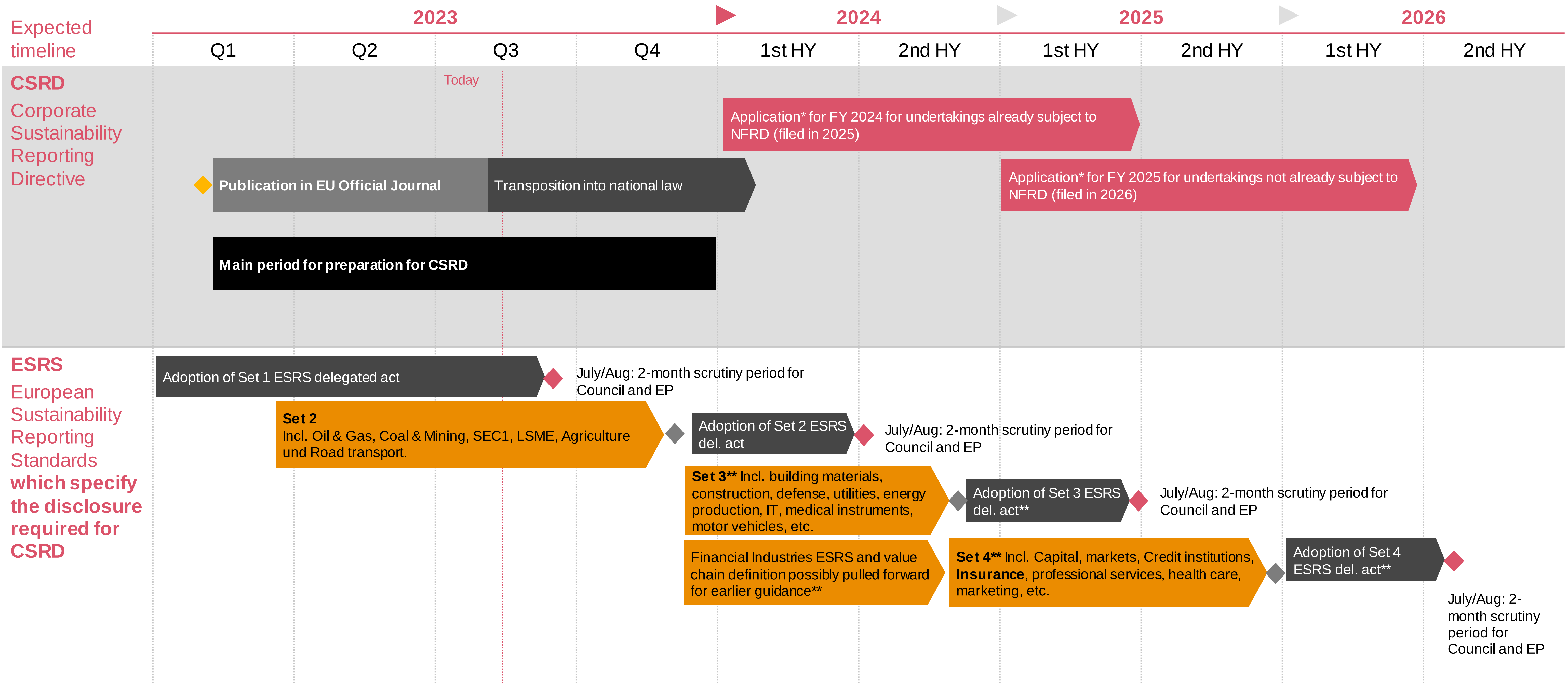
- Board Diversity
- Management Diversity
- Employee numbers
- Human capital management
  - Workforce turnover
  - Skills & Development training
  - Compensation & benefits
  - Health & safety
  - Demographics
  - Gender pay differentials
- Data security policy
- Cybersecurity training
- Cybersecurity breaches
- Supply chain management/supplier diversity

The "Big 3" ESG Reporting Frameworks

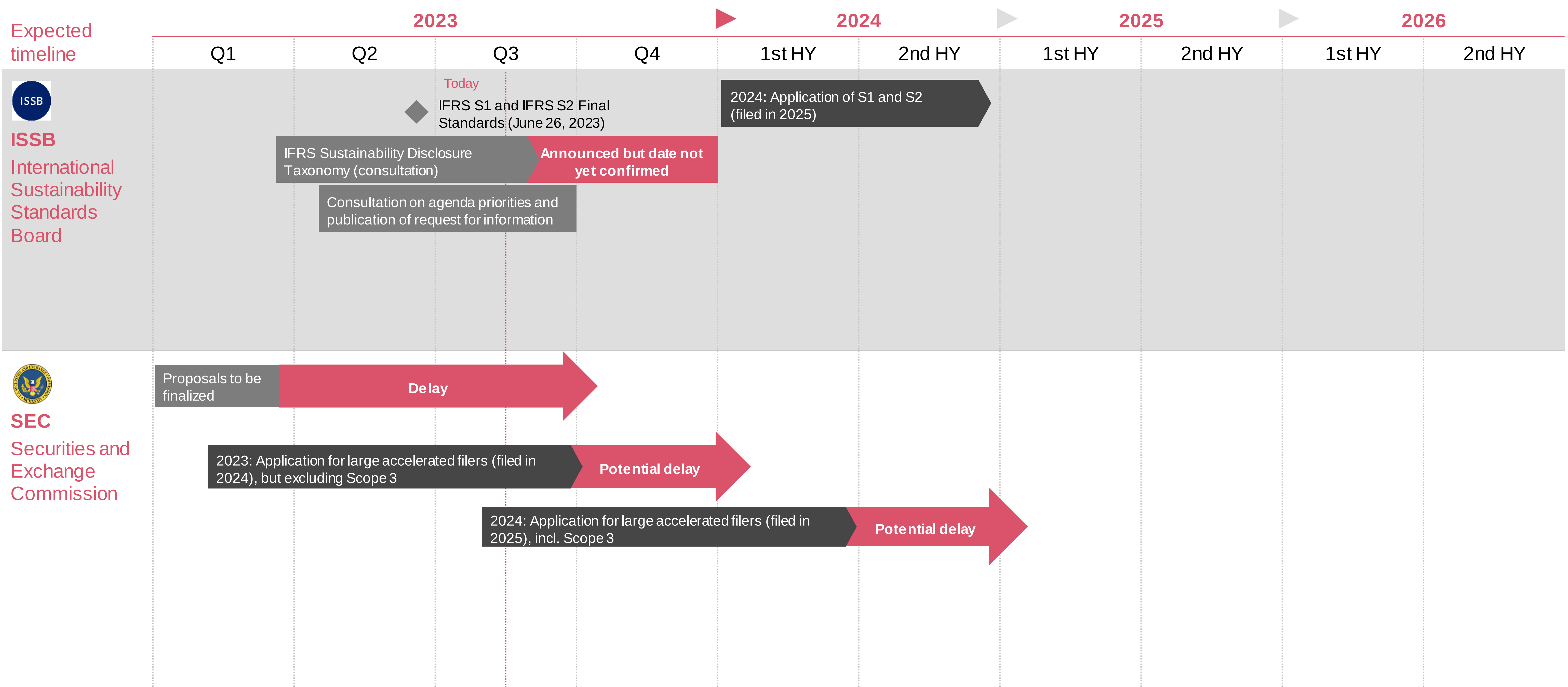
SEC	EFRAG (CSRD)	ISSB
• Proposed rule addresses climate-related risks • Additional proposed rules on human capital are expected • Industry-specific disclosures are not required • Disclosure would be provided: – In a separate section of the annual report or registration statement – In a financial statement footnote	• Final ESRS standards span environmental, social, and governance topics • Sector-specific standards are in development • Disclosure would be included within a dedicated section of the management report (similar to US annual report) • Interpretive guidance issued over double materiality assessment and value chain analysis	• Final standards (IFRS S1 and IFRS S2) address climate and other sustainability risks • Disclosure to be included as part of general purpose financial reporting • The ISSB has made changes from the exposure draft to the IFRS S1 and IFRS S2 final issued standards

Important to maintain a consistent narrative thread across all regulatory disclosures

Maintaining a consistent global narrative for ESG disclosures is a key consideration



Maintaining a consistent global narrative for ESG disclosures is a key consideration



Section 2

CSRD Reporting Primer

CSRD in a nutshell

New mandatory ESG reporting regulations in the European Union (the Corporate Sustainability Reporting Directive, or CSRD) will take considerable time to prepare for to ensure compliance.

Up to

1,000

datapoints for inclusion in the local financial statements with additional reporting required at the group consolidated level, **all requiring third-party audit.**

Coordination required across the following functions

IT
Sustainability
Legal
Control
Finance
Tax
Human Resources
Procurement
Real Estate
Compliance

Complex allocation of metric data to the legal entity level and consolidation for specific external disclosures and internal management reporting

2 years to prepare and build what financial systems did in 60 years

Who is required to report?

Single entity

Large undertaking

- If 2 of the 3 size criteria are exceeded for two consecutive fiscal years:
  - Balance sheet total: € 20 m
  - Net turnover (revenue): € 40 m
  - 250 employees (FY average)
- Listing not required

Group (parent undertaking + subsidiaries)

Parent undertaking of a large group

- If 2 of the 3 size criteria are exceeded for two consecutive fiscal years (on a consolidated basis):
  - Balance sheet total: € 20 m
  - Net turnover (revenue): € 40 m
  - 250 employees (FY average)
- Listing not required

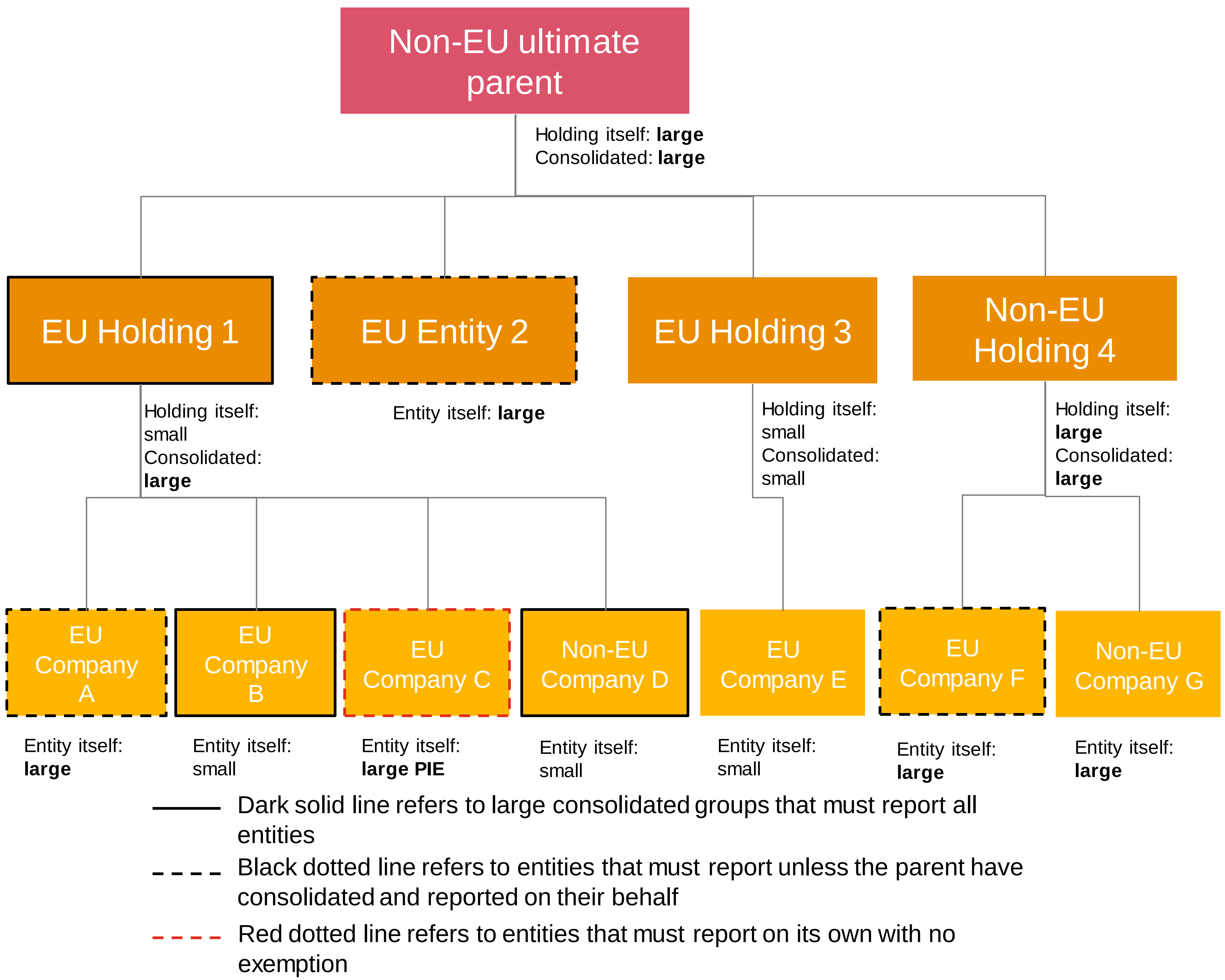
Applies to all EU undertakings meeting the above criteria, regardless of whether they are a subsidiary of an EU parent or a non-EU parent.

Additional requirement for non-EU companies to report at a global consolidated level if:

1. There is at least one EU entity within the organization that is in scope (i.e., securities listed on an EU-regulated market or “large”) **or** there is at least one EU branch that generates revenue of more than €40 million in the preceding year, **and**
2. Its consolidated net turnover (revenue) generated in the EU exceeds €150 million for each of the last two consecutive fiscal years.

Your corporate structure will determine your reporting obligations

Example CSRD Reporting obligations: Non-EU parent with non-EU subsidiaries of an EU Holdco



1. All large entities would report separately, or be exempt if their parent undertaking prepares a consolidated management report (according to Article 29a)
2. All large groups (consolidated) would report separate consolidated management reports that includes all its subsidiaries (large or small)
3. All large PIE must report on its own, with no exemption
4. All management reports must include Taxonomy Regulation disclosures covering the same scope

Scenario formulated based on our interpretation of CSRD and EU CSRD Update December 2022

Structure of the ESRS

On 31 July 2023, the European Commission adopted the final delegated act of the ESRS. The first set of standards consists of the following:

Sector-agnostic standards

Cross cutting standards	Topical standards			Four reporting areas
	Environment	Social	Governance	
ESRS 1 General requirements	**ESRS 1** Climate change	**ESRS S1** Own workforce	**ESRS G1** Business conduct	**GOV** Governance
ESRS 2 General disclosures	**ESRS E2** Pollution	**ESRS S2** Employees in the value chain		**SBM** Strategy
	ESRS E3 Water & marine resources	**ESRS S3** Affected communities		**IRO management** (Impact, risk & opportunity management) **Metrics and targets**
	ESRS E4 Biodiversity & ecosystems	**ESRS S4** Consumer & end-users		
	ESRS E5 Circular economy			

Future standards

- Sector-specific
- Listed SMEs
- Third-country companies

~350	>80	~ 80	>1000	~ 20
pages	**Disclosure Requirements**	**Quantitative metrics**	**Datapoints**	**templates**
	Disclosure Requirements (groups of information)		**Individual qualitative or quantitative information**	

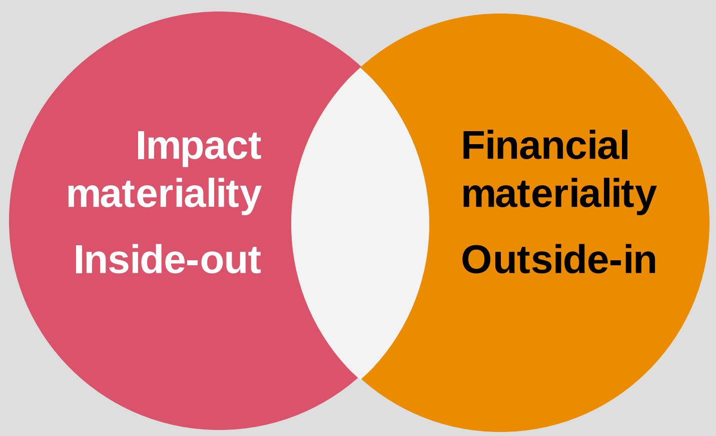
Double materiality

A sustainability matter is "material" when it meets the criteria defined for impact materiality or for financial materiality or both.

Double materiality is a key concept in the CSRD/ ESRS, which will have a significant impact on what is disclosed in the sustainability report and on the work assurance providers perform related to the process followed by the issuer.

Impact materiality

Company's impacts on people or the environment
→
environmental, social and governance matters



Financial materiality

Sustainability matter which triggers or may trigger material financial effects on the company
→
effects on cash flows, development, etc

Own operations and along the upstream and downstream value chain

(Double) Materiality assessment must cover all topics[1]

Materiality of matters may be different to materiality of information, and the different levels should be considered[2]

[1] ESRS 1 App E includes a flowchart for determining disclosures to be included in sustainability reporting.

[2] ESRS 1 App B includes a prescriptive list of sustainability matters to be considered in the assessment.

Engagement with stakeholders is central to a sustainability materiality assessment.

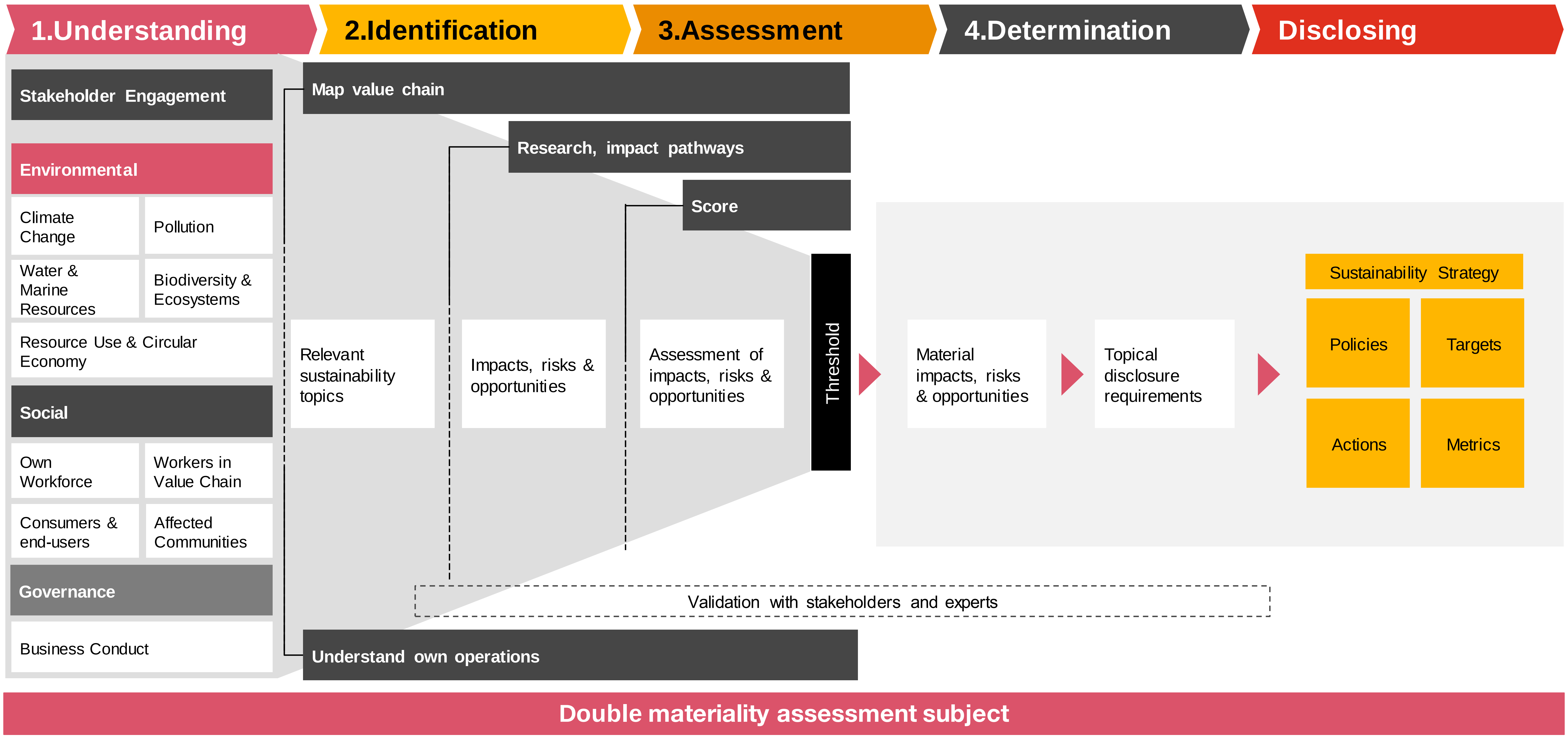
Consideration of all stakeholders is required but relevance of stakeholders may vary depending on topics.

Common categories of stakeholders:

- Investors
- Employees, other workers
- Suppliers
- Consumers, customers, end users
- Society, vulnerable groups, local communities
- Authorities, regulators, banks

Nature should be considered a 'silent' stakeholder.

What you report will be determined by your double materiality assessment



In August 2023, EFRAG released draft **interpretive guidance** for conducting a double materiality assessment and navigating the value chain

Runway for Compliance

Standard setting releases

Application requirements (EU Subsidiaries)

Application requirements (Group-level)

High-level reporting timeline

- **01** Nov 2022 CSRD approved by parliament
- **02** June 2023 EU adopts sector-agnostic standards
- **03** Jan 2024 CSRD requirements start for those in scope of NFRD (reporting 2025) [1]
- **04** June 2024 EU will adopt sector-specific, SME and non-EU standards [2]
- **05** Jan 2025 Other large companies required to report (reporting 2026)
- **06** Jan 2026 Listed SMEs required to report
- **07** Jan 2028 Non-EU companies required to report if >€150m EU revenue and 1+ sub or branch (reporting 2029)

Illustrative high-level compliance readiness timeline

- Applicability assessment
- Perform double materiality assessment
- Draft CSRD disclosures and report
- Develop metric-level processes and controls
- Engage auditor and obtain assurance
- Assess current state data and technology landscape
- Design future state data and technology landscape
- Execute implementation plan

[1] No CLIENT entities are in scope of the NFRD
[2] No CLIENT entities qualify as SMEs

Overview of the ISSB and the New Sustainability Standards

- The International Sustainability Standards Board (ISSB) is a sister entity to — and is expected to work collaboratively with — the International Accounting Standards Board (IASB)
- “The intention is for the ISSB to deliver a comprehensive global baseline of sustainability-related disclosure standards that provide investors and other capital market participants with information about companies’ sustainability-related risks and opportunities to help them make informed decisions.” - IFRS Foundation
- The ISSB’s IFRS S1 and IFRS S2 were developed from exposure drafts that were issued in March 2022 to address general and climate- related disclosure requirements after considering feedback obtained during the consultation period.
- Effective for annual reporting periods beginning on or after January 1, 2024.

First year reliefs:

- Can limit disclosures to climate-related information
- Later reporting allowed – annual information can be provided with half year reporting
- Scope 3 disclosure not required
- No need to apply Greenhouse Gas Protocol (GHG) if already using a different measurement approach
- No need to provide comparative information (Note: If a company limits disclosure in the first year to climate reporting only, it would not need to provide comparative information about risks and opportunities beyond climate in its second year)

Why is this important to a US company? Although US companies will not be required to use the ISSB standards, they may have subsidiaries subject to separate reporting in jurisdictions that adopt the ISSB standards. The standards should also serve as a useful reference point or companies preparing ESG reports given their close linkage to an established set of accounting standards.

Section 3

ISSB Reporting Primer

Summary of the Standards

IFRS S1 – General Requirements for Disclosure of Sustainability-related Financial Information

- Required to use in accordance with IFRS 1
- Fully incorporates the **TCFD recommendations**
- Material information about exposure to climate related **physical and transition risks** and opportunities useful in assessing future cash flows, over the **short, medium, and long term**
- Apply climate-related scenario analysis to assess climate resilience unless "unable to do so," in which case an "alternative method or technique" should be used **based on reasonable and supportable information**
- **Scope 1, scope 2 and Scope 3** greenhouse gas emissions disclosures.
- **Industry-based disclosures and metrics** (based on SASB standards)

IFRS S2 – Climate-related Disclosures

- Based on the Task Force on Climate-Related Financial Disclosures (**TCFD**) framework
- Requires disclosure of **material information** regarding **sustainability-related risks and opportunities** with the financial statements
- Requires **industry-specific disclosures**
- Requires the **reporting entity** and the **reporting period** to be the same as the related financial statements
- Requires the **same time** as the financial statements as part of the general-purpose financial report

Overall Metrics and Targets — Climate Exposure

A company would be required to disclose the metrics and targets it uses to manage its significant climate-related risks and opportunities

Cross-industry Metrics

- Greenhouse gas (GHG) emissions
- Transition risks
- Physical risks
- Climate-related opportunities
- Capital deployment
- Internal carbon prices
- Remuneration

Industry-based Metrics

- Key metrics relevant to 77 industries across 11 sectors, derived from SASB standards
- Organized according to the Sustainable Industry Classification System® (SICS®)

Other Metrics Used

- Other metrics used by the board or management to measure progress towards the targets identified

Climate-related Targets

- Targets set by the entity to mitigate or adapt to climate-related risks or maximize climate-related opportunities
- Such targets would need to be compared to the "latest international agreement on climate change" (currently the Paris Agreement)

Metrics — Climate GHG Emissions

GHG Emissions

Scope 1 — Direct GHG emissions from sources that are owned or controlled by the company (e.g., boilers, furnaces, and vehicles)

Scope 2 — Indirect GHG emissions from the generation of "purchased electricity" — including electricity, steam, heating, and cooling — consumed by the company

Scope 3 — Other indirect GHG emissions from activities of the company that occur from sources it does not own or control (e.g., business travel, purchased goods and services, use of sold products)

Disclosures

For each scope, absolute gross emissions in metric ton of CO2 equivalent and intensity expressed as metric ton of CO2 equivalent per unit of physical or economic output Calculated using the Greenhouse Gas Protocol Corporate Standard

Scope 1 and scope 2 emissions separately for (1) the consolidated accounting group and (2) associates, joint ventures,and unconsolidated s ubsidiaries or affiliates

The categories included within scope 3 emissions should be disclosed ("to enable users... to understand which Scope 3 emissions have been included in, or excluded from, those reported")

Section 4

SEC Reporting Primer

Refresher on climate proposal - Regulation S-K

Climate-related impacts on strategy, business model, and outlook

- Physical and transition risks reasonably likely to have a material impact over the short, medium, and long term
- Zip code level location of assets subject to climate-related risks; plus additional disclosures for assets and operations in flood hazard zones or regions of high or extremely high water stress

Greenhouse gas (GHG) emissions reporting

- Scope 1 and scope 2 disaggregated by type of greenhouse gas and in the aggregate, accompanied by an intensity measure
- Scope 3, if material or included in a GHG emissions reduction target or goal, accompanied by an intensity measure (not applicable to smaller reporting companies)
- GHG reduction targets or goals and transition plan, if any

Governance and oversight of climate risks

- Board of directors oversight of climate-related risks
- Whether any member of the board of directors has expertise in climate-related risks, and if so, the nature of the expertise
- Management's processes for identifying, assessing, and managing climate-related risk

Attestation

Large accelerated and accelerated filers would be required to obtain assurance over Scope 1 and scope 2 GHG emissions

- Limited assurance in year 2 followed by reasonable assurance in year 4
- Assurance provider must be independent and meet certain other criteria

Refresher on climate proposal - Regulation S-X

Financial impact metrics

- Impacts of (1) severe weather events and other natural conditions and (2) transition activities
- If absolute value of positive and negative impacts exceeds 1% of financial statement line item

Expenditure metrics

- Amounts capitalized and expensed to (1) mitigate the risk from severe weather events and other natural conditions, (2) mitigate exposure to transition risks, and (3) meet climate commitments
- If amounts exceed 1% of total capitalized and expensed costs

Impact on estimates and assumptions

- Qualitative description of the impact of risks and uncertainties associated with, or known impacts of, severe weather events and other natural conditions and potential transition to a lower carbon economy or any climate-related targets

Other information

- Contextual information about how each specified metric was derived, including a description of significant inputs and assumptions

Assurance requirements

Information disclosed in the footnotes would be subject to:

- Audit, as part of the financial statements taken as a whole
- Management's internal control over financial reporting (and the related audit, if applicable)

Key themes and observations from public comment letters

Reg S-K Disclosures

Many respondents brought up various concerns related to the required “if used” disclosures related to carbon pricing, scenario analysis, and transition plans.

Scope 1 and 2 GHG Disclosures

There was generally no specific opposition to the proposed scope 1 disclosure requirement.

Respondents were generally silent on scope 2 disclosures, however, there were some concerns raised about methodology, timeliness of data, and presentation of offsets and similar instruments.

Scope 3

Some respondents opposed the disclosures or suggested that they should be voluntary. Others expressed concerns around data quality and liability.

Organizational Boundaries

Some respondents expressed concerns around differences in the proposed organizational boundaries and those allowed by the GHG Protocol. Limited support for the SEC’s proposed boundaries.

Attestation

Views were mixed on both the need for and level of (limited versus reasonable) attestation and the timing of the proposed requirements.

Reg S-X Disclosures (general)

Feedback focused on:

- Lack of operability
- Cost/benefit
- Geography - suggestions that the disclosures were better suited in MD&A

1% Footnote Disclosure Threshold

Many respondents suggested that the 1% threshold for reporting climate- and transition-related impacts was too low and should be aligned with traditional financial statement materiality.

Timing

Most respondents expressed concerns about the proposed implementation timeline, with suggestions varying from one additional year to five.

Many also noted the challenges of filing the disclosures on the same timeline as the Form 10-K, suggesting providing the information outside of the 10-K at a later date (up to 12 months later).

Section 5

How are companies preparing?

Short Term: Leaders are mobilizing now given the shift in regulatory environment

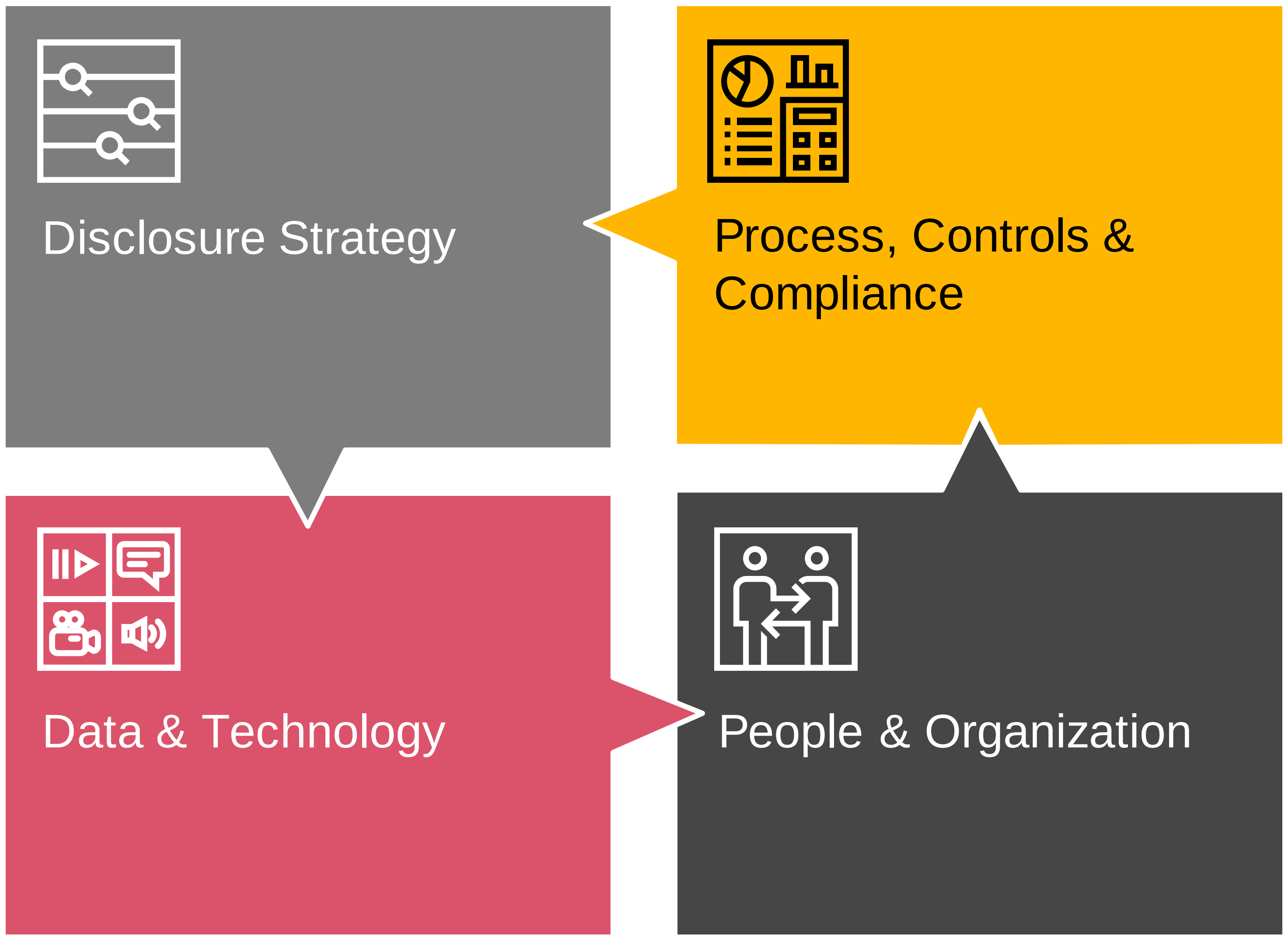
Information governance standards

ESG Center of Excellence

SEC & Regulatory ESG Reporting	Voluntary ESG Reporting
SOX-like level processes and controls for certification and validation	**Maintain and in parallel enhance** the existing metric review process and **distinguish segregation of duties**
Automate the data collection processes for Climate and Human Capital to **increase speed** and meet **SEC reporting deadlines**	**Standardize** international/domestic ESG reporting data metrics
Condense the **year-end reporting** process to fiscal year end	**Enhance capabilities** for detailed reviews and documentation for reported metrics

Building a robust framework for sustainability reporting

Key program elements



Top implementation priorities

- Alignment on ambition and priorities for sustainability reporting
- Information governance standards
- Line of defense definition
- Technology-enabled reporting solution

Key themes for a comprehensive sustainability disclosure controls and procedures model

Elements of an integrated program

Disclosure Strategy	Process, Controls & Compliance	Data & Technology	People & Organization
• Clear future-oriented ambition • Alignment on expectations • Monitoring the disclosure landscape	• Cross-cutting standards • Effective controls • Well-defined reporting calendar	• Well defined data dictionary for priority metrics and KPIs • Digitally enabled systems connected to supporting documentation and signoffs	• Clear accountability, roles and responsibilities • Adequate resourcing

Table stakes for this coming year

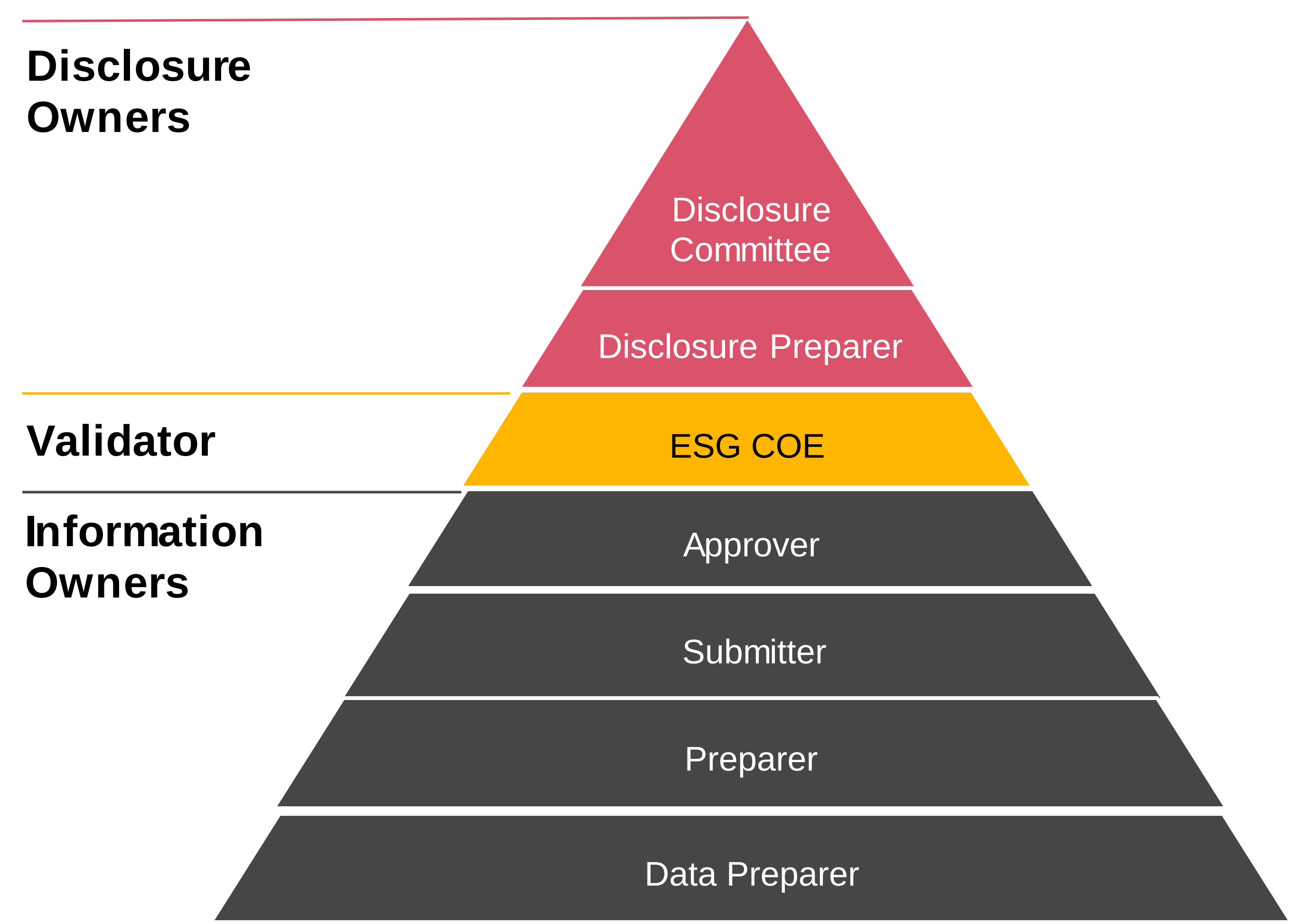
Disclosure Strategy	Process, Controls & Compliance	Data & Technology	People & Organization
Establish clear plans to address changing expectations for sustainability reporting	Develop and align on information governance standards (minimum requirements) for reported information that clearly define expectations for each disclosure type	Digitally enable a central repository with connected workflows for supporting documentation and signoffs Develop execution plan to meet timeline and data quality expectations for underlying systems	Develop clear roles & responsibilities at a line of defense level as well as at a metric level to understand personal and functional expectations

Within information governance standards, leaders are defining required DC&P across various disclosures

Overarching information governance helps **standardize data quality** across metrics, and clearly **defines roles**, **responsibilities**, and **accountability**. Based on leading practices, the table below depicts example levels of review and involvement from each team for varying types of disclosures.

Illustrative Review Process

	Disclosure as a whole certified by Disclosure Preparer	Requires enhanced certification process	Requires Claims Review	COE validation (2nd line)	Review by Disclosure Committee
SEC Required Metric	✓	✓		✓	✓
Stakeholder Critical Data	✓	✓	✓	✓	
Other Metric	✓		✓	✓	
Statement of Fact			✓	✓	



How others are preparing

1 **Assembling a cross-functional team** to drive the data collection, analysis, and reporting initiatives

2 Understanding reporting requirements and **determining applicability** of US and global reporting standards (e.g., ISSB), including proposals (e.g., CSRD)

3 **Creating an inventory** of existing climate commitments, disclosures and metrics material to investors and stakeholders along with the related data, including identifying data sources, processes and controls

4 **Assessing gaps** between the existing inventory and required data, including identifying missing data as well as low quality data and inadequate controls

5 Creating a **global project plan** to prepare for reporting:

- Inventorying all applicable US and global sustainability disclosure reporting requirements
- Developing training and resources to **upskill** personnel, including key members of management and the board
- Assessing existing climate commitments and affirm action plans or modify as applicable
- Identifying (or develop) sources for data gaps, including greenhouse gas emissions
- Documenting key reporting policies (e.g., assessment of materiality for emissions data)
- Designing and implement high-quality processes and controls over all applicable data (including consideration of accelerated reporting)

How the industry is preparing

High

Preparation Level

Low

Large Global Insurer:

- Prioritized sustainable reporting needs determined
- Target Operating Model established
- Reporting Delivery Model defined
- Global technology solution planned or operationalized
- CSRD materiality assessment performed
- Data gap assessment performed

US Fortune 100 US insurer:

- ESG Controller appointed
- Illustrative SEC disclosures prepared
- SEC roadmap prepared, that is scalable to US reporting
- Controllership owns QA/QC over ESG report
- Data mapping performed; exploring technology solutions

US Fortune 500 US insurer:

- SEC gap assessment performed
- CSRD heatmap prepared
- Beginning CSRD double materiality assessment
- Exploring technology solutions

US public non-Fortune 500 global insurer:

- Reporting maturity assessment performed
- Beginning formalization of policies and procedures

Section 6
Climate risk reporting

Common Disclosure Elements in Current and Proposed Regulations

Climate-Related

- **TCFD Reporting**
- Greenhouse Gas Emissions
  - Scope 1
  - Scope 2
  - Scope 3
- Greenhouse Gas Reduction Targets
- Carbon intensity of investment portfolio
- Sustainable investments
- Exposure to carbon-intensive industries
- Underwriting exposure
- **Losses from severe weather events**
- **Costs associated with physical & transition risk**

All three frameworks require a **climate risk disclosure** and incorporate elements based on the Task Force on Climate-related Financial Disclosures (TCFD) framework:

- Governance
- Strategy
- Impact, risk and opportunity management
- Metrics and targets

Following this popular framework unites the disclosure frameworks through key themes, including **required disclosure and quantification of the impacts of climate-related risks**

With regards to climate risk disclosures, generally, the EU/EFRAG have put forth the most comprehensive regulations, with others being incremental efforts

CSRD - ESRS E1: Climate Change

CSRD/ESRS

Topical standards

Environment

ESRS 1
Climate change

ESRS E2
Pollution

ESRS E3
Water & marine resources

ESRS E4
Biodiversity & ecosystems

ESRS E5
Circular economy

Disclosure Requirements Summary

- Registry of climate related risks and opportunities and identification as physical risk/opportunity or transition risk/opportunity
- Explanation of how scenario analysis is used to assess climate risks in own operations and throughout supply chain, including key inputs including scenarios and time horizons
  - Time horizon guidance:

CSRD/ESRS Consistent Time Horizons	
Short	Reporting period in financial statements
Medium	Short term to 5 years
Long	5+ years - can breakdown further if needed

  - Scenario guidance:

CSRD/ESRS Consistent Scenarios	
Physical risk	Must consider at least high emission climate scenarios (which may, for example, be based on IPCC SSP5-8.5)
Transition risk	Must consider at least a scenario consistent with the Paris Agreement and limiting climate change to 1.5°C, for example, based on scenarios of the International Energy Agency (Net zero Emissions by 2050,Sustainable Development Scenario, etc.), or NGFS (Network for Greening the Financial System) climate scenarios

- Identification of climate-related hazards and asset exposure to the hazards
- Anticipated financial effects from climate risks and opportunities

ISSB – IFRS S2: Climate Related Disclosures

IFRS S2 – Climate-related Disclosures

IFRS S1 - General Requirements for Disclosure of Sustainability-related Financial Information

IFRS S2 – Climate-related Disclosures

Cross industry metrics:

- Greenhouse gas (GHG) emissions
- **Transition risks**
- **Physical risks**
- **Climate-related opportunities**
- Capital deployment
- Internal carbon prices
- Remuneration

Disclosure Requirements Summary

- Registry of climate related risks and opportunities and identification as physical risk/opportunity or transition risk/opportunity
- Explanation of how **scenario analysis is used to assess climate risks** in own operations and throughout supply chain, including key inputs including scenarios and time horizons
  - Disclosure of definitions for short, medium, and long term required, but no guidance on actual terms
  - Disclosure of scenarios used required, but no guidance on actual scenarios, other than noting that publicly available scenarios would be adequate
- Identification of climate-related hazards and **asset exposure to the hazards**
- Anticipated **financial effects** from climate risks and opportunities

SEC – Subpart 1500 of Regulation S-K

SEC

Regulation S-X

Regulation S-K

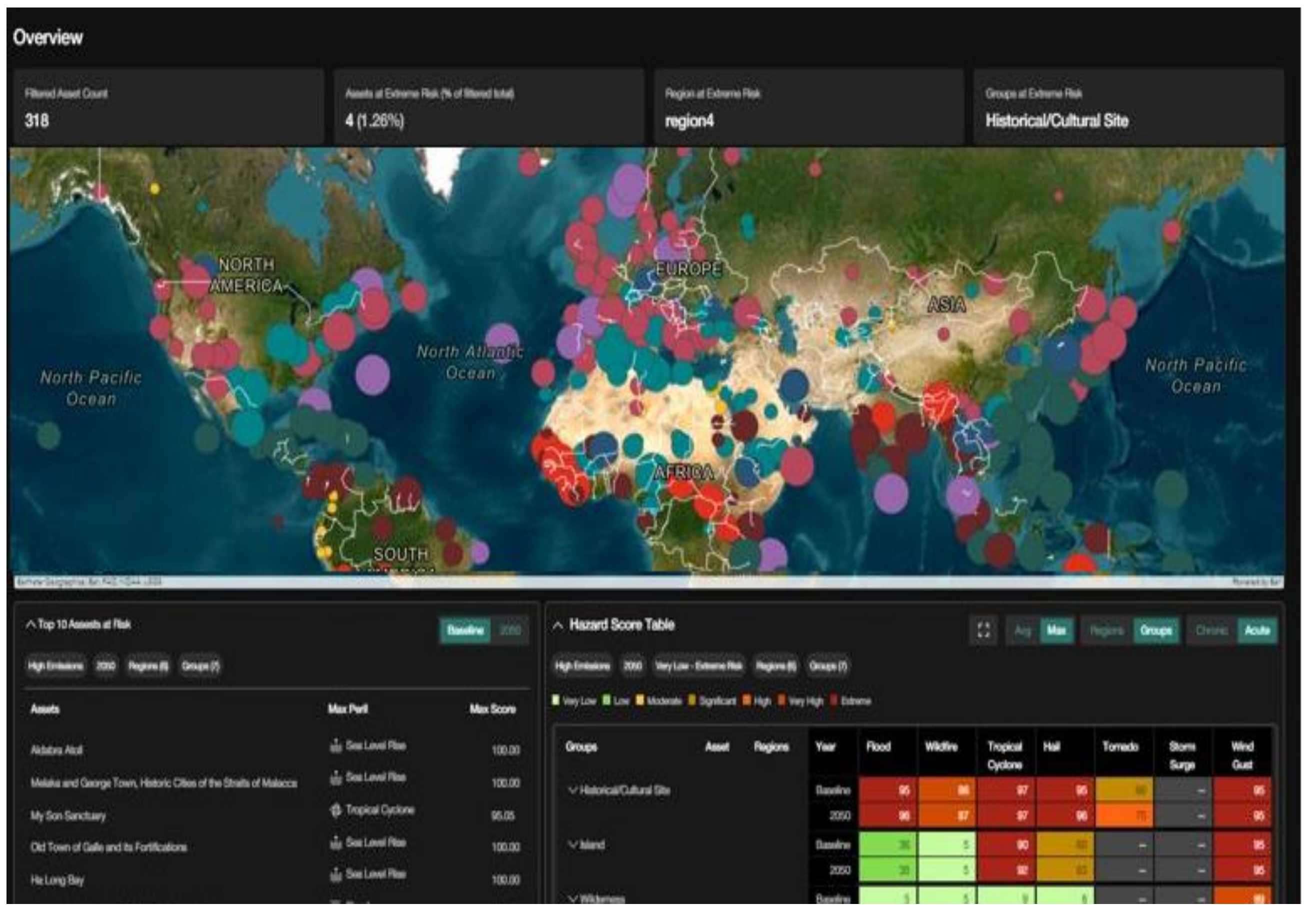
Climate-related impacts on strategy, business model, and outlook

Disclosure Requirements Summary

- Qualitative, forward-looking disclosure of climate-related impacts on strategy, business model, and outlook
- Includes physical and transition risks reasonably likely to have a material impact over the short, medium, and long term
- Reported as a separate "Climate-Related Disclosure" following guidelines similar to TCFD framework
- Also expects zip code level location of assets subject to climate-related risks
- Additional disclosures for assets and operations in flood hazard zones or regions of high or extremely high-water stress

Geospatial Climate Intelligence (GCI)

A practical approach is to coordinate across various ESG reporting frameworks is to **identify overlapping requirements**



Developed by our climate science team, our physical risk modeling solution uses scenario analysis to assess climate risk exposure, using a Geospatial dashboard for more convenient analysis and assessment of the data allowing companies to calculate hazard scores by asset location for each individual climate peril to identify combinations of locations and perils contributing the most risk

Requirement	GCI
Delineate physical risks as acute or chronic	Includes 12 climate perils – 8 acute and 4 chronic
Define and project short-, medium-, and long-term time horizons, with CSRD/ESRS providing specific definition guidance	Projects results in 5-year intervals through 2050, in line with CSRD/ESRS guidance
Scenarios must consider high and low emissions	Utilizes widely accepted low and high emission scenarios IPCC SSP1-2.6 and SSP5-8.5
Identify assets at risk, including asset location detail	Uses asset location coordinates and identifies hazard scores by asset location
Describe percentage of assets in high flood hazard and water stress regions	Flood and drought are included climate perils
Include assessment of risks in supply chain	Key supply chain locations can be included
Disclose financial impacts of material physical risks on cashflows over short-, medium-, and long-term. Express as a percentage of total assets or revenue.	Functions which link hazard severity with exposure and vulnerability to metrics, to analyze business impacts and financial losses

GCI - DEMO

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Mike has 21 years of experience leading assurance & advisory services for large global clients within the insurance, technology, entertainment, media & industrial products sectors including significant experience leading engagements for public clients' integrated audits.

Mike is an ESG champion within the insurance practice and supports our clients in their ESG journey. He has led a number of education sessions on current ESG reporting and regulatory developments.

Mike has experience advising clients through business process, governance, and internal control projects including helping clients navigate through their ESG journey.

Maria Minhas
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Maria is a director in our Trust Solutions practice and, over the past fourteen years, has worked extensively with the audit functions of our largest insurance clients. Maria is a champion within the insurance practice and supports our clients in their ESG journey.

Maria is currently working on an attest readiness assessment at one of our largest global insurance client as they prepare for SEC and CSRD reporting requirements. Maria has also spent 2 years in our National Office advising clients as they navigation through business and regulatory reporting requirements.

Maria has extensive experience in assessing our client's governance and internal controls policies and procedures.

Karen Grote
Climate Risk Modeling Director

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Karen is a Director in PwC's Risk Modeling Services practice. Karen has 20 years of experience in actuarial risk and financial modeling, and now focuses nearly all of her time on ESG and climate change risk, including climate change related risk impact assessments.

With 15 years of experience specific to consulting, Karen has assisted numerous clients assess and quantify risk and has led a broad array of projects and teams including climate risk and opportunity assessments.

Karen has a degree in Mathematics from The College of New Jersey and is a Fellow of the Society of Actuaries and a Chartered Enterprise Risk Analyst.

Thank you

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