Intergovernmental Working Group of Experts on International Standards of Accounting and Reporting (ISAR)

42nd SESSION 12 – 14 November 2025

Friday, 14 November 2025

Agenda item 5 (e). Capacity-building considerations for effective implementation of sustainability reporting requirements and standards developed at a global level

Presented by

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Digital Sustainability Disclosures... And Analysis in the AI Era.

ISAR 42

John Turner CEO XBRL International







Outline

- 1. What is Digital Reporting?
- 2. Digital Sustainability Disclosure
- 3. Analytics in an Al era
- 4. Capacity Building in 2026



Standards Development Organisation

Improving decision making with fundamental digital plumbing.

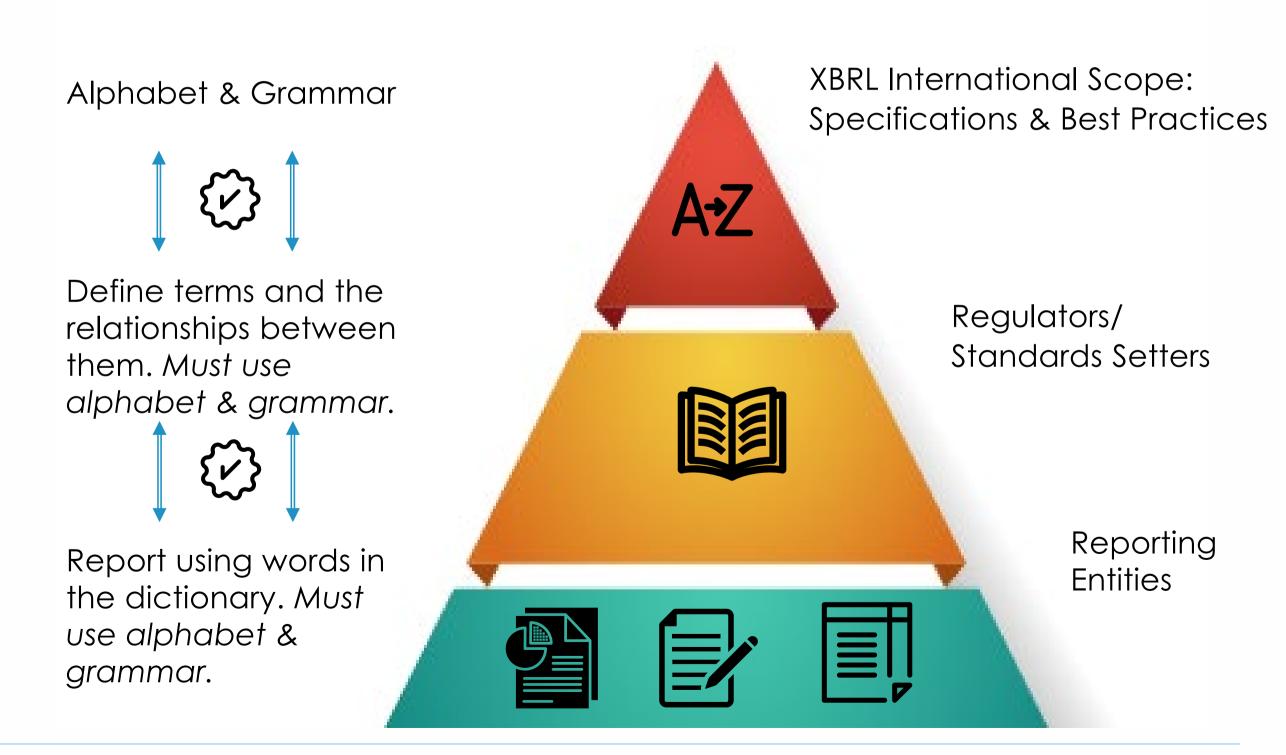




An analogy...

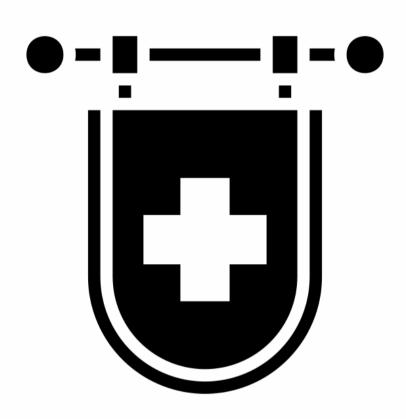
A flexible framework for digitisation of reports of any kind.

- •Structured data powers analysis, discovery and insight.
- •Corporate reports in particular are both complex and valuable.
- •The XBRL standard provides a uniform way to prepare, file, publish and analyse this information.
- •The framework can be used in a multitude of environments



Switzerland

We are content neutral and domain neutral















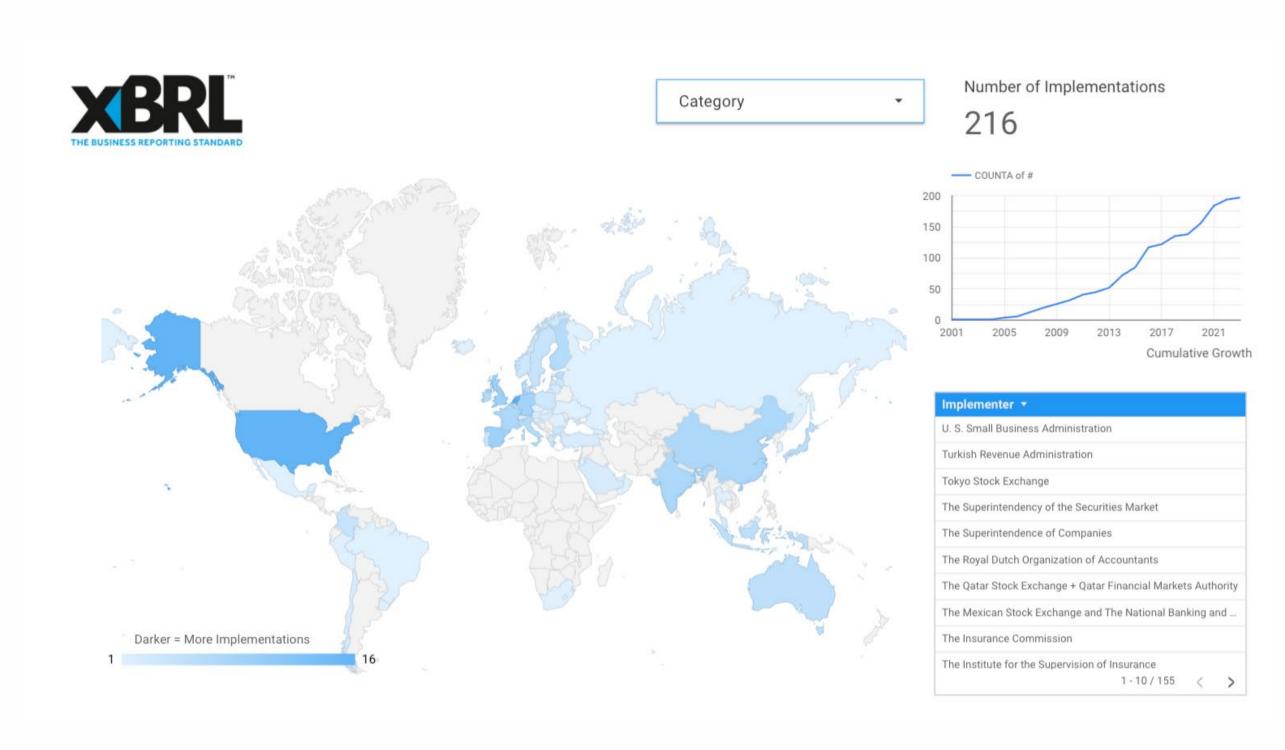






Global Mandates

Perceived asymmetric benefits mean mandates are required to bring digital disclosures into effect



Digital disclosures work best:

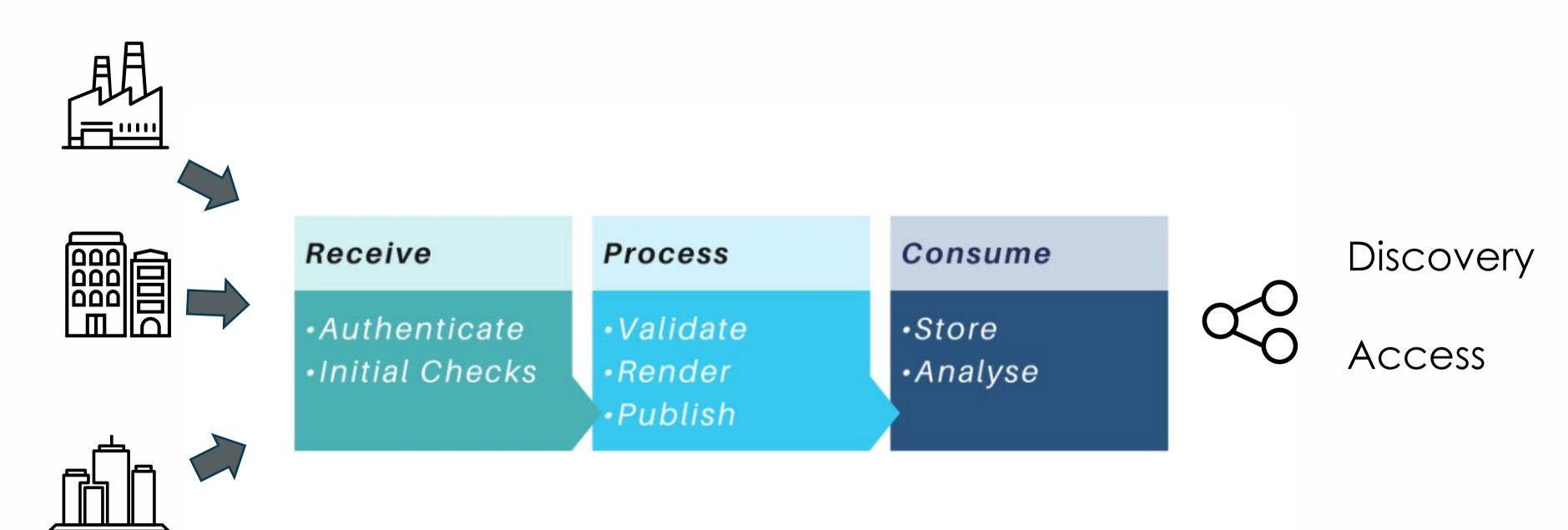
- With Inline XBRL for provenance
- With Inline XBRL for a single version of the truth
- With effective data quality rule development and monitoring
- With enforcement
- With assurance over tagging decisions





Collecting and publishing data

Regulators or some other actor needs to collect and republish



See: XBRL International Guidance





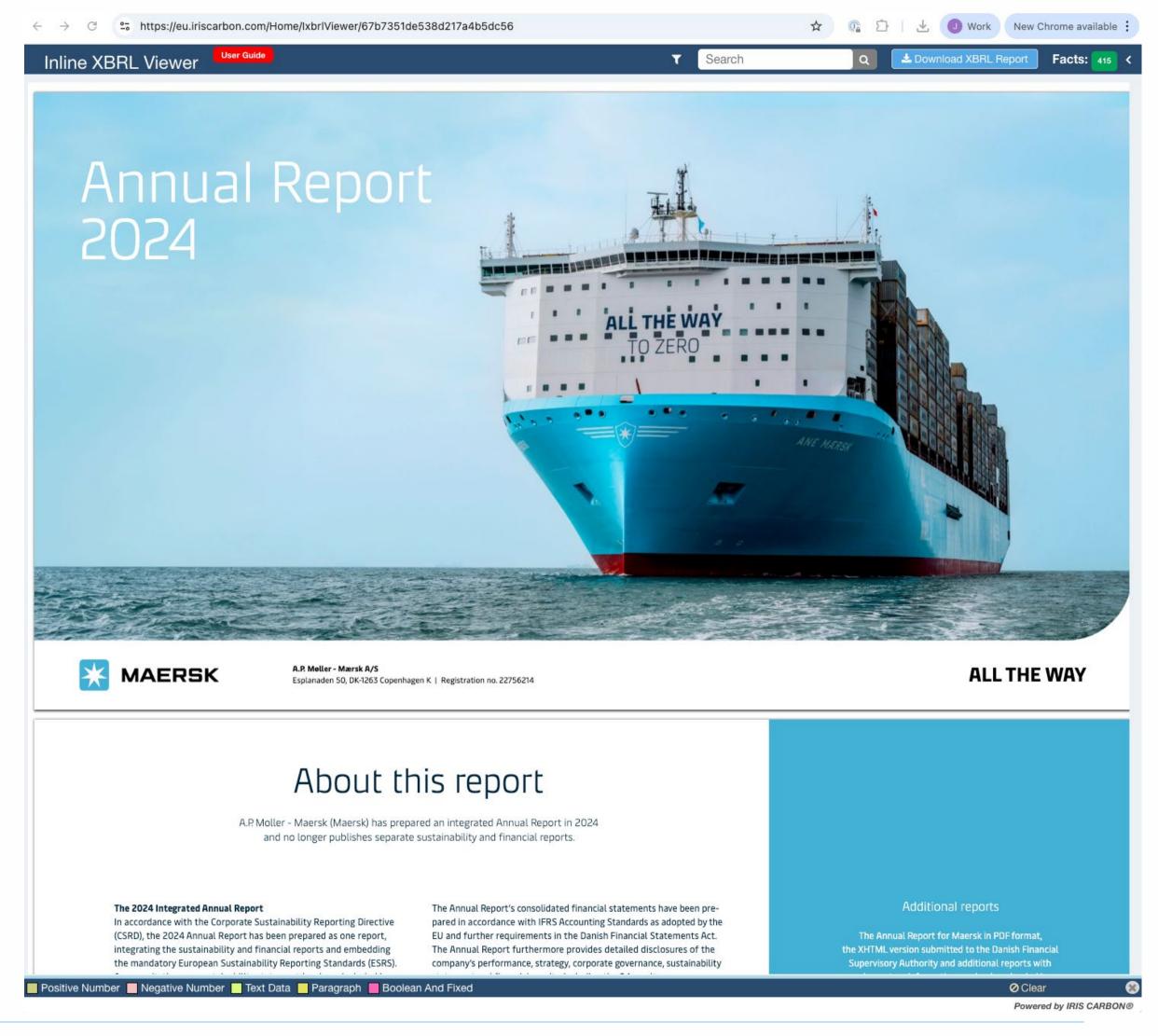
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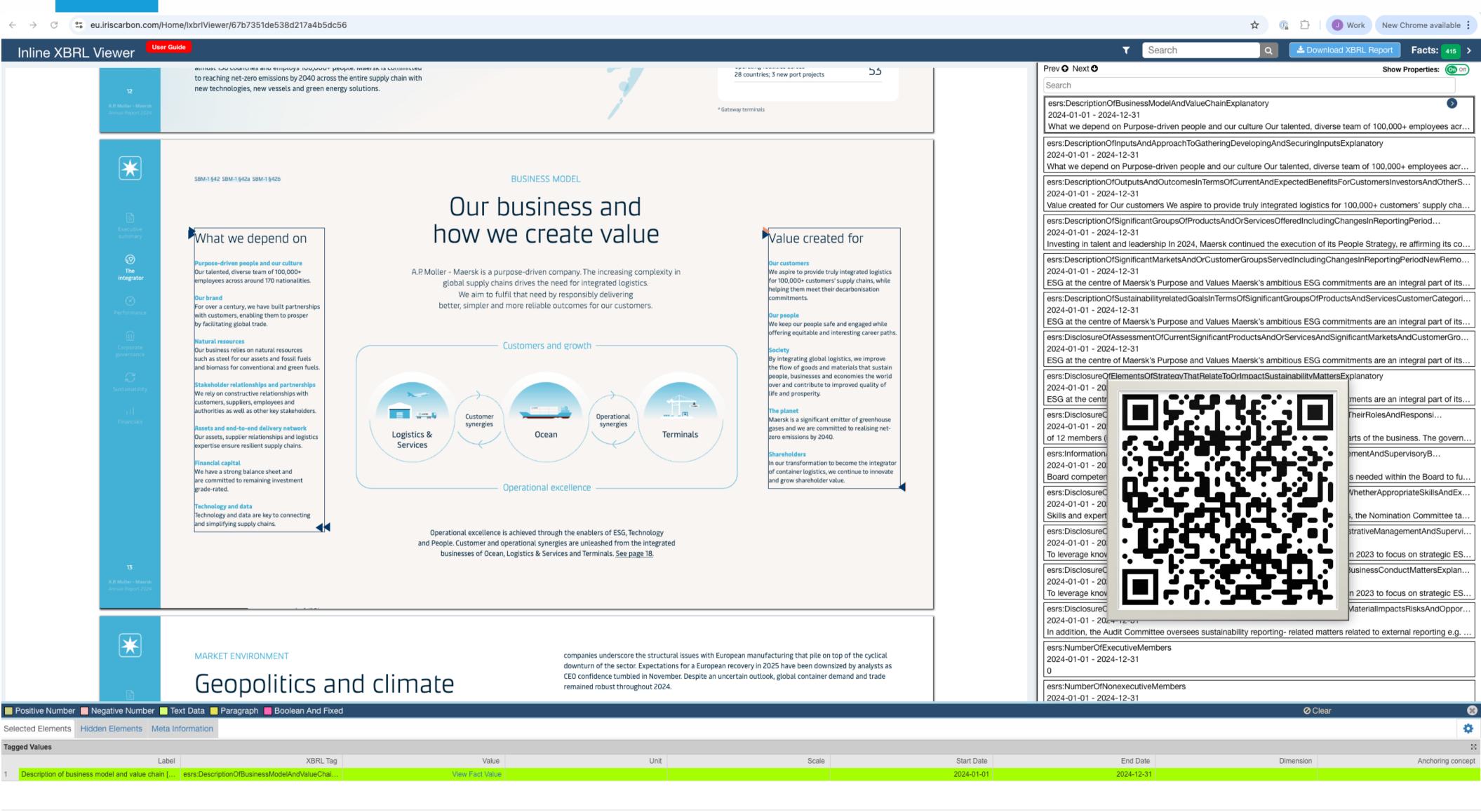
Inline XBRL sustainability
disclosures are web pages with
XBRL markup ("barcodes")
embedded around every
disclosed fact in a way that is
invisible to humans but
immediately consumable by
machines.

They can be as plain, or as complex and colourful as you like.









ReadMe BRSR Report Overview Employeement Metrics (2) % employees paid more than ... Industry% employees paid mo... Work Place Diversity Differently Abled Workforce Total Employees Material Issues Intensity Sector SASB Entities Reporting Essential Indicators (non-zeros) Entities Reporting Leadership Indicators BRSR reports | Executive Summary Extractives & (AII) Sample analytics by XBRL International Staff Non Renewable Sources Null Total number of training and awareness progra.. Renewable Sources Consumer goods Minerals Processing Training on human rights issues **XBRL** Percentage of value chain partners covered u.. Number of Entities ✓ Extractives & Miner.. **Total Water Withdrawal** 41% **Total Water Discharged** Financials Number of complaints during the year % of Recycled or reused input materials 32% Food & Beverage 1,059 economic performance human capital Scope 2 Action taken to mitigate significant social or . 299 Health Care employee related talent management 349 Infrastructure Scope 1 product quality & safety biodiversity Public policy advocated 309 Renewable Resource... Average DataPoint per report Energy intensity per rupee of turnover Product and packaging End-of-Life - Safely Di.. 26% Resource Transform... climate change customer relationship % of inputs were sourced sustainably Product and packaging End-of-Life - Recycled 22% Services 1,607 Entity has implemented a mechanism for zero li.. business ethics health & safety Product and packaging End-of-Life - Reused 9% Technology & Comm... Percentage of total turnover contributed for . 15% Water intensity per rupee of turnover Transportation water management innovation 9% % of Reclaimed Procducts and Packaging % of CAPEX Industry SASB Number of instances of data breaches along Reporting Scope supply chain energy management 53% Scope1 & 2 emissions per rupee of turnover ✓ (AII) Consolidated ✓ Null Workforce complaints during the year 45% diversity inclusion community engagement 183 Standalone ✓ Advertising & Ma.. % of R&D 34% waste management training & development ✓ Aerospace & Defe.. in-capmkt:DiscloseWhetherTargetsSetUnderT.. 10% ✓ Agricultural Prod.. human rights corporate governance ✓ Air Freight & Logi.. data privacy & security compliance Macro Economic Sector - number ✓ Airlines emissionsrisk management **GHG Emissions** Independent assessment or evaluation or ✓ Alcoholic Bevera... reporting entities assurance 2022-2023 ✓ Apparel, Accesso... Scope 1 Scope 2 Scope 3 **Energy Consumption** Energy ✓ Appliance Manuf... 600M Consumer goods Sources Areas of water stress ✓ Asset Manageme... 18% ✓ Auto Parts Extractives & Minerals **Energy Consumption** 180 20.. 20.. Processing ✓ Automobiles 400M 2022-23 Green House Gas Emissions 175 ✓ Biotechnology & ... Financials Fuel 28% 43% 159 ✓ Building Product... Other than GHG emissions 82% ✓ Chemicals Food & Beverage Scope 3 Emissions 151 ✓ Coal Operations 15% 182 Waste Management ✓ Commercial banks Electricity 72% 57% Health Care 2021-22 2021-22 ✓ Construction Mat... 2021-22 Water discharged 155 ✓ Consumer Finance Infrastructure 182 Water Withdrawal ✓ Containers & Pac... 85% Other 1% Renewable Resources & ✓ Drug Retailers Sources Alternative Energy Specific measures 2022-2023 ✓ E-commerce ✓ Education Resource Transformation % of CAPEX Waste Generated 2021-22 & 2022-23 ✓ Electric Utilities ... Services % of directly sourced from MSMEs or small producers 17% ✓ Electrical & Elect... Waste Generated 2021-22 ✓ Electronic Manuf... % of inputs were sourced sustainably 2022-23 Technology & ✓ Engineering & Co... Communications Waste Disposed 2021-22 ✓ Food Retailers & ... 2022-23 Transportation ✓ Forestry Manage...

Mandatory Disclosures in India... "BRSR"



Source: Exemplar Analytics (XBRL International)

✓ Fuel Cells & Indus...

✓ Gas U+ili+ioc 9 Di

□ ▼

✓ Hard\ Exit full screen



@xbrlint



OM 100M 200M 300M

Waste Recovered

100

Number of Reports

150 200

2021-22

2022-23

% of Reclaimed Procducts and Packaging

% of Recycled or reused input materials

% of sourced directly from within the district and neighbouring districts



Sustainability Disclosure Cautions

Unit comparability

tCO2e

tCO2e/\$¥Rs₩

GT/GJ

Standards Comparison

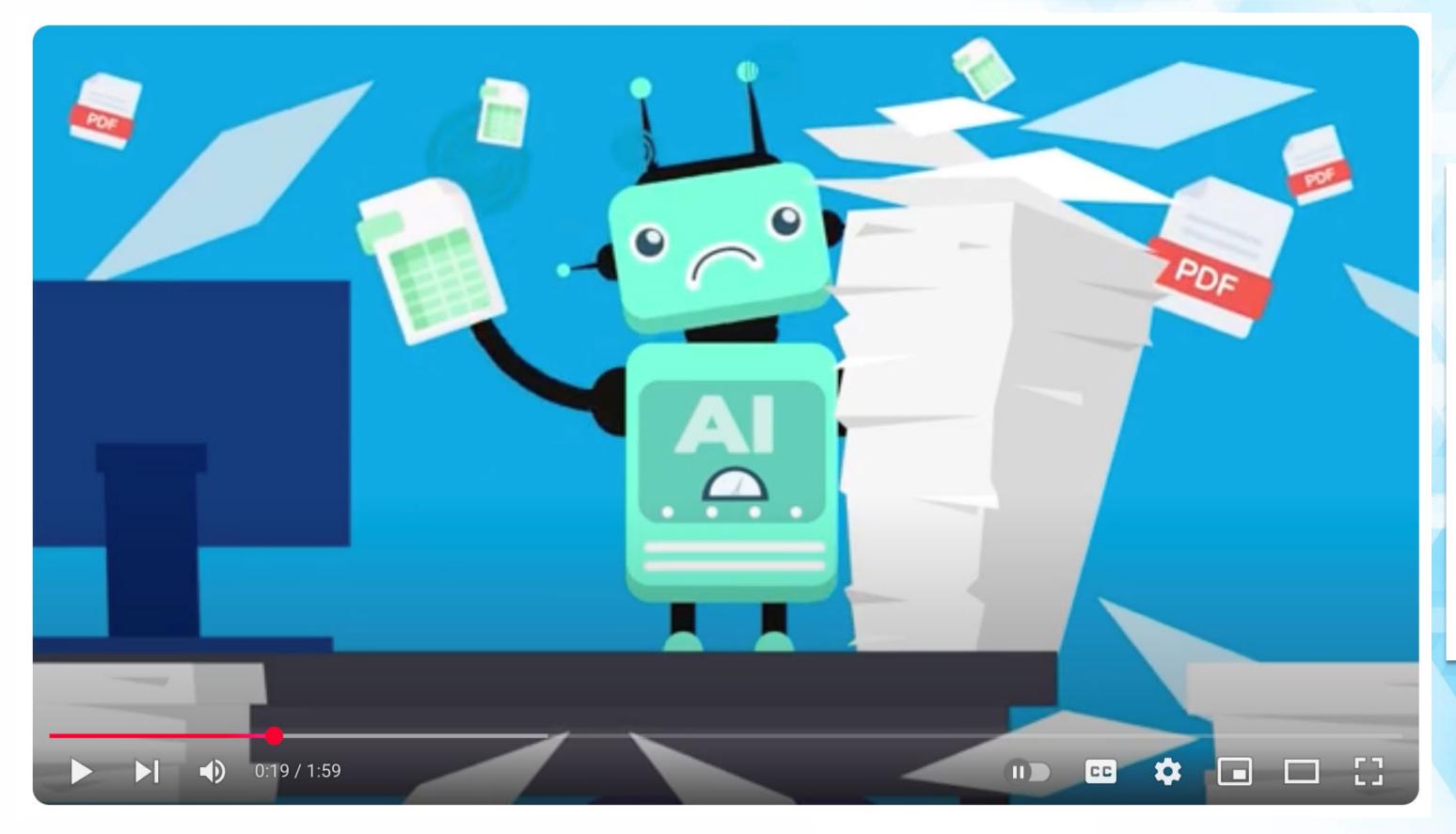
(Concordances needed)

Narrative Analytics

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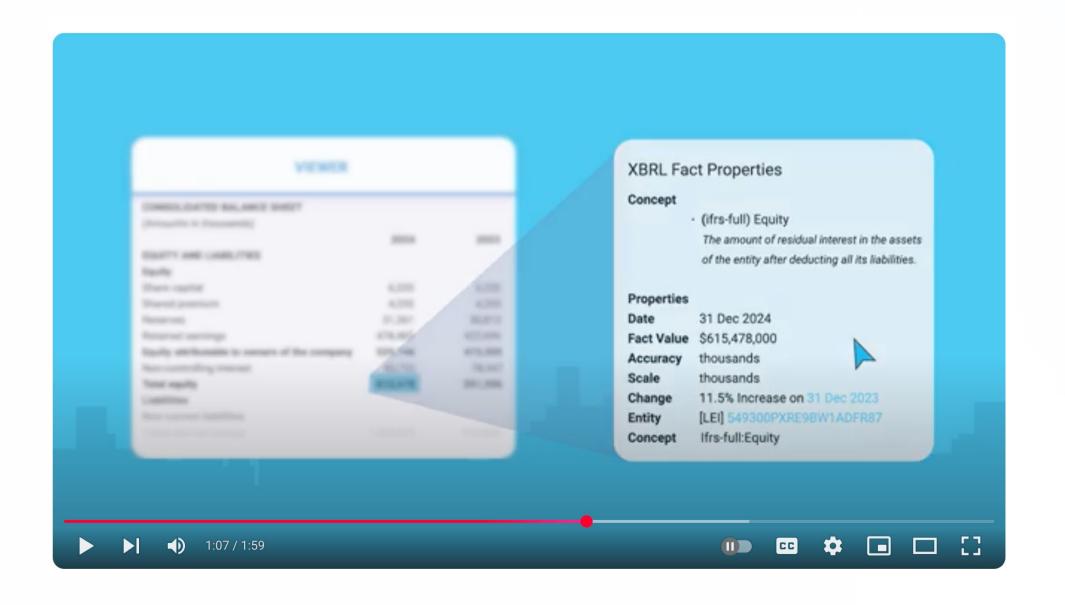


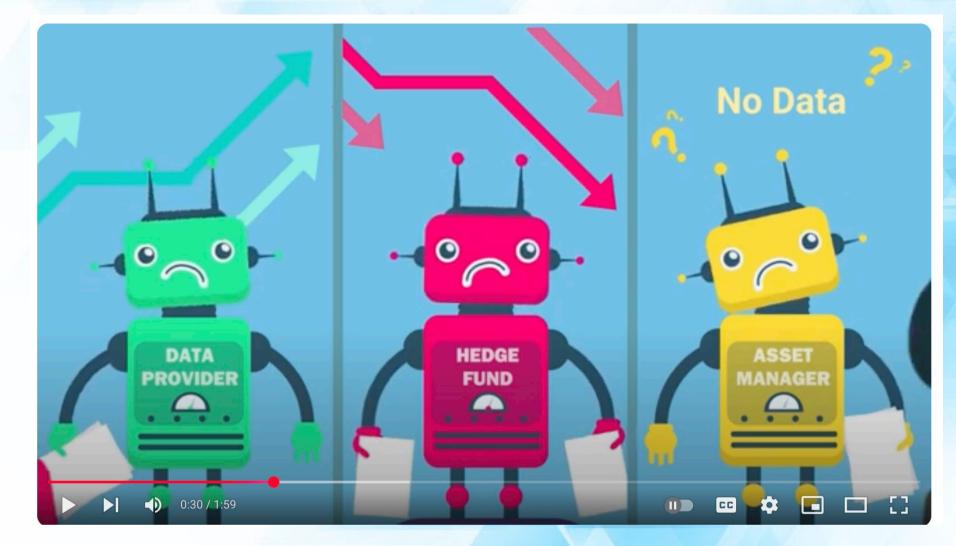
Please see the explainer video Click Here.





 Different Als... even well-trained Als will come up with different answers to the same questions using the same unstructured inputs. The data and its definitions must be structured and traceable.





Structured data =

Management Accountability
in the Al era.



Single version of the truth...

Management accountability for disclosure should be central concern for policy makers

- 1. The ability of AI to tag unstructured data without guidance is weak*. Company disclosures are almost by definition, unique, meaning reaching "investor grade" data is extremely hard.
- 2. We can have *many* versions of the digital truth, created by competing Als consuming unstructured data. OR we can have a *single* version of the digital truth that management is accountable for.







When Data Lacks Structure

Difficult Data Extraction

PDFs are hard to process—Al/OCR is error-prone, especially with complex layouts.

Numerical & KPI Issues

Inconsistent formats make comparison and aggregation difficult.

Weak Validation

No built-in checks → more manual work, less reliable insights.



No Metadata Available

Without taxonomies, systems must guess meaning and context.

Narrative Content Challenges

Free text and mixed data are hard to interpret consistently.

Al Projections

Simplifies Tagging

60%-80% Accuracy "Co-pilot" to Management

Conversational Analysis

"Trust but Verify"

Breaks open data science

Discovery/access issues

Digital Report as Beacon

All digital data

Data quality *is key*"Paper" means invisible

New modes/new realities

Reports as a Service
CA/CM and CAAT
Semantic Standards



Al will create radical corporate change. Who Wins?

The impact of AI on corporates must not be underestimated



- Change within companies is starting now.
- Al will create new winners. New losers.
- Ensuring that there is a bedrock of <u>high-quality accessible digital</u> data about performance should be a key policy concern.

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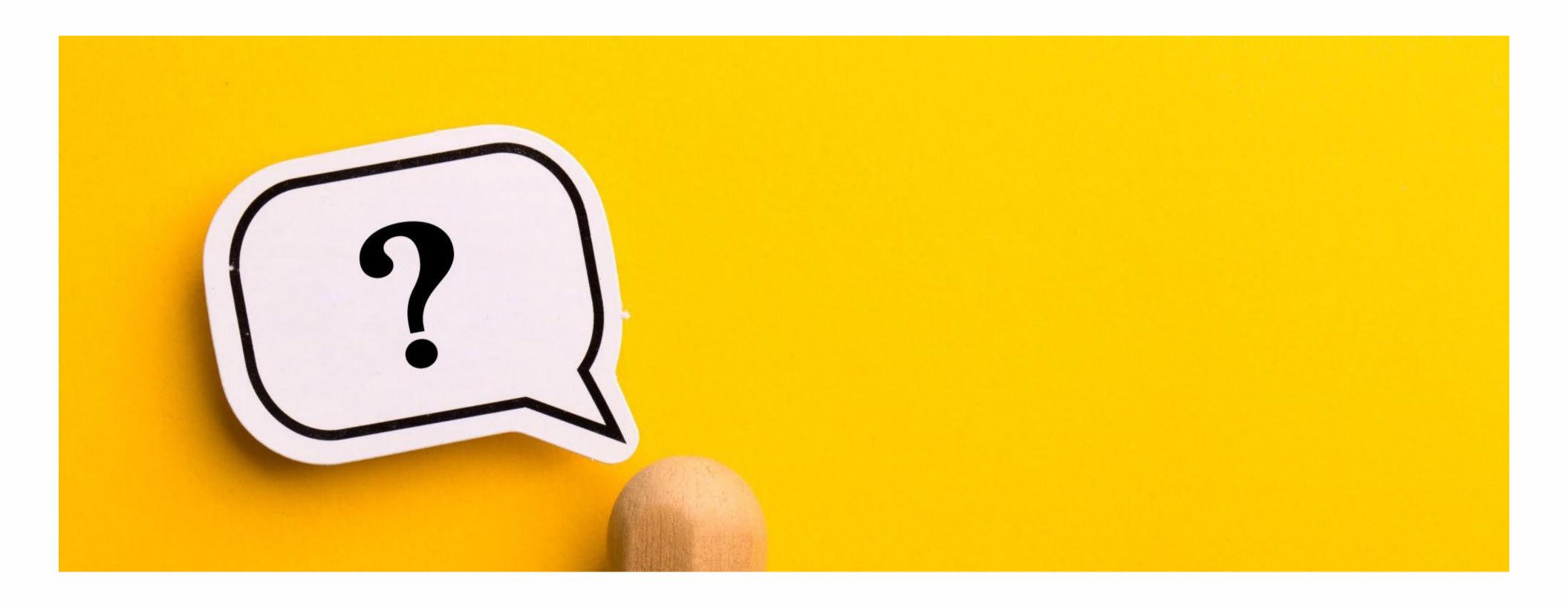








Questions?



Appendix!

Some links from this deck

- Exemplar analytics around the <u>BRSR data set</u>
- The Project Directory of XBRL mandates around the world
- Current <u>XBRL Certified Software</u> listings
- XBRL and AI
- Prototype <u>Maersk report</u>, prepared by XBRL vendor IRIS
- Sign up to the XBRL International newsletter for weekly updates
- <u>Join us</u> the global, not-for-profit standards development organization for digital reporting.
- https://www.xbrl.org

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