

Non-Financial Reporting

Tord Andersson PhD

Presentation for XBRL Sweden
3rd of June 2020

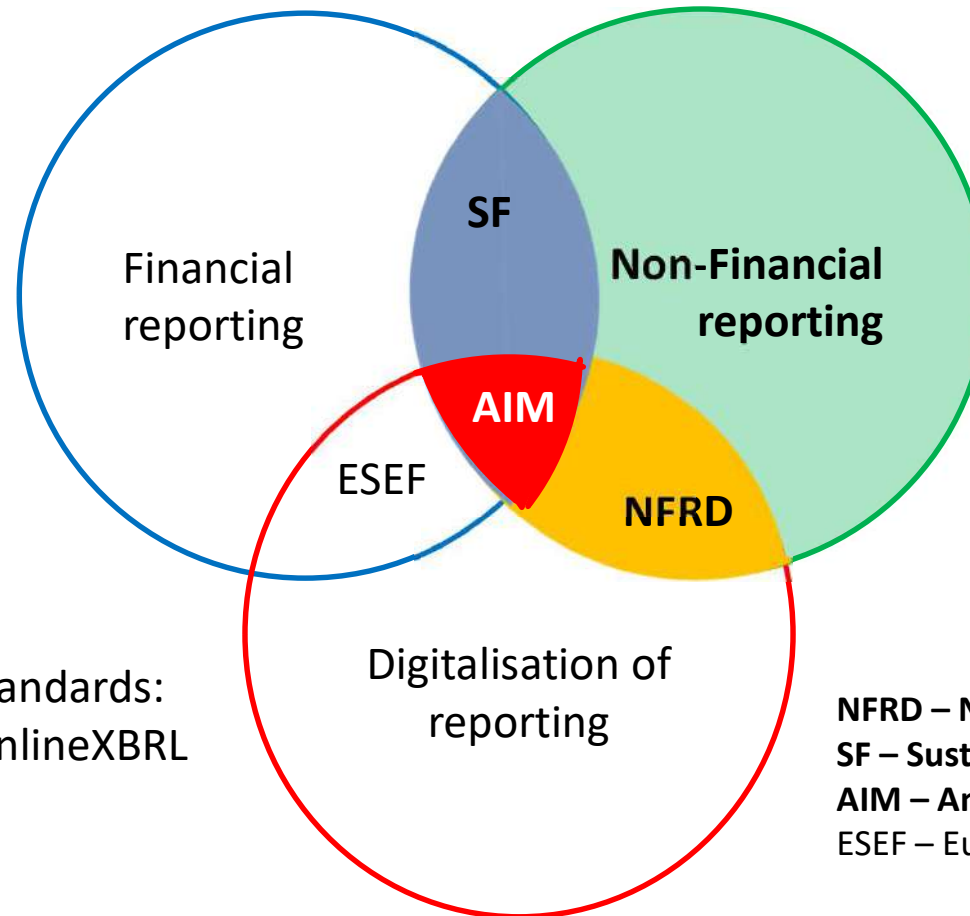
RVA Consulting

© RVA Consulting

Non-financial reporting: Redefining digital reporting

Standards:

- IFRS
- FASB (US)



Guidelines:

- GRI
- IR
- SASB
- CDP
- TCFD
- Agenda 2030/SDG
- etc

Standards:

- inlineXBRL

NFRD – Non Financial Reporting Directive

SF – Sustainable Finance

AIM – Analytical Integration Method

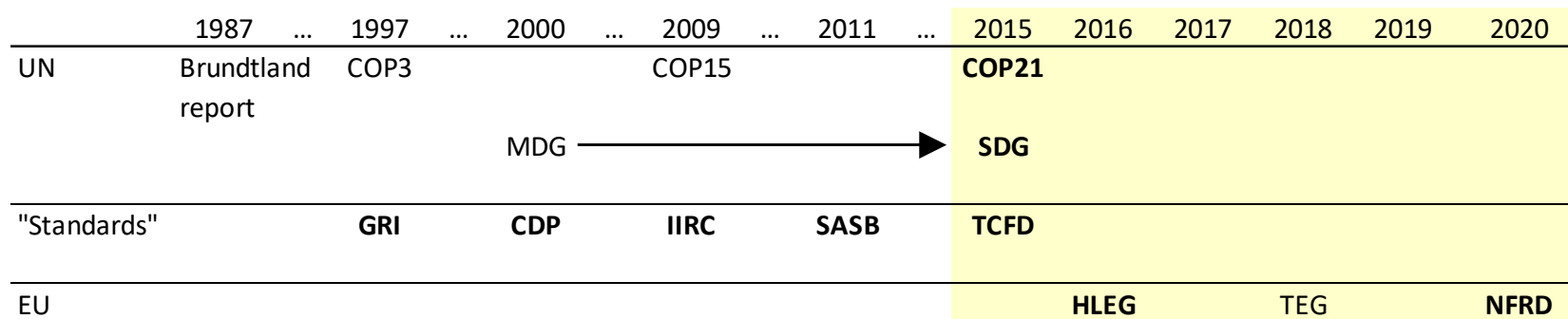
ESEF – European Single Electronic Format

RVA Consulting

© RVA Consulting

Sustainable development

- The Brundtland report (1987) defined sustainable development as:
 - “**development that meets the needs of the present without compromising the ability of future generations to meet their own needs**”.
- This points on two critical important factors in the debate on sustainable development:
 - Human values, in terms of sustainable consumption behaviour and production activities
 - Limitations, in terms of planetary boundaries
 - Where the overshoot day for Sweden for 2020 occurred already the 2nd of April.
- UN Conference on Parties (COP):
 - COP3 (1997): Kyoto protocol - Greenhouse gas emission reduction to 6 - 8 % below 1990 years level by 2008 -12
 - COP15 (Copenhagen 2009): No new agreement reached
 - COP15 (2015): Established the Paris agreement
- The Millennium Development Goals (MDGs), were eight international development goals set in year 2000.
 - These goals preceded the Sustainable Development Goals (SDG)/Agenda 2030.



Demand and supply of non-financial reporting

- The demand for Non-financial information is driven by:
 - **User** to better understand financial risks,
 - both from a sustainability perspective
 - and growth in financial products that address environment and social issues.
 - Forthcoming **EU legislation**, as regulation on:
 - Prudential requirements for credit institutions by 2022
 - Sustainability disclosure in the financial services sector by 2021
 - Classification system of sustainable activities (the taxonomy) by 2021
- So far disclosed by companies does not meet users needs, as:
 - Inadequately publicly available information due to:
 - Its not sufficient comparable or reliable
 - Information is incomplete or not reported at all.
 - Hard to find in the report
 - Companies incur unnecessary and avoidable costs related to non-financial reporting, as:
 - Uncertainty and complexity when deciding which information to disclose, as well as how and where
 - Financial sector companies also need to consider different EU legalisation
 - Pressure from sustainability rating agencies, data providers and civil society on additional information independent on NFRD

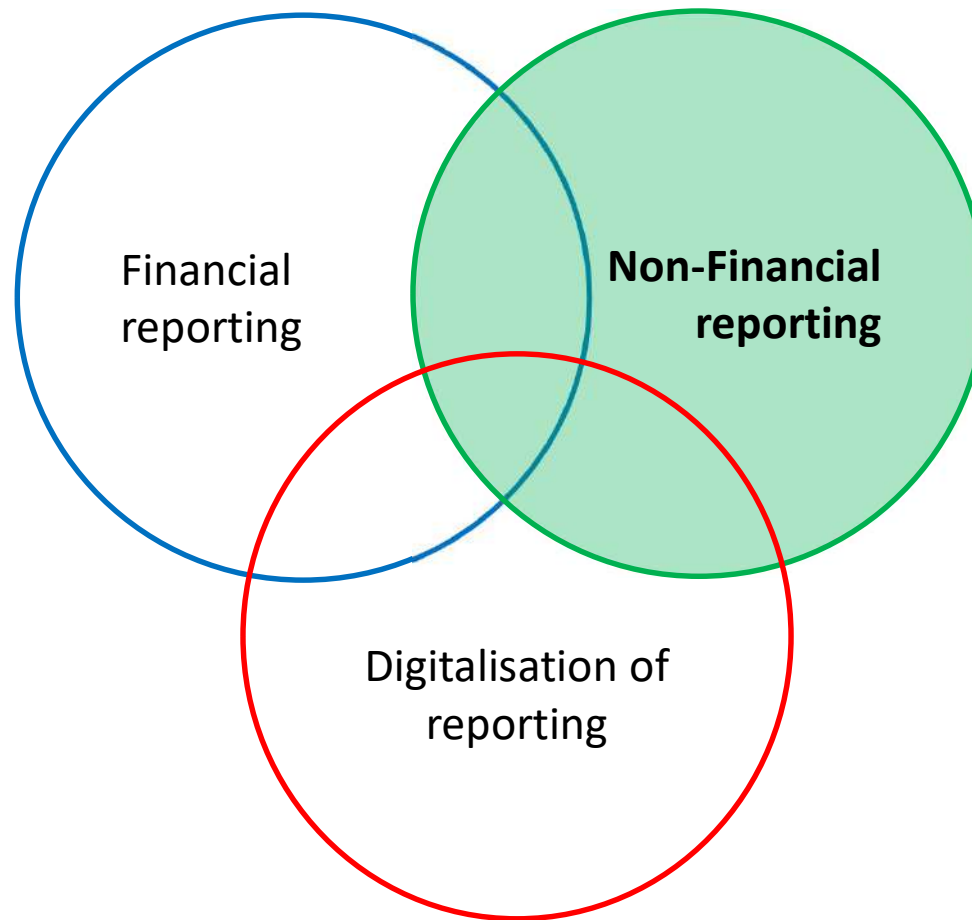
Investors ESG-strategy varies

ESG-strategy	Criteria/practice	Example	Bias
Exclusion	Exclusion of companies with activities seen as negative for society	Fossil fuel extraction	
Norm based	Exclude companies that violate norms or conventions	Human rights	
Best-in-class	Companies with best ESG practice		Often large cap
Theme based		Renewable energy	Often small- and mid cap
ESG integration	Integrate with financial analysis		
Engagement & voting	Interaction with company and its stakeholders	Management dialogue	Often large cap
Impact investing	ESG impact besides financial return	Water project in third world	Often project specific. May use alternative data

Financial vs non-financial reporting

Areas	Financial reporting	“Middle ground”	Non-financial reporting
Legal status	Regulated standards		Voluntary “recommendations”
Frameworks	IASB and FASB		GRI, IR, CDP, SASB, TCFD, Agenda 2030/SDG ...
Ongoing key projects	“Revision of IAS 1” <i>Consultation ends 30th of September</i>	CDRs “the better alignment project” <i>Runs to end of 2020</i>	Revision of NFRD <i>Consultation ends 11th of June</i>
Measurement and units of measurement -> Metrics & targets	Reporting currency e.g. USD, SEK, Used in financial statements and notes	Number of employees e.g. full time equivalent, women	Physical units as Kg, kJ, m ³ Used for scope 1-3, energy consumption, water usage
“Human values” and value focus	Business values e.g. financial risk management, business model	Governance <i>e.g. scenario analysis, risk management, strategy</i>	Environment and social values e.g. biodiversity, child labour,

Non-financial reporting: ESG guidelines



Guidelines:

- GRI
- CDP
- IR
- SASB
- TCFD
- Agenda 2030

“Non-Financial Reporting”

- According to the Non Financial Reporting Directive (NFRD) non-financial reporting encompasses areas as:
 - environmental and social aspects,
 - the area of employee and human rights,
 - anticorruption,
 - and bribery measures
- Each area builds often builds on international policy recommendations, conventions and agreements, e.g. Paris agreement 2015 and UN human rights.

ESG standards – A fragmented landscape

- Investors and “companies face a crowded and confusing landscape of 600+ rating and rankings” (corporate-citizenship.com).
- With more than 230 different sustainability standards initiative available (ITC* 2017), it’s difficult to get valuable and comparable information for investment analysis.
- As a result ESG-factors is not easy to integrate in financial decision-making by managers and investors.

*International Trade Centre
<http://www.intracen.org>

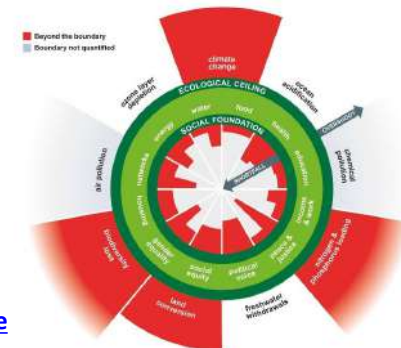
Visual ESG models lack financial qualities, despite inspiring graphics.

The SDG-goals as a wedding cake



Reference: www.weforum.org

The Doughnut of social and planetary boundaries



Reference: www.globalamalen.se

Diverse ESG-factors

ESG-factors are broadly defined as issues related to (UNEP, PRI):

- The quality and function of the natural environment and systems (E)
- Well-being and interest of people and communities (S)
- Governance of companies and other investee entities (G)



ENVIRONMENTAL (E)

- climate change
- greenhouse gas (GHG) emissions
- resource depletion, including water
- waste and pollution
- deforestation
- biodiversity loss
- changes in land use
- ocean acidification
- changes to the nitrogen and phosphorus cycles



SOCIAL (S)

- human rights
- working conditions, including slavery and child labour
- freedom of association and freedom of expression
- local communities
- conflict areas
- health and safety
- employee relations and diversity
- consumer protection



GOVERNANCE (G)

- executive pay
- bribery and corruption
- political lobbying and donations
- board diversity and structure
- shareholder rights
- stakeholder interaction
- tax strategy

Reference: EU 2018 (UNPRI 2018)

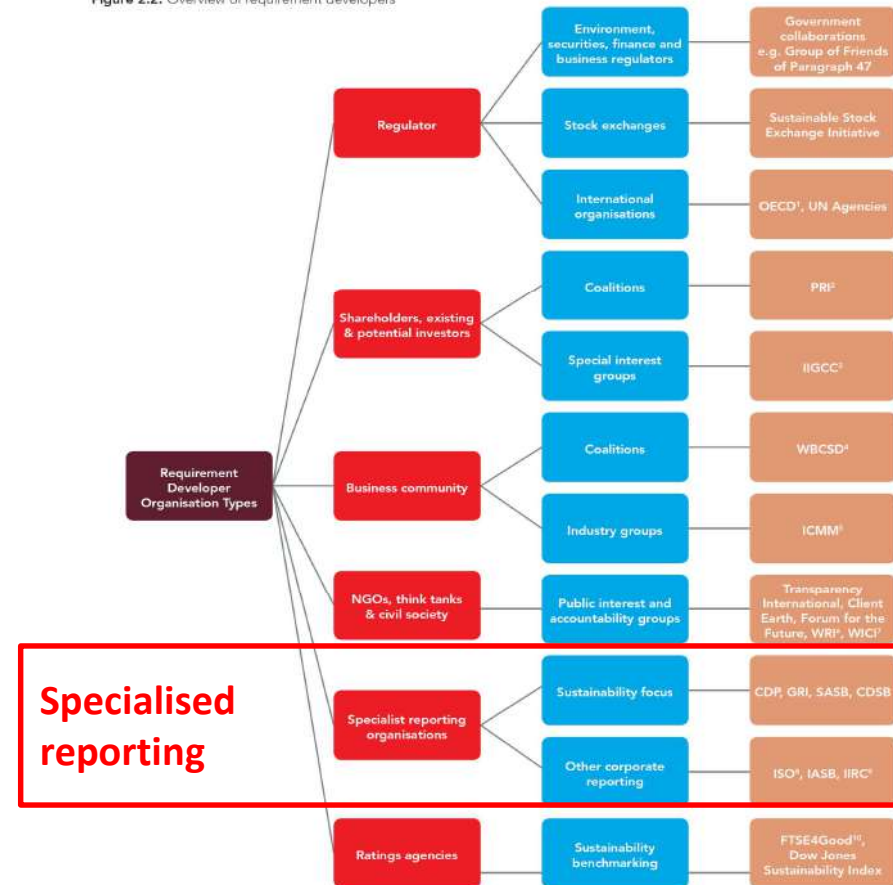
RVA Consulting

© RVA Consulting

Unique needs - Different guidelines

- The organisations involved in developing sustainability reporting have unique objectives and thus needs as they represent different stakeholder groups.
- As a result multiple developers request the same type of information.
- Specialised reporting organisations are just a few that have unique needs and request similar information, despite that their high-level aims are very similar.

Figure 2.2: Overview of requirement developers



Source: The Association of Chartered Certified Accountants 2016

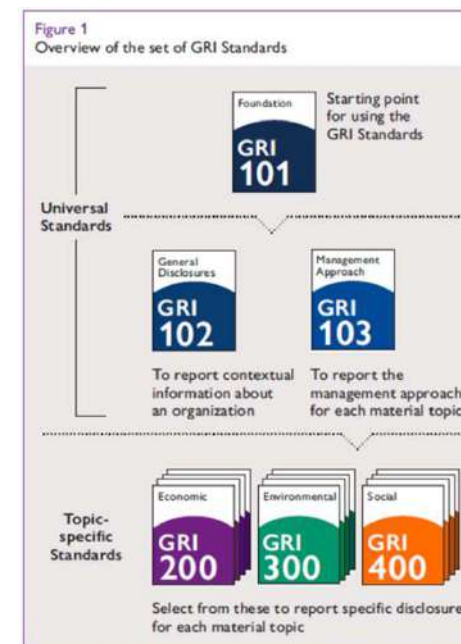
Global Reporting Initiative (GRI)



- First global standard for sustainability reporting (launched year 2000).
 - It were created according to international labour and the environmental practices
- It is the most widely used sustainability reporting framework among companies, governments and NGO:s
 - 93 % of the worlds 250 largest firms use it (KPMG 2017)
- It aims to enable third parties to assess environmental impact from the activities of the company and its supply chain
 - Examples of good sustainability reporting practices include **digitalization of organizations' supply-chain management**
- Among its focus areas in coming years are:
 - Harmonize the sustainability landscape
 - Drive effective us of sustainability information to improve performance

GRI is a recommendation developed by the Global Sustainability Standards Board (GSSB).
A NGO founded 1997 with headquarter in Amsterdam.

- In contracts to earlier reporting frameworks the standard have a modular and interrelated structure of recommendations, where each GRI standard represent best global practice.



Source: www.globalreporting.org

Carbon Disclosure Project (CDP)



- CDP piggybacked GRI's concept of environmental disclosure
- Narrow focus on prevent dangerous climate change and environmental damage, and especially carbon emissions
 - Covering over 20 % of global greenhouse gas emissions
- Client categories:
 - Cities, states and regions (free data)
 - Corporates (purchase)
 - Investors (only for members)
- Framework:
 - Initially standard for emissions and energy reporting
 - Focus areas (programs):
 - Climate change
 - Water security
 - Deforestation
 - Its Carbon Action program focus on carbon management of investment portfolios
 - Annual questionnaire to companies
 - 8400+ answered in 2019

CDP is a recommendation developed by the CDP Global System.
A charity founded year 2000 with Headquarter in Brussels.

Source: www.cdp.net

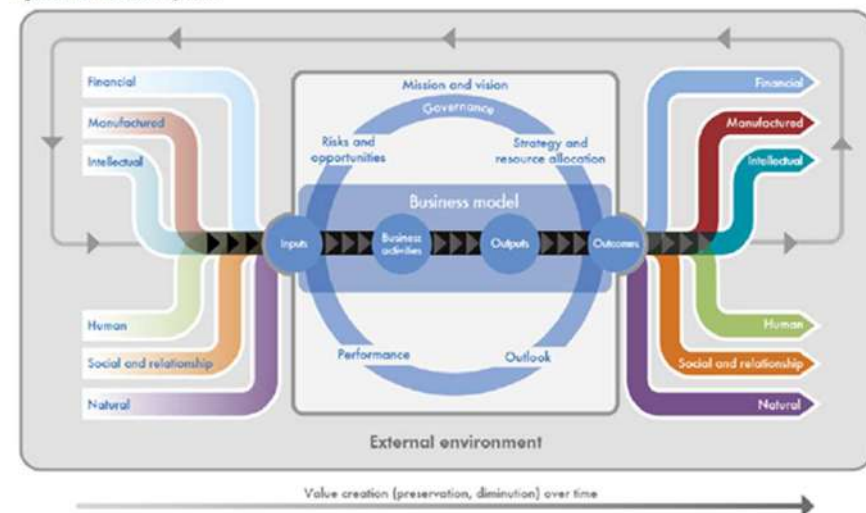
Integrated Reporting (International <IR> Framework)



- Focus on financial and other value relevant information
- The IR-report is **aimed for capital allocations decisions** as it is a:
 - “concise communication about how an organization’s strategy, governance, performance and prospects, in the context of its external environment, lead to the creation of value”
- An essential concept of <IR> is the value creation process, where the "capitals" are used to denote these various resource from which value is created, namely:
 - financial;
 - manufactured;
 - intellectual;
 - human;
 - social and relationship;
 - and natural.

The value creation process of Integrated Reporting

Figure 2: The value creation process:



Sources: www.theiirc.org, www.integratedreporting.org,

<IR> is a recommendation developed by the International Integrated Reporting Council (IIRC). A NGO founded 2009 with headquarter in London.

Sustainability Accounting Standards Board (SASB)



- An industry-specific disclosure recommendation across ESG topics.
- Facilitate communication between companies and investors about materially decision useful information.
 - The general principle is “what's measure gets done”
- Complement the work of FASB, as it is to be used in corporate filings to the Security and Exchange Commission (SEC) in the US.
- Framework:
 - Industry specific disclosure:
 - Use a Sustainability Industry Classification System (SICS) - 11 sectors and 77 industries
 - With one standard per industry
 - Focus on financial material issues
 - which is up to companies to decide and disclose

SASB is a recommendation developed by the Sustainability Accounting Standards Board Foundation. A NGO founded 2011 with headquarter in San Francisco.



Source: www.sasb.org

SASB Materiality map (sector level)



ISSUES	Health Care	Financials	Technology and Communications	Non-Renewable Resources	Transportation	Services	Resource Transformation	Consumption	Renewable Resources & Alternative Energy	Infrastructure
	Click to expand	Click to expand	Click to expand	Click to expand	Click to expand	Click to expand	Click to expand	Click to expand	Click to expand	Click to expand
Environment										
GHG emissions										
Air quality										
Energy management										
Fuel management										
Water and wastewater management										
Waste and hazardous materials management										
Biodiversity impacts										
Social Capital										
Human rights and community relations										
Access and affordability										
Customer welfare										
Data security and customer privacy										
Fair disclosure and labeling										
Fair marketing and advertising										
Human Capital										
Labor relations										
Fair labor practices										
Employee health, safety and wellbeing										
Diversity and inclusion										
Compensation and benefits										
Recruitment, development and retention										
Business Model and Innovation										
Lifecycle Impacts of products and services										
Environmental, social impacts on assets & ops										
Product packaging										
Product quality and safety										
Leadership and Governance										
Systemic risk management										
Accident and safety management										
Business ethics and transparency of payments										
Competitive behavior										
Regulatory capture and political influence										
Materials sourcing										
Supply chain management										

© 2018 SASB™ Materiality Map™

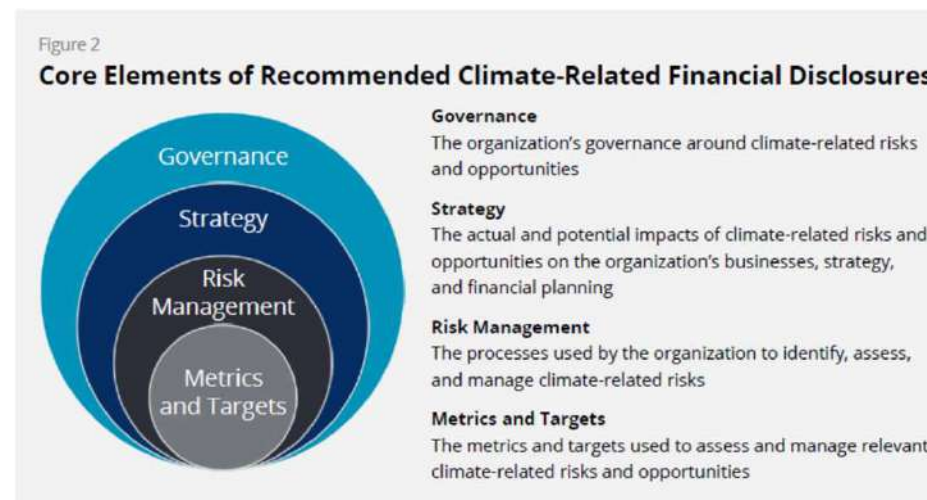
Note, that dark grey areas are material in the map.

Source: www.sasb.org

Task Force on Climate-related Financial Disclosure (TCFD)



- This industry initiative was announced in Paris 2015 by the Financial Stability Board (FSB).
- Focus on four thematic areas for climate-related financial disclosure:
 - Governance
 - Strategy
 - Risk management
 - Metrics and targets
- Introduce climate related scenarios for companies, as a tool to reach the Paris agreement as way to:
 - “Breaking the tragedy of the horizon – climate change and financial stability” /Mark Carney 2015



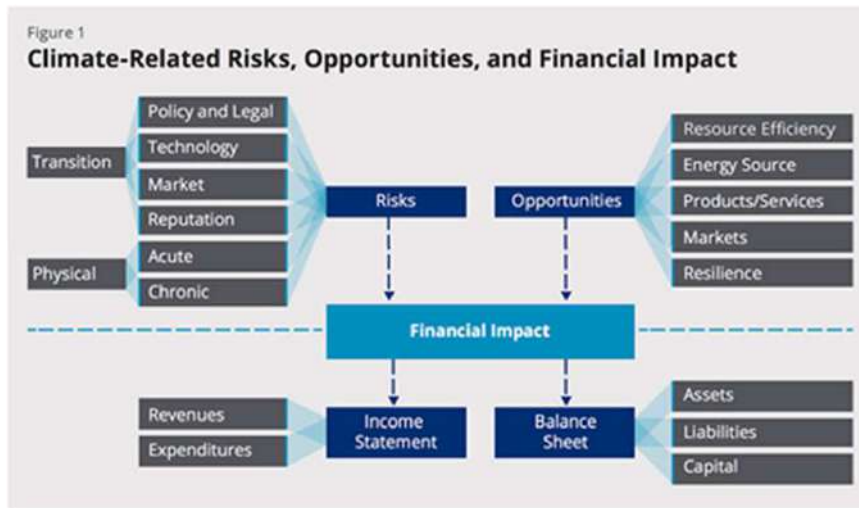
Source: www.fsb-tcf.org

TCFD is a recommendation developed by the Task Force on Climate-related Financial Disclosures.
A NGO founded 2015 with headquarter in New York.

TCFD “innovations”



Framework



Innovative cause effect relationship between ESG risk/opportunity and financial reporting.

Double materiality principle



Company impact on climate can also be financially material.

Source: www.fsb-tcf.org

Sustainability Development Goals (SDG) / Agenda 2030










- UN resolution and a “blueprint to achieve a better and more sustainable future for all”
 - Intended to be achieved by year 2030
- Framework:
 - 17 sustainable Development Goals (SDG)
 - 169 targets and 232 indicators
- Goal 12:6:
 - “Encourage companies, especially large and transnational companies, to adopt sustainable practices and to integrate sustainability information into their reporting cycle”



Source: <https://sustainabledevelopment.un.org>

Agenda 2030 is a resolution adopted in 2015 by the United Nations (UN) in New York.

ESG guidelines – Fragmented focus

Disclosure "focus"							
E nvironment		Environment (GRI 300)	Climate change, Water security, Forest	Natural capital	Environment (indicators)	Climate change risk & opportunity	SDG 12-15
S ocial		Social (GRI 400)		Human capital, Social & relationship capital	Social capital, Human capital		SDG 2-7, 11
G overnance		General (GRI 103)		Intellectual capital	Leadership & governance, Business model & innovation	Governance, strategy, risk mgmt. and metrics/targets	SDG 16-17
Financial	Financial performance & position, cash flow	Economic (GRI 200)		Financial capital, Manufactured capital			SDG 1, 8-10
<i>Established date</i>	1973	1997	2000	2009	2011	2015	2015
<i>Regulation status</i>	Regulated	Voluntary framework	Voluntary questionnaire	Voluntary framework	Voluntary framework	Voluntary framework	International policy
<i>Framework focus</i>	General	General	Specific	General	General	Specific	
<i>Other</i>	Outcome, Fair Value			Integrated, Risk & future development	Financial materiality, US (10K, 20F), "10 industries"	Future, risk & opportunity	

Corporate Reporting Dialogue (CRD): Mapping sustainability reporting

**CRD platform members:
CDP, CDSB, GRI, SASB, IIRC
+ ISO, IASB and FASB (observers)**

**A “golden standard”
for financial ESG
Performance.
Or?**

2018: CRD announce “the better alignment project”, a two-year project for mapping of participants reporting principles.

GRI & SASB to align their reporting.

CDP also aligns.

**2019: SASB, GRI, CDP
and CDSB map their
frameworks against
TCFD.**

EU green deal

**2020: The IBC of WEF support
aligning a core set of metrics and
disclosures (“Four pillars”)
suggested by the Big Four.**

EU to revise NFRD .

**CDP to develop a taxonomy,
build an online tool and set up a
forum for technical development.**

Note. The CRD project will identify how non-financial metrics relate to financial outcomes and how this can be integrated in mainstream reports

Source: <https://corporatereportingdialogue.com>

RVA Consulting

© RVA Consulting

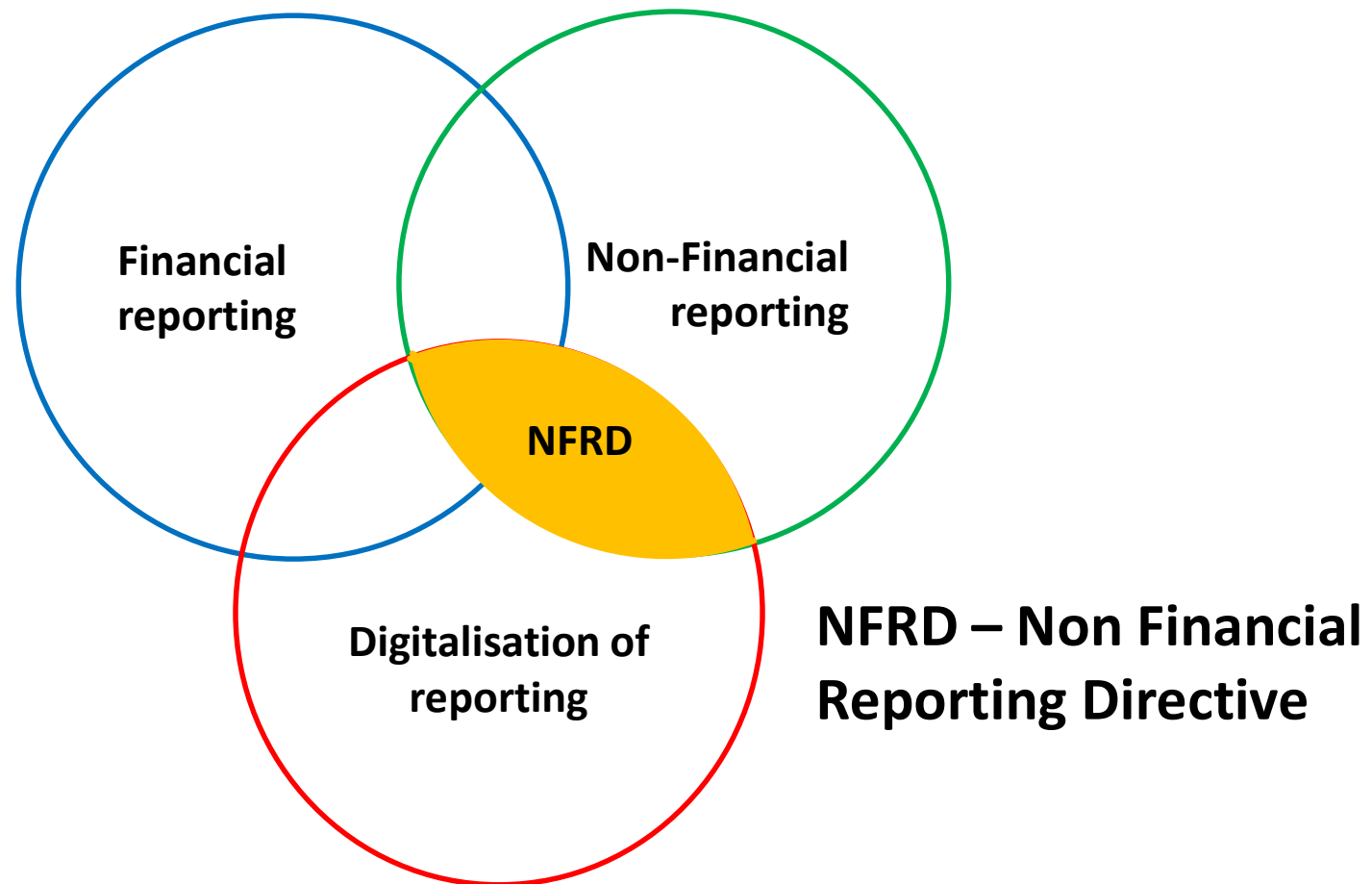
European Reporting Lab @ EFRAG



- In 2019 the European Lab set up its first project, which was on good reporting practice Climate-related Reporting (PTF-CRR).
 - The project addressed climate-related reporting by companies in line with the TCFD recommendation and climate-related reporting elements of the EU NFRD
 - Special focus has also been set on scenario analysis
- In 2020 a second project will be set up on the wider domain on non-financial reporting beyond climate-reporting to identify good reporting practice.

Source: <http://www.efrag.org>

Non-financial reporting: The Non Financial Reporting Directive



The Non-Financial Reporting Directive (NFRD)

- NFRD is an amendment to the EU Accounting Directive, which:
 - Applies to large public entities with more than 500 employees, and large banks and insurance companies
 - Require them to include non-financial reporting in their annual report from 2018 (i.e. fiscal year 2017).
- Companies need to disclose their business model, policies (and outcomes), risks, and non-financial key performance indicators (KPI) in the following categories:
 - Environmental matters
 - Social and employee aspects
 - Respect for human rights
 - Anti-corruption and bribery issues
 - Diversity on board of directors
- NFRD does NOT support any specific standard, but since 2019 it support the double materiality perspective and thus TCFD.
 - As such there is still considerable flexibility about what is reported and how.
- However, NFRD plays an important role in for private sector actions and commitment towards meeting the Agenda 2030 and the Paris Climate Agreement.

ESG disclosure - NFRD the next XBRL wave

Climate change and digitalisation are two important areas, which **will impact corporate reporting** in the EU as (Dombrowski 2020):

- Investors want a broader range of information to access long term performance and value creation.
 - EU intend to review the NFRD during 2020, and will ask EFRAG to **prepare work on non-financial standards**.
- Broadening of the ESEF to non-financial reporting.
 - **With a taxonomy for tagging non-financial information**.



The EU commission want through its **European data strategy (20-02-19)** support the establishment of common European data spaces.

This will open up a market for digital tools like automation, **advanced analytics** and machine learning, which is an area that **remains largely unexploited**.

Revision of NFRD in 2020

- As part of **the European Green Deal (2019)** and to strengthen the foundation for sustainable investments the European Commission will review the **Non-Financial Reporting Directive (NFRD)** during 2020.
- The private sector is a key to financing the green deal, and as such its important that:
 - Sustainability needs to be more broadly embedded into corporate governance framework,
 - Companies and financial institutions need to increase their disclosure on climate and environmental data,
- The private sector is also expected to help close the financing gap globally for Agenda 2030 of 2,5 – 3,0 Trillion USD per year (UN 2019).
- **The ongoing EU NFRD-consultation (ends 11th of June) will:**
 - collect the view of stakeholders with regards to revision of NFRD.
 - and it's one element of a broader strategy to review NFRD.
- **XBRL Europe will answer the NFRD-consultation.**

NFRD questionnaire: XBRL Europe WG ESG (1)

Area	Financial reporting	Non-financial reporting (NFRD)	Response	Comment
Quality & scope			Totally agree on problems with comparability & reliability. Otherwise no opinion	As an association about digitisation, we cannot comment the content of the filing requirements
Standardisation	Listed companies to use IFRS	Voluntary	A common and mandatory standard would be preferred, but no preference among existing standards	Broad stakeholder involvement preferred
Materiality			No opinion	The XBRL Community is focused on the technical reporting aspects than on regulation.
Assurance	Required	Not required	No opinion	See separate slide
Digitalisation	ESEF		Totally agree	See separate slide
Structure & location of report		Allows separate report outside legal scope	If in a separate report legalisation should be amended to ensure equal treatment as financial reports.	Non-financial information should be in a common document to give it the same importance as financial information
Personal scope			No opinion	As an association about digitisation, we cannot comment the content of the filing requirements.
Administrative burden			No opinion	As an association about digitisation, we cannot comment the content of the filing requirements.

NFRD questionnaire: XBRL Europe WG ESG (2)

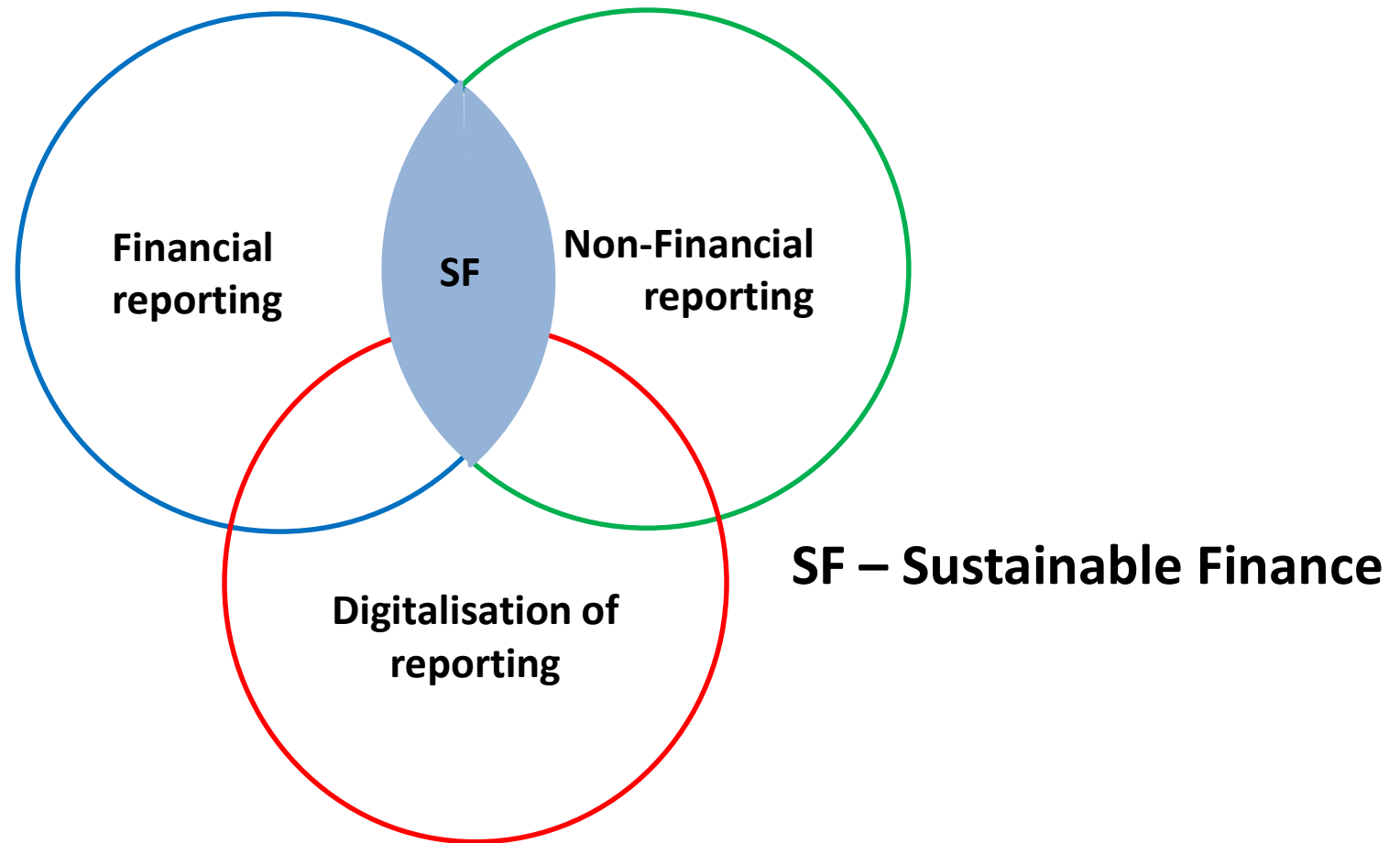
On assurance:

- Assurance is an area in the NFRD questionnaire where XBRL Europe WG ESG “has no opinion” as:
 - The XBRL Community is more **focused on the technical reporting aspects than on assurance on regulation**. Technology facilitates and enables regulation rather than enacting it.
 - We consider it is for the audit community to influence and make assurance standards. If assurance standards for NFRD were to exist, technically they should sit in the same taxonomy package as accounting requirements.

On digitalisation:

- **Inline XBRL** is used for financial reporting (ESEF regulation) and should be also used for non-financial reporting for all the reasons known - cost savings, interoperability and international comparability to improve information for end users.
- Creating EU-specific standards under the NFRD would only be beneficial if they facilitates alignment of existing relevant global Non-Financial Information standards.

Non-financial reporting: Sustainable Finance



Sustainable finance part of the Paris agreement

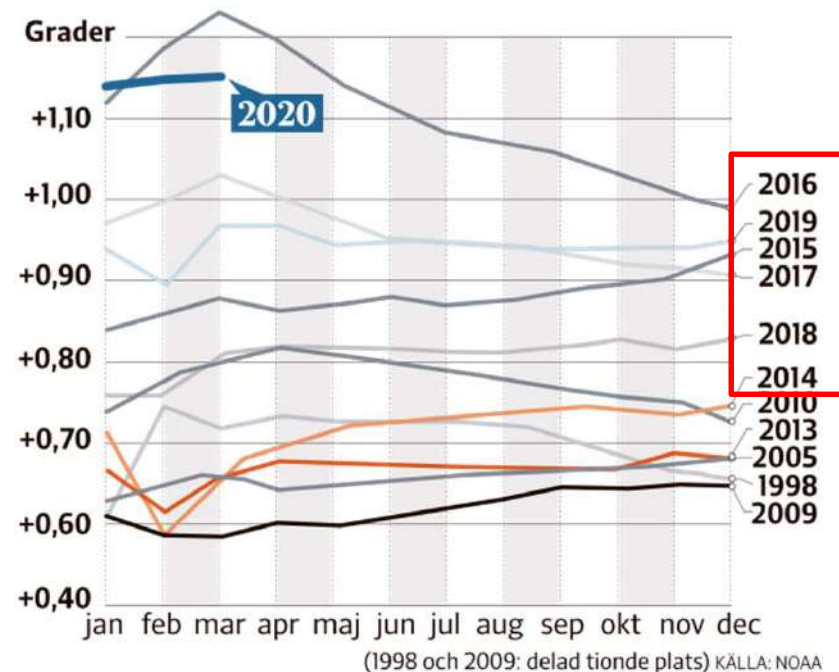
In the Paris Agreement (2015) we agreed to:

- “Making finance flows consistent with a pathway towards low greenhouse gas emissions and climate-resilient development.”
/Article 2 c
- “holding the increase in global average temperature to **well below 2 °C** above preindustrial levels and pursuing efforts to limit the temperature increase to **1.5 °C** above preindustrial levels”.

/Article 2 a

Source; FCCC/CP/2015/L.9/Rev.1

The ten hottest years since 1880



Note. Compared to 1990 as reference level

Källa: SvD 200429

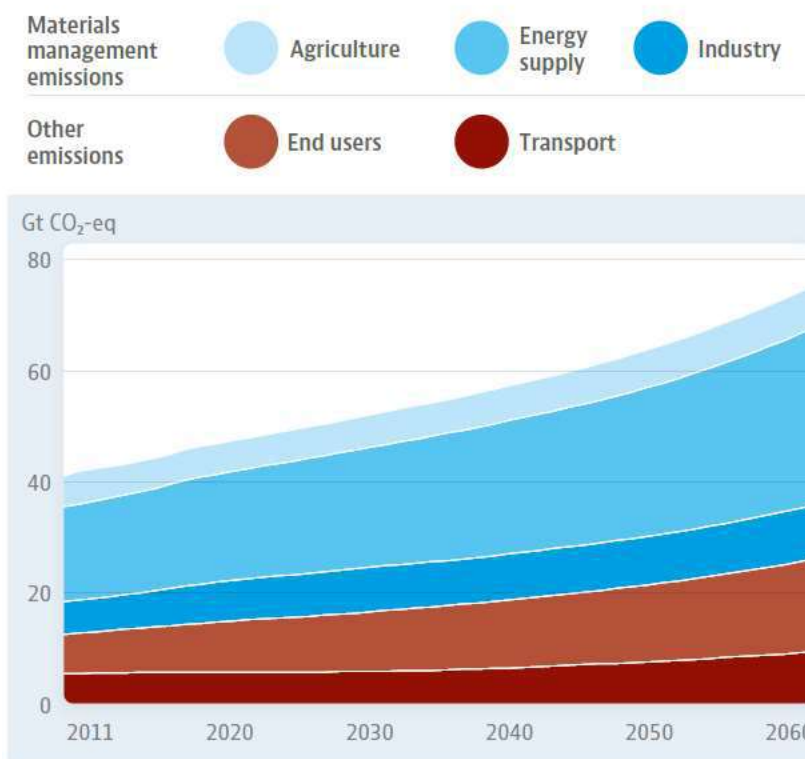
© RVA Consulting

RVA Consulting

Carbon budget and “business as usual”

- IPCC carbon budget (SR15 2018) estimated that around 420 Gt CO₂-eq. can be emitted to stay below 1,5 degree C with 66 % probability.
 - This is 10 year of current emissions levels.
- However, OECD (2018) base scenario project that total emissions will reach 75 Gt Co₂-eq. by 2060.
 - This implies that expected emissions for the period 2011 – 2060 would be equal to all emissions for the past 200 years pre 2011 (i.e. around 2 800 Gt CO₂-eq.).
- Conclusion:
 - **CO₂ emissions need to fall to net-zero by mid-century.**

Figure 11. **Materials management is a key driver of the increase in GHG emissions**



Source: Global Material Resources Outlook to 2050, OECD 2018

EU Commissions

action plan for sustainable finance

- The 2018 action plan for sustainable finance sets out a strategy to connect finance with sustainability by:
 - **establishing a clear and detailed EU classification system (taxonomy) for sustainable activities.**
 - Introduced for company reporting in coming years.
 - establishing EU labels for **green financial products.**
 - introducing measures to clarify asset managers' and institutional investors' **fiduciary duties** regarding sustainability
 - **strengthening the transparency of companies on their environmental, social and governance (ESG) policies.**
 - Revision of the NFRD directive
 - introducing a 'green supporting factor' in the EU prudential rules for banks and insurance companies.

Source: https://ec.europa.eu/info/publications/180308-action-plan-sustainable-growth_en

Taxonomy – “Self regulation”

6.5 Passenger cars and commercial vehicles

Sector classification and activity	
Macro-Sector	H - Transport and storage
NACE Level	
Code	
Description	Passenger cars, light commercial vehicles and category L vehicles (this includes all M1, N1 and L category vehicles including where applicable NACE 49.32, 53.10, 53.20, 77.11)
Mitigation criteria	
Principle	Demonstrate substantial GHG emission reduction by: <ul style="list-style-type: none"> - Increasing the number of low- and zero emission vehicles, and improving vehicle efficiency
Criteria	<p>CO₂ emissions per vehicle kilometre (gCO₂/km).</p> <p><u>For passenger cars and light commercial vehicles:</u></p> <ul style="list-style-type: none"> • Zero tailpipe emission vehicles (incl. hydrogen, fuel cell, electric). These are automatically eligible. • Vehicles with tailpipe emission intensity of max 50 g CO₂/km (WLTP) are eligible until 2025. • From 2026 onwards only vehicles with emission intensity of 0g CO₂/km (WLTP) are eligible. <p><u>For category L vehicles:</u></p> <p>Zero tailpipe emission vehicles (incl. hydrogen, fuel cell, electric).</p> <p>Brief rationale:</p> <p>Zero direct emissions vehicles (e.g. electric, hydrogen) are eligible because the generation of the energy carriers used by zero tailpipe emissions vehicles is assumed to become low or zero carbon in the near future</p> <p>Vehicles with tailpipe emission intensity of max 50 g CO₂/km (WLTP) are eligible until 2025 because the post-2020 CO₂ Regulation for cars and vans sets this threshold as an ambitious mid-term target that is significantly below the expected average emissions of new cars and vans. The 50 g CO₂/km threshold does not apply to L vehicles (e.g. motorcycles) due to their lower weight and high electrification potential.</p>

From 2026 onwards only vehicles with emissions intensity of 0 g CO₂/km (WLTP) are eligible



Source: Taxonomy report: technical annex

https://ec.europa.eu/info/files/200309-sustainable-finance-teg-final-report-taxonomy-annexes_en

Decision-marking - A central challenge

The 2017 HELG report was about how to accelerate the shift to a low carbon economy



Source:

ec.europa.eu/info/sites/info/files/170713-sustainable-finance-report_en.pdf

- A central challenge observed by HLEG was:
 - “to integrate ESG factors into financial decision making” (p 3),
 - as “... managers and investors may have difficulties when trying to incorporate it within valuation models, business strategies and decision-making” (p 21).
- Also reflected in the EFFAS course for Certified ESG analysts (2020 module 3):
 - “The biggest challenge still is the integration of ESG factors in the valuation of target companies and investment decision making” (p 11).
- Or as stated by NBIM (2020):
 - “The lack of standardised and financially relevant sustainability reporting can hinder the ability of investors to systematically consider companies’ environmental and social performance in their decision making”
- This challenge is related to that material ESG factors are not easy to incorporated into traditional financial decision-making by managers and investors.

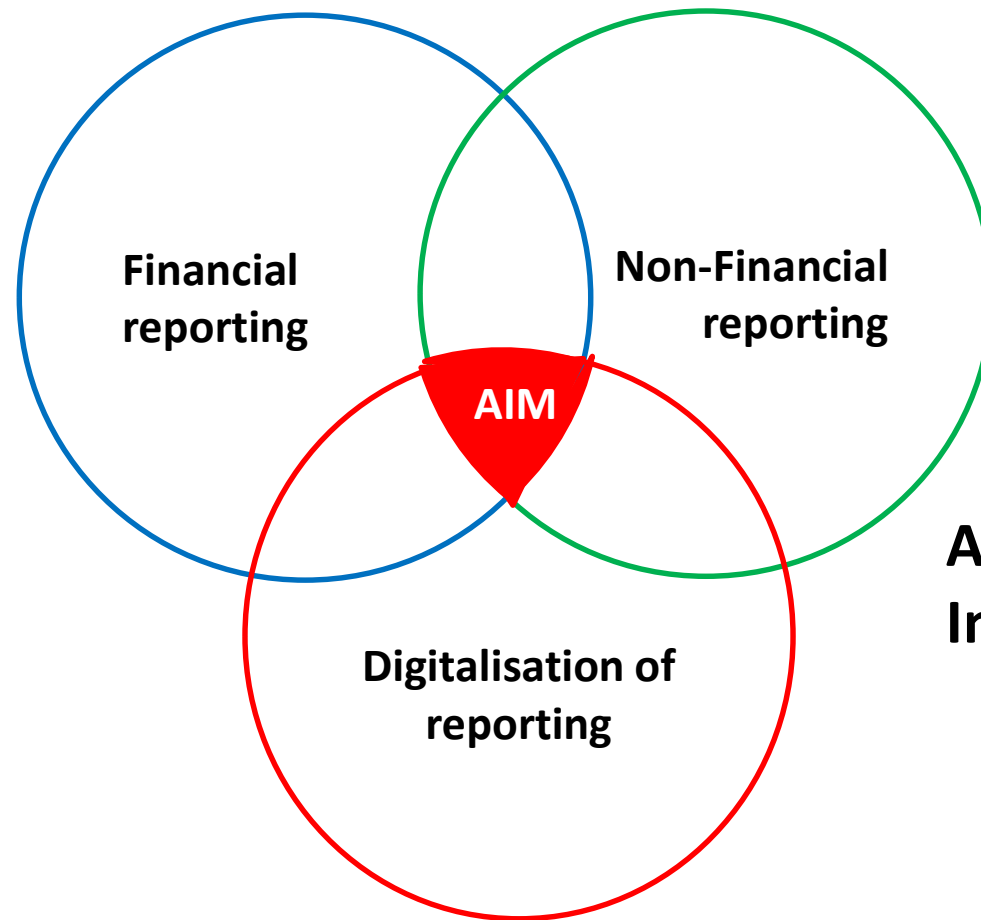
RVA Consulting

© RVA Consulting

ESG-assessment

- Interest in sustainability issues has increased in the financial sector, and can be operationalised through ESG assessments of companies.
 - The assessments are based on a number of indicators under each topic that are weighed together into a combined assessment.
- According to Tillväxtanalys (2018) “ESG assessments do not have the qualities needed to qualify as a measurement of companies’ and the economy’s sustainability risks and opportunities”.
 - Since different ESG suppliers weight the underlying indicators of ESG assessments differently, which results in significant variations in the overall assessments.
 - There is also a risk that ESG assessments largely reflect how well companies report their sustainability work, rather than how sustainable their operations are.

Non-Financial Reporting: An Analytical Integration Method (AIM)



**AIM – Analytical
Integration Method**

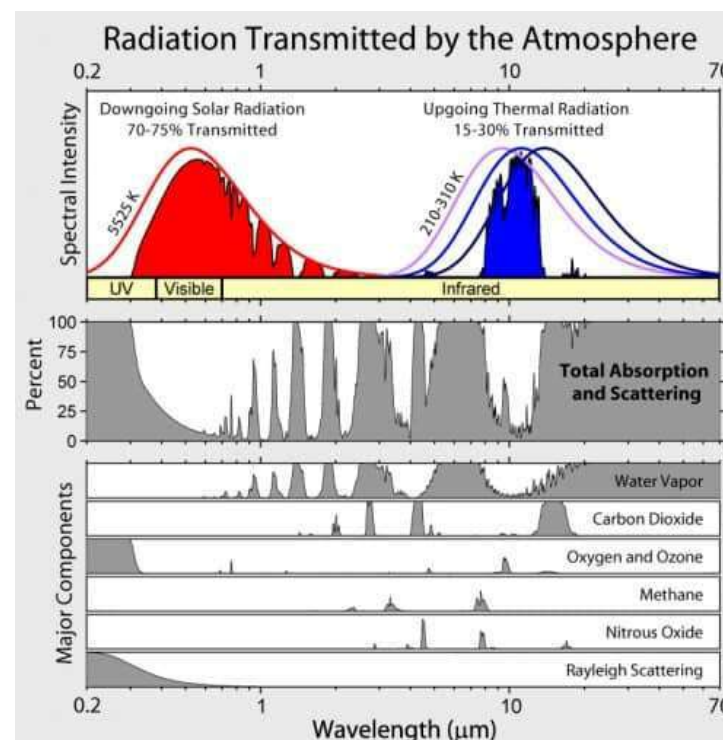
RVA Consulting

© RVA Consulting

Green House Gases

- The GHG Protocol categorizes direct and indirect emissions into three broad scopes:
 - Scope 1:
 - **All direct GHG emissions** from sources owned or controlled, such as on-site fossil fuel combustion and fleet fuel consumption
 - Scope 2:
 - Indirect GHG emissions from consumption of **purchased electricity, heat or steam** from a utility provide
 - Scope 3:
 - **Other indirect emissions**, such as the extraction and production of purchased materials and fuels, transport-related activities in vehicles not owned or controlled by the reporting entity, electricity-related activities (e.g. T&D losses) not covered in Scope 2, outsourced activities, waste disposal, etc.

* www.ghgprotocol.org



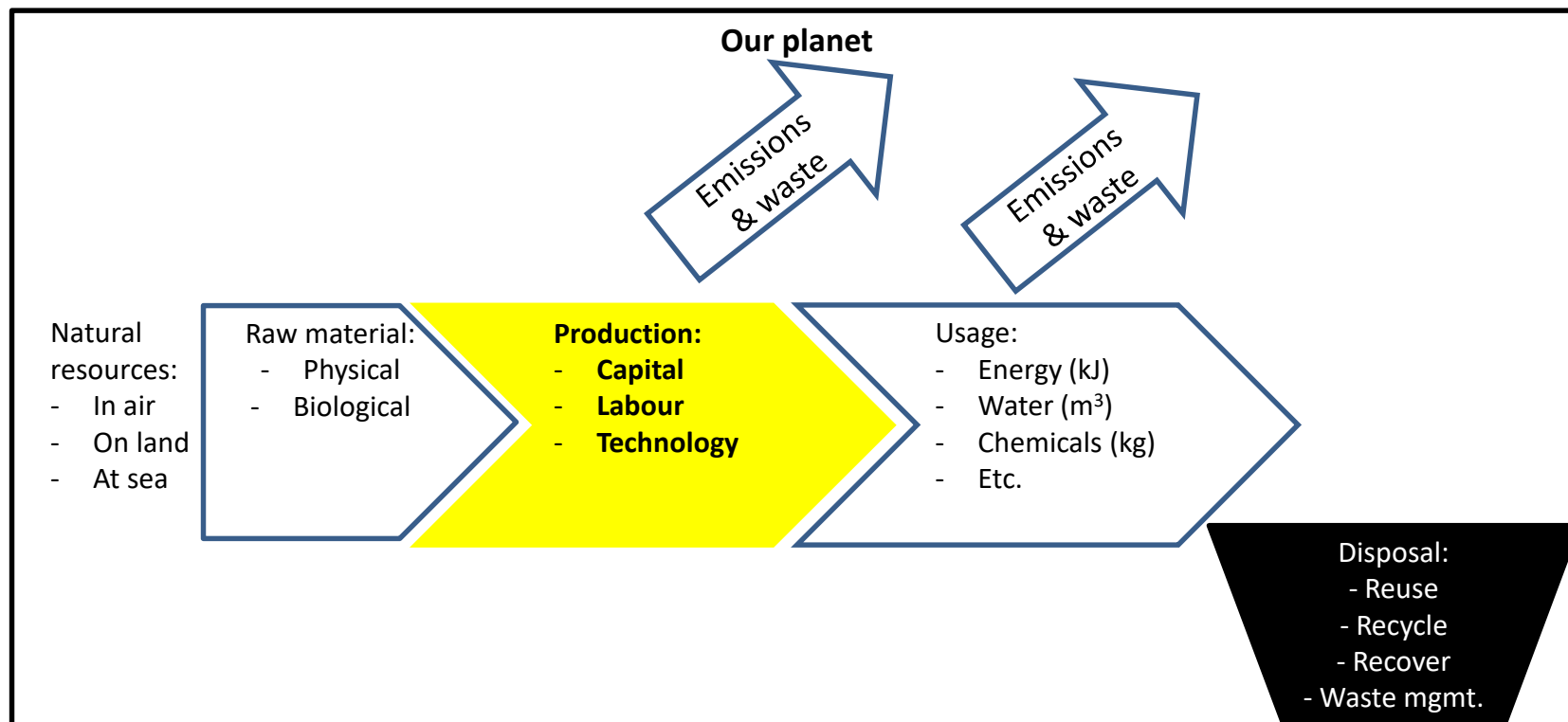
Source: <https://timeforchange.org>

Global warming is an effect that greenhouse gases in the atmosphere absorbs radiation from the sun and heat radiation from earth. The absorption capacity is greenhouse gas dependent as well as wavelength dependent.

RVA Consulting

© RVA Consulting

Physical material flows: Product life cycle and economic activity



IFRS income statement by nature reveals primary stakeholders

FUNCTION OF EXPENSE	NATURE OF EXPENSE	Primary stakeholder group
Revenue	Revenue	Customers
Cost of sales	Changes in inventories of finished goods and work in progress	
	Work performed by the enterprise and capitalised	
<i>Gross profit</i>		
Other operating income	Other operating income	Suppliers
Distribution costs	Raw material and consumables used	
Administrative expenses	Staff cost	
	Depreciation and amortisation	Employees
Other operating expenses	Other operating expense	
<i>Profit from operation</i>	<i>Profit from operation</i>	
Accounts by "department"	Finance costs	Accounts by "primary stakeholder group"
	Income from associates	
	<i>Profit before taxes</i>	
	Income tax expense	
	<i>Profit after tax</i>	
	Extraordinary items	
	<i>Net profit for the period</i>	

Source: IFRS (2003) IAS 1 appendix A
Adjusted by RVA Consulting

The nature of expense hidden in GRI 201

Direct economic value generated and distributed (GRI 201-1)	Value Added Statement (ASSC 1975)	Income statement by nature of expense (IFRS/IAS 1 Appendix 1)
+ Revenues	+ Turnover	+ Revenues
		+/- Changes in inventories of finished goods and work in progress
		+ Work performed by the enterprise and capitalised
		+ Other operating income
- Operating costs	- Bought in material and services	- Raw material and consumables used
- Employee wages and benefits	- Employee wages and benefits	- Staff costs
		- Depreciation and amortisation
		- Other operating expenses
		+/- Income from associates
- Payments to providers of capital	- Dividends payable and interest payable	- Financial costs
- Payments to government	- Taxes payable	- Income tax expense
		+/- Extraordinary items
- Community investments)		
= Economic value retained	= Amount retained for reinvestments	= Net profit for the period

Revised profit & loss statement

IFRS intends to review IAS1 during 2020, as to improve comparability. In focus is how operating and non-operating activities shall appear in the primary financial statements (including subtotals).



Board proposals - subtotals and categories

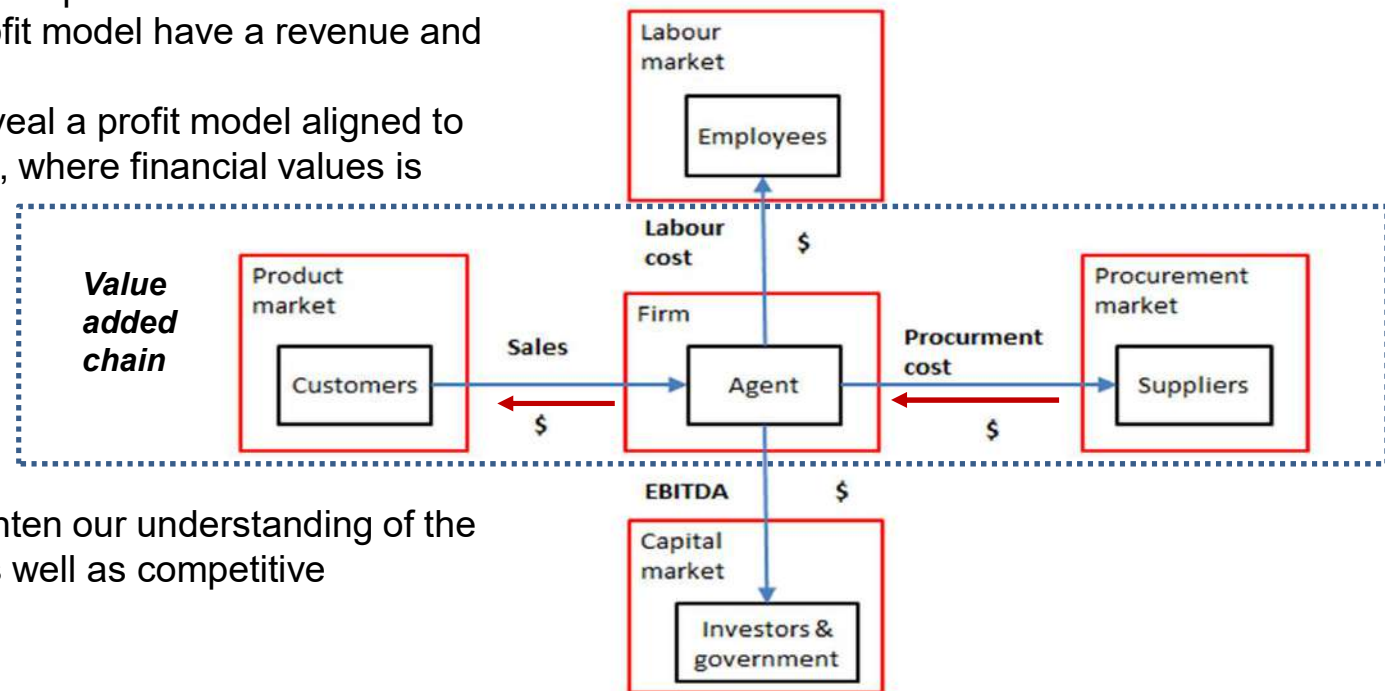
Revenue	347,000	Operating
Other income	3,800	
Changes in inventories of finished goods and work in progress	3,000	
Raw materials used	(146,000)	
Employee benefits	(107,000)	
Depreciation	(37,000)	
Amortisation	(12,500)	
Professional fees and other expenses	(10,030)	
Operating profit	41,270	
Share of profit or loss of integral associates and joint ventures	(600)	Integral associates and joint ventures
Operating profit and income and expenses from integral associates and joint ventures	40,670	
Share of profit or loss of non-integral associates and joint ventures	3,380	Investing
Dividend income	3,550	
Profit before financing and income tax	47,600	
Expenses from financing activities	(3,800)	Financing
Unwinding of discount on pension liabilities and provisions	(3,000)	
Profit before tax	40,800	
Income tax	(7,200)	
Profit for the year	33,600	

Reference: <https://cdn.ifrs.org/-/media/project/primary-financial-statements/exposure-draft/ed-general-presentation-disclosures.pdf>

Financial-material flows interaction in a business model context

Business models consist of a profit model and a value proposition, where the profit model have a revenue and cost model.

The nature of expense reveal a profit model aligned to stakeholders and markets, where financial values is created and captured.



The AIM model also enlighten our understanding of the arbitrage pricing theory as well as competitive advantage in industries*.

Financial flow

Material flow

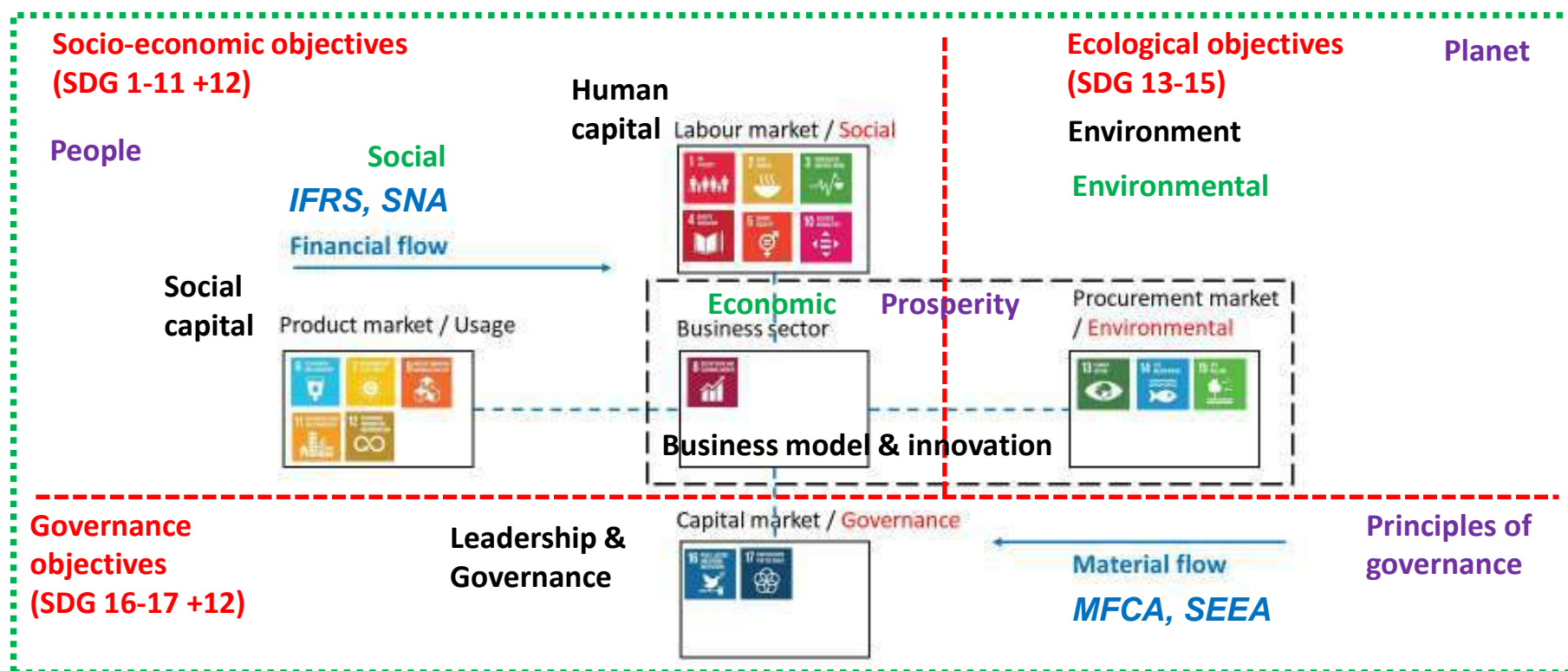
*Forthcoming working paper
for Business Model Society 2020

RVA Consulting

© RVA Consulting

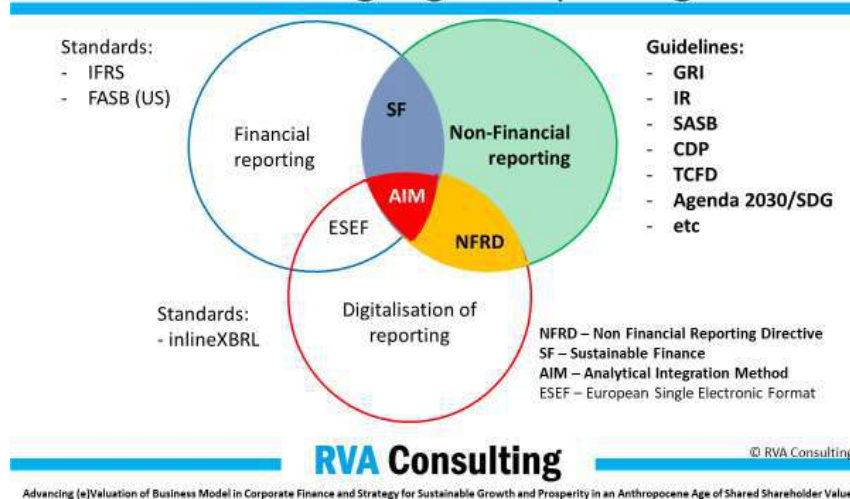
AIM framework for non-material flows

GRI, SASB, SDG



Summary of presentation

Non-financial reporting: Redefining digital reporting



Contact:

tord.andersson@rvaconsulting.se

+46-70-647 0799

RVA Consulting

© RVA Consulting

- Non-financial reporting is fragmented due to various stakeholder objectives as users and its many unrelated Key Performance Indicators (KPI).
- The EU political agenda with focus on climate change and digitalisation will driver initiatives and regulation in the area.
 - The EU review of NFRD by end of 2020 will determine the direction of regulation.
 - Also IFRS review of IAS 1 and CRDs better alignment project may affect the direction.
- This will open up a market for digital tolls like advanced analytics.
- But financial and non-financial integration need to be better aligned analytically.
 - Integration of material flows with financial flows for a stakeholder perspective may be a way to do this