Sustainable Governance in the Utilities Sector

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Dr Maria Balatbat is a Senior Lecturer at the Business School and a Founding Member of the CEEM at UNSW Sydney. Her research interests include integration of environmental, social and governance (ESG) dimensions in investment decision making including, disclosure of climate change information. She is a recipient of several ARC grants with projects that examine the capital market implications of Integrated Reporting and use of environmental and social indicators to develop a valuation methodology for investment decisions. She is a Director at the Australasian Reporting Awards (ARA), Fellow at CPA Australia, and a member of the Chartered Accountants in Australia and New Zealand (CA ANZ). Maria has a PhD in Economics at the University of Sydney

Presentation Topics:

Sustainable Governance in the Utilities Sector

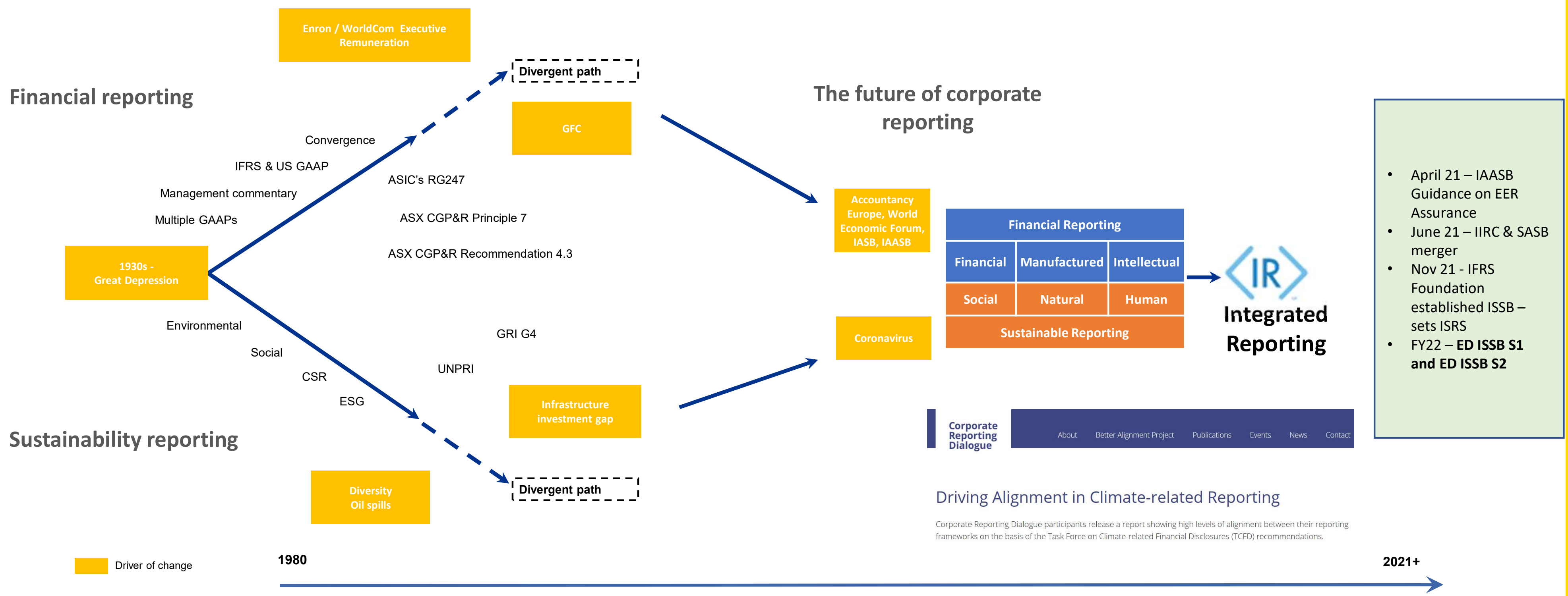
1. Drivers of change in Sustainable Business Reporting
2. Business Leadership and Integrated Thinking
3. Role of Those Charged with Governance

Trends in Sustainable Business Reporting

1. ESG Reporting and Value Creation
2. Concept of Double Materiality and Stakeholder Engagement
3. Climate Change Risks and Opportunities in the Utilities Sector

Before and after photographs show part of the Juukan Gorge rock shelters that were blasted by Rio Tinto in May 2020. Experts say the destruction of the Indigenous sacred site demonstrates that self-regulation of the mining industry does not work.

Why corporate reporting needed to change?

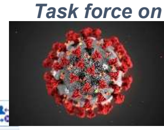


What is driving the capital markets to focus on Intangibles, including ESG matters?

Sustainable development goals

TCFD TASK FORCE ON CLIMATE-RELATED FINANCIAL DISCLOSURES

Task force on climate related financial disclosures



Covid-19

Modern slavery / Human rights

IFRS Foundation & ISSB (setting up in Nov. 2021)

IOSCO INTERNATIONAL ORGANIZATION OF SECURITIES COMMISSIONS

Megatrends

Investors

Regulators

Society

Global sustainable investment is 36% of global FUM

acsi AUSTRALIAN COUNCIL OF SUPERANNUATION INVESTORS

Larry Fink Blackrock CEO

FIGURE 1 Snapshot of global sustainable investing assets, 2016-2018-2020 (USD billions)

REGION	2016	2018	2020
Europe*	12,040	14,075	12,017
United States	8,723	11,995	17,081
Canada	1,086	1,699	2,423
Australasia*	516	734	906
Japan	474	2,180	2,874
Total (USD billions)	**22,839**	**30,683**	**35,301**

APRA Australian Prudential Regulation Authority

Australian Government Australian Accounting Standards Board

ASX

ASIC Australian Securities & Investments Commission

- Geopolitical tension/ nationalism
- Public trust/ governance
- Infrastructure & long term investment gap (energy)
- Social media ('fake news')
- Technology (AI, robotics)
- Litigation

Source KPMG

The Business Opportunity – Intangible (incl. ESG) Value

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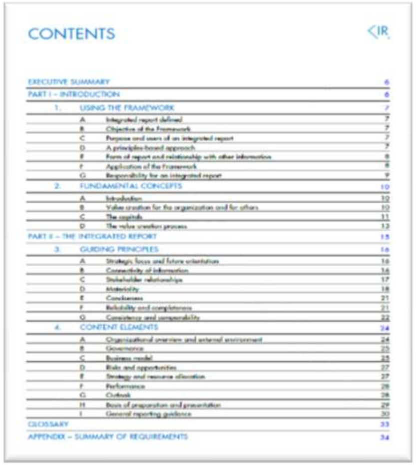
What is Integrated Reporting?

Integrated Reporting – Principles and Benefits

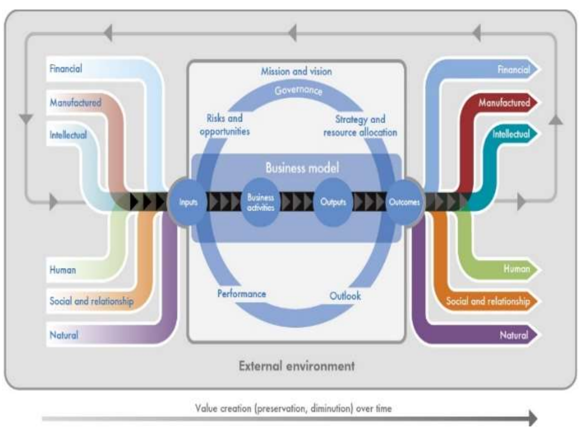
The Integrated Reporting Framework is made up of:

- Fundamental concepts (refer below)
- Content elements (9 elements)
- Guiding principles (7 principles)

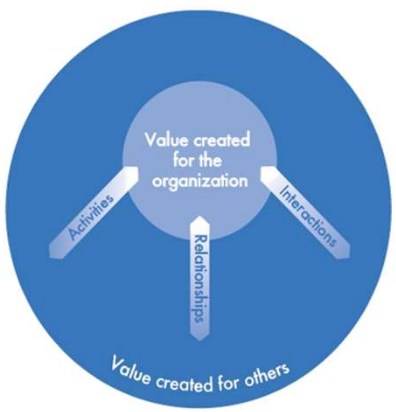

CONTENTS

The 3 fundamental concepts

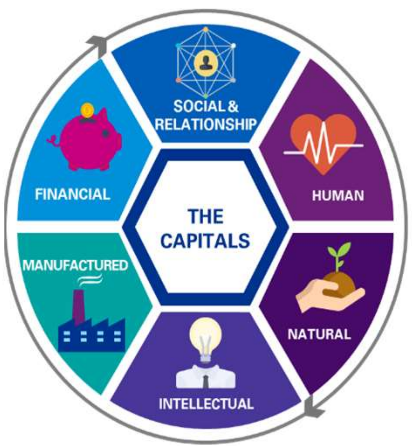
Business model (the value creation process)



Value creation



The 6 capitals



What is integrated thinking?

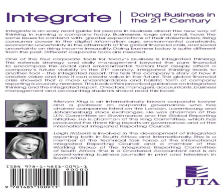
Integrated thinking

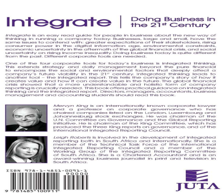
"The active consideration by an organization of the relationships between its various operating and functional units and the capitals that the organization uses or affects. Integrated thinking leads to integrated decision-making and actions that consider the creation of value over the short, medium and long term."

(<IR> Framework, Glossary)

How do you know when you have achieved integrated thinking?

‘When there is no longer separation between nonfinancial and financial performance on the company-wide acceptance that each affects each other. When all functions and divisions share in the company’s strategy and work together to achieve it. When decision making is carried out with a longer-term view on value creation and how the decisions impact on the company’s resources and relationships.’



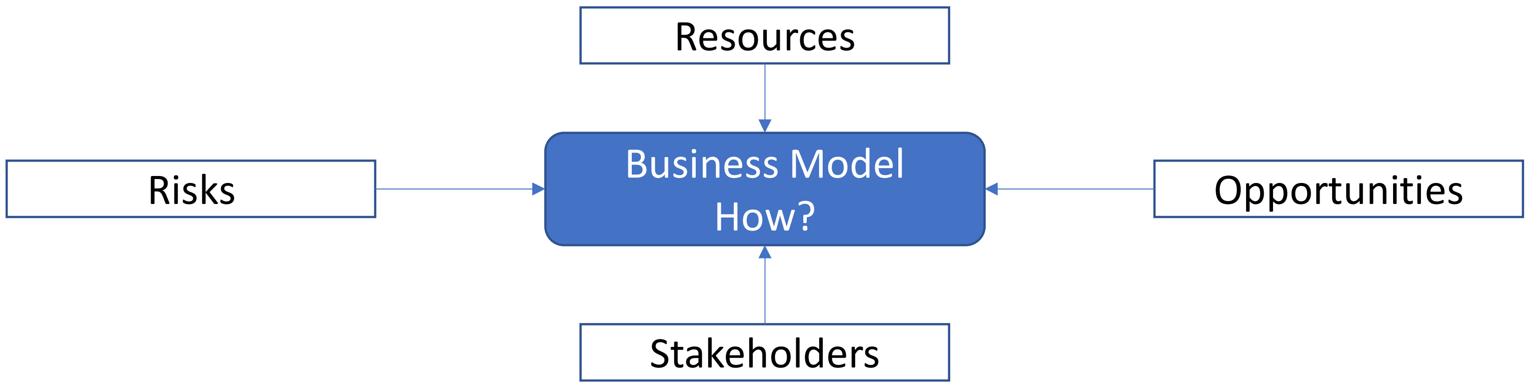


(Mervyn King, Leigh Roberts (2013):

Integrate – Doing Business in the 21st Century)

Why is integrated thinking important?

Integrated thinking involves consideration of an organization's resources and relationships and risks and opportunities in strategy and daily management

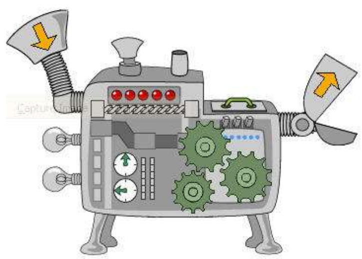


(Mervyn King, Leigh Roberts (2013): Integrate – Doing Business in the 21st Century)

Example of Integrated Thinking

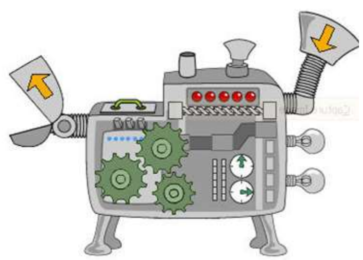
Two options:

Machine A



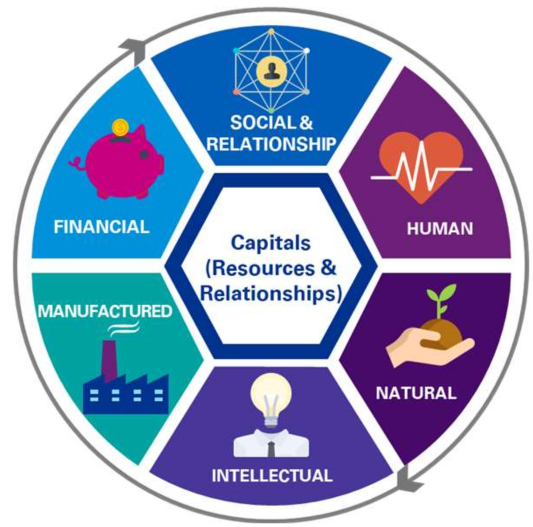
OR

Machine B

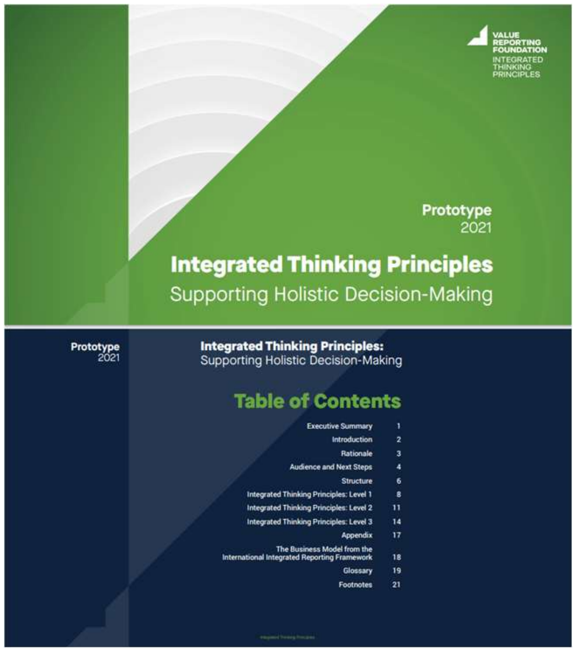


What questions do you have?

What capitals do they relate to?



Integrated Thinking Principles supports more holistic decision making, including for ESG matters (2021)


VALUE REPORTING FOUNDATION
INTEGRATED THINKING PRINCIPLES

Prototype
2021

Integrated Thinking Principles
Supporting Holistic Decision-Making

Prototype
2021

Integrated Thinking Principles:
Supporting Holistic Decision-Making

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- **VRF's Integrated Thinking Principles** create the right environment to embed Integrated Thinking in an organisation.
- Designed to be embedded in an organisation's business model & applied across key activities overseen by TCWG & managed by management.
- The Principles are interconnected & implemented on 3 levels:
  - Level 1: questions on how widely each Principle has been adopted
  - Level 2: tests how deeply the Principles have been embedded
  - Level 3: tools, practices & processes to bring integrated thinking to life.
- Principles help unlock the full intrinsic value of an organisation's intangibles & communicate this to investors in an integrated report.
- Leads to better investor assessments of how an organisation creates, preserves or erodes value over time.
- Supports a stronger WACC, more robust forecasts of future cash flows, & so higher market capitalization.

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Roles of TCWG vs Management

- TCWG (Board) are charged with directing the company in the best interest of shareholders and other stakeholders
- Executive management are charged with executing and implementing the Boards directives and delivering the planned short, medium and long-term value
- TCWG must apply integrated thinking characteristics to all decisions in supporting the Executive team
- TCWG under pressure following Banking Royal Commission and subsequent update of the ASX Corporate Governance Principles and Recommendations.

How CLP Holdings approaches corporate governance

CLP Code on Corporate Governance	• Commitment of the Board and Senior Management to good standards of corporate governance • Sets out common principles that must be adhered to across the Group
Corporate Governance Framework	• Identifies all key participants in good governance • Guides CLP to uphold the Company's values and conduct affairs with different stakeholders in an ethical, transparent and accountable manner • Defines the framework and process for monitoring the management of the Group • Sets out common principles that must be adhered to across the Group
Specific policies at Group or business unit level	• Provides guidance on appropriate conduct in day-to-day work • Must meet local regulatory requirements or local stakeholder expectations
Systems and Standards, supported by procedures and manuals	• Internal mandatory requirements that guide day-to-day operations and practices
Standard Practices and Guidelines	• Provides details for system/ standard implementation, or voluntary guidance on managing emerging issues and risks • The voluntary guideline adopts a precautionary approach, particularly for environmental aspects, helping us to prepare for new regulations

Source: CLP 2021 Annual Report p. 35

AGL’s Corporate Governance Disclosure

7. Governance Summary

AGL is committed to ensuring that its corporate governance framework, policies and practices are of a high standard. Delivering on this commitment requires AGL to have a sound understanding of current governance requirements and practices, as well as being attuned to emerging governance trends and shifting stakeholder expectations. Set out below is a summary of selected aspects of AGL's corporate governance framework and a summary of key governance focus areas during FY22.

Throughout FY22, AGL's corporate governance arrangements were consistent with the Corporate Governance Principles and Recommendations (4th edition) published by the ASX Corporate Governance Council. AGL's 2022 Corporate Governance Statement is available at **agl.com.au/CorporateGovernance**.

AGL's 2022 Corporate Governance Statement outlines AGL's arrangements in relation to its Board, Board Committees, Executive Team, risk management framework and financial reporting, diversity and inclusion, key corporate governance policies and shareholder engagement.

7.1 Board skills

AGL seeks to maintain a Board of Directors with a broad range of skills, knowledge and experience necessary to provide effective oversight over management and guide the strategic direction of the company. The Board uses a skills matrix to identify the key skills and experience the AGL Board is seeking to achieve in its membership. The skills matrix is updated regularly by each Director rating their skills, expertise and experience from 1 to 3 for each identified skill. The self-assessment ratings are subsequently considered and approved by the Board. The skills matrix as at 19 August 2022 is set out in Table 7.2.2.

In conducting the assessment, Directors were assessed using the following skills rating levels:

Significant Experience – regarded to have expert or highly qualified proficiency, knowledge and experience in the subject matter or domain and has been seen to contribute these skills in board and committee conversations and critical thinking.

Developed Understanding – developed a sound working knowledge and understanding of the subject matter through either past executive or management roles, extensive on-the-job application of skills in board and committee activities and/or through training and professional development activities.

General Familiarity – possesses an awareness and base literacy around the subject/topic and its relevance to the organisation and the Board.

Individual Director assessments were aggregated to inform an assessment of the overall level of capability represented across the Board in each of the identified priority areas.

In the ten identified areas, the Board as a whole was rated either as having Significant Experience or Developed Understanding.

The skills matrix will be used to guide the identification of potential director candidates as part of the current Board renewal process.

Further details about AGL's Board Skills Matrix are set out in AGL's 2022 Corporate Governance Statement available at **agl.com.au/CorporateGovernance**.

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7.2 Key areas of focus during FY22

Table 7.2.1: Board Focus Areas during FY22

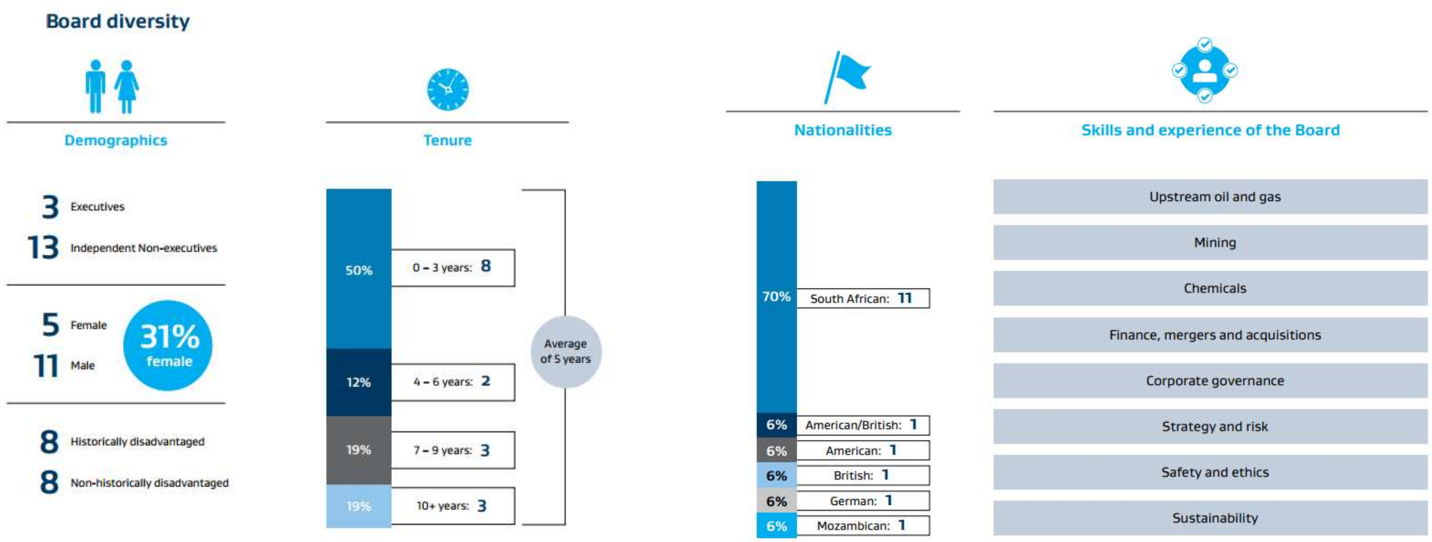
	Key Focus Areas	Business Value Drivers
Board	• Oversight of AGL's proposed demerger, which involved a significant planning process. The demerger was withdrawn on 30 May 2022 and a review of AGL's strategic direction was announced, with a focus on four key areas - reviewing existing strategies, decarbonisation objectives, optimal energy mix and capital structure. • Oversight of AGL's proposal to transition existing thermal generation sites to low-carbon industrial energy hubs. • Consideration and rejection of two unsolicited non-binding indicative proposals from a consortium led by Brookfield Asset Management Inc and Grok Ventures to acquire 100% of the shares in AGL. • Board renewal and succession planning. This included the appointment of Graham Cockroft and Vanessa Sullivan as non-executive directors, the appointment of new Executive Team members - Jo Egan (Chief Customer Officer), Amanda Lee (Chief People Officer) and Melinda Hunter (General Counsel & Company Secretary) and the commencement of a Board renewal process to appoint a new Chair, CEO and other non-executive directors following the withdrawal of AGL's proposed demerger. • Monitoring AGL's customer strategy, including the continued implementation of the Customer First Program which has delivered a series of improvements for customers and approving opportunities to grow AGL's retail business. • Group performance (including financial performance, asset performance, customer metrics, HSE performance). • Developed and approved new Climate Commitments. • Launched and progressed AGL's first Reconciliation Action Plan. • AGL's governance and risk management systems and identifying ways to further strengthen governance, accountability and culture within AGL.	$

TCWG – key characteristics

BOARD DIVERSITY

The diversity and skills of the Board ensures that Sasol is steered to deliver growth to all our stakeholders. The Board approves the strategy and has ultimate control of the company according to its Memorandum of Incorporation and Board Charter. Through its oversight and strategic steer, it ensures that Sasol capitalises on its opportunities as an ethical, decisive and responsible corporate citizen. The careful selection of individual directors, to ensure the most appropriate combination of expertise and experience, underpins the effectiveness of the Board in fulfilling its role.

- **Example:** Sasol 2019 Integrated Report



TCWG’s role in driving integrated thinking

There are 4 steps in TCWG’s role to lead implementation of integrated thinking:

1. Identify the resources and relationships (6 capitals)
2. Identify the wide diversity of risks and opportunities
3. Use the knowledge to question the organisation’s strategy and business model
4. Determine how senior management will be measured and incentivised

Source: SAICA (February 2015) Integrated Thinking –
An exploratory survey http:// *www.***integrated***reportingsa.org*

Critical role of TCWG enforced in Banking Royal Commission (2019); driven through 4th Edition of the ASX Corporate Governance Principles (effective 2020)

The Royal Commission identified three categories of failings in governance that led to misconduct:

1. Role of the Board - Is the right team in place to oversee and, where required, direct management effectively?
2. The entity's priorities – Is the Board focused on the right things to deliver long term success?
3. Accountability - Is the organisation aligned? Is reporting focused on a common long-term purpose? Are people accountable?

Trends in Sustainable Business Reporting

Dr Maria Balabat

Sustainability Reporting

- Companies worldwide are increasingly providing voluntary disclosures on governance, social, ethical, and environmental sustainability performance; typically, through stand-alone ‘Sustainability’ or ‘Corporate Social Responsibility’ (CSR) reports (Dhaliwal, Li, Tsang, & Yang, 2011).
- Sustainability Reporting goes under many names:
  - ✓ Corporate Social Responsibility (CSR) Reporting
  - ✓ Sustainability Reporting
  - ✓ Environment and Social Governance (ESG) Reporting
- There are estimated to be some 400 voluntary sustainability reporting frameworks and standards, of varying rigour and quality (e.g., GRI, CPD, TCFD, SASB, SDG, etc). The volume is confusing and is sometimes called the ‘alphabet soup’ soup of sustainability/ ESG reporting
- There confusion and lack of consistency has led to ‘greenwashing’ claims (class actions, fines) and has undermined public confidence in these sustainability reports.

Sustainability Reporting

https://home.kpmg/au/en/home/insights/2020/11/sustainability-reporting-survey-2020.html

KPMG report sustainability reporting is nearly universal with more than 80% of listed companies worldwide reporting on sustainability - GRI the most common framework used.

https://assets.kpmg/content/dam/kpmg/xx/pdf/2020/11/the-time-has-come.pdf

https://assets.kpmg/content/dam/kpmg/au/pdf/2020/sustainability-reporting-survey-2020-au-supplement.pdf

In Australia, KPMG report in 2020

- 92% of ASX100 companies report sustainability information in the Annual Report with 66% of ASX100 companies reporting in accordance with the GRI framework;
- 67% of the ASX100 now link their business activities to the SDGs.

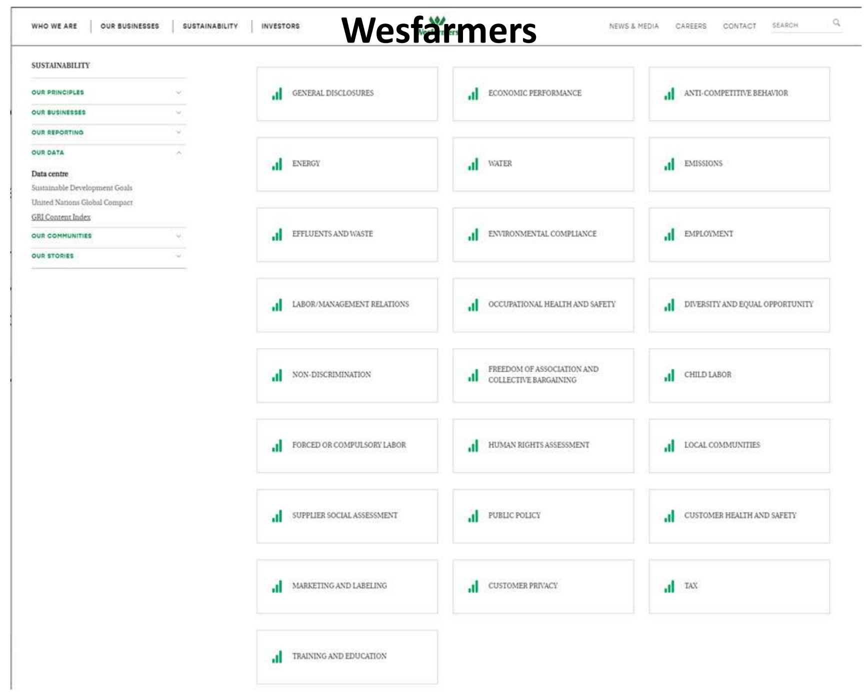
The Global Reporting Initiative (GRI) https://www.globalreporting.org/

- GRI is a not-for-profit organisation which provide voluntary suitability reporting standards which allow organizations to report the impacts of their activities on the economy, the environment and society to a wide range of stakeholders

  i.e., Organization's structure and reporting practices; activities and workers; governance; strategy; policies; practices; and stakeholder engagement.

- Reporting on matters that reflect the organisation's significant impacts on the economy, environment and society under GRI reflects a broader focus on societal value (what matters to all of society)

Example of reporting in accordance with GRI standards:



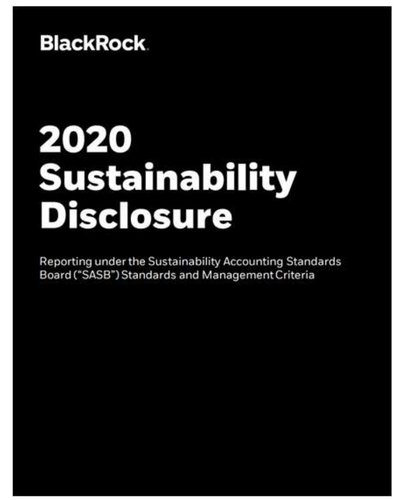
https://www.wesfarmers.com.au/sustainability/our-data/gri-content-index

The Sustainability Accounting Standards Board (SASB) https://www.sasb.org/

- USA-based non-profit organization founded in 2011 adopted mainly in US (merged with IIRC in 2021 to become VRF).
- Developed industry-specific disclosure standards across ESG topics that facilitate communication between companies and investors about financially material, decision-useful information.
- Focus on information for investors.
- Developed sector-specific Key Performance Indicators (KPIs) for sustainability reporting
- 77 sectors, with SASB Investor Advisory Group confirming the most relevant KPIs for each sector.).

Example of reporting in accordance with SASB standards:

BlackRock



https://www.blackrock.com/corporate/literature/continuous-disclosure-and-important-information/blackrock-2020-sasb-disclosure.pdf

Task Force on Climate-related Financial Disclosures (TCFD) https://www.fsb-tcfd.org/

- In 2017, the TCFD released climate-related financial disclosure recommendations
- The TCFD recommendations are voluntary and provide guidance on the disclosure of information on the financial implications of climate-related risks and opportunities
- The disclosures relate to impacts on governance, strategy, risk management; targets and metrics
- The disclosures allow market participants to integrate climate risk into business and investment decisions

Example of reporting in accordance with TCFD:

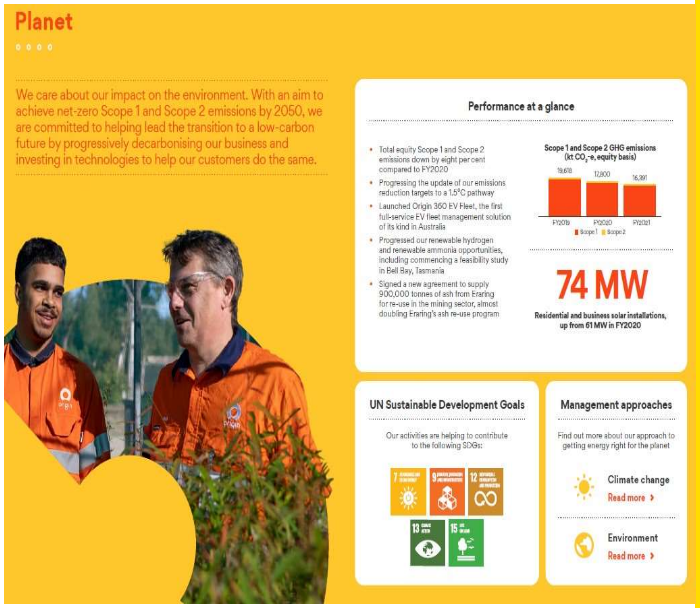
AGL

https://www.agl.com.au/-/media/aglmedia/documents/about-agl/asx-and-media-releases/2021/210812_fy21tcfdreport.pdf?la=en&hash=C6FD395B573008ED8201A5CBE2EE0AD1

Sustainability Development Goals (SDGs) https://sdgs.un.org/goals

- The Sustainable Development Goals or Global Goals were set up in 2015 by the United Nations General Assembly which are a collection of 17 goals designed to be a "blueprint to achieve a better and more sustainable future for all“ by 2030
- The SDGs are to be led by a national governments
- Some companies are voluntarily incorporating SDGs into their strategies and reporting

Example of reporting in accordance with UN SDGs: Origin Energy 2021 Report, page 20



Sustainability Reporting

Alphabet soup of ESG reporting

Corporate citizenship professionals are confronted with a wide array of environmental, social, and governance (ESG) reporting tools. Start off by differentiating between the big six below to help you manage your sustainability programs and be transparent about your company's impacts.

Purpose
Provides all organizations with standards for reporting material environmental, social, and economic performance and impacts, as well as organizational governance, to financial and other stakeholders.

Best for
Companies of any size, sector, or location

Information disclosed
General disclosures
such as governance, stakeholder engagement, and reporting practices

Economic
such as performance, market presence, and indirect economic impacts

Environmental
such as materials, energy, water, biodiversity, emissions, and waste impacts

Social
such as labor relations, health and safety, diversity, human rights, and community engagement

Purpose
Collects and analyzes environmental information disclosed by corporations and governments to help drive all organizations to measure, manage, and reduce their environmental footprint.

Best for
Publicly listed companies and suppliers looking to manage and disclose environmental footprint

Information disclosed
Climate change impacts
including greenhouse gas emissions and energy data

Water impacts
including use efficiency, quality, and ecosystem management

Forest impacts
for companies that overlap with commercial agriculture.

Also includes special considerations for biodiversity impacts, risks, and opportunities within the mining sector.

Purpose
Disclosure standards launched by the Financial Stability Board (FSB), premised on the assumptions that climate risk is a form of financial risk and that it is non-diversifiable.

Best for
Companies seeking to plan for and mitigate climate-related risks

Information disclosed
Governance
such as how, and by whom, climate-related risks are identified, assessed, and communicated

Strategy
including how a changing climate affects it, and your plans / financial implications if it does

Risk Management
risks to your people, operations, customers, and communities where you operate due to a changing climate, and how you will respond

Metrics and Targets
such as how you are calculating impacts or the results of your actions or inactions, and how you are reducing your climate impacts

ccc.bc.edu

Purpose
The international IR Framework establishes the guiding principles that underpin the SASB standards. The SASB standards are derived from the IR Framework, such that SASB and IIRC are considering a merger to unify the two into one cohesive system of corporate reporting.

Information disclosed
SASB metrics to include within IR Framework:

Environmental impacts
such as GHG emissions; air quality; energy, water, and waste management; and ecological impacts

Social capital
such as human rights and community relations; consumer privacy and data security; product quality, safety, and access; and customer welfare

Human capital
such as labor practices; employee health, safety, and engagement; and diversity and inclusion

Business model resilience and innovation
such as product lifecycle and supply chain management; and physical climate change impacts

Leadership and governance
such as business ethics, legal and regulatory environment, and risk management

Using IR	Using SASB
Framework guidance for how information is structured/presented and topics covered	**Standard** detailed requirements for reporting by topic and industry
Industry-agnostic	Industry-specific
Principles-based	Metrics-based
High-level content elements	Disclosure topics and metrics
Drives connectivity of information	Enables comparability of information

Purpose
The 17 goals, adopted by the U.N. as part of the 2030 Agenda for Sustainable Development, provide a global blueprint to improve the lives and prospects of all people.

Best for
Companies with a global reach, especially those with cross-sector partnerships

Information disclosed
For each goal, there are sub-goals—or "targets"—and related indicators, all of which can be useful for tracking your company's progress. Learn more at **sdgcompass.org**.

ALIGNMENT BETWEEN REPORTING TOOLS

These frameworks, standards, and recommendations are not mutually exclusive: A 2018 study found that 97% of S&P 500 companies that publish a corporate citizenship report utilize multiple frameworks and standards.[1]

Take the BCCCC course, **Fundamentals of Sustainability Reporting**. Enroll now at **ccc.bc.edu/learning**.

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CARROLL SCHOOL OF MANAGEMENT

1 Lukomnik, J. (2018). State of Integrated and Sustainability Reporting 2018. https://corpgov.law.harvard.edu/2018/12/03/state-of-integrated-and-sustainability-reporting-2018/#1

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Example 5: Stakeholder engagement & materiality

Reporting on what matters

To determine our material matters, we talked to a diverse range of our internal and external stakeholders about all sorts of things that mattered to them.

Central government

We engaged with government agencies, regulators, Ministers and Members of Parliament about the macro-environment in which we operate. We had constructive conversations about fuel prices, industry competition, alternative fuels and clean energy, climate change, and the security of energy supply.

Our investors

We run regular domestic and international investor roadshows. This year, key material topics included capital allocation, performance in Retail, the Flick acquisition and our dividend policy.

Our customers

We talked to customers about our latest innovations and ways to improve our customer service, such as through Fastlane and the Good in the Hood programme. This was through customer surveys and face-to-face interviews conducted as part of innovation projects.

The media

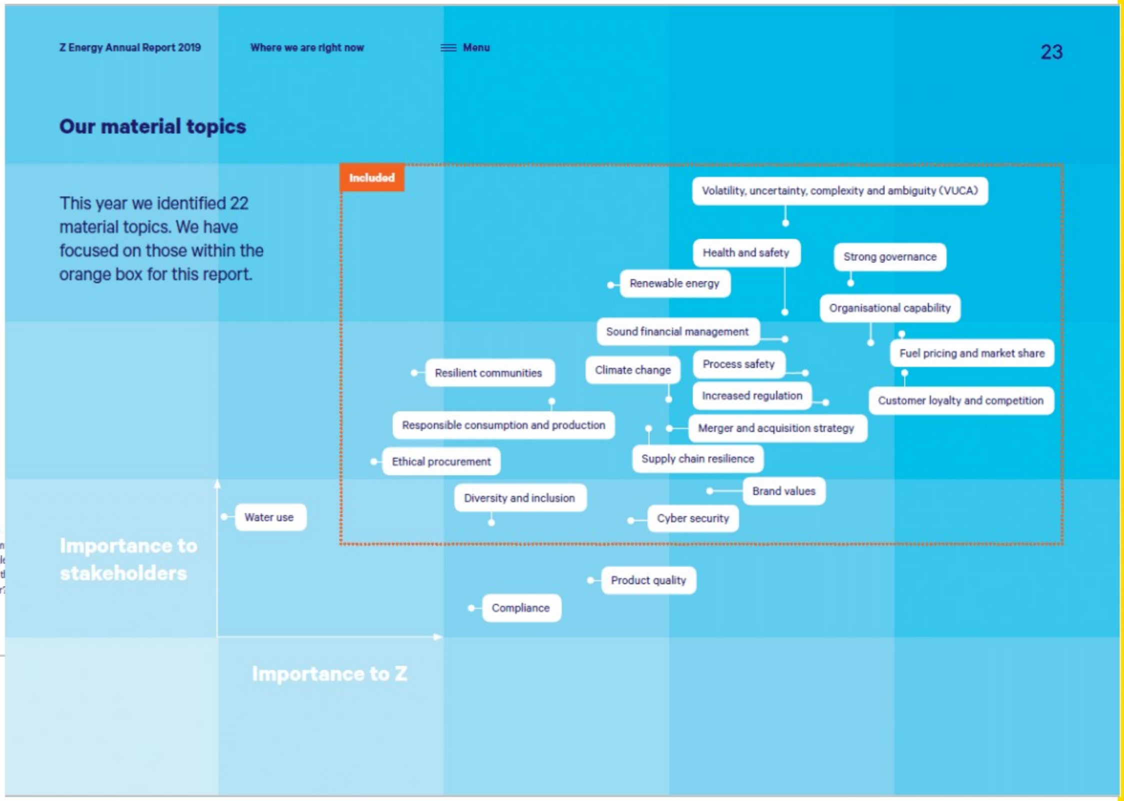
We participated in public forums and media interviews on a range of topics that matter to New Zealanders. We are known for being totally accessible and straight up when speaking in public; through this approach, we hope others will respond positively.

A diverse range of organisations

We engaged with local government, community groups, not-for-profit organisations and the sustainability sector about environmental and sustainability issues, and how Z can best make a difference in our local communities.

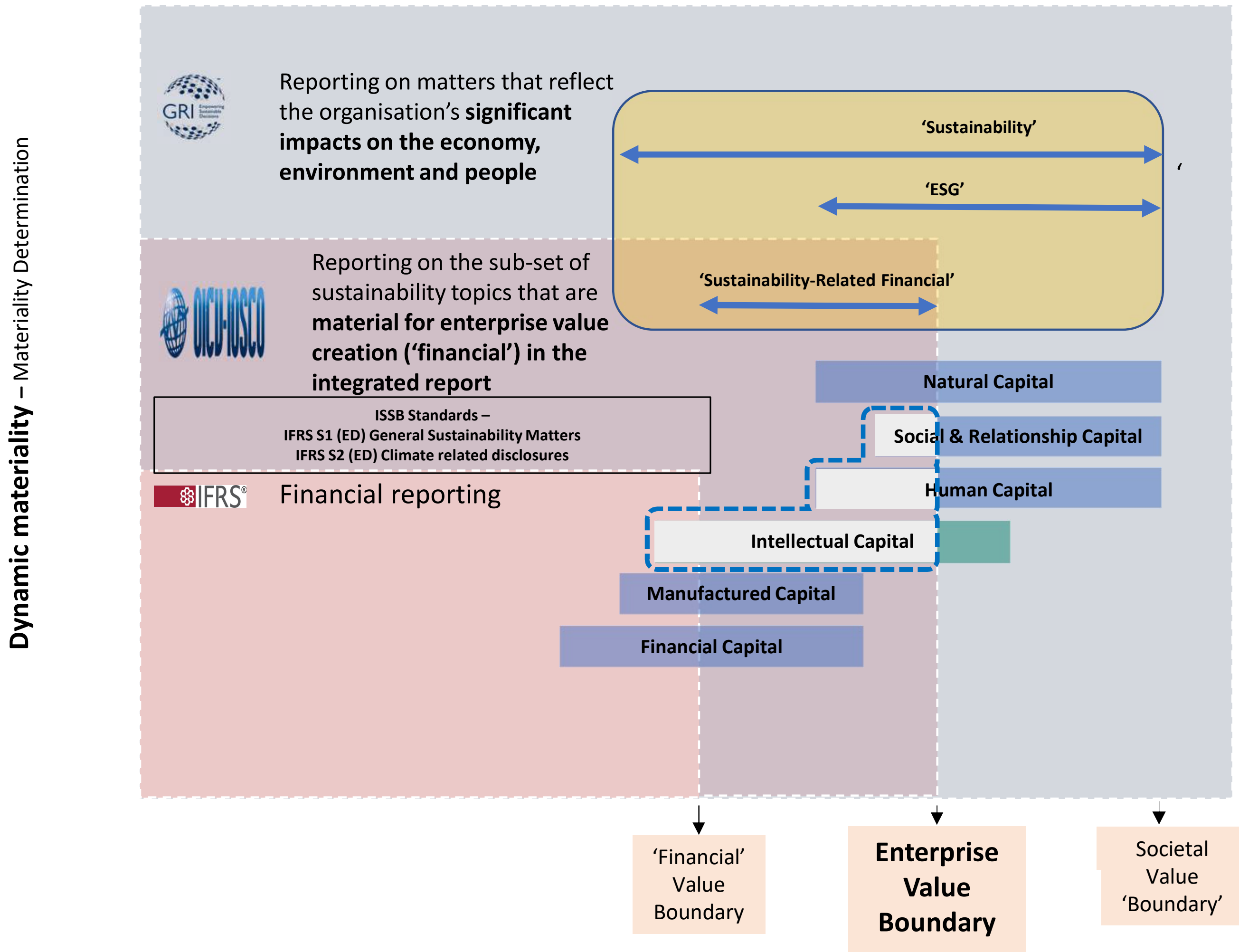
Members of the public

We remain active on social media and receive feedback and comments from members of the public. During the year we ran several prominen campaigns, including one about removing singl use plastic bags from our service stations and t more lighthearted 'What's the name of your car'



Source: Z Energy Annual Report 2019 (p.22 – 23)

Can we model this?

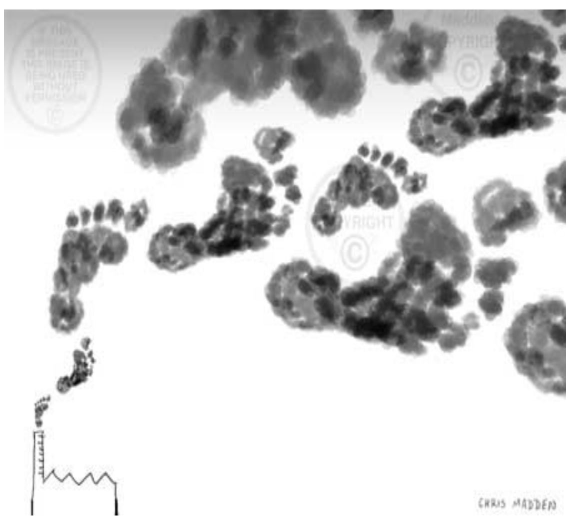


The Intangibles Boundary
'Intangibles' (results from composite of WICI definition of intangibles and place of intangibles in 6 capitals of <IR> Framework): *"organisational capital; intellectual property; innovative competencies, capabilities and experience; brand and reputation; and [institutional and relational] information sharing abilities directed to enhancing the individual and collective well-being of stakeholders."*

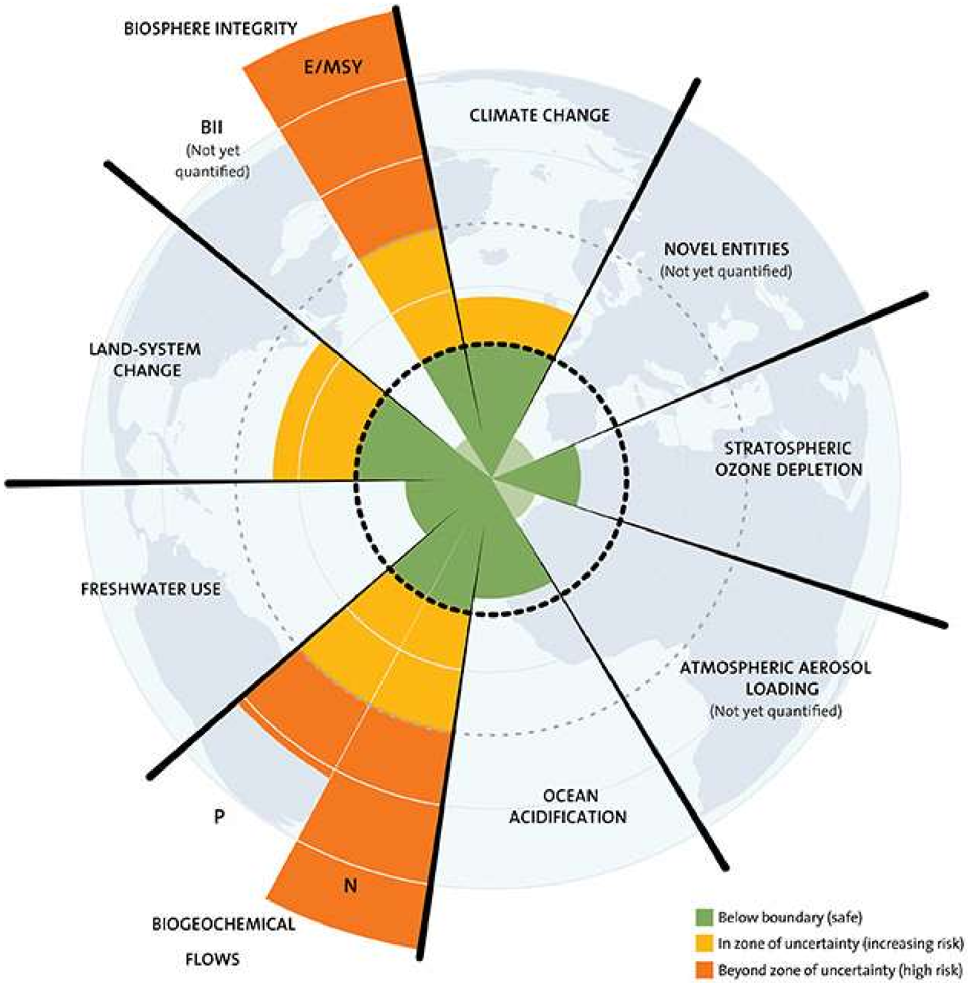
- **Environmental reporting:**
  - Environmental reporting is a subset of sustainability reporting.
  - When preparing sustainability reports, organisations generally include information about their environmental performance and impacts.
  - Research on environmental disclosure has largely examined this issue in terms of an organisation's social contract, arguing that organisations can only continue to exist in society if they operate within a value system consistent with that society
  - Organisations that have been subject to scrutiny due to concerns of poor environmental performance (e.g. high emissions, large oil spills) have subsequently been found to provide greater levels of environmental information (Deegan & Rankin 1996).
  - Another factor that could affect environmental reporting is firm reputation and strategic risk management.

Contrast between a Carbon Footprint and Fits Ecological Footprint

- **Carbon footprint** is the amount of carbon (in tonnes) emitted by an activity.



- **Ecological Footprint** translates the amount of carbon dioxide into the amount of productive land and sea area required to produce resources consumed and sequester carbon dioxide emissions
- Measured in number of planets where one planet = earth's biocapacity
- Humanity exceeded the ecological budget in October 2000 (Global Footprint Network)
- Note humanity's ecological footprint is at 1.6 times earth's biocapacity



We are progressively **crossing the planetary boundaries**

Stockholm Resilience Centre
Sustainability Science for Biosphere Stewardship
Stockholm University

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Fundamentals of GHG Accounting

- What is GHG Accounting?
- *...a way to account for the emissions and reductions of greenhouse gases in the atmosphere*
- Why account for GHG gases?
- *... you can not manage what you do not measure*
- Standards and protocols used (GHG protocol, ISO 14064)
- Sources of GHGs (6 GHGs covered by Kyoto Protocol)
- Global warming potential (GWP)
- Distinction between carbon and CO_2
- Setting boundaries
- Setting targets

Step-by-step guide to accounting and reporting GHG inventory

1. **Set temporal, organisational and operational boundaries**
2. Track emissions over time
3. **Identify and calculate GHG emissions**
4. Manage inventory quality
5. Account for GHG reductions
6. **Report GHG emissions**
7. Verify GHG emissions
8. Set GHG targets

Set boundaries

- **Temporal boundaries** will involve selecting
- Time period to report
- Calendar or fiscal period

•**Organizational boundaries** will involve identifying what units to include (e.g. consolidated, Lease arrangement JV etc)

•**Operational boundaries** will involve identifying sources of emissions

Operational Boundaries

- Define the GHG emission sources from within the organisational boundary (i.e. those that result to the burning of fossil fuels in connection with their operations/activities)
- For example: Electricity use, transportation, air travel, use of boilers and furnaces and other energy consumption
- Effective and innovative GHG management requires a comprehensive coverage of its direct (Scope 1) and indirect (Scope 2) emissions
  - Direct emissions – those emitted from **sources owned or controlled by the entity/company** (e.g. generation of electricity, heat or steam – boilers, furnaces, turbines)
  - Indirect emissions – **emissions from purchased electricity** consumed by the company in its owned and controlled equipment or operations
- Scope 3: Other indirect emissions – those emitted as a consequence of the activities of the company but **occur at sources owned by another company**

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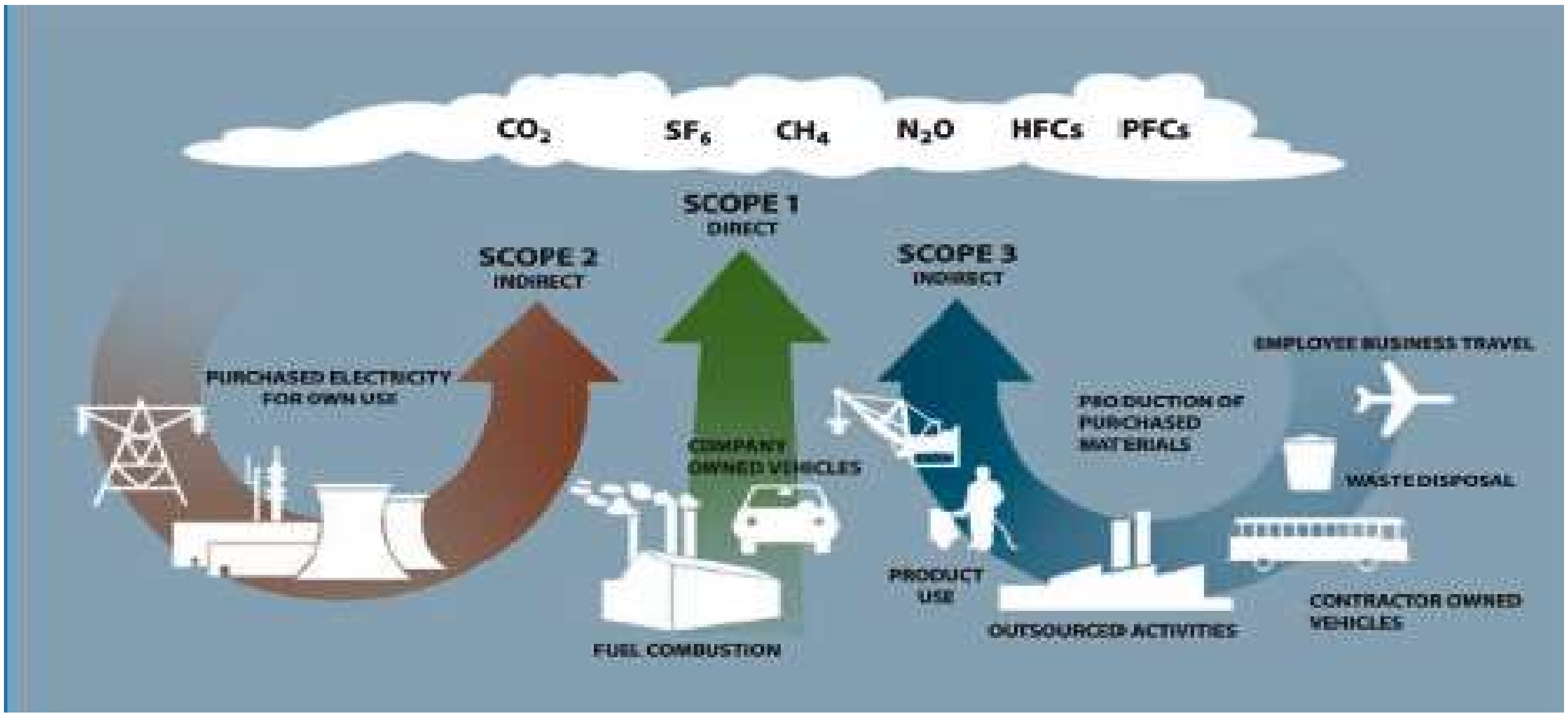
Set Operational Boundary - Breakdown of Emission Sources



Source: New Zealand Business Council for Sustainable Development

Business Value Driver key performance indicators

For more information about each key performance indicator, refer to the scorecards in Section 3.2. The key performance indicators should also be read in conjunction with the Glossary to the Business Value Drivers on page 178.

		FY22	FY21	FY20	FY19	FY18
Customers						
Net Promoter Score (NPS)		+6	+5	+2	-11	-23
Ombudsman complaints		4,873	5,973	7,731	11,138	11,413
Number of customers on Staying Connected		15,964	26,263	28,051	30,083	26,657
Average level of debt of customers on Staying Connected	$	2,973	2,768	2,293	2,301	2,502
Total average debt across mass market customer portfolio	$	241	292	319	331	501
Communities & Relationships						
RepTrak score		65.8	66.7	68.3	61.4	61.4
Community contribution	$m	3.8	5.2	4.3	4.5	4.3
Underlying effective tax rate	%	23.2	27.0	28.3	29.1	29.5
People						
TIFR employees		1.5	1.7	2.6	2.1	1.2
TIFR (employees + contractors)		2.1	2.3	3.3	3.6	2.4
Fatalities (employees + contractors)		0	0	0	0	0
Employee engagement	%	57	62	73	68	Not measured[1]
Gender mix in senior leadership pipeline	% female	35	36	38	38	42
Material breaches of Code of Conduct		0	0	0	0	Not reported
Attrition (total workforce)	%	22	10	9	12	11
Key talent retention	%	76	95	98	80	81
Environment						
Operated scope 1 + 2 emissions	$MtCO_2e$	40.1	40.8	42.7	43.2	43.6
Controlled generation intensity	tCO_2e/MWh	0.938	0.95	0.93	0.95	0.96
Controlled renewable and battery capacity	%	24.2	23.0	22.5	19.6	18.4
Emissions intensity of total revenue	$ktCO_2e/\$m$	3.0	3.7	3.5	3.3	3.4
Revenue from green energy and carbon neutral products	%	15.3	13.4	11.5	10.8	Not reported
Environmental Regulatory Reportable incidents		13	11	9	12	14

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Typico plc – GHG Statement (an Illustration)
Source: PricewaterhouseCoopers, 2009.

Summary of GHG emissions for the year ended 31 December 2009

CO_2e emissions ('000 tonnes)	Note	Performance		Adjusted Baseline	Target	Percentage Change	
		2009 Assured*	2008	2006	2012	2008 /2009	2006 /2009
Scope 1	2,3,4	432	521	645	364	-17%	-33%
Scope 2	2,3,4	1,293	1,386	1,494	1,038	-7%	-13%
Total gross controlled emissions	2,3,4	**1,725**	**1,907**	**2,139**	**1,402**	**-10%**	**-19%**
Scope 3	2,3,4	7,245	7,320	8,001	6,101	-1%	-9%
Total gross emissions	2,3,4	8,970	9,227	10,140	7,503	-3%	-12%
Renewable electricity purchased in the UK	1.9	(12)	(89)	–	–		
Renewable electricity sold to grid		(946)	(500)	–	(1,038)		
Voluntary carbon offsets		(1,725)	(1,907)	–	(1,402)		
Net emissions		6,287	6,731	10,140	5,063	-7%	-38%

Greenhouse gas emission intensity

CO_2e '000 tonnes / £m turnover	Industry benchmark#	2009	2008	Baseline 2006	Target 2012
Scope 1	0.150	0.100	0.157	0.229	0.057
Scope 2	0.400	0.299	0.418	0.531	0.162
Scope 3	1.500	1.675	2.208	2.841	0.953
Total	2.050	2.074	2.783	3.601	1.172

[Description of industry benchmark used]