



Centre for Governance, Institutions & Organisations
NUS Business School



SUSTAINABILITY REPORTING: PROGRESS AND CHALLENGES

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Director, Centre for Governance, Institutions and Organisations (CGIO)
NUS Business School, National University of Singapore
4 December 2019

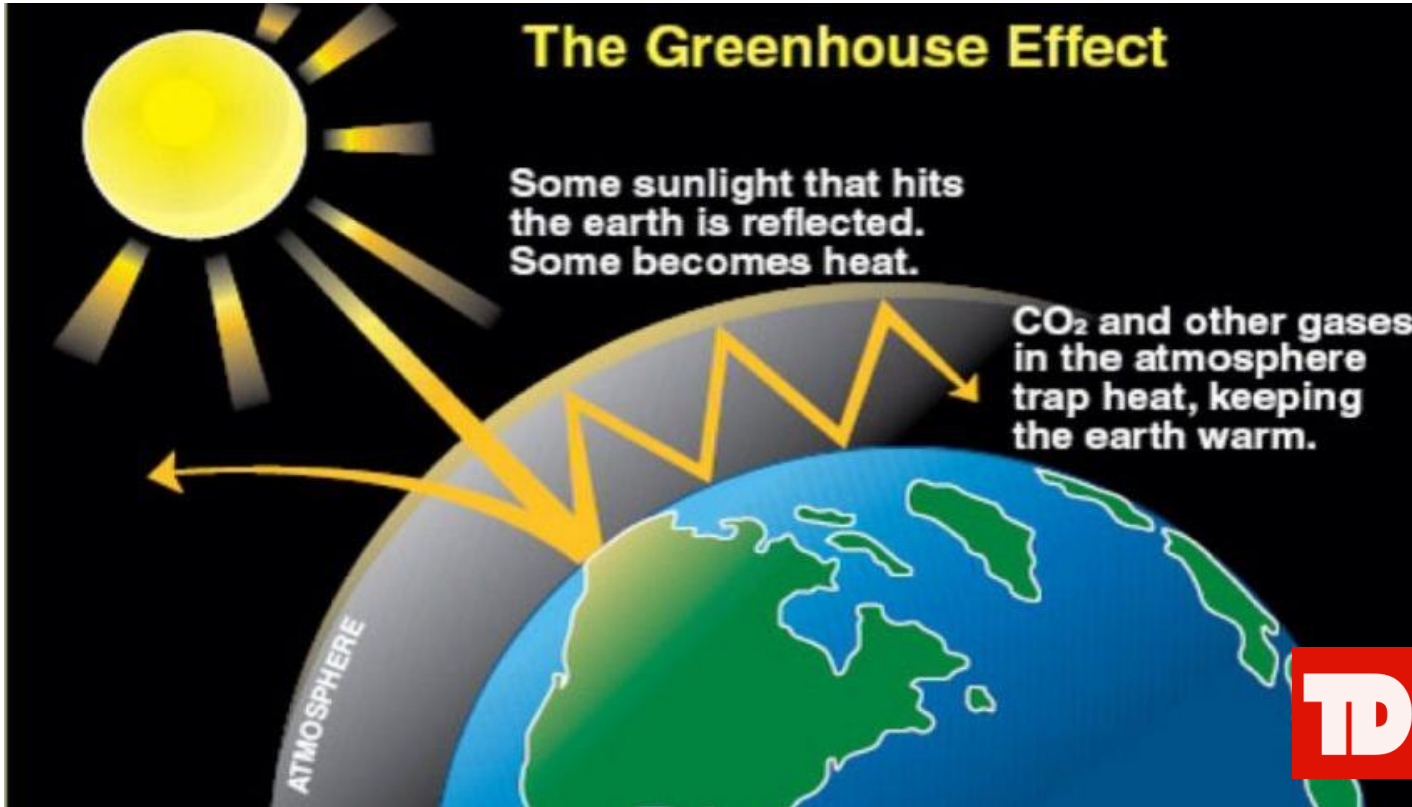
Agenda

- **Singapore and Climate Change**
- **Sustainability Information**
- **SGX Sustainability Reporting Requirements**
- **Research Methodology and Findings**
- **Summary**

Section 1

Singapore and Climate Change

You cannot deny climate science



Climate change and butterfly effect



How vulnerable is Singapore to climate change?



Image Source: CBC News Jun 17, 2019

LCZ G	Water
LCZ F	Bare Soil or Sand
LCZ E	Bare Rock or Paved
LCZ D	Low Plants
LCZ C	Bush, Scrub
LCZ B	Sparse Trees
LCZ A	Dense Trees
LCZ 10	Heavy Industry
LCZ 9	Sparsely Built
LCZ 8	Large low-rise
LCZ 7	Lightweight low-rise
LCZ 6	Open low-rise
LCZ 5	Open mid-rise
LCZ 4	Open high-rise
LCZ 3	Compact low-rise
LCZ 2	Compact mid-rise
LCZ 1	Compact high-rise



1 of 5 A map depicting Singapore's climate zones provides a research framework for urban heat island studies under the Cooling Singapore project. Replacing natural forests with buildings results in built-up surfaces retaining or producing heat. PHOTO: DR MUHAMMAD OMER MUGHAL, COOLING SINGAPORE PROJECT

The country is exposed to hazardous impacts such as rising sea levels, higher temperatures.

Image Source: The Straits Times PUBLISHED SEP 6, 2018, 5:00 AM SGT

Section 2

Sustainability Information

Facets of sustainability: More than going green

Sustainability

The possibility that human and other forms of life on earth will flourish forever.

– John Ehrenfeld, Professor Emeritus, MIT –

Sustainable Development (SD)

Meeting the needs of the present generation without compromising the ability of future generations to meet their own needs.

– Brundtland Commission, 1987 –

Enough – for all – forever.

– African Delegate to Johannesburg (Rio+10) –

Illustration on sustainability information

Examples of financial and non-financial environmental information

	Energy	Waste	Water	Procurements
Financial	Expenditure on transportation / heating	Disposal costs	Water bills	Price of purchases
Non-financial	CO ₂ tons (per person)	Waste in tons / number of collections / recycled waste	Water consumption (cubic meters)	Share of eco-labeled and fair-trade products

THE BUSINESS TIMES

Governance and sustainability must go together for long-term good

Companies that embrace the tenets of good governance and sustainability give everyone the best chance of success.

© MON, OCT 07, 2019 - 5:50 AM

MICHAEL TANG

A primer for corporate leaders in the age of reporting and standards

While the natural instinct is to have in-house experts or outside consultants doing everything in governance and sustainability reporting, this cannot be the case as leaders' ownership is necessary.

© MON, OCT 07, 2019 - 5:50 AM

LAWRENCE LOH

Section 3

SGX

Sustainability Reporting Requirements

SGX sustainability reporting requirements (1)

- Issued in June 2016
- All listed issuers will begin **sustainability reporting** for any **financial year ending on or after 31 December 2017**
- May differ in speed of progress in quality and depth in 3-year phased **transition period**
- **Listing Rule 711A** in SGX's revised guidelines requires every issuer to prepare an annual sustainability report
- **Listing Rule 711B** spells out primary components for describing issuer's sustainability practices
- Uses '**comply or explain**' basis

SGX sustainability reporting requirements (2)

Five primary components encompass:

- **Material environmental, social and governance (ESG) factors**
- **Policies, practices and performance**
- **Targets**
- **Sustainability reporting framework**
- **Board statement**

Section 4

Review of Singapore-listed Issuers' Sustainability Reports 2019

Research Methodology and Findings

Methodology

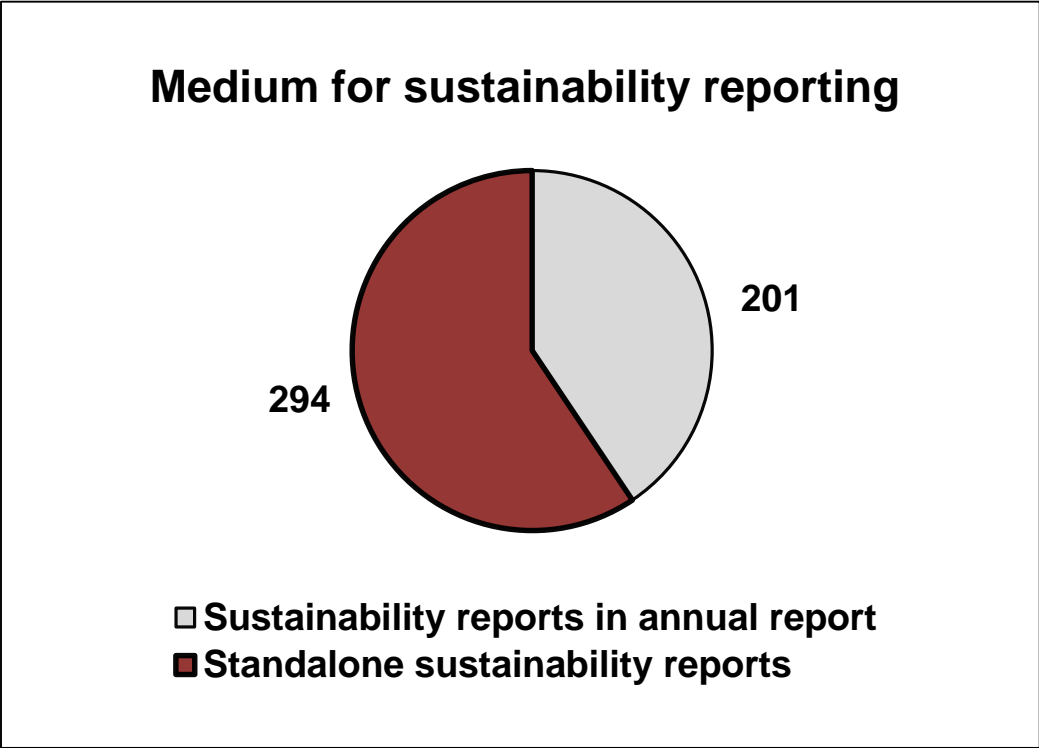
- Assessment framework

SGX-CGIO Sustainability Reporting Scorecard	
Category	Weightage
General scope	10%
Material ESG factors	20%
Policies, practices and performance	20%
Targets	20%
Sustainability reporting framework	15%
Board statement	15%
Total	100%

- Assessment scope

Singapore Listed issuers' sustainability reports announced on SGXNet as of 31/12/2018

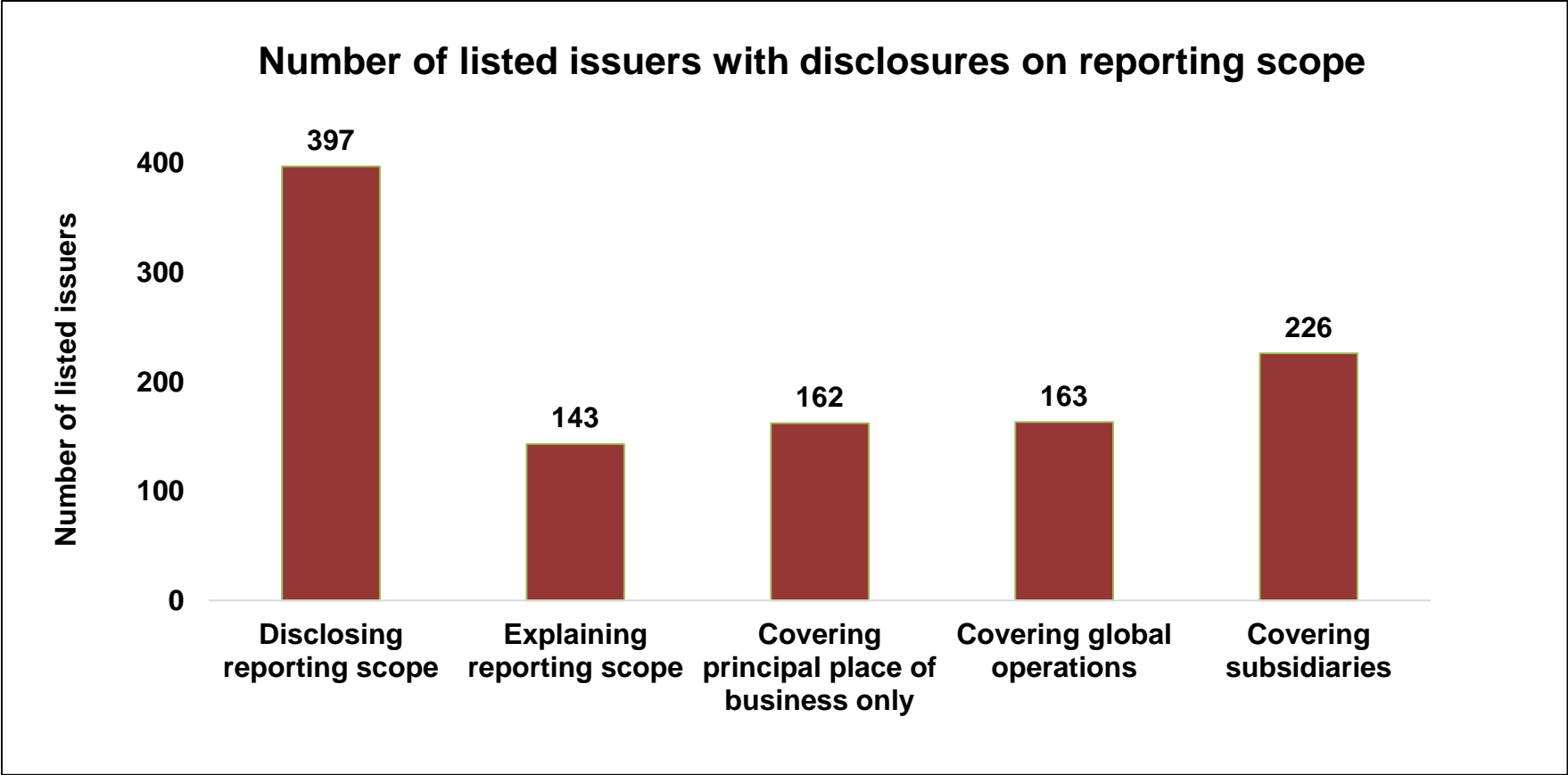
Overview of sustainability reporting in Singapore



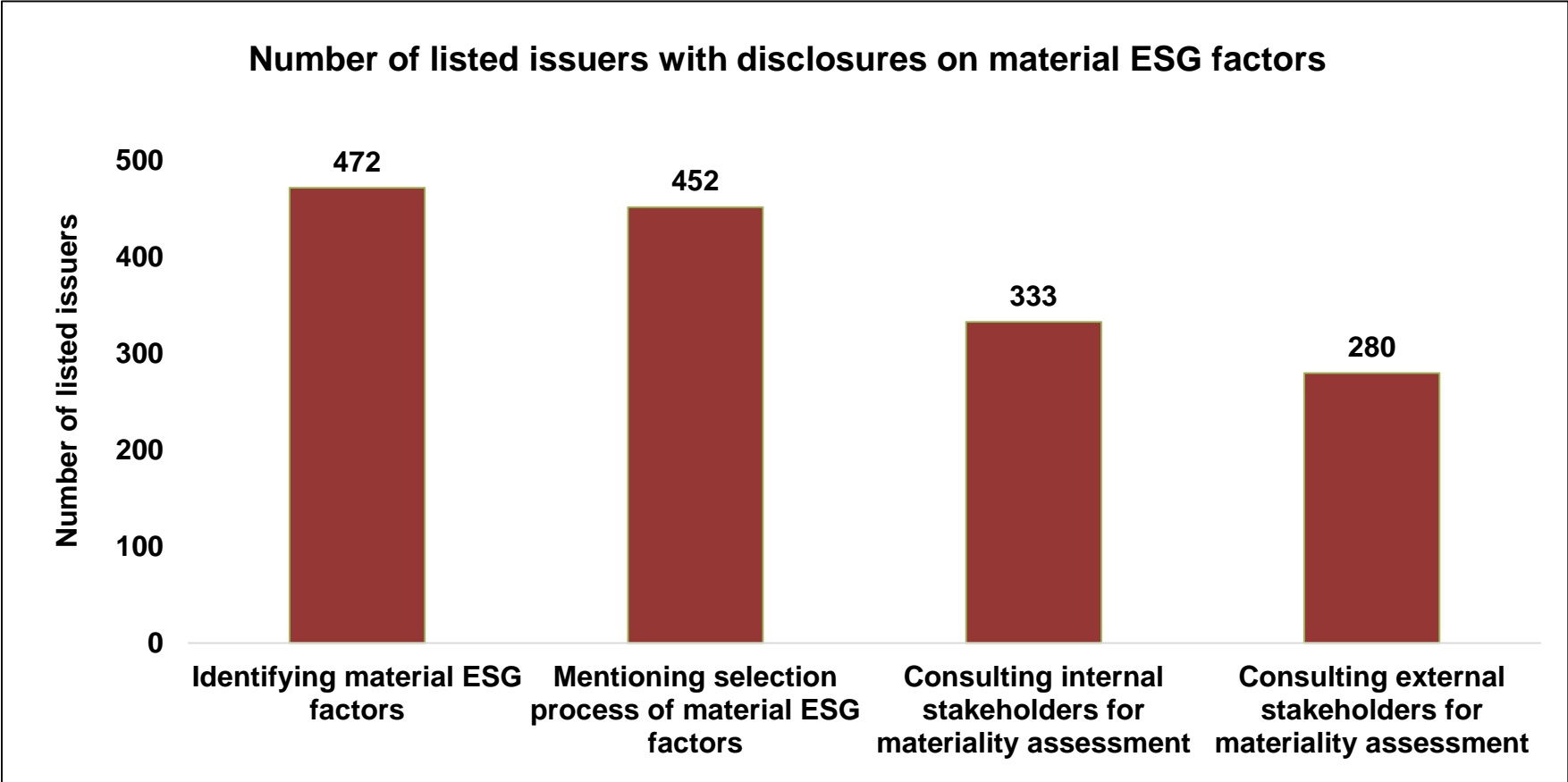
495 out of 627 Singapore-listed issuers have communicated sustainability disclosures, either as a section in their annual reports or in standalone sustainability reports.

The remaining companies were in the process of report preparation as at assessment cut-off date. All listed issuers would have their inaugural sustainability reports by the end of Year 2019.

General scope



Five primary components - Material ESG factors (1)



Five primary components - Material ESG factors (2)

Environment-related Material ESG Factor List	Communication services	Consumer discretionary	Consumer staples	Energy	Financials	Health care	Industrials	Information technology	Materials	Real estate	Utilities
Materials											
Energy	Diagonal lines	Diagonal lines	Diagonal lines	Diagonal lines	Diagonal lines	Diagonal lines	Diagonal lines	Diagonal lines	Diagonal lines	Diagonal lines	Diagonal lines
Water		Diagonal lines	Diagonal lines			Diagonal lines	Diagonal lines		Diagonal lines	Diagonal lines	Diagonal lines
Emission	Diagonal lines	Diagonal lines		Diagonal lines			Diagonal lines		Diagonal lines	Diagonal lines	Diagonal lines
Effluents and waste	Diagonal lines		Diagonal lines	Diagonal lines		Diagonal lines	Diagonal lines	Diagonal lines	Diagonal lines		Diagonal lines
Environmental complaints mechanisms											
Biodiversity											
Environmental compliance				Diagonal lines			Diagonal lines	Diagonal lines	Diagonal lines	Diagonal lines	Diagonal lines
Products and services											
Climate change disclosure	Diagonal lines										Diagonal lines
Transport											
Supplier environmental assessment			Diagonal lines								

Note:

Yellow	0 to 25% listed issuers in the sector
Diagonal lines	>25% to 50 % listed issuers in the sector
Diagonal lines	>50% to 75% listed issuers in the sector
Diagonal lines	>75% listed issuers in the sector

Five primary components - Material ESG factors (3)

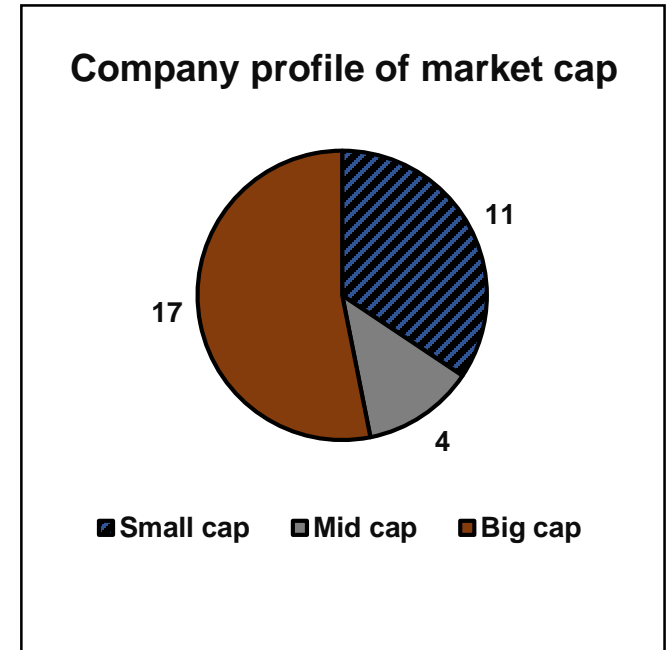
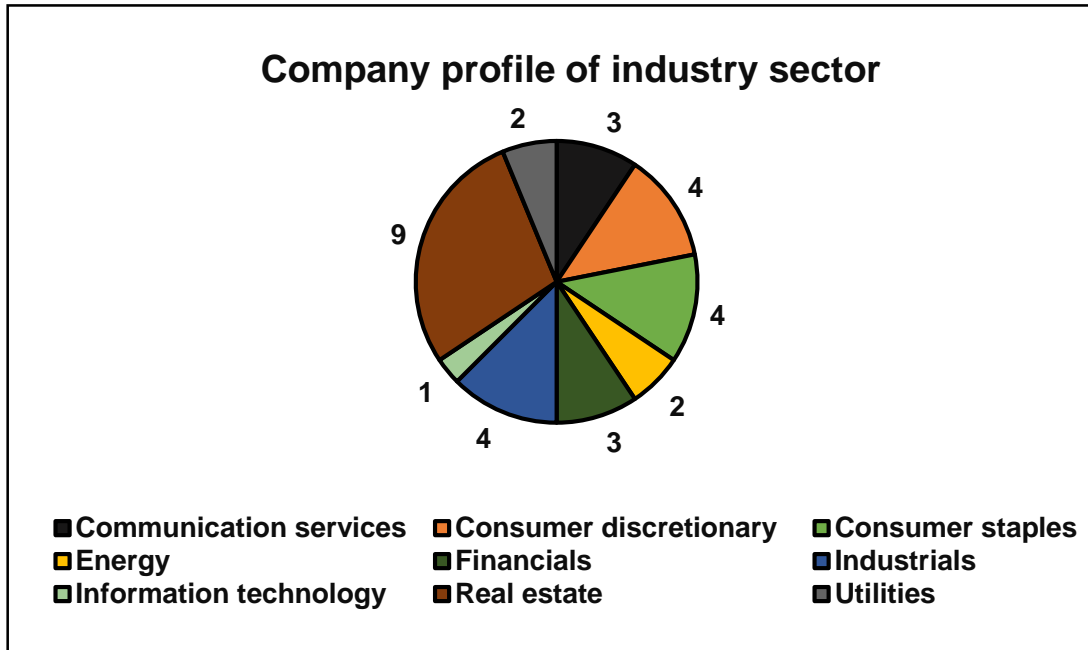
Social-related Material ESG Factor List	Communication services	Consumer discretionary	Consumer staples	Energy	Financials	Health care	Industrials	Information technology	Materials	Real estate	Utilities
Diversity and equal opportunities	>50%	>25%	0%	>25%	>25%	>25%	>25%	>50%	>25%	>25%	>25%
Labour practices and relations	0%	0%	0%	0%	>25%	0%	0%	0%	0%	0%	>25%
Occupational health and safety	>50%	>50%	>50%	>75%	>25%	>50%	>50%	>50%	>50%	>50%	>75%
Training and education	>50%	>50%	>25%	>25%	>50%	>50%	>50%	>25%	>25%	>50%	>50%
Human rights	0%	0%	>25%	0%	0%	0%	0%	0%	0%	0%	0%
Local community involvement	>50%	>25%	0%	>25%	>25%	>25%	>25%	>25%	>25%	>25%	>25%
Product responsibility	0%	>25%	>50%	0%	0%	>50%	0%	0%	0%	0%	>25%
Supplier social assessment	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Consumer privacy	>25%	0%	0%	0%	>50%	>25%	0%	>25%	0%	0%	0%
Employment	>50%	>25%	0%	>25%	>25%	0%	>25%	>25%	0%	>25%	>50%
Customer satisfaction	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Consumer health and safety	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%

Note:

0 to 25% listed issuers in the sector
>25% to 50 % listed issuers in the sector
>50% to 75% listed issuers in the sector
>75% listed issuers in the sector

Five primary components - Material ESG factors (4)

32 listed issuers have identified climate change as their material ESG factors.



THE BUSINESS TIMES

Thursday, Nov 21, 2019



Building the business case to fight climate change

Beyond responsibility and risk, the rationale of benefit is key. Companies must see that it is in their very own self-interest to take on climate change. BY LAWRENCE LOH

THE recent US\$2 billion commitment by Singapore to drive sustainability, particularly green finance, could not have been made at a more critical time. It came at the heels of an unprecedented warning by 11,258 scientists across 153 countries that our planet faces a climate emergency.

Businesses will now have to go back to the drawing board to reassess the emerging threats from climate change as well as map out responses demanded by stakeholders. Most significantly, they have to build a new case to fight climate change that goes beyond responsibility and risks.

Real anguish

For businesses, the starting point to consider climate change is normally via sustainability. Along this vein, I remember advocating the importance of sustainability even with the smaller enterprises. There was a memorandum rebuttal from a printing company CEO. He proclaimed that if his company embraced sustainability, he would have to close his business. He further retorted that his greatest enemy is the PDF file format which greatly affected his paper printing business.

The reaction epitomises the real sentiments, even anguish, amongst companies on sustainability. To them, it is basic survival that matters first. Sustainability is for the rest

of the world but leave me alone to upkeep the business – goes the sentiment so often felt. I can imagine that the “not for me” freeriding syndrome will be even more pronounced in the battle against climate change. If anything, the impact is distant and indirect. It will be difficult to conceive that business leaders will commit to fight climate change fully and immediately.

Needed action

Climate change is not a new revelation overnight. The major initiating milestone was the United Nations’ Earth Summit held in Rio de Janeiro in June 1992 where countries sought to reduce damage to the environment, especially in the use of fossil fuels.

But the key turning point was the Paris Agreement in 2015 which aimed to keep global temperature increase to below 2 deg C above pre-industrial levels and to pursue an even more stringent limit of 1.5 deg C. While this agreement has been cited just too frequently, it often goes unnoticed that each of the signatory countries, including Singapore, must act and regularly report on its efforts.

The greatest push at the home front to combat climate change came from Prime Minister Lee Hsien Loong at his National Day Rally in August 2019. Mr Lee highlighted, in particular, the potential sea level rise that will profoundly affect the island state. Accord-

ingly, the country will adopt a three-pronged strategy to combat climate change – understand the issue, take measures to mitigate it, and adapt to it.

Dual angles

Companies play a pivotal role in the climate crisis due to intense environment impact, particularly from carbon emission. Building a compelling business case is a crucial lever for action. In my view, the case has thus far been built on two angles.

The first angle comes in the form of “responsibility” to the community by not degrading the environment. It is something good for companies to do socially, and relies on corporate altruism to place society above profit.

In the second angle, consideration of climate change takes the form of “risk”. Companies make assessment of two types of risk that may come about from climate change – direct risk and derived risk.

Direct risk refers to physical impact that may actually damage the company’s products and markets, including the supply chains, through severe weather patterns such as floods and hurricanes.

Derived risk comes from new demands of consumers and investors for the company to adopt climate change actions. These may have implications on sales revenues and capital costs. The risk may also emanate from changes in regulation that require the com-

pany to pursue climate related actions thus entailing not only costs but also operational modifications.

Third angle

However, for businesses to fully accept climate change, a third angle to complete the triangle is needed – that of “rationale”. Companies must see that it is in their very own self interest to take on climate change. This will entail assessing implications of climate change actions on financial bottom lines.

The rationale angle is still in the early stage as many of the climate related standards, such as those embodied in the Global Reporting Initiative (GRI) and the Task Force on Climate related Financial Disclosures (TCFD), are just emerging and being applied.

On business benefit, there has been clear evidence on the financial impact of sustainability as a broader whole. In my study of Singapore-listed companies conducted at my research centre with Ascan CSR Network, we found a significant positive relationship between sustainability reporting and firm value.

In a summative analysis conducted by University of Oxford and Arabesque Partners involving more than 200 studies, it was found that 88 per cent of the studies show that good sustainability practices result in better operational performances. Moreover, 80 per cent indicate that such good practices give rise to better stock price performance.

But the greatest challenge is to demonstrate that climate change practices are beneficial to the company, one company at a time. The evidence is mostly anecdotal as of now.

In a recent September article, *The Straits Times* calculated that PSA Corp’s purchase of 200 liquefied natural gas (LNG) trucks, which represented 15 per cent of its truck fleet, reduced its carbon dioxide emission by 26 per cent compared to diesel trucks. The company stood to gain more than S\$3.5 million in operational savings over 10 years. And this could increase if PSA ramped up its LNG fleet even more.

The rationale view is the most crucial third angle to be triangulated with the angles of responsibility and risk. Only then will we see companies voluntarily embracing the battle of climate change.

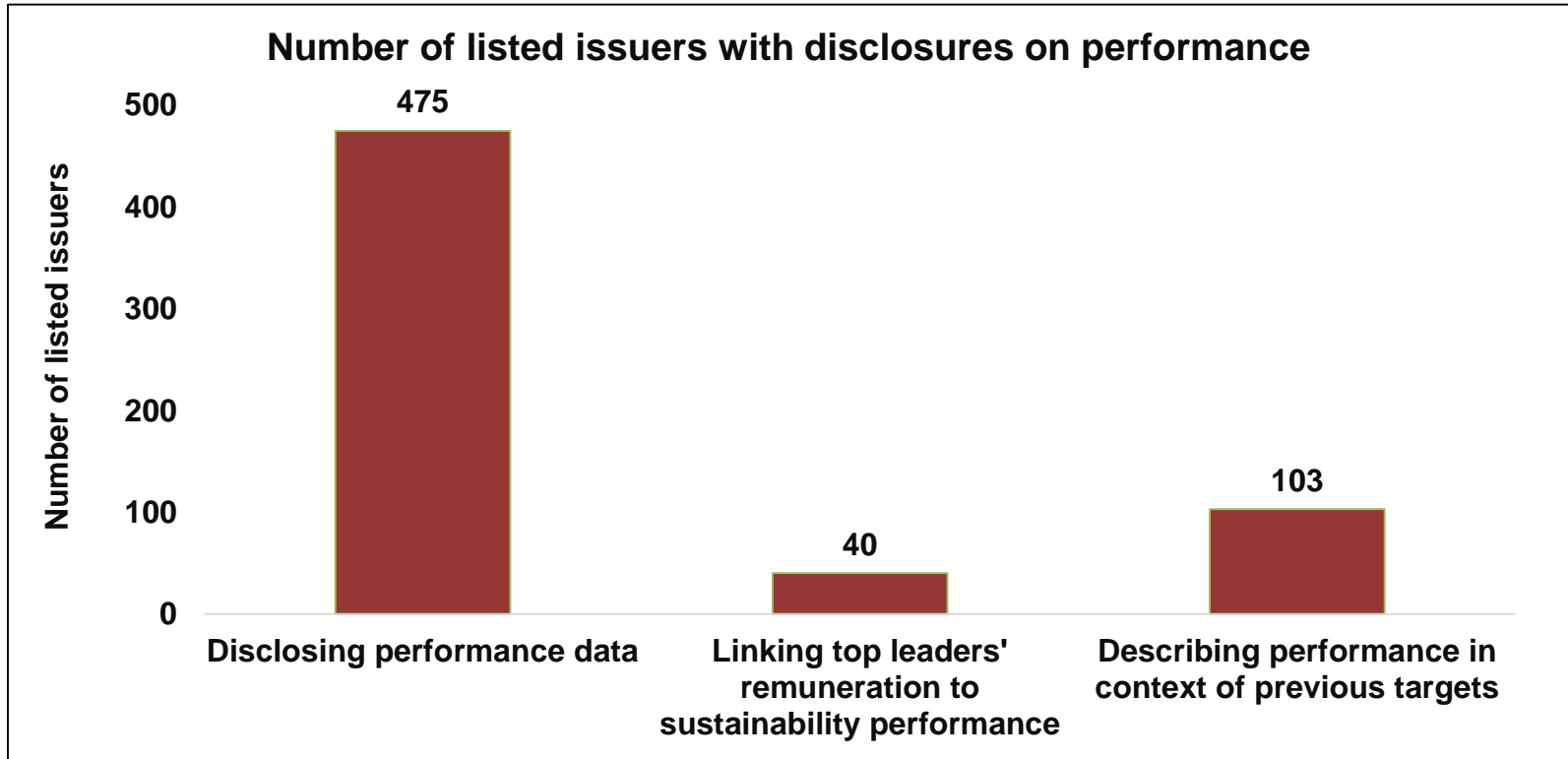
Back to the story of the printing house and its resistance to sustainability – it is clear that if the company sees the tangible returns, it will be serious about sustainability including climate change. The PDF threat, as feared by the CEO, suggests that the company should switch to a new business model. And this will be rationalised on the fundamental reasoning of self interest – business benefit.

|| The writer is associate professor and director of Centre for Governance, Institutions and Organisations at NUS Business School

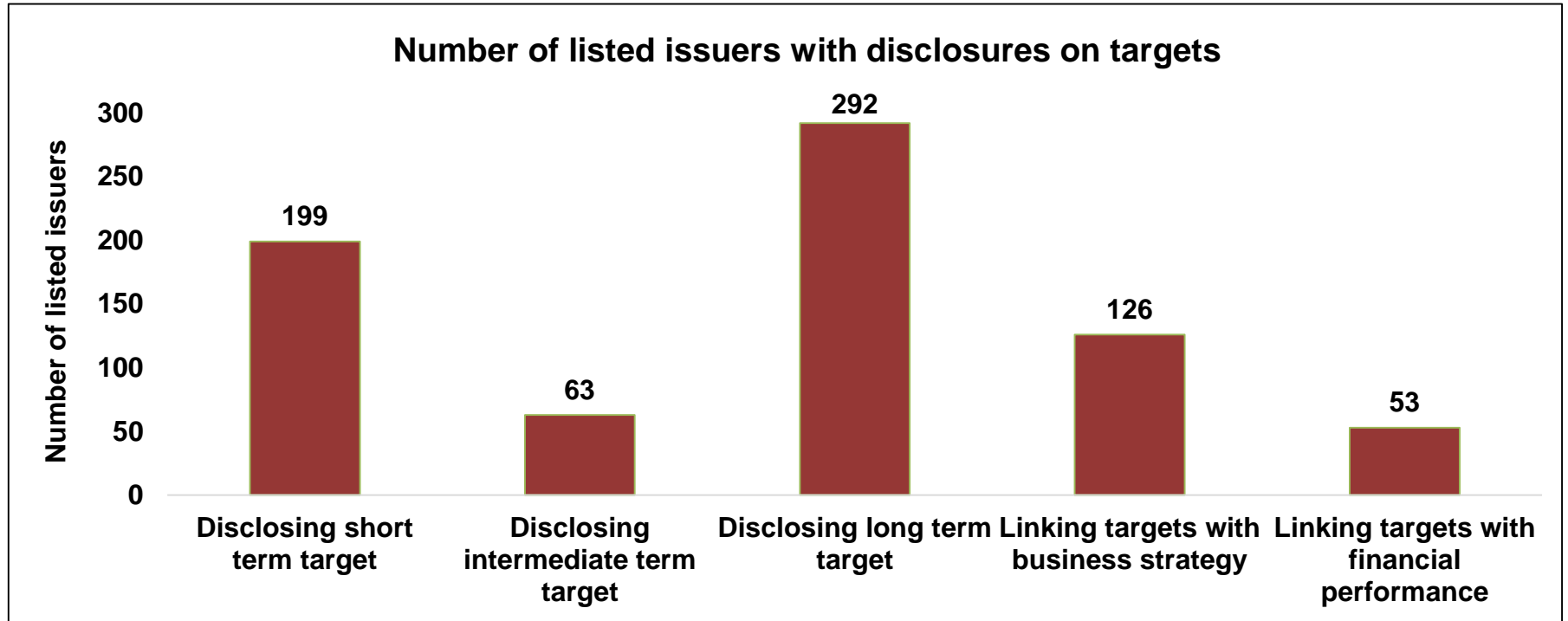
“Businesses will now have to **go back to the drawing board** to reassess the emerging threats from climate change as well as map out responses demanded by stakeholders. Most significantly, they have to **build a new case to fight climate change that goes beyond responsibility and risks.**”

“**Companies play a pivotal role in the climate crisis** due to intense environment impact, particularly from carbon emission. **Building a compelling business case is a crucial lever for action.**”

Five primary components - Policies, practices and performance



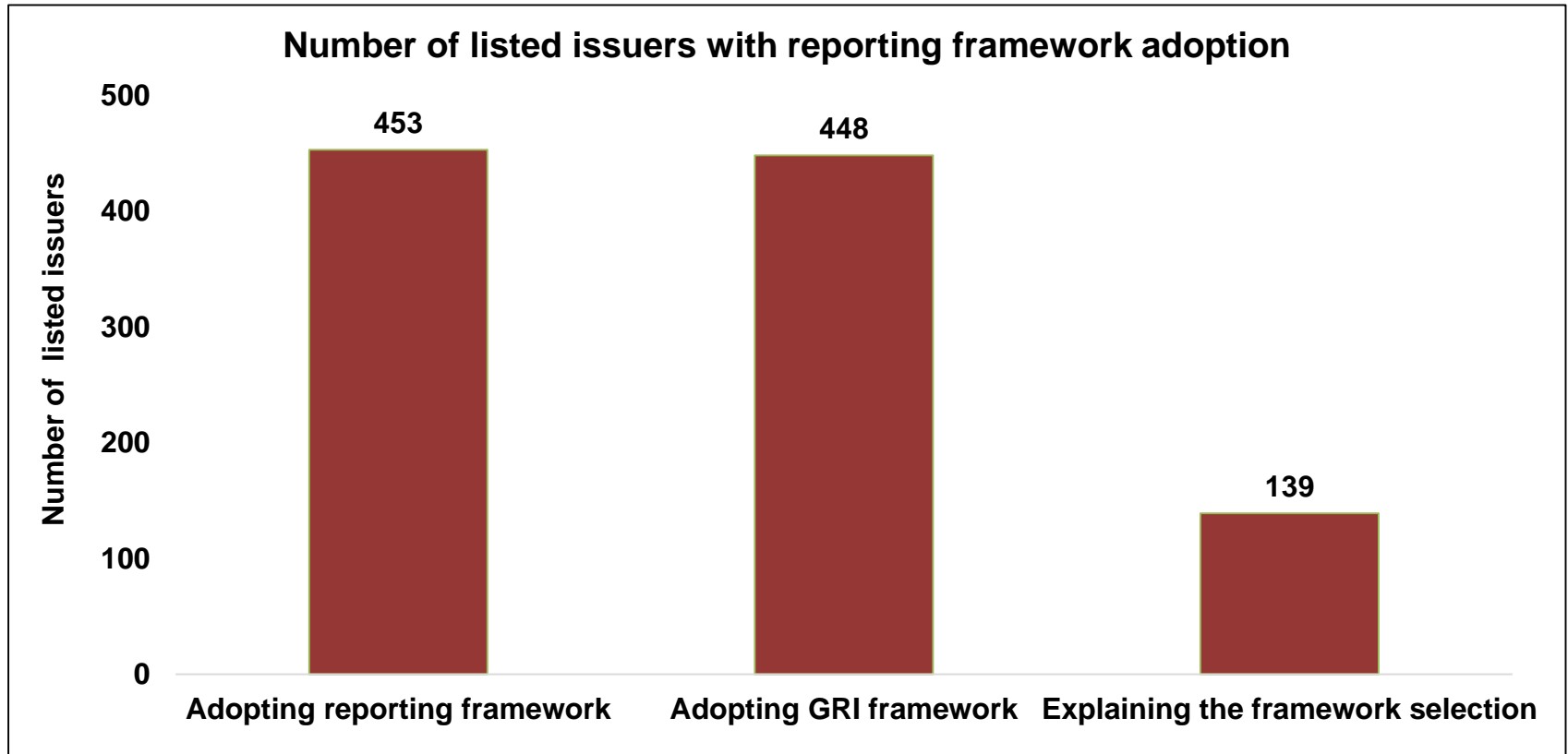
Five primary components - Targets



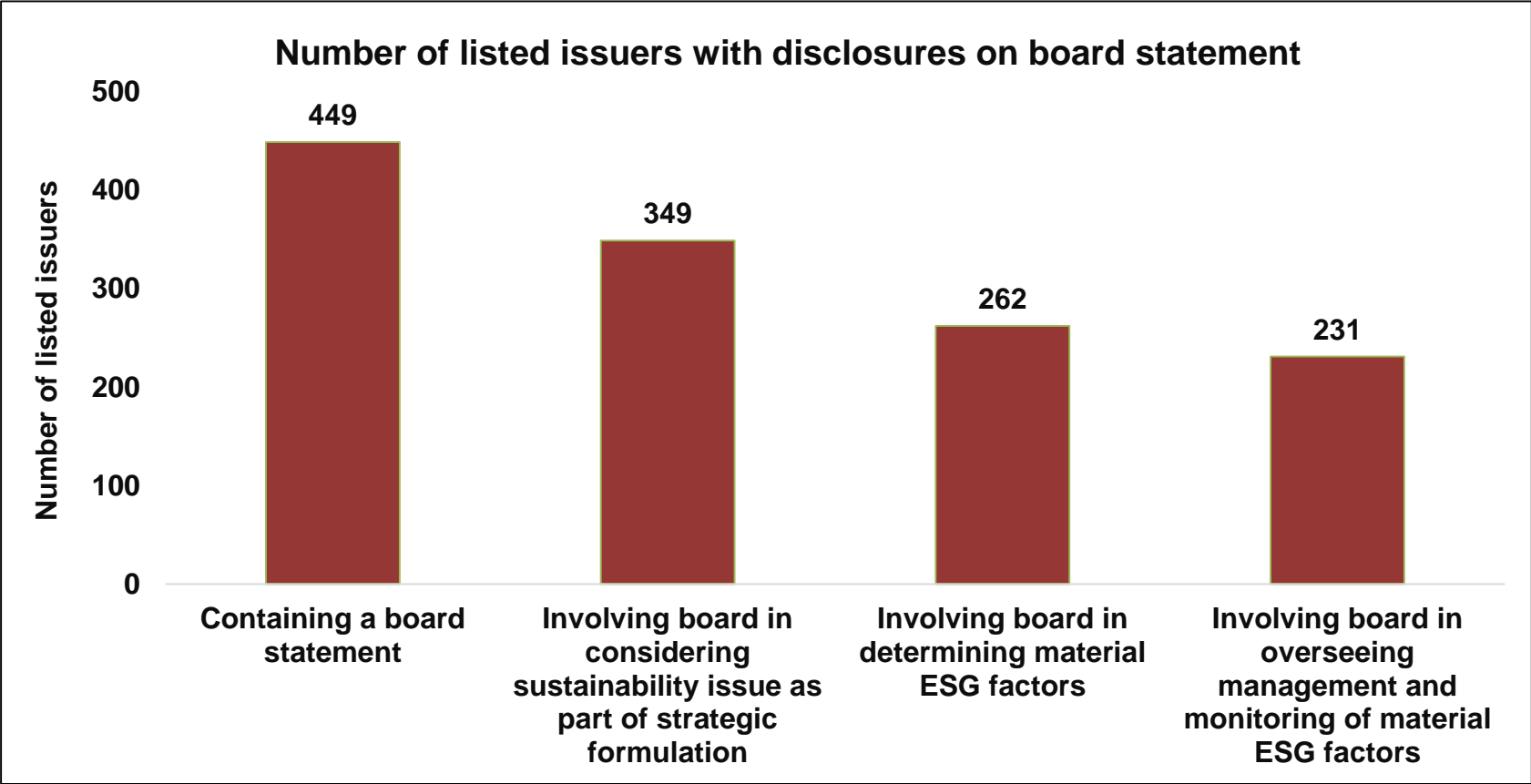
Note:

1. Short term targets refer to the targets that listed issuers hope to achieve within the next reporting period.
2. Intermediate term targets are aimed to achieve within 2 to 5 years.
3. Long term targets are aimed to achieve after 5 years or are not time-bound.

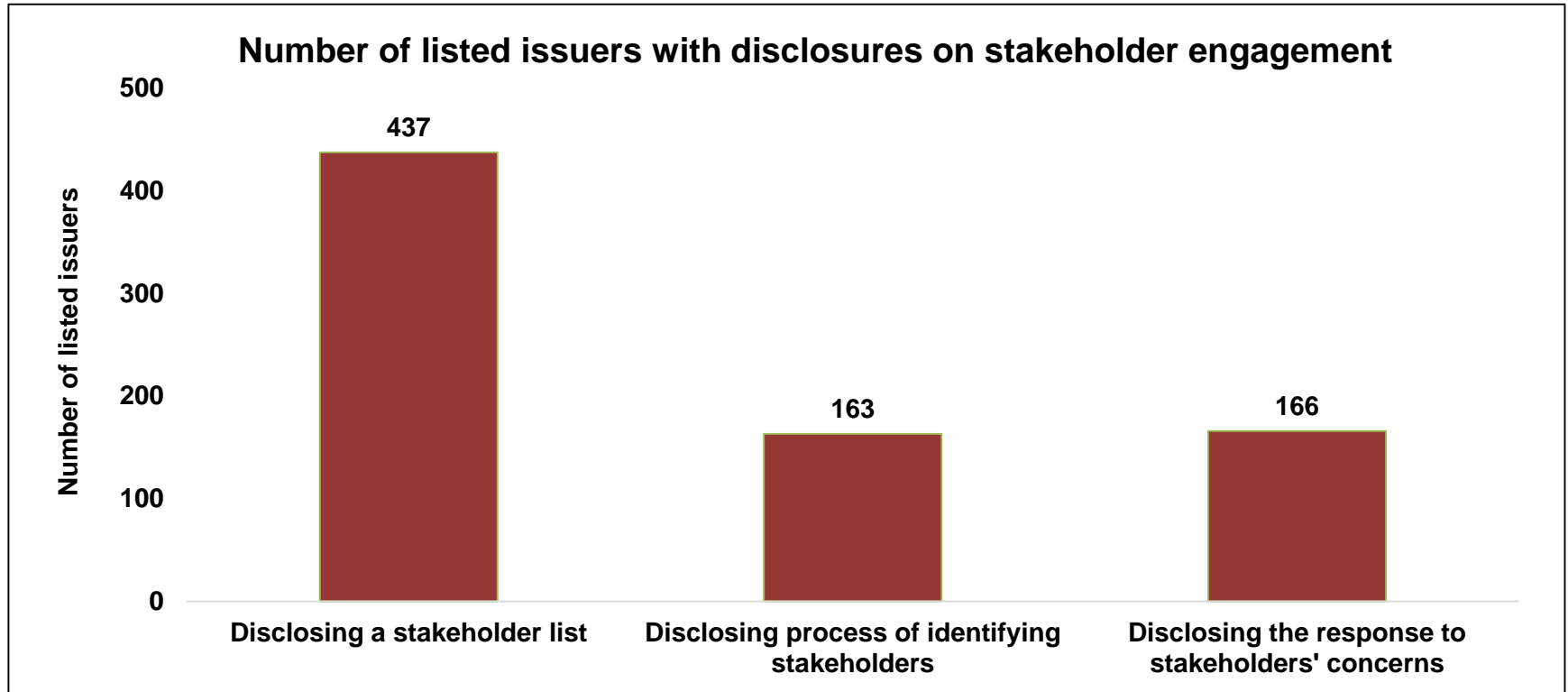
Five primary components – Reporting framework



Five primary components – Board statement



Reporting principles – Stakeholder engagement (1)



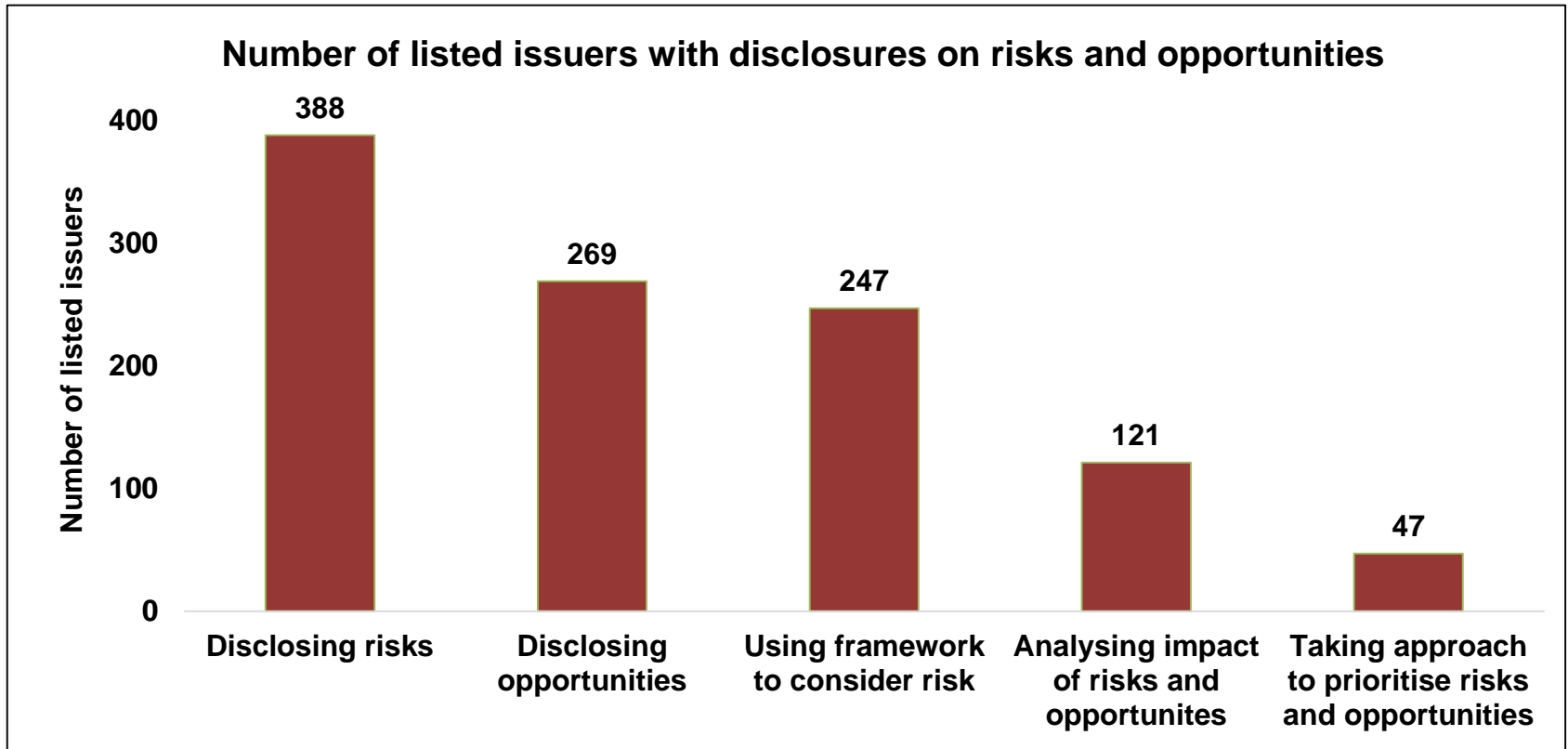
Reporting principles – Stakeholder engagement (2)

Stakeholder Groups	Communication services	Consumer discretionary	Consumer staples	Energy	Financials	Health Care	Industrials	Information technology	Materials	Real estate	Utilities
Business partners	0 to 25%	0 to 25%	0 to 25%	0 to 25%	0 to 25%	0 to 25%	0 to 25%	0 to 25%	0 to 25%	0 to 25%	>75%
Community	>25% to 50%	>50% to 75%	>50% to 75%	>50% to 75%	>25% to 50%	>25% to 50%	>25% to 50%	>25% to 50%	>25% to 50%	>25% to 50%	>25% to 50%
Current and potential investors	>75%	>75%	>75%	>75%	>75%	>75%	>75%	>75%	>75%	>75%	>75%
Customers	>75%	>75%	>75%	>75%	>75%	>75%	>75%	>75%	>75%	>75%	>75%
Employees	>75%	>75%	>75%	>75%	>75%	>75%	>75%	>75%	>75%	>75%	>75%
Government and other regulators	>75%	>75%	>75%	>50% to 75%	>50% to 75%	>75%	>50% to 75%	>50% to 75%	>50% to 75%	>50% to 75%	>50% to 75%
Industry association	0 to 25%	0 to 25%	0 to 25%	0 to 25%	0 to 25%	0 to 25%	0 to 25%	0 to 25%	0 to 25%	0 to 25%	0 to 25%
Labour union	0 to 25%	0 to 25%	0 to 25%	0 to 25%	0 to 25%	0 to 25%	0 to 25%	0 to 25%	0 to 25%	0 to 25%	0 to 25%
Media	>50% to 75%	0 to 25%	0 to 25%	0 to 25%	0 to 25%	0 to 25%	0 to 25%	0 to 25%	0 to 25%	0 to 25%	>25% to 50%
Non-governmental organisations	>25% to 50%	0 to 25%	>25% to 50%	0 to 25%	0 to 25%	0 to 25%	0 to 25%	0 to 25%	0 to 25%	0 to 25%	0 to 25%
Operators	0 to 25%	0 to 25%	0 to 25%	0 to 25%	0 to 25%	0 to 25%	0 to 25%	0 to 25%	0 to 25%	0 to 25%	0 to 25%
Suppliers/Contractors	>75%	>50% to 75%	>50% to 75%	>50% to 75%	>25% to 50%	>75%	>50% to 75%	>50% to 75%	>50% to 75%	>25% to 50%	>25% to 50%

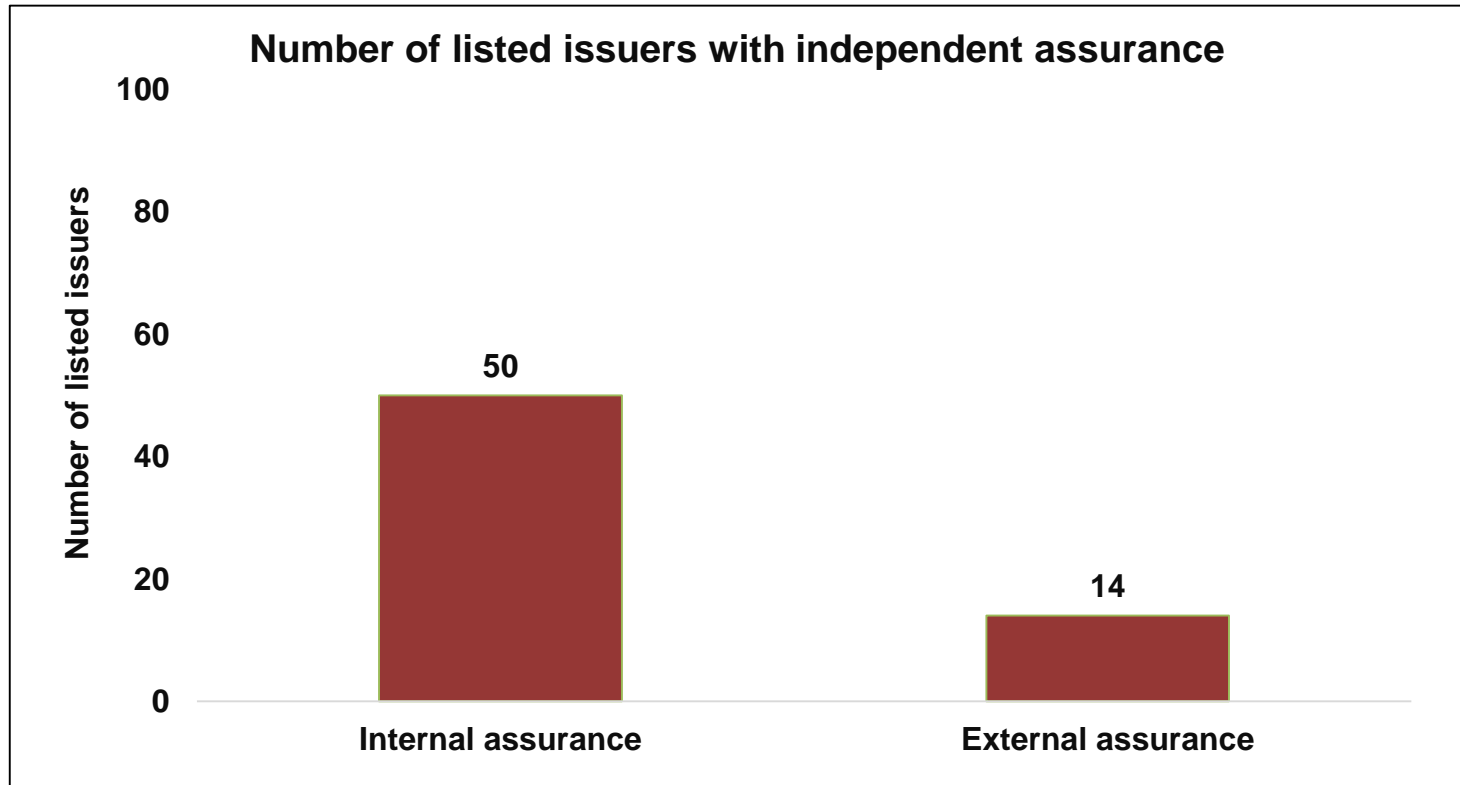
Note:

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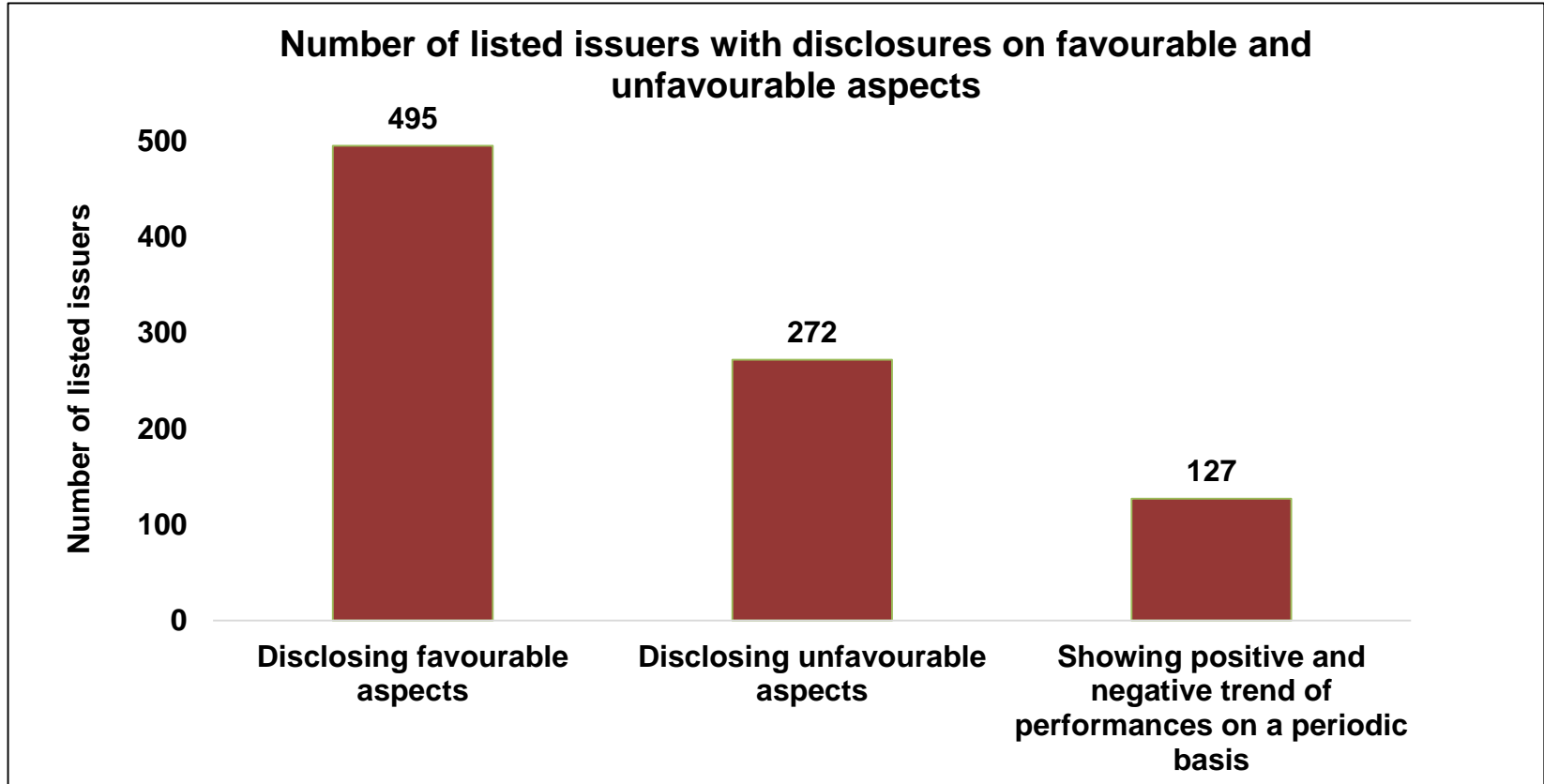
Reporting principles – Risks and opportunities



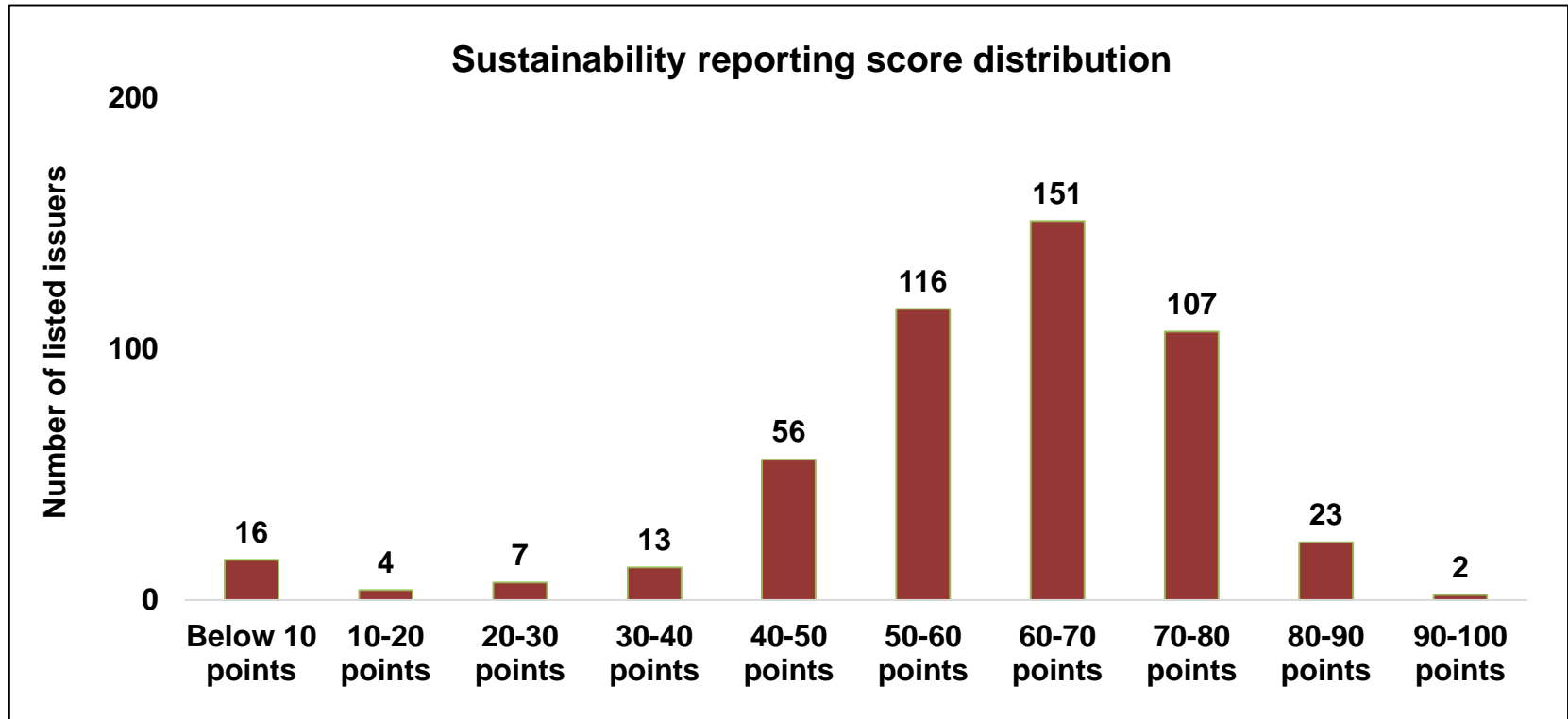
Reporting principles – Independent assurance



Reporting principles – Balanced reporting



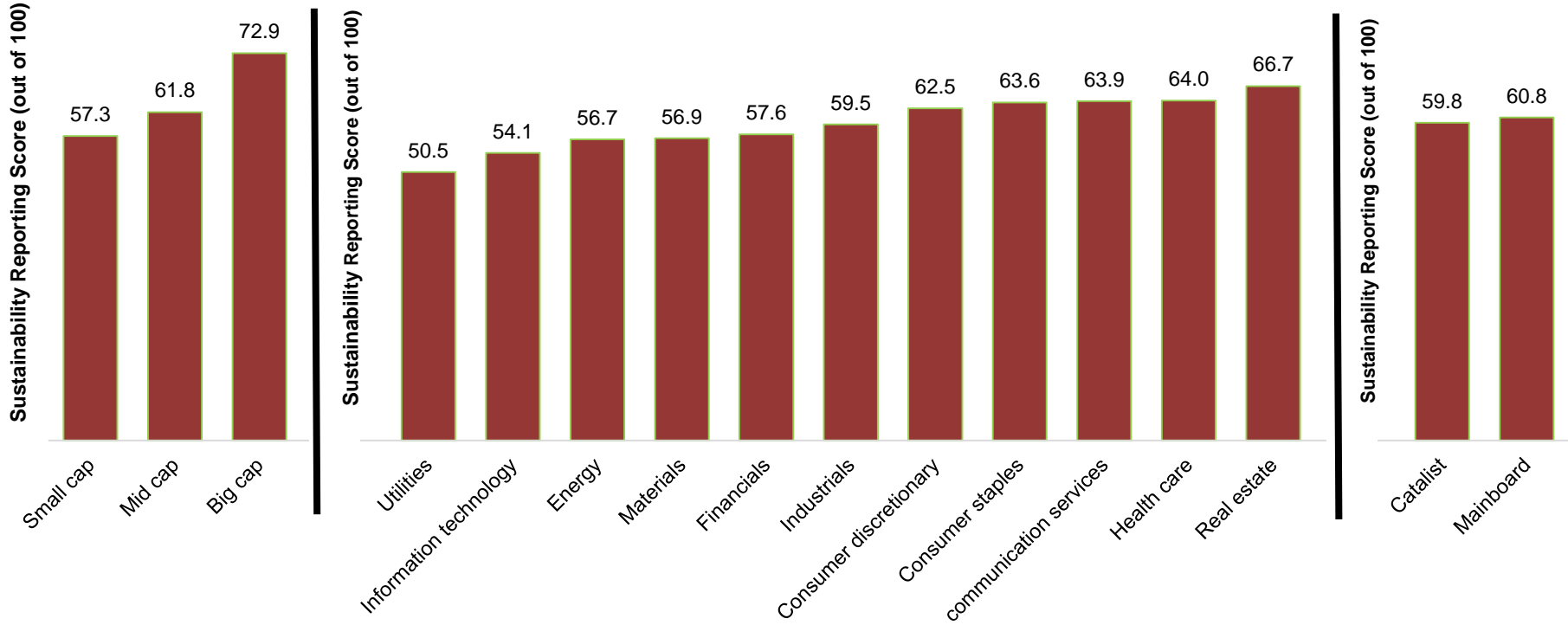
Sustainability reporting scores



Average Score: 60.6

Comparison among market cap groups, sectors and boards

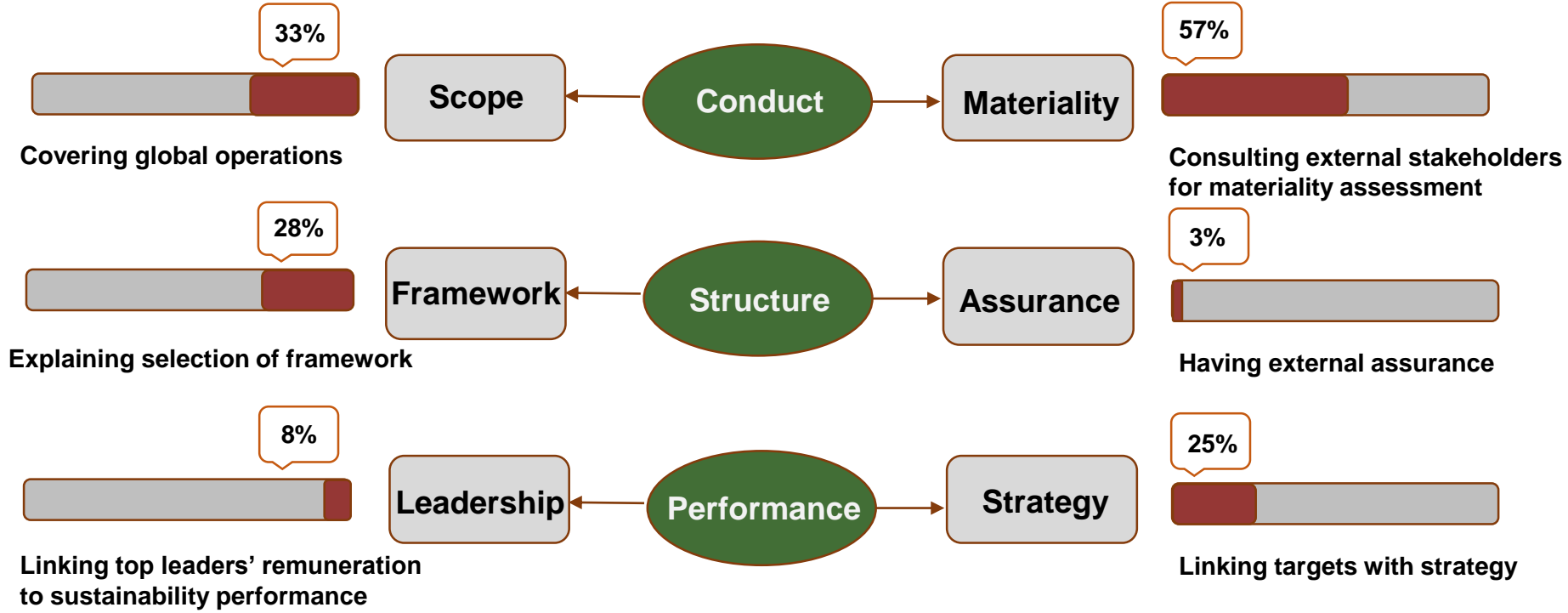
Sustainability reporting score among market cap groups, sectors and boards



Section 5

Summary

Gap analysis



The foundation of sustainability reporting

