

การจัดอบรม หัวข้อ คู่มือเป้าหมายการพัฒนาที่ยั่งยืน (SDG Guidebook) และการวัดผลกระทบด้านการ พัฒนาที่ยั่งยืนในกิจการดำเนินงานด้านสภาพภูมิอากาศ (Climate Change Impact Analysis)

10 กรกฎาคม 2569

บริษัท อีอาร์เอ็ม-สยาม จำกัด



Sustainability is our business

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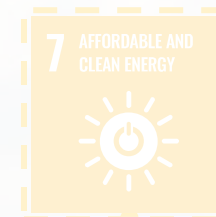
เนื้อหาและ กำหนดการ

8.30 - 9.00	ลงทะเบียน
9.00 - 10.30	การบรรยาย • ความเชื่อมโยงระหว่างความยั่งยืน, ESG และ SDGs • แนะนำ SDGs • บริบทด้านความยั่งยืนของบริษัทจดทะเบียนในประเทศไทย • ทำความรู้จักกับ IMM (Impact Measurement and Management)
10.30 - 10.45	Coffee Break
10.45 - 11.30	กิจกรรมกลุ่ม (Activity 1) • การวิเคราะห์ SDGs ที่มีความสำคัญต่อการดำเนินธุรกิจผ่านการ mapping & prioritizing ประเด็น SDGs • นำเสนอ ผลลัพธ์จากกิจกรรมกลุ่ม
11.30 - 12.00	• ทำความรู้จักกับ Climate Related Risks/Opportunities
12.00 - 13.00	พักรับประทานอาหารกลางวัน

เนื้อหาและ กำหนดการ

13.00 – 14.30	การบรรยาย - Recap from this morning - การวิเคราะห์ผลกระทบจากการเปลี่ยนแปลงสภาพภูมิอากาศ (Climate Change Impact Analysis)
14.30-14.45	Coffee Break
14.45-15.30	ทำความรู้จักกับ IMM (Impact Measurement and Management) Step 5-6 (cont.)
15.30 – 16.15	กิจกรรมกลุ่ม (Activity 2) - การจัดทำ Case Study การวิเคราะห์ผลกระทบการเปลี่ยนแปลงสภาพภูมิอากาศ - นำเสนอ ผลลัพธ์จากกิจกรรมกลุ่ม
16.15 – 16.30	สรุปการอบรม และทำแบบประเมิน

Training Materials



ผู้บรรยายหลักสูตร



นุชวรา ยั่งเจริญ
Managing Consultant



ภูมิ ศิริประภาศิริ
Consulting Partner



นภััสสร กุญแจนาค
Facilitator, Consultant

Ice Breaking



Introduction (10 mins)

In your group, take turns sharing the following (1 - 2 minutes per person):

- **Your name**
- **Your company and sector**
- **Your current role/function**
- **One expectation you have for this training**
- **One climate-related activity or policy your company has already done (or is planning to do)**



ความเชื่อมโยงระหว่าง ความยั่งยืน ESGs และ SDGs



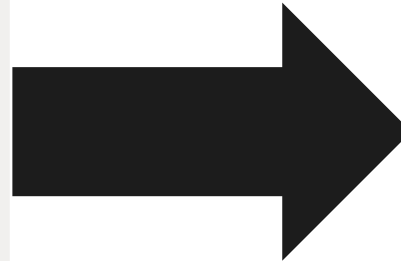
What are SDGs and ESG?

SDGs

- Adopted by the UN in 2015
- **UNIVERSAL CALL TO ACTION** to end poverty, protect the planet, and ensure that by **2030** all people enjoy peace and prosperity.



Call to actions
for businesses



ESG

- A company's ability to **SUSTAINABLY MANAGE ITS RESOURCES, RELATIONSHIPS, DEPENDENCIES AND IMPACTS** across business ecosystem
- Maintaining access to financial, human, and natural resources.



Why is ESG important to businesses?

The five key areas show how sustainability can translate to tangible improvements in the bottom line, brand reputation, and overall operational efficiency.

1

**Enhance
brand
reputation**



2

**Access to
new markets**



3

**Reduce risk
and increase
resilience**



4

**Drive
innovation for
a competitive
advantage**



5

**Improve
stakeholders
relationships**



Resource: [Understanding what sustainability is and why it matters | fsc.org](https://www.fsc.org/understanding-what-sustainability-is-and-why-it-matters)

แนะนำ SDGs



What are SDGs?

2030 Agenda for Sustainable Development



05

DIMENSIONS

17

GOALS

169

TARGETS

231

INDICATORS

“

The next 5 years will be critical for action. Those organizations that show **leadership on the SDGs** will be the most likely to **win the support of their stakeholders**, including investors, regulators, consumers, collaborators and society at large.

”

Source: Price Waterhouse Coopers (2019), "Creating a strategy for a better world", <https://www.pwc.com/gx/en/sustainability/SDG/sdg-2019.pdf>

What are Sustainable Development Goals?

The SDGs and related targets were designed to stimulate action in areas of critical importance for humanity and the planet: **people, planet, prosperity, peace and partnership.**



Resource: Transforming our world: the 2030 Agenda for Sustainable Development | Department of Economic and Social Affairs

The Role of Private Sector in 2030 Agenda

1 NO POVERTY  Create decent jobs and inclusive supply chains that support low-income communities	2 NO HUNGER  Food and agri-businesses can provide fair contracts, training, and technology access.	3 GOOD HEALTH  Offer health insurance and promote occupational safety and mental well-being.	4 QUALITY EDUCATION  Invest in vocational training and lifelong learning.	5 GENDER EQUALITY  Promote gender diversity in leadership and equal pay.	6 CLEAN WATER AND SANITATION  Reduce water consumption in operations and adopt sustainable water management practices.
7 RENEWABLE ENERGY  Invest in clean energy solutions and improve energy efficiency in production.	8 GOOD JOBS AND ECONOMIC GROWTH  Plays a central role in creating decent jobs with fair wages and conditions.	9 INNOVATION AND INFRASTRUCTURE  Adopt green technologies and invest in resilient infrastructure.	10 REDUCED INEQUALITIES  Ensure inclusive hiring and supplier diversity.	11 SUSTAINABLE CITIES AND COMMUNITIES  Promote sustainable buildings and transport solutions.	12 RESPONSIBLE CONSUMPTION  Adopt sustainable practices and integrate sustainability information into reporting
13 CLIMATE ACTION  Conduct climate risk assessments and commit to net-zero targets.	14 LIFE BELOW WATER  Businesses in shipping, fishing, and plastics can reduce waste and invest in ocean-friendly practices.	15 LIFE ON LAND  Ensure deforestation-free supply chains and invest in land restoration.	16 PEACE AND JUSTICE  Adopt strong anti-corruption and human rights policies.	17 PARTNERSHIPS FOR THE GOALS  Effective public, public-private and civil society partnerships	 THE GLOBAL GOALS For Sustainable Development

Example of SDGs Targets



เป้าหมายย่อย 13.1 เสริมภูมิคุ้มกันและขีดความสามารถในการปรับตัวต่ออันตรายและภัยพิบัติทางธรรมชาติที่เกี่ยวข้องกับภูมิอากาศในทุกประเทศ

- ตัวชี้วัด 13.1.1 จำนวนผู้เสียชีวิต สูญหาย และผู้ที่ได้รับผลกระทบโดยตรงอันเป็นผลมาจากภัยพิบัติต่อประชากร 100,000 คน
- ตัวชี้วัด 13.1.2 จำนวนประเทศที่มีและดำเนินการตามยุทธศาสตร์การลดความเสี่ยงจากภัยพิบัติระดับประเทศที่สอดคล้องกับกรอบการดำเนินงานเช่นใดเพื่อลดความเสี่ยงจากภัยพิบัติ พ.ศ. 2558 – 2573
- ตัวชี้วัด 13.1.3 สัดส่วนของหน่วยงานระดับท้องถิ่นที่มีและดำเนินการตามยุทธศาสตร์การลดความเสี่ยงจากภัยพิบัติระดับท้องถิ่น ที่สอดคล้องกับยุทธศาสตร์ระดับประเทศ

เป้าหมายย่อย 13.2 บูรณาการมาตรการด้านการเปลี่ยนแปลงสภาพภูมิอากาศในนโยบาย ยุทธศาสตร์ และการวางแผนระดับชาติ

- ตัวชี้วัด 13.2.1 จำนวนประเทศที่จัดทำกรมีส่วนร่วมที่ประเทศกำหนด (NDC) ยุทธศาสตร์ระยะยาว แผนการปรับตัวต่อผลกระทบจากการเปลี่ยนแปลงสภาพภูมิอากาศแห่งชาติ (NAP) และยุทธศาสตร์ในรายงานการดำเนินงานด้านการปรับตัว (Adaptation communications) ตามที่รายงานต่อสำนักเลขาธิการกรอบอนุสัญญาสหประชาชาติ ว่าด้วยการเปลี่ยนแปลงสภาพภูมิอากาศ (UNFCCC)
- ตัวชี้วัด 13.2.2 ปริมาณการปล่อยก๊าซเรือนกระจกรวม ต่อปี

เป้าหมายย่อย 13.3 พัฒนาการศึกษ การสร้างความตระหนัก และขีดความสามารถของมนุษย์และของสถาบันในเรื่องการลดผลกระทบและการปรับตัวต่อการเปลี่ยนแปลงสภาพภูมิอากาศ และการเตือนภัยล่วงหน้า

- ตัวชี้วัด 13.3.1 ระดับการดำเนินการเพื่อบรรจุ (1) การศึกษาเพื่อความเป็นพลเมืองโลก และ (2) การจัดการศึกษาเพื่อการพัฒนาที่ยั่งยืน เป็นเรื่องหลักใน (ก) นโยบายการศึกษาของประเทศ (ข) หลักสูตร (ค) การศึกษาของครู (ง) การประเมินผลนักเรียน

เป้าหมายย่อย 13.a ดำเนินการให้เกิดผลตามพันธกรณีที่ผูกพันต่อประเทศพัฒนาแล้วซึ่งเป็นภาคีของอนุสัญญาสหประชาชาติว่าด้วยการเปลี่ยนแปลงสภาพภูมิอากาศ ที่มีเป้าหมายร่วมกันระดมทุนจากทุกแหล่งให้ได้จำนวนหนึ่งแสนล้านเหรียญสหรัฐต่อปี ภายในปี พ.ศ. 2563 เพื่อสนองความต้องการของประเทศกำลังพัฒนา ภายใต้บริบทของการดำเนินมาตรการลดผลกระทบของการเปลี่ยนแปลงสภาพภูมิอากาศและความโปร่งใสในการดำเนินงาน ตลอดจนจัดหาเงินทุนเพื่อให้กองทุน Green Climate Fund ดำเนินการได้เต็มที่โดยเร็ว

- ตัวชี้วัด 13.a.1 จำนวนเงินที่ได้รับการจัดสรรและระดมทุนได้ต่อปี (ดอลลาร์สหรัฐ) เทียบเคียงกับเป้าหมายการระดมทุนสะสมต่อเนื่องให้ได้ 1 แสนล้านเหรียญตามพันธสัญญาจนถึงปี พ.ศ. 2568

เป้าหมายย่อย 13.b ส่งเสริมกลไกที่จะเพิ่มขีดความสามารถในการวางแผนและการบริหารจัดการที่เกี่ยวข้องกับการเปลี่ยนแปลงสภาพภูมิอากาศอย่างมีประสิทธิภาพในประเทศพัฒนาน้อยที่สุด และรัฐกำลังพัฒนาที่เป็นเกาะขนาดเล็ก โดยให้ความสำคัญต่อผู้หญิงเยาวชน ชุมชนท้องถิ่นและชุมชนชายขอบ

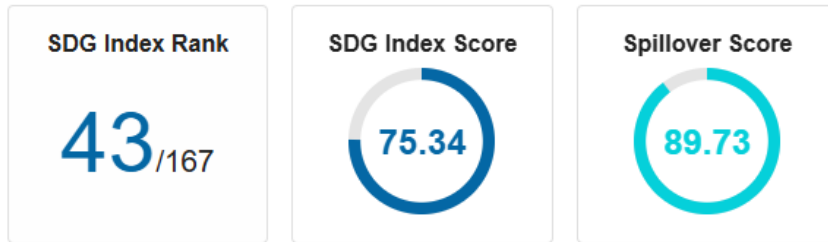
- ตัวชี้วัด 13.b.1 จำนวนประเทศพัฒนาน้อยที่สุด รัฐกำลังพัฒนาที่เป็นเกาะขนาดเล็ก ที่จัดทำกรมีส่วนร่วมที่ประเทศกำหนด (NDCs) ยุทธศาสตร์ระยะยาว แผนการปรับตัวต่อผลกระทบจากการเปลี่ยนแปลงสภาพภูมิอากาศ ยุทธศาสตร์ในรายงานการดำเนินงานด้านการปรับตัว (Adaptation communications) ตามที่รายงานต่อสำนักเลขาธิการกรอบอนุสัญญาสหประชาชาติว่าด้วยการเปลี่ยนแปลงสภาพภูมิอากาศ (UNFCCC)

บริบทด้านความยั่งยืนของบริษัท จดทะเบียนในประเทศไทย



Thailand's Progress in SDGs

Thailand ranks 1st in ASEAN, 3rd in Asia, and 43rd globally in the 2025 SDG Index. However, most goals are challenging with progress mostly stalled or small improvements, indicating huge gaps.



SDG Dashboards and Trends

Click on a goal to view more information.



Dashboards: ● SDG achieved ● Challenges remain ● Significant challenges remain ● Major challenges remain ● Information unavailable

Trends: ↑ On track or maintaining SDG achievement ↗ Moderately improving → Stagnating ↓ Decreasing ** Trend information unavailable

Resource: <https://dashboards.sdindex.org/profiles/thailand/>

IFRS S1-S2 Standards

Example of Sustainability Topics, Targets and SDGs alignment for enterprise in Thailand

Agriculture & Food Industry

Social Sustainability Issues

Major sustainability issues	Details	Overall operation in 2024	Relevant SDGs
S1 Human rights and labor practices	- Human rights principles and fair treatment of employees - Treat employees equally and be fair to employees	- Comprehensive Human Rights Due Diligence (HRDD) - There are no complaints about human rights violations.	4 QUALITY EDUCATION 5 GENDER EQUALITY 8 DECENT WORK AND ECONOMIC GROWTH 10 REDUCED INEQUALITIES 16 PEACE, JUSTICE AND STRONG INSTITUTIONS
S2 Employee health, safety and well-being	- Occupational Health and Safety Policy - Training on safety and good workplace hygiene	Lost-Time Injury Frequency Rate (LTIFR) 10.62 times (times per 1 million working hours)	8 DECENT WORK AND ECONOMIC GROWTH
S3 Animal welfare principles	Animal Welfare Policy	Certified Poultry Welfare Management System for Chicken Production for Export according to FARM FIRST Poultry by LRQA standards.	12 RESPONSIBLE CONSUMPTION AND PRODUCTION
S4 Personal development of employees	- Personal development of employees - Create satisfaction within the Company	- Organize training to develop employee potential, 100% of the annual training plan. - Overall employee satisfaction with the company is over 70%.	4 QUALITY EDUCATION 8 DECENT WORK AND ECONOMIC GROWTH

GFPT Public Company Limited

Energy & Resources

ESG Long-Term Target and SDGs in Focus		
- Achieve Net Zero GHG Emissions by 2050 (Scope 1 and Scope 2) for the E&P business under PTTEP's operational control - Reduce GHG emissions intensity by at least 30% by 2030 and 50% by 2040 (from the base year 2020) - Reduce methane emission intensity to less than 0.2% by 2030* - Reuse at least 50% of main structures, with safety awareness and efficient conditions by 2030 - Achieve zero waste to landfill by 2030	- Deliver Net Positive Impact (NPI) for new E&P operated projects in high-risk area from 2026 onwards - Avoid operation in World Heritage sites as defined by UNESCO - Achieve No Net Deforestation for new E&P operated projects from 2026 onwards - Conserve and restore 200,000 rai of forestations by 2030 - Increase more than two times the Ecosystem Services (ES) value through CSR programs by 2030, compared to the 2024 level - Achieve zero oil and chemical spill - Establish more than 22,000 conservation networks by 2030	- Achieve zero incidents (Target Zero) - Achieve stakeholder engagement level at two highest levels, Support and Advocacy, as appropriate for stakeholders in each group - Deliver social value to more than 1,300,000 beneficiaries by 2030 - Achieve 50% increase in income of focused communities participating in PTTEP projects, compared to baseline data before PTTEP project implementation
12 RESPONSIBLE CONSUMPTION AND PRODUCTION 13 CLIMATE ACTION	14 LIFE BELOW WATER 15 LIFE ON LAND	3 GOOD HEALTH AND WELL-BEING
Supporting SDGs		
1 NO POVERTY 2 ZERO HUNGER 4 QUALITY EDUCATION 5 GENDER EQUALITY 6 CLEAN WATER AND SANITATION 7 AFFORDABLE AND CLEAN ENERGY 9 INDUSTRY, INNOVATION AND INFRASTRUCTURE 10 REDUCED INEQUALITIES 11 SUSTAINABLE CITIES AND COMMUNITIES 17 PARTNERSHIPS FOR THE GOALS		

PTT Exploration and Production Public Company Limited

Example of Sustainability Topics, Targets and SDGs alignment for enterprise in Thailand

Financial Services

KTB Material Topics	Targets and Metrics	Corresponding GRI Standards	Key Stakeholders Impacted and Boundary	SDGs Serves
Social				
1. Financial Inclusion and Financial Literacy	<u>Short-term</u> The Bank is committed to supporting access to financial services for various groups through the Krungthai NEXT and Paotang applications, as well as by expanding programs and activities for financial literacy and digital technology. In 2025, the Bank has set a target to increase the number of participants in face-to-face training with hands-on practice to 3,720 people, including vulnerable groups, youth, small entrepreneurs, low-income individuals, women, the elderly, and those in remote areas. Additionally, the Bank aims for 500 participants in focus groups promoting the habit of saving from 10 universities nationwide.	3: Material Topics FI01: Number of reach and engagement of financial literacy contents	- Employees - Regulators - Society - Competitors	SDG 1, 2, 4, 5, 16 
2. Delivering Sustainable Financial Products & Services	<u>Long-term</u> Krungthai Bank aims for net zero greenhouse gas emissions related to financed emissions in the electricity generation sector by 2065, compared with the 2023 baseline.	3: Material Topics 413: Local Communities	- Customers - Regulators - Society - Shareholders - Competitors	SDG 1, 2, 4, 5, 9 
3. Community Engagement	<u>Long-term</u> Aim to increase income and improve the quality of life for people in society, to further social development on a broader scale.	3: Material Topics 413: Local Communities	Society	SDG 10, 11 

Services

Sustainability

Sustainable Development Goals and Performance

The evaluation of sustainability performance for 2025 is linked to the organization's key sustainability performance indicators and is driven through the participation of all functions across the organization. The Company has established operational plans, appointed dedicated working committees, and continuously reported performance results to the Board of Directors to obtain feedback and recommendations. This process also ensures that adequate resources are allocated to achieve the defined targets. The details of the key performance indicators are as follows:

Sustainability Development Policy	2025 Target	2025 Performance
Environmental Development Pillar 		
Achieving a net-zero greenhouse gas emissions organization by 2050	Reduce the greenhouse gas emission intensity of the hotel business (Scope 1 and 2) in the first phase by 40% by 2029, compared with the 2019 baseline year, under the 10-year action plan (2020 - 2029).	The greenhouse gas emission intensity of the hotel business (Scope 1 and 2) decreased by 38.40% compared with 2019.
Renewable Energy Operations	- Increase the proportion of all renewable energy used in the hotel business compared with 2024. - Drive the installation of solar panels with a target of installing them in more than 50% of company-owned hotels by 2028.	- The proportion of renewable energy used in the hotel business increased by 3.2 times compared with 2024. 45% of company-owned hotels have installed solar panels.
Waste and Pollution Management	- Reduce the amount of waste sent to landfill per occupied room by 20% compared with the 2019 baseline year. - Increase the recycling rate of waste generated from operations of hotel business to over 50%.	- Waste sent to landfill per occupied room decreased by 22.90% compared with the 2019 baseline year. - The recycling rate of waste generated from operations of hotel business was 29.29%.
Supporting and Contributing to Sustainable Tourism	Achieve 100% sustainability certification from the Global Sustainable Tourism Council (GSTC) for Centara Hotels & Resorts by 2025.	Centara Hotels & Resorts achieved the sustainability certification target from the Global Sustainable Tourism Council (GSTC) for all 42 hotels.

Example of Sustainability Topics, Targets and SDGs alignment for enterprise in Thailand

Industrial Products

The key SDGs aligned with SCG's Double Materiality are as follows:

Goal 6
Clean Water and Sanitation

Improve water usage efficiency, reduce external water consumption, and implement sustainable water management.

Goal 7
Affordable and Clean Energy

Increase the proportion of renewable energy use, improve energy efficiency, and promote collaboration for green infrastructure and technology to ensure access to affordable, reliable, sustainable and modern energy for all.

Goal 8
Decent Work and Economic Growth

Promote sustained, inclusive, and sustainable economic growth using the Inclusive Society approach, tailored to employees, suppliers, customers, communities, and other stakeholders.

Goal 9
Industry, Innovation, and Infrastructure

Promote resilient infrastructure and develop inclusive and sustainable innovation and industrialization.

Goal 12
Responsible Consumption and Production

Reduce waste through reuse and recycling via products and innovations to create sustainable production and consumption models.

Goal 13
Climate Action

Integrate climate change measures into national policies and implement decarbonization initiatives according to the SCG Net Zero Roadmap.

Goal 14
Life Below Water

Conserve and sustainably use the oceans, seas, and marine resources through the management, conservation, and restoration of marine and coastal ecosystems.

Goal 15
Life on Land

Protect, restore, and promote sustainable use of terrestrial ecosystems, sustainably manage forests, and halt biodiversity loss.

Goal 17
Partnerships for The Goals

Enhance multi-stakeholder partnerships across economic, social, and environmental dimensions without leaving anyone behind, and support cooperation between public, private, and civil society sectors through the PPPP model.

The Siam Cement Pcl.

Consumer Products

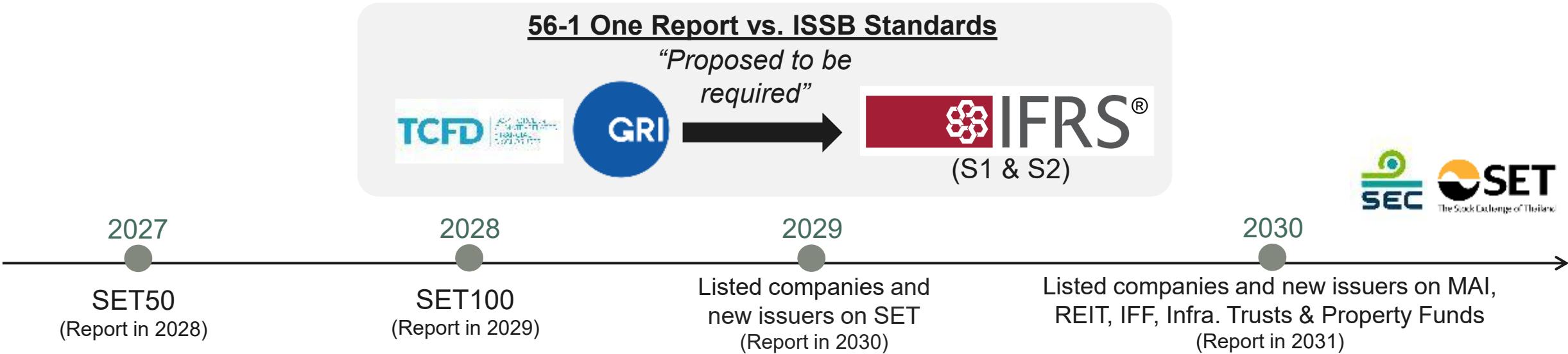
SUSTAINABLE DEVELOPMENT GOALS

How HomePro is supporting

1 NO POVERTY	End poverty in all its forms everywhere	Associate care - Living Wage - Financial education and debt management: The Company provides financial education and debt management support to associates Creating Opportunities and Careers with Business Partners - The Young Entrepreneur "Tao Kae Noi" Project Community and Social Care - Community Support During Flood Crisis
2 END HUNGER	End hunger, achieve food security and improved nutrition and promote sustainable agriculture	Associate care - Living Wage Community and Social Care - Community Occupational Support Activities
3 GOOD HEALTH AND WELL-BEING	Ensure healthy lives and promote well-being for all at all ages	Associate care - Living Wage - Associate retention - Occupational Safety, Health, and Working Environment Management - Health Care Customer care - Home Service Community and Social Care - HomePro Fun Walk 2024: Promoting Health for a Better Society - Community Support During Flood Crisis - Restrooms Project for Community
4 QUALITY EDUCATION	Ensure inclusive and equitable quality education and promote lifelong learning opportunities for all	Associate care - Bilateral Scholarship Program - Associate Development
5 GENDER EQUALITY	Achieve gender equality and empower all woman and girls	Human Rights - Human Rights Management Associate care - Diversity, Equity, and Inclusion (DEI) Customer care - Lady Service

Home Product Center Public Company Limited

IFRS S1 and S2 standards require sustainability disclosure



Benefits of applied ISSB



- Improved transparency and comparability of data
- Enhanced investor confidence and market access
- Better alignment with global practices



Challenges

- Increased costs for data collection and reporting
- Need for capacity building and training for company personnel

Immediate implications for IFRS S1-S2 readiness for companies



1

Understanding financial impacts

Deeply aware of **financial implications** from material sustainability-related and **climate-related risks and opportunities** on operations and value chain.

Example: Green Premium



2

Data and governance are key

Clear metrics, KPIs and targets for material climate-related risks and opportunities.

Clear responsibilities across organisation to track, monitor and report outcomes, with **oversight by the Board and Senior Management**.

Example: Carbon Tax



3

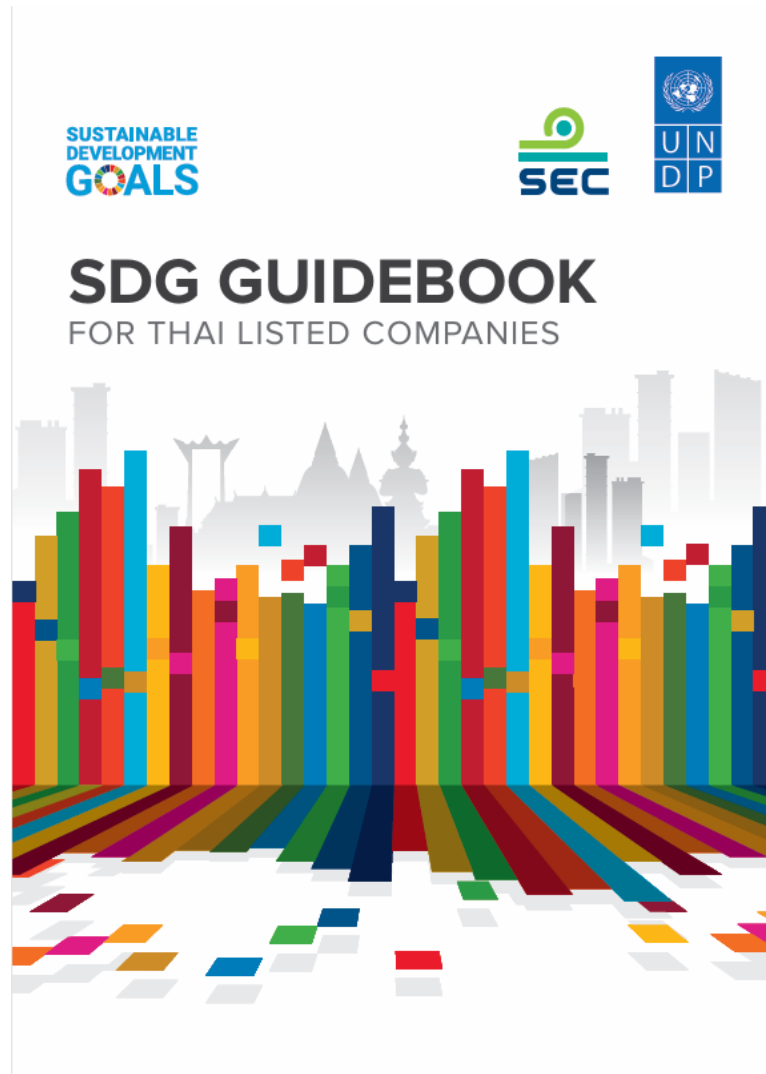
IFRS S1-S2 readiness is a transformational journey

Climate (and sustainability) imperatives will need to be grounded in your business **strategy**, your **capital allocation** and **risk management processes**.

ทำความรู้จักกับ IMM (Impact Measurement and Management)



SDG Guidebook

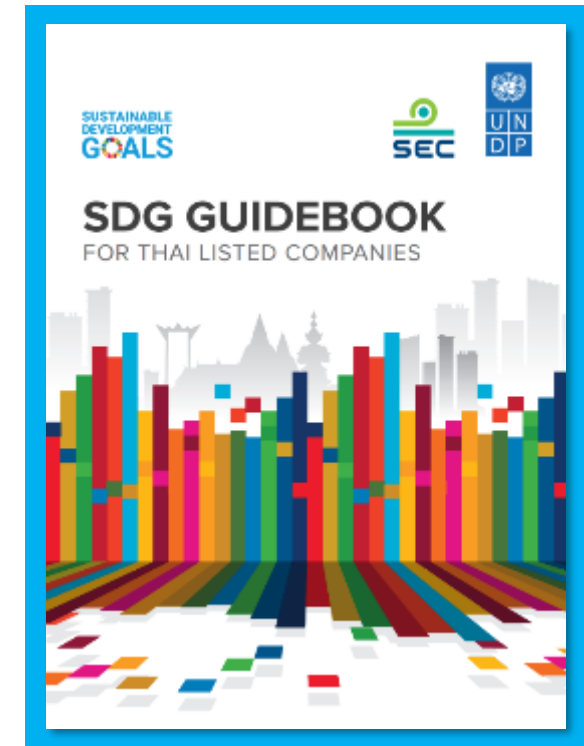


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Summarize IMM process from SDG Guidebook



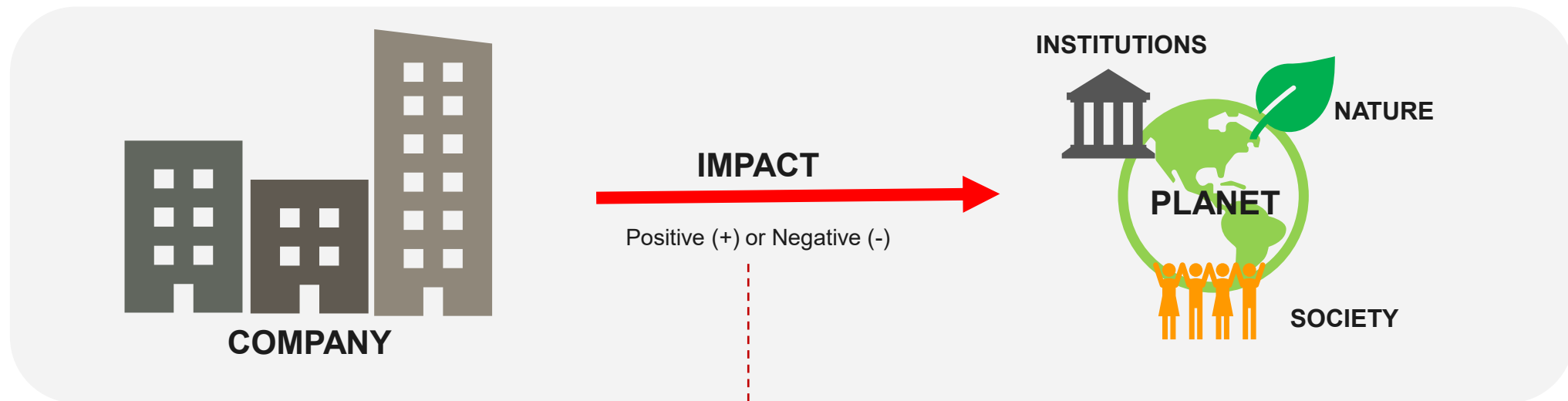
IMM Framework	
Step 1	Understanding impact and IMM - Introduction of sustainability - Introduction of impact - What is impact measurement and management defining your company's commitment to sustainability
Step 2	Identifying and engaging with stakeholders - Conducting stakeholder mapping - How to engage with stakeholders along the value chain
Step 3	Prioritizing impacts - Materiality analysis - Mapping and prioritizing SDGs along the business value chain - Business setting goals - Five dimensions of impact for each goal
Step 4	Planning for impact - Developing an impact value chain - Selecting indicators - Setting baselines and targets
Step 5	Measuring impact and integrating impact into business practices - Monitoring results and collecting data - Integrating SDGs and impact into business practices and decision-making - Managing impact risks - Reinforcing the company's commitment to impact through governance practices
Step 6	Reporting progress on impact in line with the One Report



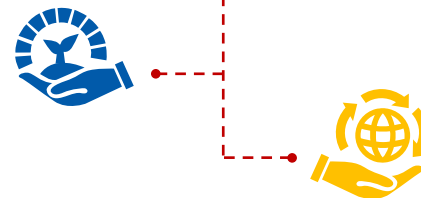
The SDG Guidebook for Listed Companies a practical guideline for listed companies to integrate SDGs into their operations and strategies, as well as to introduce them to the **Impact Measurement and Management (IMM)** framework.

What is Impact Measurement and Management?

IMM : Impact Measurement and Management refers to identifying **impacts**, to mitigate the negative and maximize the positive in alignment with one's goal.



Impact measurement involves quantifying effects **directly** or **indirectly** attributable to a company's actions.



Impact management involves **setting up systems and processes** that gear a business for successfully **meeting its impact goals**.

IMM Framework Step



1

Step
1

Understanding impact and IMM

- Introduction of sustainability
- Introduction of impact
- What is impact measurement and management defining your company's commitment to sustainability



2

Step
2

Identifying and engaging with stakeholders

- Conducting stakeholder mapping
- How to engage with stakeholders along the value chain



3

Step
3

Prioritizing impacts

- Materiality analysis
- Mapping and prioritizing SDGs along the business value chain
- Business setting goals
- Five dimensions of impact for each goal



4

Step
4

Planning for impact

- Developing an impact value chain
- Selecting indicators
- Setting baselines and targets



5

Step
5

Measuring impact and integrating impact into business practices

- Monitoring results and collecting data
- Integrating SDGs and impact into business practices and decision-making
- Managing impact risks
- Reinforcing the company's commitment to impact through governance practices



6

Step
6

Reporting progress on impact in line with the One Report

IMM Framework Step 1

IMM Framework

Step 1

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Step 6

Reporting progress on impact in line with the One Report



1



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6

Understanding impact and IMM

Benefit of understanding impact and IMM

- Understanding impact, sustainability, and IMM can help a business develop a clear sustainability statement aligned with the SDGs.
- It supports making the business case for sustainability and gaining buy-in from the board and senior leadership team.
- Contributing to positive impacts supports the business's long-term success.
- The commitment to sustainability may be embedded in the CEO's vision, corporate purpose, or other statements of intent.

Example: OLAM Group



“Sustainability has always been something that we have embedded in and embraced in our business. We do not do it as a separate activity.”

Suresh Sundararajan, CEO of Olam Ventures.

In 2017, Olam refreshed its purpose to “re-imagine Global Agriculture and Food Systems” within the ethos of Growing Responsibly, driven by:

- CEO's vision for long-term sustainability and recognition that response based mainly on doing less harm is not enough to meet pressing global sustainability challenges
- Pressure from larger stakeholders for greater transparency, traceability and accountability across its supply chain

Resource: [scaling-impact-in-asia-2022-case-study_olam_ciip-accenture-smu.pdf](https://www.olam.com/ciip-accenture-smu.pdf)

IMM Framework Step 2

IMM Framework

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Step
6

Reporting progress on impact in line with the One Report



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6

2 Identifying and engaging with stakeholders

STAKEHOLDER MAPPING



- Stakeholders are individuals or groups that are affected by or able to affect a company's activities.
- Companies should identify and map stakeholders across their **entire value chain**, considering both **directly impacted** and **potentially impacted** groups, this helps business actions with stakeholder needs and sustainability goals.

2 Identifying and engaging with stakeholders

Example: STAKEHOLDER MAPPING



Bank of Ayudhya Public Company Limited

VALUE CHAIN

PRIMARY ACTIVITIES

Funding sources
Operations
Marketing and Sales
Access to Financial Innovations and Products
Financial Transactions
After-sales Services

SUPPORT ACTIVITIES

Risk Management
Procurement Management
Human Resources Management
Digital innovation and Technology Management
Other Infrastructures, e.g., Accounting and Finance System, Business Administration, Legal Tasks, etc.

STAKEHOLDER MAPPING



Source: Krungsri Annual Registration Statement/Annual Report 2021 (Form 56-1 One Report)



SOMBOON
ADVANCE TECHNOLOGY

Somboon Advance Technology Company Limited

SUPPLIERS



PARTS / COMPONENT / MODULE / SUPPLIERS



SMART MANUFACTURING SOLUTION



CUSTOMER



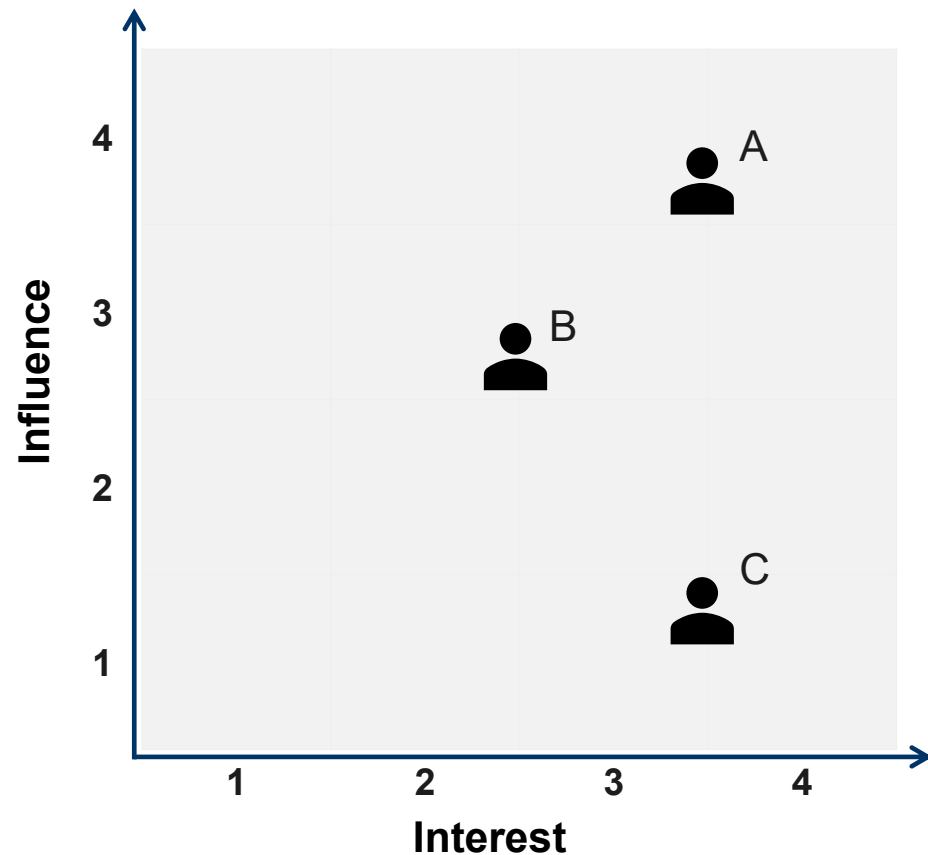
CUSTOMER



Source: Somboon Advance Technology, Sustainability Report 2021

Stakeholder Prioritization

The process of identifying, analyzing, and ranking stakeholders to effectively manage resources, tailor communication, and ensure that the most critical stakeholders receive appropriate attention and engagement.



Influence

The ability of stakeholders to impact the organization's operations.

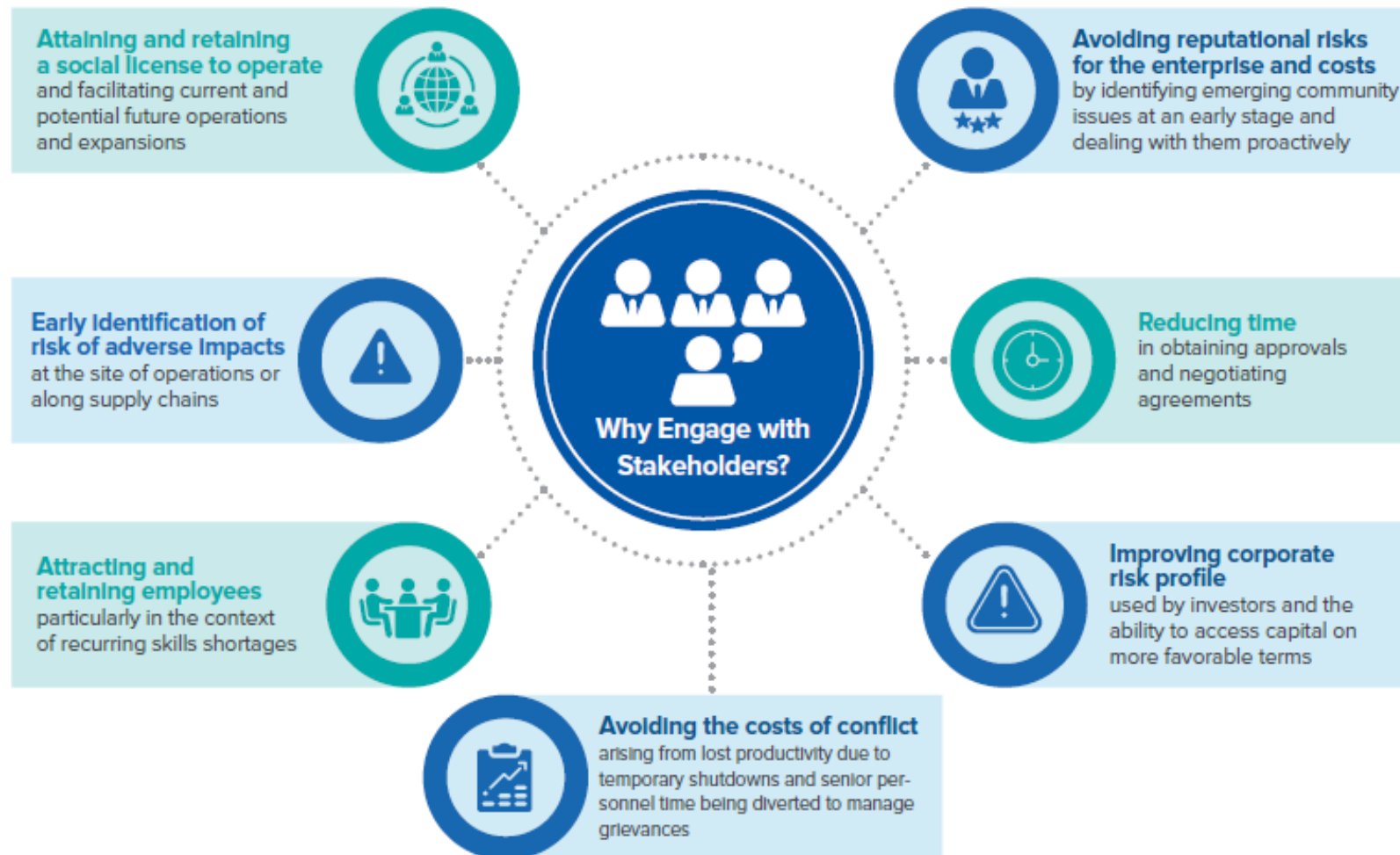
Interest

Stakeholders' responses to the organization's activities and operations.

2 Identifying and engaging with stakeholders

STAKEHOLDER ENGAGEMENT

- Starts with understanding how a company's actions affect stakeholders
- What matters most to them.



Source: Developed from "OECD Due Diligence Guidance for Meaningful Stakeholder Engagement in the Extractive Sector", OECD, 2016

2 Identifying and engaging with stakeholders

Meaningful stakeholder engagement involves **two-ways communication**



Meetings



Engagement activities



Consultation proceedings

Engagement should take into account disadvantaged and marginalized stakeholders or other vulnerable groups such as women, children, indigenous peoples and migrant workers.

Example: STAKEHOLDER ENGAGEMENT

Stakeholders	Issues of Interests	Actions & Responses	Values Creation	Engagement & Communication Approaches
Employee 	• Career progression • Skill development training • Occupational health & safety • Compensation, benefits, and remuneration • Sustainable business growth • Transparency	• Provide necessary training for continuous development • Establish programme(s) to retain good and talented employees • Provide employees with fair compensations and benefits • Enact occupational health & safety policy and guidelines among employees • Comply with Thai labour standard • Treat employees with respect following human rights principles • Provide channels for employees to submit opinions, suggestions, or complaints • Establish AWC Core values	• Employees receive adequate training for career progression • Continuous capability development • Career promotion and stability • Assessments on safety, occupational health, and workplace environment • Grievances and whistleblower mechanism	• Intranet • AWC Connect • E-mail: compliance and HR • Townhall by Chief Executives • Conversations, meetings, and operation team meetings • Employee engagement survey • Annual Report • Sustainability Report • Company website • Grievance and whistleblower channel https://www.assetworldcorp.th.com/en/corporate-governance/whistleblowing-and-complaint
Customer 	• Business ethic and transparency • High-quality products and services at a fair price • Customer relationship management • Innovative product development • Data security and privacy • Resource conservation	• Strictly conduct business in compliance with applicable laws and regulations • Offer products and services that respond to the requirements at a reasonable price • Appoint a department to receive opinions, suggestions, or complaints from customers • Source raw materials from a sustainable source • Initiate environmental protection initiatives	• Quality products and service as expected • A positive relationship between AWC and customers	• Customer services • Call centre • Customer satisfaction survey • Various media channels • Annual Report • Sustainability Report • Company website • Grievance and whistleblower channel https://www.assetworldcorp.th.com/en/corporate-governance/whistleblowing-and-complaint
Tenant 	• Fair treatment • Environmental protection • Prime location	• Strictly comply with the Business Code of Conduct and Corporate Governance Policy • Conduct business in compliance with applicable laws and regulations • Integrate green building initiative into both existing and new developments	• Long-term trust and confidence with AWC • The positive relationship between AWC and tenant • Environmental benefit from green building initiative	• Tenant relationship management • Tenant satisfaction survey • Property anniversary ceremony • Annual report • Sustainability report • Company website • Grievance and whistleblower channel https://www.assetworldcorp.th.com/en/corporate-governance/whistleblowing-and-complaint
Vendor & Supplier 	• Business ethic, transparency, and fairness • Future business direction and business growth • Supplier capacity building	• Establish standardized supplier codes of conduct • Develop supplier partnership projects • Appoint a department to communicate with suppliers on various and related issues • Treat all suppliers equally and fairly as stated in Business Codes of Conduct	• Supplier capability development • The positive relationship between AWC and supplier • Long-term trust and relationship • Quality products and services to other groups of stakeholders	• Supplier joint meeting • Supplier assessment • Annual Report • Sustainability Report • Company website • Grievance and whistleblower channel https://www.assetworldcorp.th.com/en/corporate-governance/whistleblowing-and-complaint

Source: Asset World Corporation, Sustainability Report 2020

IMM Framework Step 3

IMM Framework

Step
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Step
6

Reporting progress on impact in line with the One Report



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6

3 Prioritizing impacts

Business needs to prioritize impact to identify which outcomes and impacts matter most to the stakeholders and most relevant in the company.

3.1

Materiality analysis

Helps companies prioritize the most important outcomes and impacts by identifying what matters most to stakeholders and where the company can make a significant difference.

3.2

Mapping and prioritizing SDGs along the business value chain

Once a company identifies its material impacts, it can map how these contribute to the SDGs, focusing on the goals most relevant to its business and value chain.

3.3

Setting goals

After SDG priorities are identified, companies should integrate into their business strategy by setting impact goals focused on enhancing well-being across ESG.

3.4

Specifying the five dimensions of impact for each goal

This involves applying the five dimensions of impact from the Impact Management Project (IMP) as What, Who, How Much, Enterprise Contribution, and Risk.

Double Materiality Concept



Impact Materiality

The company's impact on the environment/society (GRI-aligned definition of materiality).

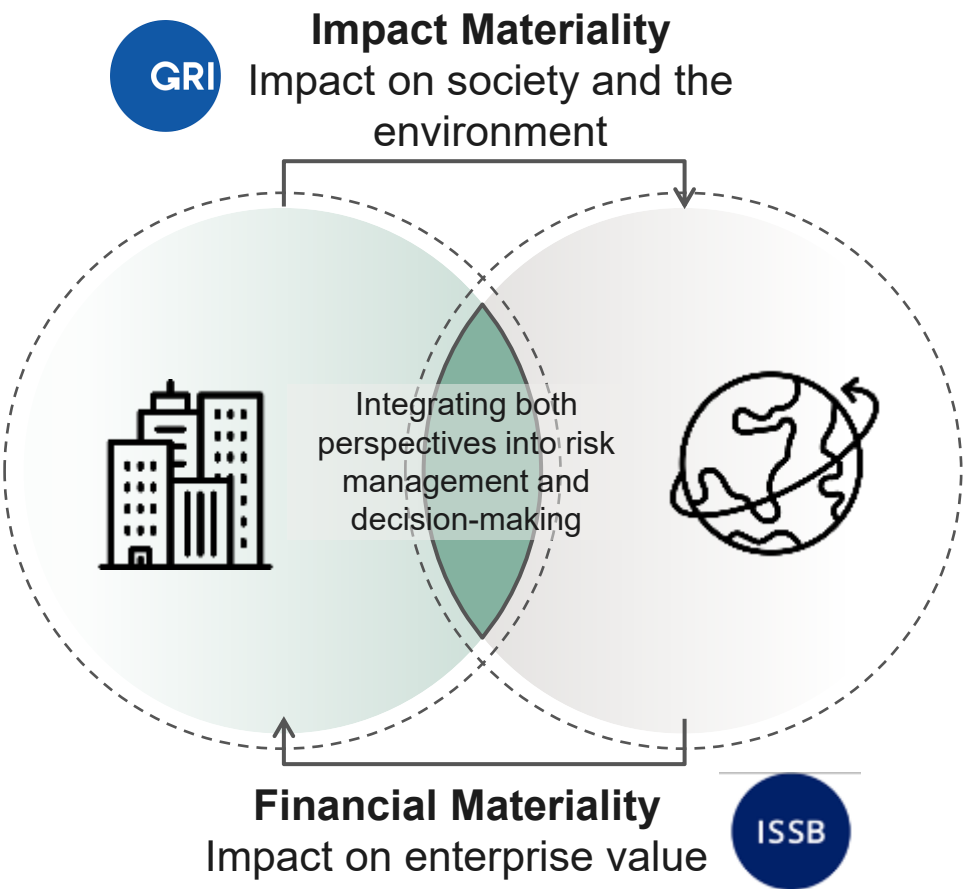
Positive Impacts

The **beneficial impacts** that the company can have on the environment/society.

Negative Impacts

The **adverse impacts** that the company can have on the environment/society.

Double Materiality



Financial Materiality

Sustainability-related impacts on the company's ability to generate enterprise value.

Opportunities

Sustainability-related opps. can **enable enterprise value** for the company.

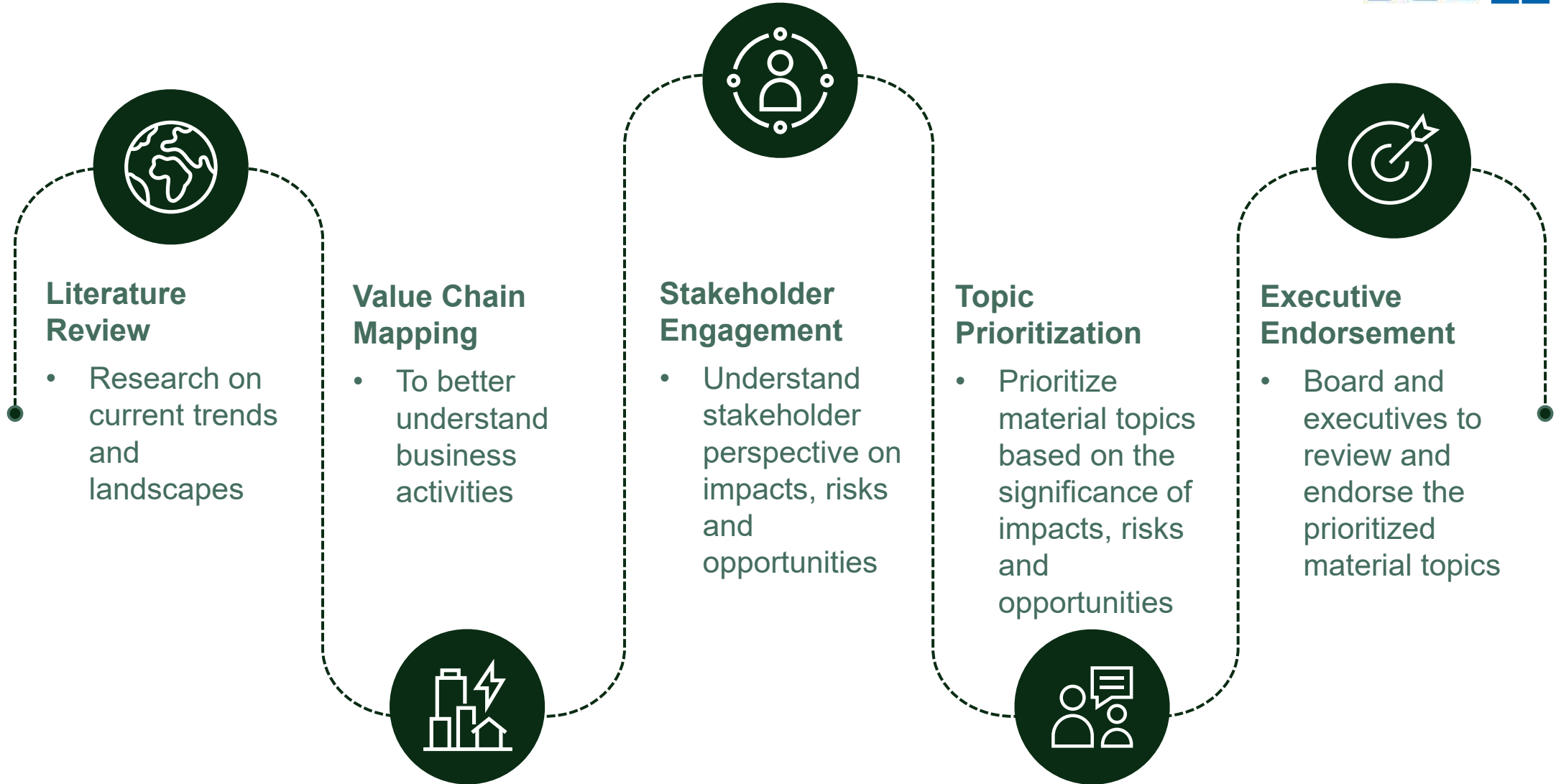
Risks

Sustainability-related risks that can **obstruct enterprise value** for the company.

“Materiality should not be restricted to what is relevant to business goals or financial performance and must include what is relevant to the business’s stakeholders, both positive and negative impacts terms.”

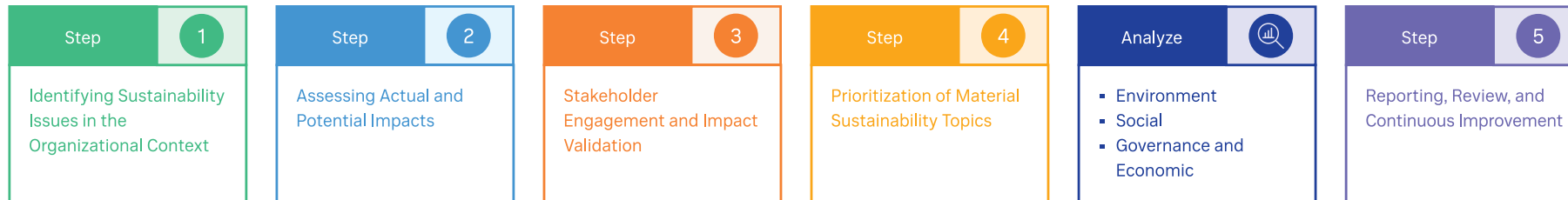
Double Materiality Assessment

**Process and results in alignment with GRI 2021 Standards*



Example

CKPower's Double Materiality Assessment 2024



↓ Determine material topics for reporting

CKPower's Material Topics			
Environmental Dimension - Energy Management and Climate Change - Environmental Management - Biodiversity	Social Dimension - Social and Community Care - Respect for Human Rights - Occupational Health and Safety - Human Capital Management	Governance and Economic Dimension - Corporate Governance - Risk and Crisis Management and Cybersecurity and Data Privacy - Business Model Resilience - System Reliability and Availability	- Innovation Management - Customer Relationship Management - Supply Chain Management

Relevant Stakeholders	Impacts on Stakeholders	Types of Impact		Financial Impacts (On a scale of 5)	Actions	SDGs
		Actual	Potential			
Environmental Management						
- Employees - Shareholders and investors - Communities and society - Government agencies (in Thailand and Lao PDR)	Effective environmental management enhances the company's operational efficiency while minimizing negative impacts on stakeholders.			- Establish an environmental policy. - Conduct environmental impact assessments in strict compliance with legal requirements and international standards. - Implement continuous monitoring and control processes to ensure environmental quality and enhance the company's environmental management performance.	 12.2, 12.4, 12.5, 12.6  13.1, 13.2, 13.3	

Once a company understands its expected material outcomes and impacts, both current and potential, as well as positive and negative, it can map how it contributes to the SDGs.

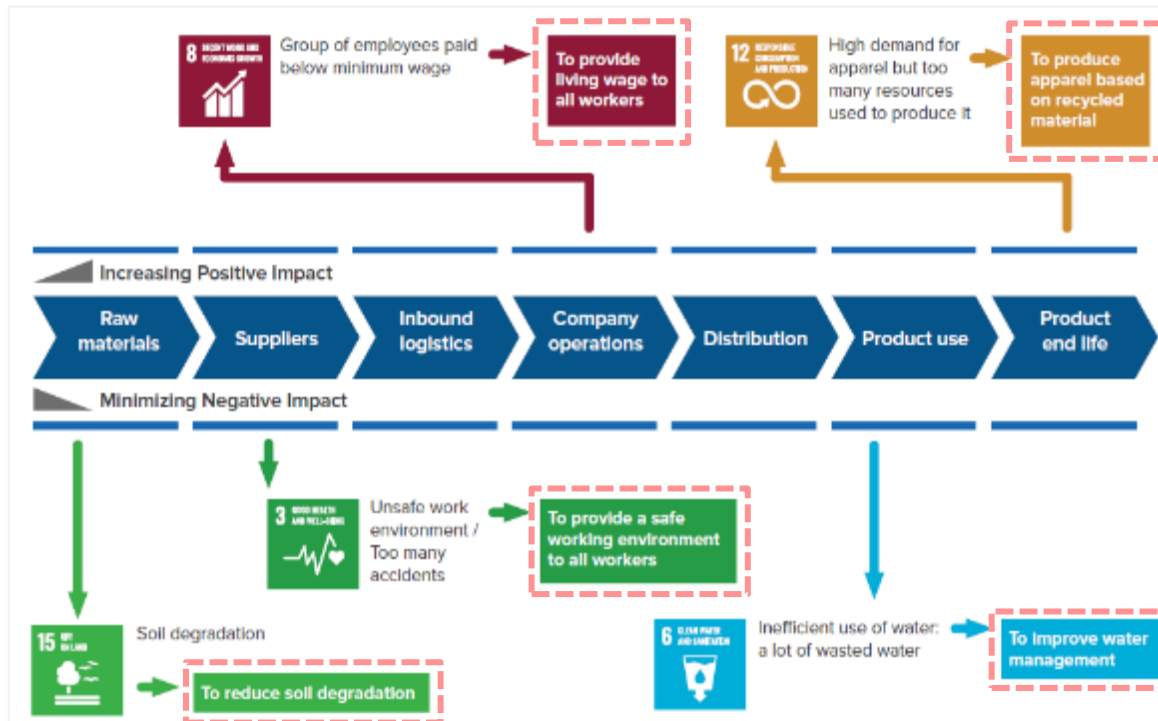
- Not all 17 SDGs may be relevant for a particular company.
- Companies need to identify and prioritize material impacts and relevant SDGs across the value chain.



Resource: Integrating the SDGs into Corporate Reporting: A Practical Guide, GRI and UN Global Compact

Example

Integration of SDGs by setting impact goals based on material positive and negative impacts



Resource: UNDP SDG Impact, 2022 from Integrating the SDGs into Corporate Reporting: A Practical Guide, GRI and UN Global Compact

Central Pattana

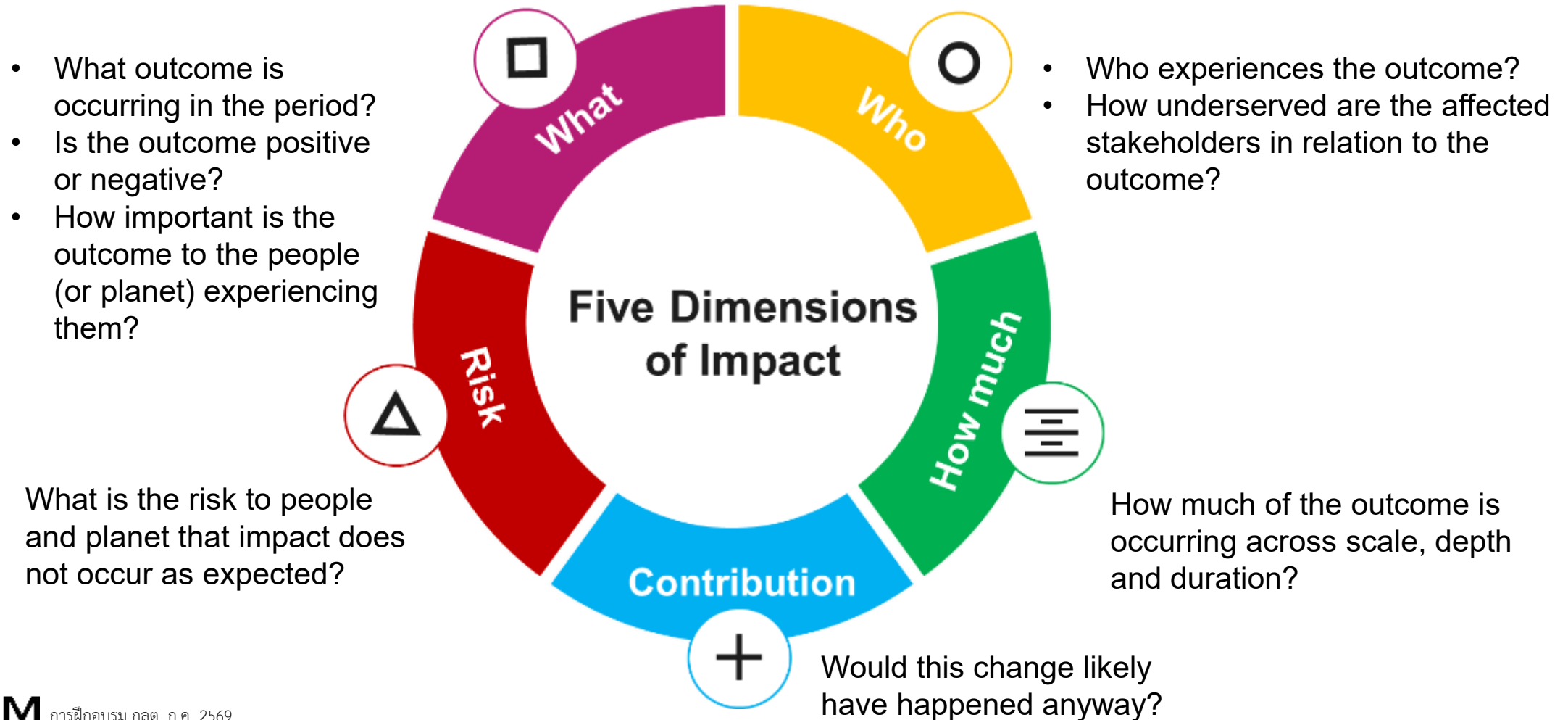
Environmental sustainability targets

**CENTRAL
PATTANA**

Priority Sustainability Issues	2021 Targets	Targets for 2022-2026
Environmental Sustainability		
7 Resource efficiency and climate change	15% reduction in Scope 1 and 2 GHG emissions intensity (compared to 2015)	Reduce Scope 1 and 2 GHG emissions intensity by 20% (compared to 2015)
8 Net zero organization	4.5% of total energy consumption come from renewable sources 4% reduction in energy consumption by 2021 (compared to 2019)	- Become a net zero organization by 2050 - Increase the share of renewable energy to 12% of total energy consumption - Reduce energy consumption by 20% (compared to 2019)
	5% of water used across shopping centres which onsite wastewater recycling systems installed	Increase the share of recycled water across shopping centres to 20%
	15% reduction in the amount of waste sent to landfill	Reduce the amount of waste sent to landfill in half

Resource: Central Pattana One Report 2021

Impact can be measured across five dimensions as What, Who, How Much, Contribution and Risk.



IMM Framework Step 4

IMM Framework

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Understanding impact and IMM

- Introduction of sustainability
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Step
6

Reporting progress on impact in line with the One Report



1



2



3



4



5



6

4 Planning for impact

Company should understand the pathway to achieving impact goals and able to set an indicators to measure their progress on the SDGs and other impacts and outcomes, align with relevant baselines and targets.



Developing an impact value chain

- **Theory of Change (TOC)** articulate the steps to achieve tangible impact targets

01

Selecting indicators

- Focusing on specific, measurable changes
- **SMART** principles

02

Setting baselines and targets

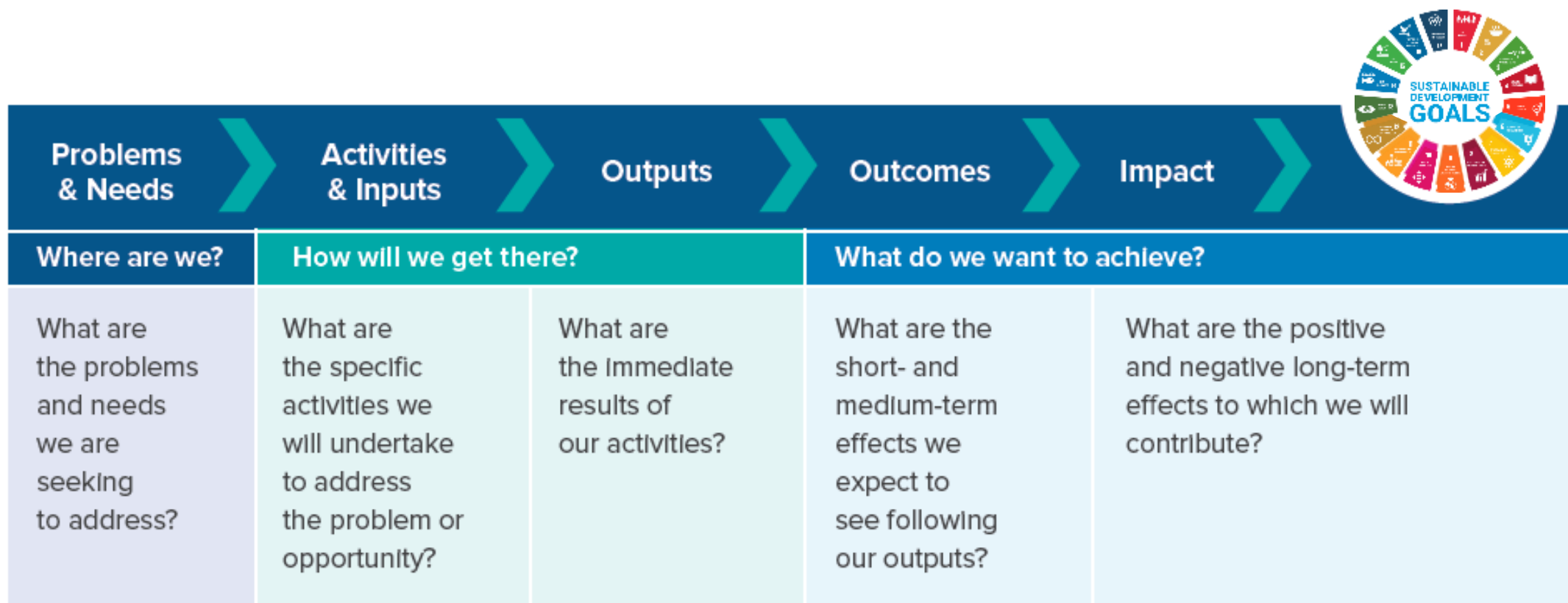
- Indicators for outcomes and impacts should be accompanied both by a **baseline value as well as a target value.**

03

4 Planning for impact

Theory of Change is a detailed description of the mechanisms through which a change is expected to occur in a particular situation.

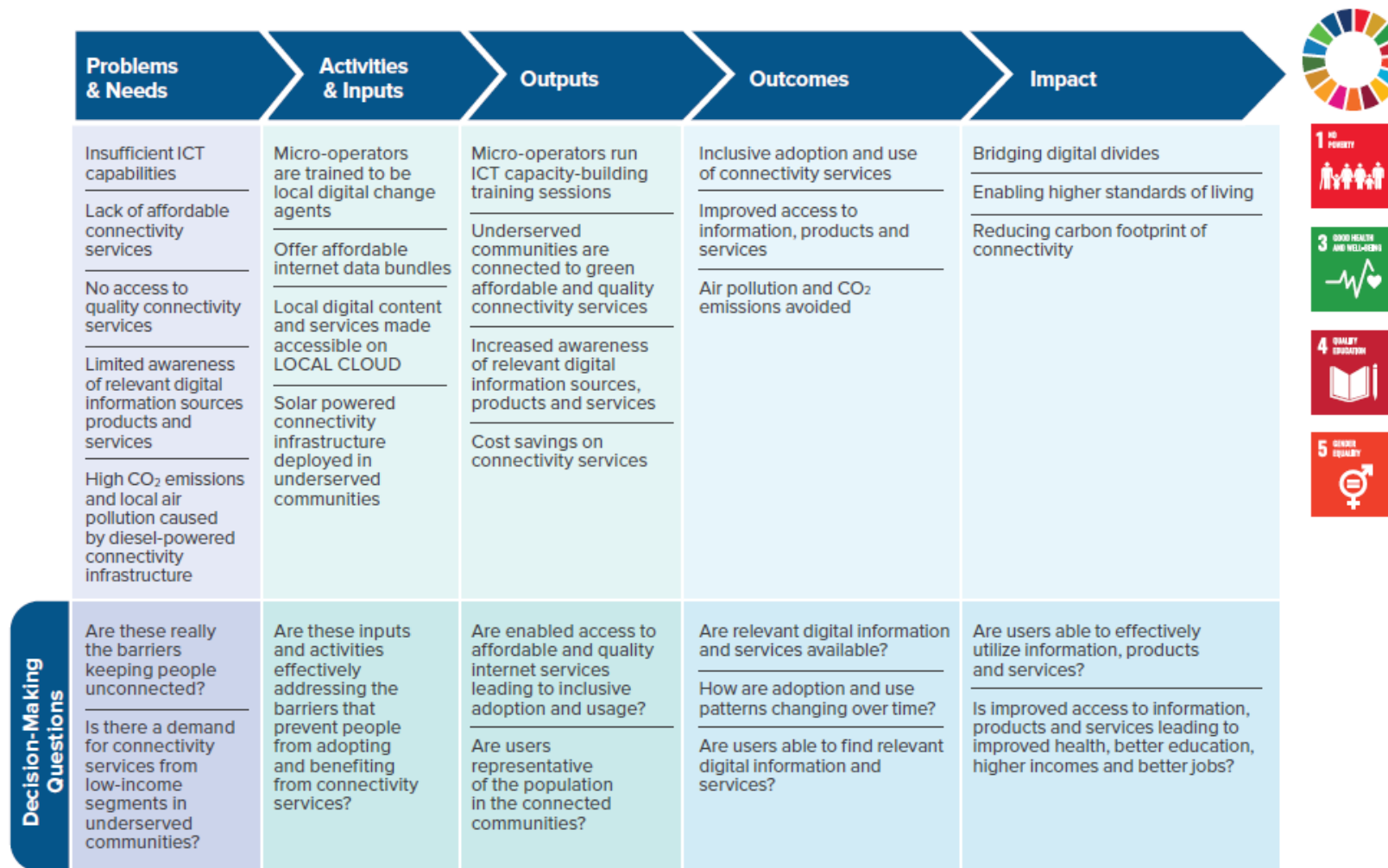
- Identifies the goals, preconditions, requirements, assumptions, interventions, and indicators of a program
- Provides important insight into and guidance on intervention and **impact evaluation** design.



4 Planning for impact

BLUETOWN

Example BLUETOWN - Impact value chain



4 Planning for impact

Selecting indicators

Companies should analyse which indicators are most relevant to informing decisions and decide on the number accordingly as each indicator involves time, cost and effort to measure and analyse.

SMART principles

S

“Specific” means that the indicator conveys simple and precise information about what needs to be measured – it is specific enough to measure progress towards results

M

“Measurable” means that the indicator is clear and unambiguous about what is measured – regardless of who uses the indicator, it would be measured in the same way

A

“Attainable” means that the indicator is realistic and can be achieved within the designated time frame – the results which it seeks to track are realistic

R

“Relevant” means that the information provided by the indicators is relevant or closely linked to the outcome or impact that needs to be measured, and the information that is provided will likely be used for decision-making to improve operations or implementation

T

“Time-bound” means that a clear timeframe is defined for which the indicator will be measured, and progress can be regularly tracked for a set period

4 Planning for impact



To specify the measures of progress, a company needs to select indicators. Indicators allow stakeholders to verify changes in outcomes and impacts relative plan.

Approach of selecting indicators

- Using global standard indicators
- Developing company-specific indicators
- Combining both standards-company developed indicators

Examples of Standard Indicators Frameworks



HARMONIZED INDICATORS FOR PRIVATE SECTOR OPERATIONS



United Nations



DRIVING AMBITIOUS CORPORATE CLIMATE ACTION



GISD

Global Investors for Sustainable Development Alliance



JOINT IMPACT INDICATORS

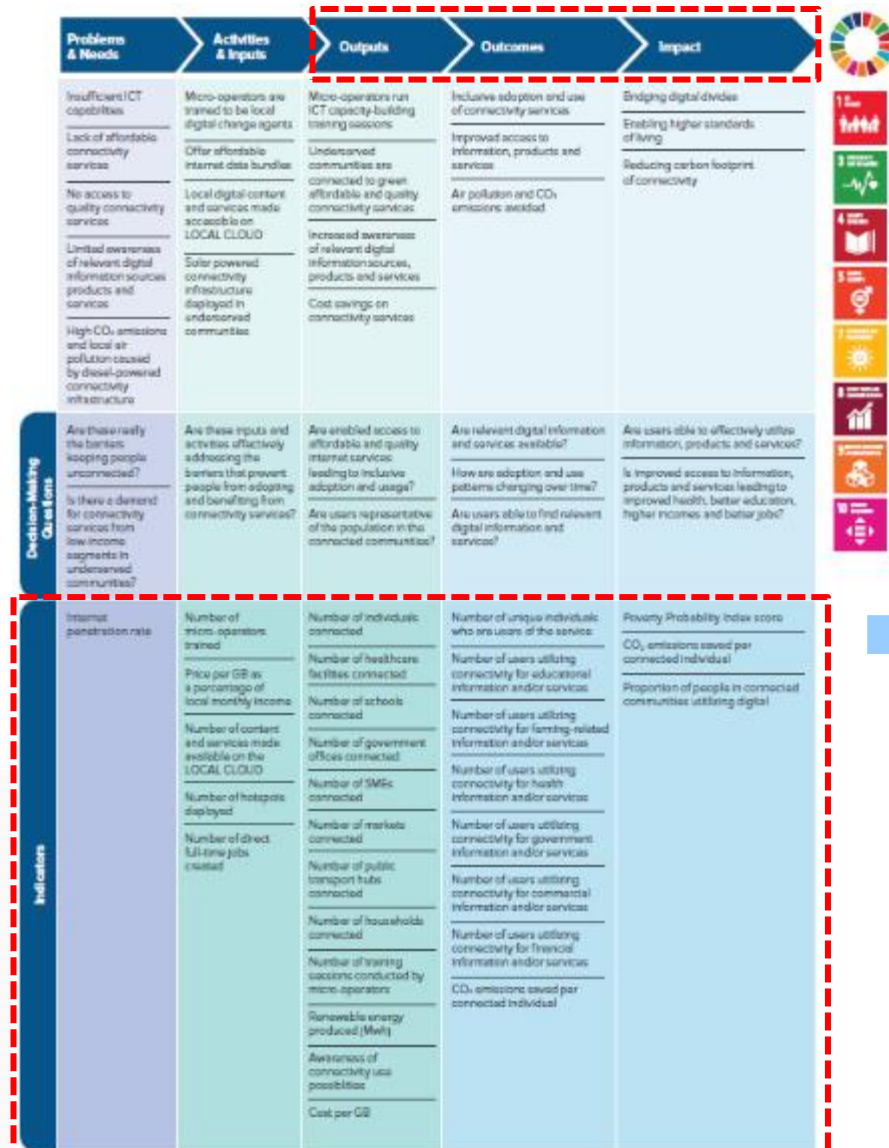


ERM

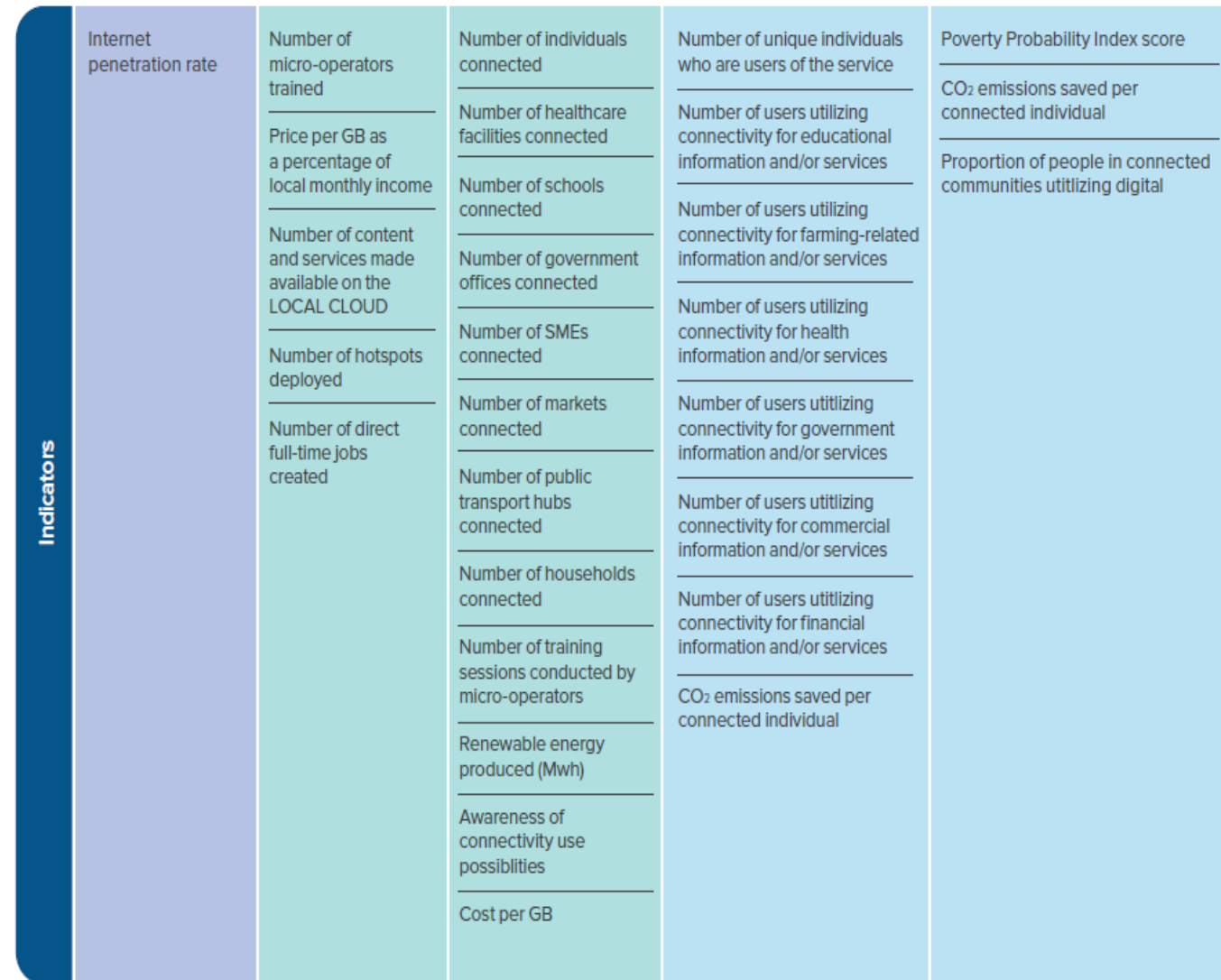
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4 Planning for impact

Example: Selecting indicators



Mapping indicators across the Outputs, Outcomes, Impact

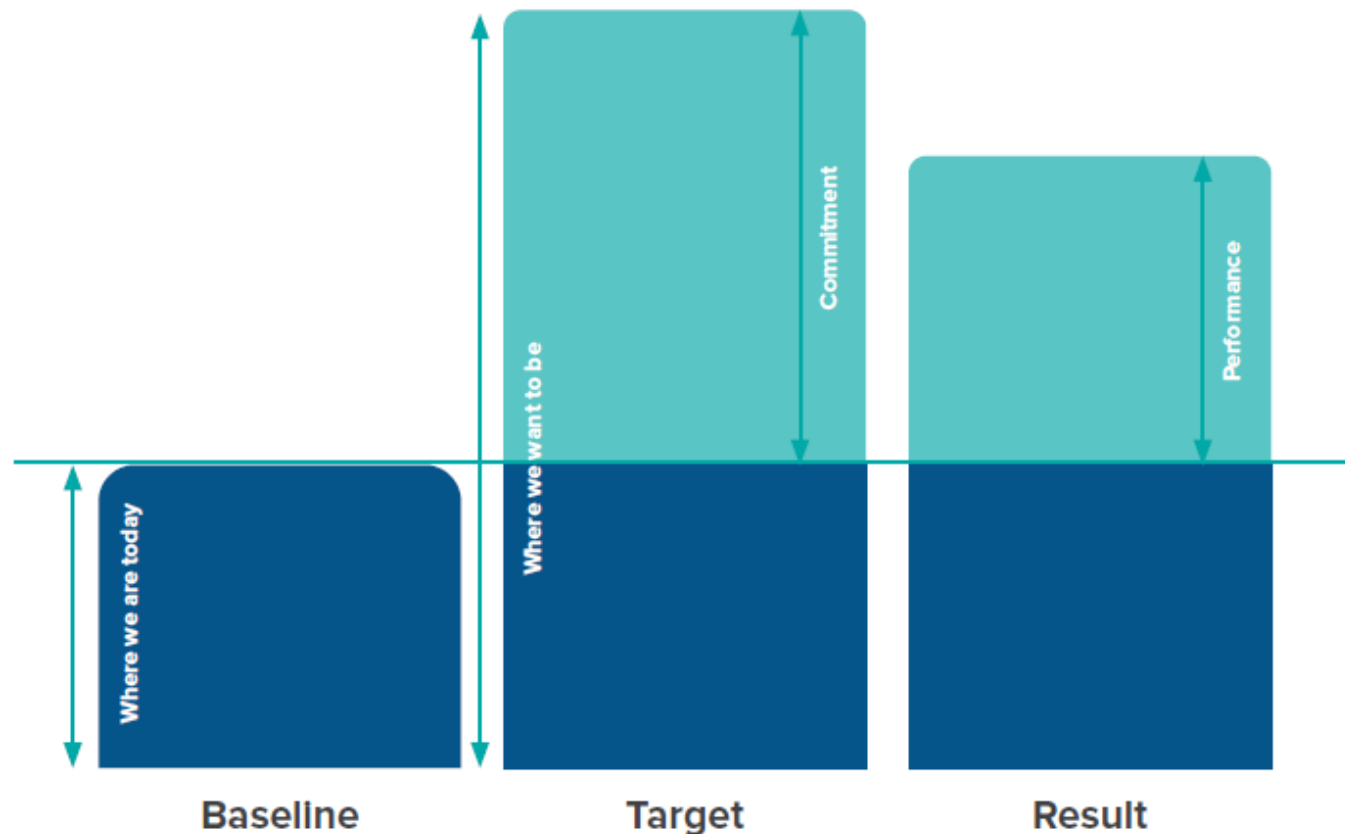


4 Planning for impact

Setting baselines and targets

Indicators for outcomes and impacts **should be accompanied both by a baseline value as well as a target value.**

- Baseline value represents the current status and **serves as a reference to assess progress toward** the desired outcome or impact.
- The target value indicates the specific outcome **aim to achieve** or the value the **indicator should reach** in the future.



A close-up photograph of a coffee machine's spout pouring a stream of dark brown espresso into a white ceramic cup. A single drop of coffee is suspended just below the spout. The background is dark and out of focus.

**Coffee Break
15 minutes**



Activity 1

IMM Framework Step 3 and 4

IMM Framework

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6

Double Materiality Concept



Impact Materiality

The company’s impact on the environment/society (GRI-aligned definition of materiality).

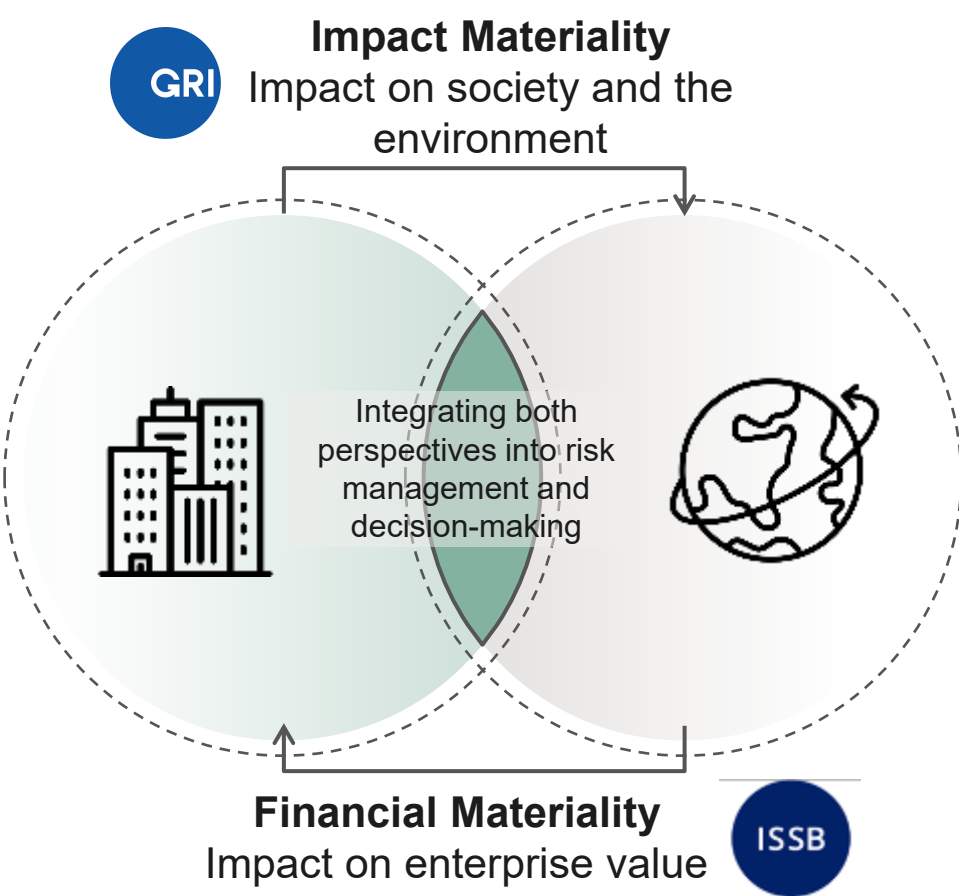
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Financial Materiality

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Sustainability-related opps. can **enable enterprise value** for the company.

Risks

Sustainability-related risks that can **obstruct enterprise value** for the company.

“Materiality should not be restricted to what is relevant to business goals or financial performance and must include what is relevant to the business’s stakeholders, both positive and negative impacts terms.”

GROUP ACTIVITIES II: Impact Lab Module 1



UNDP Impact Lab

English Sasipa Pruksangkul

IMPACT LAB

Menu

Module 1: Strategize & Plan

Back to Introduction

IMPACT VALUE CHAIN SUMMARY

Your sector: Other service activities

SDGs:

PROBLEMS AND OPPORTUNITIES INPUTS/ACTIVITIES OUTPUTS OUTCOMES IMPACT

IMPACT

Expected results (long-term/impact)

What is the specific impact you are expecting in the long-term? Map these against the mid-term outcomes you outlined in the previous step.

☒ OC XXX

☐ IM XXX

Back Next: Summary >

GROUP ACTIVITIES 1: Materiality Identification and Outcomes and Impact Identification



Company A: Construction and Property Management

Veeda Estate & Construction PCL is a mid-to-large property developer and general contractor headquartered in Bangkok, Thailand, and listed on the Stock Exchange of Thailand. Founded in 2005, the company has grown from a single residential project into an integrated developer-builder with operations across the Bangkok Metropolitan Region and major provincial cities.

Employee: 3,500 and large rotating contractor on site
Market Segment: Residential, commercial, and mixed-use real estate

Business Activities	Stakeholder Relevant	Materiality Topic
- Land acquisition and development - Residential development - Commercial and mixed-use development - Construction and general contracting - Building materials and precast - Sales, marketing, and brokerage - Property and facility management	- Employees - Shareholders and investors - Contractors and subcontractors - Suppliers (cement, steel, finishing materials, equipment) - Architects, engineers, - Local communities - Regulators and government - Landowners and adjacent property owners - Financial institutions and lenders	Environmental Dimension - Climate Change - Waste Management - Water Management - Biodiversity - Energy Management Social Dimension - Community Relation - Customer Relations - Labor practices - Occupational Health and Safety - Human Capital Development Governance Dimension - Innovation Management - Responsible Supply Chain - Cyber security and IT - Business Code of Conduct

GROUP ACTIVITIES 1: Materiality Identification and Outcomes and Impact Identification



Company A: Industrial Production

Thanapat Precision Industries PCL is a precision-component manufacturer serving automotive and electronics customers, with factories concentrated in Thailand's Eastern Economic Corridor (Rayong and Chonburi). Established in 1992, it is an original-equipment manufacturer (OEM) supplier with a strong export orientation and is currently investing to support the shift toward electric vehicles (EVs).

Employees: 6,000
Annual Revenue: THB 25 billion
Operations: Multiple energy-intensive plants (metalworking, plating, injection moulding)
Strategic Focus: Transitioning from conventional auto parts toward EV and lightweight components

Business Activities	Stakeholder Relevant	Materiality Topic
- Precision manufacturing of metal and plastic components. - Automotive parts production — engine, transmission, and EV-related parts such as battery housings. - Electronics and electrical component assembly. - Metal surface treatment and plating. - QC and export to global OEM customers. - Research and development for new EV and lightweight product lines.	- Employees (Factory workers, engineers, management) - Shareholders and investors - Suppliers (raw materials (steel, aluminium, resins), chemicals, components, and utilities) - Logistics Providers - Local communities - Regulators and government - Financial institutions and lenders - Industry Association	Environmental Dimension - Climate Change - Waste Management - Water Management - Biodiversity - Energy Management - Circular Economy Social Dimension - Community Relation - Customer Relations - Labor practices - Occupational Health and Safety - Human Capital Development Governance Dimension - Innovation Management - Responsible Supply Chain - Cyber security and IT - Business Code of Conduct

GROUP ACTIVITIES 1: Materiality Identification and Outcomes and Impact Identification



Company C: Consumer Goods & Agricultural Products

Suwan Agro-Foods PCL is an integrated agri-food and fast-moving consumer goods (FMCG) company headquartered in Bangkok, with sourcing and production across Thailand's Central and Northeastern regions. Founded in 1985, it operates across the value chain — from agricultural sourcing and contract farming through processing to branded packaged products for domestic and export markets.

Employee: 8,000

Product Range: Rice, processed foods, snacks, beverages, and sauces

Sourcing Model: Contract farming with smallholder farmers

Business Activities	Stakeholder Relevant	Materiality Topic
- Agricultural sourcing and contract farming — rice, fruits, vegetables, and sugar via a smallholder network. - Food processing and manufacturing. - Branded consumer packaged goods (FMCG) production. - Packaging operations. - Marketing, sales, and distribution — modern trade, traditional retail, food service, and export. - R&D Product Development—including healthier and value-added products.	- Employees - Shareholders and investors - Contract farmers and smallholder suppliers - Agricultural input suppliers and packaging suppliers - Logistics Partners - Local communities - Regulators and government - Financial institutions and lenders - NGOs	Environmental Dimension - Climate Change - Waste Management - Water Management - Biodiversity and soil health - Sustainable Agricultural Practices - Packaging and Plastics Social Dimension - Community Development - Customer Relations - Labor practices - Occupational Health and Safety - Human Capital Development Governance Dimension - Innovation Management - Responsible Supply Chain - Cyber security and IT - Food Safety and Quality - Products Labelling, Claims and Regulatory Compliance

Activities 1

Objective 1 : To understand and apply the process of identifying material sustainability topics by analyzing company’s stakeholder relevance, and materiality prioritization. Each groups will be assigned the company types. The impact materiality and the financial materiality should be **at least 3 contexts** each.

Impact Materiality		
Stakeholders	ESG Topics	Rationale
<i>Employees</i>	<i>Labor Practices</i>	<i>Factory and field operations can directly affect an employee’s health, safety, and human rights which are essential to maintaining a productive workforce.</i>

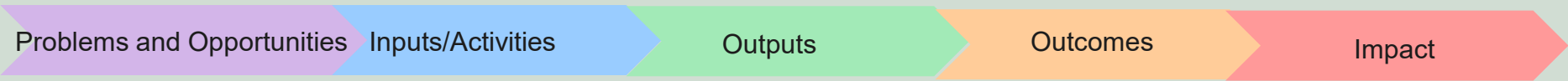
Financial Materiality		
Stakeholders	Topics	Rationale
<i>Community</i>	<i>Natural Resource Management</i>	<i>Company’s use of water, soil, and raw materials directly affects production costs and operational continuity.</i>

Activities 1

Objective 2: To understand how to develop business strategies and plans related to the ESG provided issues.

Instruction: Each group selects **1 financial materiality** and **1 impact materiality** to develop strategies and plans for ESG Development then record their answers on a flipchart.

- **Problems and Opportunities:** What are the problems and needs we are seeking to address?
- **Inputs/Activities:** What are the specific activities we will undertake to address the problems or opportunities?
- **Outputs:** What are the immediate results of our activities?
- **Outcomes:** What are the short-and medium-term effects we expect to see following our output?
- **Impact:** What are the positive and negative long-term effects to which we will contribute?



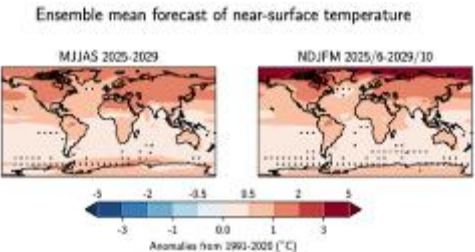
Problems and Opportunities	Inputs/Activities	Outputs	Outcomes	Impact	SDG Goals
<i>e.g. Risk of water scarcity due to climate change</i>	<i>Investment in water-saving irrigation technologies such as drip irrigation.</i>	<i>Reduced water consumption 100 megaliter</i>	<i>Reduced shortage at water sources.</i>	<i>Long-term resilience at water sources</i>	

ทำความรู้จักกับ Climate Related Risks/Opportunities

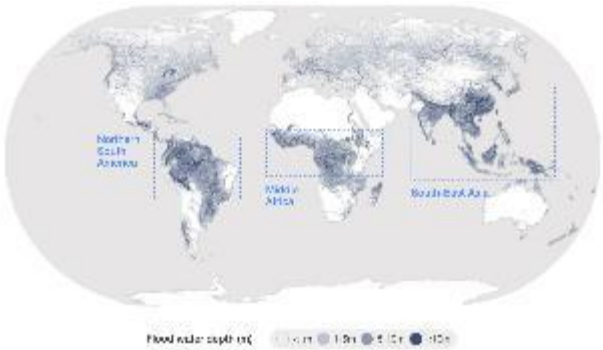


Impacts of Climate Change in 2030, 2050 and Beyond

Global High Temperatures:
2025-2029 expected to be between **1.2-1.9°C** and higher than the 1850-1900 average.



Several regions risk experiencing severe **floods and heavy rainfall** between 2050 and 2070.



2025

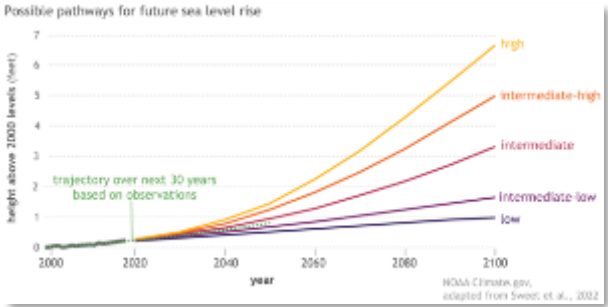
2030

2050

2100



World likely to **breach 1.5°C** limit in next five years.



Global mean **sea level** would rise at least **0.3 meters (1 foot)** above 2000 levels by 2100.



How climate-related physical risks impact companies?



There are two types of **climate-related physical risks**:

- **Acute Risks**: Risks resulting from extreme weather events, such as cyclones and floods.
- **Chronic Risks**: Risks resulting from comparatively longer-term shifts in weather pattern such as sea level rise and desertification

The following presents examples of these risks as well as their categorization:

Wind and Cyclone



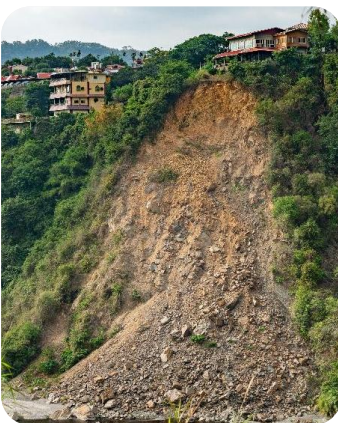
Acute

Inland Flood



Acute

Landslides



Acute

Water Availability



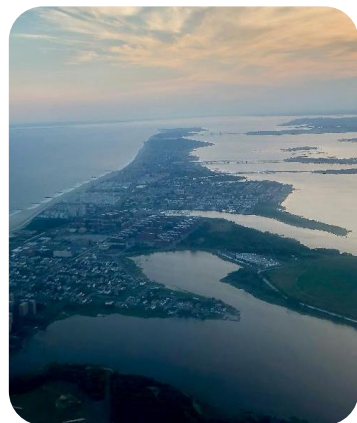
Chronic

Temperature Rise



Chronic

Sea-level Rise



Chronic



How climate-related transition risks and opportunities impact companies?

Transition risks and opportunities emerge as economies work towards reducing GHGs (e.g., transition to low-carbon economy).



- Shifts in supply and demand for certain commodities, products and services as climate-related risks and opportunities are increasingly taken into account
- Customer behavior change to prefer energy from renewable sources

Impacts on - e.g. product demand, operating costs



- Technological improvements or innovations that support the transition to lower-carbon, energy-efficiency
- The disruption caused by the displacement of old systems by new technology

Impacts on – e.g. capital expenditure, operating costs



- Stakeholder groups are becoming aware and concerned of the pollution generating GHG from fossil fuel and its negative impacts to climate change.
- Community perceptions of an organization's contribution to or detraction from the transition to a lower-carbon economy

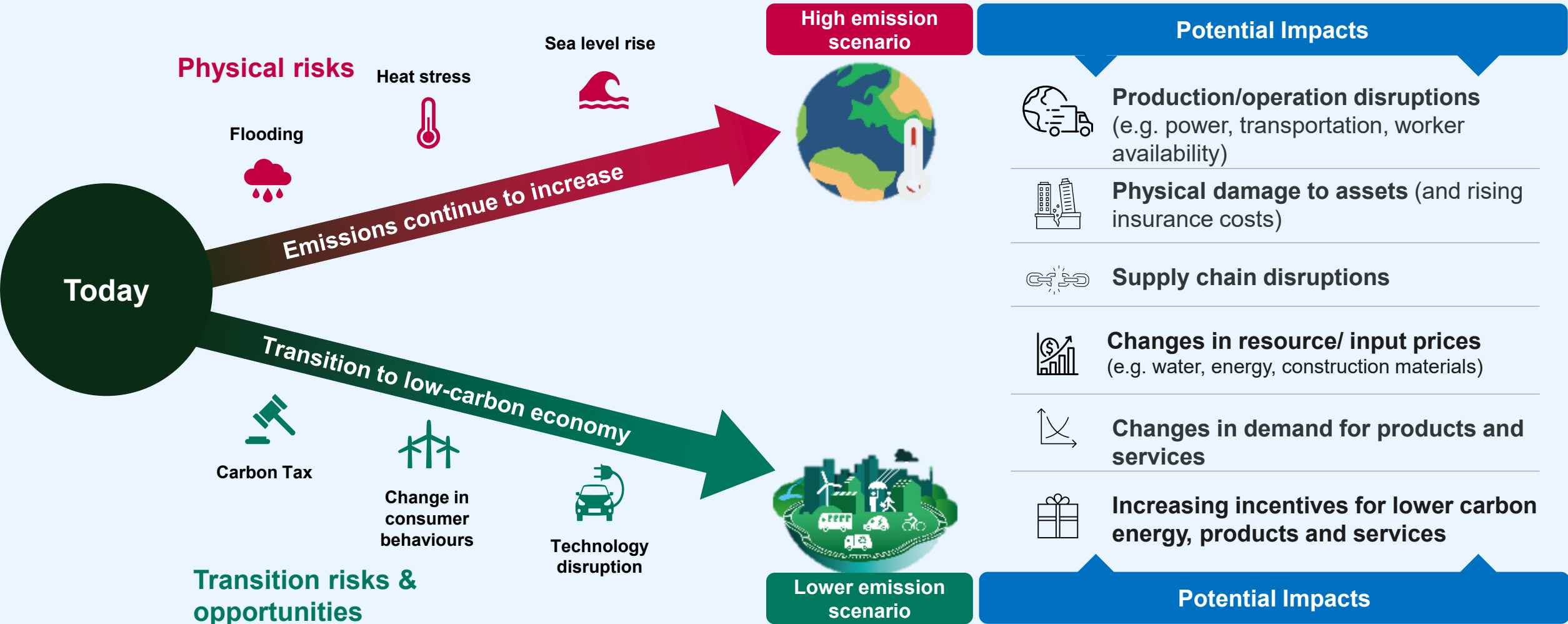
Impacts on – e.g. company valuation, customer demand



- Policy actions that attempt to constrain actions that contribute to the adverse effects of climate change
- Policy actions that seek to promote adaptation to climate change

Impacts on – e.g. capital and operating costs

Scenario Analysis



Introduction to Climate Scenarios



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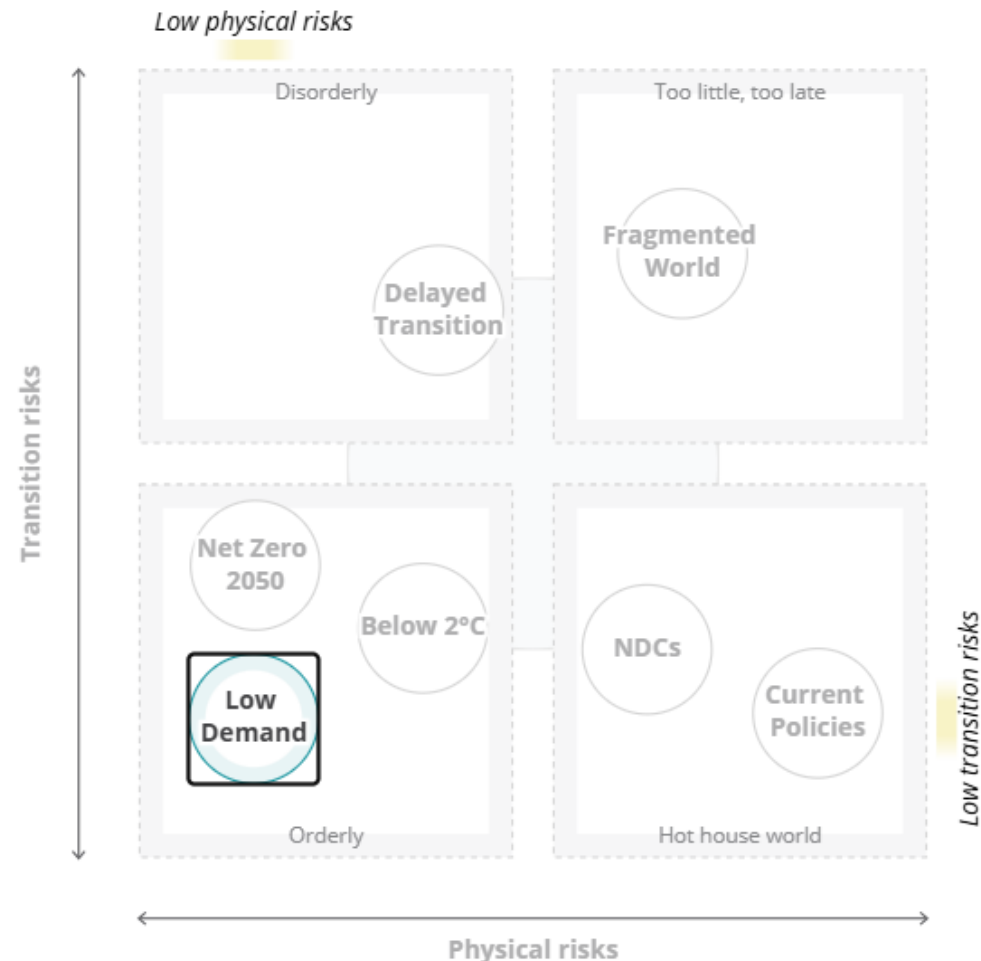
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<https://www.ngfs.net/ngfs-scenarios-portal/>

Example of Scenario Analysis Application



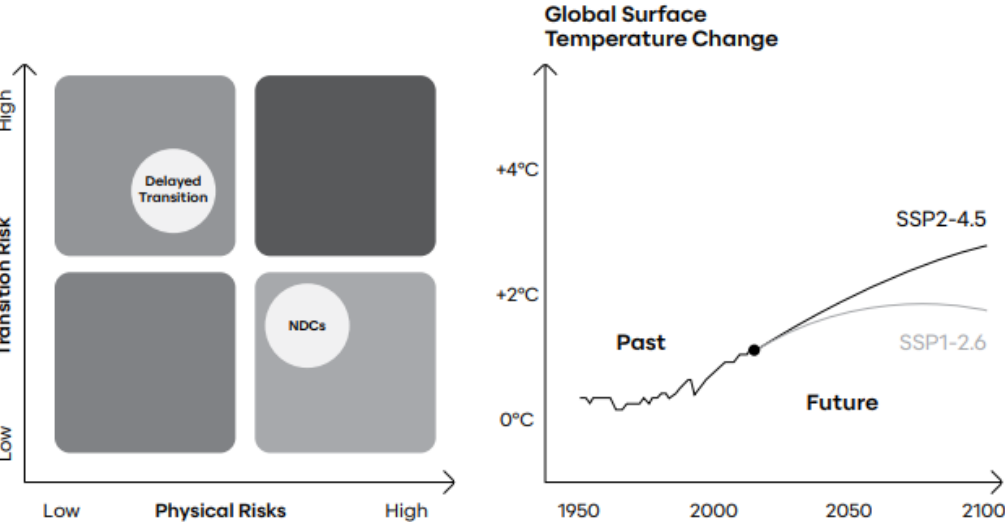
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Scenario employed by SCBX



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- Physical Risk Assessment**
For physical risk assessment, SCBX employed the Shared Socioeconomic Pathways (SSP) scenarios — SSP1-2.6 and SSP2-4.5 — which represent different climate futures based on greenhouse gas concentration trajectories. These scenarios were used to assess potential physical damages and operational losses at SCBX's key operational sites and the locations of third-party service providers.



Time Horizons for Risk Assessment

SCBX conducts its scenario analysis across three distinct timeframes to capture short-, medium-, and long-term risks:

Time Horizon	Period
Short-Term	Up to 2027
Medium-Term	2028 – 2033
Long-Term	2034 – 2050

This approach enables SCBX to identify residual risks and develop appropriate mitigation strategies over relevant planning horizons across all relevant operational assets.

Overview of Quantitative Assessment of Climate-related Risks and Opportunities

Strategy



Testing the **resilience of strategy** under different futures.

Risk Management



Identifying risks across the business and **preparing responses.**



Maximized revenues



Minimized costs



New products and services



Better business continuity



Enhanced access to capital



Quantifying financial impacts of climate change, then linking to Financial Reporting

But this can be quite challenging.



Lunch Break

Recap from this morning



What are SDGs and ESG?

SDGs

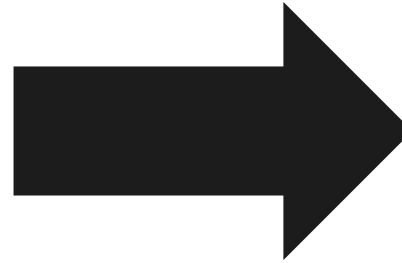
- Adopted by the UN in 2015
- **UNIVERSAL CALL TO ACTION** to end poverty, protect the planet, and ensure that by **2030** all people enjoy peace and prosperity.



ESG

- A company's ability to **SUSTAINABLY MANAGE ITS RESOURCES, RELATIONSHIPS, DEPENDENCIES AND IMPACTS** across business ecosystem
- Maintaining access to financial, human, and natural resources.

Call to actions
for businesses

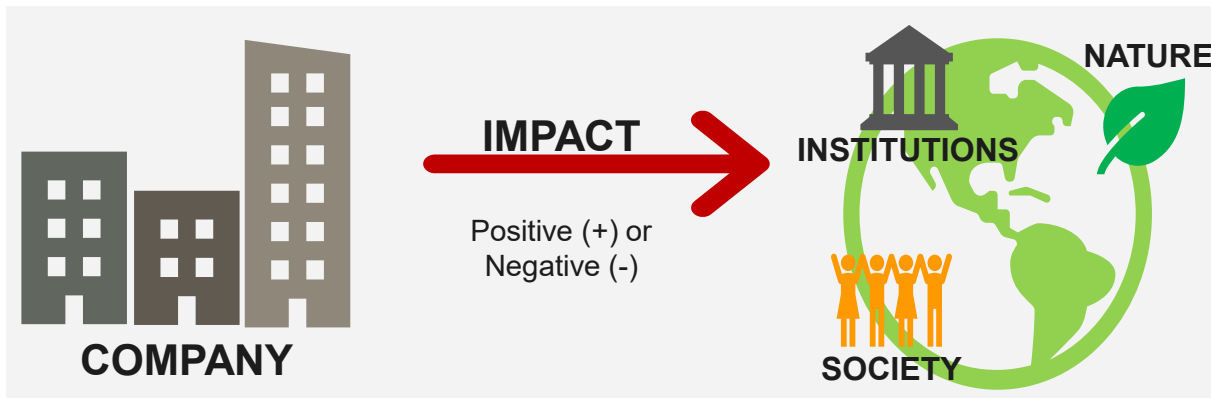


What are impacts, and risks/opportunities (IROs)?

IMPACT MANAGEMENT PLATFORM

Impact

- Effect of organization's actions on people and the natural environment
- Can be positive or negative
- Can be intended or unintended
- Can be direct or indirect.



Risks/Opportunities

- Effects on the entity's cash flows, access to finance or cost of capital
- Caused by interactions between the company and stakeholders, society, the economy and the environment throughout the value chain.



SDGs & ESG are equally important to businesses

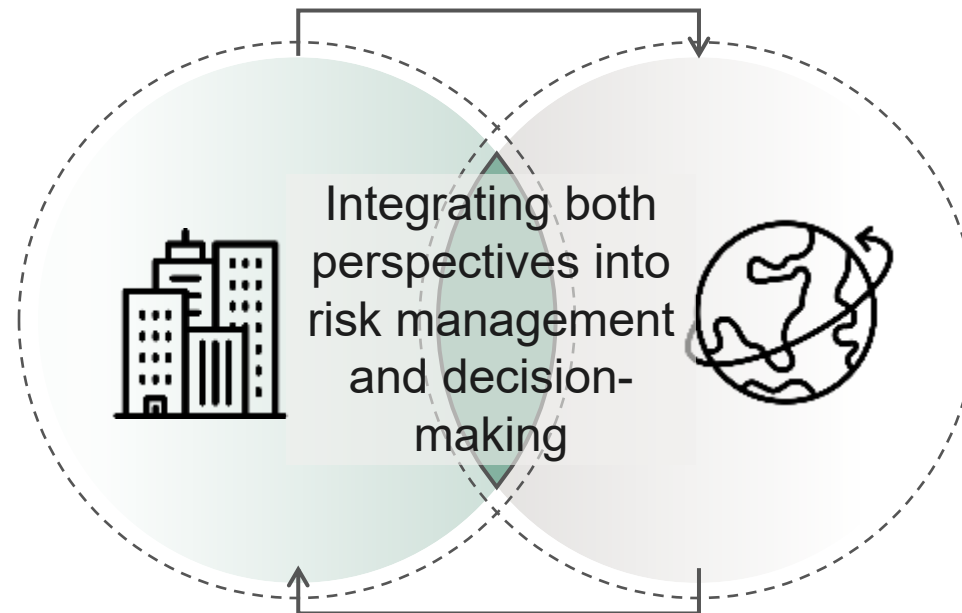


SDGs + ESG

Impact Materiality

Impact on society and the environment

To maximize
positive outcomes
and **minimize**
negative impacts
on society and the
environment



To manage risks
and **improve long-**
term financial
performance by
addressing ESG
related issues.

Financial Materiality

Impact on enterprise value

Morning Session Recap: IMM Framework



IMM Framework	
Step 1 	Understanding impact and IMM
Step 2	Identifying and engaging with stakeholders
Step 3	Prioritizing impacts
Step 4	Planning for impact
Step 5	Measuring impact and integrating impact into business practices
Step 6	Reporting progress on impact in line with the One Report

Step 1: Understanding impact and IMM

- Understanding impact and IMM to develop executive sustainability statement aligned with SDGs.
- Business case to gain buy-in from executives
- Embed in the CEO's vision, corporate purpose, or other statements of intent.

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Step 2: Identifying and engaging with stakeholders



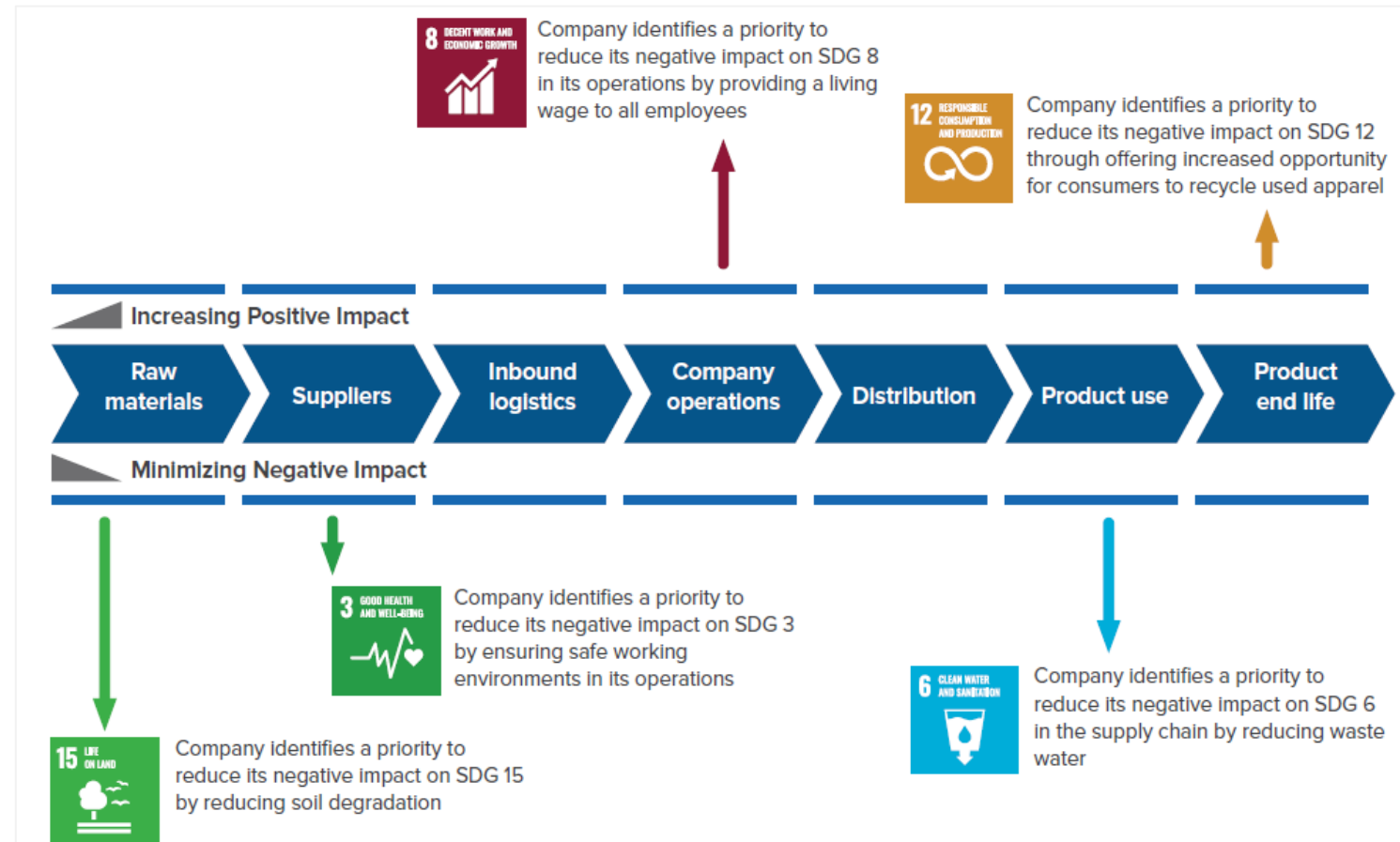
- Identify and map stakeholders across value chain
- Consider both directly impacted and potentially impacted groups
- Align actions with stakeholder needs and SDGs
- Meaningful stakeholder engagement involves **two-ways communication**

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Step 3: Prioritizing impacts

- Companies need to identify and prioritize material impacts and relevant SDGs across the value chain.

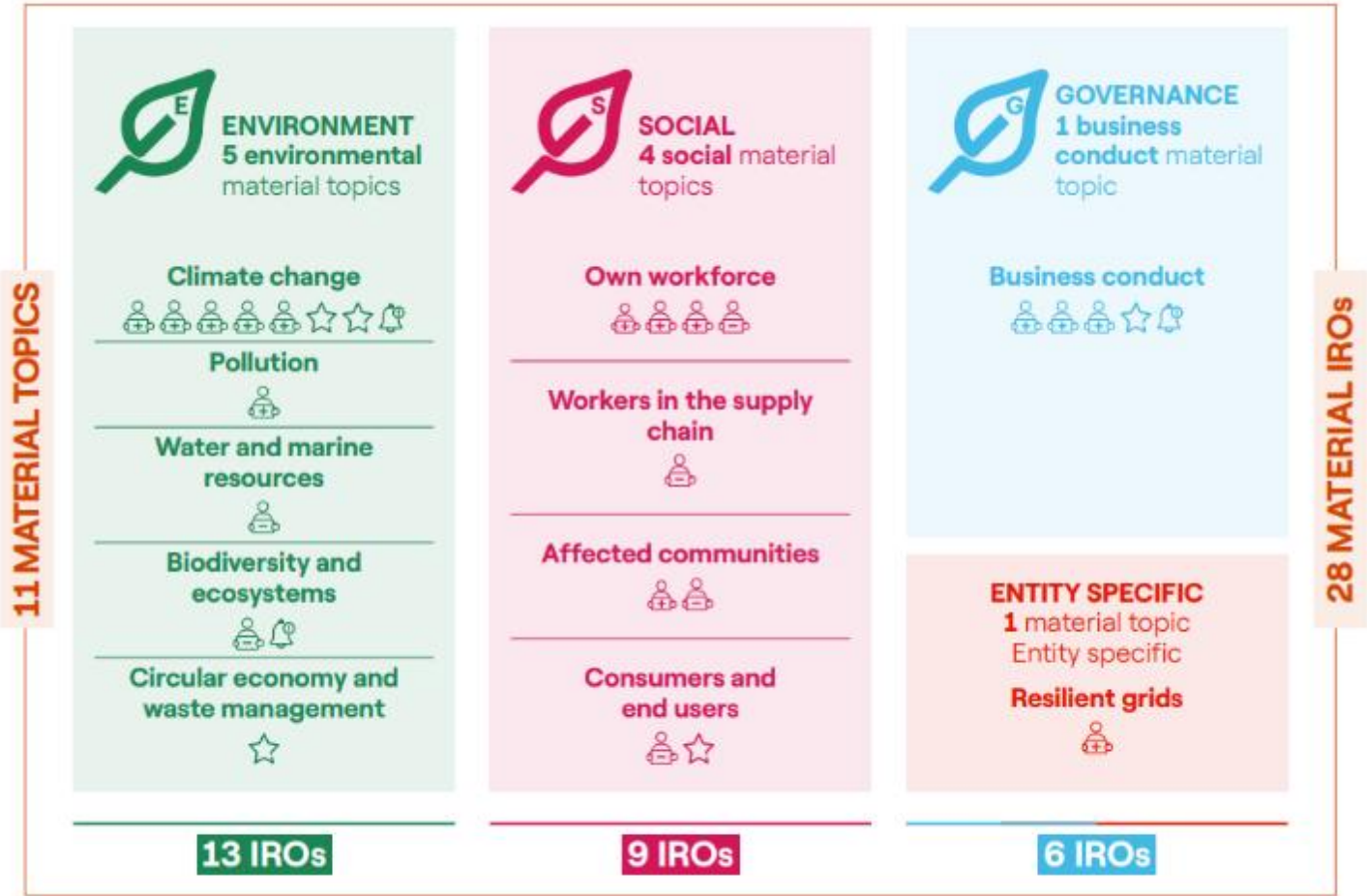


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Step 3: Prioritizing impacts

GROUP ACTIVITIES 1

Activities 1

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Step 4: Planning for impact

Developing an impact value chain

- Theory of Change (TOC) articulate the steps to achieve tangible impact targets

01

Selecting indicators

- Focusing on specific, measurable changes
- SMART principles

02

Setting baselines and targets

- Indicators for outcomes and impacts should be accompanied both by a **baseline value** as well as a **target value**.

03

Morning Session Recap: IMM Framework

Step 4: Planning for impact

IMM Framework	
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GROUP ACTIVITIES 2



Input/Activity	Output	Outcome	Impact
Doctor device distribution and training	Doctors trained and empowered to use new medical device	Increased identification of complications and high-risk pregnancies	Reduction on the number of preventable deaths
Introduction of solar panels in company's factories	75% of the energy consumed by company's factories is solar powered	Reduction in CO2 emissions by company	By 2035 company expects to be carbon neutral

Provide access to affordable credit for housing	Low-income customers apply for housing loans	Increased number of low-income customer with access to affordable housing	Improving the resilience of local community
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การวิเคราะห์ผลกระทบจากการ เปลี่ยนแปลงสภาพภูมิอากาศ Climate Change Impact Analysis



IMM Framework Step 5

IMM Framework

Step
1

Understanding impact and IMM

- Introduction of sustainability
- Introduction of impact
- What is impact measurement and management defining your company's commitment to sustainability

Step
2

Identifying and engaging with stakeholders

- Conducting stakeholder mapping
- How to engage with stakeholders along the value chain

Step
3

Prioritizing impacts

- Materiality analysis
- Mapping and prioritizing SDGs along the business value chain
- Business setting goals
- Five dimensions of impact for each goal

Step
4

Planning for impact

- Developing an impact value chain
- Selecting indicators
- Setting baselines and targets

Step
5

Measuring impact and integrating impact into business practices

- Monitoring results and collecting data
- Integrating SDGs and impact into business practices and decision-making
- Managing impact risks
- Reinforcing the company's commitment to impact through governance practices

Step
6

Reporting progress on impact in line with the One Report



1



2



3



4

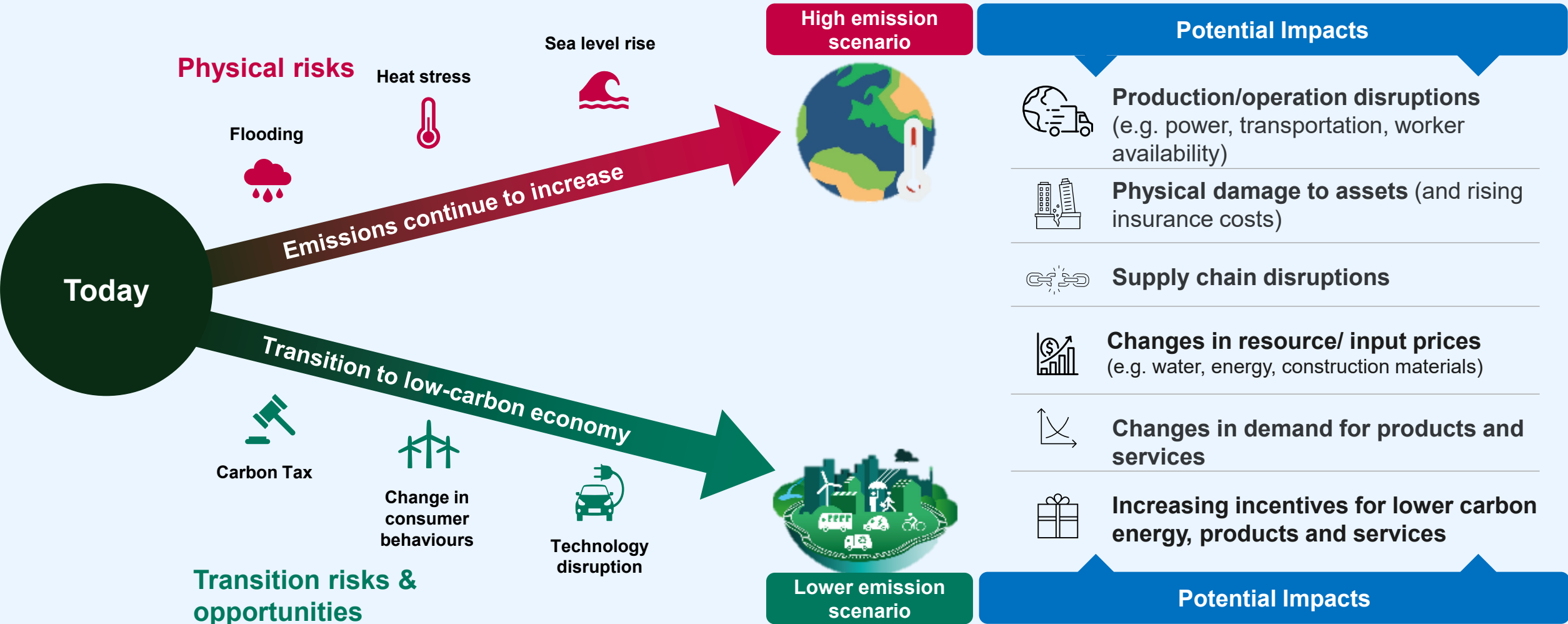


5



6

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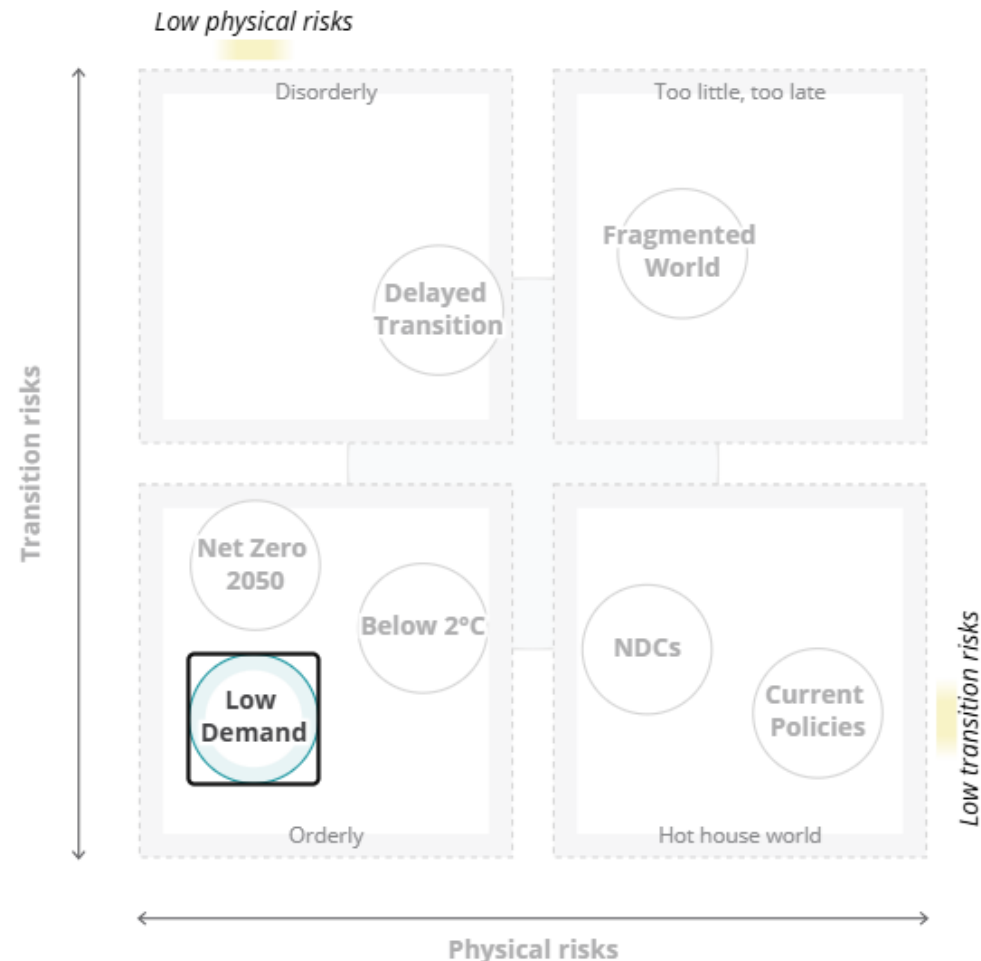
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The NGFS Delayed Transition Scenario and Nationally Determined Contributions (NDCs) Scenario were applied to evaluate the implications of transition risks. These scenarios represent opposite ends of the spectrum in terms of high physical risk and high transition risk environments. The analysis focused on assessing the potential impact of carbon pricing and GDP change under these NGFS pathways on our portfolio.
- Physical Risk Assessment**
For physical risk assessment, SCBX employed the Shared Socioeconomic Pathways (SSP) scenarios — SSP1-2.6 and SSP2-4.5 — which represent different climate futures based on greenhouse gas concentration trajectories. These scenarios were used to assess potential physical damages and operational losses at SCBX's key operational sites and the locations of third-party service providers.

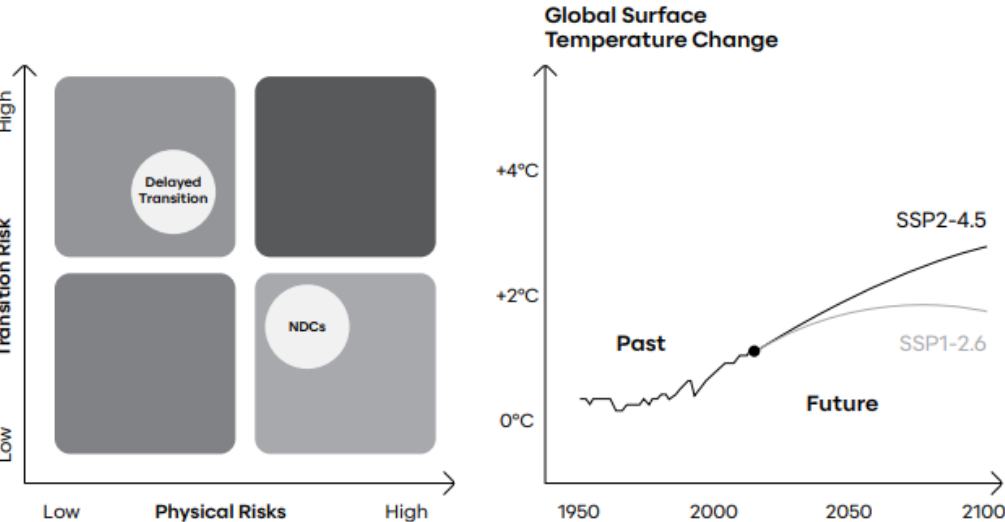


Time Horizons for Risk Assessment

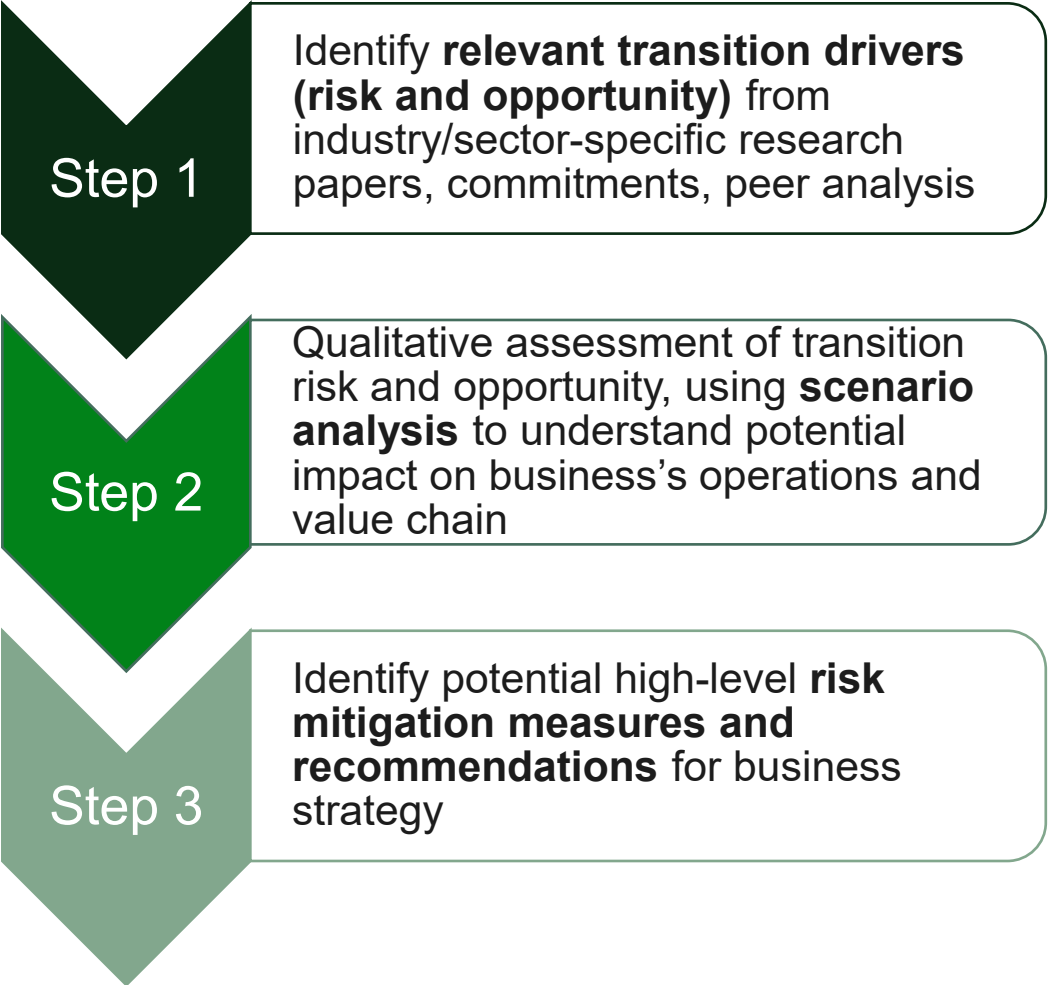
SCBX conducts its scenario analysis across three distinct timeframes to capture short-, medium-, and long-term risks:

Time Horizon	Period
Short-Term	Up to 2027
Medium-Term	2028 – 2033
Long-Term	2034 – 2050

This approach enables SCBX to identify residual risks and develop appropriate mitigation strategies over relevant planning horizons across all relevant operational assets.



Overview of Qualitative Assessment of Climate-related Risks and Opportunities



Asset	Water Scarcity				Riverine Floods				Coastal Floods				Extreme Heat				Cyclone and Wind			
	RCP 2.6		RCP 8.5		RCP 2.6		RCP 8.5		RCP 2.6		RCP 8.5		RCP 2.6		RCP 8.5		RCP 2.6		RCP 8.5	
	BSL		BSL		BSL		BSL		BSL		BSL		BSL		BSL		BSL		BSL	
	2030	2050	2030	2050	2030	2050	2030	2050	2030	2050	2030	2050	2030	2050	2030	2050	2030	2050	2030	2050
Coal																				
Philippines	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●
Thailand	●	●	●	●	●	●	N/A	●	●	●	●	●	●	●	●	●	●	N/A	●	●
Geothermal																				
Indonesia	●	●	●	●	●	●	N/A	●	N/A	●	●	●	●	●	●	●	●	N/A	●	●
Hydro																				
Laos	●	●	●	●	●	●	●	●	N/A	●	●	●	●	●	●	●	●	●	●	●
Natural Gas																				
Thailand	●	●	●	●	●	●	●	●	N/A	●	●	●	●	●	●	●	●	●	●	●
South Korea	●	●	●	●	●	●	N/A	●	N/A	●	●	●	●	●	●	●	●	●	●	●
USA	●	●	●	●	●	●	●	●	N/A	●	●	●	●	●	●	●	●	●	●	●
Solar																				
Thailand	●	●	●	●	●	●	●	●	N/A	●	●	●	●	●	●	●	●	●	●	●
Wind																				
Australia	●	●	●	●	●	●	N/A	●	N/A	●	●	●	●	●	●	●	●	N/A	●	●
Thailand	●	●	●	●	●	●	N/A	●	N/A	●	●	●	●	●	●	●	●	N/A	●	●
Taiwan	N/A	N/A	N/A	N/A	N/A	N/A	N/A	●	●	●	●	●	●	●	●	●	●	●	●	●

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Opening Question & Brief Sharing (5-10 mins)



What do you observe in the table header?

Asset	Water Scarcity				Riverine Floods				Coastal Floods				Extreme Heat				Cyclone and Wind				
	BSL	RCP 2.6		RCP 8.5		BSL	RCP 2.6		RCP 8.5		BSL	RCP 2.6		RCP 8.5		BSL	RCP 2.6		RCP 8.5		
		2030	2050	2030	2050		2030	2050	2030	2050		2030	2050	2030	2050		2030	2050	2030	2050	
Coal																					
Philippines	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	
Thailand	●	●	●	●	●		N/A			●	●	●	●	●	●	●	●	●		N/A	
Geothermal																					
Indonesia	●	●	●	●	●	●	N/A			N/A			●	●	●	●	●		N/A		
Hydro																					
Laos	●	●	●	●	●	●	●	●	●	●		N/A			●	●	●	●	●	●	●
Natural Gas																					
Thailand	●	●	●	●	●	●	●	●	●	●		N/A			●	●	●	●	●	●	●
South Korea	●	●	●	●	●	●	N/A			N/A			●	●	●	●	●	●	●	●	●
USA	●	●	●	●	●	●	●	●	●	●		N/A			●	●	●	●	●	●	●
Solar																					
Thailand	●	●	●	●	●	●	●	●	●	●		N/A			●	●	●	●	●	●	●
Wind																					
Australia	●	●	●	●	●	●	N/A			N/A			●	●	●	●	●		N/A		
Thailand	●	●	●	●	●	●	N/A			N/A			●	●	●	●	●		N/A		
Taiwan	N/A					N/A			●	●	●	●	●	●	●	●	●	●	●	●	●



Climate Risk Assessment also requires data collection.



Transition Risks and Opportunities

- Depends on the drivers that are selected

For example:

- Renewable Electricity Growth
 - Projected shift in production portfolio
 - Projected increase in demand of renewable electricity (Scenario data), etc.

Transition Drivers	Potential Impact ³					
	Fossil-Based Energy Generation		Green Energy Generation		Supply Chain	
	2030	2050	2030	2050	2030	2050
Renewable Electricity Growth (Energy Source Opportunity)	●	●	●	●	●	●
Increased revenue from the growing demand of renewable electricity						

Qualitative Climate Risk Assessment



What do the different colors mean?



Risk level (in this case, hazard rating) are “**qualitatively**” assessed as heat map to indicate the different risk levels.

Asset	Water Scarcity				Riverine Floods				Coastal Floods				Extreme Heat				Cyclone and Wind			
	RCP 2.6		RCP 8.5		RCP 2.6		RCP 8.5		RCP 2.6		RCP 8.5		RCP 2.6		RCP 8.5		RCP 2.6		RCP 8.5	
	BSL	2030	2050	2030	2050	BSL	2030	2050	2030	2050	BSL	2030	2050	2030	2050	BSL	2030	2050	2030	2050
Coal																				
Philippines	High	Low	Low	Low	Low	Medium	Low	Low	Low	Low	Low	Low	Low	Low	Low	Low	Low	Low	Low	Low
Thailand	High	Low	Low	Low	Low	N/A	N/A	N/A	Low	Low	Low	Low	Low	Low	Low	Low	N/A	N/A	N/A	N/A
Geothermal																				
Indonesia	Low	Low	Low	Low	Low	N/A	N/A	N/A	N/A	N/A	N/A	N/A	Low	Low	Low	Low	N/A	N/A	N/A	N/A
Hydro																				
Laos	High	Low	Low	Low	Low	Low	Low	Low	Low	Low	N/A	N/A	Low	Low	Low	Low	Low	Low	Low	Low
Natural Gas																				
Thailand	High	Low	Low	Low	Low	Low	Low	Low	Low	Low	N/A	N/A	Low	Low	Low	Low	Low	Low	Low	Low
South Korea	High	Low	Low	Low	Low	N/A	N/A	N/A	N/A	N/A	N/A	N/A	Low	Low	Low	Low	Low	Low	Low	Low
USA	High	Low	Low	Low	Low	Low	Low	Low	Low	Low	N/A	N/A	Low	Low	Low	Low	Low	Low	Low	Low
Solar																				
Thailand	High	Low	Low	Low	Low	Low	Low	Low	Low	Low	N/A	N/A	Low	Low	Low	Low	Low	Low	Low	Low
Wind																				
Australia	Low	Low	Low	Low	Low	N/A	N/A	N/A	N/A	N/A	N/A	N/A	Low	Low	Low	Low	N/A	N/A	N/A	N/A
Thailand	High	Low	Low	Low	Low	N/A	N/A	N/A	N/A	N/A	N/A	N/A	Low	Low	Low	Low	N/A	N/A	N/A	N/A
Taiwan	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	Low	Low	Low	Low	Low	Low	Low	Low	Low	Low	Low	Low

Time Horizons for Climate Risk Assessment



What do you observe in the table header?

TIME HORIZONS consist of:

- 2023 (Baseline/BSL)
- 2030 (mid-term)
- 2050 (long-term)

How do we know about the impacts of climate change in 2050?

Asset	Water Scarcity				Riverine Floods				Coastal Floods				Extreme Heat				Cyclone and Wind			
	BSL		BSL		BSL		BSL		BSL		BSL		BSL		BSL		BSL		BSL	
	2030	2050	2030	2050	2030	2050	2030	2050	2030	2050	2030	2050	2030	2050	2030	2050	2030	2050	2030	2050
Coal																				
Philippines	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●
Thailand	●	●	●	●	●	●	N/A	N/A	●	●	●	●	●	●	●	●	●	N/A	N/A	N/A
Geothermal																				
Indonesia	●	●	●	●	●	●	N/A	N/A	N/A	N/A	●	●	●	●	●	●	N/A	N/A	N/A	N/A
Hydro																				
Laos	●	●	●	●	●	●	●	●	●	●	N/A	N/A	●	●	●	●	●	●	●	●
Natural Gas																				
Thailand	●	●	●	●	●	●	●	●	●	●	N/A	N/A	●	●	●	●	●	●	●	●
South Korea	●	●	●	●	●	●	N/A	N/A	N/A	N/A	●	●	●	●	●	●	●	●	●	●
USA	●	●	●	●	●	●	●	●	●	●	N/A	N/A	●	●	●	●	●	●	●	●
Solar																				
Thailand	●	●	●	●	●	●	●	●	●	●	N/A	N/A	●	●	●	●	●	●	●	●
Wind																				
Australia	●	●	●	●	●	●	N/A	N/A	N/A	N/A	●	●	●	●	●	●	N/A	N/A	N/A	N/A
Thailand	●	●	●	●	●	●	N/A	N/A	N/A	N/A	●	●	●	●	●	●	N/A	N/A	N/A	N/A
Taiwan	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	●	●	●	●	●	●	●	●	●	●	●	●

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Qualitative Climate Risk Assessment

What do you observe in the table header?

RCP2.6 and RCP 8.5 are climate scenarios.

The previous slide may not be the only “future” scenario in 2030 and 2050.

Thus, climate risk assessment utilizes an approach called **SCENARIO ANALYSIS**.



Asset	Water Scarcity				Riverine Floods				Coastal Floods				Extreme Heat				Cyclones and Wildfires			
	RCP 2.6		RCP 8.5		RCP 2.6		RCP 8.5		RCP 2.6		RCP 8.5		RCP 2.6		RCP 8.5		RCP 2.6		RCP 8.5	
	BSL	2030	2050	2030	BSL	2030	2050	2030	BSL	2030	2050	2030	BSL	2030	2050	2030	BSL	2030	2050	2030
Coal																				
Philippines	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●
Thailand	●	●	●	●	●	N/A	●	●	●	●	●	●	●	●	●	●	●	N/A	●	●
Geothermal																				
Indonesia	●	●	●	●	●	N/A	●	●	N/A	●	●	●	●	●	●	●	●	N/A	●	●
Hydro																				
Laos	●	●	●	●	●	●	●	●	N/A	●	●	●	●	●	●	●	●	●	●	●
Natural Gas																				
Thailand	●	●	●	●	●	●	●	●	N/A	●	●	●	●	●	●	●	●	●	●	●
South Korea	●	●	●	●	●	N/A	●	●	N/A	●	●	●	●	●	●	●	●	●	●	●
USA	●	●	●	●	●	●	●	●	N/A	●	●	●	●	●	●	●	●	●	●	●
Solar																				
Thailand	●	●	●	●	●	●	●	●	N/A	●	●	●	●	●	●	●	●	●	●	●
Wind																				
Australia	●	●	●	●	●	N/A	●	●	N/A	●	●	●	●	●	●	●	●	N/A	●	●
Thailand	●	●	●	●	●	N/A	●	●	N/A	●	●	●	●	●	●	●	●	N/A	●	●
Taiwan	N/A	N/A	N/A	N/A	N/A	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●

<https://sustainability.egco.com/storage/document/tcfd-reports/2023/egco-tcfd-disclosures-2023-en.pdf>

Climate Risk Assessment also requires data collection.

Physical Risks

- Asset location
- Historical data
- Asset context
- Scenario data

Asset	Water Scarcity					Riverine Floods					Coastal Floods					Extreme Heat					Cyclone and Wind				
	RCP 2.6		RCP 8.5		BSL	RCP 2.6		RCP 8.5		BSL	RCP 2.6		RCP 8.5		BSL	RCP 2.6		RCP 8.5		BSL	RCP 2.6		RCP 8.5		
	2030	2050	2030	2050		2030	2050	2030	2050		2030	2050	2030	2050		2030	2050	2030	2050		2030	2050	2030	2050	
Coal																									
Philippines	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●			
Thailand	●	●	●	●	●	N/A	N/A	N/A	N/A	●	●	●	●	●	●	●	●	●	●	N/A	N/A	N/A			
Geothermal																									
Indonesia	●	●	●	●	●	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	●	●	●	●	●	N/A	N/A	N/A			
Hydro																									
Laos	●	●	●	●	●	●	●	●	●	●	N/A	N/A	N/A	N/A	●	●	●	●	●	●	●	●			
Natural Gas																									
Thailand	●	●	●	●	●	●	●	●	●	●	N/A	N/A	N/A	●	●	●	●	●	●	●	●	●			
South Korea	●	●	●	●	●	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	●	●	●	●	●	●	●	●	●			
USA	●	●	●	●	●	●	●	●	●	●	N/A	N/A	N/A	●	●	●	●	●	●	●	●	●			
Solar																									
Thailand	●	●	●	●	●	●	●	●	●	●	N/A	N/A	N/A	●	●	●	●	●	●	●	●	●			
Wind																									
Australia	●	●	●	●	●	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	●	●	●	●	●	●	N/A	N/A	N/A			
Thailand	●	●	●	●	●	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	●	●	●	●	●	●	N/A	N/A	N/A			
Taiwan	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	●	●	●	●	●	●	●	●	●	●	●	●	●			

Overview of Quantitative Assessment of Climate-related Risks and Opportunities

Strategy



Testing the **resilience of strategy** under different futures.

Risk Management



Identifying risks across the business and **preparing responses**.



Maximized revenues



Minimized costs



New products and services



Better business continuity



Enhanced access to capital



Quantifying financial impacts of climate change, then linking to Financial Reporting

But this can be quite challenging.

Example of Physical Risks Quantification

Item	Rationale		Performance indicators
P5. Water stress or water shortage	Water shortage may reduce B.Grimm Power's operating performance (Baht per year) due to reduced production of electricity and steam from combined cycle co-generation power plants that consume water as major raw materials.		- The number of days that steam turbines stop operating (days per year) - Loss of revenue (Baht per year)
Physical Risk	SSP5-8.5 (4.4°C) Scenario	SSP2-4.5 (2°C) Scenario	SSP1-2.6 (1.5°C) Scenario
Water stress for combined cycle co-generation power plant	Shut down HRSG & Steam Turbine for 15 days at a time ¹	Shut down HRSG & Steam Turbine for 7.5 days at a time ¹	Steam turbines stop operating for 5 days at a time ¹
Estimated financial implication		THB 9.7-45.7 million ¹	
Mitigation costs		THB 2.4-16.6 million ³	

Example of Physical Risk Quantification



Identified Risk	Example of Risk Implication	Financial Impacts on GC Business*	Time Horizon
Flood	• <u>Inundation of assets</u>, utilities, infrastructures, facilities and increased land erosion • <u>Disruption/damage of infrastructure</u> and movement of personnel and goods • <u>Loss of property value</u> • Personnel and infrastructure <u>safety</u> • Increase of asset <u>insurance cost</u>	<u>Assumption of (water depth 1.5 m for 1 day)</u> • Plant disruption 1 day resulted in revenue loss 0.53 million USD or 16.7 million THB. The calculation is based on the average revenue during Jan-May in the previous year) • Financial implication = revenue loss = 16.7 million THB • GC's critical 1st tier feedstock supplier may delay delivery raw material but there is no significant impact to GC. • There are 2 major customers and no significant impact on GC business	• Short-term:  • Medium-term:  • Long-term: 

Example of Transition Risks/Opps. Quantification



Current and Emerging Regulations 	- Change of vehicle excise tax structure based on the amount of greenhouse emissions. - Thailand's Nationally Determined Contribution (NDC) and UNFCCC requirements for transportation sector. - Development of carbon credits, carbon pricing and REC pricing policies in Thailand. - Future implementation of Thailand's Climate Change Act. - New stricter regulations related to current and future extreme weather - Other climate-related legal actions.	Transition: Policy, regulatory & legal	Changing of BTS Group's Climate Strategy, operations, leading to investment of new infrastructures and sources for supporting new operation systems. Currently, our BRT operates on NGV, with its emissions in 2023/24 at 1,703 tCO₂e. In 2030 we estimate a carbon price of USD 85.5 per tonne. We manage this risk through improving fuel efficiency of our fleet. As of 31 March 2024, USD conversion to THB was at THB 36.528 per 1 USD, therefore financial implications for cost of carbon tax in 2030 is approximately THB 5,318,714. The estimated cost of these actions is estimated to be THB 519,262.65. Time horizon: Medium and long term
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Opportunity	Description	Type	Impact for BTS Group
Market 	Higher demand for low-carbon transport system in Thailand presents new 'white-space' market opportunities.	Transition: Market	The most significant climate opportunities are new BTS lines and extensions, namely the Pink and Yellow line. The government aims to drive low carbon transport through new rail transit lines. BTS Group bases the potential financial impact from forecasted ridership multiplied by average fare for the Pink and Yellow lines. The estimated ridership is 130,000 daily trips and 47.45 million for each line. The average fare is THB 30, so estimated revenue for 2024 from new lines is THB 2.85 billion. The cost incurred for BTS Group is the cost of bidding for the 30 year concession which is estimated from the civil engineering, evaluation and management, and rolling stock costs at THB 9.6 billion, which equates to THB 320 million per year. Time horizon:

IMM Framework Step 5

IMM Framework

Step
1

Understanding impact and IMM

- Introduction of sustainability
- Introduction of impact
- What is impact measurement and management defining your company's commitment to sustainability

Step
2

Identifying and engaging with stakeholders

- Conducting stakeholder mapping
- How to engage with stakeholders along the value chain

Step
3

Prioritizing impacts

- Materiality analysis
- Mapping and prioritizing SDGs along the business value chain
- Business setting goals
- Five dimensions of impact for each goal

Step
4

Planning for impact

- Developing an impact value chain
- Selecting indicators
- Setting baselines and targets

Step
5

Measuring impact and integrating impact into business practices

- Monitoring results and collecting data
- Integrating SDGs and impact into business practices and decision-making
- Reinforcing the company's commitment to impact through governance practices
- Managing impact risks

Step
6

Reporting progress on impact in line with the One Report



1



2



3



4



5



6

Opening Question & Brief Sharing (5-10 mins)

How does your company structure its sustainability data collection system?



5 Measuring and integrating impact into business

Monitoring Plan

- Guide data collection and analysis
- Help track progress
- Ensure accountability and continuous improvement.

Monitoring Results and Collecting Data

- Monitor results through the selected indicators
- Progress against targets
- Means to verify accuracy of data

Results	Indicators	Baseline Value (Year)	Targets	Sources of information	Frequency	Responsibility
Output, outcome or impact statement from the Theory of Change	Indicator/metric name	Baseline value	Total target	Source of data, e.g., survey, dashboard, mobile app, reports	How often the data will be collected e.g., daily, weekly, monthly, quarterly	Who within the company or externally is responsible for collecting the data?

5 Measuring and integrating impact into business



Stakeholders

Who will you be collecting the data from?

- Employees
- Customers
- Suppliers
- Partners
- Local communities



Data Collection Method

Primary: data collected by your company (ex: field study).

Secondary: data collected by other sources that are relevant to your study (ex: national census).

Administrative: data that already exists within your organization that needs to be organized for your study.



Data Sources

- Survey
- Interviews
- Focus groups
- National statistics
- Company records
- Published reports

Measuring and integrating impact into business

Before starting data collection...

- 1) Clearly define why you are collection data – what is your purpose?
- 2) Tailor the type of tools to engage with each stakeholder.
- 3) Ask the right questions.
- 4) Be open-minded regarding all types of feedback.



STAKEHOLDER FEEDBACK

Consulting the individuals (or communities) affected by the enterprise's activities to gain a nuanced understanding of the drivers behind the outcome.

MARKET RESEARCH

Taking a thorough look at an intervention's context, market research can be used to build a 'good enough' counterfactual.

EVIDENCE-BASED RESEARCH

Sourcing depth contribution estimates through evidence-based research.

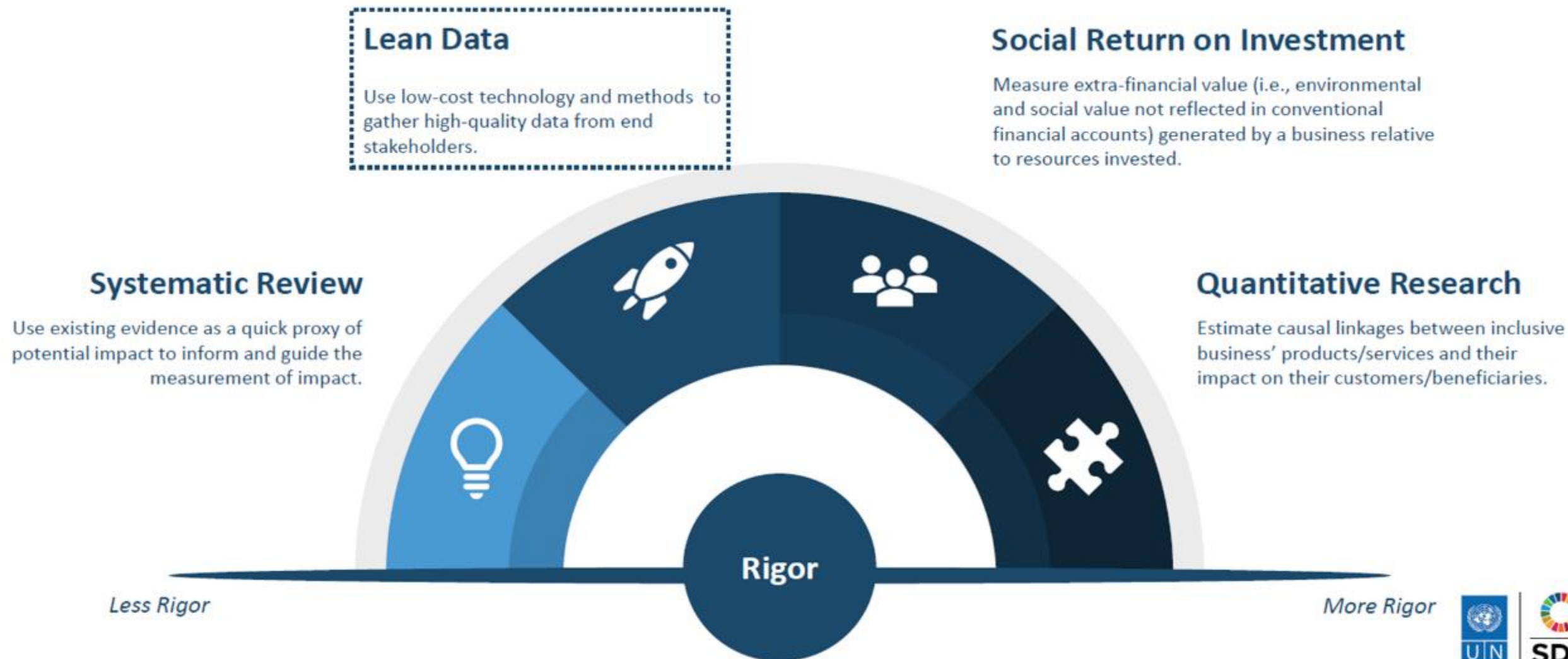
RANDOMIZED CONTROL TRIALS

Measuring the difference in outcomes over time among two randomly assigned groups.

QUASI-EXPERIMENTAL METHODS

Cover a range of statistical techniques to build experimental groups. Once these groups are created, practitioners compare the difference in outcomes over time between individuals who received the intervention and those who did not (the counterfactual).

5 Measuring and integrating impact into business



5 Measuring and integrating impact into business

Example

Indicator	Baseline(2021)	Targets (2022)	Results (2022)
Number of children achieving proficiency in functional literacy	10,000 Girls: 6,000, Boys: 10,000	15,000 Girls: 9,000, Boys: 6,000	14,000 Girls: 8,000, Boys: 6,000

SDG 4 “Ensure inclusive and equitable quality education and promote lifelong learning opportunities for all”.

- Can also disaggregate the data by gender, to understand if boys and girls benefit equally from its services.



SDGs, Targets and Indicators



SDGs are goals that include several targets, while each target consist of several related indicators.

- Goal 13 Climate Action also covers other targets other than GHG reduction.



Target

13.1

Strengthen resilience and adaptive capacity to climate-related hazards and natural disasters in all countries

Indicators ▲

13.1.1

Number of deaths, missing persons and directly affected persons attributed to disasters per 100,000 population

13.1.2

Number of countries that adopt and implement national disaster risk reduction strategies in line with the Sendai Framework for Disaster Risk Reduction 2015–2030

13.1.3

Proportion of local governments that adopt and implement local disaster risk reduction strategies in line with national disaster risk reduction strategies

SDGs, Targets and Indicators



Target
13.2

Integrate climate change measures into national policies, strategies and planning

Indicators ▲

13.2.1

Number of countries with nationally determined contributions, long-term strategies, national adaptation plans and adaptation communications, as reported to the secretariat of the United Nations Framework Convention on Climate Change

13.2.2

Total greenhouse gas emissions per year



Target
13.3

Improve education, awareness-raising and human and institutional capacity on climate change mitigation, adaptation, impact reduction and early warning

Indicators ▲

13.3.1

Extent to which (i) global citizenship education and (ii) education for sustainable development are mainstreamed in (a) national education policies; (b) curricula; (c) teacher education; and (d) student assessment

SDGs, Targets and Indicators



Target

13.a

Implement the commitment undertaken by developed-country parties to the United Nations Framework Convention on Climate Change to a goal of mobilizing jointly \$100 billion annually by 2020 from all sources to address the needs of developing countries in the context of meaningful mitigation actions and transparency on implementation and fully operationalize the Green Climate Fund through its capitalization as soon as possible

Indicators ▲

13.a.1

Amounts provided and mobilized in United States dollars per year in relation to the continued existing collective mobilization goal of the \$100 billion commitment through to 2025



Target

13.b

Promote mechanisms for raising capacity for effective climate change-related planning and management in least developed countries and small island developing States, including focusing on women, youth and local and marginalized communities

Indicators ▲

13.b.1

Number of least developed countries and small island developing States with nationally determined contributions, long-term strategies, national adaptation plans and adaptation communications, as reported to the secretariat of the United Nations Framework Convention on Climate Change

ERM's Approach to Target Setting for GHG Reduction

1. Gap Analysis of Existing GHG Inventory

- Many companies are already collecting GHG emission data to some extent
- Validate for accuracy
- Ensure alignment with international standard like GHG Protocol
- Obtain data sources to calculate GHG
- E.g. Emission factors from Thailand Greenhouse Gas Management Organization (TGO)

Greenhouse Gas Emissions

Greenhouse gas emissions decreased 8.76 million tons CO₂ compared to 2020, in line with science base targets towards the net-zero in 2050.



Performance Data	2020 ⁽¹⁾	2021 ⁽¹⁾	2022	2023	2024	GRI Standards	SASB
GHGs Scope 1 and 2 (Tons CO ₂ e) ⁽²⁾	34,243,210	33,525,541	30,116,798	27,083,867	25,479,607		
GHG Scope 1 (Tons CO ₂) ⁽²⁾	30,994,851	30,343,481	27,236,390	24,329,050	22,869,440	GRI 305-1	EM-CM-110a.1
GHG Scope 2 (Tons CO ₂) ⁽²⁾	3,248,358	3,182,060	2,880,408	2,754,817	2,610,166	GRI 305-2	
Location-Based (Tons CO ₂) ⁽²⁾	3,388,383	3,323,357	3,106,463	2,935,118	2,860,118		
Market-Based (Tons CO ₂) ⁽²⁾	3,248,358	3,182,060	2,880,408	2,754,817	2,610,166		
Biogenic CO ₂ (Tons CO ₂) ⁽²⁾	NA	4,853,737	5,459,979	3,968,392	5,522,750	GRI 305-1	
GHG emission reduction compare with base year 2020 (Tons CO ₂) (%)		717,668	4,126,412	7,159,343	8,763,603	GRI 305-5	
		2.09	12.05	20.91	25.59		
GHG Scope 3 (Tons CO ₂) ⁽²⁾	NA	15,603,650	10,014,394	10,606,251	10,695,208	GRI 305-3	
1. Purchased goods and services (Tons CO ₂) ⁽²⁾	NA	5,036,763	4,672,130	5,303,395	5,822,774		
2. Capital goods (Tons CO ₂) ⁽²⁾	NA	0	0	0	53,830		
3. Fuel and energy related activities (Tons CO ₂) ⁽²⁾	NA	1,878,089	1,461,512	1,460,420	1,266,371		
4. Upstream transportation & distribution (Tons CO ₂) ⁽²⁾	NA	1,090,483	1,542,759	1,480,778	1,109,770		
5. Waste generated in operations (Tons CO ₂) ⁽²⁾	NA	1,373	2,642	22,427	76,327		
6. Business travel (Tons CO ₂) ⁽²⁾	NA	1,479	13,225	3,910	6,761		
7. Employee commuting (Tons CO ₂) ⁽²⁾	NA	24,144	6,888	9,981	36,009		
8. Upstream leased assets (Tons CO ₂) ⁽²⁾	NA	0	0	0	0		
9. Downstream transportation & distribution (Tons CO ₂) ⁽²⁾	NA	1,145,963	422,057	566,064	388,330		
10. Processing of sold products (Tons CO ₂) ⁽²⁾	NA	4,225,574	34,002	246,235	434,023		
11. Use of sold products (Tons CO ₂) ⁽²⁾	NA	1,747,781	1,205,819	887,651	918,074		
11.1 Use of sold fossil fuels ⁽²⁾	NA	1,156,169	1,205,819	887,493	917,262		
12. End-of-life treatment of sold products (Tons CO ₂) ⁽²⁾	NA	41,467	51,556	67,203	58,623		
13. Downstream leased assets (Tons CO ₂) ⁽²⁾	NA	0	0	0	106		
14. Franchises (Tons CO ₂) ⁽²⁾	NA	487	7,735	6,578	3,977		
15. Investments (Tons CO ₂) ⁽²⁾	NA	410,047	594,068	551,609	520,234		

NA = Not Available

⁽¹⁾ Base year of scope 1+2

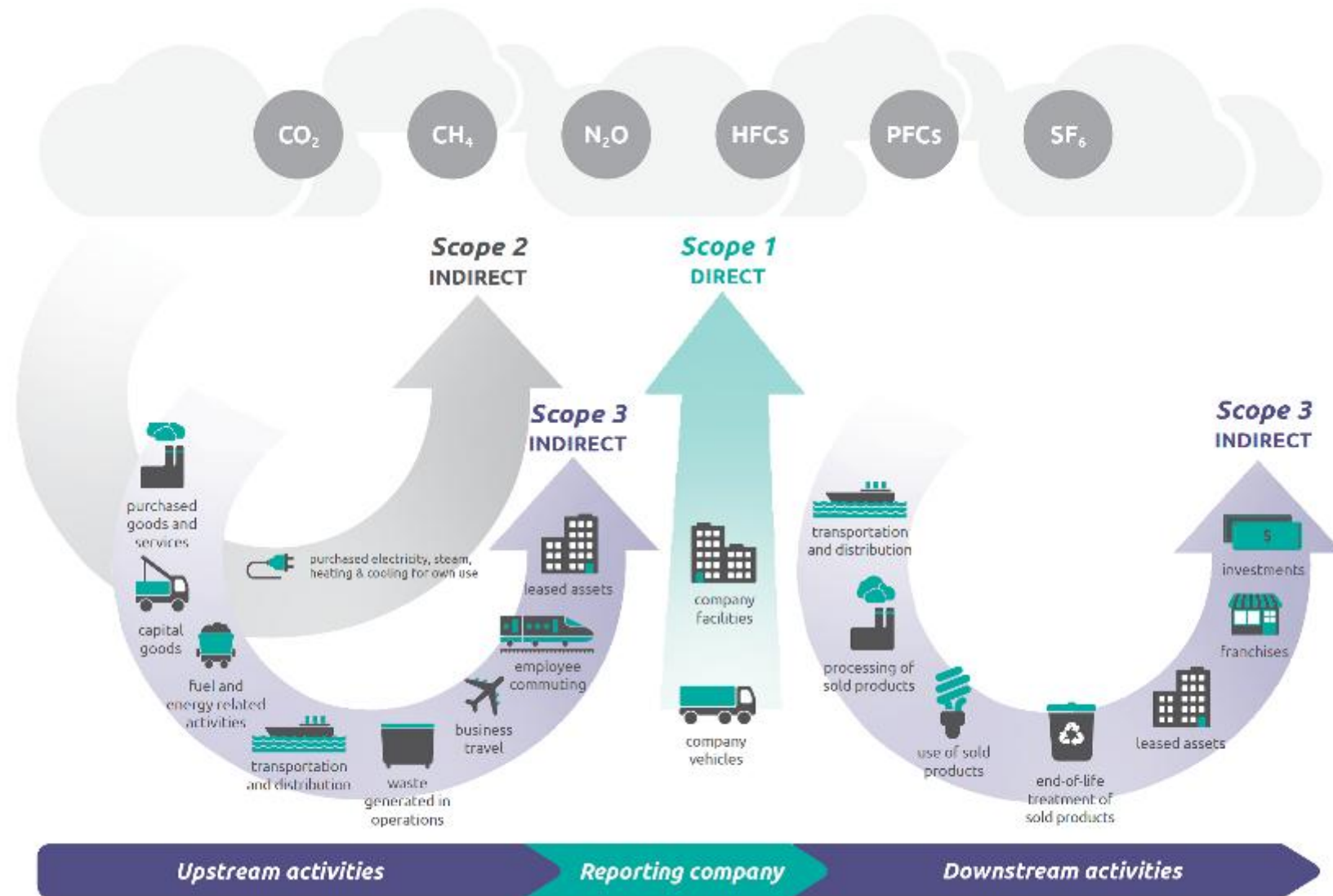
⁽²⁾ Within SCG's limited assurance scope (Page 92-94)

⁽³⁾ Base year of scope 3

ERM's Approach to Target Setting for GHG Reduction

2. GHG Baseline Data Collection

- Collect GHG Scope 1, 2, 3
- Direct VS Indirect emissions
- 15 categories of GHG Scope 3



ERM's Approach to Target Setting for GHG Reduction

3. GHG Reduction Opportunity Assessment

- Explore on how the company can reduce GHG emissions
- Actions can be specific to Scope 1, 2, 3

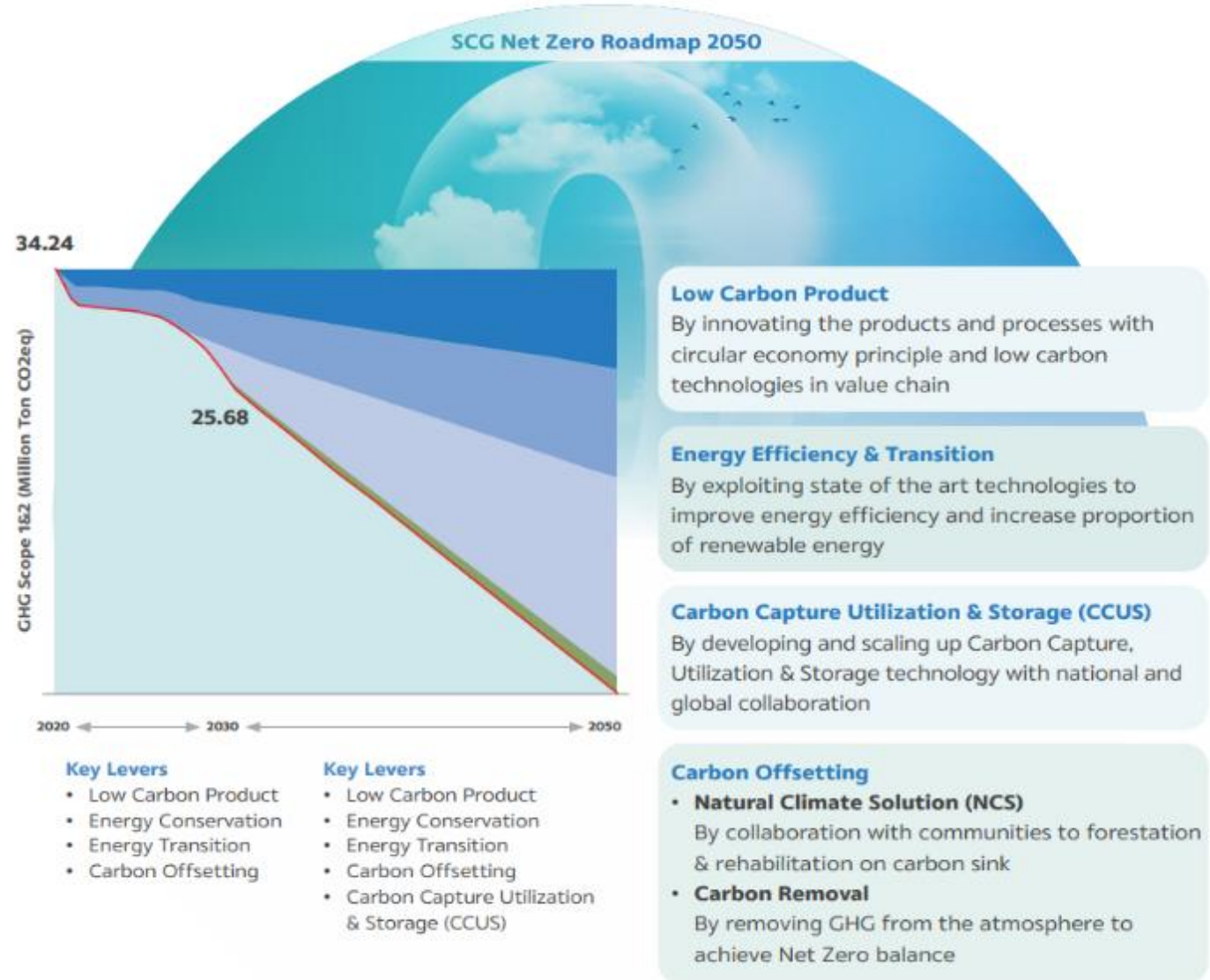


ERM's Approach to Target Setting for GHG Reduction

4. Target Setting and Developing Decarbonization Plan



SBTi validated for SCG near term target, SCG commits to reduce absolute scope 1 & 2 greenhouse gas emissions 25% by 2030 from a 2020 base year*. SCG also commits to reduce absolute scope 3 greenhouse gas emissions from the use of sold fossil fuels 25% by 2031 from 2021 base year.



A close-up photograph of a coffee machine dispensing coffee into a white cup. The coffee is a rich, dark brown color and is captured mid-pour, creating a smooth stream and a small droplet hanging from the spout. The background is dark and out of focus, emphasizing the coffee and the cup. The text "Coffee Break" and "15 minutes" is overlaid in a white, serif font at the top of the image.

Coffee Break
15 minutes

ทำความรู้จักกับ IMM (Impact Measurement and Management) Cont. Step 5-6 (cont.)



IMM Framework Step 5

IMM Framework

Step
1

Understanding impact and IMM

- Introduction of sustainability
- Introduction of impact
- What is impact measurement and management defining your company's commitment to sustainability

Step
2

Identifying and engaging with stakeholders

- Conducting stakeholder mapping
- How to engage with stakeholders along the value chain

Step
3

Prioritizing impacts

- Materiality analysis
- Mapping and prioritizing SDGs along the business value chain
- Business setting goals
- Five dimensions of impact for each goal

Step
4

Planning for impact

- Developing an impact value chain
- Selecting indicators
- Setting baselines and targets

Step
5

Measuring impact and integrating impact into business practices

- Monitoring results and collecting data
- Integrating SDGs and impact into business practices and decision-making
- Reinforcing the company's commitment to impact through governance practices
- Managing impact risks

Step
6

Reporting progress on impact in line with the One Report



1



2



3



4



5



6

How does your company integrate sustainability and climate change into internal process and management system?

What are your “special tips” in securing buy-in from executives?

5 Measuring and integrating impact into business practices

Reinforcing the company's commitment to impact through Governance practices

- Board competencies on impact and sustainability can be strengthened to ensure that impact drives the company's business agenda.

Including sustainability/impact skills in its board skills matrix.

Implementing a 'fit and proper' test for new board members/directors.

Advisory committee of suitably qualified and experienced personnel.

Promoting diversity through the representation of women and/or underrepresented stakeholder groups.

Providing training to strengthen the board's competencies.

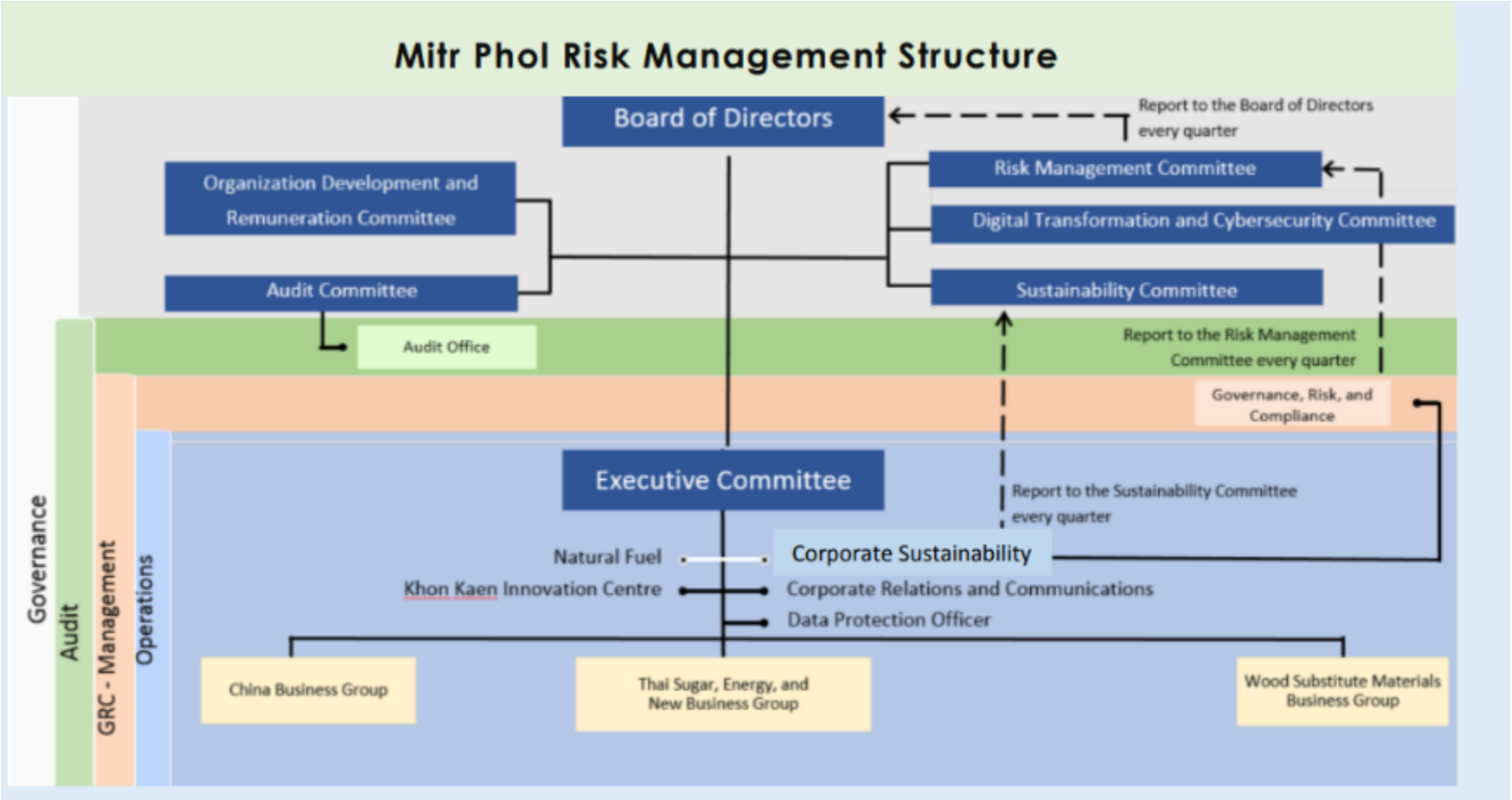
Align board remuneration with achievement of sustainability impact goals.



Climate Governance



Mitr Phol Group has established sustainability committee and risk management committee (RMC) to oversee and monitor climate change and risks related to climate change.

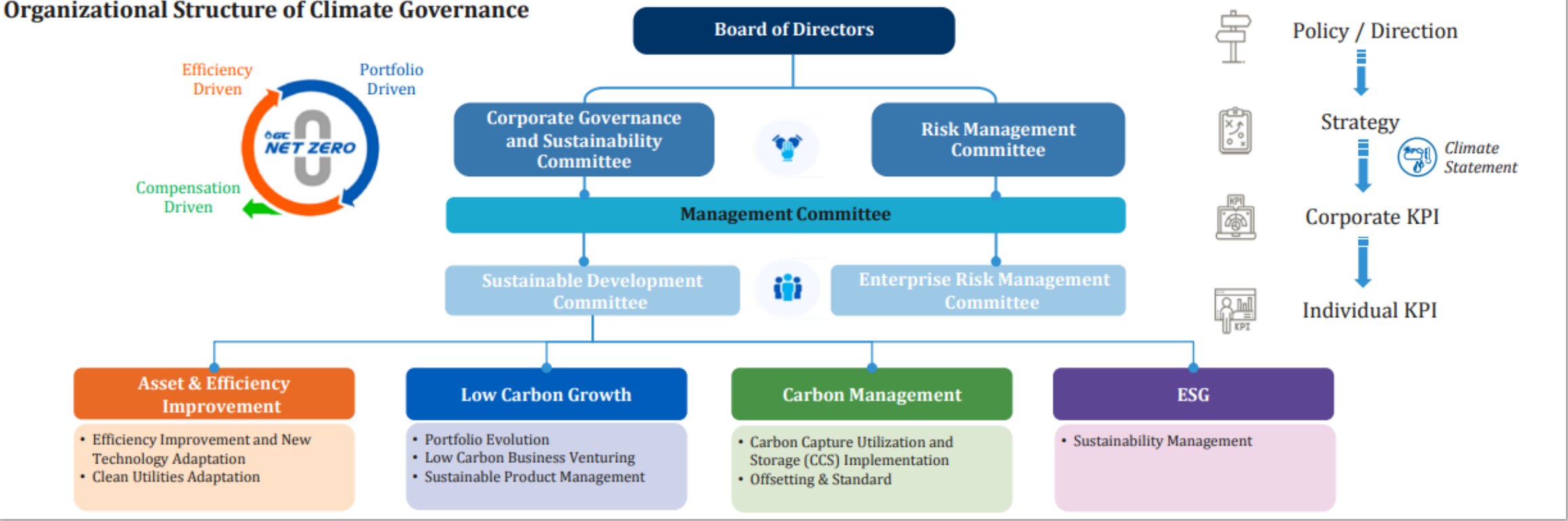


Climate Governance



GC regularly evaluates and develops board capabilities to ensure effective oversight of climate strategies and build a resilient, forward-thinking leadership.

Organizational Structure of Climate Governance



How does your company develop
Board and executive expertise and
competency in sustainability and
climate change?

5 Measuring and integrating impact into business practices

Integrating SDGs and impact into business practices and decision-making

This requires ensuring that management of the company fully endorse and are committed to the impact goals set out in earlier steps, and that these goals are embedded within company strategy and decision-making.

- Integrate impact targets into **performance reviews** for key organizational staff.
- Incorporate impact goals into the **company's public commitments**, such as the mission statement on its website.

Example



Bive is an enterprise in Colombia that aims to close the existing health access gap between rural and urban communities. Bive partners with farmer associations and coffee growers' cooperatives in low-income communities, to provide access to quick and high-quality health services that decrease preventable morbidity and mortality and promote appropriate diagnosis and treatment for diseases. Bive has benefited 152,166 people from rural, low-income populations through low-cost membership programmes, with savings of up to 50 percent in healthcare costs as compared to the average market price.

Bive used impact data to inform business decisions in several initiatives, one example of which is its Coffee Vision Project or "Visión Cafetera". Under this project, Bive works with coffee growers to help increase the detection of high-risk diseases and to strengthen growers' self-care behaviours that improve their vision – ultimately aiming to increase labour productivity as well. The company evaluated the impact of this project on the quality of life of coffee growers as well as on their productivity, collecting data on metrics such as growers' access to health services, growers' physical and visual health as well as satisfaction with the project. This generated important information for Bive's business model, which allowed the company to plan its expansion strategy with coffee growers, as well as to identify weaknesses in its business model.

For instance, the evaluation showed a positive linkage between participation in the project and labour productivity, and this helped inform a phased expansion of the project's scope to various services such as optometry, ophthalmology and eye surgery. Data also showed that the project increased risk prevention behaviours among growers, through Bive's workshops informing them about the risks associated with their work – as a result, the company expanded these risk prevention workshops to continue increasing labour productivity. The evaluation also indicated that hypertension was a major issue to focus on, particularly among women, and in response Bive connected with the official Colombian health system so that such patients could enter risk prevention and management programmes to get priority care. Additionally, Bive identified that the health care service providers through which it delivers services to growers, constitute a major part of project costs with minimal profits for the company itself. This led to a change in Bive's business model, moving the company towards direct service delivery – Bive recently created a mental health project that will be its first pilot for direct delivery of mental health services.

IMM Framework Step 6

IMM Framework

Step
1

Understanding impact and IMM

- Introduction of sustainability
- Introduction of impact
- What is impact measurement and management defining your company's commitment to sustainability

Step
2

Identifying and engaging with stakeholders

- Conducting stakeholder mapping
- How to engage with stakeholders along the value chain

Step
3

Prioritizing impacts

- Materiality analysis
- Mapping and prioritizing SDGs along the business value chain
- Business setting goals
- Five dimensions of impact for each goal

Step
4

Planning for impact

- Developing an impact value chain
- Selecting indicators
- Setting baselines and targets

Step
5

Measuring impact and integrating impact into business practices

- Monitoring results and collecting data
- Integrating SDGs and impact into business practices and decision-making
- Managing impact risks
- Reinforcing the company's commitment to impact through governance practices

Step
6

Reporting progress on impact in line with the One Report



1



2



3



4



5



6

The Form 56-1 One Report contains four parts. The SDG Guidebook focuses on Part 1, Section 3 of the One Report, which relates to ‘Business Sustainability Development’.



Part 1: Business Operation and Operating Results

1. Organizational structure and operation of the group of companies
2. Risk management
3. Business sustainability development
4. Management discussion and analysis (MD&A)
5. General information and other material facts



Part 2: Corporate Governance

6. Corporate governance policy
7. Corporate governance structure and material facts related to the board subcommittees, executives, employees and others
8. Report on key operating results related to corporate governance
9. Internal control and related party transactions



Part 3: Financial Statements

[Attaching the annual financial statements of the relevant financial period]



Part 4: Certification of Information

Certification of Information for Submission of 56-1 One Report of Non-listed Company.

Reporting progress on impact in line with the One Report

Reporting impact and SDG progress based on One Report requirements – an overview

Companies can rely on IMM Steps 1-5 to **strengthen strategy, management and reporting** in compliance with the One Report.

- The SDG Guidebook provides detailed guidance on the SDGs and IMM
- Help companies strengthen management decision-making related to impact

One Report - Sections *	SDG Guidebook – Recommended IMM Steps	SDG Impact Standards – Components
One Report Section 3: Business sustainability development		
3.1 Policy and objectives of sustainable management	Step 1 Understanding impact and IMM; Defining your commitment to sustainability • Defining your company's commitment to sustainability	Strategy
One Report Section 3.2: Management of impacts on stakeholders in the business value chain		
3.2.1 Business value chain	Step 2 Identifying and engaging with stakeholders • Stakeholder mapping	Strategy
3.2.2 Analysis of stakeholders in the business value chain	Step 2 Identifying and engaging with stakeholders • Stakeholder engagement	Strategy
One Report Section 3.3: Management of environmental sustainability		
3.3.1 Environmental Policy and guidelines	Step 3 Prioritizing impacts • Materiality analysis • Mapping and prioritizing SDGs along the business value chain • Setting goals • Specifying the five dimensions of impact for each goal	Strategy
	Step 4 Planning for impact • Developing an impact value chain • Selecting indicators • Setting baselines and targets	Management approach
3.3.2 Environmental operating results	Step 5 Measuring impact and integrating impact into business practices • Monitoring results and collecting data • Integrating SDGs and impact into business practices and decision-making • Managing impact risks • Reinforcing the company's commitment to impact through governance practices	Management approach Governance
One Report Section 3.4: Social sustainability management		
3.4.1 Social policy and guidelines	Step 3 Prioritizing impacts • Materiality Analysis • Mapping and prioritizing SDGs along the business value chain • Setting goals • Specifying the five dimensions of impact for each goal	Strategy
	Step 4 Planning for impact • Developing an impact value chain • Selecting indicators • Setting baselines and targets	Management approach
3.4.2 Social operating results	Step 5 Measuring impact and integrating impact into business practices • Monitoring results and collecting data • Integrating SDGs and impact into business practices and decision-making • Managing impact risks • Reinforcing the company's commitment to impact through governance practices	Management approach Governance

6 Reporting progress on impact in line with the One Report

Breaking down One Report requirements related to impact

This section breaks down the One Report in greater detail and provides suggestions on how to integrate Steps 1-5 with the requirements of the One Report.



Example of disclosure - Understanding impact and IMM



56-1
Report

Sustainability Strategy, Policy, and Plan

SCG has adopted the International Sustainability Standards Board (ISSB) framework as guidance for business management, taking into consideration sustainability-related risks and opportunities alongside its business operations to balance economic, social, and environmental dimensions, using double and dynamic materiality assessment as a key tool to integrate sustainability issues into SCG’s business strategies and Enterprise Risk Management (ERM). To that end, SCG has integrated sustainability-related risks and opportunities into its ERM and has a medium-term plan to facilitate decision-making, resource allocation, and medium-to long-term investments systematically.

Double and dynamic materiality assessment begins with analyzing context and external sustainability trends in the areas of climate, regulatory requirements, technology, and stakeholder expectations and benchmarking them against international standards and indicators. After that, sustainability-related risks and opportunities across the value chain are identified and assessed, taking into account both financial materiality and impact materiality on the environment and society in alignment with the relevant international frameworks.

Next, material topics are prioritized by SCG with the engagement of top executives, working committees, and stakeholders to consider the short-term, medium-term, and long-term impact and then the results are integrated into enterprise risk management before key material topics are defined. These topics serve as the framework for establishing the organization’s strategies, performance indicators, and operational targets.

Through this process, SCG identified five key material topics aligned with the Inclusive Green Growth approach, encompassing Net Zero, Nature Positive, and Inclusive Society. This enables the organization to comprehensively manage business risks and opportunities, strengthening competitiveness and supporting sustainable long-term growth.

One Report Section 3: Business Sustainability Development

3.1 Policy and Objectives of Sustainable management

IMM Framework	
Step 1	Understanding impact and IMM - Introduction of sustainability - Introduction of impact - What is impact measurement and management defining your company’s commitment to sustainability

The Siam Cement Public Company Limited: One report
Ref: [20260224-scc-one-report2025-en-02](#)

Example of disclosure - Identifying and engaging with stakeholders

56-1
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Policy and Practices for Shareholders and Stakeholders

GC's business operation involves various groups of stakeholders, ranging from shareholders, customers, business partners, creditors, competitors, government sectors and employees to communities, society, and the environment. As each stakeholder group has different needs, the Board of Directors has established policies and guidelines for responsible engagement of each stakeholder group in line with their specific needs as part of the Corporate Governance and Business Code of Conduct Handbook and disclosed them on the Company's website.



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Employees	
Expectation	Action and Response
▶ Provide physical and mental safety in the workplace to increase work efficiency and happiness. ▶ Develop skills and abilities to promote continuous learning and development. ▶ Promote fair and transparent welfare, remuneration, and working conditions to build organizational commitment. ▶ Implement a flexible, hybrid work model and build cooperation between business units across the value chain.	▶ Promote the development of a safety culture among employees (B-CAREs Strengthen), proactive risk management, personal and process safety management, and operational discipline. Enhance occupational health and safety management to comply with laws, regulations, rules, and standards at both national and international levels. Develop operational plans to prepare for emergency situations that may affect safety and business continuity (Business Continuity Management: BCM). ▶ Establish measures to care for employees' physical and mental health, ensuring they feel confident and comfortable at work by organizing various health care programs to promote employee well-being. ▶ Improve the human resource management model, and conduct employee skill development projects in line with current global trends, such as digital learning & in-house training and AI applications, to accommodate future business growth and expansion. ▶ Promote a positive organizational culture through the GC SPIRIT values and four core behaviors, namely: (1) Take initiative to create better results; (2) Keep improving self and inspiring teamwork; (3) Work proactively to serve customers' needs; and (4) Strive for the greater good. ▶ Provide various welfare benefits to support employee rights and privileges as legally mandated and beyond legal requirements.

One Report Section 3.2: Management of impacts on stakeholders in the business value chain

3.1 Business Value Chain
3.2 Analysis of stakeholders in the
business value chain

IMM Framework

Step
2

Identifying and engaging with stakeholders

- Conducting stakeholder mapping
- How to engage with stakeholders along the value chain

PTT Global Chemical Public Company
Limited: One report
Ref: Form 56-1 One Report 2025 | PTT
Global Chemical

Example of disclosure - Prioritizing impacts

56-1
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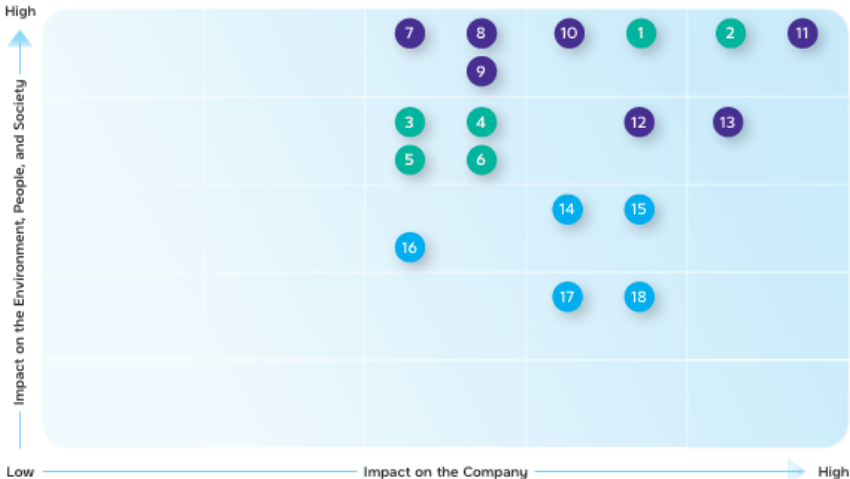
Materiality Assessment

Banpu conducts materiality assessment and prioritization of sustainability topics in accordance with internationally recognized standards – namely the AA1000 AccountAbility Principles Standard (AA1000APS), the GRI Standards, and the IFRS Sustainability Disclosure Standards. The process considers both actual and potential impacts on the Company, the environment, people, and society, and also incorporates the expectations and interests of stakeholders, ensuring a balanced, inclusive view of what matters most to the business and its broader ecosystem.

The material topics are reviewed annually to ensure continued relevance and alignment with the Company's strategic direction and external ESG landscape. The finalized material topics are submitted for review and formal approval by 2 key governance bodies:

- Sustainability Committee (management-level committee)
- Environment, Social and Governance (ESG) Committee (Board-level committee)

This governance structure reinforces transparency and accountability in ESG performance management and reporting.



- | Environment | Social | Governance |
|--|----------------------------------|--------------------------------------|
| 1. Climate Mitigation | 7. Labor Practices | 14. Cybersecurity |
| 2. Climate Resilience & Adaptation | 8. Community Relations | 15. Business Ethics & Transparency |
| 3. Air Emissions Management | 9. Human Rights | 16. Supply Chain Management |
| 4. Biodiversity & Ecosystem Protection | 10. Closure & Rehabilitation | 17. Business Resilience & Continuity |
| 5. Waste Management | 11. Occupational Health & Safety | 18. Digital Transformation |
| 6. Water Management | 12. Employee Engagement | |
| | 13. Talent Development | |

METRICS & TARGETS

	2025	Target 2025	Target 2030
Coverage of sites with climate-related risk assessment	83%	- -	100%
Unforeseen expenses resulting from physical climate-related disruptions (USD) ^(a)	0	✓ 0	0

^(a) Additional cost beyond insurance premium

CLIMATE RESILIENCE & ADAPTATION

POLICY & COMMITMENT

Banpu is committed to building long-term resilience to climate change across our operations, people, and value chain, in accordance with our Climate Change Policy. We seek to reduce vulnerability to climate-related impacts by integrating adaptation into operational planning and asset management. Our approach focuses on strengthening infrastructure resilience, improving water security through conservation and alternative supply measures, applying ecosystem-based solutions where relevant, and reinforcing preparedness for changing climate conditions. We also promote awareness, training, and collaboration with employees, communities, and other key stakeholders to build adaptive capacity and strengthen climate resilience.



Climate Change Policy

One Report Section 3.3: Management of environmental sustainability

3.3.1 Environmental Policy and guidelines

3.4.1 Social policy and guidelines

IMM Framework

Step
3

Prioritizing impacts

- Materiality analysis
- Mapping and prioritizing SDGs along the business value chain
- Business setting goals
- Five dimensions of impact for each goal

SR
Report

SR
Report

Example of disclosure - Planning for impact

DOUBLE MATERIALITY ASSESSMENT RESULTS

Material Topic	Impact Materiality			Value Chain Impact			Financial Materiality				GRI Standards	Pillar 5P-30 Str
	Natural	Human	Social	Upstream	Organization	Downstream	Financial	Strategic	Reputation	Compliance		
Climate Resilience & Adaptation	5	4	4	●	●	●	5	5	5	5	102	Pathway
Climate Mitigation	3	5	2	●	●	●	3	5	4	2	102, 103	Pathway
Biodiversity & Ecosystem Protection	4	3	1	●	●		2	3	3	4	304	Planet
Waste Management	4	3	1	●	●		3	2	3	3	306	Planet
Air Emissions Management	4	3	1	●	●		3	2	3	3	305	Planet
Water Management	4	3	1	●	●		4	1	4	3	303	Planet
Labor Practices	1	5	4		●		2	2	3	5	202, 402, 404, 405	People
Employee Engagement	1	4	1		●		2	4	3	2	401	People
Human Rights	1	5	4	●	●	●	2	2	4	4	406, 407, 408, 409, 410	People
Closure & Rehabilitation	5	5	5		●		4	2	5	5	-	People
Community Relations	1	5	5	●	●		2	3	4	3	413, 411	People
Digital Transformation	1	2	2	●	●		5	1	4	4	-	Performance
Business Resilience & Continuity	1	1	2	●	●		4	3	3	3	-	Performance
Cybersecurity	1	3	2	●	●	●	5	1	4	4	-	Performance
Occupational Health & Safety	1	5	3	●	●		3	1	4	5	403	Performance
Talent Development	1	4	1		●		2	5	3	1	404	Performance
Business Ethics & Transparency	1	1	3		●		3	3	4	5	205, 206	Partnerships
Supply Chain Management	1	3	2	●	●	●	3	3	3	2	204, 308, 414, 418	Partnerships

SR Report

SR Report

METRICS & TARGETS

	2025	Target 2025	Target 2030
Coverage of sites with biodiversity impact assessment ^(a)	94%	❌ 100%	-
Coverage of sites with biodiversity value assessment ^(b)	100%	✅ 100%	-
Coverage of sites with biodiversity management plan ^(b)	100%	- -	-
Number of significant biodiversity-related incidents	0	- -	-

^(a) Operating sites and projects under development

^(b) For operating sites identified as having potential for significant biodiversity impact only

One Report Section 3.3: Management of environmental sustainability

3.3.1 Environmental Policy and guidelines

3.4.1 Social policy and guidelines

IMM Framework

Step
4

Planning for impact

- Developing an impact value chain
- Selecting indicators
- Setting baselines and targets

Example of disclosure - Measuring impact and integrating impact into business practices



Sustainable Water Management

GC manages water sustainably, covering water management governance, sustainable water stewardship, and building networks for participatory water management (Resilience). GC also promotes integrated water management by planning water use according to the 3Rs principle (Reduce, Reuse, Recycle) to recycle water (Renewable Water) in alignment with the goal to reduce water consumption across the supply chain. GC also acts to address climate change impacts, supporting UN SDG 6: Clean Water and Sanitation. GC focuses on sustainable water management and crisis preparedness internally and externally by establishing a Water Management Taskforce to prepare for drought conditions. In 2025, GC implemented water management projects such as the wastewater reverse osmosis (WWRO) project that treats wastewater for reuse in production processes, reducing water usage by up to 2.14 million cubic meters annually. GC also optimized system operations to increase recycled water volume and reduce wastewater discharge outside the plant. Moreover, GC participates in local and national water planning and management by creating multi-sector

collaborations to promote sustainable water management. For example, GC collaborates with the PTT Group to study and provide temporary seawater desalination systems as a backup freshwater source during droughts in the Eastern region, a critical area for PTT Group's operations. This collaboration supports not only GC's operations but also benefits surrounding industries and communities.

Furthermore, GC prioritizes employee empowerment (also known as Empower Our Employees) through awareness building and training on efficient water management, promoting a responsible water management culture across the organization. GC also works with local communities in watershed conservation and restoration as part of its strategic initiatives.



Water Resource Management Targets

For more information, please visit GC's website:
<https://sustainability.pttggroup.com/en/environment/sustainable-water/sustainable-water-strategy-target-and-performance>

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One Report Section 3.3: Management of environmental sustainability

3.3.2 Environmental operating results

3.4.2 Social Operating Results

IMM Framework

Step
5

Measuring impact and integrating impact into business practices

- Managing impact risks
- Monitoring results and collecting data
- Integrating SDGs and impact into business practices and decision-making
- Reinforcing the company's commitment to impact through governance practices

PTT Global Chemical Public Company Limited :One report
Ref: Form 56-1 One Report 2025 | PTT Global Chemical

Example of disclosure - Measuring impact and integrating impact into business practices

CLIMATE SCENARIO ANALYSIS

Based on transitional and physical climate scenario analysis, Banpu recognizes that our portfolio is exposed to both long-term transition pressures and increasing physical climate risks. In alignment with these recommendations, Banpu has conducted a comprehensive assessment of climate-related risks and opportunities using 4 climate scenarios:

- IEA Stated Policies Scenario (STEPS)
- IEA Net Zero Emissions (NZE) by 2050 Scenario
- Representative Concentration Pathway (RCP) 8.5 – High-emissions scenario
- Representative Concentration Pathway (RCP) 2.6 – Low-emissions scenario

These scenarios help Banpu evaluate a range of possible future climate conditions and their potential impacts on our business operations, strategic direction, and resilience planning. Additional information is available in the Climate Change Report 2025.

SR
Report

Business	Risk/Opportunity	Scenario	Time Horizon		
			Short-term	Medium-term	Long-term
Next-Gen Mining	Carbon pricing mechanisms (including carbon tax)	NZE	L	LM	MH
		STEPS	L	LM	LM
	Mandates on and regulation of existing products and services - Stricter regulation related to limitation of coal sales	NZE	L	MH	MH
		STEPS	LM	MH	MH
	Changing customer behavior	NZE	L	L	H
		STEPS	L	L	MH
	Stigmatization of sector	NZE	LM	MH	H
		STEPS	LM	MH	MH
	Heavy precipitation	NZE	L	LM	LM
		STEPS	L	LM	LM
Power+	Carbon pricing mechanisms (including carbon tax)	NZE	L	L	MH
		STEPS	L	L	L
	Substitution of existing products and services with lower emissions options	NZE	L	L	H
		STEPS	L	L	LM
	Stigmatization of sector	NZE	L	L	MH
		STEPS	L	L	LM
	Participation in carbon market	NZE	LM	LM	MH
		STEPS	LM	LM	LM

CLIMATE TRANSITION PLAN

Banpu's climate transition plan outlines how the Company will achieve Net Zero Scope 1 and 2 emissions by 2050, with an interim target to reduce absolute Scope 1 and 2 emissions at least 20% by 2030 from a 2023 baseline. The plan sets out governance, implementation levers, capital allocation, scenario testing, and monitoring arrangements, and is reviewed and updated annually.

Climate strategy oversight is provided by the Board-level ESG Committee, which quarterly reviews strategy, targets, and progress. The CEO is accountable for execution, supported by the Climate Change Committee, which coordinates deliverables across business units, monitors implementation, escalates material issues to the Board, and ensures alignment with IFRS S2 disclosure expectations. Progress toward the 2030 target is driven by four primary levers.



Energy Efficiency and Electrification

Improving operational efficiency and electrifying open-pit mining operations in Indonesia to reduce operational energy intensity.



Low-Carbon Energy Procurement

Increasing renewable and low-carbon electricity through on-site generation and strategic procurement.



Portfolio Transformation

Investing in low-carbon products, services, and assets, supported by a commitment to allocate 10-15% of total CapEx to low-carbon business over 2026-2030.



Value Chain Engagement

Engaging suppliers and customers to support value-chain emissions reductions and strengthen the Scope 3 baseline.

IMM Framework

Step
5

Measuring impact and integrating impact into business practices

- Managing impact risks
- Monitoring results and collecting data
- Integrating SDGs and impact into business practices and decision-making
- Reinforcing the company's commitment to impact through governance practices

Example of disclosure - Measuring impact and integrating impact into business practices



One Report Section 3.3: Management of environmental sustainability

3.3.2 Environmental operating results 3.4.2 Social Operating Results

IMM Framework

Step
5

Measuring impact and integrating impact into business practices

- Managing impact risks
- Monitoring results and collecting data
- Integrating SDGs and impact into business practices and decision-making
- Reinforcing the company's commitment to impact through governance practices

Banpu Public Company Limited: One report
Ref: [BANPU_OR_2025_EN_LINK_260507_web.pdf](#)

56-1 Report

The organizational chart is structured as follows:

- Board of Directors** (Green box)
 - Nomination and Remuneration Committee (NRC)** (Green box)
 - Audit Committee** (Green box)
 - Internal Audit** (Grey box)
 - Sustainability & Corporate Governance Committee (SCGC)** (Green box)
 - Strategy, Transformation and Risk Management Committee** (Green box)
 - Group CEO & President** (Orange box)
 - Subsidiary Synergy Strategic Alignment Steering Committee (SSS)** (Yellow box)
 - Price & Finance Risk Management Subcommittee (Sub-PRMC)** (Yellow box)
 - Price & Finance Risk Management Committee (PRMC)** (Yellow box)
 - Group Management Committee** (Orange box)
 - Strategic Investment Management Committee (SIMC)** (Yellow box)
 - Risk Management Subcommittee (RMC)** (Yellow box)
- Business Divisions** (Teal boxes)
 - Refinery and Oil Trading Business Group
 - Marketing Business Group
 - Corporate Management and Organization Development
 - Accounting & Finance
 - Sustainability Management and Corporate Communications
 - Other Groups Reporting to President & CEO
 - Group Companies
 - Corporate Strategy and Business Development
- Risk Management Structure**
 - Risk Manager** (Light Green box) - One for each business division.
 - Risk Coordinator** (Light Green box) - One for each business division.
- Corporate Strategy & Planning** (Grey box)
 - Corporate Strategy & Risk Management Division** (Grey box)

As of 31 December 2025

Step 5

- Managing impact risks
- Monitoring results and collecting data
- Integrating SDGs and impact into business practices and decision-making
- Reinforcing the company's commitment to impact through governance practices

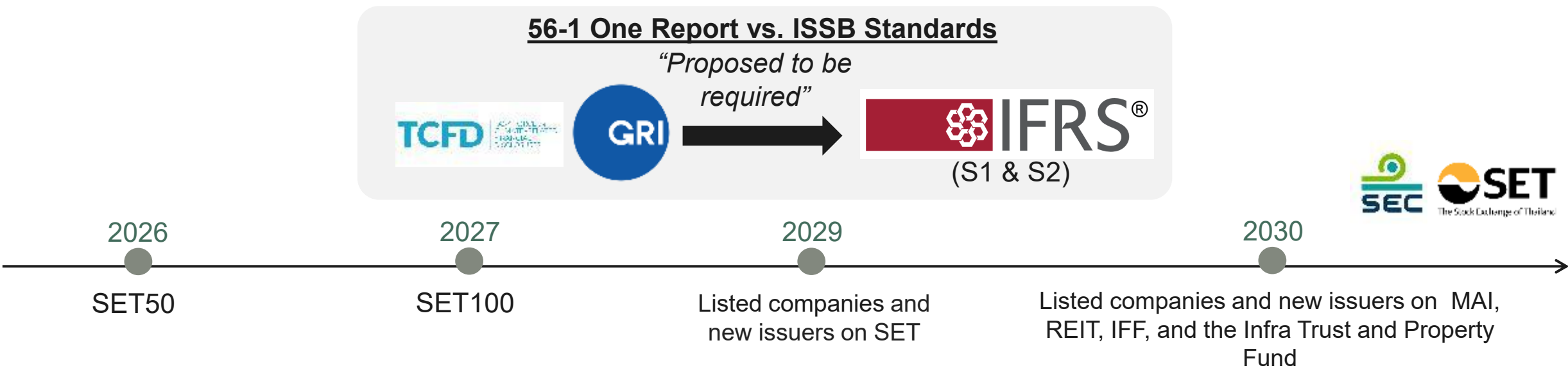
Bangchak Corporation Public Company Limited:One report
Ref: ar2025-en.pdf

Linkages between IMM, and IFRS S1-S2 Standards

IMM Framework		IFRS S1-S2 Standards
Step 1	Understanding impact and IMM	General
Step 2	Identifying and engaging with stakeholders	
Step 3	Prioritizing impacts	
Step 4	Planning for impact	Governance, Strategy, Risk Management, Metrics and Targets
Step 5	Measuring impact and integrating impact into business practices	
Step 6	Reporting progress on impact in line with the One Report	General

IFRS S1-S2 Standards

IFRS S1 and S2 standards require sustainability disclosure

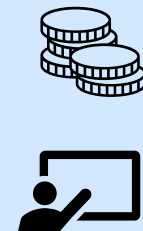


Benefits of applied ISSB



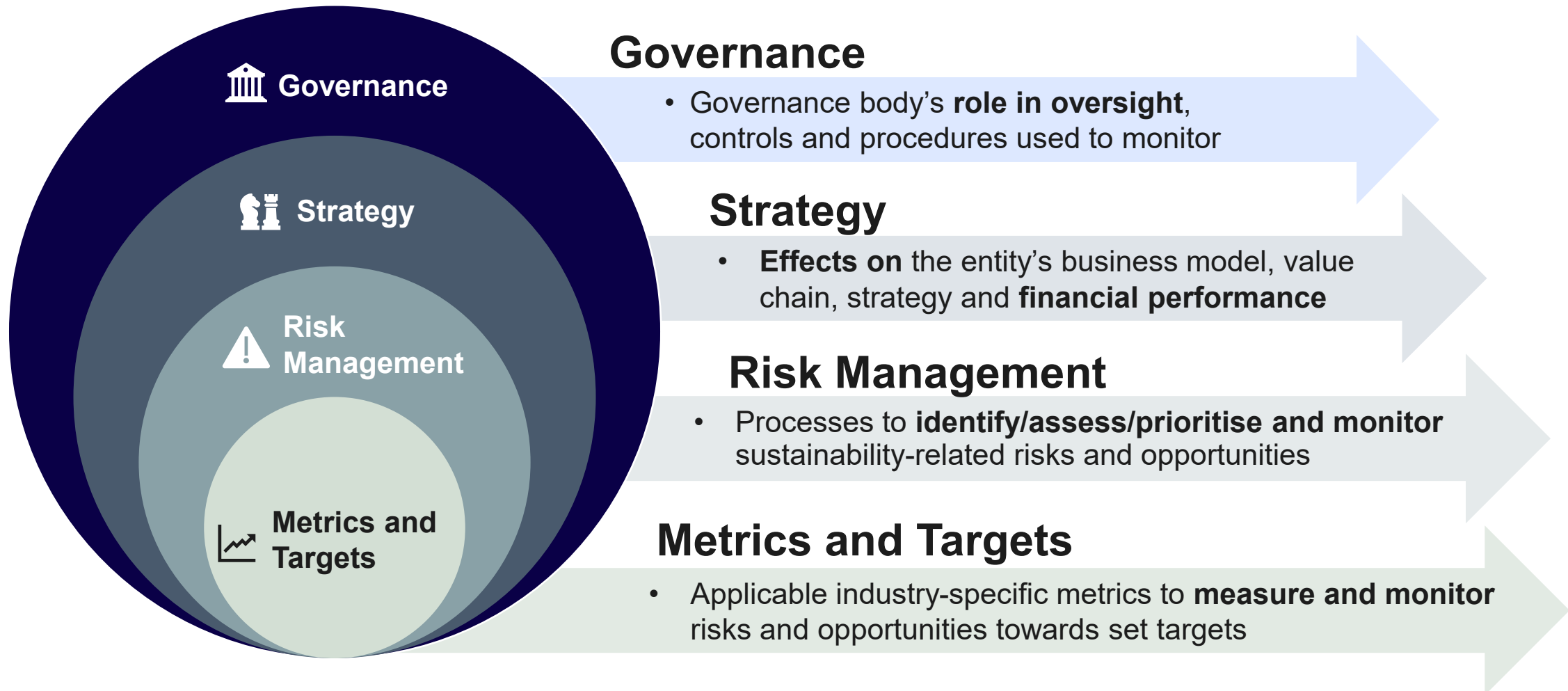
- Improved transparency and comparability of data
- Enhanced investor confidence and market access
- Better alignment with global practices

Challenges



- Increased costs for data collection and reporting
- Need for capacity building and training for company personnel

IFRS S1 sets out the 4 pillars requirements for disclosure



TCFD and IFRS S2 also have same 4 pillars as IFRS S1, but focus on climate-related risks and opps.



Taskforce on Climate-Related Financial Disclosure (TCFD)

Governance	Oversight by governance bodies in managing climate-related risks and opps.
Strategy	Actual and potential impacts of climate-related risks and opportunities on the business, strategy, and financial planning.
Risk Management	Process to identify, assess, and manage climate-related risks
Metrics and Targets	Metrics and targets used to assess and manage relevant climate-related risks and opportunities



IFRS S2 Climate-Related Disclosure

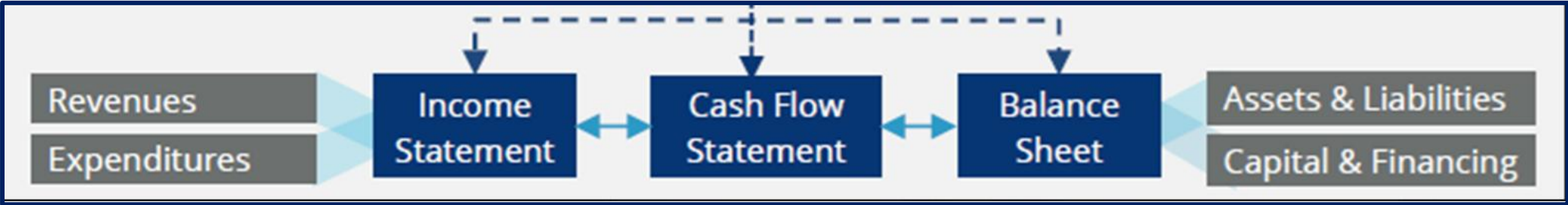
Governance	More detailed structures, policies, and individual responsibilities
Strategy	Includes transition plans, financial impacts over time horizons, resilience strategies , and tailored scenario analysis
Risk Management	Emphasizes monitoring and prioritizing climate opportunities with clear methods
Metrics and Targets	Mandates industry-specific metrics, Scope 1, 2, and 3 emissions reporting , and transparency in target-setting and carbon credit usage

IFRS S2 Data Landscape



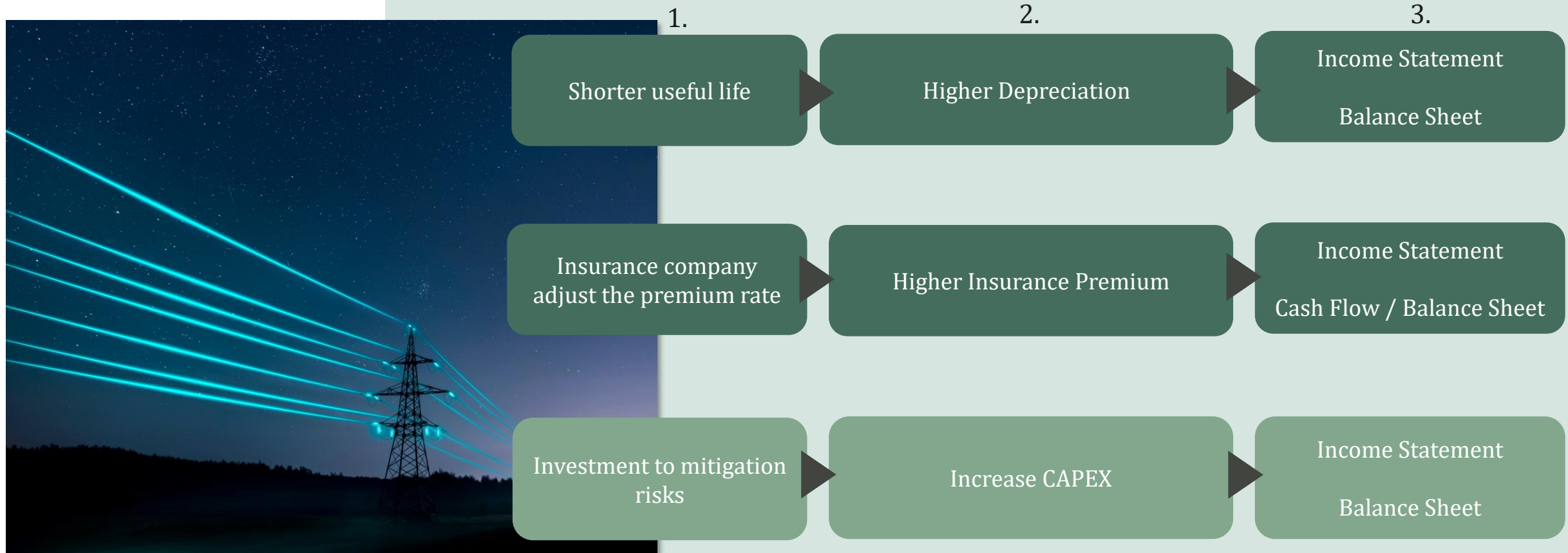
Transition to IFRS S2

- Understand the impacts of climate related risks
- Identify the affected financial parameters
- Identify the relevant accounting line items
- Identify the information to collect related to accounting and financial parameters



Example of Effects of Climate-Related Risks on the Financial Statement

Scenario: Climate Change causing severe weather events leading to heavy flood and destroying utilities assets.



Cross Sector Indicators for IFRS S2

IFRS S2 Paragraph	Cross-industry Metric Category	Required Disclosure
29(a)	Greenhouse Gas (GHG) Emissions	Scope 1, Scope 2, and Scope 3 GHG emissions (gross emissions), measurement methodology, assumptions, Scope 2 location-based emissions, Scope 3 categories, and financed emissions where applicable. (sd.swireproperties.com)
29(b)	Climate-related Transition Risks	Amount and percentage of assets or business activities vulnerable to transition risks (e.g., policy, technology, market, legal, reputation). (IAS Plus)
29(c)	Climate-related Physical Risks	Amount and percentage of assets or business activities vulnerable to physical risks (acute and chronic climate hazards). (IAS Plus)
29(d)	Climate-related Opportunities	Amount and percentage of assets or business activities aligned with climate-related opportunities (e.g., low-carbon products, renewable energy, circular economy). (IAS Plus)
29(e)	Capital Deployment	Capital expenditure (CapEx), financing, or investment deployed toward climate-related risks and opportunities. (IAS Plus)
29(f)	Internal Carbon Prices	Whether an internal carbon price is used, how it is applied in decision-making, and the carbon price (per tonne CO ₂ e). (sd.swireproperties.com)
29(g)	Remuneration	The proportion of executive remuneration linked to climate-related considerations. (sd.swireproperties.com)

IFRS S2 Sector Specific with assigned indicators

Sector	Sub-Industry (Industry Group)	Industry	Industry Code
Consumer Goods	Apparel, Accessories & Footwear	Apparel, Accessories & Footwear	CG-AA
Consumer Goods	Appliances	Appliance Manufacturing	CG-AM
Consumer Goods	Building Products & Furnishings	Building Products & Furnishings	CG-BF
Consumer Goods	E-Commerce	E-Commerce	CG-EC
Consumer Goods	Household & Personal Products	Household & Personal Products	CG-HP
Consumer Goods	Multiline & Specialty Retailers & Distributors	Multiline & Specialty Retailers & Distributors	CG-MR
Extractives & Minerals Processing	Coal Operations	Coal Operations	EM-CO
Extractives & Minerals Processing	Construction Materials	Construction Materials	EM-CM
Extractives & Minerals Processing	Iron & Steel Producers	Iron & Steel Producers	EM-IS
Extractives & Minerals Processing	Metals & Mining	Metals & Mining	EM-MM
Extractives & Minerals Processing	Oil & Gas – Exploration & Production	Oil & Gas – Exploration & Production	EM-EP
Extractives & Minerals Processing	Oil & Gas – Midstream	Oil & Gas – Midstream	EM-MD
Extractives & Minerals Processing	Oil & Gas – Refining & Marketing	Oil & Gas – Refining & Marketing	EM-RM
Food & Beverage	Agricultural Products	Agricultural Products	FB-AG
Food & Beverage	Alcoholic Beverages	Alcoholic Beverages	FB-AB
Food & Beverage	Meat, Poultry & Dairy	Meat, Poultry & Dairy	FB-MP
Food & Beverage	Non-Alcoholic Beverages	Non-Alcoholic Beverages	FB-NB
Food & Beverage	Processed Foods	Processed Foods	FB-PF
Food & Beverage	Restaurants	Restaurants	FB-RN
Food & Beverage	Tobacco	Tobacco	FB-TB
Food & Beverage	Food Retailers & Distributors	Food Retailers & Distributors	FB-FR
Infrastructure	Electric Utilities & Power Generators	Electric Utilities & Power Generators	IF-EU
Infrastructure	Engineering & Construction Services	Engineering & Construction Services	IF-EC
Infrastructure	Gas Utilities & Distributors	Gas Utilities & Distributors	IF-GU
Infrastructure	Home Builders	Home Builders	IF-HB
Infrastructure	Real Estate	Real Estate	IF-RE
Infrastructure	Real Estate Services	Real Estate Services	IF-RS

Activity 2

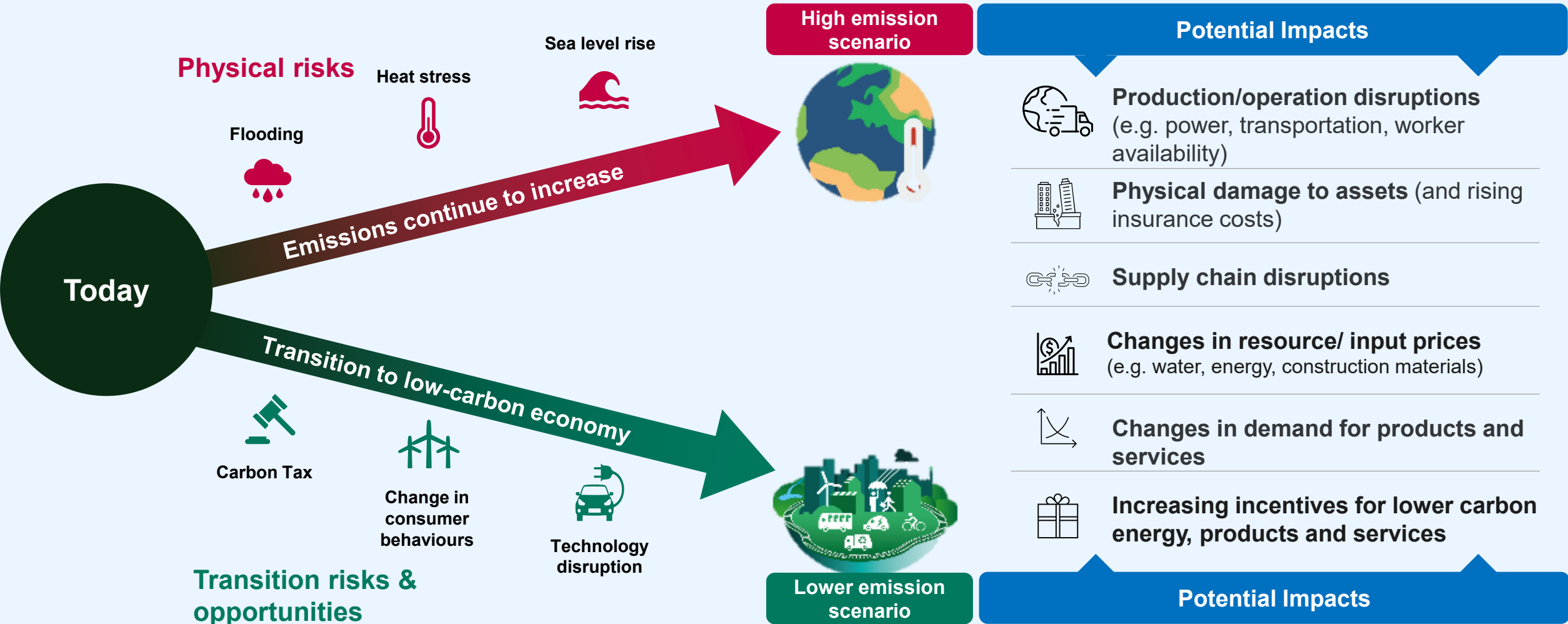
Activities 2

Objective: To understand the climate impact measurement and integration to business practices

- **Select Climate Related Impacts that are relevant to the assigned company from Activity 1**
- Brainstorm to select indicators to measure the impacts, Unit Measures, Relevant Stakeholder, Data Collection Methods
- List Anticipated Financial Impacts, Challenges/Concerns, Relevant SDGs
- List down all the challenges that you might have to face to identify and collect the data
- What SDGs Targets in SDGs 13 are associated with the impacts

Climate Related Risks and Opportunities Impacts	Business Impacts	Indicator Measurement	Relevant Data Needed	Data Collection Methods	Anticipated Financial Impacts	Challenges/ Concern	Relevant SDGs Goal
<i>Physical Risks Drought</i>	<i>Water scarcity due to climate change affecting crop production</i>	• <i>Total water withdrawn (m³)</i> • <i>Total water withdrawn from water stress area (m3)</i> • <i>Total water consumed (m³)</i>	<i>Water meter readings, irrigation records, production data, water stress maps (WRI Aqueduct), cultivated area</i>	Primary: <i>Water meters, farm records, irrigation logs, production database</i> Secondary: <i>WRI Aqueduct, local meteorological data</i>	• <i>Increased irrigation CAPEX,</i> • <i>Higher operating costs,</i> • <i>Lower crop yield,</i> • <i>Reduced revenue</i>	• <i>Suppliers data not available</i> • <i>Inconsistent farm-level data</i> • <i>Multiple water sources hard to identify</i>	<i>SDG 6, 12, 13</i>

Scenario Analysis



SDGs, Targets and Indicators



SDGs are goals that include several targets, while each target consist of several related indicators.

- Goal 13 Climate Action also covers other targets other than GHG reduction.



Target

13.1

Strengthen resilience and adaptive capacity to climate-related hazards and natural disasters in all countries

Indicators ▲

13.1.1

Number of deaths, missing persons and directly affected persons attributed to disasters per 100,000 population

13.1.2

Number of countries that adopt and implement national disaster risk reduction strategies in line with the Sendai Framework for Disaster Risk Reduction 2015–2030

13.1.3

Proportion of local governments that adopt and implement local disaster risk reduction strategies in line with national disaster risk reduction strategies

SDGs, Targets and Indicators



Target
13.2

Integrate climate change measures into national policies, strategies and planning

Indicators ▲

13.2.1

Number of countries with nationally determined contributions, long-term strategies, national adaptation plans and adaptation communications, as reported to the secretariat of the United Nations Framework Convention on Climate Change

13.2.2

Total greenhouse gas emissions per year



Target
13.3

Improve education, awareness-raising and human and institutional capacity on climate change mitigation, adaptation, impact reduction and early warning

Indicators ▲

13.3.1

Extent to which (i) global citizenship education and (ii) education for sustainable development are mainstreamed in (a) national education policies; (b) curricula; (c) teacher education; and (d) student assessment



SDGs, Targets and Indicators



Target
13.a

Implement the commitment undertaken by developed-country parties to the United Nations Framework Convention on Climate Change to a goal of mobilizing jointly \$100 billion annually by 2020 from all sources to address the needs of developing countries in the context of meaningful mitigation actions and transparency on implementation and fully operationalize the Green Climate Fund through its capitalization as soon as possible

Indicators ▲

13.a.1

Amounts provided and mobilized in United States dollars per year in relation to the continued existing collective mobilization goal of the \$100 billion commitment through to 2025



Target
13.b

Promote mechanisms for raising capacity for effective climate change-related planning and management in least developed countries and small island developing States, including focusing on women, youth and local and marginalized communities

Indicators ▲

13.b.1

Number of least developed countries and small island developing States with nationally determined contributions, long-term strategies, national adaptation plans and adaptation communications, as reported to the secretariat of the United Nations Framework Convention on Climate Change

Cross Sector Indicators for IFRS S2

IFRS S2 Paragraph	Cross-industry Metric Category	Required Disclosure
29(a)	Greenhouse Gas (GHG) Emissions	Scope 1, Scope 2, and Scope 3 GHG emissions (gross emissions), measurement methodology, assumptions, Scope 2 location-based emissions, Scope 3 categories, and financed emissions where applicable. (sd.swireproperties.com)
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29(g)	Remuneration	The proportion of executive remuneration linked to climate-related considerations. (sd.swireproperties.com)

Sector Specific Indicators for IFRS S2

IFRS S2 Sector Specific Volume B20 – Agricultural Products

Disclosure Topic	Required Indicator	Metric Type	Unit of Measure	Metric Code
Greenhouse Gas Emissions	Gross global Scope 1 GHG emissions	Quantitative	Metric tons CO ₂ -e	FB-AG-110a.1
	Discussion of short- and long-term strategy or plan to manage Scope 1 emissions, emissions reduction targets, and analysis of performance against those targets	Discussion & Analysis	N/A	FB-AG-110a.2
	Fleet fuel consumed and percentage of renewable fuel	Quantitative	Gigajoules (GJ), %	FB-AG-110a.3
Energy Management	(1) Operational energy consumed, (2) percentage of grid electricity, (3) percentage of renewable energy	Quantitative	Gigajoules (GJ), %	FB-AG-130a.1
Water Management	(1) Total water withdrawn, (2) total water consumed, and percentage of each occurring in High or Extremely High Baseline Water Stress regions	Quantitative	Thousand m ³ , %	FB-AG-140a.1
	Description of water management risks and discussion of strategies and practices to mitigate those risks	Discussion & Analysis	N/A	FB-AG-140a.2
	Number of incidents of non-compliance associated with water quantity and/or quality permits, standards, and regulations	Quantitative	Number	FB-AG-140a.3
Ingredient Sourcing	Identification of principal crops and description of climate change risks and opportunities affecting those crops	Discussion & Analysis	N/A	FB-AG-440a.1
	Percentage of agricultural products sourced from regions with High or Extremely High Baseline Water Stress	Quantitative	% (by cost)	FB-AG-440a.2
Activity Metric	Production by principal crop	Quantitative	Metric tons (t)	FB-AG-000.A
	Number of processing facilities	Quantitative	Number	FB-AG-000.B
	Total land area under active production	Quantitative	Hectares	FB-AG-000.C
	Cost of agricultural products sourced externally	Quantitative	Reporting currency	FB-AG-000.D

Sector Specific Indicators for IFRS S2

IFRS S2 Sector Specific Volume B36 – Real Estate

Disclosure Topic	Required Indicator	Metric Type	Unit of Measure	Metric Code
Energy Management	Energy consumption data coverage as a percentage of total floor area, by property subsector	Quantitative	%	IF-RS-130a.1
	Total energy consumed by portfolio area, with percentage of grid electricity and percentage renewable energy	Quantitative	Gigajoules (GJ), %	IF-RS-130a.2
	Like-for-like percentage change in energy consumption for the area with full data coverage	Quantitative	%	IF-RS-130a.3
	Discussion of long- and short-term strategy or plan to manage energy consumption, reduce climate impacts, and improve energy efficiency	Discussion & Analysis	N/A	IF-RS-130a.4
Water Management	Water withdrawal data coverage as a percentage of total floor area, by property subsector	Quantitative	%	IF-RS-140a.1
	Total water withdrawn by portfolio area, and percentage in regions with High or Extremely High Baseline Water Stress	Quantitative	Thousand m ³ , %	IF-RS-140a.2
	Like-for-like percentage change in water withdrawn for the area with full data coverage	Quantitative	%	IF-RS-140a.3
	Description of water management risks and discussion of strategies and practices to mitigate those risks	Discussion & Analysis	N/A	IF-RS-140a.4
Management of Tenant Sustainability Impacts	Percentage of new leases that contain provisions for recovering costs associated with resource efficiency improvements	Quantitative	%	IF-RS-410a.1
	Percentage of eligible portfolio that is certified to an environmental building rating scheme (e.g., LEED, BREEAM, Green Star)	Quantitative	%	IF-RS-410a.2
	Percentage of tenants separately metered or sub-metered for energy consumption	Quantitative	%	IF-RS-410a.3
Climate Change Adaptation	Area of properties located in 100-year flood zones	Quantitative	m ²	IF-RS-450a.1
	Description of climate change risk exposure analysis, degree of systematic portfolio exposure, and strategies for mitigation or adaptation	Discussion & Analysis	N/A	IF-RS-450a.2
Activity Metrics	Number of assets	Number	IF-RS-000.A	Number of assets
	Rentable floor area	Square metres (m ²)	IF-RS-000.B	Rentable floor area
	Occupancy rate	%	IF-RS-000.C	Occupancy rate

Sector Specific Indicators for IFRS S2

IFRS S2 Sector Specific Volume B62 – Auto Parts

Disclosure Topic	Required Indicator	Metric Type	Unit of Measure	Metric Code
Energy Management	Total energy consumed	Quantitative	Gigajoules (GJ)	TR-AP-130a.1
	Percentage of energy supplied from grid electricity	Quantitative	%	TR-AP-130a.1
	Percentage of energy from renewable sources	Quantitative	%	TR-AP-130a.1
Design for Fuel Efficiency	Revenue from products designed to increase fuel efficiency and/or reduce emissions during the use phase	Quantitative	Reporting currency	TR-AP-410a.1
Activity Metrics	Number of parts produced	Number	TR-AP-000.A	Number of parts produced
	Weight of parts produced	Metric tons (t)	TR-AP-000.B	Weight of parts produced
	Area of manufacturing facilities	Square metres (m ²)	TR-AP-000.C	Area of manufacturing facilities

Post-Training Survey

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Thank you

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