TCFD - IFRS S2 Climate-related Disclosures 2024

Aligned with Task Force on Climate-Related Financial Disclosures (TCFD) and International Financial Reporting Standards (IFRS) S2 Climate-related Disclosures.

Table of Contents

1.Introduction

1.1 Introduction - Executive Summary

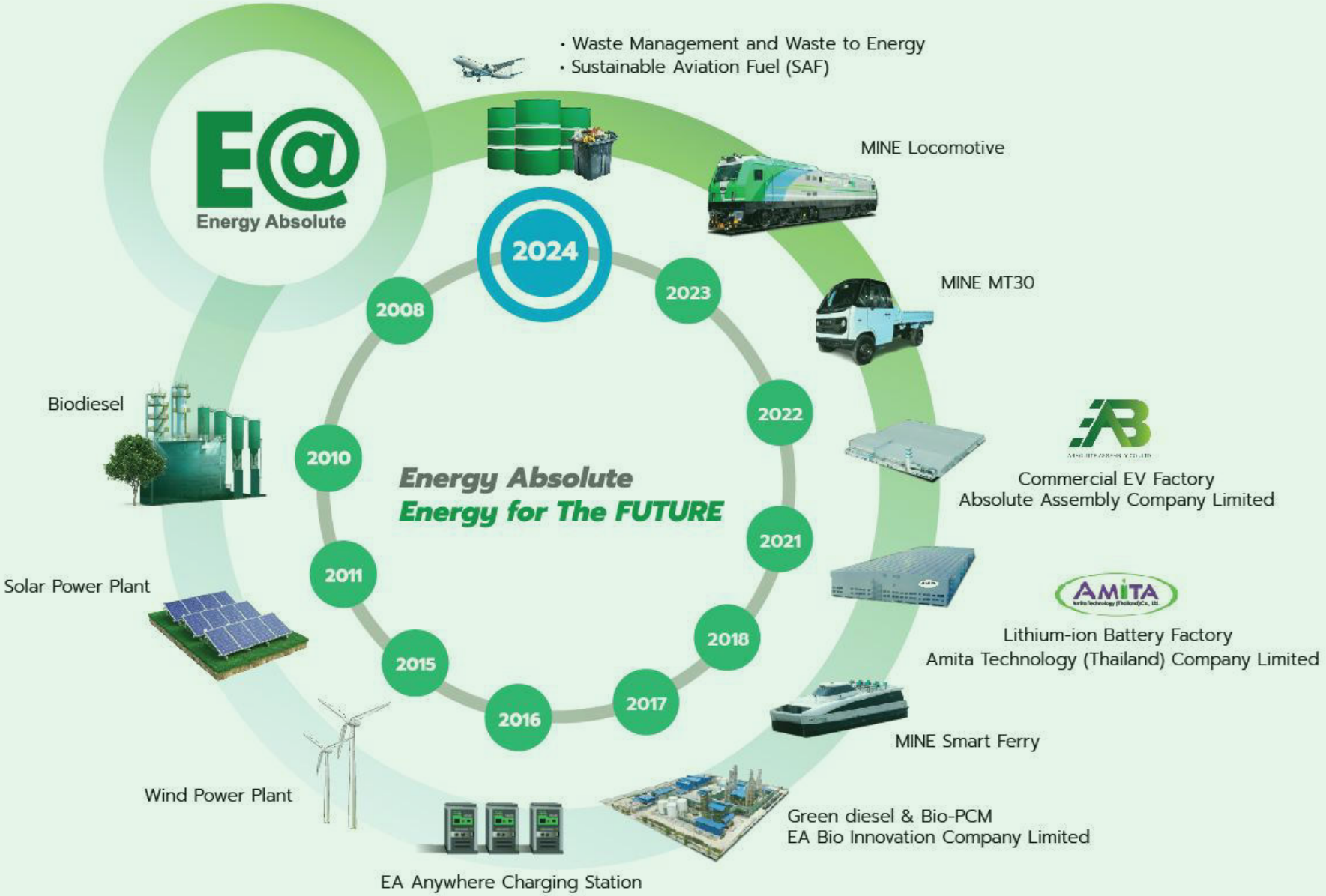
Executive Summary

Energy Absolute Public Company Limited (EA) conducted a comprehensive materiality and climate scenario assessment in alignment with IFRS S2, identifying both physical and transition risks as financially material. Acute risks such as cyclones and flooding, and chronic risks including extreme heat and water stress, are expected to pose moderate financial impacts to solar operations, with projected losses exceeding THB 80 million by 2050 under SSP5–8.5 scenarios. Transition risks—including Adder subsidy expiration, EV/battery market volatility, and asset obsolescence—have already led to cumulative financial impacts of THB 11 billion in FY2024.

In response, EA has adopted a dual-track strategic plan: (1) a Physical Climate Risk Adaptation Plan covering climate-informed infrastructure, resilient site planning, and water/resource management; and (2) a Triple-E Transition Strategy emphasizing Emissions Revolution (renewables, SAF, BESS), Emissions Innovation (low-carbon technologies), and Emissions Economy (carbon credits, green finance). These strategies are underpinned by strong governance oversight, performance-linked incentives, and integration into enterprise risk and investment processes—such as the adoption of an Internal Carbon Pricing mechanism at THB 115/tCO_2e.

EA targets Carbon Neutrality by 2040 and Net Zero by 2050, reinforcing its long-term resilience and positioning for success in a low-carbon global economy.

1.2 Introduction - About Energy Absolute



1.3 Introduction - Purpose of this report and alignment with TCFD and IFRS S2

The Company has set up the Corporate Governance and Sustainability Committee to consider potential risks, impacts, and opportunities relating to climate change which may affect our business. We have analyzed and assessed both potential risk and opportunities from climate-related issues in accordance with the Task Force on Climate-related Financial Disclosures (TCFD) framework and International Financial Reporting Standards (IFRS) S2 which includes four core elements of organizational operation: governance, strategy, risk management and metrics&targets. Moreover, this report also enhances with more specific and financially material disclosure requirements.

Figure1: Core Element of Recommended Climate-Related Financial Disclosures

Governance – disclosing the oversight and roles of the board and management in managing climate-related risks and opportunities;

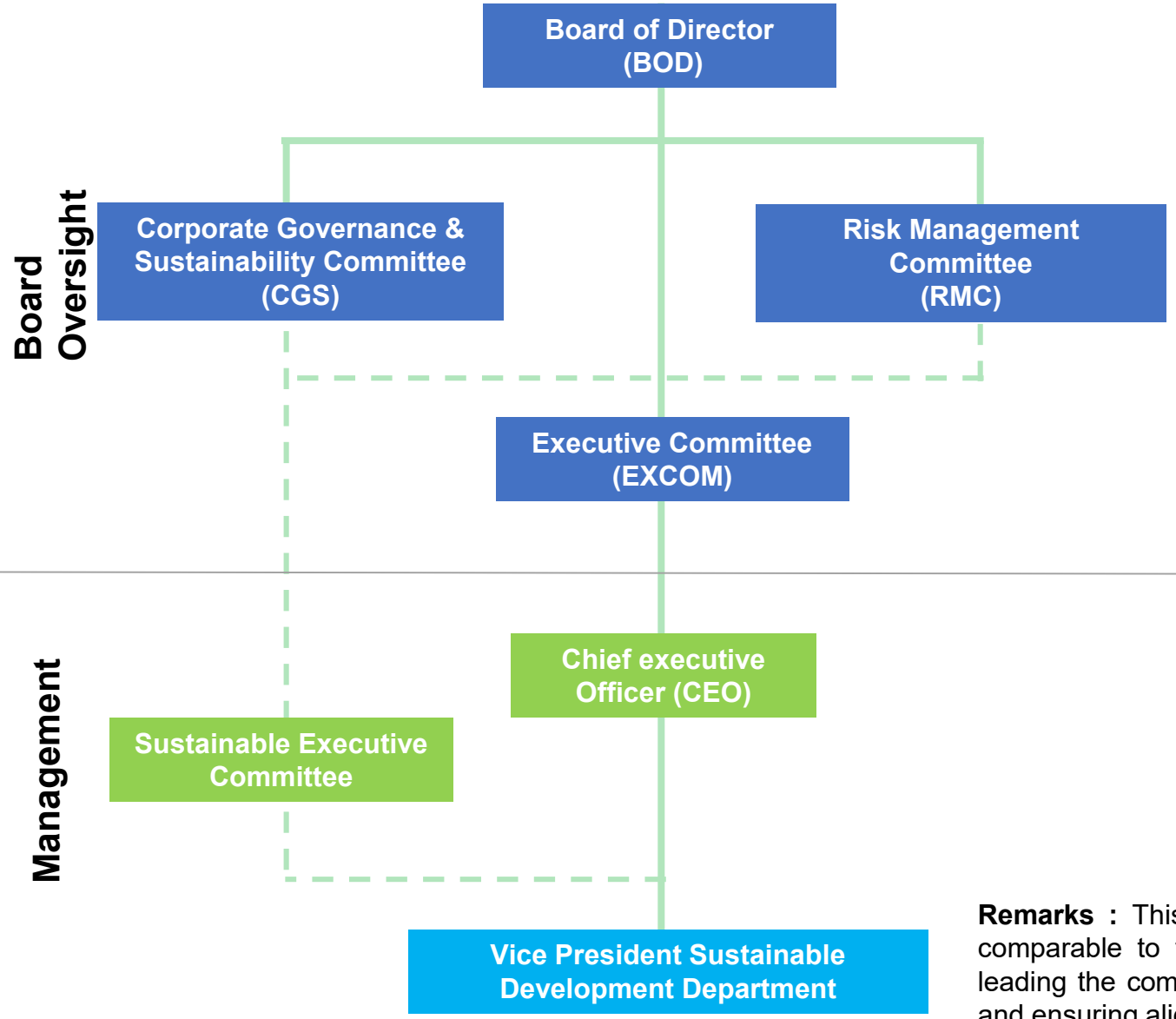
Strategy – identifying short-, medium-, and long-term climate-related risks and opportunities, including their current and anticipated financial effects and the use of scenario analysis;

Risk Management – explaining how climate risks are identified, assessed, and integrated into the company's overall risk management system;

Metrics and Targets – requiring the disclosure of Scope 1, 2, and 3 GHG emissions, emissions intensity, transition plan targets, and their financial impacts. These enhanced disclosures aim to provide investors with clear, comparable, and decision-useful information.

2.Governance

2.1 Governance - Board Oversight of Climate-Related Risks and Opportunities



Energy Absolute Public Company has established a robust governance structure and process to ensure that climate-related risks and opportunities are effectively integrated into its strategic decisions, operations, and financial reporting, in alignment with the requirements of the IFRS S2 standard.

Remarks : This position , VP Sustainable Development Department, carries responsibilities comparable to those of a **Chief Sustainability Officer (CSO).** This role is responsible for leading the company's sustainability and climate strategy, overseeing ESG- Related initiatives, and ensuring alignment with global sustainability standards and stakeholder expectations.

2.1 Governance - Board Oversight of Climate-Related Risks and Opportunities

Board-level Oversight

The **Board of Directors (BOD)** has the ultimate responsibility for the oversight of climate-related issues, setting the organization's vision, policies, and strategic direction. Climate-related agenda will be included in the Board of director's meeting at least 4 times per year. To ensure effective execution, the Board has delegated specific responsibilities to its sub-committees as follows:

Corporate Governance & Sustainability Committee (CGS)

- Role and Responsibilities: Appointed by the Board, the CGS is directly responsible for overseeing climate-related issues, planning strategies, and monitoring performance. The company's governance structure includes a dedicated committee responsible for reviewing, advising, and refining corporate strategies and sustainability targets.
- Oversight Process and Information Used: The CGS convenes quarterly to systematically monitor and assess performance against targets. These meetings involve the review of risk and opportunity assessments conducted in line with the TCFD framework , and consideration of financial tools such as Internal Carbon Pricing (ICP) to support investment decisions in low-carbon projects.
- Target Setting and Monitoring: The CGS plays a key role in reviewing and endorsing the company's climate-related targets, which include achieving Carbon Neutrality by 2040 and Net Zero GHG emissions by 2050

Risk Management Committee (RMC)

- The RMC is responsible for assessing and managing climate-related risks and ensuring these risks are systematically integrated into the company's overall enterprise-wide risk management process.

2.2 Governance - Management's Role and Accountability Structure

Under the Board's oversight, management plays a critical role in executing the climate strategy through a well-defined structure:

Executive Committee (EXCOM) and Chief Executive Officer (CEO):

- Responsible for driving and managing the implementation of strategies and policies approved by the Board to achieve the company's objectives.

Sustainable Executive Committee:

- This management-level committee is established to support operational execution.
- It functions as a cross-functional working group to drive and coordinate the implementation of sustainability projects across various business units.

Vice President, Sustainable Development Department

- This position carries responsibilities comparable to those of a **Chief Sustainability Officer (CSO).**
- **Formal Mandate:** The role's primary responsibilities are to lead the company's sustainability and climate strategy, oversee ESG-related initiatives, and ensure alignment with global sustainability standards and stakeholder expectations.
- **Reporting Lines:** This position has a direct reporting line to the CEO and a functional reporting line to the CGS and RMC.

2.3 Governance - Climate-Related Management Incentives

The Company believes that linking climate-related performance to its reward and remuneration system is a key mechanism for driving strategy and fostering accountability across the organization. Consequently, the Company has set key performance indicators (KPIs) as Climate-Related Management Incentives for executives and employees to drive efforts to achieve the Company's goals.

Summary Table of Climate-Related Management Incentives

Level	Type of Incentive	KPI/Program related to climate change
Chief Executive Officer (CEO)	Monetary	The CEO's monetary remuneration is evaluated based on performance measured against a comprehensive and balanced scorecard of KPIs. This demonstrates the integration of climate and ESG goals into the core business operations. Key indicators include ： Climate and ESG-related KPIs: • Climate-Related Management: A target related to GHG emissions reduction by 3% • DJSI Rating: (Dow Jones Sustainability Index) • Increase collaboration by collaborating with other organizations
Business Unit Manager	Monetary	For managers and employees, the Company has established the "EA Inside EA Program" to promote innovation in energy efficiency and greenhouse gas reduction. Employees who develop successful projects receive monetary incentives as a reward.
Employee	Monetary	

3.Strategy

3.1 Strategy - Identified Climate-Related Risks and Opportunities

Impact of climate - related risks and opportunities on our business

In line with the Paris Agreement which aims to limit global warming to well below 2°C from pre-industrial levels and pursue efforts to further limit
warming to 1.5°C, EA has launched new initiatives to mitigate, adapt to, and cope with climate change, all in pursuit of the organization's goal of achieving net zero greenhouse gas emissions by 2050.

In 2024, EA performed both **qualitative and quantitative analyses of physical and transition climate scenarios** to assess the likelihood and severity of potential climate-related impacts.

The Company has assessed the risks and opportunities related to climate change affecting its business operations (Own's operation), value chain (upstream and downstream activities) and financial position across its core business groups which is Renewable Power business.

This assessment encompasses potential risks and opportunities expected to impact different timeframes: **Short-term (by 2030), Medium-term (by 2040), and Long-term (by 2050)**

The Company conducted a **Climate Scenario Analysis** better to understand the potential opportunities and impacts on the business. This analysis examines both physical and transitional risks using the IPCC AR6

- **SSP1-2.6 low carbon scenario**, which reflects global commitments to limit temperature rise to 2 °C or below
- **SSP5-8.5 high greenhouse gas emissions scenario**, representing a business-as-usual (BAU) approach exceeding 2°C
- The analysis also includes considerations from **the IEA Scenario**

3.1 Strategy - Identified Climate-Related Risks and Opportunities

EA acknowledges the impact of climate change on our business. While we face climate-related risks, we also recognize the opportunities to adapt our business operations towards sustainability.

Climate-Related Risks

The Task Force divided climate-related risks into two major categories:

Physical risks: Physical risks resulting from climate change can be event driven (acute) or longer-term shifts (chronic) in climate patterns. Physical risks may have financial implications for organizations, such as direct damage to assets and indirect impacts from supply chain disruption. Organizations' financial performance may also be affected by changes in water availability, sourcing, and quality; food security; and extreme temperature changes affecting organizations' premises, operations, supply chain, transport needs, and employee safety.

Transition risks: Transitioning to a lower-carbon economy may entail extensive policy, legal, technology, and market changes to address mitigation and adaptation requirements related to climate change. Depending on the nature, speed, and focus of these changes, transition risks may pose varying levels of financial and reputational risk to organizations. Transition risks can be divided into four categories: policy and regulatory risks, technological risks, market risks, and reputational risks.

Climate-Related Opportunities

Efforts to mitigate and adapt to climate change also produce opportunities for organizations, for example, through resource efficiency and cost savings, the adoption of low-emission energy sources, the development of new products and services, access to new markets, and building resilience along the supply chain. Climate-related opportunities will vary depending on the region, market, and industry in which an organization operates.

Physical Risks	Transition Risks	Opportunities
• Cyclones (Acute) • Flooding (Acute) • Coastal Flooding • (Acute) • Extreme Heat (Chronic) • Water stress (Chronic)	• Policy & Legal • Technology • Market • Reputational Risk	• Resource Efficiency and Energy Source • Products and Service • Markets • Climate Resilience

Figure: EA Climate related risks and opportunities

3.1 Strategy - Identified Climate-Related Risks and Opportunities

Identified Physical risk

Climate-related risks of our business can encompass a variety of challenges, ranging from physical risks to transition risks. To understand potential impacts of climate change on the business's contexts, as a result, all sites within the scope of the assessment are vulnerable to being greatly impacted by these physical climate risks. The following provides a detailed overview of the majority of exposure to these **physical risks**:

Cyclone

- Strong winds can damage wind turbines and solar panels
- Transmission lines and inverters are at risk of shutdown or failure
- Heavy rainfall from cyclones may cause flash floods and restrict site access
- Increased O&M and insurance costs due to weather-related repairs

Flooding

- Floodwater may damage solar farm foundations and electrical systems
- Prolonged waterlogging can delay operations and maintenance
- Inverters, substations, and storage systems are exposed to flood risk
- May require capital investment in elevated platforms and improved drainage systems

Extreme Heat

- High temperatures reduce PV efficiency (typically ~0.4–0.5% per +1°C)
- Inverters and battery storage systems risk overheating or shutdown
- Certain wind turbine components may underperform above thermal thresholds
- Requires better thermal management and potentially increases O&M costs

Water stress

- Solar panels require regular cleaning; water scarcity can reduce output due to soiling
- Projects in arid regions may face higher water procurement costs
- Competing with local communities for water may lead to reputational and ESG risks
- Calls for sustainable water management plans (e.g., recycling, dry cleaning tech)

3.1 Strategy - Identified Climate-Related Risks and Opportunities

Identified Transition-related risks and opportunities

Transition-related risks and opportunities of our business arise from the global shift toward a low-carbon economy. These risks can emerge from changes in climate-related policies, evolving market preferences, disruptive technologies, and increasing stakeholder expectations. At the same time, this transition also presents opportunities for innovation, new revenue streams, and enhanced competitiveness in clean energy markets. Understanding these dynamics is critical to ensuring long-term business resilience. The following provides a detailed overview of the key transition risks and opportunities relevant to our business context:

Key Transition Risks	Key Transition Opportunities
 Policy & Legal • Regulatory shifts & carbon pricing mechanisms	 Clean Energy Expansion • Growth in renewable energy demand & corporate net-zero targets
 Market • EV market volatility & shifts in consumer confidence	 Battery & Energy Storage Innovation • Gigafactory expansion & Battery Energy Storage System (BESS) development
 Technology • Rapid technological obsolescence in key sectors	 Sustainable Fuel & New Green Products • Pioneering the Sustainable Aviation Fuel (SAF) market
 Reputational • Evolving investor expectations & global reporting standards	 Carbon Market & Green Finance Access • Revenue generation from carbon credits & access to green financing

3.2 Strategy - Impact on Business Model and Strategy

Sustainability Framework

Energy Absolute Public Company Limited has adopted a Sustainability Framework as the cornerstone of its long-term strategic direction. This framework integrates environmental, social, and governance (ESG) considerations into core business operations, ensuring that sustainability is not only a guiding principle but a driver of innovation, resilience, and stakeholder value. By embedding sustainability into every level of decision-making, EA is committed to creating positive impact while supporting Thailand's transition to a low-carbon and sustainable future.

VISION

"A leader in alternative energy business using modern, up-to-date and environmentally friendly technology for the benefit and fairness to consumers, shareholders, partners and employees."

3.2 Strategy - Impact on Business Model and Strategy

Sustainable Strategy

To effectively operationalize its Sustainability Framework and proactively address the escalating challenges of climate change, energy transition, and evolving societal expectations, **Energy Absolute Public Company Limited** has formulated a core sustainability strategy, the “Triple-E Strategy.” This comprehensive strategic framework functions as a foundational blueprint for guiding long-term, resilient business growth while simultaneously delivering positive and measurable impacts across environmental, social, and economic dimensions. Rooted in three interconnected pillars, the Triple-E Strategy exemplifies EA’s steadfast commitment to leading the transformation towards alternative energy by leveraging modern, environmentally responsible technologies that generate enduring value for all stakeholders — including customers, shareholders, business partners, communities, and employees.

Rather than a conventional approach to emissions reduction, the Triple-E Strategy represents a holistic and future-forward transformation agenda. It spans renewable energy development, clean mobility solutions, advanced battery innovation, circular economy integration, stakeholder engagement, and inclusive local community development. Collectively, these elements define EA’s strategic pathway to powering Thailand’s transition toward a low-carbon, inclusive, and sustainable energy future.

Emissions Revolution:

Beyond Zero

- Transitioning to renewable and clean energy in operations to reduce direct greenhouse gas emissions from the organization's activities and production processes.
- Enhancing energy efficiency to significantly reduce negative environmental impacts.
- Collaborating with stakeholders across the value chain to comprehensively promote low-greenhouse gas practices.
- Implementing rigorous verification and validation of greenhouse gas emissions, alongside transparent and auditable data disclosure.

Emissions-Innovation:

Technology for Tomorrow

- Research and development, including the application of advanced energy storage solutions in operations, utilizing environmentally friendly and sustainable materials.
- Driving innovation in new-generation electric propulsion technologies and high-efficiency battery technologies to achieve cost reduction and operational efficiency goals.
- Strategic investment in clean technologies and emerging innovations, such as Waste-to-Energy technology, clean hydrogen production, and Power-to-X technology, to accelerate greenhouse gas reduction and support the transition to a low-carbon society.

Emissions Economy:

Sustainable Value Creation

- Integrated and comprehensive development of an environmentally friendly value chain, from the upstream production of clean energy to the downstream use of products and services.
- Promoting community and stakeholder engagement through sustainable development projects to support carbon credit generation and drive shared, environmentally friendly growth.

3.2 Strategy - Impact on Business Model and Strategy

Summary of Physical Risks & Strategic Implications

Risk Category	Key Findings	Time Horizon of Peak Risk
Cyclone 	Strong winds can damage wind turbines and solar panels, while heavy rainfall from cyclones may cause flash floods and restrict site access. This leads to increased O&M and insurance costs due to weather-related repairs.	**Short-term (Acute)**
Flooding 	Floodwater can damage solar farm foundations and electrical systems such as substations and storage systems. Prolonged waterlogging can delay operations and may require capital investment in elevated platforms and improved drainage systems.	**Short-term (Acute)**
Extreme Heat 	High temperatures reduce the efficiency of solar panels (PV). There is a risk of inverters and battery storage systems overheating or shutting down, leading to reduced performance and increased thermal management costs.	**Long-term (Chronic)**
Water Stress 	Water scarcity increases the cost of cleaning solar panels and can reduce output due to soiling. Competing for water with local communities in arid regions may lead to reputational and ESG risks, necessitating sustainable water management plans (e.g., recycling, dry-cleaning technology)	**Long-term (Chronic)**

Strategic Implications

To manage physical risks, the company's strategy must integrate climate resilience across the asset lifecycle. This includes conducting climate-informed site selection based on vulnerability, designing assets to be resilient to extreme weather, enhancing maintenance and emergency response plans, and implementing sustainable resource management, such as water-saving technologies for solar farms.

3.2 Strategy - Impact on Business Model and Strategy

Summary of Transition Risks & Strategic Implications

Risk Category	Key Findings	Time Horizon of Peak Risk
Policy & Legal 	The most severe short-term risk stems from the expiration of the government's Adder subsidy, which directly impacts revenue from renewable energy operations. In the long term, the risk shifts to the implementation of carbon pricing mechanisms, which will increase operating costs across all segments.	**Short-term (2030)**
Market Demand 	This is a critical risk at present, driven by consumer confidence issues and high volatility in the EV and battery markets. This has led to a significant revenue decline and substantial inventory write-downs.	**Current / Short-term (Baseline - 2030)**
Technology 	A high and continuous risk exists in the EV & Battery business due to the rapid pace of global innovation, which could render existing technology obsolete. The company is actively mitigating this risk by seeking strategic partners.	**Continuous (2030-2040)**
Reputational 	This is a critical, company-wide risk at present, stemming from the financial and liquidity challenges faced in 2024, including the downgrade of its TRIS rating. This has impacted investor and customer confidence and is an urgent priority for management to address.	**Current / Short-term (Baseline – 2030)**

Strategic Implications

This assessment underscores the urgent need to implement a turnaround strategy and rebuild confidence.
Key strategic priorities must focus on:

- Securing strategic partners for the EV and Battery businesses.
- Diversifying revenue streams in the Renewable Energy segment to mitigate the impact of the Adder expiration.
- Effective financial and reputational management to build long-term trust.

3.2 Strategy - Impact on Business Model and Strategy

Transition Opportunities Assessment - Qualitative

Strategic Implications

To capitalize on these opportunities, the company must focus on execution and strategic investment. Key priorities include:

- **Accelerating Battery & BESS Development:** Finalizing joint ventures and expanding production capacity to capture the critical demand for grid-scale energy storage.
- **Executing the SAF Project:** Ensuring the Sustainable Aviation Fuel (SAF) plant begins production on schedule to establish a first-mover advantage in the aviation decarbonization market.
- **Securing New Clean Energy Projects:** Actively participating in bids for new renewable energy projects and pursuing Corporate PPA agreements to meet rising demand from the private sector.
- **Monetizing Environmental Assets:** Developing projects for the voluntary carbon market (T-VER) and leveraging strong ESG performance to access green financing opportunities.

3.2 Strategy - Impact on Business Model and Strategy

Physical Climate Risk Adaptation

- To enhance operational resilience under intensifying climate extremes, Energy Absolute has developed a Physical Climate Risk Adaptation Plan tailored to its renewable energy assets. The plan addresses physical risks such as floods, heat waves, and water stress—ensuring business continuity and asset protection.
- This strategic plan outlines six core adaptation pillars, including climate-informed infrastructure design, thermal and water management, and location-specific risk screening. Through proactive engineering, planning, and community engagement, EA aims to safeguard its operations while aligning with international best practices in climate adaptation.

Climate-Informed Infrastructure Design

- Install floodgates, drainage systems
- Raise inverters /substations
- **Implementation** : Construction of drainage systems, floodgates, and canals

🕒 **Timeline:** Medium-term (3–6 years)

Water Management

- Dry solar panel cleaning
- Recycled/sustainable water systems
- **Implementation** : Under development in the upcoming phase

🕒 **Timeline:** Medium to long-term (planning stage)

Site Selection & Asset Planning

- Use risk tools (e.g. WWF Filter, Think Hazard)
- Climate scenario-based screening
- Select low-risk, low-exposure sites
- **Implementation example**: Feasibility study to identify least vulnerable location

🕒 **Timeline**: All time frame

O&M Resilience

- Adjust maintenance for extreme seasons
- Auto shutdowns & standby crews
- Cyclone/flood/heat manuals
- **Implementation** : • Wind sensor sleep mode / turbine adjustment

🕒 **Timeline:** Medium-term (3–6 years)

Climate-Linked CAPEX Planning

- Budget for climate-proofing
- Cost-benefit analysis (elevation vs. damage)
- Apply ICP (THB 115/tCO_2e) for ROI
- **Implementation**: In progress under financial and investment strategy planning

🕒 **Timeline**: 5–10 years

Community & ESG Risk Mitigation

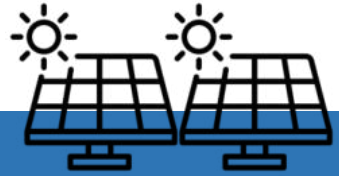
- Sustainable water usage with communities
- Prevent resource conflicts
- **Implementation:** Ongoing through community engagement and EIA planning

🕒 **Timeline:** Ongoing / Long-term

3.2 Strategy - Impact on Business Model and Strategy

Climate Transition Adaptation Plan

To strengthen business resilience in the face of dynamic climate policies, evolving technologies, and shifting market conditions, **Energy Absolute** has established a Climate Transition Adaptation Plan. This plan outlines five strategic pillars to proactively address transition risks — from revenue diversification and carbon pricing integration to low-carbon technology investments and stakeholder alignment. Together, these actions help steer the company toward long-term sustainability and global climate goals.



Reputation & Market Adaptation
- Turnaround strategy for EV & battery confidence recovery
- Stakeholder engagement

Policy & Financial Adaptation
- Diversify revenue post-Adder (e.g., 180 MW wind, corporate PPA)
- Apply ICP (THB 115/tCO_2e) for forward-looking investment screening

Technology Adaptation
- JV partnerships for EV & BESS innovation
- Invest in low-carbon fuels: SAF, Green Diesel

Finance & Carbon Market
- Develop Green Bond Framework for project refinancing
- Monetize carbon credits via T-VER (forestry, SAF, RE plants)

Stakeholder & Systemic Adaptation
- Founding member of RE100 Thailand Club Align with SDGs, COP26, Net Zero 2065 via cross-sector collaboration

3.3 Strategy –Scenario Analysis and Strategic Resilience

Physical Scenario Analysis (Overview)

Physical Risks	Key Indicators	IPCC Scenario	Time frame	Description / Criteria	Tool
Cyclones (Acute Risks)	Average Largest 1-Day Precipitation	**SSP1-2.6** **SSP5-8.5**	**2030** **2040** **2050**	• Average Largest 1-Day Precipitation as the primary indicator to represent potential impacts from tropical cyclones is well-founded and provides a clear, quantifiable measure for risk assessment. This indicator is paramount due to its direct correlation with the destructive potential of cyclonic events.	• Think Hazard • World bank climate portal knowledge
Flood (Acute risks)	Average Largest 5-Day Cumulative Precipitation			• This metric directly pertains to potential flood scenarios, encompassing both urban and riverine flooding of properties. High levels of cumulative precipitation can significantly impede drainage capabilities across various zones. Projections for this indicator have been meticulously conducted by CMIP6 in Thailand.	• WWF Risk Filter • World bank climate portal knowledge
Extreme Heat (Chronic risks)	Maximum of Daily Max-Temperature			• This indicator is crucial for evaluating long-term chronic risks associated with extreme heat. The maximum daily temperature serves as a critical measure for assessing the intensity and frequency of heat waves, which can have profound and persistent impacts.	• Think Hazard • World bank climate portal knowledge
Water stress (Chronic risks)	Water stress			• The projection of water stress, a vital chronic risk indicator, has been expertly conducted utilizing the Aqueduct tool. This advanced analytical instrument enables a comprehensive assessment of water availability relative to demand, highlighting areas of potential scarcity and vulnerability.	• Aqueduct

SSP1-2.6 represents the best-case scenario, fully aligned with the Paris Agreement's objective to limit global warming to 1.5-2°C by 2100. It depicts a future focused on sustainable development, equity, and robust environmental protection, characterized by low emissions and limited warming.

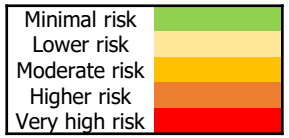
SSP5-8.5 is the worst-case scenario, leading to severe climate impacts. This scenario portrays a world characterized by rapid economic growth driven by fossil fuels, resulting in very high emissions and severe warming (>4°C by 2100).

3.3 Strategy –Scenario Analysis and Strategic Resilience

Qualitative physical risk assessment

This **qualitative physical risk assessment** provides a comprehensive overview of key climate-related risks to our Wind and Solar business units, considering distinct climate change scenarios (SSP1-2.6 and SSP5-8.5) across future time horizons (2030, 2040, 2050).

Climate Related Risks	Business units	2030		2040		2050	
		SSP1-2.6	SSP5-8.5	SSP1-2.6	SSP5-8.5	SSP1-2.6	SSP5-8.5
Cyclone	Wind						
	Solar						
Flooding	Wind						
	Solar						
Extreme Heat	Wind						
	Solar						
Water stress	Wind						
	Solar						



Hazard-Specific Insights:

- **Cyclones:** This is a **specific risk for the Wind business**, with the potential to cause direct damage to turbines and blades.
- **Flooding:** This is a **growing risk for the Solar business**, with the potential to damage infrastructure and electrical equipment.
- **Extreme Heat:** This affects both businesses by degrading the efficiency of solar panels and impacting the cooling systems of wind turbines.
- **Water Stress:** This is the **most severe risk** for the **Solar business**, stemming from the need for water to clean panels and maintain efficiency. This risk is projected to escalate to a "Very high" level.

Overall Risk Trend:

The overall risk trend clearly indicates that climate-related physical risks are set to increase significantly in the medium-term (2040) and long-term (2050), especially under a high-emission scenario
(SSP5-8.5).In the short-term (2030): Most risks remain at a manageable level (Minimal to Moderate risk). In the long-term (2050) and under the SSP5-8.5 scenario: Risks intensify to high (Higher risk) and very high (Very high risk) levels across several dimensions. This is particularly evident for Water Stress and Extreme Heat, which affect both Wind and Solar businesses but have a more pronounced impact on the Solar business. This trend suggests that without serious global greenhouse gas mitigation efforts, the company will inevitably face significant operational challenges and increased costs.

Strategic Implications:

In response to identified climate risks, the company must implement a multi-faceted strategic approach to build long-term resilience and secure its competitive advantage. This involves proactively integrating future climate projections into site selection, investing in resilient technologies like waterless solar panel cleaning systems and higher-rated wind turbines, and establishing robust operational plans for water management and emergencies. Financially, this strategy requires budgeting for increased capital and operational expenditures (OPEX/CAPEX) and analyzing potential revenue impacts in line with IFRS S2 standards. By taking these integrated actions, the company can leverage its proactive risk management to build investor confidence and solidify its position as a sustainable leader in the clean energy sector.

3.3 Strategy –Scenario Analysis and Strategic Resilience

Strategy – Physical Risk Quantitative Assessment

Methodology for Physical Risk Quantitative Assessment: Integrating Financial Materiality

Building upon the comprehensive insights derived from our Physical Risk Qualitative Assessment, the Physical Risk Quantitative Assessment employs a robust, three-tiered methodological framework to translate qualitative understanding into financially relevant metrics. This approach ensures a systematic and transparent valuation of climate-related risks across our business units, considering their relative financial significance.

Our methodology comprises three critical steps:

1. Establishing Baseline Risk Scores:

The initial phase involves establishing a baseline risk score for each identified physical hazard and business unit (Wind and Solar). These scores are derived from the Qualitative Physical Risk Assessment, reflecting the inherent physical vulnerability to specific climate hazards under different future scenarios (SSP1-2.6 and SSP5-8.5) and time horizons (2030, 2040, 2050).

2. Applying Climate Change Adjustment:

Following the establishment of baseline risk scores, the next crucial step is to maintain the consideration of climate change adjustments as outlined in the qualitative assessment. This factor accounts for the projected changes in the intensity and frequency of climate hazards under the different IPCC scenarios and future timeframes, ensuring a forward-looking perspective on our physical exposure.

3. Integrating Financial Materiality via Revenue Proportion:

To bridge the gap between physical risk and financial impact, we introduce a third step: adjusting the climate-adjusted risk scores by the proportion of revenue contributed by each business unit (Wind and Solar). This weighting allows us to prioritize risks that have the most significant potential impact on the overall financial performance of the company. By factoring in revenue contribution, the Quantitative Physical Risk Assessment provides a more nuanced understanding of the financial materiality of each climate-related hazard.

3.3 Strategy –Scenario Analysis and Strategic Resilience

Quantitative physical risk assessment

The refined results from our Physical Risk Quantitative Assessment provide a crucial overview and highlight significant trends regarding climate-related risks to our Wind and Solar business units, across various scenarios and timeframes, as depicted in the heat map.

Climate Related Risks	Business units	2030		2040		2050	
		SSP1-2.6	SSP5-8.5	SSP1-2.6	SSP5-8.5	SSP1-2.6	SSP5-8.5
Cyclone	Wind						
	Solar						
Flooding	Wind						
	Solar						
Extreme Heat	Wind						
	Solar						
Water stress	Wind						
	Solar						

Minimal risk
Lower risk
Moderate risk
Higher risk
Very high risk

Hazard-Specific Insights:

- **Cyclones:** The financial risk is assessed as Moderate risk. Although the physical severity of cyclones can be high for the Wind business, its also contribution to the company's total revenue results in the financial impact.
- **Flooding:** The risk is consistently rated as Moderate risk for the Solar business. This highlights that our solar assets, which are vulnerable to flooding, represent a highly significant portion of the company's revenue, making any potential damage or business interruption financially material.
- **Extreme Heat:** Similar to flooding, the financial risk from extreme heat to the Solar business is assessed as Moderate risk. This reflects the financial impact that heat-induced efficiency losses can have on our primary revenue-generating assets. The risk for the Wind business remains lower due to its smaller revenue share.
- **Water Stress:** The financial risk is assessed as Moderate risk. This is a key insight: while the physical risk of water scarcity was identified as "High" in the qualitative assessment, the financial impact (e.g., the cost of sourcing water relative to total revenue) is considered “Moderate". This provides a more actionable financial perspective on the risk.

Overall Assessment & Trends:

- Shift from Physical Severity to Financial Impact: This quantitative assessment critically shifts the focus from "how severe is the hazard?" to "what is the financial impact on our business?". By weighting risks with revenue proportions, we can now prioritize based on financial materiality.
- Solar Business as the Primary Financial Risk Driver: The results clearly indicate that the Solar business is the most significant source of climate-related financial risk. This is due to its high revenue contribution combined with its vulnerability to multiple hazards (flooding, heat, and water stress).
- A Stable Financial Risk Profile: Unlike the escalating trend in the qualitative assessment, the financial risk profile appears stable across all time horizons. This suggests that under our current business structure, the financial vulnerability to climate change is a persistent, ongoing challenge that requires continuous management, rather than a risk that only emerges in the distant future.

Strategic Implications

This quantitative assessment leads to a more focused and incisive strategic approach. The core implication is the prioritization of resources based on financial materiality, with a clear focus on bolstering the resilience of the Solar business. This involves targeted investments in technologies and operational plans to mitigate risks from flooding, extreme heat, and water stress, while strategically managing risks with lower financial impact, such as cyclones for the Wind business. Moreover, the stable nature of the financial risk profile underscores the need to shift from purely long-term planning towards the integration of resilience measures into ongoing operations and annual budgets to manage this persistent challenge effectively.

3.3 Strategy –Scenario Analysis and Strategic Resilience

Methodology for Assessing Climate-Related Risks & Opportunities

To ensure our business strategy is resilient, we have analyzed the potential impacts of climate-related issues under distinct transition pathways. This framework allows us to identify, assess, and manage risks and opportunities effectively, aligning with the recommendations of the Task Force on Climate-related Financial Disclosures (TCFD) and International Financial Reporting Standards (IFRS) S2. The company has a history of utilizing scenario-based assessments to understand future challenges.

Scenario Name	Description	Alignment	Purpose
IEA APS/2°C (Announced Pledges Scenario) Rapid Transition Pathway	Aggressive policy shifts toward net-zero targets, high carbon prices, and rapid clean energy adoption.	Aligned with Paris Agreement goals	Used to test our strategic resilience and identify significant opportunities in a rapidly decarbonizing world.
IEA STEPS (Stated Policies Scenario) Slower Transition Pathway	This scenario reflects the current trajectory based on existing government policies and measures that are already in place.	Above 2°C future	Used to assess our baseline risks and challenges in a business-as-usual-plus-policy environment.

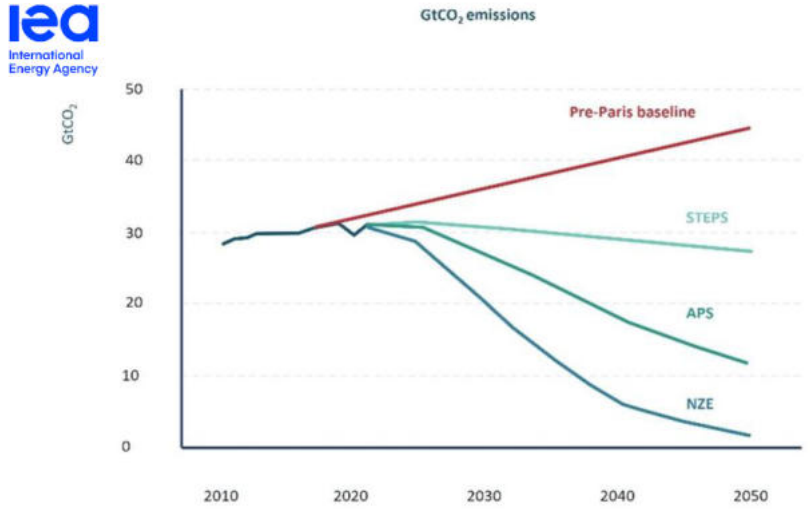


Figure : IEA Scenarios

Sources :https://environment.govt.nz/what-you-can-do/climate-scenarios-toolkit/climate-scenarios-list/international-energy-agency-scenarios/

Assessment Time Horizons

Our analysis considers the evolution of these risks and opportunities across the following timeframes to inform our long-term strategic planning:

- **Short-term: 2030**
- **Medium-term: 2040**
- **Long-term: 2050**

3.3 Strategy –Scenario Analysis and Strategic Resilience

Strategy – Transition Risks Assessment - Qualitative

This qualitative transition risk assessment provides a comprehensive overview of key climate-related transition risks across our Renewable Energy, EV & Battery, and Bio-Innovation business units. The assessment considers distinct climate transition scenarios (IEA STEPS and IEA APS/2°C) across future time horizons (2030, 2040, 2050) to inform our strategic planning and ensure resilience.

Transition Related Risks	Business units	2030		2040		2050	
		STEPS	APS/2°	STEPS	APS/2°	STEPS	APS/2°
Policy & Legal	Renewable energy						
	EV &battery						
	Bio-innovation						
Market Demand	Renewable energy						
	EV &battery						
	Bio-innovation						
Technology	Renewable energy						
	EV &battery						
	Bio-innovation						
Reputational	All Business Units						

Overall Risk Trend

- The assessment indicates that short-term risks (2030) are high across all scenarios, resulting from policy and market events that have already materialized. However, in the long term (2050), the risk profiles diverge depending on the scenario.
- The APS/2°C (rapid transition) scenario presents higher policy & legal risks, while the STEPS (slower transition) scenario poses persistent market and reputational risks if the company fails to keep pace with global trends.

Risk Level Definitions:

- **(Yellow - Moderate Risk):** An observable risk that requires monitoring but is manageable under the current strategy.
- **(Orange - Higher Risk):** A high risk that significantly impacts performance and requires proactive management measures.
- **(Red - Very High Risk):** A critical-level risk with a severe impact on the business or financial position, requiring urgent strategic adjustments.

3.3 Strategy –Scenario Analysis and Strategic Resilience

Strategy – Transition Opportunities Assessment - Qualitative

In 2024, **Energy Absolute (EA)** faced severe market, reputational, and policy risks that resulted in over THB 11.1 billion in recognized negative financial impacts, primarily affecting its EV, Battery, and Renewable Energy businesses. In response, the company is executing a turnaround strategy focused on securing strategic partners for its EV and Battery segments while simultaneously investing in high-growth opportunities like Sustainable Aviation Fuel (SAF) and Battery Energy Storage Systems (BESS). The company's future success is now contingent on managing these immediate challenges while capitalizing on the significant opportunities presented by an accelerated global energy transition, particularly under a rapid decarbonization scenario (APS/2°C).

Transition Opportunities	Business units	2030		2040		2050	
		STEPS	APS/2°	STEPS	APS/2°	STEPS	APS/2°
Clean Energy Expansion	Renewable energy						
Battery & Energy Storage Innovation	EV & Battery						
Sustainable Fuel & New Green Products	Bio-Innovation						
Carbon Market & ESG Finance Access	All Business Units						

Overall Opportunity Trend

- The assessment reveals significant growth opportunities across all business units, particularly in a rapid transition scenario. The magnitude of these opportunities consistently increases over time, with the long-term outlook (2050) showing substantial potential for market leadership.
- The **APS/2°C (rapid transition) scenario** unlocks 'Very High' ( ) opportunities across all key growth areas, especially in Battery/BESS and Sustainable Aviation Fuel (SAF). In contrast, the **STEPS (slower transition) scenario** presents 'Higher' ( ) but more moderate growth opportunities, underscoring the strategic advantage of accelerating the company's transition.

Risk Level Definitions:

- (Yellow - Moderate Opportunity): Potential exists, but the opportunity is in an early stage or requires further development.
- (Green - Higher Opportunity): A clear growth opportunity with an established and supportive market.
- (Dark Green - Very High Opportunity): An opportunity for market leadership with very high revenue potential.

3.4 Strategy –Quantitative Financial Impact Assessment

Cyclone and financial impact - Physical risk (acute)

Business unit	Risk implications	Time Horizon & Risk Level	Estimated cost
Wind 	• Potential damage to critical components (e.g., turbine blades, nacelle systems), leading to significant repair and replacement costs. Cyclone risks can force wind turbines to halt production for repairs, resulting in significant business interruption.	**Short-term (2030):** Lower risk (SSP1-2.6) Moderate risk (SSP5-8.5) **Medium-term (2040):** Lower risk (SSP1-2.6) Moderate risk (SSP5-8.5) **Long-term (2050):** Lower risk (SSP1-2.6) Moderate risk (SSP5-8.5)	• The estimated cost combines two primary components: Asset Damage (cost to repair/replace equipment) and Revenue Loss (income lost from business interruption). • The wind portfolio faces volatile and escalating financial risks, with combined impacts projected to be higher than solar, especially in a high-emissions future. • Under the SSP1-2.6 (Low-Emissions) scenario, the total financial impact is projected to **peak** around **2040 at THB 27 million** before declining. • Conversely, in the SSP5-8.5 (High-Emissions) scenario, the combined impact shows a continuous and significant increase, rising from **THB 24 million** in 2030 to **THB 29 million** by 2050.
Solar 	• Cyclone risks are expected to cause moderate asset damage, including the need to replace solar panels, repair inverters, and restore mounting structures. If a solar farm is damaged and must cease operations for maintenance, it will incur revenue loss for each day it is unable to produce electricity.	**Short-term (2030):** Moderate risk (SSP1-2.6) Moderate risk (SSP5-8.5) **Medium-term (2040):** Moderate risk (SSP1-2.6) Moderate risk (SSP5-8.5) **Long-term (2050):** Moderate risk (SSP1-2.6) Moderate risk (SSP5-8.5)	• The solar portfolio, the primary risk is consistently high revenue loss, though the overall financial impact shows less volatility than wind. • In the SSP1-2.6 (Low-Emissions) scenario, the business faces a steady, moderate increase in total impacts, growing from **THB 19 million** in 2030 to **THB 20 million** in 2050. • Under the SSP5-8.5 (High-Emissions) scenario, the total financial impact remains high but relatively stable, hovering around **THB 19 to 20 million** throughout the period.

The estimated financial impacts are indicative and based on modeling assumptions that are subject to inherent uncertainties.

3.4 Strategy –Quantitative Financial Impact Assessment

Flood and financial impact - Physical risk (acute)

Business unit	Risk implications	Time Horizon & Risk Level	Estimated cost
Wind 	• Flooding at the turbine base poses a risk to foundations and electrical systems, requiring thorough inspections and potential repairs. • These inspections and repairs can lead to extended downtime, ultimately resulting in revenue loss.	**Short-term (2030):** 🟢 Minimal risk (SSP1-2.6) 🟢 Minimal risk (SSP5-8.5) **Medium-term (2040):** 🟢 Minimal risk (SSP1-2.6) 🟢 Minimal risk (SSP5-8.5) **Long-term (2050):** 🟢 Minimal risk (SSP1-2.6) 🟢 Minimal risk (SSP5-8.5)	• The revenue loss impact for the wind business is projected to be in the range of **THB 5-6 million** across all timeframes and scenarios. • Under the SSP1-2.6 scenario, the projected revenue loss is approximately **THB 5-6 million** • For the SSP5-8.5 scenario, the impact remains at a similar level of **THB 5-6 million** . • This consistent figure indicates that while the overall financial risk is low, it is a persistent risk that must be considered in business continuity planning.
Solar 	• Moderate flooding can damage solar farm sites, inverters, and critical electrical equipment. • This damage necessitates halting operations for an extended period for assessment and repairs, leading to business interruption and revenue loss.	**Short-term (2030):** 🟡 Moderate risk (SSP1-2.6) 🟡 Moderate risk (SSP5-8.5) **Medium-term (2040):** 🟡 Moderate risk (SSP1-2.6) 🟡 Moderate risk (SSP5-8.5) **Long-term (2050):** 🟡 Moderate risk (SSP1-2.6) 🟡 Moderate risk (SSP5-8.5)	• The projected revenue loss for the solar farm business is approximately **THB 62-68 million** across all timeframes and scenarios. • Under the SSP1-2.6 (Low-Emissions) scenario, the projected revenue loss increases from approximately **THB 62 million** in 2030 to around **THB 66 million** by 2040, remaining at that level in 2050. • For the SSP5-8.5 (High-Emissions) scenario, the impact is consistently high, starting at **THB 67 million** in 2030 and rising to THB 68 million by 2050. • These figures highlight a significant and persistent financial risk from revenue loss for the solar business due to flooding. This underscores the importance of site-specific water management and robust business continuity planning.

The estimated financial impacts are indicative and based on modeling assumptions that are subject to inherent uncertainties.

3.4 Strategy –Quantitative Financial Impact Assessment

Extreme Heat and financial impact - Physical risk (chronic)

Business unit	Risk implications	Time Horizon & Risk Level	Estimated cost
Wind 	• High temperatures can cause critical wind turbine components to underperform when operating above their thermal thresholds. • This necessitates enhanced thermal management, which may lead to higher Operation & Maintenance (O&M) costs and, in severe cases, temporary output curtailment.	**Short-term (2030):** Minimal risk (SSP1-2.6) Minimal risk (SSP5-8.5) **Medium-term (2040):** Minimal risk (SSP1-2.6) Minimal risk (SSP5-8.5) **Long-term (2050):** Minimal risk (SSP1-2.6) Minimal risk (SSP5-8.5)	• The financial impact from daily revenue loss for the wind business is minimal, estimated at approximately **THB 3,400** in 2030 with a slight increase to **THB 3,500 by 2050**.This minor financial impact is consistent across both the SSP1-2.6 and SSP5-8.5 scenarios. • These figures align with the "Minimal risk" rating, indicating that direct revenue loss from extreme heat is not a primary financial concern for the wind portfolio.
Solar 	• Extreme heat directly degrades the efficiency of solar panels (PV), leading to a measurable reduction in electricity output. • Additionally, critical components like inverters and energy storage systems are at risk of overheating, which can force a system shutdown and result in a complete loss of revenue during that period.	**Short-term (2030):** Moderate risk (SSP1-2.6) Moderate risk (SSP5-8.5) **Medium-term (2040):** Moderate risk (SSP1-2.6) Moderate risk (SSP5-8.5) **Long-term (2050):** Moderate risk (SSP1-2.6) Moderate risk (SSP5-8.5)	• For the solar portfolio, extreme heat presents a more notable financial impact, directly linked to the degradation of PV panel efficiency. • The projected daily revenue loss is estimated at approximately **THB 21,500** in 2030, showing a steady **increase to THB 22,000** by 2050. • Similar to the wind portfolio, these financial impacts are consistent across both climate scenarios. • This confirms the "Moderate risk" rating and highlights the chronic nature of this physical risk, which systematically affects electricity output and revenue generation over time.

The estimated financial impacts are indicative and based on modeling assumptions that are subject to inherent uncertainties.

3.4 Strategy –Quantitative Financial Impact Assessment

Water stress risk and financial impact - Physical risk (chronic)

Business unit	Risk implications	Time Horizon & Risk Level	Estimated cost
Wind 	• For the Wind Business, the risk from Water Stress is not financially material as the generation process does not require significant water usage.	**Short-term (2030):** Lower risk (SSP1-2.6) Lower risk (SSP5-8.5) **Medium-term (2040):** Lower risk (SSP1-2.6) Lower risk (SSP5-8.5) **Long-term (2050):** Lower risk (SSP1-2.6) Lower risk (SSP5-8.5)	• No significant financial impact.
Solar 	• Water stress directly impacts solar farm operations by limiting the water available for regular panel cleaning. This leads to increased soiling loss, which degrades panel efficiency and significantly reduces annual electricity production and revenue.	**Short-term (2030):** Moderate risk (SSP1-2.6) Moderate risk (SSP5-8.5) **Medium-term (2040):** Moderate risk (SSP1-2.6) Moderate risk (SSP5-8.5) **Long-term (2050):** Moderate risk (SSP1-2.6) Moderate risk (SSP5-8.5)	• The financial impact of water stress on the solar portfolio is significant and highly dependent on the climate scenario, primarily due to revenue loss from panel soiling. • Under the SSP1-2.6 (Low-Emissions) scenario, the projected revenue loss is a consistent **THB 20 million annually** across all time horizons. • In contrast, the SSP5-8.5 (High-Emissions) scenario presents a much more severe impact. The revenue loss is approximately **THB 77 million** in the short and medium-term, escalating to **THB 80 million** by 2050.This significant variance underscores the portfolio's high sensitivity to increased water stress in a high-emissions future, making water conservation and efficient panel cleaning technologies critical strategic priorities.

The estimated financial impacts are indicative and based on modeling assumptions that are subject to inherent uncertainties.

3.4 Strategy –Quantitative Financial Impact Assessment

Transition Risk Financial Impact (Quantitative)

Transition Risk Category	Specific Risk Driver	Type of Financial Impact	Impact Value (THB Million)	Impact Nature
Policy & Legal	Adder Expiration	Revenue Decrease	~ 1,200	Actual (FY24)
	Potential Carbon Tax	Operating Cost Increase	7-11 (per year)	Projected for FY30
Market Demand	EV/Battery Market Volatility	Provisions & Write-downs	~ 5,600	Actual (FY24)
Technology and Market Transition	Asset Obsolescence	Asset Impairment & Write-off	~ 3,800	Actual (FY24)
Reputational	Decreased Investor Confidence	Increase in Financial Costs (Proxy)	~ 400	Actual (FY24)

Transition Opportunities Financial Impact (Quantitative)

Quantitative Financial Opportunity Summary

This table summarizes the potential future annual revenue streams from key growth initiatives, with assumptions benchmarked against the IEA's World Energy Outlook 2024.

Transition Opportunity Category	Specific Opportunity Driver	Type of Financial Impact	Potential Value (THB Million)	Timeframe / Scenario
Clean Energy Expansion	New Wind Projects (e.g., 180 MW)	Potential Annual Revenue	**~ 1,300**	Future (Upon Completion)
Sustainable Fuel & New Green Products	SAF Plant (100,000 liters/day)	Potential Annual Revenue	**~ 3,100**	Future
Carbon Market & ESG Finance Access	Carbon Credit Sales (from T-VER projects)	Potential Annual Revenue	**~ 150**	Projected for 2030

3.4 Strategy – Key summarize Financial Impact Assessment

This page summarize the most significant EA's climate-risk and opportunities as follow

Risks

Risk	Description	Highest Impact Value (THB Million)	Risk management action	Cost of action (THB Million)
Physical risk	Water stress directly impacts solar farm operations by limiting the water available for regular panel cleaning. This leads to increased soiling loss, which degrades panel efficiency and significantly reduces annual electricity production and revenue.	~ 80	• Implement water-saving technologies for solar farms, such as dry solar panel cleaning systems or recycled/sustainable water systems to reduce water consumption and enhance production efficiency. • Develop sustainable water management plans, particularly for areas facing water stress. • Engage with local communities on sustainable water usage to prevent resource conflicts. • Consider low-risk, low-exposure sites during project site selection, integrating future climate projections and utilizing water risk assessment tools like WWF Filter and Aqueduct.	0.5
Transition risk	Impact of the Expiration of Government Subsidy (Adder) for Solar Power Business driven by regulatory change	~ 1,200	• Diversifying revenue streams within the Renewable Energy segment. This includes pursuing new wind projects (e.g., 180 MW wind projects) and securing corporate Power Purchase Agreements (PPAs). • Leveraging electricity prices that, despite the Adder expiration, remain higher than the rates set by new Feed-in Tariff (FiT) projects, thereby helping to maintain the company's electricity sales revenue at a competitive level. • Sustaining the energy efficiency of the existing solar power operations by replacing the solar panels on a regular basis, ensuring the company maintains its electricity sales revenue.	30

3.4 Strategy – Key summarize Financial Impact Assessment

This page summarize the most significant EA's climate-risk and opportunities as follow

Opportunities

Opportunities	Description	Highest Potential Value (THB Million)	Cost of action (THB Million)
Sustainable Fuel & New Green Products	EA is actively monitoring global sustainable energy trends to leverage our expertise in creating a cleaner future. In response to the Carbon Offsetting and Reduction Scheme for International Aviation (CORSIA), which urges commercial airlines to cut greenhouse gas emissions, we are prioritizing Sustainable Aviation Fuel (SAF). Also referred to as bio-jet fuels, SAF represents a new category of low-carbon alternatives to traditional fossil-based jet fuels. It is derived entirely from renewable waste and residue feedstocks, including waste animal fat and used cooking oil from restaurants. By utilizing renewable biological resources, SAF can significantly reduce carbon dioxide emissions by up to 80% compared to conventional aviation fuels.	**~ 3,100**	142

4.Climate Risk Management

4.1 Climate Risk Management - Processes to Identify and Assess Climate-Related Risks

Energy Absolute PCL has established a systematic climate risk management process, fully integrated into the company-wide Enterprise Risk Management (ERM) framework. This approach ensures the effective identification, assessment, and management of climate-related risks and opportunities in alignment with the TCFD recommendations and IFRS S2 standards.

Climate Risk Management Framework

Our process is overseen by the Risk Management Committee (RMC) and guided by the corporate risk management handbook. It follows five core steps:

1. **Identify:** Systematically identify all relevant climate-related risks and opportunities.
2. **Assess & Measure:** Evaluate the likelihood and impact of identified risks to determine their significance.
3. **Manage:** Develop and implement appropriate mitigation and adaptation plans.
4. **Monitor:** Continuously track risks and the effectiveness of management measures.
5. **Report:** Report risk status and management performance to relevant committees and the Board.

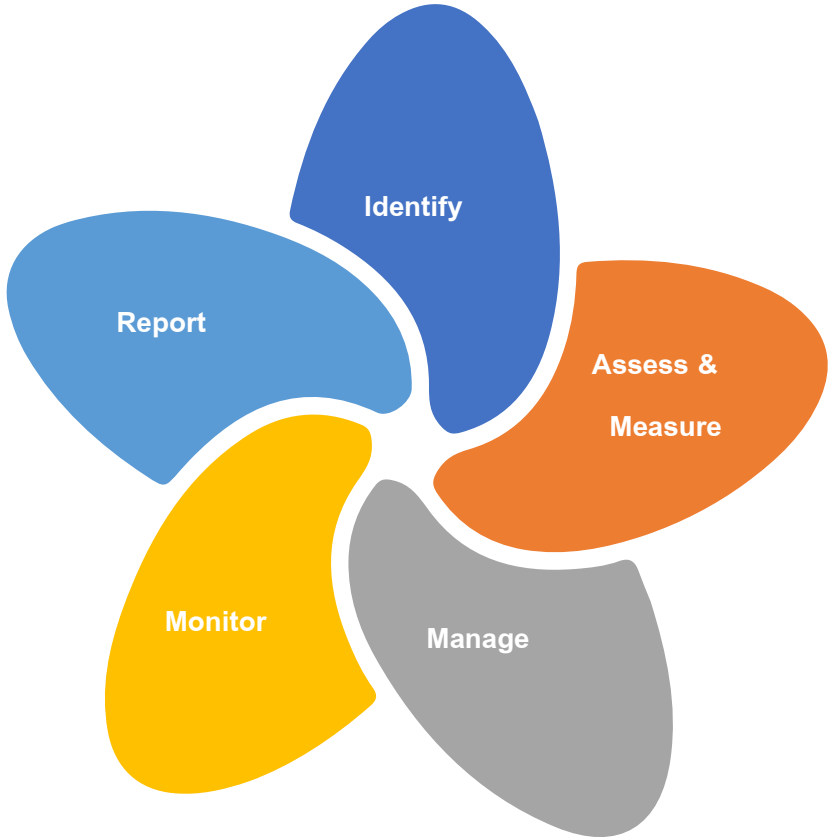


Figure : Risk Management Framework

4.1 Climate Risk Management - Processes to Identify and Assess Climate-Related Risks

Step 1: Risk Identification

We identify climate-related risks across our entire value chain, considering two main climate scenarios: an above 2 ∘ C scenario and a well-below 2 ∘ C scenario. The risks are categorized according to the TCFD framework:

Transition Risks:

- Policy & Legal: Current & changes in climate-related regulations, carbon pricing.
- Technology: Shifts to lower-emission technologies, potential for unsuccessful investments.
- Market: Changes in customer behavior and preferences.
- Reputation: Increased stakeholder concern and expectations.

Physical Risks:

- Acute: Increasing severity of extreme weather events such as cyclones and floods.
- Chronic: Longer-term shifts in climate patterns, such as sea-level rise and changes in climatic conditions.

Step 2: Risk Assessment & Measurement

Once identified, each risk is evaluated using the company's official Risk Assessment Matrix.
Methodology: Risks are assessed based on two dimensions:
Likelihood: The probability of the risk occurring.
Impact: The potential effect on the company's operations, finance, and reputation.
Risk Prioritization: The assessment results in a risk level categorization, which prioritizes management focus:

- Very High: Requires urgent risk mitigation.
- High: Unacceptable level requiring immediate mitigation.
- Medium: Acceptable level but requires vigilance and potential control improvements.
- Low: Acceptable risk requiring no immediate attention.

Risk Assessment Matrix

Risk Assessment Matrix			Likelihood				
			Very Low	Low	Medium	High	Very High
			1	2	3	4	5
Impact	Very High	5					
	High	4					
	Medium	3					
	Low	2					
	Very Low	1					

Description table of risk management according to the level of the company's risk.

Risk Level	Color Represent	Risk Description
Very High		Risk Level that significantly exceeds the level of organization risk appetite with urgent risk mitigation required.
High		Unacceptable risk level that require immediate risk mitigation to an acceptable level.
Medium		Acceptable level but must be vigilant. Internal control may be implemented for more efficient.
Low		Acceptable of risk, no attention required.

4.2 Climate Risk Management - Processes for Managing Climate-Related Risks

The Company employs a systematic and integrated process to manage these risks. This process ensures that decisions on mitigation and adaptation measures are made strategically, resources are allocated effectively, and performance is rigorously tracked. The process is managed through both top-down strategic direction and bottom-up operational initiatives.

Decision-Making and Selection of Measures

The selection of appropriate risk management measures is a structured process involving multiple levels of governance.

- **Top-Down Strategic Initiatives:** Significant capital-intensive plans, such as investments in new low-carbon technologies or large-scale adaptation projects, are driven by management and overseen by the Corporate Governance & Sustainability Committee (CGS). The Risk Management Committee (RMC) reviews these proposals to ensure alignment with the company's risk appetite before they are endorsed and submitted for Board approval.
- **Bottom-Up Operational Improvements:** The Company fosters innovation and operational efficiency through the "EA Inside EA Program". This program encourages employees and business units to propose projects focused on energy efficiency and greenhouse gas reduction. Proposed projects are evaluated based on their potential benefits, such as GHG emissions reduction and cost savings, with successful projects receiving monetary incentives.

Resource Allocation

To ensure that financial resources are allocated to the most effective climate-related initiatives, the Company utilizes specific financial tools and processes:

- **Internal Carbon Pricing (ICP):** The Company has adopted an Internal Carbon Pricing mechanism, setting a shadow price to support the assessment and decision-making for investments in low-carbon projects. This tool is integrated into the financial planning framework to stress-test the viability of investments and to quantitatively reflect the potential costs of carbon emissions in project analysis.
- **Committee Review:** The CGS reviews and considers financial tools like ICP to support investment decisions, ensuring that capital is directed toward projects that align with the Company's long-term decarbonization targets.

Monitoring and Tracking Effectiveness

The Company has established a clear framework for monitoring the implementation and tracking the effectiveness of its climate-related action plans. Implementation Oversight: A management-level Sustainable Management Committee, functioning as a cross-functional working group, is responsible for driving and coordinating the implementation of sustainability projects across all business units. Performance Monitoring: The CGS convenes quarterly to systematically monitor and assess performance against established climate-related targets and KPIs. Accountability through Incentives: To drive performance and accountability, the Company links the achievement of climate-related KPIs, such as GHG emissions reduction targets, directly to the monetary remuneration of executives and employees.

4.3 Climate Risk Management - Integration into Enterprise Risk Management (ERM)

Energy Absolute's approach to climate risk management is not treated as a standalone activity; it is fundamentally and systematically integrated into the company-wide Enterprise Risk Management (ERM) framework. This ensures that climate-related risks are identified, assessed, and managed with the same rigor and consistency as other principal business risks faced by the organization.

The integration is operationalized through the following key mechanisms:

Unified Governance Structure:

- The Risk Management Committee (RMC), which reports to the Board of Directors, has direct oversight of climate-related risks as part of its broad mandate.
- This ensures a single, high-level channel of accountability for both climate-specific and operational business risks.

Formal Inclusion in the Corporate Risk Framework:

- Climate change is formally recognized and categorized as a key component of the company's major risk areas.
- This classification ensures it receives the same level of strategic attention and resource allocation as other significant risks.

Consistent Methodology and Tools:

- The process for managing climate risks adheres to the standardized corporate methodology outlined in the company's Risk Management Handbook.
- The identification, assessment using the corporate Risk Assessment Matrix, and determination of management plans for climate risks follow the same procedures applied across the organization.

Continuous Oversight and Reporting Loop:

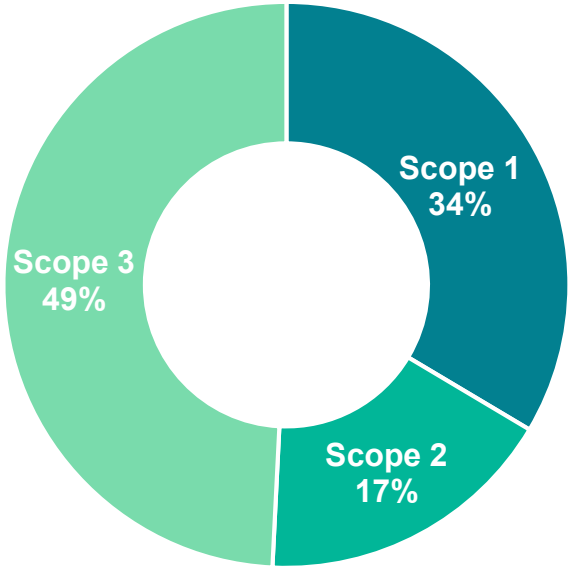
- The performance of risk management measures and the status of key climate risks are monitored continuously.
- Findings are reported on a quarterly basis to the Corporate Governance & Sustainability Committee (CGS) and the Board of Directors, ensuring top-level oversight and facilitating timely strategic adjustments.

5.Metrics and Targets

5.1 Metrics and Targets – Climate Metrics

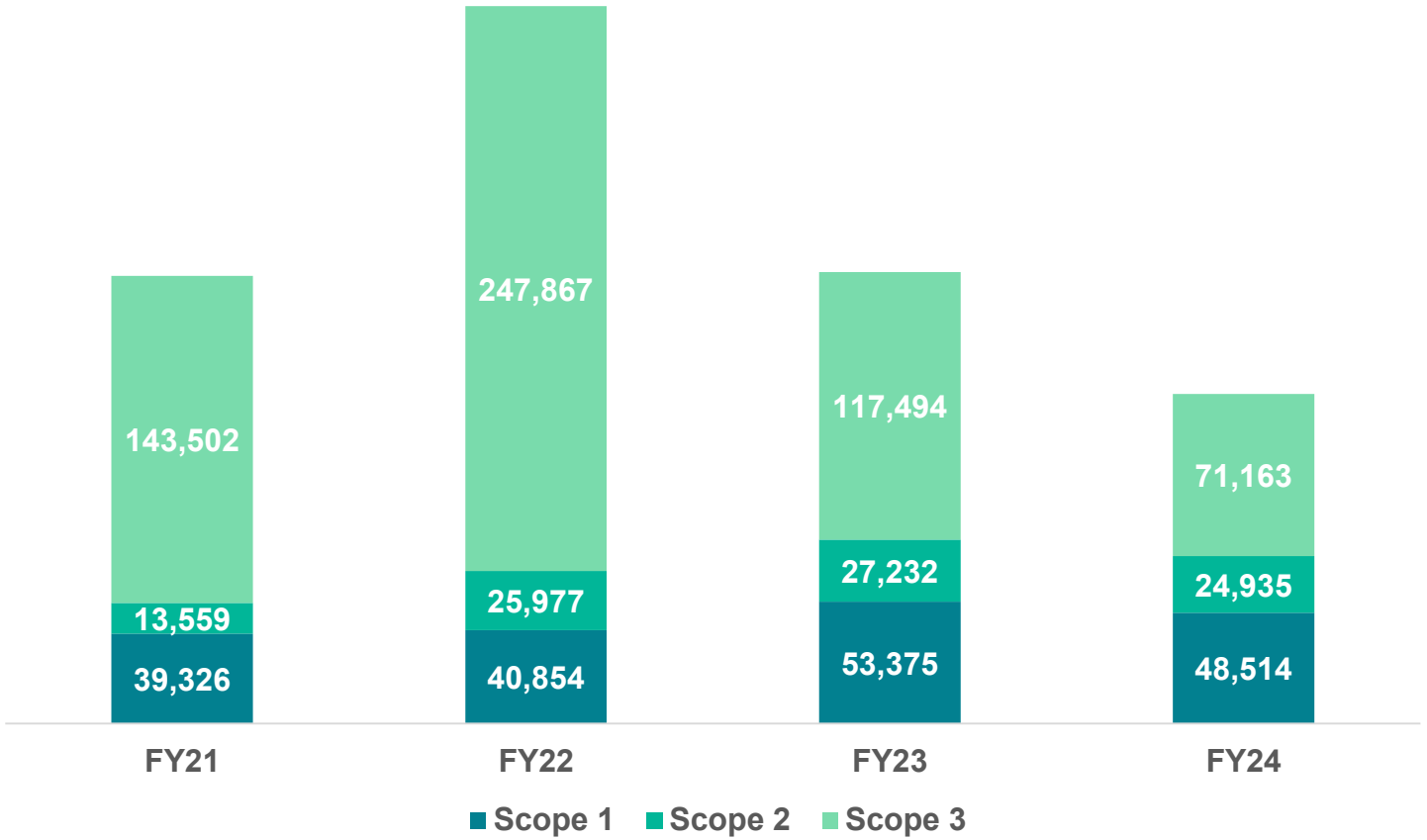
5.1.1 GHG Emissions

To determine the GHG emissions of EA Group, the Intergovernmental Panel on Climate Change (IPCC) Fifth Assessment Report (AR5) was used on Global Warming Potential (GWP) scope of GHG emissions is operational control. The Company conducted assessment according to GHG Protocol, ISO14064-1:2018 and the guidelines of Thailand Greenhouse Gas Management Organization (TGO). The data was verified by third party verifier.



GHG Emission FY24

Scope 1: Direct GHG Emissions from organization	**48,514** tonCO_2e
Scope 2: Indirect GHG Emissions from organization	**24,935** tonCO_2e
Scope 3: Other indirect GHG emissions	**71,163** tonCO_2e



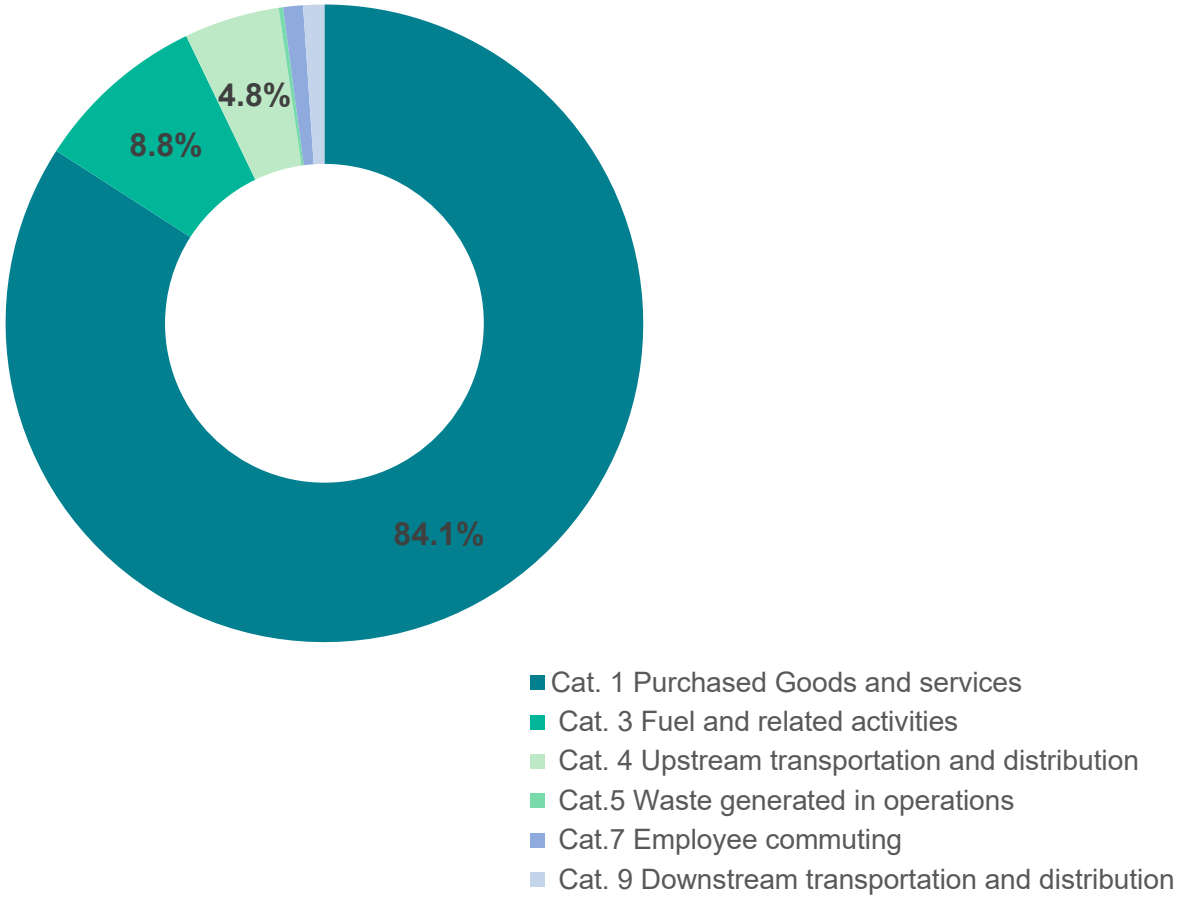
5.1 Metrics and Targets – Climate Metrics (Cont.)

5.1.1 GHG Emissions

GHG Emission Scope 3 by Category

Scope 3	FY 2024 (tonCO_2e)
Cat. 1 Purchased Goods and services	71,163
Cat. 2 Capital goods	0
Cat. 3 Fuel and related activities	7,418
Cat. 4 Upstream transportation and distribution	4,097
Cat.5 Waste generated in operations	190
Cat.6 Business travel	0
Cat.7 Employee commuting	847
Cat.8 Upstream leased assets	NR
Cat. 9 Downstream transportation and distribution	906
Cat. 10 Processing of sold products	NR
Cat. 11 Use of sold products	NR
Cat. 12 End-of-life treatment of sold products	NR
Cat.13 Downstream leased assets	NR
Cat .14 Franchises	NR
Cat. 15 Investment	0
Total scope 3 emission	84,621

Category 1: Purchased Goods and Services is identified as the most material Scope 3 emissions source for the organization.



Remarks:

- NR refers to not relevant
- EA's GHG verification statement confirmed the total value of scope 3 emissions (indirect emissions) at 71,163 metric tonnes CO2e. This total amount aligns with the CFO (Carbon Footprint for Organizations) reporting guidance from TGO (Thailand Greenhouse Gas Management Organization), which prioritizes various business activities based on the magnitude of GHG emissions to determine which scope 3 activities are expected to be most significant in size. The category with the most significant impact is category 1: purchased goods and services. In this context, category 3: fuel-and-energy-related activities, category 4: upstream transportation and distribution, category 5: waste generation in operations, category 7: employee commuting, and category 9: downstream transportation and distribution are considered to have less impact compared to others and, therefore, were not included in the Scope 3 emissions verification

5.1 Metrics and Targets – Climate Metrics

5.1.2 GHG Emission Reduction and Low-Carbon Strategies

The Company has implemented plans to reduce GHG emissions and low carbon projects as below;

Raw materials

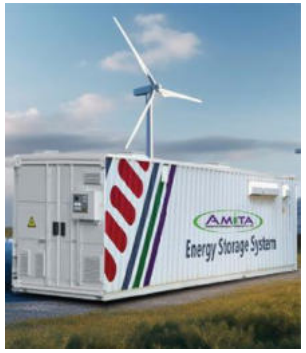
Research and development of raw materials to replace the main raw materials in the future Developing value-added products such as Green Diesel or applying environmentally friendly technologies to increase energy efficiency.

Electric Vehicle (EV)

Expanding investments in lithium-ion battery plants and energy storage systems and electric vehicle plants.

Infrastructure

Expanding the infrastructure network of the charging station to contribute to the success of the new S-Curve electric vehicle industry



Energy storage systems

Application of energy storage systems in renewable energy power plants. reduce the fluctuation of electricity less and create more stable power supply It also helps push Thailand into a Low Carbon Society. In particular, reducing pollution and global warming to achieve goals according to COP26.

RE100TH

Joined as a founding member of the “RE100 Thailand Club” (RE100TH) in order to show the intention of determination and become a key driver of energy efficiency, including aiming to solve the global warming problem and maintain the capability in enhancing Thailand’s competitiveness

Renewable Energy

Company continued to install renewable energy as solar farm and wind farm to reduce GHG emission. In 2024, the following renewable energy projects can reduce GHG emissions by 771,468 tonCO_2e

Green bond

EA operates businesses that embrace social and environmental sustainability which lead to the development of Green Bond Framework to refinance projects which generate clean energy with environmental benefits.

5.1 Metrics and Targets – Climate Metrics

5.1.2 GHG GHG Emission Reduction and Low-Carbon Strategies

GHG EMISSION REDUCTION ACTIVITIES 2024

Activity	Objective	Scope	GHG Emission Reduction (tCO2e/year)
Electricity Consumption from Renewable Energy (Solar Rooftop)	To reduce energy consumption from grid during the daytime, solar rooftop 2.849 MW was installed.	Scope 2	1,386
Energy Efficiency	To remove scale that reduces heat transfer efficiency, chemical cleaning was carried out on the 16-ton boiler. A cleaner surfaces perform a better heat exchange and reduce a fuel consumption.	Scope 1	322
Energy Efficiency	To enhance energy efficiency, nitrogen was used as a substitute for compressed air from the air compressor.	Scope 1	119

5.1 Metrics and Targets – Climate Metrics

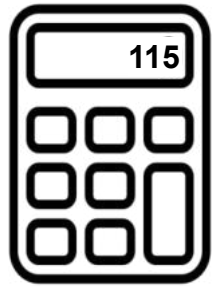
5.1.3 Internal Carbon Pricing (ICP)

Energy Absolute Public Company Limited (EA) has implemented an Internal Carbon Pricing (ICP) mechanism as a strategic financial tool and metric to assess and manage climate-related risks and opportunities. This disclosure is crucial under the IFRS S2 framework as it demonstrates how the company translates climate risks into tangible financial figures to inform all strategic decision-making.

1. **The Metric: ICP Value**
   The company has established its internal carbon price as a Shadow Price set at 115 THB per ton of CO_2 equivalent (THB/tonCO_2e), which applies to the company's Scope 1 and Scope 2 GHG emissions.
2. **Objective and Application**
   EA has systematically integrated ICP into its corporate processes and planning with the following key objectives:

Key objectives	Application
Drive low-carbon investments	• ICP is a key tool used to assess and support decision-making for investments in low-carbon projects, ensuring that such projects are evaluated with their environmental costs factored in.
Stress test investments	• The tool is integrated into the financial planning framework to stress-test the viability of investments against potential carbon-related risks.
Influence strategy and/or financial planning	• It allows the company to quantitatively reflect the potential costs of carbon emissions in project analysis, providing a clearer financial picture of climate-related impacts.
Navigate regulations	• The mechanism encourages more responsible resource management and more efficient operations by reflecting the environmental costs associated with business activities including cost from regulations i.e. carbon tax.

Shadow price
115 THB per ton of CO_2



Governance and Strategic Alignment

Strategy & Regulatory Preparedness

• Forward-looking: Prepares EA for future carbon tax regulations

• Regulatory Signal: Thai government has proposed THB 200/ tCO_2e for restructuring the excise tax calculation.

• ICP bridges the gap between current operations and upcoming compliance

Governance Structure

• Oversight by CGS Committee

• Reviews ICP use in major investment decisions

• Ensures climate risks are integrated at BOD level

5.1 Metrics and Targets – Climate Metrics

5.1.4 Industry-Specific Performance Indicators

Wind Sustainability Topics & Metrics

Topic	Metric	Unit	FY2024	Scope of Data	Reference Code
Wind Activity	Aggregate capacity of operating wind turbines	MW	386	Hanuman and Hadkanghan wind power plant	RR-WT-000.B
Wind Activity	Sales volume from wind power	Million kWh	766	Hanuman and Hadkanghan wind power plant	RR-WT-000.B
Wind Activity	Average selling price (wind)	THB/kWh	6.77	All COD wind farms	Custom Metric
Combined (Wind + Solar)	Revenue from Renewable Power Plant Business	THB Million	10,629	Wind + Solar COD Projects	Custom Metric

Solar Sustainability Topics & Metrics

Topic	Metric	Unit	FY2024	Scope of Data	Reference Code
Solar Activity	Total installed capacity of solar PV systems	MW	278	Lopburi, Nakhon Sawan, Lampang, Phitsanulok solar power plant	RR-ST-000.B
Solar Activity	Sales volume from solar power	Million kWh	663	All COD solar farms	RR-ST-000.B
Solar Activity	Average selling price (solar)	THB/kWh	8.22	All COD solar farms	Custom metric
Combined (Wind + Solar)	Internal Carbon Pricing (Shadow Price)	THB/tCO2e	115	Applicable to all investment analysis	Custom / IFRS S2 Metric
Combined (Wind + Solar)	Carbon intensity per Mwh	Tco2e/ MWh	0.0024	Wind + Solar COD Projects	Custom metric

5.2 Metrics and Targets – Climate-Related Targets

Climate-Related Targets

Aligned with SBTi and supporting the global low-carbon transition.

Based Year 2020

2030

Near –term target

(Scope 1+2)

Reduce carbon intensity per revenue by 30% from 100% of our Scope 1 and 2 emissions based on the year 2020 (58,270 tons CO2e).

2040

Carbon Neutrality

(Scope 1+2+3)

Interim milestone

2050

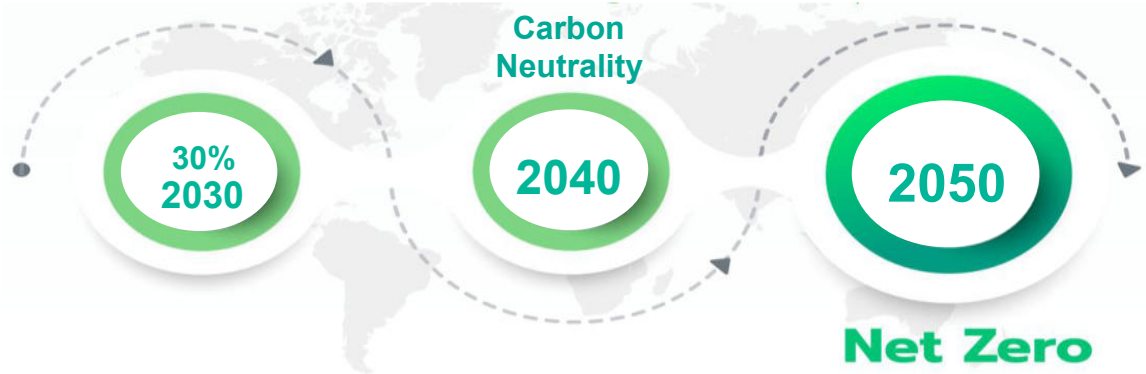
Net Zero Target

(Scope 1+2+3)

- 90% reduction in scope 1+2 emissions compared to based year 2020
- 90% reduction in scope 3 emissions compared to based year 2020

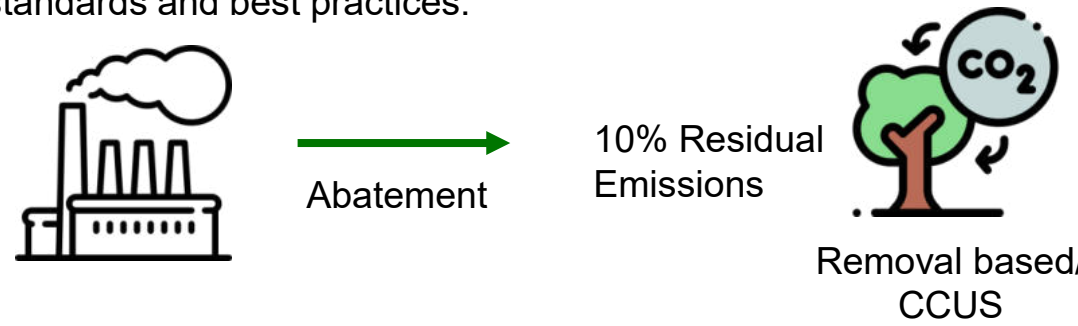
SCIENCE BASED TARGETS
DRIVING AMBITIOUS CORPORATE CLIMATE ACTION

- EA will develop a climate transition plan aligned with the Science Based Targets initiative (SBTi) to support its long-term decarbonization goals. The plan will outline key actions to achieve the 2040 carbon neutrality milestone and the 2050 Net Zero target. This includes emissions tracking, value-chain decarbonization, investments in renewable energy, and the integration of carbon removal solutions.
- Carbon offsetting will be used only as a complementary measure to address residual emissions, as outlined in the Carbon Offsetting Plan (see section 5.3).



5.3 Metrics and Targets – Carbon Offsetting Plan

Energy Absolute Public Company Limited (EA) is committed to achieving Net-Zero GHG Emissions by 2050. The company's primary strategy is to maximize direct abatement of GHG emissions from its operations and across its value chain. However, the company recognizes that there may be residual emissions that cannot be eliminated due to current technological or financial constraints. Therefore, EA has developed a carbon offsetting plan as a supplementary tool to achieve its Net-Zero target completely and credibly. This plan is designed to align with international standards and best practices.



The Role of Offsetting in the Net-Zero Target

Under the 2050 Net-Zero target, the company plans to use carbon offsetting solely to address unabated residual emissions, following these clear guidelines:

- Offsetting Ratio: The company will limit the use of carbon credits to a **maximum of 10% of its baseline emissions**, a proportion consistent with international best practices.
- Type of Carbon Credits: For the Net-Zero target, the company will exclusively use **high-quality carbon credits from GHG Removal projects**. This ensures true neutralization of residual emissions.
- The focus will be on projects from the following sources: **Nature-based Solutions:** e.g., forestry and afforestation projects.
- Technology-based Solutions: e.g., **Carbon Capture and Storage (CCS)** and Direct Air Capture (DAC) technologies.

Criteria for High-Quality Carbon Credits

To ensure that the carbon credits used are of high quality and generate genuine positive impacts, the company has established strict selection criteria:

- **Credibility and Certification:** Credits must be certified by recognized national or international bodies, such as T-VER (especially Premium T-VER), Gold Standard, VERRA, or CDM.
- **Real and Measurable:** The GHG reduction or removal must be quantifiable and verifiable, based on transparent standards such as ISO 14064-2.
- **Additionally:** The GHG reduction or removal from the project must be additional to what would have occurred in a business-as-usual scenario.
- **Permanence:** The GHG removal must be permanent, with measures in place to mitigate the risk of leakage or reversal back into the atmosphere.
- **No Double Counting:** There must be a transparent registry and retirement system to ensure that the same carbon credit unit is not used for offsetting more than once.

Annex

6.1 Annex - Reference

- Intergovernmental Panel on Climate Change (IPCC). (2021). *Sixth Assessment Report (AR6)* – Climate Change 2021: The Physical Science Basis. Retrieved from https://www.ipcc.ch/report/ar6/
- International Financial Reporting Standards (IFRS) Foundation. (2023). *IFRS S2 Climate-related Disclosures*. Retrieved from https://www.ifrs.org
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- Thailand Greenhouse Gas Management Organization (Public Organization). (2023). Criteria and Guidelines for Certification of Net Zero GHG Emissions. Bangkok: TGO.

6.2 Annex – IFRS S2 Content Mapping Table

Pillar	Guidance	Source
Governance	(a) Board oversight of climate-related risks and opportunities	P.8-9
Governance	(b) Management role in climate-related governance	P. 10-11
Strategy	(a) Climate-related risks and opportunities affecting the entity prospects	P. 13-16
Strategy	(b) Current and anticipated effects on business model and value chain	P. 17-23
Strategy	(c) Effects on strategy and decision-making; transition plan	P. 17-23
Strategy	(d) Effects on financial position, performance, and financial planning	P. 31-37
Strategy	(e) Climate resilience of strategy and business model	P. 24-34
Risk Management	(a) Processes for identifying, assessing, monitoring climate risks	P. 38-42
Risk Management	(b) Scenario analysis and climate-related opportunities	P. 40
Risk Management	(c) Integration into overall risk management process	P. 41-42
Metrics and targets	Climate-related metrics	P. 43-51

6.3 Annex – GHG Calculation Methodology

Scope 3	Emissions calculation Methodology and exclusions
Cat. 1 Purchased Goods and services	• The calculation methodology followed the Corporate Value Chain (Scope 3) Accounting & Reporting Standard, Greenhouse Gas Protocol. • Emissions from upstream transportation and distribution is calculated from the volume of purchased goods that are directly related to the production of a company's products. • Emission factors of GHG emissions refer to the data of Thailand Greenhouse Gas Management Organization (Public Organization), IPCC 2006 and Thai National LCI database. The data of GWP refers to IPCC, AR5.
Cat. 2 Capital goods	• The database of emission factors and carbon footprints for Capital Goods in Thailand is limited. • We request the emission factors and carbon footprint product data from vendors who produce capital goods to calculate the GHG in category two. • In the reporting year, there were no relevant activities under this category.
Cat. 3 Fuel and related activities	• The calculation methodology followed the Corporate Value Chain (Scope 3) Accounting & Reporting Standard, Greenhouse Gas Protocol. • The emission of fuel and energy-related activities (not included in scope 1 or scope 2) is calculated from the related to the production of fuels and energy purchased and consumed. The activity in this scope includes a. Upstream emissions of purchased fuels b. Upstream emissions of purchased electricity c. Generation of purchased electricity that is sold to end users d. Exclude calculating the transmission losses because the country's electricity emission factor includes the loss into account already. • Emission factors of GHG emissions refer to the data of Thailand Greenhouse Gas Management Organization (Public Organization), IPCC 2006 and Thai National LCI database. The data of GWP refers to IPCC, AR5.
Cat. 4 Upstream transportation and distribution	• The calculation methodology followed the Corporate Value Chain (Scope 3) Accounting & Reporting Standard, Greenhouse Gas Protocol. • Emissions from upstream transportation and distribution is calculated from the transportation and distribution of products (excluding fuel and energy products) purchased or acquired by the company in vehicles and facilities not owned or operated by the reporting company, as well as other transportation and distribution services purchased by the company. • This category includes: a. Transportation and distribution of products purchased by the company between a company's tier 1 suppliers and its own operations b. Third-party transportation and distribution services purchased by the company (either directly or through an intermediary),including inbound logistics, outbound logistics (e.g. of sold products), and third-party transportation and distribution between a company's own facilities. • Emission factors of GHG emissions refer to the data of Thailand Greenhouse Gas Management Organization (Public Organization), IPCC 2006 and Thai National LCI database. The data of GWP refers to IPCC, AR5.

6.3 Annex – GHG Calculation Methodology

Scope 3	Emissions calculation Methodology and exclusions
Cat.5 Waste generated in operations	• The calculation methodology followed the Corporate Value Chain (Scope 3) Accounting & Reporting Standard, Greenhouse Gas Protocol. Emissions from waste generated in operations is calculated from the volume of waste which was disposed and treatment by third-party. This category includes emissions from disposal of both solid waste and wastewater. • Waste treatment activities include: a. Disposal in a landfill b. Incineration c. Composting d. Waste-to-energy • Furthermore, this category included the emissions from transportation of waste. • Emission factors of GHG emissions refer to the data of Thailand Greenhouse Gas Management Organization (Public Organization), IPCC 2006 and Thai National LCI database. The data of GWP refers to IPCC, AR5.
Cat.6 Business travel	• The calculation methodology followed the Corporate Value Chain (Scope 3) Accounting & Reporting Standard, Greenhouse Gas Protocol. • Business travel is calculated from 1) Land transportation (for employee travel to support business): 1.1) Volume of filled petrol for company rental cars 1.2) Total distance of transportation, types of vehicles and types of fuel used in rental vehicles, and 2) Air Transportation: Total distance in which employees traveled by air. • Emission factors of GHG emissions refer to the data of Thailand Greenhouse Gas Management Organization (Public Organization), IPCC 2006 and Thai National LCI database. The data of GWP refers to IPCC, AR5.
Cat.7 Employee commuting	• The calculation methodology followed the Corporate Value Chain (Scope 3) Accounting & Reporting Standard, Greenhouse Gas Protocol. Employee commuting is calculated from employee from the transportation • of employees between their homes and their worksites. • Emissions from employee commuting arise from: a. Automobile travel b. Bus travel c. Rail travel d. Other modes of transportation Emission factors of GHG emissions refer to the data of Thailand Greenhouse Gas Management Organization (Public Organization), IPCC 2006 and Thai National LCI database. The data of GWP refers to IPCC, AR5.
Cat.8 Upstream leased assets	• This category are not relevant to company operations.

6.3 Annex – GHG Calculation Methodology

Scope 3	Emissions calculation Methodology and exclusions
Cat. 9 Downstream transportation and distribution	• The calculation methodology followed the Corporate Value Chain (Scope 3) Accounting & Reporting Standard, Greenhouse Gas Protocol. • Emissions from downstream transportation and distribution is calculated from emissions from transportation and distribution of products sold by company in vehicles and facilities not owned or controlled by the company. • Emissions from downstream transportation and distribution can arise from: a. Storage of sold products in warehouses and distribution centers b. Storage of sold products in retail facilities c. Air transport d. Rail transport e. Road transport f. Marine transport • Emission factors of GHG emissions refer to the data of Thailand Greenhouse Gas Management Organization (Public Organization), IPCC 2006 and Thai National LCI database. The data of GWP refers to IPCC, AR5.
Cat. 10 Processing of sold products	• The calculation methodology followed the Corporate Value Chain (Scope 3) Accounting & Reporting Standard, Greenhouse Gas Protocol. • This category includes emissions that occur from processing intermediate products sold to third parties before reaching the final end-use stage. • However, the company's sold products are in their final usable form and do not require any additional processing by downstream users. • As a result, there are no applicable emissions from this category. • Therefore, the GHG emissions from Category 10 are excluded from the Scope 3 inventory in the reporting year.
Cat. 11 Use of sold products	• In the reporting year, there were no relevant activities under this category.
Cat. 12 End-of-life treatment of sold products	• In the reporting year, there were no relevant activities under this category.
Cat.13 Downstream leased assets	• In the reporting year, there were no relevant activities under this category.
Cat .14 Franchises	• In the reporting year, there were no relevant activities under this category.
Cat. 15 Investment	• The calculation methodology followed the Corporate Value Chain (Scope 3) Accounting & Reporting Standard, Greenhouse Gas Protocol. • This category includes Scope 1 and Scope 2 emissions from investees, based on the share of investment held. • No new investments occurred in the reporting year. As a result, Category 15 emissions are omitted for the current reporting period.

6.4 Annex – GHG data performance

Description	Unit	2021 (1)	2022 (3)	2023	2024 (4)
Target: Direct and Indirect GHG emissions (Scope 1&2) per Revenue	$tonCO_2e$/MB	3.29	3.19	3.08	2.98
Direct GHG emission (Scope 1)	$tonCO_2e$	39,326	40,854	53,375	48,514
Energy Indirect GHG emissions (Scope 2)					
- Base on Location-based method	tonCO2e	13,559	25,977	27,232	24,935
- Base on Market-based method	tonCO2e	13,559	25,977	27,232	24,935
Other Indirect GHG emissions (Scope 3)(2)	$tonCO_2e$	143,502	247,867	117,494	84,621
Total Direct and Indirect GHG emissions (Scope1&2)	$tonCO_2e$	52,885	66,831	80,607	73,449
Total Direct and Indirect GHG emissions (Scope 1, 2 & 3)	$tonCO_2e$	196,387	314,698	198,101	158,070
Total Revenue	MB	20,558	27,547	31,598	18,522
GHG Emission intensity (Scope 1 & 2)	$tonCO_2e$/MB of Revenue	2.57	2.43	2.55	3.97
	$tonCO_2e$/GWh	3.14	3.53	2.85	2.43
GHG Emission per Revenue (Scope 1, 2 & 3)	$tonCO_2e$/MB of Revenue	9.55	11.42	6.27	8.53

Remark :
(1) Since 2021, reporting of GHG emissions from other indirect activities (Scope 3) have been conducted, covering all significant activities.
(2) EA reports indirect GHG emissions Scope 3 per CFO guidance from TGO (Thailand Greenhouse Gas Management Organization), prioritizing business activities by GHG emission magnitude. The most significant impact comes from category 1 (purchased goods and services). Other categories have lesser impacts and are not reported in total Scope 3 emissions
(3) In 2022, reporting boundaries were expanded to include newly acquired or expanded business units.
(4) In 2024, the GHG data verified by an independent external organization accredited by the Thailand Greenhouse Gas Management Organization (TGO).
In 2024, the biogenic CO_2 emissions from the entire Group totaled to 27.00 tCO_2e. The reported GHG emissions now include sulfur hexafluoride (SF_6) emissions.
In 2024, the reported Scope 3 emissions in the TCFD Report may not be directly comparable to the figures presented in the Sustainability Report (SD Report). This is primarily because the SD Report focuses on disclosing emissions from only the most material sources, as defined by the reporting guidelines from the Thailand Greenhouse Gas Management Organization (TGO).

Energy Absolute

Energy Absolute, Energy for the Future