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# Table of Contents

TITLE	PAGE NO.
<b>1. OBJECTIVE</b>	1
<b>2. SCOPE</b>	1
<b>3. DEFINITION OF TERMS</b>	1
<b>4. RESPONSIBILITY</b>	2
<b>5. POLICY STATEMENTS</b>	4
5.1. ACEN Enterprise Risk Management (ERM) Policy Statement	4
5.2. ACEN Risk Appetite Statement	5
5.3. ACEN ERM Framework	6
5.4. ACEN Risk Management Process	7
5.4.1. Scope, Context, Criteria	8
5.4.2. Risk Assessment	8
5.4.3. Risk Treatment	11
5.4.4. Communication & Consultation	13
5.4.5. Monitoring & Review	13
5.4.6. Recording & Reporting	13
5.5. ERM Policy Review Frequency	14
<b>APPENDICES</b>	
Appendix A: ACEN Risk Universe	
Appendix B: ACEN Risk Dictionary	
Appendix C: ACEN Risk Assessment Matrix	
<b>REFERENCES</b>	
a. ISO 31000:2018 Risk Management – Guidelines	
b. Committee of Sponsoring Organizations (COSO) – ERM Framework	
c. Task Force on Climate-Related Financial Disclosures (TCFD)	

	<b>ACEN and SUBSIDIARIES ENTERPRISE RISK MANAGEMENT POLICY</b>	Document No:
		Effective Date: <b>April 20, 2023</b>
		Revision No: <b>01</b>
		Page No: <b>1 of 17</b>

## 1. OBJECTIVE

This Enterprise Risk Management (“ERM”) Policy provides the necessary foundation and organizational arrangements for managing risks across the Company. This document:

- outlines the formal policies and procedures that will govern an integrated and enterprise-wide risk management process within the Company;
- states the key elements of the ERM framework that will assist in the effective implementation of the risk management process;
- sets out a consistent approach for managing risks across the Company, aligned with relevant standards and industry’s best practices; and
- presents the risk governance structure which identifies the parties who will be responsible for the implementation of this policy.

## 2. SCOPE

This ERM Policy covers ACEN CORPORATION (“ACEN”, the “Company”, or the “Organization”) and its subsidiaries, and shall apply to all ACEN employees, secondees, consultants, outsourced staff, and interns.

There are other management systems that are similar or connected to this ERM Policy, which are or will be covered by separate policy documents. Below are examples of said management systems:


- Health, Safety, Security and Environment (“HSSE”) Policy
- Business Continuity Management (“BCM”) Policy
- Insurance Management Policy
- Environmental & Social Policy
- Information Security Policy
- Financial management policies, such as policies concerning Hedging and Asset & Liability Management

## 3. DEFINITION OF TERMS

Below are the definitions of key terms regularly used in ERM.

The definitions of the various risks that may be identified during the implementation of the risk management process are listed in the Risk Universe (Appendix A) and defined in the Risk Dictionary (Appendix B).

Risk	Effect of uncertainty on objectives. <i>Source: ISO 31000:2018 Risk Management – Guidelines</i>
Risk Management	Coordinated activities to direct and control an organization with regard to risk. <i>Source: ISO 31000:2018 Risk Management – Guidelines</i>

	<b>ACEN and SUBSIDIARIES ENTERPRISE RISK MANAGEMENT POLICY</b>	Document No:
		Effective Date: <b>April 20, 2023</b>
		Revision No: <b>01</b>
		Page No: <b>2 of 17</b>

Impact	Outcome of an event affecting objectives. Also, referred to as “Consequence”. <i>Source: ISO 31000:2018 Risk Management – Guidelines</i>
Likelihood	Chance of something happening. <i>Source: ISO 31000:2018 Risk Management – Guidelines</i>
Risk Owner	A person or entity who has the accountability and authority to manage risk. <i>Source: ISO 31000:2018 Risk Management – Guidelines</i>
Strategic Risk	A risk that has a significant impact on the company’s defined objectives.
Operational Risk	A risk that can result to deviations from the objectives but not change the company’s defined objectives.
Project Risk	The effect of uncertainty on the project as a whole. Also be referred to as “Transactional Risk”.  <i>Source: Project Management Institute</i> <i>Note: These risks exist as long as the project is active or on-going.</i>

#### 4. RESPONSIBILITY


To ensure an effective and efficient management of risks within ACEN, the Company implements a risk governance structure such that an integrated and independent view of risk exposures can be obtained.

##### 4.1. Board of Directors

- Approves the Company’s ERM Policy and any revisions thereto;
- Approves the policies, strategies, and systems implemented for the ongoing identification, control, and mitigation of risk exposures;
- Approves the Company’s risk appetite and risk exposure allocation; and
- Reviews report from the Board Risk Management and Related Party Transaction Committee with regard to the overall effectiveness of the risk management process.

##### 4.2. Board Risk Management and Related Party Transaction (“BRMRPT”) Committee

- Reviews and recommends the Company’s levels of risk appetite and risk exposure allocation;

	<b>ACEN and SUBSIDIARIES ENTERPRISE RISK MANAGEMENT POLICY</b>	Document No:
		Effective Date: <b>April 20, 2023</b>
		Revision No: <b>01</b>
		Page No: <b>3 of 17</b>

- Reviews and assesses the adequacy and sufficiency of the Company's policies and processes for risk identification, assessment, and mitigation;
- Reviews the objectivity, effectiveness, and efficiency of the Company's risk management function; and
- Establishes a sound risk-aware culture throughout the Company.

#### 4.3. Management Committees

- Provide strategic leadership for the Company's risk management;
- Provide oversight of the strategic and operational risks for the Company, including reviewing the Company's risk universe and the progress of treatment plans that are being managed by different business units;
- Regularly identifies risk priorities and aligns business objectives with risk strategies and policies; and,
- Arbitrates and resolves conflicts arising from different risk mitigation strategies among business units.


#### 4.4. Chief Risk Officer ("CRO")

The CRO is the advocate of enterprise-wide risk management in ACEN and oversees the ERM function.

- Works with the management committees, as well as business units, to integrate risk management within the Company;
- Ensures that the Company's overall risk exposures are consistent with its risk appetite and are properly covered by risk policies;
- Strengthens systems and measurement tools needed to provide robust foundation for risk management;
- Identifies developing or emerging risks, concentrations and other situations that need to be studied through stress testing or other techniques;
- Ensures that all initiatives related to risk management are monitored and reported to the appropriate members of the organization;
- Monitors the top risks of the Company and reports status of the implementation of risk management strategies and action plans;
- Leads the management in the identification and assessment of climate-related risks and opportunities;
- Reports to the BRMRPT Committee the climate-related risks and opportunities identified by the management with their corresponding potential financial impact to the Company;
- Monitors the management of climate-related risks in relation to the overall risk exposure of the Company; and
- Ensures that the Risk & Insurance Management Team receives appropriate organizational support to establish a framework and process for the inclusion of climate-related risks in the ERM program.

#### 4.5. Risk & Insurance Management ("RIM") Team

The RIM Team has the overall accountability and ownership for the continuity and success of the ERM function. The RIM Head, together with the RIM Team members, shall:

	<b>ACEN and SUBSIDIARIES ENTERPRISE RISK MANAGEMENT POLICY</b>	Document No:
		Effective Date: <b>April 20, 2023</b>
		Revision No: <b>01</b>
		Page No: <b>4 of 17</b>

- Continuously work with the CRO in developing, implementing, reviewing, and improving the Company's ERM framework and associated policies and procedures;
- Formulate an annual risk management plan and coordinate the overall ERM activities within the Company;
- Assist the Management in determining, evaluating, and measuring the Company's risk exposures, risk appetite and risk tolerance;
- Ensure that developing or emerging risks and interrelationship of new and existing risks are regularly reviewed, updated, and reported to the CRO;
- Present megatrends and climate change updates during the annual risk assessment exercise as part of establishing the context;
- Design a framework for the identification and assessment of climate-related risks;
- Provide disclosures on the financial impact of climate-related risks in the annual Integrated Report; and,
- Facilitate continuing education of Company personnel in order to enhance the capacity and capability of all departments to effectively and efficiently manage risk.

#### 4.6. Risk Owners

- Are ultimately responsible for risks in their functional areas of responsibility;
- Collect and analyze risk data to provide risk information to the Board, BRMRPT Committee, CRO, and other departments of the Company; and
- Approve and coordinate risk management efforts and specific strategies in their functional areas.


#### 4.7. Internal Audit

- Provides objective and reasonable assurance that the internal control framework is operating effectively;
- Reports directly to the Audit Committee and the BRMRPT Committee any risk management issue due to identified internal control deficiencies and provide recommendations for improvement;
- Reviews the alignment of internal control framework with the identified risk exposures; and,
- Assists in the enhancement of the understanding of risk and controls among line staff.

## 5. POLICY STATEMENTS

### 5.1. ACEN ERM Policy Statement

ACEN is committed to incorporate ERM processes into its core business and practices, to overcome potential threats and identify viable opportunities to meet its business goals and objectives. ACEN recognizes that a good ERM system can generate trust and confidence from the Company's investors, partners, customers, employees, and other stakeholders by demonstrating risk awareness and exercising prudent management and reduction of business risks.

	<b>ACEN and SUBSIDIARIES ENTERPRISE RISK MANAGEMENT POLICY</b>	Document No:
		Effective Date: <b>April 20, 2023</b>
		Revision No: <b>01</b>
		Page No: <b>5 of 17</b>

Thus, ACEN shall:

- Incorporate risk management into its strategies, objectives, investments, operations, governance, and culture;
- Encourage the practice of risk management at all levels of the organization and across all functions;
- Collaborate with its employees, stakeholders, and business partners;
- Benchmark with global best practices for risk management;
- Seek the counsel of experts in the understanding and management of specialized risks;
- Demand ownership and accountability of risks from the Company's leaders; and
- Monitor and report the progress of risk treatment.

All ACEN employees share this commitment and will align their own business units' goals and plans to support the achievement of this policy statement.

## 5.2. ACEN Risk Appetite Statement


The ACEN Board is responsible for setting the risk appetite of the Company; thus, guiding the rest of the organization on how risks are identified, assessed, evaluated, and addressed. Some risks are inherent to ACEN's business decisions while other risks are beyond its control. There are risks that are simple and straightforward but there are also risks that are complex and multi-faceted. Furthermore, there are regularly occurring risks that provide enough data to anticipate their occurrences but there are also rare events with little to no information to use as reference or warning.

ACEN is a growth company with an ambitious target to grow its renewable energy portfolio in an industry that is rapidly transforming amidst unpredictable market conditions. ACEN is cognizant that it will be exposed to more risks than other companies, and the Company will exercise due diligence to anticipate and prepare for such risks, assess each one of them, and formulate strategies and plans to address them. At all times, ACEN will be guided by the following Corporate Policies:

- ERM Policy
- Code of Conduct
- HSSE Policy
- Environmental & Social Policy
- Financial management policies

ACEN acknowledges that there are climate-related risks that threaten the Company, its stakeholders, and the general public. It is difficult and expensive to prepare for all possible scenarios, but ACEN will exercise due diligence in addressing these risks and in reducing the impact of these events if and when they occur. Should a climate-related risk affect our operations, ACEN will deploy all necessary resources to ensure the safety of its stakeholders and recover the business as soon as reasonably practicable and address the risk in accordance with applicable laws.



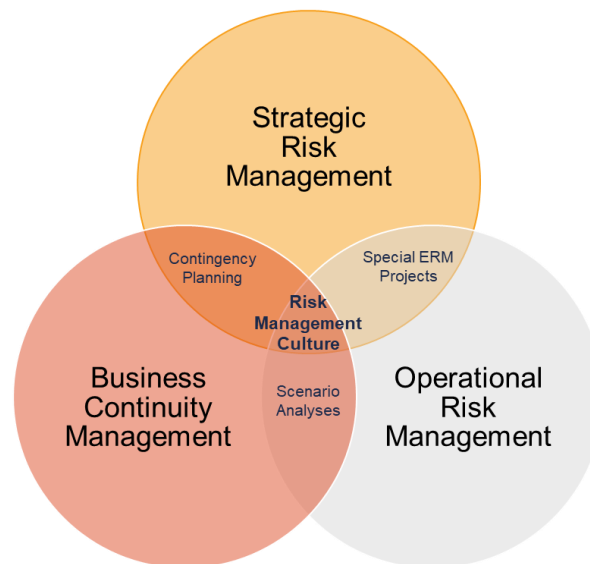
	<b>ACEN and SUBSIDIARIES ENTERPRISE RISK MANAGEMENT POLICY</b>	Document No:
		Effective Date: <b>April 20, 2023</b>
		Revision No: <b>01</b>
		Page No: <b>6 of 17</b>

### 5.3. ACEN ERM FRAMEWORK

ACEN's ERM Framework is guided by the principles of the *ERM Framework from the Committee of Sponsoring Organizations (COSO)*. Aligned with the COSO ERM Framework, ACEN believes that ERM is not a function or department but the Company's governance, processes, and culture aligning together to ensure that its strategies are developed, implemented, and achieved considering the many risks that present challenges and opportunities.

ACEN's ERM Framework (Figure 1) integrates three main areas or levels of risk management - -- Strategic Risk Management, Operational Risk Management, and Business Continuity Management.

*Figure 1: ACEN Enterprise Risk Management Framework*




#### 5.3.1. Strategic Risk Management

In the formulation of ACEN's strategies and business objectives, risk management takes the form of market analysis and the assessment of the Company's capabilities. In the process of implementing these strategies, risks that could significantly impact the direction of the Company are identified and monitored with a risk owner identified to manage these risks. Coming at full circle is the review of the Company's performance which includes how the organization managed both the identified and unidentified risks that impacted the Company's performance.

#### 5.3.2. Operational Risk Management

During the implementation of ACEN's strategies, projects, operations, and initiatives, risk management takes the form of operational risk reviews. Operational risks are risks that could result to deviations to the Company's performance objectives but not

	<b>ACEN and SUBSIDIARIES ENTERPRISE RISK MANAGEMENT POLICY</b>	Document No:
		Effective Date: <b>April 20, 2023</b>
		Revision No: <b>01</b>
		Page No: <b>7 of 17</b>

significant enough to change the Company's strategies or business objectives. This level of risk management deals with resource allocation, asset & liability management, capital management, resource management, hedging, management processes, and insurances.

Project Risks are also tackled at this level. These are risks to the attainment of a project that have a more finite or temporary period of relevance, which is the project's lifecycle.

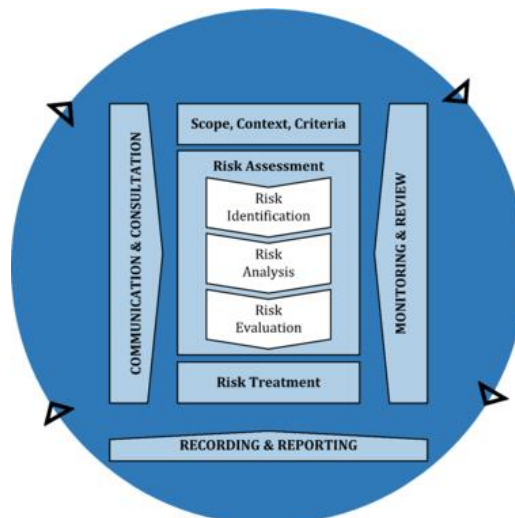
### 5.3.3. Business Continuity Management


The third area of ACEN's ERM system deals with low-likelihood, high impact events that significantly challenge the organization's operations, performance, and strategies. These include natural disasters and unexpected market events. Business Continuity Management prepares the organization to handle these events with the primary objective of ceasing value degradation or reducing any negative consequences. This also includes the practice of recovering the business after going through a crisis.

## 5.4. ACEN RISK MANAGEMENT PROCESS

The Company follows ISO31000:2019 Risk Management – Guidelines for its Risk Management Process (Figure 2). This process is conducted by ACEN and its subsidiaries on a regular basis and can be used for different levels of risk management (i.e., strategic, operational, project).

*Figure 2: Risk Management Process  
ISO31000:2019 Risk Management - Guidelines*



	<b>ACEN and SUBSIDIARIES ENTERPRISE RISK MANAGEMENT POLICY</b>	Document No:
		Effective Date: <b>April 20, 2023</b>
		Revision No: <b>01</b>
		Page No: <b>8 of 17</b>

#### 5.4.1. Scope, Context, Criteria

Before risks are identified, the Company, its management committees, business units, project teams, and/or employees must review the following to better frame the process of risk assessment:

- Objectives, decisions to be made, and/or desired outcomes
- Time frame for the objectives, decisions, or outcomes
- Resources required and available, as well as their location
- Stakeholders, internal and external
- External environment
- Internal environment
- Risk Appetite and Risk Tolerance

In the review of one's scope, context, and criteria, risk owners may use known analytical tools used in business management such as, but not limited to:

- SWOT Analysis
- PESTEL Analysis
- Porter's Five-Forces Model
- Scenario Analysis

It is also important to now consider climate-related scenarios and how these affect the scope, context, and criteria. These can be perils or opportunities to the Company's objectives.

#### 5.4.2. Risk Assessment


This is the process of identifying, analyzing, and evaluating risks, the outcome of which is the identification of top risks related to the established scope, context, and criteria.

##### 5.4.2.1. Risk Identification

The Company, its management committees, business units, project teams, and/or employees should find, recognize, and describe risks that might prevent or help the achievement of the Company's objectives.

Risks must be recognized during this stage, whether or not they are within the control of the Organization.

Concerning climate-related risks, the Company must review both physical and transition. Physical risks are those that directly affect the Company's assets, operations, and employees. Physical risks can be acute risks (extreme and sudden) or chronic risks (gradual but significant). Transition risks are changes to the external environment triggered by climate change and climate action such

	<b>ACEN and SUBSIDIARIES ENTERPRISE RISK MANAGEMENT POLICY</b>	Document No:
		Effective Date: <b>April 20, 2023</b>
		Revision No: <b>01</b>
		Page No: <b>9 of 17</b>

as changes in policies, laws, technologies, and market dynamics.

The ACEN Risk Universe (Section 6.1) provides a list of risks that can be used as a guide when identifying risks.

#### 5.4.2.2. Risk Analysis

ACEN understands that identified risks are not the same in nature, likelihood, and impact.

The first step in analyzing risks is to determine the possible cause/s of such risks. By doing so, it is possible to identify the right risk as well as finding opportunities to aggregate or disaggregate the risk. To do this, various known analytical methodologies can be used such as, but not limited to:

- Five (5) Whys
- Fishbone (or “Ishikawa”) Diagram
- Scatter Diagram
- Failure Mode and Effects Analysis
- Bow-Tie Analysis

To determine the likelihood of the risks identified, ACEN has developed a Risk Assessment Matrix. The table below offers users two (2) ways of determining likelihood of risks --- Frequency and Probability --- both methods are acceptable.

*Figure 4: Risk Assessment Matrix for Likelihood*

LIKELIHOOD RATING		FREQUENCY	PROBABILITY
5	Almost Certain	Happens more than once in ACEN every year	97% or higher
4	Likely	Has happened more than once in ACEN	61% to 96%
3	Possible	Has happened in ACEN more than once per year in the industry	21% to 60%
2	Unlikely	Heard of in the industry	4% to 20%
1	Rare	Never heard of in the industry	3% or lower

Each of the identified risks must also be analyzed in terms of its potential impact which can be a combination of any of these four categories: Health & Safety, Environmental, Reputational, and Financial. The table below is the Risk Assessment Matrix for Impact.


	<b>ACEN and SUBSIDIARIES ENTERPRISE RISK MANAGEMENT POLICY</b>	Document No:
		Effective Date: <b>April 20, 2023</b>
		Revision No: <b>01</b>
		Page No: <b>10 of 17</b>

Figure 5: Risk Assessment Matrix for Impact

IMPACT RATING		HEALTHY & SAFETY	ENVIRONMENTAL	REPUTATIONAL	FINANCIAL
5	Significant	Fatality	Massive, lasting damage to the environment	Massive Effect, high level of concern and actions from the national government	>20% of Target Net Income After Tax
4	Major	Permanent Disability	Major, requires significant resource to rehabilitate	Major Effect, involvement of national government	10% to 20% of Target Net Income After Tax
3	Moderate	Major Injury or Health Effects (e.g., Loss Time Incident)	Moderate, damage that will require clean up	Moderate Effect, local or regional government concern	5% to 10% of Target Net Income After Tax
2	Minor	Minor Injury or Health Effects (e.g., Medical Treatment Case, Restricted Work Case)	Minor, damage to the environment but no lasting effect	Minor Effect, local public concern	1% to 5% of Target Net Income After Tax
1	Minimal	Slight Injury or Health Effects (e.g., First Aid Case)	Slight effect, contained within site	Slight Effect, local public awareness but no concern	>1% of Target Net Income After Tax

*Notes on Health & Safety Impact:*

- Aligned with the HSSE Policy
- Do not distinguish if the physical harm will be on ACEN personnel or external stakeholders, as long as this was due to the Company's operations

*Notes on Environmental Impact:*

- Aligned with the HSSE Policy
- Consider climate-related risks

*Notes on Reputational Damage:*

- Aligned with the Environmental & Social Policy

*Notes on Financial Impact:*

- Net Income After Tax (NIAT) is the ideal measure but alternative ways to estimate financial value is acceptable
- Considers both property damage and loss of revenue due to business interruption

Once the likelihood and impact of each risk are assessed based on the tables above, plot each risk on a Risk Map such as the one shown below. When determining the rating of a risks with multiple impacts, choose the highest rating among the applicable impact categories.


	<b>ACEN and SUBSIDIARIES ENTERPRISE RISK MANAGEMENT POLICY</b>	Document No:
		Effective Date: <b>April 20, 2023</b>
		Revision No: <b>01</b>
		Page No: <b>11 of 17</b>

Figure 6: Risk Map

		LIKELIHOOD				
		1	2	3	4	5
IMPACT		Rare	Unlikely	Possible	Likely	Almost Certain
5	Significant					
4	Major					
3	Moderate					
2	Minor					
1	Minimal					

#### 5.4.2.3. Risk Evaluation


Once the risks have been assessed and plotted on a risk map, these must then be further evaluated for the following:

- Existing Controls
- Additional Risk Treatment required (see section 5.4.3.)
- Level of Risk (see section 5.3.)
- Risk Ownership

When identifying the Risk Owner for a particular risk, it is best to name a specific person whose roles and responsibilities will be greatly affected by the occurrence of such risk. Also, make sure that the Risk Owner has adequate authority to decide over risk treatment measures or to deploy the necessary resources.

#### 5.4.3. Risk Treatment

In the treatment of risks, one can identify controls that can reduce the likelihood or impact of the said risks. It is also possible to remove the risks, all in all. Below are popular approaches to the treatment of risks and multiple approaches can be taken for a single risk.

	<b>ACEN and SUBSIDIARIES ENTERPRISE RISK MANAGEMENT POLICY</b>	Document No:
		Effective Date: <b>April 20, 2023</b>
		Revision No: <b>01</b>
		Page No: <b>12 of 17</b>

#### 5.4.3.1. Risk Avoidance

The objective of this risk treatment approach is to eliminate the risk by simply not making any decisions leading to the risk itself. Two popular approaches of risk avoidance are:

- Change of strategy or objective
- Diversification

#### 5.4.3.2. Risk Mitigation

To reduce the likelihood of the risk from occurring, the popular approaches for risk mitigation are:

- Control procedures, such as quality management protocols
- Maintenance and repair activities
- Monitoring and escalation protocols
- Online redundancies or “hot” back-ups
- Hedging

#### 5.4.3.3. Consequence Management


To reduce the impact of the risk when it actually or eventually occurs, the popular approaches are:

- Contingencies or “cold” back-ups
- Business Continuity Management
- Stakeholder communications

#### 5.4.3.4. Risk Transfer

The objective of this risk treatment approach is to let another party take the risk. This is usually for low likelihood, high impact risks. This also will depend on the Company’s risk appetite. The popular approaches for risk transfer are:

- Insurance
- Outsourcing
- Alternative Risk Financing/Sharing options

	<b>ACEN and SUBSIDIARIES ENTERPRISE RISK MANAGEMENT POLICY</b>	Document No:
		Effective Date: <b>April 20, 2023</b>
		Revision No: <b>01</b>
		Page No: <b>13 of 17</b>

#### 5.4.3.5. Risk Acceptance

After all controls have been put into place, there may be some “residual risks”. The Company may then decide to simply accept these risks. Accepted risks are usually governed, controlled, monitored, and reported. The management of these accepted risks are through Company policies and procedures, reporting, and audit.

#### 5.4.4. Communication & Consultation

Throughout the ERM process, communication and consultation is key. The purpose of communication is to increase the awareness and understanding of the identified risks, while the purpose of consultation is to seek the views of subject matter experts and stakeholders.

During risk identification, communication and consultation are key processes so that risks are properly identified and defined. In the same manner, these are important steps during risk evaluation and risk treatment.

Internal and external stakeholders can be involved in this process and can increase the level of inclusiveness towards the management of risks.


#### 5.4.5. Monitoring & Review

It is important that the Company monitors and reviews its ERM activities all throughout the process. This ensures compliance of the organization with the agreed risk management activities and risk treatment measures as well as regularly checking the quality of the analysis and decisions made.

#### 5.4.6. Recording & Reporting

Recording and reporting the various ERM activities, throughout the entire process of identification, evaluation, and treatment, is essential as it helps communicate the Company’s risk management efforts to internal and external stakeholders. Doing so will enable the Company to document the ERM process for compliance, knowledge management, and process improvement purposes. Ultimately, this will ensure alignment of expectations across a variety of stakeholders.



	<b>ACEN and SUBSIDIARIES ENTERPRISE RISK MANAGEMENT POLICY</b>	Document No:
		Effective Date: <b>April 20, 2023</b>
		Revision No: <b>01</b>
		Page No: <b>14 of 17</b>

### 5.5. ERM Policy Review Frequency

This ERM Policy and its individual elements will be reviewed on a regular basis (see table below). The review or revision of these elements, individually or collectively, can be performed earlier than the default review frequency subject to the request of the BRMRPT Committee and/or the CRO.

ERM Governance Tool		Default Review Frequency	Reviewer	Approver
1	ERM Policy	Every 2 years	Executive Management Committee / Operations Management Committee	BOD / BRMRPT Committee
2	ERM Policy Statement	Every 2 years	Executive Management Committee / Operations Management Committee	BOD / BRMRPT Committee
3	ERM Framework	Every 2 years	Executive Management Committee / Operations Management Committee	BOD / BRMRPT Committee
4	Risk Appetite Statement	Every 2 years	Executive Management Committee / Operations Management Committee	BOD / BRMRPT Committee
5	Risk Tolerance	Annually	Chief Risk Officer / Business Unit Heads	Executive Management Committee
6	Risk Assessment Matrices	Annually	Chief Risk Officer / Business Unit Heads	Executive Management Committee
7	Risk Assessment Process	Annually	Risk & Insurance Management Team	Chief Risk Officer
8	Risk Universe	Annually	Risk & Insurance Management Team	Chief Risk Officer
9	Risk Dictionary	Annually	Risk & Insurance Management Team	Chief Risk Officer
10	Governance Structure	Annually	Executive Management Committee / Operations Management Committee	BOD / BRMRPT Committee

## Appendix A

### ACEN Risk Universe

#### EXTERNAL RISKS

#### INTERNAL RISKS

Global Market	Local Market	Regulatory & Compliance	Stakeholder Relations	Political Violence	NATURAL HAZARDS	Human Resources	Operations & Processes	Physical Assets	Financial Resources	Intangibles
<ul style="list-style-type: none"> <li>• Geopolitical</li> <li>• Capital Availability</li> <li>• Forex Risk</li> <li>• Commodity Prices</li> <li>• Leapfrog Technologies</li> <li>• Investment Valuation</li> </ul>	<ul style="list-style-type: none"> <li>• Country Risk</li> <li>• Capital Availability</li> <li>• Interest Rate</li> <li>• Electricity Prices</li> <li>• Competitor Risks</li> <li>• Investment Valuation</li> </ul>	<ul style="list-style-type: none"> <li>• Regulatory Changes</li> <li>• Corporate</li> <li>• Industry</li> <li>• Taxation</li> <li>• Labor</li> <li>• Local</li> <li>• Int'l Trade</li> <li>• Curtailment Risk</li> </ul>	<ul style="list-style-type: none"> <li>• Customer Relations</li> <li>• Partner Relations</li> <li>• Government Relations</li> <li>• Investor Relations</li> <li>• Labor Relations</li> <li>• Community Acceptance</li> <li>• Social Media</li> </ul>	<ul style="list-style-type: none"> <li>• Mob / Riot</li> <li>• Kidnapping / Abduction</li> <li>• Terrorist Attack</li> <li>• Sabotage / Fraud</li> <li>• Hacking Risk</li> <li>• Control Systems</li> <li>• Corporate Systems</li> <li>• Online Presence</li> </ul>	<ul style="list-style-type: none"> <li>• Typhoon / Tornado</li> <li>• Floods / Tsunami</li> <li>• Hailstorm / Blizzard</li> <li>• Heat Wave / Drought</li> <li>• Lightning / Wild Fire</li> <li>• Earthquake / Sinkhole</li> <li>• Volcanic Eruption</li> <li>• Landslide / Mudslide</li> <li>• Pandemic / Epidemic</li> <li>• Solar Flare</li> <li>• Animal Behavior</li> <li>• Toxic Fumes</li> </ul>	<ul style="list-style-type: none"> <li>• Recruitment</li> <li>• Talent Development</li> <li>• Health &amp; Wellness</li> <li>• Employee Turnover</li> <li>• Succession Management</li> <li>• Employee Fraud / Theft</li> <li>• Cultural Alignment</li> </ul>	<ul style="list-style-type: none"> <li>• Workplace Violence / Harassment</li> <li>• Health &amp; Safety Incident</li> <li>• Project Delay</li> <li>• Pollution</li> <li>• Comm'n Failure</li> <li>• Misaligned Performance Metrics</li> </ul>	<ul style="list-style-type: none"> <li>• Resource Adequacy</li> <li>• Asset Efficiency</li> <li>• Over / Under Maintenance</li> <li>• Obsolescence</li> <li>• Asset Failure / Breakdown</li> <li>• Critical Spare Parts</li> <li>• Transmission Line</li> </ul>	<ul style="list-style-type: none"> <li>• Financial Modeling</li> <li>• Energy Trading</li> <li>• Budget / Cost Management</li> <li>• Liquidity</li> <li>• Debt Coverage</li> <li>• Taxes</li> <li>• Portfolio Concentration</li> </ul>	<ul style="list-style-type: none"> <li>• Service Contracts</li> <li>• Land Access</li> <li>• Business Permits</li> <li>• Data Access</li> <li>• Data Integrity</li> <li>• IT Platform Alignment</li> <li>• Knowledge Management</li> </ul>

## APPENDIX B ACEN Risk Dictionary

### External Risks

External risks are uncertainties that can impact the Company's objectives and strategies which originate from third parties. The Company has little to no influence over the likelihood or velocity of these risks from happening. These could also be influenced by sudden or gradual changes to the climate.

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|---|--|
| <b>1. Global Market Risks</b>           | <b>Changes in global trade conditions that have direct or indirect impact on the Company's operations, financial position, deals, and expansion projects.</b>  |
| 1.1. Geopolitical Risk                  | <p>Slow or sudden change/s in the geopolitical relations of countries or regions which may result to trade embargos, trade sanctions, tightening regulations, reporting requirements, corporation laws, ownership restrictions, restrictions to repatriation of profits, or even war.</p> <p><i>Possible Root Causes: Geopolitical Incidents, Global Supply &amp; Demand, Trade Regulations, Peace and Order, Country-to-Country Relations, Climate Change</i></p> |
| 1.2. Capital Availability Risk (Debt)   | <p>Tightening of the international debt market that can lead to challenges in acquiring loans or issuing bonds for current and future operations.</p> <p><i>Possible Root Causes: Geopolitical Incidents, Debt Supply and Demand, Global Interest Rate Market, Foreign Exchange Currency Market Changes</i></p>  |
| 1.3. Capital Availability Risk (Equity) | <p>Availability of equity capital from the international markets/investors that can lead to challenges in raising equity for current and future operations.</p> <p><i>Possible Root Causes: Geopolitical Incidents, Equity Supply and Demand, Global Interest Rate Market, Equity Issuance of Direct Competitors, Regulations</i></p>  |
| 1.4. Foreign Exchange Risk              | <p>Significant fluctuations in foreign exchange currency market/s that can impact ACEN's financials, directly or indirectly. These changes can be in the form of a sharp or gradual movement, it can also be for a short or prolonged duration.</p> <p><i>Possible Root Causes: Geopolitical Incidents, Global Supply &amp; Demand, Peace &amp; Order, Change in Regulations, Money Market Movements, Climate Change</i></p>                                       |
| 1.5. Commodity Prices Risk              | <p>Significant increase or decrease in global commodity prices that affect ACEN's financials, directly or indirectly. These changes can be in the form of a sharp or gradual movement, it can also be for a short or prolonged duration.</p> <p><i>Possible Root Causes: Geopolitical Incidents, Global Supply &amp; Demand, Peace &amp; Order, Change in Regulations, or Health, Safety, Environmental Issues, Climate Change</i></p>                             |
| 1.6. Leapfrog Technologies Risk         | <p>The introduction, launch, or adaptation of an emerging technology that would make existing technologies less attractive to investors and to the public. The inability to adapt or prepare for these technologies can result to opportunity costs.</p> <p><i>Possible Root Causes: Breakthrough R&amp;D and Confirmatory Tests, Movements in Intellectual Property/ies, Climate Change</i></p>   |

- 1.7. Investment Valuation Risk (International) The difference between actual and expected valuation of the Company's international debt or equity issuances, contracts, or assets.
- Possible Root Causes: Company Image/Communication, Sovereign Risks where assets are situated, Market Valuation, Misaligned Objectives*
- 2. Local Market Risks** **Changes in the local conditions that have direct or indirect impact to the Company's operations, financial position, deals, and expansion projects. For ACEN, this includes the Energy Sector.**
- 2.1. Country Risk Changes in the country's ability to meet its national debts and investment grade, affecting the local market. This can impact the Company's financial performance and obligations, both current and planned.
- Possible Root Causes: National Incidents, Money Market Movements, Regulations, Country-to-Country Relations*
- 2.2. Capital Availability Risk (Debt) Tightening of the local debt market that can lead to challenges in acquiring loans or issuing bonds for current and future operations.
- Possible Root Causes: National Incidents, Debt Supply and Demand, Loan Defaults, Changes in Local Interest Rate*
- 2.3. Capital Availability Risk (Equity) Availability of equity capital from the international markets/investors that can lead to challenges in raising equity for current and future operations.
- Possible Root Causes: National Incidents, Equity Supply and Demand, Competitor Actions, Regulations*
- 2.4. Interest Rate Risk Significant increase or decrease of the prevailing and forecasted interest rates that can affect existing and future financing initiatives of the Company.
- Possible Root Causes: Geopolitical Incidents, Global Trade, Money Market Movements, National Incidents, National Policies, or Change in Regulations*
- 2.5. Electricity Prices Risk Volatility of the local electricity prices, or the commodity it is indexed with, which can impact the Company's margins and expansion strategies.
- Possible Root Causes: Commodity Supply & Demand, Commodity Prices, Power Supply & Demand, Shutdown of Powerplants, or Grid Issues*
- 2.6. Competitor Risk The announcement, launch, or implementation of a competitor firm's projects, financing, press release, or any other actions that has a significant impact to the Company's projects, financing initiatives, corporate activities, stock prices, or reputation. It is important to note the nature, size, timing, and speed of these actions. This can also cover legal and illegal activities.
- Possible Root Causes: Changes in Regulation, Interpretation of Regulations, Reporting Requirements, or Malicious Intent.*
- 2.7. Investment Valuation Risk (Local) The difference between actual and expected valuation of the Company's local debt or equity issuances, contracts, or assets.
- Possible Root Causes: Company Image/Communication, Market Valuation, Misaligned Objectives*
- 3. Regulatory & Compliance Risks** **Changes in any applicable law, regulation, implementing rules, agency memoranda, reporting requirements, and processing. This includes the difference in interpretation on how these are implemented by the relevant government agency/ies or its official/s.**
- 3.1. Regulatory Changes Risk (Corporate) Changes to national laws, regulations, implementing rules, executive orders, or government agency protocols related to general business practices, especially those affecting corporations.
- Possible Changes: Changes in the Corporation Code, Reporting Requirements, Changes in a Government Agency's protocols (SEC, PSE, BIR, DENR*

- 3.2. Regulatory Changes Risk (Power Sector) Changes to national laws, regulations, implementing rules, executive orders, or government agency protocols related to the energy sector which includes, but are not limited to, power generation, transmission, distribution, and trading.
- Possible Changes: Changes in laws concerning the Energy Industry, Changes in laws concerning Renewable Energy, Reporting Requirements, Changes in a Government Agency's protocols (DOE, PEMC, NGCP, WESM), Climate Change*
- 3.3. Regulatory Changes Risk (Taxation) Changes to national laws, regulations, implementing rules, executive orders, or government agency protocols related to Taxes, including the implementation of Income Tax Holidays, remittances, and offsetting.
- Possible Changes: Changes in Taxation Laws, Reporting Requirements, Tax Computations, Changes in a Government Agency's protocols, Stakeholder Lobbying, Climate Change*
- 3.4. Regulatory Changes Risk (Labor) Changes to national laws, regulations, implementing rules, executive orders, or government agency protocols related to employment and hired labor.
- Possible Changes: Changes in Labor Laws, Reporting Requirements, Changes in a Government Agency's protocols, Stakeholder Lobbying, Climate Change*
- 3.5 Regulatory Changes Risk (Local Government) Changes to provincial, municipal and barangay laws, regulations, implementing rules, executive orders, or government agency protocols related to local laws where the Company's operations are situated (or will be situated). This covers laws concerning Indigenous People (or "IP").
- Possible Changes: Changes in Local Laws, Reporting Requirements, Interpretation of Laws, Personalities of local government officials, Stakeholder Lobbying, Climate Change*
- 3.6. Regulatory Changes Risk (International Law) Changes to local laws that can affect companies with investments or operations in other countries. This can cover ownership restrictions, company registrations, taxations, environmental standards, labor practices, repatriation of profits, and reporting.
- Possible Changes: Changes in Laws, Trade Regulations, Country-to-Country Relationships, Climate Change*
- 3.7. Curtailment Risk Unscheduled or unfavorable decision to curtail power dispatched from the Company's operating assets.
- Possible Root Causes: Power Supply & Demand, Grid Issues, Climate Change*
- 4. Stakeholder Relations Risk** **Slow or sudden shift/s on how a stakeholder, or group of stakeholders, deals with the Company. Their action or inaction can lead to significant impact to the Company's operations, expansions, and reputation.**
- 4.1. Customer Relations Risk Shifts in the Company's customer requirements such as feedstock, pricing, contract duration. This also includes customers cancelling their contracts with the Company, for valid or invalid reasons.
- Possible Root Causes: Customer Requirements, Competitor Actions, Climate Change
- 4.2. Partner Relations Risk Changes in the way a supplier or third-party service provider deals with the Company, resulting to cancelled contracts, renegotiations, delay in deliveries, failure to deliver, health and safety incident, environmental incident, or negative public image. This also covers equity and joint venture partners.
- Possible Root Causes: Misaligned Objectives, Changes in partners' financial position, Company Image/Communication, Climate Change

- 4.3. Government Relations Risk Differences between the actual and expected behavior of a government office or government official, which includes legal and illegal activities.
- Possible Root Causes: Misaligned Objectives, Malicious Intent, Climate Change*
- 4.4. Investor Relations Risk Actions or inaction of the Company's investors, whether current or potential, that are detrimental to the Company's operations, financing activities, stock price, reporting requirements, dividend management, disclosures, or corporate image.
- Possible Root Causes: Misaligned Objective, Investor Requirements, Company Image/Communications, Implementation of policies, Climate Change*
- 4.5. Labor Relations Risk Actions or inaction of the Company's employees, whether current or potential, that can affect the Company's operations and/or labor practices. This can cover national labor affiliations. These actions can range from peaceful discussions to violent activities.
- Possible Root Causes: Misalignment of Objectives, Employee Morale, HR Policies and Practices, Company Image/Communications, Malicious Intent*
- 4.6. Local Community Relations Risk Actions or inaction of the local community where the Company has an existing or upcoming operations. These actions can range from peaceful discussions to violent activities. These could also be direct or indirect actions against the Company.
- Possible Root Causes: Misaligned Objective, Community Requests/Expectations, Company Image/Communications, Implementation of regulations, HR Policies & Practices, Climate Change*
- 5. Political Violence Risks** **Slow or sudden attempts to endanger the Company's personnel, officers, operations, assets, or reputation. This could be performed by an individual, a group, or several groups with motivations ranging from personal enrichment to political motivations.**
- 5.1. Mob / Riot Risk Any plan, attempt, or moves against the Company's employees, investors, guests, operations, assets, and reputation by using violence to wreak havoc, inflict damage, or insight chaos against the Company's employees, investors, guests, operations, assets, and reputation. This can be performed by one or more individuals.
- Possible Root Causes: Political Motivations, Malicious Intent*
- 5.2. Kidnapping & Abduction Risk Any plan, attempt, or moves against the Company's employees, investors, or guests. This can be performed by one or more individuals. The victims could be one or more related parties.
- Possible Root Causes: Political Motivations, Malicious Intent*
- 5.3. Terrorist Attack Risk Any plan, attempt, or move against the Company's employees, investors, guests, operations, or assets, performed by a known terrorist or militant group.
- Possible Root Causes: Political Motivations, Malicious Intent*
- 5.4. Sabotage & Fraud Risk Any plan, attempt, or move against the Company by an external party, whether performed by an individual or group of individuals, to misrepresent, discredit, defame, or deceive the Company or any of its stakeholders. This also includes a direct or indirect tampering of Company assets and operations that will result to adverse conditions.
- Possible Root Causes: Political Motivations, Malicious Intent*

5.5. Hacking Risk  
(Controls Systems) Any plan, attempt, or move against the Company's control systems which can result to business interruptions, access restrictions, access/download/copying/deletion/ransoming/disclosure of company information.

5.6. Hacking Risk  
(Corporate Systems) *Possible Root Causes: Political Motivations, Malicious Intent*  
Any plan, attempt, or move against the Company's financial and reporting systems which can result to business interruptions, access restrictions, access/download/copying/deletion/ransoming/disclosure of Company information. This also includes gadgets, software and application used by employees.

5.7. Hacking Risk  
(Online Media) *Possible Root Causes: Political Motivations, Malicious Intent*  
Any plan, attempt, or move against the Company's online media tools such as websites and social media accounts which can result to business interruptions, access restrictions, access/download/copying/deletion/ransoming/disclosure of company information. This also includes the online accounts of Company employees, guests, and partners.

*Possible Root Causes: Political Motivations, Malicious Intent*

## Internal Risks

Internal risks are uncertainties that can impact the Company's objectives and strategies which originate from the Company's assets, operations, employees, investors, and guests. The Company has a high level of influence over the likelihood or velocity of these risks from happening. The Company also has a good level of capability over the mitigating and treatment measures. These could also be influenced by sudden or gradual changes to the climate.

### **1. Human Resources      Variations in the Company's policies, procedures, communication, and implementation of its Human Resources function which covers full-time employees, part-time employees, contractuels, and consultants.**

1.1. Recruitment Risk      The ability (or inability) to recruit employees who match the Company's current and future workforce requirements. This covers full-time employees, part-time employees, contractuels, and consultants.

*Possible Root Causes: Misalignment to Job Requirements, Labor Supply & Demand, Misaligned Compensation Package, Wrong Prioritization*

1.2. Talent Development Risk      Differences between the actual and expected capabilities of the employees against the deliverables. This covers full-time employees, part-time employees, contractuels, and consultants.

*Possible Root Causes: Misalignment of Objectives, Misrepresentation, Lack of Training, Wrong Performance Metrics*

1.3. Employee Health & Wellness Risk      Significant number and severity of physical and mental issues among the Company's workforce, making it difficult for the workforce to perform their duties and complete their deliverables on time and/or within quality. This covers full-time employees, part-time employees, contractuels, and consultants. This includes employee morale. This covers full-time employees, part-time employees, contractuels, and consultants.

*Possible Root Causes: Misalignment of Objectives, Workload Management, Employee Engagement, Compensation & Benefits, Employee Development, Climate Change*

1.4. Employee Turnover Risk      Significant number of resignations, retirement, or termination from the Company's workforce rendering the organization understaffed to complete its deliverables and hit its objectives. This covers full-time employees, part-time employees, contractuels, and consultants.

*Possible Root Causes: Misalignment of Objectives, Misrepresentation, Lack of Training*

1.5. Succession Management Risk      The ability (or inability) to replace key positions in the Company left behind by an employee or consultant because of resignation, retirement, termination, critical illness, or fatality. This covers full-time employees, part-time employees, contractuels, and consultants.

*Possible Root Causes: Lack of Training, Employee Development, Compensation & Benefits, Labor Supply & Demand*

1.6. Employee Fraud/Sabotage/Theft Risk      Any plan, attempt, or move against a member (or members) of the Company's workforce to misrepresent, discredit, defame, steal from, or deceive the Company or any of its stakeholders. This covers full-time employees, part-time employees, contractuels, and consultants.

*Possible Root Causes: Misalignment of Objectives, Malicious Intent*

1.7. Cultural Alignment Risk      Differences between the actual and expected behavior of the Company's workforce against its defined values, policies, procedures, and strategies. This covers full-time employees, part-time employees, contractuels, and consultants.

*Possible Root Causes: Misalignment of Objectives, Misrepresentation, Lack of*



*Training, Wrong Performance Metrics, Climate Change*

- 6. Operations & Processes**  
**Variations in the Company's policies, procedures, communication, and implementation of its business process covering project development, power plant operations, supply chain management, and administrative functions.**
- 2.1. Workplace Violence / Harassment Risk  
 Any plan, attempt, or move by a member (or members) of the Company's workforce to inflict physical or mental harm to a Company's stakeholder. This includes sexual harassment, discrimination, bullying, and defamation.  
*Possible Root Causes: Misalignment of Objectives, Miscommunication, Malicious Intent, Lack of Training*
- 2.2. Health & Safety Incident Risk  
 Medical emergencies or accidents that occur within or due to the Company's operations and workforce activities. These incidents may result to near misses, first aid situations, loss-time incidents, or business interruptions.  
*Possible Root Causes: Misalignment of Objectives, Miscommunication, Wrong Performance Metrics, Lack of Training, Malicious Intent, Climate Change*
- 2.3. Project Delay Risk  
 Differences between the actual and expected implementation of projects and project milestones. This could be due to a member of the Company's workforce, a vendor/supplier, or unrelated party/ies.  
*Possible Root Causes: Misalignment of Objectives, Miscommunication, Wrong Performance Metrics, Lack of Training, Malicious Intent, Climate Change*
- 2.4. Pollution Risk  
 Unexpected pollution resulting from the Company's operations and workforce activities, especially those that are beyond the accepted thresholds. This covers air, water, soil, and noise pollution.  
*Possible Root Causes: Misalignment of Objectives, Miscommunication, Wrong Performance Metrics, Malicious Intent, Climate Change*
- 2.5. Supply Chain Risk  
 Differences between the actual and expected performance of a Company's operations throughout its value chain. From vendor management to customer satisfaction.  
*Possible Root Causes: Misalignment of Objectives, Miscommunication, Wrong Performance Metrics, Lack of Training, Malicious Intent, Climate Change*
- 2.6. Communications Failure Risk  
 Significant deviations from the intended message to the received message, resulting to errors, mistakes, or accidents.  
*Possible Root Causes: Miscommunication, Wrong Performance Metrics, Lack of Training, Malicious Intent, Climate Change*
- 2.7. Misaligned Performance Metrics  
 Undefined, unclear, or miscommunicated performance metrics that comes in the form of Employee Key Performance Indicators, or a counter-party service level agreement, thus, resulting to errors, mistakes, or accidents.  
*Possible Root Causes: Miscommunication, Wrong Performance Metrics, Lack of Training, Malicious Intent*
- 3. Physical Assets**  
**Variations in the Company's policies, procedures, communication, and implementation in the management of its physical and hard assets (or capex), covering power generation, power distribution, company vehicles, and office assets.**

- 3.1. Natural Resources Adequacy Risk Significant deviations between the actual output versus the expected output based on resource estimation/modeling, thus, resulting to lower power generation, lower revenues, and/or higher costs.
- Possible Root Causes: Climate-related Pattern, Wrong/Incomplete resource data, Erroneous resource estimation/modeling, Project Execution, Climate Change*
- 3.2. Efficiency Risk The ability (or inability) of a Company's asset to perform within expected parameters, thus, resulting to lower power generation, lower revenues, and/or higher costs.
- Possible Root Causes: Design Failure, Project Execution, System Incompatibilities, Maintenance & Repair, Obsolescence, Climate Change
- 3.3. Over/Under Maintenance Risk Performing inadequate or excessive maintenance activities resulting to the asset being damaged, inoperable, underperforming, or volatile, thus, resulting to lower power generation, lower revenues, higher costs, pollution, and/or health & safety incident.
- Possible Root Causes: Maintenance Scope, Maintenance Schedule, Poor Workmanship
- 3.4. Obsolescence Risk The asset, or its key components, already reaching its end-of-life. This covers the actual assets and the necessary software to operate it. This also covers technologies that will no longer be supported by its OEM (original equipment manufacturer).
- Possible Root Causes: Design Failure, Obsolescence, OEM Financial Standing, OEM Relations*
- 3.5. Power Generation Asset Failure / Breakdown Risk The probability of a power generation asset becoming inoperable or operating beyond the expected parameters. This covers gradual failure and sudden breakdowns.
- Possible Root Causes: Design Failure, Project Execution, System Incompatibilities, Maintenance & Repair, Obsolescence, Climate Change
- 3.6. Critical Spare Parts Risk Variations in the Company's policies, procedures, communication, and implementation of management of critical spare parts. This includes the acquisition, storage, handling, and maintenance of the said parts. Failure to manage this well will render the critical spare parts unavailable or unusable when the primary asset experiences failures or breakdowns.
- Possible Root Causes: Design Failure, Improper Handling & Storage, Maintenance, Obsolescence*
- 3.7. Transmission Line Asset Failure / Breakdown Risk The probability of a transmission line or substation asset becoming inoperable or operating within expected parameters. This covers gradual failure and sudden breakdowns.
- Possible Root Causes: Design Failure, Project Execution, System Incompatibilities, Maintenance & Repair, Obsolescence, Climate Change*
- 4. Financial Resources** **Variations in the Company's policies, procedures, communication, and implementation of its financial management function covering financing activities, debt management, dividend management, investments, cashflow management, customer receivables, employee salaries, accounts payable, customer receivables, and tax remittances.**
- 4.1. Financial Modeling Risk Significant deviations between the actual and expected results from the financial model which then may result to wrong financial decisions for projects, investments, financing, and contracts.
- Possible Root Causes: Misalignment of Objectives, Miscommunication, Lack of Training, Wrong Performance Metrics, Employee Health & Wellness*

4.2. Energy Trading Risk Significant deviations between the actual and expected results from the energy trading which then may result to lower margins or financial losses.

*Possible Root Causes: Misalignment of Objectives, Miscommunication, Lack of Training, Wrong Performance Metrics, Employee Health & Wellness, Climate Change*

4.3. Cost Management Risk Significant deviations between the actual and budgeted expenditures for capital and operating expenses which then may result to lower margins or financial losses.

*Possible Root Causes: Misalignment of Objectives, Miscommunication, Lack of Training, Wrong Performance Metrics, Employee Health & Wellness*

4.4. Liquidity Risk The ability (or inability) of collecting receivables, paying payables, managing short term investments, and adhering to short term financial obligations resulting to a tight or negative cash position. This will then result to penalties, unscheduled borrowings, liquidation of investments, or loan restructuring.

*Possible Root Causes: Misalignment of Objectives, Miscommunication, Inadequacy of Process Controls*

4.5. Debt Coverage Risk The ability (or inability) of paying loan obligations with creditors resulting to a tight or negative cash position. This will then result to penalties, unscheduled borrowings, unscheduled financing activities, liquidation of investments, or loan restructuring.

*Possible Root Causes: Misalignment of Objectives, Miscommunication, Inadequacy of Process Controls*

4.6. Tax Reporting & Remittance Risk Significant deviations between the actual and estimated tax liabilities of the Company which then may result to penalties, higher tax obligations and reputational damage. This covers the timely reporting and remittance of national and local taxes.

*Possible Root Causes: Misinterpretation of Tax regulations, Miscommunication, Lack of Training*

4.7. Portfolio Concentration Risk Significant deviations between the actual and estimated profit margins due to the wrong mix/weight of the Company's investments which then may result to lower margins or financial losses.

*Possible Root Causes: Misalignment of Objectives, Miscommunication, Lack of Training, Wrong Performance Metrics*

**5. Intangibles**  
**Variations in the Company's policies, procedures, communication, and implementation of its non-physical and non-financial assets of the Company that provide benefit to the Company for its current and future operations.**

5.1. Service Contract Management Risk The ability (or inability) to manage the Company's service contracts issued by the government where the Company's operations exist or will exist. This covers the application, bidding, documentation, payment, management, and reporting for these Service Contracts.

*Possible Root Causes: Misinterpretation of Regulations, Misalignment of Objectives, Miscommunication, Lack of Training, Inadequacy of Controls*

5.2. Land Title / Access Risk The ability (or inability) to manage the Company's land-use rights such as land ownership, land lease, foreshore lease agreement, or right-of-way for the locations where the Company's operations exist or will exist. This covers the application, negotiation, documentation, payment, management, and reporting for these agreements.

*Possible Root Causes: Misinterpretation of Regulations, Misalignment of Objectives, Miscommunication, Lack of Training, Inadequacy of Controls*

- 5.3. Business Permit Risk  
The ability (or inability) to manage the Company's business permits issued by the national and local governments where the Company's operations exist or will exist. This covers the application, documentation, payment, management, and reporting for these business permits.
- Possible Root Causes: Misinterpretation of Regulations, Misalignment of Objectives, Miscommunication, Lack of Training, Inadequacy of Controls*
- 5.4. Data Access Risk  
The ability (or inability) of the Company's authorized personnel to access internal software, documents, and reports. This may result to project delays, business interruptions, errors, mistakes, and/or reputational damage.
- Possible Root Causes: System Issues, Access Management, Miscommunication, Lack of Training, Inadequacy of Controls*
- 5.5. Data Integrity Risk  
The quality of Company information contained in its data warehouse. This covers the management of the data warehouse and/or supplier of data management services. This may result to wrong financial decisions for projects, investments, financing, and contracts.
- Possible Root Causes: System Issues, Access Management, Miscommunication, Lack of Training, Inadequacy of Controls*
- 5.6. IT Platform Alignment Risk  
The ability (or inability) of the Company's chosen software and applications to communicate seamlessly that does not result to errors or delays. This may result to wrong financial decisions for projects, investments, financing, and contracts. This may also result to business interruptions if the control systems are integrated.
- Possible Root Causes: System Issues, Access Management, Miscommunication, Lack of Training, Inadequacy of Controls*
- 5.7. Knowledge Management Risk  
The ability (or inability) of the Company to document, store, analyze, and retrieve key company information which are contained in various formats to include, but not limited to, software, applications, websites, social media account, emails, SMS conversations, and paper documents.
- Possible Root Causes: Miscommunication, Wrong Performance Metrics, Lack of Training*

## Natural Hazards

Due to climate change and natural disasters, the Company and its stakeholders face grave danger from the volatility, unpredictability, and severity of natural forces. Most of these are "acts of god" while some are "man-made". While we cannot stop them from happening, predict their occurrence, or know the magnitude of its impact, we can minimize the impact and/or recover as fast as possible.

Animal Behavior / Migratory Patterns	The unexpected movement of a large number of animals, usually of a single kind/species.
Avalanche	A large mass of snow, ice, and soil, detached from a mountain slope and sliding or falling suddenly downward.
Blizzard	A storm, technically an extratropical cyclone, with dry, driving snow, strong winds, and intense cold.
Drought	A period of dry weather.
Earthquake	A series of vibrations induced in the earth's crust by the abrupt rupture and rebound of rocks in which elastic strain has been slowly accumulating.
El Niño	A warm ocean current of variable intensity that develops usually after late December which sometimes causes catastrophic weather conditions.
Epidemic	A disease affecting many persons at the same time and spreading from person to person in a locality where the disease is not permanently prevalent.
Flooding / Flood	A great flowing or overflowing of water, especially over land not usually submerged.
Geomagnetic Storm	A temporary disturbance of the earth's magnetic field, induced by radiation and streams of charged particles from the sun.
Hailstorm	A sudden heavy fall of small, hard balls of ice.
Heatwave	A period of abnormally hot and usually humid weather.
Heavy Rains	Extreme downpour of rainwater which can be due to seasonal cycles, typhoons, or hurricanes.
Hurricane	A tropical cyclone of the Atlantic Ocean, Caribbean Sea, Gulf of Mexico, or eastern Pacific Ocean, having sustained wind speeds of at least 64 knots (74 miles per hour, 33 meters per second): hurricanes form in waters with surface temperatures of about 80°F (27°C), intensifying as temperatures rise.
La Niña	A cool ocean current that sometimes following an El Niño but causing nearly the opposite extreme wet and cold conditions.
Landslide	The downward falling or sliding of a mass of soil, or rock on or from a steep slope usually due to an earthquake or heavy rains.

Lightning	An electric spark discharge in the atmosphere, occurring within a thundercloud, between clouds, or between a cloud and the ground.
Pandemic	A disease prevalent throughout an entire country, continent, or the whole world.
Poison Fog	An unusual occurrence where toxic or poisonous chemicals are mixed with a fog.
Sinkhole	A hole formed in soluble rock by the action of water, serving to conduct surface water to an underground passage.
Solar Flare	A brief eruption of intense high-energy radiation from the sun's surface, associated with sunspots and causing electromagnetic disturbances on the earth, as with radio frequency communications and power line transmissions.
Storm Surge	An abnormal rise in the level of the sea along a coast caused by the onshore winds of a severe cyclone.
Subsidence	The gradual sinking of landforms to a lower level as a result of earth movements, mining operations, etc.
Tornado	A potentially violent and destructive system of atmospheric circulation, characterized by a long, funnel-shaped cloud extending toward the ground and made visible by condensation and debris: although tornadoes have occurred on all continents except Antarctica, they are most common in the United States.
Toxic Fumes	The release of deadly chemicals or gasses.
Tsunami	An unusually large sea wave produced by a seaquake or undersea volcanic eruption.
Typhoon	A tropical cyclone in the western Pacific Ocean or northern Indian Ocean, having sustained winds of at least 64 knots (74 miles per hour, 33 meters per second): typhoons form in waters with surface temperatures of about 80°F (27°C), intensifying as temperatures rise.
Volcanic Eruption	The ejection of molten rock, steam, etc., as from a volcano or geyser.
Wildfire	Any large fire that spreads rapidly and is hard to extinguish.
Wind Patterns	Unexpected changes in the wind velocity and direction.

## Appendix C

### ACEN Risk Assessment Matrix

Impact		Health & Safety	Environmental Impact	Financial Impact	Reputational Damage	LIKELIHOOD				
						1	2	3	4	5
						Rare	Unlikely	Possible	Likely	Almost Certain
						3% or lower	4% to 20%	21% to 60%	61% to 96%	97% or higher
						Never heard of in the Industry	Heard of in the Industry	Has happened in ACEN; more than once per year in the Industry	Has happened more than once in ACEN	Happens more than once in ACEN every year
5	Significant	Fatality	Massive, lasting damage to the environment	>20% of Target NIAT	Massive Effect, e.g. high level of concern and actions from national government					
4	Major	Permanent Disability	Major, requires significant resource to rehabilitate	10% to 20% of Target NIAT	Major Effect, involvement of national government or NGO					
3	Moderate	Major Injury or Health Effects (e.g. LTI)	Moderate, damage that will require clean up	5% to 10% of Target NIAT	Moderate Effect, Local or regional government concern					
2	Minor	Minor Injury or Health Effects (e.g. MTC, RWC)	Minor, minor damage to environment but no lasting effect	1% to 5% of Target NIAT	Minor Effect, Local public concern					
1	Minimal	Slight Injury or Health Effects (e.g. FAC)	Slight Effect, contained within site	<1% of Target NIAT	Slight Effect, Local public awareness but no concern					

