



Risk Governance & Risk Management Process

Energy Absolute Public Company Limited structured its Compliance structure into the concept of Three Lines of Defense (3LOD) to effectively enhance the communications on risk management and control by clarifying essential roles and duties of relevant employees involved.

1. **The First line Of Defense** : Operational management is operational managers own and manage risks, responsible for maintaining effective internal controls and for executing risk and control procedures on a day-to-day basis. Operational management identifies, assesses, controls, and mitigates risks, guiding the development and implementation of internal policies and procedures and ensuring that activities are consistent with goals and objectives, also is responsible for implementing corrective actions to address process and control deficiencies. Through a cascading responsibility structure, mid-level managers design and implement detailed procedures that serve as controls and supervise execution of those procedures by their employees.
2. **The Second line Of Defense** : Corporate Governance, Risk Management and Compliance Functions hold oversight responsibility and operate independently from the first line of defense, to help build and/or monitor the first line of defense controls to enable the organization to operate efficiently, transparently, and reduce the risk of non-compliance with various requirements. A risk management function that facilitates and monitors the implementation of effective risk management practices by operational management and assists risk owners in defining the target risk exposure and reporting adequate risk-related information throughout the organization. A compliance function to monitor various specific risks such as noncompliance with applicable laws and regulations. These activities are carried out in alignment with the COSO ERM Framework and international best practices. Risk Management and Compliance Functions shall report risk status to the Risk Management Committee on a regular basis. In case of an incident that has significant impact on the Company's operation, the Risk Management Working Group shall immediately report such incident to top executives and Chairman of the Risk Management Committee.
3. **The Third line Of Defense** : Internal Audit Function, which plays a vital role in providing assurance to the Board of Directors and senior management that the internal controls implemented by the first and second lines of defense are appropriate and aligned with the organization's objectives and relevant standards. Internal Audit provides independent assurance on the effectiveness of risk management, compliance and operational processes. It doesn't engage in operational activities or direct risk management but supports the organization through systematic evaluations and improving the effectiveness of internal controls. Internal audit of enterprise risk management process being conducted in every two years. Audit engagements employ with the international audit standard with a variety of tools and techniques, including risk assessments, interviews, data analysis, and testing of process evidence, to evaluate the adequacy and effectiveness of the risk management and internal control system.

The concept of Three Lines of Defense (3LOD)



Roles for each line of defense model, exist at senior management or executive level.

Three Lines of Defense	Dedicated Role/Function	Responsibility
The 1 st Line of Defense	Head of Operational Management of each Process Unit.	Operational management is operational managers own and manage risks, responsible for maintaining effective internal controls and for executing risk and control procedures on a day-to-day basis.
The 2 nd Line of Defense	Head of Risk Management and Compliance Unit, Senior Manager of Risk Management and Compliance	Hold oversight responsibility and operate independently from the first line to help build and/or monitor the controls to enable the organization to operate efficiently and reduce the risk of non-compliance, reporting to Risk Management Committee.
The 3 rd Line of Defense	Head of Internal Audit Unit, Senior Manager/ Manager of Internal Audit	Provide independent assurance on the effectiveness internal control system of risk management process, compliance and operational processes to the Board and senior management.



Risk Management Process in New Product Development Process

The Risk management principles and practices for business and product development have been adopted by the Company. EA applied Risk & Opportunity assessment procedure, ISO-PD-001 to evaluate potential risks in new product development. Prior to any new product is released into the market, the Company has identified potential risks and established essential safety requirements during the new project development process. The risk assessment criteria comprising of likelihood and impact of the risk factors including financial risks, regulatory risks, operational risks of process approach such as material input, man, machine, method and measurement. It also ranks the severity of each risk factor by using the risk assessment matrix to assess the overall risk level and determine appropriate risk control measures and considers inherent risk and residual risk of each risk.

Risk Management Training for Executive and Employee

EA Group encourages our Executive Management to be aware of Governance, Risk Management and Compliance (GRC) which is an Organizational strategy for managing governance, risk management, and compliance with industry and government regulations. We also encourage all non-executive directors to participate in risk training in both inside and outside organization. Meanwhile, risk management culture shall also be fostered constantly among the Board of Directors, executive management, and all Employees.

Corporate Risk Management training is also provided throughout the organization for all employees which included both of Management level and Non-Management level on regular basis to ensure that they are aware of the importance of Risk Management principles.

EA has prioritized strengthening its risk management culture for the year 2025 by developing and implementing a self-learning programs throughout the organization for executive management and all employees. The programs have been designed to be mandatory courses. The satisfying result shows that all participants successfully met the evaluation criteria, achieving a pass rate of at least 80% out of a possible 100%. This reflects our employees' commitment and understanding of the organization's key practices. The programs are cover crucial topics, including;

- Risk Management Principles,
- Anti-Corruption and Bribery,
- Code of Conduct and Code of Ethics,
- Non-Discrimination and Anti-Harassment,
- Diversity and Inclusion and
- IT Security Awareness and PDPA.



Energy Absolute Public Company Limited

89 AIA Capital Center Building, 16th Floor, Ratchadaphisek Road, Dindaeng Sub-District, Dindaeng District, Bangkok 10400

3 หลักสูตร

เพื่อวางรากฐานองค์กรให้ยั่งยืน

ขอเชิญพนักงานประจำทุกท่าน เข้าเรียนรู้และทำแบบทดสอบ

ระยะเวลาในการอบรมแต่ละหลักสูตร 10-40 นาที

The Mandatory courses for executive management and all employees, Year 2025

Risk Management Principles 2025

เป้าหมายเข้าเรียน : 100%
คะแนนผ่านการอบรม : 80%

[บังคับ] การบริหารความเสี่ยงในองค์กร
2568

Learning Participation Target: 100%
Minimum Passing Score: 80%



[บังคับ] การดำเนินงาน
ภายใต้ธรรมาภิบาล 2568



[บังคับ] IT Security Awareness
& PDPA 2568

1. การต่อต้านการทุจริตและคอร์รัปชัน
2. จรรยาบรรณของกลุ่มพลังงานบริษัท Code of Conduct
3. นโยบายการไม่เลือกปฏิบัติและการต่อต้านการล่วงละเมิด
4. นโยบายการส่งเสริมความหลากหลายและยอมรับความแตกต่างของบุคคล

1. ความมั่นคงปลอดภัยด้านไอทีและไซเบอร์
2. พ.ร.บ. คุ้มครองข้อมูลส่วนบุคคล พ.ศ. 2562

หมายเหตุ - พนักงานที่ไม่มีคอมพิวเตอร์ส่วนตัว สามารถใช้คอมพิวเตอร์ส่วนกลางในการเรียนรู้ หรือ ติดต่อ ฝ่ายทรัพยากรบุคคล

สอบถามข้อมูลเพิ่มเติม :

Corporate Governance Principles 2025;

- Anti-Corruption and bribery,
- Code of Conduct and Code of Ethics,
- Non-Discrimination and Anti-Harassment,
- Diversity and Inclusion

IT Security Awareness and PDPA 2025

Risk Management & Guideline

การบริหารความเสี่ยง
และแนวทางจัดการกับความ
เสี่ยงและโอกาส



จัดทำโดยฝ่ายบริหารความเสี่ยง
Energy Absolute PLC

เนื้อหา Content



Why we have to understand Risk Management Principles

ทำไมเราต้องเข้าใจเรื่องการบริหารความเสี่ยง

Definitions of Risks

ความหมายของความเสี่ยงและสิ่งที่เกี่ยวข้อง

Risk Management Principles

การบริหารความเสี่ยง

Risk Assessment

การประเมินความเสี่ยงและโอกาส

Risk Criteria, Impact and Likelihood/ Monitoring and Evaluation

เกณฑ์ประเมินความเสี่ยง/การติดตามและประเมินผล



GRC for Leaders: EA has launched educational session in risk management to Top management through a course called “GRC for leader”. The objective of the course is to strengthen practices of organizational strategy in Governance, Risk Management and Compliance. 27 of top management participated in the course, and each one of them successfully completed the training.



Risk training for non-executive directors: EA extended an opportunity to its non-executives to participate in Risk management program for corporate leader which was conducted by the Institute of Director (IOD). The objective of the training is to enhance participants' knowledge in key risk-related topics, including risk management framework (risk strategy, architecture, protocol) and how to manage risk, opportunity and crises.

08.45 – 09.00	เปิดเข้าห้องอบรมออนไลน์ ผ่านโปรแกรม Zoom		
09.00-12.00	Session 1: Risk Management Framework - เข้าใจถึงความสำคัญของกรอบโครงสร้างการบริหารความเสี่ยงที่คณะกรรมการควรจัดให้มีขึ้น - กลยุทธ์ความเสี่ยง (Risk Strategy) - โครงสร้างความเสี่ยง (Risk Architecture) - หลักการความเสี่ยง (Risk Protocol) <u>วิทยากร</u> ดร.นฤมล สิงห์เสนี	09.00-12.00	Session 2: Managing Opportunities - รับทราบถึงบทบาทของกรรมการในการสร้างความตระหนักให้ฝ่ายบริหารผ่านถึงโอกาสที่อาจเกิดขึ้นกับองค์กร - เข้าใจบทบาทและหลักการในการบริหารความเสี่ยงที่เกิดจากการบริหารโอกาสหรือการดำเนินกลยุทธ์ - สามารถชักถามประเด็นที่สำคัญกับฝ่ายบริหารในประเด็นที่เกี่ยวข้องกับความเสี่ยงจากการบริหารโอกาสหรือดำเนินกลยุทธ์ได้ <u>วิทยากร</u> คุณฐิตาภรณ์ ตู้จินดา
12.00 – 13.30	พักรับประทานอาหารกลางวัน		
13.30-16.30	Session 3: Managing Risks - รับทราบถึงความสำคัญและวิธีที่กรรมการจะสามารถเข้าใจธุรกิจและความเสี่ยงภายในองค์กร - รับทราบประเด็นที่กรรมการควรซักถามฝ่ายบริหารเกี่ยวกับการบริหารจัดการความเสี่ยงภายในองค์กร - เข้าใจหลักและวิธีการในการพิจารณารายงานความเสี่ยงที่ได้รับจากฝ่ายบริหาร <u>วิทยากร</u> คุณวราวุธ ปรีดานนท์	13.30-16.30	Session 4: Managing Crises - เข้าใจถึงลักษณะสำคัญของภาวะวิกฤตในรูปแบบต่างๆ - เข้าใจบทบาทและแนวทางในการบริหารจัดการภาวะวิกฤต (Crisis management framework) - ระยะก่อนเกิดวิกฤต (Before the crisis) - ระยะวิกฤต (During the crisis) - ระยะหลังวิกฤต (After the crisis) <u>วิทยากร</u> ดร.ดวงมณ จีงเสถียรทรัพย์



EA Risk Review Report 2025

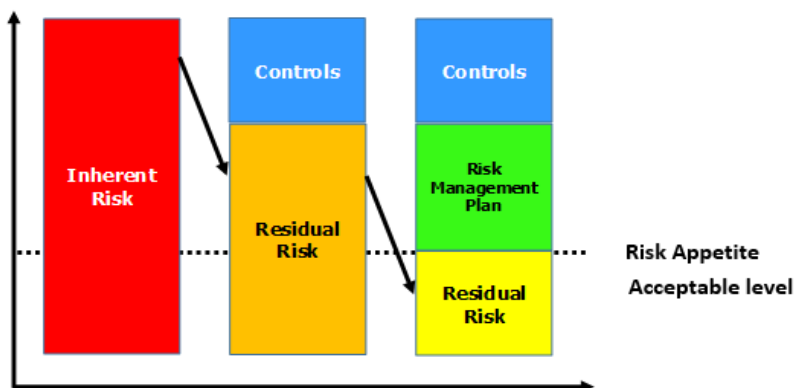
Our Vision: To become a leader in the alternative energy business

EA Risk Management Policy : Energy Absolute Public Company Limited (“the Company”) recognizes the importance of risk management as a part of good corporate governance and a significant foundation to bring the Company toward the achievements of expected objectives. Proper risk identification and management will support good decision making and enable the Company to perceive opportunities and be aware of any possible impacts on its operation.

EA Risk Review Report in the year 2025 is the Company’s risk assessment report. It highlights two main categories of risks by considering likelihood and impact (magnitude), there are Social Risk and Financial Risk. The report also clearly identifies risk descriptions, risk assessment, risk level, risk responses, mitigating actions and responsible persons. In summary, Risk Review Report demonstrates EA’ s commitment to identifying, assessing, and managing risks critical to its business operations. This is achieved through the implementation of various policies, measures, and tools to mitigate risk levels to an acceptable level.

Process to determine the Risk Appetite : The Company defines risk appetite as the level of residual risk it is willing to accept after considering existing control measures. The determination of risk appetite begins with the assessment of inherent risks and existing controls, using the equation: $\text{Residual Risk} = \text{Inherent Risk} - \text{Control Measures}$. The evaluation helps identify whether the current risk level exceeds control effectiveness. The defined risk appetite is reviewed on an annual basis and must be acknowledged by Executive Management as part of the organization’s risk management planning process. Risk Appetite is carried out in alignment with the COSO ERM Framework. Risk Management Functions shall report risk appetite to the Risk Management Committee on a regular basis as the responsible body to determine and review measures and follow-up to prevent risks from being acceptable risk levels.

The diagram shows the relationship between inherent risk, control measures, and residual risk



Reference : EA Risk Management Manual



EA Risk Review Report 2025

Our Vision: To become a leader in the alternative energy business

Risk Assessment Matrix

Risk Assessment Matrix			Likelihood				
			Very Low	Low	Medium	High	Very High
			1	2	3	4	5
Impact	Very High	5	5	10	15	20	25
	High	4	4	8	12	16	20
	Medium	3	3	6	9	12	15
	Low	2	2	4	6	8	10
	Very Low	1	1	2	3	4	5

Reference : EA Risk Management Manual

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

Risk Level	Colour Represent	Risk Description
Very High		- Risk level exceeding the risk level that the organization can accept significantly. - To consider taking actions as first priority to reduce the risk level before starting the process / procedure.
High		- The level of risk that cannot be accepted requires managing the risk to an acceptable level. - Must be controlled and a risk reduction plan must be developed, taking into account appropriateness in terms of budget, technology, personnel, etc.
Medium		- An acceptable level, but there must be vigilance and potential improvements in internal controls for greater efficiency. - Consider monitoring existing measures, and establish additional measures or control methods.
Low – Very Low	 	- Acceptable level, no need to manage the risk. - It is necessary to maintain the level within this group, conduct regular inspections, monitoring, vigilance, and strictly adhere to procedures/work documents to prevent any increase or escalation of risks.

Reference : EA Risk Management Manual



No.	Risks			Risk Assessment						Risk Management			Remark
	Types of Risks	Risk Descriptions	Impact of Risks	Inherent Risk			Residual Risk			Risk Responses	Mitigating Actions	Responsible Persons	
				Likelihood	Impact	Risk level	Likelihood	Impact	Risk level				
1	Social and Environmental Risk	Risks from Operations that Impact to Environment and Compliance with Regulatory Requirements - Pollution which affect nearby Community, including air, water and industrial waste. Risks from disputes with Social/ Communities - The company being sued / complained	The Company's operations that may impact the environment could pose economic risks due to costs related to environmental restoration and negatively affect the organization's image, potentially reducing consumer and business partner confidence. In addition, non-compliance with environmental laws and regulations may result in legal liabilities, financial losses, operational disruptions, and reputational damage, and reduced stakeholder confidence. The group of companies operates projects in various areas surrounded by communities, society, and stakeholders. A dispute with the community can affect the Company in several ways, such as its image and credibility, financial impacts from lawsuits and compensation, and strained relations between the organization and the community. In addition, negative publicity or inaccurate information circulated through digital and social media may adversely affect the Group's reputation and stakeholder confidence.	4	5	20	3	1	3	Treat : Risk Reduction/ Risk Control	<u>ISO 14001</u> The Company places importance on establishing an environmental management system (ISO 14001: 2015) to ensure sustainable business operations in harmony with the community, society, and the environment. The focus is on preventing pollution that affects nearby communities, including air pollution, water pollution, industrial waste, as well as the impacts of climate change and water scarcity. The Company has set up an ISO working group of quality, safety, and environmental management. Set up Guidelines for operation and monitoring of environmental management both inside and outside the factory to ensure that the Company's activities do not harm or destroy the environment and community resources. According to audits by the certifying agency for ISO standards, the Company's operations comply with standards, laws, and relevant management system requirements without negatively impacting the environment and community resources.	ISO Department	
										<u>3R concept (Reuse, Reduce and Recycle)</u> The Company follows the 3R concept: Reduce, Reuse, and Recycle, which helps reduce waste during production, decrease material waste disposal, and lower waste management costs.	Operation Department		
										<u>Installation of solar rooftop</u> the Company has implemented the Solar Rooftop project and reducing electricity consumption within buildings to lower greenhouse gas emissions	Operation Department		
										<u>Creating a community relations</u> It places great importance on creating a community relations to ensure smooth business management and maintain good relationships with the surrounding communities. The Company has designated community relations officers to communicate, coordinate, and address concerns regarding the Company's operations. These officers also participate in community activities, provide a channel for complaints, and have installed a complaint box at the project site. In addition, community relations officers and project staff continue to actively assist and develop the community. The Company ensures timely, transparent, and accurate communication and has established crisis communication guidelines to manage situations that may affect its reputation and stakeholder confidence.	Corporate Social Responsibility Department		



No.	Risks			Risk Assessment						Risk Management			Remark
	Types of Risks	Risk Descriptions	Impact of Risks	Inherent Risk			Residual Risk			Risk Responses	Mitigating Actions	Responsible Persons	
				Likelihood	Impact	Risk level	Likelihood	Impact	Risk level				
2	Financial Risk	The risk of investment value and returns that may not meet expectations - The investment costs influenced by the prices of imported equipment, which may be affected by exchange rate fluctuations, uncertainty in supply and demand, and additional unforeseen costs or expenses beyond initial projections.	The Company may be impacted by rising investment costs, which could lead to lower project returns and a longer payback period. Additionally, if demand and supply do not meet expectations, project revenue may decline, affecting the Company's profitability. Unexpected hidden costs and increased expenses could create financial burdens and impact the company's liquidity. Furthermore, interest rate fluctuations may increase interest expenses, affecting cash flow and overall financial performance.	3	5	15	2	1	2	Treat : Risk Sharing/ Risk Transfer/ Risk Control	<u>Entering in to FX Forward Contracts</u> - The Company has risk management tools for exchange rate risk such as entering in to Foreign Exchange Forward Contracts – FX Forward to mitigate risk of changes in exchange rate to maintain financial stability. <u>Financial instrument as Interest Rate Swap</u> - It also has a policy to manage loan interest rate risk by employing such a financial instrument as Interest Rate Swap Agreements to convert floating interest rates to fixed rates.	Finance Department	
										The Company implements prudent financial and investment risk management by conducting thorough feasibility studies and comprehensive investment appraisals, using appropriate assumptions and sensitivity analysis. In addition, investments are diversified across various projects and business sectors to reduce exposure to volatility from any single project.	Strategy Development&Investment Department		
										Carefully select equipment suppliers and contractors, and closely control project costs.	Procurement Department		
										Regularly monitor project progress and control implementation to reduce cost and schedule risks.	Operation Department		