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Sustainability Management

PRINCIPLE: *PTT Group companies are committed to working in a socially, environmentally, and economically sustainable manner to maintain a license to operate while balancing a diverse range of stakeholders, in order to assure sustainable business growth.*

Expectations

- 4.1 Organizational Governance
- 4.2 Human Rights
- 4.3 People
- 4.4 Security, Safety, Health, and Environment
- 4.5 Fair Operating Practices
- 4.6 Corporate Citizenship
- 4.7 Supply Chain Management
- 4.8 Product Stewardship
- 4.9 Reporting and Reputation
- 4.10 Stakeholder Management

PTT GROUP SUSTAINABILITY MANAGEMENT POLICY

Announcement of PTT Public Company Limited

PTT Group is determined to be a business leader operating in line with the principles of sustainable development and the Sufficiency Economy Philosophy. Through operational excellence, innovation, and transparency, PTT Group is committed to building trust in its stakeholders. The PTT Group Sustainability Management Framework provides the foundation for its group-wide approach and aligns to international standards.

The key attributes of the Policy are as follows:

1. Comply with all applicable laws and regulations in all countries of operations and adhere to international practices and guidelines.
2. Operate in an economically, socially and environmentally sustainable manner whilst balancing the interests of a diverse group of stakeholders to ensure sustainable business growth.
3. Raise awareness of PTT Group Sustainability Management Policy to business partners and customers along with promoting sustainable practices to reduce impacts throughout the value chain.
4. Continuously promote innovation and technological development for the sustainable benefits of environment and society.
5. Adhere to the principles of corporate citizenship and engage in improving community livelihoods by leveraging PTT Group's expertise in energy to promote sustainability for all.
6. Disclose the Policy, management approach and performance as well as become a role model in shaping a culture of sustainable business conduct.

All management and employees of PTT Group are responsible for contributing, driving, and executing the PTT Group Sustainability Management Policy and Framework.

SUSTAINABILITY MANAGEMENT

The PTT Group Sustainability Management Framework (Revision 3) has been developed based on the 2012 PTT Group Sustainability Management Framework, to ensure up-to-date content and alignment with the policies, standards, and international management approaches to which PTT Group adheres. The Framework comprises sustainability issues ("Elements"), scopes of application, management approaches, and performance indicators which PTT Group companies may adopt for use as appropriate.

Application of the PTT Group Sustainability Management Framework is the responsibility of all employees and management within PTT Group. PTT Group Companies and functions are responsible for the development and implementation of plans in accordance with the requirements stipulated herein, in consideration of their respective business risks and opportunities, in order to achieve the established objectives.

Guidance

This Framework adopts language from the International Organization for Standardization (ISO), specifically the terms shall and should, where shall refers to requirements that must be complied with as stated, and should refers to recommendations that may be applied as deemed appropriate.

The PTT Group Sustainability Management Framework consists of 10 Elements, where each Element contains the following components:

- Objective of the Element
- Scope of Application, which identifies examples of risks and opportunities, in addition to relevant management approaches
- Performance indicators
- Implementation Process
- Tools and Procedures

Scope of Application

The PTT Group Sustainability Management Framework is applicable to all PTT-operated businesses (Corporate Functions, Business Units, Operational Sites, and functions under full operational control). This includes, additionally, businesses through which PTT has direct investments, such as businesses with 100% share ownership, Subsidiaries, and Joint Ventures. Partners in businesses that are not directly under PTT operational responsibility, such as associate companies, principal contractors, suppliers, and group companies in which PTT has a substantial involvement, are expected to maintain their own performance standards that align with the PTT Group Sustainability Management Framework.

Table 1 Scope of Application

Organization	Application	Elaboration
PTT-Operated Business and 100% Share Ownership	Mandatory	The Framework is to be applied formally and systematically in accordance with the prescribed requirements.
- Less than 100% share ownership and managed under PTT (Flagship) - Less than 100% share ownership but more than or equal to other investors (Majority)	Adopt	The Framework is to be adopted in alignment with existing management approaches.
Less than 100% share ownership and less than other investors (Minority)	Inform	The Framework is to be acknowledged, and performance to be reported to PTT.

PTT GROUP SUSTAINABILITY MANAGEMENT SYSTEM

The PTT Group Sustainability Management System is a management approach developed and announced for the purpose of managing sustainability issues in the organization, and for supporting the achievement of business objectives in line with its commitments and the PTT Group Sustainability Management Policy. The Sustainability Management System is a tool that enables management, corporate functions, business units, and operational sites and units to integrate sustainability into its daily operations by providing guidelines in issue prioritization, planning processes, implementation, and determining measures to evaluate progress against targets.

The PTT Group Sustainability Management System consists of five steps, as follows:

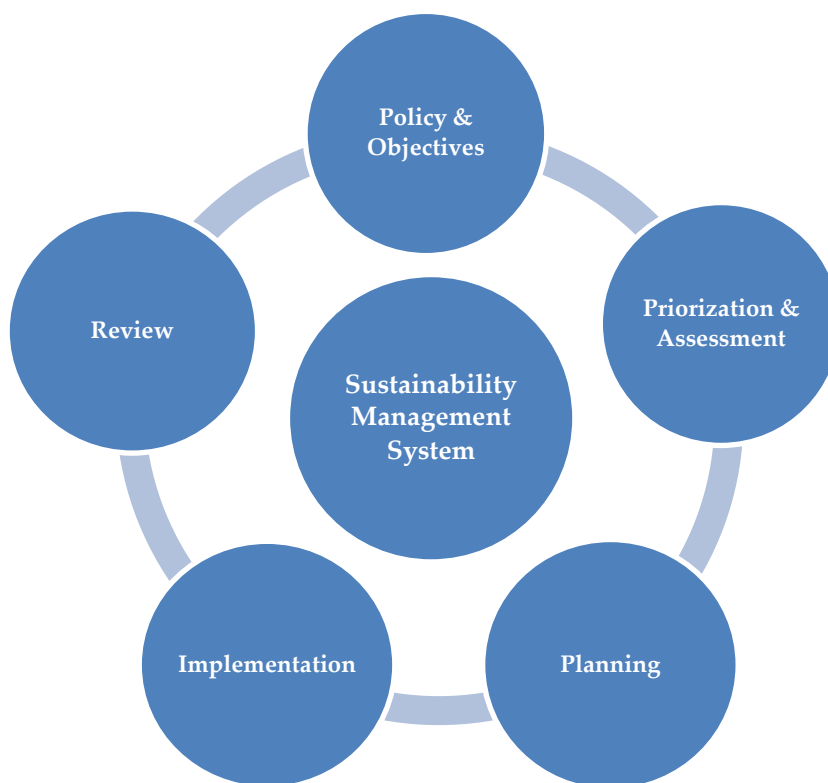


Figure 1 PTT Group Sustainability Management System

Step 1: Policy & Objectives

Management must demonstrate their commitment to sustainability by enacting the PTT Group Sustainability Management Policy and deploying it to Group companies for implementation according to the specified scope of application. Group companies are to use the Policy as an approach in developing strategies, performance measures, and procedures, as well as communicate the Policy to relevant parties. Given this, the Sustainability Management function or designated responsible functions must:

- a) Determine the objectives for sustainability management, by evaluating:
 - Vision, Corporate Strategy, Business Strategy, Policy, Value chain, as well as internal and external factors;
 - Business-related risks and opportunities; and
 - Stakeholder concerns and expectations towards the organization (where stakeholder groups include: Country, Shareholders, Customers, Employees, Partners, and Community and Society).
- b) Communicate the Policy and objectives of sustainability management to management and employees at all levels of the organization.

Step 2: Prioritization & Assessment

The prioritization and assessment of material sustainability issues allows organizations to understand the material economic, social, and environmental issues that may impact the organization's value creation in the short and long terms, or impact stakeholder decision-making in relation to business operations. Therefore:

- a) The sustainability management function or designated functions should collaborate with relevant functions in the organization, such as Strategy, Risk Management, Procurement, Finance, etc., to determine material issues for management, by considering the following factors:
 - Corporate Strategy;
 - Stakeholder expectations and concerns;
 - Performance over the past year against targets and best practices of national and international business leaders;
 - Economic, social, and environmental trends at the national and international levels, including short and long-term business risks and opportunities; and
 - Material issues for the region, country, and industry group.

Following this stage, the materiality assessment should consider impacts to business operations in 2 dimensions:

- Impact to business (risks and opportunities), and
- Interest and impact to internal and external stakeholders.

The assessment criteria used in evaluating the above impacts could be one that is aligned with the Enterprise Risk Management approach, or is developed as appropriate for the business model.

- b) Following the determination of material issues by relevant functions, the Sustainability Management function or designated function must compile and systematically review material issues into an issue register, which can be presented in the form of a matrix as shown below:

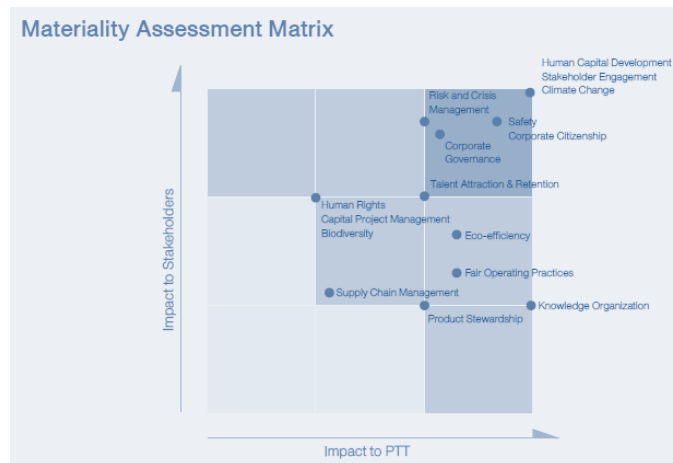


Figure 2 Materiality Assessment Matrix

Step 3: Planning

The planning process is the stage used for determining objectives, targets, success factors, and preparing human capital and organizational resources. Such a process is necessary for the systematic integration of material issue management into daily operations. Therefore:

- a) Relevant functions should review existing policies, management systems, and processes to identify appropriate areas for the integration of material issues into corporate and business strategies, and annual plans. This can be carried out by considering national and international best practices of business leaders in managing material issues, and adopting such practices into existing management systems and processes as relevant. Overall, the plan should specify the following:
 - Clear roles and responsibilities in driving performance
 - Objectives and targets
 - Details of the plan and stages of implementation
 - Targets and key performance indicators
 - Monitoring and control measures
 - Budget and resources
- b) Relevant functions should propose the plan to management for approval, and notify the company's sustainability management or otherwise designated function to evaluate the plan's alignment with the sustainability issues and approaches of other functions, in order to develop a concrete corporate-wide sustainability management plan.
- c) The sustainability management/designated function must propose the corporate sustainability management plan to management and the Board of Directors for their approval and recommendations.

Step 4: Implementation

To ensure the effectiveness of sustainability management, relevant functions must operate according to the determined plan, and identify best practices in the process in order to share knowledge with other functions.

- a) Relevant functions must deploy the strategy, business plan, and operational plans to employees at the function, business unit, and operational site level; continuously improve performance to bring about change in various areas, and must:
- Clarify objectives and expectations related to sustainability management.
 - Increase employee understanding of sustainability issues through continuous knowledge-sharing, communication, and training by collaborating with the sustainability management/designated function.
 - Support regular stakeholder engagement in order to communicate the objectives of the plan, and receive feedback on their expectations, concerns, as well as monitor and resolve issues through dialogues, public participation, meetings, etc.

Step 5: Review

The Performance Review stage is the process of evaluating sustainability management progress and determining improvement opportunities in achieving the set objectives and targets. Self-assessments are to take place annually and by independent third-parties every 3 years, or as appropriate.

- a) The sustainability management function and relevant functions must review and analyze results from implementation of the plan, by:
- Evaluating performance progress against plan, targets, and indicators;
 - Considering risks, business opportunities, and unexpected events that occurred during implementation; and
 - Integrate opinions, concerns, and recommendations from stakeholder engagement as input for plan improvements as appropriate.
- b) The sustainability management function must identify and prioritize improvement opportunities, and work towards short- and long-term improvements, and present findings to:
- Relevant functions and responsible owners for implementation, and
 - Management and the Board of Directors for opinions, recommendations, and any additional improvements opportunities.
- c) The sustainability management/designated function, together with relevant functions, must report performance progress to management according to the timeframe stipulated.
- d) The sustainability management/designated function, together with relevant functions, must compile information to prepare the Annual Report, Sustainability Report, or reports in other formats, to disclose both quantitative and qualitative results against targets.
- e) The sustainability management function should engage an independent third party to verify the data reported for completeness and accuracy.

OBJECTIVE

- Determine approach for management, monitoring and review, improvement, and disclosure of performance on corporate governance.
- Commit to leadership in sustainability management by:
 - Designing a clear sustainability management process, verification process, and responsibilities for the sustainability management system.
 - Fostering a sustainability culture across the organization.
 - Adhering to the Sufficiency Economy Philosophy.

SCOPE OF APPLICATION

Organizational Governance refers to the systematic integration of sustainability principles, practices, values and culture into business processes. This involves planning, control, and decision-making to ensure that objectives are achieved upon the foundation of clear and concrete structures and processes. In this way, Sustainability Management Governance covers Management and Board of Directors' Leadership in driving change, building a corporate-wide sustainability management culture, transparency in operations, and collaboration between the company, public and private sectors, and civil society and communities.

Risks & Opportunities

Risks and opportunities refer to issues that may impact business operations in both the short-term and long-term. Examples of issues that are relevant to Corporate Governance include:

- **Board Responsibility**

The integration of sustainability in governance systems and Board decision-making, where the organization:

- Should encourage Board involvement and responsibility in sustainability management, long-term value creation for stakeholders, and management of business risks and opportunities by considering the organization's material sustainability issues.
- Should monitor performance, encourage Board Meeting attendance, and evaluate performance of the Board of Directors.

- **Leadership Responsibility**

A leader refers to an individual that can determine business direction and strategy, and assumes an important role in deploying sustainability management across the organization by conveying the company's vision, policies, and organizational targets to relevant functions. Therefore, leaders:

- Should build a sustainability culture across the organization by acting as a good and transparent role model, responding to stakeholders' needs in a balanced manner, and consider risks and opportunities in driving the organization towards sustainability.
- Should support capacity development for employees, partners, and suppliers to increase operational efficiency and build their responsibility for sustainability management.
- Should monitor and review sustainability management performance according to the determined timeframe, and provide recommendations in improving policy, management systems, and sustainability management governance processes.

• **Risk Management and Business Continuity Management**

The management of economic, social, and environmental risks, as well as business continuity management, where the organization:

- Must assess risks that may impact the organization in the short-term and long-term, including emerging risks that could materialize within 3-5 years. In this way, the organization should also consider issues that are of importance to stakeholders to prepare appropriate management measures. Such issues could cover:
 - Common issues, which have high frequency in occurrence but are low risk, such as general questions and queries; and
 - Material issues to business operations and PTT Group's reputation (positive and negative reputational impacts), and issues that should be regularly monitored for their potential extreme impact to the organization.
- Must apply the Business Continuity Management approach.
- Should foster a risk management culture within the organization to enhance consciousness amongst all employees and management regarding the importance of and their responsibility for risk management, to be accomplished via different means such as:
 - Risk management training on different risk issues, and
 - Risk management indicators for management, which are tied to monetary compensation.

• **Sustainability Management Culture**

The strengthening of employee awareness and provision of incentives for sustainability management in order to drive the systematic integration of sustainability into management processes. The organization:

- Should establish sustainability performance indicators for management and employees that are tied to monetary compensation.
- Should organize sustainability management training for employees and management at all levels.

• **Transparency**

Transparency refers to transparent, fair, and accountable governance, where the organization:

- Must adhere to laws and ethical standards, and assume social and environmental responsibility in all stages of operations to enhance trust in the organization's practices.
- Should demonstrate transparency in the organization's objectives, decision-making processes, activities, environmental and social impacts, and performance in issues that are of importance to stakeholders.

• Collaboration

Collaboration with the public sector, private sector, and/or civil society and communities in order to drive environmental, social, and governance changes at the national and international levels, where the organization:

- Should support collaboration through the sharing of knowledge, expertise, and experiences; contributions through monetary means, technologies, and innovations, etc., as well as clearly specify the objectives, targets, and success factors for collaboration.
- Should demonstrate thought leadership in society on sustainability management and in areas in which the organization has expertise.

PERFORMANCE INDICATORS

Performance indicators refer to units of measurement which are used to evaluate the success of performance in alignment with the requirements of Element 1. Relevant functions may choose to adopt the following indicators, including but not limited to:

Organizational Governance	
Leading	<ul style="list-style-type: none"> • Number of performance indicators of employees, management, and Board of Directors that are tied to monetary compensation • Percentage of employees receiving sustainability training
Lagging	<ul style="list-style-type: none"> • Annual corporate reputation score • Results of assessment on employee understanding of corporate sustainability management • Percentage of achievement of corporate strategy

IMPLEMENTATION PROCESS

Relevant functions must consider risks and opportunities related to Organizational Governance as specified above, in relation to various other issues that may impact current and future business performance, and integrate the aforementioned risks and opportunities into existing processes in a systematic manner. Relevant functions should further provide supporting evidence to demonstrate compliance to the 4 stages of the implementation process, as follows:

Step 1: Prioritization and Assessment

Approach	Supporting Evidence
1. Conduct an assessment analyzing the risks and opportunities of integrating sustainability management principles, practices, values and culture into the organization, and prioritize sustainability issues in order to develop management plan by considering: <ul style="list-style-type: none"> • Risks and Opportunities (as indicated above) • Vision, Strategy, and Performance targets • Organizational material issues to be managed 	<ul style="list-style-type: none"> • Risk Assessment Process that includes risks and opportunities related to sustainability management governance • List of material issues related to sustainability management governance, such as: <ul style="list-style-type: none"> – Board and Leadership Responsibility – Transparency – Sustainability Management Culture etc.

<ul style="list-style-type: none"> • Economic, social, and environmental trends at the national and international levels, and material issues at the regional and industry group level • Stakeholder engagement results, including stakeholder needs, expectations, and grievances 	
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Step 2: Planning

Approach	Supporting Evidence
<p>1. Develop a strategy to drive sustainability management, by considering material risks and opportunities for the organization, and specify details regarding:</p> <ul style="list-style-type: none"> • Responsible owner for driving sustainability performance • Objectives and targets • Timeline • Budget and resources • Monitoring and control measures • Performance indicators 	<ul style="list-style-type: none"> • Sustainability Management Strategy • Relevant sustainability management process documents • Sustainability performance indicators for: <ul style="list-style-type: none"> - Management, who are responsible for sustainability management in their relevant areas - Employees

Step 3: Implementation

Approach	Supporting Evidence
<p>1. Implement the organization's sustainability management strategy by developing a business plan and operational plan that aligns with the strategy's objectives and targets. Implementation approaches include:</p> <ul style="list-style-type: none"> • Communication of the strategy, business plan, and operational plan to relevant functions • Training and capacity development for employees, management, and/or relevant stakeholders on sustainability management • Supporting collaboration with the public sector, private sector, or civil society and community in their respective sustainability issues 	<ul style="list-style-type: none"> • Performance results according to strategy and plan • Evidence of communication of strategy, business plan, and operational plan to relevant functions • Sustainability training curriculum for management and employees, covering the following content: <ul style="list-style-type: none"> - PTT Group Sustainability Management Policy - PTT Group Sustainability Management Framework - Economic, social, and environmental trends at the national and international levels, as well as regional and industry group trends - Best Practices in Sustainability • Collaboration approaches with the public sector, private sector, or civil society and communities

Step 4: Review

Approach	Supporting Evidence
1. Continuously review and evaluate sustainability management performance by considering progress in implementation of the strategy, business plan, and PTT Group Sustainability Management Framework, as well as evaluate short-term and long-term improvement opportunities.	<ul style="list-style-type: none">• Evidence of monthly/quarterly sustainability performance review with management approval• Recommendations for improvement of the sustainability management process
2. Evaluate performance against the PTT Group Sustainability Management System, national and international sustainability practices, best practices, and designate review into two components: <ul style="list-style-type: none">• Annual self-assessment• Independent third party assessment every 3 years, or as appropriate	<ul style="list-style-type: none">• Self-assessment process and independent third party assessment process• Evidence of assessment or sustainability performance verification on a monthly/quarterly basis• Assessment results and improvement plan
3. Revise policy, management system, and sustainability governance processes to improve effectiveness and overall governance.	<ul style="list-style-type: none">• Plan outlining the review of policies, management systems and processes, with management approval• Evidence of review of policies, management systems and processes, with management approval• Results of the review of policies, management systems and processes, with management approval
4. Prepare a sustainability management summary to report results to management, relevant functions, and stakeholders. Disclose performance to the Board of Directors at minimum on an annual basis, to gather feedback from the Board and integrate recommendations to improve management efficiency and create shared-value among PTT Group.	<ul style="list-style-type: none">• Sustainability management performance summary• Evidence of communication to relevant functions for public disclosure, such as Sustainability Management, Corporate Communications, or Public Relations• Evidence of reporting on sustainability management to stakeholders and management, such as meeting agendas and summaries, sustainability report, etc.
5. Foster knowledge-sharing on sustainability management to enhance PTT Group management excellence.	<ul style="list-style-type: none">• Best Practice shared in the Knowledge Management Portal• Establishment of knowledge-sharing platforms, such as knowledge-sharing forums on sustainability management, etc.

TOOLS AND PROCEDURES

Relevant functions may apply the following tools and procedures for use in their implementation process, including but not limited to:

- PTT Group Sustainability Management Policy
- PTT Group Sustainability Management Framework
- PTT Group Sustainability Management Training Program
- Enterprise Risk Management System

OBJECTIVE

- Determine management approach for the organization's material human rights issues, covering risk assessment, monitoring, review and improvement, and disclosure of human rights performance.
- Encourage practices within PTT Group that respect human rights, cultures, and individual rights granted by the law, covering all stakeholder groups within PTT Group's operational boundary, and in accordance with the following international principles:
 - United Nations Global Compact (UNGC) Principles on Human Rights
 - United Nations Universal Declaration of Human Rights (UNDHR)
 - United Nations Framework and Guiding Principles on Business and Human Rights (Ruggie Framework: Protect, Respect, Remedy)

SCOPE OF APPLICATION

Human Rights refer to the basic rights and freedoms granted to all individuals. The organization should respect and demonstrate awareness of the importance of human rights of all stakeholder groups, and understand salient human rights issues (issues at risk of the most severe negative impacts) that are present in the company's activities and business relationships, across its value chain. The scope of this element covers: risk assessment, human rights management and due diligence, complicity in human rights violations, resettlements, and labour rights, among others.

Risks & Opportunities

Risks and opportunities refer to issues that may impact business operations in both the short-term and long-term. Examples of issues that are relevant to Human Rights include:

• Human Rights Due Diligence

Conducting due diligence to identify the organization's risks and opportunities in human rights, in order to manage human rights risks and impacts in a timely manner. The organization:

- Should assess human rights risks for all activities, products, services, and operations, as well as new projects with human rights issues potentially embedded in them.
- Should work to prevent human rights impacts that may occur from operations, and in the case of violations, the organization should investigate, mitigate, and manage impacts in a transparent manner.
- Should continuously monitor human rights issue management to ensure effectiveness of the process, and report performance results to relevant parties.

- **Labour Rights**

Legal and human rights accorded between employers and employees within the agreed scope of work, such as the right to a safe working environment, the right to unionization, etc. The organization:

- Must respect and promote employees' ability to lay claim the aforementioned rights.

- **Safety and Security**

The fundamental right of stakeholders to a safe and secure working environment and a good quality of life, where the organization:

- Must have security and safety control measures in place for all stakeholder groups, in particular for groups at risk of human rights violations and vulnerable groups, such as women, disabled persons, migrant labourers, etc.

- **Labour Management and Hiring in the Supply Chain**

The process of ensuring that all suppliers partnering with PTT Group in the supply chain respect and adhere to human rights principles. The organization:

- Should collaborate with suppliers in creating awareness of human rights in the supply chain.
- Should integrate human rights principles into suppliers' and contractors' employment contracts, and apply the principles as part of the supply chain management process to ensure transparent and accountable practices.

- **Land Acquisition and Resettlement**

The management of community resettlement in the case of land acquisition, where the organization:

- Must engage with communities in the case of resettlement by providing channels for communities to access information and provide feedback, as well as promote fair compensation to communities.

- **Complicity**

Cases in which the organization's business operations may directly or indirectly be complicit in violating human rights within its supply chain, where the organization:

- Should have good approaches and processes in place to control potential occurrences of complicity in human rights violations.

- **Human Rights Training**

Creating awareness and understanding of respect for human rights for all employees in the organization, in order to protect against human rights violations and complicity, where the organization:

- Should organize human rights training for employees and management, in particular for functions or employees that are at risk of human rights violations, such as security personnel and employees working in operational areas.

- **Grievance Process**

The establishment of channels to receive human rights grievances and protect complainants, where the organization:

- Must have a transparent and systematic grievance management process, covering the stages of receiving complaints, communication to responsible owners, investigation and resolution as appropriate, and results compilation and summary.

PERFORMANCE INDICATORS

Performance indicators refer to units of measurement which are used to evaluate the success of performance in alignment with the requirements of Element 2. Relevant functions may choose to adopt the following indicators, including but not limited to:

Human Rights	
Leading	<ul style="list-style-type: none">• Percentage of activities or operations that have undergone human rights risk assessments• Percentage of activities or operations at risk for human rights, that have risk mitigation plans in place• Percentage of employees or suppliers receiving human rights training• Percentage of contracts which specify requirements/protections against human rights violations
Lagging	<ul style="list-style-type: none">• Number of grievances or cases related to human rights violations where the organization is at fault

IMPLEMENTATION PROCESS

Relevant functions must consider risks and opportunities related to Human Rights as specified above, in relation to various other issues that may impact current and future business performance, and integrate the aforementioned risks and opportunities into existing processes in a systematic manner. Relevant functions should further provide supporting evidence to demonstrate compliance to the 4 stages of the implementation process, as follows:

Step 1: Prioritization and Assessment

Approach	Supporting Evidence
1. Conduct a human rights risk assessment and prioritize risks regarding human rights violations in order to identify the organization's material issues. The assessment is to cover all activities, products, and services that are currently undertaken by the organization and will be carried out in the future, and further identifies opportunities in enhancing the organization's capacity for human rights issue management.	<ul style="list-style-type: none">• Human Rights Risk Assessment Process• List of the organization's material human rights issues, covering all stages of operations from decision-making on investments, pre-operations, during, and post-operations. Issues could cover:<ul style="list-style-type: none">- Labor Rights- Security and safety of stakeholders- Complicity in human rights violations- Land acquisition and resettlements

Step 2: Planning

Approach	Supporting Evidence
1. Develop a human rights action plan that aligns with best practices, the organization's risks and opportunities (as specified above), while adhering to the principles of Protect, Respect, and Remedy. Specify details regarding: <ul style="list-style-type: none">• Responsibilities• Objectives and targets	<ul style="list-style-type: none">• Human rights action plan according to the organization's risks and opportunities• Relevant process documents on human rights issue management, such as the PTT Group Human Rights Guidelines, Human Rights Management in the Supply Chain, and Labor Rights• Human rights performance indicators

<ul style="list-style-type: none"> • Timeline • Budget and resources • Monitoring and control measures • Performance indicators 	
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Step 3: Implementation

Approach	Supporting Evidence
<p>1. Implement the human rights issue management action plan in accordance with the specified objectives and targets. Implementation approaches include:</p> <ul style="list-style-type: none"> • Communication of the action plan to relevant functions • Training for employees, management, and/or relevant stakeholders to enhance understanding and awareness on the importance of respecting human rights, and vulnerable groups at risk of human rights violations • Development of human rights grievance channels 	<ul style="list-style-type: none"> • Performance results according to plan • Evidence of communication of action plan to relevant functions • Human rights training courses for all employees and functions at risk of human rights violations, such as security personnel, suppliers/partners, etc. • Human rights grievance channels

Step 4: Review

Approach	Supporting Evidence
<p>1. Review and evaluate human rights performance to identify short-term and long-term improvement opportunities, and review potential new risks that may have been encountered during business operations and stakeholder engagement processes, such as supplier audits, employee engagement surveys, and grievance reviews.</p>	<ul style="list-style-type: none"> • Evidence of performance review, with management approval • Recommendations for improvement of the human rights issue management process
<p>2. Organize an audit or verification of the human rights issue management system, according to priority of human rights risks.</p>	<ul style="list-style-type: none"> • Audit or verification process of human rights issue management • Evidence of audit or verification process • Results of human rights issue management process audit or verification
<p>3. Prepare a performance summary to disclose to stakeholders and relevant functions, and report results to the sustainability management/designated function to integrate into the</p>	<ul style="list-style-type: none"> • Human rights issue management performance summary • Evidence of communication to relevant functions for public disclosure, such as Sustainability Management, Corporate Communications, or Public Relations

Approach	Supporting Evidence
sustainability management system as input for continuous improvement.	<ul style="list-style-type: none"> Evidence of reporting to stakeholders and management, such as meeting minutes, sustainability report, etc.
4. Promote knowledge-sharing on the human rights issue management process to enhance PTT Group management excellence.	<ul style="list-style-type: none"> Best Practice shared in the Knowledge Management Portal Establishment of knowledge-sharing platforms, such as meetings and knowledge-sharing forums

TOOLS AND PROCEDURES

Relevant functions may apply the following tools and procedures for use in their implementation process, including but not limited to:

- PTT Way of Conduct
- Corporate Governance Ethical Standards and Code of Business Ethics Handbook (CG Handbook)
- PTT Group Human Rights Management System
- PTT Group Human Rights Risk Assessment
- Corporate Human Rights Risk Register

OBJECTIVE

- Determine approach for management, monitoring and review, improvement, and disclosure of performance on human resources management.
- Promote individual capacity development for employees and create a balance between career growth and personal lives, and prepare employees for life post-retirement.
- Treat all employees with fairness, respect diversity in the workforce, and maintain good relations with all.
- Create partnerships within PTT Group to build a knowledge-based society by developing employees at all levels to be good, capable, and professional individuals in the workplace, as well as demonstrate readiness for continuous learning, ultimately increasing the capabilities of PTT Group business operations and creating benefits for stakeholders.

SCOPE OF APPLICATION

Employees are integral in driving the organization towards success, in accordance with its targets, vision, and strategic objectives. Efficient human resources management therefore encompasses long-term talent retention within the organization, talent attraction and engagement-building, and capacity development for all employees.

Risks & Opportunities

Risks and opportunities refer to issues that may impact business operations in both the short-term and long-term. Examples of issues that are relevant to Human Resources Management include:

• Recruitment

The process of recruitment talented and capable employees in a transparent manner, and adhering fairly to relevant labor standards, where the organization:

- Should support diversity in the workforce to create benefits for the business through diverse viewpoints and experiences.
- Should provide equal opportunities to all candidates, and protect against discrimination on the basis of gender, religion, age, ethnicity, social status, political opinions, or education, etc.

• Labour Rights

Legal and human rights accorded between employers and employees within the agreed scope of work, where the organization:

- Must demonstrate equal respect to the labor rights of all employees, covering the following rights:
 - The right to a safe working environment;
 - The right to form and join trade unions;
 - The right to fair compensation and equal pay for equal work, free from all forms of discrimination; and

- The right to rest and leisure, among others.
- Must prohibit the use of forced and child labour across the organization's supply chain.

- **Human Capital Development**

Enhancing the capacity of employees in carrying out their responsibilities, in order to promote career growth and support the organization's achievement of its business objectives. The organization:

- Should invest in activities and human capital development projects; organize trainings that are appropriate for all employees' roles, responsibilities, and individual career growth ambitions.
- Should encourage knowledge-sharing within the organization through various channels, such as best practices sharing through the Knowledge Management Portal, knowledge-sharing events, seminars, and collaboration at work, etc.
- Should foster an innovation culture among employees and provide a process or channel which encourages innovation development in the organization.
- Should evaluate the effectiveness of human capital development projects, by utilizing various approaches and indicators, such as value-based, quantitative, and monetary indicators, in order to demonstrate achievement of objectives and targets, as well as benefits to the organization and employees.

- **Employee Engagement**

The process of responding to employee expectations and maintaining good relations with employees, where the organization:

- Should continuously engage with employees to understand their needs and expectations; create a balance between career growth and personal lives, as well as prepare employees for life post-retirement.
- Should measure employee engagement with the organization on an annual basis; analyze results and integrate recommendations from the survey into continuous improvements for building employee engagement. The organization should further analyze the differences in survey results between groups of employees, or between male and female employees, to better respond to each group's needs more effectively.

- **Talent Attraction and Retention**

Increasing the organization's competitiveness by retaining high-performing employees over the long-term, where the organization:

- Should develop an approach for long-term employee retention (longer than 3 years), that aligns with employee performance, in order to offer incentives and build employees' responsibilities for business, ultimately leading to reduced turnover and good employee relations.

- **Performance Evaluation**

Assessment of employee performance across the organization, where the organization:

- Should apply various mechanisms to evaluate employee performance, such as a two-way performance evaluation between line managers and employees and a performance evaluation system/career path management system, for continuous and appropriate employee development.

• Complaints and Grievances

The provision of channels for employees to independently express their complaints and grievances, where the organization:

- Should communicate with all employees to ensure their understanding of the grievance process, available channels, and rights to express grievances, including the right to fair and anonymous investigation, as well as updates on status of the investigation and transparent disclosure of information, to ensure that employees will not receive negative retaliation against their ability to work and their safety.
- Should record and disclose information related to grievances, namely types of grievances and overall status of investigation – without identifying details of the complainant – and disclose the organization's approaches and mechanisms in preventing reoccurrence of the grievance in order to demonstrate its transparency in human resources management.

PERFORMANCE INDICATORS

Performance indicators refer to units of measurement which are used to evaluate the success of performance in alignment with the requirements of Element 3. Relevant functions may choose to adopt the following indicators, including but not limited to:

People	
Leading	<ul style="list-style-type: none"> • Average number of training hours for employees and management • Investment budget or number of investment projects for human capital development • Number of projects focused on building employee engagement • Number of knowledge assets gained from internal employee knowledge-sharing • Percentage of employees participating in the employee engagement survey • Percentage of female employees in high management positions
Lagging	<ul style="list-style-type: none"> • Monetary benefits from investments in human capital development projects across the organization • Employee Engagement Score • Employee Turnover Rate

IMPLEMENTATION PROCESS

Relevant functions must consider risks and opportunities related to People as specified above, in relation to various other issues that may impact current and future business performance, and integrate the aforementioned risks and opportunities into existing processes in a systematic manner. Relevant functions should further provide supporting evidence to demonstrate compliance to the 4 stages of the implementation process, as follows:

Step 1: Prioritization and Assessment

Approach	Supporting Evidence
1. Conduct an assessment of risks and opportunities to identify material sustainability issues related to human capital, and prioritize issues by considering its impact to business operations and stakeholders.	<ul style="list-style-type: none"> • Risk Assessment Process covering risks and opportunities relevant to human capital • List of the organization's material issues on human capital, such as: <ul style="list-style-type: none"> – Fair talent attraction process which aligns with human rights principles

	<ul style="list-style-type: none"> - Human capital development and creation of a knowledge-based society - Long-term talent attraction and retention (including long-term incentives) - Value-based measurement of human capital development projects
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Step 2: Planning

Approach	Supporting Evidence
1. Develop an action plan to manage the organization's material risks in human capital and develop improvement opportunities. Specify details regarding: <ul style="list-style-type: none"> • Responsibilities • Objectives and targets • Timeline • Budget and resources • Monitoring and control measures • Performance indicators 	<ul style="list-style-type: none"> • Human Resources Action Plan according to the organization's risks and opportunities, including: <ul style="list-style-type: none"> - Preparedness for roles and responsibilities - Human capital development at each employee level, from entry-level to retiring employees - Performance evaluation for employees and management - Preparedness for life post-retirement • Relevant process documents, such as the talent attraction process, human capital development, and value-based project measurement • Human resources performance indicators
2. Develop a process to measure value from human capital development projects across the organization, and analyze benefits in creating added value for the business	<ul style="list-style-type: none"> • Value-based measurement process for human capital development projects

Step 3: Implementation

Approach	Supporting Evidence
1. Implement the human resources management action plan in accordance with the specified objectives and targets. Implementation approaches include: <ul style="list-style-type: none"> • Communication of the action plan to relevant functions • Training for employees, management, and/or relevant stakeholders to enhance understanding of sustainable human resources management 	<ul style="list-style-type: none"> • Performance results according to plan • Evidence of communication of action plan to relevant functions • Training courses for employees and management • Collaboration approaches on human capital development

<ul style="list-style-type: none"> Promote collaboration in human capital development, such as with educational institutions, research institutes, etc. 	
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Step 4: Review

Approach	Supporting Evidence
1. Review and evaluate human resources management performance and identify short-term and long-term improvement opportunities.	<ul style="list-style-type: none"> Evidence of performance review, with management approval Recommendations for improvement of the human resources management process
2. Measure value from human capital development projects – through quantitative and monetary means – to illustrate benefits to the company from human capital development.	<ul style="list-style-type: none"> Business value added generated from human capital development
3. Prepare a performance summary to disclose to stakeholders and relevant functions, and report results to the sustainability management/designated function to integrate into the sustainability management system as input for continuous improvement.	<ul style="list-style-type: none"> Human resources management performance summary Evidence of communication to relevant functions for public disclosure, such as Sustainability Management, Corporate Communications, or Public Relations Evidence of reporting to stakeholders and management, such as meeting agendas and summaries, sustainability report, etc.
4. Promote knowledge-sharing on the human resources management process to enhance PTT Group management excellence.	<ul style="list-style-type: none"> Best Practice shared in the Knowledge Management Portal Establishment of knowledge-sharing platforms in the organization, such as meetings and knowledge-sharing forums

TOOLS AND PROCEDURES

Relevant functions may apply the following tools and procedures for use in their implementation process, including but not limited to:

- PTT Way of Conduct
- PTT Group Knowledge Management System

OBJECTIVE

- Determine approach for risk assessment, management, monitoring and review, improvement, and disclosure of performance on Security, Safety, Health and Environment (SSHE).
- Create partnerships within PTT Group on SSHE management in order to elevate performance, reduce capital costs, and deliver added value.

SCOPE OF APPLICATION

Efficient performance in security, safety, health and environment (SSHE) is an important foundation for operations, as it reduces risks of accidents and environmental impacts in all areas of operations –leading to the safety and security of stakeholders, reduction in negative impacts to business, such as reputation and organizational trust. The scope of the element covers compliance to requirements, laws, and international standards, efficient resources management, resource use reduction, climate change preparedness, integrated water resources management, and biodiversity conservation, etc.

Risks & Opportunities

Risks and opportunities refer to issues that may impact business operations in both the short-term and long-term. Examples of issues that are relevant to SSHE include:

- **Occupational Health and Safety**

Managing occupational health and safety inside and outside the organization, where the organization:

- Must assume responsibility in creating an appropriate and safe working environment and reduce the occurrence of injuries, lost workdays and serious incidents for all personnel in the organization as well as relevant stakeholders, such as suppliers, contractors, and communities surrounding operations.
- Should systematically monitor and collect data related to the occupational health and safety of employees, suppliers, and contractors, to identify business practices or operational areas across its supply chain that contain occupational health and safety risks, and allow for appropriate management and remediation.
- Should instil a safety culture across the organization to create common responsibility for occupational health and safety management.

- **Security**

Maintenance of the security of the organization's property, equipment, and personnel, where the organization:

- Should have in place measures to control and monitor security risks, and efficiently respond to threats and emergencies, in order to reduce the occurrence of damages or business interruptions.

- Should conduct human rights training for security personnel to prevent any cases of human rights violations of all related parties.

- **Environmental, Social, and Health Impact Assessment (ESHIA)**

The assessment of impacts in new project planning, and impacts to the health and safety of communities surrounding operations, where the organization:

- Should conduct ESHIA for all capital projects to ensure preparedness in responding to various impacts that may occur during project construction.
- Should disclose ESHIA results to relevant stakeholders to allow for their access to the information in a timely manner.
- Must provide grievance channels, investigate and resolve all grievances in a transparent, fair, and timely manner.

- **Resources Management**

The efficient use of resources and reduction in the use of resources that impact upon the environment, society, and health. The organization:

- Should specify targets in reducing environmental impacts, covering:
 - Direct and indirect greenhouse gas emissions, as well as air emissions (Nitrous oxides, Sulphur oxides, and Volatile Organic Compounds (VOCs))
 - Energy consumption
 - Waste disposal to landfill
 - Waste and effluents management
- Should enact measures to control oil and chemical spills, and prevent reoccurrence of spills.
- Should aim to use raw materials or equipment that is environmentally-friendly.
- Should promote the use of renewable energy, such as solar energy, hydropower, wind, geothermal, and biodiesel, etc.
- Should carry out environmental investments to generate business benefits and increase operational efficiency.

- **Climate Change**

Adaptation and preparedness for climate change impacts and pressures at the national and international levels, where the organization:

- Should have in place a concrete climate change management approach, clearly specifying responsible functions and owners, and ensure the continued engagement of management.
- Should work towards reducing or controlling climate change risks, covering regulatory, physical, property, and price volatility risks, etc.
- Should seek business opportunities which encourage secure organizational growth in the midst of existing challenges, such as the development of products or services that reduce carbon dioxide emissions.

- **Biodiversity**

The management of biodiversity impacts resulting from PTT Group operations, covering newly developed projects and acquisitions, where the organization:

- Should conduct a biodiversity risk assessment for projects that are in high biodiversity risk areas, and prepare appropriate mitigation plans.
- Should promote collaboration with government agencies and communities surrounding operations in protecting against biodiversity loss and maintaining the

abundance of the surrounding environment and ecosystem, to be achieved through various activities and collaboration approaches.

• **Integrated Water Resources Management**

The efficient management of water resources, where the organization:

- Must be aware of water scarcity risks, impacts from climate change, and changes in regulatory and pricing mechanisms by ensuring that appropriate tools, mechanisms, and management approaches are in place.
- Must engage with stakeholders to mutually manage water resource use and limit the occurrence of conflicts.

PERFORMANCE INDICATORS

Performance indicators refer to units of measurement which are used to evaluate the success of performance in alignment with the requirements of Element 4. Relevant functions may choose to adopt the following indicators, including but not limited to:

Occupational Health, Security, and Safety	
Leading	<ul style="list-style-type: none"> Percentage of employees receiving occupational health and safety training Percentage of contracts with SSHE requirements
Lagging	<ul style="list-style-type: none"> Occupational illness frequency rate (OIFR) Lost workday case (LWC) Absentee rate (AR) resulting from work-related injuries or illnesses Number of fatalities due to work-related accidents
Environmental Resources Management	
Leading	<ul style="list-style-type: none"> Environmental measurement not meeting legal requirements Environmental measurements which demonstrated improvements
Lagging	<ul style="list-style-type: none"> Environmental Return on Investment, including cost reduction and/or revenue generation Number of grievances resulting from non-compliance with SSHE laws or regulations Number of legal cases resulting from non-compliance with SSHE laws or regulations
Environment, Safety, and Health Impact Assessment (ESHIA)	
Leading	<ul style="list-style-type: none"> Number of projects that have undergone environment impact assessments Number of projects that have undergone environment, social, and health impact assessments
Lagging	<ul style="list-style-type: none"> Number of grievances from communities surrounding operations that result from non-compliance with SSHE laws and regulations Fines or penalties resulting from non-compliance with SSHE laws and regulations
Climate Change	
Leading	<ul style="list-style-type: none"> Percentage of investment projects for climate change management Percentage of investment in renewable energy
Lagging	<ul style="list-style-type: none"> Revenue from climate change products and services
Biodiversity	
Leading	<ul style="list-style-type: none"> Percentage of operational sites that have been assessed for biodiversity risks Number of activities and operational sites that are at risk for biodiversity, with risk mitigation plans in place
Lagging	<ul style="list-style-type: none"> Rate of increase or decrease of target/threatened/key species in operational sites or project areas
Integrated Water Resources Management	
Leading	<ul style="list-style-type: none"> Number of projects resulting from community engagement on water resources management
Lagging	<ul style="list-style-type: none"> Number of conflicts with stakeholders related to water resources use

IMPLEMENTATION PROCESS

Relevant functions must consider risks and opportunities related to Security, Safety, Health and Environment as specified above, in relation to various other issues that may impact current and future business performance, and integrate the aforementioned risks and opportunities into existing processes in a systematic manner. Relevant functions should further provide supporting evidence to demonstrate compliance to the 4 stages of the implementation process, as follows:

Step 1: Prioritization and Assessment

Approach	Supporting Evidence
<p>1. Conduct an assessment of risks and opportunities related to SSHE in order to identify and prioritize issues that may impact current and future business operations, covering economic, social, environmental, and individual-level issues, by considering:</p> <ul style="list-style-type: none">• Activities carried out by business units and operational sites; the organization's property, tools, and equipment• Interest and impact to stakeholders• Investments and business expansion <p>Furthermore, identify opportunities to improve SSHE performance in the short-term and long-term.</p>	<ul style="list-style-type: none">• Risk Assessment Process covering risks and opportunities relevant to SSHE, covering all stages of activities and projects• List of the organization's risks and opportunities in SSHE, such as:<ul style="list-style-type: none">– Occupational health, Security, and Safety– Efficient resources management– Integrated water resources management– Biodiversity, etc.

Step 2: Planning

Approach	Supporting Evidence
<p>1. Develop an action plan to manage the organization's material risks and opportunities related to SSHE. Specify details regarding:</p> <ul style="list-style-type: none">• Responsibilities• Objectives and targets• Timeline• Budget and resources• Monitoring and control measures• Performance indicators	<ul style="list-style-type: none">• Action Plan covering the organization's SSHE risks and opportunities• Relevant process documents, such as SSHE management standards• SSHE performance indicators
<p>2. Determine quantitative SSHE performance targets to continuously monitor performance and analyze progress according to plan. Identify improvement opportunities (in line with the Action Plan in Item 1).</p>	<ul style="list-style-type: none">• Short-term and long-term quantitative targets

Step 3: Implementation

Approach	Supporting Evidence
<p>1. Implement the SSHE management action plan in accordance with the specified objectives and targets.</p> <p>Implementation approaches include:</p> <ul style="list-style-type: none">• Communication of the action plan to employees and relevant functions to enhance understanding• Training for employees and relevant responsible functions to encourage familiarity with SSHE policies and management standards• Promote collaboration with PTT Group companies, suppliers, partners and/or contractors in SSHE management, in order to promote responsibility in reducing impacts and increasing operational efficiency	<ul style="list-style-type: none">• Performance results according to plan• Evidence of communication of action plan to relevant functions• Training courses for relevant employees and management• Collaboration approaches with stakeholders, and financial and non-financial benefits received from SSHE management

Step 4: Review

Approach	Supporting Evidence
<p>1. Review and evaluate SSHE management performance and identify short-term and long-term improvement opportunities.</p>	<ul style="list-style-type: none">• Evidence of performance review, with management approval• Recommendations for improvement of the SSHE management process
<p>2. Engage an independent third party in conducting a SSHE performance audit in order to verify the SSHE management system and identify improvement opportunities.</p>	<ul style="list-style-type: none">• Independent assurance process• Evidence of independent assurance• Results of assurance by independent third party
<p>3. Prepare a performance summary of progress against targets to disclose to stakeholders and relevant functions, and report results to the sustainability management/designated function to integrate into the sustainability management system as input for continuous improvement.</p>	<ul style="list-style-type: none">• SSHE management performance summary• Evidence of communication to relevant functions for public disclosure, such as Corporate Communications or Public Relations• Evidence of reporting to stakeholders and management, such as meeting agendas, sustainability report, etc.
<p>4. Organize an independent third party audit and verification of the accuracy and completeness of SSHE performance data.</p>	<ul style="list-style-type: none">• Evidence of assurance and verification by an independent third party.
<p>5. Promote knowledge-sharing on the SSHE management process to enhance PTT Group management excellence.</p>	<ul style="list-style-type: none">• Best Practice shared in the Knowledge Management Portal• Establishment of knowledge-sharing platforms in the organization, such as

Approach	Supporting Evidence
	meetings and knowledge-sharing forums

TOOLS AND PROCEDURES

Relevant functions may apply the following tools and procedures for use in their implementation process, including but not limited to:

- PTT Way of Conduct
- PTT Group Quality, Safety, Health, and Environment (QSHE) Policy
- PTT Group Biodiversity Statement
- PTT Group Biodiversity and Ecosystem Services Management Procedure
- Safety, Health, and Environment Performance Database

OBJECTIVE

- Determine approach for risk assessment, management, monitoring, review, and disclosure of performance on Fair Operating Practices.
- Promote PTT Group business practices that align with international principles in ethics and transparency, as well as laws and regulations, as follows:
 - United Nations Global Compact (UNGC) Principles on Anti-corruption, to combat corruption in all forms, including bribery and extortion.
 - The Extractive Industries Transparency Initiative (EITI), which aims to increase transparency in the disclosure of payments to governments and the responsibility of companies in extractive industries, by requiring the disclosure of fees, concessions, taxes, and other payments to governments in a transparent and accountable manner.

SCOPE OF APPLICATION

Fair and transparent governance is the critical foundation for businesses in building trust among stakeholders regarding its operations, and is linked to organizational reputation. This element therefore encompasses respect for the rule of law in all areas of operations, combatting corruption in all forms, strong internal controls, privacy and conflicts of interest, and whistleblowing and protection of whistle-blowers.

Risks & Opportunities

Risks and opportunities refer to issues that may impact business operations in both the short-term and long-term. Examples of issues that are relevant to Fair Operating Practices include:

• **Respect for the Rule of Law**

Conducting business in adherence to laws and regulations in all areas of operations, where the organization:

- Must operate according to the laws, requirements, and regulations of all regions or countries in which it has business operations or significant investments.
- Must closely monitor changes in legal mechanisms, relevant requirements and regulations to prevent any violations from occurring, and maintain good relations with the region or country in which it conducts business.
- Should internally report all cases of violations of requirements or regulations due to business conduct, including any violations of economic, social, and environmental laws and regulations, to ensure transparency and accountability in operations.

- **Tax Payments**

The accurate payment of taxes in each region or country where the organization has business operations or significant investments, to build trust among the public regarding its conduct, where the organization:

- Should disclose tax payments to stakeholders, covering fees, concessions, and payments to governments, in order to demonstrate its commitment to combatting international tax evasion and to protect the organization's reputation.

- **Anti-corruption & Bribery**

The provision, offer, promise or agreement to provide, accept or request for money, assets or other benefits that are inappropriate for government officers, private officers, or any relevant person in charge either directly or indirectly, in order to do or refrain them from their duty of which deliver or preserve inappropriate business affairs or other business benefits. The organization:

- Must combat corruption and bribery in all forms, including extortion and abuse of power, by enacting policies, management approaches, and control measures to prevent corruption and bribery.
- Should conduct an anti-corruption and bribery risk assessment for its business operations to identify existing risks, and prepare mitigation measures to manage the aforementioned risks.
- Should promote internal and external collaboration to combat corruption and bribery, such as partnerships with the public sector and between PTT Group companies.
- Should instil a culture of fair operating practices for employees, management, suppliers, partners, contractors, and relevant stakeholders by conducting training or communicating on policies, measures, and approaches to combat corruption and bribery – leading to the creation of awareness and accountability across the organization.
- Should follow up and report performance an anti-corruption and bribery case for continuous improvement.

- **Conflict of Interest**

A conflict between the interests of an individual and collective interests, which may impact decision-making or conduct by related parties, leading to corrupt or non-transparent practices, where the organization:

- Must require all personnel to report any cases in which it is suspected that they or their relatives has a conflict of interest with PTT, to ensure that the organization is aware of the risks surrounding corruption and bribery that may arise from conflicts of interest.

- **Internal Controls**

The verification of business conduct in accordance with the Business Code of Conduct and various ethics principles, as a crucial process in preventing corruption. The organization:

- Must have in place an effective internal control system to use in managing risks and promoting organizational transparency.
- Should encourage employees and management at all levels to collaborate in the internal control and audit process.

- **Non-discrimination**

Discrimination refers to the differential treatment of an individual upon the basis of characteristics that are unrelated to the principles of fairness or working requirements, where such differentiating characteristics could include race, skin color, gender, religion, political opinion, ethnicity, and social status. The organization:

- Should combat discrimination in all stages of business operations and create equal opportunities for all.

- **Anti-Monopoly and Anti-Unfair Competition**

The conduct of business on the premise of fair competition in order to promote innovations, efficient performance, and good relations between partners, suppliers, customers, and business allies, where the organization:

- Must oppose business practices that lead to monopolization, the obstruction of competition, consumers, and other business owners, as well as combat against collaboration for the purposes of monopoly or reduction in competition.

- **Political Affiliation**

The conduct of business on the basis of political neutrality, where the organization:

- Should demonstrate its political neutrality, and refrain from supporting or aiding political parties through means such as monetary contributions, in-kind donations, or participation in political activities to gain business advantage.

- **Privacy, Data Security, and Use of Insider Information**

Protection of the organization's assets, including knowledge assets, where the organization:

- Should advocate respect for organizational asset ownership, and work against those seeking personal gain from the use of insider information or by infringing upon rights.

- **Whistleblowing and Protection of Whistle-blowers**

Creating a culture of business transparency and mutual accountability, where the organization:

- Should encourage anonymous whistleblowing, and provide protection to whistle-blowers against any negative impacts to their work or safety.
- Should record and investigate whistleblowing cases in a timely manner and regularly report results to the whistle-blower and related parties until the monitoring and investigation process is complete.
- Should record and disclose information related to whistleblowing (which in this case refers to the types of cases reported and overall status of resolution, without directly specifying details of the informant or whistle-blower), as well as approaches and mechanisms that the organization employs to prevent reoccurrence.

PERFORMANCE INDICATORS

Performance indicators refer to units of measurement which are used to evaluate the success of performance in alignment with the requirements of Element 5. Relevant functions may choose to adopt the following indicators, including but not limited to:

Fair Operating Practices	
Leading	<ul style="list-style-type: none"> Percentage of employees that have signed an acknowledgement of the Corporate Governance, Ethical Standards, and Code of Business Ethics Handbook Percentage of employees receiving training on business ethics Percentage of issues identified through internal audits, whistleblowing, or grievances that have been resolved
Lagging	<ul style="list-style-type: none"> Number of grievances or cases, where it has been proven that the organization was at fault, that resulted from violations of the Code of Business Conduct and Anti-corruption policy

IMPLEMENTATION PROCESS

Relevant functions must consider risks and opportunities related to Fair Operating Practices as specified above, in relation to various other issues that may impact current and future business performance, and integrate the aforementioned risks and opportunities into existing processes in a systematic manner. Relevant functions should further provide supporting evidence to demonstrate compliance to the 4 stages of the implementation process, as follows:

Step 1: Prioritization and Assessment

Approach	Supporting Evidence
1. Conduct a risk assessment covering issues in fair operating practices, and prioritize issues to identify risks from current or future business activities. Consider impacts to the organization and relevant stakeholders, as well as ways in changing risks into opportunities for improving organizational performance.	<ul style="list-style-type: none"> Risk assessment process relating to fair operating practices List of the organization's material risks to fair operating practices, such as: <ul style="list-style-type: none"> Corruption Violations of the Code of Business Conduct Bribery Discrimination

Step 2: Planning

Approach	Supporting Evidence
1. Develop an action plan to manage the organization's material risks in fair operating practices. Specify details regarding: <ul style="list-style-type: none"> Responsibilities Objectives and targets Timeline Budget and resources Monitoring and control measures Performance indicators 	<ul style="list-style-type: none"> Action Plan covering the organization's material issues in fair operating practices Relevant process documents, such as the CG Handbook, Standard of Ethics, etc. Fair operating practices performance indicators

Step 3: Implementation

Approach	Supporting Evidence
1. Implement the action plan on fair operating practices in accordance with the specified objectives and targets. Implementation approaches include:	<ul style="list-style-type: none"> Performance results according to plan Evidence of communication of action plan to relevant functions Training courses for employees and management covering content as:

<ul style="list-style-type: none"> • Communication of the action plan relevant functions • Training for employees and management on the organization's Code of Business Conduct, ethical and legal requirements, and approach to combatting corruption and bribery in all forms • Promote collaboration with the public and private sectors, such as partnerships to combat all forms of corruption and bribery, to ensure transparency, accountability, and trust in business conduct 	<ul style="list-style-type: none"> – PTT Group Anti-Corruption Policy – Corporate Governance, Ethical Standards, and Code of Business Ethics Handbook – Best Practices in fair and transparent business practices at the national and international level • Collaboration approaches with the public and private sectors to promote fair practices
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Step 4: Review

Approach	Supporting Evidence
1. Review and evaluate performance in conducting fair operating practices and identify short-term and long-term improvement opportunities.	<ul style="list-style-type: none"> • Evidence of performance review, with management approval • Recommendations for improvement in conducting fair operating practices, and other relevant issues
2. Engage an independent third party in providing assurance on organizational compliance to fair operating requirements.	<ul style="list-style-type: none"> • Independent assurance process • Evidence of independent assurance, such as assurance plan and list of participants • Results of assurance by independent third party, such as the result itself, or verification of compliance to fair operating principles or the Code of Business Conduct
3. Organize an independent third party audit to verify the accuracy and completeness of data on the payment of fees, concessions, and taxes to government.	<ul style="list-style-type: none"> • Evidence of assurance and verification by an independent third party
4. Prepare a summary of performance regarding fair practices, compliance with the Code of Business Conduct, ethical requirements, and management of the organization's related risks and opportunities in this area. Report results to stakeholders and relevant functions, as well as to the sustainability management/designated function to integrate into the sustainability management system as input for continuous improvement.	<ul style="list-style-type: none"> • Summary of performance in fair operating practices • Evidence of communication to relevant functions for public disclosure, such as Sustainability Management, Corporate Communications, or Public Relations • Evidence of reporting to stakeholders and management, such as announcements, meeting agendas, sustainability report, and reports to anti-corruption networks, etc.
5. Disclose information on fees, concessions, and taxes to governments	<ul style="list-style-type: none"> • Evidence of information disclosure, such as reporting on company's annual

Approach	Supporting Evidence
in each region or country in which the organization has business operations or significant investments.	tax payments via the annual report, sustainability report, or website
6. Promote knowledge-sharing on fair practices to enhance PTT Group management excellence.	<ul style="list-style-type: none"> • Best Practice shared in the Knowledge Management Portal • Establishment of knowledge-sharing platforms in the organization, such as meetings and knowledge-sharing forums

TOOLS AND PROCEDURES

Relevant functions may apply the following tools and procedures for use in their implementation process, including but not limited to:

- PTT Way of Conduct
- Corporate Governance, Ethical Standards, and Code of Business Ethics Handbook (CG Handbook)
- PTT Group Anti-Corruption Policy
- PTT Group Tax Policy

OBJECTIVE

- Determine approach for risk assessment, management, monitoring, review, and disclosure of performance on corporate citizenship.
- Create partnerships between PTT Group and communities in order to elevate qualities of life.
- Demonstrate leadership in publicly advocating for the organization's role in sustainability, based upon PTT Group's areas of expertise.

SCOPE OF APPLICATION

Good corporate citizenship refers to the act of conducting business whilst engaging with communities to elevate their qualities of life and contribute to human development, under to the framework of respect for the rights and freedoms of all, to bring about stakeholder trust and mutual growth. The scope of this element covers community investment, stakeholder collaboration, such as with the public and private sectors, and sustainability leadership.

Risks & Opportunities

Risks and opportunities refer to issues that may impact business operations in both the short-term and long-term. Examples of issues that are relevant to Corporate Citizenship include:

• **Public Advocacy**

Demonstrating leadership in advocating for sustainable development and sustainable business practices in order to stimulate public knowledge and understanding of sustainability issues, where the organization:

- Should advocate support for policies and laws that are related to its business operations.
- Should consider engagements with sustainability organizations in order to continuously improve business practices, such as by:
 - Becoming a member of the World Business Council for Sustainable Development (WBCSD)
 - Aligning its practices with the principles of the United Nations Global Compact (UNGC)
 - Supporting the United Nations Sustainable Development Goals (SDGs)

• **Social Investment and Community Development**

Contribution to the elevation of communities' qualities of life and human development through various means, such as social investments, charitable donations, and commercial initiatives, where the organization:

- Should have in place a clear social investment and community development strategy that aligns with its business approach and material issues, and which is applied across the organization from the corporate level to operations.

- Should primarily focus on community investments and social development in order to create shared value.
- Should have an approach for reviewing and evaluating results of community development activities and projects, including quantitative, qualitative, and value-based indicators, and measure social returns on investment.
- Should encourage employees and management to participate in social and community development through volunteering, planning, and organizing activities, etc.

• **Collaboration**

Collaboration with governmental departments, the private sector, civil society, and communities in relevant community development issues, where the organization:

- Should consider collaboration approaches that align with its social investment and community development strategy, material issues, and business approach, in order to address environmental and social challenges.
- Should clearly indicate objectives, targets, and success factors for collaboration.

• **Public Awareness**

Assuming a role in building public awareness to create a sustainable society, where the organization:

- Should engage with the public to create understanding of sustainability management through meetings, trainings, public communication, etc.

PERFORMANCE INDICATORS

Performance indicators refer to units of measurement which are used to evaluate the success of performance in alignment with the requirements of Element 6. Relevant functions may choose to adopt the following indicators, including but not limited to:

Corporate Citizenship	
Leading	<ul style="list-style-type: none"> • Number of engagements related to the development of guidelines, policies, or laws • Percentage of investments in community development, divided according to community investments, charitable donations, and commercial initiatives • Number of volunteer hours by employees and management participating in community development projects
Lagging	<ul style="list-style-type: none"> • Percentage of community development projects that have been assessed for returns on investment • Annual Corporate Reputation Score • Community Engagement Score

IMPLEMENTATION PROCESS

Relevant functions must consider risks and opportunities related to Corporate Citizenship as specified above, in relation to various other issues that may impact current and future business performance, and integrate the aforementioned risks and opportunities into existing processes in a systematic manner. Relevant functions should further provide supporting evidence to demonstrate compliance to the 4 stages of the implementation process, as follows:

Step 1: Prioritization and Assessment

Approach	Supporting Evidence
<p>1. Identify material risks and opportunities regarding corporate citizenship, and prioritize issues to manage and integrate into the development of an action plan that aligns across all levels of the organization, from the corporate level to operations, by considering:</p> <ul style="list-style-type: none">• Vision and PTT Group's role in community and society• Business Strategy and Sustainability Strategy• Stakeholder engagement results• Issues that may potentially impact organizational trust• Economic, social, and environmental trends at the national and international levels, and material issues at the regional and industry group level	<ul style="list-style-type: none">• Materiality process identifying risks and opportunities in corporate citizenship• List of material issues related to corporate citizenship, such as:<ul style="list-style-type: none">– Social Investment and Community Development– Public and Private Sector Collaboration– Corporate reputation

Step 2: Planning

Approach	Supporting Evidence
<p>1. Develop an action plan to manage risks and develop opportunities related to corporate citizenship. Specify details regarding:</p> <ul style="list-style-type: none">• Responsibilities,• Objectives and targets,• Timeline,• Budget and resources,• Monitoring and control measures,• Performance indicators <p>In order to determine concrete engagement approaches with the public and private sectors, civil society and communities, to allow the organization to effectively and proactively address material issues.</p>	<ul style="list-style-type: none">• Corporate citizenship action plan covering the organization's material risks and opportunities• Relevant process documents on corporate citizenship, such as:<ul style="list-style-type: none">– Community and social development plan– Public sector communication and engagement plan, in order to maintain independence and transparency• Social and community development indicators
<p>2. Develop a process to measure value from community and social development projects, and analyze benefits in creating added-value for society and business.</p>	<ul style="list-style-type: none">• Value-based measurement process for community and social development projects
<p>3. Develop a public communications strategy to create public awareness of the organization's leadership in sustainability management.</p>	<ul style="list-style-type: none">• Public communication to enhance community awareness of sustainability

Step 3: Implementation

Approach	Supporting Evidence
<p>1. Implement the corporate citizenship action plan in accordance with the specified objectives and targets.</p> <p>Implementation approaches include:</p> <ul style="list-style-type: none">• Communication of the action plan to relevant functions• Training for relevant employees to promote understanding regarding the roles, expectations, and capabilities of the communities with which the organization engages	<ul style="list-style-type: none">• Performance results according to plan• Evidence of communication of action plan to relevant functions• Training courses for employees at the corporate and operational site level, covering content as:<ul style="list-style-type: none">– Value-based measurement of community development projects– Public communication approaches

Step 4: Review

Approach	Supporting Evidence
<p>1. Review and evaluate corporate citizenship performance from both the perspective of the organization and community, and identify short-term and long-term improvement opportunities.</p>	<ul style="list-style-type: none">• Evidence of performance review, with management approval• Recommendations for improvement in corporate citizenship• Corporate Reputation Survey
<p>2. Undertake the valuation of community and social development projects in order to demonstrate benefits to the organization and communities.</p>	<ul style="list-style-type: none">• Business value-added, generated from community and social development projects
<p>3. Prepare a performance summary indicating progress on the action plan to disclose to stakeholders and relevant functions, and report results to the sustainability management designated function to integrate into the sustainability management system as input for continuous improvement.</p>	<ul style="list-style-type: none">• Corporate citizenship performance summary• Evidence of communication to relevant functions for public disclosure, such as Sustainability Management, Corporate Communications, or Public Relations• Evidence of reporting to stakeholders and management, such as meeting minutes, announcements, sustainability reports, etc.
<p>4. Promote knowledge-sharing on the corporate citizenship working process to enhance PTT Group management excellence.</p>	<ul style="list-style-type: none">• Best Practice shared in the Knowledge Management Portal• Establishment of knowledge-sharing platforms in the organization, such as meetings and knowledge-sharing forums.

TOOLS AND PROCEDURES

Relevant functions may apply the following tools and procedures for use in their implementation process, including but not limited to:

- PTT Way of Conduct
- Community Development and Community Relations Manual

- PTT Group Community Development Framework (Education, Community and Society Development, Natural Resources and Environment)
- PTT Group Communications Strategy

OBJECTIVE

- Determine approach for risk assessment, management, monitoring, review, and disclosure of performance on supply chain management.
- Manage risks to reduce economic, social, and environmental impacts that may emerge from external procurement or from business partners carrying out product development, services, and business processes on behalf of PTT Group, where such impacts include supply chain interruption, delays, and risks to PTT Group's reputation, etc.
- Create partnerships in PTT Group on supply chain management in order to build competitive advantage and synergy in reducing capital costs and generating added-value.

SCOPE OF APPLICATION

Supply Chain Management refers to the management of economic, social, and environmental impacts in the production process, service delivery, and procurement through means as risk management, good corporate governance, supplier collaboration, and continuous capacity development for employees and suppliers. Consideration of the aforementioned factors will reduce the risks of business interruption resulting from unexpected events, create long-term benefits for the organization and suppliers, and further promote stakeholder trust in the organization's good practices.

Risks & Opportunities

Risks and opportunities refer to issues that may impact business operations in both the short-term and long-term. Examples of issues that are relevant to Supply Chain Management include:

• Risk Management

The management of economic, social, and environmental risks in the organization's supply chain and processes of business partners acting on behalf of PTT Group, in order to maintain business continuity and reduce impacts to its image and reputation. The organization:

- Should conduct a spend analysis of the supply chain in order to specify the risk levels of each supplier group, including critical suppliers.
- Should conduct a sustainability risk assessment of the supply chain, covering economic, social, and environmental risks, to identify suppliers or activities that are high-risk and that need to be managed within an acceptable risk level.
- Should conduct regular supplier performance audits to remain aware of supplier operational efficiency, challenges, and improvement opportunities, to ensure supplier conduct complies with requirements of the organization.
- Should review risk issues at least once a year, and consider new risks that may potentially emerge and impact business operations.

- **Business Ethics and Transparency**

Conducting business under the framework of good governance, transparency, and fairness, where the organization:

- Must strictly adhere to laws and ethical standards, and operate according to human rights principles in all stages of operations, including supplier and contractor conduct, and further provide knowledge to suppliers and contractors about relevant human rights approaches.
- Should apply the PTT Group Suppliers Sustainable Code of Conduct to ensure that suppliers/business partners acting on behalf of PTT Group in product development activities, services, and business processes, will adhere to ethical principles.

- **Supply Chain Collaboration**

Collaboration in the supply chain to create business value, such as cost reduction or revenue generation, where the organization:

- Should encourage partnerships with PTT Group companies and/or partner and supplier groups to manage supply chain risks and seek new opportunities for value creation in business.
- Should encourage collaboration with the public sector and civil society in managing sustainability issues in the supply chain.

- **Supplier Capacity Development**

Increasing capabilities for relevant employees, suppliers, and partners on sustainable business practices to reduce supply chain risks and promote efficient partnerships, where the organization:

- Should integrate sustainability issues into supplier practices, such as integrating sustainability factors into supplier selection criteria, specifying sustainability requirements in contracts, and supplier sustainability training.
- Should organize trainings for procurement staff to promote understanding of sustainable supply chain management, the application of best practices, and creation of incentives for sustainability, such as sustainability performance indicators for employees.

PERFORMANCE INDICATORS

Performance indicators refer to units of measurement which are used to evaluate the success of performance in alignment with the requirements of Element 7. Relevant functions may choose to adopt the following indicators, including but not limited to:

Supply Chain Management	
Leading	<ul style="list-style-type: none">• Percentage of functions/business units that have carried out supply chain risk assessments• Percentage of procurement staff receiving training on sustainable procurement processes• Percentage of suppliers that have signed an acknowledgement of the PTT Sustainable Suppliers Code of Conduct• Percentage of suppliers that have been assessed on sustainability performance• Percentage of suppliers receiving sustainability training
Lagging	<ul style="list-style-type: none">• Number of violations of the PTT Sustainable Suppliers Code of Conduct and supplier environmental, social, and governance (ESG) requirements• Supplier satisfaction score resulting from collaboration with the organization• Number of projects or additional business value generated from collaboration in the supply chain, including among PTT Group companies, and with partners and suppliers

Supply Chain Management

- Number of cases of business interruptions or serious incidents resulting from supply chain management

IMPLEMENTATION PROCESS

Relevant functions must consider risks and opportunities related to Supply Chain Management as specified above, in relation to various other issues that may impact current and future business performance, and integrate the aforementioned risks and opportunities into existing processes in a systematic manner. Relevant functions should further provide supporting evidence to demonstrate compliance to the 4 stages of the implementation process, as follows:

Step 1: Prioritization and Assessment

Approach	Supporting Evidence
1. Conduct an assessment and prioritization of risks and opportunities in supply chain management, in order to specify issues to be managed. The assessment should cover: <ul style="list-style-type: none">• Spend Analysis• Supplier Risk Level• Critical Suppliers• Activities and services that are currently carried out and will be carried out by the organization in the future, such as the procurement of goods and services between PTT Group suppliers	<ul style="list-style-type: none">• Supply chain risk and opportunity assessment process• List of supplier groups by risk level• Total supply chain spending• List of risks and opportunities in supply chain management, such as:<ul style="list-style-type: none">- Ethics and transparency in operations- Collaboration with suppliers- Capacity building for suppliers

Step 2: Planning

Approach	Supporting Evidence
1. Develop a supply chain management action plan covering the organization's material risks and opportunities. Specify details regarding: <ul style="list-style-type: none">• Responsibilities• Objectives and targets• Timeline• Budget and resources• Monitoring and control measures• Performance indicators	<ul style="list-style-type: none">• Action Plan covering the organization's material risks and opportunities in supply chain management• Relevant process documents, such as a Sustainable Procurement Procedure, Supplier Audit Process, etc.• Performance indicators for supply chain management

Step 3: Implementation

Approach	Supporting Evidence
<p>1. Implement the supply chain management action plan in accordance with the specified objectives and targets. Implementation approaches include:</p> <ul style="list-style-type: none">• Communication of the action plan to relevant functions• Training and capacity building for employees, management, and relevant stakeholders, such as suppliers and contractors, to enhance understanding of sustainable supply chain management, and to use that knowledge in decision-making processes and efficient management• Promote collaboration with PTT Group and stakeholders in efficient supply chain management and create added value for business	<ul style="list-style-type: none">• Performance results according to plan• Evidence of communication of action plan to relevant functions• Training courses for relevant employees and functions, covering content as:<ul style="list-style-type: none">– PTT Group Sustainable Procurement and Supplier Management Policy– PTT Group Suppliers Sustainable Code of Conduct– Relevant laws– Best Practices in supply chain management• Supply chain collaboration with PTT Group and stakeholders

Step 4: Review

Approach	Supporting Evidence
<p>1. Review and evaluate supply chain management performance to identify short-term and long-term improvement opportunities, as well as new risks that may have been encountered through business operations or supplier engagement channels, such as supplier audits.</p>	<ul style="list-style-type: none">• Evidence of performance review, with management approval• Recommendations for improvement of the supply chain management process and supplier collaboration
<p>2. Conduct a supplier sustainability performance audit to understand suppliers' compliance to the PTT Group Sustainability Management System and their ability to contribute to mutual value creation through collaboration with the organization.</p>	<ul style="list-style-type: none">• Supplier audit process• Evidence of audit process, such as:<ul style="list-style-type: none">– Supplier audit plan– List of participants• Results of audit or sustainability performance assurance by an independent third party
<p>3. Prepare a supply chain management performance summary to disclose to stakeholders and relevant functions, and report results to the sustainability management designated function to integrate into the sustainability management system as input for continuous improvement.</p>	<ul style="list-style-type: none">• Supply chain performance summary• Evidence of communication to relevant functions for public disclosure, such as Sustainability Management, Corporate Communications, or Public Relations• Evidence of reporting to stakeholders and management, such as summary from the Annual Supplier Relationship

Approach	Supporting Evidence
	Management Seminar (SRM), sustainability report, etc.
4. Promote knowledge-sharing on supply chain management to enhance PTT Group management excellence.	<ul style="list-style-type: none"> • Best Practice shared in the Knowledge Management Portal • Establishment of knowledge-sharing platforms in the organization, such as meetings and knowledge-sharing forums

TOOLS AND PROCEDURES

Relevant functions may apply the following tools and procedures for use in their implementation process, including but not limited to:

- PTT Group Sustainable Procurement and Supplier Management Policy
- PTT Group Suppliers Sustainable Code of Conduct

OBJECTIVE

- Determine approach for risk assessment, management, monitoring, review, and disclosure of performance on product stewardship.
- Create partnerships in PTT Group in the development of products that benefit society and the environment, customers, and generate economic value added.

SCOPE OF APPLICATION

Product stewardship refers to the research and development of products and services that integrates considerations of health, social, and environmental impacts throughout a product's life cycle, while at the same time remaining conscious of customers' expectations and the commitment to creating benefits for society, the environment, and organization. Product stewardship therefore encompasses compliance to laws and relevant standards, life cycle assessment, promoting research and development (R&D) of social and environmental innovations, product labelling, as well as customer relations management.

Risks & Opportunities

Risks and opportunities refer to issues that may impact business operations in both the short-term and long-term. Examples of issues that are relevant to Product Stewardship include:

- **Compliance**

Acting in compliance to relevant laws, standards, and requirements related to products and services, where the organization:

- Must regularly monitor changes to legal mechanisms and regulations related to product development, such as product labelling and reduction in the use of hazardous chemicals, to ensure legal compliance.
- Should monitor performance and record data in cases where products and services are in violation of product labelling regulations, or health, safety, social and environmental standards, to effectively rectify and prevent such violations from occurring.

- **Innovation**

Promoting research and development for product, service, and process innovations to create social and environmental benefits, where the organization:

- Should encourage investments in product and service research and development that are environmentally-friendly, such as biodegradable plastic.
- Should promote the use of renewable energy in production processes.
- Should work to increase revenue from environmentally-friendly products.

- **Life Cycle Assessment (LCA)**

The process of analysing and evaluating the impact of a product on health, the environment, and society across its life cycle, from the stages of raw material extraction, manufacturing, logistics and distribution, product use, processing, to disposal and waste management, where the organization:

- Should integrate LCA results in the development of quality, socially and environmentally-friendly products and services, as well as manage risks that may occur across the product's life cycle, reduce costs, and develop business opportunities.

- **Product Labelling**

The certification of products and services according to national and international standards to demonstrate the organization's commitment to reducing social and environmental impacts across the product's life cycle, where the organization:

- Should present accurate and complete information on products and services in a transparent manner, by communicating with customers to enhance their understanding on:
 - Principles used in developing products and services
 - Product life cycle, as well as its sustainability characteristics
 - Proper use of the product and safety considerations
 - Product collection and transport
 - Disposal of product, its packaging, and appropriate methods of reuse

- **Customer Relations**

The engagement and building of good relations with customers, where the organization:

- Should systematically receive feedback and grievances, and work towards responding to grievances in a timely manner.
- Should integrate customer expectations as input into the planning process for product and service research and development
- Should maintain relations with existing customers, and create opportunities in seeking new customers in the market through regular engagement and evaluation of customer satisfaction.
- Should analyze short-term and long-term stakeholder needs, as well as market trends and trends in economic, social, and environmental aspects at the national and international level, to use as input in developing future products and services and foster organizational growth.

PERFORMANCE INDICATORS

Performance indicators refer to units of measurement which are used to evaluate the success of performance in alignment with the requirements of Element 8. Relevant functions may choose to adopt the following indicators, including but not limited to:

Product Stewardship	
Leading	<ul style="list-style-type: none"> • Percentage of products and services that have undergone lifecycle assessments • Percentage of products and services that are certified for sustainability • Number of repeated grievances related to the organization's products and services, resulting from the same issue • Number of patents and petty patents • Number of environmental product and service innovations

Product Stewardship

Lagging	<ul style="list-style-type: none">• Customer Satisfaction Score• Number of violations of laws or regulations related to product labeling, or health, safety, social, and environmental standards, throughout a product's life cycle• Revenue from environmentally-friendly products and services
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IMPLEMENTATION PROCESS

Relevant functions must consider risks and opportunities related to Product Stewardship as specified above, in relation to various other issues that may impact current and future business performance, and integrate the aforementioned risks and opportunities into existing processes in a systematic manner. Relevant functions should further provide supporting evidence to demonstrate compliance to the 4 stages of the implementation process, as follows:

Step 1: Prioritization and Assessment

Approach	Supporting Evidence
1. Conduct an assessment of risks and opportunities in developing PTT Group products and services, in order to identify and prioritize material issues for management, by considering: <ul style="list-style-type: none">• Product and Service Research and Development (R&D) process• Impacts of products and services to the environment, society, health and safety• Stakeholder opinions and recommendations, such as customers and service users• Changes in relevant laws, requirements, and regulations	<ul style="list-style-type: none">• Risk Assessment Process covering risks and opportunities relevant to product stewardship• List of the organization's material issues related to product stewardship, such as:<ul style="list-style-type: none">– Innovation, and Product R&D– Life Cycle Assessment (LCA)– Product labeling– Customer relations

Step 2: Planning

Approach	Supporting Evidence
1. Develop an action plan in the research and development of product and service excellence by applying principles and approaches that are socially and environmentally-friendly. Integrate stakeholders' needs as input into the planning process in order to concretely respond to their expectations. The plan should specify details regarding: <ul style="list-style-type: none">• Responsibilities• Objectives and targets• Timeline• Budget and resources• Monitoring and control measures	<ul style="list-style-type: none">• Product and service R&D process• Action plan covering material issues in product and service R&D, such as:<ul style="list-style-type: none">– Product and service life cycle assessment (LCA)– Innovation– Product labeling– Risks and opportunities from changes in laws and regulations• Relevant process documents related to management of product stewardship, such as Product/Service R&D Process, Product Life Cycle Assessment (LCA), Customer Feedback Procedure, etc.

<ul style="list-style-type: none"> • Performance indicators 	<ul style="list-style-type: none"> • Product stewardship performance indicators
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Step 3: Implementation

Approach	Supporting Evidence
<p>1. Implement the product stewardship action plan in accordance with the specified objectives and targets. Implementation approaches include:</p> <ul style="list-style-type: none"> • Communication of the action plan to relevant functions • Communication with customers and service users about products and services • Training and capacity development for employees and management that assume responsibilities in research and development of products and services • Promote collaboration between PTT Group companies and the private sector in delivering products through to commercialization 	<ul style="list-style-type: none"> • Performance results according to plan • Evidence of communication of action plan to relevant functions • Training courses for relevant employees and management, covering content as: <ul style="list-style-type: none"> – Strategic direction in product stewardship – Principles in developing socially and environmentally-friendly products and services – Customer relationship management and grievance processes – Best Practices in product stewardship • Evidence of customer communication, such as communication on safety information, advertisements, and product labeling, etc.

Step 4: Review

Approach	Supporting Evidence
<p>1. Review and evaluate product stewardship performance and identify short-term and long-term improvement opportunities.</p>	<ul style="list-style-type: none"> • Evidence of performance review, with management approval • Recommendations for improvement of the product stewardship process
<p>2. Evaluate customer satisfaction related to PTT Group's products and services, to use as input in the continued improvement of the product development process.</p>	<ul style="list-style-type: none"> • Customer Satisfaction Survey Process • Evidence of customer satisfaction, such as survey plan, or customer satisfaction target • Customer satisfaction score
<p>3. Prepare a product stewardship performance summary to disclose to stakeholders and relevant functions, and evaluate alignment with:</p> <ul style="list-style-type: none"> • Organization's sustainability strategy • Target for development of products to commercialization <p>Furthermore, report results to the sustainability management/designated function to integrate into the sustainability management system as input for continuous improvement.</p>	<ul style="list-style-type: none"> • Product stewardship performance summary • Evidence of communication to relevant functions for public disclosure, such as Sustainability Management, Corporate Communications, or Public Relations • Evidence of reporting to stakeholders and management, such as meeting agendas and minutes, sustainability report, etc.

Approach	Supporting Evidence
4. Promote knowledge-sharing on the product stewardship process to enhance PTT Group management excellence.	<ul style="list-style-type: none"> • Best Practice shared in the Knowledge Management Portal • Establishment of knowledge-sharing platforms in the organization, such as meetings and knowledge-sharing forums

TOOLS AND PROCEDURES

Relevant functions may apply the following tools and procedures for use in their implementation process, including but not limited to:

- PTT Group Quality, Safety, Health, and Environment (QSHE) Policy
- PTT Group Self-Declaration Green for Life Label

OBJECTIVE

- Determine management approach, monitor and review, improve, and disclose organization's sustainability performance.
- Disclose organizational performance in economic, social, and environmental dimensions in a transparent, accurate, and complete manner, by determining content according to relevant sustainability reporting approaches

SCOPE OF APPLICATION

Reporting on sustainability performance demonstrates the organization's commitment to disclosing its economic, social, environmental, and governance performance to internal and external stakeholders. Aside from creating trust in the organization, reporting is a critical process in reviewing performance and identifying opportunities for continuous improvement. The element covers: reporting approaches (national and international) and report quality assurance.

Risks & Opportunities

Risks and opportunities refer to issues that may impact business operations in both the short-term and long-term. Examples of issues that are relevant to Reporting and Reputation include:

• Sustainability Reporting Approach

The development of a sustainability report in order to disclose organizational performance in the environment, social, and governance dimensions, and demonstrate commitments in sustainability management. The organization:

- Should develop a sustainability report in alignment with laws and relevant national and international reporting approaches, such as:
 - Stock Exchange of Thailand (SET) Reporting Guideline
 - Global Reporting Initiative (GRI)
 - Integrated Reporting Framework (IR)
 - Communication on Progress to the United Nations Global Compact (UNGC)
 - The International Petroleum Industry Environmental Conservation Association (IPIECA) Oil and Gas Industry Guidance on Voluntary Sustainability Reporting
- Should integrate various global sustainability trends into the reporting process, such as:
 - The Sustainable Development Goals (SDGs), and
 - Reporting on material issues identified by the Sustainability Accounting Standards Board (SASB).

- Should engage an independent third party in verifying the accuracy of information disclosed, to foster continuous improvement and efficiency of the data collection process, to ensure the full scope of coverage of business operations.

• **Reputation and Communication**

Enhancement of organizational reputation amongst the public and communication on various issues, where the organization:

- Should develop a strategy for reputation building and public communication, including advertisements, providing information for news sources, marketing, and activities to promote corporate reputation.

PERFORMANCE INDICATORS

Performance indicators refer to units of measurement which are used to evaluate the success of performance in alignment with the requirements of Element 9. Relevant functions may choose to adopt the following indicators, including but not limited to:

Reporting and Reputation	
Leading	<ul style="list-style-type: none"> • Number of indicators as required by law that are disclosed to stakeholders • Number of indicators reported according to material issues • Results of verification on the accuracy and completeness of information disclosed in the sustainability report, by an independent third party
Lagging	<ul style="list-style-type: none"> • Results of stakeholder survey on sustainability report • Alignment of the sustainability report to relevant guidelines • Annual corporate reputation score

IMPLEMENTATION PROCESS

Relevant functions must consider risks and opportunities related to Reporting and Reputation as specified above, in relation to various other issues that may impact current and future business performance, and integrate the aforementioned risks and opportunities into existing processes in a systematic manner. Relevant functions should further provide supporting evidence to demonstrate compliance to the 4 stages of the implementation process, as follows:

Step 1: Prioritization and Assessment

Approach	Supporting Evidence
<p>1. Compile the organization's material issues from relevant functions, business units, and operational sites, for use in determining content and scope of the sustainability report. Prioritize compiled issues by considering:</p> <ul style="list-style-type: none"> • Opportunities and impact to the organization • Interest and impact to stakeholders <p>Following the prioritization, results may be presented in matrix form.</p>	<ul style="list-style-type: none"> • Issue compilation and prioritization process • List of the organization's material issues for reporting

Step 2: Planning

Approach	Supporting Evidence
<ol style="list-style-type: none">1. Develop a sustainability reporting action plan, specifying details regarding:<ul style="list-style-type: none">• Responsibilities for the reporting process• Objectives and targets for reporting• Scope of the information to be disclosed• Timeline of performance for disclosure, and timeframe for data collection• Budget and resources• Monitoring and control measures• Performance indicators	<ul style="list-style-type: none">• Sustainability Reporting action plan• Relevant reporting process documents, such as the materiality and issue prioritization process• Reporting performance indicators

Step 3: Implementation

Approach	Supporting Evidence
<ol style="list-style-type: none">1. Implement the reporting action plan in accordance with the specified objectives and targets. Implementation approaches include:<ul style="list-style-type: none">• Communication of the objectives and targets for reporting to relevant functions• Training for relevant functions to create understanding on the reporting process, and national and international reporting approaches• Promote collaboration among PTT Group companies in publicly disclosing information – demonstrating leadership in transparent business practices	<ul style="list-style-type: none">• Performance results according to plan• Evidence of communication of action plan to relevant functions• Training courses for relevant employees and functions, covering content as:<ul style="list-style-type: none">– Sustainability reporting procedure– Relevant sustainability reporting approaches– The importance of continued performance reporting for stakeholders

Step 4: Review

Approach	Supporting Evidence
<ol style="list-style-type: none">1. Review and evaluate the reporting process and identify short-term and long-term improvement opportunities, such as preparing reports according to new reporting frameworks.	<ul style="list-style-type: none">• Evidence of performance review, with management approval• Recommendations for improvement of the reporting process according to feedback from management, stakeholders, and relevant reporting principles
<ol style="list-style-type: none">2. Engage an independent third party in conducting assurance of the sustainability report to determine	<ul style="list-style-type: none">• Independent assurance process• Evidence of assurance by an independent third party, such as:

Approach	Supporting Evidence
<p>compliance with relevant reporting approaches, covering:</p> <ul style="list-style-type: none"> • Data collection process • Scope of performance data • Balance of information reported, including both positive and negative performance • Comparability • Accuracy • Timeliness • Clarity and Reliability 	<ul style="list-style-type: none"> – Assurance plan – Assurance statement • Results of assurance by independent third party, and gaps for improvement
<p>3. Prepare a reporting performance summary to disclose to stakeholders and relevant functions, and report results to the sustainability management/designated function to integrate into the sustainability management system as input for continuous improvement.</p>	<ul style="list-style-type: none"> • Reporting performance summary • Results of gap closure action plans and improvements as identified by the independent assurance process
<p>4. Promote knowledge-sharing on the reporting process to enhance PTT Group management excellence.</p>	<ul style="list-style-type: none"> • Best Practice shared in the Knowledge Management Portal • Establishment of knowledge-sharing platforms in the organization, such as meetings and knowledge-sharing sessions on the sustainability reporting process

TOOLS AND PROCEDURES

Relevant functions may apply the following tools and procedures for use in their implementation process, including but not limited to:

- Sustainability Reporting Procedure

OBJECTIVE

- Determine management approach, monitor and review, improve, and disclose performance on stakeholder engagement.
- Analyze and develop understanding of stakeholder issues and concerns in order to ensure efficient stakeholder management.
- Create a framework for dialogue on issues that can deliver mutual benefits with stakeholders and the organization.
- Create stakeholder trust and acceptance.

SCOPE OF APPLICATION

Stakeholder refers to an individual or a group of individuals both inside and outside the organization that may receive direct and indirect impacts from business operations across PTT Group's supply chain. Efficient stakeholder engagement should support the organization in thoroughly responding to stakeholders needs, as well as reduce reputational risks and chances of business interruption. The element encompasses stakeholder risk management, collaboration, transparency, and grievance processes.

Risks & Opportunities

Risks and opportunities refer to issues that may impact business operations in both the short-term and long-term. Examples of issues that are relevant to Stakeholder Management include:

• Collaboration and Stakeholder Engagement

Engagement with stakeholders in the public and private sectors, civil society and communities, to drive social, environmental and governance change, where the organization:

- Should demonstrate leadership in fair, transparent, and accountable stakeholder engagement by indicating clear objectives, targets, and success factors of collaboration for all parties.
- Should receive feedback from stakeholders and regularly conduct an assessment of stakeholder engagement towards the organization.
- Should apply lessons learned from stakeholder engagement in improving stakeholder engagement approaches in a systematic manner, such as through the Knowledge Management Portal.

• Complaints and Grievances

The provision of channels for stakeholders to express grievances and complaints independently, where the organization:

- Must have in place an efficient grievance process, covering all stages from receiving grievances, recording and communication to relevant parties, investigation and

monitoring, grievance resolution, and root-cause analysis and processes to prevent grievance reoccurrence.

- Must investigate and resolve complaints fairly. Keep the secret of the complainant and report the status of operations to the relevant parties over a specified period of time.
- Should record and disclose the information of complaints only specific types and overall status includes the guidelines and mechanisms used by the organization to address and resolved the complaint.

• Transparency

Fair and transparent stakeholder engagement, where the organization:

- Should disclose its important stakeholders, engagement approaches for each group, frequency of engagements, as well as important issues for each group and approaches for response.

PERFORMANCE INDICATORS

Performance indicators refer to units of measurement which are used to evaluate the success of performance in alignment with the requirements of Element 10. Relevant functions may choose to adopt the following indicators, including but not limited to:

Stakeholder Management	
Leading	<ul style="list-style-type: none"> • Percentage of employees receiving training on stakeholder engagement, as relevant • Stakeholder database, covering a stakeholder name list, stakeholder needs and expectations, issues of importance, and relevant risks
Lagging	<ul style="list-style-type: none"> • Percentage of grievances resolved within the designated timeframe • Number of repeated grievances resulting from the same issue • Annual corporate reputation score

IMPLEMENTATION PROCESS

Relevant functions must consider risks and opportunities related to Stakeholder Management as specified above, in relation to various other issues that may impact current and future business performance, and integrate the aforementioned risks and opportunities into existing processes in a systematic manner. Relevant functions should further provide supporting evidence to demonstrate compliance to the 4 stages of the implementation process, as follows:

Step 1: Prioritization and Assessment

Approach	Supporting Evidence
1. Identify and prioritize the organization's stakeholders based on the following considerations: <ul style="list-style-type: none"> • Current and future stakeholder groups • Direct and indirect impacts to stakeholders resulting from business operations, products, and services • Interest and influence of stakeholders to the organization's 	<ul style="list-style-type: none"> • List of the organization's stakeholders, including impacts of operations to stakeholders • List of important issues for stakeholders, covering: <ul style="list-style-type: none"> – Common issues – Material issues to PTT Group's business operations and reputation

operations, as well as important issues for stakeholders	<ul style="list-style-type: none"> – Issues with potential extreme impact to the organization, that must be monitored – Sustainability issues covering economic, social, and environmental dimensions
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Step 2: Planning

Approach	Supporting Evidence
1. Develop a corporate stakeholder action plan covering the organization's material risks and opportunities. Specify details regarding: <ul style="list-style-type: none"> • Responsibilities for stakeholder management • Objectives and targets • Timeline • Budget and resources • Monitoring and control measures • Performance indicators 	<ul style="list-style-type: none"> • Stakeholder management action plan covering the organization's material risks and opportunities • Relevant process documents on stakeholder management, such as stakeholder management approach, grievance management process, and public communication process • Performance indicators for stakeholder management
2. Develop a stakeholder management plan specific for each stakeholder group, or for material issues, by considering the following factors: <ul style="list-style-type: none"> • Importance of the stakeholder group with which the organization will be engaging, as well as risk issues and concerns of the group • Impact of business operations to the aforementioned stakeholder group, and level of impact tolerance • Employee capabilities in engaging with the stakeholder group, such as the role of stakeholders in each operational area, and understanding of their concerns and expectations, etc. 	<ul style="list-style-type: none"> • Stakeholder Management Plan divided by group or risk level
3. Develop a systematic stakeholder grievance process, covering the following components: <ul style="list-style-type: none"> • Grievance channel • Record and communication of grievance to relevant party • Investigation and monitoring of the grievance • Resolution • Protection against grievance reoccurrence 	<ul style="list-style-type: none"> • Grievance management process • List of types of grievance issues and status of resolution

Step 3: Implementation

Approach	Supporting Evidence
<p>1. Implement the stakeholder action plan in accordance with the specified objectives and targets. Implementation approaches include:</p> <ul style="list-style-type: none">• Communication of the action plan to relevant functions• Application of the Enterprise Risk Management System and PTT Group Business Continuity Management System in managing issues and stakeholders according to the level of risk for each group, to maintain risks within an acceptable level• Training for employees, business units, and employees in operational areas that assume responsibilities in stakeholder engagement	<ul style="list-style-type: none">• Performance results according to plan• Evidence of communication of action plan to relevant functions• Risk management plan covering stakeholder risks and related issues• Business continuity management plan covering emergency preparedness training• Training courses for employees and management

Step 4: Review

Approach	Supporting Evidence
<p>1. Review and evaluate performance in stakeholder management to identify short-term and long-term improvement opportunities, as well as new risks that may have been encountered during engagement activities.</p>	<ul style="list-style-type: none">• Evidence of performance review, with management approval• Recommendations for improvement of the stakeholder engagement process
<p>2. Prepare a performance summary to disclose to stakeholders and relevant functions, and report results to the sustainability management/designated function to integrate into the sustainability management system as input for continuous improvement.</p>	<ul style="list-style-type: none">• Results from stakeholder management, including lessons learned and best practices in stakeholder engagement• Summary of grievance management:<ul style="list-style-type: none">– Number of grievances received– Status of resolution• Evidence of communication to relevant functions for public disclosure, such as Sustainability Management, Corporate Communications, or Public Relations• Evidence of reporting to stakeholders and management, such as announcements, meeting agendas and minutes, sustainability report, website, etc.
<p>3. Promote knowledge-sharing on the stakeholder management process to enhance PTT Group management excellence.</p>	<ul style="list-style-type: none">• Best Practice shared in the Knowledge Management Portal• Establishment of knowledge-sharing platforms in the organization, such as meetings and knowledge-sharing forums

TOOLS AND PROCEDURES

Relevant functions may apply the following tools and procedures for use in their implementation process, including but not limited to:

- Corporate Governance, Ethical Standards, and Code of Business Ethics Handbook (CG Handbook)
- Community Development and Community Relations Manual
- Ordering & Customer Relations Center: ORC 1365

APPENDICES

A. Performance indicators for 10 Elements

B. Alignment with Practices and Standards (National & International)

C. Terms & Definitions

D. Tools & Procedures

Element 1 Organizational Governance

Element 2 Human Rights

Element 3 People

Element 4 Security, Safety, Health, and Environment (SSHE)

Element 5 Fair Operating Practices

Element 6 Corporate Citizenship

Element 7 Supply Chain Management

Element 8 Product Stewardship

Element 9 Reporting and Reputation

Element 10 Stakeholder Management

E. PTT Group Human Rights Management System

A. PERFORMANCE INDICATORS FOR 10 ELEMENTS

Responsible functions may apply the following indicators in evaluating their performance in the Sustainability Management Element of the PTT Group Operational Excellence Management System (OEMS), as follows:

KPI code	Type of KPI	KPI name	KPI description	Reporting level	Reporting frequency
SM- 1	Lagging	% of achievement of corporate strategy	An indicator of organizational governance sub-element, as measured by the percentage of achievement of corporate strategy	PTT Corporate and PTT Group companies	Annually
SM- 2	Lagging	# No.of grievances or cases related to human rights violations where the organization is at fault	An indicator of human rights sub-element, as measured by the number of grievances or cases related to human rights violations where the organization is at fault	PTT Corporate and PTT Group companies	Annually
SM- 3	Lagging	Employee Engagement Score	An indicator of people sub-element, as measured by the Employee Engagement Score	PTT Corporate and PTT Group companies	Annually
SM- 4	Lagging	#No.of grievances and legal cases resulting from non-compliance with SSHE laws or regulations	An indicator of SSHE sub-element, as measured by the number of grievances and legal cases resulting from non-compliance with SSHE laws or regulations	PTT Corporate and PTT Group companies	Annually
SM- 5	Lagging	#No.of grievances or cases, where it has been proven that the organization was at fault, that resulted from violations of the Code of Business Conduct and Anti-corruption policy	An indicator of fair operating practices sub-element, as measured by the number of grievances or cases, where it has been proven that the organization was at fault, that resulted from violations of the Code of Business Conduct and Anti-corruption policy	PTT Corporate and PTT Group companies	Annually
SM- 6	Lagging	% of community development projects that have been assessed for returns on investment	An indicator of corporate citizenship sub-element, as measured by the percentage of community development projects that have been assessed for returns on investment	PTT Corporate and PTT Group companies	Annually
SM - 7	Lagging	# of violations of the PTT Sustainable Suppliers Code of Conduct and supplier environmental, social, and governance (ESG) requirements	An indicator of supply chain management sub-element, as measured by the number of violations of the PTT Sustainable Suppliers Code of Conduct and supplier environmental, social, and governance (ESG) requirements	PTT Corporate and PTT Group companies	Annually
SM - 8	Lagging	Customer Satisfaction Score	An indicator of product stewardship sub-element, as measured by the Customer Satisfaction Score	PTT Corporate and PTT Group companies	Annually
SM - 9	Lagging	Annual Corporate Reputation Score	An indicator of reporting and reputation sub-element, as measured by the Annual Corporate Reputation Score	PTT Corporate and PTT Group companies	Annually
SM - 10	Lagging	%of grievances resolved within the designated timeframe	An indicator of stakeholder management sub-element, as measured by the percentage of grievances resolved within the designated timeframe	PTT Corporate and PTT Group companies	Annually

B.ALIGNMENT WITH PRACTICES AND STANDARDS (NATIONAL & INTERNATIONAL)

Element		1	2	3	4	5	6	7	8	9	10
Principles & Frameworks	United Nations Global Compact (UNGC) Advanced Level	◆	◆	◆	◆	◆	◆	◆			◆
	United Nations Universal Declaration of Human Rights (UNUDHR)		◆	◆							
	Guiding Principles on Business and Human Rights (Ruggie Framework)		◆	◆				◆			
	Voluntary Principles on Security and Human Rights	◆	◆		◆						◆
	Extractive Industries Transparency Initiatives (EITI)					◆				◆	
	The Global Goals for Sustainable Development (SDGs)	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆
	World Business Council for Sustainable Development (WBCSD)	◆		◆	◆						
	International Financial Cooperation (IFC) Environmental and Social Performance Standards		◆	◆	◆			◆			◆
	CDP - Climate Change and Water	◆			◆		◆			◆	◆
Management Standards	ISO 26000:2010		◆	◆	◆	◆	◆		◆		◆
	ISO 9001:2008								◆		
	ISO 14001:2004				◆						
	OHSAS 18001:2007			◆	◆						
	ISO 50001					◆					
	TLS 8001:2553	◆		◆	◆			◆			
Programs	Sufficiency Economy	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆
	Thailand Quality Award (TQA)	◆		◆	◆	◆		◆	◆		◆

Element		1	2	3	4	5	6	7	8	9	10
Ranking Agencies	Dow Jones Sustainability Indices (DJSI)	◆		◆	◆	◆		◆		◆	◆
	FTSE4Good ESG	◆	◆	◆	◆	◆		◆	◆		
	EcoVadis	◆	◆	◆	◆			◆			
	SET Awards	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆
Reporting & Disclosure	Global Reporting Initiative (GRI)	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆
	Integrated Reporting (IR)	◆								◆	◆
	Sustainability Accounting Standards Board (SASB)	◆		◆	◆	◆	◆	◆	◆		◆
	IPIECA Oil & Gas Industry Guidance on Voluntary Sustainability Reporting		◆	◆	◆	◆	◆		◆		◆

C. TERMS & DEFINITIONS

Term	Definition
CDP Climate Change & CDP Water	A disclosure system for corporate performance related to climate change and water consumption. https://www.cdp.net/en/climate and https://www.cdp.net/en/water
Dow Jones Sustainability Indices (DJSI)	The Dow Jones Sustainability Indices is a series of indices assessing the sustainability performance, covering economic, environmental and social aspects, of world-leading listed companies. This set of indices is accepted by investors around the world. http://www.sustainability-index.com/
EcoVadis	An international assessment methodology used to rate the supply chain sustainability performance of both suppliers and companies. http://www.ecovadis.com/
Extractive Industries Transparency Initiative (EITI)	An international initiative to promote transparency, fair operation, accountability and good governance in the extractive industry. It further includes the principle and practice of anti-competition, anti-monopoly, and anti-corruption. https://eiti.org/
FTSE4 Good ESG	Sustainability indices of FTSE Group, which are used for evaluating corporate sustainability performance covering environmental, social and economic aspects. http://www.ftse.com/products/indices/f4g-esg-ratings
Global Goals for Sustainable Development (Sustainable Development Goals: SDGs)	The 17 sustainability goals launched by the United Nations and endorsed by 193 countries around the world.
Global Reporting Initiative (GRI)	An international institution whose mission is to develop guidelines for voluntary sustainability reporting to help organizations report on their economic, environmental and social performance.
International Financial Cooperation (IFC) Environmental and Social Performance Standards	A management standard developed by the International Financial Cooperation that helps organizations in managing their environmental and social risks.
Integrated Reporting (IR) Framework	A framework for integrated reporting covering financial and sustainability performance. http://integratedreporting.org/resource/international-ir-framework/
International Petroleum Industry Environmental Conservation Association (IPIECA)	A global oil and gas industry association whose mission is to collaborate with oil and gas companies around the world in managing environmental and social issues. http://www.ipieca.org/
ISO 9001:2008	Quality Management System Standard
ISO 14001:2004	Environmental Management System Standard
ISO 26000:2010	Guideline on social responsibility
ISO 50001	A standard and framework of energy management for industries, businesses and organizations. The purpose of this standard is to reduce global energy consumption by 60 percent.

TLS 8001:2553	A Thai Labor Standard on social responsibility in Thai business developed as a regulation of labor practices concerning benefits, working hours, and work safety.
OHSAS 18001:2007	International Occupational Health and Safety Management System
Sustainability Accounting Standards Board (SASB)	A non-profit organization whose mission is to develop and disseminate sustainability accounting standards for 79 industries in 10 sectors, including health care, technology and communication, renewable resources and alternative energy, transportation, non-renewable resources, infrastructure, services, resource transformation, financials and consumption.
Thailand Quality Award (TQA)	A national quality award representing corporate governance excellence.
United Nations Global Compact (UNGC)	A global agreement, launched by the United Nations, on good corporate governance, human rights, labor rights, environment and anti-corruption. http://www.unglobalcompact.org/
UN Guiding Principles on Business and Human Rights (Ruggie Framework)	The United Nations 'Protect, Respect and Remedy' framework focusing on human rights and salient human rights issues for all stakeholders.
United Nations Universal Declaration of Human Rights (UNUDHR)	The global human rights declaration is a common standard of fundamental human rights, including discrimination, security, privacy protection, justice and fairness, working condition and education
Voluntary Principles on Security and Human Rights	The principles on security and human rights developed based on the agreement between governments, private sector, NGOs and extractive industries to provide guidance to companies on minimizing risk of human rights abuses in surrounding communities.
World Business Council for Sustainable Development (WBCSD)	Organization of transnational corporations who advocate for cooperation between business and government to further the sustainability agenda.

D. TOOLS & PROCEDURES

Tools & Procedures		Steps				User	
		Prioritization & Assessment	Planning	Implementation	Review	Corporate	Operation
1 Organizational Governance	PTT Group Sustainability Management Policy	◆	◆			◆	◆
	PTT Group Sustainability Management Framework	◆	◆		◆	◆	
	PTT Group Sustainability Management Training Program		◆			◆	◆
	PTT Enterprise Risk Management Manual	◆	◆	◆	◆	◆	◆
2 Human Rights	PTT Way of Conduct	◆	◆			◆	◆
	Corporate Governance Ethical Standards and Code of Business Ethics Handbook	◆	◆			◆	◆
	Human Rights Management Process	◆		◆	◆	◆	
	PTT Group Human Rights Risk Assessment	◆	◆			◆	
	Corporate Human Rights Risk Register	◆	◆			◆	◆
3 People	PTT Way of Conduct	◆	◆			◆	◆
	PTT Group Knowledge Management Portal		◆		◆	◆	◆
4 Security, Safety, Health & Environment	PTT Way of Conduct	◆	◆			◆	◆
	PTT Group Quality, Safety, Health, and Environment (QSHE) Policy	◆	◆			◆	◆
	PTT Group Biodiversity Statement	◆	◆			◆	◆
	PTT Group Biodiversity and Ecosystem Services Management Manual	◆	◆	◆		◆	◆
	Safety, Health, and Environment (SHE) Performance Database	◆	◆		◆	◆	

Tools & Procedures		Steps				User	
		Prioritization & Assessment	Planning	Implementation	Review	Corporate	Operation
5 Fair Operating Practices	PTT Way of Conduct	◆	◆			◆	◆
	Corporate Governance Ethical Standards and Code of Business Ethics Handbook	◆	◆			◆	◆
	PTT Group Anti-Corruption Policy	◆	◆			◆	◆
	PTT Group Tax Policy	◆	◆			◆	◆
6 Corporate Citizenship	PTT Way of Conduct	◆				◆	
	Community Development and Community Relations Manual		◆	◆		◆	◆
	PTT Group Community Development Framework (Education, Community and Society Development, Natural Resources and Environment)	◆	◆			◆	
	PTT Group Communications Strategy	◆	◆			◆	
7 Supply Chain	PTT Group Sustainable Procurement and Supplier Management Policy	◆				◆	
	PTT Suppliers Sustainable Code of Conduct		◆	◆		◆	
8 Product	PTT Group QSHE Policy				◆	◆	
	PTT Group Self.Certified Green for Life Label			◆	◆	◆	
9 Reporting	Sustainability Reporting Procedure	◆	◆			◆	

Tools & Procedures		Steps				User	
		Prioritization & Assessment	Planning	Implementation	Review	Corporate	Operation
10 Stakeholder Management	Corporate Governance Ethical Standards and Code of Business Ethics Handbook	◆	◆			◆	◆
	Community Development and Community Relations Manual	◆	◆			◆	◆
	Ordering & Customer Relations Center: ORC 1365		◆	◆		◆	
	Enterprise Risk Management System		◆	◆		◆	

E. PTT Group Human Rights Management System

SECTION 1 OVERVIEW AND SUMMARY

PTT Group is committed to sustainable management by endorsing Sustainability Management Policy and Sustainability Management Framework. This, in effect, will lead to effective implementation.

PTT Group Sustainability Management Project develops Human Rights Management System to serve as a guideline for PTT Group for Human Rights management.

PURPOSE OF THIS GUIDELINE

- Set an overarching approach for human rights issues management relevant to PTT Group business; and
- Assist PTT Group functions in implementing the required procedures.

SCOPE OF THIS GUIDELINE

- The HRMS applies to all activities of PTT Group with potential human rights impacts, including early developmental stages such as mergers and acquisitions throughout the entire life cycle of project.
- The HRMS applies to all PTT Group operating projects globally.
- This HRMS is only an internal approach for PTT Group for managing human rights risks associated with PTT Group's owned and influenced activities and is to be overruled by local and international laws, regulations, standards which the company is committed to.

As PTT Group conducts business in a complex global marketplace, HRMS cannot address every situation that might arise on the job. However, PTT Group is committed to conduct business in accordance with good governance, business ethics, transparency and accountability. In situations where local customs or practices conflict with international standards, PTT Group must engage meaningfully with communities about the mismatch between local practices and international human rights standards to resolve the situation in order to achieve sustainable development goal.

Context for this guideline

- The company needs to develop a systematic approach for assessing and addressing human rights risks, mitigating impacts and monitoring and reporting performance. The systematic approach or tools to support the management of human rights issues includes;
- External drivers (e.g. voluntary commitments and legal requirements).
- Governance structure and roles and responsibilities of involved functions for human rights management.
- Management system and assurance process (i.e. human rights risk identification and assessment, human rights compliance assurance, and performance monitoring and reporting).

OVERVIEW OF HUMAN RIGHTS MANAGEMENT SYSTEM

PTT Human Rights Management System is shown in Figure 1.

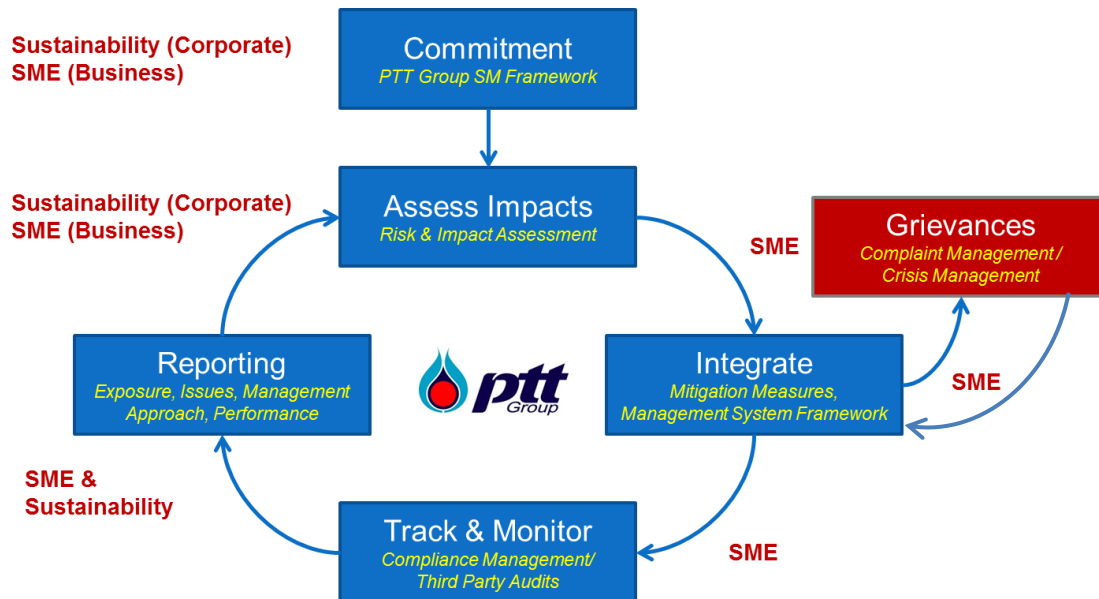


Figure 1 Overview of PTT Group Human Rights Management System

PTT Group defines its commitment in sustainability management through its Sustainability Policy and Sustainability Management Framework. To ensure the successful compliance with the policy and framework, a human rights management system has been developed to govern the direction of human rights related practice within PTT Group according to element 2 (human rights) and element 3 (people) under PTT Group Sustainability Management Framework. The human rights management system consists of 5 key activities:

1. **Assess Impacts:** human rights risks and impacts are identified and assessed in both national and industrial level. This includes assessment in the areas of operations and level of personnel.
2. **Integrate:** after impact assessment, ensure mitigation measures for identified human rights risks are implemented through the sustainability management framework, OHS management system, handbook for community engagement.
3. **Grievances:** grievance mechanism is in place for stakeholders to address complaint or report cases of human rights violation efficiently. Those reporting complaints should be under protection. Grievance mechanism can be the existing one or public participation process.
4. **Track and Monitor:** follow-up on the implementation of management approach and mitigation measures
5. **Report:** regularly report and publicly disclose management approach and performance to public and stakeholders.

SECTION 2 EXTERNAL STAKEHOLDERS AND VOLUNTARY COMMITMENTS

EXTERNAL STAKEHOLDERS AND VOLUNTARY COMMITMENTS

The concept of 'human rights' was first enshrined in law through the Universal Declaration of Human Rights (UDHR) after the end of World War II, aiming to abolish violations of human rights. Since then, organizations try to address human rights through a variety of contexts such as fair corporate governance, labor practice, equal opportunity, and protection of the rights of minorities. While majority of human rights related initiatives are related to social aspects, current human rights issues are also related to the environmental aspect as well. As individuals are to enjoy safe, clean, healthy and sustainable environment, activities of the business may have potential impacts to the environment and therefore impact environmental quality and rights as mentioned earlier.

Currently, there are many organizations and associations at the global level who are concerned about business and human rights. Numbers of guidelines and initiatives have been published to assist companies in implementing human rights and ethics consideration into the business operation.

Human rights guided principles are developed by United Nations Global Compact (UNGC), United Nations Universal Declaration of Human Rights (UDHR), United Nations Declaration on the Rights of Indigenous Peoples, International Labor Organization (ILO), and United Nations Framework and Guiding Principles on Business and Human Rights (UNGPs). All of which focus on variety of aspects of human rights issues but the main objective is to support the rights of all individuals, regardless of their roles and position in the society.

PTT Group voluntarily implements human rights related initiatives and is an active member of UNGC. More companies within the oil and gas industry are aware of human rights issues as the nature of business poses high risk to violate rights of affected individuals. Human rights guidance documents specific for oil and gas industry are developed by IPIECA e.g. Human Rights and Ethics in Oil and Gas Industry, Human Rights Due Diligence Process, Indigenous People and the Oil and Gas Industry, etc. Specific to oil and gas and mining companies, the Extractive Industries Transparency Initiative (EITI), a global standard that promotes revenue transparency, focuses on improving governance of resource-rich countries, reducing corruption and increasing transparency by fostering open public debate about how oil, gas, and mining revenues are used. Three key components of the EITI comprise (a) disclosure of payments made by companies to governments, (b) disclosure by governments of the payments that they receive, and (c) independent verification of the payments made and received (e.g. taxes, royalties). However, PTT Group takes step forward in disclosing its financial performance publicly.

Similarly, ISO26000 also provides sufficient guideline with regards to approach towards social responsibility which includes aspects of human rights, labor practices, environment, community involvement and fair operating practices.

Global Reporting Initiative (GRI)'s Sustainability Reporting Guidelines also includes aspects of human rights related performance and management approach for organizations to publically disclose material information through sustainability reports.

EXTERNAL REGULATORY AND PUBLIC ADVOCACY

Compliance to applicable laws, local practices (e.g. embedded or cultural practices) and regulations of the host countries is the basic requirement which PTT Group must adhere to, in addition to the internal standards and guidelines. PTT Group reviews the country based human rights risks¹ to understand human rights issues currently exist in the country of operations.

PTT Group respects the international norms of behavior and shall strive to adhere to the international norms. PTT Group shall ensure the effectiveness of human rights risk management and governance to prevent complicity. This will be monitored based on PTT Way of Conduct.

Where appropriate, PTT Group will ethically and constructively participate to review and comment on proposed legislation, regulations and emerging policy issues.

¹ World Report, Human Rights Watch, <https://www.hrw.org/previous-world-reports>

SECTION 3 HUMAN RIGHTS POLICY AND GOVERNANCE FRAMEWORK

POLICIES AND COMMITMENT

PTT Group has Sustainability Policy to promote sustainability practices of companies within PTT Group. PTT Group Sustainability Management Framework provides the foundation for the approach to support the achievement of the policy which incorporates elements from, or are aligned with, other international policies, standards and management practices to which PTT Group has committed, such as Global Reporting Initiative (GRI), Dow Jones Sustainability Index (DJSI), the World Business Council for Sustainable Development (WBCSD), the United Nations Global Compact and International Standards ISO 26000. Each business unit and company within PTT Group is responsible for ensuring the compliance with PTT Group Sustainability Policy and Sustainability Management Framework.

Human rights is one of the ten elements of the PTT Group Sustainability Management Framework and focuses on the rights of every stakeholder groups including vulnerable individuals and minorities such as women, disabled, indigenous, etc. in relevant issues such as labor rights, health and safety of employees and contractors, safeguard the environment, create a sustainable positive impact in our host communities, and respect all human rights where we operate.

Although protecting human rights is the role of governments, we believe that our company has a role in respecting and promoting human rights in our sphere of influence. This also presents us with an opportunity to make positive contributions in the areas of governance, transparency, respect for the rule of law, and socioeconomic development in the area where we operate. Moreover, all employees shall respectfully comply with the defined principles to ensure effectiveness of all PTT operations.

Apart from element 2 on human rights, element 3 on people is one of the key elements of the sustainability management framework of PTT which requires management in different dimensions that are interrelated. This is key success factor in successfully managing issues of human rights in the long-term. Key principles in managing people are understanding and respecting labor rights, namely, legal rights and rights that define relationship between employers and employees under labor law and employment. This relationship relates to employees' basic rights, such as; right to safety working condition, right to association, right to negotiation. The right to negotiation includes equal opportunities, working hours, minimum wages, right not to be forced labors, right to compensation and benefits and etc.

For more details, refer to PTT Group Sustainability Management Framework.

GOVERNANCE STRUCTURE

The governance structure for human rights management system can be in line the Sustainability Management Manual and PTT Way of Conduct where PTT Group is divided into 2 levels as follows.

- Corporate Level consists of;
 - PTT Corporate; has key responsibility to define PTT Way of Conduct and shared service by defining consistent policies of PTT Group.
 - Business Group; plays a role in setting the strategies, goals, tracking performance of each business unit closely in order to achieve excellence and create synergy.
- Operational level in PTT Group includes Flagship, Business Units and its subsidiaries; focuses on operating their own business to excellence and achievement, and to integrate PTT Way of Conduct with the business operations to achieve PTT Group's maximum performance.

Roles and responsibilities of material distributor

The ownership of Human Rights Management System is PTT Sustainability Management, with responsibilities for:

- Issuing the Human Rights Management System manual;
- Ensuring effective implementation of the Human Rights Management System within PTT Group; and
- Defining the periodic review or when the trigger for change is to occur, including monitoring changes that may have effect on implementation (3-year periodical review for PTT Group Sustainability Management Framework)

Key Personnel Roles and Responsibilities

- Sustainability Alignment Committee (SAC) oversees the implementation of Human Rights Management System and provides direction or comments in order to demonstrate human rights commitment in alignment with PTT Group Sustainability Management Framework;
- Sustainability Management (SM) from each company under PTT Group actively assists and supports the implementation of Human Rights Management System; and
- Relevant Function /department (Subject Matter Expert: SMEs) from each company under PTT Group ensures the effective implementation of the existing controls and performance.

POLICY DEPLOYMENT MECHANISMS

Sustainability Management team from each company is responsible for the governance and effective deployment support of the Human Rights Management System within each company by adopting existing policy deployment mechanisms, rules, and regulations available. This ensures effective mitigation and control of human rights risk.

SECTION 4 HUMAN RIGHTS RISK MANAGEMENT REQUIREMENTS

At PTT Group, human rights risks are managed at two levels (Corporate and Operations), in order to define roles and responsibilities for the development and implementation of mitigation measures and ensure the effectiveness of risk management. Issues are grouped into 6 areas, including 1) Employee (labor rights), 2) Community (community rights), 3) Supply Chain, 4) Security and safety, 5) Environment, and 6) Customer

(consumer rights). Scope of human rights issues relevant to PTT Group and responsible departments are provided in **Table 1**.

Table 1 Scope human rights issues under PTT and PTT subsidiaries' responsibilities

Labor Rights	Community Rights	Supply Chain	Security and safety	Environment	Consumer Rights
Working Conditions	Standards of Living and Quality of Life	Supplier Engagement	Security Management	Water Security	Consumer Health and Safety
Freedom of Association and Collective Bargaining	Community Health and Safety	Supplier Code of Conduct	Security Training	Impact of Pollution	Data Privacy
Forced and Compulsory Labor	Community Engagement			Waste and Hazardous Materials Management	
Child Labor	Cultural Heritage			Preservation of Biodiversity	
Safe and Healthy Working Conditions	Minorities Including Indigenous Peoples			Broadening Access to Energy	
Discrimination	Resettlement				