



**PTTEP**



▶▶ **Sustainability**

# **SUSTAINABILITY**

# **BOOKLET**



# SUSTAINABILITY BOOKLET



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# PTTEP

## Journey Towards Sustainability

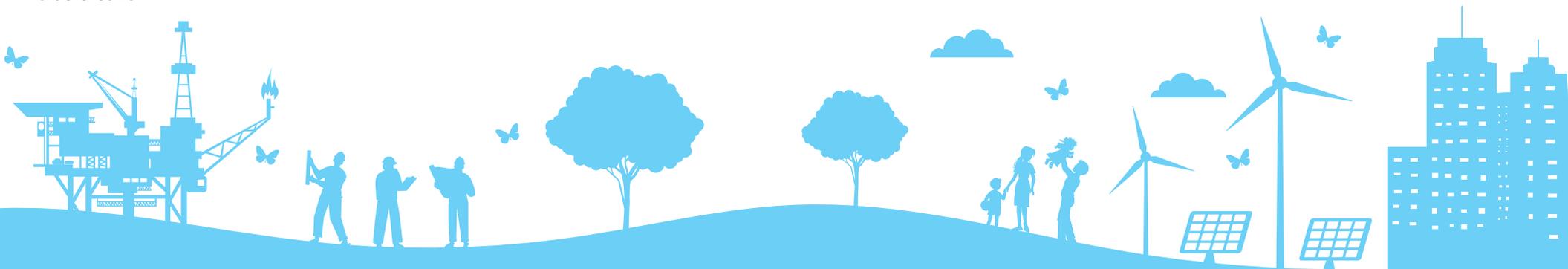
PTTEP has embarked on a journey towards sustainability since our establishment in 1985. The Company's mission is to operate globally to provide reliable energy supply and sustainable values to all stakeholders in line with our vision: "Energy Partner of Choice through Competitive Performance and Innovation for Long-term Value Creation". To achieve such vision, PTTEP has adopted the Sustainability Framework comprising 3 pillars: 1) High Performance Organization (HPO), 2) Governance, Risk Management and Compliance (GRC), and 3) Sustainable Value Creation (SVC) as a guide to operate our business to deliver long-term growth and sustainable values to our stakeholders.

Over the past 3 decades, in the waves of change and uncertainty, PTTEP's sustainability has been firmly grounded with high performance targets and aspirations to ensure positive impacts on Environmental, Social and Governance (ESG) dimensions. Such solid foundation leads to PTTEP's enhanced business performance as well as greater stakeholder value creation.

It is undeniable that in the next decade, the world will face more and more major challenges such as climate change, global economic uncertainties, energy transition, degradation of resources and environment particularly biodiversity crisis. PTTEP recognizes the urgent need to transform the way we operate to respond to the global trends and our transition towards Net Zero Greenhouse Gas Emissions 2050 target while continuously delivering long-term values from the inside to the outside (From We to World) and maintaining our steady growth.

The Sustainability Booklet manifests a comprehensive approach and expectations underlying PTTEP managerial perspectives towards sustainability. Guided by clear expectations under "One Team, One Goal" philosophy, everyone will have the opportunity to contribute in terms of knowledge, expertise and experiences to co-create sustainable values for society and our planet – now and in the future.

To push forward the next chapters of PTTEP journey towards sustainability, a commitment from our staff, partners and stakeholders is key to deliver a better world for the next generations **and the time is now.**



# SUSTAINABILITY AT PTTEP

## SUSTAINABILITY AT A GLANCE



**Energy Partner  
of Choice**



### VISION

"Energy Partner of Choice" through competitive performance and innovation for long-term value creation

### MISSION

To operate globally for reliable energy supply and sustainable values to all stakeholders

### CORPORATE VALUES

#### CORPORATE VALUES



## SUSTAINABILITY STATEMENT

PTTEP's sustainability means being a responsible and resilient organization. We aim to embrace energy transition and create sustainable value to the Company and our stakeholders with commitment to achieving Net Zero Greenhouse Gas Emissions by 2050. Our Sustainability Framework is based on 3 pillars: High Performance Organization (HPO); Governance, Risk Management and Compliance (GRC); and Sustainable Value Creation (SVC).

While growing our business through the gas value chain, we will diversify beyond E&P with focus on technology and innovation, decarbonization and future energy. Our competitiveness is driven by robust operations and efficiency improvement. We strive to become a GRC role model and zero incident organization. At PTTEP, we operate responsibly to ensure business sustainability with due care for the community, society and environment.

Approved by PTTEP Board of Directors in August 2022

## SUSTAINABILITY POLICY

Guided by PTTEP's Sustainability Framework and Vision "Energy Partner of Choice", PTTEP is committed to conducting our businesses with responsibility and resilience in response to the energy transition while creating shared values to all stakeholders (From We to World). All could be achieved through PTTEP's Sustainability Policy outlined below:

- Drive organizational implementation to achieve Net Zero Greenhouse Gas Emissions by 2050 for E&P business covering Scope 1 and Scope 2 under PTTEP's operational control.
  - Maximize E&P competitiveness, ensure business growth through gas value chain and new businesses in clean energy and technology and enhance our capability and knowledge base to adjust to future changes.
  - Emphasize operational excellence, efficiency improvement, innovation as well as Digital, Organization and New Normal Transformations for continuous improvement.
  - Strengthen the Safety, Security, Health and Environment (SSHE) management to achieve our Zero Incident Organization target.
  - Conduct business with transparency and efficiency, adhere to good corporate governance principles and ensure appropriate risk management and internal control, as well as compliance with relevant laws and regulations throughout the Company's value chain in every operating country.

- Create sustainable and long-term shared values to all stakeholders through community and social development, natural resources conservation and environmental rehabilitation along with appropriate implementation of carbon offset programs covering forestation and other initiatives, particularly those designed to absorb carbon in coastal and marine ecosystems (Blue Carbon).

The successful implementation of this policy requires a total commitment from PTTEP management and employees at all levels with expectations for PTTEP subsidiaries, stakeholders, suppliers & contractors and business partners to share the same commitment in parallel with respecting labor and human rights. PTTEP shall disclose our sustainability performance with transparency in accordance with the recognized international standards and pursue collaborative action through dialogues and partnerships with global organizations to demonstrate our commitment and strengthen sustainability capabilities.



(Mr. Montri Rawanchaikul)  
Chief Executive Officer  
20 January 2023

Ref No. 10010-PCY-001-R04, Effective Date: 20 January 2023

## SUSTAINABILITY FRAMEWORK

To achieve our vision to become the “Energy Partner of Choice”, PTTEP has developed the Sustainability Framework comprising 3 pillars:

### HPO



**High Performance Organization**

Emphasizing continuous performance improvement to become more effective, efficient and productive in response to energy transition with focus on technology and innovation, decarbonization and future energy.

### GRC



**Governance, Risk Management, and Compliance**

Emphasizing transparent and efficient operations for the organization’s stability and sustainability through governance, appropriate risk management and internal control as well as strict compliance with relevant laws and regulations.

### SVC



**Sustainable Value Creation**

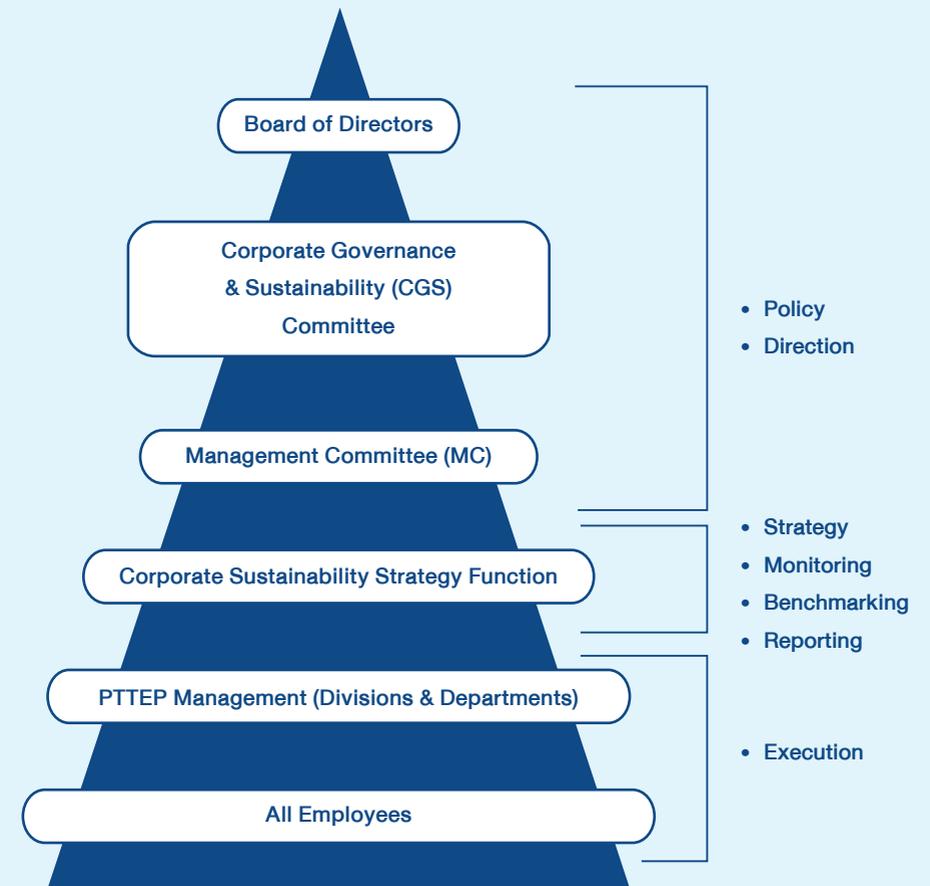
Emphasizing long-term value creation for all stakeholder groups through organizational sustainability, responsible operations, natural resource conservation, environmental rehabilitation as well as community and social development.

PTTEP Sustainability Framework is in line with the United Nations Sustainable Development Goals (UN SDGs), particularly SDGs 7, 8, 12, 13, 14 and 16 that directly relate to PTTEP operational activities. PTTEP strongly believes that the well-balanced management of the 3 pillars will drive the Company towards sustainable growth.



## SUSTAINABILITY GOVERNANCE

PTTEP believes that a strong governance structure with clear accountability will enable us to translate our commitments into actions in order to achieve sustainability goals. The governance structure and its key roles and responsibilities on sustainability have been designed as follows:



### Board of Directors



- Determine PTTEP's policy and business directions.
- Approve Sustainability Framework and Strategy.

### Corporate Governance & Sustainability Committee



- Review Sustainability Framework and Strategy for Board of Directors' approval.
- Promote Sustainability Framework, Policy and Strategy, monitor and review performance and effectiveness of sustainability roadmap implementation.

### Management Committee (MC)



- CEO as Chairman
- All EVPs as Members

- Review sustainability material issues significant to the strategies, business directions, investment plans, budget and human resources of PTTEP and its subsidiaries.
- Monitor sustainability performance and support underperforming gap closing to ensure that the sustainability objectives are met.

### Corporate Sustainability Strategy Function



- Propose Sustainability Framework and Strategy including long-term targets for endorsement by MC, CGS Committee and Board of Directors.
- Regularly monitor Sustainability Strategy implementation.
- Participate in domestic and international sustainability benchmarking programs for continual improvement.
- Maintain effective internal and external sustainability communication and disclosure.

### Management (Divisions & Departments)



- Deploy Sustainability Strategy, assign clear roles and responsibilities and allocate adequate resources to ensure effective implementation of Sustainability Strategy within his/her area of responsibility.

### All Employees



- Comply with PTTEP's sustainability requirements as stated in this booklet.
- Support Sustainability Strategy implementation related to his/her area of responsibility.
- Communicate with relevant stakeholders to ensure better understanding of PTTEP's Sustainability Framework and targets.

# SUSTAINABILITY STRATEGY

## PTTEP STRATEGY & LONG-TERM TARGETS

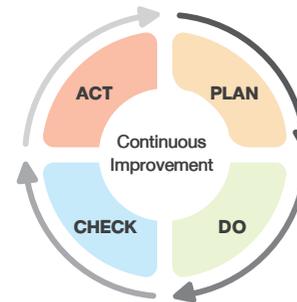
Under Sustainability Framework, PTTEP has developed 3 key strategy pillars and long-term targets to be achieved by 2030 including Net Zero Greenhouse Gas Emissions target by 2050 to address and prepare for future challenges, cope with energy transition as well as create long-term value to meet stakeholders' expectations.

PTTEP key strategy pillars and its long-term targets can be summarized in the following diagram.

### Key Strategy Pillars

	1. DRIVE VALUE	2. DECARBONIZE	3. DIVERSIFY
Strategy Area	<ul style="list-style-type: none"> <li>Strengthen E&amp;P and ensure Thailand energy security:                             <ul style="list-style-type: none"> <li>Maximize production;</li> <li>Expedite development;</li> <li>Monetize discovery.</li> </ul> </li> <li>Enhance competitiveness of unit cost.</li> <li>Expand gas-weighted portfolio and LNG business.</li> </ul>	<ul style="list-style-type: none"> <li>Manage E&amp;P for lower carbon portfolio.</li> <li>Execute GHG emissions reduction plan.</li> <li>Accelerate CCS projects.</li> <li>Maximize use of renewable and future energy in operation.</li> <li>Pursue emission offsetting and Ocean for Life.</li> </ul>	<ul style="list-style-type: none"> <li>Scale up AI &amp; Robotic Ventures (ARV).</li> <li>Capture Gas to Power and renewable energy opportunity.</li> <li>Explore CCUS, Hydrogen and future energy.</li> <li>Commercialize in-house technology.</li> </ul>
Long-term Target	<ul style="list-style-type: none"> <li>Production CAGR                             <ul style="list-style-type: none"> <li>5% in 2030, maintain @700 KBOED after 2030</li> </ul> </li> <li>Unit cost ≤ 25 \$/BOE by 2030</li> <li>R/P ≥ 5 years by 2030</li> <li>Zero incident organization</li> </ul>	<ul style="list-style-type: none"> <li>EP Net Zero 2050</li> <li>GHG intensity reduction (2020 base year)                             <ul style="list-style-type: none"> <li>≥30% by 2030</li> <li>≥50% by 2040</li> </ul> </li> </ul>	<ul style="list-style-type: none"> <li>Net income contribution                             <ul style="list-style-type: none"> <li>≥20% by 2030</li> </ul> </li> </ul>

## SUSTAINABILITY MANAGEMENT SYSTEM



To ensure continuous improvement of PTTEP sustainability performance, PTTEP Sustainability Management System consists of 4 key steps in line with the Plan-Do-Check-Act (PDCA) or Deming Cycle.

### PLAN

#### Policy Commitment



Management demonstrates commitment to sustainability by enacting the PTTEP Sustainability Policy and deploying it throughout the Company and subsidiaries for implementation.

All PTTEP personnel are expected to strictly follow the policy.

#### Prioritization & Assessment



The sustainability materiality prioritization and assessment process allows PTTEP to understand the material issues, covering Environmental, Social and Governance dimensions that are significant to PTTEP.

The process is designed for a review on an annual basis and a full cycle of assessment every 3 years.

Results from the prioritization & assessment are the key inputs for the "Planning" process.

#### Planning



The planning process is defined to determine strategies, targets, plans, performance indicators and resource preparation (financial, human capital, etc.).

The planning process involves all functions within the Company and is conducted on an annual basis.

## DO

**Implementation** All functions have accountability and responsibility for the execution of the Company's strategies to ensure sustainability management effectiveness. Key actions are:



- Deploy strategies and plans to all employees;
- Clarify sustainability objectives and expectations;
- Increase staff understanding on sustainability issues;
- Implement and support stakeholder engagement sessions as well as resolve issues through dialogues, public participation, meetings, etc.

## CHECK

**Monitoring & Review** Monitoring and review are routinely conducted to evaluate sustainability management progress.



Sustainability performance is disclosed through various channels including the "Sustainability Report & Website", and the information is disclosed as per the GRI Standard requirements with data verification by an independent third party to ensure the reliability of the disclosed data.

Each year, the Company's sustainability performance is benchmarked by recognized ESG raters (domestic and international) through both active and passive approaches.

Improvement opportunities from the monitoring and review as well as the benchmarking will be defined with specific action plans to achieve the set targets and sustainability commitments.

## ACT

**Continual Improvement** The continual improvement allows the Company to promptly respond to the issues that may impact the sustainability targets and commitments of the Company. The cycle can be repeated throughout the sustainability management to ensure continual improvement.



## STAKEHOLDER MANAGEMENT & MATERIALITY

Stakeholder management is vital to organizational sustainability as it aims to create and maintain positive relationships through appropriate management of individual stakeholder needs and expectations related to the Company's business and global trends.

### PTTEP Stakeholder Groups



Government Agencies and Regulators



Independent/Public Organizations, NGOs and Academics



Shareholders, Investment & Financial Institutions and Creditors



Vendors, Suppliers/Contractors



Customers



Business Partners, Consortium and Joint Ventures



Communities



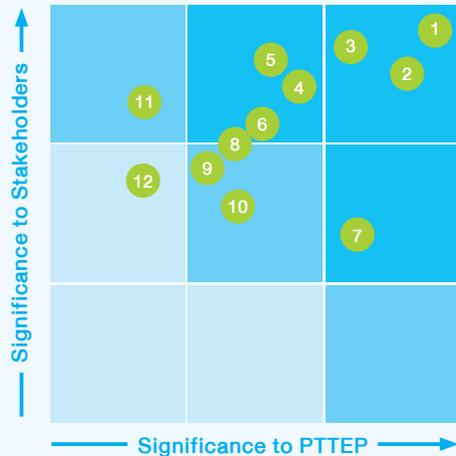
Press and Media



Employees

Each year, PTTEP conducts a sustainability materiality assessment where materiality issues are identified and prioritized into 2 dimensions: significance to PTTEP (X-Axis) and significance to stakeholders (Y-Axis). The PTTEP materiality assessment result in 2022 is shown below.

Example: 2022 PTTEP Materiality Matrix



- |  |                                  |
|--|----------------------------------|
| 1 Energy Transition towards Net Zero       | 7 Circular Economy               |
| 2 Technology & Innovations                 | 8 Biodiversity Impact Management |
| 3 Governance, Risk Management & Compliance | 9 Supply Chain Management        |
| 4 Safety, Security, Health & Environment   | 10 Cybersecurity                 |
| 5 Contribution to Communities & Society    | 11 Human Rights                  |
| 6 Human Resource Preparation               | 12 Stakeholder Management        |

The Company incorporates prioritized materiality issues as part of corporate strategy development. Targets and action plans on management, communication, collaboration and potential enhancement are developed for further implementation with a periodical progress report as per the defined Stakeholder Management Guideline and Issue and Stakeholder Management System (ISMS) Guideline. The “Whistleblowing System” is also put in place as a channel for stakeholders to file a complaint.

# SUSTAINABILITY ASPIRATION & MANAGEMENT APPROACH

PTTEP is committed to our sustainability aspirations to ensure effective implementation of Sustainability Strategy company-wide to achieve our long-term targets. The Company determines sustainability management approaches for each related sustainability material issue for E&P operations in accordance with the stakeholders’ expectations, including global sustainability trends and in alignment with various international standards.

## ORGANIZATIONAL SUSTAINABILITY

### Governance, Risk Management & Compliance (GRC)



PTTEP upholds business transparency and efficiency with adherence to governance principles, appropriate risk management and internal control, as well as strict compliance with relevant laws and regulations under the integration of Governance, Risk Management and Compliance or GRC. PTTEP strives for excellence in business integrity to pave our way towards sustainability.

PTTEP developed 2 strategies of Smart Assurance and Mindful GRC as well as their long-term roadmap and targets with focus on efficiency integration, flexibility and technology application to ensure timely information for relevant parties to make an appropriate decision and guide PTTEP executives and employees to understand and be able to apply the GRC principles to their daily operations. More specific details are shown in the following parts:

## 1. Corporate Governance & Business Ethics & Compliance

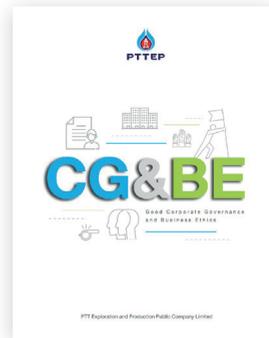
### Aspiration:

Increase confidence and public acceptance on PTTEP's good corporate governance and business ethics in all operations.



The sub-board of Corporate Governance & Sustainability (CGS) Committee is assigned to oversee and assure that the Corporate Governance & Business Ethics (CG&BE) principles are implemented at every level of the Company's operations and continuously maintained in response to laws and international standards.

PTTEP developed the CG&BE and its booklet representing the highest principles covering political neutrality, anti-fraud and corruption, discrimination, confidentiality of information, conflict of interest, anti-money laundering, trade competition and safety, security, health and environment to be used in the governing and running of PTTEP businesses. When acting on behalf of PTTEP Group, directors, management and employees must comply with this document.



CG&BE Booklet  
<https://www.pttep.com/en/Aboutpttep/>

Furthermore, to accommodate all stakeholders, PTTEP provides various official channels such as "Whistleblowing System" on PTTEP website, including communication channels by post and e-mail to receive the observed behaviors or situations that may violate the CG&BE of PTTEP Group.

PTTEP has communicated and provided a training on CG&BE to all employees, subsidiaries, vendor/suppliers covering 100% and joint ventures (including stakes above 10%), with written acknowledgement.

## 2. Risk & Crisis Management

### Aspiration:

Assure that the key risks are properly managed to support the achievement of PTTEP aspirations and business plans.



PTTEP established Enterprise Risk Management (ERM) Policy and Framework approved by the Risk Management Committee (RMC) assigned from the Board of Directors for risk oversight.

The risk management process is aligned with ISO 31000 and the Committee of Sponsoring Organizations of the Treadway Commission (COSO) framework.



Risk assessment is conducted on a quarterly basis, but not limited to, in accordance with the changes in business contexts throughout the year. Corporate risk profile and mitigation plans which are the results of the assessment are annually approved and quarterly monitored by RMC to ensure that all key risks, especially risks with high impact at the corporate level, are well managed to prevent unfortunate surprises, reduce potential losses and minimize recurrence risks.

Moreover, Business Continuity Management System (BCMS) in line with international standard ISO 22301 was developed to prepare for effective response during disruption following emergency or crisis with aim to:

- Protect our people, environment, asset and reputation;
- Mitigate the risks of disruptive incidents;
- Minimize the risks of non-compliance with government regulations and laws;
- Continually improve the organization's business continuity capabilities.



## IT Security, Cybersecurity & System Availability

### Aspiration:

*Prevent and respond to various cybersecurity threats to minimize damage from cybersecurity incidents that may impact business operations while promoting organizational performance.*



PTTEP Digital Security Policy, Information Security Management System Policy and Cybersecurity Policy were established with reference to the National Institute of Standards and Technology (NIST)'s framework. PTTEP's information security management system for our data center facilities, internet service, network service and private clouds has been verified by a third party to conform to ISO 27001.

In addition, PTTEP conducts a third-party vulnerability analysis including simulated hacker attacks and puts the incident response plan in place with testing scheduled on a semi-annual basis at a minimum to assure that the security of the IT infrastructure/ information security management systems can appropriately react to prevent the incident.

In order to prevent cybersecurity incidents and threats to ensure business continuity, the Company has implemented control measures for the information system, equipment security as well as data backup and recovery. The Company also provides training and raises employees' awareness through a series of communication emails covering a variety of cybersecurity topics such as malware and ransomware, phishing email attack, etc. as well as promoting the Personal Data Protection Act (PDPA).



## Safety, Security, Health & Environment (SSHE)

**Aspiration:**  
Become  
a zero incident  
organization.



PTTEP's Safety, Security, Health and Environment Management System (SSHE MS) was developed to adhere to the SSHE Policy requirements. SSHE MS was designed to align with international standards and industry best practices. Additionally, the SSHE MS is a structured process utilized to identify, prioritize and manage SSHE risks and consequences to be As Low As Reasonably Practicable (ALARP). This is to ensure that all employees and contractors return home safely and all incidents are prevented to avoid causing adverse impacts on stakeholders and the environment.

### 7 Elements of PTTEP's SSHE MS



Regarding the verification and validation of SSHE MS implementation effectiveness, the SSHE MS internal and external audits (by Certified Body) are regularly conducted against the requirements of the recognized international standards, e.g. ISO 14001 Environmental management systems, ISO 45001 Occupational health and safety management systems, etc.



### 5 Levels of PTTEP's SSHE Culture Maturity

PTTEP strives for a generative SSHE culture. Every 3 years, SSHE culture maturity survey is conducted. The survey result indicates the perceptions and attitudes of the employees and contractors on the SSHE culture maturity level of their organization and provides the information to identify actions for continual SSHE culture improvement.

## Tax Strategy

### Aspiration:

Pay fair share of taxes in every country where we operate and fulfill our role as a responsible corporate citizen by complying with the intent of the applicable tax laws and regulations.



PTTEP Group Tax Strategy was established to lead the Group towards paying a fair share of taxes and tax transparency as we believe that they are key elements to enable us to sustainability. These include, but are not limited to, fully complying with applicable tax laws and regulations of all respective countries, not transferring value created to low tax jurisdictions, engaging in reasonable tax planning that is aligned with our commercial and economic activities, undertaking transfer pricing using the arm's length principle, not using secrecy jurisdictions or tax havens for tax avoidance.

In addition, PTTEP fully supports the Extractive Industries Transparency Initiative (EITI) created by a global coalition of governments and private companies to promote improved governance of extractive industries to ensure that the exploitation of natural resources is truly for global population's benefits. We have disclosed information covering revenue, profit before tax, income tax accrued, income tax paid and main business activities in countries where we operate.

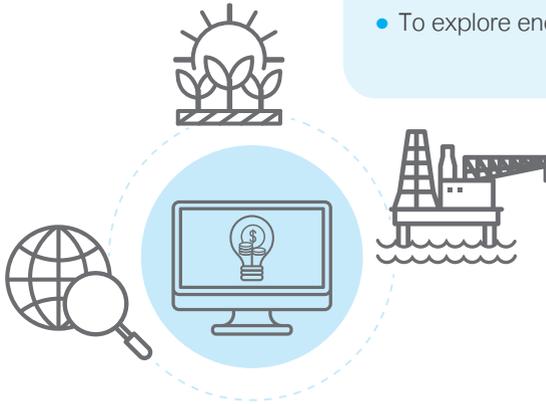
## Technology Development, Innovation & Digitalization

### Aspiration:

Drive E&P business efficiency and competitiveness to become a sustainable organization amidst business challenges and energy transition.

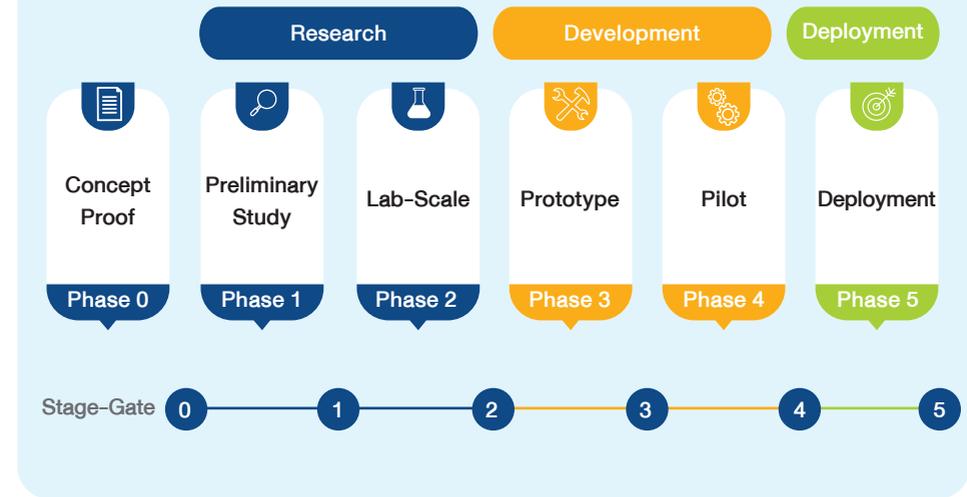
PTTEP established the Technology Development, Innovation and Digitalization Policy to ensure that the technology and innovation could be effectively deployed to the operation and turned into commercialization. The Company has researched and developed new technologies through collaboration with 3 main objectives:

- To enhance petroleum exploration and production business;
- To minimize environmental impacts;
- To explore energy transition opportunities.



Technology Development Process (TDP) was developed as a Stage-Gate process. The Stage-Gate is a project management technique comprising 5 phases to ensure effectiveness of the Research, Development and Technology (RD&T) project management and minimize risks under advisory supervision in alignment with the Company's directions and policy by the Technology Development Committee (TDC).

### Technology Development Process (TDP)



Additionally, PTTEP utilizes digital technology to improve operational efficiency and hence competitiveness. The process is undertaken through digital initiatives across all workstreams within the E&P value chain; the building of data foundation platform and information surveillance system; the adoption of advanced analytics tools, process automation, Artificial Intelligence/Machine Learning (AI/ML); and the creation of data monitoring and visualization for faster and more efficient exploration, production and development.

## Supply Chain Management

### Aspiration:

Maximize operational efficiency, reliability, transparency and shared values between PTTEP and suppliers.



PTTEP established Supply Chain Management Policy including its procedure and management system to improve operational efficiency and competitiveness while preventing and reducing social and environmental risks as well as monitoring suppliers that might affect stakeholders' trust in PTTEP's operation and consequently impact the overall business. Under the policy, the procurement of local goods and services is encouraged (where possible) to support the local economy and generate income where PTTEP operates.

PTTEP identifies critical suppliers by conducting a work category analysis in order to classify and prioritize work categories, then select critical suppliers from important and high-priority work categories based on their spend, risks (e.g. providing critical component or non-substitutable supplier) and relevancy to our business. The list of critical suppliers can help PTTEP justify appropriate decisions on procurement planning and strategy as well as operation.

Furthermore, PTTEP has a centralized process to identify high ESG risk suppliers via supply positioning process. The criteria for ESG risk identification cover 4 areas: economic risks, governance/ethics risks, environmental risks and social risks. The critical and high ESG risk suppliers are regularly audited on-site to ensure that their performance and implementation comply with PTTEP Vendor Sustainable Code of Conduct. All vendors have to provide a written acknowledgement in extranet system, namely "Procurement and Contract".

The "Green Procurement" was initiated to acquire materials, supplies and services in consideration of their environmental and social impacts.

Additionally, PTTEP has enhanced relationships with suppliers through the collaboration of supplier capability improvement. Events and meetings are organized to hear their ESG suggestions and cultivate the understanding of both sides, which will improve operational efficiency and foster true cooperation.

## ENVIRONMENTAL STEWARDSHIP

### Environmental Management & Operational Eco-Efficiency

### Aspiration:

Minimize environmental footprints from operational activities through responsible operation.



PTTEP implemented the Environmental Management System (EMS) which was integrated as part of SSHE MS implementation and aligned with SSHE Policy and ISO 14001 international standard covering all activities in E&P phases (exploration, development, production and decommissioning) including major supporting activities; product transportation, waste management, logistics and supply chain management.

PTTEP's EMS has been certified by a third party covering 100% group-wide operations.

Prior to the commencement of a new project in exploration, production and decommissioning phase, PTTEP requires all projects (both domestic and international) to provide the minimum requirements for conducting Environmental Impact Assessment (EIA), which includes Health and Social Impact Assessment (HIA & SIA) defined in the PTTEP Environmental Impact Assessment procedure and disclose it on PTTEP website and the government's available domains accessible by the affected parties.

To reduce the overall environmental footprints from the Company's operations as well as minimize natural resource consumption and waste-generating activities, PTTEP set short, medium and long-term targets of environmental aspects that are in line with the Company's strategy such as greenhouse gas emissions and waste disposal. As for the others such as energy consumption, water consumption, air emissions (NO<sub>x</sub>, SO<sub>x</sub> and VOC<sub>s</sub>), hydrocarbon spills, etc., the annual targets are set to allow the Company to keep the improving trend in our business operations.

## Climate Change Management



# EP NET ZERO 2050

### Aspiration:

- Achieve Net Zero Greenhouse Gas (GHG) Emissions by 2050, covering both direct emissions (Scope 1) and indirect emissions (Scope 2) of the petroleum exploration and production business under PTTEP's operational control.
- Minimize risks arising from climate change in response to energy transition.

PTTEP manages the climate issue initially by understanding our external and internal drivers to obtain identified risks and opportunities arising to the Company. The climate-related risk assessment process is in line with the Task Force on Climate-related Financial Disclosures (TCFD) Framework. Then, the commitment and strategy are addressed and communicated for the company-wide operations.

The Company's climate management plan, containing the mitigation, adaptation, and resilience actions, is consequently developed to manage the identified risks/opportunities. Moreover, PTTEP continuously conducts GHG performance monitoring and reporting in line with ISO 14064-1 to assure conformance to the plan and identify the improvement area as well as promotes transparency by disclosing our climate management to the public and stakeholders.

## EP Net Zero 2050 and Interim Targets



### Exploring for Lower Carbon E&P Portfolio

- 1 Lower Carbon E&P Portfolio Management

### Production and Planet in Balance

#### Beyond Conventional Practice

- 1 Zero Routine Flare for New Assets
- 2 Carbon Capture, Utilization and Storage (CCUS)
- 3 Maximization of Renewable Energy in Operations
- 4 Full Application of Circular Economy Concept
- 5 Methane Emission Reduction via Technology

#### Beyond Operation

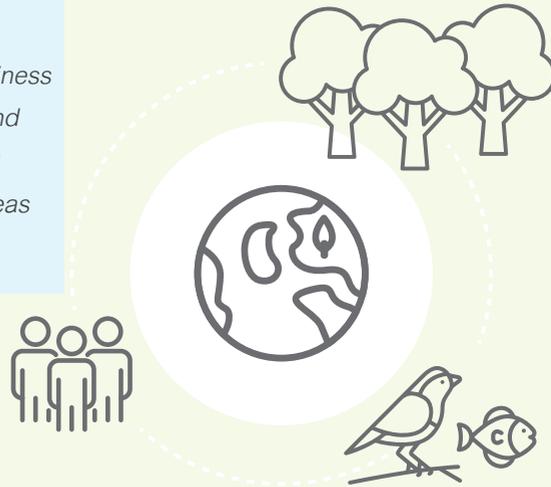
- 1 Carbon Removal Project and Carbon Credit Purchasing
- 2 Advanced Carbon Removal Technology

Additionally, as part of lower carbon E&P portfolio management, we aim to invest more in natural gas, which is viewed as critical to clean energy transition; explore future energy options as well as diversifying beyond petroleum exploration and production business.

## Biodiversity & Ecosystem Services (BES) Management

### Aspiration:

Minimize impacts on BES and integrate them into business decision-making process and promote net positive impact on BES at all operational areas where applicable.

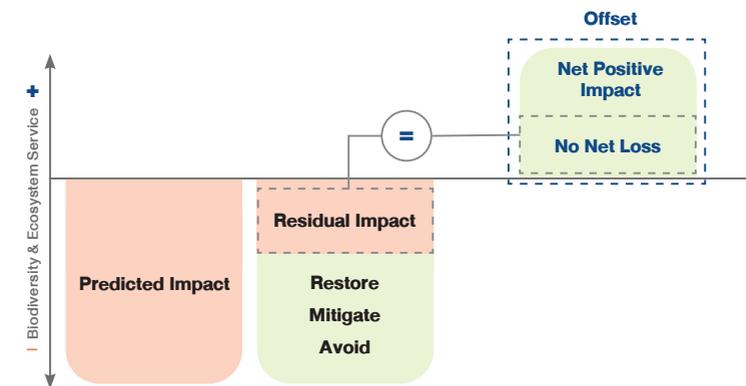


Climate change and biodiversity loss are part of the interlinked crisis the world is facing today. As climate change is a primary driver of biodiversity loss and climate change depends on biodiversity as part of solutions. Therefore, in parallel with climate change management, PTTEP commits to promoting biodiversity through:

- Avoiding operating in World Heritage sites as defined by UNESCO and achieving no net loss in biodiversity in protected areas as defined by the International Union for Conservation of Nature (IUCN) Category I-IV Protected Areas by 2044.
- Achieving the Net Positive Impact of Ocean Biodiversity and Ecosystem Services (Ocean BES) value in all offshore operations by 2030, compared to the 2019 base year.
- No Gross Deforestation for Exploration & Production from 2021 onwards.

PTTEP developed the Biodiversity and Ecosystem Services (BES) Management System in line with international guidelines such as International Petroleum Industry Environmental Conservation Association (IPIECA) and International Finance Corporation (IFC). This guideline provides management practices according to the mitigation hierarchy of avoid, mitigate, restore and offset at all PTTEP operational sites.

### Biodiversity Mitigation Hierarchy



The Company aims to improve BES value through offsetting programs of which the majority is under Ocean for Life Strategy to increase ocean BES value in alignment with our commitment.

Moreover, the Company conducts a biodiversity and ecosystem services risk assessment and integrates it into the Environmental Impact Assessment (EIA) of all E&P projects. Biodiversity Action Plan (BAP) is developed at a high biodiversity risk project which is designed to prevent the loss of endangered species as well as protect and restore ecosystem services that might be impacted by the Company's operation.

## SOCIAL DEVELOPMENT

### Human Resource Management

PTTEP asserts equal treatment for all employees. All are entitled to a good work environment and capability building through People Analytics (PA) tools to measure employees' performance and define strategic workforce planning to support employees' career mobility opportunities, remain core practices to attract and retain top talent for the Company's competitiveness. PTTEP also inspires and encourages employees to demonstrate their best capabilities and exercise EP SPIRIT corporate values to their full extent.

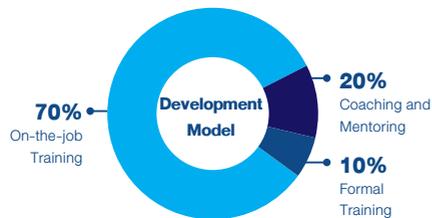
#### 1. Human Capital Development

##### Aspiration:

Grow personnel competency to prepare readiness for organizational transformation, digital technology and new way of working

PTTEP has improved our development systems and processes by fully exercising the competency-based training and development approach under the 70:20:10 development model. These strengthened approaches aim to speed up our employees' competency.

#### 70:20:10 Development Model



Executive and employee competency development programs are put in place through in-house and external training, long-term training and development programs and a master's degree scholarship program for employees.

PTTEP has outlined and annually reviewed succession plans for all management positions to ensure PTTEP's business continuity and sustainability.

The Key Performance Indicators (KPIs) assessment or Performance and Development Appraisals (PDAs) is carried out on an annual basis for all employee performance evaluations together with 360-degree behavior (EP SPIRIT) evaluation.

#### 2. Labor Practice & Retention

##### Aspiration:

Maintain good relationships with employees while providing fair treatment and a safe and healthy working environment.



##### Sabaijaidee Project

PTTEP ensures equitable treatment of employees, without discrimination and harassment on the basis of ethnicity, race, sex, age, skin color, religion, disability or other factors not related to work. PTTEP respects gender diversity, provides equal remuneration for employees and puts great effort and respect into approaches to religious differences through the amendment of the Human Resources Rules and Regulations B.E. 2020 and International Labour Organization Declaration on Fundamental Principles and Rights at Work (ILO).

PTTEP ensures strict compliance with the labor laws enforced by every country where we operate. A Welfare Committee has been established comprising executive members and employee representatives from all work sites representing 100% of total employees. PTTEP Welfare Committee meets every 2 months to discuss labor-related issues that cover compensation, welfare, human resource management and labor rights.

PTTEP introduced various channels for grievance handling issues such as PTTEP Whistleblowing, Human Resource business partner and line manager channels addressed in the Human Resources Policy.

In addition, the Company provides support programs to foster employees' health and well-being such as flexible working hours, work-from-home option, childcare facilities, breastfeeding rooms, paid family beyond parental leave, etc. to ensure employee satisfaction, productivity and retention.

Employee engagement survey is conducted on a 2-year basis. The analysis results can be broken down to age group, gender and position level, allowing PTTEP to appropriately define improvement plans following the survey results.

## Corporate Citizenship & Philanthropy

### Aspiration:

Create sustainable value for community and society through corporate social responsibility projects with SROI  $\geq 2$ .

PTTEP is committed to operating with the right balance of economic, social and environmental aspects, having the United Nations Sustainable Development Goals (UN SDGs) as business guidelines, to gain trust and acceptance and support undertakings that will bring benefits to the Company and society as a whole.

PTTEP's policies and guidelines, namely Corporate Social Responsibility Policy, Community Relations and Management Policy and PTTEP Philanthropy Guideline, were established to ensure that our initiatives truly create benefits and sustainable value to society and community.

Furthermore, PTTEP has a clear direction and focus for guiding our philanthropic activities which are classified into 3 categories: charitable donation, community investment and commercial initiative. The PTTEP's CSR projects under 4 main themes have been implemented to build the Company's brand and reputation, and more importantly, strengthen our relationships with key stakeholders, aiming to support positive socio-economic and wider environmental benefits.

### 4 Main Themes of PTTEP's CSR Projects



Basic Needs



Environment



Education



Culture

As PTTEP's operations are mostly offshore, we have tasked ourself to safeguard, preserve and protect the oceans. The "Ocean for Life" Strategy was then initiated to conserve and rehabilitate marine resources and ecosystem as well as providing well-being to the coastal communities.

The Social Return on Investment (SROI) is used as a measuring tool to help the Company on CSR project prioritization with a view of project efficiency and effectiveness for implementation to ensure that our efforts are properly addressing stakeholders' needs.

## Social Impact on Communities

### Aspiration:

Avoid the possibility of conflict from potential hazards to neighboring areas which may negatively impact the environment, cultural heritage and health of local people.

PTTEP is committed to creating trust and gaining acceptance from stakeholders around our operational areas via early stakeholder engagement in accordance with the Community Relations and Management Policy and Corporate Social Responsibility Policy on top of the PTTEP Environmental Impact Assessment (EIA).



Furthermore, PTTEP developed the Stakeholder Management Guideline, Issue and Stakeholder Management System (ISMS) Guideline, Involuntary Resettlement Guideline and Grievance Handling Guideline for a good practice throughout the stakeholders or

communities around the Company's operations and activities, covering key social impacts such as relocation, indigenous peoples, cultural preservation, grievance mechanism, etc. These PTTEP guidelines enable the Company to maintain "Social License to Operate" through appropriate management and effective engagement, including social risk assessment, prioritization, mitigation and monitoring in order to protect PTTEP from business losses and/or reputation damage.

PTTEP regularly conducts engagement surveys to better understand the needs and level of community engagement. The survey result is incorporated into our action plan to achieve the set target to enhance the community's quality of life.

## Human Rights

### Aspiration:

*Achieve no human rights violation from our direct operational activities as guided by international standards.*

PTTEP established Human Rights Policy and its management system to ensure that our direct operational activities have no human rights violations to our employees, contractors/suppliers, and communities while providing energy security to the society as part of the basic needs to better the quality of life. Our Human Rights policy and management system are guided by human rights principles in accordance with international standards: the United Nations Universal Declaration of Human Rights (UDHR), the United Nations Guiding Principles on Business and Human Rights (UNGPR) the United Nations Global Compact (UNGC) and the International Labour Organization Declaration on Fundamental Principles and Rights at Work (ILO). The policy expects all PTTEP's own operations (employees, direct activities, products and services) and encourages third parties (suppliers, contractors and business partners) to comply with our human rights commitment for the concrete implementation in our business.

## PTTEP Human Rights Management System



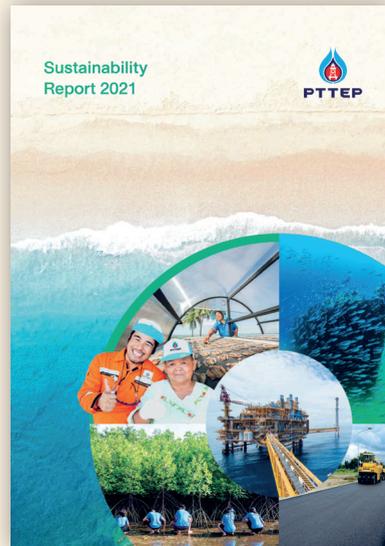
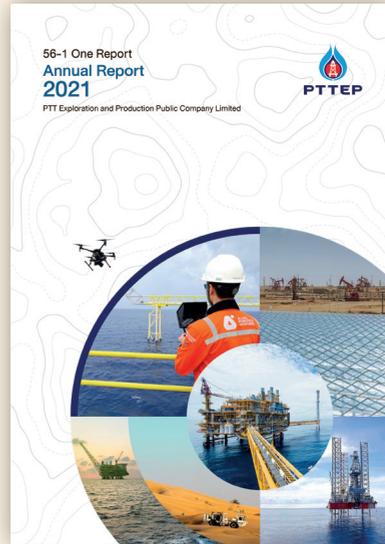
PTTEP Human Rights Management System involves 3 key aspects covering due diligence process, whistleblowing and remedies, and building shared responsibility and understanding on human rights.

PTTEP's human rights risk assessment process integrated as part of the enterprise risk assessment is conducted on an annual basis with 100% of PTTEP's operations, contractors and tier 1 suppliers and joint ventures with aim to proactively and systematically identify and mitigate human rights risks directly or indirectly associated with our activities for both onshore and offshore assets throughout E&P value chain ranging from investment (M&A), seismic survey, exploration and appraisal drilling, development and production, employment practices, supply chain management to security management.

The human rights risks from medium level up require a mitigation plan with quarterly monitoring to reduce the risks to as low as reasonably practicable level.

# SUSTAINABILITY PERFORMANCE DISCLOSURE

The Company's annual sustainability performance and data, both quantitative and qualitative, are verified by an independent external third party to ensure that they are reliable and accurate. The information will then be disclosed in PTTEP's Annual Report (56-1 One Report), Sustainability Report and official website for transparency.



Scan to visit PTTEP website



The Sustainability Booklet is certified Carbon Neutral  
by Thailand Greenhouse Gas Management Organization (TGO).  
This is how we turn our commitment to climate change into action.



**PTTEP**

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