



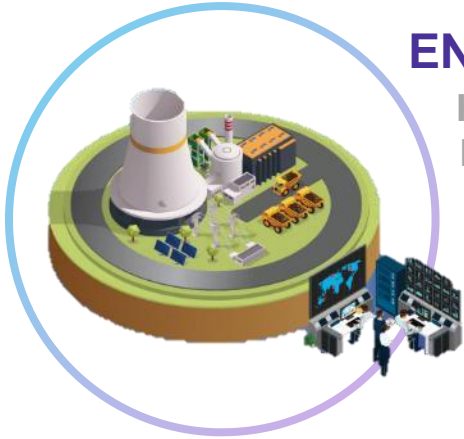
# SMARTER ENERGY FOR SUSTAINABILITY

# BANPU AT A GLANCE

# BANPU: an international versatile energy provider

## ENERGY GENERATION

HIGH EFFICIENCY AND  
LOW EMISSION (HELE)



## ENERGY RESOURCE

COAL AND GAS



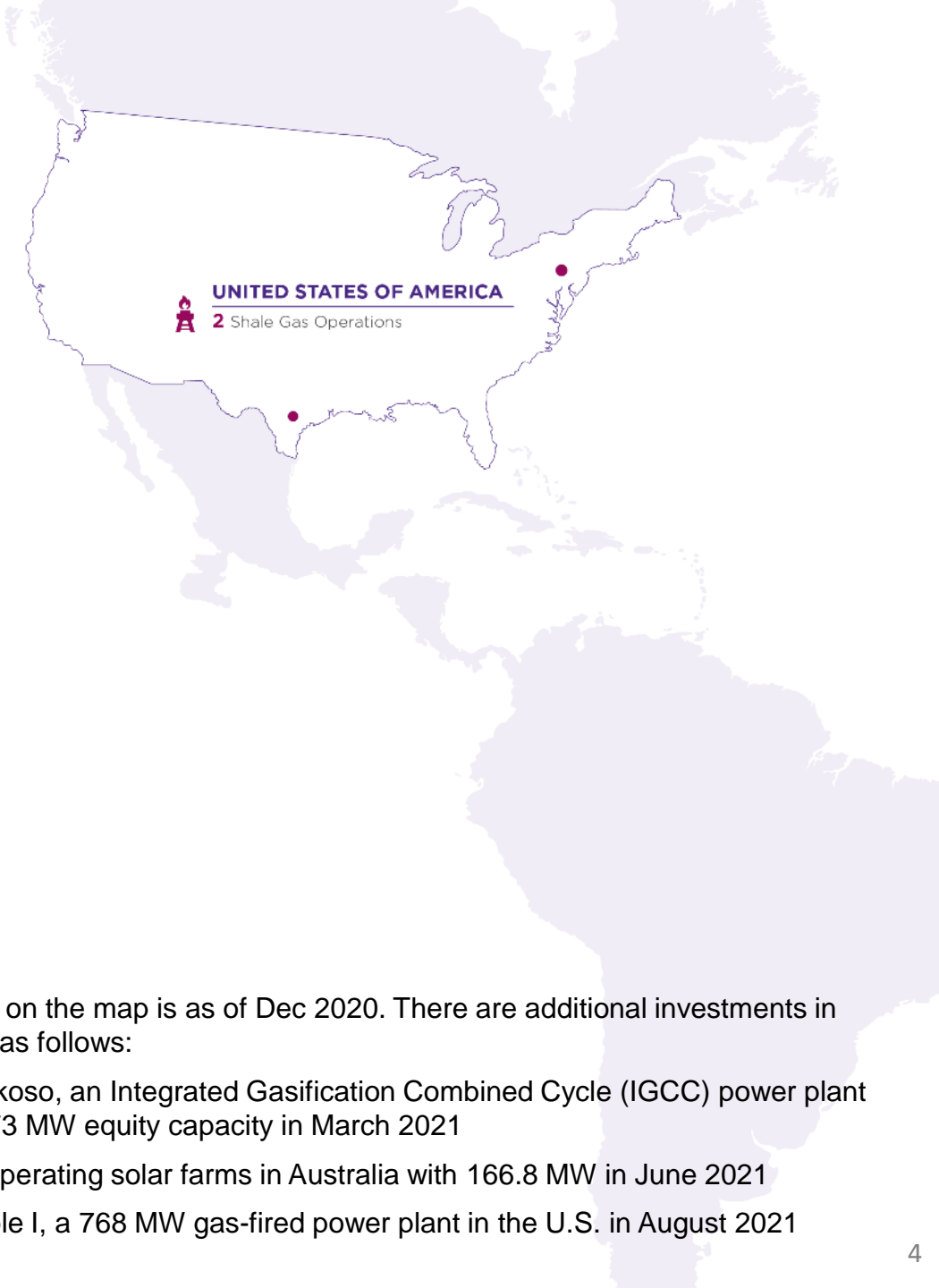
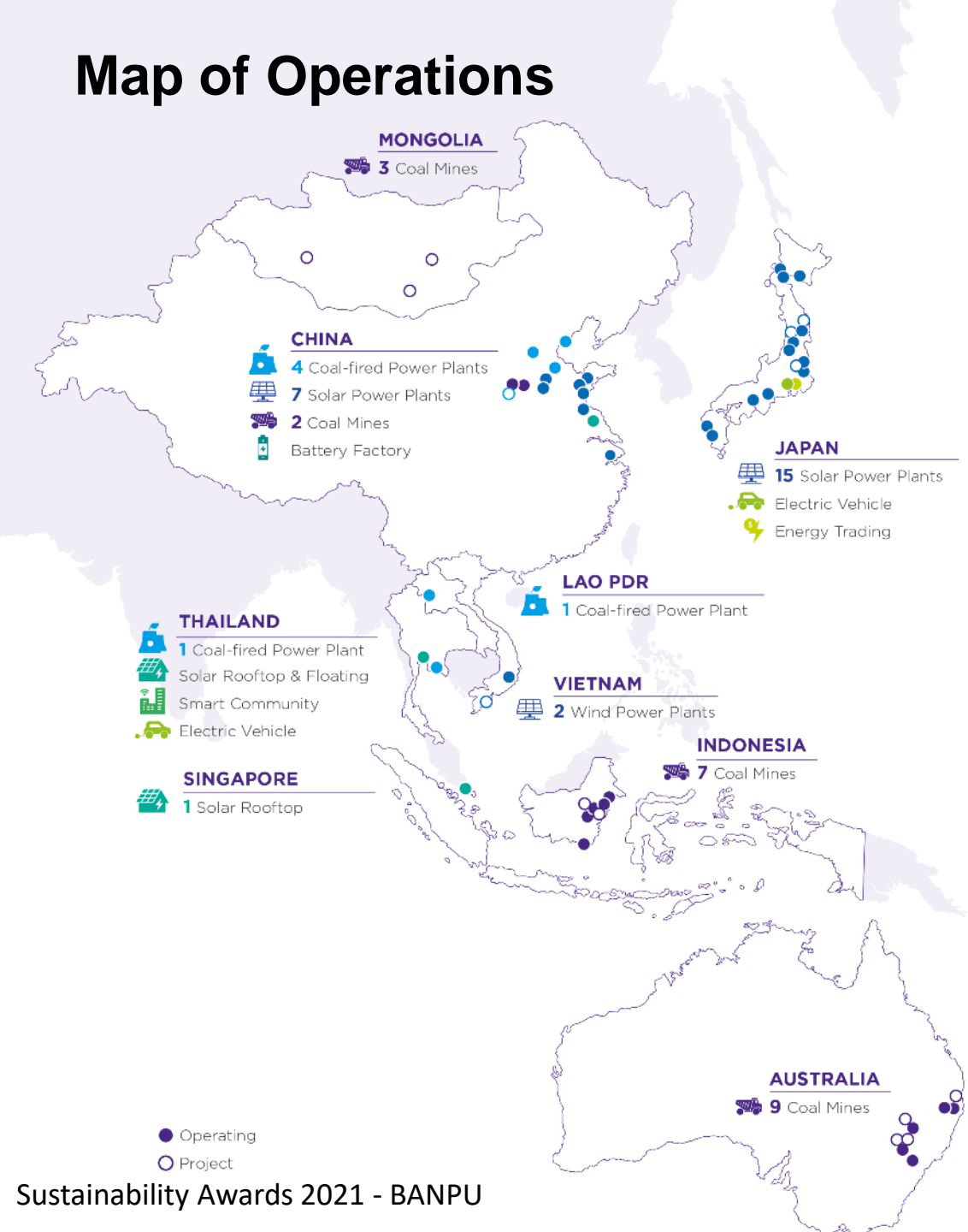
## ENERGY TECHNOLOGY

- SOLAR ROOF
- ENERGY STORAGE
- E-MOBILITY
- SMART CITIES
- ENERGY TRADING



**Banpu is well-positioned as  
“an International Versatile Energy Provider”.**

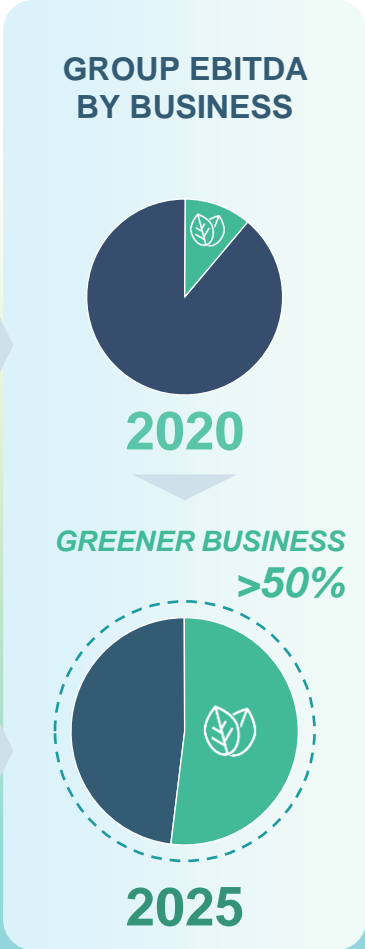
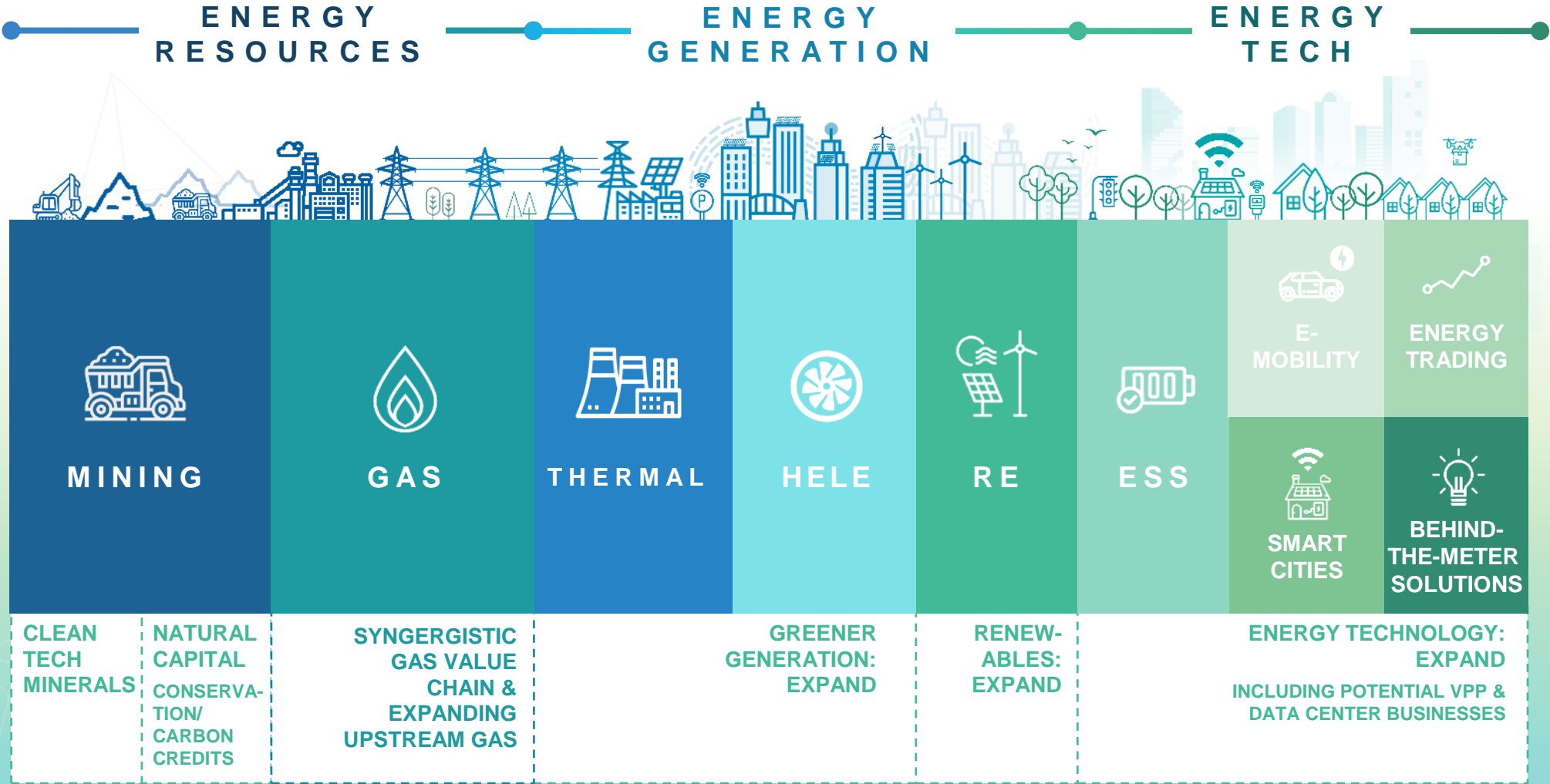
# Map of Operations



Note: Information on the map is as of Dec 2020. There are additional investments in 2021 with details as follows:

- Invested in Nakoso, an Integrated Gasification Combined Cycle (IGCC) power plant in Japan with 73 MW equity capacity in March 2021
- Acquired two operating solar farms in Australia with 166.8 MW in June 2021
- Acquired Temple I, a 768 MW gas-fired power plant in the U.S. in August 2021

# Banpu: Greener, Smarter 2025 portfolio targets



LEADING OUR TRANSFORMATION WITH ESG PRINCIPLES



# Banpu: investment focus 2021-25

## MINING



### Strategic Minerals entry

Venture into mining of high growth, clean tech minerals, driven by growing energy technology trends. Core focus regions include Australia and Indonesia

### Natural Capital Solutions

Investment in reforestation/deforestation prevention for carbon offsetting along with land and biodiversity improvement

## GAS



### Upstream Expansion

Consolidate core unconventional natural gas basins, prioritize synergistic acquisitions with sustainable cash flow, and leverage automation technology

### Synergistic and greener value chain

Explore synergistic and sustainable opportunities that enhance returns

## THERMAL



### HELE power development

Development of *Greener* power assets with higher efficiency and lower emissions

### US Gas-fired power opportunities

Seek investment opportunities in CCGT power plants, with potential synergies

## RENEWABLES



### Solar and Wind power opportunities

Continuous expansion of renewables portfolio in the Pacific Rim with key focus in Vietnam, Australia, US, Japan, and China

## ENERGY TECH



### Energy storage systems production ramp-up

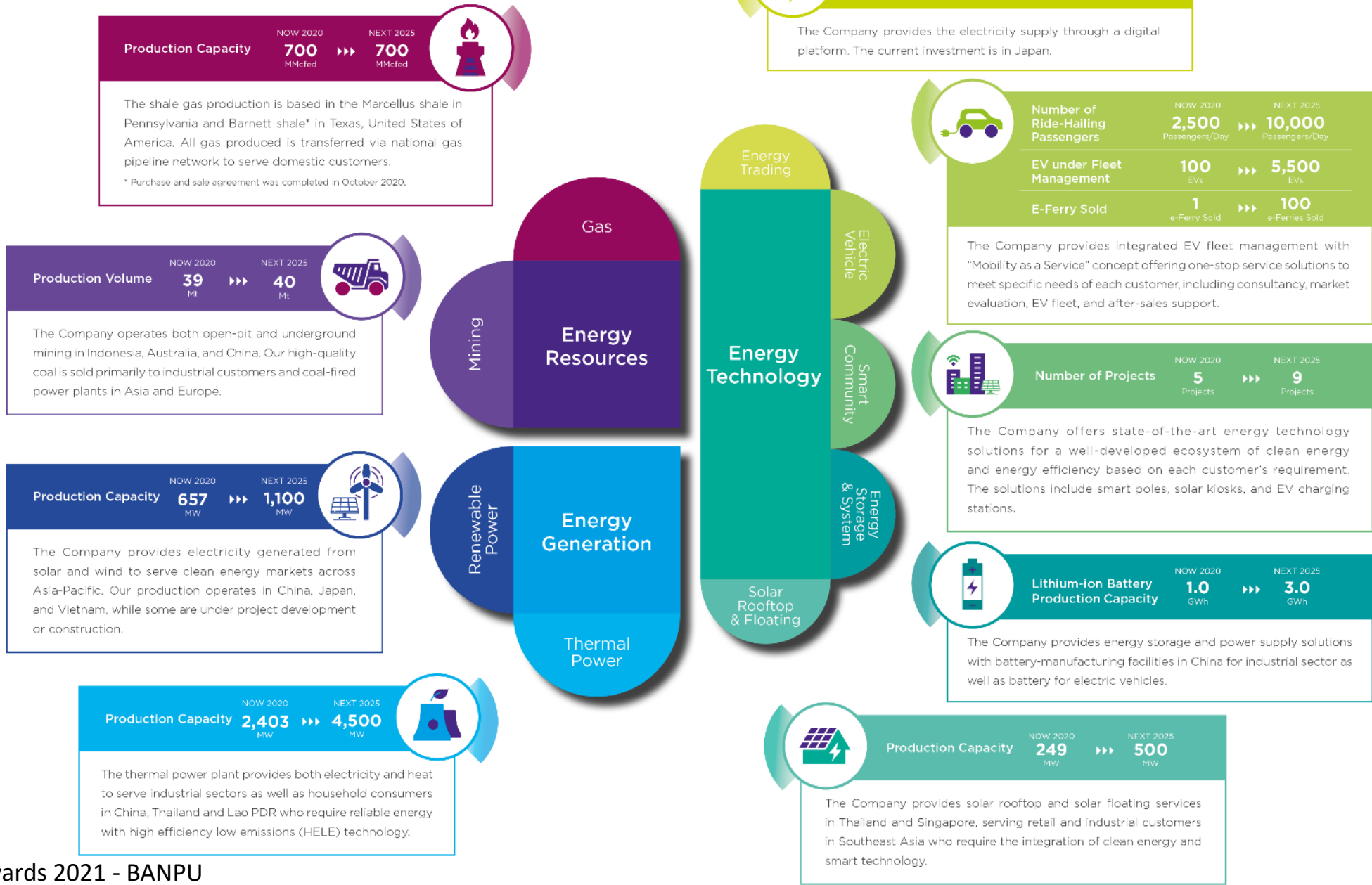
Capitalize on battery demand growth by expanding Li-ion production capacity

### Banpu energy ecosystem expansion

Scale up e-mobility services, smart city solutions and energy trading businesses, while venturing into new high growth areas such as virtual power plants and data centers

LEADING OUR TRANSFORMATION WITH ESG PRINCIPLES

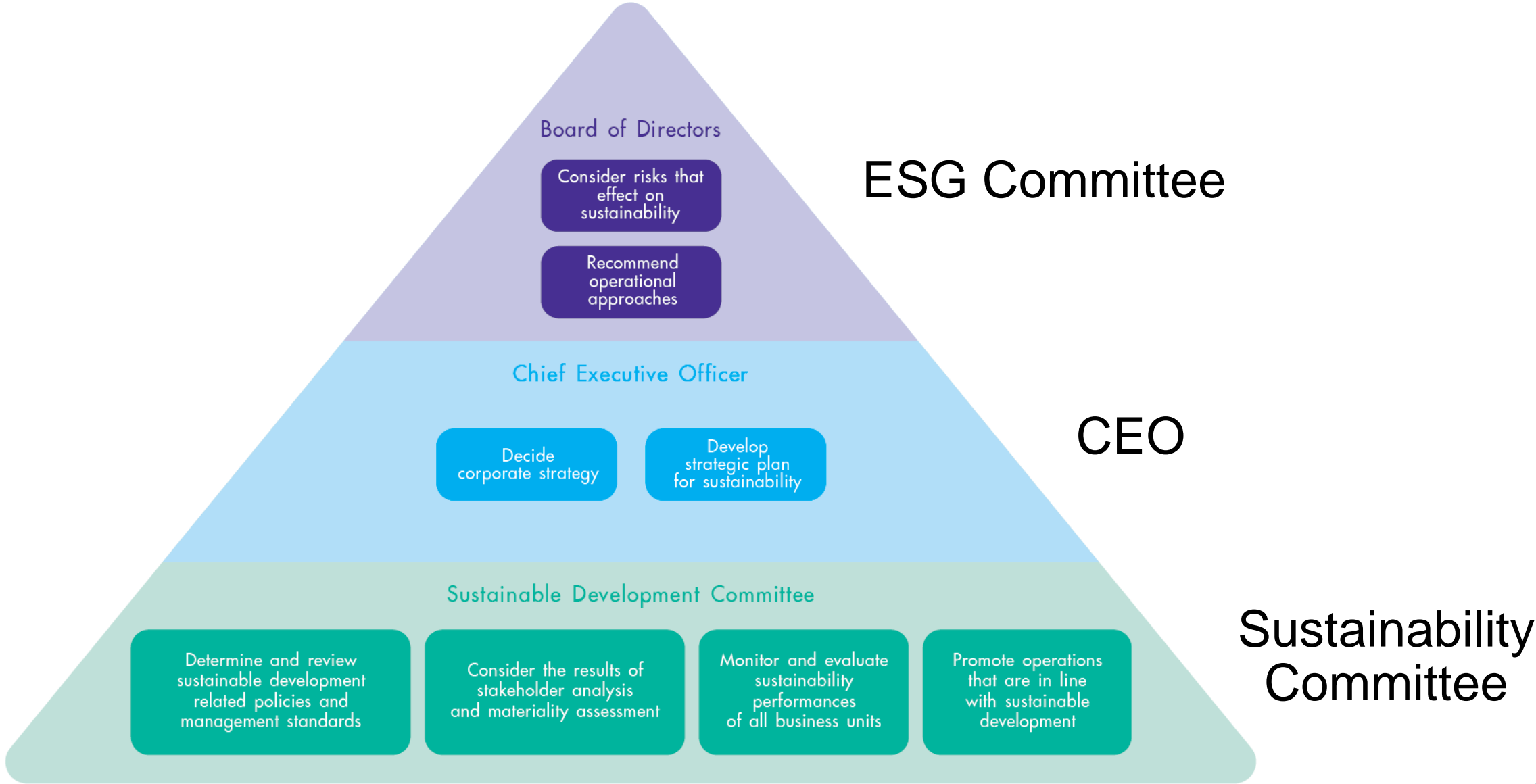
# Banpu: Now & Next



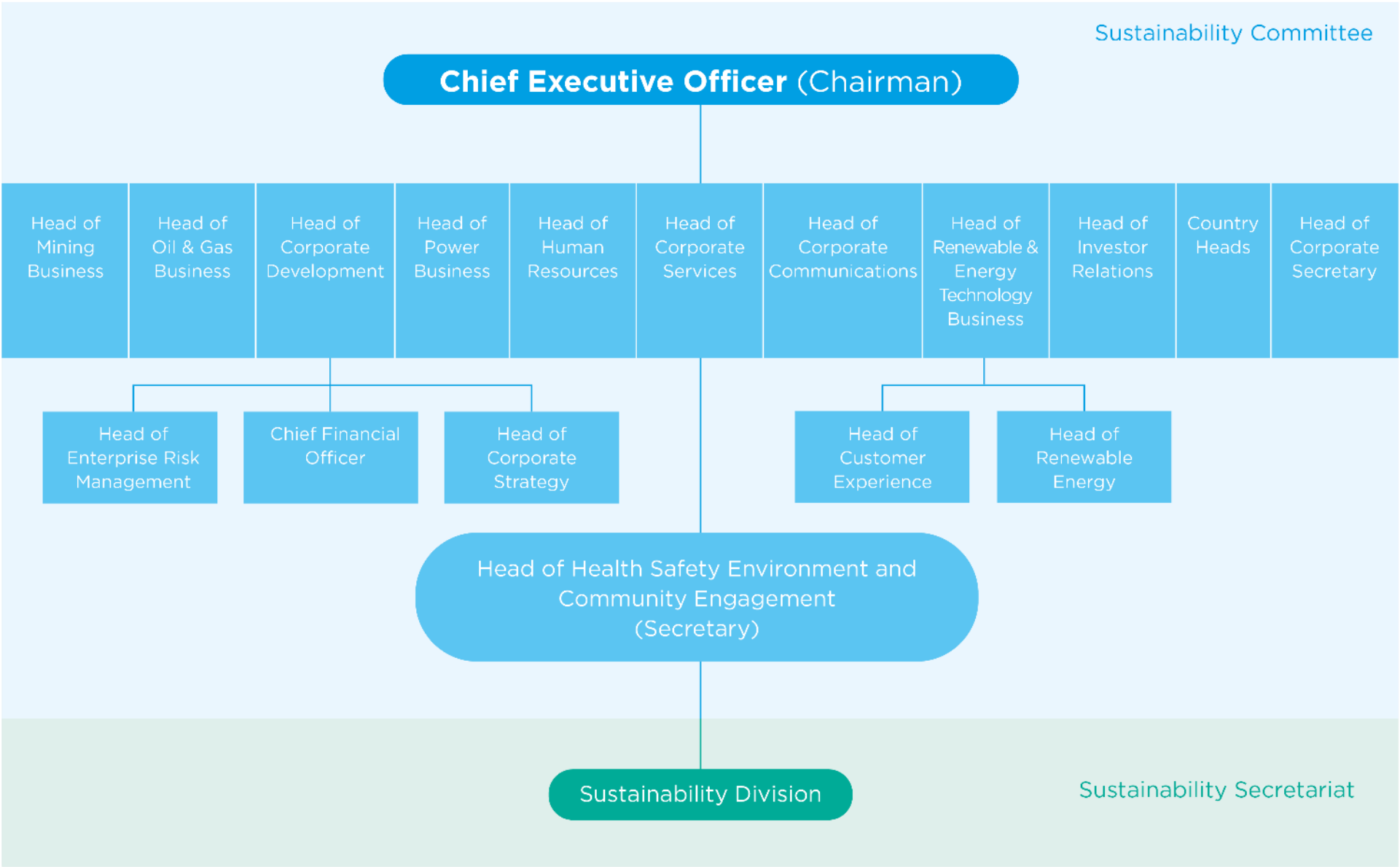
# SUSTAINABILITY STRATEGY & FRAMEWORK



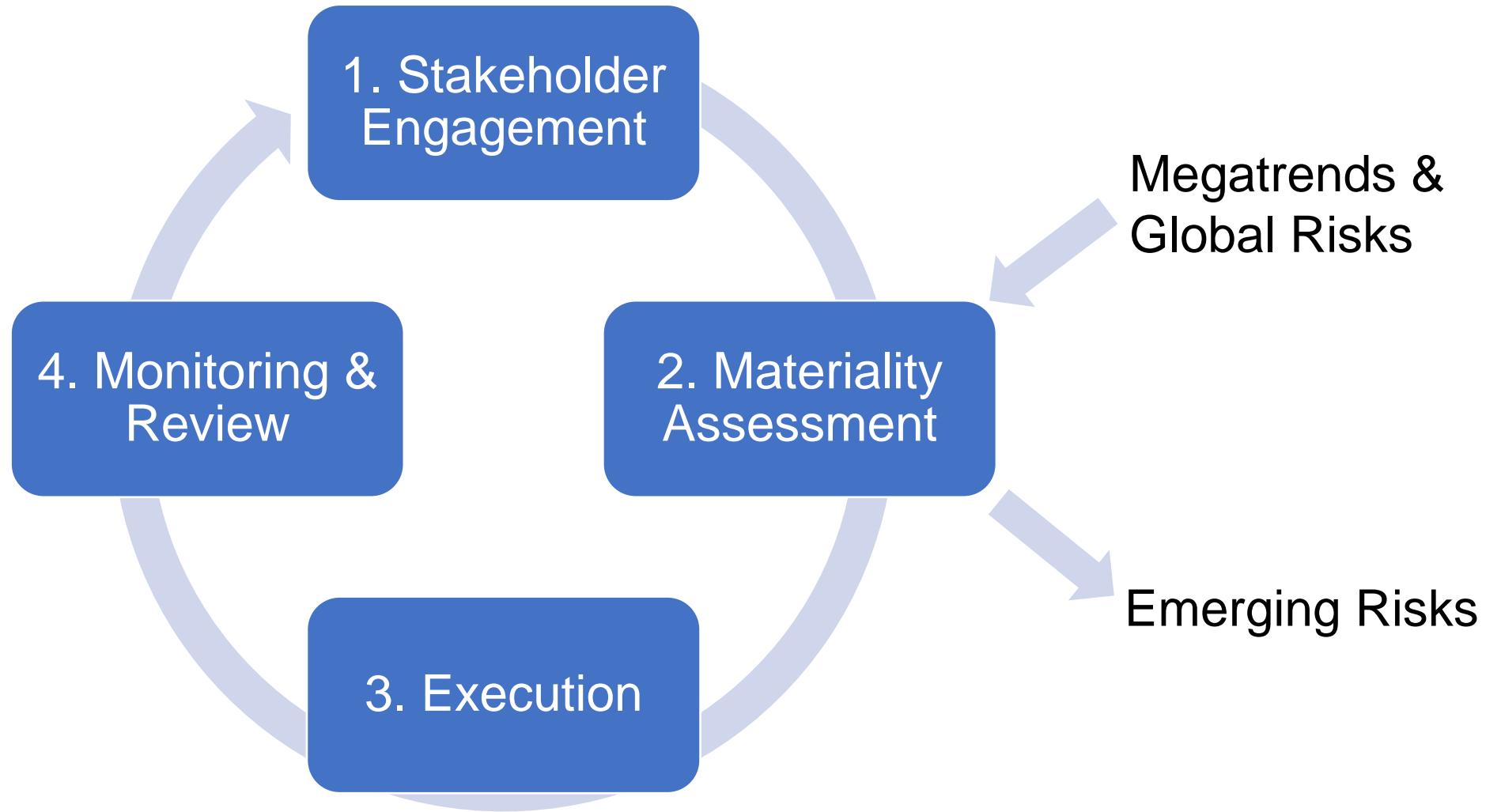
# Board governance



# Management governance ►►► Sustainability committee



# Sustainability management framework



# Stakeholder engagement

## Community



Gas Business in the U.S.



Coal Business in Indonesia

## Employee

Last Day

Now, response rate is

87%

We invite you to **participate** in the survey.

Your **participation** in the survey is a **valuable feedback** about your work experience to allow Banpu to **continuously improve** on providing a **positive work experience**.

**Note:**

- The survey link is directly sent by Kincentric to those who have not finished the survey.
- The survey is for employees who joined before 1 May 2020.

😊😊😊😊😊

If you have any questions, please contact 6890 or 6979

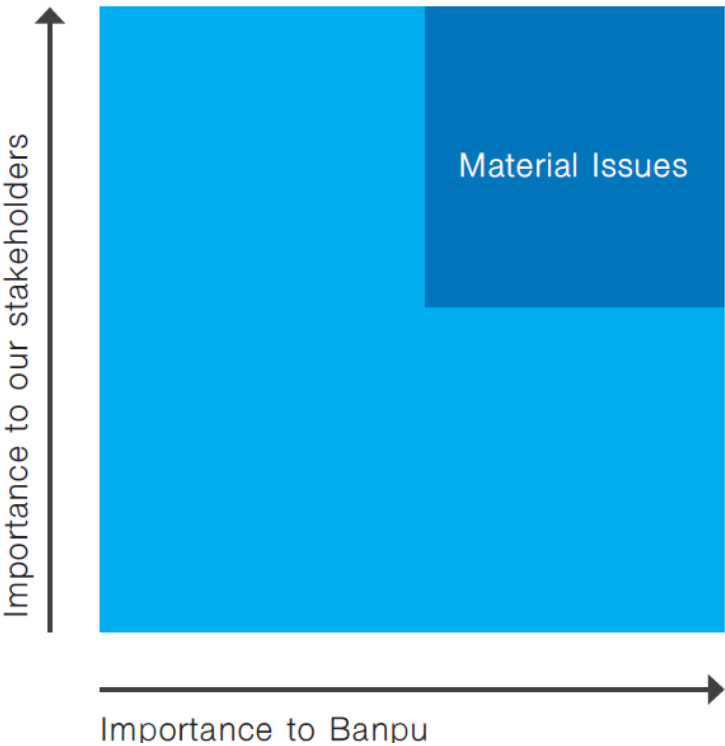
Banpu Heart and Employee Engagement Survey 2020

Sustainability Awards 2021 - BANPU

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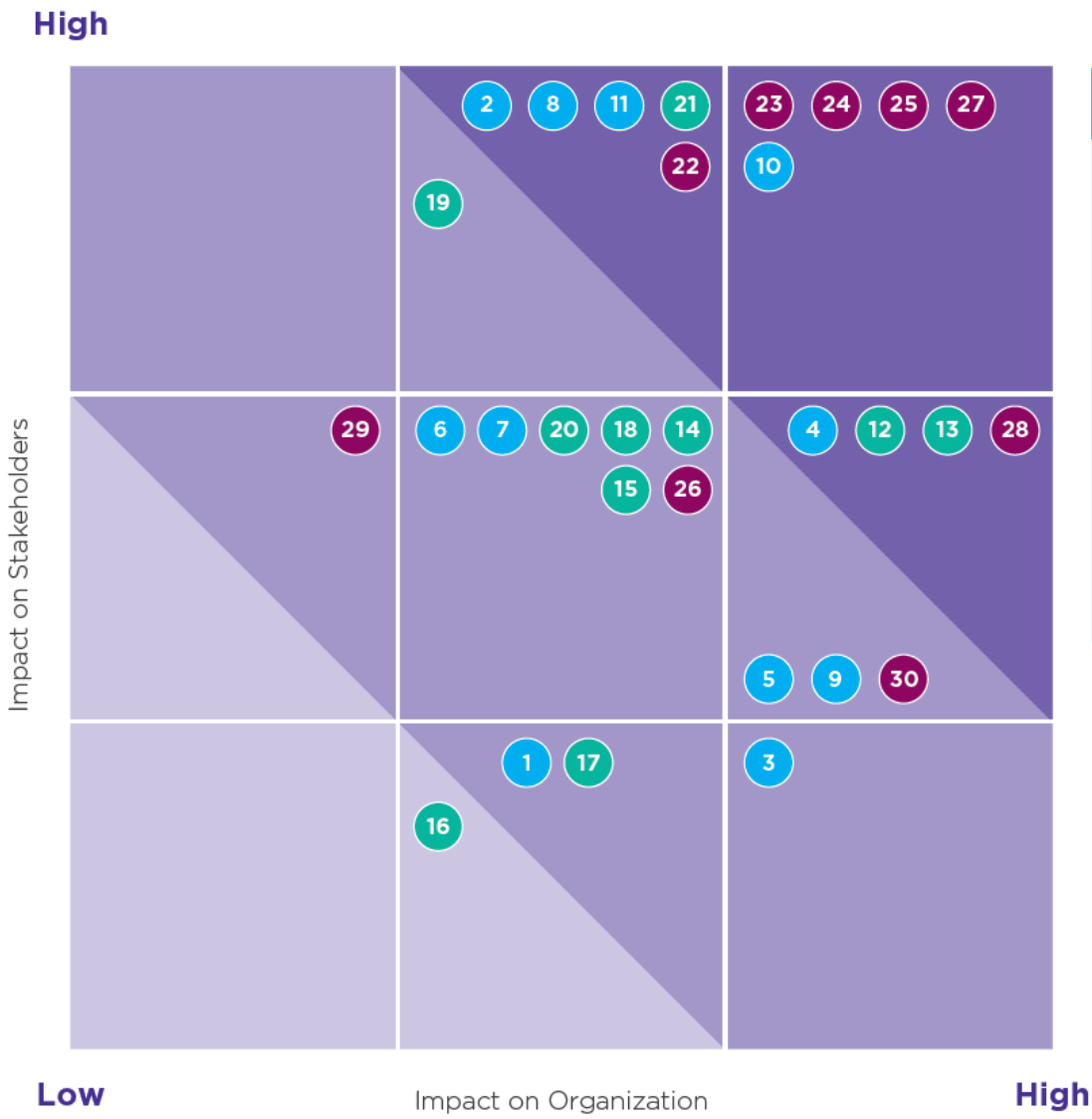
# Stakeholder's issues ▶▶▶ Material issues

Stakeholder	Engagement Method	Stakeholder's Issue
 Employee	<ul style="list-style-type: none"><li>• Communication between human resources department and employee</li><li>• Employee involvement in committees</li><li>• Complaint channel</li><li>• “Banpu Heart” behavioral survey</li><li>• Employee engagement survey</li><li>• Town Hall Meeting</li></ul>	<ul style="list-style-type: none"><li>• Direction of the Company</li></ul>
		<ul style="list-style-type: none"><li>• Business ethics and responsible business practices</li></ul>
		<ul style="list-style-type: none"><li>• Happiness in workplace</li><li>• Reasonable wages and benefits</li><li>• Career opportunities</li></ul>
		<ul style="list-style-type: none"><li>• Capability development</li></ul>
		<ul style="list-style-type: none"><li>• Safety in workplace</li></ul>
 Community	<ul style="list-style-type: none"><li>• Community Consultative Committee (CCC)</li><li>• Stakeholder satisfaction survey</li><li>• Compliant channel</li><li>• Communication with community development officers</li><li>• Public information on the website</li></ul>	<ul style="list-style-type: none"><li>• Social and environmental impact from the Company's activities</li></ul>
		<ul style="list-style-type: none"><li>• Safety in life and residence</li></ul>
		<ul style="list-style-type: none"><li>• Respect on human rights</li></ul>
		<ul style="list-style-type: none"><li>• Community well-being and economic distribution</li></ul>





# Materiality matrix (2020)



Governance	Environment	Social
1. Sustainability Governance	12. GHG Emissions	22. Employee Management
2. Business Ethics	13. Energy	23. Human Capital Development
3. Digital Transformation	14. Air Emissions	24. Corporate Culture
4. Supplier Management	15. Water	25. Occupational Health & Safety
5. Customer & Product Stewardship	16. Waste	26. Human Rights
6. Economic Distribution	17. Biodiversity	27. Community Engagement
7. Efficiency & Reliability of Power Plants	18. Mineral Waste	28. Community Development
8. Socioeconomic Compliance	19. Mine Closure	29. Resettlement
9. Risk Management	20. Mine Subsidence	30. Indigenous Peoples
10. Business Continuity Management	21. Environmental Compliance	
11. Data Privacy & Cybersecurity*		

\* New topic in 2020

# Verification by the 3<sup>rd</sup> Party



AA1000  
Licensed Assurance Provider



## LR Independent Assurance Statement

### Relating to Banpu Public Company Limited's Sustainability Report for the calendar 2019

This Assurance Statement has been prepared for Banpu Public Company Limited in accordance with our contract but is intended for the readers of this Report.

#### Terms of engagement

Lloyd's Register Quality Assurance Ltd. (LR) was commissioned by Banpu Public Company Limited (BANPU) to provide independent assurance on its Sustainability Report 2019 (the Report) against the assurance criteria below to a moderate level of assurance and at the materiality of the professional judgement of the verifier using Accountability's AA1000AS (2008) Type 2 approach<sup>1</sup>.

Our assurance engagement covered BANPU's operations and activities in Australia, China, Indonesia, Japan and Thailand (as Head Office) and specifically the following requirements:

- Evaluating the nature and extent of BANPU's adherence to all three AA1000 AccountAbility Principles - inclusivity, materiality and responsiveness.
- Confirming that the report is in accordance with:
  - GRI Standard and core option,
  - GRI Mining and Metals Sector Disclosures and
  - GRI Electric Utilities Sector Disclosures
- Evaluating the reliability of data and information for the selected indicators listed below:

Environmental: GRI 302-1 Energy Consumption, GRI 302-3 Energy Intensity, GRI 305-1 GHG Emissions Scope 1, GRI 305-2 GHG Emissions Scope 2 and GRI 305-4 GHG Emissions Intensity  
Social: GRI 403-9 (2018) Fatality, Fatality Rate, TRIFR, LTIFR, ISR and Major Incident

Note: LRQA was asked to verify only TRIFR, LTIFR and ISR for the operations in Australia, China, Indonesia, Japan (only employee) and Thailand

Our assurance engagement excluded the data and information of BANPU's suppliers, contractors and any third-parties mentioned in the report.

LR's responsibility is only to BANPU. LR disclaims any liability or responsibility to others as explained in the end footnote. BANPU's responsibility is for collecting, aggregating, analysing and presenting all the data and information within the report and for maintaining effective internal controls over the systems from which the report is derived. Ultimately, the report has been approved by, and remains the responsibility of BANPU.

#### LR's Opinion

Based on LR's approach nothing has come to our attention that would cause us to believe that BANPU has not, in all material respects:

- Met the requirements above
- Disclosed reliable performance data and information as no errors or omissions were detected
- Covered all the issues that are important to the stakeholders and readers of this report.

The opinion expressed is formed on the basis of a limited level of assurance and at the materiality of the professional judgement of the verifier.

**Note:** The extent of evidence-gathering for a limited assurance engagement is less than for a reasonable assurance engagement. Limited assurance engagements focus on aggregated data rather than physically checking source data at sites. Consequently, the level of assurance obtained in a limited assurance engagement is substantially lower than the assurance that would have been obtained had a reasonable assurance engagement been performed.

<sup>1</sup> GHG quantification is subject to inherent uncertainty.



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Website kpmg.com/th

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## Independent limited assurance report

To the Directors of Banpu Public Company Limited ("Banpu")

#### Conclusion

Based on the procedures performed, as described below, nothing has come to our attention that causes us to believe that the selected subject matters ("Subject Matters") identified below and included in the Sustainability Report 2020 (the "Report") for the year ended 31 December, together with the disclosures regarding their adherence to the three AccountAbility Principles of Inclusivity, Materiality, Responsiveness and Impact under AA1000AP (2018), and reliability of Subject Matters are not, in all material respects, prepared in compliance with the reporting criteria (the "Criteria").

#### Our Responsibilities

We have been engaged by Banpu and are responsible for providing a limited assurance conclusion in respect of the Subject Matters for the year ended 31 December 2020 to be included in the Report as identified below.

Our assurance engagement is conducted in accordance with the International Standard on Assurance Engagements ISAE 3000 *Assurance Engagements other than Audits or Reviews of Historical Financial Information* and ISAE 3410 *Assurance on Greenhouse Gas Statements*. We have also conducted our engagement in accordance with the Accountability Assurance Standard of Sustainability AA1000AS (2008) at moderate level that corresponds to a limited assurance as per ISAE 3000 with a Type 2 engagement, which covers not only the nature and extent of the organisation's adherence to the AA1000AP (2018), but also evaluates the reliability of Subject Matters as indicated below. These standards require the assurance team to possess the specific knowledge, skills and professional competencies needed to provide assurance on sustainability information, and that we plan and perform the engagement to obtain limited assurance on whether the Subject Matters are prepared, in all material respects, in compliance with the Criteria. We have complied with the independence and other ethical requirements of the International Ethics Standards Board for Accountants' International Code of Ethics for Professional Accountants (including International Independence Standards) (IESBA Code), which is founded on fundamental principles of integrity, objectivity, professional competence and due care, confidentiality and professional behavior. The firm applies International Standard on Quality Control 1 and

accordingly maintains a comprehensive system of quality control including documented policies and procedures regarding compliance with ethical requirements, professional standards and applicable legal and regulatory requirements.

We have not been engaged to provide an assurance conclusion on any other information disclosed within the Report.

#### Subject Matters

Subject Matters comprised of the following data expressed numerically or in descriptive text for the year ended 31 December 2020:

- GRI 302-1 Energy consumption within organization
- GRI 302-3 Energy intensity
- GRI 303-3 Water withdrawal (2018)\*
- GRI 303-4 Water discharge (2018)\*
- GRI 303-5 Water consumption (2018)\*
- GRI 305-1 Direct (Scope 1) GHG emissions
- GRI 305-2 Energy indirect (Scope 2) GHG emissions
- GRI 305-3 Other indirect (Scope 3) GHG emissions
- GRI 305-4 GHG emissions intensity
- GRI 305-6 Emissions of ozone-depleting substances (ODS)\*
- GRI 305-7 Nitrogen oxides (NOx), sulfur oxides (SOx), and other significant air emissions (NOx, SOx, PM and Hg)\*
- GRI 306-2 Waste by type and disposal method\*
- GRI 306-4 Transport of hazardous waste\*

# Commitment on SDGs

## PREVIOUS ACHIEVEMENT

2021

2022

2023

2024

2025

6-3  
6-4



- Water baseline data is available at all business units
- Zero significant tailings spills
- Zero hazardous waste to landfill

- Hazardous waste disposal less than 6 tonnes for thermal power business
- Intensity of non-hazardous waste disposal less than 0.130 kg/MWh for thermal power business
- Intensity of hazardous waste disposal less than 0.010 kg/tonne and non-hazardous waste disposal less than 0.140 kg/tonne for mining business

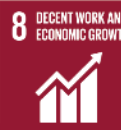
7-2



- 0.66 GW of renewable energy
- 0.25 GW of solar rooftop
- 700 MMcfed of shale gas production

- More than 50% of portfolio are clean energy
- More than 1.1 GW of renewable energy production capacity

8-7  
8-8



- Zero occupational fatalities
- More than 50% of spending on local suppliers

- More than 70% of business unit assessed for human rights risks

- Lost time injury rate of employees less than 1.99 and contractors less than 0.14
- High-consequence injuries rate (employee) less than 0.06
- Zero high-consequence injuries rate (contractor)

12-4



- SO<sub>2</sub> emissions intensity less than 30 g/tonne for mining business
- SO<sub>2</sub>, NO<sub>x</sub>, TSP emissions intensity less than 76.6, 118.4, and 23.0 g/MWh for thermal power business

- 5% energy intensity reduction from 2019 for mining business

13-1  
13-2



Integrate internal carbon pricing in investment decision

- 7% GHG emissions intensity reduction from BAU for mining business
- 20% GHG emissions intensity reduction from BAU for thermal and renewable power business

15-1  
15-2  
15-5



- All business units assessed for potential impact on biodiversity
- More than 90% of revegetation against plan for mining business

- Net positive impact on biodiversity upon closure of the mine identified as high potential for biodiversity impact



All community development projects are linked to the SDGs

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## HUMAN RIGHTS



### PRINCIPLE 1 : Support and respect human rights PRINCIPLE 2 : No human rights abuses

- Respect and comply with local laws and international principles responding to human rights, especially the rights of indigenous peoples
- Conduct human rights due diligence to access human rights risks in supply chain
- Provide equal opportunity, regardless of race, gender, religion, or nationality

## LABOR



### PRINCIPLE 3 : Freedom of association PRINCIPLE 4 : Elimination of forced labor PRINCIPLE 5 : Abolition of child labor PRINCIPLE 6 : Elimination of discrimination in workplace

- Allow employees to exercise freedom of association and collective bargaining such as forming a labor union
- Comply with local laws and regulations regarding child and forced labor
- Provide opportunity to everyone with no discrimination across all stages of employee lifecycle

## ENVIRONMENT



### PRINCIPLE 7 : Precautionary approach to environmental challenges PRINCIPLE 8 : Environmental responsibility PRINCIPLE 9 : Environmentally friendly technologies

- Comply with environmental regulations as well as actively monitor environmental risks to prevent negative impact
- Manage efficiently use of resources to preserve natural resources, reduce waste disposal and avoid waste to landfill
- Apply digital technology to improve environmental management system such as utilizing 3D photogrammetry in subsidence management
- Access biodiversity risk and avoid to operate in the area with high biodiversity value or threatened species

## ANTI-CORRUPTION



### PRINCIPLE 10 : Work against corruption

- Follow the international principles of corporate governance to ensure the ethical conduct of the Company, especially in anti-corruption
- Build employees' awareness of business ethics through implementation of corporate governance policy, code of conduct, and related policies

# Employee: drive by engagement level

Last Day

Now, response rate is

87%

We invite you to participate in the survey.


Your participation in the survey is a valuable feedback about your work experience to allow Banpu to continuously improve on providing a positive work experience.

Note:

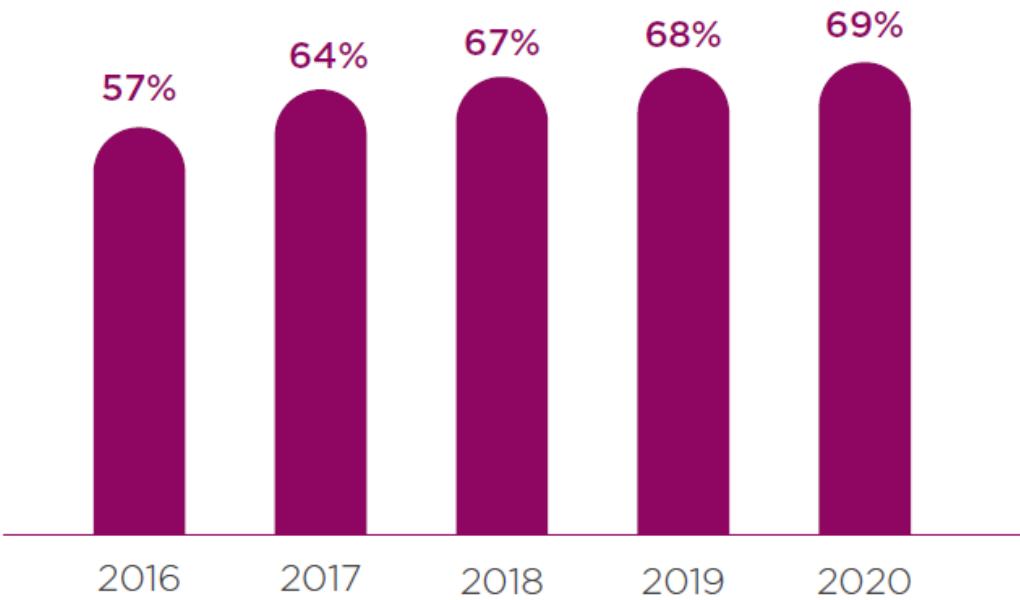
- The survey link is directly sent by Kincentric to those who have not finished the survey.
- The survey is for employees who joined before 1 May 2020.

If you have any questions, please contact 6890 or 6979.

Banpu Heart and Employee Engagement Survey 2020



LEVEL OF EMPLOYEE ENGAGEMENT



Year	Level of Employee Engagement
2016	57%
2017	64%
2018	67%
2019	68%
2020	69%

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# Employee: embed “Banpu Heart” in all stages of employee life cycle



**P a s s i o n a t e** **I n n o v a t i v e** **C o m m i t t e d**  
Striving for the Future      New Ideas, New Solutions      Success is the Only Option



## Recruitment

Access personalities and behaviors by using “Personality inventory test” and “Culture-fit assessment”



## On-boarding

Corporate culture “Banpu Heart” workshop for new recruits



## Development

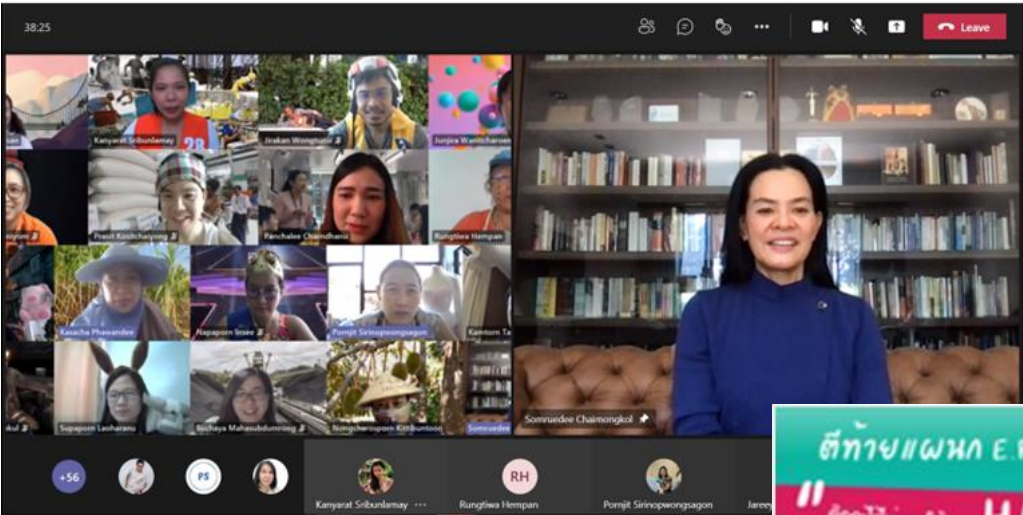
Strengthen through various activities and communication channels



## Performance evaluation

Embed “Banpu Heart” as part of behavior-based KPI

# Employee: strengthen “Banpu Heart” in daily life in all countries

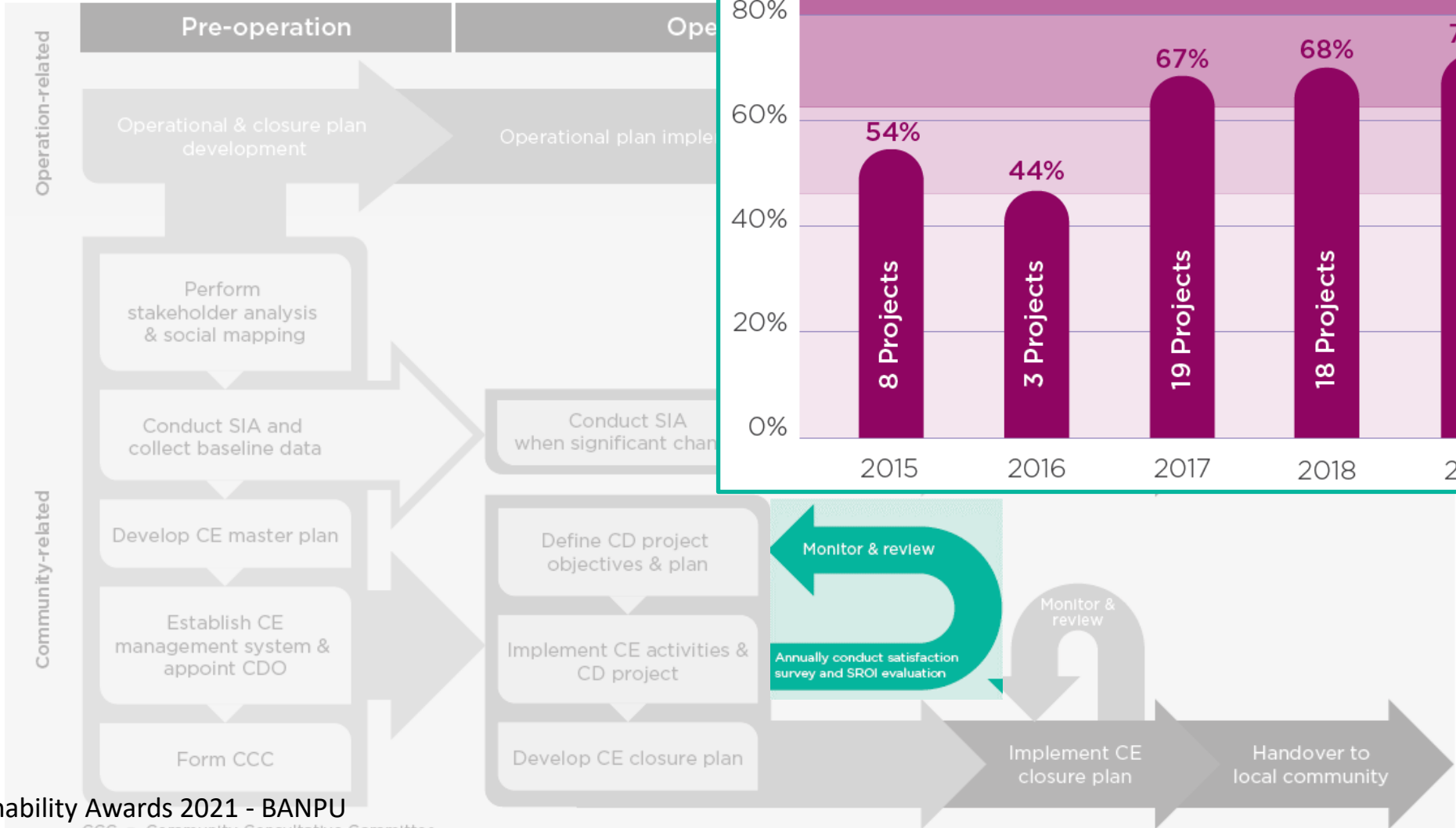
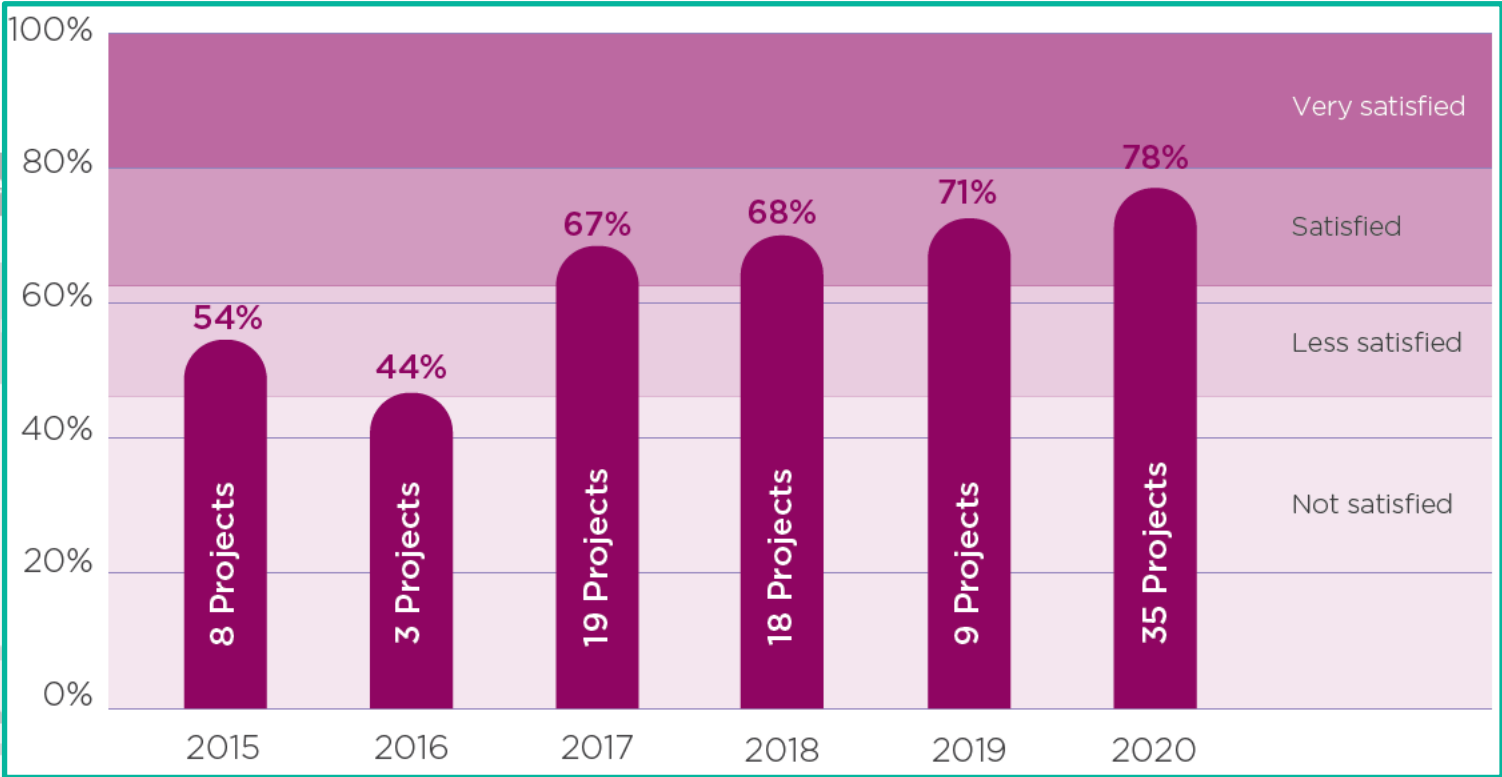




# Community: 6-dimensional activities



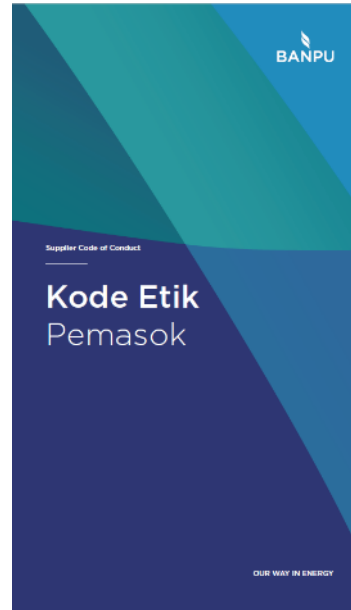
# Community: monitor community's satisfaction



# Supplier: Code of Conduct available in 6 language



English



Indonesian



Chinese



Japanese



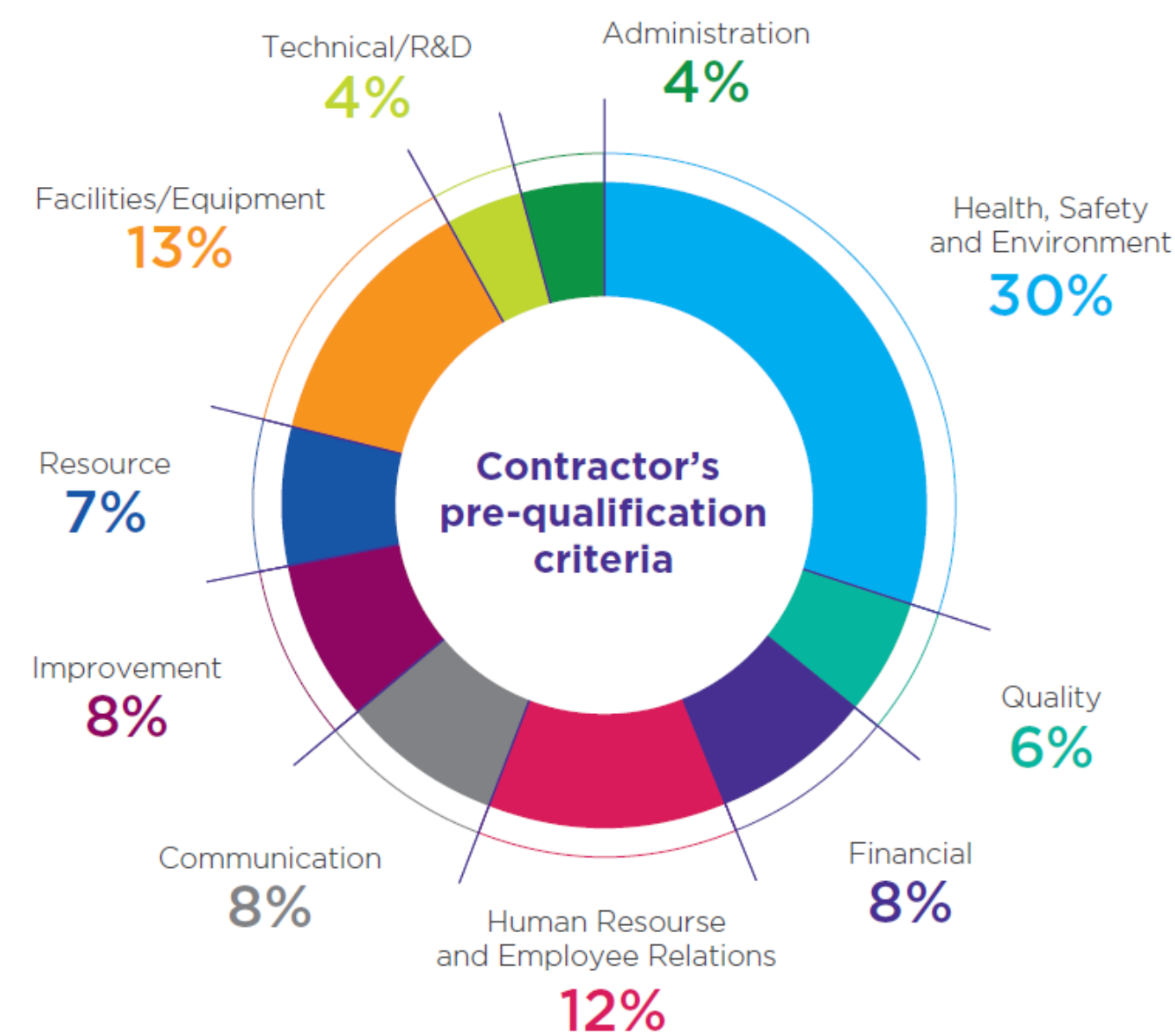
Thai



Vietnamese



# Supplier: ESG integration in supplier selection



# BUSINESS RESILIENCE

## Emerging Risk

# Emerging risks

## Risks from Climate Change

Global concern on alternative use of energy with lower GHG emissions to combat the climate change

## Risk from the Advancement of Energy Technologies

Transformation of energy through disruptive technology causing sudden shift in the energy industry including related laws & regulations

## Cyber Threats

Increasing digital dependence may lead to cyber threats causing data breaches and operation shutdown and affect the business continuity and reputation

## Risks of the COVID-19 Pandemic

The COVID-19 pandemic causing business operation and business continuity

# Risk from climate change

Banpu has developed strategy to be part of the low carbon society with a clear target to reduce GHG emissions.

Mitigation	Progress as of 1H-2021
Policy & Governance	<ul style="list-style-type: none"> <li>Established ESG Committee at the BoD level to oversee the ESG matters to ensure that the ESG is managed corresponding to Banpu's value and stakeholders' long-term interests</li> <li>Set up Climate Change Committee to be responsible for managing the climate change risk holistically as well as mitigating associated risks, leading to a reduction of GHG emissions in the future</li> <li>Set up working team to conduct "Decarbonization project" to draft strategic plan and key project milestones of decarbonization related activities</li> <li>Announced new GHG emissions targets towards 2025 for both mining and power businesses</li> <li>Completed climate-related risks and opportunities assessment following the Task Force on Climate-related Financial Disclosures (TCFD) recommendation</li> </ul>
Strategy & Investment	<ul style="list-style-type: none"> <li>Launched a new 5-year business plan for 2021-2025 on the theme "Greener, Smarter" strategy by accelerating the transition towards the energy sustainability goal, with key achievements as follows:               <ul style="list-style-type: none"> <li>Gas business: acquired Barnett in the U.S. with ~597 MMcfed net production and ~3.5 Tcfe 1P reserves</li> <li>Thermal power business: COD SLG project 1,320 MW in China with HELE technology                   <ul style="list-style-type: none"> <li>: Invested in an IGCC power plant in Japan, 543 MW with HELE technology</li> </ul> </li> <li>Renewable power business: achieved 906 MW committed renewable capacity across Asia</li> </ul> </li> </ul>
Operation	<ul style="list-style-type: none"> <li>Installed a microgrid system with 2 MW of Solar PV and 2 MW of battery storage at Trubaindo, Indonesia</li> <li>Changed fuel oil from B20 to B30 to increase of biogenic GHG scope 1 in Mining Business Indonesia</li> <li>Developed the "flue gas treatment and waste heat recovery" project at Zhengding power plant, selected as China's 100 Eco-environmental Innovation Projects</li> </ul>

# Risk from the advancement of energy technologies

Banpu endeavors to deploy technologies and agile approach as well as foster innovation culture

Mitigation	Progress as of 1H-2021
Strategy & Investment	<ul style="list-style-type: none"><li>• Launched a new 5-year business plan for 2021 – 2025 on the theme “Greener, Smarter” strategy by accelerating the transition towards the energy sustainability goal, with the achievement below: -<ul style="list-style-type: none"><li>- Solar rooftop &amp; floating: 249 MW committed capacity across North and Southeast Asia</li><li>- Energy storage: 0.5 GWh on equity basis in lithium-ion battery production capacity</li><li>- E-Mobility: 3,729 passengers/day ride hailing via electric Tuk-Tuk service, 215 electric vehicles under fleet management, and 1 e-ferry sold</li><li>- Smart cities: 5 projects includes energy management and smart infrastructure</li><li>- Energy trading: 220 GWh electricity sales in Japan</li></ul></li></ul>
Digital transformation	<ul style="list-style-type: none"><li>• Expanded the innovative culture to China by establishing 2 Digital Capability Centers (DCC)</li><li>• Continue embedding the agile approach for project development, with 13 new use-cases and initiatives, e.g. In-pit visualization and production, Short-term Supply-chain Optimization (SSO) program</li><li>• Continue implementing Banpu Digital Academy to conduct the online training about the digital and agile approach for employees, increased from 400 in 2018 to 1,400 people in 2020</li></ul>



# Cybersecurity threats

Banpu implements data privacy and IT security policies and processes to reduce the overall risks or impact of a cyber threat

Mitigation	Progress as of 1H-2021
Policy	<ul style="list-style-type: none"><li>Announced the information and Cybersecurity policies and practices</li></ul>
Control & Awareness	<ul style="list-style-type: none"><li>Implemented the Data Privacy policy to define the purpose of data collection, disclosure of information, and security of personal data</li><li>Obtained the ISO 27001 Information Security Management Systems (ISMS) certification, inclusion of countermeasures and action plans in the event of a cyberattack</li><li>Conducted the disaster recovery plan (DRP) exercise annually for the critical data, namely financial data and enterprise documents. The effectiveness of response plan is then accessed by the 3<sup>rd</sup> party as a part of the business continuity management system certification.</li><li>Organized the crisis communications exercise simulating scenarios involved with the critical information leakage from cyber threats</li><li>Evaluated cyber risk at power asset level and arrange knowledge sharing related Cyber Security Act</li><li>Educated employees on cyber threats, including practices and prevention against cyber threats, e.g. phishing emails to raise employee's awareness</li></ul>

# Risks of the COVID-19 pandemic

Banpu has effectively implemented business continuity management system and online communication to smoothen operating management.

Mitigation	Progress as of 1H-2021
Strategy & measurements	<ul style="list-style-type: none"><li>• Employees:<ul style="list-style-type: none"><li>- Activated the Crisis Management Team (CMT) and Incident Management Team (IMT) in all operating countries to execute the business continuity plan and launch various measurements in response to the pandemic to ensure uninterrupted business operation and safety of all employees, e.g. 100% work from home measurement, execute electric document management system, conduct webinar &amp; socialization for high alert and awareness</li><li>- Provided face masks, alcohol gel, vaccination and covid-19 insurance benefit for all employees. Currently, almost all employees in all operating countries already took the 1<sup>st</sup> shot of vaccine.</li><li>- Arranged “Banpu Family Connect” on the online platform to keep all employees in touch and relax</li></ul></li><li>• Supply chain: Strengthen supply chain management to ensure the availability of critical contractors and logistics of products and services<ul style="list-style-type: none"><li>- Mining Business: Provided vaccine to small Indonesian contractors</li><li>- Renewable: Worked with EPC on alternative plan to accelerate construction and applied bubble and seal method for each subcontractor activities at site</li></ul></li><li>• Corporate:<ul style="list-style-type: none"><li>- Continue implementing cost control measurements</li><li>- Conducted scenario testing for prudent cash flow management to minimize the impact from the global economy downturn due to the COVID-19 pandemic</li></ul></li></ul>

# BUSINESS RESILIENCE

## Business Continuity

# Banpu business continuity management framework

## Business Continuity Management (BCM) Framework (Aligned with ISO22301)



- Leadership
- Organization Context
- Planning
- Support and
- Embedding BCM in Organization's Culture



- Critical Business Functions (CBFs)
- Business Impact Analysis (BIA)
- Risk Assessment (RA)
- Strategy
- Business Continuity Plan (BCP)
  - Response Plan
  - Recovery Plan



- Plan Exercise
- Performance Evaluation
  - Internal Audit
  - Management Review
- Continuous Improvement



- Crisis & Emergency Team (CEM) Activation
- Plan and Execution

*PREPARATION STAGE*

*CRISIS/EMERGENCY STAGE*

# Banpu group's BCM teams



## CMT\*: Crisis Management Team (Crisis Management at Corporate Level)

Escalate to CMT in case impact  
beyond country level to response

Escalate to CMT in case impact  
beyond country level to response

### Example: Crisis Emergency & CBFs Team Thailand

#### Crisis Emergency Team (CEM)

IMT: Incident Management Team

EMT: Emergency Management  
Team

ERT: Emergency Response Team

Support Team, Thailand

CCT: Crisis Communication Team

DRT: Disaster Recovery Team

RRT: Relative Response Team

GA: General Affairs

Support Team, Thailand

#### Critical Business Functions (CBFs) Team

Marketing, Sales & Logistics

Finance – Treasury

Finance – Corporate Controller

Information Technology

Human Resources

Legal

General Administrations

Corporate Communications

Cooperate Compliance

Health, Safety, Environment & Community  
Engagement

Corporate Strategy

Enterprise Risk Management

BCM Steering Committee (BCMR: Mr. Jirameth) is to ensure the  
business continuity system in place and effectiveness.

CEM & CBFs Team

CEM & CBFs Team

CEM & CBFs Team

CEM & CBFs Team

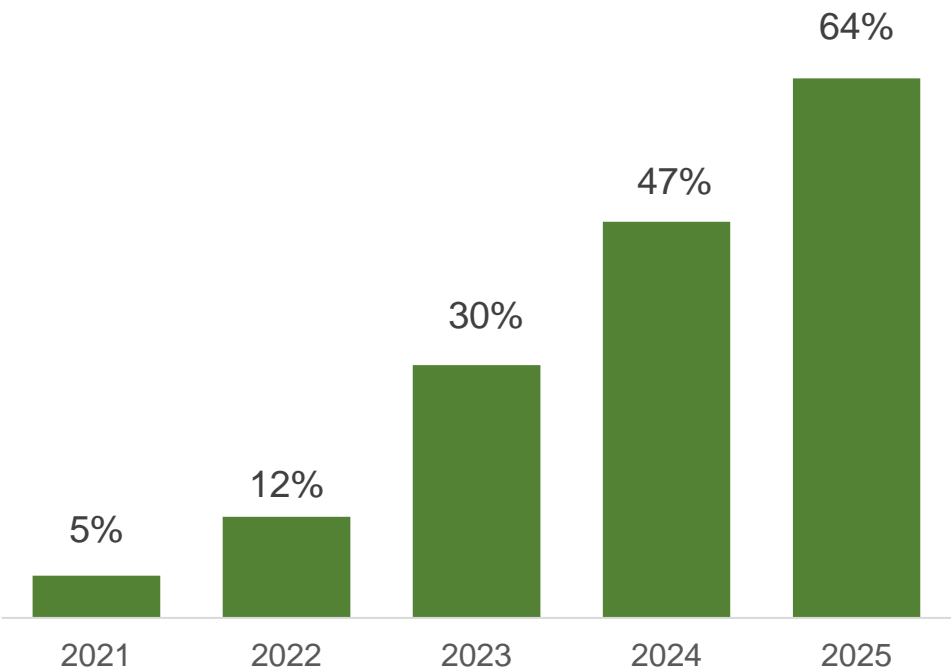


\*CMT activate and response to the crisis in case impact beyond country level or IMT (country) level

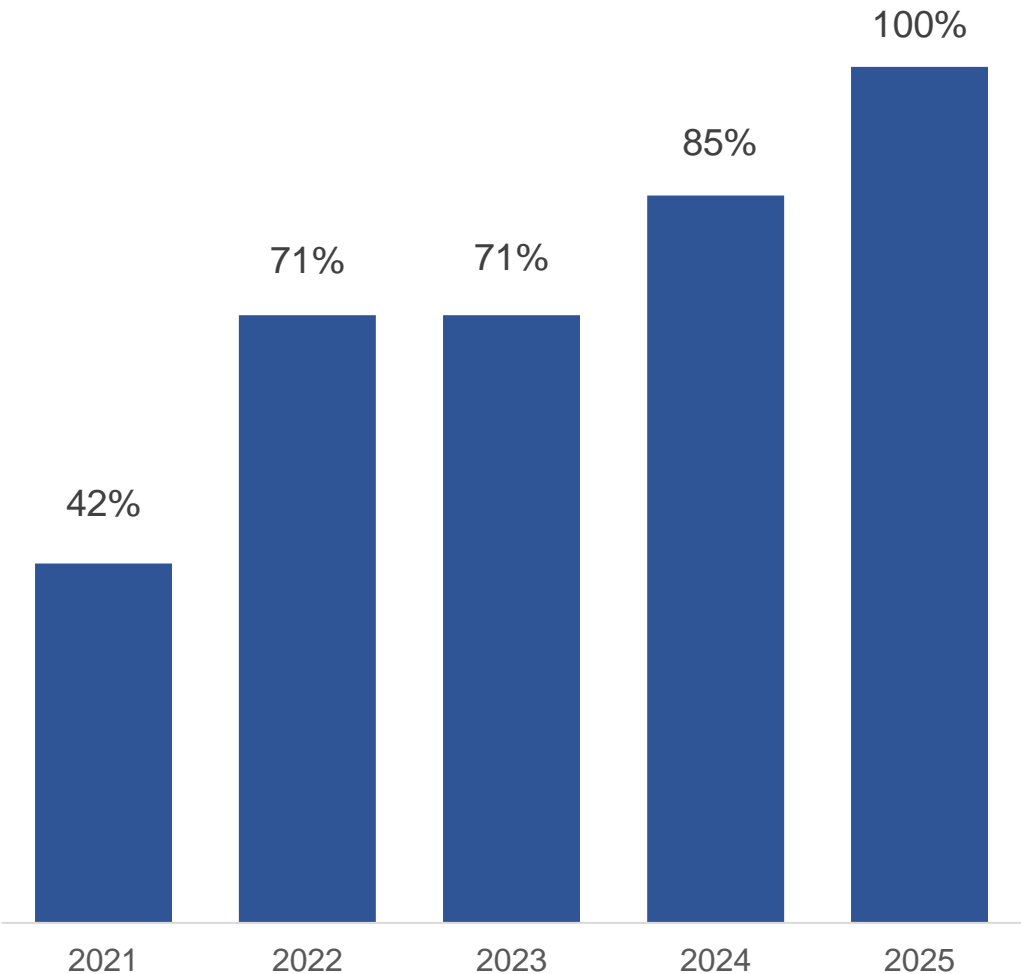


# Targets for business continuity management

Coverage of BCP exercise for critical business functions



Coverage of CMT / IMT exercise



# Examples of business continuity plans



Flood Incident



IT Disaster /  
Cybersecurity



Political  
Demonstration



Company Protest



Fire Incident



Pandemic

# Examples of business continuity plan at operations (COVID-19)



- Work from home for all staffs at BKK office
- Seek vaccine for employees, currently at 55%
- IMT meeting every month and update via LINE group
- All CBFs activated and follow their own BCPs
  - ✓ Legal dept. applied e-Signature for contract
  - ✓ HR dept. applied electronic online workflow such as medical expenses reimburse, Tax Document, etc



- Work from home for all staffs at JKT office
- Seek vaccine for employees, currently at 47%
- IMT meeting every week
- Social distancing at mine sites
- Isolation at sites and hospital, test before resume to work
- Travelling restriction at sites



- Seek vaccine for employees, currently at 92%
- IMT meeting every week
- Travelling restriction at sites



- Work from home for all staffs at Sydney office
- Vaccine promotion for employees, currently at 0.25%
- IMT meeting every week
- Social distancing at mine sites
- Travelling restriction at sites

# BOARD INVOLVEMENT

# Board involvement: governance management during COVID-19



## Employees

- Monitor pandemic situation and provide support at all operations
- Support efficiency and convenience of “work from home” measurement through IT Technology



## Society

- Support Mitr Phol-Banpu Solidarity to Aid Thailand on COVID-19 Confrontation Endowment to provide helping hands and moral support to all affected sectors, especially front-line medical personnel
- Support programs to relief economic impacts for affected and underprivileged people throughout the country



# CORPORATE CITIZENSHIP & SOCIAL RESPONSIBILITY

- Employee -

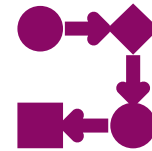
# Employee: care during COVID-19



**Safety**



**Protection**



**Facilitation**



**Heart & Soul**

# Employee: care during COVID-19



## Safety

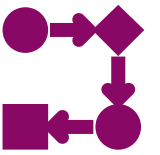
- 80% of Thai Expats working overseas managed to travel back to Thailand in March 2020.
- 100% work from home for employees working in Bangkok office.
- 1<sup>st</sup> period: December 22, 2020 – February 8, 2021
- 2<sup>nd</sup> period: April 8, 2021 until present
- Activated the Incident Management Team (IMT) for crisis management and communication.
- Applied COVID-19 insurance for employees starting from March 2020.



## Protection

- Coordinated with The Social Security Office to get COVID-19 vaccination for employees.
- Coordinates with local organizations to get vaccines for Thai Expats working in overseas.
- Provides the protection kits to employees (Mask, alcohol spray, medicines).
- Provided the protection kits to employees who required to work at customer's site.
- Sourced and secured the Booster Vaccines for employees including their 1 family member.

# Employee: care during COVID-19



## Facilitation



### COVID-19 related

- Closely monitor the situations in order to support employees in timely manner and allocate additional budget if needed.
- In case of risk of COVID-19 infection from working, the company fully supports all cost occurred.
- Should travel overseas be required for work, the company fully supports all associated cost. (ASQ, PCR test and etc.)
- Formed the voluntary team to support employee by giving guidance and coordinating with hospitals if needed.
- In case of COVID-19 infection with employee who works overseas, coordinated with the International SOS and local doctor at the working site to closely monitor the symptoms during home isolation.



### WFH Support

- Strengthen employees' skills & competencies" by maintaining the development programs to employees as usual through various effective development channels.
- Adjusted the claiming process for employees to more conveniently reimburse welfare and benefit during work from home.
- Allowed reimbursement of office facilities for WFH under the flexible benefit.
- Applied the Tele Medicine in coordination with insurance company for employees to be able to consult doctor virtually and get medication.
- Apart from COVID-19 situations, we also responded to other situations to support employees in time of crisis, such as provided expense supports for temporary relocation to avoid risks from explosion of Chemical Factory in Bangkok suburban.

# Employee: care during COVID-19



Heart & Soul

- Arranged the Health Talk session for employees relating to Self-care during WFH.
- Provided the Counselor / Psychiatrist Service.
- Continuing the virtual workout to keep employees healthy: 1-on-1 personal trainer, yoga class, Zumba class.

**BANPU**  
BOOST UP YOUR  
HAPPINESS  
งานพีดี สุขภาพจิตดี

บริการให้การปรึกษากับ  
RF Counselor / Psychiatrist  
ผ่านระบบ Web Application ตลอด 24 ชม.

“ เพื่อเพิ่มความสุขในการทำงานและเรื่องส่วนตัว ”

เช่น ความสัมพันธ์กับหัวหน้า การตัดสินใจในชีวิตประจำวัน สร้างสุขจากงานประจำ  
วางแผนอย่างไรให้ชีวิตไม่เครียดเกินไป คิดถึงเพื่อนเก่า ไตสุขภาพไม่ดี  
อยากออกไปเที่ยวแต่ไม่อยากเสี่ยงกับไวรัสโควิด-19 ในพื้นที่เสี่ยง  
อยากหาเพื่อนใหม่แต่ไม่รู้จะไปหาที่ไหน

With Covid-19

มีอะไรสงสัยถามได้

Boost up your  
Happiness

ปรึกษาฟรี

หากต้องการรับบริการสามารถลงทะเบียนได้ที่  
<https://happy.relationflip.com> (ไม่ค่าใช้จ่าย)  
1. กดปุ่มลงทะเบียน 2. กรอกข้อมูลส่วนตัว 3. กดขอรับบริการ  
4. รอรับบริการผ่านระบบ Web Application จากจิตแพทย์

• สนับสนุนบริการตลอด 24 ชม. 099-0026888

Relationflip : For the Better Version of Yourself

HR ร่วมกับ HSEC และทีมงานเฉพาะกิจ  
เชิญเพื่อนพนักงานเข้าร่วมฟัง



## HEALTH TALK

### ดูแลตัวเองอย่างไรเมื่อพบว่า ติดเชื้อโควิด

โดย  
**นพ.สุธี อินทรชาติ**  
แพทย์เฉพาะทางด้านเวชศาสตร์ฉุกเฉิน  
โรงพยาบาลนวมเวช  
ดูแลผู้ป่วย Community Isolation และ Home Isolation

วันศุกร์ที่ 13 สิงหาคม 2564  
14.00 -15.00

- Update ความรู้สายพันธุ์เดลต้า
- ขั้นตอนเมื่อรู้ตัวเองว่าอยู่ในกลุ่มผู้ป่วยโควิด
- การตรวจเชื้อ และเข้าสู่ระบบสาธารณสุข  
มีขั้นตอนอย่างไร + ช่องทางการติดต่อ
- ชุด telemedicine ประกอบได้ด้วยอะไรบ้าง
- ข้อปฏิบัติ Home Isolation ระหว่างรอ  
process สาธารณสุข
- การแยกตัวออกจากบุคคลอื่น (ถ้าเผื่อโดนถึงจะ  
ปลอดภัย)

Human Resources Department





# Employee: engagement during WFH

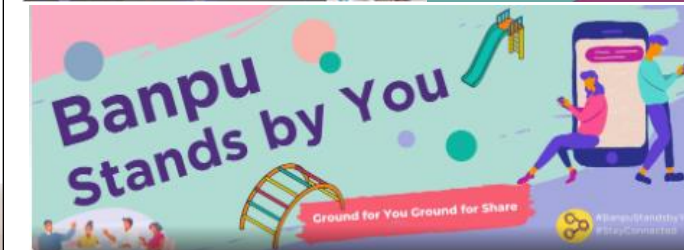


## Banpu Stands by You

Informal platform: Facebook closed group was created

### Objective:

- To make employees confident in the Company in handling situations.
- To create morale and encouragement. To keep updates of company's key movements.
- To engage them in company activities.



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# Employee: engagement during WFH

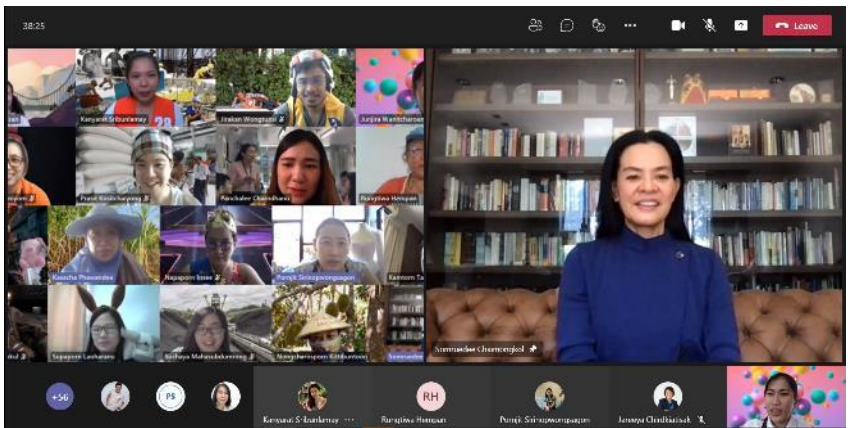


## Banpu Family Connect

Virtual Session via MS Team

### Objective:

- To get together.
- To create morale and encouragement.
- To engage them in company activities.



BanpuHeart

Banpu Family Connect

HR x Relationflip

ชวนมาร่วมพูดคุยในหัวข้อ

เทคนิค

การดูแลงานและใจอย่างไร

ให้สามารถอยู่กับ Covid

เพื่อนสนิทยาม WFH

วันที่: 6 สิงหาคม 2021

เวลา : 13.30 - 14.30 น.

ผ่านช่องทาง MS Team

ทำให้อิสระไม่เกิดความสูญเสียการทำงานแบบ WFH ที่น่าดึงดูดใจที่เมื่อเวลาจัดการเวลาของตัวเองมากขึ้น

Distancing ยังไม่เพียงพอในช่องโหว่ชีวิต-บาด -> ห่างกาย ใจไม่ห่างกัน

นอนไม่พออย่าหลับ พอลืมต่อนอนเข้าไม่ยากลุกดูสิถ้าใจยังไม่สงบอย่านอน ถ้าใจยังไม่สงบอย่าทำอาหารที่ต้องทำให้ตัวเอง ผ่านมาหลายเดือนก็ยังไม่ชนะ?

Speaker

คุณศุภาดา วัฒนปกรณ์

นักจิตวิทยาชำนาญการพิเศษ

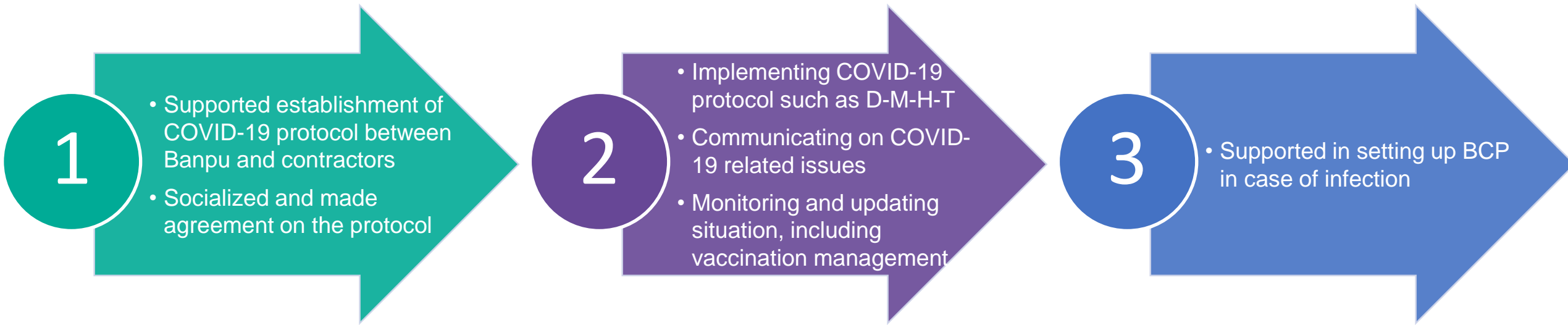
Relationflip

# CORPORATE CITIZENSHIP & SOCIAL RESPONSIBILITY

- Contractor -

# Contractor: practices at operational sites

Each country applied three approaches for supporting contractors and adjusted to fit the local context



## Example of additional measures in Indonesia

- Setting up a VGR (Vaksin Gotong Royong), a vaccine program by ITM for small contractors
  - Encouraging contractors to get the vaccine
  - Supported contractors on how to registration to get the vaccine
  - Provided channel to get the vaccine and coordinate with VPP (Vaksin Program Pemerintah), Vaccination from Government, in order to get the vaccine to support contractors
  - Donated to community in the areas where contractors lived through CSR programs
  - Supported High Flow Nasal Canule for hospital through CSR program which can support both community and contractors
- Invited contractors & outsources to get the vaccine at ITM office





# Contractor: practices in Thailand

## 1 Established COVID-19 protocol between sites and contractors

- Communicating COVID-19 hygiene protocol applied for contractors (e.g. strictly comply with D-M-H-T-T principles, proceed in case of infection)
- Updating COVID-19 situation, related information and prevention measures on noticed boards



## 2 Implementing & monitoring

- Monitoring daily health check before entering the sites
- Allocated suitable manpower in each station to avoid the congestion of worker and safety space



## 3 Established BCP in case of infection

- Providing hand sanitizer sets e.g., alcohol gel & spray, masks, cleaning water and soaps at all essential points of the sites
- Sourcing Rapid Antigen Test (ATK) kits
- Coordinating and supporting to registration agencies for COVID-19 vaccination
- Prepared business continuity plan and isolation zone and facilities in case contractor is found to be infected with COVID-19

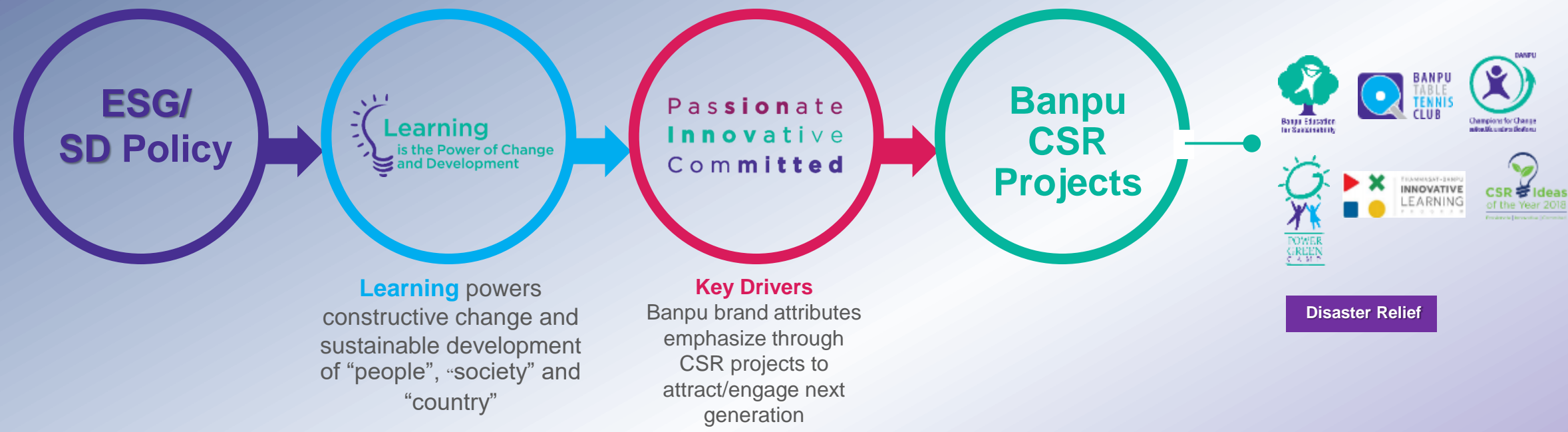




# CORPORATE CITIZENSHIP & SOCIAL RESPONSIBILITY

- Society -

# Banpu's CSR



## Business Credo

*“An industry will be strong only when it is developed in tandem with social and environmental responsibility”*



# Banpu CSR – Our Way in Making Social Impact



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# Disaster Relief

2004

Indian Ocean Tsunami

2008

Sichuan Earthquake

2011

Thailand's Great Flood

2018

Laos dam collapse in Attapeu  
Severe Flood in Nan  
Earthquake in Hokkaido

2019

Tropical Storm Pabuk



As a good corporate citizen, Banpu takes an active part in disaster relief efforts, both domestic and international. With our contribution, the affected people are able to resume their livelihoods and continue earning a living for themselves and their families.





2020  
-  
2021

COVID-19 Outbreak

# Mitr Phol - Banpu Solidarity to Aid Thailand on COVID-19 Confrontation Endowment



As the first wave of Covid-19 in Thailand existed in early 2020, Mitr Phol Group and Banpu Public Company Limited jointly established the 'Mitr Phol - Banpu Solidarity to Aid Thailand on COVID-19 Confrontation Endowment' in March. With a total budget of THB 500 million raised from the two companies for THB 250 million each.

# Mitr Phol - Banpu Endowment Objectives



- To provide important medical and public health equipment to prevent and control the COVID-19 situation for hospitals and public health agencies across the country
- To boost morale and empower medical personnel and volunteers who devoted themselves to support the society during the outbreak

- To relieve the economic impacts on the vulnerable people across the country
- To inspire other organizations to support the governmental and public sectors in handling the crisis



# Covid-19 Situations in Thailand and Endowment Actions

## 1<sup>st</sup> Wave

Jan 20: 1<sup>st</sup> infected case in Thailand



## 2<sup>nd</sup> Wave

Dec 20: Cluster in Central Prawn Market in Samut Sakhon



## 3<sup>rd</sup> Wave

Apr 21: Clusters in Bangkok Pub and Narathiwat prison



## 4<sup>th</sup> Wave

Jul 21: Increasing number of infected cases and deaths

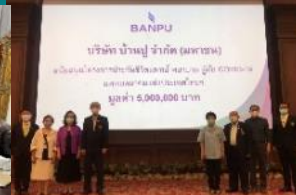


- Support medical equipment to capable hospitals and provincial/district hospitals in remote and high-risk areas
- Support insurance for medical personnel
- Donation of quality face masks
- Donation of food supplies and goodie bags to affected people
- EV car sharing to support medical personnel

- Support field hospitals
- Support medical equipment and PPE to provincial/district hospitals in remote and high-risk areas
- Donation of food supplies and goodie bags to affected people

- Support hospitals for capability increase in handling number of COVID-19 patients
- Support necessary equipment to prevent the spread of COVID-19 in high-risk zones
- Support telemedicine system
- Sharing EV car and e-scooters to support medical personnel missions
- Support medical equipment and PPE to provincial/district hospitals in remote and high-risk areas
- Donation of food supplies and goodie bags to affected people







# Banpu Next's CSV project

## Banpu Next EV Car Sharing for Caring

- Provided Evs to safe journeys of medical personnel during COVID-19 pandemic with free of charge
- Phase 1: 50 EV cars allocated over a period of three months to King Chulalongkorn Memorial, Phyathai 1, Phyathai 2, Phyathai Nawamin and Paolo Paholyothin hospitals
- Phase 2: 21 EV cars and e-scooters allocated to Medical Professionals at Budsarakam Field Hospital
- Phase 3 (Current): EV cars to provide food supplies and necessities to people in need.



## Highlighted Figures



Approx. **340**

Organizations that the Endowment  
provided supports



**>140**

Number of hospitals that were  
provided support on medical  
equipment and supplies to  
confront COVID-19



Approx. **40**

Number of provinces that  
the supports has been  
covered.







# Creating Employee Engagement through Company's CSR



**ครัวบ้านปู**  
BANPU HEARTWARMING KITCHEN  
ปรุงสุข ด้วยใจ

**ครัวบ้านปู ปรุงสุข ด้วยใจ คืออะไร?**  
BANPU HEARTWARMING KITCHEN

โครงการครัวบ้านปู ปรุงสุข ด้วยใจ (Banpu Heartwarming Kitchen) เป็นเวทีให้พนักงานได้อาสา ร่วมแบ่งปัน ความช่วยเหลือไปยังชุมชนที่ได้รับผลกระทบจากการแพร่ระบาดของโควิด-19 ผ่านกิจกรรมประกอบอาหาร ร่วมกับสมาชิกในครอบครัวในทุกๆ วันเสาร์ ตั้งแต่วันที่ 28 สิงหาคม - 30 ตุลาคม พ.ศ. 2564 หรือสนับสนุนร้านอาหารในชุมชนที่ได้รับผลกระทบจากสถานการณ์ดังกล่าวเช่นเดียวกัน

หมายเหตุ : การสื่อสารภาษา ผ่านหนังสือโครงการสูงสุดประมาณ 200 คลิป ถือเป็นเป็นการสื่อสารอย่างมีประสิทธิภาพและปลอดภัยตามมาตรฐาน



BanpuHeart

Engage staff to contribute to the society (under Mitr Phol – Banpu Endowment) and create pride for Company's effort to social responsibility

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