

# CH1 Sustainable Development

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# 1.1 Sustainability visions and goals GRI 2-23

## USIG Vision: Create sustainable value for a sustainable society

We aim to continuously create sustainable value with our core competency to contribute to social sustainability.

Based on the sustainable vision, we have developed three core strategies: "R&D and innovation," "steady operations", and "social inclusion", hoping to create value with stakeholders together. We extend the contents of the core strategies into seven key topics as the foundation for honest and reasonable partners to build visions.



## APC Sustainability Vision: Leader of Innovation and Sustainability

### Sustainability Strategy and Principles:

Innovative Technology, Sustainable Development, Safety and Harmony

### Sustainability Approach:

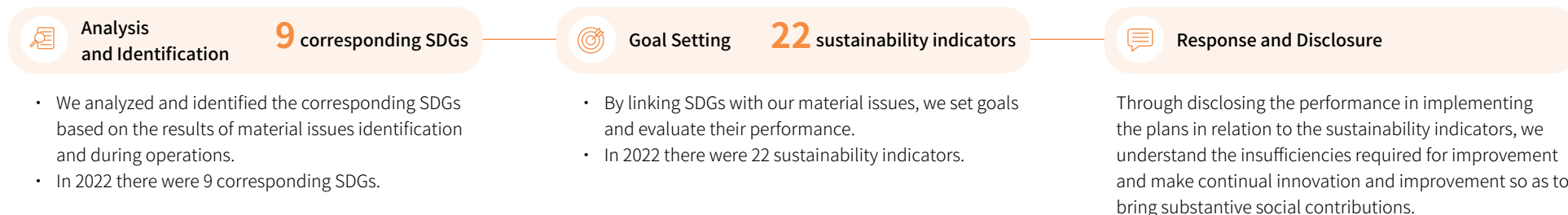
More economic benefits, good governance, higher production efficiency, environmental sustainability and survival, people-oriented management, CSR fulfillment

As a member of USIG, we have set our vision, strategy, principles, and approach of sustainable development based on the group's sustainability vision. We have also combined the key issues of USIG for the reference of realizing our sustainability visions and goals.



## Response to UN SDGs GRI 2-24










Setting out from the core value of sustainable development, we combine the UN SDGs with the our sustainability approaches. Through the following three stages: “analysis and identification”, “goal setting”, and “response and disclosure”, we have identified the association between our sustainability approaches and the SDGs and set the relevant goals for operational management.



## Correspondence and Actions Between SDGs and Sustainability Approaches

SDGs	Sustainability Approaches	SDGs	Sustainability Approaches
<b>3 Good health and well-being</b> Provide employees with high-quality healthcare service through a well-established welfare system and reduce causalities and accidents through management of highly hazardous chemicals.	People-oriented management	<b>9 Industry, innovation and infrastructure</b> Provide R&D resources and engage in product innovation and R&D to increase product added value.	More economic benefits
<b>4 Quality education</b> Support and sponsor education and sustainable development in remote townships to ensure equal opportunity of education for vulnerable children.	CSR fulfillment	<b>11 Sustainable cities and communities</b> Reduce air pollutant emissions and improve waste management to reduce the production of hazardous substances and enhance environmental quality.	Environmental sustainability and survival
<b>6 Clean water and sanitation</b> Enhance water efficiency and reduce impacts on water and ecosystems through the quality control, recycling, and reuse of effluents.	Environmental sustainability and survival	<b>12 Responsible consumption and production</b> Enhance materials efficiency, recycling, and reuse to reduce waste generation and practice sustainable resource management.	Enhance production efficiency
<b>7 Affordable and clean energy</b> Enhance energy efficiency and develop renewables for environmental sustainability through clean production and green manufacturing.	Enhance production efficiency	<b>13 Climate action</b> Assess risks and opportunities due to climate change and plan countermeasures to lower the environmental impact brought by climate change.	Environmental sustainability and survival
<b>8 Decent work and economic growth</b> Improve economic performance, provide a safe workplace environment, ban child labor, and ensure remuneration equality to maintain human rights and the right to work for workers.	More economic benefits Good governance		




Note: (X) represents unachieved targets; currency: NTD

SDGs	Goals	2022 Performance	Response	
	<ul style="list-style-type: none"> <li>Insurance/healthcare benefits</li> <li>Implementing process safety management (PSM)</li> </ul>	<ul style="list-style-type: none"> <li>Employee group medical insurance</li> <li>Birth allowance for 10 persons, NT\$10,000 each</li> <li>Four sessions of health checkups, 210 persons in total</li> </ul>	<ul style="list-style-type: none"> <li>Inhouse service of contracted physicians for 6 times</li> <li>Promoting the process safety management system</li> </ul>	<ul style="list-style-type: none"> <li>5.2 Talent development</li> <li>5.3 Healthy workplace</li> </ul>
	<ul style="list-style-type: none"> <li>Scholarships and grants</li> <li>Practicing education for remote townships</li> </ul>	<ul style="list-style-type: none"> <li>Sponsoring NT\$5 millions for USI Education Foundation</li> </ul>		<ul style="list-style-type: none"> <li>5.4 Social engagement</li> </ul>
	<ul style="list-style-type: none"> <li>Water reclamation (reuse) rate &gt;95.0%</li> <li>Water consumption per unit product: &lt;4.1 m3/MT</li> <li>Effluent water quality, COD &lt;50 mg/L</li> </ul>	<ul style="list-style-type: none"> <li>Water reclamation rate: 99.2 %</li> <li>Water consumption per unit product: 3.8 m3/MT</li> <li>Effluent COD 40.72 mg/L</li> </ul>		<ul style="list-style-type: none"> <li>4.1 Resources management</li> </ul>
	<ul style="list-style-type: none"> <li>Energy efficiency monitoring</li> <li>Set energy conservation target: Electricity conservation rate 1.0%</li> <li>Build green power (solar PV) installations</li> </ul>	<ul style="list-style-type: none"> <li>Electricity consumption per unit product: 1.477 MWh/MT</li> <li>Electricity conservation rate 0.68 % (X) (Note 1)</li> <li>Plan and implement green power strategies within the group:Linyuan Plant will use green power (solar PV) of about 2.5GWh in 2025 by law.</li> </ul>		<ul style="list-style-type: none"> <li>4.2 Climate change and energy management</li> </ul>
	<ul style="list-style-type: none"> <li>Maintain corporate growth through sustainable investment</li> <li>Ban child labor and ensure remuneration equality</li> <li>Zero occupational accidents</li> </ul>	<ul style="list-style-type: none"> <li>Net income after tax: NT\$1.447 billions</li> <li>Ratio of basic salary and remuneration of women to men: Intermediate and junior officers 1.08:1 and general employees 0.88:1.</li> <li>Employee injury rate: 0</li> </ul>		<ul style="list-style-type: none"> <li>2.2 Economic performance</li> <li>5.2 Talent development</li> <li>5.3 Healthy workplace</li> </ul>
	<ul style="list-style-type: none"> <li>Product development or quality improvement: At least one product each year</li> <li>Proportion of R&amp;D funds in total revenues &gt;0.6%</li> </ul>	<ul style="list-style-type: none"> <li>Product development: 2 products</li> <li>R&amp;D funds: NT\$54,214 thousand, accounting for 0.55% (X) of the total revenues (Note 2)</li> </ul>		<ul style="list-style-type: none"> <li>3.1 Technology R&amp;D</li> </ul>
	<ul style="list-style-type: none"> <li>Air pollutant emissions monitoring and improvement</li> <li>Waste management</li> </ul>	<ul style="list-style-type: none"> <li>Equipment and component leakage tour inspection: 280 spots/month</li> <li>Complying with the recognized target emissions for air pollution of Gaoping Phase I.</li> <li>Commissioning waste disposal to qualified contractors in accordance with the regulations of the Environmental Protection Administration</li> </ul>		<ul style="list-style-type: none"> <li>4.3 Emissions management</li> </ul>
	<ul style="list-style-type: none"> <li>Ethylene efficiency <math>\leq 1.100</math></li> <li>Flexible intermediate bulk container (FIBC) recovery rate &gt;78%</li> <li>Circular economy, waste metal recovery</li> </ul>	<ul style="list-style-type: none"> <li>Ethylene efficiency: 1.0041</li> <li>FIBC recovery rate: 78.2%</li> <li>Waste metal recovery: 72.3MT</li> </ul>		<ul style="list-style-type: none"> <li>4.1 Resources management</li> <li>4.3 Emissions management</li> </ul>
	<ul style="list-style-type: none"> <li>Climate change risk management</li> <li>Establish the carbon reduction commitment to reduce emissions by 27% over 2017 by 2030.</li> </ul>	<ul style="list-style-type: none"> <li>Analyze climate-related risks and opportunities and assess their potential financial impacts based on the TCFD recommendations</li> <li>Establish the ISO 50001 energy management system (EnMS) and monitor energy efficiency indicators.</li> <li>The 2022 emissions reduced by 4.5% over 2017</li> </ul>		<ul style="list-style-type: none"> <li>4.2 Climate change and energy management</li> </ul>

Note 1: The target for electricity conservation in 2022 was unachieved because some improvement projects were postponed due to COVID-19, reducing their contribution to electricity conservation and leading to the unachieved target.

Note 2: The 2022 R&D funds were NT\$54,214 thousand, equivalent to that of 2021. Due to the heat market demand, product sales maintained at a high level, increasing revenues by about 2.61%. The product R&D funds accounted for 0.55% of the total revenues, below the target value (0.6%).

The short-term action plan and long-term planning for the SDG-linked sustainability approaches are as follows:

Sustainability Approaches	Short-term Action Plan (2022-2023)	Long-term Planning (2024-2025)
 <b>Governance</b>	<p>More economic benefits Good governance</p> <ul style="list-style-type: none"> <li>• Kaohsiung Intercontinental Container Terminal (ICT)</li> <li>• Project Phase II: Enhance materials dispatch flexibility</li> <li>• Gulei Project: Build the own ethylene supply system</li> <li>• Assess debottlenecking of production lines</li> </ul>	<ul style="list-style-type: none"> <li>• Build EVA production facilities in the Gulei Petrochemical Complex</li> <li>• Integrate product and production lines to enhance market influence</li> <li>• Assess new production line construction</li> </ul>
 <b>Environmental</b>	<p>Enhance production efficiency Environmental sustainability and survival</p> <ul style="list-style-type: none"> <li>• Enhance resource efficiency and reduce effluents and waste</li> <li>• Enhance equipment availability for energy conservation and carbon reduction</li> <li>• Plan green power construction</li> </ul>	<ul style="list-style-type: none"> <li>• Plan renewables</li> <li>• Promote clean production and green manufacturing</li> <li>• Response to climate change and extreme weather events</li> </ul>
 <b>Social</b>	<p>People-oriented management CSR fulfillment</p> <ul style="list-style-type: none"> <li>• Implement PSM</li> <li>• Zero occupational accidents</li> <li>• Sponsor social welfare and engage in educational activities</li> </ul>	<ul style="list-style-type: none"> <li>• Successor training</li> <li>• Enhance industrial safety checks for zero accident.</li> <li>• Continuously sponsor charitable activities to enhance social service capacity</li> </ul>

# 1.2 Our value chain

## About APC

Established on 25 January 1977, Asia Polymer Corporation (stock code: 1308) is headquartered in Taipei. In response to the government’s investment incentivization policy, we built a polyethylene plant in the Linyuan Petrochemical Industrial Park in Kaohsiung City to develop, manufacture, and sell low-density polyethylene (LDPE) and ethylene vinyl acetate copolymer resin (EVA).

After two production line expansions in May 1984 and September 2015, the current capacity is 145,000MT/year.

In response to the “Kaohsiung City Existing Industrial Pipelines Self-Governance Ordinance”, we relocated the head office to the Linyuan Plant in Kaohsiung in June 2016.

## Operational Deployment

Become the leader of EVA manufacturing by keeping R&D in Taiwan, developing higher-valued products and high-end applications, deploying the Greater China market, enhancing global market competitiveness, re-investing in the “Gulei Integrated Refinery Project” in Zhangzhou, Fujian, through a third area, vertically integrating steam cracking, petrochemical intermediate materials, and plastic products, reducing transportation costs, and enhancing competitive niche.

## Locations

All major operational locations are in Taiwan, including the Taipei HQ and Linyuan Plant.

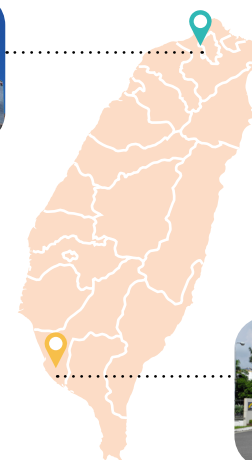
Taipei HQ takes charge of product sales, and the Linyuan Plant engages in product manufacturing and R&D.

### Basic data GRI 2-1、2-8

<b>Name of Company</b>	Asia Polymer Corporation		
<b>Date of establishment</b>	25 January 1977	<b>Industry</b>	Plastics industry
<b>Chairman</b>	Quintin Wu	<b>President</b>	Pei-Chi Wu
<b>Capital</b>	NT\$5.93 billion	<b>Numbers of employees</b>	234 persons (by 31 December 2022)
<b>Head Office</b>	No.3, Industrial 1st Rd., Linyuan Dist., Kaohsiung, Taiwan, 832 ROC	<b>Taipei HQ</b>	12F, No. 37, Jihu Road, Neihu District, Taipei City
<b>Revenues</b>	NT\$9.815 billion	<b>Total Production</b>	130,120MT
<b>Major Products</b>	Low Density Polyethylene (LDPE) Ethylene Vinyl Acetate Copolymer Resin (EVA)		



Taipei HQ



Head Office, Linyuan Plant



## Corporate History

### 1986

- Publicly offered on the Taiwan Stock Exchange (TWSE)
- Australian BTR NYLEX invested in APC and acquired 51% of our shares and transferred the shares to its subsidiary BTRN Asia in the same year.

### 1984

- The 3<sup>rd</sup> production line was constructed and started mass production.

### 2022

- Completed the ISO 14064-1 GHG inventory and verification of APC Linyuan Plant

### 2021

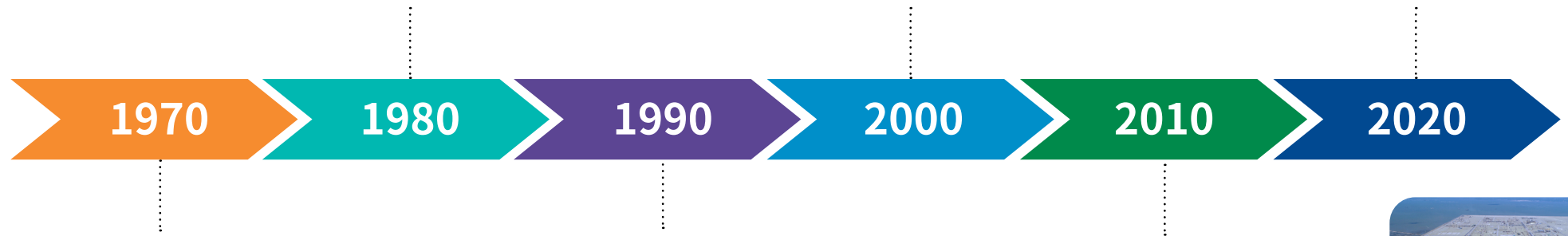
- Implemented the process safety management (PSM) system.

### 2009

- Passed SONY GP certification

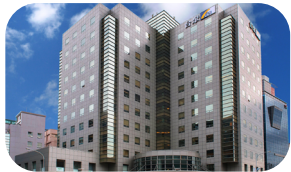
### 2001

- Passed OHSAS 18001 certification



### 1977

- APC company establishment
- Constructed a polyethylene plant in Linyuan Petrochemical Industrial Park in Kaohsiung



### 1998

- Passed ISO 14001 certification

### 1997

- BTRN Asia transferred 51% of its shares to Bermuda Belgravia One Limited co-invested by USI and UPC Technology Corporation.

### 1994

- Passed ISO 9002 certification

### 2019

- The Board passed the investment in the Kaohsiung Intercontinental Container Terminal Project Phase II.

- Passed ISO 50001 certification

- Passed ISO 45001 certification

### 2017

- Started the construction of the Gulei Project

### 2016

- Relocated the head office to Linyuan Plant in Kaohsiung
- Completed and started the commercial operation of the 4th EVA production line

### 2011

- The Board passed the construction of a 45,000MT EVA production line in Linyuan Plant





## Products GRI 2-6

We mainly produce the following two types of resins: low density polyethylene (LDPE) and ethylene vinyl acetate copolymer resin (EVA).

### LDPE can be divided by application into film grade, injection grade, and lamination grade.

- Films:** Various packaging films and extruded tubes made by blowing or casting.
- Injection:** Artificial flowers and plastic household products made through injection molding, and insulated boxes, bicycle cargo racks/baskets, and other processing products such as foam nets and ultrafine fiber made through powder coating.
- Lamination:** Packaging materials for processed foods/beverages and release paper made through lamination/coating.

2022 LDPE output: 33,651MT.

### EVA can be divided by application into foaming grade, PV grade, and lamination grade

- Foaming:** Shoe insole materials made through injection molding or compression molding.
- PV:** PV battery module packaging film made through extrusion molding.
- Lamination:** Printing or packaging products such as pre-coating, card laminate made by coating on base materials such as BOPP and PET.

2022 EVA output: 96,469MT

### LDPE Application



Packaging films



Medical extrusion tubes

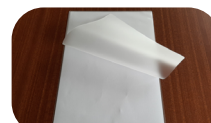


Colored lamination



Artificial flowers

### EVA Application



Card laminate



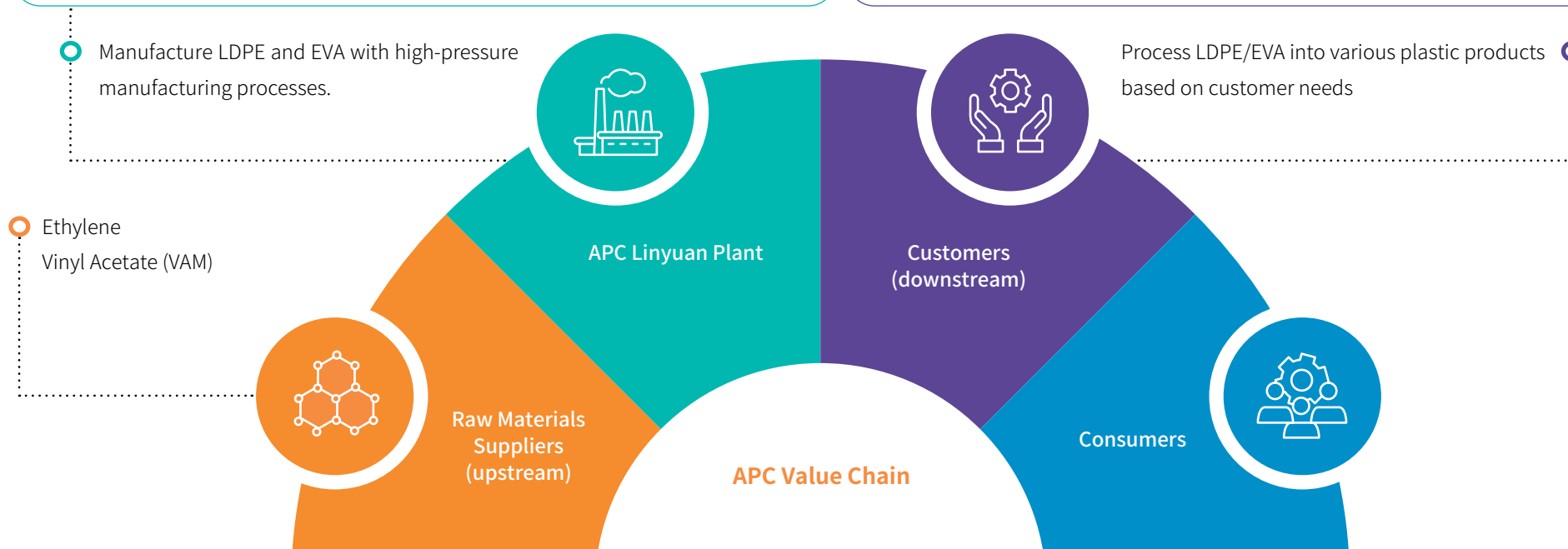
PV module packaging film



Foamed shoe materials



Pre-coating





## Business Philosophy and Goals

As a member of USIG, we uphold USIG’s business philosophy: “solid operations, professional management, seeking excellence, and serving society” to pursue operational excellence and sustainable development. Through investment in upstream material ethylene and continual product innovation and R&D, we stabilize raw materials supply and fulfill the product customization of customers to create economic benefits and enhance production efficiency to achieve the vision of corporate sustainable operations and CSR.

**APC Sustainability Strategy**

**Innovative Technology**

Through continual improvement of product quality and new product development, we aim to lead the market.

**Sustainable Development**

Through continual process improvement, energy conservation, and waste reduction, we promote environmental sustainability and survival.

**Safety and Harmony**

Through building a safe and harmonious workplace environment and public welfare participation, we fulfill our corporate social responsibility.

## Membership associations GRI 2-28

Industry intelligence exchange is a drive for corporate growth. We actively participate in various professional groups and enhance influence by combining with external powers. Through this interaction and business association, we share and promote the professional technologies and competencies in various fields. We also sponsor associations to publish journals and organize activities so as to promote industry development.

**Membership in Major Associations in 2022**

Name of Organization	Petrochemical Industry Association of Taiwan	Taiwan Synthetic Resins Manufacturers Association	Taiwan Responsible Care Association (TRCA)	Industrial Safety and Health Association of the ROC	Kaohsiung County Industrial
Member	✓	✓	✓	✓	✓
Supervisor/Director	✓		✓		

# 1.3 Stakeholder engagement GRI 2-29

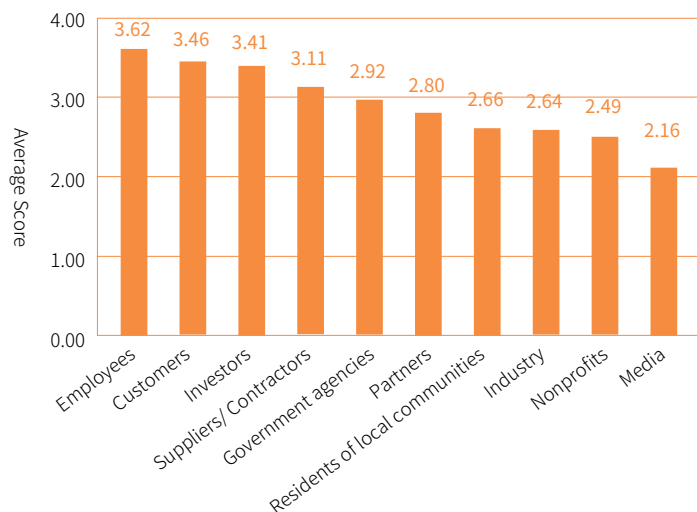
## Identification of stakeholders

Every year the “ESG Committee Working Team” of representatives from 18 APC units evaluates and surveys stakeholders once. Each team member lists the stakeholders with close contacts and influence by business, such as employees, investors, customers, suppliers/contractors, community residents, government agencies, nonprofits, industry, partner, and the media.

Based on the five attributes of stakeholders as specified in the AA 1000 Stakeholder Engagement Standard (SES 2015): responsibility, influence, dependency, diverse perspectives, and tension, we scored each stakeholder group from 0-4 marks by the intensity of relationship to identify and evaluate stakeholders. The results, sorted by the average score, are diagrammed below:

After discussing the results of stakeholder identification and evaluation, based on the evaluation score the project secretary and three team leaders of the ESG Committee determined the following five major stakeholder groups: employees, customers, investors, suppliers/contractors, and government agencies. Additionally, “community residents” was also selected as a major stakeholder group in consideration of their close interaction with the Company, which requires our response. Then, the results of stakeholder engagement, including the identification of stakeholders, the issues that concern them, communication channels, and method of address, were submitted to the ESG Committee for approval and reported to the Board.

**Prioritization of APC Stakeholders 2022**






Based on the stakeholder attributes in AA 1000 SES (2015): Responsibility, influence, dependency, diverse perspectives, and tension




**Major APC Stakeholder Groups 2022**



## Concerned issues and response

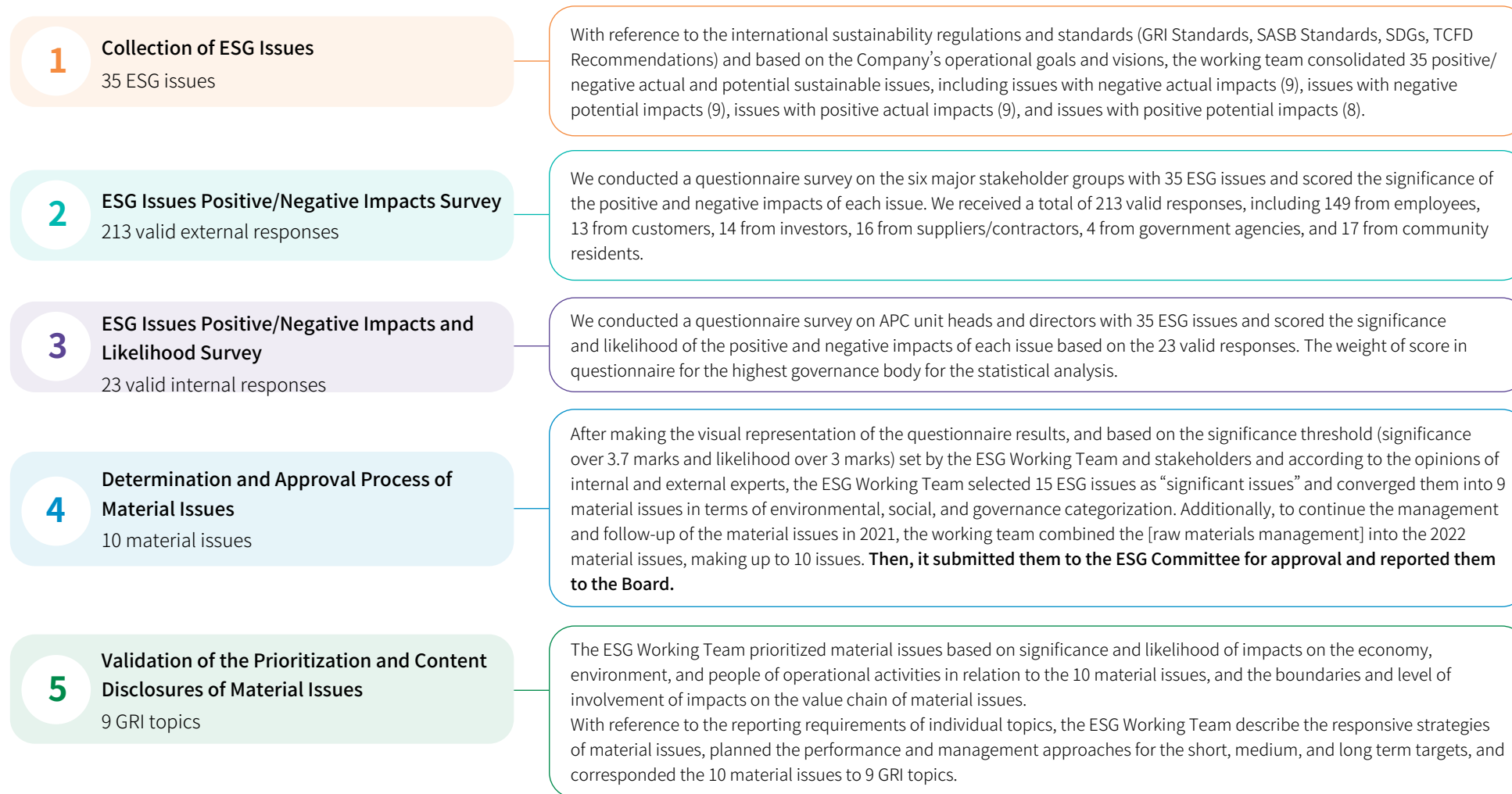
Through the external business communication in routine operations, the ESG Committee Working Team collected the “concerned issues and major communication channels” of the six major stakeholder groups and addressed the issues that concerned them and the status of implementation. The concerned issues, communication channels, and responses of major stakeholder groups in 2022 are tabulated below:

Major stakeholders	Materiality	Concerned Topic	Communication Channels and Frequency	APC’s Response	Status of Implementation	Response
 Employees	Employees are an important asset. Through well-structured salaries, welfare system, and education and training, we cohere employee engagement, enrich and enhance their professional knowledge and skills, and promote to mutual existence and mutual prosperity through sustainable development together with the Company.	<ul style="list-style-type: none"> <li>Climate Change and Energy Management</li> <li>OH&amp;S</li> <li>Talent attraction and retention</li> </ul>	<ul style="list-style-type: none"> <li>Performance interviews (once a year)</li> <li>Employee welfare committee (thrice a year)</li> <li>Occupational Safety &amp; Health Committee meeting (once a quarter)</li> <li>Employee health checkup (once a year)</li> <li>Education/training (as planned)</li> <li>Labor union general meeting (once a year)</li> <li>Labor union board meeting (four times a year)</li> <li>Pension Reserve Supervisory Committee meeting (twice a year)</li> </ul>	<ul style="list-style-type: none"> <li>USI Green Energy Corporation (USIGE), a USIG business, will discuss the green power purchase contract with all USIG businesses in 2024.</li> <li>We arrange occupational safety education and training and emergency response drills for employees to achieve zero accidents.</li> <li>We offer appropriate remuneration, develop a well-structured welfare system, give a raise to employees based on their annual performance, and plan complete duty-based education and training to achieve talents development and retention.</li> </ul>	<ul style="list-style-type: none"> <li>Annual performance evaluation and salary raise</li> <li>3 Employee Welfare Committee meetings</li> <li>4 OH&amp;S Committee meetings</li> <li>2 Pension Reserve Supervisory Committee meetings</li> <li>4 sessions of employee health checkups</li> <li>5,188 hours of employee education and training</li> <li>6 sessions of health services by contracted physicians</li> </ul>	4.2 Climate change and energy management 5.1 Talent selection 5.2 Talent development 5.3 Healthy workplace
 Customers	Customers are the important partners of our operations and development. Through technological cooperation and product improvement, we provide customers with satisfactory products and services.	<ul style="list-style-type: none"> <li>Climate Change and Energy Management</li> <li>Technology R&amp;D</li> <li>SCM</li> </ul>	<ul style="list-style-type: none"> <li>Sales visit (monthly)</li> <li>Customer satisfaction survey (at least once a year)</li> <li>Market survey (irregularly)</li> <li>Handling of customer feedback and customer complaints (irregularly)</li> </ul>	<ul style="list-style-type: none"> <li>Set targets for energy conservation and carbon reduction and identify financial implications and other risks and opportunities due to climate change.</li> <li>Request all suppliers to supply raw materials that do not contain restricted or limited substances so as to comply with the regulations for sustainable materials.</li> <li>Request suppliers to sign the Supplier Commitment, conduct onsite supplier audits, and provide guidance for or request improvement from suppliers that fail the APC social and environmental assessments.</li> </ul>	<ul style="list-style-type: none"> <li>Sales representatives visited customers 83 times/month on average.</li> <li>Technical service for 78 customers throughout the year.</li> <li>Overall customer satisfaction: 98%</li> <li>Completion rate of customer feedback handling: 100%</li> </ul>	3.1 Technology R&D 3.3 Supply chain management 4.2 Climate change and energy management
 Investors	Investors are the important supporters of our survival and development. Through capital investment and governance oversight, they enable the Company’s sustainable survival and development.	<ul style="list-style-type: none"> <li>Economic Performance</li> <li>OH&amp;S</li> <li>Climate Change and Energy Management</li> </ul>	<ul style="list-style-type: none"> <li>Annual general meeting of shareholders (annually)</li> <li>Market Observation Post System (as prescribed by law)</li> <li>Publication of financial statements and annual reports (as prescribed by law)</li> <li>Contact information of spokespersons (irregularly)</li> <li>“Investor Service” section on the corporate website (irregularly)</li> <li>USIG Stock Home website on the corporate website (irregularly)</li> <li>Publication of the ESG report (annually)</li> <li>Audit Committee Email (irregularly)</li> <li>Investment conference (annually, minimum)</li> </ul>	<ul style="list-style-type: none"> <li>We hold investor conferences for investors to understand the Company’s status of operations and future prospects.</li> <li>Publication of financial statements and annual reports as prescribed by law.</li> <li>Real-time publication of material information.</li> <li>Establish the “USIG Safety Incentives Regulations) to achieve OH&amp;S the policy goal of “zero accident”.</li> <li>Electricity reduction by 1% each year through suggestions for process energy reduction and process improvement.</li> <li>USI Green Energy Corporation (USIGE), a USIG business, will discuss the green power purchase contract with all USIG businesses in 2024.</li> </ul>	<ul style="list-style-type: none"> <li>Annual general meeting of shareholders (27 May 2022)</li> <li>Publication of financial statements and annual reports as prescribed by law.</li> <li>2022 Corporate Governance Evaluation</li> <li>One investor conference in 2022</li> </ul>	2.2 Economic performance 4.2 Climate change and energy management 5.3 Healthy workplace

Major stakeholders	Materiality	Concerned Topic	Communication Channels and Frequency	APC's Response	Status of Implementation	Response
 Suppliers/ Contractors	Suppliers are the important partners that manufacture and supply raw materials and equipment to us. They affect our production, operations, and product quality.	<ul style="list-style-type: none"> <li>· SCM</li> <li>· PSM</li> <li>· OH&amp;S</li> </ul>	<ul style="list-style-type: none"> <li>· Procurement procedures (on-demand)</li> <li>· Supplier questionnaire survey (annually/new supplier)</li> <li>· Performance review meeting (on-demand)</li> <li>· Face-to-face review meeting (by product category)</li> <li>· Purchaser visit (irregularly)</li> <li>· Market survey (weekly)</li> <li>· Contractor consultative organization meeting (irregularly)</li> </ul>	<ul style="list-style-type: none"> <li>· Request suppliers to sign the Supplier Commitment, conduct onsite supplier audits, and provide guidance for or request improvement from suppliers that fail the APC social and environmental assessments.</li> <li>· Implement the 14 items required by PSM based on regulatory requirements and reduce process risk through USIG audits.</li> <li>· Establish the "USIG Safety Incentives Regulations) to achieve OH&amp;S the policy goal of "zero accident".</li> </ul>	<ul style="list-style-type: none"> <li>· Survey on issues that concern suppliers, Once</li> <li>· Secondary Material Purchasing Planning Meeting, irregularly</li> <li>· Market survey report, weekly</li> <li>· Purchaser visits, irregularly</li> </ul>	3.3 Supply chain management 5.3 Healthy workplace
 Government agencies	Government agencies are an important indicator and direction for business development and market cultivation. Addressing the legal compliance of government agencies is the basic concept and principle for business survival and development.	<ul style="list-style-type: none"> <li>· PSM</li> <li>· OH&amp;S</li> <li>· Water resources management</li> </ul>	<ul style="list-style-type: none"> <li>· Exchange of official documents and report of material information and data (as prescribed by law)</li> <li>· Participation in law and regulation outreach activities or public hearings. (as prescribed by law)</li> <li>· Participation in forums, seminars, or annual conferences (as prescribed by law)</li> <li>· Onsite investigation (as prescribed by law)</li> <li>· Market Observation Post System (as prescribed by law)</li> </ul>	<ul style="list-style-type: none"> <li>· Implement the 14 items required by PSM based on regulatory requirements and reduce process risk through USIG audits.</li> <li>· Abide by the laws and regulations of government agencies and achieve the OH&amp;S policy goal of "zero accident" based on the "USIG Safety Incentives Regulations).</li> <li>· Establish the 3-stage water conservation measures to save water consumption by 10%, and fill insufficiencies through water purchase with water tankers.</li> </ul>	<ul style="list-style-type: none"> <li>· Exchange of official documents with government agencies: 10 documents/month on average</li> <li>· Legal outreach: 5 sessions/month on average</li> <li>· Forums or seminars: 3 sessions/month on average</li> <li>· Onsite inspection: 41 times/year</li> </ul>	4.1 Resources management 5.3 Healthy workplace
 Residents of local communities	Community residents are our close partners. Apart from being one of the main workforce sources, they are the supervisor of our operations, industrial safety, and environmental protection.	<ul style="list-style-type: none"> <li>· Social engagement</li> <li>· OH&amp;S</li> <li>· Air pollution control</li> <li>· Underground pipeline transportation</li> </ul>	<ul style="list-style-type: none"> <li>· Participation in community activities (irregularly)</li> <li>· Organization of the tennis friendship competition (annually)</li> <li>· Establishment of scholarships and promotion of talent development (annually)</li> <li>· Onsite sampling inspection (daily)</li> <li>· Community visit (irregularly)</li> <li>· Engagement in educational activities (irregularly)</li> <li>· Prevention of third-party damage (irregularly)</li> </ul>	<ul style="list-style-type: none"> <li>· Establish sound interactive relationships with community residents through participation in community activities and community visits for them to understand plant operations and prevent misunderstandings.</li> <li>· Abide by the laws and regulations of government agencies and achieve the OH&amp;S policy goal of "zero accident" based on the "USIG Safety Incentives Regulations).</li> <li>· Implement VOCs leakage tests periodically through internal and external units to ensure the health and safety of the workplace environment and community residents.</li> <li>· Explain the status of pipeline operation and related issues to community residents during pipeline construction inspections and residency.</li> </ul>	<ul style="list-style-type: none"> <li>· Visited village and neighborhood heads irregularly.</li> <li>· Adopted the "Air Quality Purification Zone Adoption Program" for Wang Gung Elementary School</li> <li>· Implemented the Wang Gung Elementary School GHG Emissions Matching Plan</li> <li>· Participated in the activities of the Kaohsiung Environmental Protection Bureau.</li> <li>· Organized the USIG Cup Tennis Competition</li> <li>· Sponsored the charitable activities organized by the USI Education Foundation.</li> <li>· Conducted pipeline construction residency and inspections to prevent third-party damage.</li> </ul>	4.3 Emissions management 5.3 Healthy workplace 5.4 Social engagement

# 1.4 Materiality analysis

## Process to determine material topics GRI 3-1



Each year the working team reviews the consistency between the analysis results of material issues and three APC sustainability principles: Innovative Technology, Sustainable Development, Safety and Harmony and their performance.

## Results of Material Issue Identification 2022

	Significance	Material Topic
Environmental	<b>Negative Actual</b> - Increased energy prices - Insufficient power supply	<b>Climate Change and Energy Management</b> (GRI 302 Energy)
	<b>Negative Potential</b> Carbon tax collection	
	<b>Negative Actual</b> Insufficient reservoir water	<b>Water resources management</b> (GRI 303 Water and Effluents)
	<b>Negative Actual</b> Improper air pollution control	<b>Air pollution control</b> (GRI 305 Emissions)

	Significance	Material Topic
Social	<b>Positive Actual</b> Building a friendly workplace environment	<b>OH&amp;S</b> (GRI 403 Occupational Health and Safety)
	<b>Positive Potential</b> A happy workplace and business	
	<b>Negative Actual</b> Improper process safety management	<b>PSM</b>
	<b>Negative Potential</b> Accidents of highly hazardous chemical substance	
	<b>Negative Potential</b> No succession plan	<b>Talent attraction and retention</b> (GRI 401 Employment)

	Significance	Material Topic
Governance	<b>Positive Potential</b> Manufacturing transformation --Extrication from industry burdens Success in the development of sustainable materials	<b>Technology R&amp;D</b>
	<b>Positive Actual</b> New product development and product diversity	
	<b>Positive Actual</b> Proper supply chain management	<b>SCM</b> (GRI 308: Supplier Environmental Assessment) (GRI 414 Supplier Social Assessment)
	<b>Positive Actual</b> Steady growth in financial performance	<b>Economic Performance</b> (GRI 201 Economic Performance)

## List of Material Issues 2022 GRI 3-2



### Environmental (E)

1. Climate change and Energy management
2. Water management
3. Air pollution control
4. Raw materials management



### Social (S)

1. OH&S
2. PSM
3. Talent attraction and retention



### Governance (G)

1. Technology R&D
2. Supply chain management
3. Economic performance

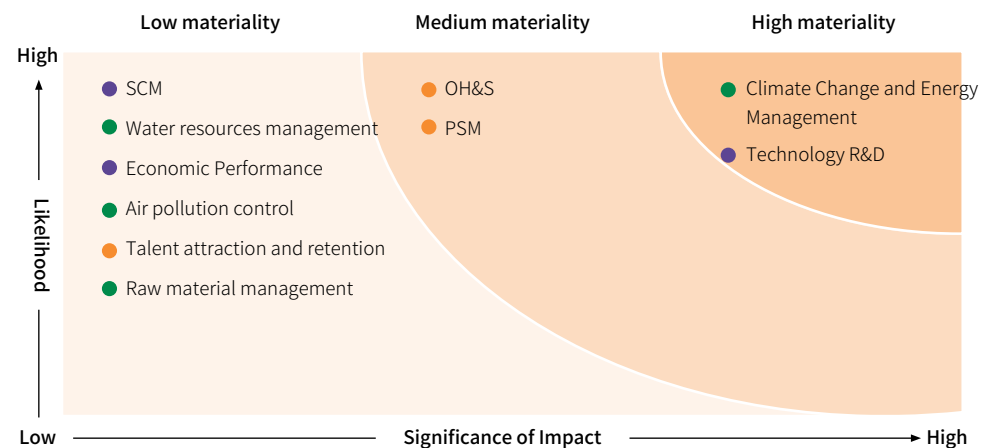
Description: To continue the management and follow-up of the short, medium, and long-term goals set in 2021, we included [**raw materials management**] in to material issues of 2022, **making up to 10 issues**.

### Material Issue Comparison: 2022 vs. 2021:

Aspects	Material Topics		Changes	Causes of Change
	2022	2021		
Environmental	Climate Change and Energy Management	Climate Change and Energy Management		The extreme weather events due to climate change are still an issue of global concern, and businesses should make early preparation for the EU policies.
	Water resources management	---	Add	Water shortages have been increasing in southern Taiwan in recent years, making water management an increasingly important topic to both APC and stakeholders.
	Air pollution control	Air pollution control		Air quality is still an issue of public concern in the petrochemical sector, and its impacts are concerned by community residents.
	Raw material management	Raw material management		Continue the management and follow-up of the short, medium, and long-term goals set in 2021.
Social	OH&S	OH&S		A safe workplace environment has always been the issue that concerns both employers and employees most, and the provision of a friendly and happy workplace environment is the expectation from businesses.
	PSM	PSM		Process safety is crucial to the safety of both employees and community residents and an undeniable issue to the management of highly hazardous chemicals.
	Talent attraction and retention	Talent attraction and retention		Talent retention is an important basis for business operations. Hence, it is necessary to value employee benefits and training and the succession plan to prevent talents gap.
Governance	Technology R&D	Technology R&D		The development of sustainable materials and business transformation matter corporate competitiveness.
	SCM	---	Add	Understanding the impact on business operations, society, and the environment of suppliers and practicing supplier management are crucial to corporate sustainable development.
	Economic Performance	Economic Performance		The steady growth of financial performance is the prime issue of corporate sustainable development.

### Identification and Boundaries of Material Issues

After determining ten material issues through the materiality analysis, the working team prioritized material issues by high, medium, and low materiality based on their significance and likelihood and corresponded them to the GRI specific topics and topic boundaries.





Materiality Sorting	Aspects	Material Topics	Reasons for Materiality	Corresponding GRI Standards Material Topic	Topic Boundaries			GRI Management Approach Corresponding Section	
					Level of Involvement	Scope of Impact			
						Upstream (Note 1)	Business Operations		Downstream (Note 2)
1	Environmental	Climate change and Energy management	All businesses must face extreme weather events due to climate change and cannot avoid the necessity of improving energy efficiency and reducing GHG emissions.	GRI 302 Energy 2016 GRI 305 Emissions 2016	<ul style="list-style-type: none"> <li>The compliance with the Greenhouse Gas Reduction and Management Act (now Climate Change Response Act) and the Energy Administration Act and enhancement of energy efficiency directly impact APC Linyuan Plant and indirectly impact government agencies and community residents.</li> <li>The technology and experience exchange of energy conservation and carbon reduction will also indirectly affect out partners.</li> </ul>	<ul style="list-style-type: none"> <li>Government agencies</li> <li>Partners (Note 3)</li> </ul>	<ul style="list-style-type: none"> <li>APC Linyuan Plant</li> </ul>	<ul style="list-style-type: none"> <li>Community agencies</li> </ul>	4.2 Climate change and energy management
2	Governance	Technology R&D	Developing new products and improving product quality can enhance market competitiveness, and fulfilling customer demands is the foundation of our sustainable development.	N.A.	<ul style="list-style-type: none"> <li>Technology R&amp;D capacity affects product competitiveness and business operations, which directly impact employees and customers.</li> <li>The Company's operational growth indirectly impacts investors and partners.</li> </ul>	<ul style="list-style-type: none"> <li>Investors</li> <li>Partners</li> </ul>	<ul style="list-style-type: none"> <li>Taipei HQ</li> <li>APC Linyuan Plant</li> </ul>	<ul style="list-style-type: none"> <li>Customers</li> </ul>	3.1 Technology R&D
3	Social	PSM	As accidents of the primary process are often catastrophic to petrochemical plants, PSM implementation has become a trend in Taiwan's petrochemical sector. To prevent low-likelihood and high-hazard critical accidents, PSM is crucial to APC.	N.A.	<ul style="list-style-type: none"> <li>Process safety accidents directly impact plant operations and employee safety, with the scope of impact covering Linyuan Plant, investors, government agencies, and customers.</li> <li>They also indirectly affect customer demands and community resident safety.</li> </ul>	<ul style="list-style-type: none"> <li>Investors</li> <li>Partners</li> </ul>	<ul style="list-style-type: none"> <li>APC Linyuan Plant</li> </ul>	<ul style="list-style-type: none"> <li>Customers</li> <li>Community residents</li> </ul>	5.3 Healthy workplace
4	Social	OH&S	A healthy and safe workplace environment concerns workers most. Hence, we must implement safety and health management and provide employees and non-employees with a healthy and safe workplace environment.	GRI 403 Occupational-health-and-safety-2018	<ul style="list-style-type: none"> <li>Implementing safety and health management can prevent accidents and directly impact APC employees and workers engaging in the relevant operations and activities in Linyuan Plant.</li> <li>Legal compliance indirectly impacts government agencies.</li> </ul>	<ul style="list-style-type: none"> <li>Suppliers/Contractors</li> <li>Government agencies</li> </ul>	<ul style="list-style-type: none"> <li>APC Linyuan Plant</li> </ul>		5.3 Healthy workplace
5	Governance	SCM	Issues in relation to sustainable operations and supply chain risk management are gaining importance. Hence, it is very important for us to understand the impacts on corporate operations, society, and the environment of suppliers and implement supplier management.	GRI 308 Supplier Environmental Assessment 2016 GRI 414 Supplier Social Assessment 2016	<ul style="list-style-type: none"> <li>Add the Supplier CSR Commitment as a requirement for new supplier evaluation. This directly impacts APC suppliers/contractors.</li> <li>Undersupply or quality instability of suppliers directly impact Linyuan Plant and customers.</li> </ul>	<ul style="list-style-type: none"> <li>Suppliers/Contractors</li> </ul>	<ul style="list-style-type: none"> <li>Taipei HQ</li> <li>APC Linyuan Plant</li> </ul>	<ul style="list-style-type: none"> <li>Customers</li> </ul>	3.3 Supply chain management
6	Environmental	Water resources management	Due to global warming and climate change, water shortages have become increasingly severe in Taiwan in recent years. The government's water rationing measures will directly affect the operation of our production lines.	GRI 303 Water and Effluents 2018	<ul style="list-style-type: none"> <li>The government's water rationing measures prevent the optimal operation of production lines and affect production costs to directly impact the operating cost of Linyuan Plant.</li> <li>Reduced raw materials demand and product supply indirectly impact suppliers and customers.</li> </ul>	<ul style="list-style-type: none"> <li>Suppliers/Contractors</li> </ul>	<ul style="list-style-type: none"> <li>APC Linyuan Plant</li> </ul>	<ul style="list-style-type: none"> <li>Customers</li> </ul>	4.1 Resources management