

2026

# 台塑石化氣候績效報告

Formosa Petrochemical Corporation  
Climate Performance Assessment Report

---

 **TCAN** TAIWAN CLIMATE ACTION NETWORK 台灣氣候行動網絡研究中心

# Key Takeaways

Taiwan Climate Action Network (TCAN) evaluated Formosa Petrochemical Corporation (FPCC)'s climate transition based on the IFRS S2 framework, focusing on six key areas: **Target Setting, Climate Risks and Opportunities, Climate Engagement, Capital Expenditure and Decarbonization Strategy, Governance and Accountability, and Just Transition.** Major findings are presented below.

## 1. Target Setting

**FPCC's current climate targets do not demonstrate credible alignment with either a 1.5°C pathway or the structural transition challenges facing the global oil and petrochemical sector.** The company uses 2007 as its baseline year, which also coincides with its historical emissions peak. Over the past three years, FPCC's actual Scope 1 and 2 emissions have consistently remained below its disclosed target trajectory, raising concerns regarding whether these targets function as meaningful transition constraints or primarily serve regulatory compliance purposes.

**Material inconsistencies exist between FPCC's sustainability reports and its Self-Determined Reduction Plans submitted to Taiwan's Ministry of Environment.** While the sustainability report targets a near-term 2025 Scope 1 and 2 absolute emission of 22.71 MtCO<sub>2e</sub>, the 2030 target under the Self-Determined Reduction Plans relaxes to approximately 26.33 MtCO<sub>2e</sub> despite a narrower system boundary. This structural divergence indicates a critical lack of meaningful absolute emissions reductions in the mid-term transition.

**Lack of Scope 3 emissions targets represents another major gap.** FPCC's Scope 3 emissions exceed 50 MtCO<sub>2e</sub> annually and are substantially larger than its operational emissions, yet the company has not established corresponding short-, medium-, or long-term Scope 3 reduction targets. According to the Science Based Targets initiative (SBTi)'s Pathways and Metrics for the Net-Zero Transition in the Oil & Gas Sector Research Report (2026), end-use emissions (Scope 3 Category 11) are the most material component of the sector's climate impact. Transition Pathway Initiative (TPI) scenario analysis further indicates that FPCC's emissions-intensity trajectory remains misaligned not only with a 1.5°C pathway, but also with Below 2°C and National Pledges scenarios.

## 2. Climate Risks and Opportunities

FPCC has disclosed climate-related risks and opportunities under the TCFD framework and quantified financial impacts such as carbon pricing and sustainable aviation fuel (SAF) production. However, the company's risk analysis remains heavily focused on short-term regulatory compliance rather than longer-term structural transition risks.

**FPCC exhibits clear inconsistency in its carbon-pricing assumptions.**

FPCC uses a carbon price of NTD 300/tCO<sub>2</sub>e when estimating financial benefits from transition opportunities, while the internal carbon price (ICP) for capital deployment is set at a nominal NTD 100/tCO<sub>2</sub>e. This divergence risks the underestimation of future transition risks while overstating the benefits of incremental reduction measures.

**The scenario analysis of FPCC does not address post-2030 carbon-pricing escalation.**

Taiwan's Carbon Fee Review Committee has formulated a progressive carbon-pricing trajectory, recommending potential rates of NTD 1,200–1,800/tCO<sub>2</sub>e by 2030. Based on FPCC's disclosed 2030 emissions trajectory, annual carbon costs could potentially rise to approximately NTD 27–47 billion, substantially exceeding the company's latest disclosed pre-tax profit of NTD 12.7 billion.

**FPCC also appears to understate structural market-transition risks.**

Previous disclosures acknowledged electric vehicle adoption and declining transport fuel demand as transition risks, yet these issues are omitted in the latest sustainability and TCFD reporting. At the same time, the company continues to frame petrochemicals primarily as a cyclical industry expected to recover through supply-demand normalization. This perspective appears increasingly difficult to reconcile with regional capacity oversupply and global trends toward plastic reduction policies, circular economy regulation, recycled-content mandates, and the secular decline of long-term fossil fuel demand.

### 3. Climate Engagement

FPCC discloses engagement with investors, suppliers, customers, industry associations, NGOs, and local communities. However, disclosures on value-chain engagement, climate policy participation, and social dialogue remain limited relative to emerging expectations under IFRS S2 and Climate Action 100+ (CA100+).

**Although FPCC reports its Scope 3 emissions, the company has not clearly disclosed value-chain engagement on climate transition.** There is no evidence showing that FPCC has established low-carbon procurement expectations for upstream suppliers, transition engagement mechanisms with downstream customers, or strategies to address the downstream lifecycle emissions inherently associated with fossil fuel and petrochemical products.

**Climate policy engagement remains another major gap.** InfluenceMap's LobbyMap assessment characterizes FPCC's climate-policy engagement as limited and largely passive. The company scores only 4 out of 100 on engagement intensity, with limited evidence of proactive support for Paris Agreement-aligned climate policy, circular economy regulation, emissions caps, or carbon pricing mechanisms. Public disclosure regarding alignment between FPCC's climate positions and those of its industry associations also remains limited.

### 4. Capital Expenditure and Decarbonization Strategy

FPCC's current strategy remains predominantly locked into incremental, facility-level efficiency improvements within its existing refining and petrochemical system, rather than demonstrating broader structural transformation toward low-carbon business models.

The company has disclosed plans to scale sustainable aviation fuel (SAF) production from 5,500 tonnes annually in 2025–2026 to 50,000 tonnes by 2030. However, these **low-carbon products remain immaterial compared with FPCC's core fossil fuel and petrochemical business.** Petroleum products still account for approximately 75.5% of the company's total revenue, while petrochemicals contribute another 18.1%. The company also continues to project substantial future sales volumes for gasoline, diesel, ethylene, propylene, and butadiene.

While FPCC has disclosed approximately NTD 5.16 billion in short-term transition-related investment and NTD 6.6 billion by 2030, **disclosures remain focused primarily on individual efficiency projects rather than capital allocation alignment.** According to CA100+'s 2025 assessment, FPCC did not meet any indicators related to capital allocation alignment. Current disclosures do not clarify whether the company plans to gradually reduce investment in high-carbon assets or how future capital expenditure will support low-carbon technologies and business transformation.

**The company's current reduction measures also remain heavily weighted toward process optimization and energy efficiency instead of deep decarbonization.** Renewable energy deployment remains limited relative to the scale of the company's operational emissions, with planned solar capacity totaling only 8.9 MW. Reported annual emissions reductions from disclosed measures account for less than 1.2% of annual Scope 1 and 2 emissions over the past three years. Compared with international peers, FPCC has disclosed limited progress on deep decarbonization technologies such as process electrification, low-carbon hydrogen, carbon capture and storage (CCUS), or circular feedstock integration.

## 5. Governance and Accountability

FPCC has established board-level climate governance structures and sustainability committees consistent with Taiwan's corporate governance requirements. However, current governance disclosure still appears relatively compliance-oriented. **Current disclosures provide limited evidence on how climate transition considerations are structurally embedded in strategic decision-making, capital reallocation, or core business-model transformation.**

Board disclosures primarily emphasize emissions inventories and reporting activities, while providing limited information regarding oversight of high-carbon asset risks, Scope 3 management, low-carbon product transition, deep decarbonization technologies, or executive accountability mechanisms linked to transition outcomes. Although its score in [TPI Management Quality](#) improved in 2025 by linking executive remuneration to climate performance and disclosing planned reduction actions, the company still does not meet TPI indicators related to transition planning and implementation. Overall, FPCC's governance framework does not yet clearly demonstrate how management accountability, investment governance, and strategic planning are being aligned with a credible net-zero pathway.

## 6. Just Transition

FPCC's current approach to just transition remains limited and has shown little substantive progress over the past year. Under CA100+'s latest assessment, the company only partially meets just transition expectations, recognizing potential social impacts but without disclosing structured worker engagement, transition planning, or workforce support measures. Similarly, the World Benchmarking Alliance (WBA)'s 2026 just transition assessment found that FPCC did not meet any of the assessed disclosure indicators.

**Current stakeholder engagement disclosure focuses primarily on general CSR activities rather than addressing structural transition impacts on employment, regional economies, workforce reskilling, or social resilience in high-carbon industrial regions.** The existing reporting of FPCC provides limited evidence that just transition considerations have been systematically integrated into climate governance or transition planning. Further analysis is available in the "[Taiwan Corporate Just Transition Assessment Report](#)" published by TCAN in February 2026.

## TCAN Recommendations

### **1. Re-examine current climate targets to enhance consistency between targets and actual emission trends.**

There is a clear discrepancy among current sustainability reports, Self-Determined Reduction Plans, and actual emissions, with some targets higher than recent actual emission levels. It is recommended that FPCC follow the IFRS S2 and CA100+ disclosure frameworks to re-examine its baseline years, target years, and decarbonization pathways. The company should also establish Scope 3 targets and communicate with the value chain to enhance the credibility of its transition pathway.

### **2. Accelerate transition planning for low-carbon products and high-carbon assets.**

In the face of global trends such as plastic reduction, circular economy policies, capacity expansion in China, and shifts in petrochemical product demand, it is recommended that FPCC should not view petrochemical market variations solely from a cyclical perspective, but should further assess the medium- to long-term risks of its existing oil refining and basic petrochemical raw material businesses. In addition to existing energy conservation and process improvements, the company should also disclose more concrete medium- to long-term deployment plans for SAF, circular materials, alternative fuels, and deep decarbonization technologies, as well as phasing down high-carbon products and assets, to reduce the risks of high-carbon asset lock-in and stranded asset risks.

### **3. Strengthen Scope 3 management, climate policy engagement, and just transition planning.**

Although FPCC has disclosed its Scope 3 emissions, its engagement with suppliers, customers, and industry associations on net-zero transition remains limited. It is recommended to establish an engagement mechanism regarding Scope 3 management and support climate policy that aligns with the Paris Agreement. Regarding the potential impacts of the long-term transition, FPCC should initiate just transition planning at an early stage, establishing substantive dialogue and supporting mechanisms with workers, local communities, and stakeholders.



 **TCAN** TAIWAN CLIMATE ACTION NETWORK 台灣氣候行動網絡研究中心