



Approaches in

Corporate Climate Actions

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Manager Sustainability Strategy and Management

TCFD and SDGs Workshop for Beginners Day 1

May 27th, 2021

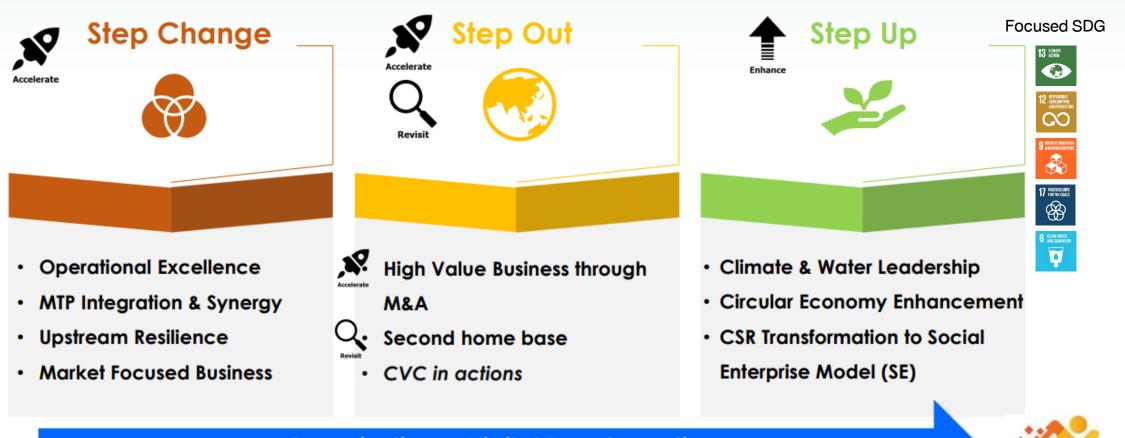
PTT Global Chemical Public Company Limited

Petrochemical Flagship of PTT Group





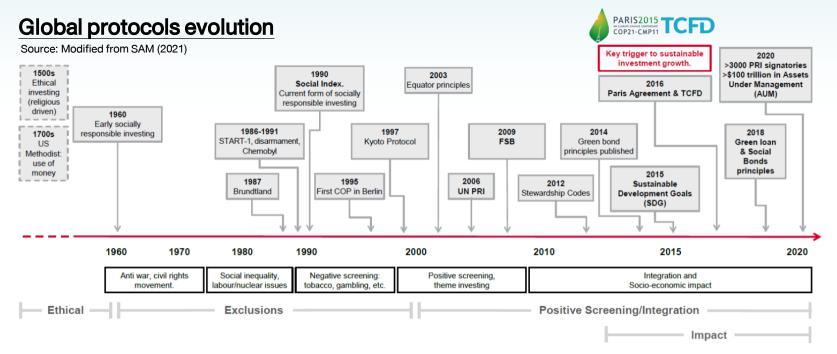
Our 3 steps strategy



Organization & Digital Transformation People / Organization / Digital / Culture

Key external factors that drive evolution in corporate climate actions

Climate actions revolution



Country pledges & carbon policies implementation

Source: Net-zero Target Status (climatewatchdata.org) (Mar 2021)



| • 2050 as Target Year | 36 Parties | Other Target Year | 5 Parties |
|-----------------------|------------|-----------------------|-------------|
| • 2045 as Target Year | 1 Party | Not Applicable | 1 Party |
| • 2040 as Target Year | 1 Party | No Document Submitted | 150 Parties |
| • 2035 as Target Year | 1 Party | | |
| • 2030 as Target Year | 2 Parties | | |



Long-term Business Competitiveness

Value Protection & Creation



Climate actions implementation

High level framework



Target / Strategy / Policy

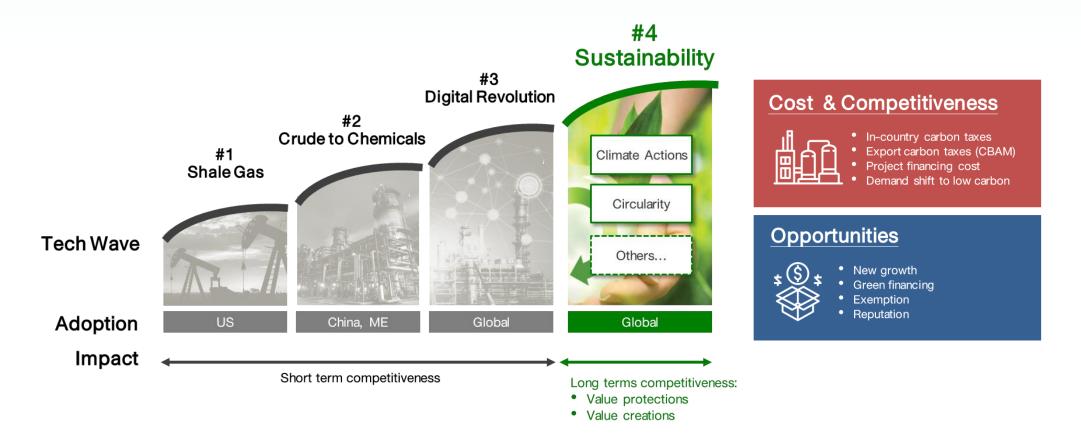
Strategic Actins / Governance / Risk Mgmt

Disclosure / 3rd Parties Verification



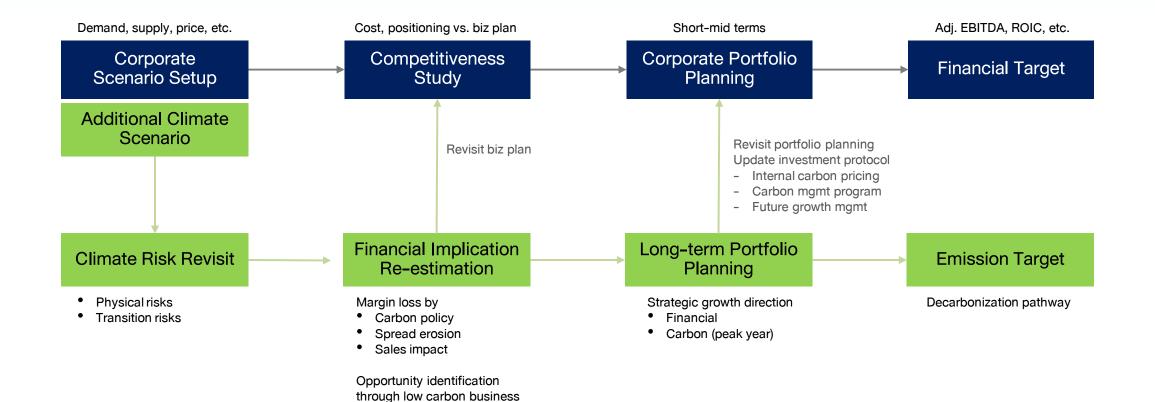
Climate actions implementation: Setup the tone

Internal communication & engagement from BoD to staff levels



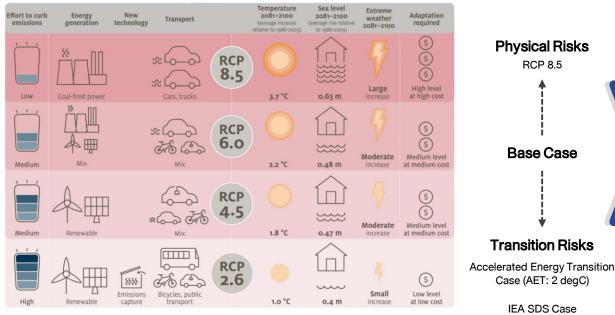


Challenging the "as is" business planning & operation





Redefine key risks & implications

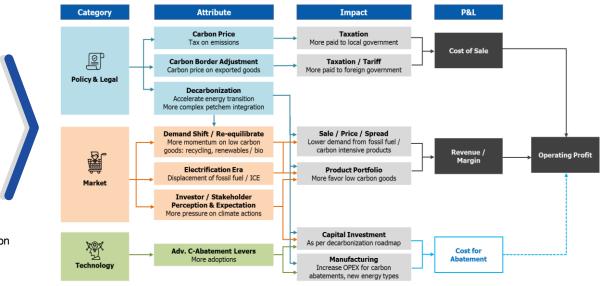


RCP 8.5

(Well below 2 degC)

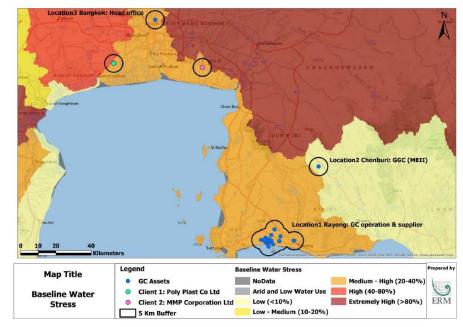
Source: Coastal climate change infographic series.

Example of transition risk categories & impacts





Redefine climate actions



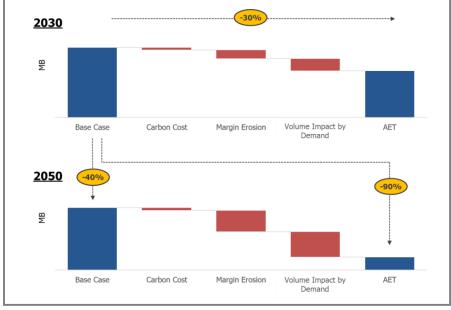
Example of physical risk study

Source: WRI-Aqueduct Water Risk Atlas

One water strategy:

- Internal: water saving, water innovation, water stewardship
- External: water related to community, water conservation

Example of transition risk study

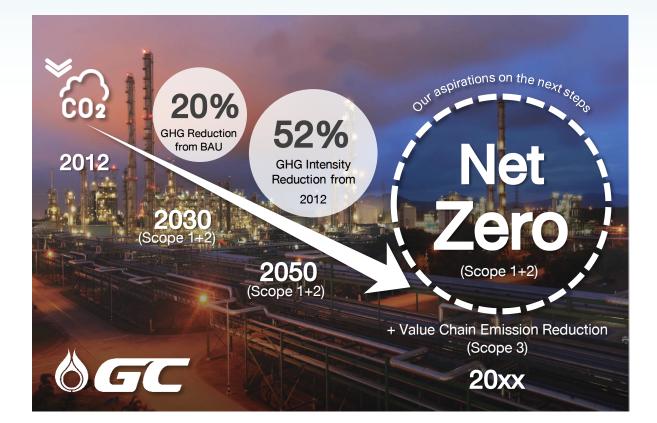


Remark: Illustrative

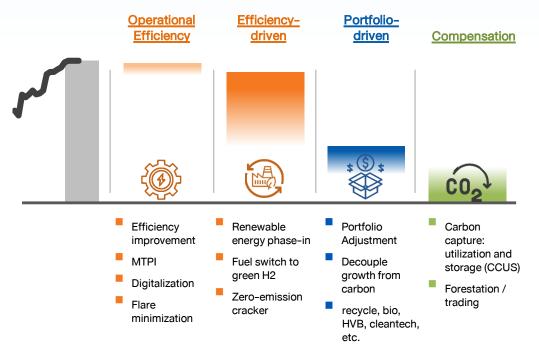


- Business plan update
- Investment process & protocol update
- Portfolio update, including reshape / monetization plan
- Decarbonization governance model update, etc.





Scope 1+2 Emission An ambition to become net zero



Scope 3 Emission Engage value-chain partners for GHG reduction

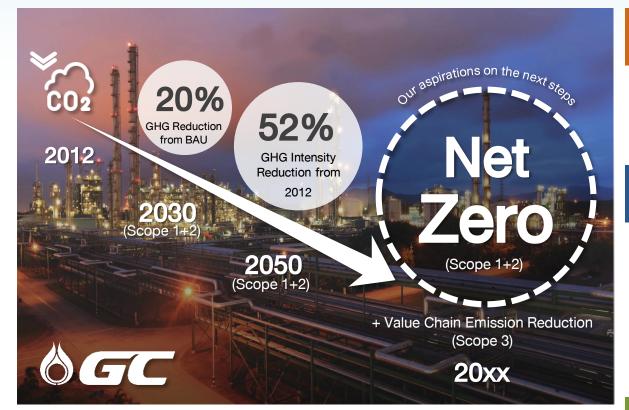


GC

Supplier | Customer



Climate actions implementation: Measure the results



Efficiency-driven: ~1-1.5% reduction



Existing assets Business operation Manufacturing plants

Portfolio-driven: ~10% reduction



Investment mgmt Product portfolio mgmt Efficiency Improvement (2017-2019) Flare Reduction

(Heavy gas project)

Energy Switching

(Solar rooftop projects)

Low-carbon Raw

Materials & Prod.

~236,000 ~1,300 ton CO₂e

~890[≈]

Bio-based Raw PBS | PLA Materials & Prod. Methyl Ester | Ethanol Oleochemicals

> Downgauging Recycling | Upcycling You ເກົຣ໌ມ

Low-carbonESS (CVC Fund I)BusinessHVB

Portfolio Mgmt & Monetization

Forestation



GPSC share disposal



Compensation: ~0.5% reduction



Remaining carbon inventory balancing



MEMBER OF

Dow Jones

S&P Global

CDP

Sustainability Indices

In Collaboration with RobecoSAM (

Sustainability Award Gold Class 2021



<u>The 1st company in</u> <u>Thailand</u> recognized in

LEAD LEVEL

Among 41 global lead participants

MSCI

FTSE4Good (Top 3) (Exce



6 consecutive years





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A LIST: CLIMATE CHANGE & WATER SECURITY

The only company in chemicals sector raked

No.1 FOR 2 CONSECUTIVE YEARS

More detail: https://sustainability.pttgcgroup.com/en/home