



Net Zero Pathway



Climate change is an everyone agenda

BAU pathway:

>3

Degree C
Temperature
Rise (2100)



Global GDP

-30%

Grain Yield Reduction

>50%



Implications

Quality of Living



- Extreme weather events
- Massive resettlement
- Food scarcity

Business



Competitiveness

- Industry landscape changes
- New laws & regulations
 - Compliance
 - Tax, fee, tariff

Lost estimation:

~5-15+%

Basic Chemicals
Plastics



Multiple opportunities can be captured



Corporate



Value Protection

- Prepare for climate impacts & risks
- Develop credibility & reputation



Value Creation

- Create new business
- Attract top talents
- Access to green financing



Supply Chain



Demand Driven for Low Carbon Goods & Services

- Sustainable procurement
 - Advocate, educate and collaborate with value chain partners



Customer

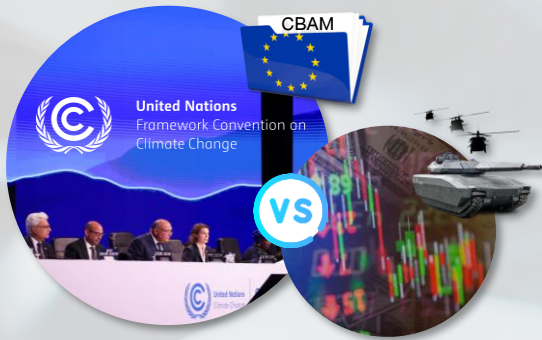


Low Carbon / Sustainable Solutions

- Scope 3 reduction
 - Bio-based, bio-content
 - Recycled
- Scope 1/2 reduction
 - Enhance processability / throughput
- LCA reduction
 - Downgauging, more durable

Executives and board play critical roles

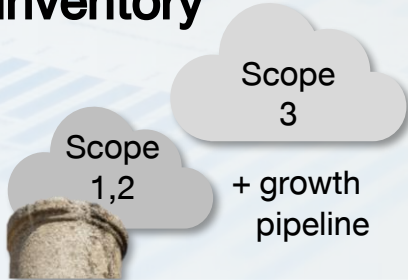
Global trends & signposts update



- Pledges
- Climate regulations / incentives
- Standards
- Crisis
- War
- Others



GHG accounting / inventory



Technologies & ecosystem

- Efficiency
- RE
- CCUS
- H2
- Others



Net zero pathway & implications



- Decarbonization levers
- New biz opportunities
- Risk profile / exposure
- Resources needed

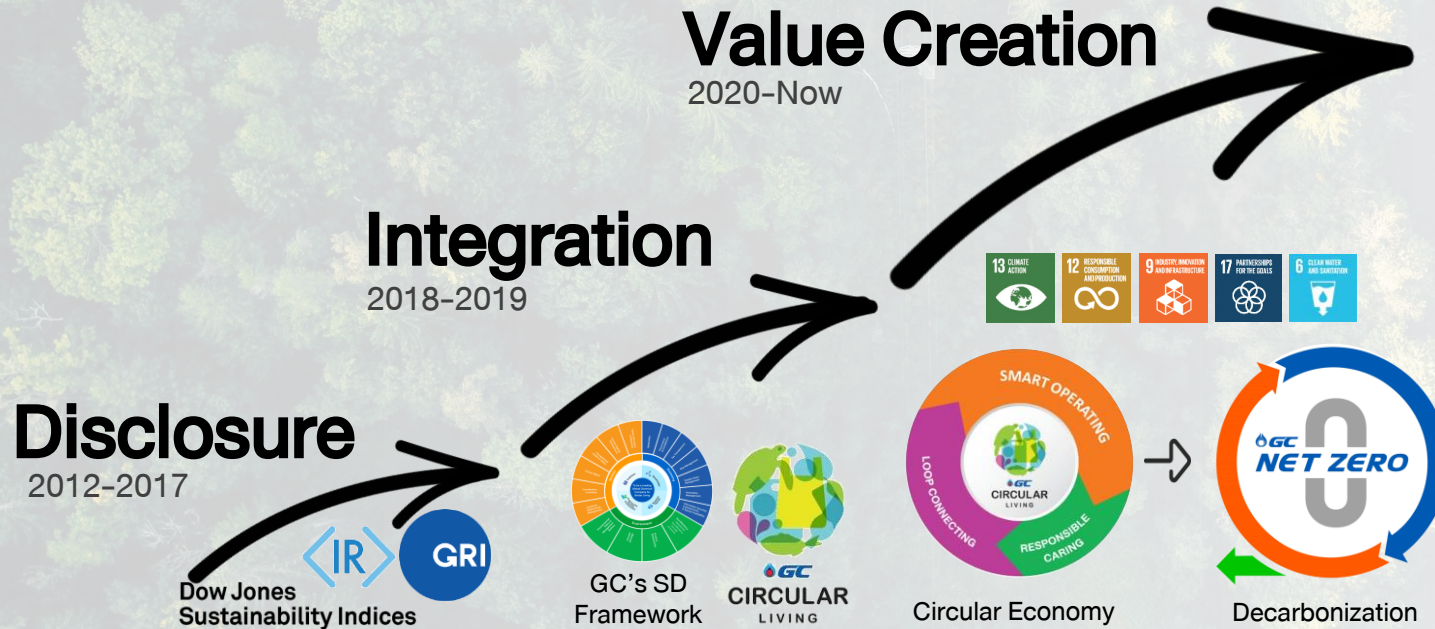
Executives and board



Direction & Decision

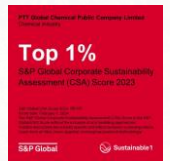


integrates sustainability into our business operation



ESG Leadership

1 Member of
Dow Jones Sustainability Indices
No. **1** Powered by the S&P Global CSA
For 5 consecutive years in chemical sector
(2019–2023)



Business Planning



A-Level
Climate & Water

Only 1 Chemical company in Thailand

Standard
Implementation

Scenario
Testing

Biz Decisions
Making

Sustainable Supply chain

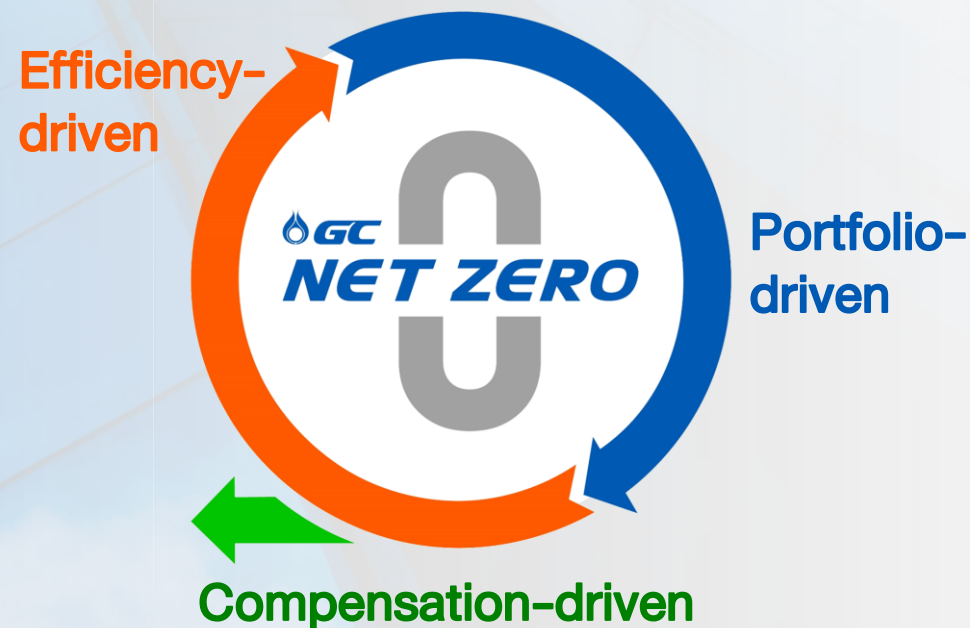
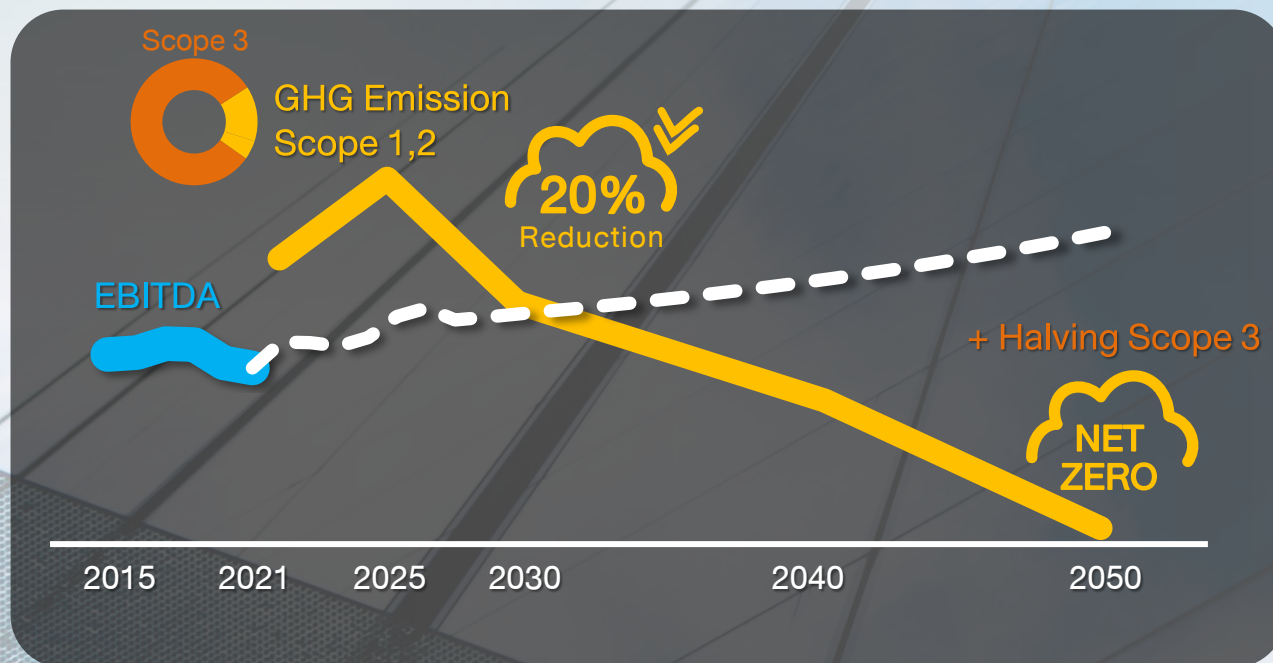


Top 1% Globally
The highest-level Platinum award

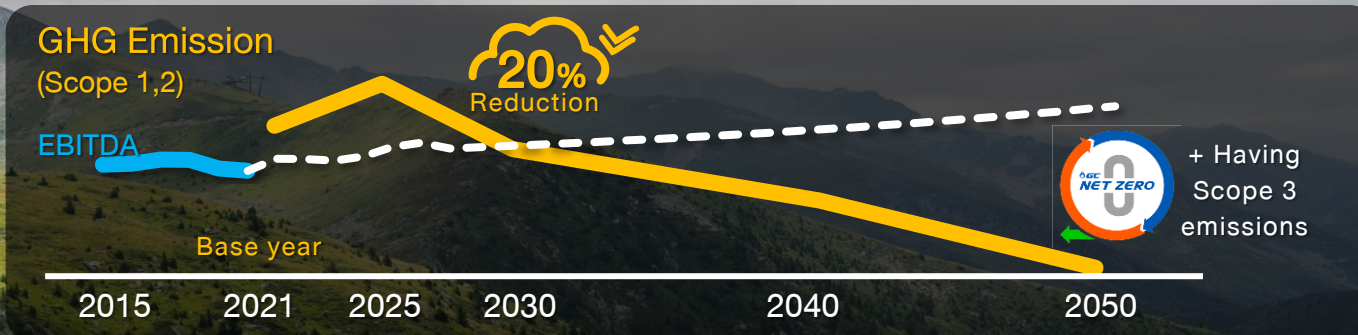
- Labor & Human Rights
- Ethics
- Sustainable Procurement
- Environment



We aim to become “**Net Zero**” Company with Sustainable Business Growth



GC's NET ZERO Pathways



GHG Reduction: 5⁺⁺ Billion USD

Growth: 22⁺⁺ Billion USD

20% Efficiency-driven

55% Compensation-driven

25% Portfolio-driven



1,000,000⁺ tCO₂e ≡

Energy & efficiency improvement (2050)



100%

Clean energy utilization (2050)



New Low Carbon Tech

To overcome today's limitation
(Hydrogen, electrification, etc.)



6,300,000⁺ tCO₂e ≡

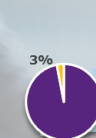
CCS + collaboration with partners (2050)



1,000,000 tCO₂e ≡

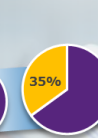
Carbon credit management (2050)

- Nature-based solutions
- Tech-based solutions
- Carbon credit purchase



3%

2021



35%

2030



>35%
Performance
Chemicals

Performance Chemicals
Petchem & Green

3,300,000

tCO₂e ≡

Portfolio adjustment
"Low carbon, high value"
(HVB, advanced materials,
etc.)



Circularity Solutions

Create options for customers and value chain
partners

InnoPlus YOU UP
InnoEco Inso YOU UP
UPCYCLING
by GC

Roll-out to all STEPs strategy + Deploy new governance models



GHG / Carbon Credit
Accounting & Reporting Standards



Internal Carbon Pricing:
Shadow Price



Sustainable Procurement
Sustainable Finance



Perf. Mgmt. Protocols
Playbook



20%

Efficiency-driven

Reduce assets' emission and adapt new technology



55%

Compensation-driven

Employ Technology- and Nature-based Solutions

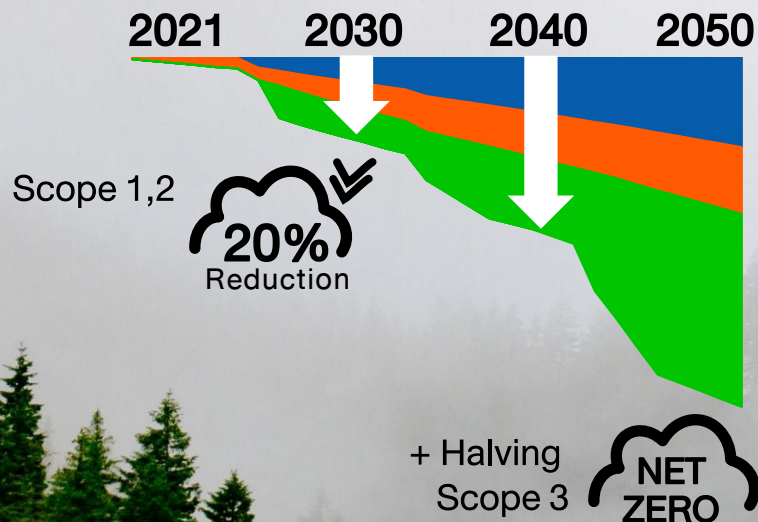


25%

Portfolio-driven

Enhance quality of earning
Offer low carbon & eco solutions

Roadmap (2021-2050)



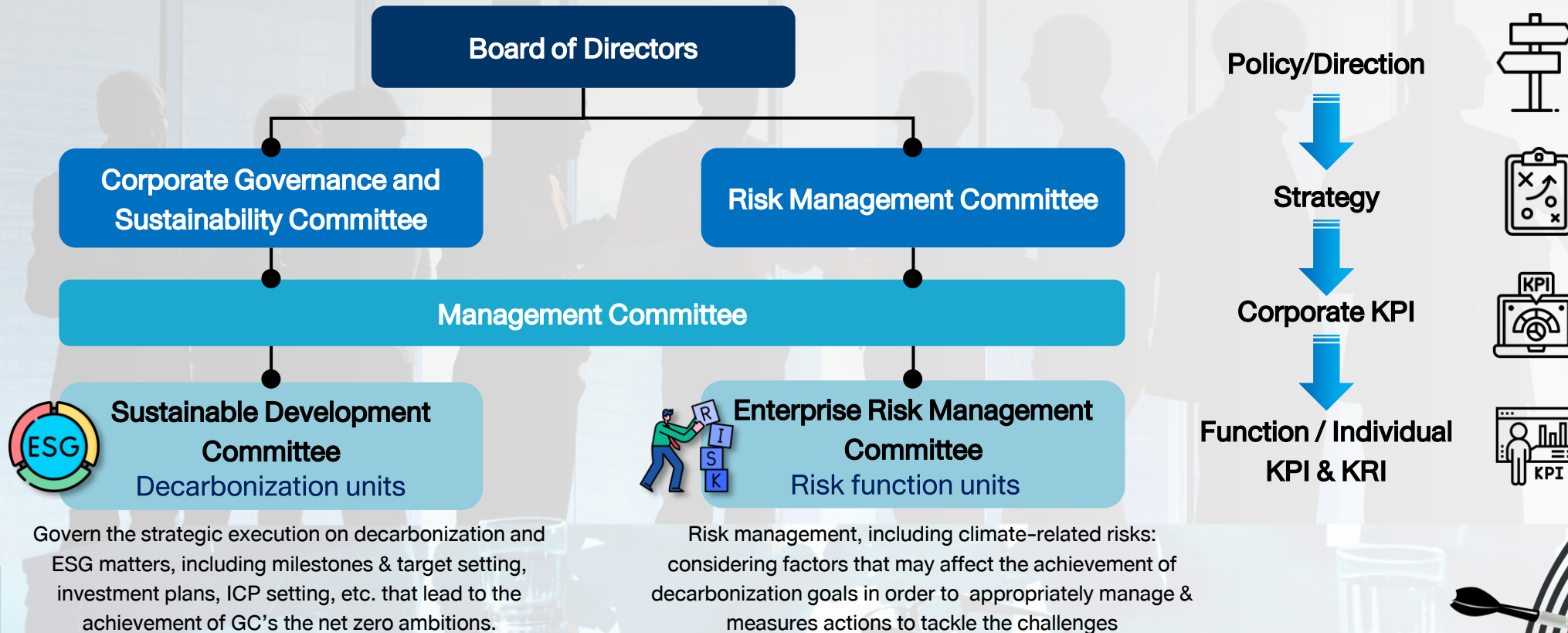
5⁺⁺
Billion USD

22⁺⁺
Billion USD

Decarbonization levers
implementation

Business portfolio
transformation

GC's ESG & Climate Governance



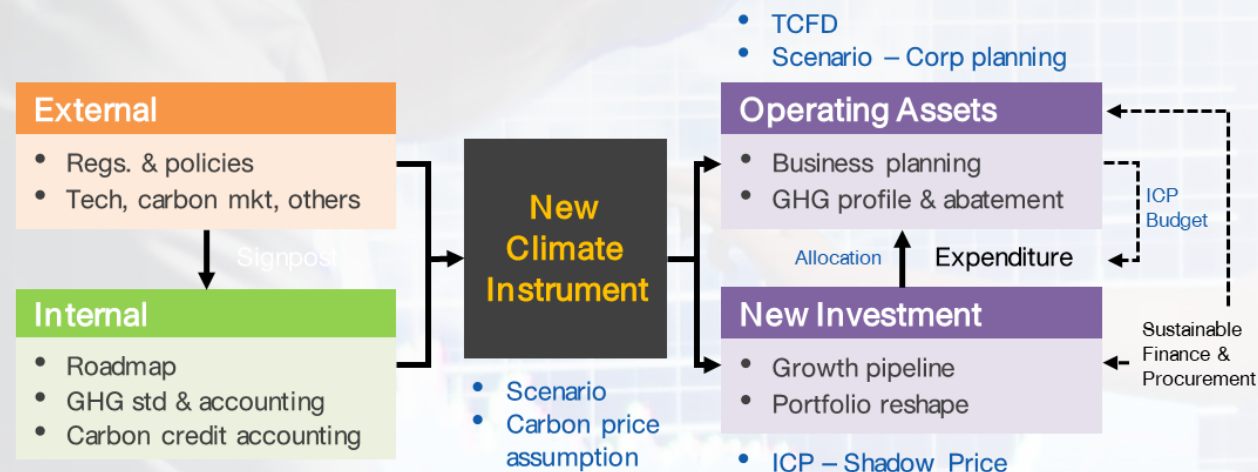
Climate & Carbon Mechanisms

for business planning & decision making

Integration with corporate strategy



Processes & governance model



Let's Collaborate

"Together to Net Zero"

