

Internal Carbon Pricing Concepts



GC has adopted an internal carbon pricing mechanism to strengthen climate resilience and support its low-carbon transition.

The objectives are to:

- Drive energy efficiency
- Drive low-carbon investments
- Identify and seize low-carbon opportunities
- Navigate regulations
- Stress test investments

Scope Covered: Scope 1 GHG emissions

Type: Shadow Price

Price Level: Average number at 70.5 USD/tCO₂e (2,502 THB/tCO₂e)

Application: Integrated across all business decision-making processes

Internal Carbon Pricing: Shadow Price



To incorporate assumptions on full cost of decarbonization into business decisions



Application Area

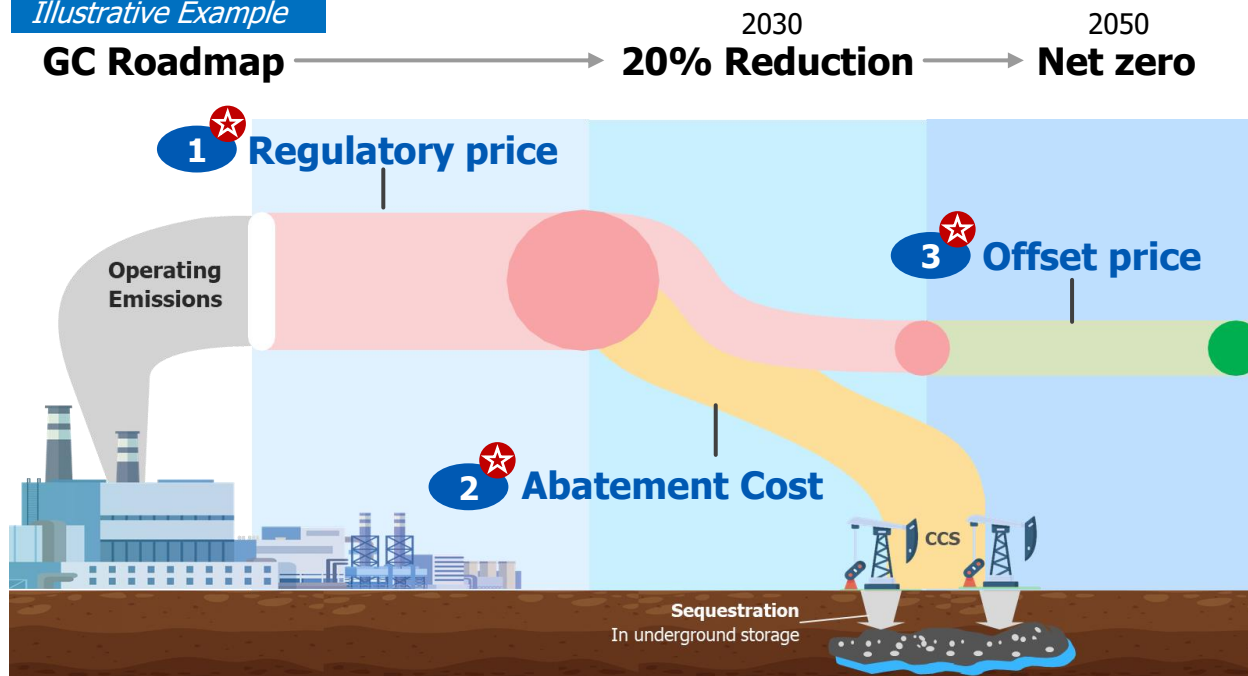
- Investments



Design Principles

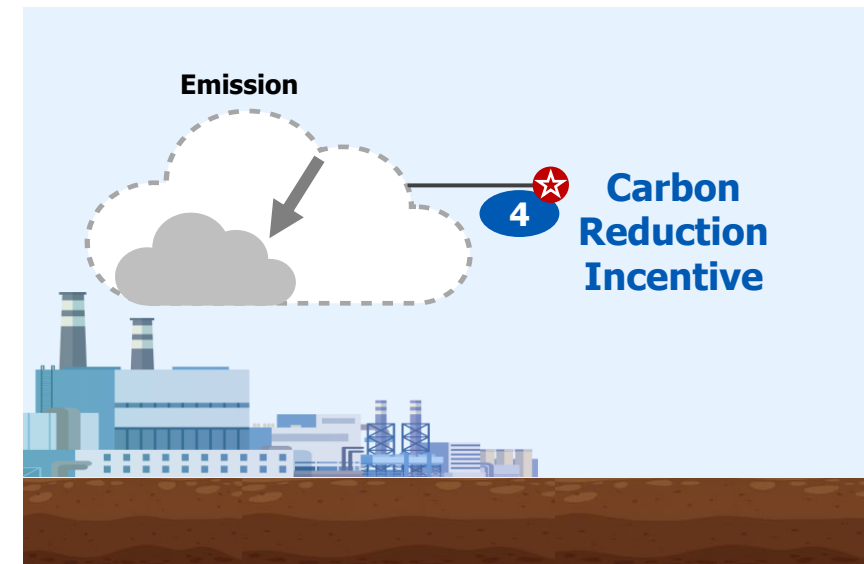
- Investment decisions made on project economic that reflects
 - Target emissions of the new asset
 - Cost of carbon based on GC's decarbonization roadmap, or
 - Carbon reduction incentive based on GC's decarbonization roadmap

Illustrative Example

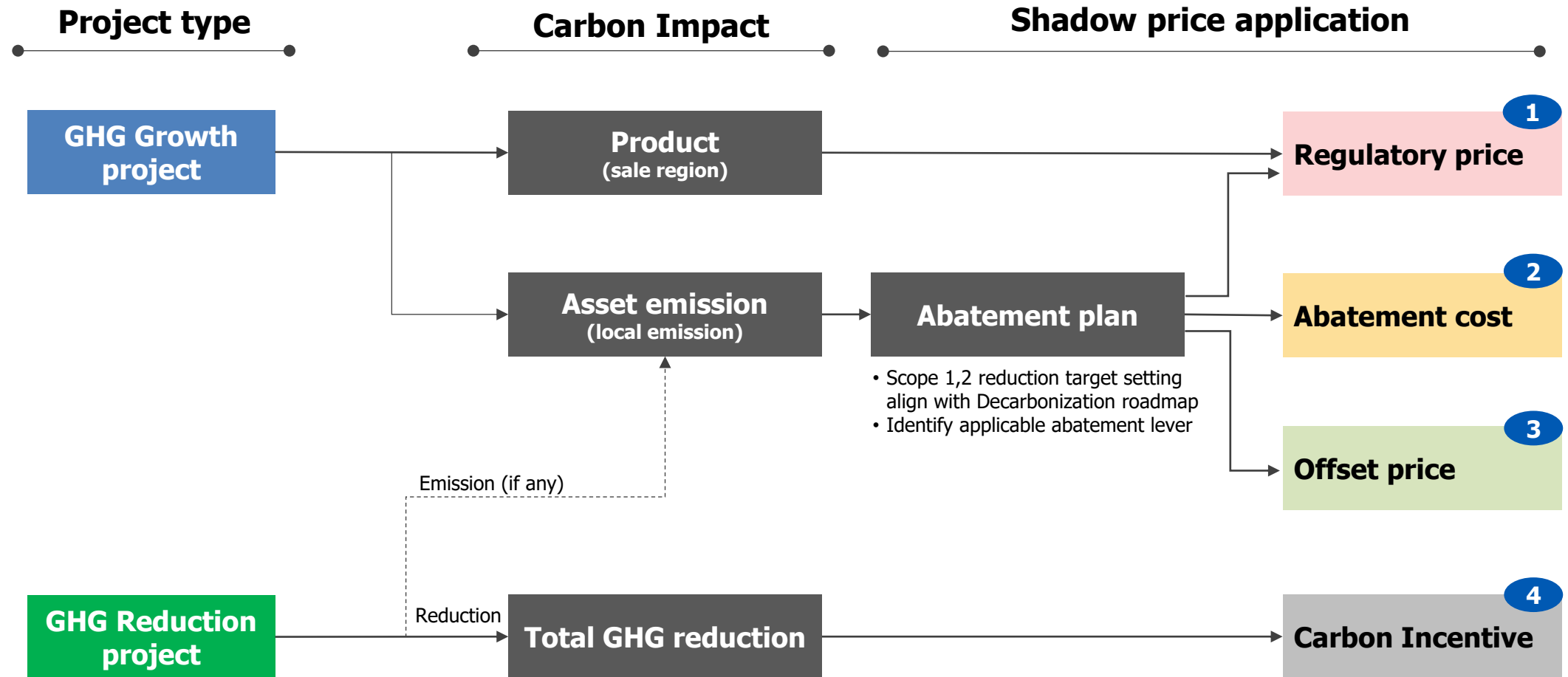


★ Corporate assumptions (annually updated)

GC Roadmap → 2050 NPV Based case → 2050 NPV Energy Transition case



Internal Carbon Pricing: Shadow Price application



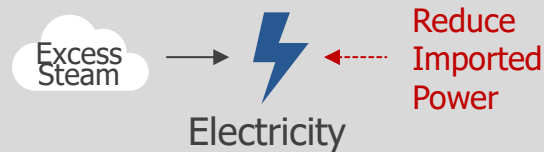
New growth project (w/o scope 1)



Shadow price model

- Replace all scope 2 with low carbon power & steam purchase
- % adaptation are aligned with clean energy plan
- **Additional cost assigned:**
 - Abatement cost: energy & steam
 - Regulatory price: residue emission + export geographics

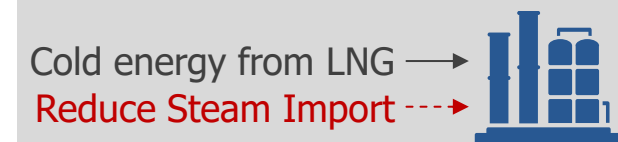
Excess steam utilization (Steam turbine power generator)



Shadow price model

- Lower quantities of low carbon power (external purchase) needed
- **Saving cost assigned:**
 - Abatement cost: Carbon incentive price

Cold energy utilization



Shadow price model

- Lower quantities of low carbon steam (external purchase) needed
- **Saving cost assigned:**
 - Abatement cost: Carbon incentive price

Shadow Price (average number at 70.5 USD/tCO₂e (2,502 THB/tCO₂e) and range between 14-113 USD/tCO₂e