



2023 台泥企業團  
法人說明會

INVESTOR'S CONFERENCE



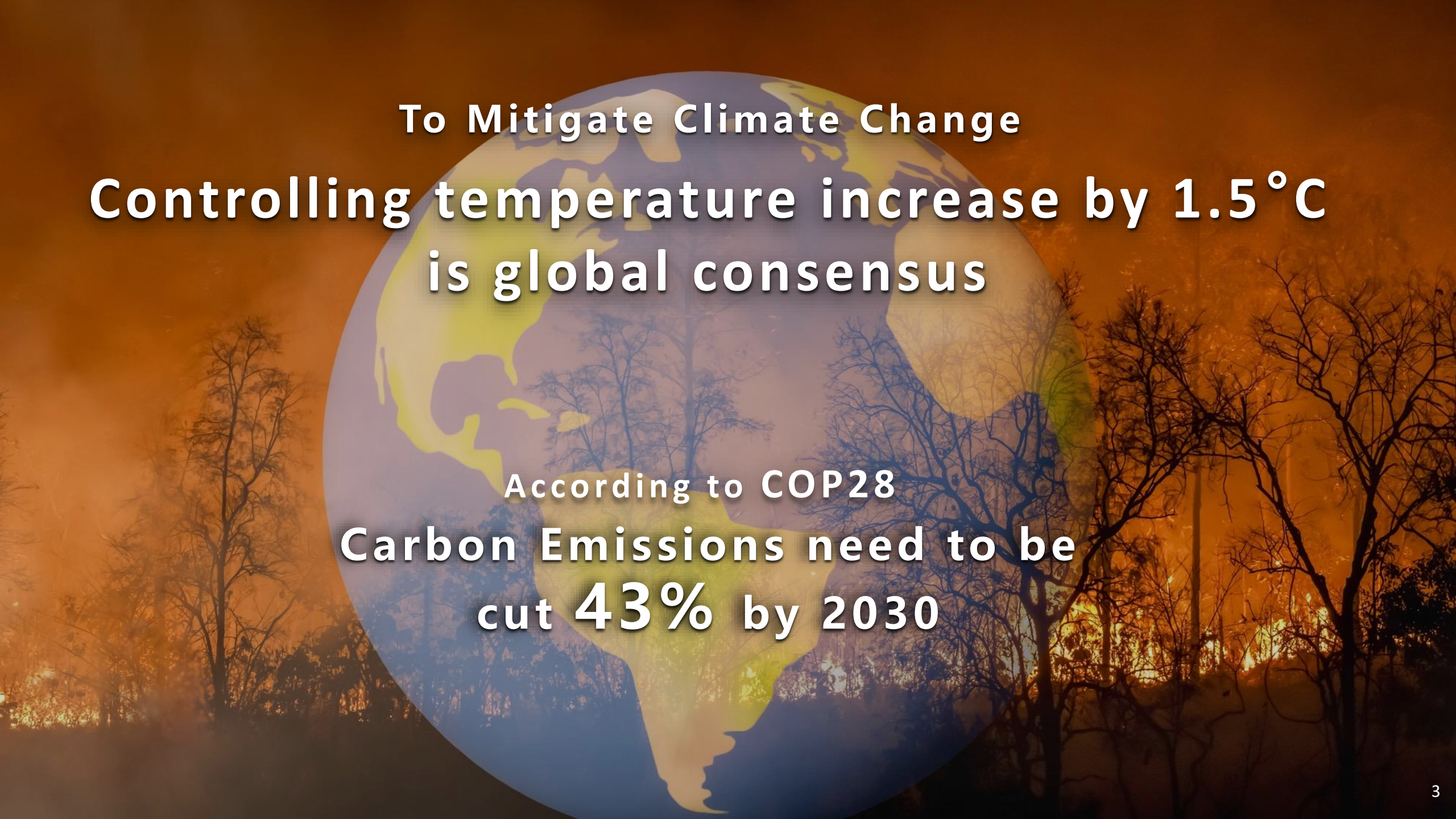


The Future of TCC

# Green Globalization







To Mitigate Climate Change  
**Controlling temperature increase by 1.5°C  
is global consensus**

According to COP28  
**Carbon Emissions need to be  
cut 43% by 2030**



# Carbon Pricing Initiatives Around the World

**US**

**2023**

**Prove it Act**

Carbon Emission Disclosure  
Emissions Reduction Goal  
Carbon Tariff

**China**

**2024**

**National Carbon  
Trading Market**

**EU**

**2023**

**CBAM**

**Taiwan**

**2024**

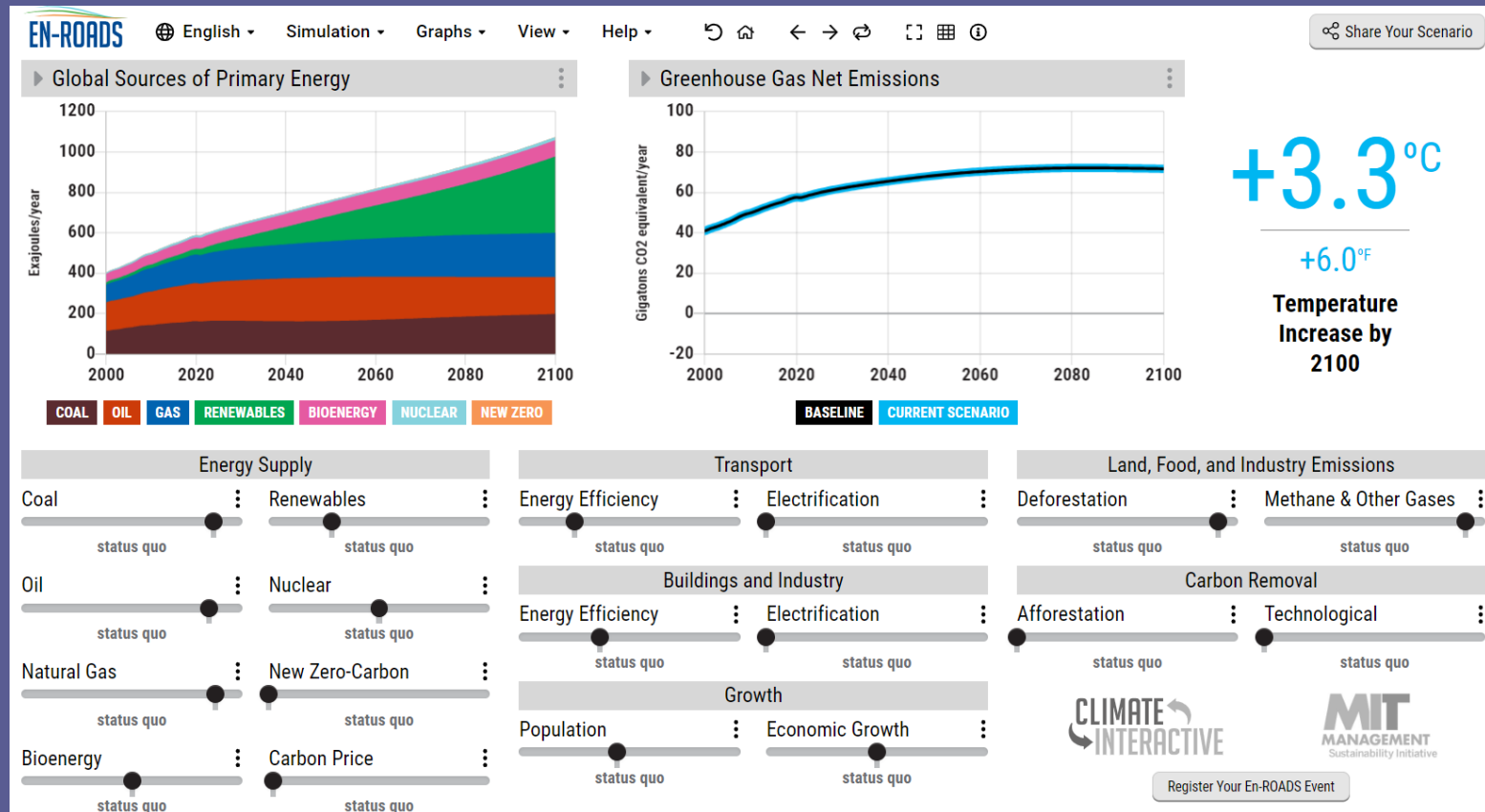
**Carbon Fee**



# Global temperature would increase by 3.3°C if Human did not take timely actions



## Current Greenhouse Gas Net Emissions : +3.3°C



John D. Sterman,  
Professor of Management at the MIT

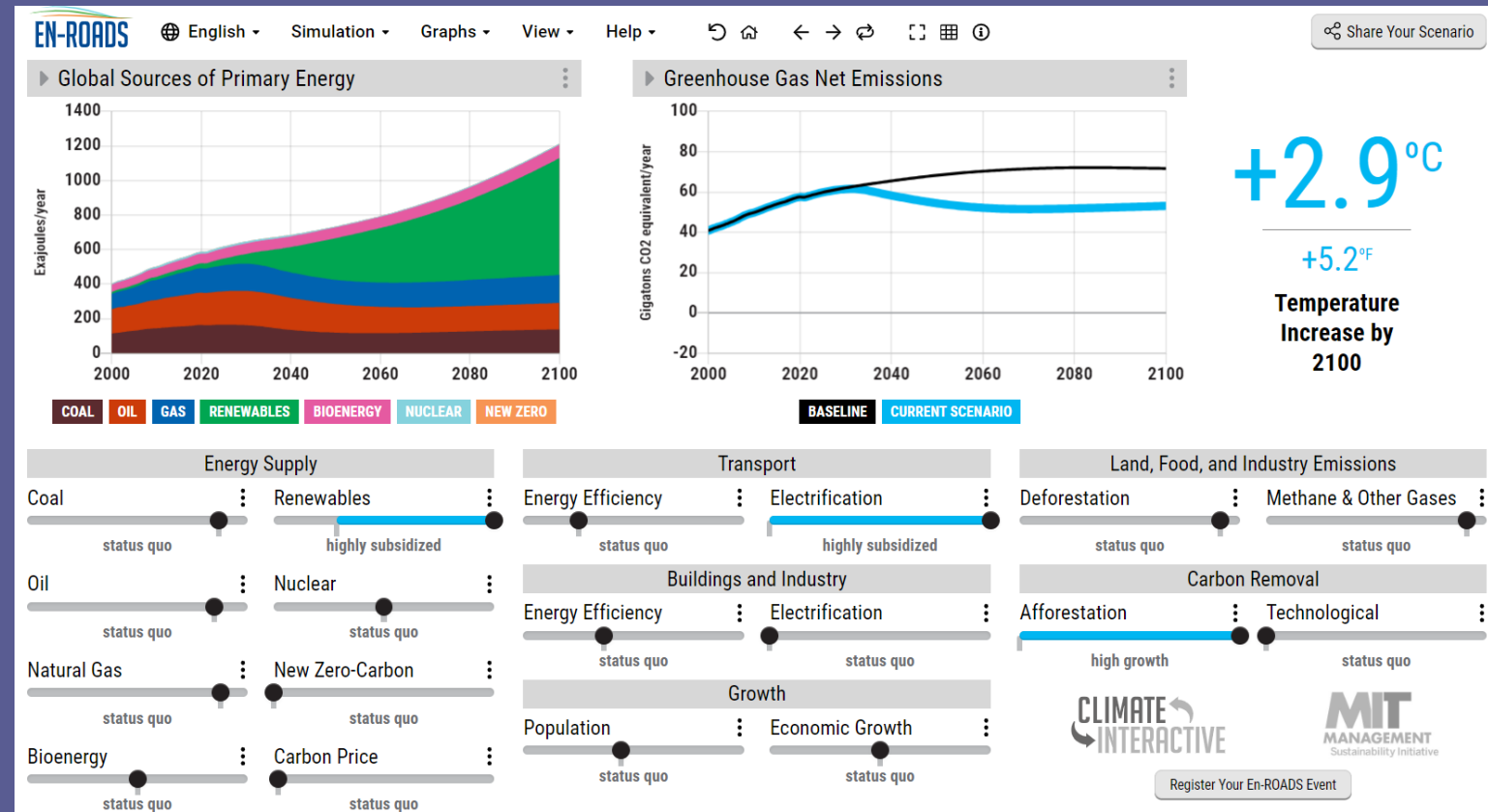


*"If we keep heading toward our current business-as-usual future, there will be even higher risks of severe, irreversible impacts and our ability to adapt will be limited." -- John D. Sterman*

Even with full subsidies of renewable energy, electric transport, and afforestation, global temperature would still increase by 2.9°C



Even with full utilization of renewable energy, widespread electric transport, and active afforestation, carbon reduction effectiveness remains limited



John D. Sterman,  
Professor of Management at the MIT

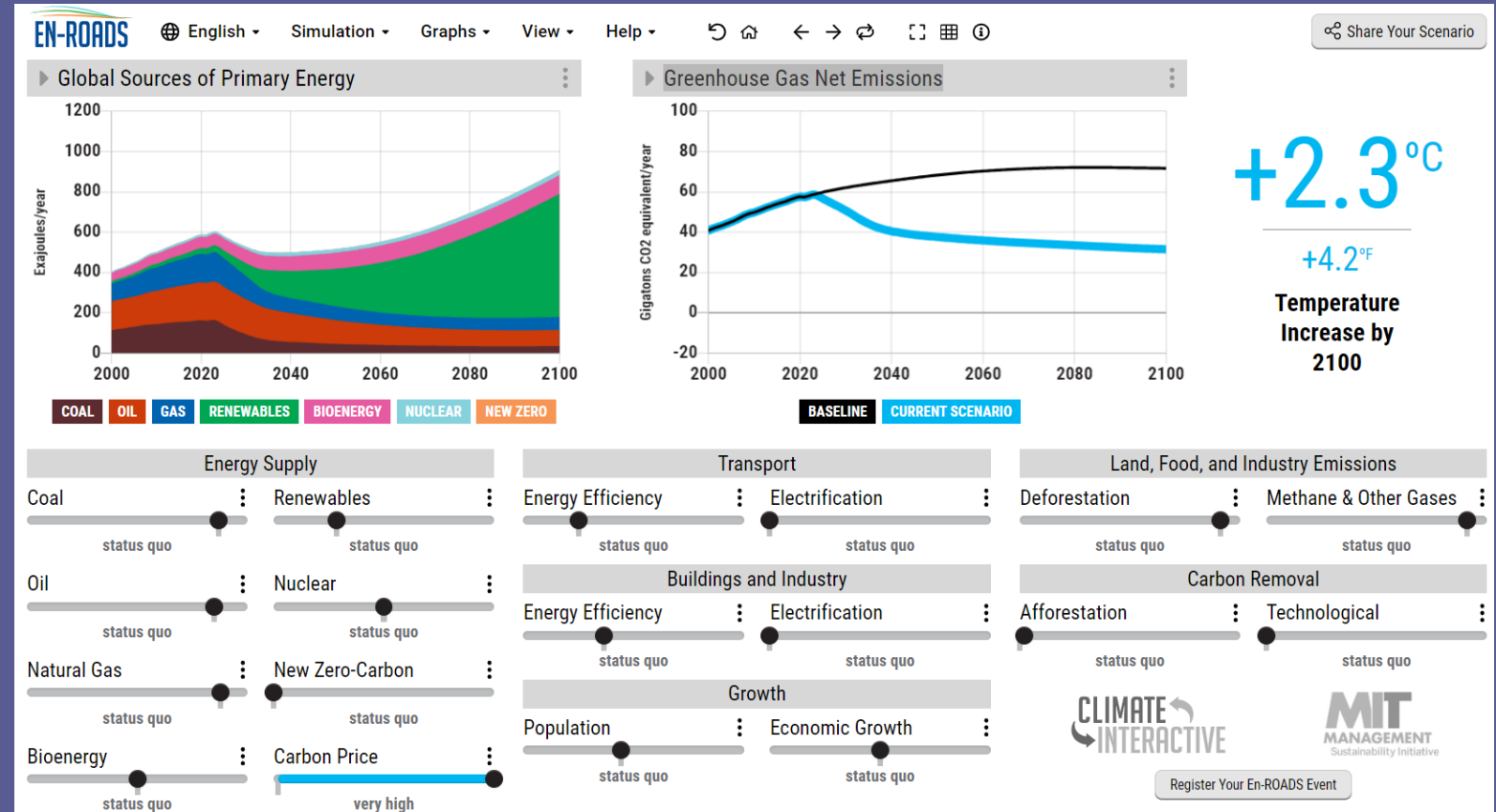


*“If we keep heading toward our current business-as-usual future, there will be even higher risks of severe, irreversible impacts and our ability to adapt will be limited.” -- John D. Sterman*

# Carbon fee imposition would control temperature increase by 2.3°C

## Carbon pricing is inevitable

John D. Sterman,  
Professor of Management at the MIT



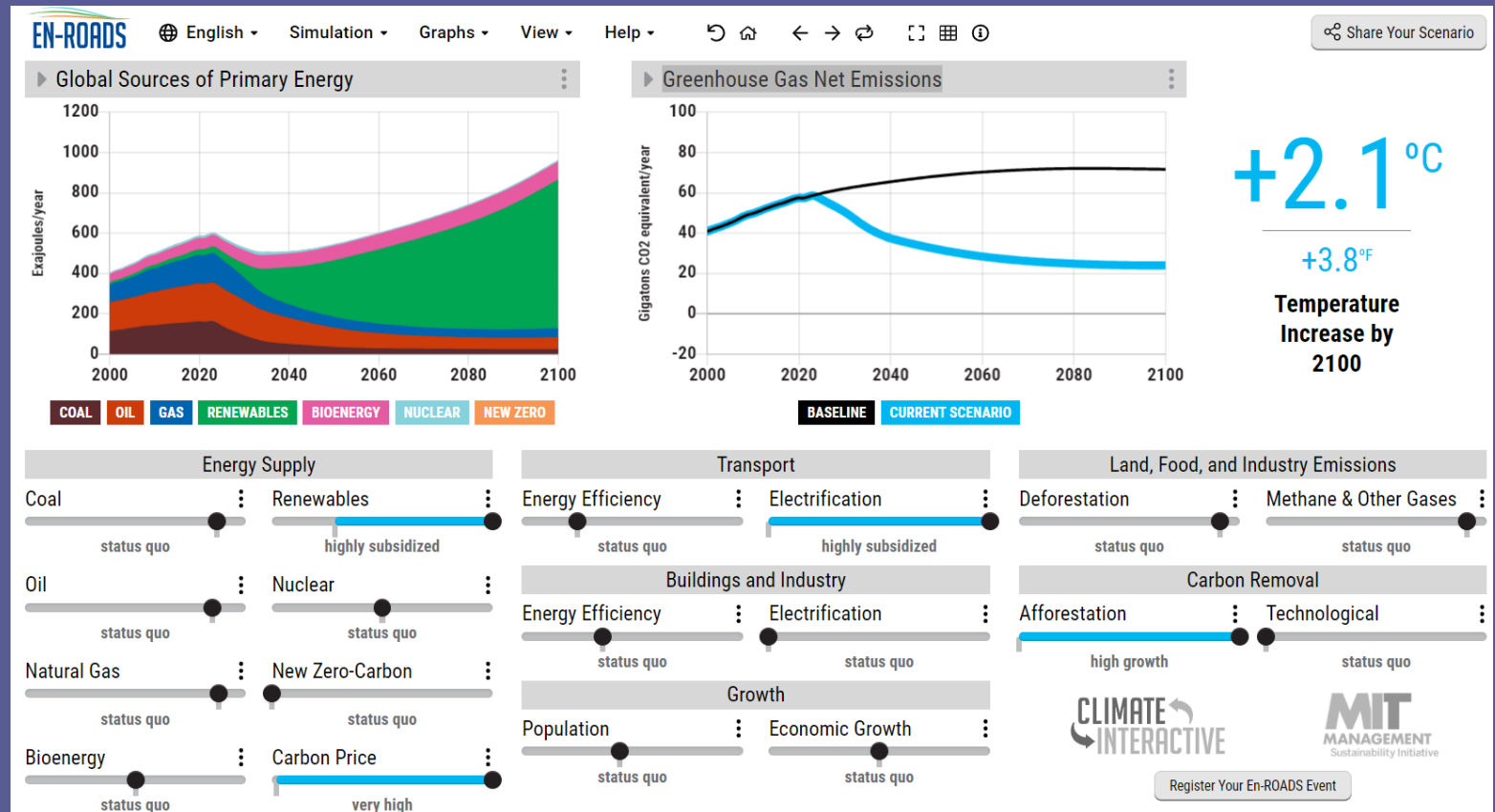
*“If we keep heading toward our current business-as-usual future, there will be even higher risks of severe, irreversible impacts and our ability to adapt will be limited.” -- John D. Sterman*



# Humans are frogs in hot water of climate change



Even with maximized renewable energy use, complete transport electrification, active afforestation, and carbon pricing, 1.5°C target remains unmet.



John D. Sterman,  
Professor of Management at the MIT



*“If we keep heading toward our current business-as-usual future, there will be even higher risks of severe, irreversible impacts and our ability to adapt will be limited.” -- John D. Sterman*

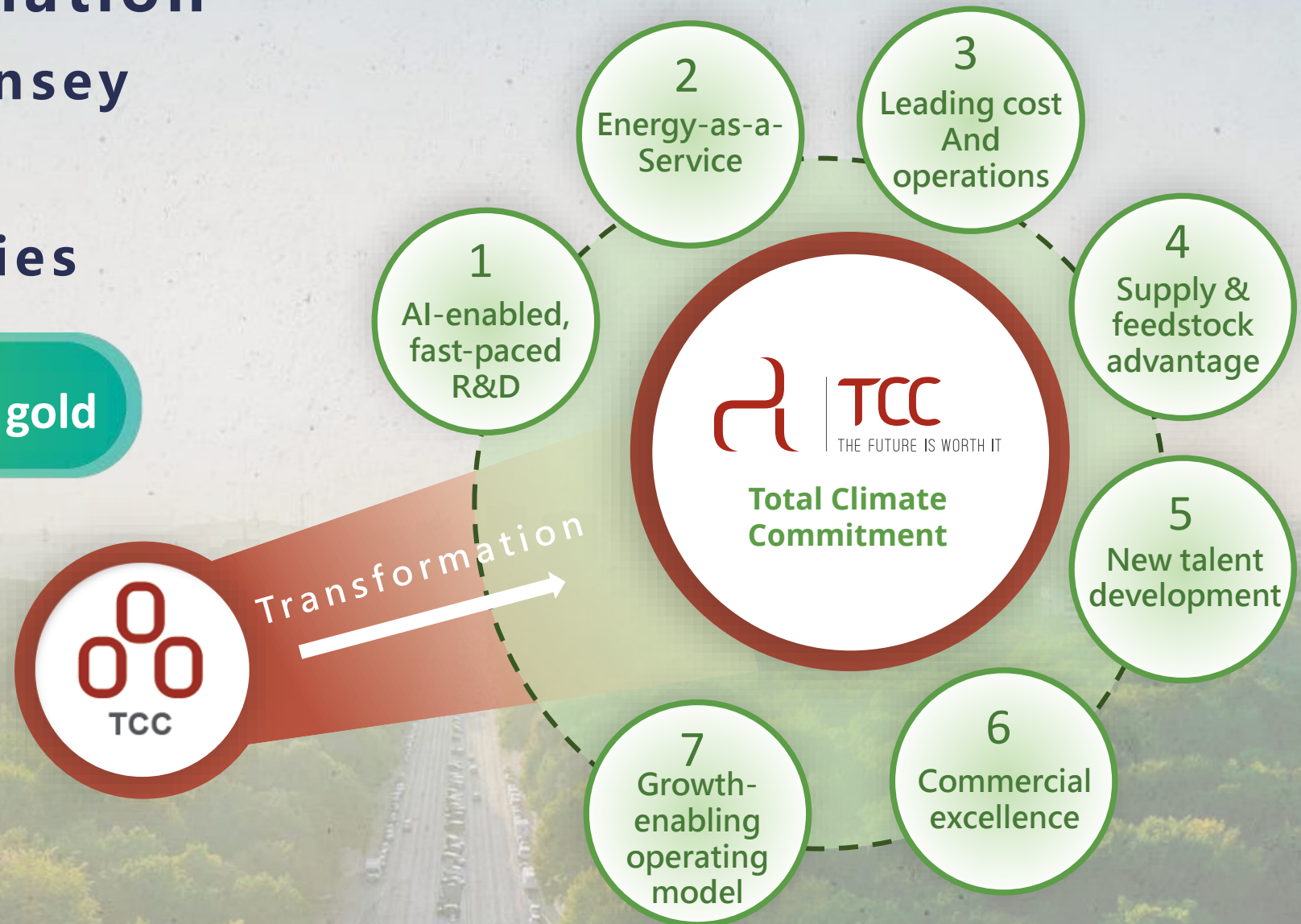


# TCC Transformation

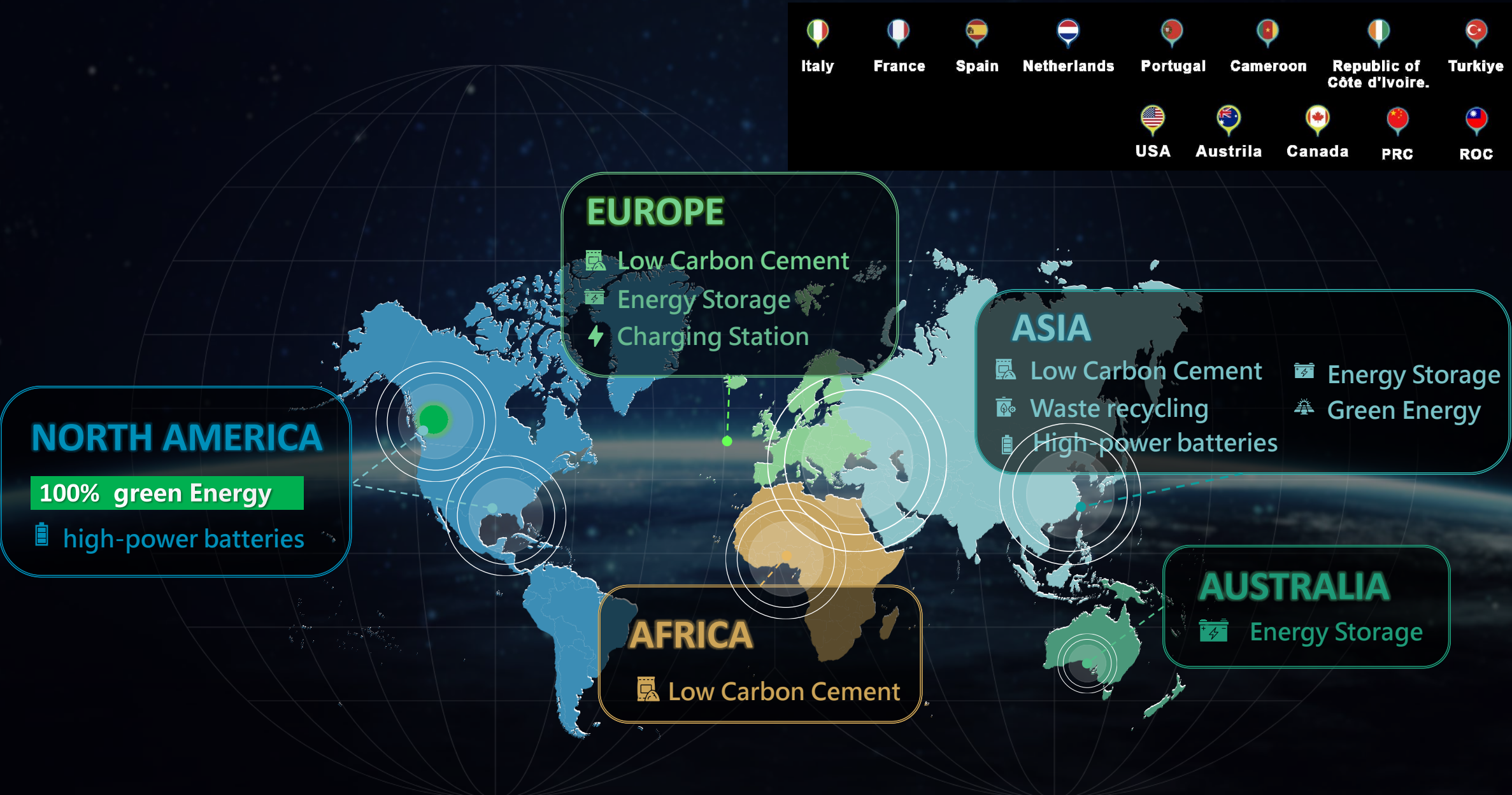
in line with McKinsey  
“Decacorn”  
Seven Capabilities



Green is the new gold



# TCC Green Globalization – Deploy Global Carbon Competitiveness





# Establishes Low-Carbon, Ultra High-Power Battery Factory in Vancouver

Target top 1% global customers

**Molicel**  
Next generation  
high-efficiency  
Ternary lithium battery

Ultra High  
Power

Low Carbon

High discharge rate

- ✓ EU Battery Law Effective in August; Decarbonize Batteries
- ✓ 100% Hydropower Green Electricity
- ✓ Local Production of Lithium Nickel Cobalt Mine reduces GHGs from Raw Material Transportation
- ✓ 50% less GHGs than batteries produced in Asia



# Low Carbon Cement Global Deployment





# OYAK Low-Carbon Cement Plants Carbon Reduction Achievements

Turkey Aslan Plant



- 1 Key Turkish operational plant with annual clinker production capacity of 1.8 million metric tons
- 2 **Replace Coal with alternative fuels**  
TSR reached **61%** in 2023, **53%** in 2022
- 3 TSR target at **70%** by 2030

Cement Plant GHG  
emission in 2023

**628**

kg.CO2/ton.CEM

Turkey Ankara Plant



- 1 30 km from capital city center, annual clinker production capacity of 1.3 million metric tons
- 2 **Replace Coal with alternative fuels**  
TSR reached **46%** in 2023, **40%** in 2022
- 3 TSR target at **65%** by 2030

Cement Plant GHG  
emission in 2023

**652**

kg.CO2/ton.CEM

# Cimpor Low-Carbon Cement Plants Carbon Reduction Achievements

Portugal Souselas Plant



- 1 2 clinker production lines, with annual clinker production capacity of 1.8 million metric tons
- 2 **Replace Coal with alternative fuels**  
TSR reached 44% in 2023
- 3 TSR target at 63% by 2030

Cement Plant GHG emission in 2023

**613**

kg.CO2/ton.CEM

Côte d'Ivoire Plant



- 1 **First calcined clay mass production base in the world**
- 2 Launched two low carbon cement products, Low Carbon CEM II 42.5 and Ultra Low Carbon CEM IV 32.5  
Plans to **introduce this technology to Portugal**

Carbon Reduction  
(Calcined clay with mixed clinker  
v.s. Ordinary Portland Cement)

**- 40 %**

Cameroon Kribi Plant



- 1 **No kiln cement plant ; High Energy efficiency**
- 2 Second Generation Calcined Clay production line  
Expected to commence operation in Q4 2023

Biomass fuel usage

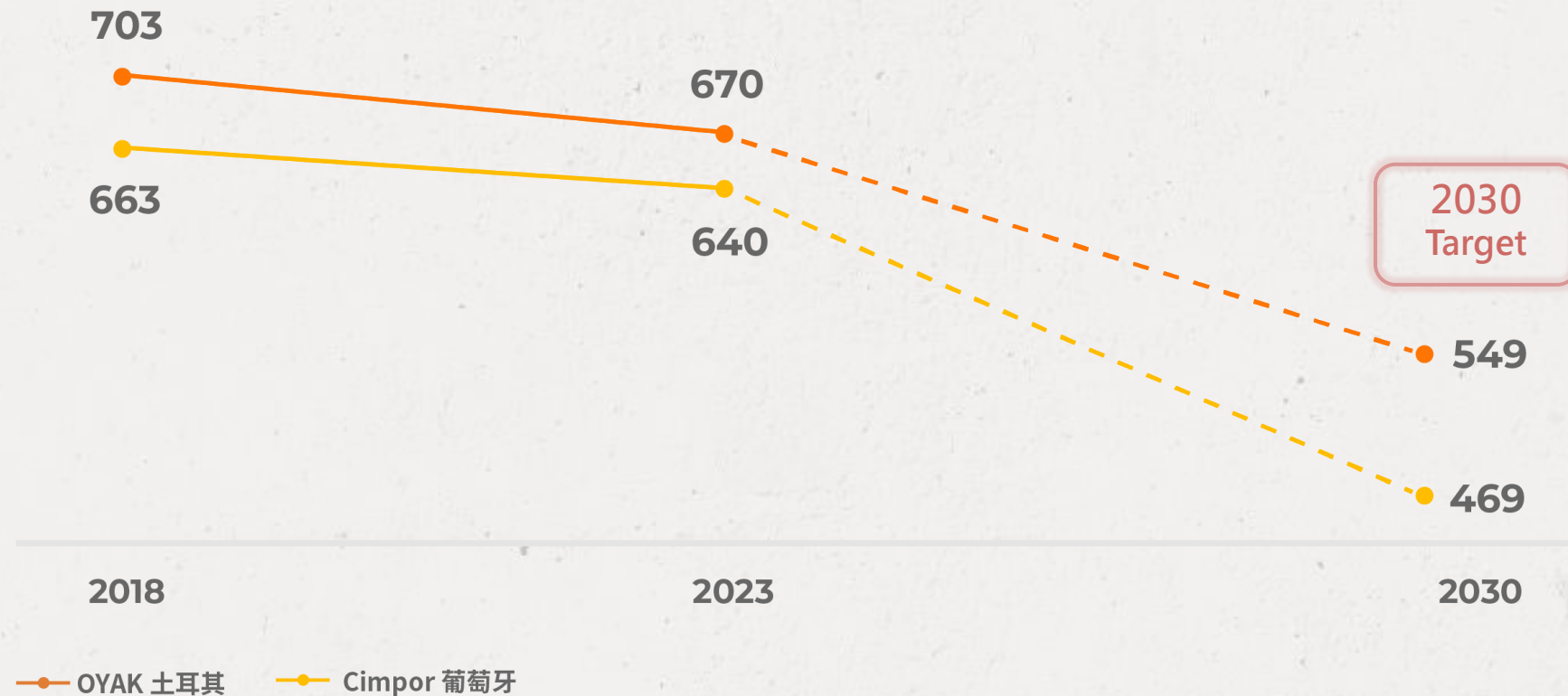
**90 %**



# OYAK & Cimpor Carbon Reduction Performance and 2030 Targets

Increasing shareholding of Oyak Cement and Cimpor would help TCC group achieve SBT goals with higher certainty

CO2 Emissions per ton of Cement

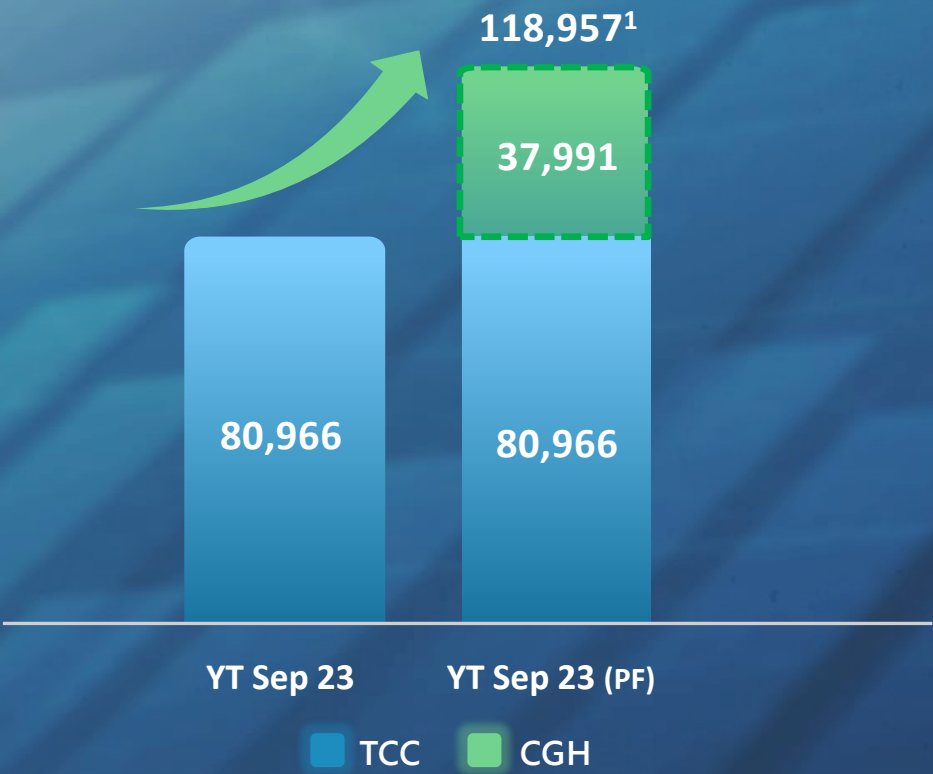


Sources from: Cimpor Global Holdings

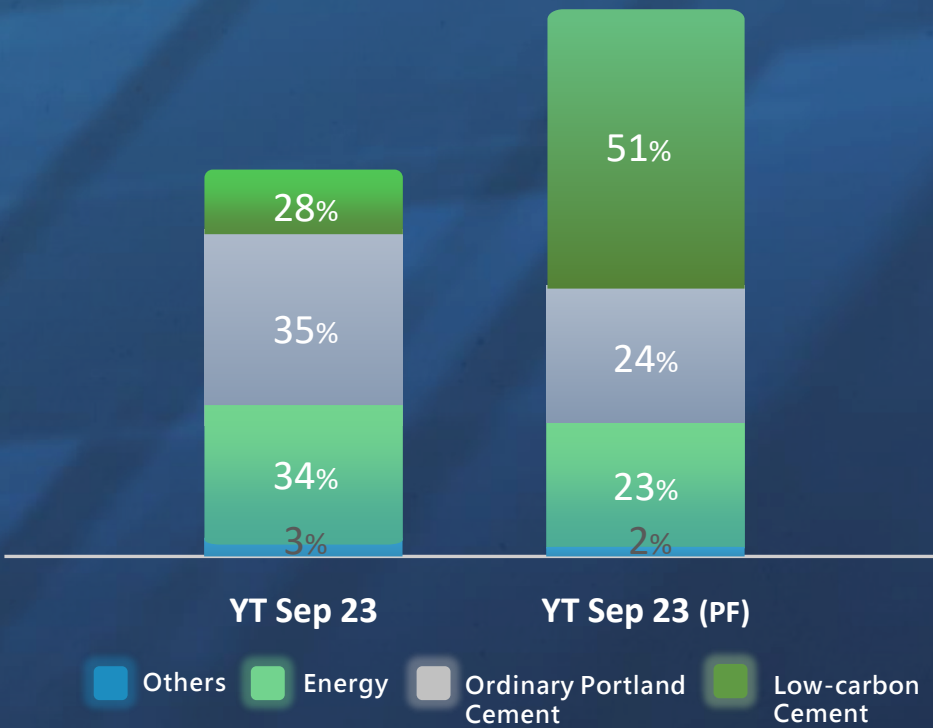
# Pro-forma Consolidated Financial report for the first three quarters

## Consolidated Revenue

Unit: In millions of NTD



## Composition of Consolidated Revenue



Notes : Pro-forma Consolidated figures, Considered the Cimpor Global Holdings(CGH)



# Pro-forma Consolidated Financial report for the first three quarters

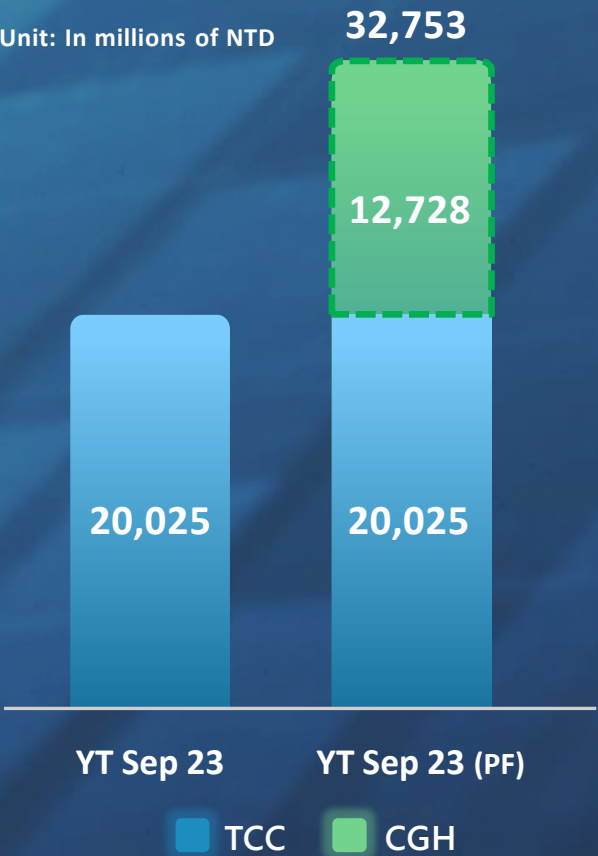
## Consolidated Net income

Unit: In millions of NTD



## Consolidated EBITDA

Unit: In millions of NTD



## Net Debt/EBITDA

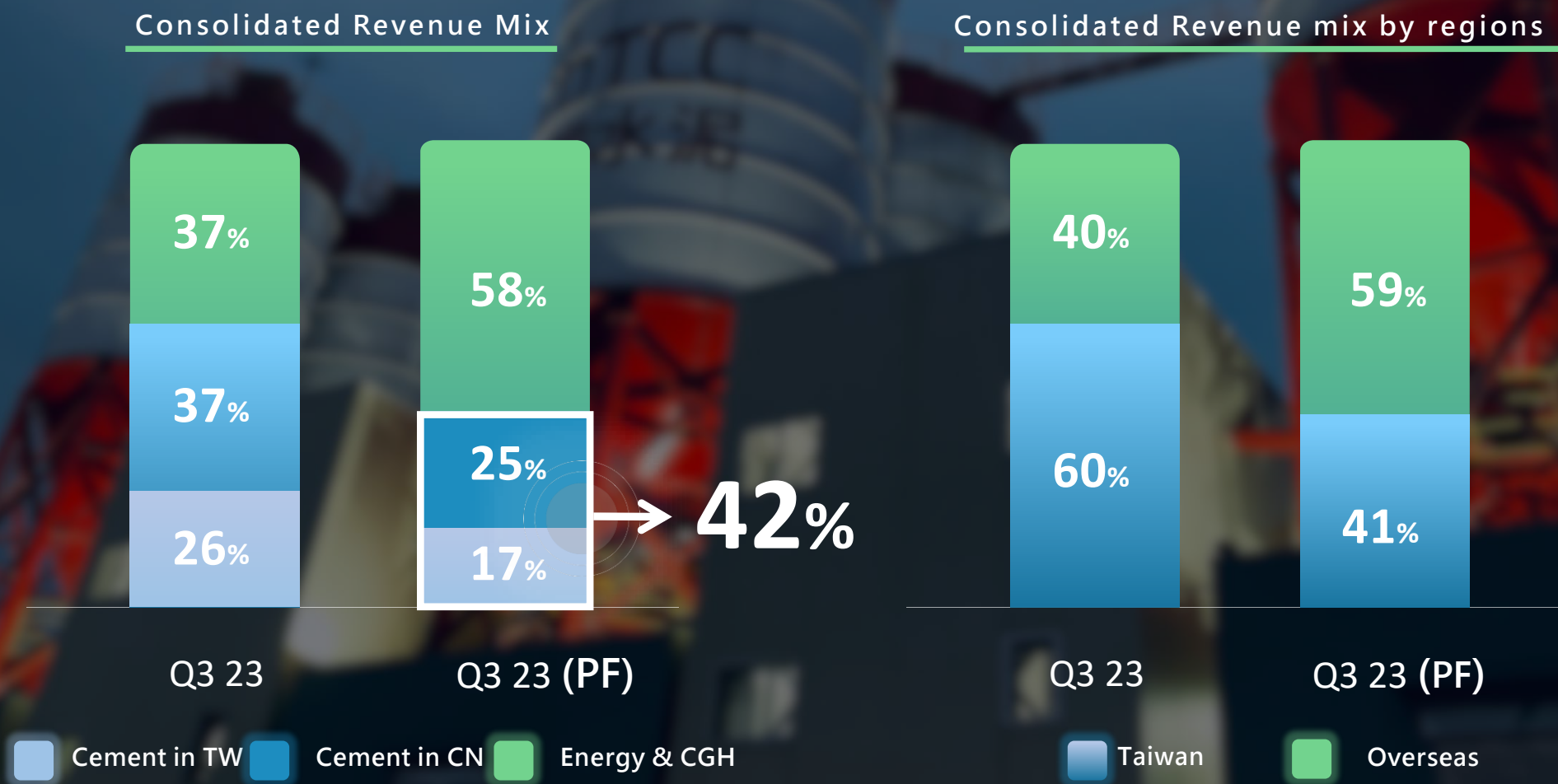


Note 1 : Pro-forma Consolidated figures, Considered the Cimpor Global Holdings(CGH)

Note 2 : NET DEBT (net interest-bearing liabilities) = Interest-bearing liabilities - cash and cash equivalents - financial assets at fair value through profit or loss (current) - financial assets at fair value through OCI (current) - Financial assets measured at amortized cost

Note 3 : Interest-bearing liabilities = short-term borrowings + short-term bills payable + long-term borrowings due within one year + long-term borrowings + corporate bonds payable + long-term bills payable

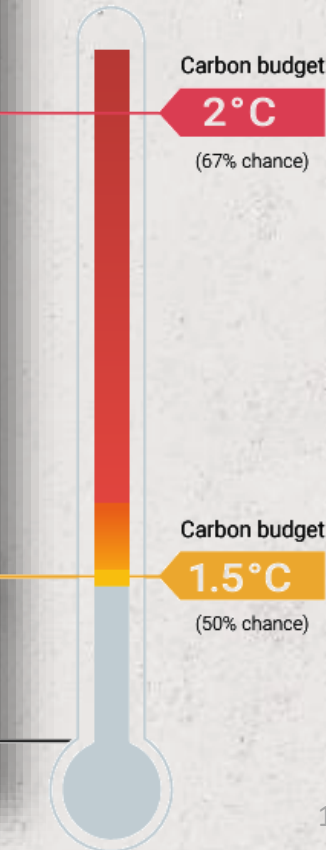
# More Diversified, Resilient, and Growth-Oriented Revenue Mix



Notes : Pro-forma Consolidated figures, Considered the Cimpor Global Holdings(CGH)



# TCC fully in line with SBT 1.5°C Pathway in 2024





# Launched Taiwan lowest carbon concrete, helping construction and engineering reduce carbon emissions by 15-20%

Total  
Climate  
Cement

Total  
Climate  
Concrete

商周

4》這些碳排大戶最會減碳  
——傳統高碳排產業減碳Top 3

碳排成長率(%)

1. 台泥 -16.16

2. 台達化 -15.78

3. 南緯 -15.77



NTU Risk Society and Policy Research  
Center – Survey Report





Ultra-High Performance Concrete

# Cement can also be an innovative industry: Patented UHPC Energy Storage Cabinet



## EnergyArk



Low Carbon



Fire-resistant &  
Fire Extinguishing



Weather Resistant



Compressive Strength

**Better safe, Never sorry.**





TCC strengthens global  
competitiveness in carbon reduction  
**Benefiting others, self, humanity and the Earth**

**In service for life**



**THANK YOU**