



**Board of Directors
Strategic Thinking Session 2022**

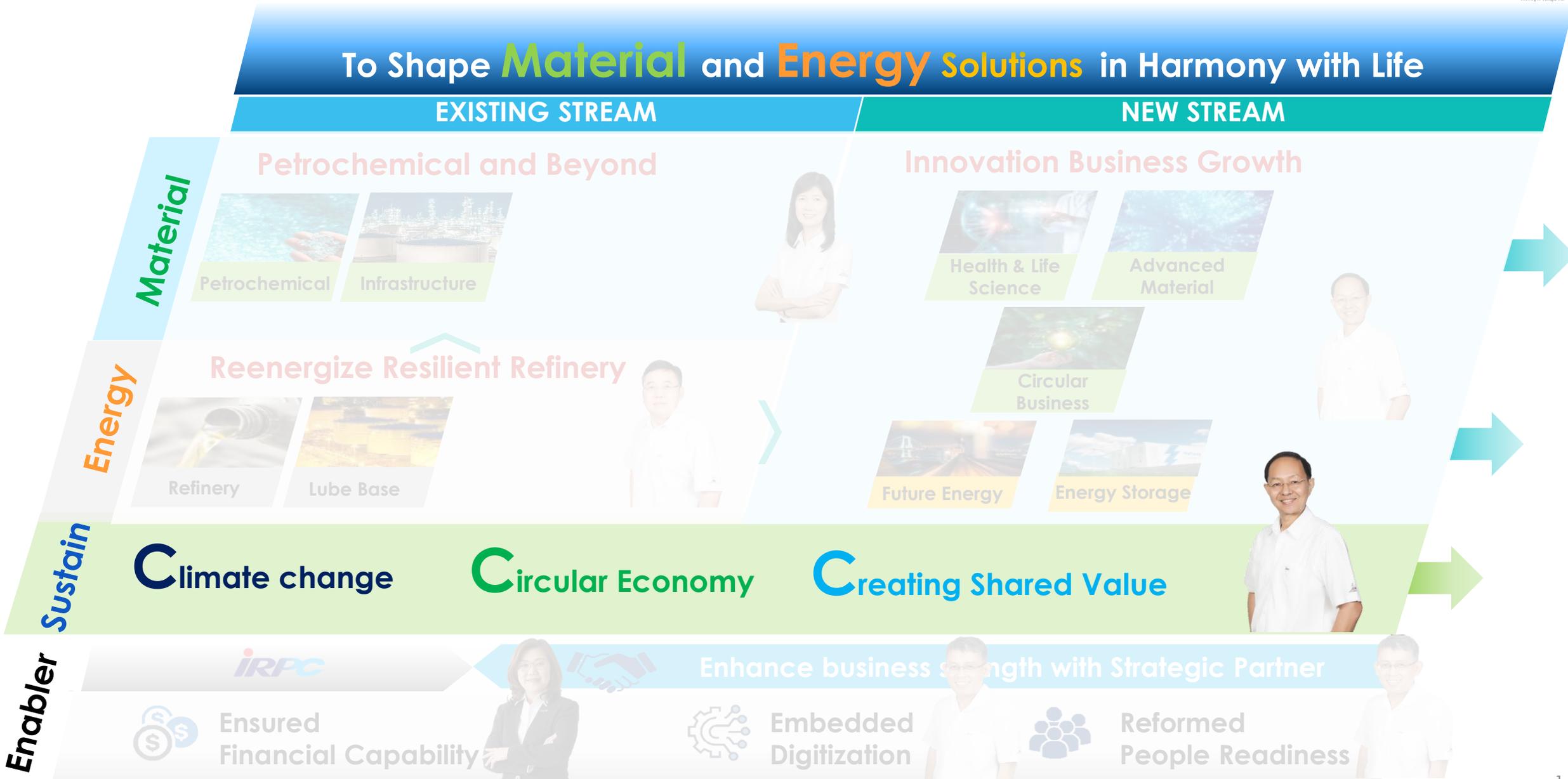
Sustainability

K. Somkiat Lertritpuwadol

19 Aug 2022



Strategic Move to the New ERA



Climate change

Low Carbon +

Support **low carbon society** and sustainable roadmap to net zero



Circular Economy

Living +

Create Living + for all stakeholders through **waste minimization and Eco solution** business and services



Creating Shared Value

Recognition +

Honors and awards from **positively impact** the health and wellbeing of people through our products and business



Impact of GHG & Climate Change Thailand Commitment

COP26 Glasgow Climate Pact

Focusing on real actions and urgency



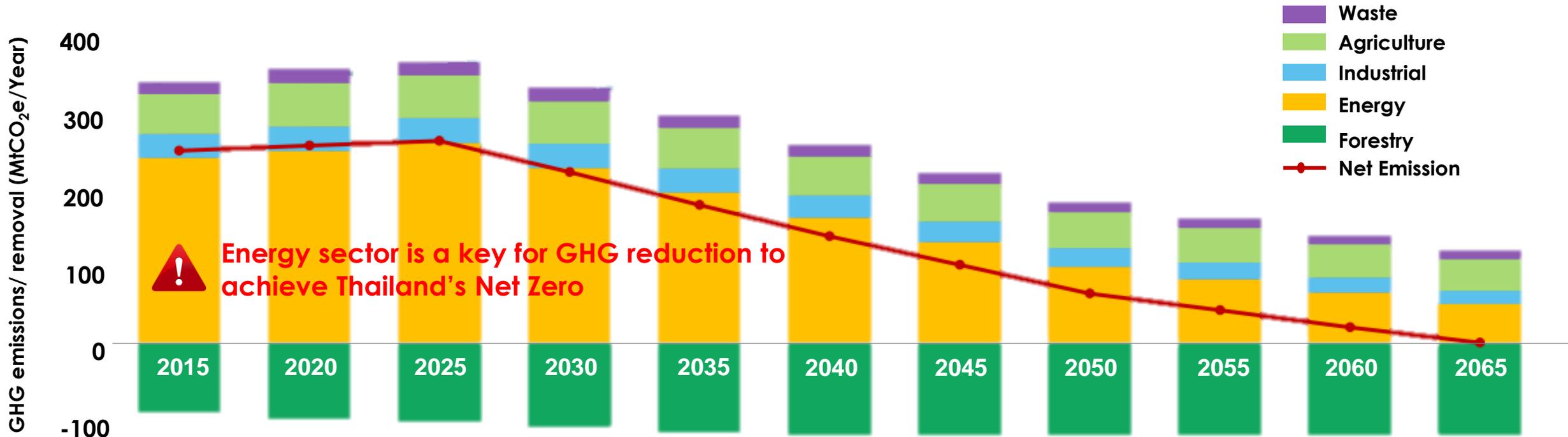
Emission cut by 40% in 2030*
Carbon Neutral in 2050
and **Net-Zero in 2065**

Key Actions

- 100% EV sales by 2035
- Expand carbon sink in the forestry
- Expand renewable energy generation

Note: * Base on projected Business-as-usual (BAU) level by 2030

Thailand's Long-Term Low Greenhouse Gas Emission Development Strategy



Energy sector is a key for GHG reduction to achieve Thailand's Net Zero

อ้างอิง: ผลการศึกษาการปรับปรุงสถานการณ์จำลอง การปล่อยก๊าซเรือนกระจกของ LT-LEDS (ฉบับปรับปรุง) เพื่อมุ่งสู่เป้าหมาย 2065 NET ZERO EMISSION จาก สำนักงานนโยบายและแผนทรัพยากรธรรมชาติและสิ่งแวดล้อม (นำเสนอผลการศึกษา ๑๘ กรกฎาคม ๒๕๖๕)

Climat**e** change

Support **low carbon society** and sustainable roadmap to net zero



Low Carbon +

Aspiration

IRPC aims to...



NETZERO

Commit to reduce emissions by

20% by 2030*

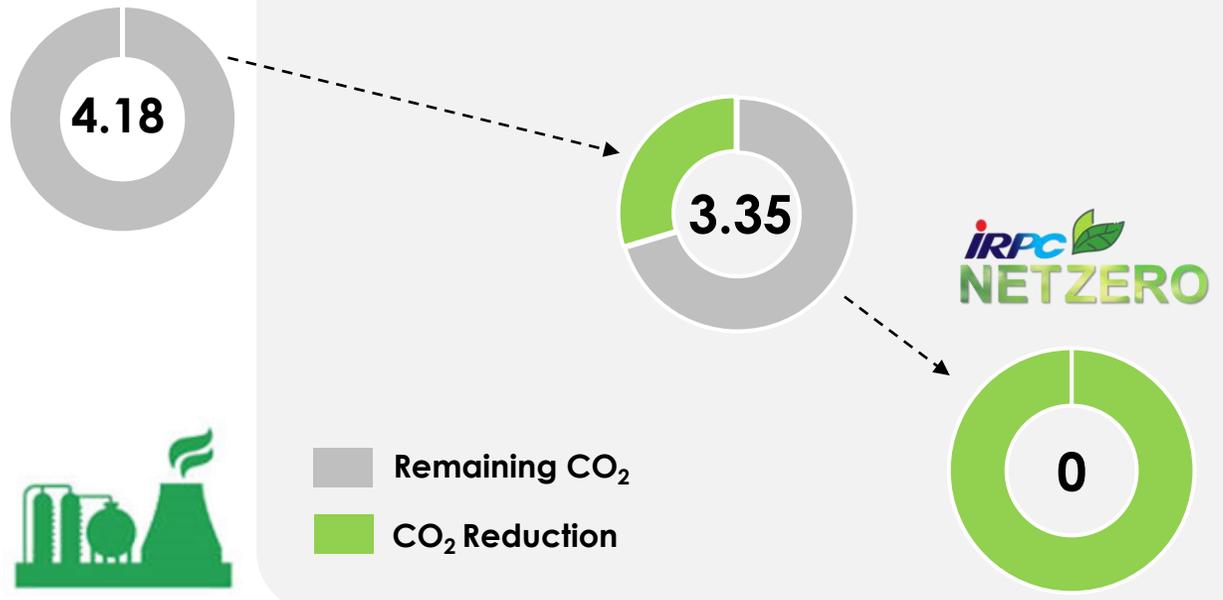
Carbon Neutrality 2050

Net Zero by 2060

* Base year 2018

Our Journey ... To be NET ZERO by 2060 with ERA

Base year 2018	Long Term Target 2030	Long Term Target By 2060
MTCO ₂	-20% (from base year 2018)	Net Zero



Note: Base year 2018
 • 5 years turn back from current
 • Normal operation

Note: Number refer to Absolute Remaining CO₂

3 Core Pillars to Drive Net Zero Commitments.

1 Eco-operation & technology

Eco-Operation	Greener Power
<ul style="list-style-type: none"> Energy Intensity Index (EII) 	<ul style="list-style-type: none"> Solar Power & Divest Coal

2 Reshape portfolio

Low Carbon Business	Clean Technology
<ul style="list-style-type: none"> Renewable Business Decarbonized Product 	<ul style="list-style-type: none"> H2 Ecosystem Decarbonized Startup

3 Absorption and offset

CCS	Forestation
<ul style="list-style-type: none"> CCS with in PTT group 	<ul style="list-style-type: none"> PTT Collaboration

1 Eco-operation & technology

Existing IRPC emission

IRPC existing emission portfolio by Source

4,000,000+

tCO₂e (Scope 1+2)



Switching operations to renewable energy and alternative fuels, and achieving energy savings project by innovation

Eco-Operation

Utilize every means to increase energy efficiency and reduce GHG emission.

- **EII** Top Quartile **~83%** in 2025
- Zero routine flaring

Greener Energy

Switching operations to renewable energy and alternative fuels.

- **Solar** (Floating, Rooftop, Solar Farm)
- **Divest Coal (U03,04)** to NG
- **Divest Coal (U02)** to **50MW** (Fuel Cell Study)

Eco-operation in all assets and Greener Energy

2 Reshape portfolio



Expedite New Stream via Low carbon and clean tech.

Portfolio adjustment to low carbon and clean technology project



Low Carbon Business



Renewable Business

• **Solar-Wind-Battery**

• **Innovative Solutions** Provider for renewable energy e.g. Flex Solar PV, Nano Coating, Pontoon and Bifacial PV

Decarbonized Product

- **Bio energy:** Bio jet study
- Explore business opportunities of **CCU**



Clean Technology



- Seeking new opportunities in **H2 ecosystem**
- Scouting potential **startup via Decarbonize Thailand** Startup Sandbox program

3 Absorption and offset



Capture & offset carbon using CCS technologies and Nature

Capture & offset carbon using CCS technologies and nature



CCS technology through collaboration with in PTT group

Forestation

- The creation of stakeholder engagement and social impact through community forest development
- Taking credits from forestation projects to offset CO₂ emission from operations

Key Considerations as IRPC Start to Execute Net Zero

WHAT

Three Core Pillars to Drive Net Zero Commitments.

Eco-operation & technology

Shift the operation from fossil based power to renewable energy and increase energy efficiency

Reshape portfolio

Adjust portfolio by investing in non-oil with Eco-Solutions

Absorption and offset

Seek all means to absorb and offset carbon

WHEN

Commit to reduce emissions by
20% by 2030*

Carbon Neutrality 2050
Net Zero by 2060

* Base year 2018

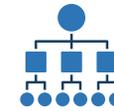


- Indicator - **Carbon Price**

Internal External

WAY FORWARD

Start to execute Net Zero



Governance and Organization



Investing and Financing



Carbon inclusive investment

ESG Financing



Processes



Accounting and Reporting



People

Circular Economy

Create Living + for all stakeholders through **waste minimization and Eco solution** business and services



Living +

Aspiration

IRPC aims to ...

Build the ECO-Solutions and Turning Waste to Value

Policy: Maintain Zero waste to landfill

- A** Waste utilization with 3R principle > 95% in 2040
- B** Waste to value (IRPC Circular Concept)

Creating Shared Value

Honors and awards from **positively impact** the health and wellbeing of people through our products and business



Recognition +

Aspiration

IRPC aims to...

Uplifts the sustainable value to stakeholder by

Increase 20% of True Value in 2030

Economy — Ecology — Social

Note: IRPC True Value Assessment 2021 at 10%