Thaioil Group defines the Net Zero GHG Emissions Strategy, known as the 3Cs strategies, with the details as follows:



# C – Cut Down Existing Emissions

Reducing GHG emissions in the current process of production (Scopes 1 and 2)

### Operational Approaches

- Emphasizing continuous energy efficiency improvement and controlling the ratio of low-emission fuel consumption in the production process to exceed that of high-emission fuel. This involves utilizing high-efficiency technologies and decommissioning obsolete production units to significantly increase the refinery's energy efficiency. Moreover, the use of fuel oil, which contributes to high GHG emissions in the production process, will be discontinued. This is due to the use of refined fuel oil in the production process which can produce high value products, therefore reducing emissions at the end consumption stage.
- Conducting a feasibility study on the use of Carbon Capture and Storage (CCS) technology in the production unit.
- Studying the adaptation of fuel use patterns in the production process to alternative fuels such as biomass or hydrogen, etc.

#### 2023 Progresses

- Completed the Net Zero GHG Emissions Pathway 2026 2060.
- Implemented 23 energy efficiency improvement projects.
- Collaborated with PTT Group in studying the application of carbon capture, storage, and utilization as well as adapting hydrogen production.

## C – Compensate Residual Emissions

Offsetting the remaining greenhouse gases

- Supporting the rehabilitation of the natural system or Nature-based Solutions through promoting the reforestation to capture carbon in the atmosphere.
- Creating carbon credits from investment projects that advocate carbon reduction.
- Conducting a feasibility study on a carbon credit trading approach.
- Allocated forest areas, including 8,300 rai of terrestrial forest and 356.22 rai of mangrove forest, in collaboration with the public sector to implement reforestation for carbon credit benefits.
- Created an accumulation of certified carbon credit of 1,310,492 tons of carbon dioxide equivalent (tCO<sub>2</sub>e) from TOPSPP's Co-generation power plant in the Thailand Voluntary Emission Reduction Program (T–VER) since 2019.
- Created carbon credit 554 tons of carbon dioxide equivalent from 1 energy efficiency improvement projects.
- Enhanced knowledge and understanding of carbon market directions as well as Thai and international legal trends for employees.

## C – Control Future Emissions

Controlling GHG emissions in the future

- Seeking investment opportunities in alternative energy, environmental-friendly, and low emission businesses, such as Sustainable Aviation Fuel (SAF), biobusiness, blue and green hydrogen business, and carbon utilization.
- Considering Carbon Pricing for driving investment in low-carbon technologies.
- In the process of the feasibility study of business growth diversification strategies to create profit stability and explore new value diversifications.
- In the process of the feasibility study of Carbon Utilization in collaboration with the PTT Group and monitoring government regulations.