



Climate Change

กลุ่มบริษัท พีทีที โกลบอล เคมิคอล จำกัด

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4 Apr. 2017

เติบโตอย่างยั่งยืน ด้วยยุทธศาสตร์ 3 ประสาน

BIG

เติบโตทัดเทียม
องค์กรชั้นนำ



GROWTH

- ขยายการลงทุนในประเทศที่มีความได้เปรียบด้านตลาดและวัตถุดิบ
- บุกเบิกตลาดและผลิตภัณฑ์ใหม่ ด้วยนวัตกรรม

Double size
PetChem revenue
~ 30 B\$ in 2024

STRONG

สร้างผลตอบแทนที่มั่นคง
ให้ความเชื่อมั่นต่อนัก
ลงทุน



SUSTAIN CORE

- รักษาความสามารถทางการแข่งขันให้ธุรกิจปัจจุบัน

1st Quartile
Return on Invested
Capital (ROIC)
14% in 2024

LONG

ดำเนินธุรกิจอย่างยั่งยืน

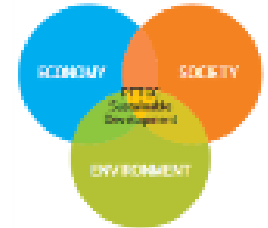


SUSTAINABILITY

- สร้างความสมดุลระหว่างธุรกิจ สังคม ชุมชน และสิ่งแวดล้อม (2E 1S)
- ต่อยอดสู่ความยั่งยืน ด้วยการขยายผลออกสู่การร่วมพัฒนาคู่ธุรกิจตลอด สายโซ่อุปทาน

Listed in DJSI
Top 10%

เป็นผู้นำในธุรกิจ
เคมีภัณฑ์ เพื่อ
สร้างสรรค์
คุณภาพชีวิต



Listed in DJSI Top 10%

**COP 21
GHG Intensity Commitment**

**Envi. DJSI & CDP
Leader Sector**

**Waste Water Recycle
>40 %**

**PTT Group Raw water
Supply Security**

Environmental Sustainability (Climate)

(1) Drive and Ensure effective Climate Change Strategy to achieve COP 21 for DJSI & CDP

- Advise the long range goal and plans to meet COP21 National Commitment

(2) Implement Product Stewardship to balance minimum Envi. impact and business

Develop and maintain Life Cycle Management (LCM)

- Product Footprint calculation (Carbon & Water)
- Product Life Cycle Assessment (LCAs)
- Product Life Cycle Cost (LCC)
- Product Eco design

(3) Consult and drive Operational Eco Efficiency report

- Advise for improve the eco-efficiency e.g. Water & Energy used ,Water recycle, GHG reduction projects etc.

License to operate & Business Growth

(1) Develop EIA /EHIA for new projects , plant modifications and EIA Monitoring

- Develop new or revise EIA/EHIA report
- Proceed for approval with ONEP & IEAT
- Troubleshoot EIA Monitoring report

(2) Track, participate national SHE Related legal requirements and advise compliance in PTTGC

- Participate in external taskforces e.g. PTIT, FTI, PCD, DIW
- Convince governmental authorities
- Alert PTTGC concern parties in advance

(3) Be a good Citizen in Map Ta Phut Eco Industrial Town

- Certified Eco-Factory, Green Industry
- Participate IEAT Eco-Symbiosis

Proactive Environmental Management (PEM)

(1) Build PEM

- Establish Green Culture of 3Rs Reduce, Reuse and Recycle
- Environmental Performance Benchmarking
- Build PEM Expertise in PTTGC
- Best Practice & Knowledge Sharing

(2) Ensure PTTGC raw water supply security

- Drive to implement internal Water Ascertainment projects e.g. WWRO, SWRO
- Drive to implement external Water Ascertainment projects with Rayong War room

(3) Ensure effective VOC Management

- MTP VOC Responsible Collaboration
- VOC Emission from Tank, Waste Water Treatment , T/A, Loading = 0

Resources / System Support

People – Coach, Supervise and Convince

- Be the Subject Matter Expert of Emerging Issues in PTTGC and PTT group
- Convince GPC & BU to drive and support Environment Sustainability strategy
- Coach Local Envi. Engineer and Process Engineer to calculate GHG and Eco Efficiency

Performance – Drive Long Range Plan

- Climate Change COP 21 Strategy
 - GHG Intensity reduction 52% in 2050
 - GHG reduction 10% from BAUs in 2022
 - Scope 3 target : Waste to landfill, Water Reduction
- Water Ascertainment
 - Waste Water Recycle >40%
 - Zero unplanned Raw Water Shortage

Process – Develop & Maintain System support

- Be the MR for ISO 14064-1 (Quantification and Reporting GHG)
- ISO 14062 (Product Eco design)
- ISO 14044 (Life Cycle Assessment)
- ISO 14045 (Eco-Efficiency)
- Eco Factory, GI

End

Way

Mean

5Y-Climate Strategy Long Range Plan

2020



2016

- (1) Certified ISO14064-1:2006
 - GHG Report
 - Training & Internal Audit (Course)
 - Uncertainty
- (2) GHGs Reduction Projects Implementation
 - Energy Saving projects
 - T-VERs (study)
 - T-VETS (phase I)
- (3) Carbon footprint & Carbon Neutral (AL, SD Report)
- (4) DJSI & CDP
- (5) Proactive Environmental Management (PEM)
 - (5.1) Circular Economy
 - Organic & Municipal waste management (REF)
 - (5.2) Product Stewardship
 - LCM, LCC, Eco-design (study)
 - LCAs (all)
 - Lower Toxicity (Study)
 - Water Footprint (EOB)
 - (5.3) GHG reduction Target
 - 52% GHG Intensity reduction in Y2050
 - 10% BAUs GHG reduction in Y2022
 - 10% Scope 3 (Water reduction, Waste to landfill)
- (6) Green Industry (L4&L5)

2017

- (1) Certified ISO14064-1:2006
 - GHG Report
 - Training & Internal Audit
 - Scope 3 (+1)
 - Uncertainty
 - **International boundary**
- (2) GHGs Reduction Projects Implementation
 - Energy Saving projects
 - T-VERs (implement)
 - T-VETS (phase II)
- (3) Carbon footprint & Carbon Neutral (AL, SD Report)
- (4) DJSI & CDP
- (5) CFP & CFR (re-certificate)
- (6) Proactive Environmental Management (PEM II)
 - (6.1) Circular Economy
 - Organic & Municipal waste management (ARO)
 - (6.2) Product Stewardship
 - LCM, LCC, Eco-design (phase II)
 - Environment footprint (study)
 - Lower Toxicity (OLE3)
 - Water Footprint (REF&ARO)
 - (6.3) GHG reduction Target
 - 52% GHG Intensity reduction in Y2050
 - 10% BAUs GHG reduction in Y2022
 - 10% Scope 3 (Water reduction, Waste to landfill)
- (7) Carbon Price (study)

2018

- (1) Certified ISO14064-1:2006
 - GHG Report
 - Training & Internal Audit
 - Scope 3 (+1)
 - Uncertainty
 - International boundary
- (2) GHGs Reduction Projects Implementation
 - Energy Saving projects
 - T-VERs
 - T-VETS (phase II)
 - Carbon Credit & CSR project
- (3) Carbon footprint & Carbon Neutral (AL, SD Report)
- (4) DJSI & CDP
- (5) CFP & CFR (re-certificate)
- (6) Proactive Environmental Management (PEM II)
 - (6.1) Circular Economy
 - Organic & Municipal waste management (OLE)
 - (6.2) Product Stewardship
 - LCM, LCC, Eco-design (phase II)
 - Environment footprint (OLE & POL)
 - Lower Toxicity (all)
 - Water Footprint (all)
 - (6.3) GHG reduction Target
 - 52% GHG Intensity reduction in Y2050
 - 10% BAUs GHG reduction in Y2022
 - 10% Scope 3 (Water reduction, Waste to landfill)
- (7) Carbon Price (implement)
- (8) Eco-Factory (re-certificate)

2019

- (1) Certified ISO14064-1:2006
 - GHG Report
 - Training & Internal Audit
 - Scope 3 (+1)
 - Uncertainty
 - International boundary
- (2) GHGs Reduction Projects Implementation
 - Energy Saving projects
 - T-VERs
 - T-VETS (phase II)
 - Carbon Credit & CSR project
- (3) Carbon footprint & Carbon Neutral (AL, SD Report)
- (4) DJSI & CDP
- (5) CFP & CFR (re-certificate)
- (6) Proactive Environmental Management (PEM II)
 - (6.1) Circular Economy
 - Organic & Municipal waste management (OLE)
 - (6.2) Product Stewardship
 - LCM, LCC, Eco-design (implement)
 - Environment footprint (EOB)
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Objectives

- **Reduce the rate of Global Warming, stay within a 2° deg C temperature incremental band and **CO₂e concentration in air < 450 ppm by the end of the year 2100****
- **Support Thai Government who committed to the Conference of the Parties to the United Nations Framework Convention on Climate Change (COP21)**
- **Gain DJSI & CDP (Carbon Disclosure Project) climate change survey awards points**
- **Prevent the worst of Climate Change**

Basic Concept

- The **Sectoral Decarbonization Approach (SDA)** is a scientifically-informed method
- GHG intensity (GHG Emission per Production) of the sectors, based on scenario assumptions about each sector's average structure

Time Frame

- **PTTGC established the long-term strategy on climate change using Science Based Target to mitigate GHG intensity reduction of 52% by 2050 from the base year of 2012**
 - Energy Conservation, Cleaner Fuel, Better Combustion Efficiency, Lower emission technology, Reduce Carbon Footprint

PTTGC Greenhouse Gas Intensity (COP21) Target & Performance

“PTTGC established the long-term strategy on climate change using Science Based Target to mitigate GHG intensity reduction of 52% by 2050 from the base year of 2012.”

