

3.1 รายงานความก้าวหน้าการดำเนินงานด้านการบริหารความยั่งยืน ไตรมาสที่ 4 ปี 2566 DECEMBER 19, 2023

IRPC has set the main levers for Net Zero Transition in 2023 as follow :

Q4 Performance

<u>Highlight:</u>

Eco- Operation & Technology	85.5 % %EII 2023 106,309 tCO2 Reduction from EII project estimated er		 RDCC economizer recovery (FGC) 7,358 tCO2e Clean heat exchangers / Fire heater 40,725 tCO2e ADU1 Pinch Technology 7,895 tCO2e RDCC economizer recovery (FGC) 7,358 tCO2e Solar Floating 8.5 MW 5,389 tCO2e RDCCTGTU WHB recovery (73E406) 4,205 tCO2e Strengthen OPOL-Increasing of HP 4,196 tCO2e Reduce fuel at 24B001 by stop some (New) 2,185 tCO2e CHP1 HRSG Cleaning Project 2,067 tCO2e OPTIMIZE Steam ที่ใช้ supply หอเผา 1,556 tCO2e
Reshape	100%	7 Initiatives	 Furniture in fit auto 3D printing with CU Prosthetic leg กับมูลนิธิขาเทียม Watch box with cosmo group Bio container with JCJ Recycle waste for society Project Boonrawd
portfolios	Progress vs plan	circular initiatives	
Absorption	20,000	50%	 MFL 20,000 rais , Currently in the process of registering the area Select area in Nov 2023 CCU project study with PTT group
and offset	Reforestation project Rais	Completed (%) in CCU project study	

Source : Team Analysis

Key Hi-Light : Award and Collaborations Project

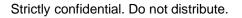


Thailand Energy Awards 2022 in "Energy Saving of Cracking and Quenching Processes by Digitalization" implemented at the IRPC ETP

Cooperation agreement with Boon Rawd Brewery and PTT to develop returnable equipment (e.g. bottle crate) from waste materials



พิธีลงนามบันทึกข้อตกลงความร่วมมือ การพัฒนาเทคโนโลยีและนวัตกรรมเพื่อต่อยอดวัสดุเหลือใช้ สู่ผลิตภัณฑ์หมุนเวียนที่ยั่งยืน



Managers.



ÍRP

Key Hi-Light : CE Project



Furniture in fit auto

Plan to deliver 3 more branch within Y'22 #9.ยโดธร #10 ราชพฤกษ์ #11 (เพิ่ม) รัยนาท



3D printing with CU

rPET/ABS : >> Already tested no. 14 and 15, Result test PASS Comment: No. 14 shows better appearance than No. 15 Next: Test No.14 with bigger product



Prosthetic leg Sirindhorn foundation has internal issue → Still not sure when to sign NDA

Another recycle project: มุลนิชีขาเทียม @ เชียงใหม่ แผ่นหนา 10-15 mm →Discussing long-term process i.e. volume



Recycle waste for society



Watch box /cosmo group

Update: Waiting to plastic waste in Feb-Mar 23





Bio container with JCJ

Update: same status - waiting for new order from end use



- To collect and utilize waste to upcycling products
- To achieve sustainable plastic waste management by circular economy practice

Project Boonrawd

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Key Hi-Light : Forestation Project Site Visit with MFLF





İR**P**

Key Hi-Light : Forestation Project Site Visit with MFLF

ลงพื้นที่สังเกตการณ์กระบวนการตรวจสอบความใช้ได้โครงกำร T-VER ภาคสมัครใจ โครงการจัดการคาร์บอนเครดิตในป่าเพื่อการพัฒนาที่ยั่งยืน อ.แม่ริม จังหวัดเชียงใหม่

ร่วมสังเกตการณ์กิจกรรมเปิดการตรวจสอบความใช้ได้ ร่วมกับผู้ประเมินภายนอก และชุมชน และร่วมสังเกตการณ์กิจกรรมตรวจสอบข้อมูลภาคสนาม ณ แปลง ตัวอย่างป่าชุมชน





SET AWARDS 2023

Sustainability Excellence Sustainability Awards of Honor

SET market capitalization of over THB30 bln. but no more than THB100 bln.





บมจ. ไออาร์พีซี IRPC

nancsulta

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NTA A





2023 result

Activities



Key enablers Action					
Policy and structure	 Launch boardroom-level decarbonization levers Incorporate sustainability concerns and GHG reduction in project steering committee Seek out green financing for decarbonization efforts and change internal financing rules Gear organizations toward sustainability goals and execute strategy 				
People	 Upskill and Training Change management program Communication programs Leader and role model 				
Process	 Set up infrastructure to kick-start implementation, also net-zero lab Integrate carbon pricing into financial performance and operation planning Implement decarbonization criteria in procurement, sourcing and supply chain 				
System and data tracking	 Set up end-to-end (E2E) sustainability-production system (SPS) for all functions Set up GHG reduction target as corporate KPI and deploy to all related functions Set up carbon tracking and accounting system 				

2024 Action Plan

Activities

Key enablers	Action	Result			
Policy and structure	 Set up Forestation structure Align Net zero target in subsidiary company Update goal with Global sustainability goal (SBTI) Refine and update decarbonization levers Establish policies to integrate circular economy principle 	 Forestation team Strategy alignment Align with Global standard Review, verify GHG pathway Deploy CE Policyy and roadmap 			
People	 Sustainability training (ESG Academy) Develop sustainability leadership programs 	 Increase capability building and ESG mindset of target group 			
Process	 Implement ESG system and Integrate AI for GHG prediction Enhance sustainability reporting transparency (TCFD) Post evaluate decarbonization assessment in procurement Calculation and verify CFO,CFP in operations 	 Visualize and automated ESG platform CFP for Styrenic product group 			
Change management & communication	 Continuous communication program Improve sustainability dimension in corporate website 	 Increase engagement of stakeholder 			

Progression

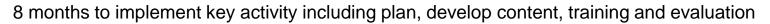
Today focus

ESG Academy framework : Increase capability building and ESG mindset of target group



Stream	Target audience	Objective and outcome	Course format
Executives	IRPC executive management (CEO,SEVP,EVP,VP)	 To understand how to strategically integrate ESG principles into overall corporate strategy and decision-making. To effectively engage with diverse stakeholders, including investors, customers, employees, and communities, etc. To identifying and managing ESG-related risks and opportunities to enhance the organization's resilience and competitiveness. 	 In-person session 4 sessions on ESG trend and direction 2 hours per session
Middle management / Key function	IRCP's employee at the Middle management level who work on each topic	 To gain expertise in implementing and managing ESG frameworks and standards such as GRI, SASB, TCFD To be able to engage cross-functional teams, fostering collaboration between departments such as finance, operations, human resources, and marketing to drive ESG initiatives. 	 In-person sessions with video recording. 10 sessions on ESG topics 3 hours per session.
Employee	IRPC employee at all level	 To understand ESG principles and alignment with the organization's values and mission To create awareness of ESG considerations into their daily work practices, regardless of their role or department. 	 Video recording session 3 sessions on ESG principles and corporate alignment 1 hour per session

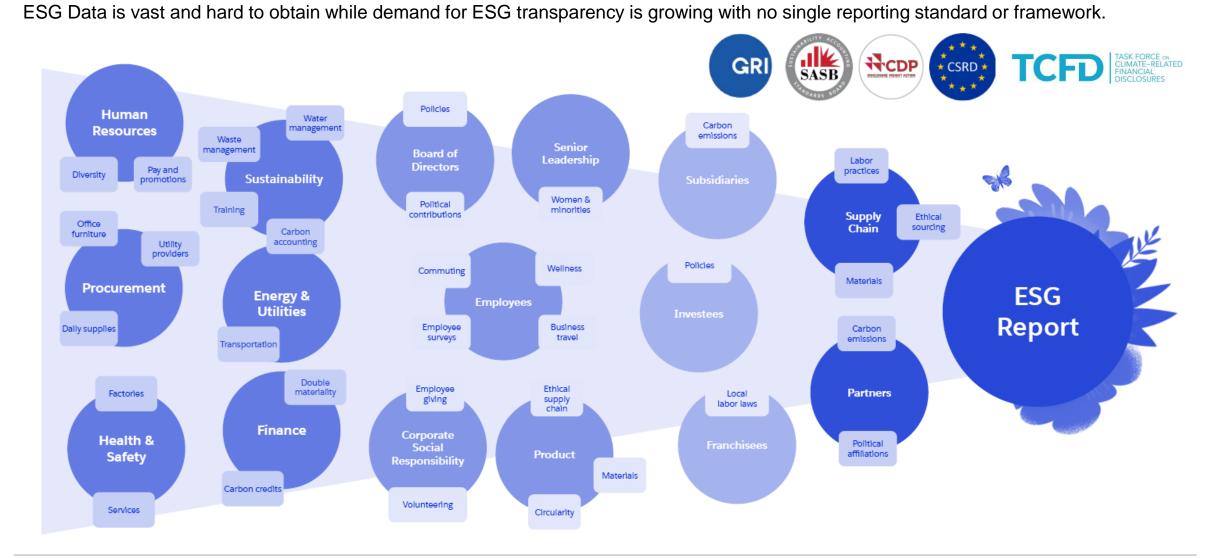
ESG Academy – High level timeline



Activity Month	Dec	Jan	Feb	Mar	Apr	Мау	Jun	Jul	Aug	Sep	Oct	Outcome
(1) Planning												
Define objective and approach												Curriculum outline
Clarify overall requirements: timeline, outline, participants												Kick-off meeting
(2) Developing												
Perform desk research from internal and external sources, including international instruments and												Training material and presentation
Develop a contents of each training sessions.												
(3) Training												
IRPC's Executives				• •		• •						4 sessions - onsite
IRPC's Middle management & key functions						• •	• •	• •				10 sessions - onsite
IRPC's Employee								•				3 sessions - online
(4) Evaluation												
Testing result and evaluation from RWA survey												Score improvement
Summarize all deliverables												



Implement ESG platform due to difficulties in Handling and Reporting IRPC ESG Data due to Manual Processes

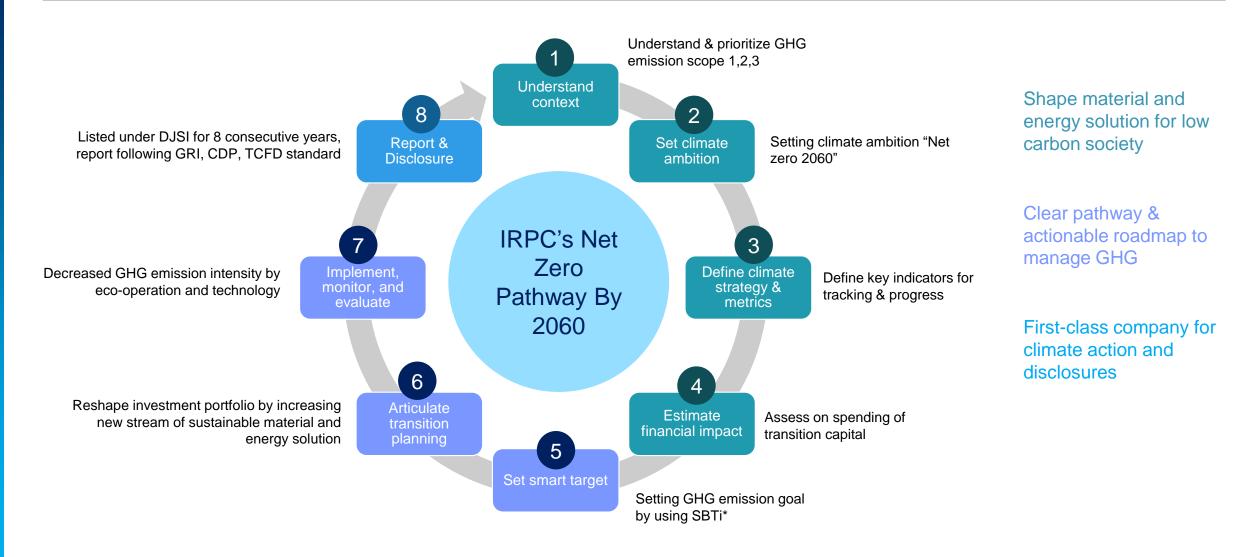


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ESG platform help to tracking and reporting system project

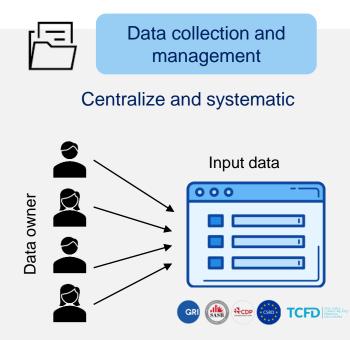


We need effective tool and system to support our transformation in action of setting, tracking, formulating and reporting

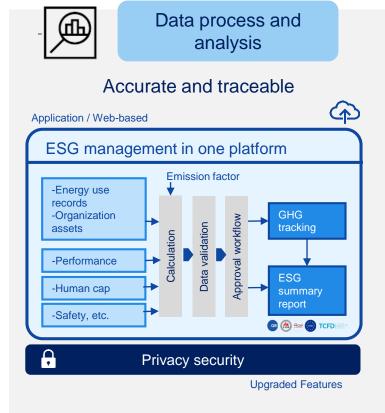


TO BE : Development for ESG platform is part of sustainable pathway

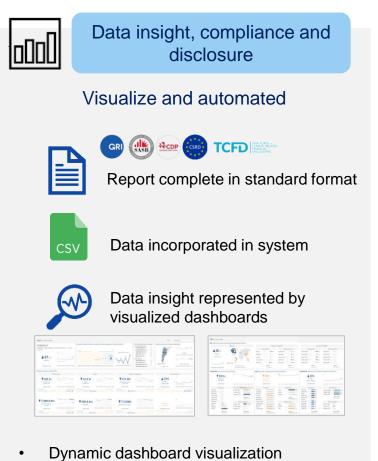
ESG Data will be centralized, more accurate and traceable. Meanwhile report will be generated automatically and insightful



- Centralize platform with user friendly interface
- Data collection formatting in alignment with international reporting framework
- Real time editing by multiple users



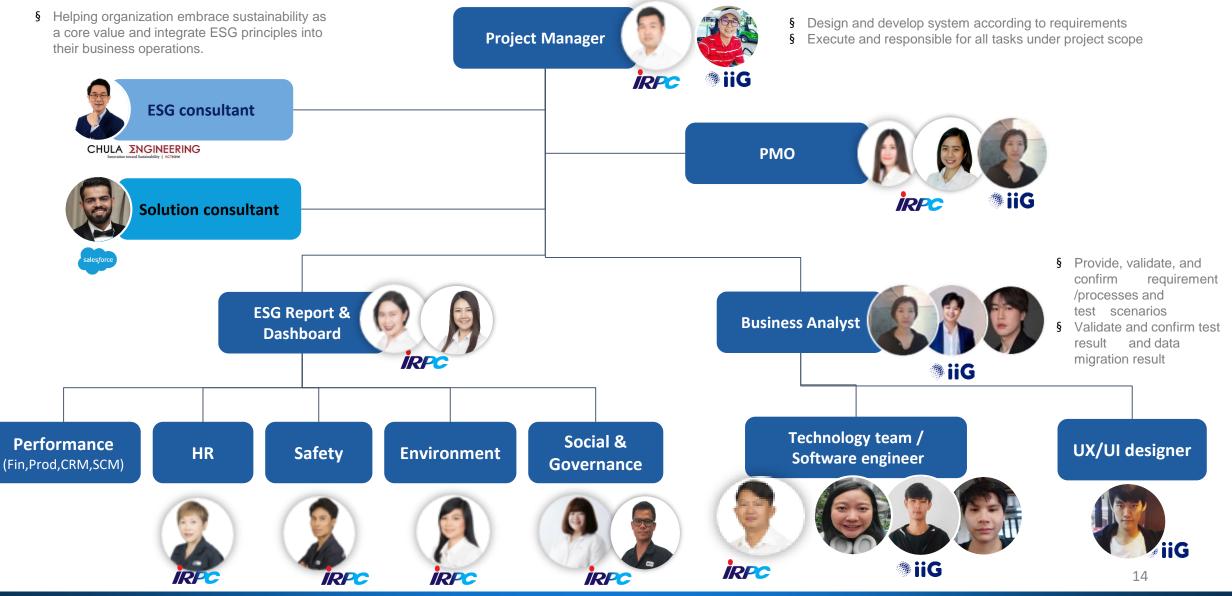
- Data conversion / unit of measure
- Automated consolidation and calculation
- Auditable, reliable of data



- Improved data quality from effective way
 of management
- Report generation with one click



Project Team Organization



IRPC ESG Tracking and Reporting - Project kick off



Project High Level Timeline

Project will be implemented within 7 months, ensuring by project governance process.

Activity	2023		2024							
Activity	Nov	Dec	Jan	Feb	Mar	Apr	Мау	Jun	Jul	
Discovery Workshop for data assessment and requirement	Kick Of	f 15-Dec- Require	23 ment Signed off	Sprint 2 • Human Ca • Safety	_		nt 3:			
Analyze & Design High level solution architecture			12-Jan- Design	24 Signed off				Sprint 4:	ort	
Implementation Develop platform solution				•	•	•		• ESG Dash		
Testing User Acceptance Test: UAT				Sprii	nt 1:					
Training & Delivery Training, deployment, go-live					n / ROI / Prod / Ipply Chain / C			Go-L 9-Ju		
Project Management Monitor and report (progress, issue, risk)									HGHT!	
▲ 10-Nov-23										

IRPC has set the main levers for Net Zero Transition in 2024 as follow :

2024 Target

Eco-Operation & Technology



Reduction from Ell project and Divest coal in 2024

3% % GHG reduction VS baseline 4 %

Total % accumulate GHG reduction from baseline

Reshape portfolios

Design & Eco-Design Adoption Rate Material Efficiency Improvement

process optimization

3 Initiatives (IL3 approved)

- Re-design process with operation and RD
- Reduce raw material consumption
- Explore sustainable feed stock
- Collaboration with external stakeholder

Absorption and offset



40,000 Rais

Accumulation area from 2023



% Area accumulation from target target

Source : CSSP

For Acknowledgement

จึงเรียนมาเพื่อโปรดทราบรายงานความก้าวหน้าการดำเนินงาน ด้านการบริหารความยั่งยืน ไตรมาสที่ 4 ปี 2566 และแผนการดำเนินงาน ปี 2567