

# erex Co., Ltd. [9517]

To become a pioneer in the new era of electric power with renewable energy at its core

Supplementary Materials for the 1Q of FY March 2025

(3 Months Ended June 30, 2024)

August 9, 2024

# Cautions Regarding Forward-Looking Statements



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# 1. Summary of Financial Results for the 1Q of FY March 2025

- 2. Initiatives for FY March 2025
- 3. Strategies for De-Carbonization

#### **Previously Announced Structural Reforms Lack of Coordination** Damage to Financial Imbalance between **Procurement and Sales** among Divisions Strength **Reinforcement of Collaboration** Improvement of Financial **Balance Optimization** Strength among Divisions **Establishment of SCR Office**, Alliance with strategic partners Procurement at reasonable **Supply & Demand Strategy** quantities and prices for retail Securing funds for overseas Office, and Overseas sales volume each time business growth through 3rd **Business Management Dept.** party allotment of new shares across the organization

Structural reforms led to a return to profitability in the 1Q of FY March 2025

By continuing the initiatives in the 2Q and beyond, erex Group will firmly achieve the full-year plans and aims further upside



 Changes in procurement policy and enhanced inter-divisional collaboration have optimized the balance between procurement and retail sales, eliminating sales with negative spread

**Net Sales/Operating Income: Steady Progress vs Plans** 

# Power Sales Volume Grew due to the Effect of New Measures, Including the Development of New Retail Rate Plans

- 1. High Voltage: Strong sales of erex Group's proprietary new rate plans (launched in July 2023) that reference futures prices
  - ✓ Power sales volume increased by +38.3% YoY
  - ✓ New rate plans are expected to account for more than 30% of all high voltage demands by the end of the year
- 2. Low Voltage: Sales grew due to acquisition of large project contracts and tie-in with high voltage projects
  - √ Net sales increased by +6.0% YoY
- 3. Corporate PPA, Aggregation: Multiple discussions are underway
  - ✓ Concrete discussions with major companies are underway



# **Vietnam: Steady Progress toward Profitability**

#### 1. New Construction of Biomass Power Plants

- ✓ 7<sup>th</sup> National Power Development Plan (PDP7) Projects: Hau Giang Biomass Power Plant is to start operations in December 2024
- √ 8<sup>th</sup> National Power Development Plan (PDP8) Projects: Construction of two biomass power plants in Tuyen Quang and Yen Bai is to start by the end of this year
- ✓ An Giang has been selected as the site for the third project, with construction to start in FY2025
- ✓ Discussions with the Vietnamese government progressed steadily for erex Group to acquire 50% of the carbon credits attributable to Vietnam
- ✓ Vietnam and erex Group plan to form a joint task force towards the establishment of ETS market for carbon credits

## 2. Fuel Development

- ✓ Plants to process woody residues into pellets are under construction. The Tuyen Quang Plant is to start operations around December 2024 and Yen Bai Plant around January 2025
- ✓ Final terms for raw materials (woody residues, etc.) necessary for pellet plant operations are being discussed with several suppliers in the vicinity of the pellet plant, and an agreement on raw material supply is scheduled to be signed this summer
- ✓ Pelletized fuel is planned to be exported to Japan and other countries, and a contract for transportation from the pellet plant to the export port and a warehouse near the export port will be secured this summer



# Cambodia: Reduction of Imported Power and De-Carbonization Developments

# 1. New Construction of Hydroelectric Power Plant (80 MW)

- ✓ Construction is to be completed by the end of 2025, backed by an abundance of water
- ✓ With high PPA level of 7.9¢/kWh, the project features excellent economic efficiency (global average of 5.4¢/kWh) \*Purchase of 3,577 operating hours even during low operating periods in the dry season (seven months) is to be secured
- Construction work enters the final stage, with the construction start of dam, power generation tunnels, etc.
- ✓ A second hydroelectric power plant (20 MW) with the same conditions downstream is under consideration for completion in May 2026

#### 2. Construction of New Biomass Power Plants

✓ Based on the high potential of various unused biomass resources and the plantation and afforestation system, a joint feasibility study with Power China (Power Construction Corporation of China)\*, which is highly trusted by the Cambodian government, will be conducted from this fall, including the site location, with the aim of starting construction of the first unit by the end of this year at the earliest

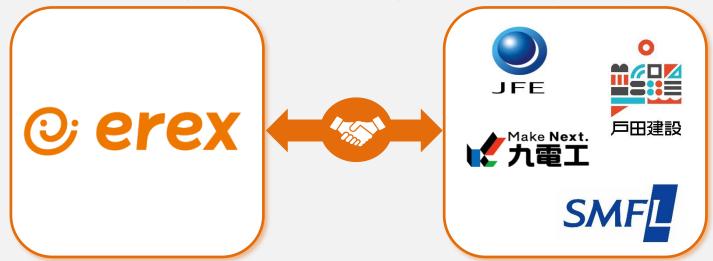
\*Power China (Power Construction Corporation of China): Electric infrastructure construction company with sales of approximately 12 trillion yen. The company has built several power plants in Cambodia

✓ The Cambodian government has requested the construction of multiple units to back out highpriced electricity imports from neighboring countries and to secure a stable power source that contributes to de-carbonization.



# **Business Developments with Strategic Partners**

- 1. Concrete discussions are underway with JFE Engineering Corporation, TODA CORPORATION, KYUDENKO CORPORATION, and Sumitomo Mitsui Finance and Leasing Company Limited for business developments in Japan and overseas
  - ✓ Business alliance agreements have been signed with JFE Engineering and TODA CORPORATION



2. In addition to the above Japanese companies, leading Vietnamese companies hope to invest in erex Group's Vietnam businesses



# Improvement of Financial Strength

- Financial strength improved due to alliances with strategic partners and net income recognized in the 1Q of FY March 2025
  - ✓ May 30, 2024: Third-party allotment of new shares
     (Amount: 11.8 billion yen allotted to: JFE Engineering Corporation, TODA CORPORATION, KYUDENKO CORPORATION, and Sumitomo Mitsui Finance and Leasing Company Limited)
  - ✓ 1Q of FY March 2025 (Income before income taxes: 3.1 billion yen, Net income: 1.7 billion yen)

(Billion Yen)	FY March 2024 Full Year (IFRS Results)	FY March 2025 1Q (IFRS Results)	Increase/Decrease
Cash and Deposits *	19.6	31.1	+11.4
Interest-Bearing Debt	55.9	54.0	△1.8
Equity Ratio	32.2%	40.4%	+8.2%

<sup>\*</sup>Time deposits with a term longer than 3 months are categorized as "other financial assets"

- Japan Credit Rating Agency, Ltd. (JCR) Rating: Long-term Issuer Rating: A-, Outlook: Negative (February 19, 2024)
  - ✓ JCR Comments: "erex Announces Issuance of New Shares by Third-Party Allotment, Easing Downward Pressure on Ratings"

Reference: May 13, 2024 News Release (erex | Japan Credit Rating Agency, Ltd. - JCR )

### FY March 2025: 1Q Results (Apr 2024 - Jun 2024) IFRS Basis



#### [YoY Comparison]

- Net Sales: ▲22.4 billion yen YoY due to lower wholesale volume (JEPX, PPA, etc.)
- Operating Income: +6.4 billion yen YoY due to elimination of sales with negative spread of procured power sources and optimized balance between procurement and retail sales

#### [Comparison vs Plans (1Q)]

- Net Sales: Slightly higher than plans due to an increase in low-voltage power sales volume and hedging transactions, etc.
- Operating Income: Higher than plans due to an increase in low-voltage power sales volume and a decrease in SG&A expenses

#### [Foreign Exchange]

■ Foreign exchange gain of about 1.3 billion yen was recorded due to yen depreciation. On the other hand, strong yen is positive for fuel procurement (In terms of FY March 2025, 90% or more is hedged by foreign exchange contracts. In the case of

JPY appreciation, it will be positive in FY March 2026 onward.)

(Billion Yen)	FY March 2024 1Q (Results)	FY March 2025 1Q (Results)	FY March 2025 Full Year (Plans)	YoY Increase/ Decrease (Amount)	YoY Increase/ Decrease (%)	Achievement Ratio vs Full Year Plans
Net Sales	55.9	33.4	155.4	<b>▲</b> 22.4	<b>▲</b> 40.2%	21.5%
EBITDA <sup>*1</sup>	▲2.5	4.4	-	6.9	-	-
SG&A Expenses	2.7	2.1	-	▲0.5	<b>▲</b> 21.0%	-
Operating Income	<b>▲</b> 4.5	1.9	5.3	6.4	-	35.5%
Income before Income Taxes	▲3.8	3.1	4.3	6.9	-	71.6%
Net Income*2	▲3.3	1.7	1.8	5.1	-	92.7%

<sup>\*1</sup> EBITDA: Income before income taxes + Interest expense + Depreciation + Amortization of goodwill, etc.

<sup>\*2</sup> Net income attributable to the owners of the parent company

# FY March 2025: 1Q Results (Breakdown of Sales and Profit)



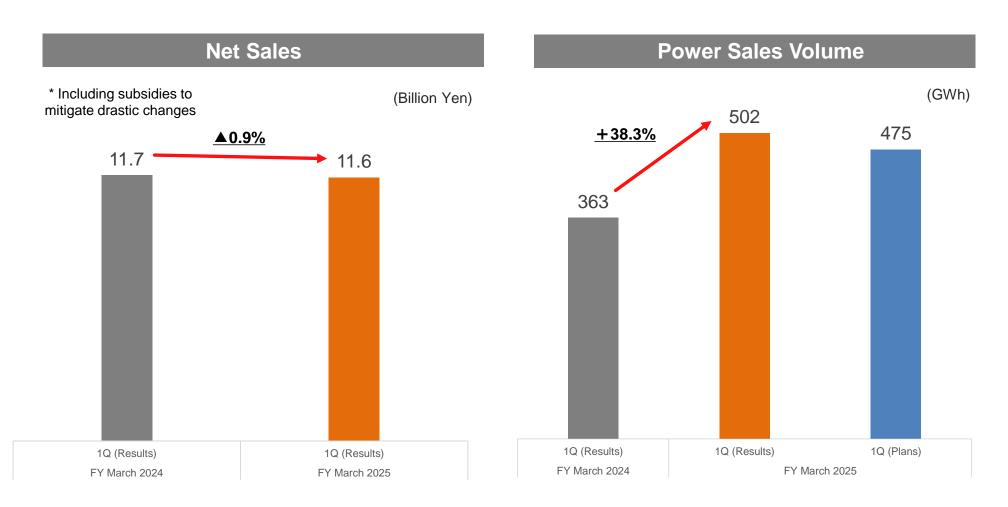
	(Billion Yen)	FY March 2024 1Q (Results)	FY March 2025 1Q (Results)	FY March 2025 Full Year (Plans)	Special Remarks
N	et Sales	55.9	33.4	155.4	
	Retail & Trading	61.7	38.5	185.1	<ul> <li>Decrease in wholesale</li> <li>[High Voltage] Increase in power sales volume due to proprietary new rate plans</li> <li>[Low Voltage] Increase in power sales volume due to increase in the number of corporate customers, etc.</li> </ul>
	Power Generation & Fuel	9.3	12.2	49.9	<ul> <li>Increase due to the contract fee for securing the capacity of the Itoigawa Power Plant, etc.</li> <li>Increase in other inter-group transactions</li> </ul>
	Overseas	0.0	0.0	1.0	
	Other Consolidation Adjustments	<b>▲</b> 15.1	▲17.4	▲80.6	Offset due to inter-group transactions
0	perating Income	<b>▲</b> 4.5	1.9	5.3	
	Retail & Trading	▲2.7	2.8	9.8	<ul> <li>Elimination of sales with negative spread by the change of procurement strategy</li> <li>Cost increase due to capacity contribution</li> </ul>
	Power Generation & Fuel	▲2.1	▲0.6	▲2.1	Increase due to the contract fee for securing the capacity of the Itoigawa Power Plant and decrease in repair expenses resulting from curbed operation
	Overseas	▲0.2	▲0.1	<b>▲</b> 1.3	
	Other Consolidation Adjustments	▲0.6	▲0.5	▲1.7	
	IFRS Adjustments	1.3	0.3	0.6	

<sup>\*</sup>Figures by division are before IFRS adjustments

<sup>\*</sup>Internal calculations as erex Group has only one business segment.

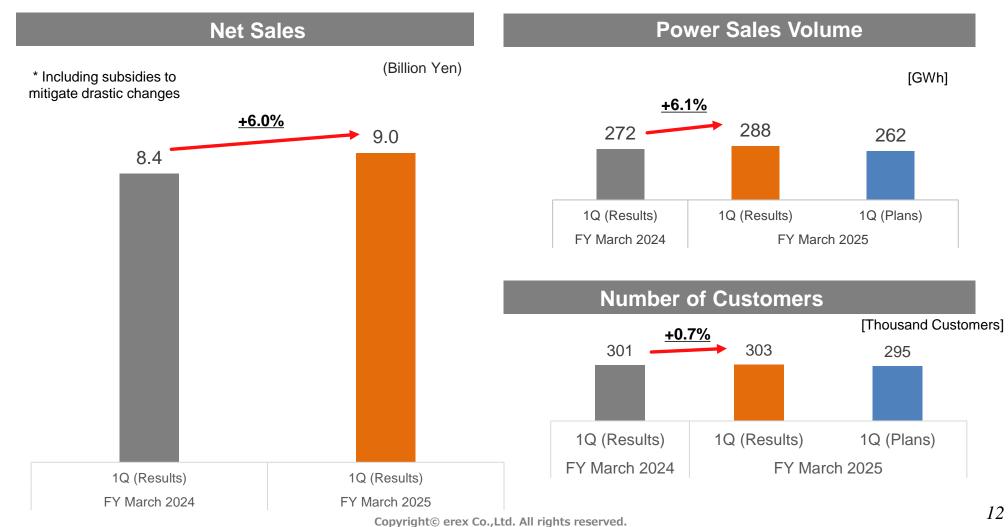


- Power sales volume increased by +38.3% YoY due to expanded sales of erex Group's proprietary plans
- Net sales declined by ▲0.9% YoY due to a decline in unit sales prices in line with a drop in market price.
- The percentage of hybrid plans (referring to futures prices) increases





- Net sales increased by +6.0% YoY due to an increase in power sales volume, reflecting an increase in new applications from corporate customers with high usage and high gross margins
- Reinforcement of communication with sales agents and website improvements were successful



# **Summary of the Consolidated Balance Sheet**



	FY March 2024	FY March 2025 1Q		
(Billion Yen)	(Billion Yen) (End of the Period)		Increase/ Decrease	Major Reasons for Increase/Decrease
Current Assets	66.8	69.9	3.1	<ul> <li>Increase in cash and deposits</li> <li>Decrease in short-term loans receivable from affiliates due to transfer to long-term</li> <li>Decrease in accounts receivable / other than trade due to decrease in derivatives transactions</li> </ul>
Non-Current Assets	81.1	89.2	8.1	<ul> <li>Increase in long-term loans receivable from affiliates due to transfer from short-term</li> <li>Increase in derivative receivables due to mark-to-market valuation of foreign exchange contracts</li> </ul>
Total Assets	147.9	159.1	11.2	
Current Liabilities	46.4	42.3	△4.0	<ul> <li>Decrease in accounts payable / trade due to a decrease in PP, transactions</li> <li>Decrease in short-term loans payable due to repayment of commitment line</li> </ul>
Non-Current Liabilities	46.4	44.7	△1.6	<ul> <li>Decrease in long-term loans payable due to transfer to current portion</li> <li>Increase in deferred tax liabilities due to mark-to-market valuation of foreign exchange contracts</li> </ul>
Total Liabilities	92.8	87.0	△5.7	
Owners of Parent Company's Interest	47.6	64.1	16.5	<ul> <li>Increase in capital stock and capital surplus through 3rd-party allotment of new shares</li> <li>Increase in retained earnings due to increase in net income</li> </ul>
Noncontrolling Interest	7.5	7.9	0.4	
Total Net Assets	55.1	72.0	17.0	
Cash & Deposits	19.6	31.1	11.4	Increase due to 3rd-party allotment of new shares
Interest-Bearing Debt	55.9	54.0	△1.8	<ul> <li>Decrease in short-term loans payable due to repayment of commitment line, etc.</li> </ul>
Net Asset Ratio	32.2%	40.3%	8.1%	<ul> <li>Increase in shareholders' equity due to 3rd-party allotment of new shares and net income</li> </ul>

<sup>\*</sup>Transition to IFRS from the current fiscal year



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#### Details of Response from FY March 2025 Onward

#### Status of Initiatives

Quotation

Procurement

Response to Supply & Demand Management Procurement of power sources is to be conducted consistent with retail selling prices on a case-by-case basis, rather than procuring in anticipation of JEPX price hikes



- Daily inter-divisional coordination of sales unit prices for each customer during the contract period (mainly one year ahead) is conducted
- ⇒ No price mismatch

 A variety of power sources, including PPA power sources, in-house power sources and JEPX are utilized, and procurement is to be conducted as needed for a fixed sales volume on a caseby-case basis



Sales status is shared in real time and necessary transactions are conducted by utilizing all trading channels

⇒Building neutral position

Response to Inter-Divisional Collaboration  Inter-divisional collaboration is to be strengthened and a risk management system is to be built through the creation of Supply and Demand Strategy Office, SCR Office (risk management), and Overseas Business Management Department





- The organization was made functional and risk management systems were established in each area promptly after the creation last year
- ⇒Increased organizational strength, contributing to stabilization of earnings



# **Various Measures are Implemented to Increase Earnings**

High

Voltage

Strong sales of fully fixed and hybrid plans (utilizing electricity futures)\*

Business
Expansion by
Making the
Most of
Originality

 Proposal of a number of corporate PPAs, particularly for large businesses

Active participation in bidding projects

Low Voltage

- Strong acquisition of sales channels such as WEB, moving, etc.
- Campaigns centered on large corporate projects
- Development of new rate plans to meet customer needs

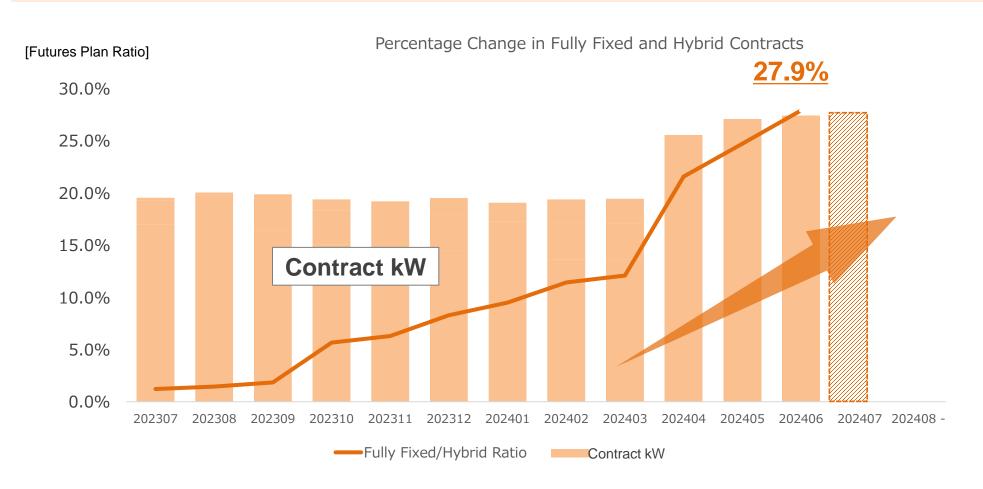


Hybrid Plan: A plan with market-linked prices during the off-season when the market prices tend to be cheap, and fixed unit price during summer and winter when there is a risk of price increases

<sup>\*</sup> Fully Fixed Plan: A plan with a single unit price throughout the year, unaffected by fuel price fluctuations, etc.



Fully fixed and hybrid plans utilizing electricity futures drove growth in power sales volume Inquiries are increasing mainly from customers who want to increase predictability of electricity rates



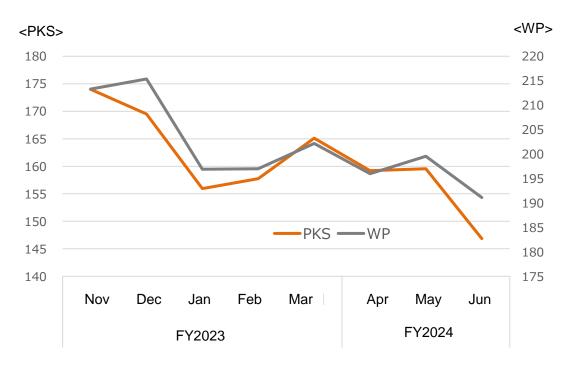


- Prices of PKS and wood pellets have been on a downward trend recently due to easing supply and demand caused by troubles and delays in starting operations of biomass power plants of other companies in Japan
- PKS co-firing is considered at the Itoigawa Power Plant which can accept biomass fuels using other companies' excess PKS inventory at low cost
- On the other hand, the Saiki Power Plant has acquired certification for the use of wood pellets and has established a system that allows co-firing in preparation for PKS price hike

#### **Fuels Used**

Power Plant	Fuels Used	Usage Volume
Tosa	PKS	
Saiki	PKS Wood Pellets	
Buzen	PKS Wood Pellets	Approx. 1.2
Ofunato	PKS	million tons
Nakagusuku	PKS Wood Pellets	
Itoigawa	Coal Biomass	

#### **Biomass Fuel Import Prices (\$/t)**



<sup>\*</sup>erex Group's calculations based on Ministry of Finance Trade Statistics (https://www.customs.go.jp/toukei/srch/index.htm?M=77&P=0)



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# **Issues in Southeast Asia**

Power Shortages due to Population Growth

**Risk of Energy Price Hikes** 

Response to De-Carbonization

Decline in Energy Self-Sufficiency Improvement of Income Level

**Job Creation** 

# **Providing the Solution of "Biomass Power Generation"**

### **Stable Power Supply**

- Stable power supply that is not affected by weather conditions
- Being able to improve energy selfsufficiency and support economic growth

#### **De-Carbonization**

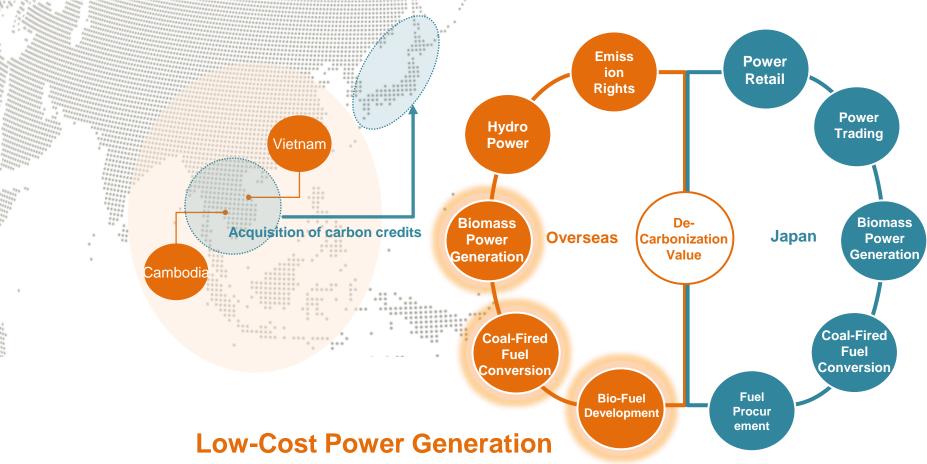
- De-carbonization is a global issue, and without de-carbonization, response to an increasingly globalized society is not possible
- Biomass power generation is optimal in Southeast Asia, where biomass resources are abundant

#### **Contribution to Employment**

- Employment of agricultural workers occurs in the production of biomass fuels
- Expected to cover a wide range of fields such as power generation, fuel accumulation and transportation



# erex Group aims to de-carbonize Southeast Asia by utilizing the knowledge it has cultivated



**Improvement of Energy Self-Sufficiency** 

## **Southeast Asia: Vietnam - Handling of Carbon Credits**



- Carbon credits are an effective way to achieve de-carbonization, and countries are focusing their efforts on them
- In May 2024, discussions were held with the Vietnamese Minister of Natural Resources and Environment regarding carbon credits to be generated from erex Group's project
- Discussions with the Vietnamese government are steadily progressing for erex Group to acquire 50% of the carbon credits generated by erex Group's projects that belong to the country of Vietnam
- Vietnam and erex Group plan to form a joint task force towards the establishment of ETS market for carbon credits

## Newly-Built Biomass Power Project

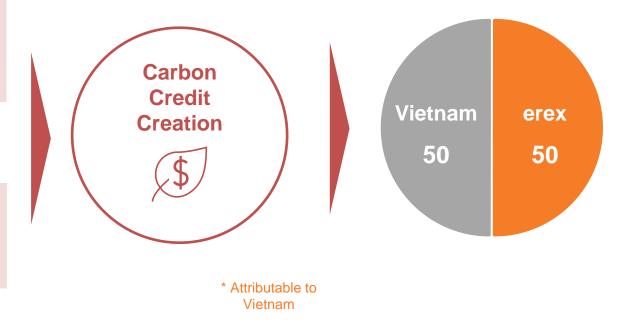


Maximum **8** Locations Total **1,100** MW

# Fuel Conversion Project



Maximum **6** Locations **1,585** MW



# Southeast Asia: Vietnam - Business Progress and Outlook (1) Power Generation and Fuel Business

#### Newly-built biomass power generation, coalfired conversion

- Approval of the implementation for the 8<sup>th</sup> Power Development Plan (PDP8) of Vietnam (April 1, 2024)
- Construction is to be started by the end of the year for Yen Bai and Tuyen Quang out of 18 sites (total 1,100 MW)
- An Giang Power Plant has been selected as the third project, with construction to start in FY2025
- Also working on fuel conversion of coal-fired power

#### **Fuel Business**

- Plants are under construction to process wood residues into pellets. Tuyen Quang and Yen Bai pellet plants will start operations around December 2024 and January 2025, respectively
- Final terms for raw materials (wood residues, etc.)
  necessary for pellet plant operations are being
  discussed with several suppliers in the vicinity of the
  pellet plants, and an MOU for the supply of raw
  materials is scheduled to be signed this summer
- Pelletized fuel is planned to be exported to Japan and other countries, and an MOU on transportation from the pellet plant to the export port and securing a warehouse near the export port are scheduled to be implemented this summer

#### **Each Project Site**





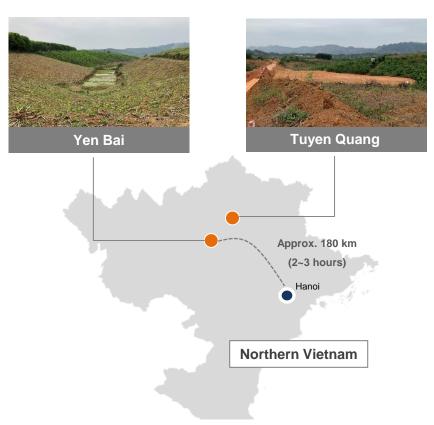
- Construction of biomass power plants in Yen Bai and Tuyen Quang is to start by the end of the year
- The projects were selected for Financing Programme for Joint Crediting Mechanism (JCM 4) Model Projects in FY2023 \*2.

	Yen Bai
Power Plant	<b>Newly-Built Biomass</b>

Business Company Name	erex Yen Bai Biomass Power Co.
Power Plant Name	Yen Bai Biomass Power Plant
Construction Site	Yen Bai Province, Socialist Republic of Vietnam
Investing company (Planned)	erex Co., Ltd 100%.
Selling price	8.47US cent/kWh (based on local FIT system)
Generation Output	50MW
Fuel	Woody residue (approx. 500,000 t/year)
construction Period	Approx. 2.5 years
Funding (Planned)	Project finance (about 30% equity)
Business	

lewly-Built Biomass Powe Plant	Tuyen Quang	
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r driding (r lanned)	1 Toject illiance (about 50 % equity)	
B u s i n e s s Company Name	erex Tuyen Quang Biomass Power Co.	
Power Plant Name	Tuyen Quang Biomass Power Plant	
construction site	Tuyen Quang Province, Socialist Republic of Vietnam	
Investing Company (Planned)	erex Co., Ltd. 100%	
Selling Price	8.47US cent/kWh (based on local FIT system)	
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Fuel	Woody residue (approx. 500,000 t/year)	
Construction Period	Approx. 2.5 years	
Funding (Planned)	Project finance (about 30% equity)	



<sup>\*1</sup> A project that utilizes superior de-carbonization technology to reduce greenhouse gas emissions in developing countries, etc., and conducts measurement, reporting, and verification (MRV). The aim is to reduce greenhouse gas emissions in developing countries and other countries, and to help Japan and partner countries achieve their greenhouse gas emission reduction targets through the JCM. Subsidy will be provided up to one-half of the initial investment cost for excellent de-carbonization technology, etc. This project is being implemented with the cooperation of the Vietnamese and Japanese governments

# Southeast Asia: Vietnam - Business Progress and Outlook (3) Hau Giang Biomass Power Repres

- The first commercial biomass power plant (20MW) in Vietnam is under construction. The plant will be erex Group's first overseas power plant and will start operations in December 2024
- Construction of Hau Giang Biomass Power Plant was approved in the 7<sup>th</sup> National Power Development Plan (PDP7)
- The project was selected for Financing Programme for Joint Crediting Mechanism (JCM <sub>∗1</sub> ) Model Projects in FY2022 ⋅₂.



<sup>\*1</sup> A project that utilizes superior de-carbonization technology to reduce greenhouse gas emissions in developing countries, etc., and conducts measurement, reporting, and verification (MRV). The aim is to reduce greenhouse gas emissions in developing countries and other countries, and to help Japan and partner countries achieve their greenhouse gas emission reduction targets through the JCM. Subsidy will be provided up to one-half of the initial investment cost for excellent de-carbonization technology, etc. This project is being implemented with the cooperation of the Vietnamese and Japanese governments

# Southeast Asia: Vietnam - Business Progress and Outlook (4) Biomass Fuel Pellet Plant e Participation (4) Plant e Participation (4) Biomass Fuel Pellet Plant e Participation (4) Plant e Participation

- Plants to produce wood pellets mainly from unused resources such as wood residues are under construction in Tuyen Quang and Yen Bai
- Pelletized fuel is to be exported to Japan and other countries
- Japan Bank for International Cooperation (JBIC) and Sumitomo Mitsui Banking Corporation provide cofinancing

#### **Tuyen Quang Pellet Plant**



Business Company Name	EREX SAKURA BIOMASS TUYEN QUANG CO.,LTD.
B u s i n e s s Operation	EREX SAKURA BIOMASS TUYEN QUANG PLANT
Construction Site	Tuyen Quang Province, Vietnam
In vesting Company	erex: 97% SAKURA GREEN ENERGY JOINT STOCK COMPANY: 3%
Start of Operations	December 2024
Investment Amount	20,400,000USD

#### Yen Bai Pellet Plant



Business Company Name	EREX SAKURA BIOMASS YEN BAI CO.,LTD.
B u s i n e s s Operation	EREX SAKURA BIOMASS YEN BAI PLANT
Construction Site	Yen Bai Province, Vietnam
In vesting Company	erex: 97% SAKURA GREEN ENERGY JOINT STOCK COMPANY: 3%
Start of Operations	January 2025
Investment Amount	20,400,000USD



#### **Hydroelectric Power Generation Business**

- Construction to be completed by the end of 2025, backed by an abundance of water
- With high PPA level of 7.9¢/kWh, the project features excellent economic efficiency (global average of 5.4¢/kWh) \*Purchase of 3,577 operating hours even during low operating periods in the dry season (seven months) is to be secured
- Currently construction of the dam and tunnels for power generation is in the final stages
- The second hydropower plant with the same conditions downstream is under consideration for completion in May 2026

#### **Biomass Power Generation Business**

- Based on the high potential of various unused biomass fuels and the plantation and afforestation system, a joint feasibility study with Power China (Power Construction Corporation of China)\*, which is highly trusted by the Cambodian government, including the site location, will be conducted this fall, aiming to start construction of the first unit by the end of this year at the earliest
- The Cambodian government has requested the construction of multiple units to back out highpriced electricity imports from neighboring countries and to secure a stable power source that contributes to de-carbonization









# **ENERGY RESOURCE EXCHANGE**