JCM Sustainable Development and Safeguards Assessment Report

Project description	
Title	Introduction of 0.97 MW Rooftop Solar Power System for Fishery Net Factory
Project participant (Thai)	Siam Brothers co.,ltd
Project participant (Japanese)	Finetech.co.,ltd
Project location	65 Moo 5, Bangrak, Phra Pradaeng, Samut Prakan Province, Kingdom of Thailand
Latitude, longitude	13°38'37.86"N, 100°31'27.63"E
Project status	01/03/2019

Report description		
Date of report completion	19 June 2025	
Version	1.0	
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	Title	CEO
	Organization	FINETECH.Co.,Ltd
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	E-mail	

Note:

- Related figures, documents, evidence related to the description may be attached as attachment.
- In the case where there is any other relevant issue that needs to be considered, it is be specified in the last row of each area of assessment.

Certification letter

19/06/2025

I, the undersigned, hereby certify that Finetech.co.,Ltd is the author of the "Sustainable Development and Safeguards Assessment Report " of the project titled Introduction of 0.97 MW Rooftop Solar Power System for Fishery Net Factory developed by Finetech.co.,ltd And Siam Brothers co.,ltd located at 65 Moo 5, Bangrak, Phra Pradaeng, Samut Prakan Province, Kingdom of Thailand

The report was prepared by the team members as follows:

No.	Name	Position	Signature
1	MOTOYUKI OKADA	CEO	[redacted]
2	MITSUHIKO JIMBO	Manager	
3	MASAO TAKAGI	Thai Branch Manager	

Signature [redacted]

(Motoyuki Okada)

Position CEO

Seal (if any)

Part 1: General information of the project area before project implementation

Provide baseline information describing the conditions before project implementation. This data is essential for assessing the project's environmental, social, and economic impacts. Ensure the details are accurate and comprehensive to support a thorough evaluation.

Area of Assessment	Description
1. Environment and natural resources	
1.1 Air pollution	No air pollution was reported in the area.
1.2 Water pollution	No water pollution was reported in the area.
1.3 Soil pollution	No soil pollution was reported in the area.
1.4 Noise pollution	No noise pollution was reported in the area.
1.5 Odor pollution	No odor was reported in the area.
1.6 Water consumption	No water consumption was reported in the area.
1.7 Solid waste/municipal solid waste	There is no leftover problem in the area.
1.8 Hazardous waste/infectious waste/electronic waste	No pollution from hazardous waste/ infectious waste /electronic waste was found in the area.
1.9 Energy (i.e. Wasted Energy, Renewable Energy)	Used electricity from power grid.
1.10 Land Use	The project is located on private land.
1.11 Biodiversity	Biodiversity was not relevant in the industrial era.
1.12 Wild animal/ Aquatic ecosystem	No wild animal or aquatic ecosystem is found in the area.
1.13 Other (Please specify…)	
2. Society	
2.1 Socio-cultural characteristics	The sociocultural characteristics were those of a typical farming village. Society is made up mainly of the working class, who are engaged in agriculture, manufacturing and the service industry.
2.2 Health and safety	There was no major concern in terms of health and safety in the area.
2.3 Traditions, cultures and/or valuable places worthy of conservation	The tradition and cultural values of the people in the area are commonly found in the central region of Thailand. There were no distinctive places of high conservation values.
2.4 Race, religion, and ethnic	Most of the population in the area were of Thai origin

Area of Assessment	Description
group	who practice Buddhism.
2.5 Transportation	The primary mode of transportation in the area was public buses and private motorbikes.
2.6 Other (Please specify…)	
3. Economic	
3.1 Overall local economy (i.e. income, expenditure, etc.)	The local economy in the area is largely driven by manufacturing and agriculture.
3.2 Employment/Career	Factory workers, farmers, service industry workers.
3.3 Major agricultural activity in the area	Rice, vegetables and fruit cultivation.
3.4 Major industry in the area	Manufacturing
3.5 Major service sector in the area	Retail, small restaurants and transportation were the main service sector in the area.
3.6 Basic infrastructure (i.e. road, school, etc.)	The basic infrastructure in the area included transportation (road network), utilities (electricity, water supply, waste management), as well as telecommunications.
3.7 Other (Please specify…)	

**Project Participant explains in detail of provenance and importance of issue consider about before project implement and specify if the project is rightful/environmental law, social, and economy. To have Negative impact assessment (Do-no-net-harm) with supporting documents.*

Part 2 Sustainable Development Goals

2.1 Sustainable Development Contributions Assessment

*Please mark ✓ in ☐ to identify the contributions of the proposed project to specific SDG. The project is required to contribute to **at least two SDGs, in addition to** SDG13: Climate Action.*

Project Contributions to SDGs	Indicator (Please specify)	Description of Indicator
☐ SDG 1: No Poverty		
☐ SDG 2: Zero Hunger		
☐ SDG 3: Good Health and Well-being		
☐ SDG 4: Quality Education		
☐ SDG 5: Gender Equality		
☐ SDG 6: Clean Water and Sanitation		
☑ SDG 7: Affordable and Clean Energy	Amount of generated clean energy (Unit: MWh)	Increase share of renewable energy in national energy mix
☐ SDG 8: Decent Work and Economic Growth		
☐ SDG 9: Industry, Innovation and Infrastructure		
☐ SDG 10: Reduced Inequality		
☐ SDG 11: Sustainable Cities and Communities		
☐ SDG 12: Responsible Consumption and Production		
■ SDG 13: Climate Action		
☐ SDG 14: Life Below Water		
☐ SDG 15: Life on Land		

Project Contributions to SDGs	Indicator (Please specify)	Description of Indicator
☐ SDG 16: Peace and Justice Strong Institutions		
☑ SDG 17: Partnerships to achieve the Goal	Last progress report submission date	Operational continuity of the JCM project, which mobilizes additional financial resources, disseminates low-carbon technologies, and reduces GHG emissions in Thailand

**Project Participant provides the description for each indicator of the selected SDGs and presents currently available datasets along with supporting documents.*

2.2 Details on Monitoring Parameters for Demonstrating SDG Contributions

Provide details on how to monitor the indicators identified in Section 2.1.
(Tables can be added based on the number of selected SDGs.)

SDG Number	7
SDG Target	Affordable and clean energy
Variable or Indicator	Amount of generated electricity (Unit: MWh)
Duration/Frequency	Monthly
Method/Tool	Power meter
Responsible person	Staff of SiamBrothes Co., Ltd.

SDG Number	17
SDG Target	Partnerships to achieve the goal
Variable or Indicator	Last annual progress report submission date
Duration/Frequency	Yearly
Method/Tool	–
Responsible person	Staff of SiamBrothes Co., Ltd.

Part 3 Do no net harm

3.1 'Do no net harm' Risk Assessment and Safeguards

Specify impacts and mitigation plans to mitigate negative impacts.

Potential Impact of Project Activity	Severity Level of Impact				Description of Impact	Action Plan to mitigate harmful impacts
	None	Low	Moderate	High		
1. Impacts on Environment and Natural Resources						
1.1 Physical resources						
Water pollution	✓					
Soil pollution	✓					
Air pollution	✓					
Noise pollution	✓					
Odor pollution	✓					
Soil erosion, coastal/river erosion	✓					
Vulnerability to natural disaster	✓					
Other	✓					
1.2 Waste management						
Increase in solid waste/municipal solid waste	✓					

Potential Impact of Project Activity	Severity Level of Impact				Description of Impact	Action Plan to mitigate harmful impacts
	None	Low	Moderate	High		
Increase in hazardous waste such as waste contaminated with oil, chemicals and used oil etc.	✓					
Increase in infectious waste	✓					
Increase in electronic waste		✓			At the end of the project period, which is expected in 2036, there will be waste solar panels.	Since solar panels contain lead and other hazardous substances, we plan to dispose them in controlled landfill sites that have measures to prevent groundwater contamination or dispose them in an appropriate manner through specialist waste management companies. If recycling facilities for solar panels are available at that time, we put top priority to recycle them as part of business efforts.
Other	✓					
1.3 Biological resources						

Potential Impact of Project Activity	Severity Level of Impact				Description of Impact	Action Plan to mitigate harmful impacts
	None	Low	Moderate	High		
Impacts on forest areas and land-use change	✓					
Loss of land and wildlife ecosystem	✓					
Loss of water resources and aquatic ecosystem	✓					
Foraging	✓					
Food	✓					
Other	✓					
1.4 Human livelihood						
Water drainage or waterway diversion	✓					
Change in water consumption	✓					
Change in land ownership	✓					
Other	✓					
2. Social impacts						
Public security such as increase in crime risks	✓					

Potential Impact of Project Activity	Severity Level of Impact				Description of Impact	Action Plan to mitigate harmful impacts
	None	Low	Moderate	High		
Health impacts	✓					
Relocation or temporary/permanent loss of land	✓					
Loss of housing	✓					
Impact on public utilities such as electricity, telephone service etc.	✓					
Impact on traffic	✓					
Community conflict	✓					
Employment and labor	✓					
Impact on people of certain race, religion and ethnic groups	✓					
Damage to areas of high conservation value, such as religious sites, historic sites, monuments, important places of the community etc.	✓					
Impact on human rights such as education, freedom of thought, religion etc.	✓					

Potential Impact of Project Activity	Severity Level of Impact				Description of Impact	Action Plan to mitigate harmful impacts
	None	Low	Moderate	High		
Gender inequality such as in employment opportunities, salary, promotion, benefits, termination of contract etc.	✓					
Other	✓					
3. Economic impacts						
Increase unemployment /loss of income of people in local communities	✓					
Other	✓					

**Criteria for assessing the level of impact severity*

1. None: The proposed activity has no direct/indirect impacts on the environment, society and economy.

2. Low: The proposed activity causes some changes to the existing conditions but has no implication on the quality of the environment, society and economy. The impact is short-lived and temporary, and the extent of the affected area is not large (1km perimeter).

3. Moderate: The proposed activity causes some changes to the existing conditions and has implications on values or qualities of the environment, society and economy. The impact is short-lived and temporary. The extent of the affected area is large but confined to the related area (2km perimeter).

4. High: The proposed activity causes some changes to the existing conditions and has implications on value or quality of the environment, society, economy, and potentially the ecosystem. The impact is permanent and the extent of the affected area id extensive (3km perimeter).

3.2 Details on Monitoring Parameters for Ensuring No Negative Impacts

Provide details on how to monitor the impacts identified in Section 3.1.

(Tables can be added based on the number of negative impacts identified)

Category of negative impact	Impacts on Environment and Natural Resources
Subcategory of negative impact	Increase in electronic waste
Vulnerable group	People in nearby **the waste disposal site** communities
Possible negative impact	Environmental Impact of Solar Panel Disposal
Parameter/indicator	Number of PV modules properly disposed of 3024 sheets
Reference	Hazardous Substance Act (No.4) B.E. 2562 (2019) Notification of Ministry of Industry Subject: List of Hazardous Substances (No.7) B.E. 2565 (2022)
Duration/frequency	The processing period is approximately one month, and is done once.
Method/Tools	Disposal at a controlled disposal site by a waste disposal company
Responsible person	Staff of SiamBroters
Expected outcome	Almost no impact on the environment