Webinar on the Joint Crediting Mechanism (JCM) Implementation in Thailand 2020 – Utilizing the JCM during the COVID-19 Period –



JCM subsidized project in Thailand

"Introduction of Biomass Boiler to Cooking Oil Factory"

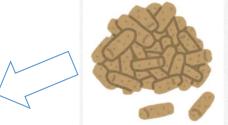
25th August 2020

Tepia Corporation Japan

Installed equipment in the project







Biomass Fuel: PKS (Palm Kernel Shell)

Steam(35 t/h) used to refine ๊ำุ๊ก bland Cooking Oil



Multi Fuel Biomass Boiler

(Water Tube-Fire Tube Combination Boiler with Step Grate)

Roles of TEPIA and TVOP in the JCM project



Collaboration Model Collaboration Model Collaboration Model Collaboration Model Collaboration (Not Japanese affiliate and Japanese Company)	ed) enia	Thanakorn Vegetable Oil Products Co., Ltd. (TVOP)
Type of Business	Research & Consulting Company in Japan	Vegetable Cooking Oil Manufacturing in Thailand
Roles of each entity in the JCM project	 "Representative Entity" Preparation of Proposal for JCM subsidy Advisory from Environment consultant perspective JCM Project registration Periodical Monitoring Report to Japanese Government 	 "Cooperative Entity" Maintain* subsidized equipment (Biomass Boiler) to be used in designated term (10years) * Maintenance Contract with EPC Monitor steam production amount and electricity usage and report to TEPIA

TEPIA and TVOP are collectively responsible to Japanese Government for the project execution until 2030.

Current Status of the Project



No.	Event	Status (Expected Timing)
1	Construction of the Biomass Boiler (Start Steam Production)	Done (2019/11/14)
2	Periodical Monitoring Report to Japanese Government (yearly)	First year: Done (2020/3/31) will continue until 2030/3/31
3	JCM Methodology Development	Under development (The Draft of methodology has been developed) <expected 2021="" march="" timing:=""></expected>
4	Project Design Document (PDD) Development upon Organize Local Stakeholders Consultation (LSC), Validation by Third Party Entity (TPE)	Not yet <expected 2021="" september="" timing:=""></expected>
5	JCM Project Registration (Registered by Japan-Thailand Joint Committee)	Not yet <expected 2022="" march="" timing:=""></expected>
6	First JCM Credit Issuance upon Verification by TPE	Not yet <expected 2022="" middle="" of="" timing:=""></expected>
7	Last JCM Credit Issuance upon Verification by TPE	Not yet <expected 2030="" timing:=""></expected>



CO2 emission reduction of the project

Boiler Efficiency + Fuel Switching

<Project Model>

Biomass Boiler with Sufficient Efficiency (84%)

Biomass Fuel (PKS), which emission factor is "0"

<Reference Model>

Conservative Reference

High-end model Once through Boiler

Natural Gas

Annual expected CO2 emission reduction volume

29,759 t CO2 / year



Effect and Countermeasure to COVID-19

- Had a certain damage for the business, however, business transaction has been resumed with "New Normal"
 - ➤ <u>MRV (Monitoring) Risk</u>: Automatic monitoring by SCADA system
 - <u>Biomass Procurement Risk</u>: Multi Supplier Procurement
 - On-site Audit(for project registration) Prohibition Risk
 Conduct Zoom Conference

We are preparing for further project development

Thank you very much for your kind attention.



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