



Status of JCM Implementation in Thailand

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Thailand Greenhouse Gas Management Organization (Public Organization): TGO

Webinar on the Joint Crediting Mechanism (JCM) Implementation in Thailand

– Utilizing the JCM during the COVID-19 Period -

August 25, 2020



Thailand Greenhouse Gas Management Organization (Public Organization): TGO

Bilateral Cooperation on the JCM for the Low Carbon Growth Partnership between Japan and the Kingdom of Thailand, 19th November 2015



JCM Development Cycle



JCM Development Cycle

01



Submit
proposal and
selected as a
JCM Model
Project

02



Develop Methodology
and Project Design
Document (PDD)



04

Request for
registration

03



Validate
PDD



05

Monitor
and report

06



Verify
monitoring
report

07

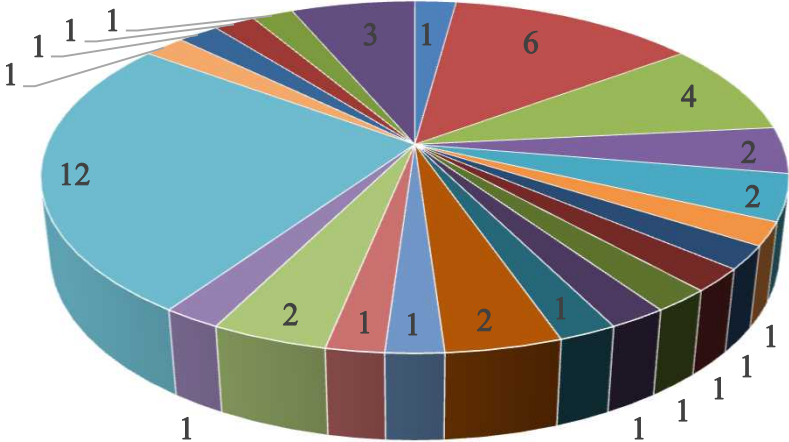


Request for credit
issuance

1

JCM Model Projects

Project type	Number of projects	GHG reduction (tCO ₂ /y)
energy demand	19	83,536
energy industries	14	102,595
	33	186,131



Number of project categorized by technology

- air-conditioning
- chiller
- refrigerator
- absorption achiller
- swirling induction
- heat pump
- fridge showcase
- boiler
- waste heat recovery
- heat exchanger
- LED
- air compressor
- gas fired melting furnace
- air conditioning control
- loom
- electrolyzer
- solar
- biomass power plant
- biomass boiler
- biomass co-generation
- power generation by waste heat

2

Approved Methodologies (9 methods)

ID TH_AM	Title	Latest version	Date of approval
001	Installation of Solar PV System	1.0	23 Aug 2016
002	Energy Saving by Introduction of Multi-stage Oil-Free Air Compressor	2.0	21 Aug 2017
003	Energy Saving by Introduction of High Efficiency Inverter Type Centrifugal Chiller	1.0	21 Aug 2017
004	Installation of energy saving air jet loom at textile factory	1.0	21 Aug 2017
005	Energy Saving by Introduction of High Efficiency Non-Inverter Type Centrifugal Chiller	2.0	14 Jan 2019
006	Installation of Displacement Ventilation Air Conditioning Unit in the Cleanroom of Semiconductor Manufacturing Factory	1.0	21 Aug 2017
007	Power Generation by Waste Heat Recovery in Cement Industry	1.0	20 Apr 2018
008	Introducing heat recovery heat pumps with natural refrigerants for the food manufacturing industries	1.0	14 Jan 2019
009	Installation of gas engine cogeneration system to supply electricity and heat	1.0	14 Jan 2019

Proposed Methodologies (7 methods)

Submit request to the secretariat (2 methods)

Title
Energy Saving by Introduction of High Efficiency Once-through Boiler and Installation of Economizer into Existing Boiler
Installation solar PV System

Finish call for public input (5 methods)

Installation of Energy-efficient Refrigerators Using Natural Refrigerant at Cold Storage
Energy Saving by Installation of an Evaporator with Mechanical Vapor Recompression
Energy Saving by Introduction of High Efficiency Screw Chiller for freezing and refrigeration
Installation of an inverter-controlled separate type fridge showcase for convenience store(s)
Introduction of High Efficiency Electrolyzer in Caustic Soda Production Plant

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Third Party Entity (5 companies)

Company name	Designated date	1. Energy industries	2. Energy Distribution	3. Energy demand	4. Manufacturing industries	5. Chemical industry	6. Construction	7. Transport	8. Mining/mineral production	9. Metal production	10. Fugitive emissions from fuels	11. Fugitive emissions from production and consumption of halocarbons and sulphur hexafluoride	12. Solvent use	13. Waste handling and disposal	14. Afforestation and reforestation	15. Agriculture
Lloyd's Register Quality Assurance Limited (LRQA)	23 Aug 2016	○ ●	○ ●	○ ●				○ ●						○ ●		
Bureau Veritas Certification Holding SAS (BVC)	23 Aug 2016	○ ●	○ ●	○ ●	○ ●	○ ●		○ ●	○ ●	○ ●	○ ●		○ ●	○ ●	○ ●	○ ●
Japan Quality Assurance Organization (JQA)	21 Aug 2017	○ ●		○ ●	○ ●	○ ●					○ ●			○ ●	○ ●	
Japan Management Association (JMA)	21 Aug 2017	○ ●	○ ●	○ ●											●	
EPIC Sustainability Services Private Limited (EPIC)	10 Dec 2018	○ ●	○ ●	○ ●	○ ●	○ ●	○ ●	○ ●	○ ●	○ ●	○ ●	○ ●	○ ●	○ ●	○ ●	○ ●

4

Registered Projects (6 projects)

Project Title	Expected Greenhouse Gas Emission Reduction (tCO ₂ eq/year)	Date of approval
Introduction of Solar PV Systems on Rooftops of Factory and Office Building	440	21 Aug 2017
Reducing GHG emission at Textile Factory of Luckytex (Thailand) Public Company Limited by Upgrading to Air-saving Loom	253	20 Apr 2018
Installation of High Efficiency Air Conditioning System and Chillers in Semiconductor Factory	3,327	20 Apr 2018
Energy Saving for Semiconductor Factory with High Efficiency Centrifugal Chiller and Compressor	324	20 Apr 2018
Introduction of 3.4MW Rooftop Solar Power System to Air-conditioning Parts Factories	1,071	14 Jan 2019
Power Generation by Waste Heat Recovery in Cement Industry	29,206	2 Aug 2019
Introduction of 30MW Rooftop Solar Power System to Large Supermarkets	12,699	27 Mar 2020
Total	47,320	

4**Request for registration (7 projects)**

Submit request to the secretariat (1 project)**Project Title**

Introduction of 5MW Floating Solar Power System on Industrial Water Reservoir in Thailand

Finish call for public input (6 projects)**Project Title**

Energy Saving for Air Conditioning in Tire Manufacturing Factory with High Efficiency Centrifugal Chiller

Introduction of Heat Recovery Heat Pumps to a Chicken Slaughtering Plant in Thailand

Introduction of 3.4MW Rooftop Solar Power System in Technical Center and Office Buildings

Introduction of 0.95 MW Rooftop Solar Power System in Cigarette Lighter Factory

Introduction of 0.97 MW Rooftop Solar Power System for Fishery Net Factory

Installation of Co-Generation Plant for On-Site Energy Supply in Motorcycle Factory

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Credit Issuance (3 projects)

Project title	JCM credits (tCO ₂ eq)	
	Thai side	Japanese side
Introduction of Solar PV Systems on Rooftops of Factory and Office Building	149	151
Installation of High Efficiency Air Conditioning System and Chillers in Semiconductor Factory	1,202	1,202
Energy Saving for Semiconductor Factory with High Efficiency Centrifugal Chiller and Compressor	57	58
Total	1,408	1,411

Request for credit issuance (2 projects)

Submit requests to the secretariat (2 projects)

Project title	JCM credits (tCO ₂ eq)	
	Thai side	Japanese side
Reducing GHG emission at Textile Factory of Luckytex (Thailand) Public Company Limited by Upgrading to Air-saving Loom	130	130
Introduction of 3.4MW Rooftop Solar Power System to Air-conditioning Parts Factories	354	355
Total	484	485

6

Seminar & Workshop (18 events)

Title of Meeting	Co-organizer	Date
JCM capacity building in Thailand	Institute for Global Environmental Strategies (IGES)	6 th Nov 2015
		25 th Jan 2016
		22 nd Aug 2017
		31 st Jan 2019
A training for JCM TPE		26-27 th Jan 2016
Workshop on writing PDD		5 th Sep 2019
		30 th Sep 2016
JCM Implementation in Thailand	Global Environment Centre Foundation (GEC)	11 th Sep 2018
		12 th Sep 2019
		25 th Aug 2020
Japan-Thailand Joint Crediting Mechanism (JCM)	Ministry of Economy, Trade and Industry (METI)	6-7 th Jul 2016
		17 th Oct 2017
Developing JCM Projects in Thailand	Asian Development Bank (ADB)	27 th Sep 2016
Opportunities and Development of JCM for the private sector (give information of the MOEJ funding for FY 2016 – First call)	Thailand Greenhouse Gas Management Organization (TGO)	7 th Apr 2016
		5 th Oct 2016
		7 th Apr 2017
		10 th Apr 2018
		5 th Apr 2019

Ready Thailand to Combat Climate Change

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