JCM Project Design Document Form

A. Project description

A.1. Title of the JCM project

Introduction of High-Efficiency Looms in Weaving Mill

A.2. General description of project and applied technologies and/or measures

The proposed JCM project aims to achieve GHG emission reductions at an existing textile factory in Indonesia by introducing highly efficient air jet looms, replacing more conventional air jet looms.

The project is located at the factory of PT Nikawa Textile Industry in Karawang Regency, West Java Province. Under the proposed project, 81 units of the latest model of air-jet looms are installed. The new air-jet looms, JAT 810 made by Toyota Industries Corporation, come with the original air-saving technology to reduce air consumption for weft insertion more than 15 % comparing to the conventional model.

A.3. Location of project, including coordinates

Country	Republic of Indonesia
Region/State/Province etc.:	West Java Province
City/Town/Community etc:	Karawang Regency
Latitude, longitude	6°22'08.8"S, 107°19'18.4"E

A.4. Name of project participants

The Republic of Indonesia	PT Nikawa Textile Industry
Japan	Nisshinbo Textile Inc.

A.5. Duration

Starting date of project operation	01/07/2018
Expected operational lifetime of project	7 years

A.6. Contribution from Japan

The proposed project was partially supported by the Ministry of the Environment, Japan (MOEJ) through the Financing Programme for JCM Model projects, which provided financial support of less than half of the initial investment for the projects in order to acquire JCM credits. Further, implementation of the proposed project promotes diffusion of low carbon technology within Indonesia.

B. Application of an approved methodology(ies)

B.1. Selection of methodology(ies)			
Selected approved methodology No. ID_AM011			
Version number	ver01.0		

B.2. Explanation of how the project meets eligibility criteria of the approved methodology

Eligibility	Descriptions specified in the	Project information		
criteria	methodology			
Criterion 1	The project replaces existing air jet	The project replaces existing air jet looms		
	looms at a weaving factory with air	at a weaving factory with JAT810, which		
	jet looms equipped with energy	are equipped with energy saving		
	saving technologies such as an	technologies such as an optimized shape		
	optimized shape reed's tunnel of	reed's tunnel of nozzles and a pressure		
	nozzles and a pressure sensor to	sensor to measure air pressure of nozzles		
	measure air pressure of nozzles for	for optimization of compressed air		
	optimization of compressed air	consumption of welt insertion.		
	consumption of welt insertion.			
Criterion 2	The air jet looms which are	The air jet looms JAT810 which are		
	installed by the project reduce the	installed by the project reduce the		
	specific air consumption by at least	specific air consumption by more than		
	15% compared with the reference	15% compared with the reference air jet		
	air jet looms in line with the	looms.		
	description in Section I of this			
	methodology.			

C. Calculation of emission reductions

C.1. All emission sources and their associated greenhouse gases relevant to the JCM project

Reference emissions				
Emission sources	GHG type			
Electricity consumption by air compressors to generate compressed air	CO ₂			
for the reference air jet looms				
Project emissions				
Emission sources	GHG type			
Electricity consumption by air compressors to generate compressed air for the project air jet looms	CO ₂			

JAT810	JAT810	JAT810	JAT810	JAT810	JAT810	JAT810	JAT810	JAT810	
JAT810	JAT810	JAT810	JAT810	JAT810	JAT810	JAT810	JAT810	JAT810	
JAT810	JAT810	JAT810	JAT810	JAT810	JAT810	JAT810	JAT810	JAT810	
JAT810	JAT810	JAT810	JAT810	JAT810	JAT810	JAT810	JAT810	JAT810	<u> </u>
JAT810	JAT810	JAT810	JAT810	JAT810	JAT810	JAT810	JAT810	JAT810	PC
JAT810	JAT810	JAT810	JAT810	JAT810	JAT810	JAT810	JAT810	JAT810	Monitoring Point No.1
JAT810	JAT810	JAT810	JAT810	JAT810	JAT810	JAT810	JAT810	JAT810	
JAT810	JAT810	JAT810	JAT810	JAT810	JAT810	JAT810	JAT810	JAT810	
JAT810	JAT810	JAT810	JAT810	JAT810	JAT810	JAT810	JAT810	JAT810	
Monit	oring poi	nt No.1:		All 81	project	air jet	looms a	re conn	nected to a
Amou	Amount of fabric woven by the		monitoring system. The amount of the fabric woven by						
projec	project air jet looms			each loom is recorded in the hard drive of a PC located					
JAT810 : project air jet loom				in the control room.					

C.2. Figure of all emission sources and monitoring points relevant to the JCM project

Year	Estimated	Reference	Estimated	Project	Estimated	Emission
	emissions (tC	O ₂ e)	Emissions (tCO ₂	e)	Reductions (tC	CO ₂ e)
2018		1,075.58		860.47		215
2019		2,151.17		1,720.94		430
2020		2,151.17		1,720.94		430
2021		2,151.17		1,720.94		430
2022		2,151.17		1,720.94		430
2023		2,151.17		1,720.94		430
2024		2,151.17		1,720.94		430
2025		1,075.58		860.47		215
2026		-		-		-
2027		-		-		-
2028		-		-		-
2029		-		-		-
2030		-		-		-
Total (tCO ₂ e)					<u> </u>	3,010

Note: The estimated emission reductions in each year are rounded down after the decimal point.

D. Environmental impact assessment	
Legal requirement of environmental impact assessment for	No
the proposed project	

E. Local stakeholder consultation

E.1. Solicitation of comments from local stakeholders

To solicit comments from local stakeholders, a consultation meeting was planned by the project participants, and the project participants sent out invitation letters to the consultation meeting to various stakeholders. Details of the local stakeholders consultation meeting aresummarized as follows:

Date and Time: 04 September 2018, 9:00-12:00 Western Indonesia Time

Venue: PT Nikawa Textile Industry

Address: Kawasan Industri Mitra Karawang Jaya Desa Parung Mulya, Kecamatan Ciampel, Kabupaten Karawang, Jawa Barat 41361, INDONESIA

Invited organization from Indonesia side:

- Indonesia JCM Secretariat
- Coordinating Ministry of Economic Affairs (CMEA)
- Directorate of Energy Conservation, Directorate General of New Renewable Energy and Energy Conservation, Ministry of Energy and Mineral Resources of Indonesia (MEMR)
- Center for Research and Development for Green Industry and Environment (PPIHLH), Ministry of Industry of Indonesia
- Indonesia Textile Association (API)
- Production and Industry Bureau, West Java Province
- Energy and Mineral Resources Agency, West Java Province
- PT Anugerah Texindotama

Meeting agenda:

- Opening Remarks and Introduction
- Progress of Joint Crediting Mechanism (JCM) in Indonesia
- Project Outline
- Project Technology
- MRV (Monitoring, Reporting and Verification) of the project
- Q & A Session
- Closing Remarks

Meeting summary:

There were total of twenty three stakeholders from the invited agencies and the project developers attended the meeting. There were no negative comments toward the proposed project expressed during the stakeholders meeting by the attendees. For those who were invited and were unable to attend the meeting, the project participants sent presentation materials used during the meeting, requesting them to send their comments, if any. The project did not receive any comments from those who were invited and were not able to attend the local stakeholders' consultation meeting. The comments received during the local stakeholders meeting, along with the responses/action to the comments, are listed in the following section.

E.2. Summary of comments received and their consideration					
Stakeholders	Comments received	Consideration of comments received			
Center for	What is the role of Indonesian	Joint Committee (JC) consists of			
Research and	government in the implementation	members from seven relevant Ministries			
Development	of MRV under JCM?	of Indonesia, and JC is the highest			
for Green		decision making entity under			
Industry and		Indonesia-Japan JCM cooperation. JC is			
Environment,		responsible to approve the MRV			
Ministry of		methodologies which are applied to the			
Industry		JCM projects, as well as approval of the			
		project registration and credit issuance.			
		(No further action needed.)			
	How do you collect relevant data	The air jet looms JAT810 installed for			
	for calculation of emission	the project has in-built monitoring			
	reductions from the project?	system which is directly connected to			
		the central control. The required			
		monitoring parameter, production			
		quantity is monitored by the in-built			
		monitoring system, then collected and			
		archived.			
		(No further action needed.)			
Indonesia	How the knowledge transfer from	The training to operate the machines has			
JCM	Japan to Indonesia regarding the	been provided to operators at the plant			
Secretariat	operation of the new machines will	since start of the project. Also, Toyota			

E.2. Summary of comments received and their consideration

	be achieved?	Industries Corporation has local team with certified technicians based in Bandung for the training and maintenance of the project. In all phases of installation, Toyota's local team will
		provide trainings which are relevant to
		operation and monitoring. (No further action needed.)
Production and Industry	Production and Industry Bureau of West Java greatly appreciate the use	(No further action needed.)
Bureau, West	of environment-friendly weaving	
Java Province	machines at PT Nikawa, which also	
	goes along with the West Java	
	government's long-term plan.	
	The emission reduction project at	(No further action needed.)
	PT Nikawa is a good initiative to	
	contribute towards Strategic	
	Environmental Analysis of West	
	Java and hopefully many other	
	companies in the province will	
	contribute toward emission reductions as well.	
Indonesia	Are there criteria for the size of the	There is no limitation on the scale of
Textile	companies which can be qualified	companies eligible to apply for JCM.
Association	to apply for JCM?	(No further action needed.)

F. References	
n/a	

Reference lists to support descriptions in the PDD, if any.

Annex	
n/a	

Revision history of PDD		
Version	Date	Contents revised
01.0	30/10/2018	1st draft
02.0	31/01/2019	2nd draft
		Revised based on the findings from validation:
		(Section A.5. / Section C.2. / Section C.3.)
	03/09/2019	Initial registration by the Joint Committee through electronic
		decision