

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	01/01/2017
Expected operational lifetime of project	9 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 criteria	Descriptions specified in the methodology	Project information
Criterion 1	The project replaces existing air jet looms at a weaving factory with air jet looms equipped with energy saving technologies such as an optimized shape reed's tunnel of nozzles and a pressure sensor to measure air pressure of nozzles for optimization of compressed air consumption of welt insertion.	The project replaces existing air jet looms at a weaving factory with JAT810, which are equipped with energy saving technologies such as an optimized shape reed's tunnel of nozzles and a pressure sensor to measure air pressure of nozzles for optimization of compressed air consumption of welt insertion.
Criterion 2	The air jet looms which are installed by the project reduce the specific air consumption by at least 15% compared with the reference air jet looms in line with the description in Section I of this methodology.	The air jet looms JAT810 which are installed by the project reduce the specific air consumption by more than 15% compared with the reference air jet looms.

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

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

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
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
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

<p>Monitoring point No.1:</p> <p>Amount of fabric woven by the project air jet looms</p> <p>JAT810 : project air jet loom</p>	<p>Each project air jet loom is equipped with the meter to record the amount of fabric woven. Sum of the fabric production in meters installed to the project air jet looms will be recorded and will be double checked with the production instructions.</p>
--	---

C.3. Estimated emissions reductions in each year

Year	Estimated Reference emissions (tCO ₂ e)	Estimated Project Emissions (tCO ₂ e)	Estimated Emission Reductions (tCO ₂ e)
2017	902.0	721.6	180
2018	1804.0	1443.2	360
2019	2164.8	1731.8	432
2020	2164.8	1731.8	432
2021	2164.8	1731.8	432
2022	2164.8	1731.8	432
2023	2164.8	1731.8	432
2024	1262.8	1010.2	252
2025	360.8	288.6	72

2026	-	-	-
2027	-	-	-
2028	-	-	-
2029	-	-	-
2030	-	-	-
Total (tCO ₂ e)			3,024

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 the proposed project	No
---	----

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 are summarized 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 Research and Development for Green Industry and Environment, Ministry of Industry	What is the role of Indonesian government in the implementation of MRV under JCM?	Joint Committee (JC) consists of members from seven relevant Ministries of Indonesia, and JC is the highest decision making entity under Indonesia-Japan JCM cooperation. JC is responsible to approve the MRV methodologies which are applied to the JCM projects, as well as approval of the project registration and credit issuance. (No further action needed.)
	How do you collect relevant data for calculation of emission reductions from the project?	The air jet looms JAT810 installed for the project has in-built monitoring system which is directly connected to

		<p>the central control. The required monitoring parameter, production quantity is monitored by the in-built monitoring system, then collected and archived.</p> <p>(No further action needed.)</p>
Indonesia JCM Secretariat	How the knowledge transfer from Japan to Indonesia regarding the operation of the new machines will be achieved?	<p>The training to operate the machines has been provided to operators at the plant since start of the project. Also, Toyota 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.</p> <p>(No further action needed.)</p>
Production and Industry Bureau, West Java Province	Production and Industry Bureau of West Java greatly appreciate the use of environment-friendly weaving machines at PT Nikawa, which also goes along with the West Java government's long-term plan.	(No further action needed.)
	The emission reduction project at 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.	(No further action needed.)
Indonesia Textile Association	Are there criteria for the size of the companies which can be qualified to apply for JCM?	<p>There is no limitation on the scale of companies eligible to apply for JCM.</p> <p>(No further action needed.)</p>

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