

JCM Project Design Document Form

A. Project description

A.1. Title of the JCM project

Installation of all-electric injection molding machine with power regeneration to plastics & packaging manufacturing plants

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

The proposed JCM project aims to contribute to Indonesia's sustainable development through improvement in energy efficiency and reduction in greenhouse gases (GHG) by installing of all-electric injection molding machine with power regeneration at an existing plastics & packaging manufacturing plants in Indonesia. The newly installed all-electric injection molding machine with power regeneration significantly reduces the plant's electricity consumption as compared with hydraulic injection molding machine which is reference one.

The project is located at 7 factories (Figure 1 to 7 below show the project locations) and 36 molding machines are newly installed in total. Under the proposed project, all-electric injection molding machine with power regeneration reduces electricity consumption of the molding machine.

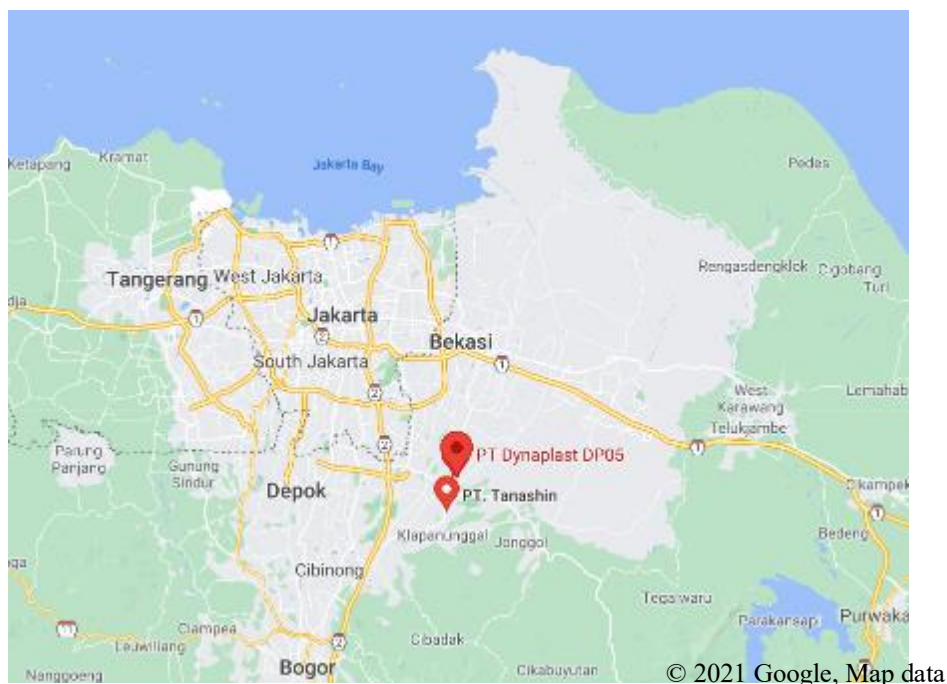


Figure1: Project location1

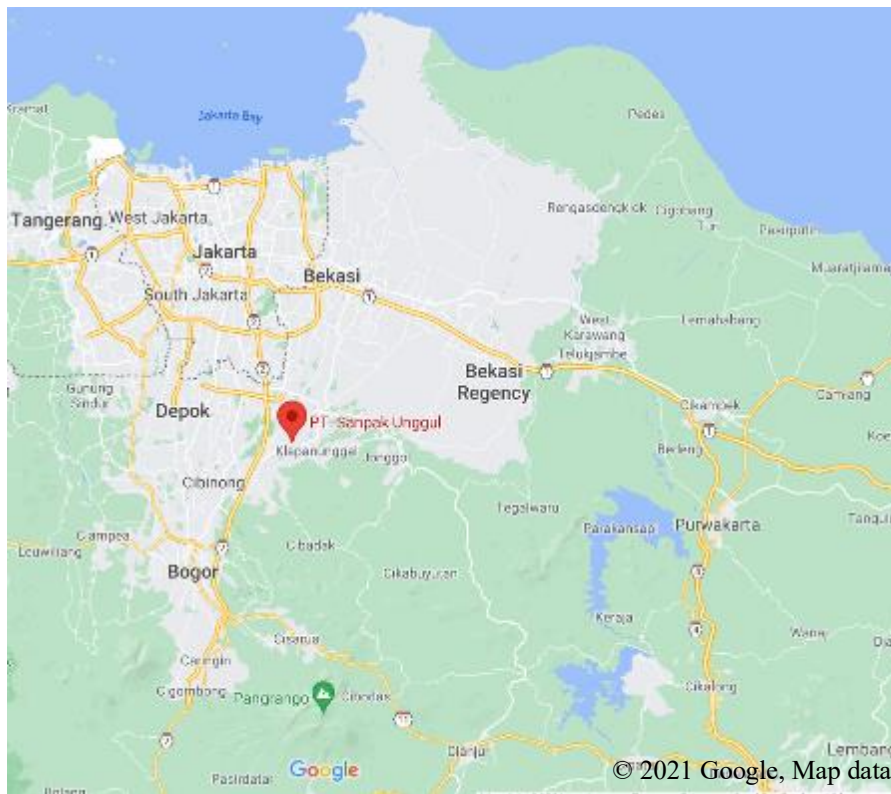


Figure2: Project location2

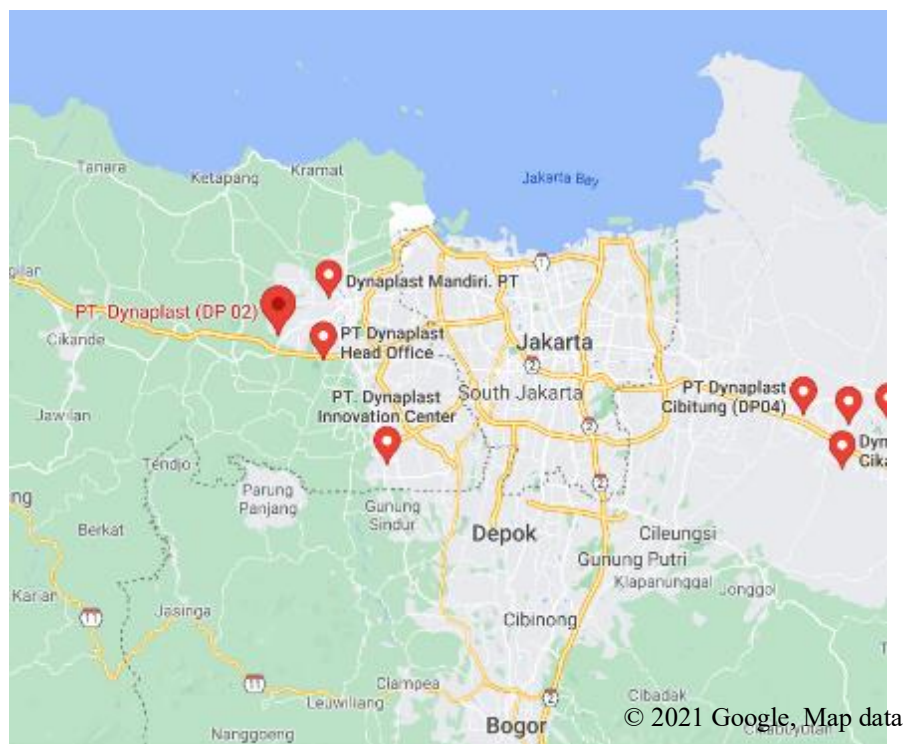


Figure3: Project location3

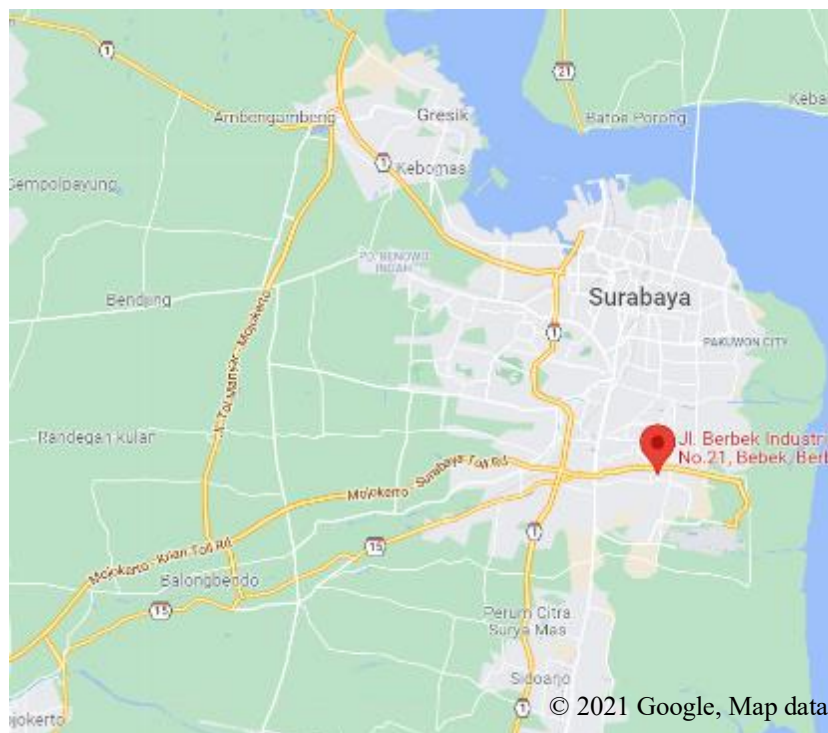


Figure4: Project location4

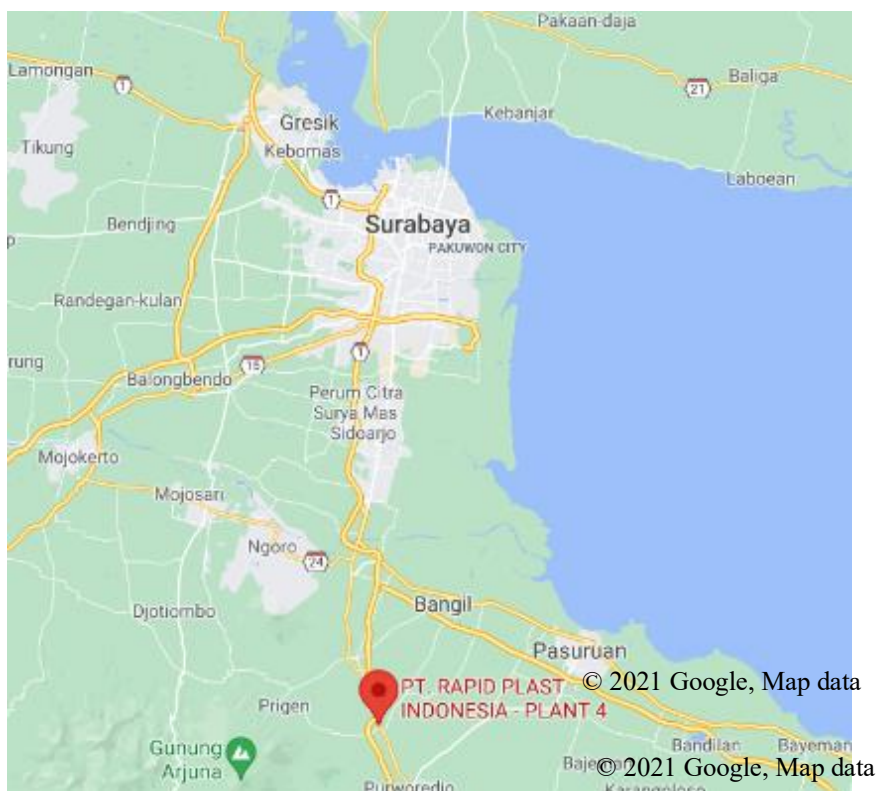


Figure5: Project location5

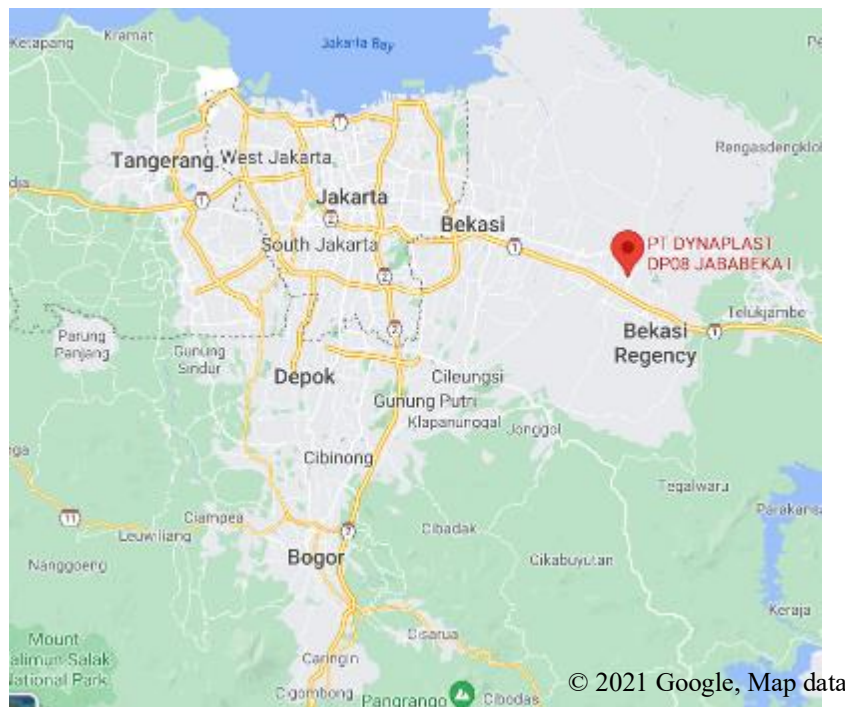


Figure6: Project location6

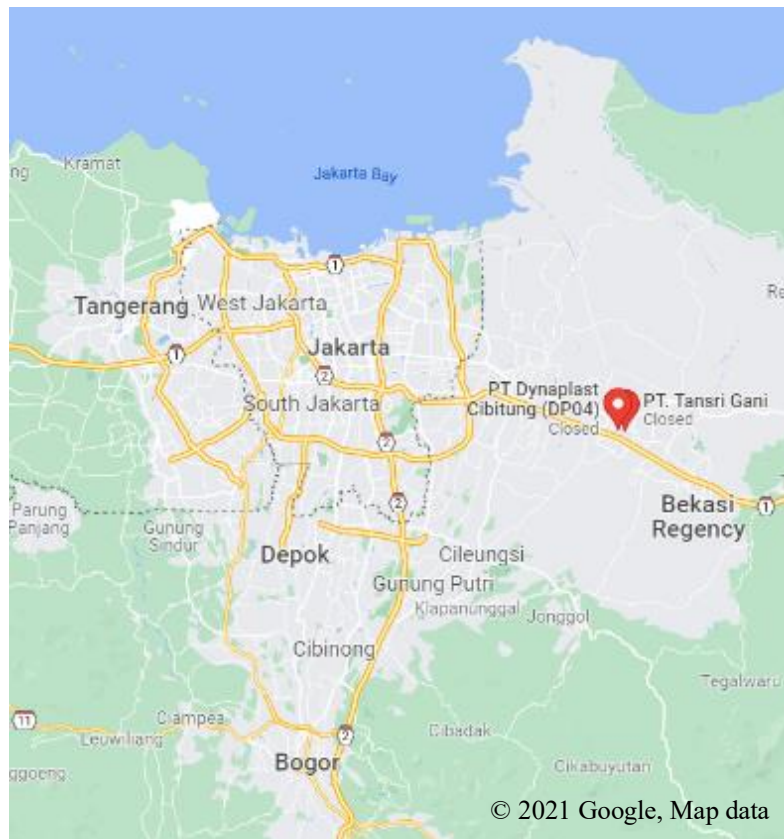


Figure7: Project location7

A.3. Location of project, including coordinates

Country	The Republic of Indonesia
Region/State/Province etc.:	<p>Project location 1 Bogor, Jawa Barat 16820</p> <p>Project location 2 Bogor, Jawa Barat 16964</p> <p>Project location 3 Kota Tangerang, Banten 15135</p> <p>Project location 4 Sidoarjo 61256, East Java</p> <p>Project location 5 Pasuruan, Jawa Timur 67161</p> <p>Project location 6 Bekasi, Jawa Barat 17530</p> <p>Project location 7 Bekasi, Jawa Barat 17530</p>
City/Town/Community etc:	<p>Project location 1 Jalan Raya Narogong Km. 19, Dayeuh, Cileungsi, Pasir Angin, Cileungsi,</p> <p>Project location 2 Jl. Pancasila IV No.KM. 9, Cicadas, Raya,</p> <p>Project location 3 Jl. Industri Raya II No.9, Pasir Jaya, Kec. Jatiuwung,</p> <p>project location 4 Jln Berbek Industri V/21,</p>

	<p>project location 5 Jl. Raya Malang - Pasuruan No.97, Palang, Lemahbang, Kec. Sukorejo</p> <p>Project location 6 Jalan Jababeka VI Raya Blok C No.7, Cikarang Utara, Pasirgombong, Kec. Cikarang Utara</p> <p>Project location 7 Jl. Inspeksi Saluran Kalimalang RT.01 / RW.01, Sukadanau, Kec. Cikarang Barat</p>
Latitude, longitude	<p>Project location 1 Latitude: S 6°21'34" Longitude: E 106°57'55"</p> <p>Project location 2 Latitude: S 6°24'46" Longitude: E 106°55'49"</p> <p>Project location 3 Latitude: S 6°11'25" Longitude: E 106°33'11"</p> <p>Project location 4 Latitude: S 7°19'57" Longitude: E 112°45'29"</p> <p>Project location 5 Latitude: S 7°42'16" Longitude: E 112°44'44"</p> <p>Project location 6 Latitude: S 6°15'52" Longitude: E 107°11'18"</p> <p>Project location 7 Latitude: S 6°15'11" Longitude: E 107°5'40"</p>

A.4. Name of project participants

The Republic of Indonesia	PT Dynaplast Project location 1 Dynaplast Project location 2 Sanpak Unggul Project location 3 Dynaplast Jatake Project location 4 Rapidplast Plant2 Project location 5 Rapidplast Plant4 Project location 6 Dynaplast Plant8 Project location 7 Dynaplast 4
Japan	Tokyo Century Corporation

A.5. Duration

Starting date of project operation	28/03/2020
Expected operational lifetime of project	8 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.	JCM-ID-AM025
Version number	Ver.01.0

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	All-electric injection molding machine with power regeneration is newly installed.	The proposed project installs 35 new all-electric injection molding machines with power regeneration from Japan Steel

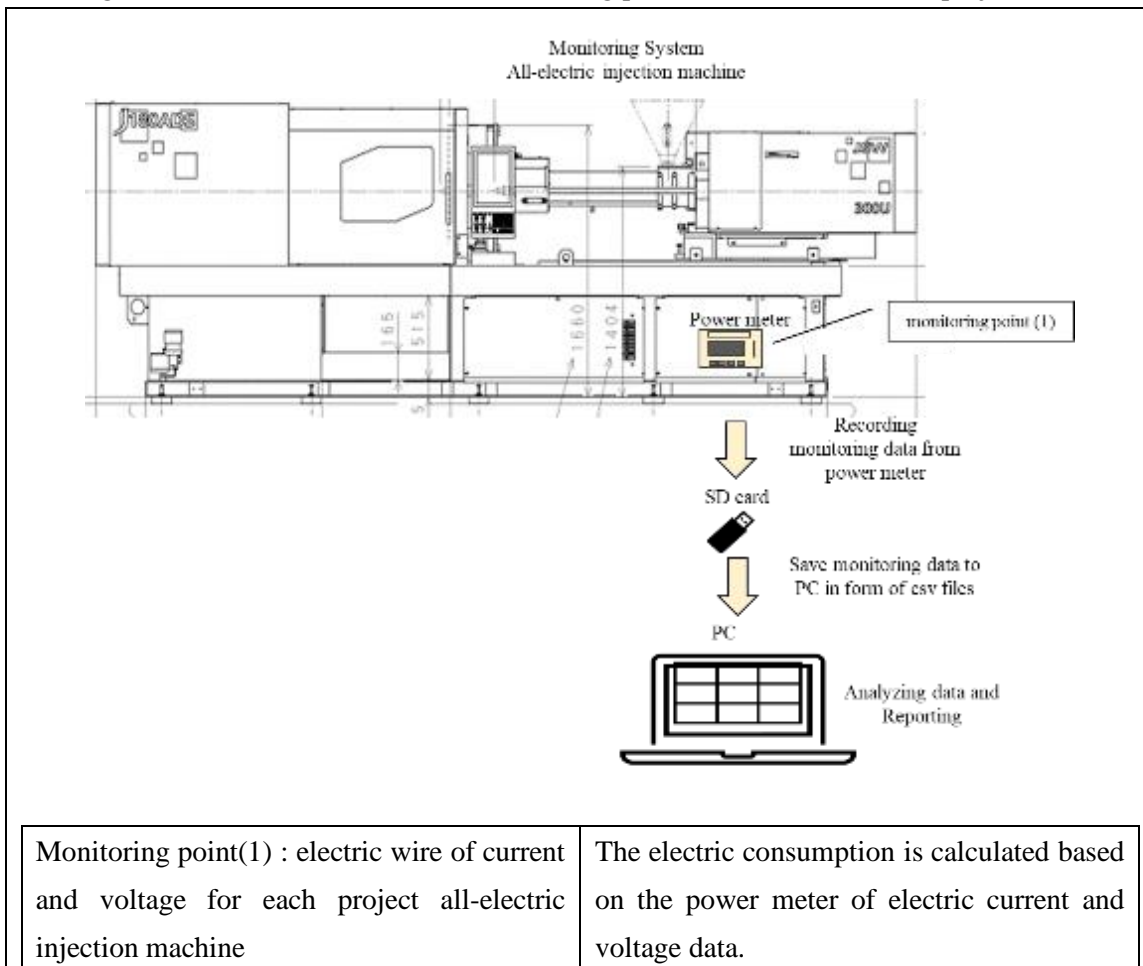
	Works, LTD (JSW) .
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C. Calculation of emission reductions

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

Reference emissions	
Emission sources	GHG type
electric consumption by hydraulic injection molding machine	CO ₂
Project emissions	
Emission sources	GHG type
electric consumption by all-electric injection molding machine	CO ₂

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



C.3. Estimated emissions reductions in each year

Year	Estimated	Reference	Estimated	Project	Estimated	Emission
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	emissions (tCO ₂ e)	Emissions (tCO ₂ e)	Reductions (tCO ₂ e)
2020	4,857.2	2,584.0	2,273
2021	6,354.4	3,380.5	2,973
2022	6,354.4	3,380.5	2,973
2023	6,354.4	3,380.5	2,973
2024	6,354.4	3,380.5	2,973
2025	6,354.4	3,380.5	2,973
2026	6,354.4	3,380.5	2,973
2027	6,354.4	3,380.5	2,973
2028	1,497.2	796.5	700
Total (tCO ₂ e)			23,784

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
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E. Local stakeholder consultation

E.1. Solicitation of comments from local stakeholders

In order to cover a diverse group of stakeholders, on 17 December 2021, a local stakeholder consultation has been conducted by the project participants.

The list of attendees to the meeting has been consulted to the JCM secretariat of the Indonesian side, and the local stakeholders to be invited have been fixed. The project participants sent invitation letters to those stakeholders to notify them of convening the local stakeholder consultation meeting. The schedule and participants of the meeting are provided below.

Date: 17 December 2021

Venue: Zoom on line

Time: 9:00-10:00

Agenda:

1. Opening remarks

 Tokyo Century Corporation

 PT. Dynaplast

2. Introduction about Joint Crediting Mechanism (JCM)

- Indonesia JCM secretariat
3. Tokyo Century's presentation
Tokyo Century Corporation
4. Project Overview and introduced Technology and Facility
PT. Dynaplast
5. Q&A and comments to receive from the participants

Participants:

[Local stakeholders]

No.	Organization	Position
1	Indonesia JCM Secretariat	Senior Advisor
2	CMEA / Indonesia JCM Secretariat	Head of Indonesia JCM Secretariat
3	CMEA / Indonesia JCM Secretariat	Analyst
4	CMEA / Indonesia JCM Secretariat	Analyst
5	CMEA / Indonesia JCM Secretariat	Analyst
6	Indonesia JCM Secretariat	Advisor
7	DANONE Indonesia, Sustainable Development Department	Manager
8	PT MGM (Multi Guna Mesindo)	Director
9	JSW INDONESIA	Director
10	Selaras Cipta Nusantara Persada	Director
11	Selaras Cipta Nusantara Persada	Director

[Project participants]

No.	Organization	Position
1	Tokyo Century Corporation	Manager
2	Tokyo Century Corporation	Staff
3	Tokyo Century Corporation	Director
4	PT. Dynaplast	Chief Executive Officer
5	PT. Dynaplast	Group Managing Director for Consumer Packaging
6	PT. Dynaplast	Chief Shared Services Officer
7	PT. Dynaplast	Business Unit Head Indonesia West I
8	PT. Dynaplast	Business Unit Head Indonesia East (PT Rapid Plast)

9	PT. Dynaplast	Business Unit Head Finance, Treasury & Accounting DNPA
10	PT. Dynaplast	Corporate Finance Associate Director
11	PT. Dynaplast	Business Unit Head Indonesia West I
12	PT. Dynaplast	Plant Manager Dynaplast Jatake [DP02]
13	PT. Dynaplast	Plant Manager PT Rapid Plast Plant Surabaya
14	PT. Dynaplast	Plant Manager PT Dynaplast Cileungsi [DP05]
15	PT. Dynaplast	Department Head Production PT Sanpak Unggul
16	PT. Dynaplast	Department Head Technical PT Sanpak Unggul
17	PT. Dynaplast	Analyst DNPA Financial & Tax
18	PT. Dynaplast	Specialist Group Environmental Sustainability
19	PT. Century Tokyo Leasing Indonesia	Manager
20	PT. Century Tokyo Leasing Indonesia	Officer

A summary of the received comments and consideration of those comments are provided in Section E.2.

E.2. Summary of comments received and their consideration

Stakeholders	Comments received	Consideration of comments received
Indonesia JCM secretariat	Could you provide information on their locations and machines?	The project participants sent to the JCM secretariat information on the latest list of their locations and machines. If the machines move in the future, the documents must be submitted to the JCM secretariat. No further action is 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	31/12/2021	First Edition