JCM Project Design Document (PDD), JCM proposed methodology and their attached sheets are preliminary drafts and have neither been officially registered/approved under the JCM, nor are guaranteed to be officially registered/ approved under the JCM.

JCM Project Design Document Form

A. Project description

A.1. Title of the JCM project

Introduction of Energy from Waste Project in Ho Chi Minh City, Viet Nam

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

The proposed JCM project aims to generate electricity from waste incineration to supply to the grid in the Socialist Republic of Viet Nam. The key technology is to introduce incinerators to combust the Municipal Solid Waste (MSW) and generate electricity from the heat generated from the incinerators (Energy-from-Waste, "EfW"). The proposed JCM project will utilize the MSW in Ho Chi Minh City as resource to generate electricity and reduce the amount of landfilled waste. The EfW facility will be built in Tay Bac waste treatment complex in Ho Chi Minh City, the Socialist Republic of Viet Nam.

A.3. Location of project, including coordinates

Country	The Socialist Republic of Viet Nam
Region/State/Province etc.:	N/A
City/Town/Community etc:	Ho Chi Minh City
Latitude, longitude	10°58'34.4"N 106°26'48.5"E

A.4. Name of project participants

The Socialist Republic of Viet Nam	Special Purpose Company ("SPC") to be set up by the Japanese Participants
Japan	Hitachi Zosen Corporation. K.K. Satisfactory International EJ Business Partners Co., Ltd.

A.5. Duration

Starting date of project operation	01/2/2018
Expected operational lifetime of project	20 years

A.6. Contribution from developed countries

The technology of Energy-from-Waste which has been developed by the Japanese project participant, Hitachi Zosen Corporation is introduced in the proposed project.

The Japanese project participants transfer the operational technology through training to the Vietnamese project participants. The Japanese side provides financial support to the project.

B. Application of an approved methodology(ies)

B.1. Selection of methodology(ies)

Selected approved methodology No.	JCM-JP-VN-000*
Version number	Ver. 01
Selected approved methodology No.	N/A
Version number	N/A
Selected approved methodology No.	N/A
Version number	N/A

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	To install incinerators that combust fresh MSW that would have been treated at landfills.	The project installs new incinerators to incinerate MSW that is currently landfilled at a SWDS.
Criterion 2	The project facility has boilers and turbines to generate electricity from the heat created by waste incineration.	The project installs boiler and turbine from the heat recovered from waste combustion to generate electricity to supply to the grid.
Criterion 3	The incinerators are designed and equipped to achieve the following criteria. Ignition loss: 5% or less Yearly operational period: Longer than 7200 hours	The proposed incinerator is designed and equipped to meet the criteria.
Criterion 4	The treatment capability of an incinerator is designed to be greater than 300t/day.	The project installs two 300t/day treatment capacity incinerators to treat 600t/day of waste.

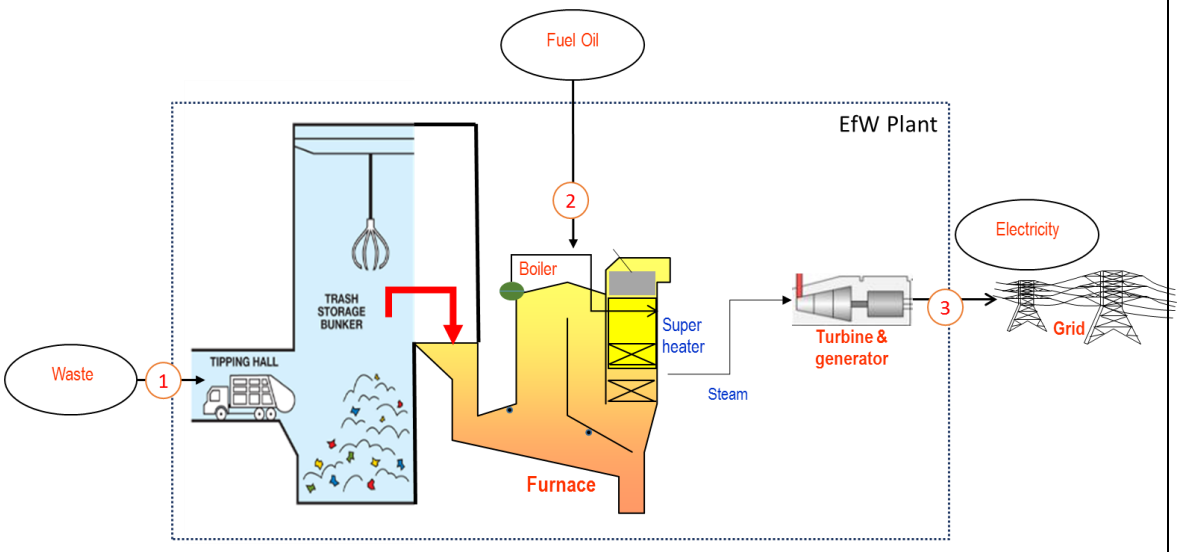
Criterion 5	The project facility is designed and equipped to satisfy the "National Technical Regulation on Emission of Industrial Waste Incinerators (QCVN30:2010/BTNMT)".	The project facility is designed and equipped to comply with the emissions standard of Viet Nam.

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
Methane emissions from SWDSs	CH_4
Grid electricity generation	CO_2
Project emissions	
Emission sources	GHG type
Fossil fuel consumption	CO_2
CO_2 emissions from fossil waste combustion	N_2O
CH_4 and N_2O emissions from waste combustion	CH_4

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



① Amount of waste (weight) input
② Amount of Fuel oil consumption
③ Amount of Electricity supplied

C.3. Estimated emissions reductions in each year

The estimated emissions reductions vary depending on the composition of the waste. The estimated emissions are calculated based on 3 different cases.

Case 1

Year	Estimated Reference emissions (tCO_{2e})	Estimated Project Emissions (tCO_{2e})	Estimated Emission Reductions (tCO_{2e})
2018	69,688	128,053	-58,365
2019	94,277	128,053	-33,776
2020	112,036	128,053	-16,017
Total (tCO_{2e})	276,001	384,159	-108,158

Case 2

Year	Estimated Reference emissions (tCO_{2e})	Estimated Project Emissions (tCO_{2e})	Estimated Emission Reductions (tCO_{2e})
2018	68,620	100,215	-31,595
2019	97,196	100,215	-3,019
2020	117,145	100,215	16,930
Total (tCO_{2e})	282,961	300,645	-17,684

Case 3

Year	Estimated Reference emissions (tCO_{2e})	Estimated Project Emissions (tCO_{2e})	Estimated Emission Reductions (tCO_{2e})
2018	65,732	85,911	-20,179
2019	93,041	85,911	7,130
2020	112,764	85,911	26,853
Total (tCO_{2e})	271,537	257,733	13,804

D. Environmental impact assessment	
Legal requirement of environmental impact assessment for	Yes

the proposed project	

E. Local stakeholder consultation

E.1. Solicitation of comments from local stakeholders

Local stakeholder consultation to be conducted.

E.2. Summary of comments received and their consideration

Stakeholders	Comments received	Consideration of comments received
N/A	N/A	N/A

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	02/3/2015	First edition