



MINISTRY OF ENVIRONMENT
AND TOURISM



Ministry of the Environment



WORKSHOP ON FACILITATING THE JCM IMPLEMENTATION IN ASIA AND PACIFIC IN FY2016

FEB 28 - MAR 1, 2017

TOKYO, JAPAN

FIRST CREDIT ISSUANCE EXPERIENCE AND DEMONSTRATION OF JCM REGISTRY SYSTEM IN MONGOLIA

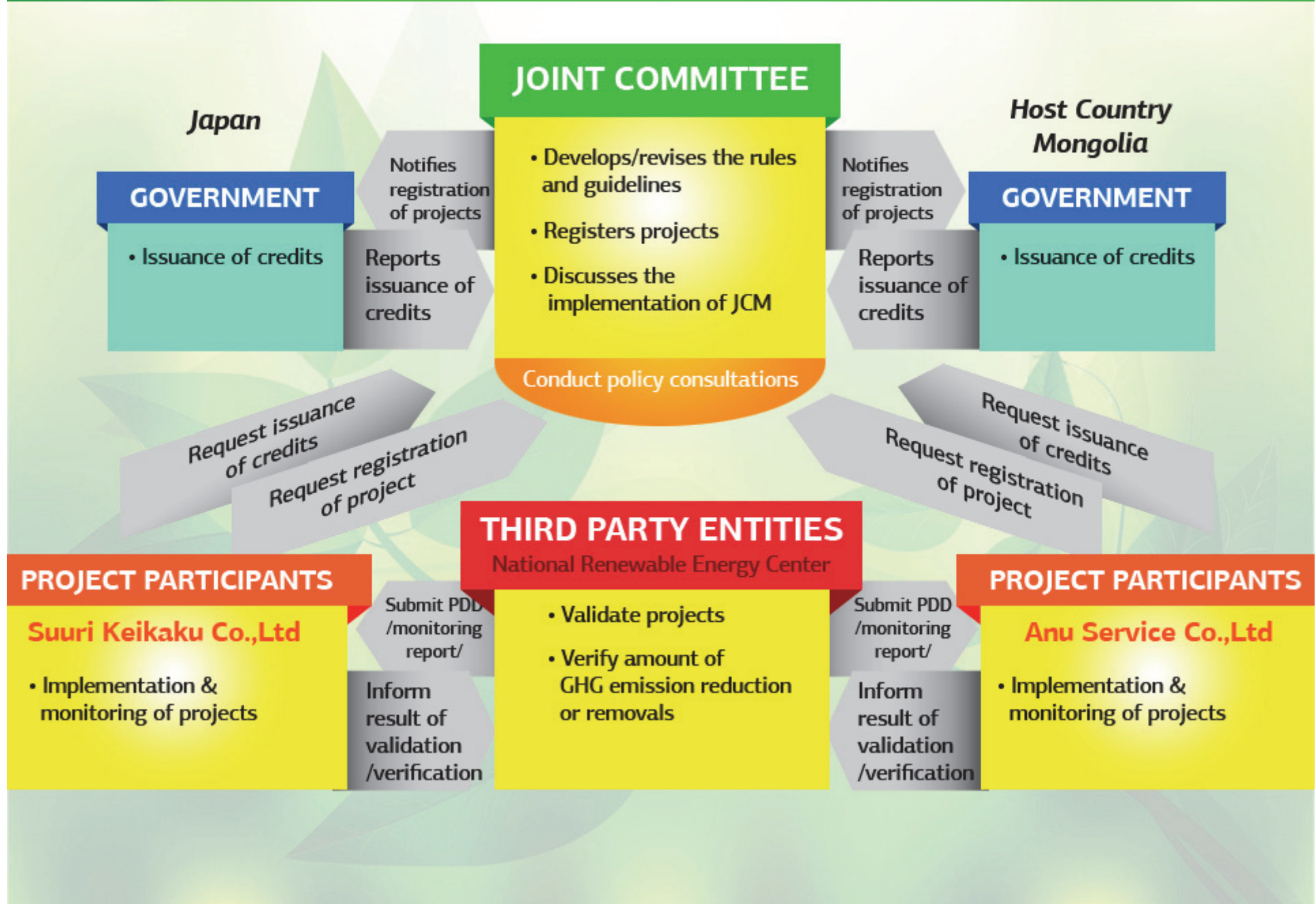
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MINISTRY OF ENVIRONMENT AND TOURISM,
NATURE CONSERVATION FUND,
JCM SECRETARIAT

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GOVERNANCE SCHEME - CREDIT ISSUANCE PROCEDURE



TPE AND THEIR ROLES AND RESPONSIBILITIES

RESPONSIBILITIES

- THIRD-PARTY ENTITY SHOULD BE DESIGNATED BY THE JOINT COMMITTEE
- CANDIDATE ENTITIES ARE EITHER
- ACCREDITED UNDER ISO 14065 BY AN ACCREDITATION BODY THAT IS A MEMBER OF THE IAF AND / OR PAC,
- DESIGNATED OPERATIONAL ENTITY ACCREDITED BY THE EB OF THE CDM

REQUIREMENTS

- SUFFICIENT KNOWLEDGE OF THE JCM
- COMPLETING AN OBJECTIVE ASSESSMENT BASED ON EVIDENCE
- CONFORMITY WITH REQUIREMENTS OF THE STANDARDS (ISO 14064, ISO 14065, ISO 14066)
- PRINCIPLES TO DEMONSTRATE (ISO 14065),

***IMPARTIALITY**

***COMPETENCE**

***FACTUAL APPROACH TO DECISION MAKING**

***OPENNESS**

***CONFIDENTIALITY**

INTRODUCTION TO THE VALIDATION AND VERIFICATION PROCESS

PLANNING

Project design document

- Emission sources (Boundary)
- Reference level
- GHG emission reductions
- Monitoring plan

Project design



IMPLEMENTATION

EX-POST

Monitoring Report

- Monitoring
- GHG emission reductions

PROJECT ACTIVITIES

Implementation



INTRODUCTION TO THE VALIDATION AND VERIFICATION PROCESS

VALIDATION IS THE PROCESS OF INDEPENDENT EVALUATION OF A PROPOSED JCM PROJECT BY A THIRD-PARTY ENTITY AGAINST THE VALIDATION GUIDELINES AS DEVELOPED BY THE JOINT COMMITTEE ON THE BASIS OF THE PDD (RoI para.24)

VALIDATION MEANS:

- DOCUMENT REVIEW
- ON-SITE ASSESSMENT

VALIDATION STEPS:

- RECEIVING OF THE APPLICATION FOR VALIDATION SERVICE AND CONTRACTING
- EXECUTION OF AGREEMENT

ASSIGNMENT OF TEAM MEMBER

- ASSESSMENT OF PDD
- ASSESSMENT OF MONITORING PLAN
- PREPARATION OF DRAFT VALIDATION REPORT
- TECHNICAL REVIEW
- AUTHORIZATION OF VALIDATION REPORT

VALIDATION REPORT

- JCM VALIDATION REPORT FORM- JCM_MN_F_VAL_REP_VER01.0

VALIDATION ACTIVITY CONDUCTED IN LINE WITH " JCM GUIDELINES FOR VALIDATION AND VERIFICATION"

INTRODUCTION TO THE VALIDATION AND VERIFICATION PROCESS

VERIFICATION IS THE PERIODIC INDEPENDENT REVIEW AND EX POST DETERMINATION BY A THIRD-PARTY ENTITY OF THE MONITORED GHG EMISSIONS REDUCTIONS OR REMOVALS AS A RESULT OF A REGISTERED JCM PROJECT DURING THE VERIFICATION PERIOD (RoI para.31)

VERIFICATION MEANS:

- DOCUMENT REVIEW
- ON-SITE ASSESSMENT
- DATA AUDITING

VERIFICATION STEPS:

- RECEIVING OF THE APPLICATION FOR VERIFICATION SERVICE AND CONTRACTING
- EXECUTION OF AGREEMENT
- ASSIGNMENT OF TEAM MEMBER
- ASSESSMENT OF MONITORING PLAN
- ASSESSMENT OF MONITORING REPORT
- PREPARATION OF DRAFT VERIFICATION REPORT
- TECHNICAL REVIEW
- AUTHORIZATION OF VERIFICATION REPORT

VERIFICATION REPORT:

VERIFICATION ACTIVITY CONDUCTED IN LINE WITH " JCM GUIDELINES FOR VALIDATION AND VERIFICATION"

NATIONAL RENEWABLE ENERGY CENTER'S ACTIVITIES- AS TPE OF JCM

2012 - IMPLEMENTATION OF THE MRV MODEL PROJECT “REPLACEMENT OF COAL-FIRED BOILERS BY GEO-THERMAL HEAT PUMP FOR HEATING”

2012 - IMPLEMENTATION OF MRV MODEL PROJECT “UPGRADING AND INSTALLATION OF HIGH EFFICIENT HEAT ONLY BOILERS”

2014 – ACCREDITED AS VALIDATION AND VERIFICATION ENTITY UNDER ISO 14065, BY THE MONGOLIAN AGENCY FOR STANDARDIZATION AND METROLOGY,

2015 - DESIGNATED AS TPE BY THE JC OF JCM

2015 - VALIDATION SERVICE OF THE JCM PROJECT “CENTRALIZATION OF HEAT SUPPLY SYSTEM BY INSTALLATION OF HIGH-EFFICIENCY HEAT ONLY BOILERS IN BORNUUR SOUM” -2015

PROJECTS PARTICIPANTS - ANU SERVICE CO.,LTD, SUURI- KEIKAKU CO.,LTD JAPAN

MN001 INSTALLATION OF HIGH-EFFICIENCY HEAT ONLY BOILERS IN 118TH SCHOOL OF ULAANBAATAR CITY PROJECT

PROJECT LOCATION: THE 118-TH SCHOOL IN ULAANBAATAR CITY IS LOCATED IN 8 KHOROO, KHAN-UUL DISTRICT. THIS SCHOOL OPENED RELATIVELY NEW, IN 2009. KHAN-UUL DISTRICT OF ULAANBAATAR CITY IS THE OUTSIDE OF THE SERVICE AREA OF THE HEAT SUPPLY FROM THE THERMAL POWER PLANTS. THEREFORE, HOB IS A NECESSARY HEATING SERVICE FOR SCHOOLS AND KINDERGARTENS....

GHG EMISSION REDUCTION MEASURES: THIS PROJECT INVOLVES THE INSTALLATION OF NEW HOB FOR HOT WATER SUPPLY SYSTEM AND THE REPLACEMENT OF EXISTING COAL- FIRED HOB. THE BOILER EFFICIENCY OF THE REFERENCE HOB IS TYPICALLY LOWER THAN THAT OF THE PROJECT HOB. THEREFORE, THE PROJECT ACTIVITY LEADS TO THE REDUCTION OF COAL CONSUMPTION, RESULTING IN LOWER EMISSION OF GHGS AS WELL AS AIR POLLUTANTS.

APPLIED METHODOLOGY: MN_AM002 “REPLACEMENT AND INSTALLATION OF HIGH EFFICIENCY HEAT ONLY BOILER (HOB) FOR HOT WATER SUPPLY SYSTEMS”

REGISTERED DATE: 2015/06/30

CREDIT ISSUED: 2016/09/29

AMOUNT OF CREDITS ISSUED: 50TN/CO2

PROJECTS PARTICIPANTS - ANU SERVICE CO.,LTD, SUURI- KEIKAKU CO.,LTD JAPAN

MN002 CENTRALIZATION OF HEAT SUPPLY SYSTEM BY INSTALLATION OF HIGH-EFFICIENCY HEAT ONLY BOILERS IN BORNUUR SOUM PROJECT

PROJECT LOCATION: THE BORNUUR IS LOCATED IN THE NORTH OF TUV PROVINCE, 105 KM DISTANT FROM ULAANBAATAR AND 155 KM FROM CENTER OF TUV PROVINCE. THE PURPOSE OF THE BOILERS IS TO HEAT SCHOOL, HOSPITAL, KINDERGARTEN AND CULTURAL CENTER AND LOCAL GOVERNOR'S OFFICE AND ETC.. NECESSARY TO REPLACED OF THE HEATING INFRASTRUCTURE AND COMPOSED OF THE INSTALLATION OF HEAT ONLY BOILERS (HOB) AS WELL AS PIPE LAYING WORK, ELECTRICAL CONSTRUCTION, AND BOILER BUILDING CONSTRUCTION.

GHG EMISSION REDUCTION MEASURES : THE KEY TECHNOLOGY IS APPLIED IN THE BOILER, "EKOEFEKT 600", WITH A ROTARY GRATE. SINCE THE REPLACEMENT OF LOW EFFICIENCY HOB WITH "EKOEFEKT 600" (650 KW, HIGH EFFICIENCY HOB) LEADS TO THE REDUCTIONS OF COAL CONSUMPTION, THIS REPLACEMENT LEADS TO CO2 AND OTHER AIR POLLUTANTS EMISSION REDUCTIONS

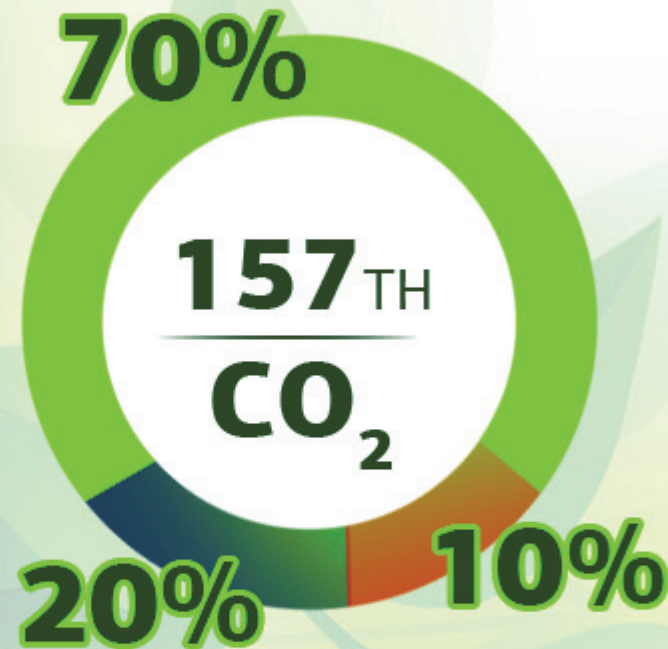
APPLIED METHODOLOGY: APPLIED METHODOLOGY: MN_AM002 "REPLACEMENT AND INSTALLATION OF HIGH EFFICIENCY HEAT ONLY BOILER (HOB) FOR HOT WATER SUPPLY SYSTEMS"

REGISTERED DATE: 2015/06/30

CREDIT ISSUED: 2016/09/29

AMOUNT OF CREDITS ISSUED: 107TN/CO2

CREDIT ISSUANCE



- Installation of high-efficiency Heat Only Boilers in 118th School of Ulaanbaatar City Project
- Centralization of heat supply system by installation of high-efficiency Heat Only Boilers in Bornuur soum Project



Existing old-type Heat Only Boiler (HOB) was replaced with high-efficiency HOBs (300kW x 2) to supply hot water for space heating at the school in Ulaanbaatar.



PP from Japan:
Suuri-KEeikaku Co., Ltd.
PP from Mongolia:
Anu-Service Co.,Ltd.

Existing old-type HOBs were replaced with the centralized control system of high-efficiency HOBs (650kW x 3) to supply hot water for space heating.

➔ Amount of JCM credits issued: **50 t-CO₂**
(Monitoring period: September 2015 to May 2016)

➔ Amount of JCM credits issued: **107 t-CO₂**
(Monitoring period: September 2015 to May 2016)

For further information

- ✓ Information on the JCM including issuance of credits is available at: <https://www.jcm.go.jp/>
- ✓ Information on JCM registry system for Japan is available at: <https://www.jcmregistry.go.jp/>
- ✓ General Information regarding JCM is available at: <http://www.mmechanisms.org/e/>

WHAT IS REGISTRY SYSTEM?

- A SYSTEM TO MANAGE ALL THE DATA, WITH PRIMARY TASK IS TO OPERATE A DATABASE FOR COLLECTING, VERIFYING AND TRACKING DATA FROM THE PROJECT PARTICIPANTS. THIS IS SIMILAR TO THE WAY THAT BANK RECORDS BALANCES AND MOVEMENTS IN MONEY USING ACCOUNTS ALLOCATED TO INDIVIDUALS OR OTHER ENTITIES.
- CARBON MARKET REGISTRY IS A SYSTEM THAT CAN TRACK THE LOCATION OF EMISSION REDUCTION UNITS AT ALL TIMES.
- EVERY RELIABLE CLIMATE MITIGATION SCHEME HAS ITS OWN REGISTRY TO REGISTER ALL OF THEIR ACTIVITIES AND AVOID DOUBLE COUNTING, DOUBLE CLAIMING, AND DOUBLE FINANCING.



JCM REGISTRY SYSTEM

EACH JCM PARTNER COUNTRY HAS A FLEXIBILITY TO DEVELOP THEIR OWN REGISTRY SYSTEM. HOWEVER, THE SYSTEM MUST STILL FOLLOW “COMMON SPECIFICATIONS OF THE JCM REGISTRY”

- THIS DOCUMENT ALSO STATES THE DEFINITION OF THE BELOW TERMINOLOGIES:

ISSUANCE	TRANSFER	ACQUISITION	CANCELLATION	RETIREMENT
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ACCORDING TO “COMMON SPECIFICATION” DOCUMENT, EACH REGISTRY SHOULD :

- **AVOID DOUBLE COUNTING AND**
- **HAS THE FOLLOWING ACCOUNTS:**

A government
holding
account

Entity(ies)
holding
account

Cancellation
account(s)

A retirement
Account

SERIAL NUMBER IN REGISTRY

COMMON SPECIFICATION OF THE JCM REGISTRY PARA 11:

- (A) SCHEME IDENTIFIER: "JCM" IS STATED AT THE BEGINNING OF THE ACCOUNT NUMBER;
- (B) COUNTRY IDENTIFIER: THE COUNTRY IN WHOSE JCM REGISTRY THE ACCOUNT IS MAINTAINED, IDENTIFIED BY MEANS OF THE TWO-LETTER COUNTRY CODE DEFINED BY THE INTERNATIONAL ORGANIZATION OF STANDARDIZATION (ISO 3166); AND
- (C) A UNIQUE NUMBER: A NUMBER UNIQUE TO THAT ACCOUNT FOR THE COUNTRY IN WHOSE JCM REGISTRY THE ACCOUNT IS MAINTAINED

EXAMPLE: JCM-MN-JP-000000001

Identification title: JCM
Host country: MN
Issued country: JP
Credit ID number: 000000001

ID Number in Mongolia: JCM-MN-001-01-01-MN-000000001

Identification title: JCM
Host country: MN
Reference number: 001
Sectoral scope: 01
Number of issuance: 01
Issuance country: MN
Credit ID number: 000000001

THE SERIAL NUMBER MAY VARY AS IT IS DEPENDENT ON THE COUNTRY'S REGISTRY SYSTEM OF EACH COUNTRY WHILE STILL FOLLOWING THE COMMON SPECIFICATION

TYPES OF CREDIT TRANSACTION IN JCM

Source: IGES

1. Transfer

Company A has 50 tCO₂ credit and would like to transfer 25 tCO₂ credit to the holding account of the Government of Monglia (GoM). GoM account already has 50 tCO₂ credit.

	Before transfer		after transfer
Account A	50 tCO ₂	-25 tCO ₂ ➔	25 tCO ₂
GoM account	50 tCO ₂	+25 tCO ₂ ➔	75 tCO ₂

2. Retirement

Company B has 100 tCO₂ and would like to retire 75 tCO₂ for national reporting

	before retirement		After retirement
Account B	100 tCO ₂	-75 tCO ₂ ➔	25 tCO ₂
Retirement account	0 tCO ₂	+75 tCO ₂ ➔	75 tCO ₂

3. Cancellation of credits

Company A has 25 tCO₂ credit and would like to cancel all of the remaining credits (25 tCO₂)

	Before cancellation		After cancellation
Account A	25 tCO ₂	-25 tCO ₂ ➔	0 tCO ₂
Cancellation account	0 tCO ₂	+25 tCO ₂ ➔	25 tCO ₂

Report to national registry system

(JCM common specification para 5: ...are used as part of the internationally pledged GHG mitigation efforts by the respective countries)

INFORMATION FOR PUBLIC

COMMON SPECIFICATIONS OF THE JCM REGISTRY PARA 19
EACH SIDE MAKES NON-CONFIDENTIAL INFORMATION PUBLICLY AVAILABLE AND
PROVIDES A PUBLICLY ACCESSIBLE USER INTERFACE THROUGH THE INTERNET THAT
ALLOWS INTERESTED PERSONS TO QUERY AND VIEW IT.

Issuance of credits

Total projects found: 2

Project title						
Reference number	Monitoring period	Date of JC decision on notification	Country	Notified amount of credits to be issued	Date of issuance	Amounts of credits issued
Centralization of heat supply system by installation of high-efficiency Heat Only Boilers in Bornuur soum Project						
MN002	15 Sep 15 - 02 May 16	29 Sep 16	Mongolia	22	30 Sep 16	22
			Japan	85	30 Sep 16	85
Installation of high-efficiency Heat Only Boilers in 118th School of Ulaanbaatar City Project						
MN001	20 Sep 15 - 15 May 16	29 Sep 16	Mongolia	10	30 Sep 16	10
			Japan	40	30 Sep 16	40


JCM REGISTRY SYSTEM

THE REGISTRY SYSTEM IN MONGOLIA IS DEVELOPED AND MAINTAINED TO ENSURE THE ACCURATE ACCOUNTING OF THE ISSUANCE, HOLDING, TRANSFER, ACQUISITION, CANCELLATION AND RETIREMENT OF JCM CREDITS.

COMPONENTS IN THE MONGOLIA JCM REGISTRY:

- “MASTER OPERATION SHEET” TO REGISTER JCM PROJECT AND NEW ACCOUNT IN THE SYSTEM AND TO MODIFY THE INFORMATION WHICH ALREADY IN THE REGISTRY SYSTEM
- “CREDIT RELATED OPERATION SHEET” TO MANAGE THE JCM CREDIT IN THE REGISTRY SYSTEM
- “MASTER SHEETS” ACT AS A DATABASE THAT STORE ALL OPERATION AND INPUT IN THE SYSTEM.
- “ACCOUNT SHEETS” IS TO MANAGE THE CREDIT AMOUNT OF EACH ACCOUNT.

Components of the Registry		
Operation	Remarks	Sheets Link
Master Operation	Register Project	Register Project
	Open Account	One account for one entity
	Edit Project Info	
	Edit Account Info	Editing credits info is not allowed
Credits Related Operator	Issuance of Credits	Issuance
	Transfer of Credits	Transfer
	Retirement of Credits	Retirement
	Cancellation of Credits	Cancellation
	Balance Inquiry	Balance
Database	Remarks	Sheets Link
Master	Project Info Master	Project Master
	Credit Issuance Master	Credit Master
	Account Master	Account Master
	Histry of Operation	History
Account	Holding Accounts	For Mongolian gov and entities
	Retirement Account	Retirement Account
	Cancellation Account	Cancellation Account



THANK YOU FOR YOUR ATTENTION
ARIGATOU GOZAIMASU