JCM Verification Report Form

A. Summary of verification

A.1. General Information

Title of the project	Reducing GHG emission at textile factories by upgrading to air-saving loom
Reference number	ID015
Monitoring period	01/01/2017- 30/09/2018
Date of completion of the monitoring report	04/02/2019
Third-party entity (TPE)	Japan Quality Assurance Organization (JQA) (TPE-ID-003)
Project participant contracting the TPE	Toray Industries, Inc.
Date of completion of this report	27/02/2019

A.2 Conclusion of verification and level of assurance

Overall verification opinion	☒ Positive ☐ Negative
☒ Unqualified opinion	Based on the process and procedure conducted, JQA provides reasonable assurance that the emission reductions for Reducing GHG emission at textile factories by upgrading to air-saving loom ✓ Are free of material errors and are a fair representation of the GHG data and information, and ✓ Are prepared in line with the related JCM rules, procedure, guidelines, forms and other relevant documents
(If overall verification opinion is negative, please check below and state its reasons.) ☐ Qualified Opinion ☐ Adverse opinion ☐ Disclaimer	<State the reasons>

A.3. Overview of the verification results

Item	Verification requirements	No CAR or CL remaining
The project implementation with the eligibility criteria of the applied methodology	The TPE determines the conformity of the actual project and its operation with the eligibility criteria of the applied methodology.	☒
The project implementation against the registered PDD or any approved revised PDD	The TPE assesses the status of the actual project and its operation with the registered/validated PDD or any approved revised PDD.	☒
Calibration frequency and correction of measured values with related requirements	If monitoring Option C is selected, the TPE determines whether the measuring equipments have been properly calibrated in line with the monitoring plan and whether measured values are properly corrected, where necessary, to calculate emission reductions in line with the PDD and Monitoring Guidelines.	☒
Data and calculation of GHG emission reductions	The TPE assesses the data and calculations of GHG emission reductions achieved by/resulting from the project by the application of the selected approved methodology.	☒
Avoidance of double registration	The TPE determines whether the project is not registered under other international climate mitigation mechanisms.	☒
Post registration changes	The TPE determines whether there are post registration changes from the registered PDD and/or methodology which prevent the use of the applied methodology.	☒

Authorised signatory:	Mr. ☒ Ms. ☐
Last name: Asada	First name: Sumio
Title: Senior Executive	
Specimen signature:	Date: 27/02/2019

B. Verification team and other experts

	Name	Company	Function*	Scheme competence*	Technical competence*	On-site visit
Mr. ☒ Ms. ☐	Tadashi Yoshida	JQA	Team leader	☒	Authorized	☐
Mr. ☒ Ms. ☐	Irhan Febiyanto	External individual	Team member	☒	Authorized	☒
Mr. ☐ Ms. ☒	Sachiko Hashizume	JQA	Internal reviewer	☒	Authorized	☐

Please specify the following for each item.

* *Function: Indicate the role of the personnel in the validation activity such as team leader, team member, technical expert, or internal reviewer.*
* *Scheme competence: Check the boxes if the personnel have sufficient knowledge on the JCM.*
* *Technical competence: Indicate if the personnel have sufficient technical competence related to the project under validation.*

C. Means of verification, findings and conclusions based on reporting requirements

C.1. Compliance of the project implementation and operation with the eligibility criteria of the applied methodology

<Means of verification>

The project was registered as a JCM project on 24/08/2018, which applied JCM approved methodology ID_AM011_ver01.0 "Installation of energy saving air jet loom at textile factory" under the scheme of Joint Crediting Mechanism between Republic of Indonesia and Japan.

The purpose of the project is to reduce CO_2 emissions from energy consumption of air compressors by replacing the existing weaving looms with the latest air-saving looms (Toyota JAT810). The project implemented at 3 sites of textile factory consists of 96 units of the latest air-saving looms (16 units at ISTEM, 17 units at CENTEX and 63 units at Easterntex). Toyota JAT 810 can reduce air consumption for weft insertion by more than 15% compared to the conventional model (JAT 710) and this effect contributes not only to the reduction of CO_2 emission from the electricity consumption of air-compressors but also to the reduction of running cost. Thus, the registered project has achieved 1,244 tCO_2 of the emission reductions during the monitoring period of 01/01/2017 – 30/09/2018.

The JCM website indicates that the starting date of the project operation is 01/01/2017 and this monitoring period is from 01/01/2017 until 30/09/2018. It is confirmed through the review of relevant documents, on-site assessment and the interview with the PPs that the

monitoring of the project actually started on 01/01/2017.

JQA has assessed whether the project implementation and operation during the monitoring period complies with the eligibility criteria of the applied methodology. After desk review, an on-site assessment was conducted on 10-11/01/2019. JQA conducted a physical inspection and interviewed with the PPs listed in Section F of this verification report.

The assessment results regarding the eligibility criteria are summarized as below:

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.

Through the review of relevant documents, on-site inspection and the interview with the PPs, the project information of Criterion 1 in the PDD is confirmed as follows:

- The existing weaving looms at 3 sites of ISTEM, CENTEX and Easterntex have been replaced by the latest air-saving looms (Model: JAT810) manufactured by Toyota Industries Corporation which are equipped with energy-saving technologies such as an optimized shape reed's tunnel of nozzles and a sensor to monitor air pressure of nozzles for controlling the compressed air consumption of welt insertion.

Hence, it is concluded that the project meets Criterion 1 with a satisfactory result during the monitoring period.

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.

Through the review of the monitored data and the interview with the PPs during on-site assessment, the project information of Criterion 2 in the PDD is confirmed as follows:

- The specific air consumptions (SAC_{PJ}) of the project air jet looms (JAT810) installed at ISTEM, CENTEX and Easterntex during the monitoring period are compared with those (SAC_{RE}) of the reference air jet looms (JAT710). As a result, the project air jet looms showed the reduction rates ($RR_{i,j}$) of more than 20% for every code.

Hence, it is concluded that the project meets Criterion 2 with a satisfactory result during the monitoring period.

Regarding the monitoring period, JQA raised CL 03 and the issue was resolved as explained in "Findings".

<Findings>

< CL 03 >

The PPs are requested to clarify why the monitoring period of 2017 is interrupted on 17/12/2017 in Table 1 of MRS.

< Resolution by the PPs >

The monitoring period for 2017 was revised to 01/01/2017-31/12/2017.

< Assessment by the TPE >

It is confirmed through the review of the revised MRS and the interview with the PPs that the monitoring period for 2017 was not interrupted on 17/12/2017 but continued up to 31/12/2017. Accordingly, the duration of this monitoring period for 2017 and 2018 is revised 01/01/2017-30/09/2018. Thus, CL 03 is closed.

<Conclusion based on reporting requirements>

JQA concludes that the implementation and the operation of the proposed project are in compliance with two eligibility criteria of the applied methodology ID_AM011 during this monitoring period.

C.2. Assessment of the project implementation against the registered PDD or any approved revised PDD

<Means of verification>

JQA has assessed the status of the project implementation against the registered PDD through the review of the relevant documents, on-site inspection and interviews with the PPs. The project is implemented by the project participants of PT. Indonesia Synthetic Textile Milles (ISTEM), PT. Easterntex and PT. Century Textile Industry Tbk. (CENTEX) from Republic of Indonesia and Toray Industries, Inc. from Japan.

The assessment results are summarized as follows;

[Physical features of the project]

The project participants of PT. Indonesia Synthetic Textile Milles (ISTEM), PT. Easterntex and PT. Century Textile Industry Tbk. (CENTEX) have replaced the existing weaving looms (JAT710) with the latest air-saving looms (Toyota JAT810) to reduce CO_2 emission from electricity consumption of air compressor. Ninety-six units of the latest air-saving looms in total have been installed at 3 sites of the textile factory (16 units at ISTEM, 17 units at CENTEX and 63 units at Easterntex). Toyota JAT 810 is able to reduce air consumption for weft insertion by more than 15% compared to the existing model (JAT 710). The installation of the equipment complies with the description of the registered PDD.

JQA confirms through the on-site inspection and the interview with the PPs for the first verification that the physical features of the project are in place and the PPs have implemented the project as per the registered PDD.

[Monitoring points]

One monitoring parameter described below is measured by the meter in accordance with the monitoring plan.

1. $AP_{PJ,i,j,p}$: Amount of fabric woven by the project air jet loom type *i* at the project factory *j* during the period *p* [m/p]

It is confirmed through the on-site inspection and interview with the PPs that the meter is located at the right position of production line to measure the amount of fabric woven produced. The measured amount is recorded manually on the inspecting sheet every production lot at ISTEM and CENTEX or automatically transmitted to the server of the data monitoring system at Easterntex. The data is double-checked by a responsible staff on a monthly basis to prevent the missing of data. Detailed information on the monitoring data of these parameters is described in Section C.4.

[Monitoring structure]

The monitoring structure has been established and the roles and responsibilities of the personnel are consistent with the description in Monitoring Structure Sheet. The staff training for operation, monitoring and maintenance of the system was conducted in January and February 2014.

It is confirmed through the review of relevant documents and the interview with the PPs that the monitoring activity has been appropriately implemented during the monitoring period,

in line with the monitoring plan of the registered PDD.

Regarding the specification of the meter at Easterntex factory, JQA raised CL 02 and the issue was resolved as explained in "Findings".

<Findings>

< CL 02 >

The PPs are requested to provide the specification of meter installed at the monitoring point 1 at Easterntex factory. .

< Resolution by the PPs >

Easterntex doesn't use the meter for measuring fabric woven length. The length is displayed automatically by the monitor display.

< Assessment by the TPE >

The air jet loom installed at at Easterntex factory has a built-in measuring system for the production of fabric woven, instead of using meter. As the number of weft per inch of the fabric woven is previously designed and controlled by JAT810 according to the type of the category, the length of the fabric woven produced can be measured automatically by counting the total number of the weft during the operation. It is confirmed through the review of the relevant document and the interview with the PPs that the production of fabric woven is automatically measured by the built-in measuring system of JAT810 and can be read on the display panel. Thus, CL 02 is closed.

<Conclusion based on reporting requirements>

JQA concludes that the project has been implemented in accordance with the registered PDD during the monitoring period, and no changes are found from the description of the registered PDD.

C.3. Compliance of calibration frequency and correction of measured values with related requirements

<Means of verification>

The measuring equipment used in the project activity is meter (Model MS3: 1-5) made by Kori Seiki MFG Co., Ltd.

The calibration of the meter is not required as per the methodology ID_AM011 which states that the fabric is a commercial commodity under contract with a client and is subject

to an accurate measurement.

<Findings>

No issue was identified.

<Conclusion based on reporting requirements>

JQA confirms that the calibration of the meter to measure the amount of fabric woven is not required as per the methodology ID_AM011. Therefore, no correction of the measured value is required.

C.4. Assessment of data and calculation of GHG emission reductions

<Means of verification>

JQA has assessed the data and calculation of GHG emission reductions achieved by the project activity as follows:

(a) The corresponding Monitoring Report Sheet of the applied methodology has been used;

Through the review of the monitoring report for the project which is titled as JCM_ ID015_MRS-draft_ver4.1.xlsx, it is confirmed that the Monitoring Report Sheets (MRS(input) 2017, MRS(calc_process) 2017, MRS(input) 2018 and MRS(calc_process) 2018) of applied methodology ID_AM011 are appropriately used.

(b) A complete set of data for the monitoring period for all parameters monitored ex post was provided to the verification team in the form of several kinds of files.

Monitoring Report Sheet (MRS) provided by the PPs contains a complete set of the monitored data on the amount of fabric woven during the monitoring period of 01/01/2017 - 30/09/2018. The data are separately provided for each year of 2017 and 2018. It is confirmed through the review of the monitored data that the amount of fabric woven is fully provided for the monitoring period.

(c) Information provided in the monitoring report has been checked with sources such as plant logbooks, inventories, purchase records, laboratory analysis;

JQA has reviewed the correctness of monitored data given in the MRS for the amount of fabric woven through cross-checking it with the monthly data provided by the PPs.

Parameters	Monitored values	Method to check values in the monitoring report with sources
$AP_{PJ,i,j,p}$ (m/p)	ISTEM 1,248,104 (2017) 1,311,991 (2018) CENTEX 1,585,282 (2017) 1,031,844 (2018) Easterntex 10,709,697 (2017) 7,453,725 (2018)	The value of fabric woven in the MRS is cross-checked with monthly data.

It is confirmed through the cross-check of the monitored data in the MRS with the monthly data that the values of fabric woven production in the MRS for ISTEM, CENTEX and Easterntex are fully consistent with the sum of their monthly data, and reference emissions ($RE_{j,p}$), project emissions ($PE_{j,p}$) and emission reductions ($ER_{j,p}$) in the MRS are correctly calculated.

(d) Any assumptions used in emission calculations have been justified;

Through the review of the MRS and the interview with the PPs, it is confirmed that no assumption has been used in the calculations of emission reductions and hence no justification is required.

(e) Appropriate emission factors, default values, and other reference values have been correctly applied.

Through the review of the MRS and the interview with the PPs, it is confirmed that CO_2 emission factor for consumed electricity ($EF_{elec,j}$), specific electricity consumption of the air compressor (SEC_j), specific air consumption of the project air jet loom ($SAC_{PJ,i,j}$) and reduction rate of specific air consumption of the project air jet loom ($RR_{i,j}$) which were determined at the time of validation and provided in the MPS, have been correctly applied in the calculation of reference emissions.

The data monitored and required for verification and issuance is to be kept and archived electronically for two years after the final issuance of credits.

Regarding the correctness of values for $AP_{PJ,i,j,p\ j}$ in "Prod qtty" files and in Table 1 of the MRS, JQA raised CAR 01, CAR 02 and CL 01 and these issues were resolved as explained in "Findings".

<Findings>

< CAR 01 >

As for the values of $AP_{PJ,I,j,p}$ in May and June 2018 for ISTEM and Feb, Mar, May, July 2017, Jan, Feb, Mar and Apr 2018 for CENTEXT, these values in TTL sheet are not consistent with those values in their monthly data.

< Resolution by the PPs >

There were some mistakes in the calculation. As countermeasure, we change referring formula in EXCLE file. The following revised data files were provided by the PPs:
2017 Prod qtty (CTX) ver2-R.xlsx,
2017 Prod qtty (ETX) ver2.xlsx,
2017 Prod qtty (ISTEM) ver2.xlsx,
2018 Prod qtty (CTX) Jan to Sep ver2.xlsx,
2018 Prod qtty (ETX) Jan to Sep ver2.xlsx,
2018 Prod qtty (ISTEM) Jan to Sep ver2-R.xlsx

< Assessment by the TPE >

It is confirmed through the review of the revised data files and MRS that the values of $AP_{PJ,i,j,p}$ in the data files of CENTEX, ISTEM and Easterntex are correctly re-calculated and accordingly the values of $AP_{PJ,i,j,p}$ in MRS are appropriately revised. Thus, CAR 01 is closed.

< CAR 02 >

The values of $AP_{PJ,I,j,p}$ for ISTEM and CENTEX in Table 1 of MRS are mistakenly inputted into the wrong cells (Cell D17, 18).

< Resolution by the PPs >

The revised MRS was provided by the PPs.

< Assessment by TPE >

It is confirmed through the review of the revised MRS that the values of $AP_{PJ,i,j,p}$ for ISTEM and CENTEX in Table 1 of MRS are correctly inputted into the right cells. Thus, CAR 02 is closed.

< CL 01 >

There are inconsistencies in the values of fabric woven length between the inspection sheet and the calculation sheet of ISTEM. The PPs are requested to cross-check these data in May and June 2018 for ISTEM and Feb 2017, Mar 2018 for CENTEX.

< Resolution by the PPs >

As a result of cross-checking the length of fabric woven in the monthly data files of ISTEM and CENTEX with their inspection sheet, some inconsistencies were found and accordingly the data were corrected. The result is summarized in the spreadsheet (File name: Prod Qty Errata.xlsx). Based on the result, MRS is also revised.

< Assessment by the TPE >

JQA requested the PPs to cross-check the amount of fabric woven in May and June 2018 for ISTEM and Feb 2017 and Mar 2018 for CENTEX with their inspection sheet which are randomly selected by a sampling. As a result of cross-checking, the error ratio was 1.44% for ISTEM and 0.94% for CENTEX, which corresponds to 0.1% and 0%, respectively, of the emission reductions. It is confirmed through the review of the revised monthly data that these error ratios are much smaller than 5% of the materiality threshold for verification, which is requested by the paragraph 101 of JCM Guidelines for Validation and Verification (JCM_ID_GL_VV_ver01.0) and therefore the values of $AP_{PJ,i,j,p}$ in MRS are free from the material errors. Thus, CL 01 is closed.

<Conclusion based on reporting requirements>

JQA concludes that the monitored data and the project-specific parameters fixed *ex-ante* are appropriately and correctly applied in the calculation of GHG emission reductions achieved by the project activity, in accordance with the applied methodology ID_AM011 and the monitoring plan of the registered PDD.

C.5. Assessment of avoidance of double registration

<Means of verification>

It is confirmed that a written confirmation from the PPs regarding no registration under other international climate mitigation mechanisms was provided at the time of validation and the declaration letter signed by the PP's representative in the MoC was submitted to the Joint Committee. In addition, it is re-confirmed through the check of the relevant website and the interview with PPs that the project has not been registered under any other mechanisms at the time of verification.

<Findings>

No issues was identified.

<Conclusion based on reporting requirements>

JQA concludes that the project has not been registered under other international climate mitigation mechanisms.

C.6. Post registration changes

<Means of verification>

It is confirmed through the review of documents and the on-site assessment that the project has not been changed from the registered PDD and/or methodology.

<Findings>

No issue was identified.

<Conclusion based on reporting requirements>

JQA concludes that the project has not been changed from the registered PDD and/or methodology.

D. Assessment of response to remaining issues

An assessment of response to the remaining issues including FARs from the validation and/or previous verification period, if appropriate

No issues including FAR from the validation are remained. As this is the first verification, no issues from the previous verification are also remained.

E. Verified amount of emission reductions achieved

Year	Verified Reference Emissions (tCO_2e)	Verified Project Emissions (tCO_2e)	Verified Emission Reductions (tCO_2e)
2013	-	-	-
2014	-	-	-
2015	-	-	-
2016	-	-	-
2017	2,977.4	2,254.0	723
2018	2,148.6	1,627.2	521
2019	-	-	-

2020	-	-	-
Total (tCO_2e)			1,244

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

F. List of interviewees and documents received

F.1. List of interviewees

(CENTEX)

- Kastuya Okajima — Production Director, PT. CENTEX
- Fatkhurrohman — Deputy Factory Manager, PT. CENTEX
- Wahyana — Spinning & Weaving General Manager, PT CENTEX
- Amri Sety C — Weaving Manager, PT. CENTEX
- Satoshi Kojima — Senior staff, Toray Industries Inc.
- Tsuyoshi Nakao — Team Leader, ERM

(ISTEM)

- Masaru Kimura — Production Director, PT. ISTEM
- Wilman — Assistant Manager QC, PT. ISTEM
- Taofik I. — Assistant Manager MTC, PT. ISTEM
- Agung R. — Department Manager, PT. ISTEM
- Satoshi Kojima — Senior staff, Toray Industries Inc.
- Tsuyoshi Nakao — Team Leader, ERM

F.2. List of documents received

1. JCM Project Design Document (ID015) _ver3.0, 31/07/2018
2. Monitoring Spreadsheet: JCM_ID015_MRS_draft_ver4.1.xlsx, (Monitoring period: 01/01/2017 - 30/09/2018)
3. JCM Validation Report (ID015), 20/03/2018
4. JCM Modalities of Communication Statement Form (ID011) (JCM_ID_F_MoC_ ver01.0)
5. JCM Approved Methodology JCM_ID_AM011_ver1.0
6. JCM Glossary of Terms (JCM_ID_Glossary_ver02.0)
7. JCM Project Cycle Procedure (JCM_ID_PCP_ver05.0)
8. JCM Guidelines for Developing Project Design Document and Monitoring Report (JCM_ID_GL_PDD_MR_ver03.0)
9. JCM Guidelines for Validation and Verification (JCM_ID_GL_VV_ver01.0)
10. JCM Verification Report Form (JCM_ID_F_Vrf_Rep_ver01.1)

11. Revised monthly data report on the amount of fabric woven during the monitoring period for ISTEM, CENTEX and Easterntex
    - 2017 Prod qtty (ISTEM) ver2.xlsx
    - 2017 Prod qtty (CTX) ver2-R.xlsx
    - 2017 Prod qtty (ETX) ver2.xlsx
    - 2018 Prod qtty (ISTEM) Jan to Sep ver2.xlsx
    - 2018 Prod qtty (CTX) Jan to Sep ver2.xlsx
    - 2018 Prod qtty (ETX) Jan to Sep ver2.xlsx
12. Technical characteristics of the latest air jet loom JAT810 made by Toyota Industries Corporation

13-1. Air consumption data of JAT810 and JAT710 for various categories prepared by Toyota Industries Corporation

13-2. Report on the sub-nozzle jet characteristics of air jet loom, Textile Machinery Society of Japan, p.39, vol.68

14-1. Maintenance manual of JAT810

14-2. Disassembly and installation manual of JAT810

14-3. Operation manual of JAT810

15-1. Agenda of local stakeholder consultation meeting held on 29/09/2016

15-2. “Installation of energy saving air jet loom at textile factory” presented at LSC meeting

16-1. Record on staff training of JAT810 conducted at CENTEX and Easterntex

16-2. Standard operational procedure of JAT810

17-1. Schematic diagram of monitoring structure at ISTEM

17-2. Schematic diagram of monitoring structure at CENTEX

17-3. Schematic diagram of monitoring structure at Easterntex

18. Inspection record of turbo compressor (TRE50-560kW)

19-1. Catalogue of meter (MS3:1-5) made by Kori Seiki MFG Co. Ltd.

19-2. Specification of the meter (MS3:1-5)

20. Inspecting sheet for amount of fabric woven production

21. Determination of SAC and RR

22. Determination of SEC

23. Result of cross-checking of $AP_{PJ,i,j,p}$ for ISTEM and CENTEX (Prod Qty Errata.xlsx)

Annex Certificates or curricula vitae of TPE's verification team members, technical experts and internal technical reviewers

Please attach certificates or curricula vitae of TPE's validation team members, technical experts and internal technical reviewers.

Statement of competence

Name: Dr. Tadashi Yoshida

Qualified and authorized by Japan Quality Assurance Organization.

Function	Date of qualification
Validator	2014/12/22
Verifier	2014/12/22
Team leader	2014/12/22

Technical area within sectoral scopes	Date of qualification
TA 1.1. Thermal energy generation	2014/12/22
TA 1.2. Renewables	2014/12/22
TA 3.1. Energy demand	2014/12/22
TA 4.1. Cement and lime production	2015/11/12
TA 4.6. Other manufacturing industries	2014/12/22
TA 5.1. Chemical industry	2014/12/22
TA 10.1. Fugitive emissions from oil and gas	2014/12/22
TA 13.1. Solid waste and wastewater	2014/12/22
TA 14.1. Afforestation and reforestation	-

Statement of competence

Name: Dr. Irhan Febijanto

Qualified and authorized by Japan Quality Assurance Organization.

Function	Date of qualification
Validator (JCM project only)	2017/8/21
Verifier (JCM project only)	2017/8/21
Team leader	-

Technical area within sectoral scopes	Date of qualification
TA 1.1. Thermal energy generation	2014/12/22
TA 1.2. Renewables	-
TA 3.1. Energy demand	2014/12/22
TA 4.1. Cement and lime production	-
TA 4.6. Other manufacturing industries	-
TA 5.1. Chemical industry	-
TA 10.1. Fugitive emissions from oil and gas	-
TA 13.1. Solid waste and wastewater	-
TA 14.1. Afforestation and reforestation	-

Statement of competence

Name: Ms. Sachiko Hashizume

Qualified and authorized by Japan Quality Assurance Organization.

Function	Date of qualification
Validator	2015/11/20
Verifier	2015/11/20
Team leader	2018/6/22

Technical area within sectoral scopes	Date of qualification
TA 1.1. Thermal energy generation	2015/11/20
TA 1.2. Renewables	2015/11/20
TA 3.1. Energy demand	2015/11/20
TA 4.1. Cement and lime production	-
TA 4.6. Other manufacturing industries	-
TA 5.1. Chemical industry	-
TA 10.1. Fugitive emissions from oil and gas	-
TA 13.1. Solid waste and wastewater	2015/11/20
TA 14.1. Afforestation and reforestation	-