Case3: Air Jet Loom

Mr. Kentaro Takahashi
Progarmme Manager
Climate and Energy Area
Institute for Global Environmental Strategies (IGES)

IGES
Institute for Global Environmental Strategies

Project Image

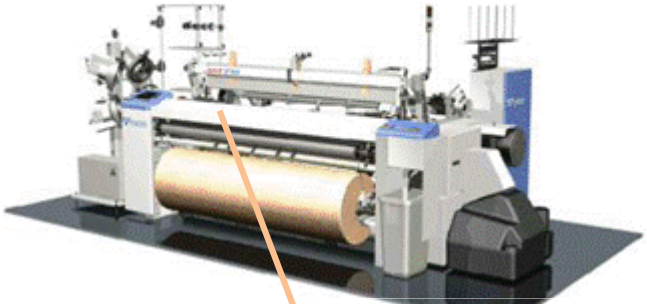
Source: Indonesia JCM webisite
http://jcm.ekon.go.id/en/index.php/content/MjM%253D/gallery

Eligibility Criteria:TH_PM004

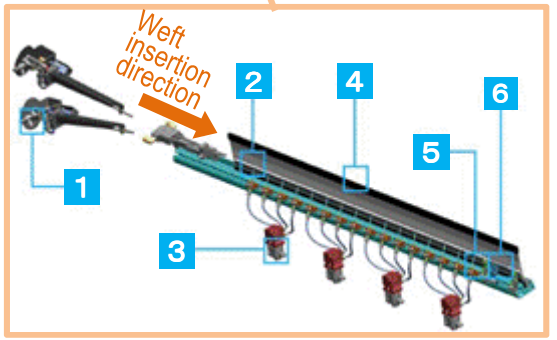
4th Proposed Methodology in Thailand

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.
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.

Toyota JAT810



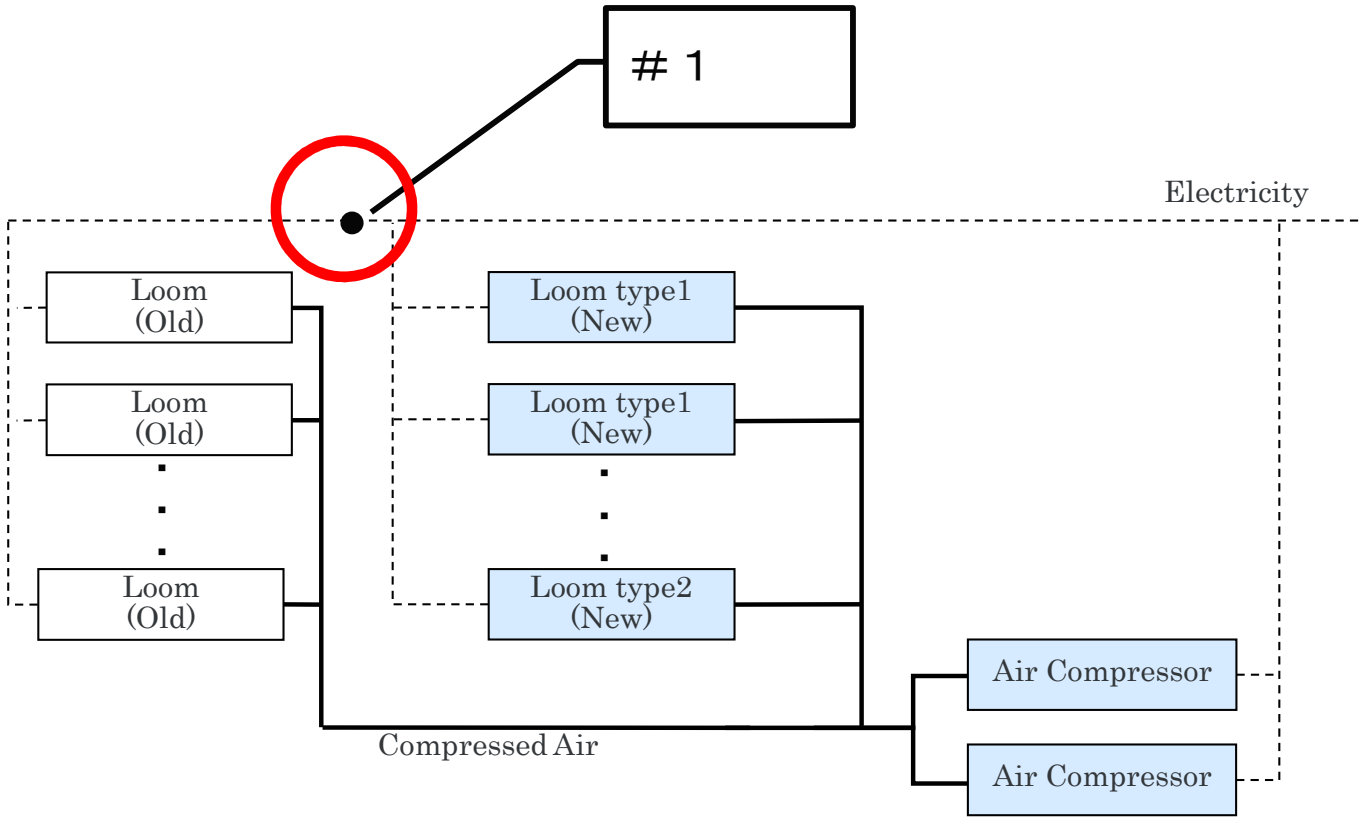
Air-Jet weft insertion system



Monitoring Parameter: TH_PM004

Monitoring parameter is only one: the amount of fabric woven.

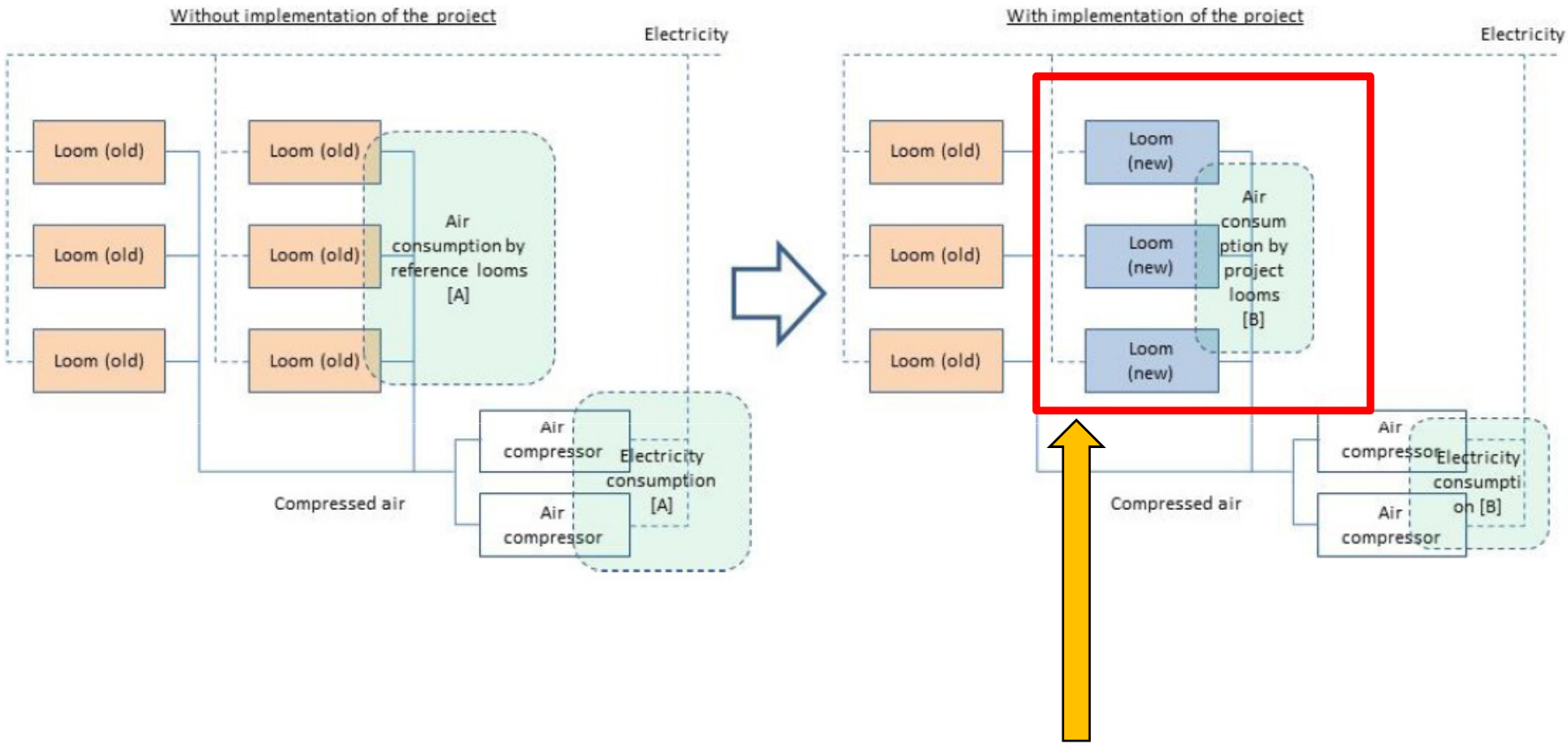
Example:



Emission reductions under TH_PM004

GHG emission reduction measures	Replacement of existing air jet looms at textile factory with the ones equipped with energy saving technology reduces compressed air consumption and leads to reducing electricity consumption by the compressor, and consequently GHG emission reductions.
Calculation of reference emissions	Reference emissions are calculated with amount of fabric produced in the project, the specific air consumption of the project air jet loom, reduction rate of air consumption, the specific electricity consumption of the air compressors and CO_2 emission factor for electricity consumed.
Calculation of project emissions	Project emissions are calculated with amount of fabric produced in the project, the specific air consumption of the project air jet loom, the specific electricity consumption of the air compressors and CO_2 emission factor for electricity consumed.

Emission reductions under TH_PM004



Project loom can reduce CO_2 emission compared with the reference loom by saving the load of air compressors through the air saving technology,