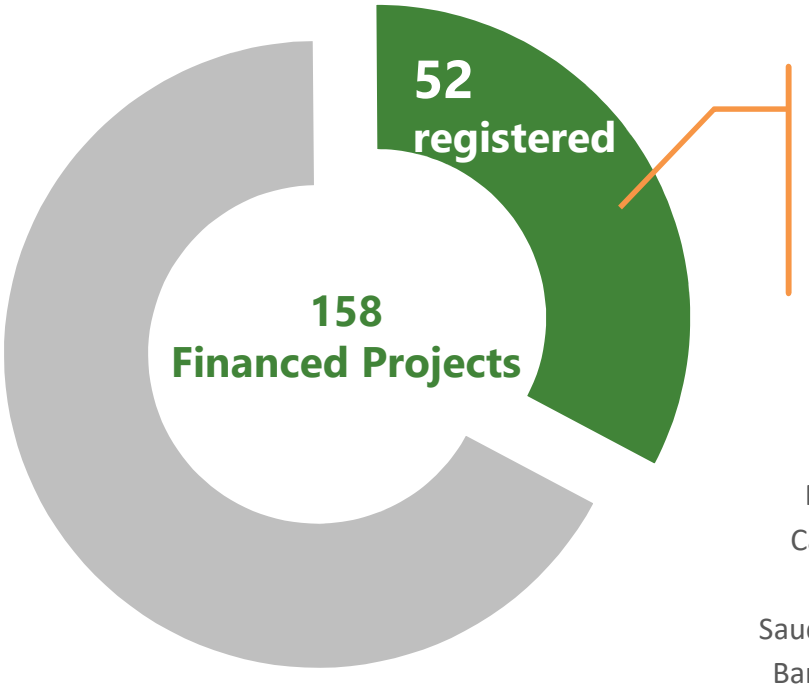
JCM's Contributions to the SDGs

Tomohiko Hattori, Researcher, Climate and Energy Area

Contributors:
Kentaro Takahashi, Program Manager, Climate and Energy Area
Temuulen Murun, Researcher, Climate and Energy Area
Akibi Tsukui, Researcher, Climate and Energy Area

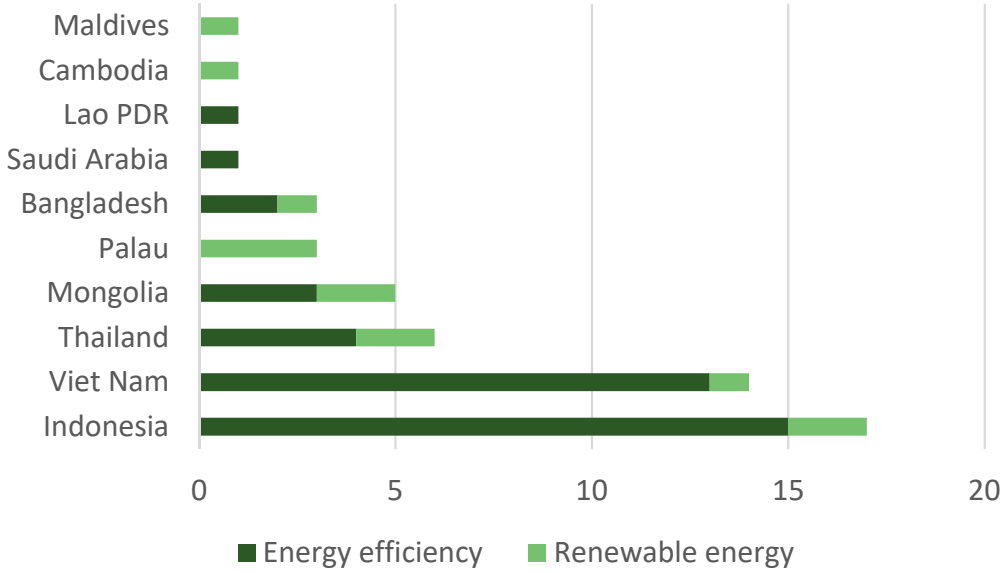
IGES
Institute for Global Environmental Strategies

Statistics of the JCM



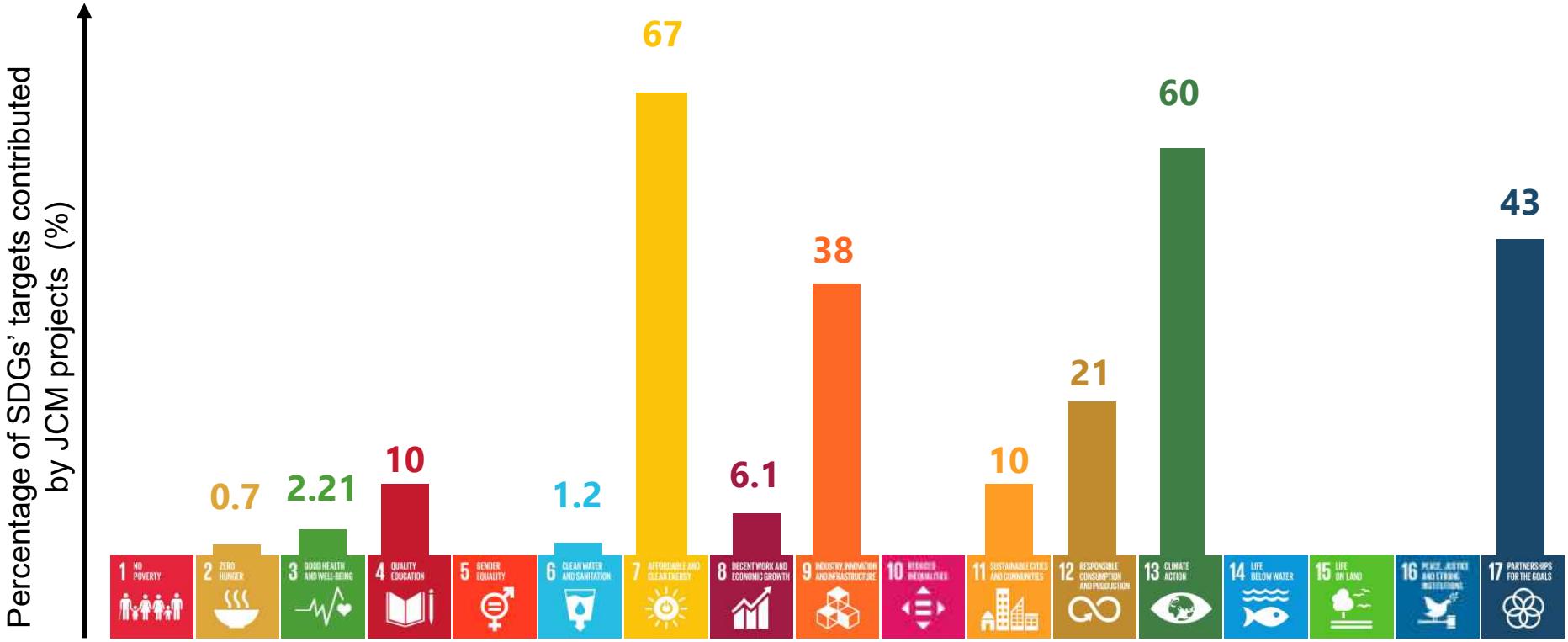
Energy efficiency-related projects: 39

Renewable energy projects: 13



Source: IGES JCM database (As of August 2019)

Key findings from JCM and SDGs analysis



Reference: IGES JCM database, JCM Project Design Document (PDD), UNDP SGDs

Key findings from JCM and SDGs analysis

- **Contribution to 169 SDG Targets by registered JCM projects**

Goals	Targets	Impacts through the JCM projects	Projects
17. Partnership for the Goals	17.3	Mobilising financial and technical support from different sources	52
	17.6	Acceleration of international cooperation and dissemination of low-carbon technology	52
	17.7		52
	17.9		52
	17.14		52
	17.15		52
	17.16	Enhancement of the global partnership and communication among multi-stakeholders	52
	17.17		52
13. Climate action	13.2	GHG emission reductions by low-carbon technology	52
	13.3		52
	13.A		52

Key findings from JCM and SDGs analysis

- **Contribution to 169 SDG Targets by registered JCM projects**

Goals	Targets	Impacts through the JCM projects	Projects
7. Affordable and Clean energy	7.2	Increased share of renewable energy and Introduction of energy efficiency facilities	52
	7.3		52
9. Industry, Innovation, and infrastructure	9.1	Development of sustainable and resilient infrastructure and energy efficient industry by low-carbon technology	52
	9.4		52
	9.A		52
12. Sustainable consumption and production	12.2	Use of natural resources for sustainable energy	52
	12.A		52
11. Sustainable Cities and Communities	11.6	Reduction of GHG emissions and environmental impacts	52
4. Quality Education	4.4	Capacity building by the Japanese project participants to local staffs	52

Case 1. Solar Power Plant in farm, Mongolia

Farmdo Co., Ltd. & Every day Farm LLC, Bridge LLC

Project overview:

- 8.3MW solar plant in Ulaanbaatar suburb farm
- Mitigation of air pollution and stabilization of power supply

Estimated CO2 emission reduction : 11,474 tCO2/year

Source: http://gec.jp/jcm/projects/15pro_mgl_02/

- Solar PV system reduces CO2 emission by displacement of grid electricity using fossil fuel (SDGs **7**, **13**).
- Promotion of more sustainable community and production (SDGs 11,12)
- Contribution to food security by combination of vegetable farm (SDG **2**)
- Farmdo provides capacity development in terms of operation and monitoring (SDG **4**).
- The financial and technical support has successfully involved multi-stakeholders in the projects (SDG **17**).

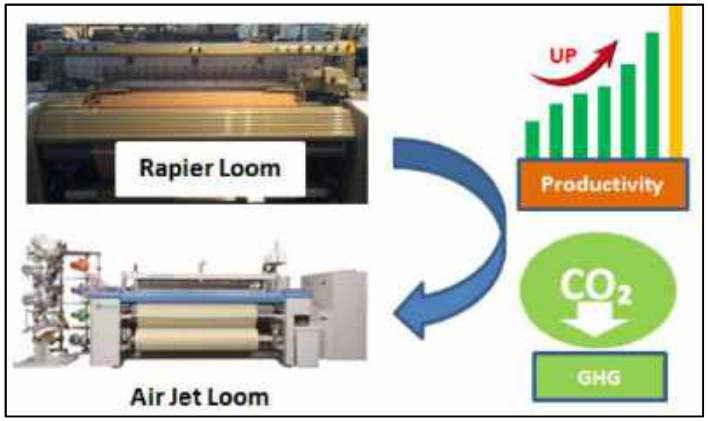
Case 2. High Efficiency Looms at Factory, Bangladesh

Toyota Tsusho Corporation & Hamid Fabrics Limited

Project overview:

- Installation of High efficiency air jet looms at a weaving factory
- Reduction in energy consumption and increase in productivity

Estimated CO2 emission reduction : 382 tCO2/year



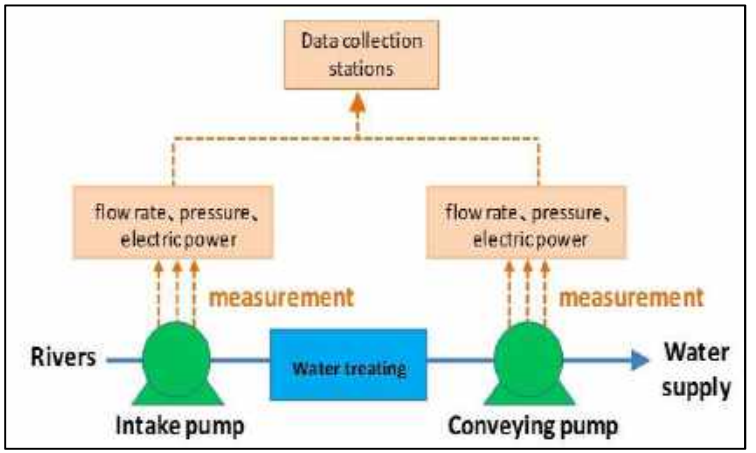
Source: http://gec.jp/jcm/projects/15pro_ban_01/

- Introduced air jet looms reduce CO2 emission by higher energy efficiency (SDG 7, 13)
- Technical upgrading in labour-intensive sector promotes sustainable industry and production (SDG 8, 9, 11, 12).
- Toyota Tsusho provides capacity development in terms of operation and monitoring (SDG 4).
- The financial and technical support has successfully involved multi-stakeholders in the projects (SDG 17).

Case 3: High Efficiency Water Pump, Vietnam

Project overview: Installation of high efficiency water pump in the treatment plant in Danan city, Vietnam. Energy saving achieved by the replacement of old pumps contributes to reducing CO2 emissions

Estimated CO2 emission reduction: 738 tCO2/year



http://gec.jp/jcm/projects/16pro_vie_01/

- Energy efficiency and reduction of CO2 emission (SDG **7**, **13**)
- Stable and sustainable water supply by building resilient infrastructure (SDG **6**, **9**, **11**, **12**)
- Providing capacity building regarding operation and monitoring in order to operate the project properly (SDG **4**)
- Gathering financial support from multi-stakeholders improves partnership between both countries that are involved in the project (SDG **17**)

Conclusion

- Total emission reductions from registered JCM projects: 177,979 tCO2 (as of 2019 Sep)
  - Renewable energy projects: 63,083 t-CO2
  - Energy-efficiency projects: 114,896 t-CO2 (including waste heat recovery projects)

- Goals with contribution by JCM projects :

- More variety of projects could be developed in order to contribute to more goals:

Thank you for your attention.

Tomohiko Hattori (Mr.)
Researcher
Climate and Energy Area
Institution for Global Environmental Strategies (IGES)
E-mail: hattori@iges.or.jp
Phone: +81-46-874-7604

IGES
Institute for Global Environmental Strategies