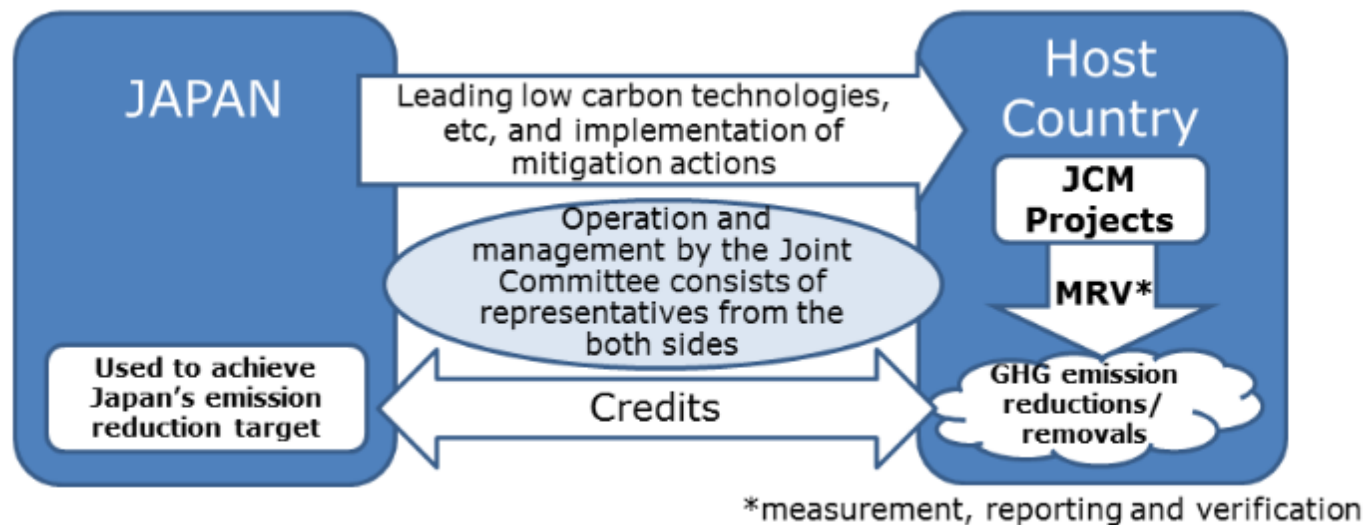


The JCM contribution to NDCs and SDGs in Mongolia

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Joint Crediting Mechanism (JCM)

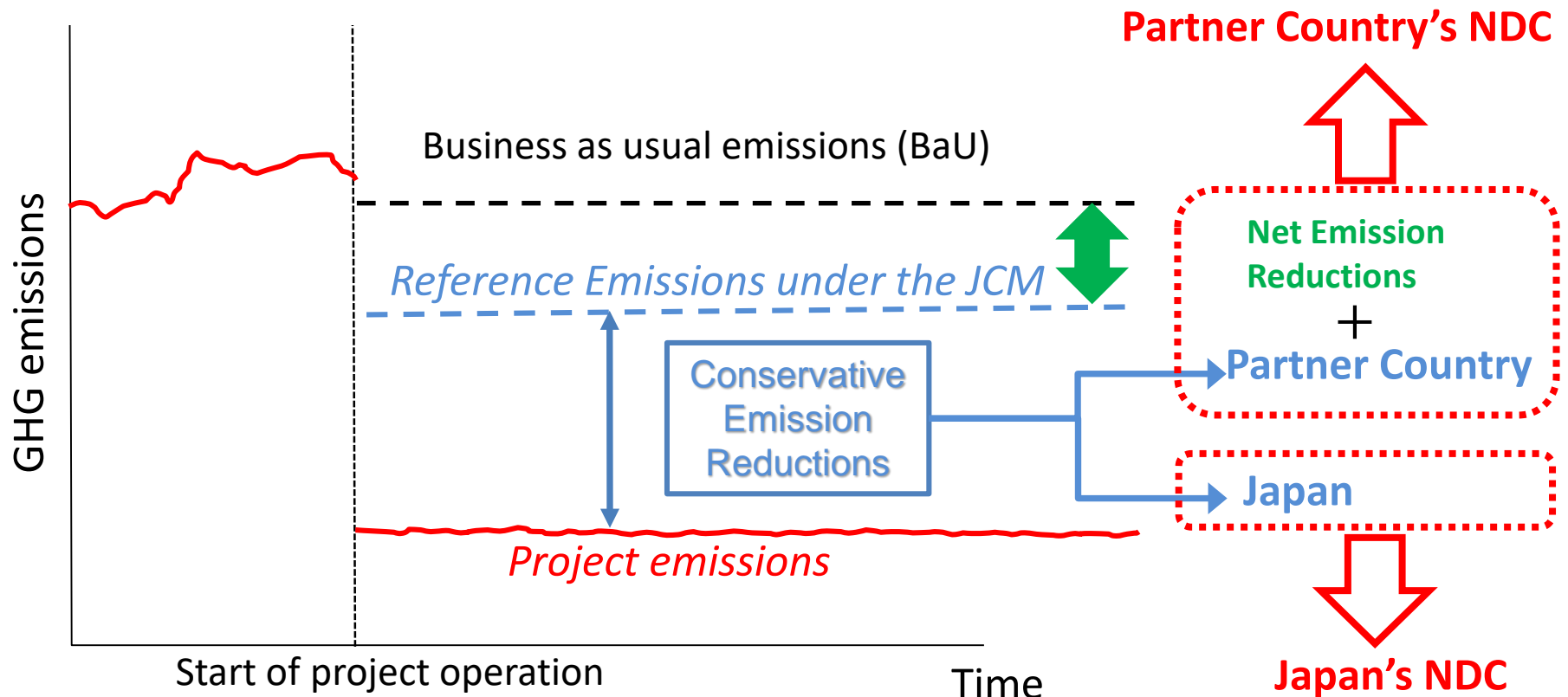
- To facilitate **diffusion of leading low carbon technologies, products, systems, services, and infrastructure** as well as implementation of mitigation actions, and **contributing to sustainable development of the Host Country**
- To appropriately **evaluate contributions to GHG emission reductions or removals from Japan** in a quantitative manner, through mitigation actions implemented in the Host Country and **use those emission reductions or removals to achieve emission reduction targets of the countries involved**



Reference: MOEJ, JCM programme

The JCM contribution to Mongolian NDC

Net emission reductions will automatically contribute to the achievement of National Determined Contribution (NDC) of the host country.



Mongolian NDC

Sector	Priority actions	GHG emission reduction as % in the year 2030
Energy Industries	<p>Increase renewable electricity capacity from 7.62% in 2014 to 20% by 2020 and to 30% by 2030 as a share of total electricity generation capacity</p> <p>Specific measures: Installation of 675 MW capacity large hydro power facilities Installation of 354 MW wind power facilities Installation of 145 MW solar PV power facilities</p> <p>Reduce electricity transmission losses from 13.7% in 2014 to 10.8% by 2020 and to 7.8% by 2030</p>	<p>The expected mitigation impact of these policies and measures will be a 14% reduction in total national GHG emissions excluding Land use, land use change and forestry by 2030, compared to the</p>

Mongolian NDC

	<p>Reduce building heat loss by 20% by 2020 and by 40% by 2030, compared to 2014 level</p> <p>Specific measures: Improving insulation for existing panel apartment buildings of 18184 households in the capital city, Ulaanbaatar</p>	projected emissions under a business as usual scenario.
	<p>Reduce internal energy use of Combined Heat and Power plants (improved plant efficiency) from 14.4% in 2014 to 11.2% by 2020 and 9.14% by 2030</p> <p>Specific measures: Improved efficiency of coal fired plants</p>	
	<p>Implement advanced technology in energy production such as super critical pressure coal combustion technology by 2030.</p>	

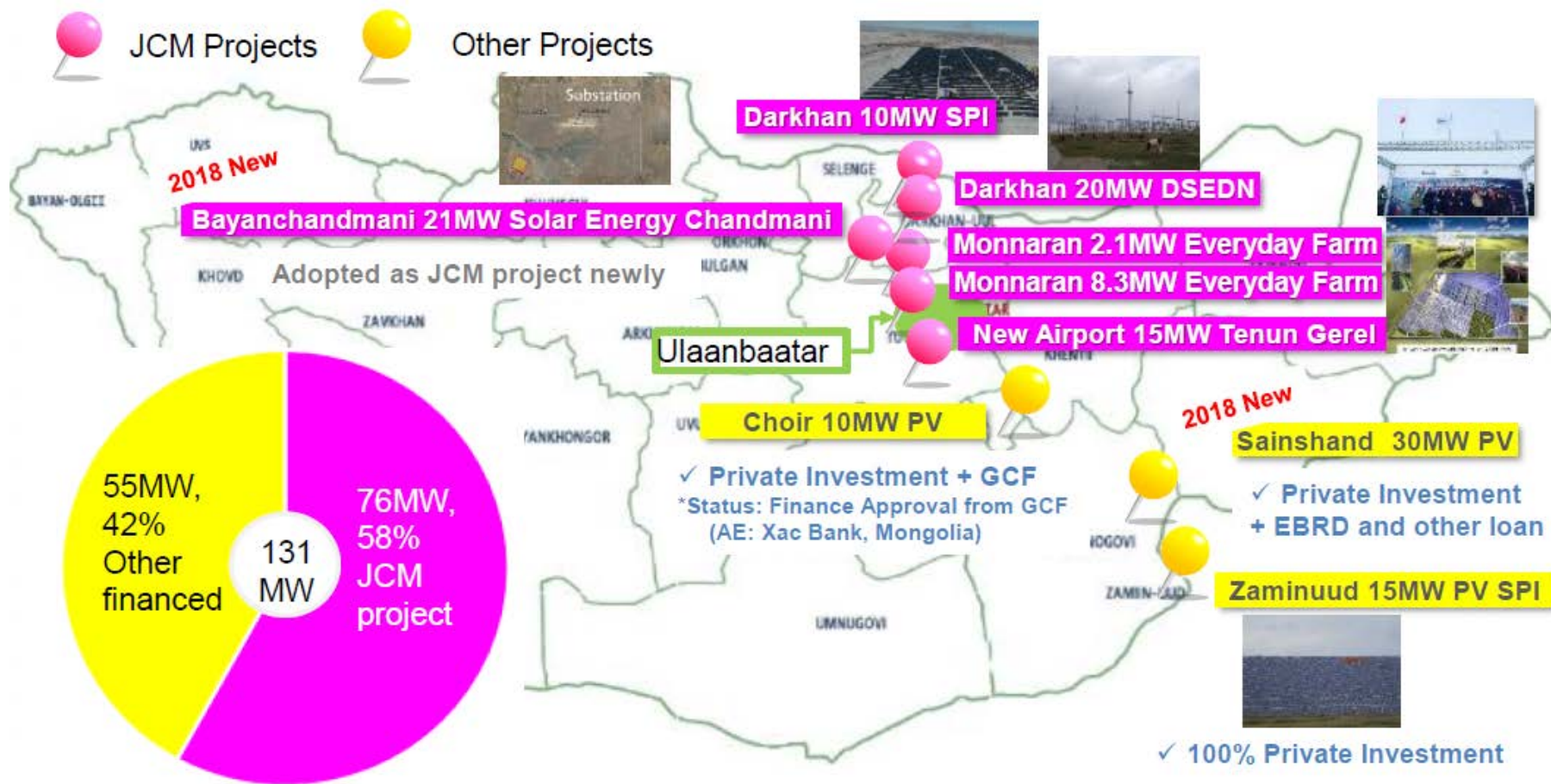
Mongolian NDC

Industrial sector	Reduce emissions in the cement industry through upgrading the processing technology from wet- to dry-processing and through the construction of a new cement plant with dry processing up to 2030.	
Agriculture	Maintain livestock population at appropriate levels according to the pasture carrying capacity.	
	Agriculture (development of a comprehensive plan for emission reductions in the livestock sub-sector for implementation between 2020 and 2030)	

Reference: UNFCCC website

https://www4.unfccc.int/sites/ndcstaging/PublishedDocuments/Mongolia%20First/150924_INDCs%20of%20Mongolia.pdf

Contributions to Mongolian NDC

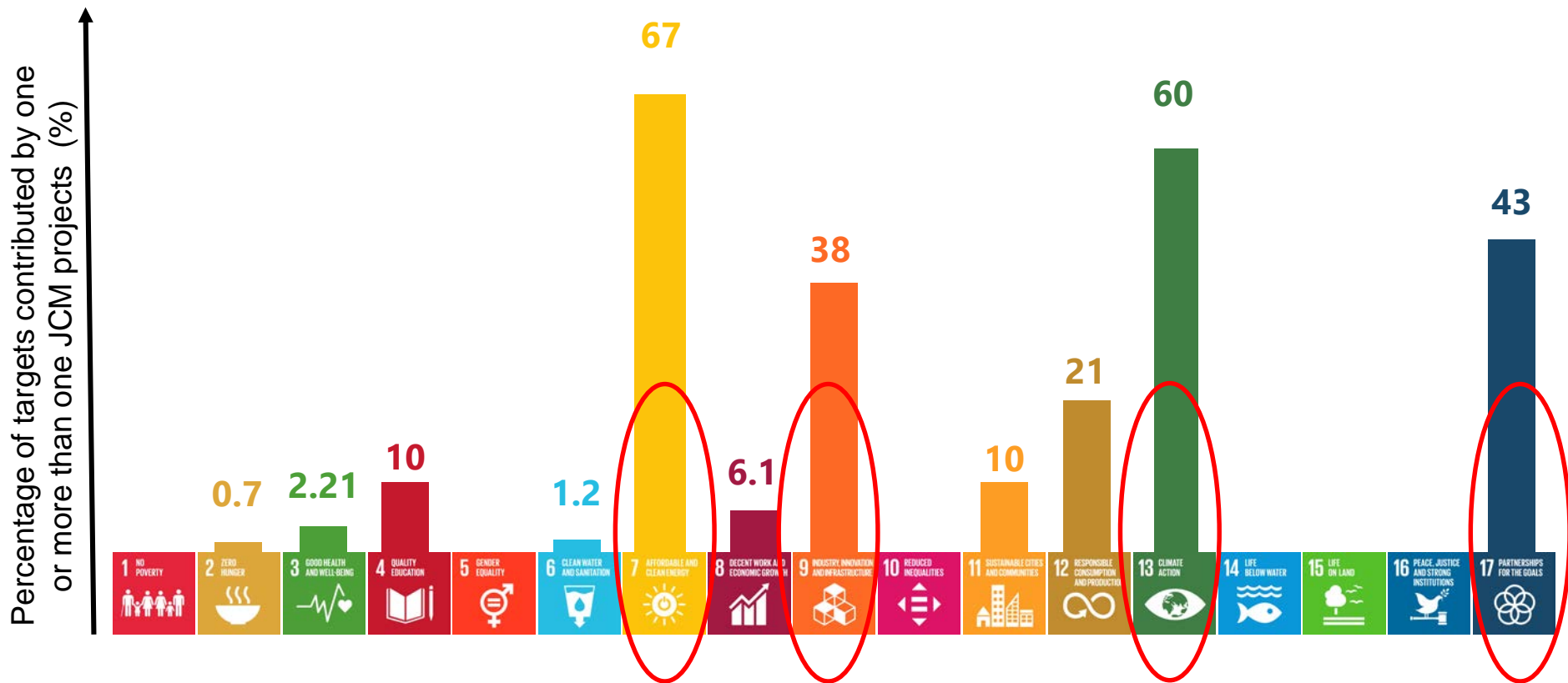


NDC: Installation of 145 MW solar PV power facilities

Reference: MOEJ, current update of the JCM programme

Key findings from JCM and SDGs analysis

- Contribution toward SDG targets is various depending on the JCM projects (Not all JCM projects have the same contributions)



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

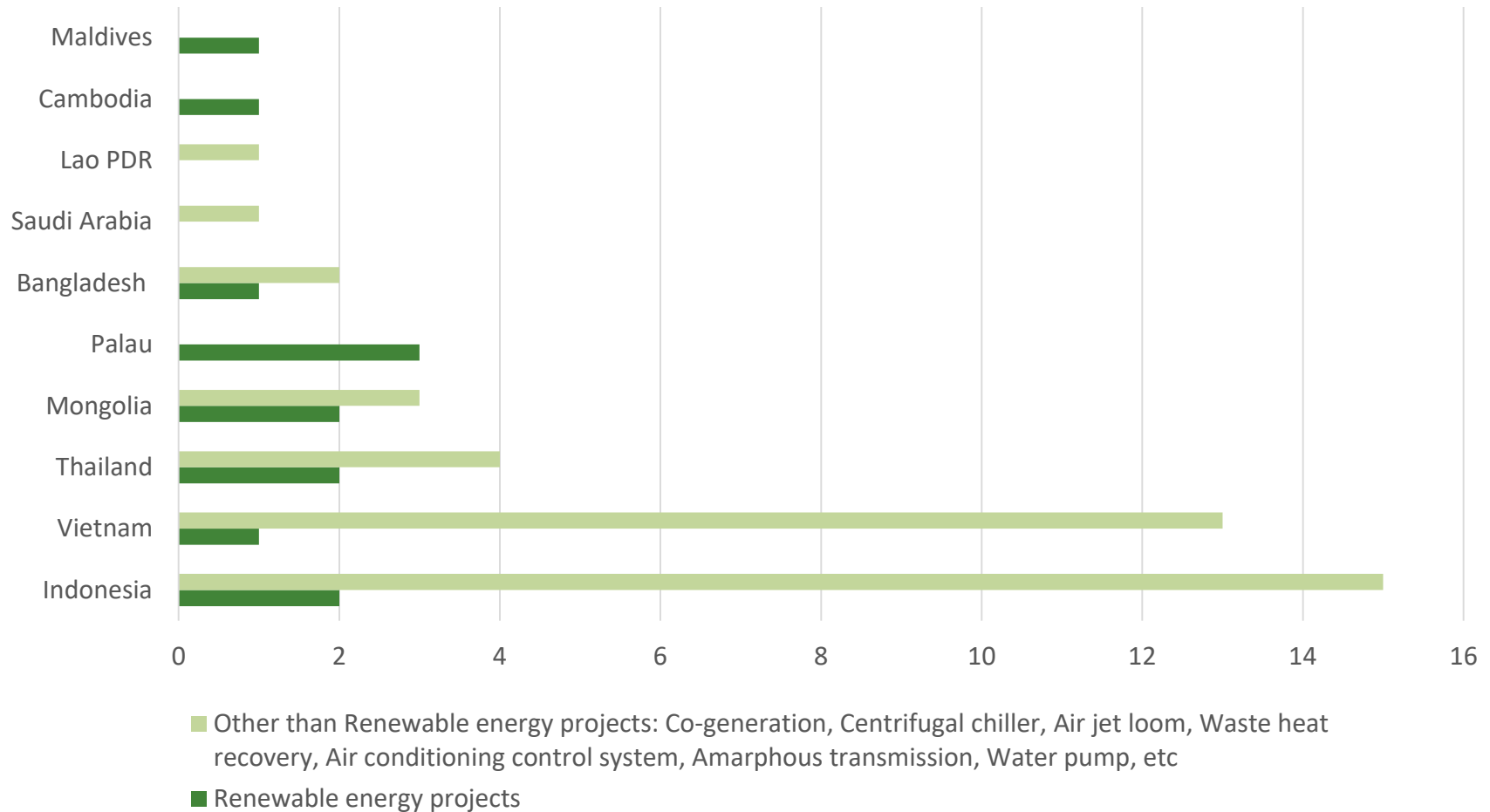
Key findings from JCM and SDGs analysis

- Total registered JCM projects contribution to 169 SDG Targets

Goals	Targets	Projects	Goals	Targets	Projects
Strengthen and revitalize the Global Partnership for SDGs	17.3	52	Sustainable energy for all	7.b	52
	17.6	52	Resilient infrastructure, inclusive and sustainable industrialization	9.1	52
	17.7	52		9.4	52
	17.9	52		9.a	52
	17.14	52	Sustainable consumption and production	12.2	52
	17.15	52		12.a	52
	17.16	52	Resilient human settlement	11.6	52
	17.17	52	Education, lifelong learning	4.4	52
Combat climate change	13.2	52	Sustainable energy for all	7.3	39
	13.3	52	Sustainable economic growth	8.2	32
	13.a	52	Sustainable energy for all	7.1	17
Affordable	7.a	52	Sustainable consumption and production	12.4	13

Insights for JCM projects

- Number of registered JCM projects in Country-based



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

form

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Case1. Renewable energy project in Mongolia

Project overview: Installation of a 10MW Solar power generation plant with the 110kV substation in Darkhan City, Mongolia. It supplies the generated electricity through the power transmission network. The power plant employs crystalline solar modules of maximum output of 310W per panel and module conversion efficiency of 15.9%.

GHG Emission reduction: 11,221 t-CO₂/year



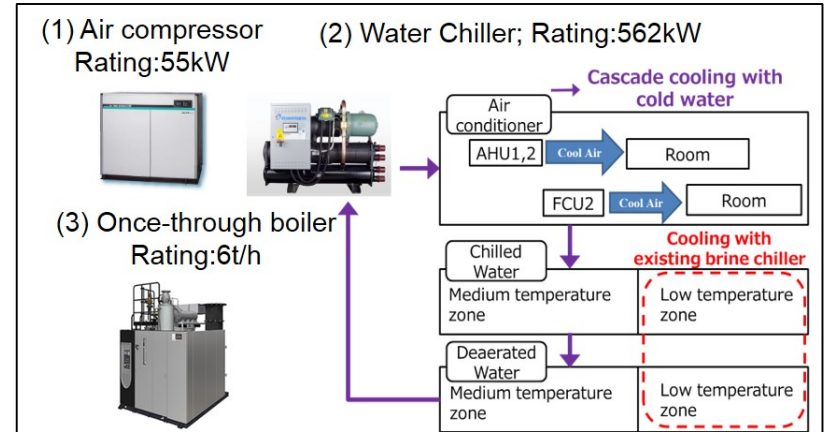
Reference: GEC website
http://gec.jp/jcm/projects/15pro_mgl_01/

- Introducing solar energy in the power system reduces GHG emission; and increasing clean, affordable, and sustainable energy in the country
- Building resilient and sustainable infrastructure in Mongolia; and strengthening developing country's technological capacity to move towards more sustainable production
- Increasing solar power generated electricity reduces coal consumption in a power plant; reducing air pollution
- Mobilizing financial and technical support from different sources and encourages public and private participation

Case2. Energy efficiency project in Vietnam

Project overview: Introduce highly-efficient and energy-saving equipment in Long An brewery, Vietnam. This project reduces electricity and LPG consumption by introducing air compressor, cold water chiller and once-through boiler (LPG).

GHG Emission reduction: 111 tCO₂/year



Reference: GEC website
http://gec.jp/jcm/projects/17pro_vie_03/

- Improving energy efficiency and reducing power consumption which leads to GHG emission reduction.
- Installing high efficient energy-saving equipment in a developing country, promoting sustainable industrialization, technical upgrading in labor intense sector, and improve sustainable production and consumption.
- Mobilizing financial and technical support from different sources and encourages public and private participation

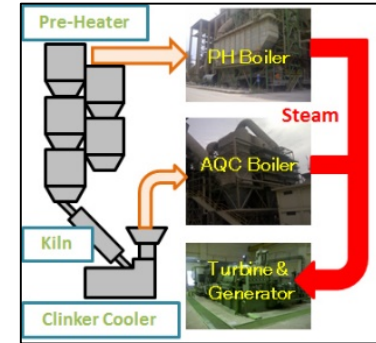
More opportunities under the JCM



Amorphous transformers in power distribution



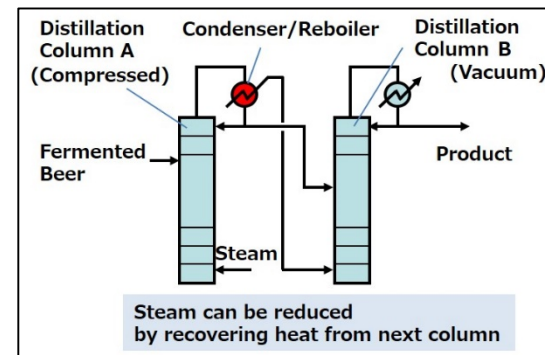
High efficient Heat-Only-Boiler



Waste heat recovery from cement factory



High efficient water pump in water treatment



High efficient distillation system in tequila factory

Reference: GEC website <http://gec.jp/jcm/projects/>

More opportunities under the JCM

- Expected direct and indirect SDGs contributions:



- Diversify future JCM projects in order to contribute various SDGs and targets:



- More analysis and linkages of all JCM projects with SDGs
Example: Biomass projects in Philippines and Indonesia,
Waste energy projects in Myanmar etc.

Thank you for your attention

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