

## Introduction of 1MW Rooftop Solar Power Systems to University

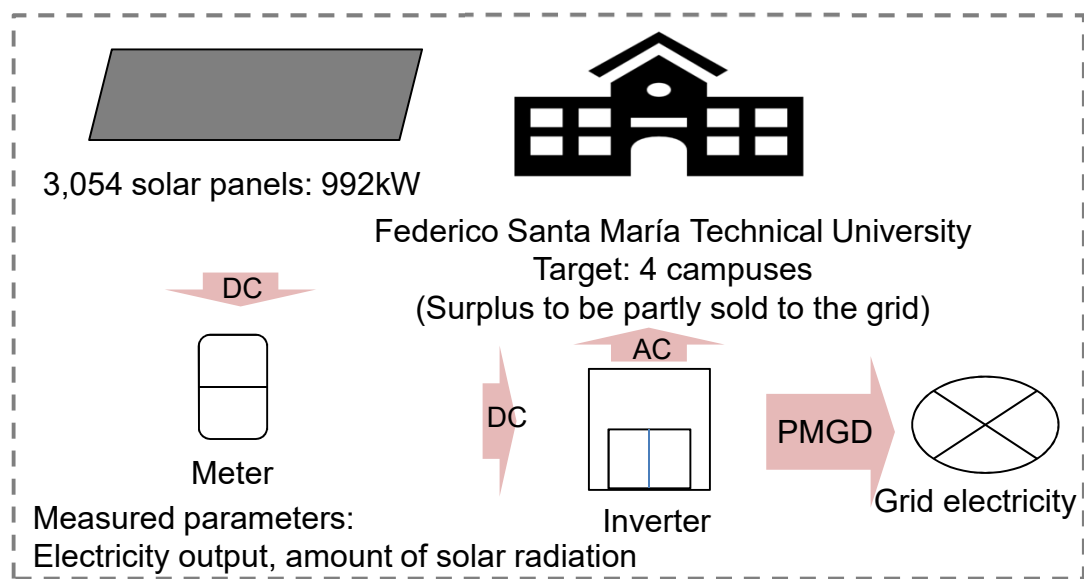
PP (Japan): Waseda Environmental Institute

PP (Chile): MGM Innova Capital Chile SpA

## Outline of GHG Mitigation Activity

This project aims to reduce CO2 emissions by introducing a 992kW rooftop solar system at 4 campuses of the Chilean university Universidad Técnica Federico Santa María (San Joaquín, Valparaíso, Viña del Mar, and Vitacura). Solar panels produced by Panasonic Corporation will be used. These feature the industry's top class technology, with each panel having an output of 325W and a module efficiency of 19.7%.

Once the panels are installed on its roofs, the university will consume in-house the electricity generated by the panels. The Chilean partner, MGM Innova Capital, will sell the surplus power to the grid under the PMGD framework (from its acronym in Spanish, meaning Small Means of Distributed Generation).



## Expected GHG Emission Reductions

**517tCO2/year**

$$\text{Emission reduction } ER_p = RE_p - PE_p \quad *PE_p = 0 \\ = RE_p$$

$$RE_p = \text{Reference emissions} \\ = [\text{Estimated annual energy generation}] \times \\ [\text{Emission factor of grid electricity}] \\ = 1,647.593 \text{ MWh/year} \times 0.314 \text{ tCO}_2/\text{MWh} \\ = 517 \text{ tCO}_2/\text{year}$$

$$PE_p = \text{Project emissions} = 0$$

## Sites of JCM Model Project

