



NEDO Continues joint efforts for Smart Grid with India

Akihiko Miyamoto
President

New Energy and Industrial Technology Development Organization (NEDO)
August 17, 2016

NEDO's projects in India



Ongoing Projects

- ① Solar Power and Micro-Grid System (2014 - 2019)
- ② Management System in Telecom Towers (2012 - 2016)
- ③ Smart Grid Project (2014 - 2018)
- ④ High-Performance Industrial Furnace (2014 - 2018)
- ⑤ Energy Center for Steel Plant (2014 - 2019)
- ⑥ ICT Based Green Hospital (2014 - 2019)

Completed Projects

- ⑦ Micro Hydropower Turbine (FS 2015)
- ⑧ Feasibility Study for USC Coal-Fired Power Plant (FS 2015 - 2016)
- ⑨ Feasibility Study for High-efficiency Coal Utilization Systems (FS 2015 - 2016)
- ⑩ Sinter Cooler Waste Heat Recovery System (2009 - 2014)
- ⑪ Highly Efficient Coal Preparation System (2008 - 2014)
- ⑫ Coke Dry Quenching System (2006 - 2011)
- ⑬ Waste Heat Recovery System of Steel Plant (2001 - 2004)
- ⑭ Waste Heat Recovery System of Cement Plant (2001 - 2004)
- ⑮ Dual-Fuel Generation System (2008 - 2011)
- ⑯ Capacity Building Project (2009 - 2011)

Smart Grid challenges in India:

- [Supply] Rapid increase in Demand / Grid stabilization / AT&C loss / GHG emission
- [Demand] Energy conservation / Energy access

Solutions

NEDO Projects

Supply

Smart Grid
(Smart Meter, EMS)



- Solar Power and Micro-Grid System PJ
- Smart Grid PJ

Supply
/Demand

Battery
(Grid stabilization)



PJ Under discussion
with MNRE

Supply
/Demand

EMS
(Optimization of
Supply & Demand)

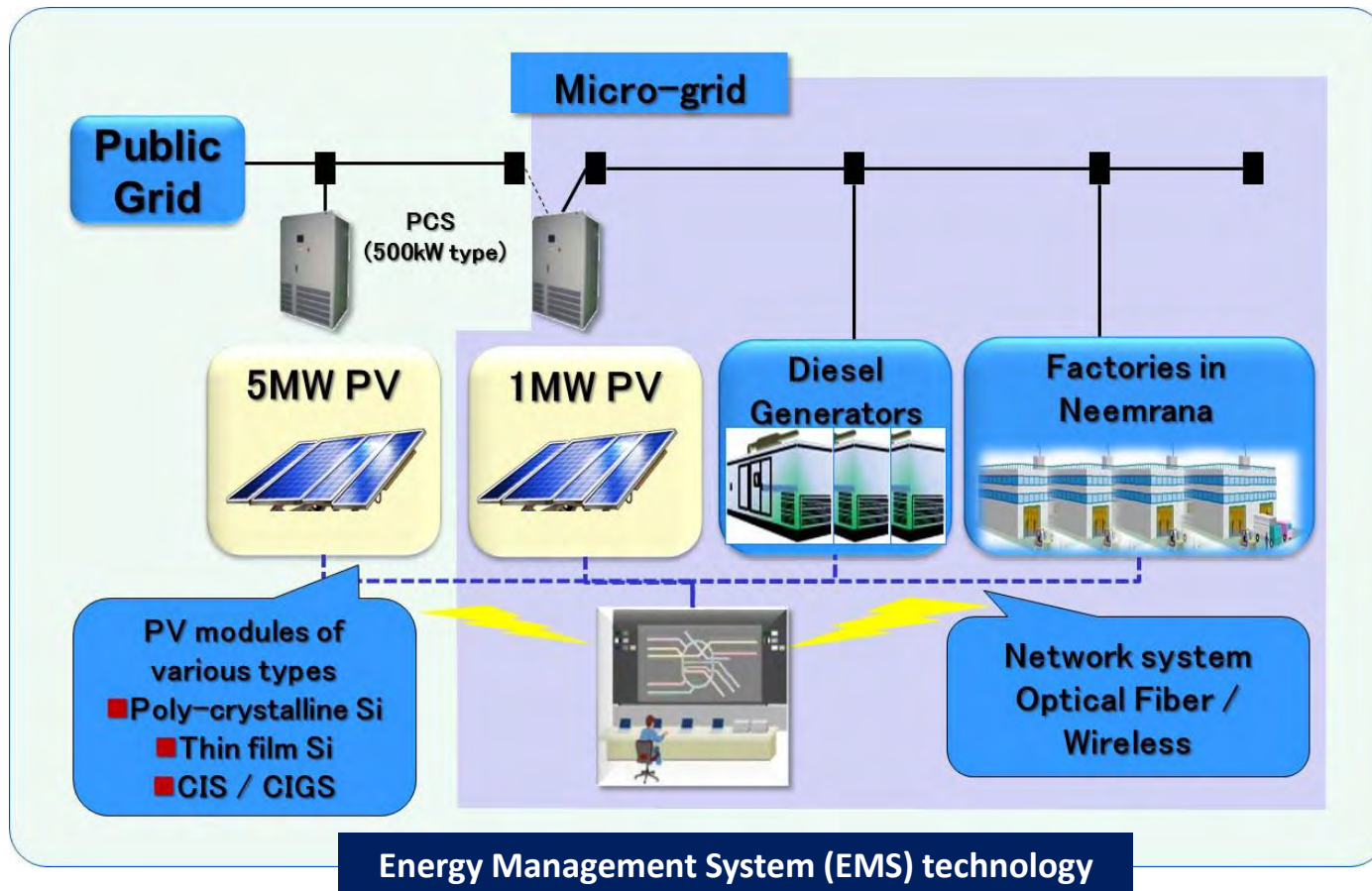


- ICT Based Green Hospital PJ
- Energy Center for Steel Plant PJ

Solar Power and Micro-Grid System

NEDO Project in Neemrana Industrial Zone consists of two components

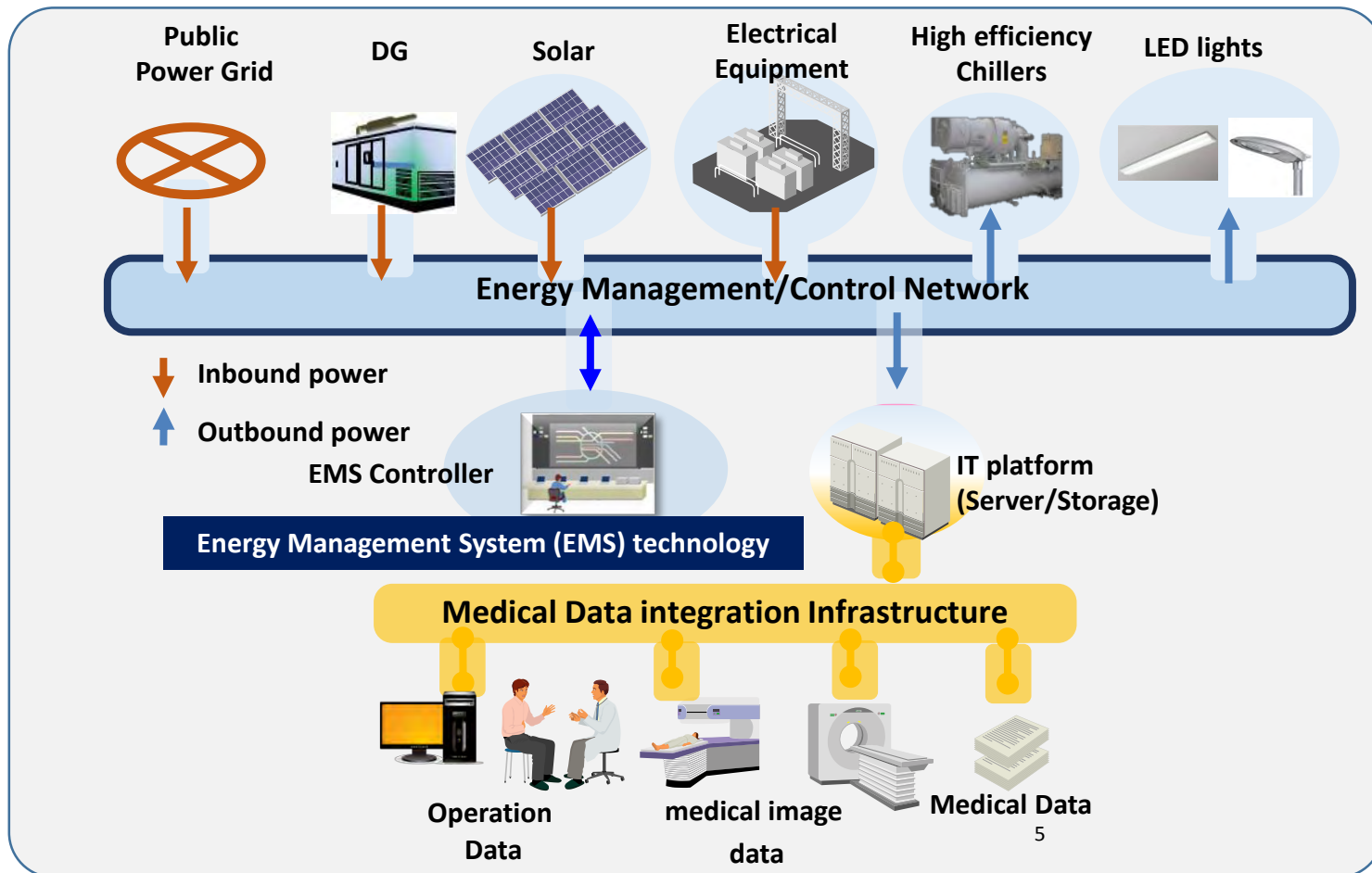
- 5MW PV power generation system project
- Micro grid consisting of 1MW PV power generation system integration with industrial DG sets.



ICT Based Green Hospital

The objectives of this demonstration project is to

- Enable the tracking and visualization of a hospital's overall energy use by putting an IT system environment in place and upgrading to highly efficient systems and equipment such as PV and LED.



Continue joint efforts for Smart Grid with India



NEDO continues “Working together” for Smart Grid with India based on Smart Community Concept

- ✓ Stabilization of electricity supply with demand side management
- ✓ Promotion of energy saving
- ✓ Creation of disaster resistant communities

Smart-grid and Battery technologies for Grid stabilization



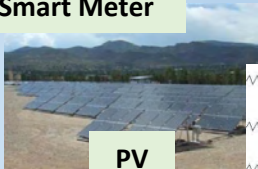
Smart Meter



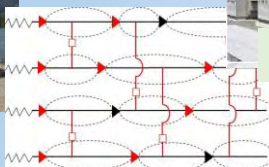
SCADA



Lithium-ion battery



PV



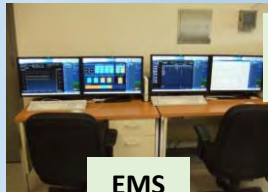
Multi-divided
multi-connected network



NAS battery



Redox Flow



EMS



Collaboration with India and Japan

National Smart Grid Mission, MOP





www.nedo.go.jp/english/

Thank you!