

Research Project supported by Ministry of Economy, Trade and Industry, Japan (METI)

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# Feasibility Study on the installation of Solar Power generation, Storage Batteries and Boiler fuel conversion for the public hospitals in Republic of Uzbekistan

November 2023  
Hanwa Co., Ltd.

# 1. Company profile : Hanwa Co., Ltd.

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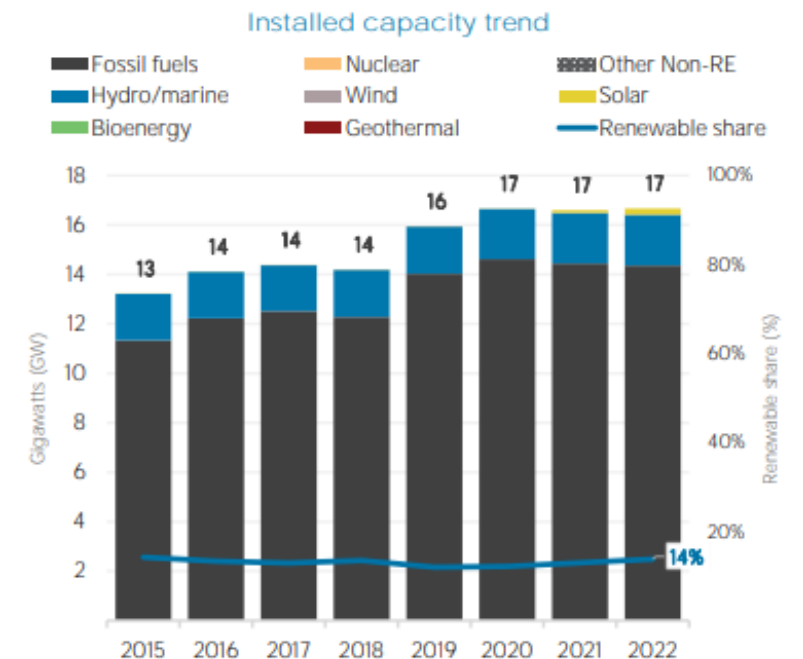
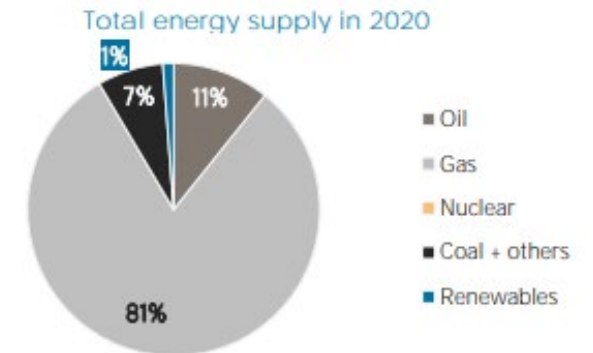
- Established : 1946
- Business type : Trading company
- Consolidated base (Mar., 2023)(million of US\$)(US\$1=¥150)
  - Net sales : 17,788
  - Net income : 352
  - Net assets : 2,059
- Trading items :
  - Steel (46%), Metal(15%), Energy/Chemical(13%),  
Foods(5%), others(Lumber, machinery)(5%),  
Overseas(16%)
- Employee : 5,442
- Listed company on the Tokyo Stock Exchange Prime Market

## 2. Background of the Proposed Project

1. Uzbekistan is facing **shortage of electricity supply** due to its growing population and economy. Unstable power supply causes **power outages in hospitals**, which in turn affects patients.
2. Uzbekistan's energy supply is **highly dependent on fossil fuels**. In line with the country's climate change policy, a **shift to renewable energy** is an important issue for the country.
3. Several Uzbek nationals work for HANWA and would like to contribute to solve above issues.



HANWA is aiming to provide stable electricity to hospitals in Uzbekistan utilizing clean energy.



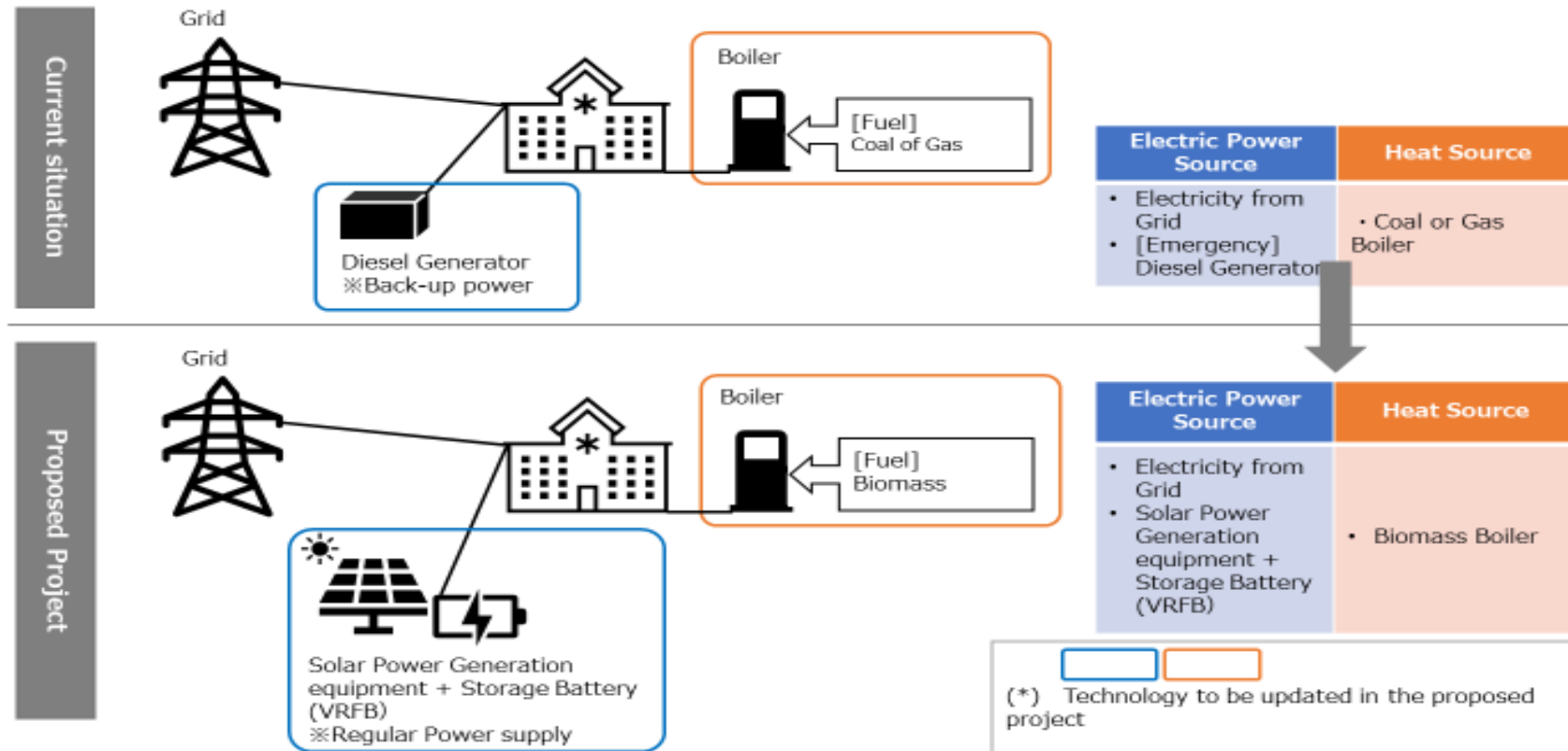
Source: IRENA

# 3. Proposed Project

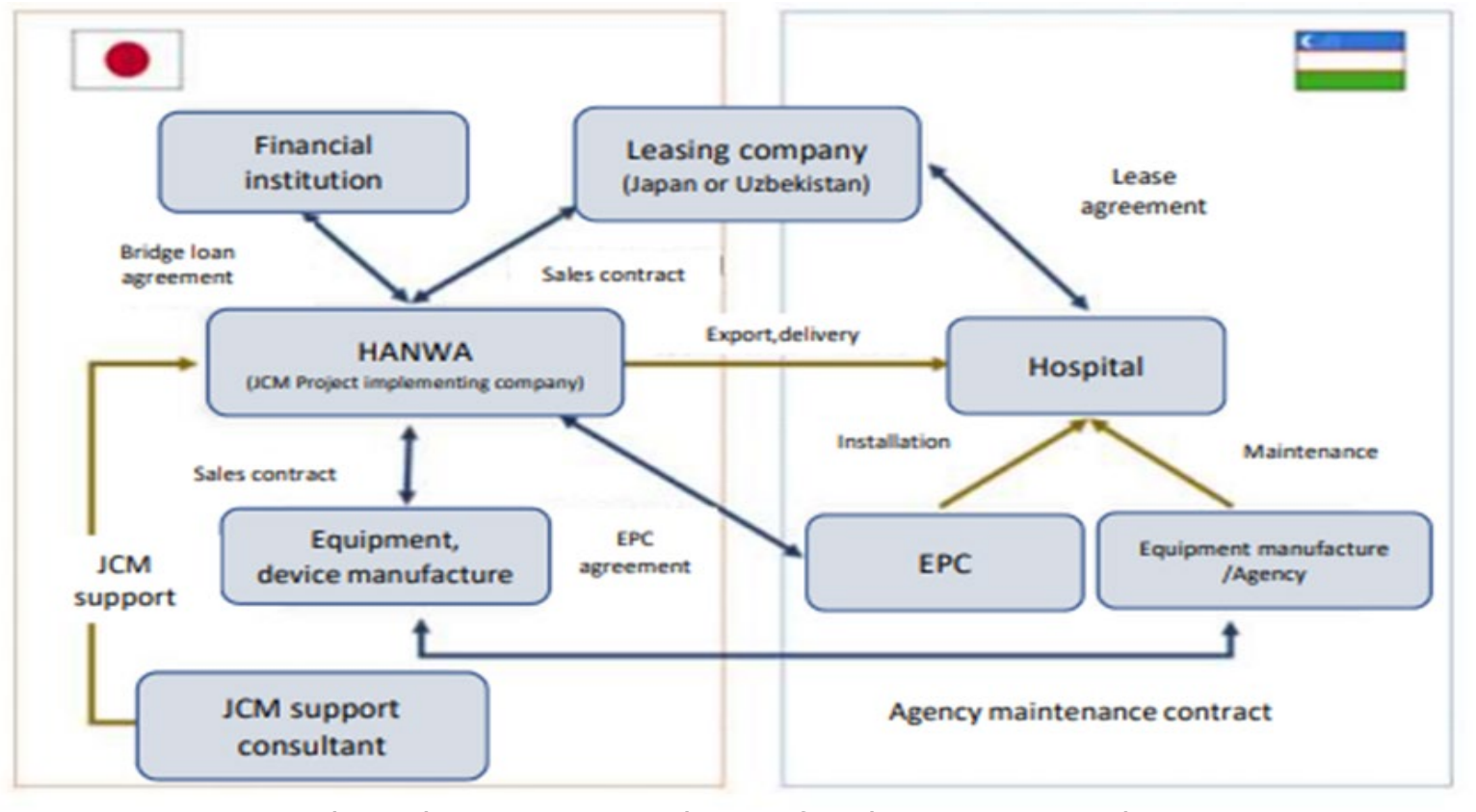
## ~Clean and Stable Energy Supply to the Hospitals~



1. Replacement from **Diesel Generator to Solar Power Generation + Storage Battery** as back-up power source in local public hospitals in Uzbekistan which are using grid electric power with unstable supply.
2. For heat supply, possibility of conversion from **Coal/Gas Boiler to Biomass Boiler (or Heat pump system)** is considered.



# 4. Proposed Project Implementation Scheme



Expected Implementation Scheme for the Commercialization

# 5. Study area in Uzbekistan

- HANWA is currently targeting local public hospitals in Yakkabog District.



# 6. Study Item and Schedule of Feasibility Study



Study item	2023					2024	
	Aug	Sep	Oct	Nov	Dec	Jan	Feb
(1) Trend analysis of related policy/system	██						
(2) Study of commercialization and making JCM project							
A) Research of system/market	████████████████████████████████						
B) Technical investigation	██						
C) Study of commercialization			██				
D) Study of making JCM project				██			
(3) Study of Agenda and countermeasure				████████████████████████████████			
(4) Calculation of GHG emission reduction and study of emission reduction contribution				████████████████████████████████			
(5) Adjustment with Uzbekistan government official for commercialization		██					
Report						████████████████	
Investigation in Uzbekistan		▲		▲			