New Enterprise Model of Renewable Energy

2017.7

Korea Hydro & Nuclear Power Co.



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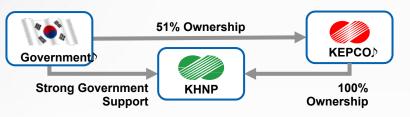
KHNP Overview

KHNP at a Glance



KHNP plays a key role in the national electricity supply as the sole nuclear power generator in Korea

Ownership Structure



- Established on April 2, 2001, as a result of a corporate spin-off from KEPCO
- A public enterprise indirectly owned by the Korean government vi a KEPCO

Solid Credit Ratings

- Moody's (Aa2/Stable)
- S&P (AA/Stable)
- Fitch (AA-/Stable)

Quick Facts (as of March 31, 2017)

Establishment. ⊳	Spun-off from KEPCO in 2001
Ownership.)	100% owned by KEPCO (which is majority owned by the Korean government)
Employees.	11,303
Assets.)	KRW52,688 bn(USD 52 bn)
Sales.	KRW2,688 bn(USD 2.7 bn)
Operating Profit	KRW740 bn (Margin: 27.5%), (USD 740 Mil)
Generation Capaci ty.⊳	28,439MW with 82 units (Nuclear: 23,116MW with 25 units)

Global Peer Comparison - Moody's



Global Peer Comparison - S&P



Generation Facilities



Net Capacity

83Units **28,538MW**

Nuclear Power

Hanbit ••••• 5,900₩

Wolsong ••••• 4,779MW

Hanul ••••• 5,900₩ (△2,800)

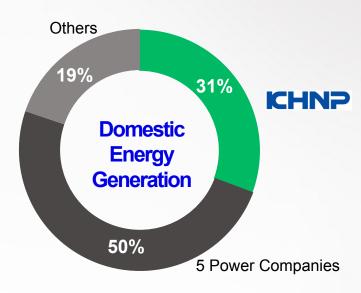
SUM ● ● ● ● • 25Units 23,116MW

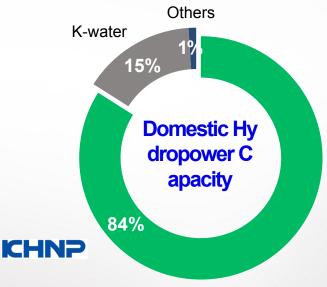
Hydro Power(Including PSP)

SUM ●●●● • • • 51Units 5,306MW

Renewable

SUM • • • • • 7Units 116MW





2

Model Proposal

Background





Agreement

Business policy

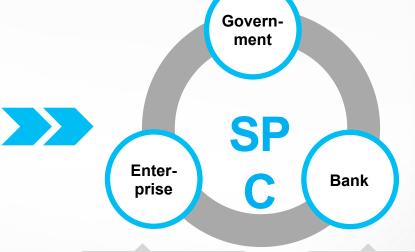
- **▶** Government Agency
- **▶** Public Enterprise

Project Development

Financing

Construction Equipment

O & M



- **▶** Energy Enterprise
- ► Manufacturer

Experience

- ► MDB, ECA
- ► Commecial Bank

Finance, Advice

Proposal



PPP Mode Specific Project

Current

- **►** Specific Project
- **▶** Balancing governance inside entity
- Less flexibility

New Mode Multiple Projects

Proposal

- ► Open to additional projects
- ► Balancing business inside industry
- ► Diversified approach for renewable energy

Advantages



- Business portfolio
- Resolve political interests
- Increased investment due to more transparency
- Hands on experience of entity
- Decisions made by SPC for overall business decisions
- Spread of technology, Know-how
- Higher Credit, Easier Funding
- Reasonable returns to stakeholders
- Various funding schemes

1 Diversification

2 Efficiency

Credit Enhan cement

Disadvantages



- Passive approach
- Policy oriented
- Less practical
- Motivation of participants
- Fixed compensation, Stable job
- Conflicts in integration process
- Fear to sunk cost

1 Bureaucracy

Agency Problem

Trial and Error

Greater Synergy if GOALS are similar



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