



# Korea Power Engineering Company, Inc.



February 2010

# I. Company Overview

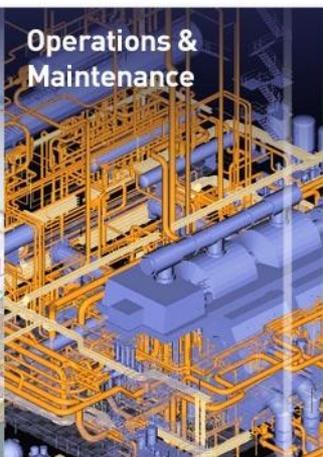
Nuclear Power



Thermal Power



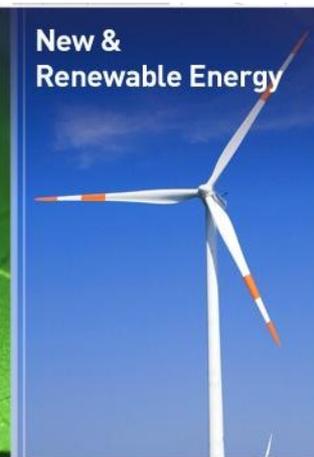
Operations & Maintenance



Environment



New & Renewable Energy



Construction



# KOPEC – Korea’s Leader in Power Plant Engineering Company

“To become a world-class power plant engineering specialist”

## Market dominance now and beyond

- Korea’s leading provider of design and engineering for nuclear, thermal and hydro-electric plants
- 35 years of experience with 20 nuclear power plants under its belt
- Current 100% market share in nuclear power plant design
- State-of-the-art technology for thermal and nuclear power plants
- Strong position to capture the growing market in Korea and overseas

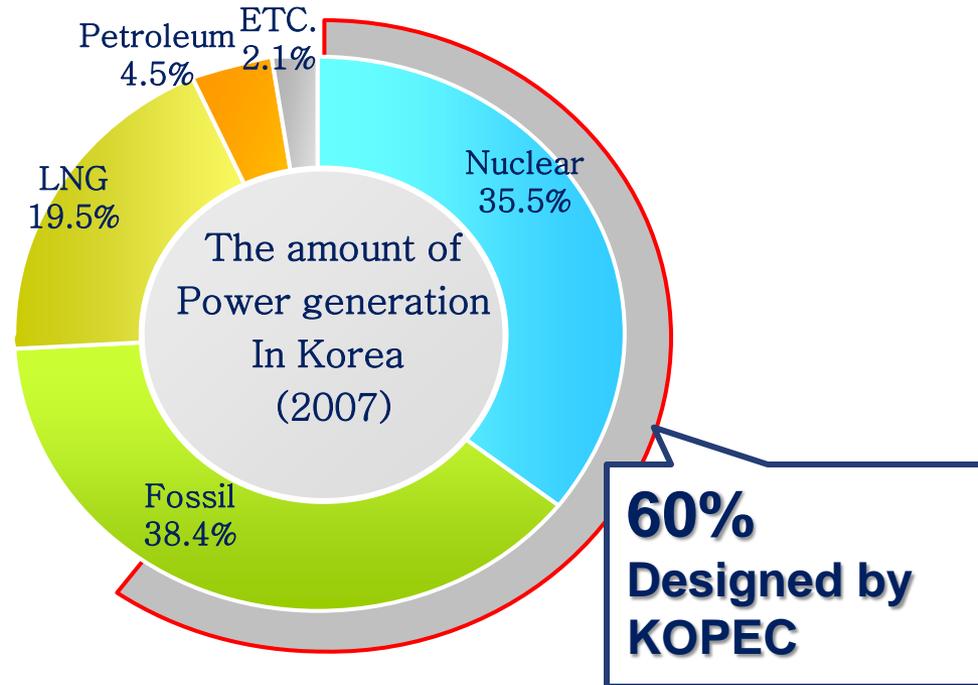
## Business Overview

Nuclear Power Plant Engineering	<ul style="list-style-type: none"><li>▪ Architectural Engineering of Nuclear Power Plant</li><li>▪ Nuclear Steam Supply System (“NSSS”)</li></ul>
Thermal Power Plant Engineering	<ul style="list-style-type: none"><li>▪ Standard Coal Fired Plant</li><li>▪ Large scale Coal Fired Power Plant</li><li>▪ Combined Cycle Power Plant</li><li>▪ CFBC</li></ul>
Others	<ul style="list-style-type: none"><li>▪ Project Management(PM)</li><li>▪ Construction Management(CM)</li></ul>

# Business overview

## Design & Engineering

60% of electric power generation in Korea produced in the power plants designed by KOPEC



# Business overview

## O&M (Operations & Maintenance)

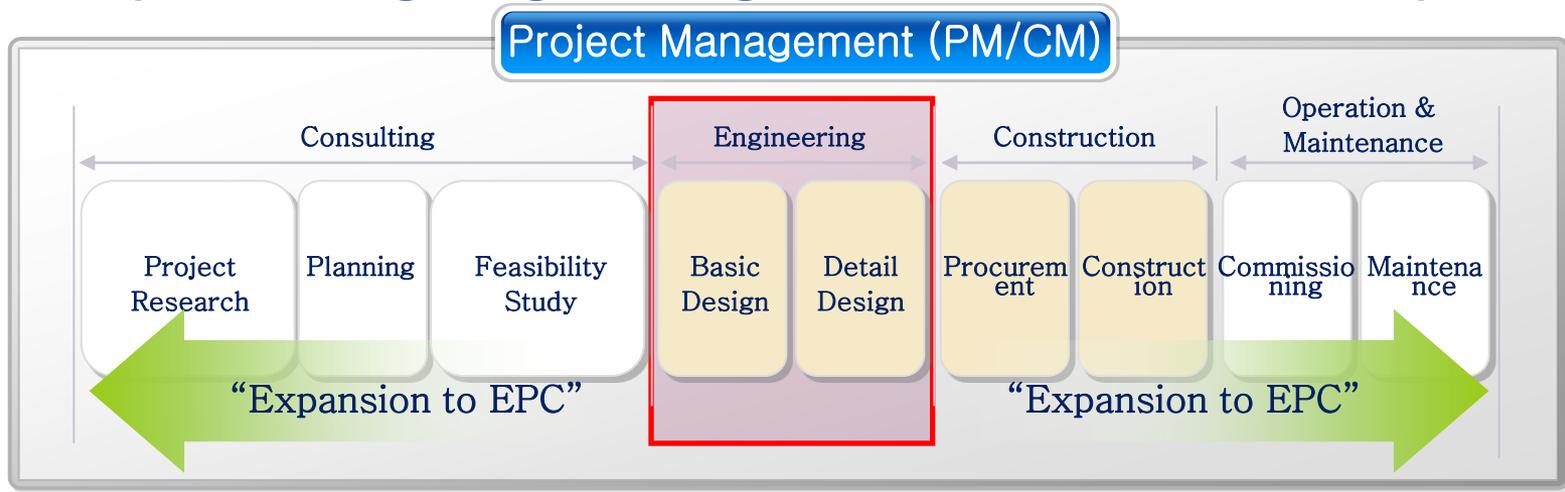
Contribution to the improvement of the existing plants' operability, efficiency, and safety



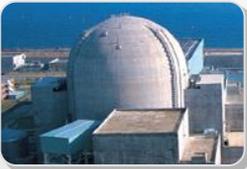
# Business overview

## PM/CM

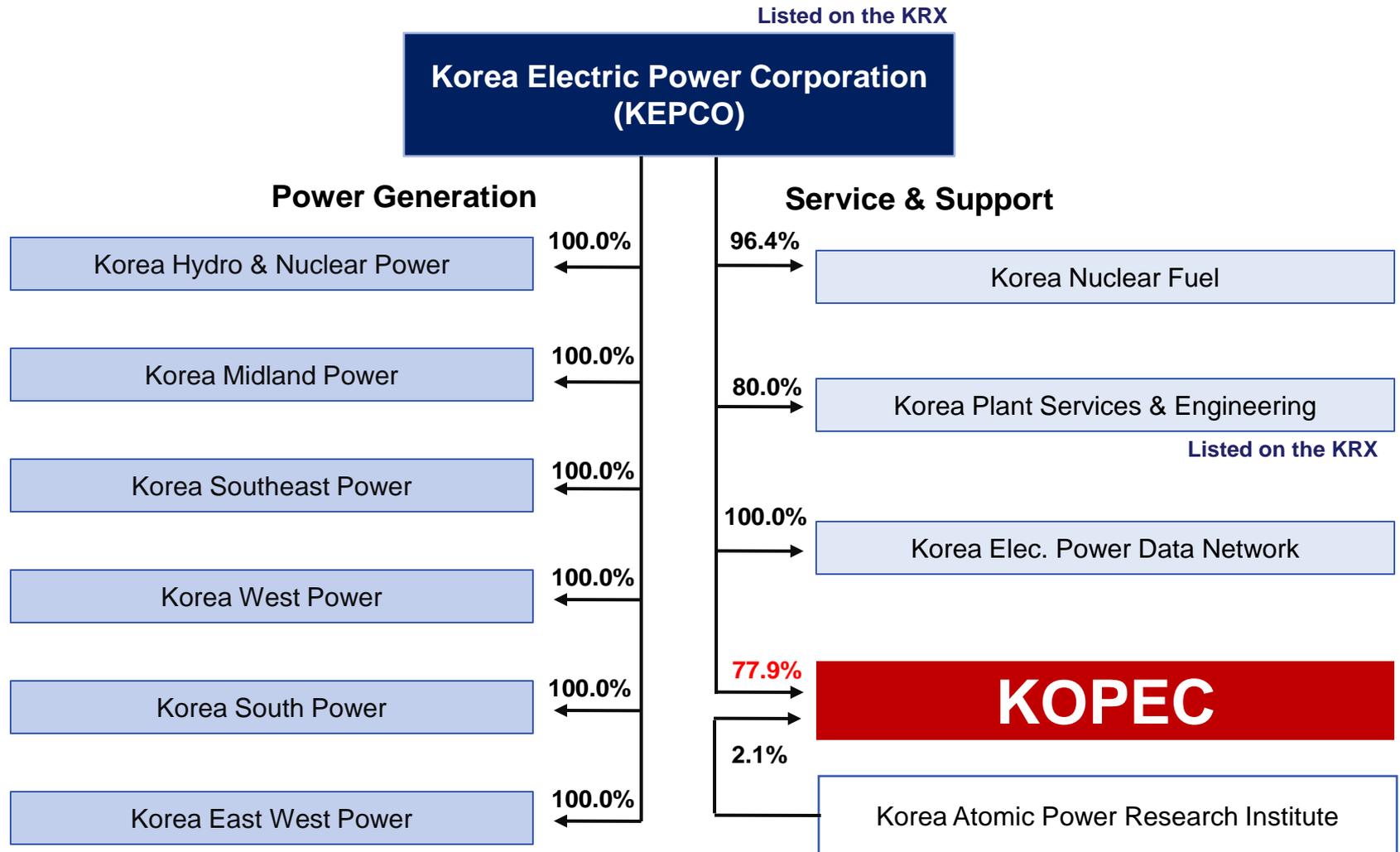
Management of entire or some parts of a construction project  
(Consulting, Engineering, Construction, O&M , etc )



### Involved Projects

SOC		POWER PLANTS		PRIVATE SOC	
					
KTX Project	Incheon Int'l Airport	Nuclear	Thermal	Incheon Int'l Airport Rail	Bridge of Busan-Gejei

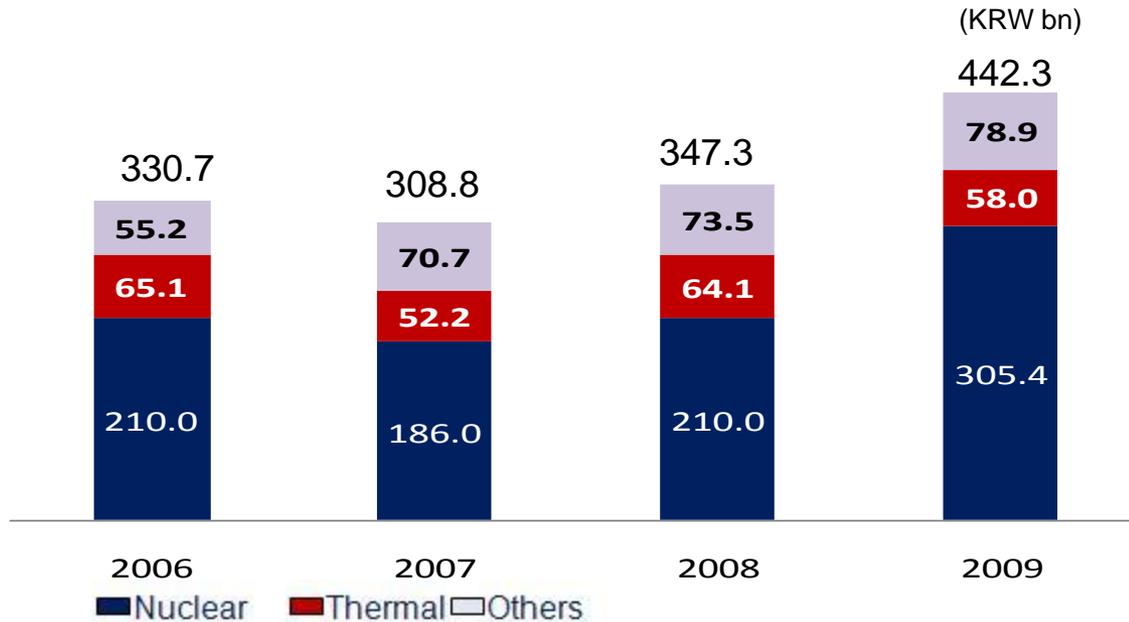
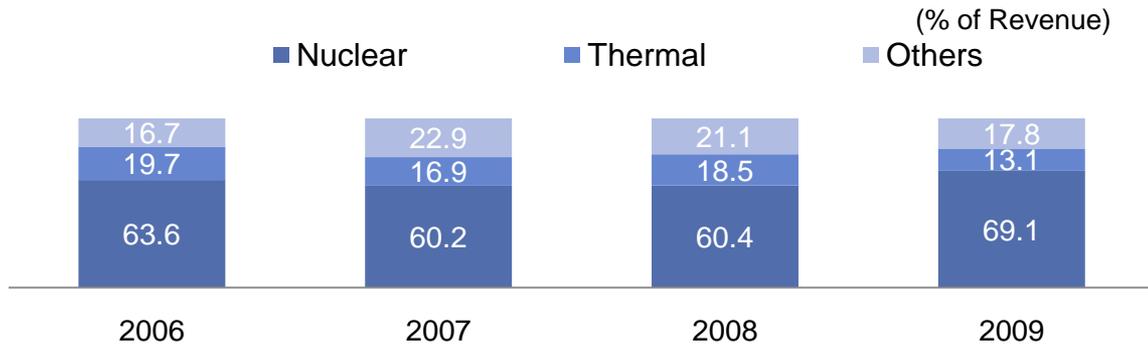
# Ownership – KEPCO & Affiliated Companies



# Revenue



## Revenue Breakdown



# II. Investment Highlights



# Investment Highlights



1

Attractive market opportunities in Korea and overseas

2

Proven track record and technology

3

Experienced and capable manpower

4

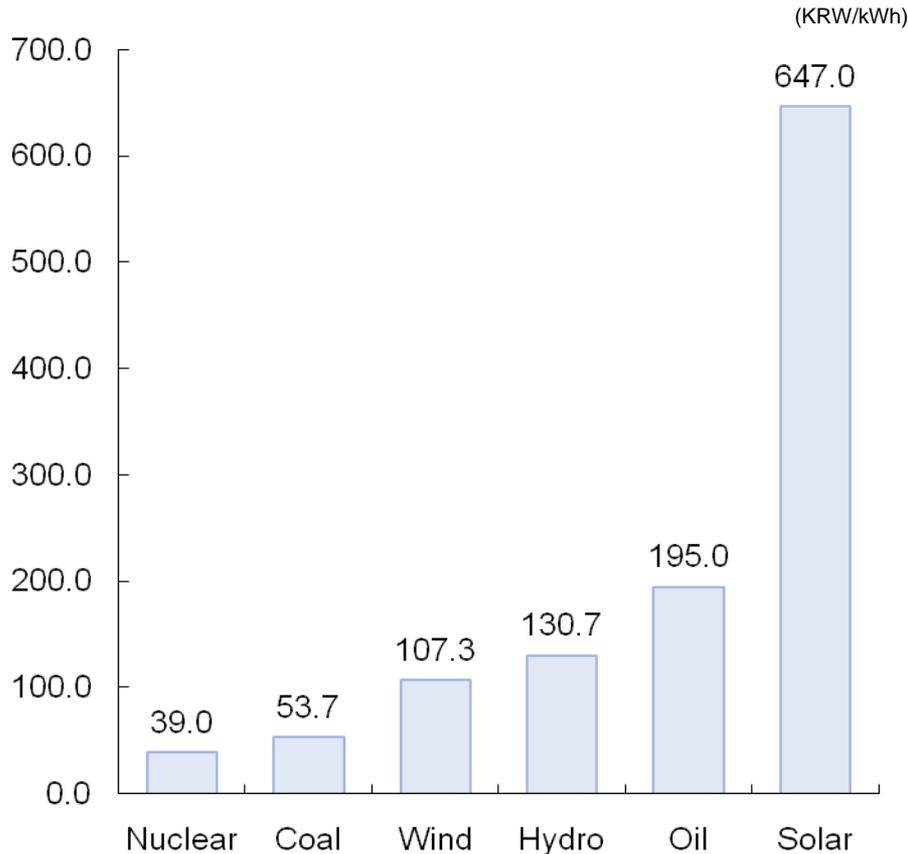
Solid financial position

# Attractive Market Opportunities – Rediscovery of Nuclear Power



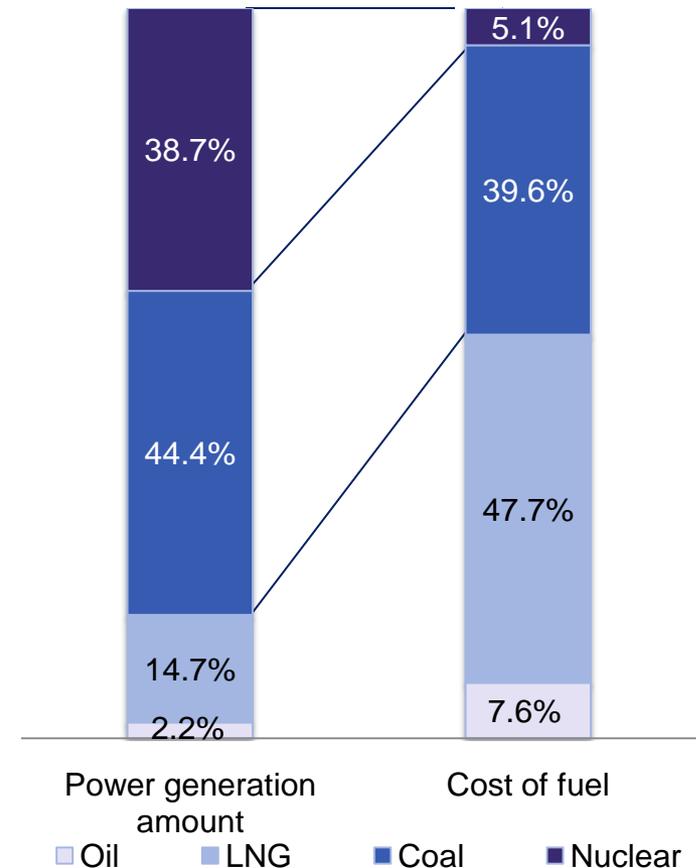
## Cost-effective & efficient source of energy

Selling cost by generation source



Source: KEPCO as of the end of 2008

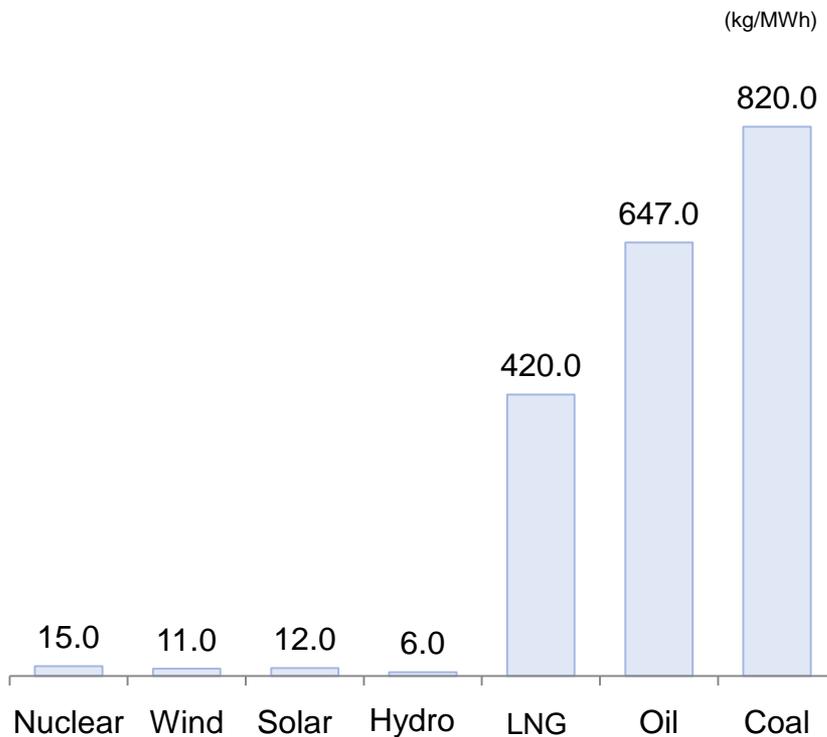
Power generation volume vs. cost



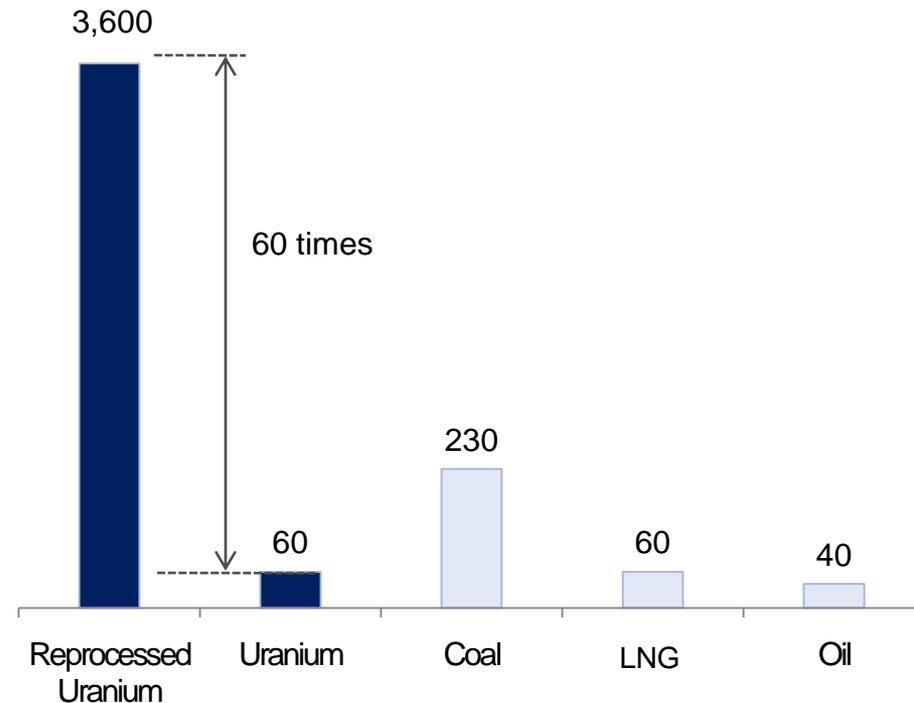
# Attractive Market Opportunities – Rediscovery of Nuclear Power (Cont'd)

Clean and environmentally-friendly source of energy.

Carbon dioxide emission by fuel type



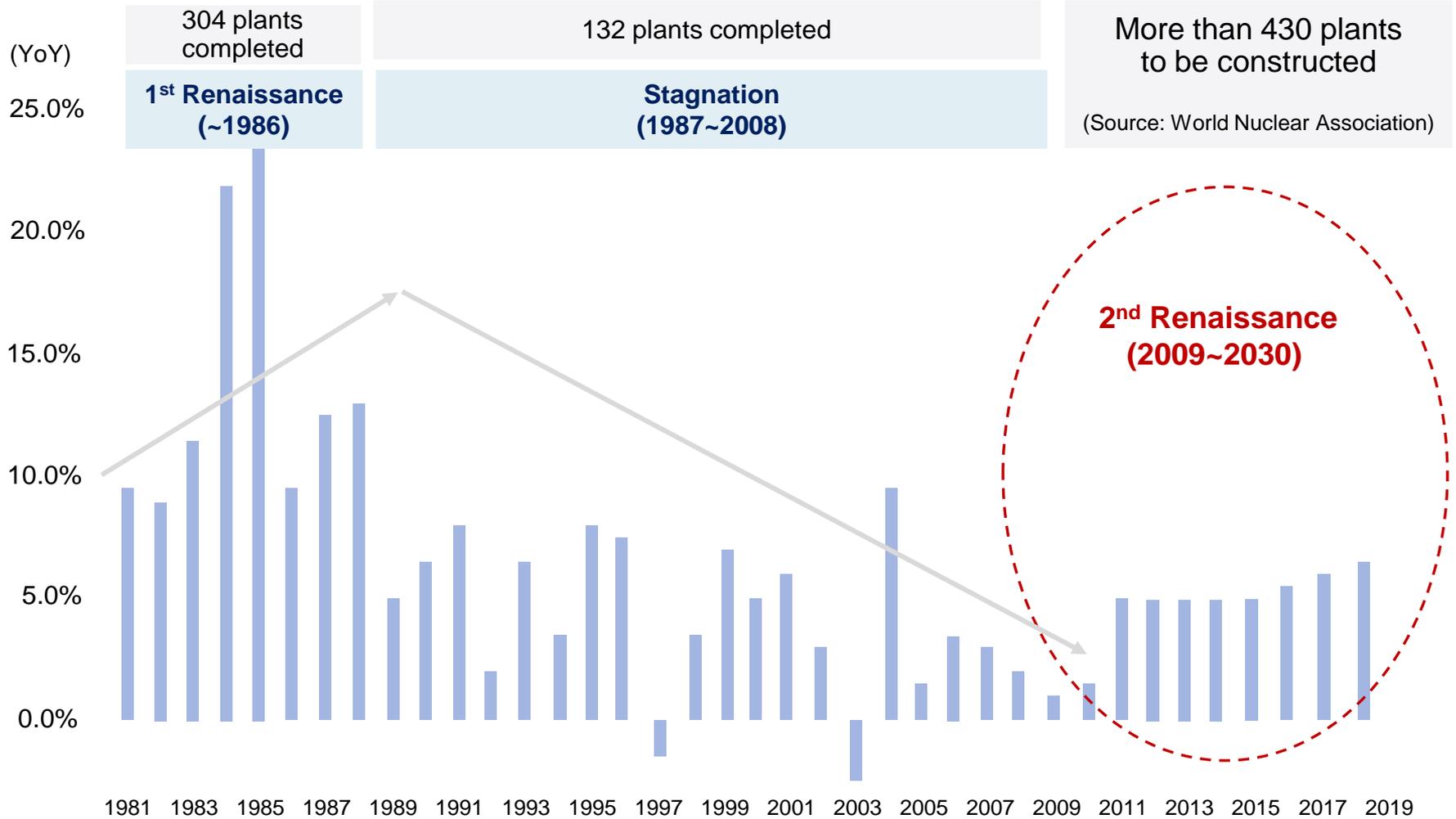
Usage life span by fuel type



Source: European Commission, KHNP

# Attractive Market Opportunities – Global Market Growth

## Beginning of a 2<sup>nd</sup> Renaissance in the nuclear industry



# Attractive Market Opportunities – Korea's Focus on Nuclear Energy (Cont'd)

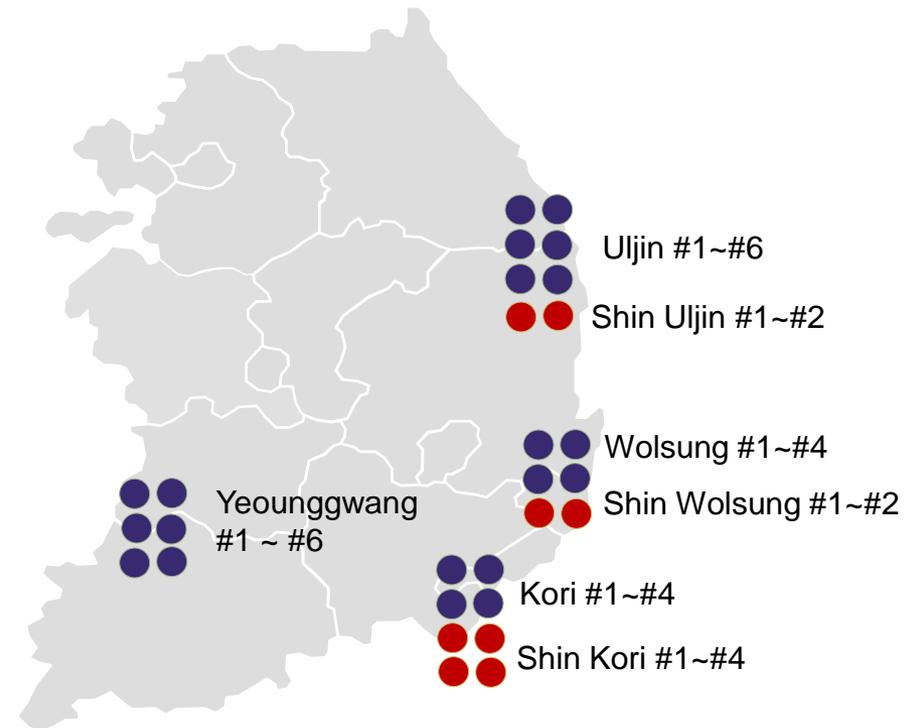
## KOPEC's Proven Track Record in Korea

- Korea's sole provider of power plant engineering, with 35 years of specialization
- Participated in engineering for all 20 of Korea's nuclear power plants.

1975 - 1986	9 projects as sub-contractor
1987 - 2009	11 projects as prime contractor
Current	100% market share

### Nuclear power plants contracted since 1987

- Nuclear power plants constructed
- Nuclear power plants currently under construction



Source : KHNP, KEPCO



# Market Leadership – Technology

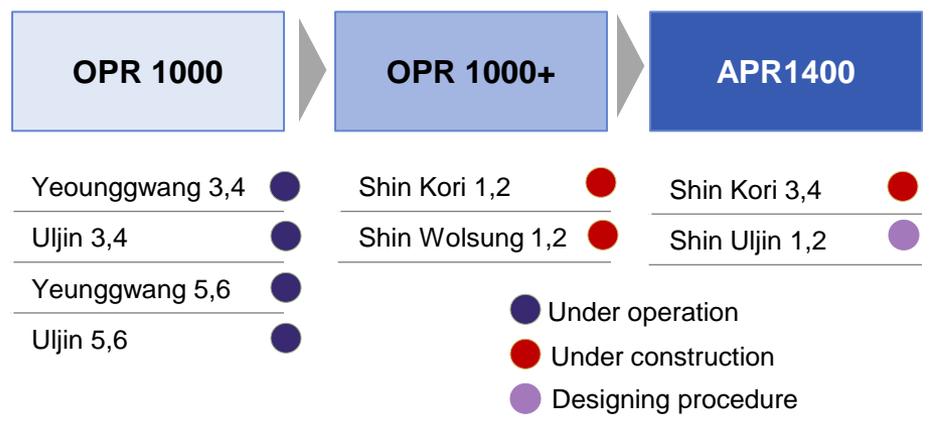
## Differentiated technology focus

	A/E (Architectural Engineering)	NSSS (Nuclear Steam Supply System)
Design/ engineering	<b>KOPEC</b>	<b>KOPEC</b>
Construct/ manufacture	Hyundai, Daewoo, SK, Samsung, etc	Doosan Heavy Industry

## Expanding areas of expertise

- Environment**
  - Denitrification system
  - Desulfurization system
  - Carbon capture storage (CCS)
- Renewable energy**
  - Wind power energy
  - Tidal power energy
  - Solar power energy
- Operations & maintenance**
  - Managing power plant life span
  - Analyzing power plant
  - Safety
  - Performance upgrade

## Models for nuclear power plants

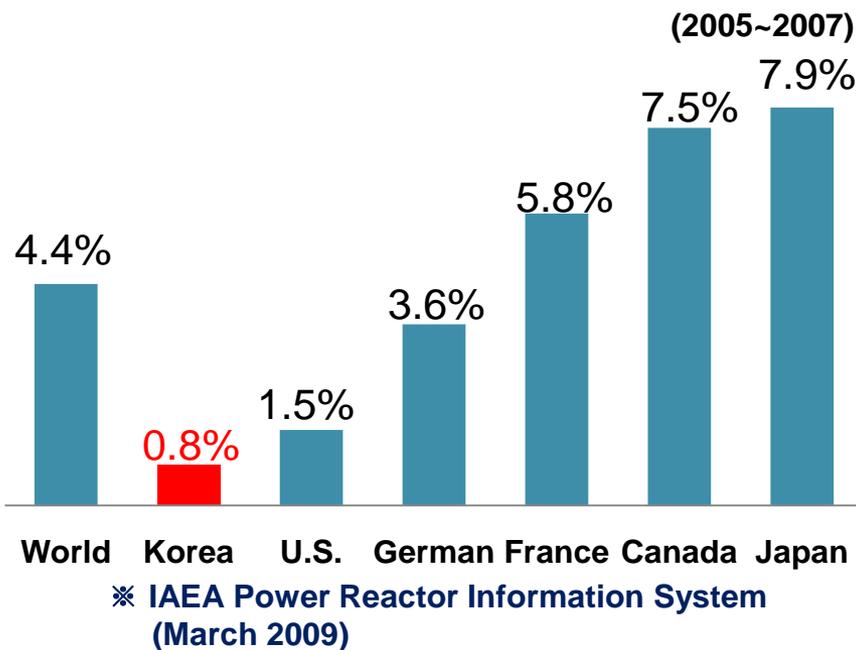


# The Strength of Korea Nuclear Power Plant

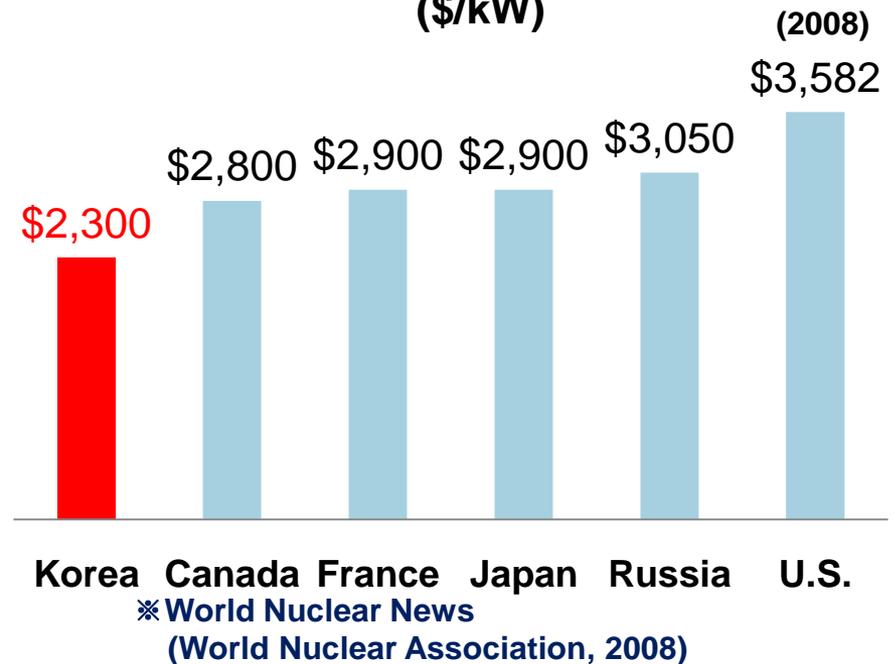


The best stability, safety and price competitiveness in the world.

Unplanned Capability Loss Factor



Cost of Building Nu. Power Plant (\$/kW)

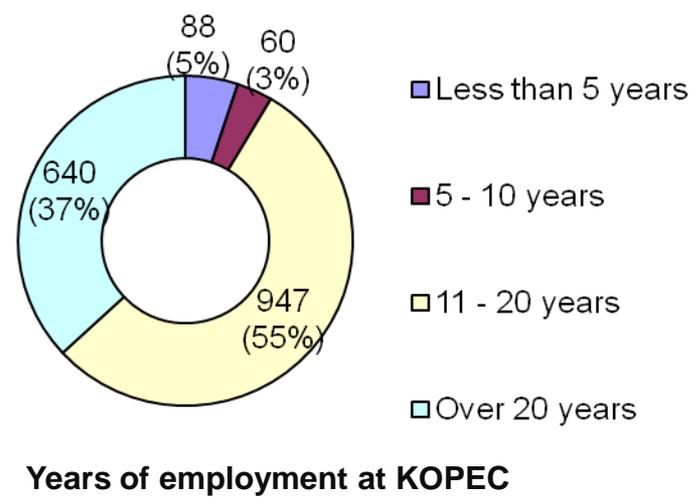
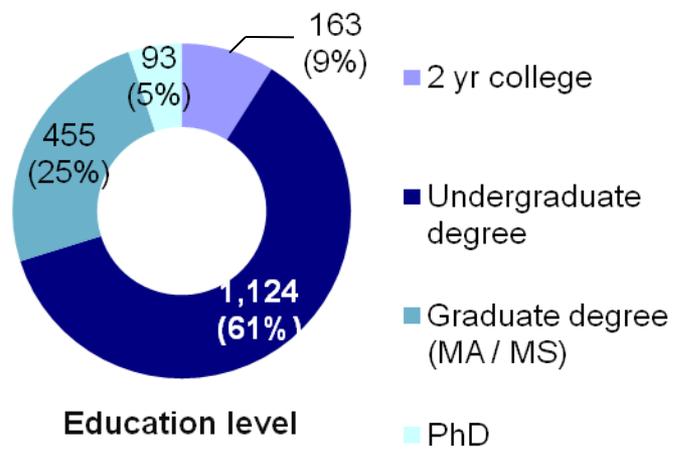


# Market Leadership – Manpower

## Top management with 30+ years of industry and related experience

<b>An, Seung Kyoo</b>	<b>CEO &amp; President</b> Former Vice Chairman, Hyundai Engineering
<b>Kim, Joo Wan</b>	<b>Auditor</b> Former Managing Director, Joongdo Ilbo
<b>Lee, Bae Soo</b>	<b>Senior Vice President &amp; Head of Planning &amp; Marketing Division</b> Former General Manager, Management Planning Department
<b>Kang, Sun Goo</b>	<b>Senior Vice President &amp; Head of Nuclear Project &amp; Engineering Division</b> Former Vice President, Power Engineering Institute
<b>Park, Chi Sun</b>	<b>Senior Vice President &amp; Head of Plant Engineering &amp; Construction Division</b> Former General Manager, Civil & Architectural Engineering Department

## Capable and experienced industry professionals

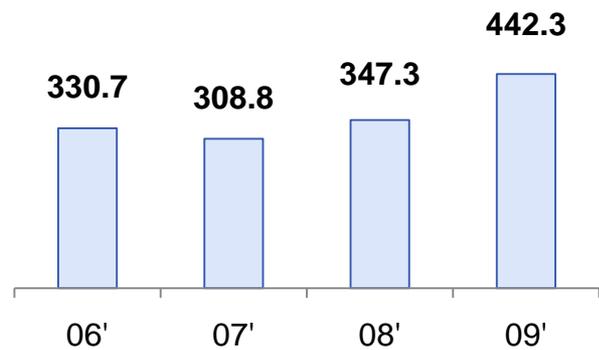


# Solid Financial Position



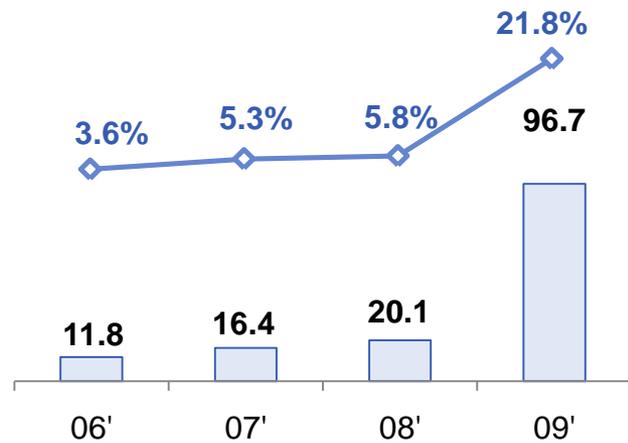
## Revenue

(KRW bn)



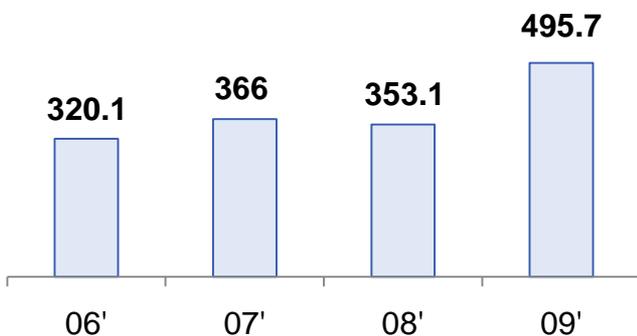
## Operating income / margin

(KRW bn)



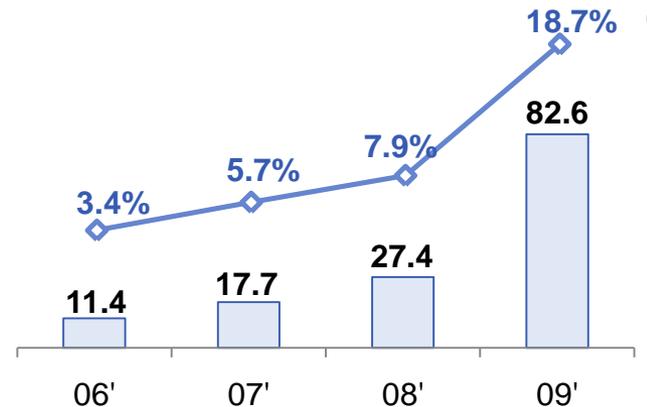
## Assets

(KRW bn)



## Net income / margin

(KRW bn)



# Key Investment Highlights

