



**KOREA EAST-WEST
POWER CO.,LTD.**

COAL Demand/Supply Outlook in Korea



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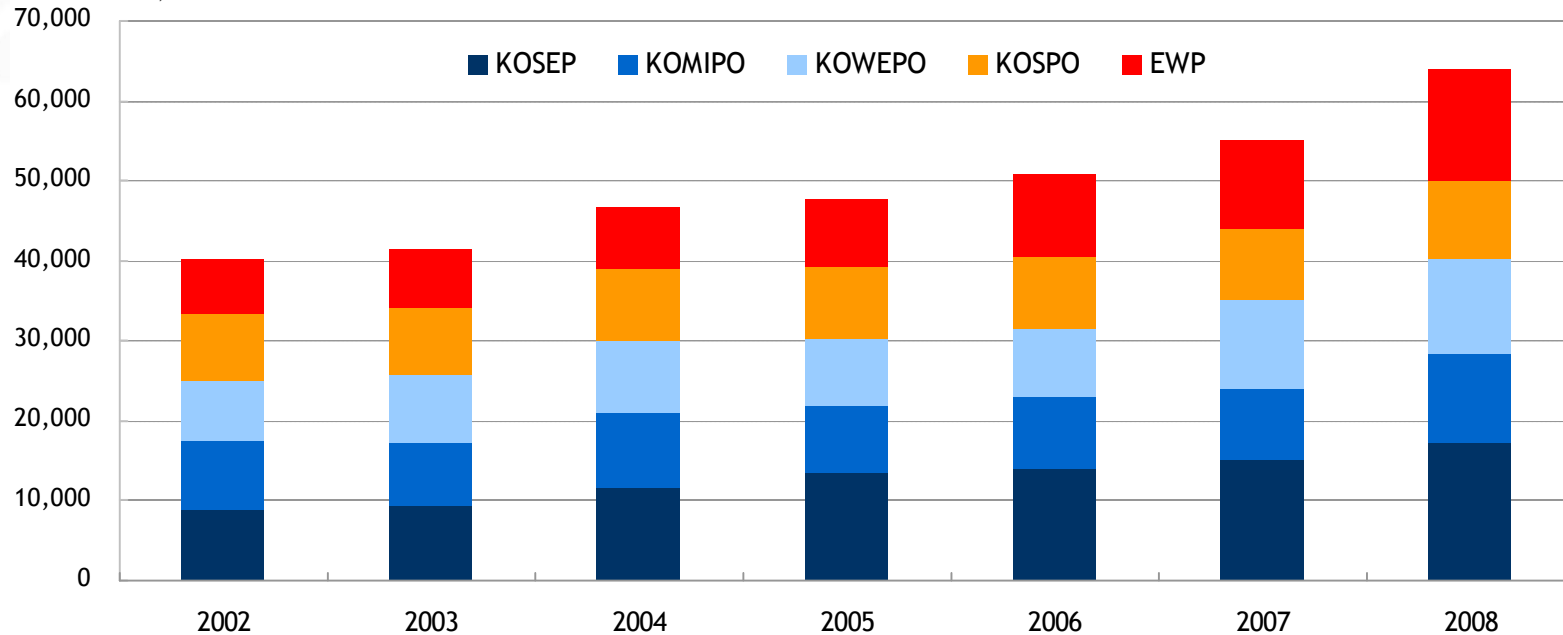
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I . Coal Demand in Electricity Industry



Historical Trend in Coal Demand by Utility Companies(2002-2008) - Electricity Industry

(Unit: Thousand Ton)

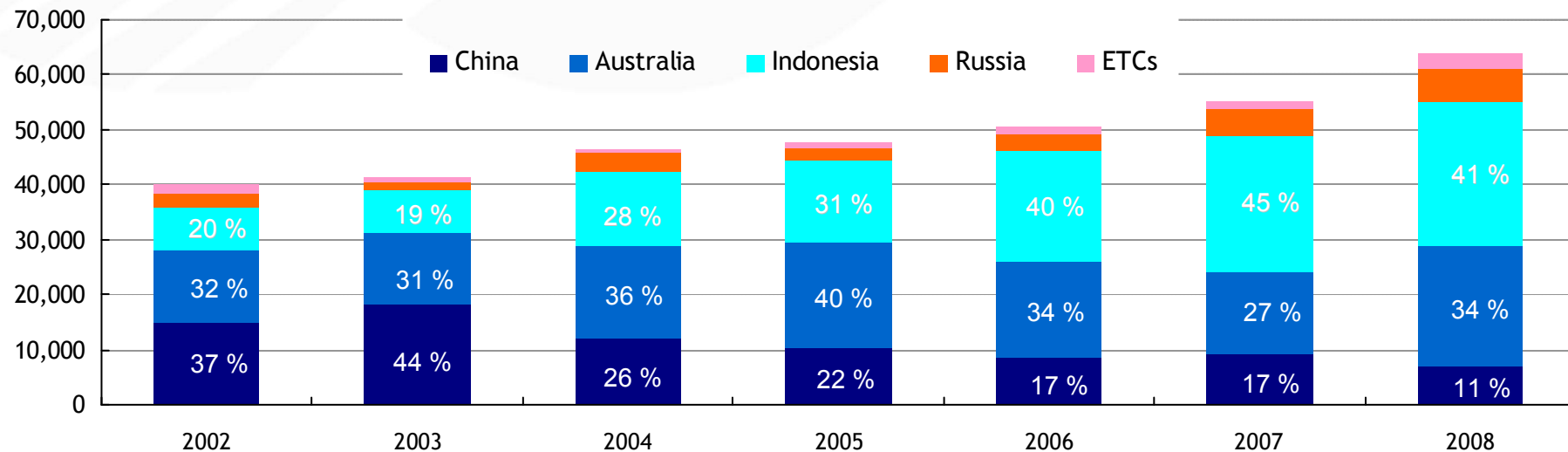


Thermal Coal Import by Korean Gencos

Genco	2002	2003	2004	2005	2006	2007	2008
KOSEP	8,958	9,493	11,444	13,441	13,976	15,037	17,269
KOMIPO	8,644	7,894	9,577	8,352	9,064	9,018	11,029
KOWEPO	7,453	8,257	9,161	8,609	8,465	11,026	11,953
KOSPO	8,280	8,475	8,805	8,806	8,894	8,848	9,789
EWP	6,869	7,273	7,580	8,448	10,254	11,223	13,837
TOTAL	40,204	41,392	46,567	47,657	50,653	55,152	63,877

Historical Trend in Coal Demand by Sources(2002-2008)

- Electricity Industry

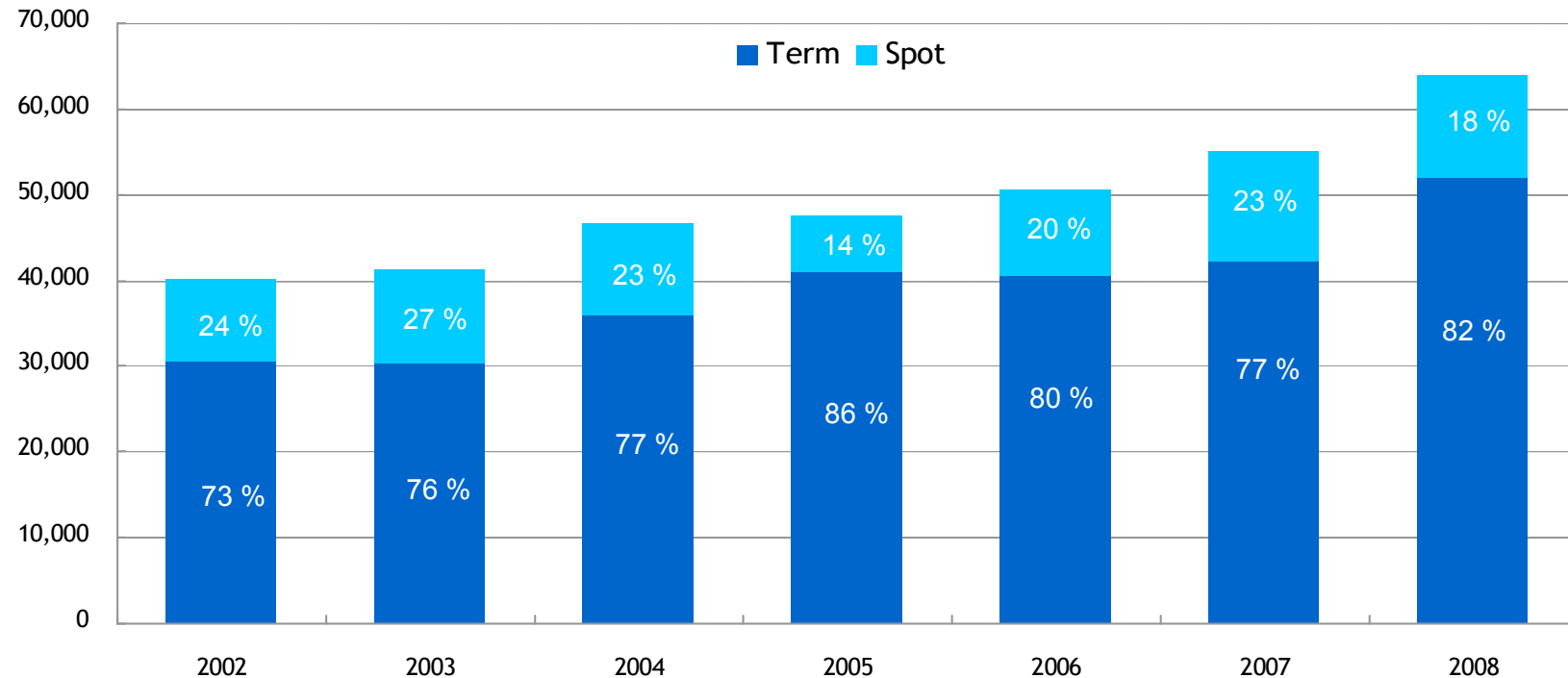


Thermal Coal Import by Countries

Country	2002	2003	2004	2005	2006	2007	2008
China	15,061	18,142	12,106	10,330	8,587	9,172	6,931
Australia	12,893	12,984	16,888	19,274	17,435	15,135	21,996
South Africa	0	0	0	0	130	302	1,083
Canada	1,418	742	280	417	811	1,112	1,482
Indonesia	8,004	8,021	13,207	14,981	20,241	24,847	26,120
Russia	2,492	1,331	3,656	2,289	3,157	4,512	6,016
USA	336	171	431	365	291	71	249
TOTAL	40,204	41,392	46,567	47,657	50,653	55,152	63,877

Historical Trend in Coal Demand by Contract Types(2002-2008) - Electricity Industry

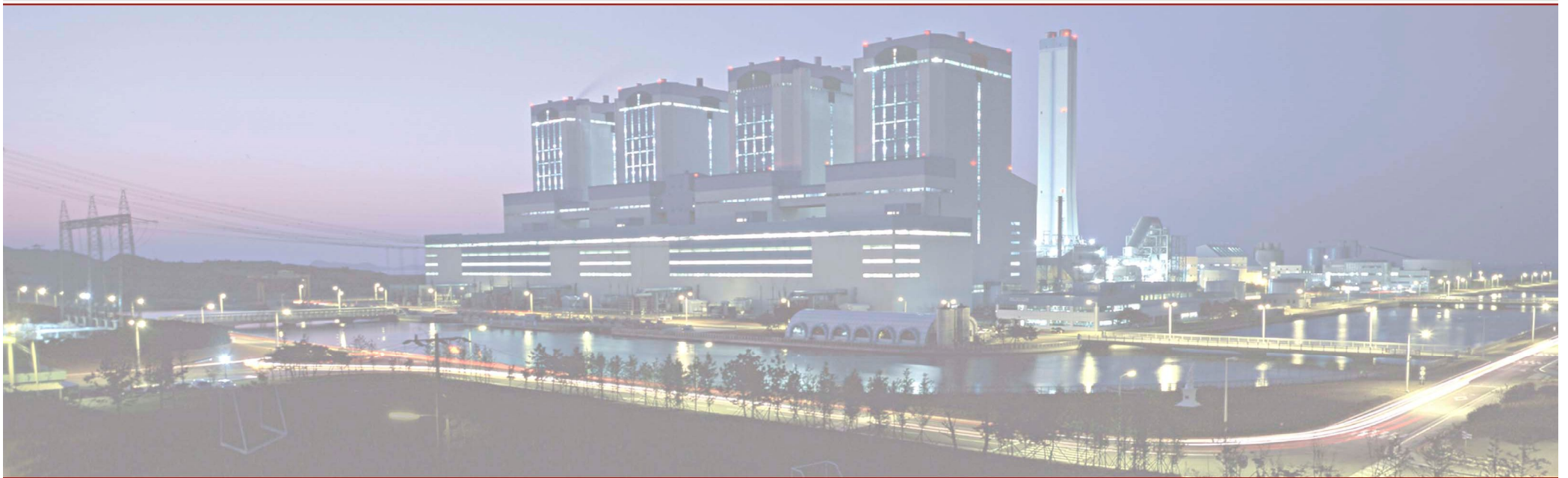
(Unit: Thousand Ton)



Thermal Coal Import by Contract types

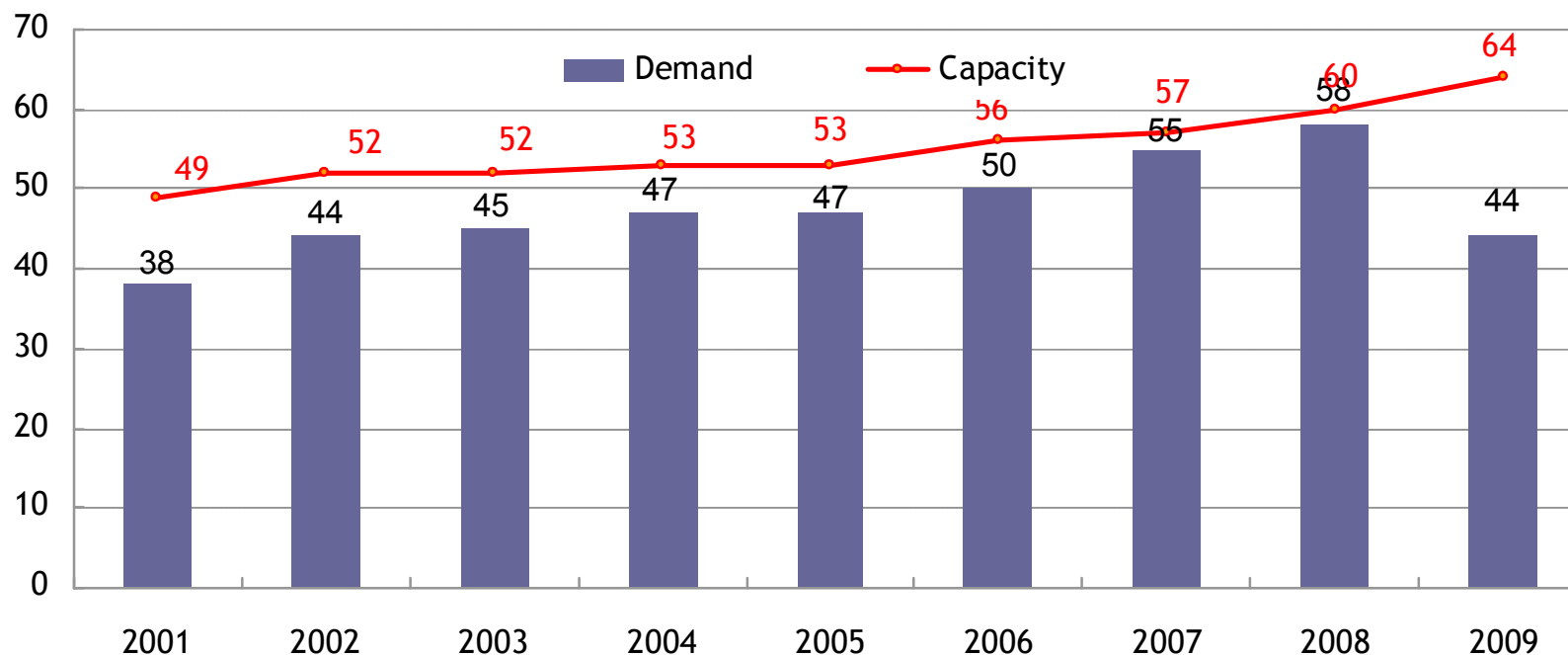
Contract	2002	2003	2004	2005	2006	2007	2008
Term	30,475	30,239	35,885	41,049	40,631	42,260	52,098
Spot	9,729	11,153	10,682	6,607	10,022	12,892	11,779
TOTAL	40,204	41,392	46,567	47,657	50,653	55,152	63,877

II. Coal Demand in Steel Mill Industry



Steel Production Demand & Capacity

(Unit: Million Ton)



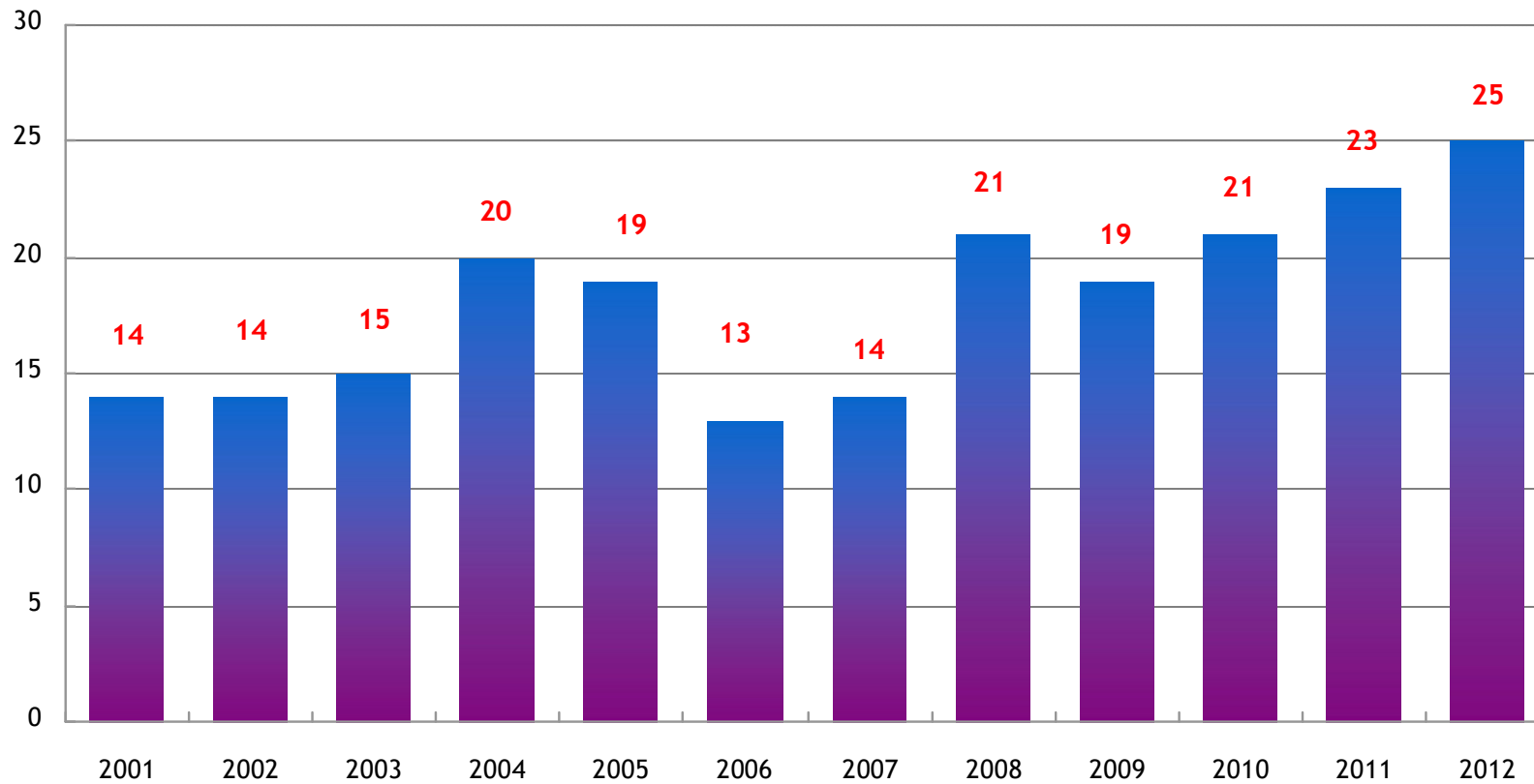
Steel Production Demand & Capacity

Contract	2001	2002	2003	2004	2005	2006	2007	2008	2009
Capacity	49	52	52	53	53	56	57	60	64
Demand	38	44	45	47	47	50	55	58	44

Source: Korea Iron & Steel Association

Historical trend in Coal Demand - Steel Mill Industry

(Unit: Million Ton)



Contract	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012
TOTAL	14	14	15	20	19	13	14	21	19	21	23	25

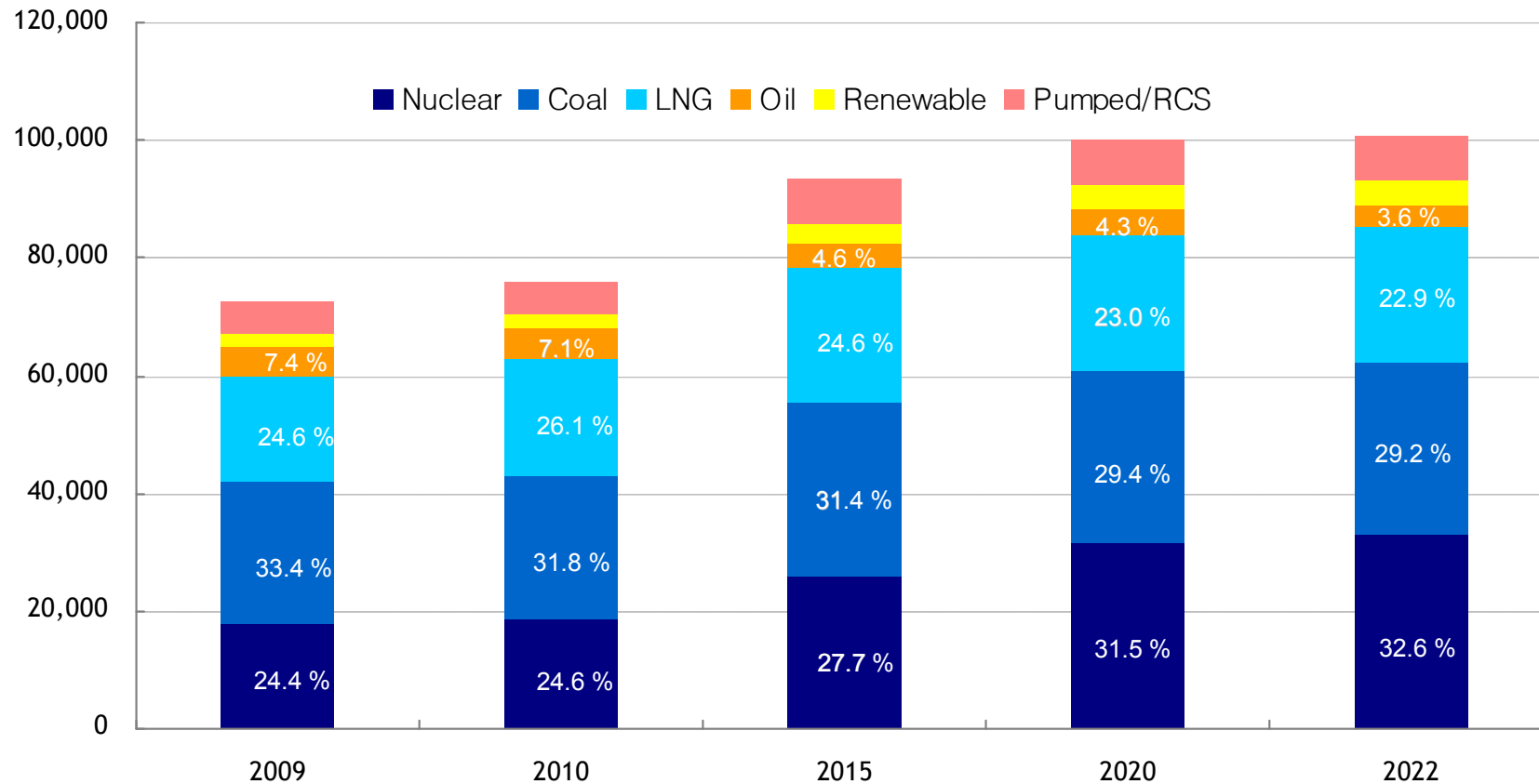
Source: GTIS, Macquarie Research, May 2009

III. Thermal Coal Demand Projection



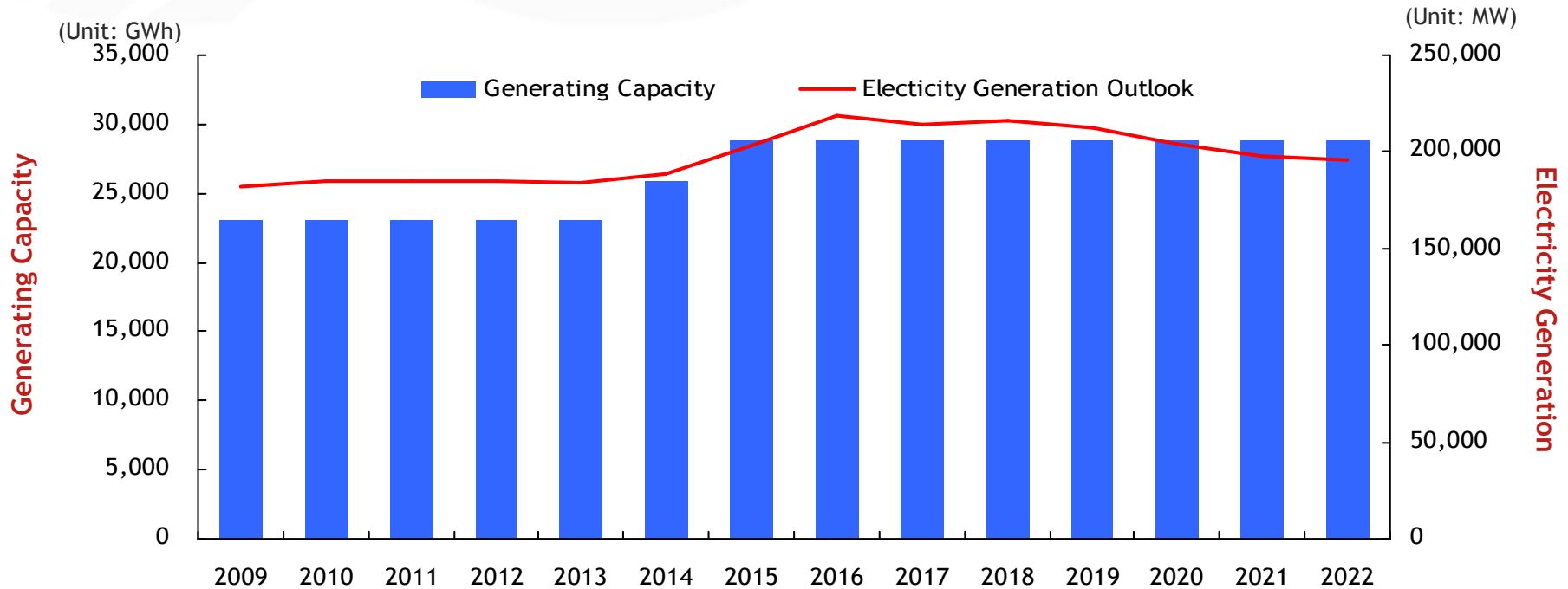
Generation Capacity Mix Outlook by Fuel Types

- The percentage of nuclear capacity is expected to increase by 8.2%, whereas that of Coal and LNG are expected to decrease.



Source: MKE (Electricity Supply and Demand Basic Plan #4 - Published in Dec 2008)

Generating Capacity / Electricity Generation Outlook - Coal-fired Power Plants Construction Plan

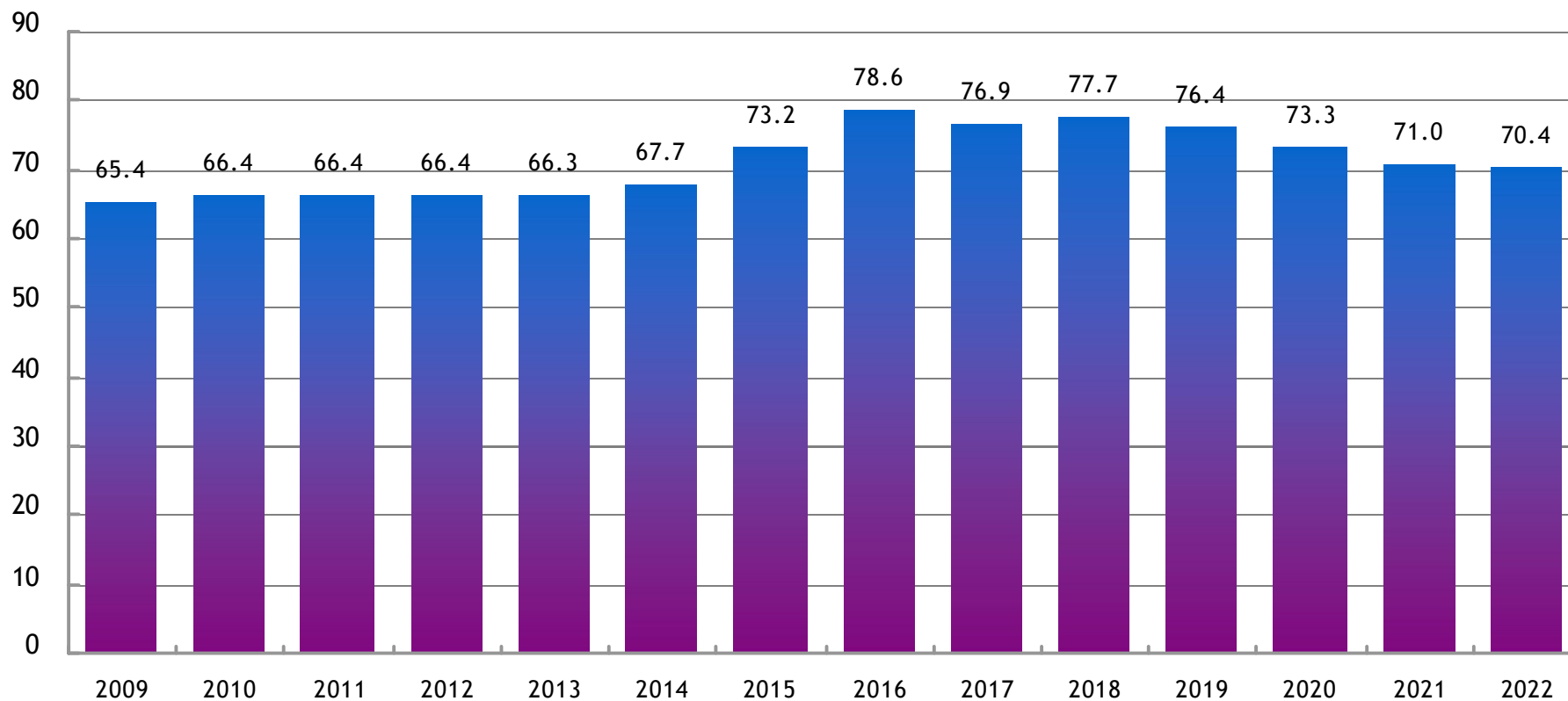


Commissioning Schedule of New Coal-fired Power Plants

	2009	2014	2015
Plant Name(company)	Hadong Thermal#8(KOSPO)	Yeongheung thermal#5(KOSEP) Dangjin thermal#9(EWP) Yeongheung thermal#6(KOSEP)	Samcheok thermal#1(KOSPO) Samcheok thermal#2(KOSPO) Dangjin thermal#10(EWP)
Capacity(MW)	500	2,740	3,000

Thermal Coal Demand Projection

(Unit: Million Ton)



Conversion factor

- Gross Calorific Value (as received) : 5,830 kcal/kg

12 - Thermal efficiency : 41%

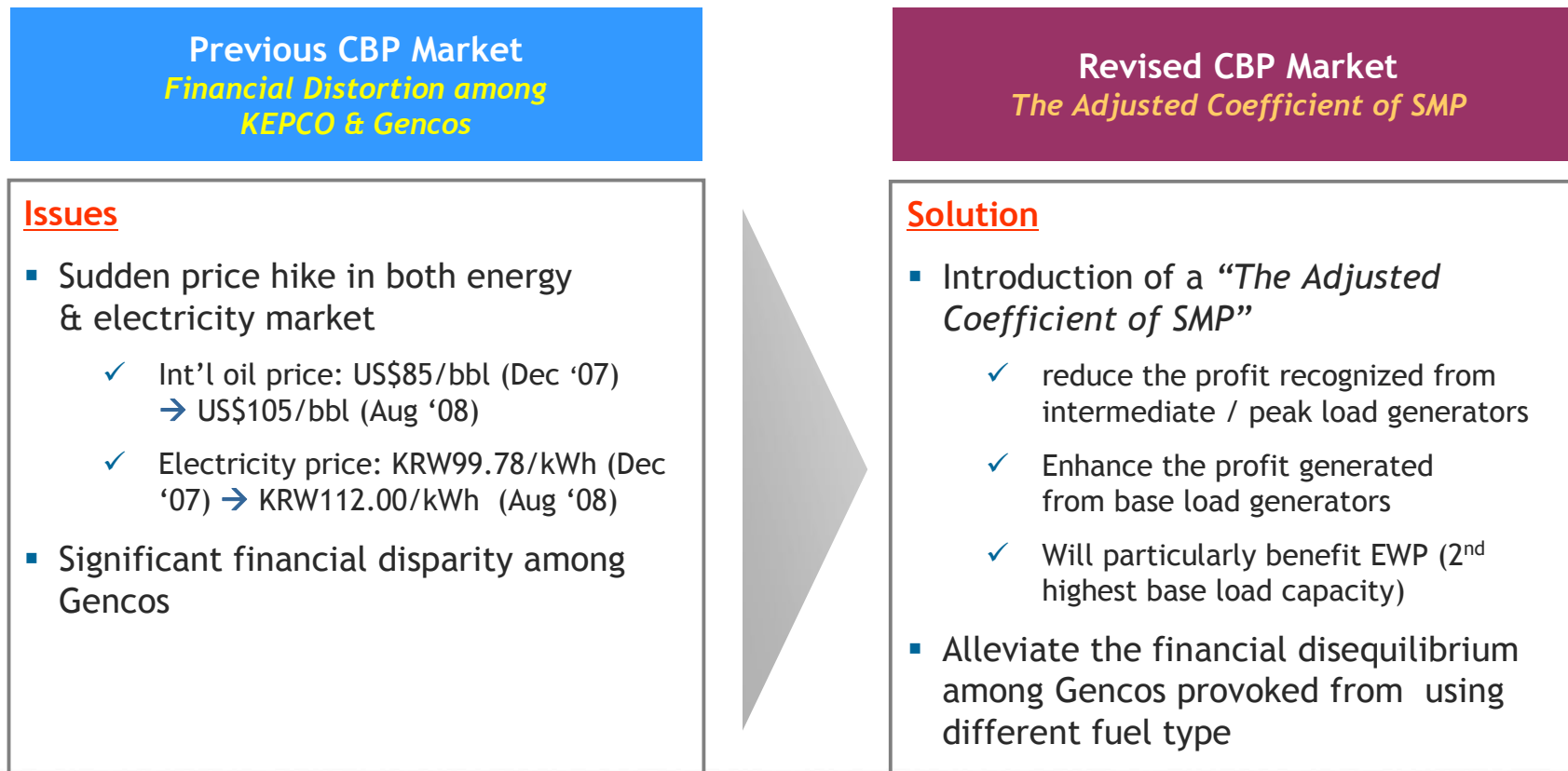
IV. Coal Purchasing Strategy



Overview of KPX System1

: Revision on CBP ('Cost-Based Pool') Market

- As the suspension of TWBP (Two Way Bidding Pool) system is taking longer than expected, CBP system has been continuously revised to reduce the power generation cost and to secure adequate reserves
- In May 2008, the Government implemented a revised CBP market by introducing a “The Adjusted Coefficient of SMP” in order to mitigate the impact on financial distortion among Gencos



Overview of KPX System2

: The Adjusted Coefficient of SMP

Application of The Adjusted Coefficient of SMP

- ✓ Abolition of Regulated Market Price (RMP) system
- ✓ EWP can pass through 100% of its fuel cost through the energy price
- ✓ Electricity Generation Cost Evaluation Committee annually determines The Adjusted Coefficient

Power Price Comparison

Price type		Old Price	New Price	Remarks
Capacity Payment (CP)	Base Load	KRW 7.46/kWh	KRW 7.46/kWh	<ul style="list-style-type: none"> ▪ KRW 7.46/kWh as a base price, CP is differentiated by regions, by seasons and by hours
	Non Base Load			
Energy Price	Base Load	Min (SMP, RMP)	$[\text{Max}\{(\text{SMP}-\text{Fuel Cost}), 0\} \times \text{The Adjusted Coefficient} + \text{Fuel Cost}]$	<ul style="list-style-type: none"> ▪ The Adjusted Coefficient <ul style="list-style-type: none"> ✓ Nuclear : 0.3052 ✓ Coal : 0.1865 ✓ Anthracite : 0.75 ✓ Others/General : 0.3270
	Non Base Load	SMP		

※ RMP : Regulated Market Price, SMP : System Marginal Price

Introduction of “The Adjusted Coefficient of SMP” will motivate Gencos to procure the fuel with lower prices and lead to fair competition among Gencos. It will increase the efficiency of the power market by stimulating cost reduction

Striking Balance between Stable Supply and Economic Purchasing: Effective Coal Procurement Management

- Diversification of Coal Sources
 - Canada, South African, USA
- Cooperation among Gencos
 - Unified coal procurement & negotiation
 - Cargo swaps
- Enhancing Relationship with Suppliers
 - Try to increase term contracts
- Investment in Coal Mine
 - Off-takes

Stable Supply

- Diversification Pricing Policy
 - Index linked, Option embedded
- Improvement of Low CV Coal Blending
 - Increase Low CV coal like Indonesian
- Securing more Dedicated Vessels for Distant Sourcing
 - FOB Spread b/w Newcastle and RBCT
- Diversification of Coal Procurement Method
 - Direct Sourcing, Private Negotiation

Economical Purchasing



V. Things to be considered



Things to be considered 1 : Nuclear Power Plants Construction Plan

Locations of new Power Plants



Getting support as CO2 free power plants

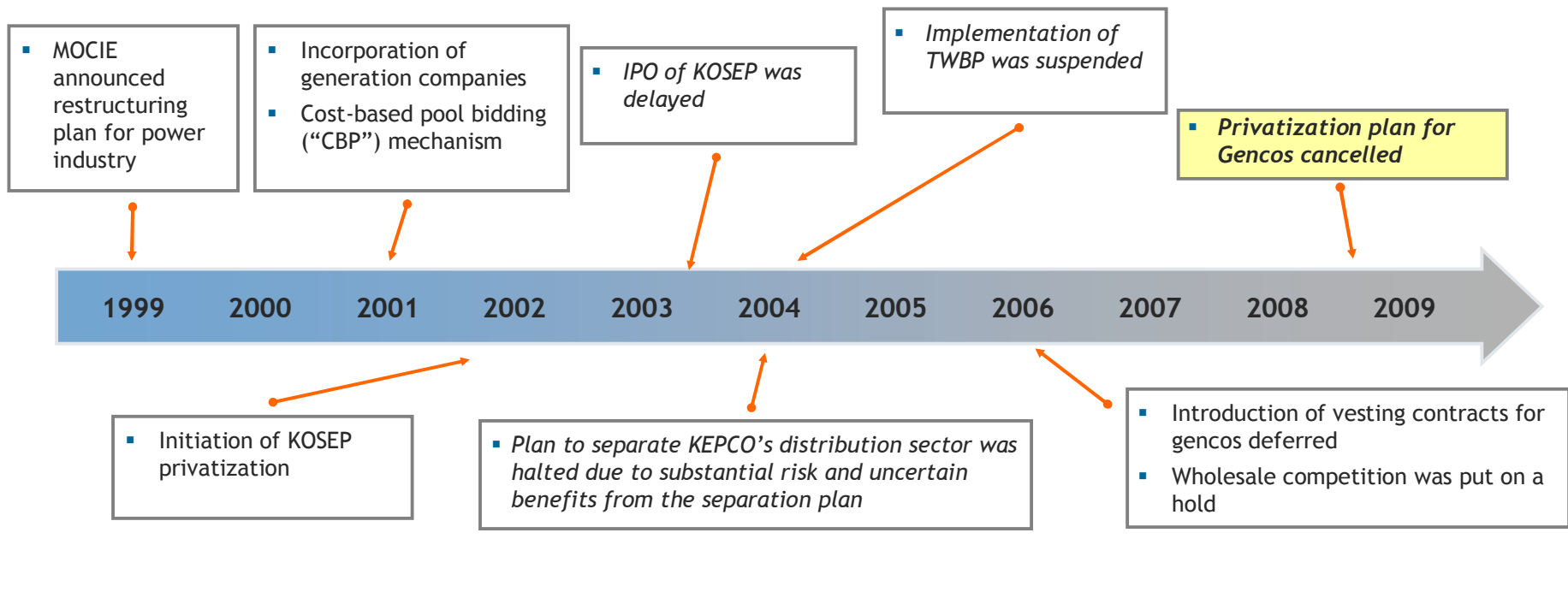
Description

YEAR	Nuclear Power Plant
2010	Shin-Kori #1(1000)
2011	Shin-Kori #2(1000)
2012	Shin-Wolsong #1(1000)
2013	Shin-Wolsong #2(1000)
	Shin-Kori #3(1400)
2014	Shin-Kori #4(1400)
2015	Shin-Ulchin#1(1400)
2016	Shin-Ulchin#2(1400)
2018	Shin-Kori #5(1400)
2019	Shin-Kori #6(1400)
2020	Shin-Ulchin#3(1400)
2021	Shin-Ulchin#4(1400)

Things to be considered 2

: Power Industry Restructuring Process

The power industry restructuring plan delayed and the former privatization plan for Gencos cancelled



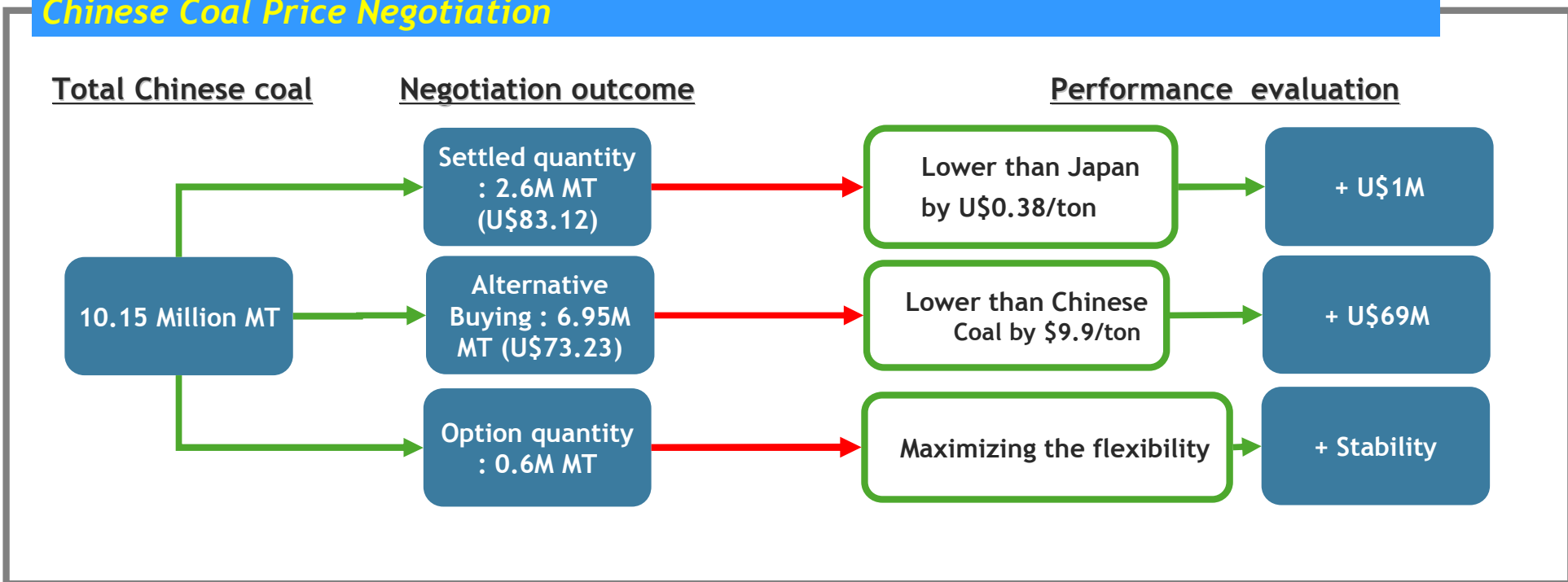
Cancellation of GENCOS Privatization Plan

- Privatization plan for KEPCO and its Gencos was cancelled in July 2008
- According to a reform plan for public firms by government, the plan has been completed to create a more efficient management structure and conducive environment for Gencos since 2008

Things to be considered 3 : Active Cooperation among Gencos

- '09. 2. 9. Inauguration of 5 Korea Gencos' Unified fuel Procurement Section
- '09. 6. 17. Unified Price Negotiation for Chinese coal of 2,600,000 MT (+/- 600,000 MT option)

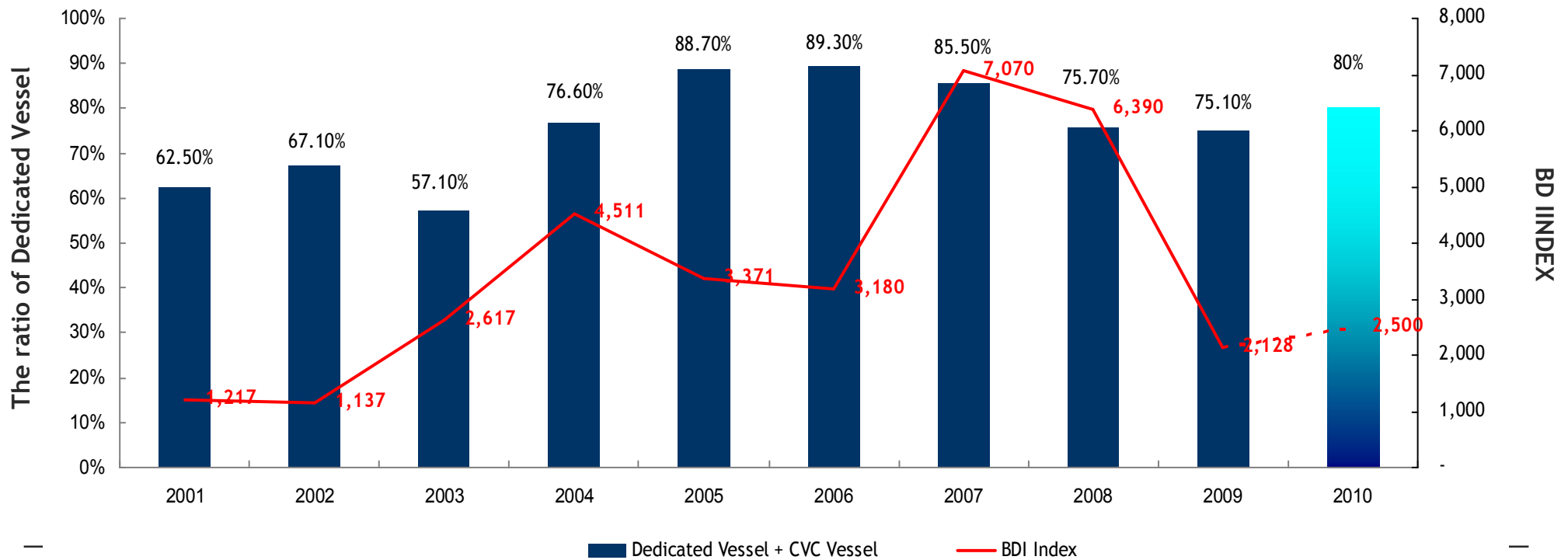
Chinese Coal Price Negotiation



PLAN: Expansion of the strategic alliances on purchasing into Australian & Indonesian coal COULD be considered.

Things to be considered 4 : The Ratio of Dedicated Vessels VS Spot Vessels(Genco)

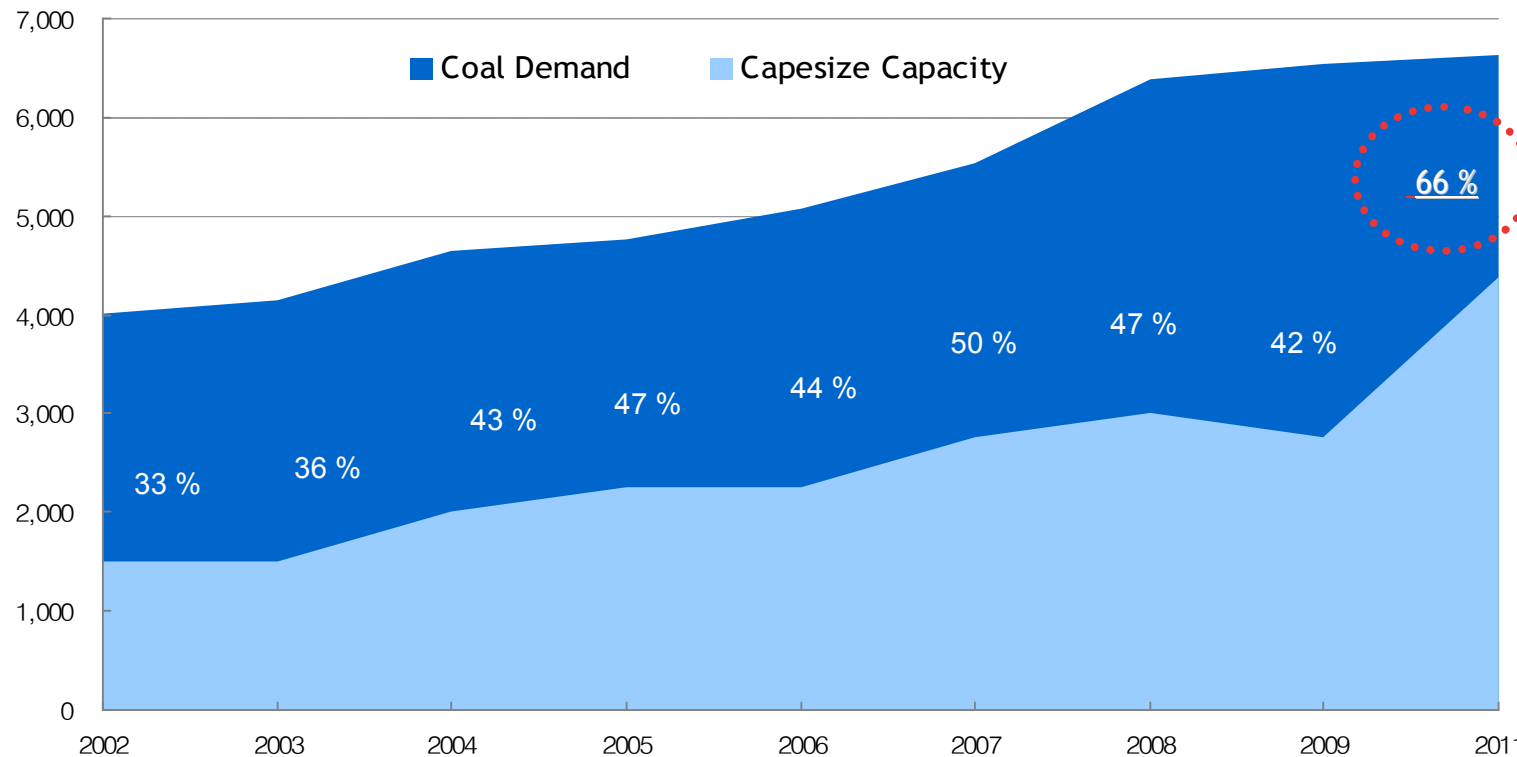
- Portion of Dedicated Vessel for Gencos coal transportation is expected to increase



	2001	2002	2003	2004	2005	2006	2007	2008	2009
Dedicated + CVC	62.50 %	90.50 %	57.10 %	76.60 %	88.70 %	89.30 %	85.50 %	75.70 %	75.10 %
SPOT	37.50 %	9.50 %	42.90 %	23.40 %	11.30 %	10.70 %	14.50 %	24.30 %	24.90 %

Things to be considered 5 : The Ratio of Capesize Vessel (Genco)

- Portion of Capesize vessel for Genco coal transportation is expected to increase up to over 60% by 2011



TYPE	2002	2003	2004	2005	2006	2007	2008	2009	2011
# of Capesize	12	12	16	18	18	18	22	24	24
Capacity of Capesize	1,500	1,500	2,000	2,250	2,250	2,750	3,000	2,750	4,375
Coal Demand	4020	4139	4657	4766	5066	5528	6388	6540	6640