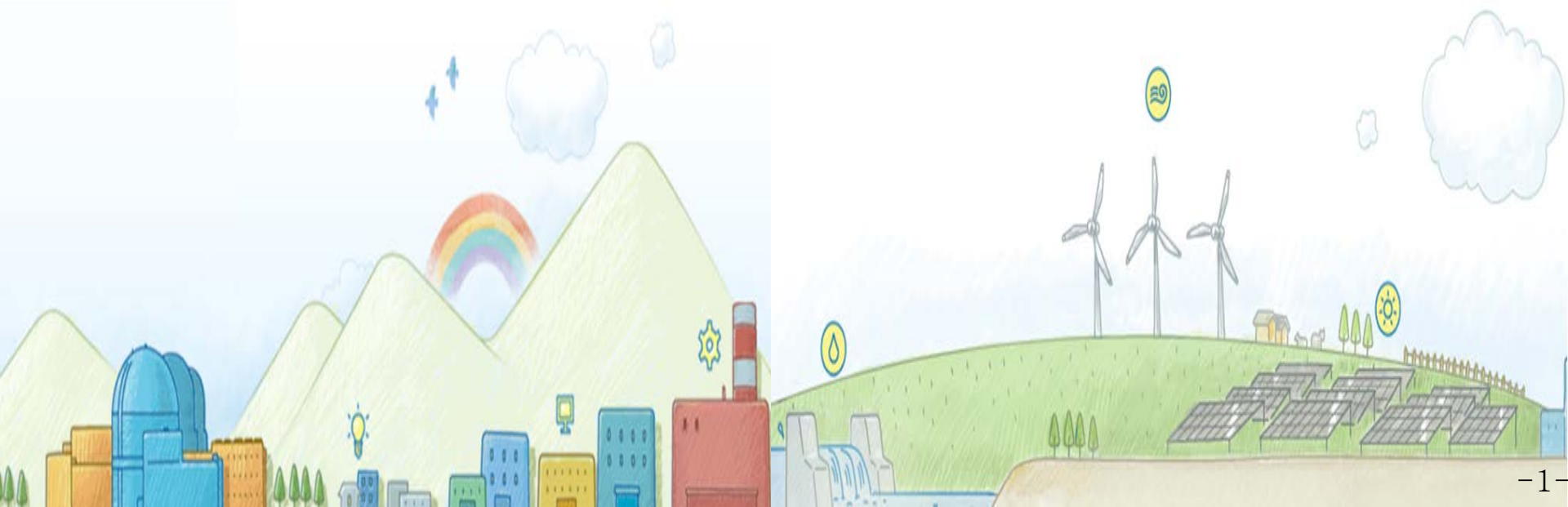
Chameliya Hydroelectric Power Project

& Our interest in New Projects in Nepal

KHNP
KOREA HYDRO & NUCLEAR POWER CO., LTD

Hydropower Business Team, KHNP



Heartily welcome to Korea

For the celebration of the 40th anniversary of the establishment of diplomatic relationship between Nepal and the Republic of Korea

Thanks to the Embassy of Nepal, Seoul for the invitation

Korea Hydro & Nuclear Power Co.

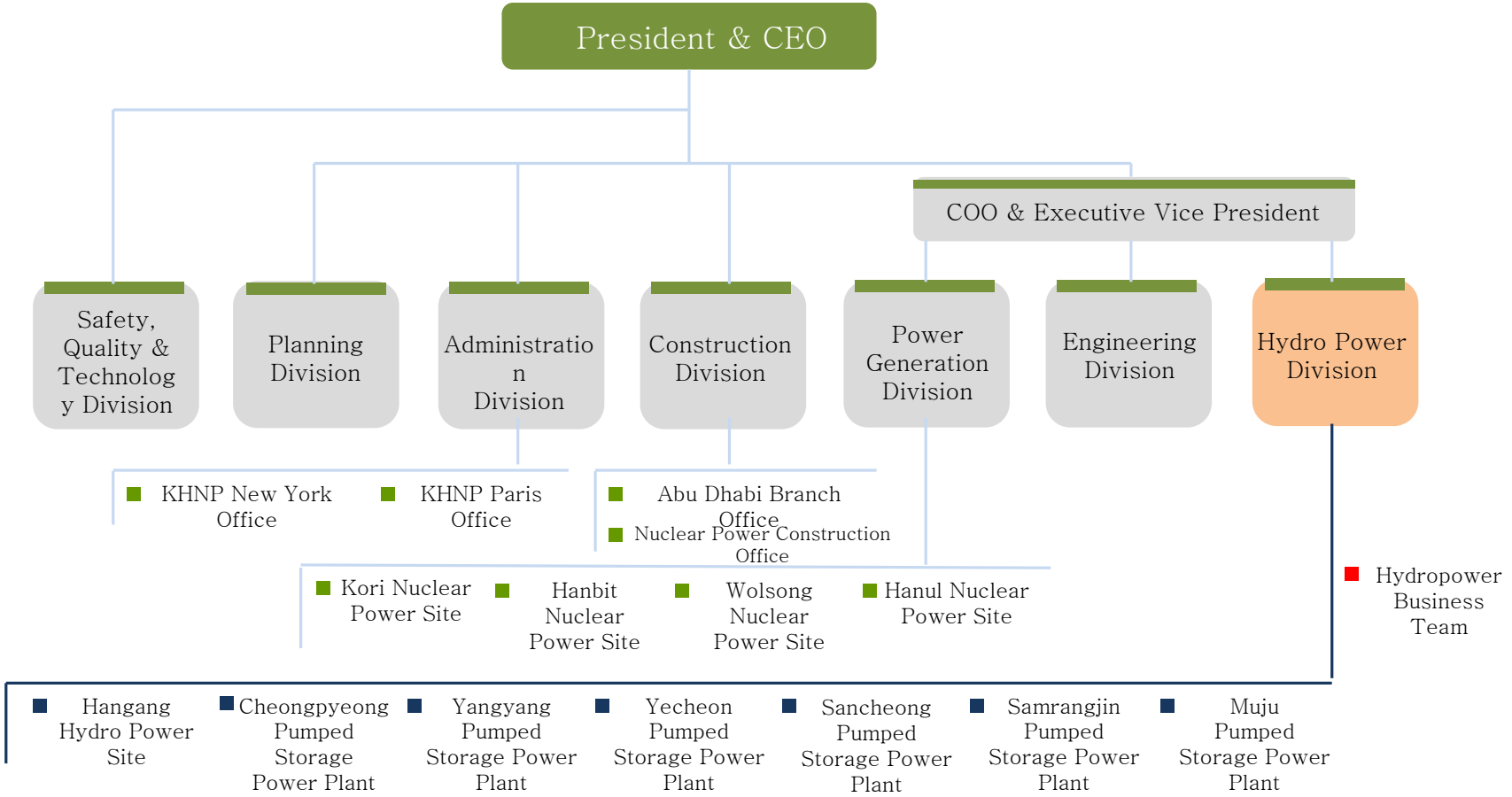
Ⅰ Introduction of KHNP

Ⅱ Chameliya Hydroelectric Project

Ⅲ HydroPower projects in Nepal

Ⅰ Introduction of KHNP

Organization

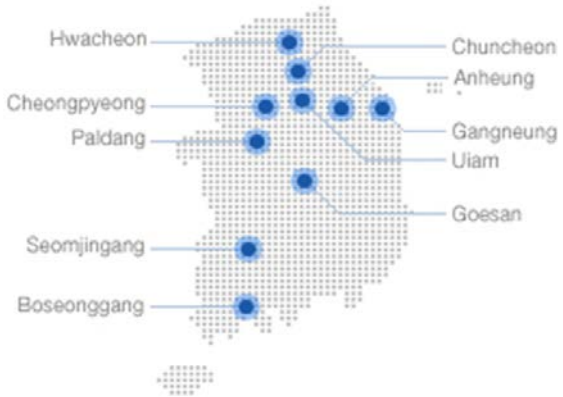


Human Resources

As of March 31. 2014

Classification		Number of Staffs
Human Resources	Board of Directors	6
	Managers	3,165
	Staffs	5,203
	Research	320
	Temporary, Security	893
Total		9,587

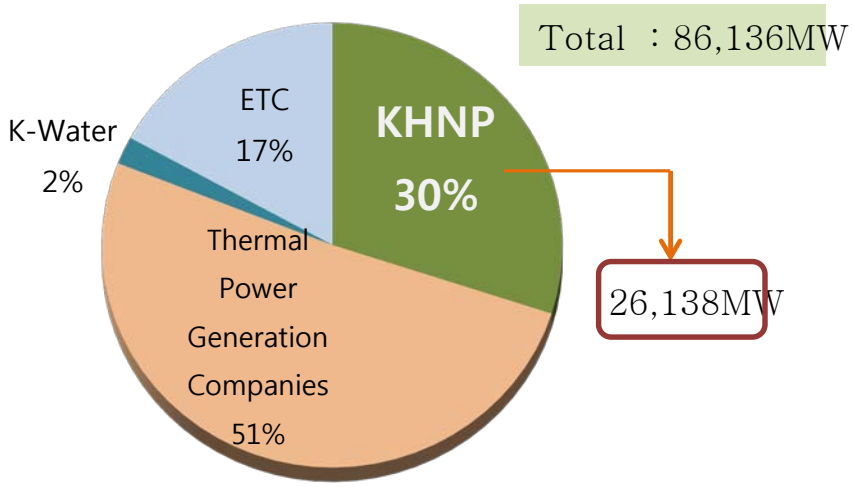
<With Leading Technology, KHNP provides 30% of power supply in Korea>



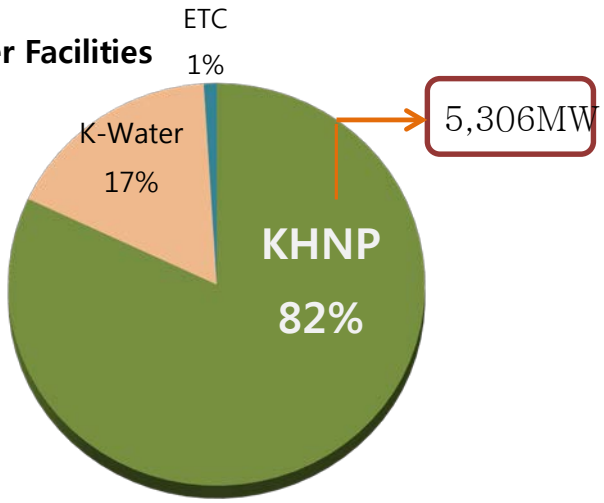
Power Generation Facilities

Classification	Nuclear						Hydro-Small Hydro	Pumped-Storage	Solar	Wind	Fuel cell	Total
	Kori	Shin-kori	Hanbit	Hanul	Wolsong	Shin-Wolsong						
Units	4	2	6	6	4	1	35	16	5	1	1	81
Capacity (MW)	3,137	2,000	5,900	5,900	2,779	1,000	606.1	4,700	56.25	0.75	58.8	26,138MW (100%)
Total	20,716(79.2%)						606.1 (2.3%)	4,700 (18%)	57 (0.2%)		58.8 (0.2%)	
							Hydropower		New &Renewable Energy			

Power Generation Facilities in Korea



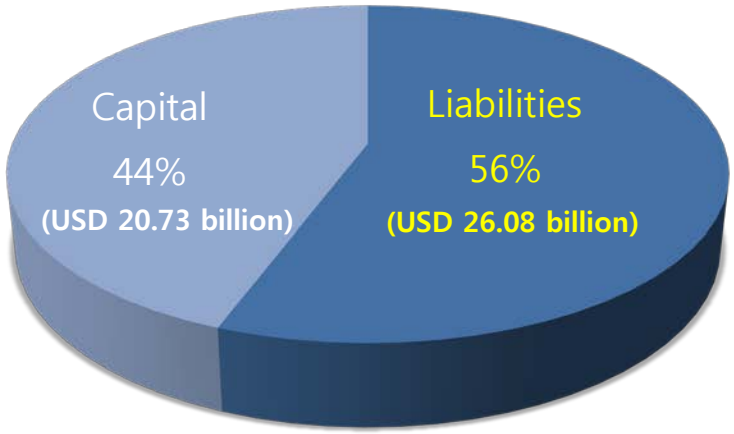
Hydropower Facilities



Financial Status

<As of 2013>

Liabilities & Capital



Current Assets USD 3.74 billion

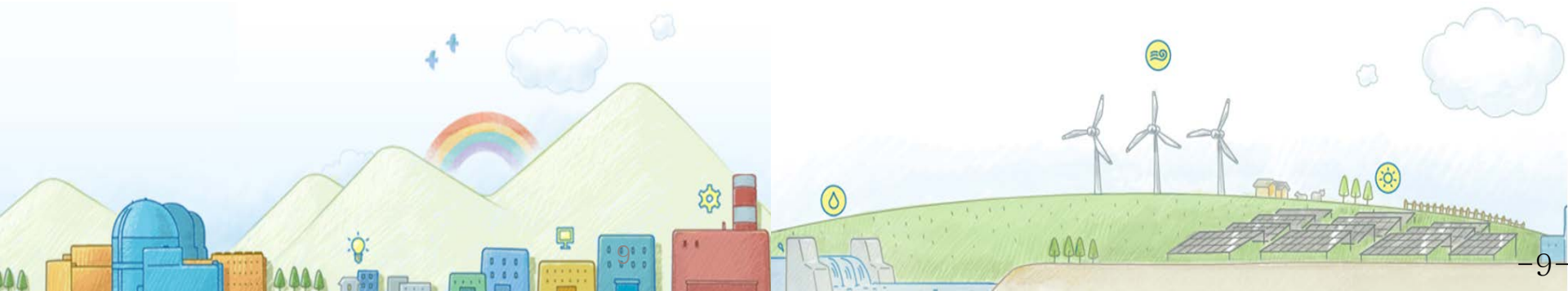
Non-Current Assets USD 43.07 billion

Sales USD 6.40 billion

Profit USD 0.26 billion

	Moody's	S&P	Fitch	R&I
Credit Rating	A1/Stable (Sep. 2012)	A^{+}/Stable (Sep. 2013)	AA^{-}/Stable (Jul. 2013)	A^{+}/Positive (Aug. 2007)

Ⅱ Chameliya Hydroelectric Project



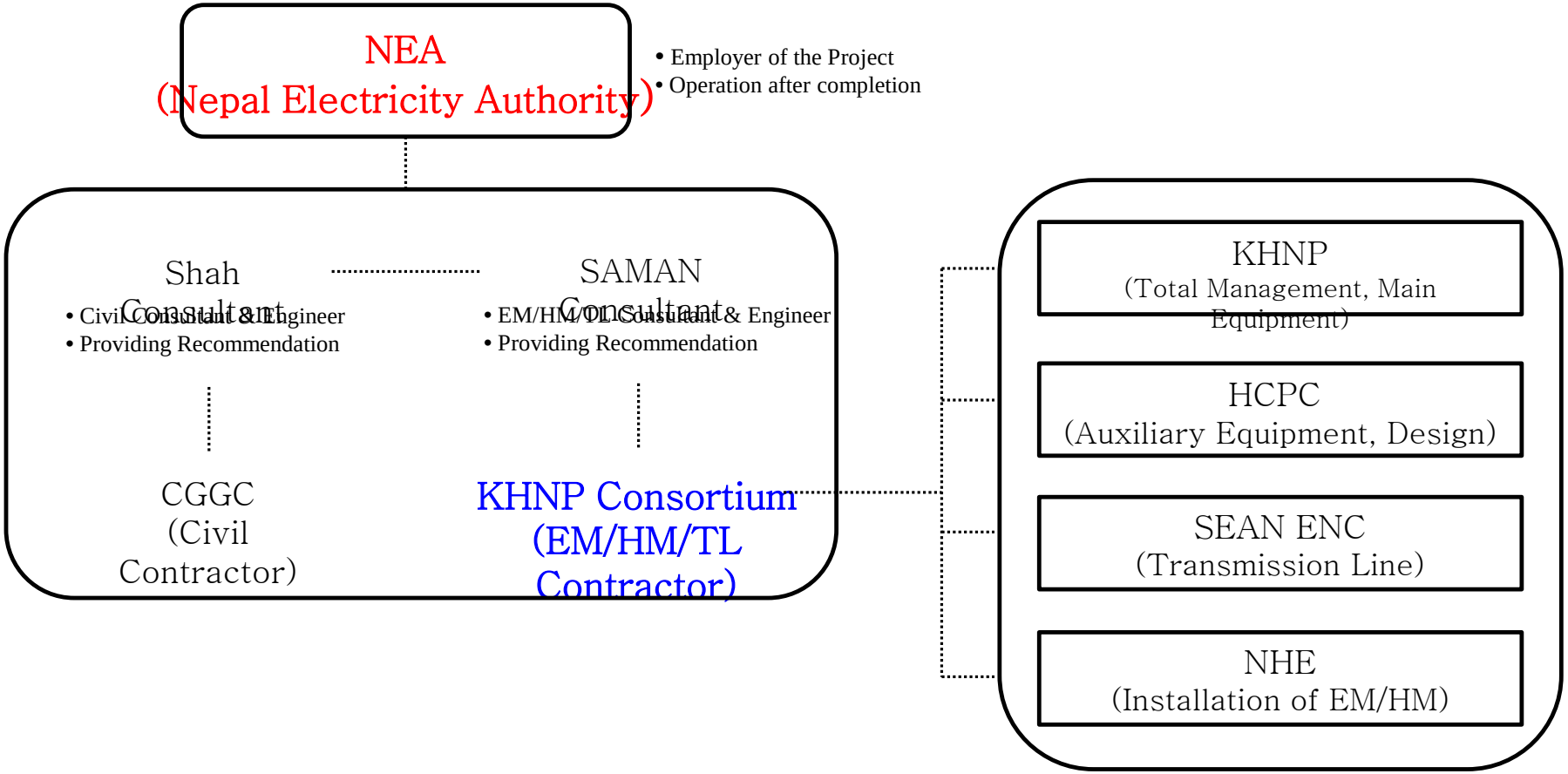
Project Overview

- Project Name :30MW Chameliya Hydroelectric Power Project
- Work Scope : Supply, Installation of EM/HM/TL
- Employer : Nepal Electricity Authority, NEA
- Contractor: **KHNP Consortium**

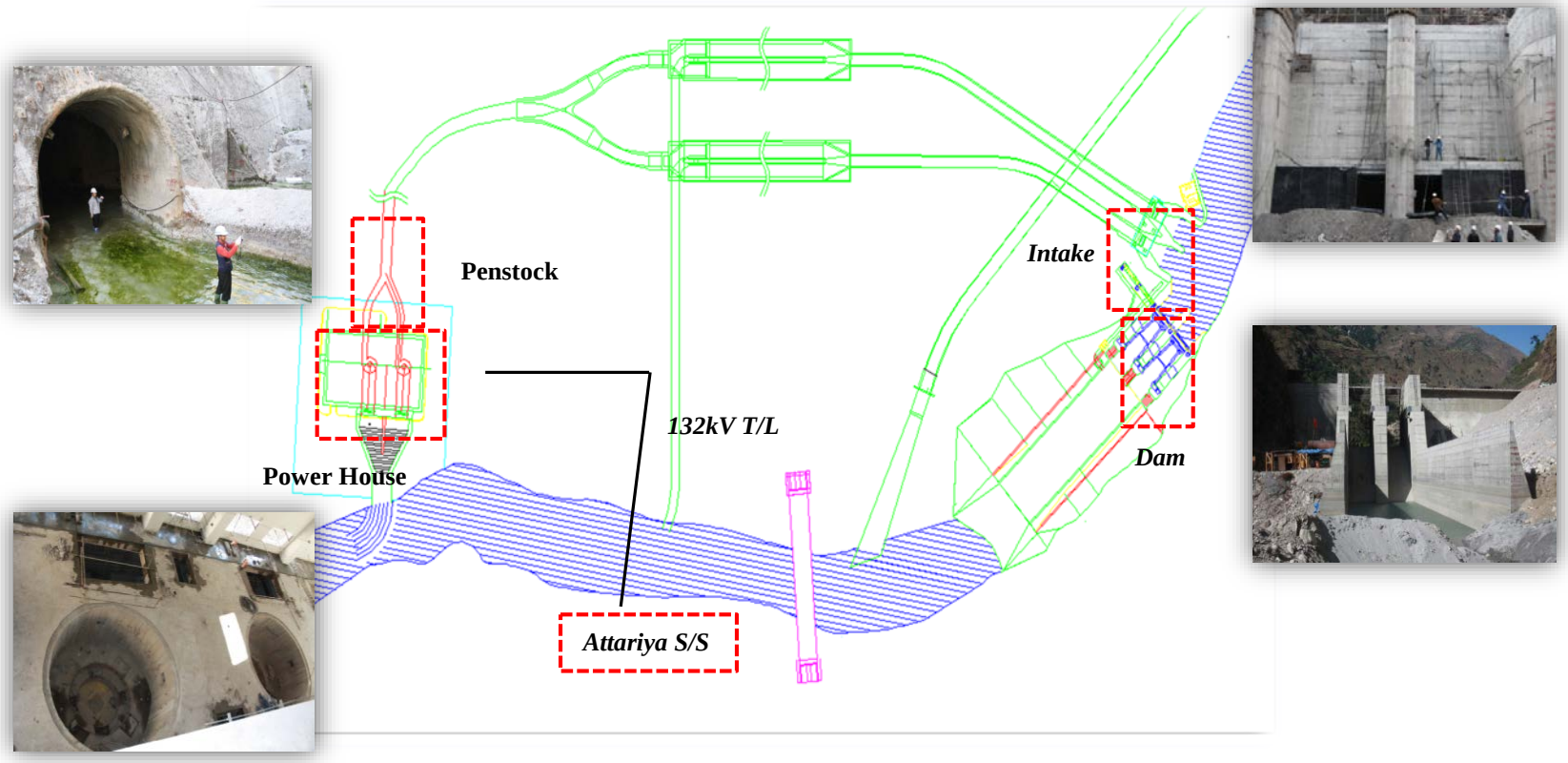
<KHNP, HCPC, SEAN ENC, Nepal Hydro Electric Ltd.(NHE)>

- Contract Price : **USD** 48million (USD 39.8million + NRs 650million)
- Funding : Korea – Nepal Economic Development Cooperation Fund (EDCF)

Organization

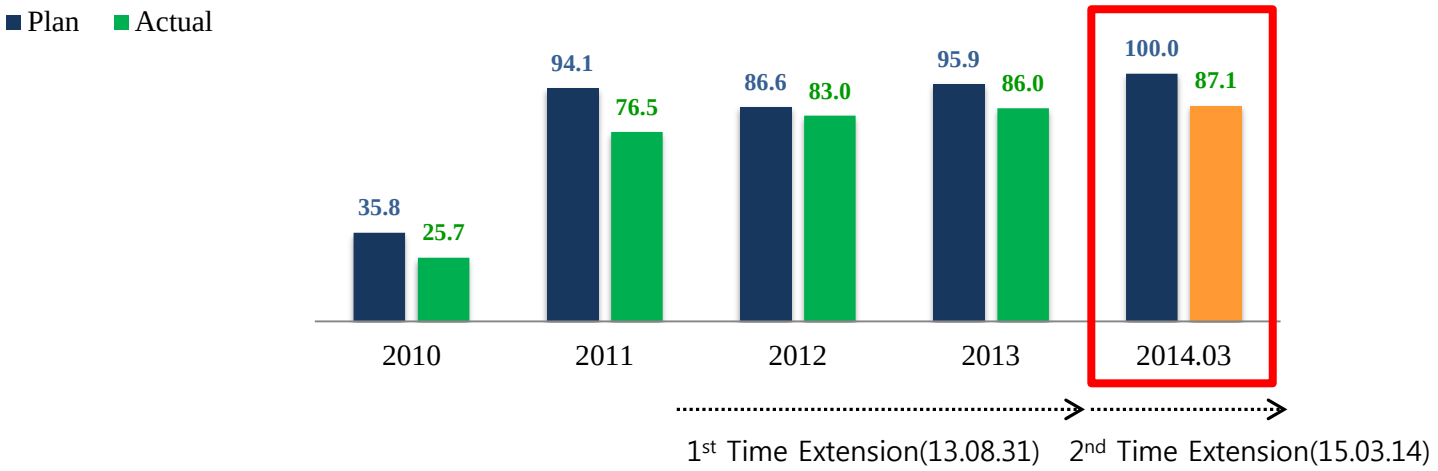


Work Scope of KHNP Consortium



Project Status

Annual Total work Progress



Clarification	Equipment Supply (USD)[%]			Installation (NRs)[%]		Total
	Main Equip.	Aux. Equip.	T/L	T/L	EM/HM	
	KHNP	HCPC	SEAN		NHE	
Progress	98.5	98.6	99.3	91.2	50.0	87.1

Major Issues

Oct. 22, 2008 Bidding

Apr. 30, 2009 Contract Signing <Project Period : May. 2009 ~ Dec. 2011>

Sep. 30, 2011 Time Extension of the Project (1st) <Extended Period : Dec. 17, 2011 ⇒ Aug. 31, 2013>

→ Due to Constant Civil Work delay

20 months

Nov. 2011 ~ Jun. 2013 Efforts for the normalization of the Project

Several discussions were held between officials of Government of Korea ar
with Minister/Secretary of MoE and MoF and NEA

Jul.17, 2013 Employer(NEA) extended Project time (2nd) <Extended Period Aug. 31, 2013 ⇒ Mar. 14,

19 months

Aug. 29, 2013 Termination of the Contract

Sep. 02, 2013 K-EXIM requests amicable agreement through mutual cooperati

Oct. 25, 2013 Minutes of Meeting

→ Contractor continues the work at site

Consultant prepare final report for 1st time extension cost

NEA agrees to make payment for 1st time extension
after Board approval

Major Issues Continue

Nov. 07, 2013 Withdrawal of Termination and Continue the work at Project Site

Validity of Bond was extended up to → End of July, 2014

AP-Bond, AP-Bond(2.97million)

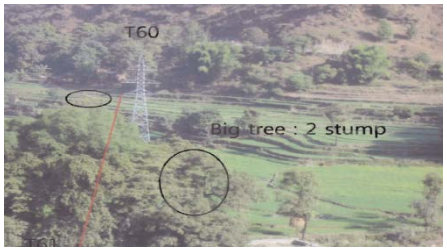
NEPAL ELECTRICITY AUTHORITY नेपाल विद्युत प्राधिकरण NEA Board of Director's final Approval for the Time Extension Cost is

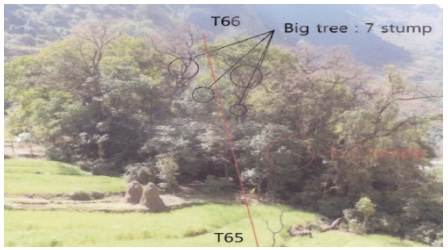
Considering Current civil work progress, **additional Time Extension** is required

Key Issues

▣ Delay in Treatment for the Squeezing section of Headrace Tunnel and vertical tunnel

▣ Delay in Tree cutting and Land Acquisition at Transmission Line





As the biggest Power company owned by Government of Korea

KHNP will do its utmost effort for the successful completion of the project

▣ Increase of Project cost

Time Extension cost is not decided till date

▣ Warranty and Equipment Performance

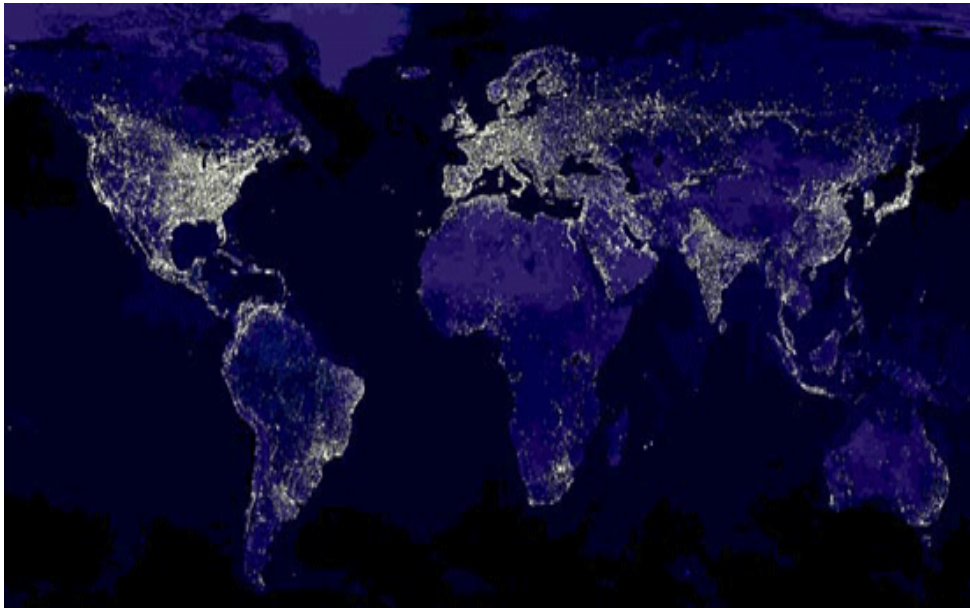
↳ Manufacturer rejected extension of Warranty period

Equipment has been stored at site without proper preservation

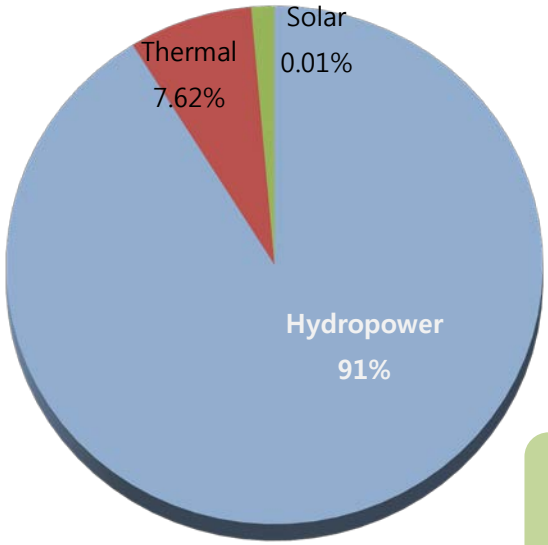
Ⅲ Hydropower Project in Nepal

Opportunity for the development of Hydropower Project

- Potential / Present 42,000MW / 750MW
- Distribution Rate 18%
- Power consumption has been increased 8.7% annually during past 10 years
- Load Shedding 14 hours/day



Power Generation Facilities in Nepal

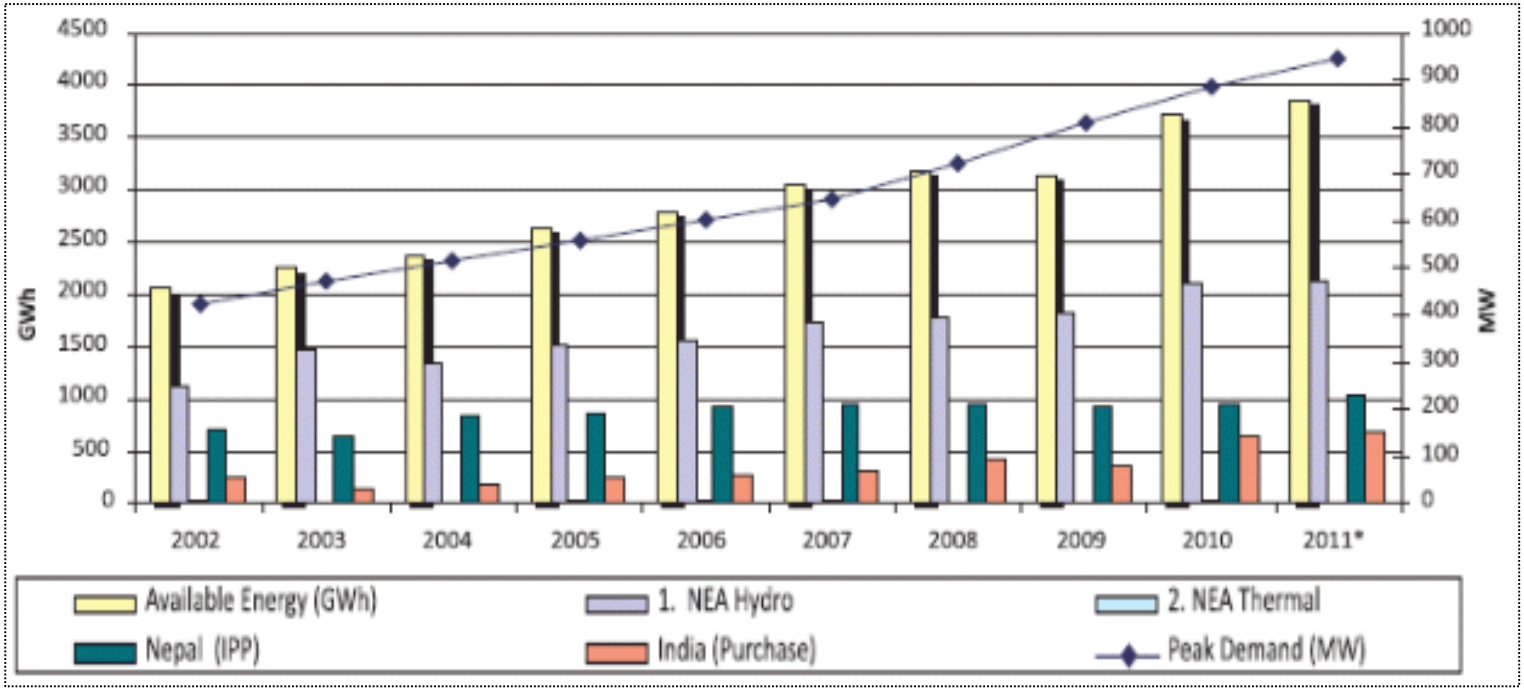


NEA 526.49 MW (74.6%)
IPP 178.98 MW (25.4%)

Power Industry in Nepal

Power Consumption and Supplier

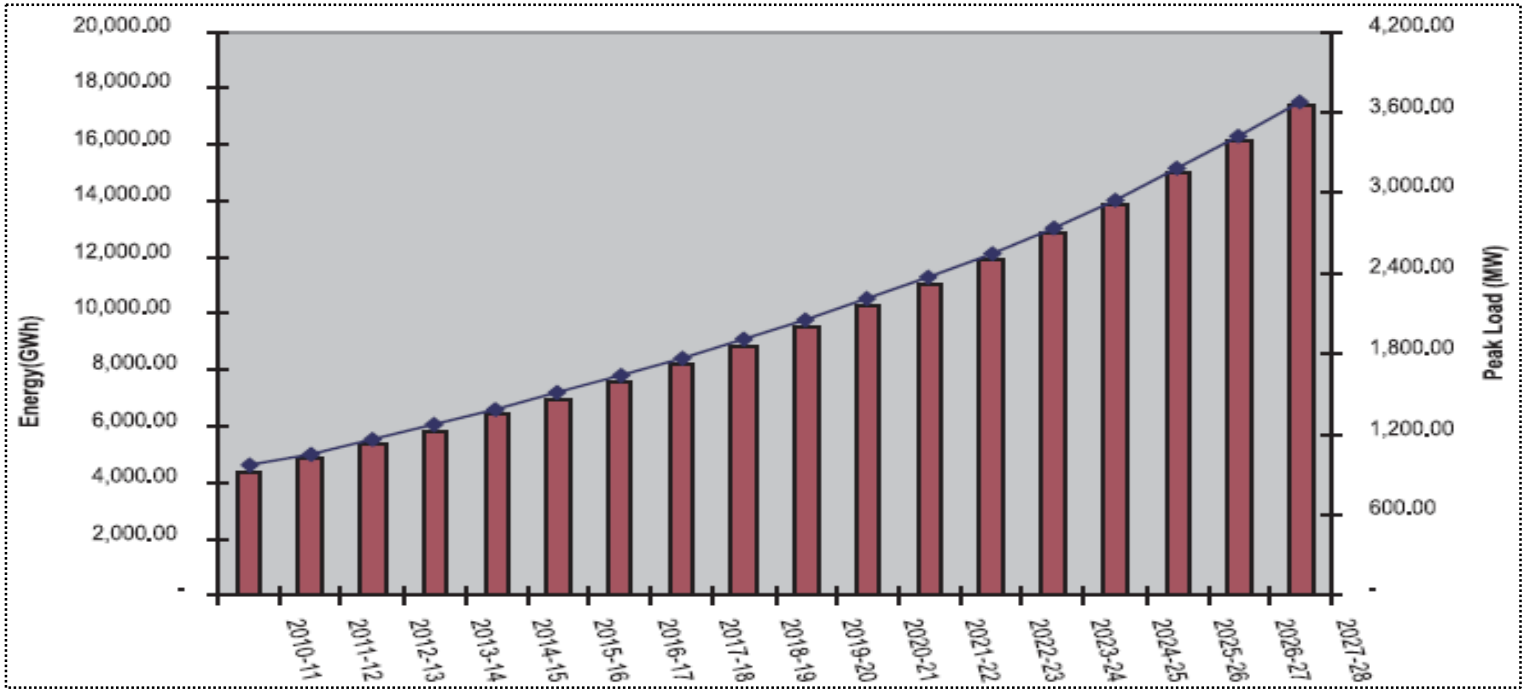
→ Due to lack of power supply by NEA, Nepal has to import 42% of total power consumption from India or Private Sector



Prospect of Power Industry in Nepal

Power consumption would be increased 8.4%/year until 2017

- Through Hydropower IPP Business, Nepal is seeking Power Generation and Economic Development
- Hydropower business would be more important as time goes by



Comparison of Hydropower Business Circumstances

Tariff	Tariff negotiation 3 Times → After F/S, EPC Signing, Commercial operating
Capacity Payment	97% of Payment is maid during Stand-by status → Compensation for the power generation difference due to change in amount of rainfall
Guarantee	Government guarantees enforcement agreement, power sales, water supply → Provide favorable conditions for Project Financing
FOREX	Compensation for the Foreign Exchange loss
Taxation	Vat Exemption for corporate Tax, Sales Tax and dividend Tax + 5% of Custom duty
ROE	17% of ROE Guaranteed → Suki Kinari (840MW), Patrind (147MW)

Comparison of Hydropower Business Circumstance

Credit Rating

Sovereign Credit Rating : "E" (K-EXIM, May, 2014)
→ Difficulties in Project Financing

PPA

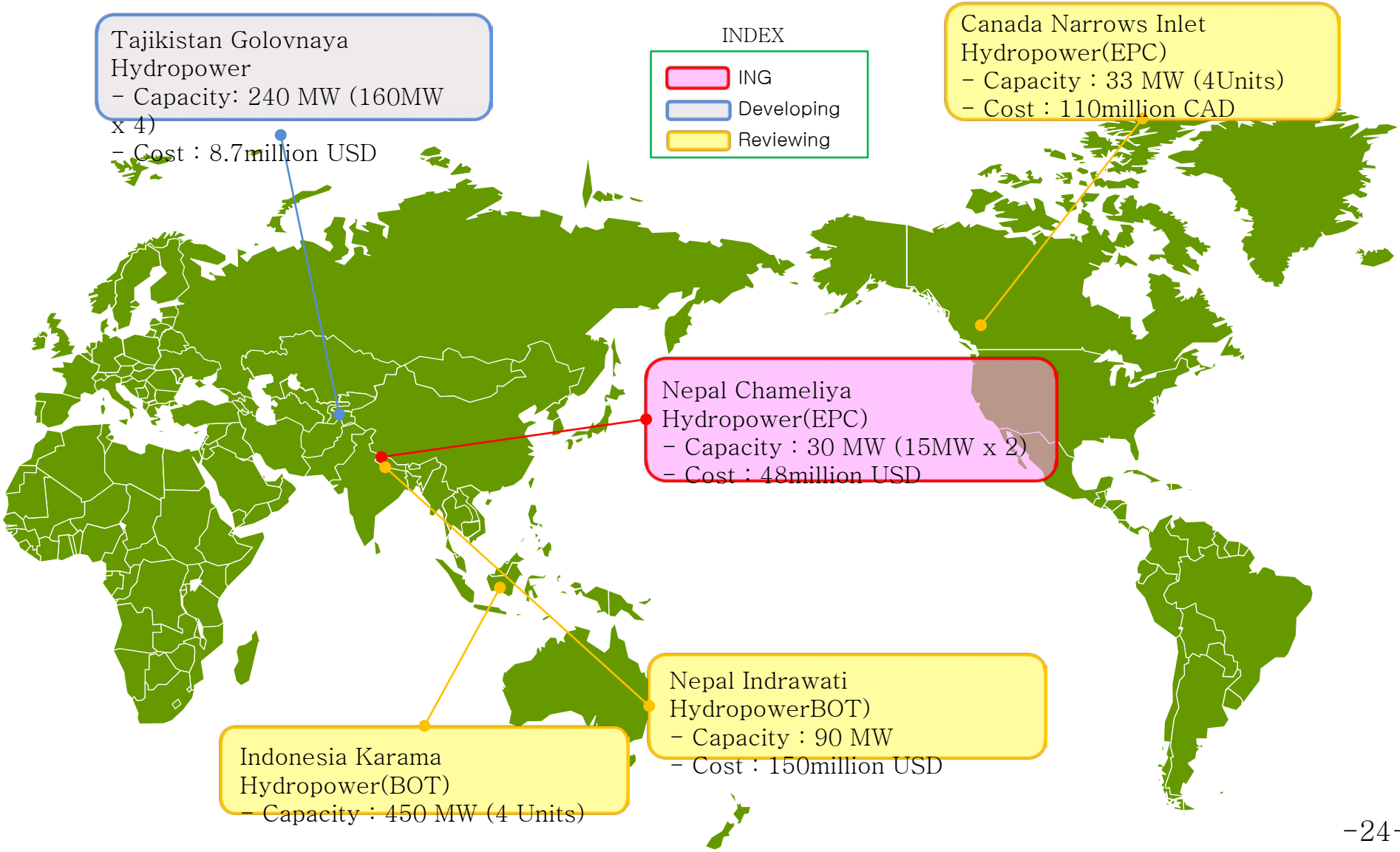
Low PPA Price → Refer to below table

Taxation

High income Tax and Delay in Decision

Project	Owner	Capacity	Completion	PPA	Remark
Likhu-4	Green Venture	120	'14.12	USD 0.059	3% annual increase, 15years
Mistry	Robust Energy	42	'16.5	NRs 4.66 (USD 0.05)	3% annual increase, 15years
Upper Bhote Koshi	Bhote Koshi Power	36	'01.5	USD 0.06	3% annual increase, 15years
Upper Tamakosh	Upper Tamakosh Hydropower	456	'15.12	NRs 5.3 (USD 0.056)	3% annual increase, 14years
Upper Marshyandi	Sinohydro Sagarmatha Power	50	'16.9	USD 0.069	3% annual increase, 10years

Oversea Projects by KHNP



Thank you