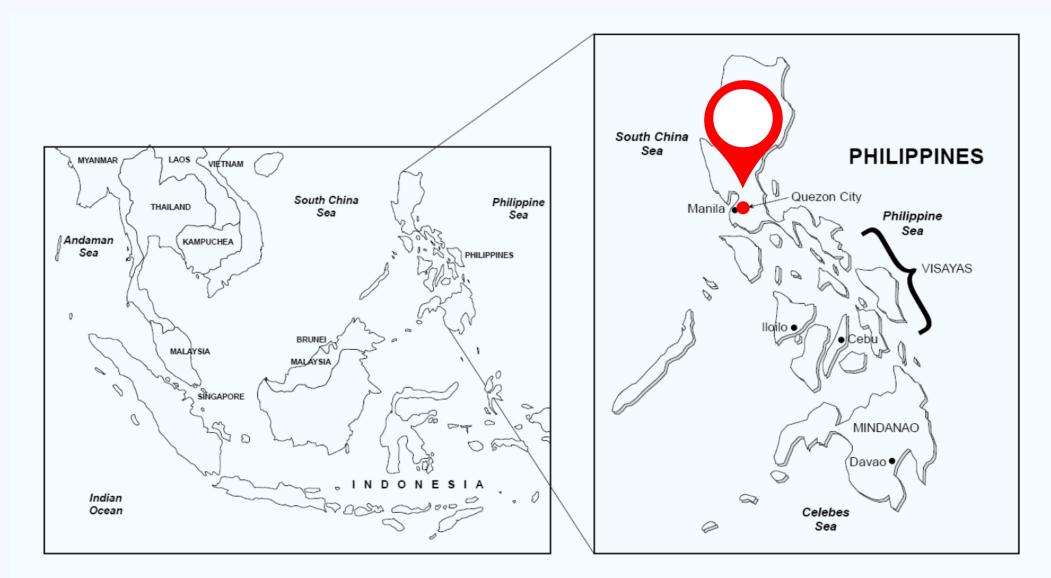


Project Finance Modeling Quezon Power Plant Case Study

Quezon 440 MW Coal Fired Power Plant

FMO

Financial Model Online





Project Description



Capacity: 440 MW

PPP Type: BOO

PPA Life: 25 Years

Total Project Cost: \$809mn

Leverage: 75% Debt

Construction Date: December 1996

Operations Date:
January 2000



Philippines Power Sector Development



1971 - 1987

NPC is monopoly in power generation and transmission

1987 - 1992

government opens up power sector to private entities

1991 - 1997

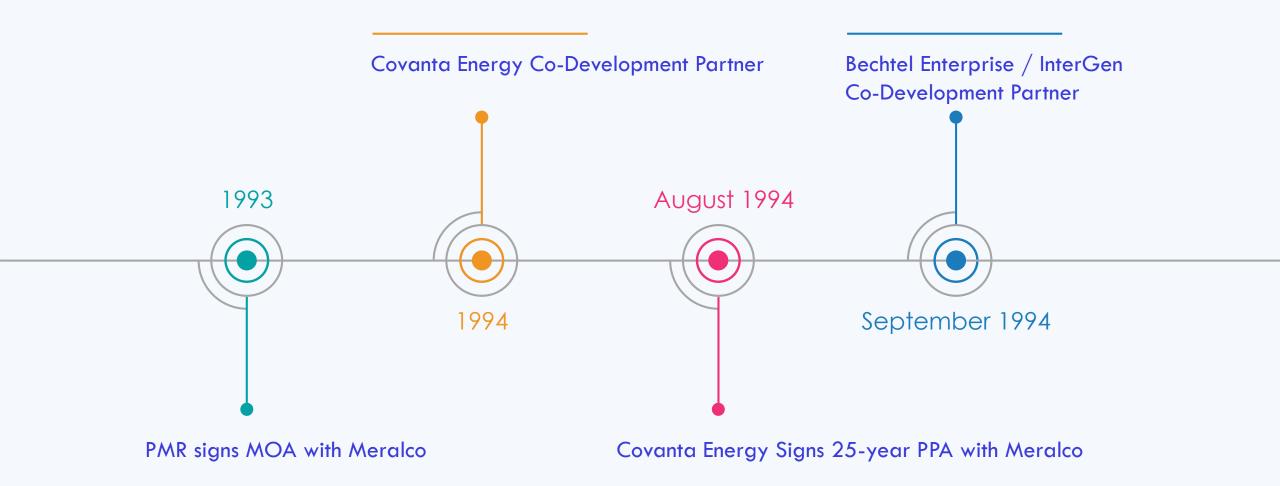
30 IPP projects with combined capacity of 5,000 MW is completed

1998 - 2001

Asian financial crisis, IPP contracts review

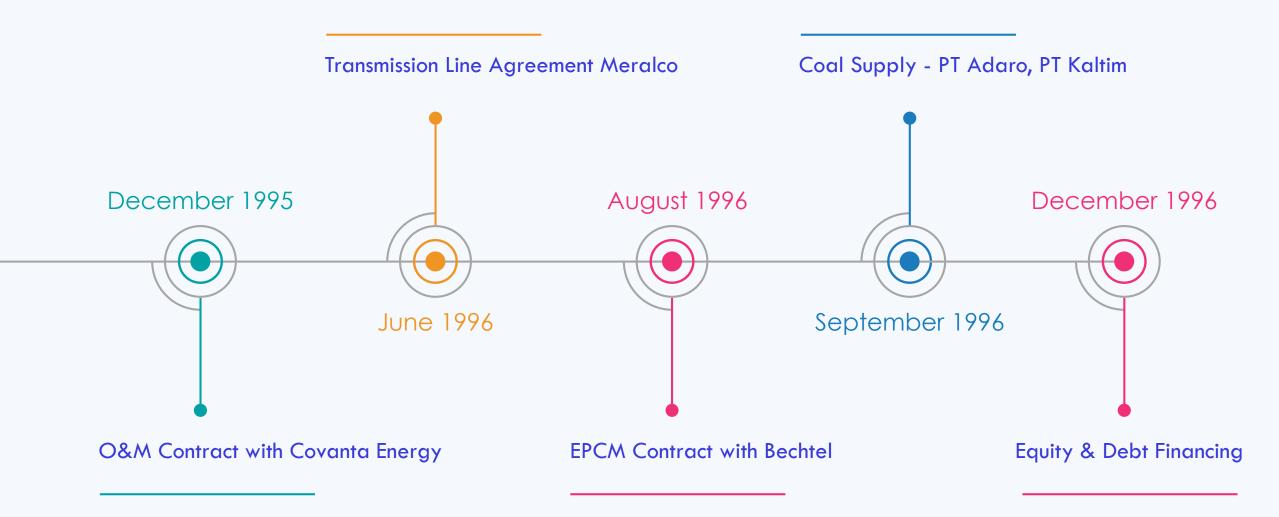


Project Origins





Project Progress





PPA

Offtaker:

Meralco

Structure:

Take or Pay

Payment Structure:

Capacity, O&M, Energy Fees

Payment Indexation:

US Dollar

Annual Revenue 1 st Year:

US\$ 237 mn



EPCM Contract

EPCM Contractor:

Bechtel

Contract Structure:

Turn-Key, Fixed Price

Guarantees:

Completion Date & Performance



O&M Contract

O&M Contractor:

Covanta Energy

Plant Technology:

Commercially Proven

Guarantees:

Bonuses and Penalties



Coal Supply

Coal Suppliers:

PT Adaro PT Kaltim

Structure:

Put or Pay

Guarantees:

Financial Guarantees



Exchange Rate and Country Risks

Exchange Rate:

PPA denominated in US\$

Country Risk:

EXIM Bank Insurance

Political & Economic Landscape:

Improving

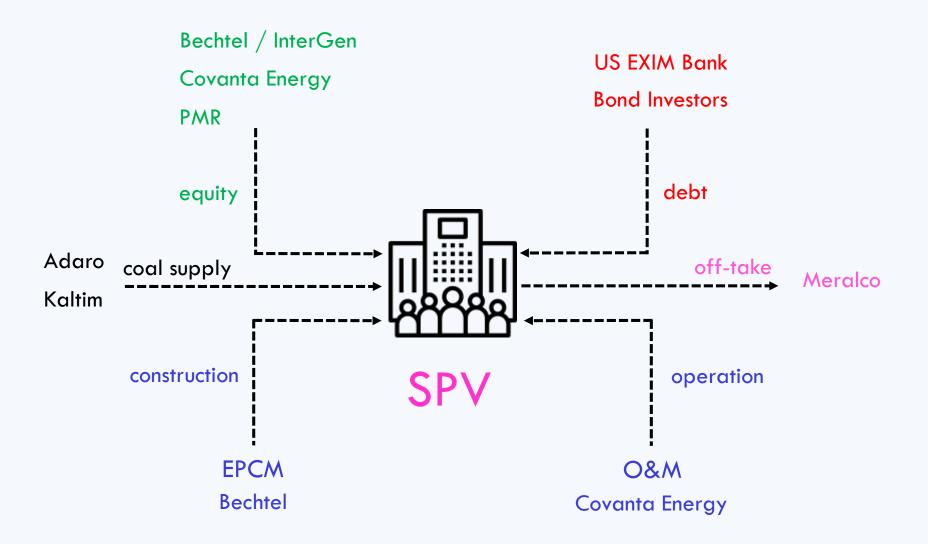


Financing

Equity Financing	\$ mn	Ownership %
Bechtel / InterGen	144.2	72
Covanta Energy	54.7	26
PMR	0	2
Total Equity	198.9	
Debt Financing	\$ mn	
US EXIM Bank	392.0	
Bond Investors	215.0	
Total Debt	607.0	



Roles & Responsibilities





Project Finance Modeling Quezon Power Plant Case Study



Risk Allocation

	development / financing risk	construction risk	revenue risk	operation risk	coal supply risk	exchange rate risk	political risk
equity investors	\mathscr{Q}						
lenders							
off-taker			\mathscr{D}			\mathscr{O}	
EPCM contractor		\mathscr{D}					
coal supplier					\mathscr{Q}		
O&M contractor				\mathscr{D}			
US EXIM Bank							\mathscr{Q}



Project Economics

US\$ 8.4 bn Total Revenue: US\$ 4 bn US\$ 933 mn Debt Service: US\$ 2.1 bn Dividends: Projected Equity IRR 20% Payback: 4 years

Quezon Power Project – Acquisition by EGCO

14 May 2012 (Reuters) - Thailand's second-largest private power producer, Electricity Generating Public Company Limited (EGCO), said on Monday it would spend \$375 million to buy an additional 45.9% stake in Quezon power plant in the Philippines, raising EGCO's holding in Quezon Power to 98%

Implied Equity Valuation	US\$ 817 mn
Initial Equity Investment	US\$ 200 mn
Dividends 2000-2011	US\$ 600 mn
Exit IRR	24%



Quezon Power – Key Takeaways

Strong Power Demand

Well Structured Risk Allocation

Robust Project Economics