ENERGY WORLD

# ENERGY WORLD CORPORATION LTD.

# *Investor Presentation*

***February 2018***

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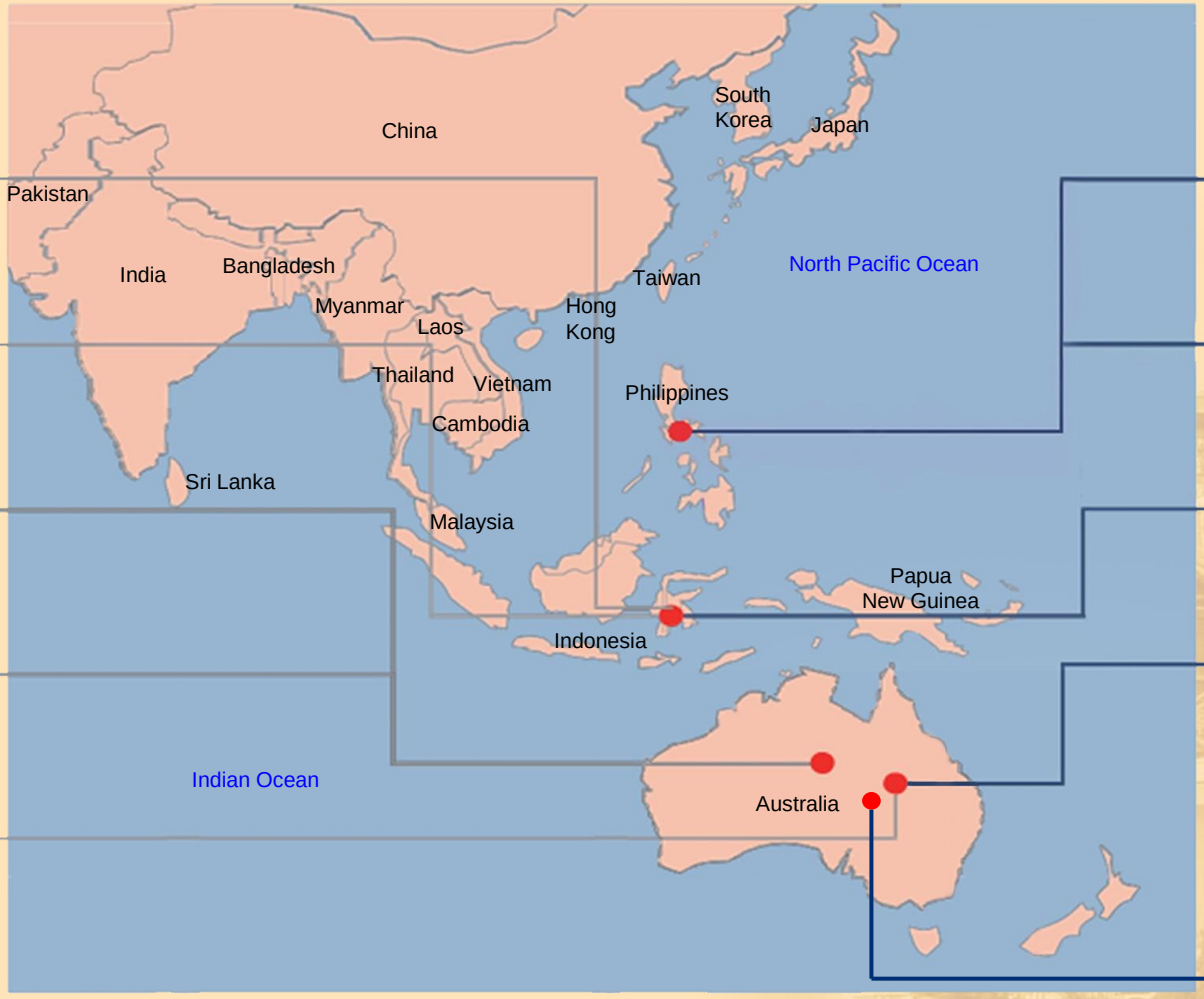
# Our Projects

## Energy World's focus is on LNG to Asia

**Existing Assets**

- Sengkang Power Plant Block 1 & Block 2
- Sengkang Gas Field
- Alice Springs Power Plant [1]
- Alice Springs LNG Project [1]
- Gilmore and Eromanga Gas Fields [1]

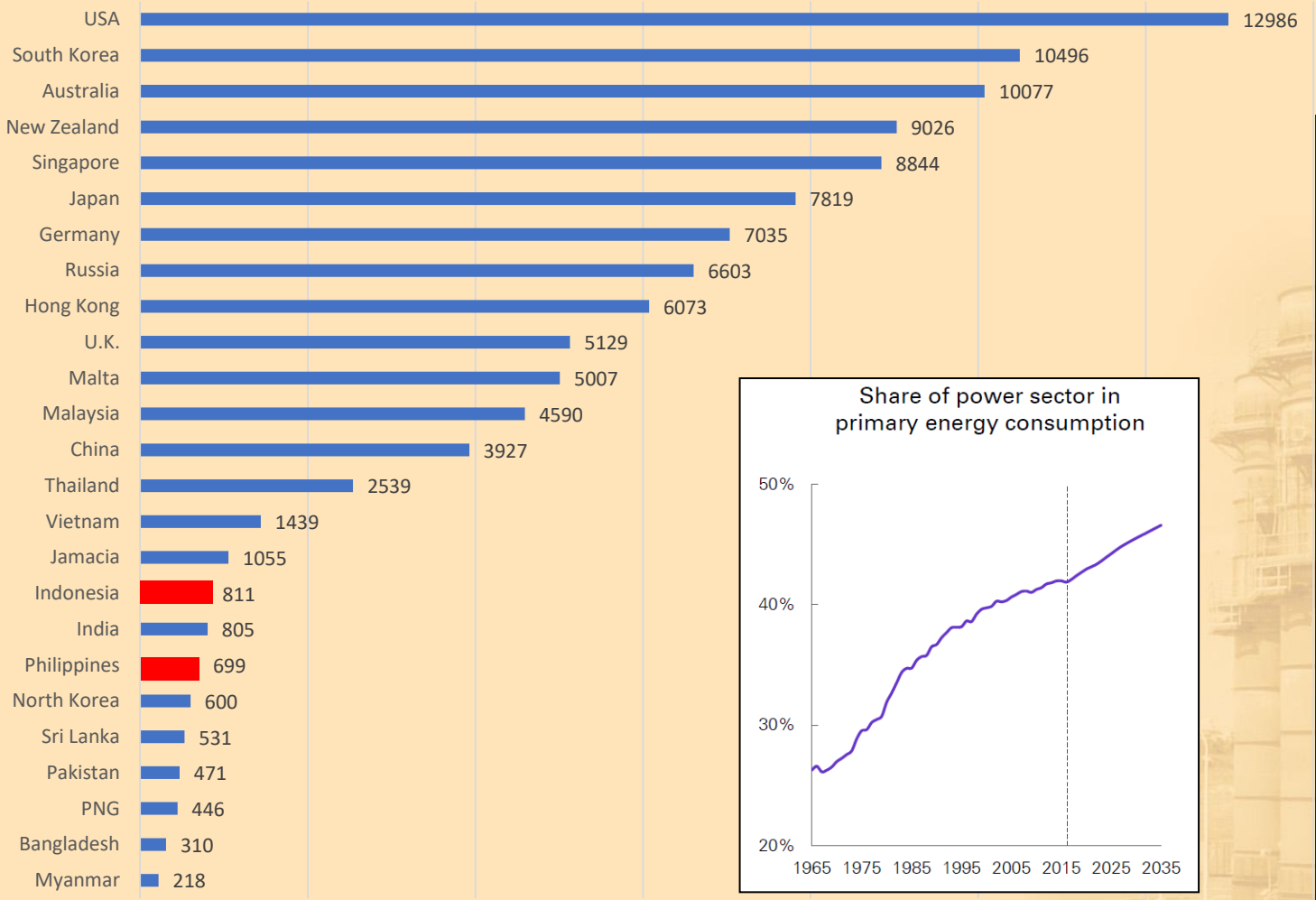



**Projects Under Development**

- Philippines LNG Hub
- Philippines Power Plant
- Sengkang LNG Project
- Gilmore LNG Project
- PEL 96 Southern Cooper Gas

# Electricity Consumption

Kilowatt Hour Consumption Per Capita Per Annum




kilowatt hour consumption per capita per annum.
Source data: World Bank



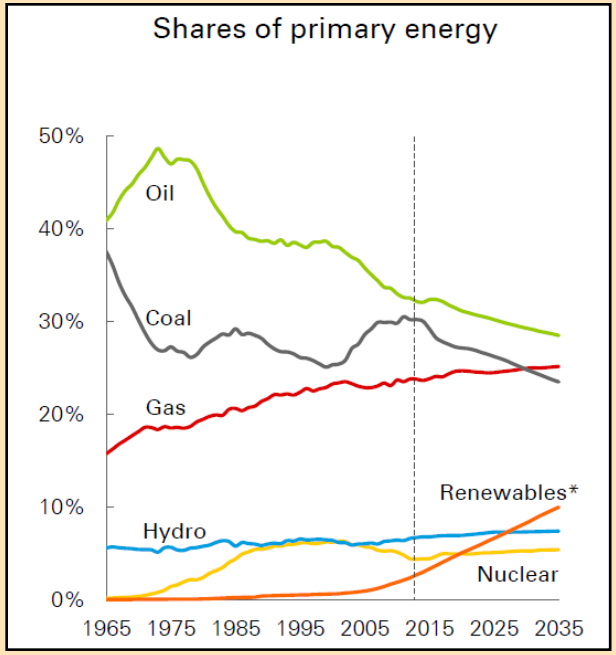

Source: BP Outlook 2017

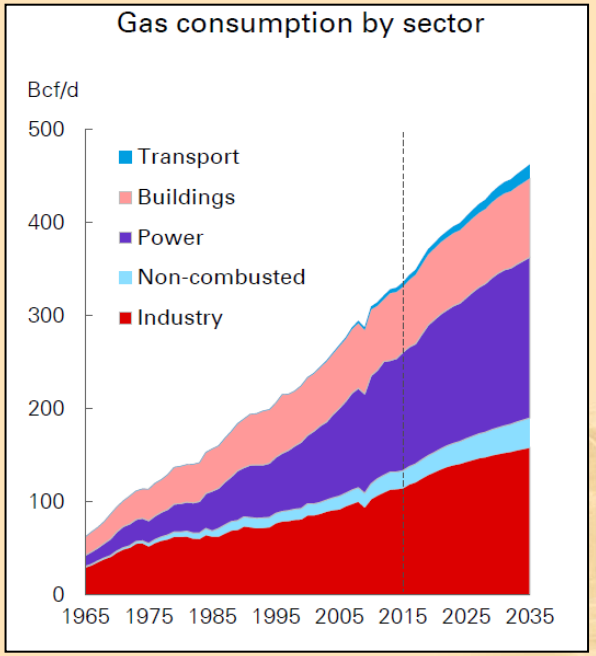
- The world economy continues to electrify; nearly 67% of the increase in demand for energy comes from electricity
- The rising share reflects consumer preferences for energy that is clean and convenient at the point of use
- High growth opportunity in emerging markets as prosperity rises

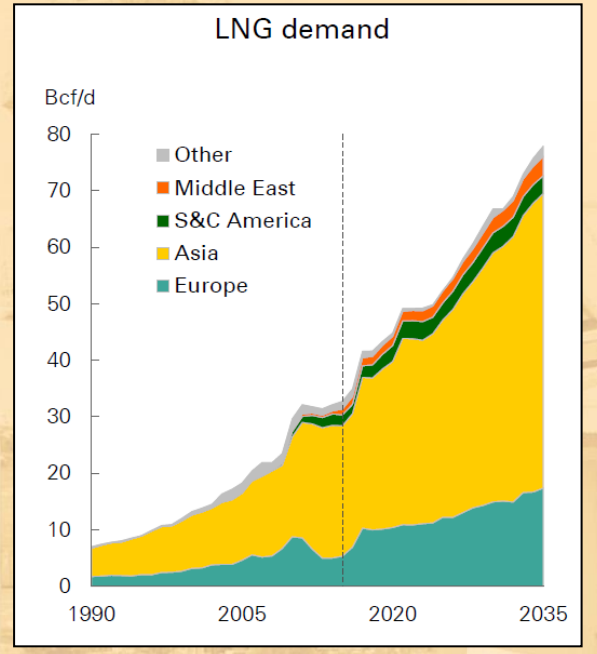
➢ Support this growth with clean and green energy

# Increasing Importance of Gas and LNG

- The importance of gas in the energy mix continues to grow and is expected to overtake coal to become the 2nd most important source of energy
- Renewables grow rapidly, but from a low base
- Demand for gas fired power rises steadily, as does the use of gas for industry
- Demand for LNG from Asian consumers is forecast to double over the next 15-20 years



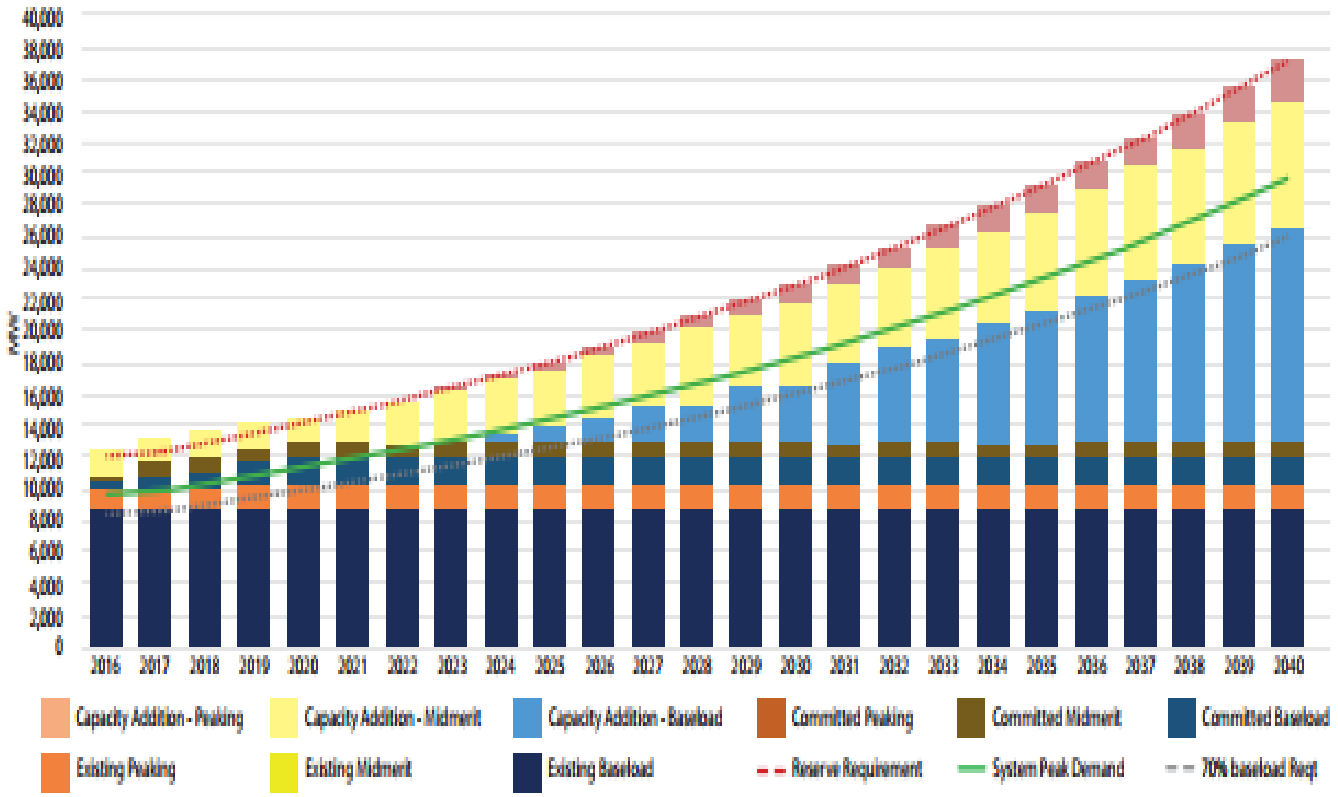

Source: BP Outlook 2017

# Philippines Landscape – Robust Demand for Power

The Philippines Department of Energy ("DOE") forecasts that the Philippines will need 43,765 MW of additional power capacity by 2040, up from the existing capacity of 13,877 MW, representing a compound growth rate of 6% p.a.

The Luzon grid, which accounts for 70% of total existing capacity, is expected to triple from 9,726 MW to 29,852 MW by 2040, a growth rate of 5% p.a.

**Luzon Power Demand Supply Outlook – 2016- 2040**



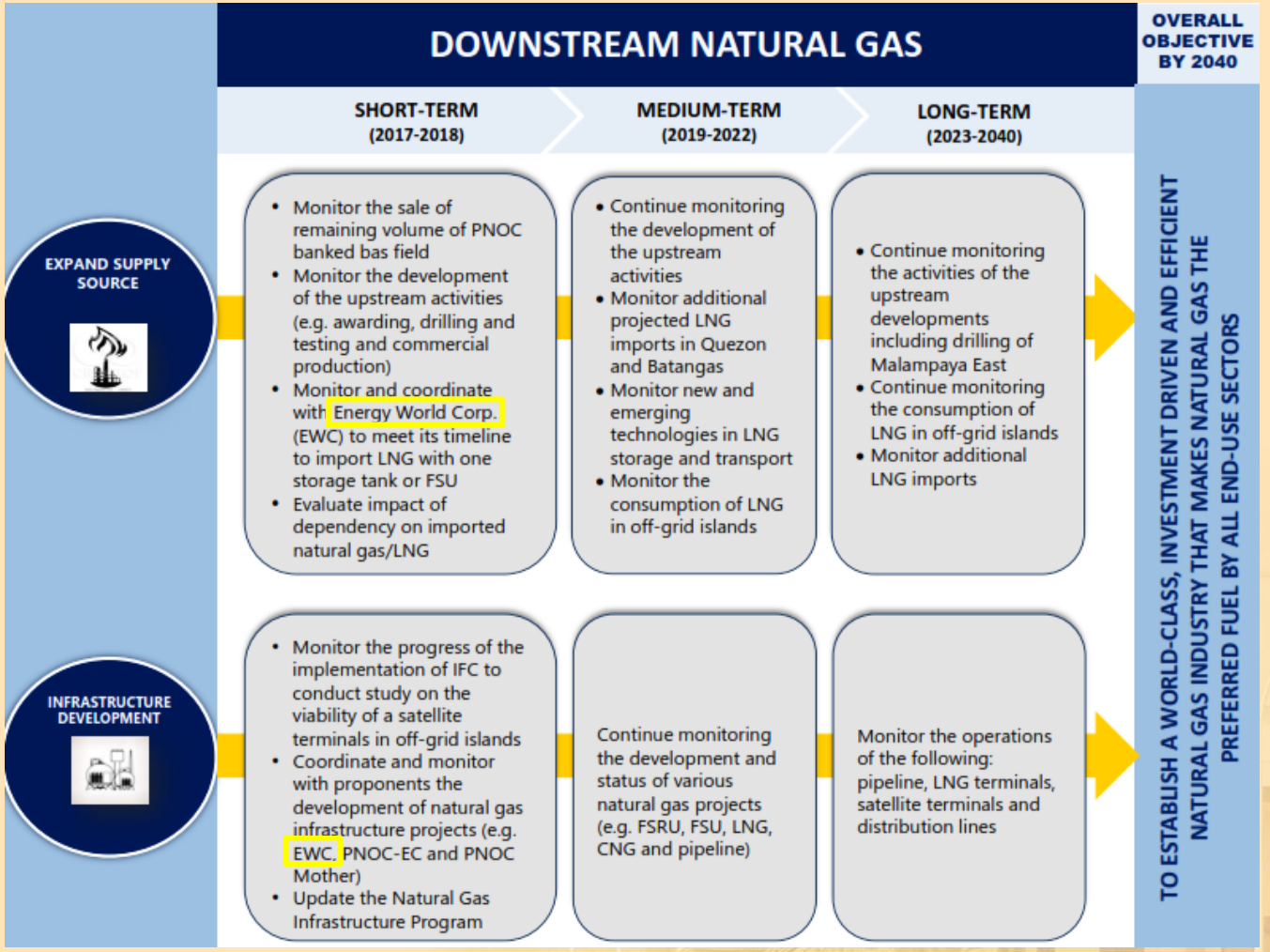

Source: Philippines Department of Energy

# Philippines Landscape – Strategic Positioning for LNG Hub

## Gas Demand

The Philippines currently has only one source of gas – the Malampaya gas field. This field is expected to be depleted by early/mid 2020's, and currently provides gas to approximately 3,200 MW of power plants. There is no/very small industrial use of gas currently in the Philippines

EWC's Philippines Hub Terminal represents the only current solution for bringing gas to the Philippines, including after Malampaya's depletion, and represents a key strategic part of the DOE's vision for development of the Philippines gas market




Source: Philippines Department of Energy

# Teaming up with industry leaders: LNG and Power

**ENERGY WORLD**

**Investor, Developer & Operator**

CHART

LNG process provider
Cold boxes
Gas treatment (By TDE)
Liquefaction BOP

SIEMENS

Electrical and rotating equipment
Electrical BOP

CEPA

Slipform Engineering – civil works, process engineering and LNG tank construction
CEPA – operation and maintenance

ARUP

Civil and Structural Engineering

**Other Consultants, Suppliers and Service Provider:**

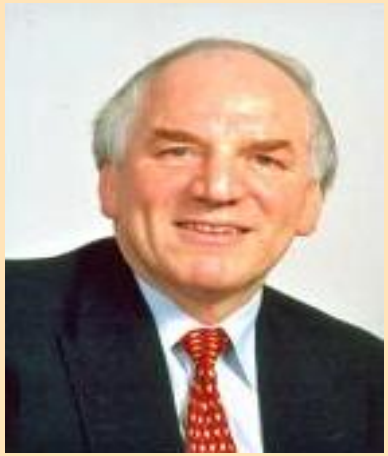
CH.IV International – LNG specialists
Woodfield – loading arms
Penspen – pipeline routes and design
University of Southampton – cryogenic consultants

GTT
Expert in LNG

Tank Membrane Lining Technology – LNG Expert in handling and storage

# Our People

## Stewart Elliott, Chairman and CEO



Mr. Elliott has built over 6,500 MW of electricity generating capacity in Asia. He was previously with the Hopewell Group, where Mr. Elliott was the MD who built and listed CEPA in Hong Kong and subsequently sold 80% to Southern Electric for US$2.7b in 1997. Mr. Elliott then founded Energy World International in 2000 and took control of what is now known as Energy World Corporation in Australia. Mr. Elliott has pioneered the development of modular LNG in the 2000's and the Hub and Spoke concept to distribute LNG to developing countries

| **Philippines Power Projects by Stewart Elliott** | | |
|---|---|---|
| Location | Capacity (MW) | Contract Amount (USD) |
| Navotas - 1 | 200 | 150 Million |
| Navotas - 2 | 105 | |
| Pagbilao Coal | 735 | 930 Million |
| Sual | 1200 | 1,300 Million |
| O & M Barges | 270 | |
| LNG Hub Terminal | | 300 Million |
| Power Plant | 650 | 600 Million |
| **Total Amount:** | **3,170** | **3.28 Billion** |

Mr. Stewart Elliott with President Ramos inspecting the Pagbilao Coal Fired Power Plant

# Philippines – Pagbilao LNG Hub Terminal and 650 MW Power Plant

# Philippines – Pagbilao LNG Hub Terminal & 650 MW Gas Fired Power Station





## Pagbilao Project:

- Energy World is developing the first LNG Hub Terminal in the Philippines, which will act as a hub for onward distribution of LNG throughout the Philippines
- We are also developing a 650MW CCGT power plant at this site

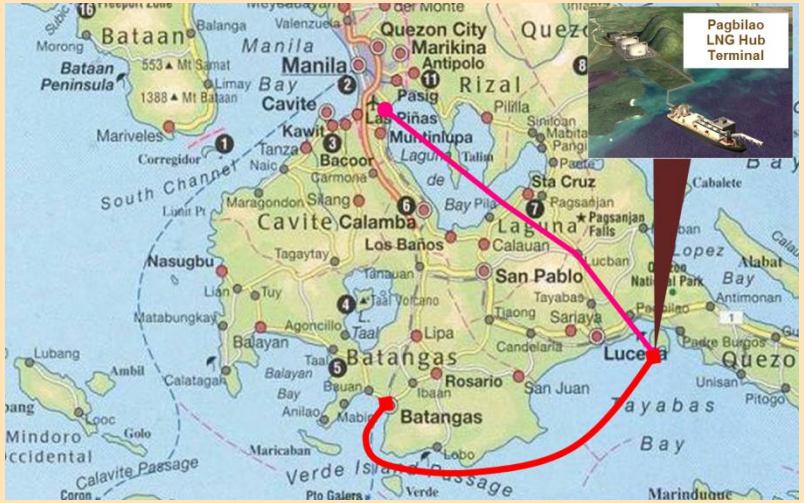
# Philippines – Pagbilao LNG Hub Terminal

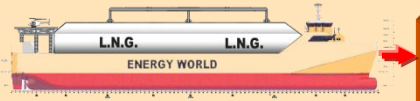

View of Jetty and Hub Terminal

Foundations for second 130,000 cubic meter storage tank have been laid

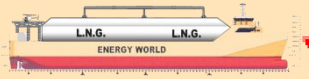
- Strategically important asset for Philippines nascent gas industry
- 130,000 m3 LNG Hub Terminal is 90% completed
- Deep water jetty is capable of handling all sizes of LNG vessels
- Facility is capable of handling a throughput of 3 mtpa of LNG annually with the 1st tank, which can support 3,000 MW of gas fired power generation
- This will support our adjacent 650 MW combined cycle gas fired power plant, and provide expansion options for both EWC and third party gas clients
- Hub Terminal to be run on a tolling model for third party clients

# LNG Distribution Options – Creating a Market

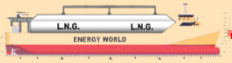



Large LNG vessel for deliveries of LNG to the Hub Terminal




Middle size LNG Ship for distribution of LNG on a national scale



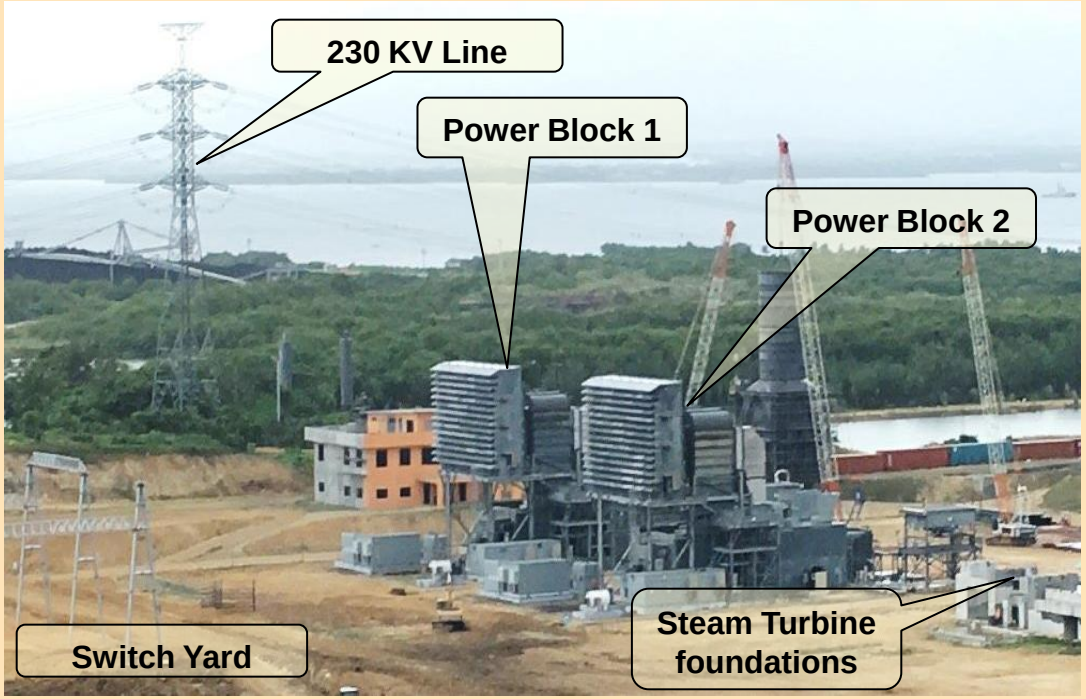

Small LNG Ship for distribution of LNG on a regional scale

LNG Truck for local deliveries of LNG

- **The LNG Terminal at Pagbilao will act as a Hub Terminal. LNG can be imported to the Hub Terminal, and then distributed in smaller cargoes to users around the Philippines**
- **There are multiple options for the distribution including pipelines, shipping and land transport solutions**
- **Once available in the Philippines, we foresee significant demand for LNG**
- **We are being approached by a number of provinces and islands wishing to secure LNG supplies**
- **We are having initial discussions with industry players on their needs for LNG**

Ocean Quest, owned by our major shareholder EWI, will be used to ship LNG to the Hub Terminal

# Philippines – Pagbilao 650 MW Combined Cycle Power Plant




- 650 MW Combined Cycle Gas Turbine Power Plant construction is significantly completed
- Project is being developed in stages:
  - Block 1 - 200 MW gas turbine (85% complete)
  - Block 2 - 200 MW gas turbine (80% complete)
  - Block 3 - 250 MW steam turbine (foundations complete, equipment ready for delivery)
- Plant will secure gas from adjacent LNG hub terminal
- Electricity will initially be sold into the Wholesale Electricity Spot Market ("WESM")
- There is sufficient land at site to expand our power generation capacity to cater to forecast growth in Philippines demand

# Philippines – Land Agreement

**Land Agreement**

Following the National Grid Corporation of the Philippines (”NCGP’s”) announcement of the exact location of the Pagbilao Sub Station, we were able to identify the exact termination point for our right of way

We entered into a binding agreement with a Land Agent, who together with the Quezon Province, has secured land ownership and right of way access agreements with individual land owners

The right of way access will provide us with the right to construct, operate and maintain a transmission line

The Quezon Province and Land Agent are in the process of securing the land title transfer

The terms of the Land Agreement are confidential

We previously obtained all required approvals for the design and construction of the transmission line

# Philippines – Connection Agreement

**230 KV Line**

On 28 November NGCP granted us immediate access to the adjacent 230 KV line which will provide for up to 200 MW of power, on a temporary basis

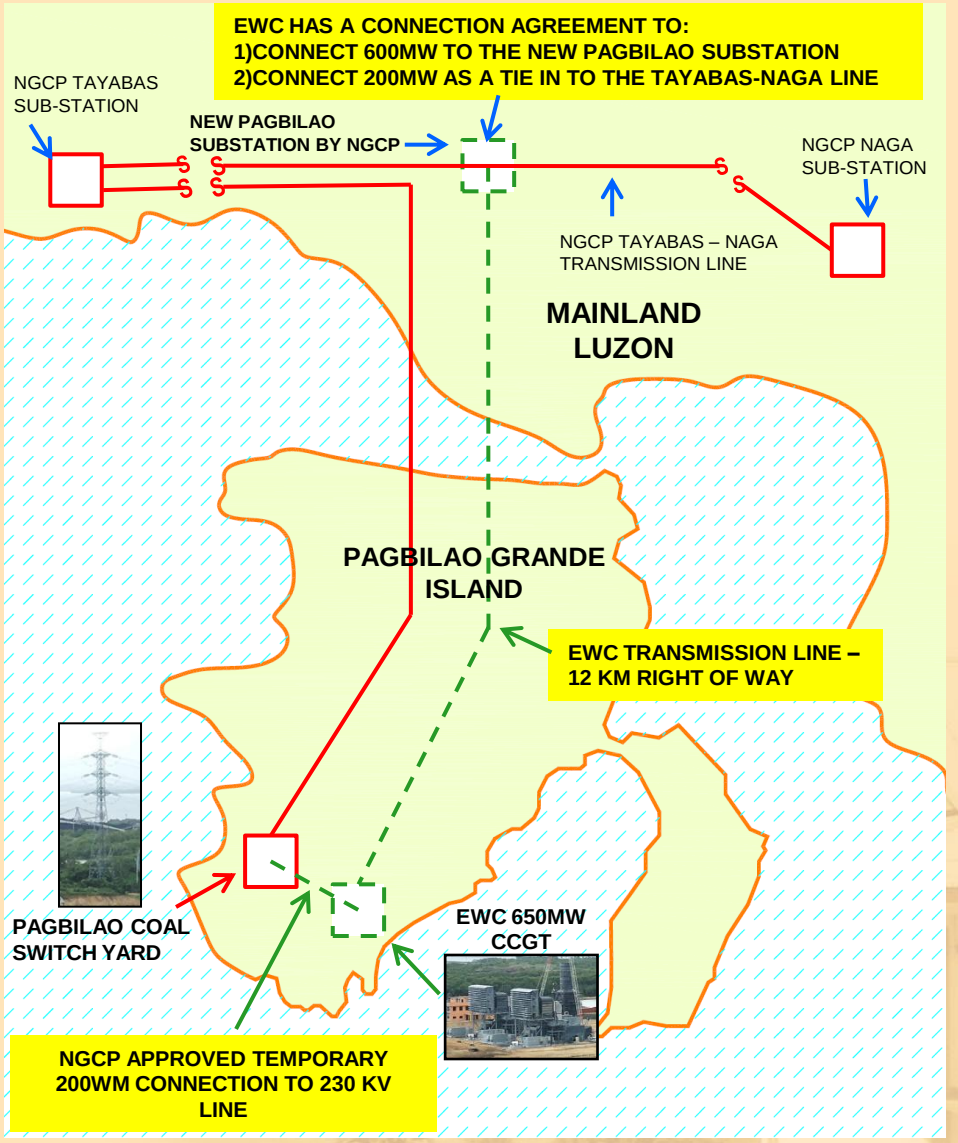
**Connection Agreement:**

We have previously signed a connection agreement with NGCP that provides us access to the main grid as follows:

-A tie in connection to the existing Taybas – Naga transmission line for up to 200 MW, which is immediately available
-A connection for the full 600 MW plant capacity when NGCP completes construction of the Pagbilao Sub Station

NGCP and the National Transmission Corporation ("Transco") are responsible for construction of the new Pagbilao Sub Station

While we anticipate the facility will be completed by December 2019, it must be noted that this process is outside of our control



# Pagbilao Power Plant – A Pathway to Completion

2011

**DEC-2011**
EWC receives DOE Endorsement for LNG Power Project at Pagbilao

**JUN-2013**
EWC receives DOE Approval to apply for Transmission Service

**NOV-2013**
EWC Completes System Impact Study

**DEC-2015**
EWC and NGCP sign the Connection Agreement for full output of the Pagbilao Power Plant. Connection Agreement is predicated on NGCP constructing a new HV Substation at Pagbilao – Location to be determined.

## OCT 2017

•NGCP Confirms the location of the New Pagbilao Sub Station.

**NGCP Construction of New Pagbilao HV Substation**

**Hub Terminal**

**Initial 200 MW**

**Transmission Line**

**NOV 2017**

•Land Agreement now in place.
•Transmission Line is designed and ready for construction.

NGCP Completion of Sub Station

**2nd 200 MW**

**250 MW Steam Turbine**

Earlier connection possible with NGCP approval of tie in to existing 230 KV system

650 MW Output

2015 Delays outside of EWC Control 2017 JUN-DEC 2018* DEC 2018* DEC 2019*

* Dates remain outside of EWC control and are subject to funding, NGCP and other DOE entities

# Philippines – Political Support

(From Left to Right)

Donato Marcos
Undersecretary of DOE

Redentor Delola
Assistant Secretary of DOE

Felix William Fuentebella
Undersecretary of DOE

Stewart W.G. Elliott
Chairman, M.D. & C.E.O
Energy World Group

Alfonso Cusi
Secretary of DOE

Admiral Lista
President of PNOC

Brian Allen
Executive Director
Energy World Group

Jesus Posadas
Undersecretary of DOE

Matthias Weber
Senior Sales Manager
Siemens

**Department of Energy Site Visit of Pagbilao LNG Hub Terminal on 26 July 2017**

House of Representatives' Site Visit at EWC's Facility on 24 August 2017

Congressman Lord Allan Jay Q. Velasco
Chairman House Committee on Energy

Stewart W.G. Elliott
Chairman, M.D. &C.E.O, Energy World Group

# Our Indonesian Projects

- Sengkang Production Sharing Contract (PSC)
- Sengkang Power Station
- Sengkang LNG

# Indonesia – Sengkang Gas Field

## Sengkang PSC

**The Sengkang PSC Block is located in the province of South Sulawesi. The PSC is operated by Energy Equity Epic Sengkang ("EEES") which is 100% owned by EWC and covers 2,925 square kilometres**

**Gas from the PSC is supplied to the 315MW Sengkang Power Station IPP; PT Energi Sengkang ("PTES") which is owned 95% by EWC**

**EEES is currently developing the PSC to its full potential including the recent drilling of wells in the WASAMBO gas fields in order to supply LNG to the Domestic Market in Indonesia**

**2P reserves are estimated at 203 BCF, while total gas in place is estimated at 7-9 TCF based on PT Lapi ITB studies**

**The PSC expires in October 2022. We have been invited by DG Migas and SKK Migas to apply for an extension beyond 2022, and the process has commenced**



# Indonesia – Sengkang Power

Aerial view of Sengkang Power Plant

Block 2

Block 1

**Location**
Sengkang
South Sulawesi, Indonesia

**Performance Metric**
Trailing 3 year Avg.
Availability Factor = 86.3%

**Capacity**
Block I: 135MW
Block II: 180MW
Total Output:
315MW (total rated output of 357 MW)

**Completion Date**
Block I = 1996,
Block II = 2012

- **The Sengkang Power Station is 315 MW, comprising of Block 1 of 135 MW and Block 2 of 180 MW**
- **Gas is obtained from the Sengkang gas field**
- **Electricity is sold under a take or pay Power Purchase Agreement ("PPA") with PLN. This PPA has terms which include the rights for PLN to purchase the plant from us at a price determined with refence to a formula. At this time, PLN has not chosen to exercise such rights. In fact, it is our intention to negotiate for an extension to the PPA.**
- **The PPA is currently until 2022. We have had initial discussions regarding extensions beyond 2022.**

# Indonesia – Sengkang LNG


The Sengkang LNG Plant has a design capacity of 2 mtpa, consisting of 4 modular 500,000 tpa trains, an import/export terminal and jetty facilities

Construction is 80% complete

Gas will be purchased from our Sengkang gas field, where an allocation agreement has already been concluded, ensuring supply of gas until 2022

Gas is expected to be sold to PLN under an offtake agreement for domestic use

We also have a license to export LNG, subject to meeting domestic gas obligations, and this could be used to supply our Philippines Hub Terminal

We continue to progress construction of the project at a modest pace, but are waiting for finalization of various agreements (discussed on next page) before proceeding to complete this project

It is our intention to complete construction of 500,000 tonnes of capacity initially, and then roll out another module each 3 months, until all 4 modules are in commercial operation

# Indonesia – Current Status

We have been progressing a solution for our assets in Indonesia with the appropriate regulatory authorities

We have been invited by DG Migas and SKK Migas to submit an extension application for the Sengkang PSC, to extend the field beyond its current expiry in October 2022, and the process has commenced

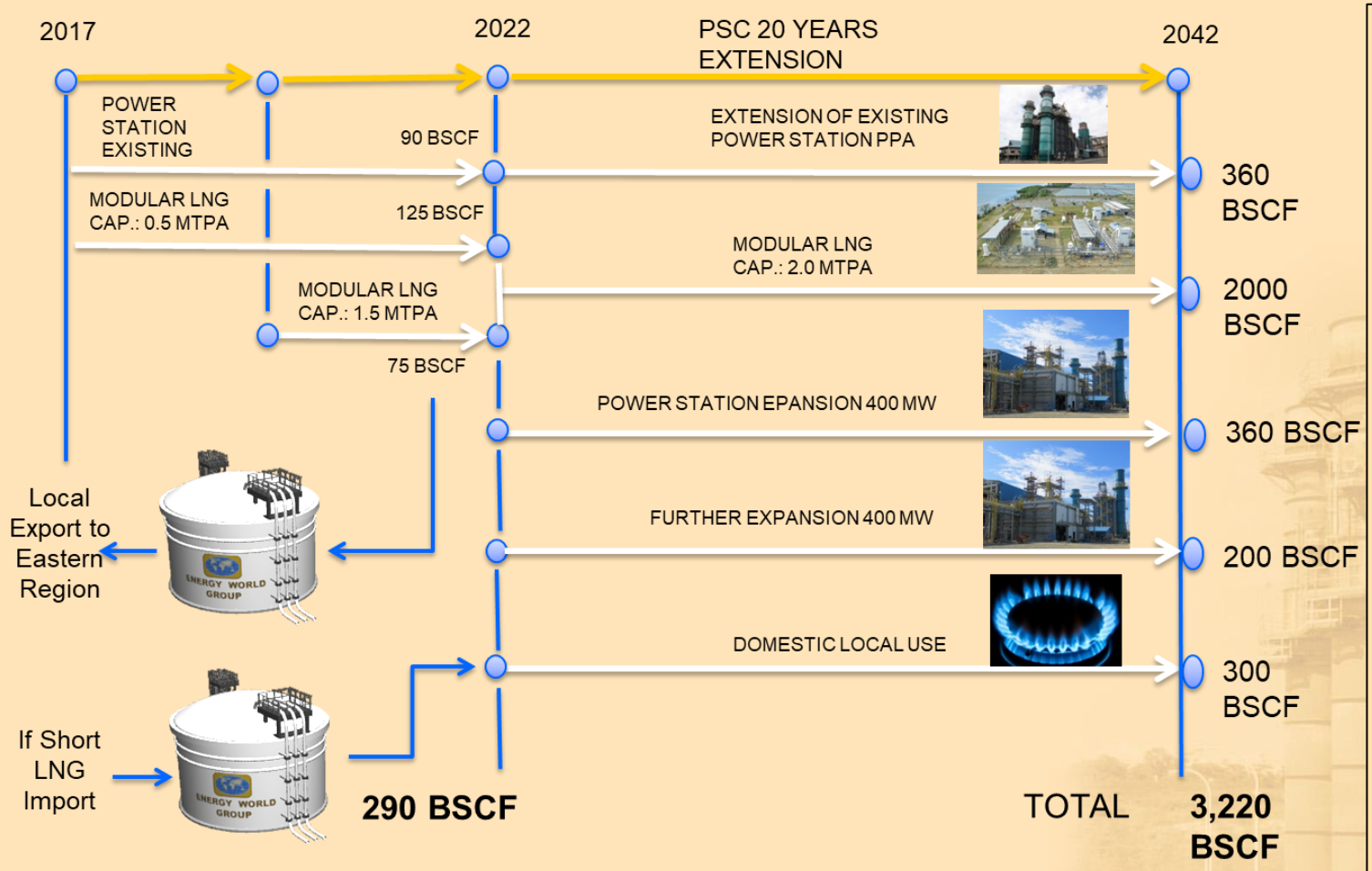
We are discussing with PLN for an offtake agreement for LNG sales, which had been delayed due to regulatory conditions impacting the price for domestic LNG

The gas allocation agreement from the Sengkang gas field was signed in 2015 which will ensure the supply of gas to the LNG facilities until 2022, however, as part of the LNG offtake agreement, we are discussing with PLN and SKK Migas the price at which gas from the well head will be sold to the LNG facility

Bank funding is potentially available from domestic banks, subject to documentation, and pending the results of the offtake agreement and gas supply pricing

The above discussions are ongoing and at various stages of the process

# Indonesia – Growth Opportunities



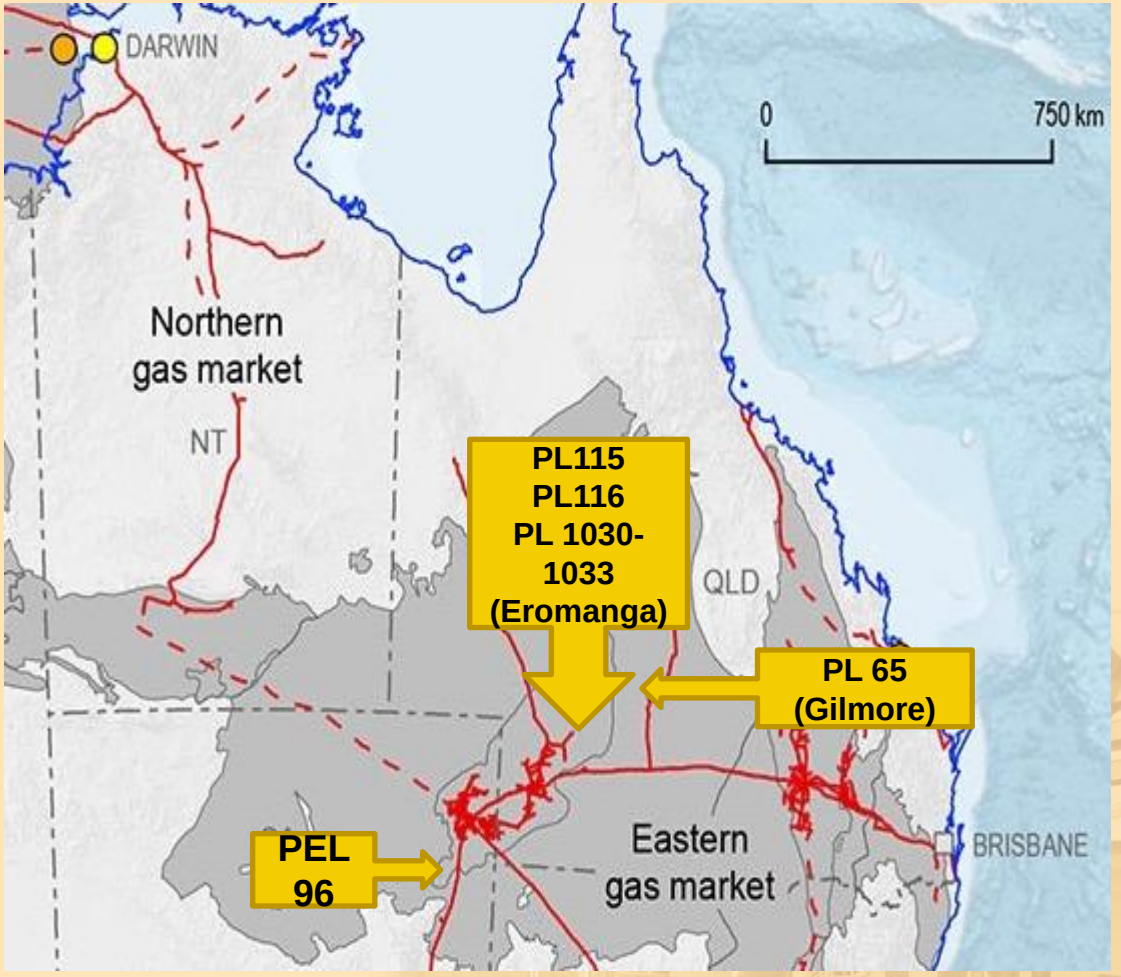

PT. LAPI ITB

SENGKANG PSC

| Prospect/Lead | Gas In Place (BCF) | | |
|---|---|---|---|
| | P10 | P50 | P90 |
| Tacipi Prospect | 1778,72 | 1567,46 | 1376,77 |
| Tacipi Lead | 1855,18 | 1645,43 | 1456,92 |
| Walanae Lead | 383,91 | 339,42 | 300,07 |
| Malawa Lead | 5149,37 | 4519,18 | 3917,85 |
| **TOTAL** | **9167,18** | **8071,49** | **7051,61** |

**If we can secure an extension to the PSC, we have many opportunities to expand in Sengkang, given PT Lapi ITB estimates of 7- 9 TCF of gas in place**

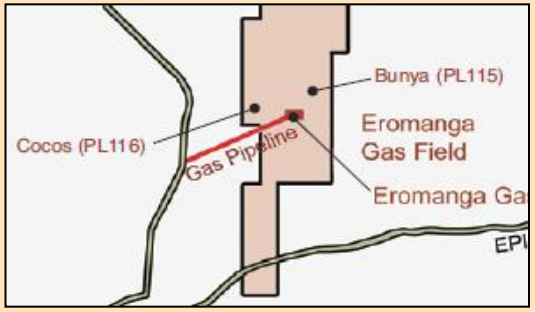
# Australian Projects

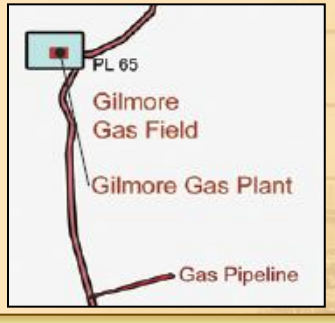


# Australia – Fields and LNG Facilities

- Australian domestic gas prices have increased significantly over the past few years
- Our 100% owned gas fields have proven reserves
- Importantly, they also have existing gas processing facilities connected to existing pipelines. These facilities are currently shut in
- We are investigating the opportunity to re-commence commercial production from these fields, with gas being sold into the domestic market. Initial reports suggest that the processing facilities are in good order, and could be recommissioned with only modest cost
- In addition, we have previously commenced construction of a 56,000 tpa LNG facility utilizing gas from PL 65
- Strike Energy has recently declared technical success at PEL 96, and are progressing towards drilling the first well in the "Jaws" program, spud date anticipated on 14 February 2018

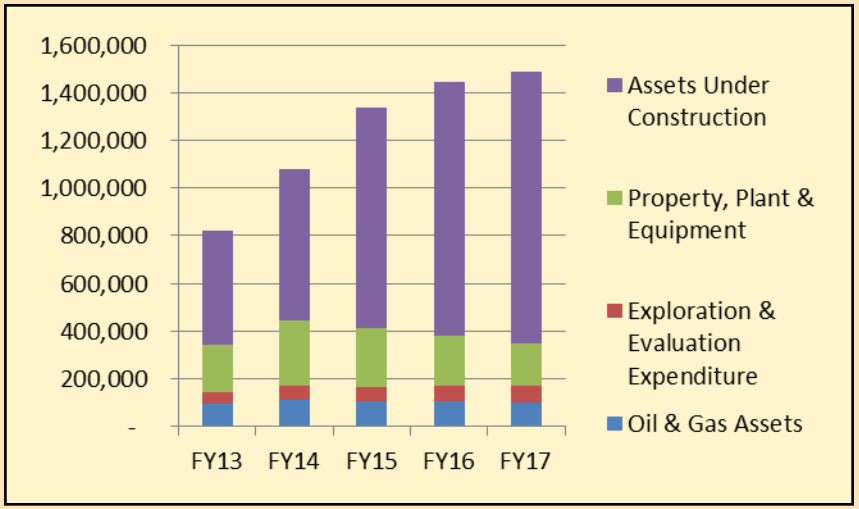
| | Effective Interest | Recorded Resource (BCF) | Future Potential (BCF) | | |
|---|---|---|---|---|---|
| | | | I | II | III |
| PL 65 | 100% | 20 | 400 | 500 | 500 |
| Bunya & Cocos (PL115 &PL116) | 100% | 11 | 1,000 | 1,500 | 2,000 |
| ATP 549 (now PL 1030, PL1031, PL1032, PL1033) | 100% | | 1,000 | 2,000 | 8,000 |
| PEL 96 (based on Strike reports) | 33.33% | 52 | 500 | 1,000 | 2,500 |
| Thylungra (PL184) | 100% | | | | |
| ATP 259 | 2% | | | | |
| Total: | | 83.6 | 2,900 | 5,000 | 13,000 |



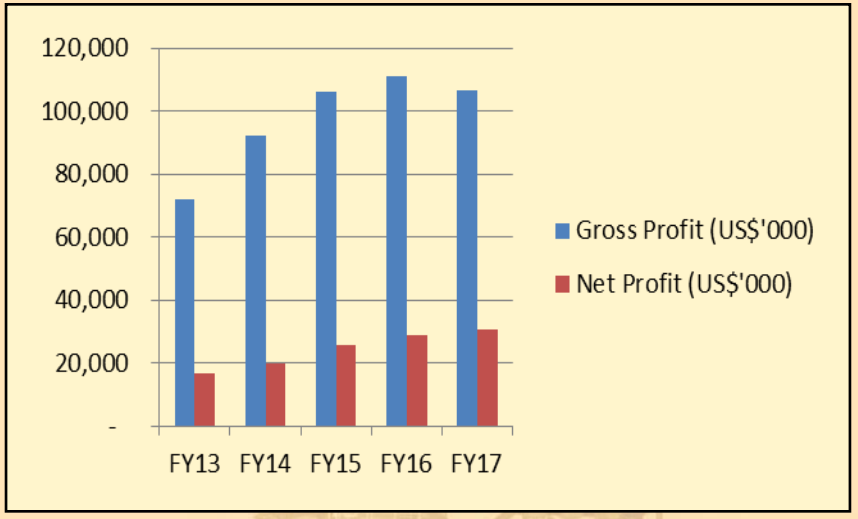




# Financials

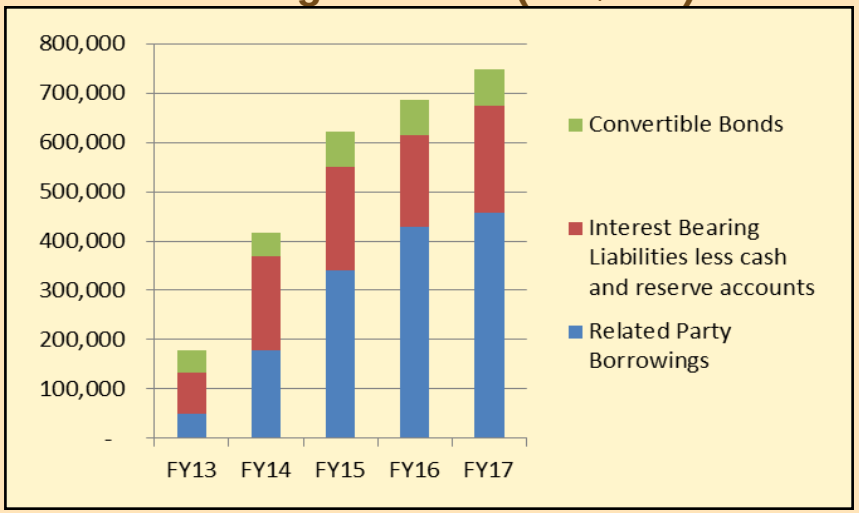
## Fixed Assets (US$000)




## Profits (US$000)




## Funding Sources (US$000)




- The company's asset base has increased as a result of construction of the projects in the Philippines and Indonesia
- Substantial funding has been obtained by deferring payments to Slipform, a related party construction company
- Profitability is principally derived from the Sengkang power station

# Project Funding Plan Update

## Summary of Financing Plan

| | USD'm |
|---|---|
| Phase I | 292 |
| Phase II | 370 |
| Total | 662 |

## Phase I – Financing

| | USD'm |
|---|---|
| 1.DBP/Landbank for Philippine Power Plant | 150 |
| 2.LNG Hub Corporate Note Phase II | 42 |
| 3.Bank Mandiri Sengkang LNG | 100 |
| | 292 |

## Phase II – Project Expansion

| | USD'm |
|---|---|
| 1.PHASE II Philippines Power (ST) | 200 |
| 2.PHASE II Indonesia LNG Plant | 100 |
| 3.Gilmore LNG Plant | 70 |
| | 370 |

## Phase III – Others possibilities under review, but not committed

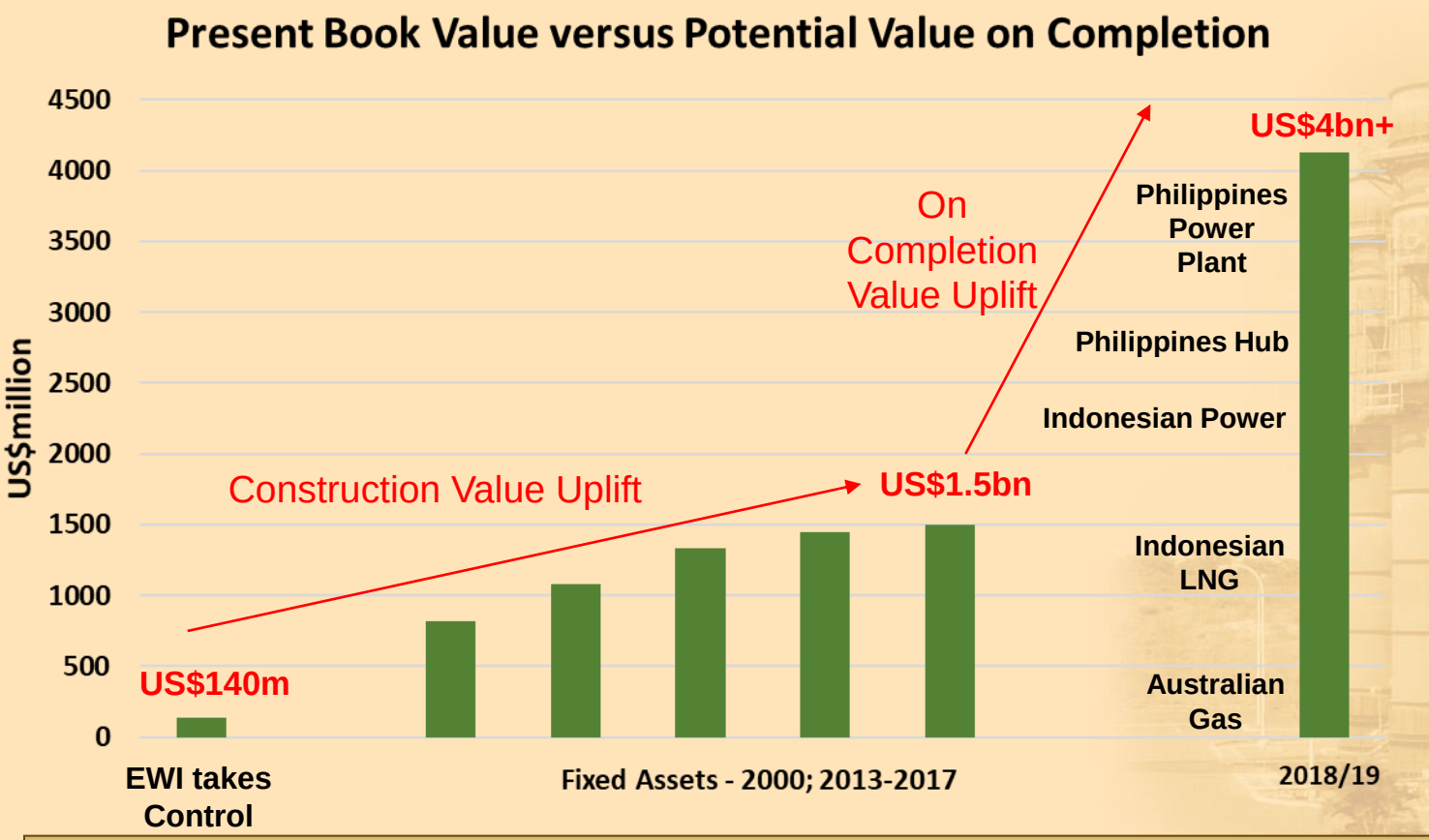
We continue to consider other debt, equity and asset ownership structures, including potential Listings on relevant Stock Exchanges

# Value Proposition

**EWC's 5 main projects in 3 core countries of operation are at various stages of completion, with substantive works having been completed in the Philippines and Indonesia over the last few years, and with existing facilities currently on care and maintenance in Australia**

**The Philippines power plant and hub terminal are expected to commence commercial operations in 2018**

**The chart below depicts the value uplift we have seen through construction, and the US$4bn+ value proposition we see unlocking with the completion of current projects**





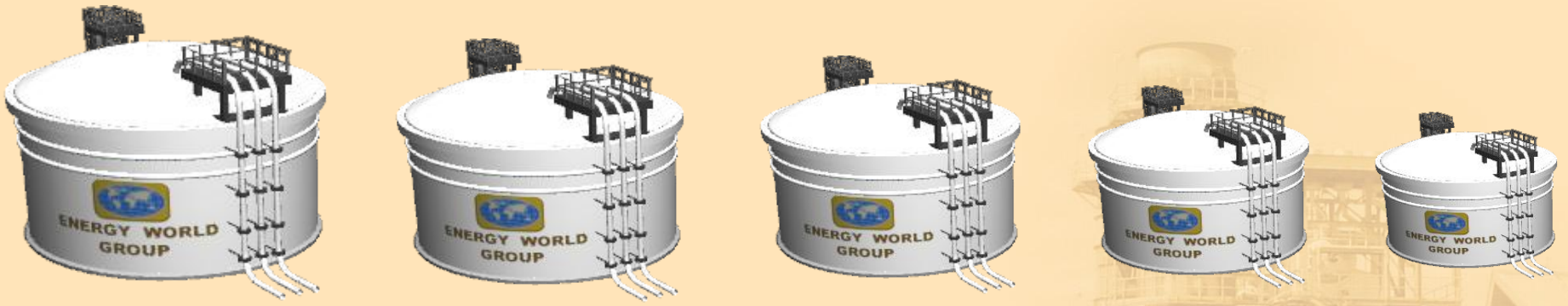
# Share Information

| | |
|---|---|
| Shares on Issue: | 1.795 billion |
| Convertible Bonds: | US$50m convertible to approx. 101m shares * |
| Options on Issue: | Nil |
| Market Cap (@ A$0.39) | A$700m |

| Shareholders | Percentage |
|---|---|
| Energy World International | 39.62% * |
| Clermont Group | 21.54% |
| Capital Group | 7.17% |
| Top 20 Shareholders | 90.29% |

*** Energy World International converted a US$25m CB into ordinary shares at 50 cents on 30 November 2017, 2 years ahead of expiry**

# Many Thanks from Energy World




## Delivering Clean and Green Energy to Asia Pacific
## Whatever Quantity You Require