

## Annual General Meeting 29 November 2018

DELIVERING CLEAN ENERGY TO ASIA PRESERVING THE ENVIRONMENT



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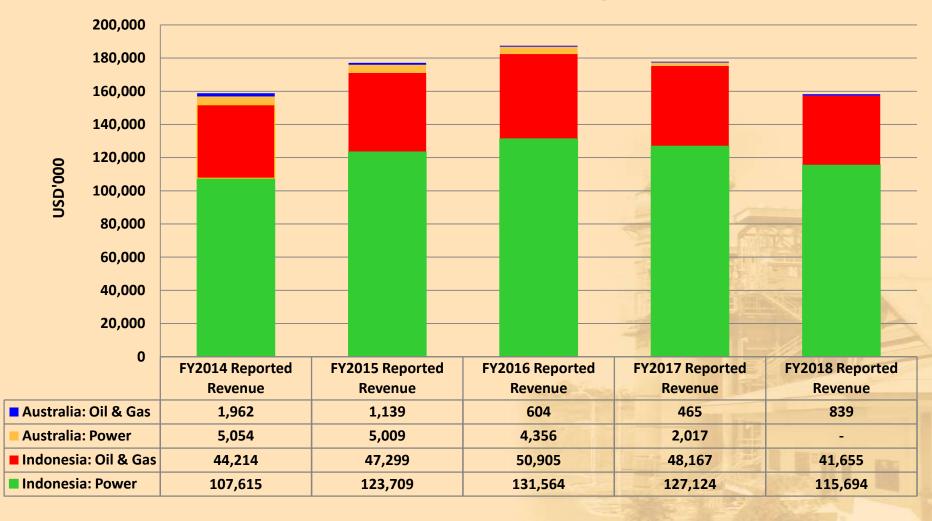






## Financial Highlights – Revenue

## Revenue by segment





## Financial Highlights – Gross Profit

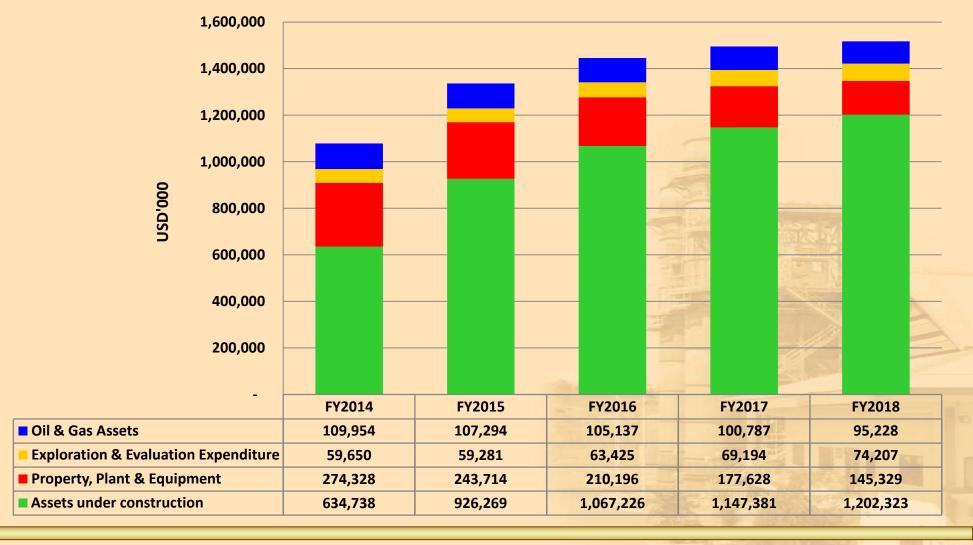


Gross profit of US\$96.8m was down 9.1%, principally as a result of decreased gas production from our Sengkang PSC in Indonesia. A new compressor package has been ordered, and is in transit, which once installed, is expected to increase gas production.



## Financial Highlights – Fixed Assets Continue to grow

## Oil & Gas Assets, PP&E, Assets Under Construction and Exploration & Evaluation Assets





## **Corporate Updates**





## **Corporate Updates**

- Energy World International ("EWI"), our major shareholder, converted its US\$25m convertible Note into equity at an exercise price of A\$0.50, two years ahead of maturity
- EWI continued its strong financial support advancing a further US\$15m of working capital facilities throughout the year, and has contributed a further US\$15m since balance date
- Post balance date we completed a new transaction with Standard Chartered Private Equity (Singapore) Limited ("SCPE"), whereby they reinvested their existing US\$50m investment into a US\$50m loan plus the issue of 101m warrants, exercisable at 50 cents
- As part of the US\$50m restructuring, SCPE required the following,
   EWI and Slipform Engineering to defer any payment of principal and interest until the SCPE loan is fully repaid.
- EWI is required to maintain at least a 35% shareholding in EWC and Stewart Elliott is to remain as CEO.



## Indonesia – Update

### For the Sengkang Gas Field

- As announced on 2 September 2018 their has been widespread media reporting on an announcement by the Vice Minister on an extension of the Sengkang PSC
- At this stage we have not received any official advice and can not comment
- We remain committed to our statement that we expect a positive outcome by year end.



## Indonesia – Update

### For the Sengkang Power Station

- We made a scheduled repayment of US\$17.8m of principal and interest on the Sengkang Power Plant project funding facility in April 2018, fully repaying 6 of the 9 lenders
- We have had early discussions with appropriate authorities on an extension of the PPA beyond 2022, which to date have been positive.

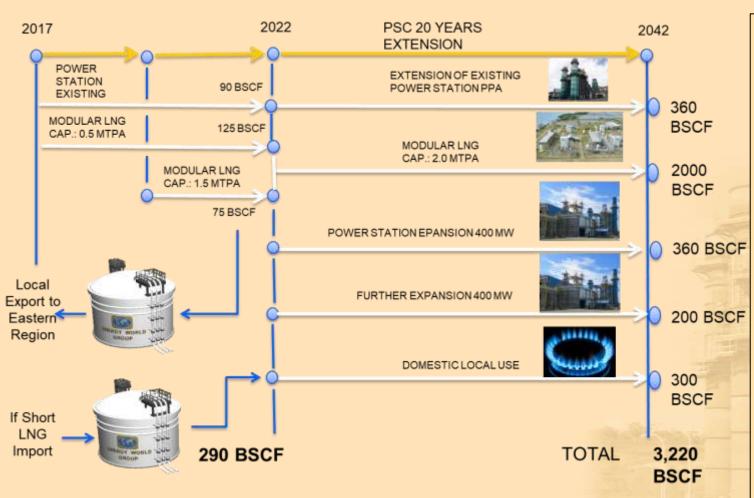
### For the Sengkang LNG Facility

- We are still in discussions with PLN for an offtake agreement for LNG sales, which had been delayed due to volatile LNG prices
- 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 will be sold to the LNG facility

The above discussions are ongoing.



## **Indonesia – Growth Opportunities**





#### 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



## **Indonesia – Update**

Mr. Arcandra Tahar, Vice Minister of Energy and Mineral Resources, Republic of Indonesia, discussing the PSC extension with Mr. Stewart Elliott and Mr. Brian Allen on 22 November 2018





## Australia – Update

- In Australia we secured A\$2m in Australian Government funding to accelerate our Eromanga and Gilmore gas field refurbishment programme
- We have commenced the process to restart gas production from the Eromanga gas field, expected to be achieved in 2H 2019, followed by the restart of Gilmore in 2020
- We made an application for PL 1030, PL 1031, PL 1032 and PL 1033, replacing parts of ATP 549, with relinquishment of the balance of the permit
- We are also in the process of acquiring the remaining 80.4% of PL 184 and 100% interest in ATP 932.
- We have recently agreed to acquire PL 117, which is connected to our Eromanga processing plant facility.
- The PEL 96 JV successfully drilled the Jaws -1 well. Commerciality will be declared when the sustained gas production crosses the threshold for booking a reserve.



- Landbank and DBP have provided us with updated finance terms, for which they are currently seeking internal approval
- Simultaneously, we are documenting the proposed transaction and working through the required Conditions Precedents that will form part of any agreement
- We have had strong political support throughout the year, including from the Philippines Senate, who has requested that the DOE, ERC and NGCP all assist EWC to ensure that our power plant can be bought into commercial production at the earliest opportunity
- The DOE presented a report to Senate stating that imported LNG will be the cheapest source of fuel for electricity generation in the Philippines
- Our 650MW Power Plant has been granted a Certificate of National Significance under President Dutert's Executive Order No.30





## Republic of the Philippines ENERGY INVESTMENT COORDINATING COUNCIL

# CERTIFICATE OF ENERGY PROJECT OF NATIONAL SIGNIFICANCE FOR COMMERCIAL PHASE

This is to certify that the PAGBILAO 650 MW COMBINED CYCLE GAS TURBINE POWER PLANT, located in Brgy. Ibabang Polo Pagbilao Grande Island, Province of Quezon, applied for by ENERGY WORLD CORPORATION, is an Energy Project of National Significance (EPNS) for Commercial Phase. This is in consonance with the policy thrusts and specific goals of the Philippine Energy Plan (PEP) of the government pursuant to Republic Act No. 7638 of the Department of Energy (DOE) Act of 1992, as amended and possesses the attributes provided under Executive Order No. 30, series of 2017.

With this Certificate of EPNS for COMMERCIAL PHASE, the 650 MW PAGBILAO COMBINED CYCLE GAS TURBINE POWER PLANT shall be entitled to all the rights and privileges provided for under Executive Order No. 30.

The DOE, in the exercise of its supervisory power, has the right to amend, alter or revoke this Certificate of EPNS for Commercial Phase, subject to existing rules and regulations.

Given this NOV 26 2018 at Energy Center, Bonifacio Global City, City of Taguig City.

ALFONSO G. CUSI Secretary





#### Right of Way and 230 KV Line

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

We have commenced the process to acquire the Right of Way

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

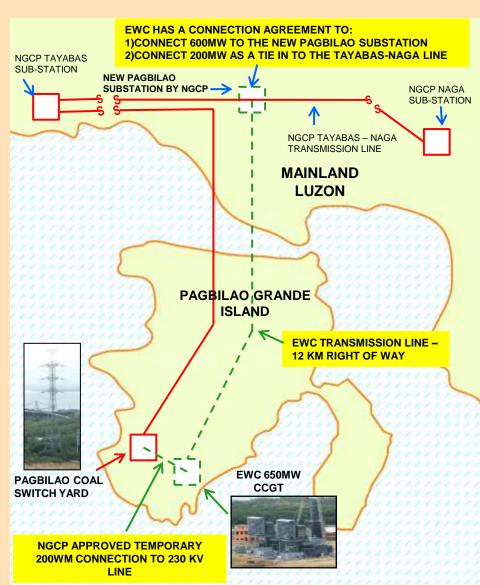
#### **Connection Agreement:**

We have 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 March 2020, 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 NGCP Completion Initial 200 MW** of Sub Station 650 **Transmission** Line **NOV 2017** 2nd 200 MW Output Land Agreement now in 250 MW Steam place. **Turbine**  Transmission Line is designed and ready for construction.

2015 Delays outside of EWC Control

Funding + 6 months\*

+ 12 months\*

March 2020\*

<sup>\*</sup> Dates remain outside of EWC control and are subject to funding, NGCP and other DOE entities



#### **Construction of 12 KM transmission Line**



**Concreting of Tower 1 Foundations** 



**Site Preparation at Tower 5 Foundation** 



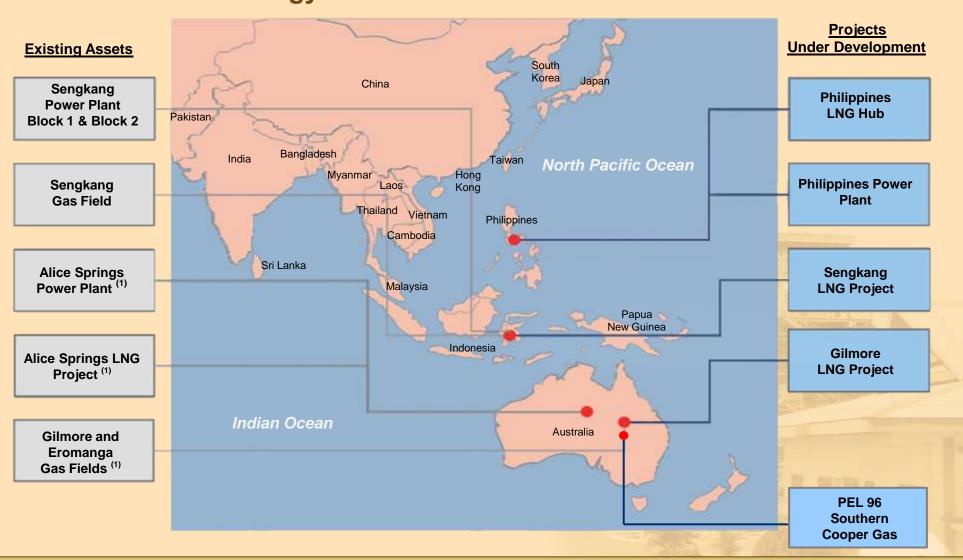
## **Project Updates**





## **Our Projects**

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







Sengkang Power Station



## Indonesia – Sengkang Power





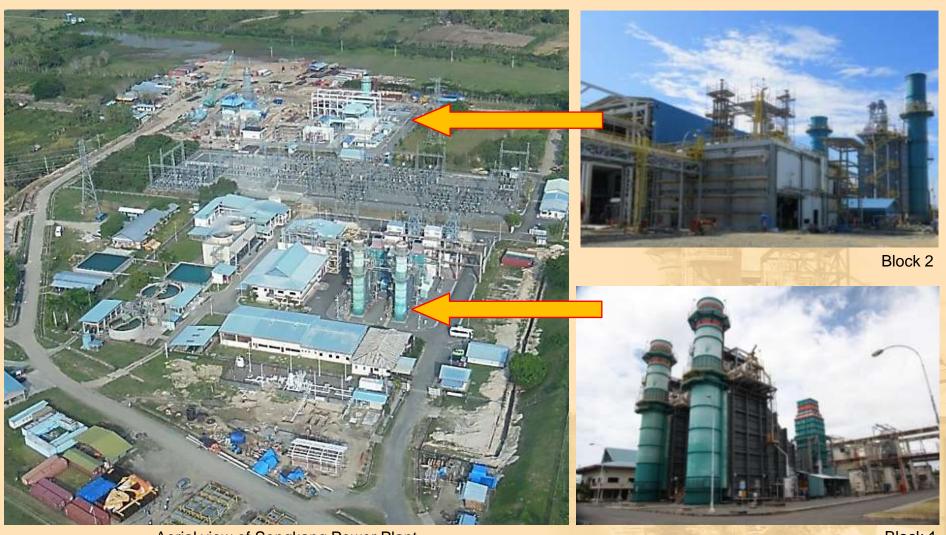
- The Sengkang Power Station is 315 MW, comprising of Block 1 of 135 MW and Block 2 of 180 MW
- Gas is obtained from the Sengkang gas field
- Electricity is sold under a take or pay PPA with PLN.
- The PPA is currently until 2022. We have had initial discussions regarding extensions beyond 2022.

2001	47.5% of 135 MW = Net 64 MW
2018	95% of 315 MW = Net 299 MW



## **Indonesia – Sengkang Power**

### **Sengkang Power Station Block 1 and Block 2**



Aerial view of Sengkang Power Plant

Block 1





Sengkang Production Sharing Contract (PSC)

Indonesia



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.

2P reserves are estimated at 192 BCF, while total gas in place could be over 2 TCF.

Production for this financial year was down. A new compressor package has been ordered, which once installed, is expected to increase gas production.

The compressor package is currently on route to Indonesia, and civil works are being completed for its arrival.











## Mr. Stewart Elliott inspecting Booster Compressor Factory in Houston





## **Booster Compressor Package Loaded on Truck in Houston**





## **Booster Compressor Plinth Foundation**





## **Booster Compressor Plinth Foundation**









## **Gas Processing Plant in Sengkang Indonesia**





## **Gas Processing Plant in Sengkang Indonesia**







Sengkang LNG Plant Indonesia



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 before proceeding to complete this project









#### **View of LNG Plant Site**





#### **View of LNG Plant Site**





#### **View of LNG Plant Site**





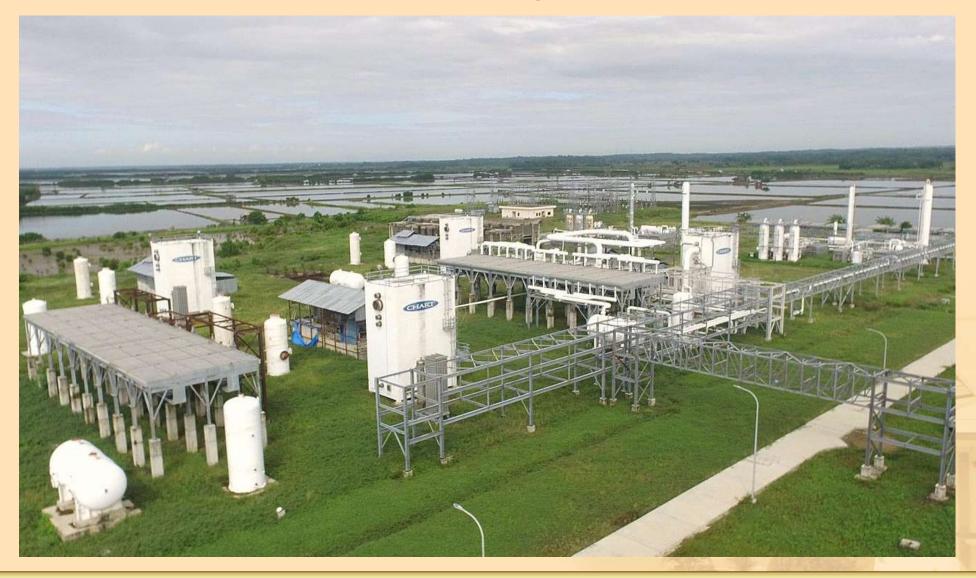
#### **LNG Tank and Cold Box**



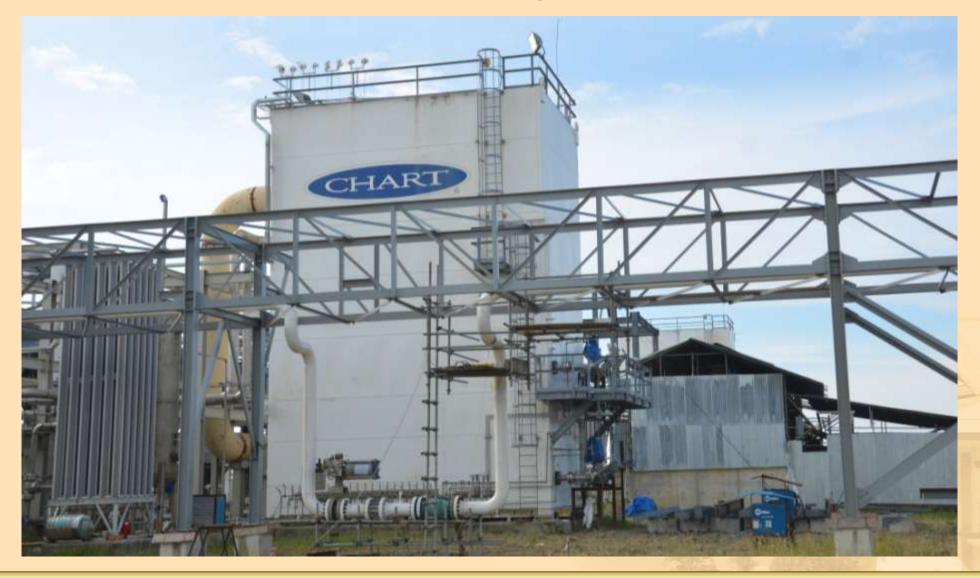






















### **SIEMENS Compressor Trains**





### **SIEMENS Compressor Trains**













### **Progress of Marine Jetty**





### **Progress of Marine Jetty**





### 12.5m Gangway Tower at Marine Jetty





### **Cutter Suction Dredger**







Our Australian Projects

**Existing Facilities** 

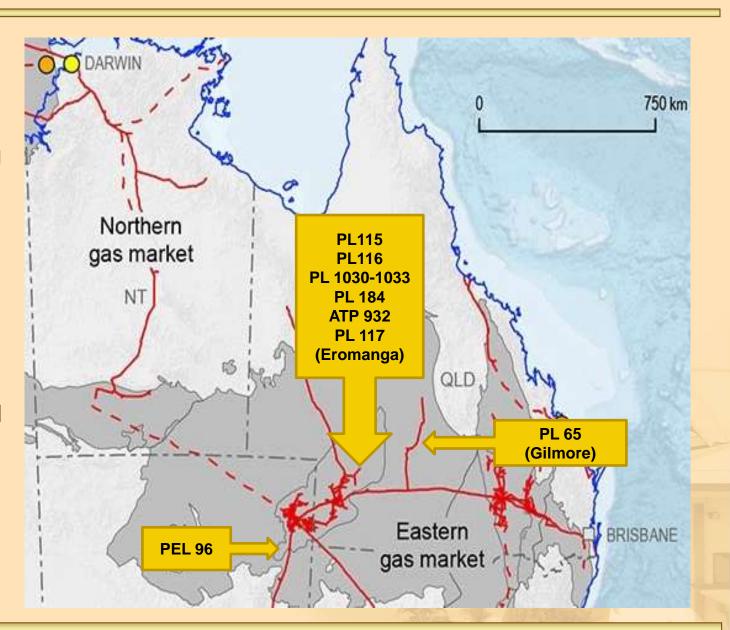


#### **Australian Gasfields – Positioned for Growth**

**AGF** owns significant interests in onshore gas fields with existing gas discoveries

Existing wells are connected to existing infrastructure.

We have held onto these assets since 2001 despite calls and opportunities to sell.





#### **Energy Security Issues Providing a Market Opportunity for AGF**

### Valuable East Coast Gas Resource Waiting in the Wings

		Effective Interest
PL 65	Gilmore	100%
Bunya & Cocos (PL115 &PL116)	Eromanga	100%
PL 1030, PL1031, PL1032, PL1033	Eromanga	100%
PL 184	Eromanga	100%*
PL 117	Eromanga	100%*
ATP 932	Eromanga	100%*
PEL 96	Cooper	33.33%
ATP 259	Eromanga	2%

<sup>\*</sup> In the process of acquiring a 100% interest in these fields.

#### The Timing Is Right

**Economic fundamentals** 

Politics and policy support

GAP funding secured

Technology is available and waiting to be applied

The value proposition is outstanding

AGF is poised to take advantage of the industry dynamic





### AGF – Short Term Rewards with Large Upside Potential

Revenue Potential



**AGF** seeks to maximize the potential return through a structured plant refurbishment, work-over, seismic and drilling program, with early cash flow expected.

Unconventional Drilling - upside

**Unconventional drilling** 

**Conventional Drilling** 

New zones within existing wells

Restart existing production wells

2019 2020 2023

Staged development plan with large upside potential



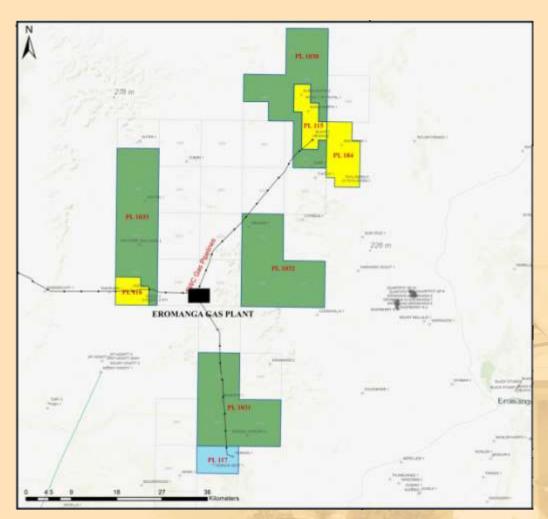
PL 115 & PL 116 (Bunya and Cocos) plus PL 1030, PL 1031, PL 1032 and PL 1033, together with the acquisition of outstanding share of PL 184, PL117 and ATP 932

Our Eromanga gas fields were commissioned in 1999 and have produced 1.3 bcf of gas from PL 115 and 116 before being put on care and maintenance in 2001

Selective acquisition process to increase acreage

Purchasing balance of PL 184 Purchasing ATP 932 and PL 117

Considering other opportunities





### **Australia – Eromanga Facilities**





Facilities have the potential to provide 12 TJ per day (4.38 PJ per year)

Facilities already connected to the Queensland market through the Carpentaria Pipeline

Assessment process to bring the facilities back online has begun with initial positive feedback

Work has commenced



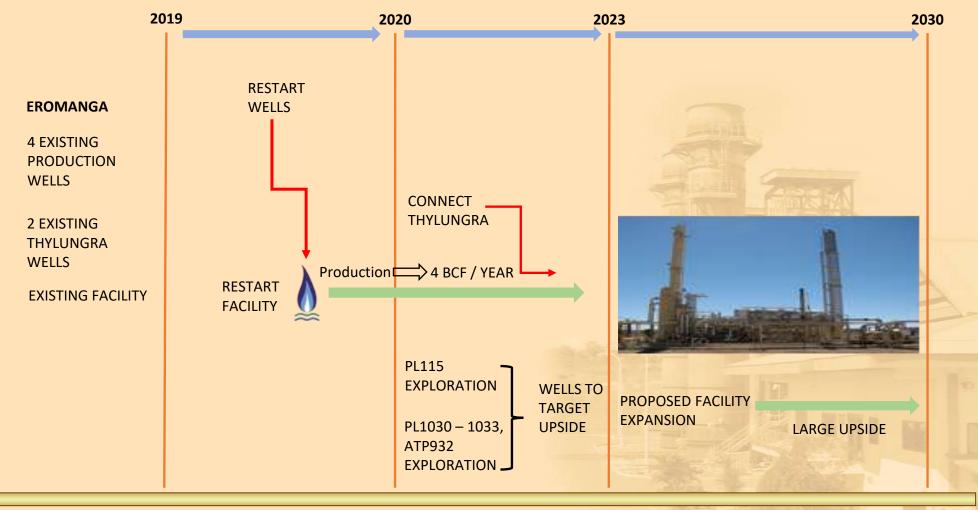






### Australia – Eromanga Development Plans

Eromanga development plan anticipates production in 2H 2019, ramping up through the subsequent connection of PL 184 into existing facilities, targeting different zones and future exploration wells.





#### **View of Eromanga Gas Field**





#### **View of Eromanga Gas Field**





#### **View of Eromanga Gas Field**





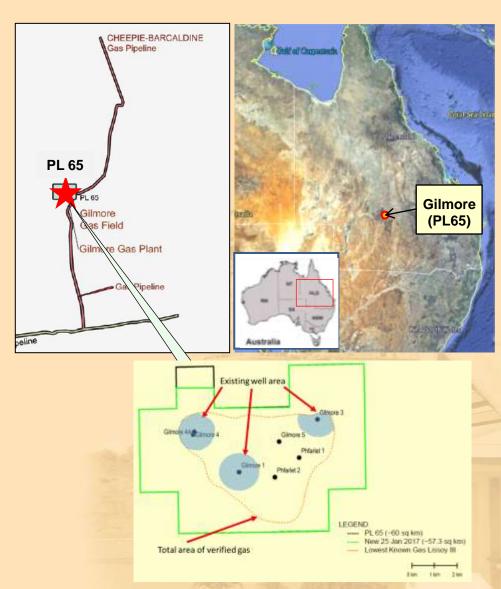
#### **Australia – Gilmore Gas Field**

The Gilmore gas field was discovered in 1964 and has produced 8.8 bcf of gas before being put on care and maintenance in 2001.

3 wells have produced gas

Independent reports have confirmed the resource potential

Deeper wells, more complex geology than Eromanga





#### **Australia – Gilmore Facilities**

Gas processing facilities are in place and have the potential to provide 12 TJ per day (4.38 PJ per year)

Assessment process to bring the facilities back online has begun, with positive early feedback. We expect relatively modest capex requirements, and first gas to be produced in 2020.

Facilities are already connected to the Queensland market through the Cheapie to Barcaldine Pipeline









#### Australia – Gilmore LNG

AGF has partially completed the development of a 56,000 tpa LNG processing plant

AGF believes there is a market available for domestically distributed LNG, to fill a shortfall in current gas supplies, but also in the longer term for communities in remote locations, mine sites and industry.

LNG can be used as a replacement fuel in heavy haul trucks, mining equipment and agriculture etc. Not only will it be cheaper than Diesel, it will significantly reduce the carbon foot print of the current diesel supply chain.

LNG can be distributed cost competitively via road transport throughout Australia.

- > Improved energy security for Australian businesses
- Provides an alternative clean energy solution



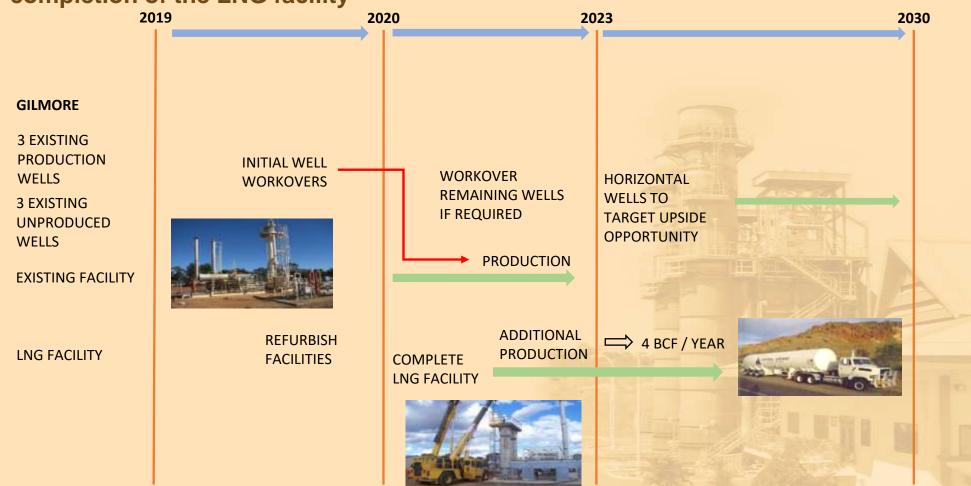






### **Australia – Gilmore Development Plans**

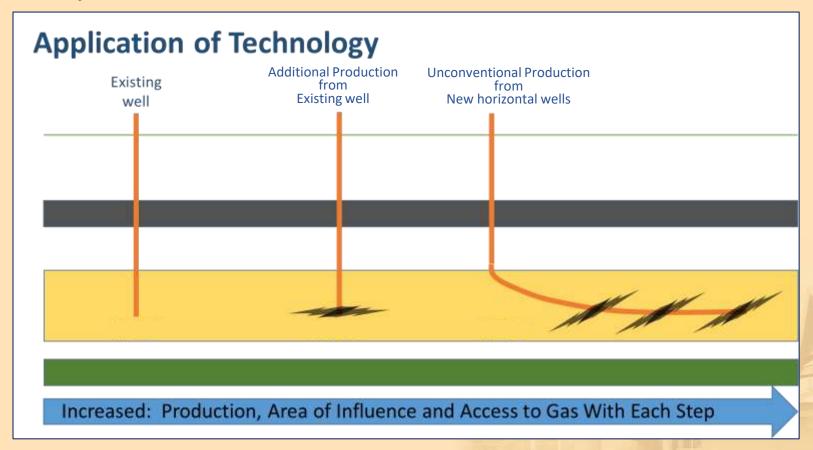
The Gilmore development plan anticipates production in 2020 ramping up through further well workovers and future exploration wells, together with the completion of the LNG facility





### **Australia – Gilmore Development Plans**

#### Gas previously flowed at 1.8 mmcfd



- We will utilise technology that was not available when the field was discovered
- This technology has been tried and tested in the Eromanga basin by others



### **Australia – Gilmore Gas Field**

#### **View of Gilmore Gas Field**





# **Australia – Gilmore LNG Project**

#### **Erection of Process Equipment**





# **Australia – Gilmore LNG Project**

### **Process Equipment**





### Other Projects – PEL 96

AGF Interest 33.3%

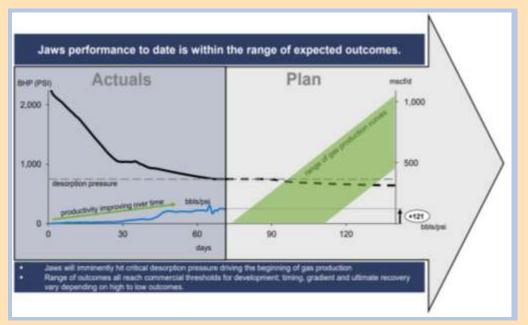
Operating Party

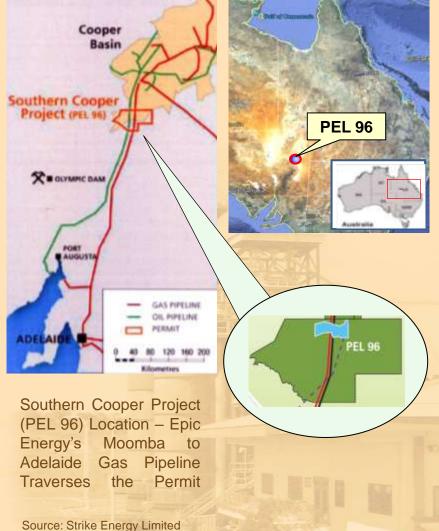
Strike Energy

**Status** 

Strike has recently completed the Jaws-1 well, which underwent dewatering. Commerciality will be declared once the sustained gas production crosses the threshold for

booking a reserve









# **Philippines Projects**

The Philippines – Pagbilao LNG Hub Terminal and Power Plant



### Philippines – Pagbilao LNG Hub Terminal



# Pagbilao Power Plant and LNG Terminal:

- Terminal 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







# **Our LNG Projects**

The Philippines – Pagbilao LNG Hub Terminal and Power Plant

**LNG Hub Terminal** 



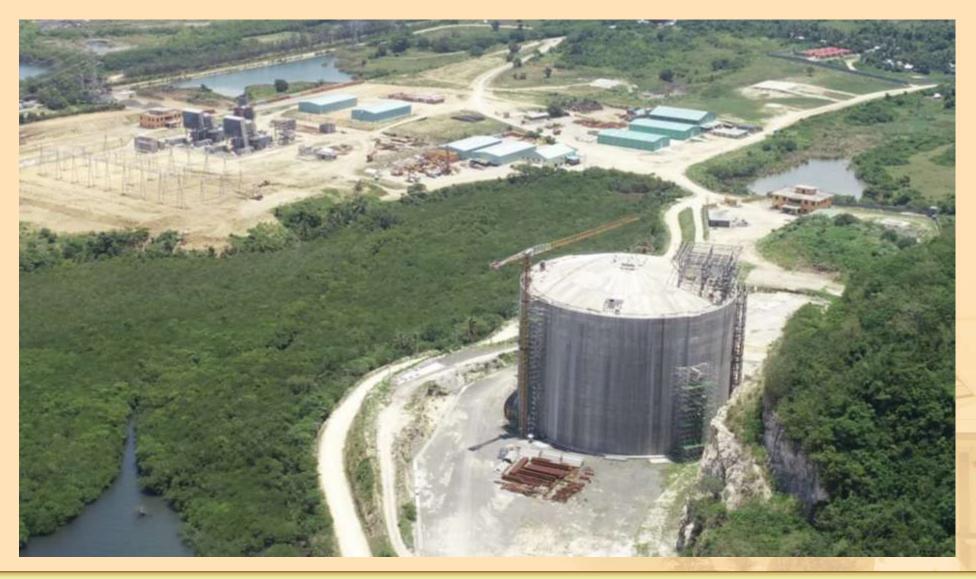
- The Hub is a strategically important asset for Philippines nascent gas industry
- 130,000 m3 LNG Hub Terminal is 92% completed
- Deep water jetty is capable of handling all sizes of LNG vessels
- Facility is capable of handling 3 mtpa of LNG, which can support 3,000 MW of gas fired power plants
- •This 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



View of Jetty and Hub Terminal



#### **View of The Tank and Power Station**



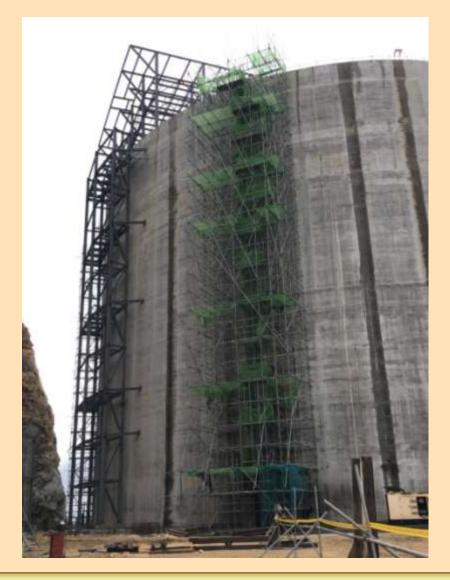


#### View of The Tank No. 1





#### **Construction of Tier 1 & 2**







## **Construction of Roof Dome Pump Platform**





#### LNG Tank No.1 & No. 2





#### **Site Foundation of LNG Tank No. 2**



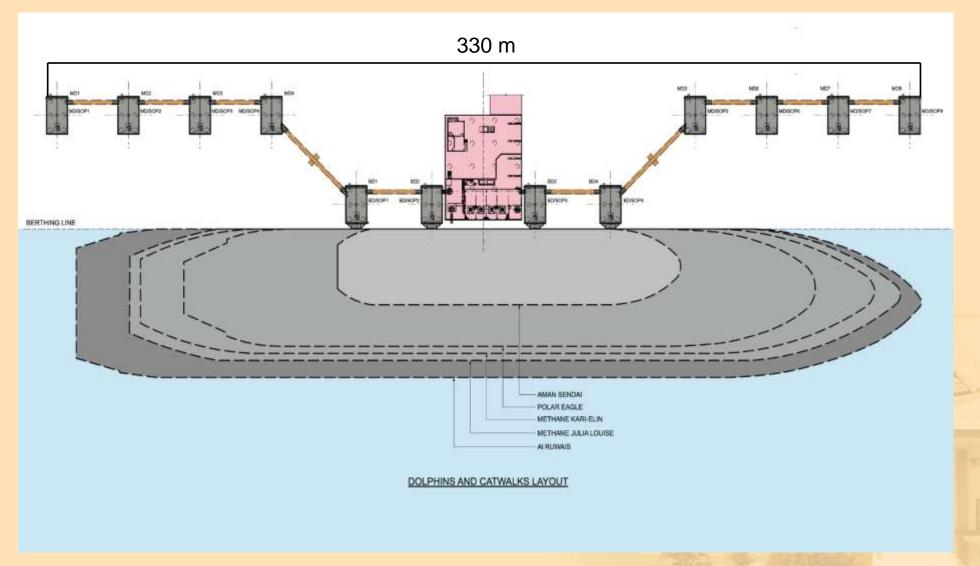




**LNG Jetty** 



## **Layout Plan of Jetty Area**



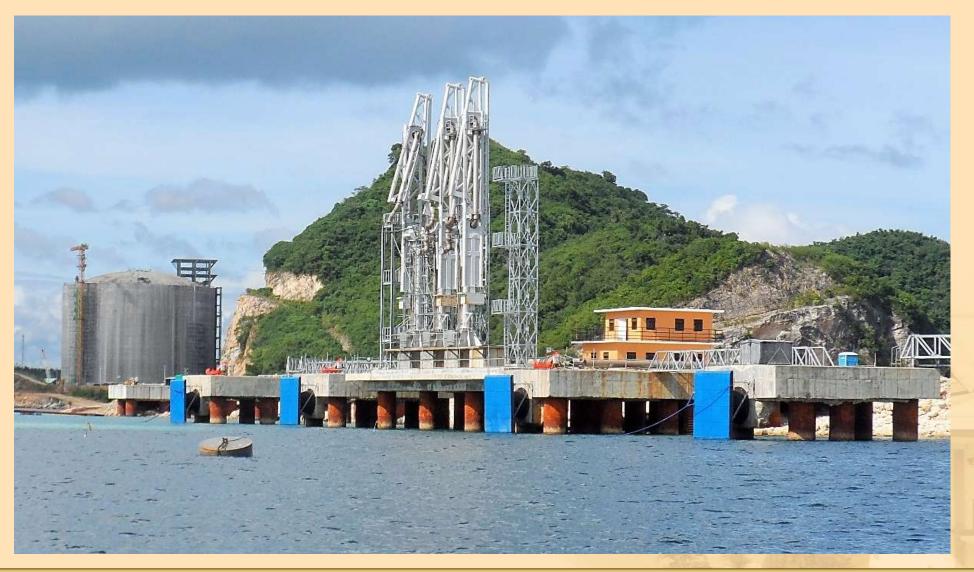


## **View of Jetty Area**





## **View of Jetty Area**



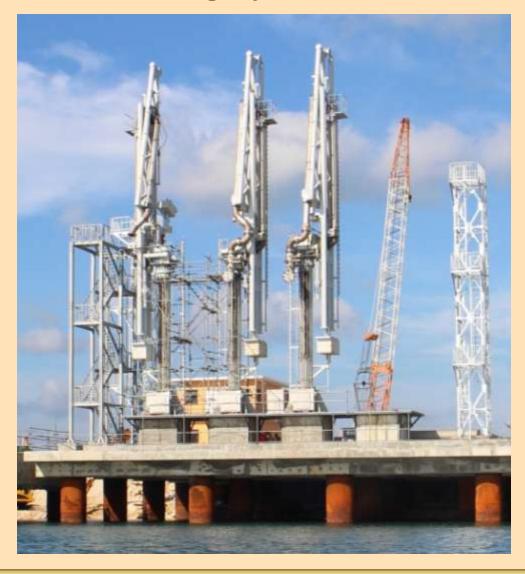


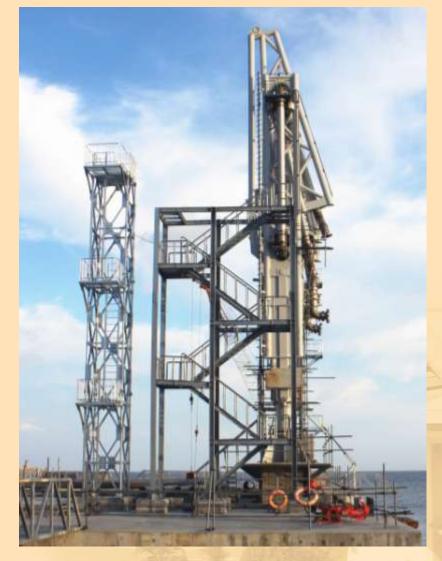
## **View of Jetty Area**





## **Gangway Tower & Fire Monitoring Towers installation completed**







## **Jetty Walkway**





## **Welding and Insulation of LNG Pipeline**





## **Installation of LNG Pipeline**







650 MW Combined Cycle Gas Fired Power Station





- 650 MW Combined Cycle Gas Turbine Power Plant construction is significantly completed
- Project is being developed in stages:
  - Block 1 200 MW gas turbine (87% complete)
  - Block 2 200 MW gas turbine (84% 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



#### **Main Plant Area**





#### **View of Power Station**





## **Construction of Bypass Stack at Power Station**





## **Construction of Bypass Stack at Power Station**





## **Construction of Bypass Stack at Power Station**





#### **Construction of Transformer Blast Wall**





## **Construction of Power Station – Switchyard Area**





#### **Construction of Power Station – Steam Turbine Foundations**





#### HI Rotor & LP Rotor Photos









Philippines – Facilities



## View of Combined Cycle Building & Control Room / Admin. Building





## **Warehouse in Operation**











# Philippines – Pagbilao Power and LNG Support From Stakeholders



Site Visit from Landbank of the Philippines on 26 November 2018





Site Visit from Landbank of the Philippines on 26 November 2018





Site Visit by Mr. Alfonso Cusi, Secretary of the Department of Energy, Philippines





Site Visit by Mr. Alfonso Cusi, Secretary of the Department of Energy, Philippines





Site Visit by the House of Representatives, Congressman Lord Allan Jay Q. Velasco Chairman House Committee on Energy





#### **Land Agreement Ceremony**





#### **Political Support - Public Hearing on Senate**





#### **Political Support - Public Hearing on Senate**





Graham Elliott, Executive Director of EWC with Senator Sherwin Gatchalian, Chairman of the Committee on Energy at the Senate Hearing on 18 June 2018





#### Imported LNG is the Most Economic Source of Fuel for Electricity

During the Hearing, The Philippines Department of Energy ("DOE") discussed a report entitled "The Economic Benefits of Switching to the Use of Natural Gas" which states that the use of imported LNG as a fuel source for power generation provides the most economic option for electricity generation in the Philippines. Their findings are as follows:

Fuel Type	Generation Costs (p/kWh)	More Expensive Than LNG
		Ву
Coal	P 5.49 /kWh	P 0.96 /kWh
Natural Gas (Malampaya)	P 4.67 /kWh	P0.14 /kWh
Natural Gas (Imported LNG)	P 4.53 /kWh	<mark>0</mark>
Diesel	P 14.40 /kWh	P 9.87 /kWh
Renewables	P 4.92 /kWh	P 0.39 /kWh

The study shows that electricity generated from imported LNG will be more economic than electricity sourced from Coal, the indigenous Malampaya Gas Field, Diesel and even Renewables.



#### LNG as a Clean Source of Energy

# Philippines President Executive Order No. 66

#### MALACAÑANG Manila

MFN 10316

#### BY THE PRESIDENT OF THE PHILIPPINES

**EXECUTIVE ORDER NO. 66** 

#### DESIGNATING THE DEPARTMENT OF ENERGY AS THE LEAD AGENCY IN DEVELOPING THE PHILIPPINE NATURAL GAS INDUSTRY

WHEREAS, the Malampaya Gas-to-Power Project, the largest and most important investment of its kind in Philippine history, represents the beginning of the Natural Gas Industry in the Philippines;

WHEREAS, the development of the Natural Gas Industry shall provide a much awaited boost to the economy by opening up vast opportunities both for the government and the private sector:

WHEREAS, Section 2 of R.A. 7618 otherwise known as the "Department of Energy Act of 1992," declares, among others, that it is the policy of the State to ensure a continuous, adequate and economic supply of energy with the end in view of ultimately achieving self-reliance in the sountry's energy requirements through the integrated and intensive exploration, production, management and development of the country's indigenous energy resources, without sacrificing ecological concerns;

WHEREAS, Section 4, r(a) and 3(b) of R.A. 7638 provide that the Department of Energy (DOE) is mandated to formulate policies for the planning and implementation of a comprehensive program for the efficient supply and economical use of energy consistent with approved national economic plan, and to provide a mechanism for the integration, rationalization and coordination of the various energy programs of the Government with a preferential bias for environment-friendly, indipensous and low-cost sources of energy.

WHEREAS, Section 5(c) of R.A. 7638 mandates the DOE to establish and administer programs for the exploration, transportation, marketing, distribution, utilization, conservation, stockpiling and storage of energy resources of all forms, whether conventional or nonconventional;

WHEREAS, Section 5(e) of R.A. 7638 authorizes the DOE to regulate private sector activities relative to energy projects provided it shall provide for an environment conductive to free and active private scotor participation and investment in all energy activities;

WHEREAS, natural gas has been recognized as an environment-friendly, indigenous and low-cost source of energy among the indigenous energy resources;

WHEREAS, the critical nature of developing the Natural Gas Industry necessitates the involvement and support of various government agencies to ensure a unified and coordinated effort towards establishing a successful and rebust Natural Gas Industry.

NOW, THEREFORE, I, GLORIA MACAPAGAL-ARROYO, President of the Philippines, by virtue of the powers vested in me by law, do boreby order:





WHEREAS, natural gas has been recognized as an environment-friendly, indigenous and low-cost source of energy among the indigenous energy resources;



#### Philippines President Executive Order No. 66

Designating the Department of Energy as the lead agency in developing the Philippines Natural Gas Industry

SECTION 1. The Department of Energy is hereby designated as the lead government energy in ensuring a unified and coordinated effort towards establishing a successful and sobust therefolia belance.

SEC 2. Pursuant to its mandate, the Department of Energy shall recommend the appropriate policy statements, inclusively rules and guidelines and other incuments in order facilitate and encourage private action investments and participation in the natural gas industry;

SEC 3. The Department of Energy may sall upon any department, agency or instrumentally of the Covernment like assistance to receive the development of the Natural Gas Industry and shall have the authority to retain the services of inchmisel consultants of preven and internationally recognized expertise in natural gas incheology as may be deemed microstary, subject to the existing rules and regulations on comultancy contracts;

SEC 4. All government agencies shall assist and cooperare with the Department of ergy as may be necessary to develop and implement the programs for the natural gas industry;

SEC 5. The funding requirements to carry out the tasks under this Order shall be chargeable against savings from the appropriations of the Department for the first year of implementation of this Order. Funds for succeeding years shall be chargeable against the regular appropriations of the Department;

SEC 6. Effectivity. - This Order shall take effect immediately.

IN WITNESS WHEREOF, I have hereunto set my hand and caused the seal of the Republic of the Philippines, to be afficial.

Done in the City of Manila, this <u>180</u>°; day of January , in the year of Our Lord, two thousand and two.



by the President

JAN 22 2002

BERTO G. ROMU Executive Secretary





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SECTION 1. The Department of Energy is hereby designated as the lead government agency in ensuring a unified and coordinated effort towards establishing a successful and robust Natural Gas Industry;

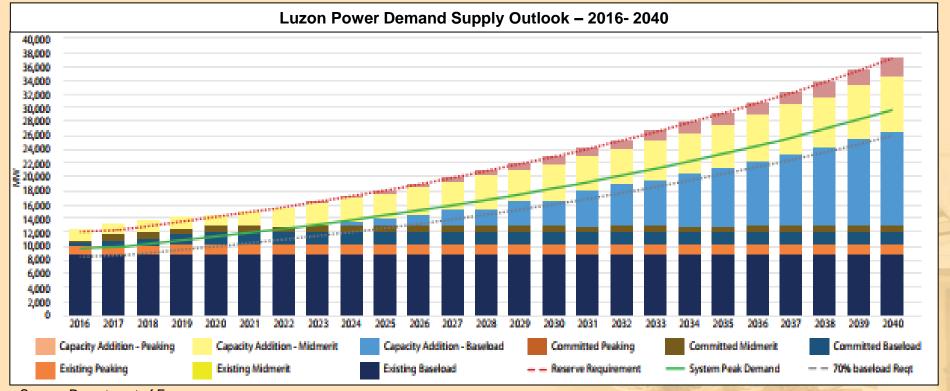
- SEC 2. Pursuant to its mandate, the Department of Energy shall recommend the appropriate policy statements, industry rules and guidelines and other issuances in order to facilitate and encourage private sector investments and participation in the natural gas industry;
- SEC 3. The Department of Energy may call upon any department, agency or instrumentality of the Government for assistance to ensure the development of the Natural Gas Industry and shall have the authority to retain the services of technical consultants of proven and internationally recognized expertise in natural gas technology as may be deemed necessary, subject to the existing rules and regulations on consultancy contracts;
- SEC 4. All government agencies shall assist and cooperate with the Department of Energy as may be necessary to develop and implement the programs for the natural gas industry;



#### Philippines Landscape – Robust Demand for Power

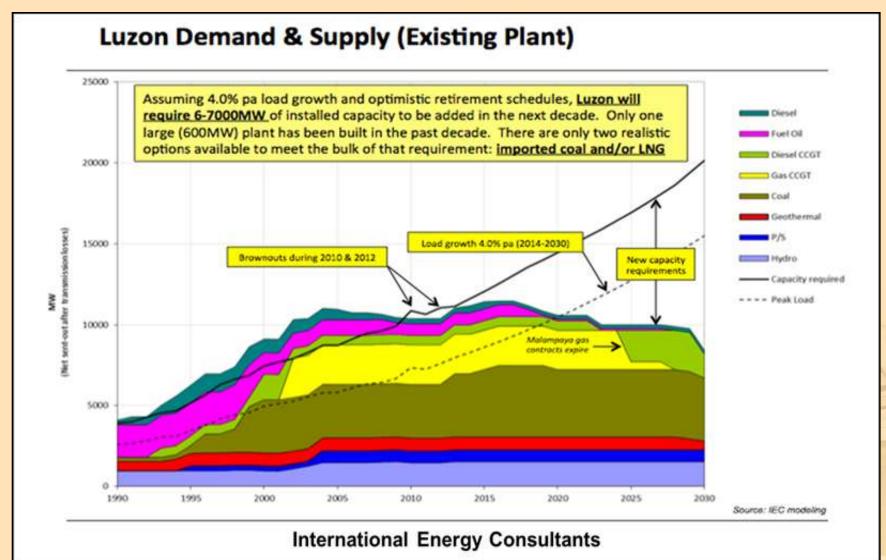
The Department of Energy forecasts that the Philippines will need 43,765 MW of additional power capacity by 2040, up from the existing capacity of 13,877 MW, representing a compound growth rate of 6% pa.

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% pa.





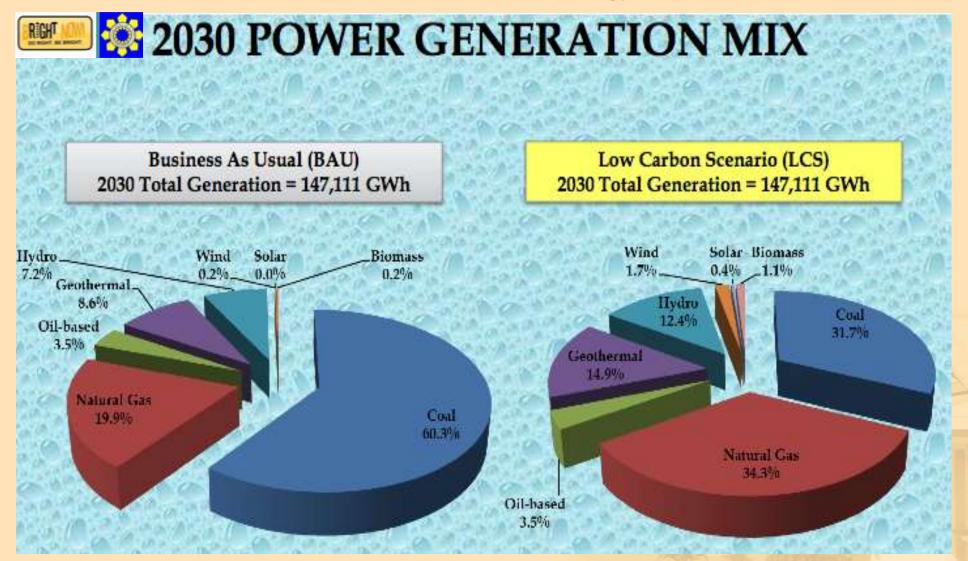
#### **Luzon – Power Generation**





#### **Philippines – Power Generation**

**Demand for Clean and Green Energy in the Philippines** 





# **LNG Distribution Options – Creating a Market**



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 cargos 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 initials discussions with industry players on their needs for LNG



### **LNG Distribution Options - Pipelines**





# **LNG Distribution Options - Shipping**

#### **EWC** is Working with GTT to Develop Suitable Shipping Solutions





# **LNG Distribution Options - Shipping**

#### **EWC** is Working with GTT to Develop Suitable Shipping Solutions



#### **Main Dimensions**

133 m Length overall: Length between perpendiculars: 126 m Breath, moulded: 28 m Depth, at main deck: 11.7 m Depth, at trunk deck: 14.56 m Draft, Design: 4.8 m Draft, Ballast: 3.7 m Air Draft: 29 m Deadweight, at design: 7,937 tons 14,300 UMS Gross tonnage:

#### **Cargo Tanks**

2 Membrane type GTT Mark III Flex tanks

Cargo Capacity (100%V):

16,600 m<sup>3</sup>

Boil-Off-Rate:

0.20% per day



# **LNG Distribution Options - Shipping**

LNG Ship - Ocean Quest, owned by EWI, at Jetty





#### **Value Proposition**

EWC's 5 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 2019.

The chart on the next slide depicts the value uplift we have seen through construction, and the US\$4bn+ value proposition we see unlocking with the completion of current projects.







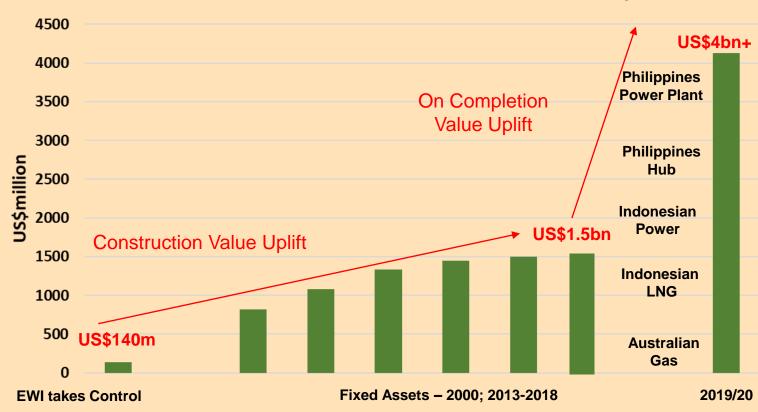






# **Value Proposition**

#### **Present Book Value versus Potential Value on Completion**















# **Shareholders Equity**

30/12/2001		
	A\$	
Issued Capital	188m	
Reserves	31m	
Retained Earnings	-79m	
Shareholders Funds	140m	
NTA Per share	A\$0.20	

Capital Raised			
Date	Amount Raised	Price	
10 Aug 2006	A\$14.4m	A\$0.08	
13 Feb 2007	A\$100m	A\$0.50	
05 May 2008	A\$156m	A\$1.20	
10 Jul 2011	A\$86.5m	A\$0.50	
30 Nov 2017	US\$25m	A\$0.50	





### Many Thanks from Energy World











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

EWG20181129