

**Pilot Energy Limited**

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**Announcement to ASX**

**5 March 2021**

**MARKET UPDATE**

Pilot Energy Ltd (PGY) provides a market update delivered by Brad Lingo, PGY Chairman to the Sydney Mining Club last night on 4 March 2021.

The presentation provides updates to the information provided at the December 2020 EGM.

This announcement has been authorised by the Board of Directors of the Company.

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**Enquiries**

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PILOT ENERGY LIMITED  
ASX:PGY



# Sydney Mining Club Presentation

Uniquely Positioned  
to Begin the Transition



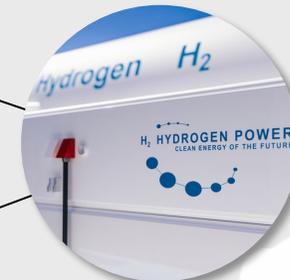
# Overview – Making the Transition

Leveraging existing business and assets in Tier-1 locations to transition from a pure oil & gas company into a World-class renewable energy developer

Existing Business



Opportunities



Western Australia

Perth

Bunbury

# Investment Highlights



**Tier 1 assets** – Owner/Developer of **Mid-West Integrated Renewable & Hydrogen Project** and South-West Blue Hydrogen & CCS Project



**Transformational growth opportunities** – to leverage existing assets, location and infrastructure to deliver world-class renewable energy projects



**Ideally located** – for identified exploration opportunities, for World-class renewable resources, for established infrastructure and to meet growing renewable energy market demand in WA



**Multiple commercialisation options** – supported by existing infrastructure, local industry and Government energy policies



**Established infrastructure in the Mid-West region** – supports existing production from Cliff Head Oil Field and potential generation of renewable energy through low-capex tie-ins



**Well credentialled, experienced and proven management team** – with track records of delivering energy projects

# Pilot at a Glance

ASX Code:

PGY

## Capital Structure

• Issued shares (4 March 2021)	218.5 million
• Market Capitalisation (4 March 2021) <sup>1</sup>	\$17.9 million
• Cash on hand (31 December 2020)	\$1.55 million

## Reserves & Resources

• Proved & Probable Reserves <sup>2</sup>	-
• 2C Contingent Resources <sup>2</sup>	~1,000,000 BOE

## Renewable Projects (Underdevelopment)

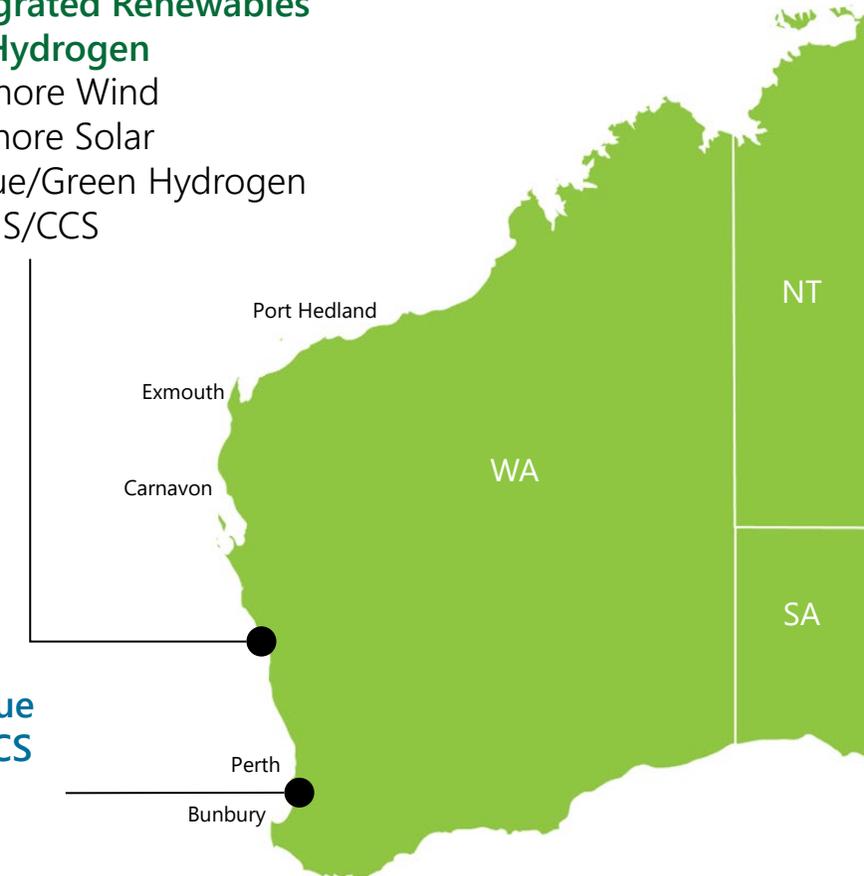
• Wind/Solar Power (MW) -	1,300+
• Hydrogen (kg/day)	Up to 250,000
• CCS/CCUS (tonnes per annum)	Up to 2 million

Share price



## Mid-West Integrated Renewables and Hydrogen

- Mid West Offshore Wind
- Mid West Onshore Solar
- Arrowsmith Blue/Green Hydrogen
- Cliff Head CCUS/CCS



## South-West Blue Hydrogen + CCS

- Kwinana Blue Hydrogen
- Harvey CCS

1. Trading PGY shares on the ASX is currently suspended pending conferring with the impact of a potential acquisition may have on the Mid West Feasibility Study Condition – see ASX Announcement 1 March 2021. PGY's share price at time of suspension was \$0.082/share after reaching a 52-week high of \$0.092/share  
 2. Approximately 300,000boe associated with the Cliff Head project remains under review and may be reclassified as reserves subject to the finalisation of new oil sales agreement to replace existing BP Kwinana arrangements

# Proven, Experienced Board and Management Team



**Brad Lingo**

**Executive Chairman and Director**

30+ years international senior executive experience

Upstream/midstream energy, energy infrastructure, finance

Proven track record of creating & growing shareholder value



**Tony Strasser<sup>1</sup>**

**Managing Director**

Extensive oil & gas experience including corporate finance and M&A 25+ years

Proven record in oil & gas with shareholder backing through multiple ventures



**Daniel Chen**

**Non Executive Director**

17+ years of international business, project management and leadership experience in large scale transport and logistics

Corporate advisor to private Australian oil & gas companies since 2018



**Bruce Gordon<sup>1</sup>**

**Non Executive Director**

Corporate Finance and Corporate Audit Specialist in the Natural Resources Sector

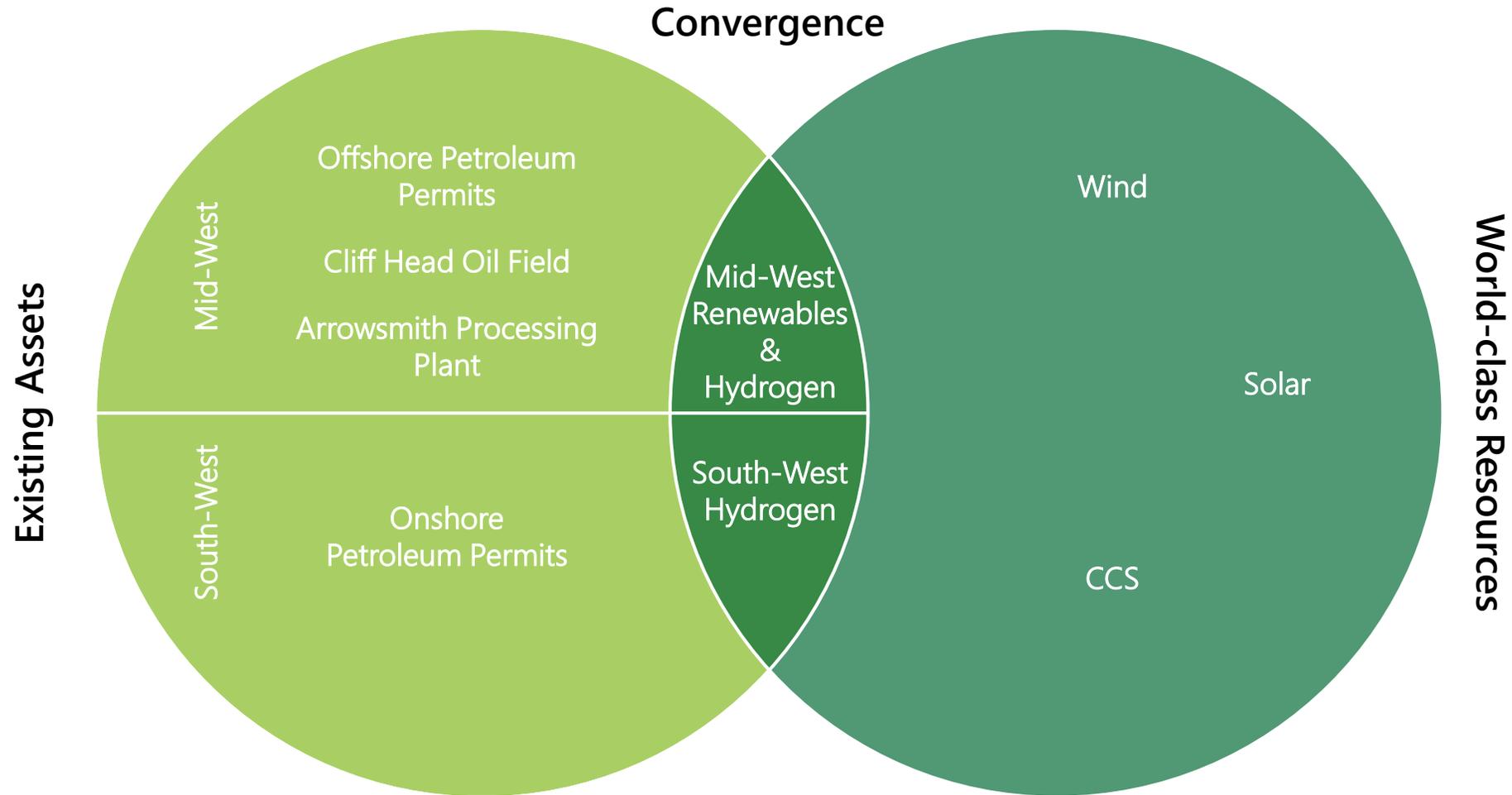
Over 25 years acting for, and advising, ASX and International oil and gas companies.

Extensive public company accounting, financial reporting and corporate governance knowledge



1. Following completion of the Royal acquisition, Tony Strasser is to be appointed Managing Director and Bruce Gordon is to be appointed non executive Director. Michael Lonergan will retire from the Pilot Board prior to completion of the acquisition

# Strategy and Opportunity



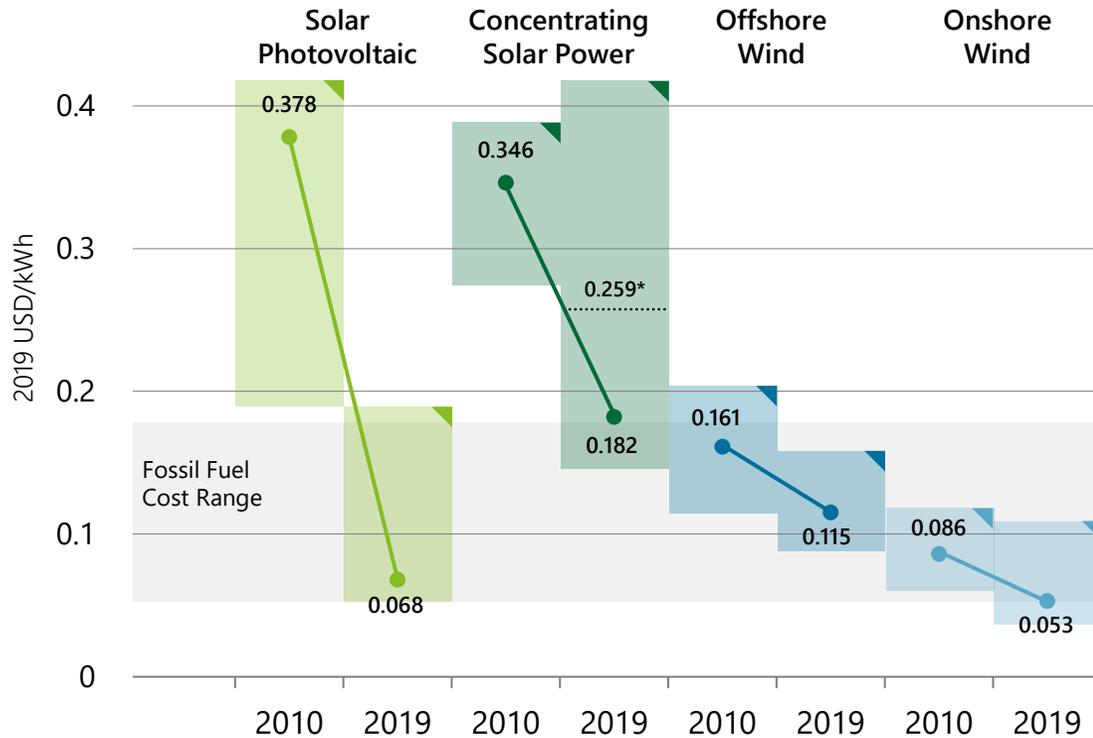
# The energy transition is accelerating - recent events

- WA Government Oakajee Strategic Industrial Area renewable hydrogen call for expressions of interest
  - Seeking 1.3 GW of wind & solar in the Mid West WA for green hydrogen production – 24,500 tpa
- APA Pathfinder Program
  - Targeting clean molecules – hydrogen production, storage, transmission & use
  - Parmelia Gas Pipeline transformation to 100% hydrogen ready
- Fortescue green hydrogen
  - FMG-Kawasaki Heavy Industries MOU global liquid hydrogen consortium to develop Australia-Japan supply chain
  - Development study for Bell Bay, Tasmania green ammonia plant
- Commonwealth Government announcement of Carbon Capture Use and Storage Development Fund
  - Grants of up to \$25 million for pilot projects or pre-commercial projects aimed at reducing emissions
  - Submissions due 29 March 2021
  - [www.business.gov.au/grants-and-programs/carbon-capture-use-and-storage-development-fund](http://www.business.gov.au/grants-and-programs/carbon-capture-use-and-storage-development-fund)

# The Case for Renewables

Technology advances have dramatically reduced costs for solar & wind power in last decade below fossil fuel alternatives

Global weighted average levelized cost of electricity from utility-scale renewable power generation technologies, 2010 and 2019



Source: IRENA – "Renewable Power Generation Costs in 2019", June 2020 Report



Competitive power generation costs make investment in renewables highly attractive



Renewable power generation technologies are competing head-to-head with fossil fuel options without financial support



Increasingly undercutting fossil fuel options, in many cases by a substantial margin



Declining costs driven by improving technologies, higher capacity factors, scale economies, & competitive supply chains



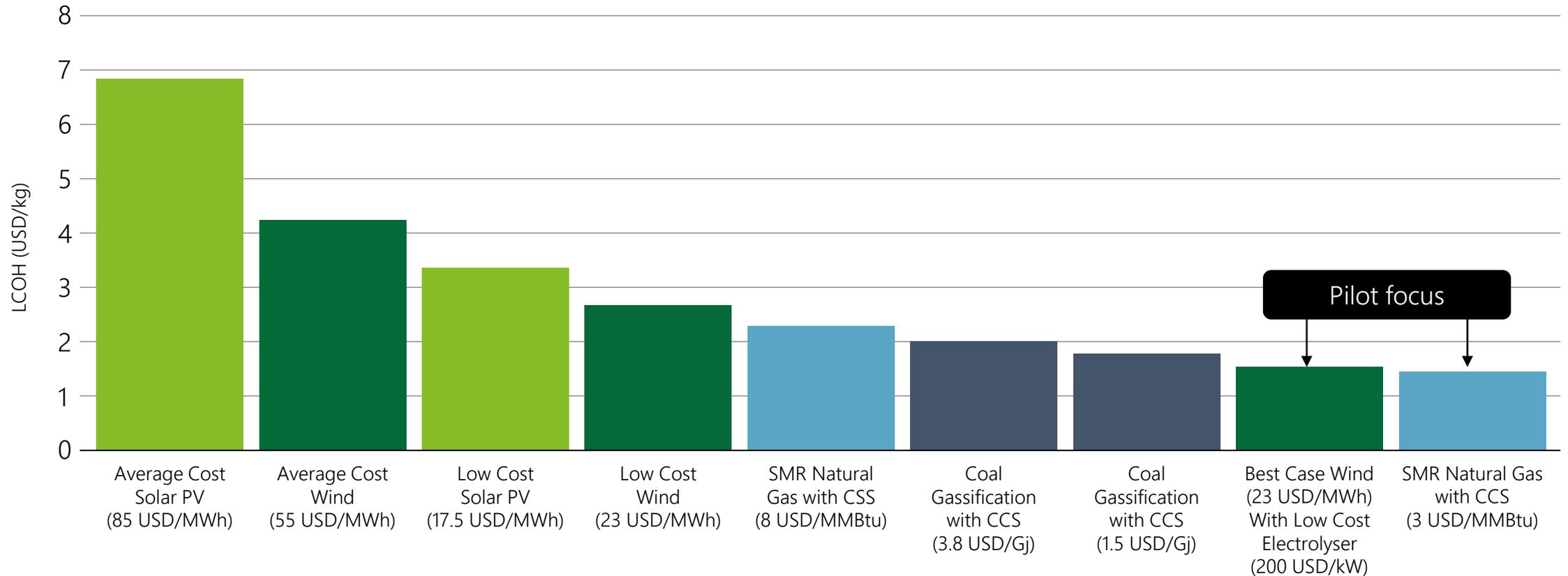
56% of capacity additions for utility-scale renewable power in 2019 achieved lower electricity costs than cheapest new coal



Capital availability

# The Case for Low Cost Hydrogen

## Costs of Producing Hydrogen from Renewables and Fossil Fuels Today (Levelized Cost of Hydrogen)



[https://www.irena.org/-/media/Files/IRENA/Agency/Publication/2019/Sep/IRENA\\_Hydrogen\\_2019.pdf](https://www.irena.org/-/media/Files/IRENA/Agency/Publication/2019/Sep/IRENA_Hydrogen_2019.pdf)

# A Clear Pathway to Low Cost Hydrogen

Mid-West Renewable & South-West Hydrogen Projects are uniquely positioned for both blue and green hydrogen



Low-cost industrial scale renewable energy – wind & solar



Existing readily accessible, established CCS/CCUS sites



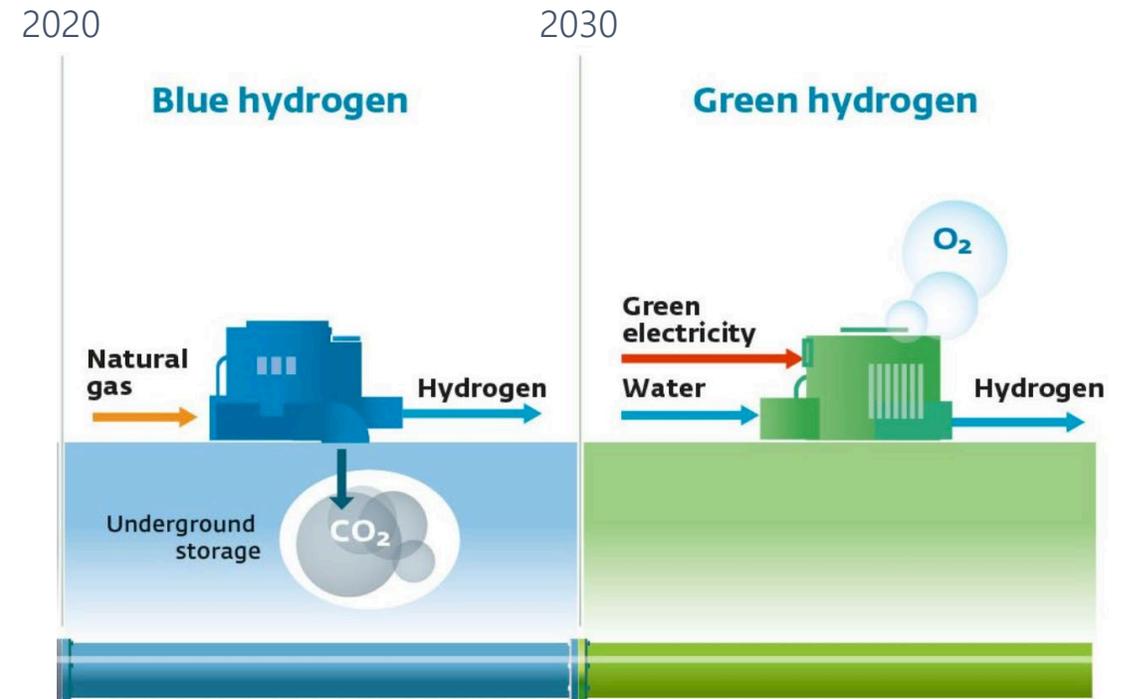
Readily available natural gas feedstock for blue hydrogen



Existing Commonwealth regulatory framework allowing CCUS/CCS in offshore Commonwealth waters – Cliff Head



Existing South-West Hub CCS Project under-appraisal for sequestration of 800,000+ tpa of CO<sub>2</sub> within PGY petroleum tenures<sup>1</sup>

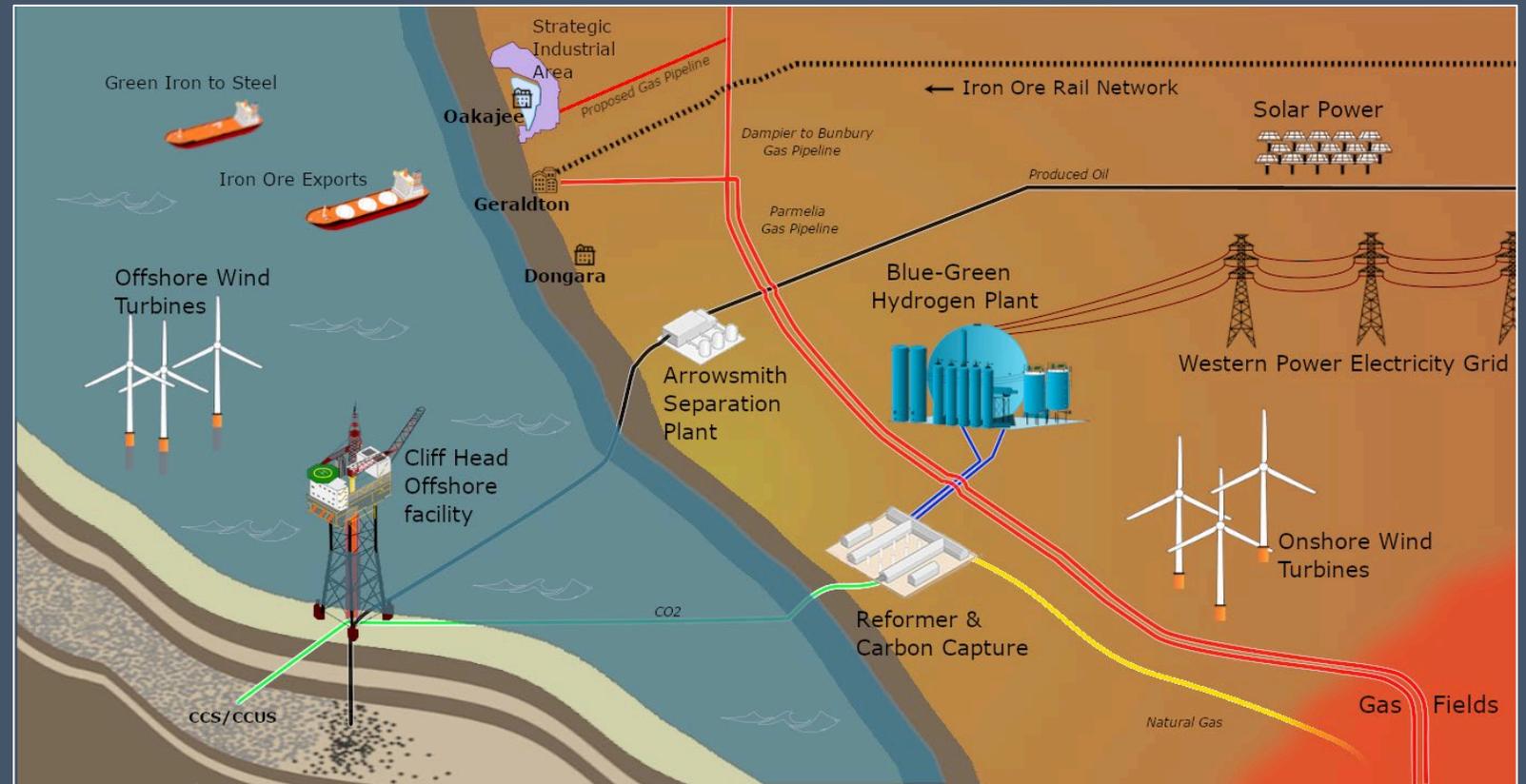


Source: Gasunie - "Indications of Hydrogen"

1. Dynamic Modelling of CO<sub>2</sub> Sequestration in the Harvey Area. A report by ODIN Reservoir Consultants for DMIRS 2018/7

# Mid-West Renewables & Hydrogen

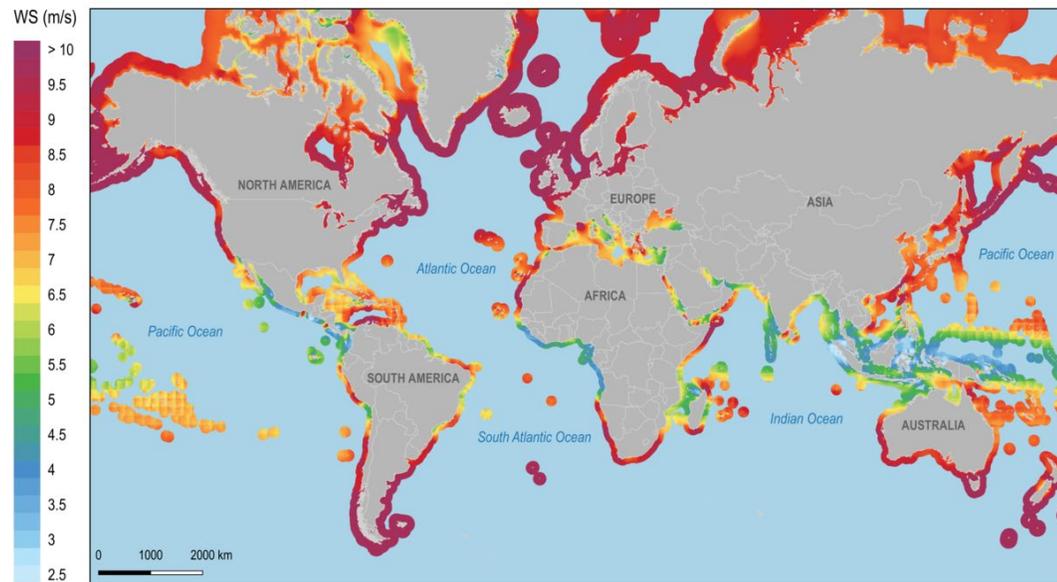
**Premium Renewable  
Energy Resource**  
anchoring development  
of transformational  
renewable energy  
projects



# Mid-West Region: World-class Wind & Solar Resources

Uniquely located in one of the world's best renewable energy jurisdictions

## Global Offshore Wind Speeds



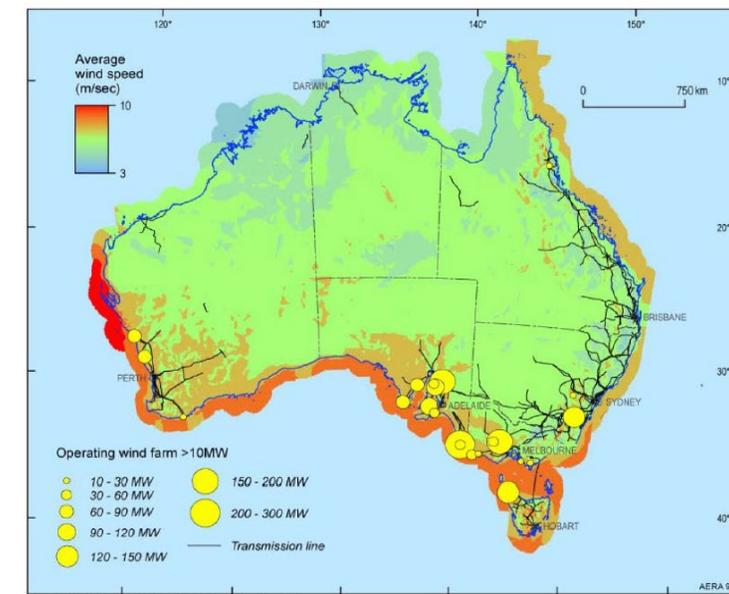
This wind resource map provides an estimate of mean annual wind speeds (m/s) extending 200 kilometers from shore at a hub height of 100 meters. It is provided under a World Bank Group (WBG) initiative on offshore wind that is funded and led by the Energy Sector Management Assistance Program (ESMAP). For more information please visit: <https://esmap.org/offshore-wind>. The wind resource data is from the Global Wind Atlas (version 3.0), a free, web-based application that provides data with a 100 m resolution based on the latest input datasets and modeling methodologies. For more information please visit: <https://globalwindatlas.info>.



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## Australia's Renewable Resources: Wind



Map of Australia showing the location of operating wind farms. The map indicates areas of wind speeds (m/second) as well as transmission lines. Some of the world's best wind resources are along the south-western, southern and south-eastern margins.

Source: Geoscience Australia and ABARE (2010) *Australian Energy Resource Assessment*.



[www.arena.gov.au](http://www.arena.gov.au)



# Mid-West Renewable Resource Zone – All The Right Stuff



## Premium Renewable Resource Precinct

**Renewable resources** – Coastal Mid-West is one of Australia's highest rated renewable energy resource regions for both wind & solar as assessed by Geoscience Australia

**Government strategic focus** – WA Government committed to developing the Mid-West major industrial area and renewable resource zone into a global renewable energy and hydrogen hub

**Renewable energy demand** – Mid-West renewables resources and hydrogen resource potential attracting interest of major International and local companies pursuing renewable energy projects



## Established Infrastructure

**Grid connected** – Served by Western Power's South-West Integrated System 330 kV transmission lines

**Pipeline connected** – Access to DBNGP & Parmelia Gas Pipelines provide potential pathways to market for hydrogen

**Ports, road & rail** – Mid-West Region endowed with established infrastructure



## Clear Hydrogen Development Pathway

**Blue hydrogen** – Combination of existing Perth Basin gas supplies, low cost renewable energy and existing suitable CCS/CCUS assets can support first-mover, lowest cost blue hydrogen supply chain

**Green hydrogen** – Abundant low cost renewable energy & abundant H<sub>2</sub>O in combination with blue hydrogen provides foundation for development of lowest cost green and blue/green hydrogen supply chain

**Green iron & steel** – Combine low cost blue/green hydrogen supply with World-class Mid-West magnetite iron production provides opportunity for globally cost-competitive green iron & steel

# Multiple Commercialisation Pathways

## Mid-West Renewables Project

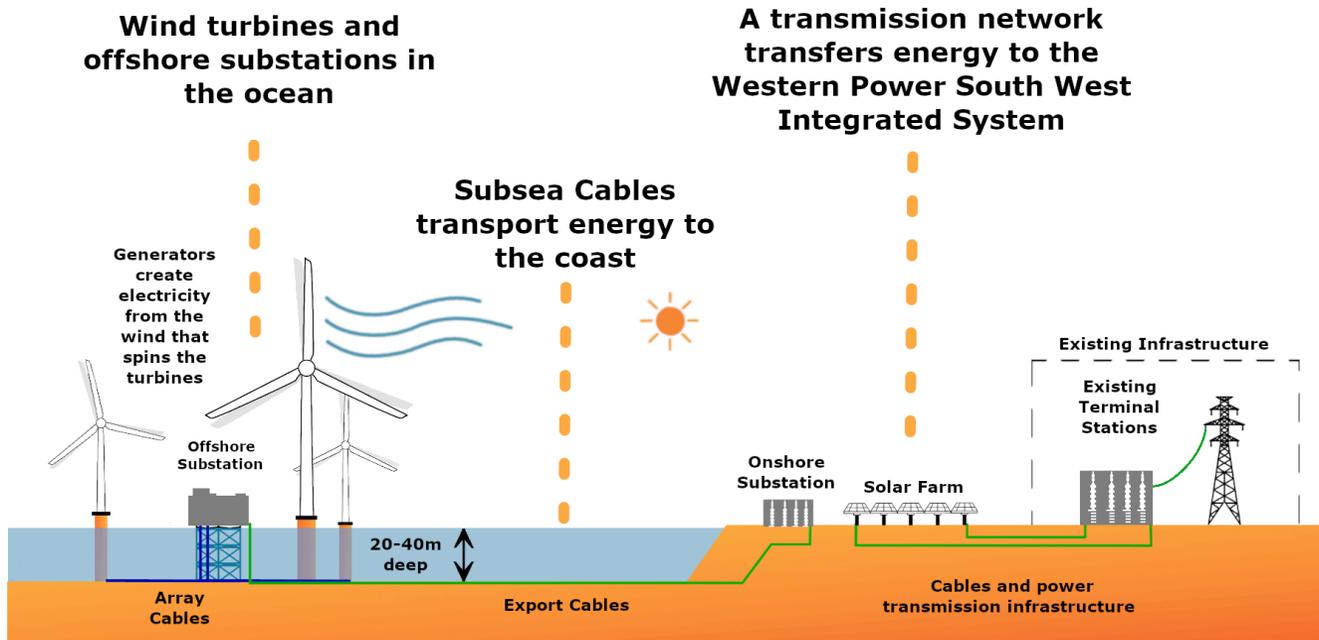
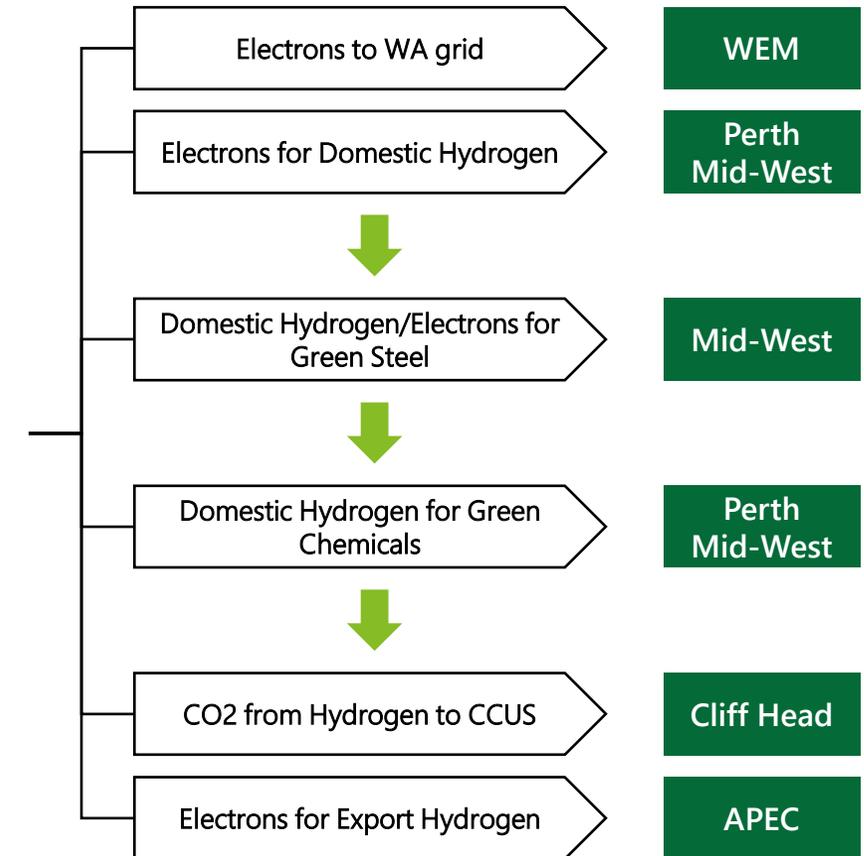


Diagram not to scale



# Integrating the Mid-West: Renewables & Cliff Head

## Cliff Head Oil Field/Infrastructure provides unique position

- The only offshore oil and gas infrastructure along the Mid-West Region coast

## WA-481-P provides significant opportunity accessible from Cliff Head

- Permit contains multiple identified exploration targets surrounding existing Cliff Head infrastructure

## Mid-West Region coast has multiple sites for offshore wind development

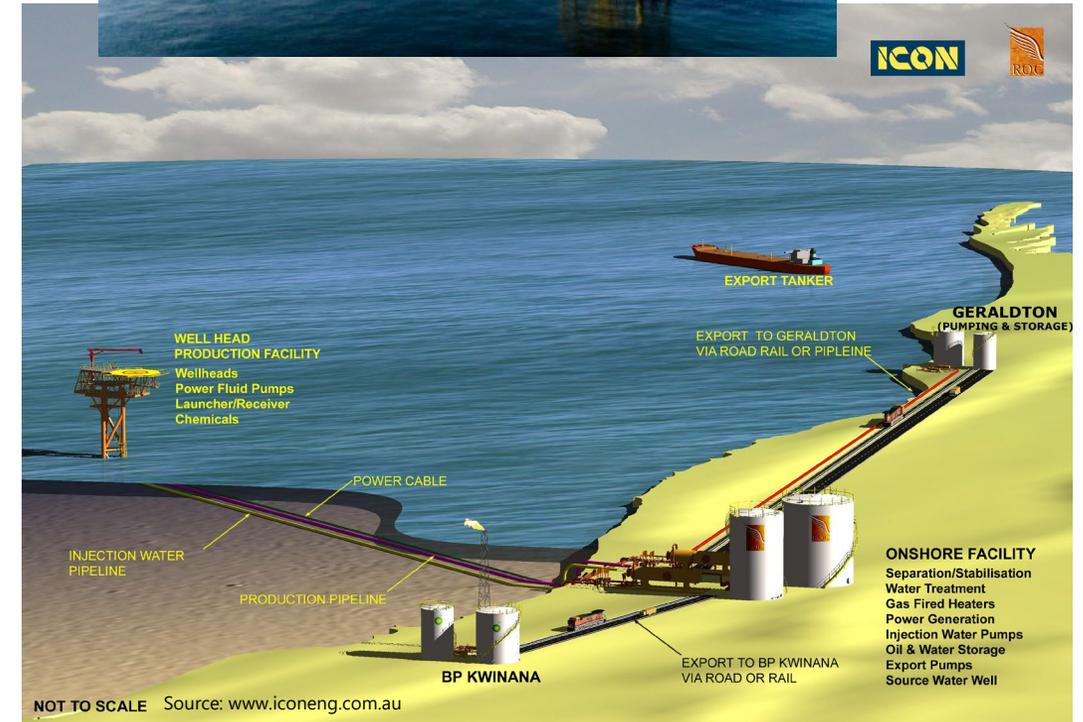
- Cliff Head facilities provide potential anchor point for Mid-West WSP

## Opportunity to simplify/streamline feasibility/development of Mid-West WSP

- Maximize use of existing infrastructure, easements, tenures, operations, studies & data

## Combining offshore wind & existing operations creates potential new value

- Potential to share costs and defer existing infrastructure abandonment liabilities
- Reduced costs potentially result in a lower economic threshold for continued operations



# South-West Blue Hydrogen Project

Focussed on delivering blue hydrogen combining advanced carbon capture with premium renewable energy resource



# South-West Blue Hydrogen & CCS

## Focus on development of blue hydrogen production project

- Hydrogen produced using natural gas using low-cost conventional SMR/ATR technology with full CCS

## “Blue” hydrogen has compelling cost/economic advantage

- Platts Analytics estimates blue hydrogen can be produced at a cost of US\$1.40/kg with full CCS versus “green” hydrogen production cost of US\$4.42/kg\*

## Pilot existing asset foot-print provides platform for CCS

- EPs 416/480 cover the WA Govt sponsored SW Hub Carbon Capture & Storage (CCS) Project

## SW Western Australia footprint provides ready access to infrastructure and markets

- Pilot’s existing assets have ready access to gas, power, water, CCS and target hydrogen end market

## Existing data & knowledge base streamlining development

- Commonwealth and WA Government work on SW Hub CCS Project provides substantial data/knowledge base for dedicated blue hydrogen CCS site creating opportunity to streamline/accelerate project feasibility & approvals

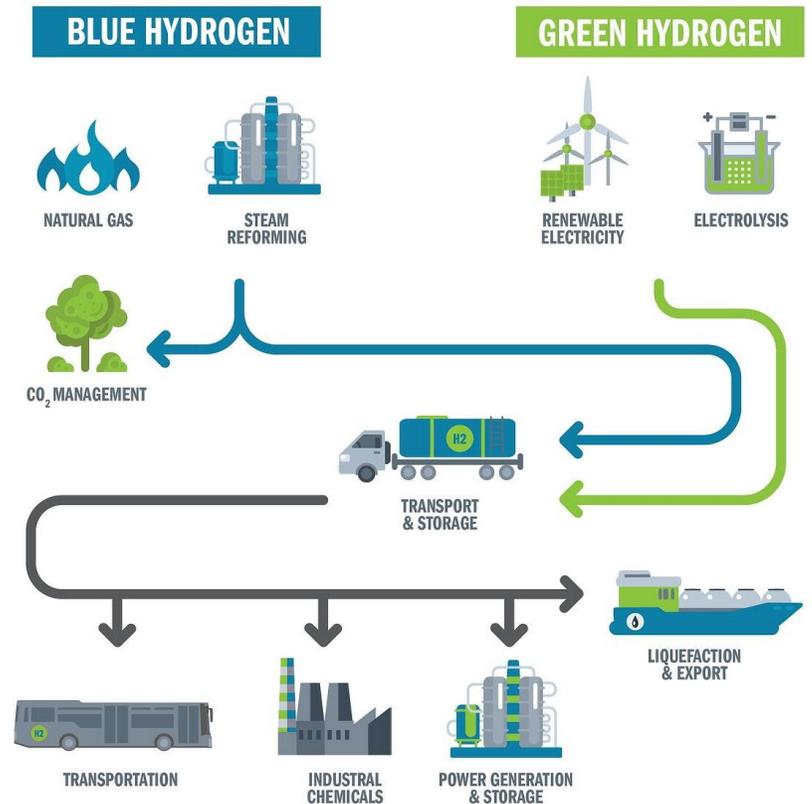
## Feasibility to partnering

- Once feasibility studies are completed, focus on securing large development partner

## Large range of potential partners

- BP, Santos, Woodside – all pursuing blue hydrogen

\*S&P Global Platts Article – Cost, logistics offer “blue hydrogen” market advantage over “green” alternative, 19 March 2020 - <https://www.spglobal.com/platts/en/market-insights/latest-news/electric-power/031920-cost-logistics-offer-blue-hydrogen-market-advantages-over-green-alternative>



Source: <https://blog.ballard.com/green-hydrogen-sources>

# Integrated Renewables Development Strategy

Focus on large scale wind & solar leveraging existing assets and facilities – Cliff Head, Arrowsmith & SW tenures



## Utilizing Existing Asset Footprint

Progress project feasibility works/ studies to provide a project for partnering



## Leverage Existing Data & Knowledge Base

Foundation for dedicated studies serving dual purpose for upstream & renewables to streamline project feasibility & approvals



## Feasibility to Permitting

Once preliminary feasibility established pursue permitting & regulatory approvals in parallel with full feasibility



## Permitting to Partnering

Once feasibility studies are completed and regulatory approval process advanced focus on securing large development partner



## Large Range of Potential Partners

CIP, China Resource Fund, Equinor, Siemens, GE, BP Lightsource, Eni – all of which are pursuing renewables – offshore wind or solar

# Key Milestones

	CY2020	CY2021	CY2022	CY2023
<b>Corporate</b>	<ul style="list-style-type: none"> <li>• <b>May</b> – New strategy announced</li> <li>• <b>September</b> – Transactions deliver and enhance foundation assets</li> <li>• <b>September</b> – Secure corporate funding through equity capital raising</li> </ul>	<ul style="list-style-type: none"> <li>• Develop partnering strategy for Mid-West WSP</li> <li>• Formulate overall corporate and project funding strategy &amp; plan</li> </ul>	<ul style="list-style-type: none"> <li>• Implement corporate and project funding strategy</li> <li>• Implement Mid-West WSP partnering strategy</li> <li>• Raise corporate and project equity finance including funding for Mid-West WSP</li> </ul>	
<b>Mid-West Integrated Renewables &amp; South-West Blue Hydrogen &amp; CCS</b>	<ul style="list-style-type: none"> <li>• <b>July</b> - Complete pre-feasibility</li> <li>• <b>September</b> – Commence project feasibility studies</li> <li>• <b>December</b> – Engage feasibility specialist energy transition renewables project advisors</li> </ul>	<ul style="list-style-type: none"> <li>• Complete project feasibility studies</li> <li>• Commence project development &amp; environmental approvals</li> <li>• Commence project FEED &amp; energy marketing</li> </ul>	<ul style="list-style-type: none"> <li>• Complete project development &amp; environmental approvals</li> <li>• Complete project FEED &amp; energy marketing</li> </ul>	<ul style="list-style-type: none"> <li>• Potential FID on initial phase of Mid-West WSP development</li> </ul>
<b>Cliff Head + WA 481 - P</b>	<ul style="list-style-type: none"> <li>• <b>April</b> Cliff Head renewal project completed</li> <li>• <b>October</b> – CH6/7 Production workover</li> </ul>	<ul style="list-style-type: none"> <li>• Maintain production</li> <li>• Detailed well planning for Cliff Head Renewal Project (3 wells)</li> <li>• Oil sale</li> <li>• WA 481 -P free carry work program</li> </ul>	<ul style="list-style-type: none"> <li>• Possible drilling campaign for Cliff Head Renewal Project</li> <li>• Oil sales</li> <li>• WA 481 -P free carry work program</li> </ul>	<ul style="list-style-type: none"> <li>• Oil sales</li> <li>• WA 481 -P free carry work program</li> </ul>

# Summary

## Leveraging existing assets and experience to move from pure oil & gas explorer into an energy transition company developing oil & gas production and World-class renewable energy projects



Material holdings in both Mid-West & South-West Regions of Western Australia, recognised as World-class wind and solar resources – existing assets located in the heart of the Mid-West Renewable Resource Zone

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Ownership in key energy licenses & infrastructure – secured ownership in key oil & gas tenures and infrastructure through Royal Energy & Key Petroleum acquisitions

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Potential World-class renewable energy projects – strategy to leverage existing oil & gas infrastructure and tenures with World-class renewable wind and solar resources to deliver offshore wind and onshore wind and solar project for domestic and export green energy, hydrogen and mineral beneficiation

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Proven, experienced Team – Board and Management have strong track records of building and delivering energy and resource projects

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Well capitalised to start the transition – Pilot well funded to pursue feasibility World-class offshore wind and onshore wind and solar projects supplying the Mid-West and South –West Regions with underlying sustaining cashflow from the Royal Energy acquisition

# Compliance Statements

## Disclaimer

This investor presentation has been prepared by Pilot Energy Limited ABN 86 115 229 984 (Pilot or the Company).

Any material used in this presentation is only an overview and summary of certain data selected by the management of Pilot. The presentation does not purport to contain all the information that a prospective investor may require in evaluating a possible investment in Pilot nor does it contain all the information which would be required in a disclosure document prepared in accordance with the requirements of the Corporations Act and should not be used in isolation as a basis to invest in Pilot. Recipients of this presentation must make their own independent investigations, consideration and evaluation of Pilot. Pilot recommends that potential investors consult their professional advisor/s as an investment in Pilot is considered to be speculative in nature.

This presentation contains “forward looking statements” concerning the financial condition, results of operations and business of Pilot. All statements other than statements of fact or aspirational statements, are or may be deemed to be “forward looking statements”. Often, but not always, forward looking statements can generally be identified by the use of forward looking words such as “may”, “will”, “expect”, “intend”, “plan”, “estimate”, “anticipate”, “continue”, “outlook”, and “guidance”, or other similar words & may include, without limitation, statements regarding plans, strategies and objectives of management, future or anticipated production or construction commencement dates and expected costs, resources or reserves, exploration results or production outputs.

## Assumptions

Forward looking statements are statements of future expectations that are based on management’s current expectations and assumptions, known and unknown risks and uncertainties that could cause the actual results, performance or events to differ materially from those expressed or implied in these statements. These risks include, but are not limited to price fluctuations, actual demand, currency fluctuations, drilling and production results, commercialisation reserve estimates, loss of market, industry competition, environmental risks, physical risks, legislative, fiscal and regulatory developments, economic and financial market conditions in various countries and regions, political risks, project delay or advancement, approvals and cost estimates.

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## Competent Persons Statement

This presentation contains information on conventional petroleum reserves and resources which is based on and fairly represents information and supporting documentation (including Reserves and Contingent Resources as of 30 June 2020 reported in Triangle public disclosures (ASX: TEG) as operator of Cliff Head. Prospective resources relate to undiscovered accumulations requiring further exploration, appraisal and evaluation) reviewed by Dr Xingjin Wang, a Petroleum Engineer with over 30 years’ experience and a Master in petroleum engineering from the University of New South Wales and a PhD in applied Geology from the University of New South Wales. Dr Wang is an active member of the SPE and PESA and is qualified in accordance with ASX listing rule 5.1. He is a former Director of Pilot Energy Ltd and has consented to the inclusion of this information in the form and context to which it appears.**Authorisation**

This presentation and announcement has been authorized by the Board of Directors of Pilot Energy Limited.

## MW WSP Feasibility Study Reporting Conditions

Pilot has agreed the following conditions with the ASX in relation to the MW WSP feasibility study:

1. The Company must continue to spend funds on its existing and proposed oil and gas projects.
2. The Company must disclose in each quarterly activities report until September 2022, the proportion of expenditure incurred in relation to exploration and evaluation on the oil and gas projects and the Mid-West Wind and Solar Project.
3. The Company must disclose as separate line items in each quarterly activities report until September 2022, expenditure incurred in relation to exploration and evaluation on the oil and gas projects and the Mid-West Wind and Solar Project.
4. Proceeding beyond the feasibility study stage of the Project (or incurring expenditure in excess of the budgeted feasibility expenditure in relation to the Project) constitutes a change in the nature and scale of the Company’s activities in terms of Listing Rule 11.1 and as such the Company will be required to comply with all of the requirements of Chapters 1 and 2 of the Listing Rules before it proceeds beyond the feasibility study or incurs expenditures in excess of the budgeted feasibility expenditure on the Project.

PILOT ENERGY LIMITED  
ASX:PGY



# General Meeting

10 December 2020

## Resolutions

