

Lion at a glance

- ASX listed oil and gas company with conventional PSC's in Indonesia.
- Focus on conventional oil and gas production and development, appraisal and step out exploration risk opportunities.
- Exploring green hydrogen opportunities in Australia.
- Net production of around 40bopd from the Seram PSC which also contains the 1.5TCF Lofin gas/condensate discovery.
- Leveraging synergies in conventional assets and access to both infrastructure and markets.
- Executive team and strategic investors with impressive track records for value creation in Asia.

Contact

Lion Energy Limited

ABN 51 000 753 640

ASX Code: LIO

Suite 1
295 Rokeby Road
Subiaco WA 6008
Australia

Tel +61 8 9211 1500 | Fax +61 8 9211 1501

info@lionenergy.com.au

www.lionenergy.com.au

Directors & Officers

Tom Soulsby	Executive Chairman
Damien Servant	Executive Director
Russell Brimage	Non-Executive Director
Chris Newton	Non-Executive Director
Zane Lewis	Non-Executive Director
Arron Canicais	Company Secretary

For more information contact

Tom Soulsby
+61 487 527 958
tsoulsby@lionenergy.com.au

Update on green hydrogen roadmap

Key Highlights:

- Set against a backdrop of Australian low emission goals and further government support for the hydrogen industry, **Lion is positioning itself to be an early mover in green hydrogen production in Australia.**
- Based on ongoing analysis of the hydrogen value chain potential, Lion is initially focusing its strategy on a decentralised, low capital intensive and shorter lead time part of the green hydrogen chain. That is, **green hydrogen and refuelling infrastructure attached to the national energy market for the domestic heavy mobility market (buses and trucks).**
- With the objective to deliver green hydrogen at the pump at a price close to diesel price parity outlined by our studies, **Lion is evaluating the potential for building a network of modular hydrogen production and refuelling stations across Australia, with an initial focus on Queensland.**
- In parallel to further technical work undertaken with GPA Engineering ("GPA"), **Lion is currently undertaking preliminary discussions on the supply of green hydrogen to fleet operators and public agencies in Australia,** with a focus on Queensland, intended to lead to the identification of the location for the first hydrogen production and refuelling station by year-end.
- **Lion is aiming to be at the forefront of producing and delivering hydrogen to meet the impending demand from bus fleet operators and will update investors on investment scope and scale in due course.**

Lion Energy Limited ("Lion" or "Company"; ASX: LIO) welcomes the recent announcement by the Australian federal government to boost the federal investment under the Clean Hydrogen Industrial Hubs program.

Mr Tom Soulsby, Lion's Executive Chairman, said *"we are very pleased by the government's response to the opportunity that hydrogen represents for Australia. These announcements demonstrate that hydrogen is increasingly viewed as an essential component of a de-carbonized world and reinforces Lion's decision to investigate becoming an early domestic producer and distributor of green hydrogen as outlined in our earlier market releases"*.

Following extensive and ongoing market analysis and interaction with market participants and public departments, Lion is focusing its initial efforts on the production and delivery of green hydrogen for the domestic heavy mobility market. We are close to completing the stage 2 work of our hydrogen strategy within budget as outlined in an announcement dated May 7, 2021, entitled "Embracing the energy market disruptor: green hydrogen".

ASX Announcement

4 October, 2021



Mr Soulsby said *“the heavy mobility sector is ripe for adopting hydrogen as a solution for zero-emission targets. For the bus industry in particular, some states have ambitious targets, with a requirement for all new public transport bus purchases to be zero-emission by 2025. Hydrogen buses are already commercially available, but the refuelling infrastructure is still missing. Lion is focussed on the potential for filling the gap, initially in Queensland and eventually across Australia.”*

As part of our stage 2 strategy, Lion appointed GPA back in June 2021 to undertake a high-level techno-commercial assessment of a 2,000kg per day generic hydrogen production and refuelling facility. The objective was to assess the potential business case for further investment in a hydrogen production plant in Australia. This work has motivated us to move to a second phase. Lion is pleased to report that GPA will now undertake a second phase qualitative and quantitative review of the modular hydrogen compression, storage and dispenser offers received from various vendors.

GPA is one of Australia’s most experienced hydrogen engineering firms and they are assisting Lion plan for an early entry into the green hydrogen market and have assisted Lion prepare a model hydrogen production and refuelling station (see Figure 1 below).

Figure 1: Lion’s initial 2D drawings for a potential 2,000kg/day hydrogen production and refuelling station



Lion is also working with the Australian Road Research Board (“ARRB”) on a business case for hydrogen buses in Queensland. ARRB will deliver an economic case and a transition plan, and this will be provided by Lion with the co-operation of regulators, bus fleet owners and operators to assist with their decision making and transition planning.

ASX Announcement



4 October, 2021

Mr Soulsby said, *"we are very encouraged by our results so far. Our production concepts, and market approaches are well advanced. We have already identified a handful of potential locations, and we are focussing on the selection of the first site. We believe that our work in green hydrogen is well timed with zero net emission targets being adopted by the Queensland State Government and our work is extremely well received."*

Mr Soulsby went further to explain that *"Lion's work with QUT, which was announced June 2, 2021, is close to completion. The draft geospatial tool enables us quickly to ascertain the suitability of larger hydrogen production locations factoring in market and renewable energy delivery infrastructure. We will update the market on this work upon completion, expected by year end. Our work with Wagner Corporation also continues with discussions ongoing."*

Separately, Mr Soulsby, Lion's Executive Chairman, has been appointed as a board advisor to the Hydrogen Queensland Industry Group (H2Q), which is an industry led organisation committed to securing the economic, environmental and social opportunities hydrogen offers Queensland and Australia. For more information on H2Q, please see h2q.com.au.

The Company cautions that there can be no certainty that a suitable hydrogen opportunity will be identified as a result of this work. Further, there can be no certainty that any conditions precedent to progressing such an opportunity (including, without limitation, compliance with ASX Listing Rules 11.1.2 and/or 11.1.3 to the extent applicable) will be satisfied.

ENDS

This ASX announcement was approved and authorised for release by the Board of Directors.