



Elixir Energy

ASX : EXR

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HYDROGEN PROJECT UPDATE

HIGHLIGHTS

- Acquisition of *Solar Ilch* 50 MW solar project in the South Gobi region completed
- Strategic studies launched on green hydrogen potential for Mongolia pursuant to MOU with Government of Mongolia, results are in progress
- Neil Young appointed as Deputy Chairman of new NGO *Future Energy – Mongolian Hydrogen Council*

Elixir Energy Limited (“Elixir” or the “Company”) is pleased to provide an update on progress being made in its South Gobi based green hydrogen project.

A regular operations update on the Company’s current three rig CBM drilling program will follow in the next week or so.

SOLAR PROJECT ACQUISITION

Elixir’s Mongolian subsidiary, GOH Clean Energy LLC, is today acquiring, Mongolian company Solar Ilch LLC for consideration of 720,000 Elixir shares. This company is a special purpose vehicle that owns various rights to the *Solar Ilch* undeveloped 50 MW solar project located in the South Gobi region of Mongolia. Some key project features are as follows:

- **Secured land package:** Long term land lease agreement in place with the local Government unit (Khan Bogd Soum).
- **Approvals granted:** Various required development regulatory processes met.
- **Procured ongoing support:** Ongoing agreement with the Mongolian vendor with respect to provide assistance in dealing with the regulators, etc.
- **Favorable location - proximity to large energy demand node, etc:**
 - Located ~40 kilometres from the Rio Tinto operated Oyu Tolgoi copper/gold mine.
 - Proximate to Oyu Tolgoi’s very large saline water source (water being the key ingredient, alongside renewable electricity, for green hydrogen production).

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- The South Gobi has excellent solar resources for its latitude (the same as Southern Europe), given the lack of cloud cover in the Gobi desert.
- **Technology advantage:** GOH Clean Energy LLC has just ordered a solar monitoring unit from Australian company Fulcrum (who has previously supplied it with a SODAR unit to measure wind and solar in another location in the region). This will be installed on the *Solar Ilch* site to give very granular data (e.g. including the effect of local dust conditions) to maximise the project funding capacity of the project.
- **Validating capacity factors:** Elixir's desktop studies (see ASX release dated 14 October 2021) indicate that the combined solar and wind resources in the South Gobi region have exceptional capacity factors – a key source of competitive advantage for green hydrogen production. GOH Clean Energy will shortly be measuring both to bankable standards.



Neil Young recently inspecting the Solar Ilch site

GREEN HYDROGEN STRATEGIC STUDIES

Elixir has commissioned various engineering, legal and commercial studies to support its South Gobi hydrogen project, the key results of which will be reported as they progress. The current status is as follows:

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- A legal study into the regulation of hydrogen projects in Western Australia has recently been received from PricewaterhouseCoopers (PWC), a recognized expert in this area. The purpose of this study is to outline how green hydrogen is regulated in a mature jurisdiction. This has now been supplied to the Company's Mongolian lawyers to compare the key issues identified therein with the comparable Mongolian laws. The final product will be delivered to the Mongolian Ministry of Energy under the company's MOU with it. Current expectations are that few if any material legal changes would be required for green hydrogen production to commence in the country.
- A concept stage study has been commissioned from Australian engineering firm GPA Engineering for a pilot project to supply green hydrogen to Inner Mongolian steel mills in China. GPA has recently garnered substantial relevant experience in Australian green hydrogen projects of various types.
- A commercial study has been initiated with international energy consulting firm Rystad Energy into China's long term hydrogen demand and supply. Recent public views from Wood Mackenzie and Bloomberg New Energy Finance are that China will require substantial hydrogen imports. In Elixir's view, Mongolia is exceptionally well placed to supply such imports.
- Elixir's internal desktop studies indicate that very substantial saline water sources are available in the South Gobi region – as evidenced by Oyu Tolgoi's (the largest copper mine in Mongolia), water sources (which can supply nearly one tonne per second of water to the mine, but still only use a small fraction of the water in the relevant saline aquifers). Local experts have been engaged to provide the Company with more detailed inputs on water supply issues, both technical and the approvals process road map.
- Elixir has recently commenced engagement with the international financial institutions (IFIs) who operate in Mongolia over project finance for a green hydrogen pilot.

DEEP IN-COUNTRY ENGAGEMENT

The Company's Managing Director, Neil Young, has just been appointed as a founding Board member of a NGO recently established in Mongolia called *Future Energy – Mongolian Hydrogen Council*. Mr Young was elected as the Deputy Chairman of the Board of the Council. The NGO's purpose is to promote the development of a hydrogen industry in Mongolia to multiple stakeholders, both locally and internationally.

Mr Young said: *"The acquisition of Solar Ilch is a material step in the implementation of our relatively recently announced hydrogen strategy – but is only one of a good number of moves we are making on this front in addition of course to our intensive three rig current CBM drilling program). I am very pleased to be appointed as Deputy Chairman of the new Mongolian Hydrogen Council and look forward to working with my fellow Board members to advance what could be a very substantial industry in Mongolia in the decades to come."*

By authority of the Board:

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For further information on Elixir Energy please visit the Company's website at www.elixirenergy.com.au