



ASX Release

14 August 2025

North Rukwa Project drilling campaign update.

Five-hole program independently endorsed by industry experts.

Highlights

- A five-hole drilling campaign for North Rukwa Project's western margin in Tanzania has now been independently peer reviewed by a globally recognised team of industry experts.
- Drilling targets have been pinpointed using the Company's upgraded helium charge model, based on previous drilling results and the Company's integrated technical analysis.
- The campaign targets an accessible risked gas-phase helium resource that also aligns with the recent assessment by Netherland, Sewell & Associates, Inc (NSAI).
- If successful, these wells will form the backbone of the Company's near-term resource monetisation plans in line with the Company's strategic direction.
- An in country safety and logistics survey has also been conducted by the Company's drilling team.
- Webinar to be hosted by Executive Chairman Mr Dennis Donald on Monday 18 August.

Noble Helium Limited (ASX:NHE) ("Noble Helium" or "the Company") has confirmed five gas-phase helium targets for drilling along the western margin of its flagship North Rukwa project in Tanzania hosting a Prospective Helium Resource Mean Estimate of 225.5 billion cubic feet (BCF).¹

The Drilling Plan

Mbelele-1A will be drilled to a total depth of 88m to appraise the potential shallow gas cap identified in maiden drilling at the Company's Mbelele prospect. Lab measurements of the gases exsolved from the pressurised formation fluid samples taken from below the potential gas cap yielded helium concentrations of between 0.40% and 2.46%.²

A further four exploration wells will test two structures and seven potential free gas zones between 180m and 600m deep at Kinambo, 30km southeast of Mbelele, where multiple positive helium indicators have been identified including gas bubbling at surface with helium concentrations significantly above atmospheric.

Drilling will be focused on proving up and then growing North Rukwa's gas-phase helium resource along the western margin to facilitate the development of a small-scale operation capable of

¹ Refer ASX release dated 28 July 2025 *North Rukwa prospective helium resource upgraded*.

² Refer ASX release dated 6 February 2024 *Mbelele lab results confirm high helium concentrations at North Rukwa Project*.

generating positive cashflow within 18 months. Data collection on the wells will be a prime goal with the target zones being cost effectively logged and assessed.

As part of the Company's new, holistic risk reduction strategy, the planned drilling campaign has been independently reviewed by a globally recognised team of drilling and geological experts following a comprehensive peer review process. Throughout the independent review process safety was at the forefront of the assessment criteria.

Noble Helium Executive Chairman, Mr Dennis Donald, said:

"The North Rukwa Project has the potential to be a globally significant helium producing system that the Company's focused strategy is committed to monetising in quick time."

"We have every confidence that our next drilling plan comprising five holes across two prospects will return the results we are looking for. To minimise risk and maximise the probability of success, the plan was preceded by a comprehensive integrated technical analysis and signed off by a team of world class experts, all of whom I would describe as amongst the best in their respective fields. This independent assessment has validated our approach."

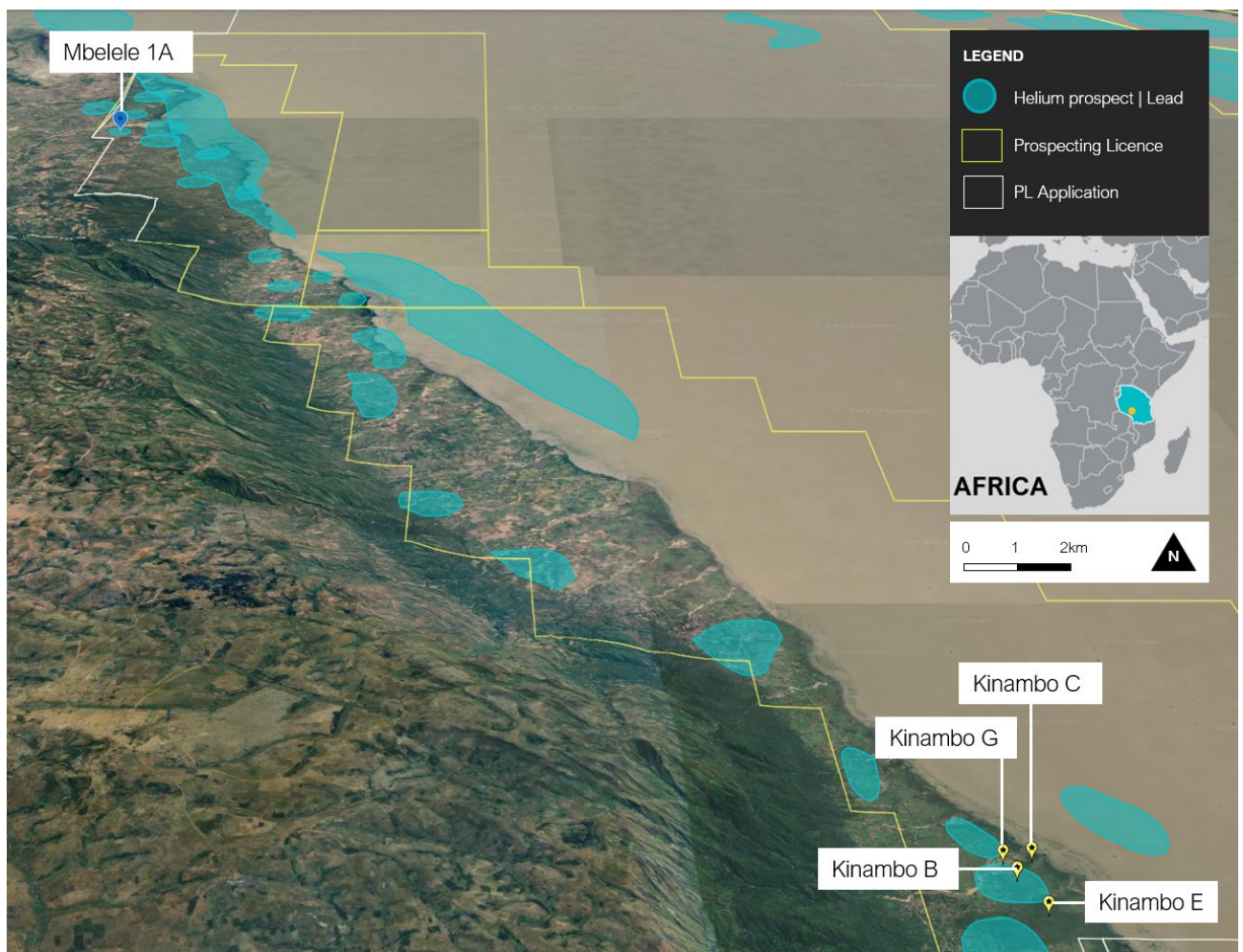


Figure 1. North Rukwa Project western margin map showing drill targets.

All wells will be vertical onshore wells. The BoreXpert drilling rig and wireline logging equipment is currently on standby at zero cost and can be rapidly mobilised to site. As set out below, this rig is fully fit for purpose.

The drilling campaign's budget and timing are still being finalised, subject to the last stage of field engineering currently underway to complete the program. However, overall costs are expected to be less than 10% of the Company's maiden 2-well drilling campaign at Mbelele, where a high-cost oil and gas drilling rig and relevant support services were necessary to protect against a long list of risks and unknowns including flammable gases and blow out prevention. With the geology and the risks now much better understood, a rig used for water wells and geothermal drilling is more than competent for the purposes of this campaign.

Making it happen

Noble Helium's Chief Operating Officer, Mr Dermott O'Keefe and Country Manager, Joseph Uisso, have been at the North Rukwa Project examining access to the drilling sites and closing out the field engineering program in preparation for drilling.



Figure 2. Noble Helium's Chief Operating Officer, Mr Dermott O'Keefe together with Joseph Uisso, our Country Manager photographed a few days ago at the North Rukwa Project examining access to the drilling sites along with a local survey team.

Mr Dennis Donald, our Executive Chairman, is currently in Australia talking to shareholders and working with the Company's geological team led by Technical Director, Mr Justyn Wood.

Noble Helium Technical Director, Mr Justyn Wood said:

"Helium requires a different lens to that used for hydrocarbons. Valuable lessons learned from detailed analysis of the results from our first drilling campaign have put us in a strong position to find commercially viable helium deposits at low cost. The North Rukwa basin remains one of the most promising helium exploration areas globally, and we now have a clearer understanding of how the system works and a strategy for success."

"The Mbelele appraisal will maximise the value of the opportunity, while geophysical responses distinguish Kinambo as being target-rich, with direct access to charge from helium-rich Karoo and deep crustal sources. Independent targets, multiple gas-phase mechanisms, and a favourable depositional environment for reservoir and seal development significantly increases probability of success."

Webinar, Monday 18 August 2025

Noble Helium's Executive Chairman, Mr Dennis Donald, invites investors to join the Company's investor webinar to be held from 11am – 12 noon AEST (Brisbane time) on Monday, 18 August 2025.

Webinar Details

Time: 11am – 12 noon AEST (Brisbane, Sydney, Melbourne time) Monday, 18 August 2025
(9am – 10am AWST Perth time).

Register now: <https://events.teams.microsoft.com/event/b91e2afe-0283-4619-92bf-04d4d2e52d24@975241e2-77c0-4b0e-a818-5f00ddb4e104>

For any questions regarding the webinar, please email gareth@republicir.com.au.

This announcement has been authorised for release on the ASX by Noble Helium's Board of Directors.

For further information:

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Forward-looking statements

This announcement may contain certain “forward-looking statements”. Forward looking statements can generally be identified by the use of forward-looking words such as, “expect”, “should”, “could”, “may”, “predict”, “plan”, “will”, “believe”, “forecast”, “estimate”, “target” and other similar expressions. Indications of, and guidance on, future earnings and financial position and performance are also forward-looking statements. Forward-looking statements, opinions and estimates provided in this presentation are based on assumptions and contingencies which are subject to change without notice, as are statements about market and industry trends, which are based on interpretations of current market conditions. Forward-looking statements including projections, guidance on future earnings and estimates are provided as a general guide only and should not be relied upon as an indication or guarantee of future performance.

Competent Persons Statement

The technical information provided in this announcement has been compiled by Mr. Justyn Wood, Executive Director with Noble Helium Limited. The resource estimates have been prepared in accordance with the definitions and guidelines set forth in the Petroleum Resources Management System, 2018, approved by the Society of Petroleum Engineers.

Mr Wood is a qualified geophysicist with over 30 years technical, and management experience in exploration for, appraisal and development of, oil and gas resources. Mr Wood has reviewed the results, procedures and data contained in this announcement and consents to the inclusion in this announcement of the matters based on the information in the form and context in which it appears.

NSAI Resource Update

The technical persons responsible for preparing the reserves estimates presented herein meet the requirements regarding qualifications, independence, objectivity and confidentiality set forth in the Standards Pertaining to Estimating and Auditing of Oil and Gas Reserves Information promulgated by the Society of Petroleum Engineers. We are independent petroleum engineers, geologists, geophysicists and petrophysicists; we do not own an interest in these properties nor are we employed on a contingent basis. Netherland, Sewell & Associates, Inc. performs consulting petroleum engineering services under the Texas Board of Professional Engineers Registration No. F-2699. Netherland, Sewell & Associates, Inc has consented to the form and context in which the Prospective Resource Estimates and supporting information are presented.

Cautionary Statement for Prospective Resource Estimates

With respect to the Prospective Resource estimates contained within this report, it should be noted that the estimated quantities of gas that may potentially be recovered by the future application of a development project relate to undiscovered accumulations. These estimates have an associated risk of discovery and risk of development. Further exploration and appraisal is required to determine the existence of a significant quantity of potentially moveable helium.

Natural helium for a high-tech world.

Noble Helium is answering the world's growing need for a primary and geo-politically independent source of helium. Located along Tanzania's East African Rift System, the Company's four projects are being advanced according to the highest ESG benchmarks to serve the increasing supply chain fragility and supply-demand imbalance for this scarce, tech-critical and high-value industrial gas.

Priced at up to 50 times the price of LNG in liquid form, helium is now essential to many modern applications as an irreplaceable element in vital hi-tech products such as computer and smartphone components, MRI systems, medical treatments, superconducting magnets, fibre optic cables, microscopes, particle accelerators, and space rocket launches – NASA is a major consumer. Rising demand and constrained supply are fuelling growth prospects within the global marketplace, particularly for cleaner “green helium” sourced from non-carbon environments. At present, more than 95% of the world's helium is produced as a by-product of the processing of hydrocarbon-bearing gas.

