



INVESTOR UPDATE

19 February 2024

New Energy Technology Ltd

QUARTERLY INVESTOR UPDATE

December 2023 Quarter

New Energy Technology (“NET”)

NET has resolved to increase communications with investors. To that end, management will be issuing brief quarterly updates covering:

- Progress of each portfolio company in terms of technology development and commercialisation
- NET’s view on the current state of capital markets as relevant to green fuel
- NET’s latest insights on the emerging green fuel value chain
- Financial movements in our asset base
- Exits and liquidity events
- Investment pipeline
- Consulting
- Other activities

We hope this provides valuable insights for investors, leads to discussions with investors about possible collaboration opportunities, and gives shareholders a good sense of NET’s state of play and outlook. Management welcomes discussions with and questions from investors.

Technology Progress by NET’s portfolio companies

NET currently has four private investments in clean hydrogen technology ventures. Here is a brief update on the technology and commercialisation progress of each.

- USA-based Starfire continues to progress towards full production proof of its 250kg/day green ammonia commercial unit. Supply chain challenges and capital market challenges discussed later in this update have resulted in some time overruns, but the milestones have been hit, just a bit later than targeted. All four product lines spanning the supply chain from green ammonia production to downstream end-use in power production and chemicals have progressed and have strong partnerships and indicative off-takes from global major customers. The complex technology and the vertical business model means there is lots of development and then tooling up to do, with revenue planned for 2026.
- Spanish-based Jolt secured the site for their first commercial production plant and began tooling up for production, which is expected to kick off in mid-2024. Jolt reacted with agility to the



softening of the hydrogen hype by diversifying with an additional new business division to sell their existing membrane coating technology into the huge water filtration sector, opening up the opportunity for additional early revenue from an existing global market. The disruptive efficiency of Jolt's technology was further demonstrated by additional new potential customer test results, and by Jolt receiving its first indicative commercial off-take subject to manufacturing getting up and running.

- Latvian-based Naco successfully switched on and operated its test production line in-house to iron out any manufacturing process issues and supply small volumes of product to committed customers. It secured a non-dilutive grant of \$16M from the EU to go towards building its first commercial production plant, and is likely to get further grant funding for plant capital expenditure from the Polish government to build the factory in Poland. Production is expected to kick off in the second half of 2024.
- UK-based Supercritical continue to progress on technical milestones and within budget. The joint development at the Teesside zero carbon hub is ongoing, as is the partnership with ScottishPower. Supercritical are currently in the advanced stages of raising capital, likely led by a global oil major.

Recent Insights into the Emerging Green Fuel Value Chain

NET is constantly updating our understanding of the emerging clean fuel value chain and the energy transition more broadly with real-time independent data from industry, government, and academic sources around the world, including ongoing discussions with experts across our extensive networks.

With this information, we update proprietary in-house dynamic modelling of the value chain and how it is most likely to emerge through the transition to a low carbon world. This gives us practical insight and, more importantly, foresight, about the costs and benefits of available technology, infrastructure, and business model plays in the energy transition space.

During the December quarter, we specifically developed additional foresight into:

1. The role of mid-stream costs in the dynamics of delivering decarbonised molecules to a range of use cases. A key insight is that storage and transport is even harder and more expensive than previously modelled. Our assessment says that, in most cases, it is not going to be possible to replace current fossil fuel supply chains with an equivalent zero carbon molecule commodity at an equivalent price. Not this decade, and not next decade. Fossil fuels are really good at doing what energy value chains need, which is storing energy cheaply for use on demand.

The cheapest mid-stream cost component of delivered pure hydrogen in the foreseeable future, for most supply chains we model, comes in at around A\$5/kg (just for the mid-stream). Even if hydrogen can be produced very cheaply, say \$2/kg, which we think could happen next decade, that puts the delivered pure hydrogen cost at \$7. That's a very long way from the \$2/kg delivered price everybody agrees would be needed to unlock commercial markets without subsidies. In electricity pricing terms, that mid-stream cost equates to around \$200/MWh, again, that's just for the midstream component. That kills the majority of pure-hydrogen-for-energy business models.

The mid-stream cost component of delivered Ammonia, in comparison, comes in at less than one sixth of the cost of pure hydrogen, at around A\$0.8/kg. In electricity pricing terms,



that's around A\$30/MWh.

2. Our modelling tells us that using hydrogen or ammonia for energy will not be used for residential or consumer transport, with very few exceptions. It's far too complex and expensive. Electrification will solve that 'last mile' for residential heating and consumer transport. The implications of this electrification for grid transformation and expansion are truly epic. Even then, it will not be impossible to electrify everything.

NET is continuing our endeavors to find the sweet spot where clean molecules will be needed to solve specific use cases. We assess that clean molecules will be needed in some electricity generation, some industrial heating applications, some industrial chemical applications, and some (very) limited transport use cases.

During 2021-2022 NET focused on upstream insights, then in 2023 it was midstream, and in 2024 we will be increasing our focus on downstream insights and investments.

Capital Markets for Green Fuel Technology

By objective measures, 2023 was a brutal year for early-stage technology investment capital. In the US, total venture capital (VC) shrunk by two thirds, while globally it shrunk by 40%. The analogy we use is that if your blood oxygen drops by 40%, you shut down. Two big VC banks in the US went under, including the bank that held all of Starfire's cash (thankfully the team reacted very quickly and was able to rescue all their funds and now has a new CFO and a robust cash risk strategy in place). Sky-rocketing inflation sent panic through capital markets, the Ukraine war continued to create anxiety in energy commodity and financing markets with implications for transition investment markets, and a huge hike in interest rates mean investor capital was much happier sitting on the sidelines. These forces produced a dearth of liquidity events in the venture landscape and resulted in many ventures failing, many failing to raise, many having down-rounds, and a number of VC firms around the world shutting down.

On top of that, some of the hydrogen over-hype we had been flagging for the last few years reduced, as more actors and investors became informed about technical and financial challenges facing profitability for some hydrogen businesses models in the near term. This appears to have generalised to a softening of sentiment, but from a very high starting point.

Climate tech continues to be somewhat of a protected sector from some of these general headwinds noted above, due to a combination of regulatory and social imperative and the sheer volume of dedicated clean tech capital looking to participate. Instead of our hydrogen tech venture valuations rising by 10X or 15X each round as they had previously, they tended to rise by 3X or 5X each round, representing a significant slowing of the curve, but still very solid growth. All of our portfolio ventures had to work harder to raise capital, with raising taking up to twice as long as previous rounds. Softer valuations can work to NET's favour when negotiation terms for new investments.

Current data suggest 2024 will see conditions improve. We expect the forces noted above to sustain some soft pressure on green fuel tech valuations to keep them from shooting back up, which is positive for NET's investing activity. At the same time, we expect capital markets relevant to our activity to open up significantly, for a few reasons, summarised here.

Regulatory frameworks designed to subsidise green fuel development to the tune of hundreds of billions of dollars have long been in the pipeline in the EU and US and are now taking definition,



providing investors with some comfort about business models and margins. Interest rates are heading downwards, leaving 'parking' of capital as a less attractive option. Many investors simply held onto capital through 2023, resulting in pent-up demand for investment activity. The effects of the Ukraine war on energy markets appear to have stabilised for now. Escalation of conflict in the middle-East represents a material risk to energy markets, but for now that has not happened, and in any case climate tech is only partially exposed, with the other forces above potentially acting to balance this risk.

NET's current capital position as at end of the December quarter 2023:

- \$1.8M cash in bank and \$0.7K liquid holdings.
- Capital raising activity is currently limited to a small number of large European corporates that have natural alignment with NET's business. Advanced negotiations are underway with one, more information will be shared as it progresses.
- NET may open a new investment round during 2024 to fund growth but no decision has been made yet.
- The Naco capital raising was negotiated and reached practical close during the Dec quarter, delivering NET with material uplift in asset valuation from \$792K to \$2.2M in January.
- Starfire had trouble raising the full US\$50M it was after during mid 2023 so they closed their Series B with US\$25M instead. This was not surprising given the fierce macro-economic and venture capital market headwinds of 2023 described above. Starfire's high enterprise valuation, which went from A\$25M up to A\$350M during the hydrogen hype period of 2021-2022, has been cited by potential investors as an issue. During the December quarter Starfire raised an additional US\$5M from global shipping major MOL and is currently in advanced discussions with numerous potential investors. Given the ongoing headwinds discussed above, we would not be surprised if Starfire needs to reduce its valuation or offer additional incentives to attract the large amount of capital it is after to execute on its vertical business growth model.
- NET's strategic stake in ASX-listed Pilot Energy increased in value from A\$405K to around \$700K by the end of the quarter.
- Supercritical is currently nearing the close of its first capital raising round since NET invested. We will share details when we can, but we can say it is likely to be led by a global energy major and is likely to deliver multiples to NET's asset value.
- Jolt is preparing for a capital raise in the second half of 2024 that is likely to deliver multiples to NET's asset value.

Exits & Liquidity events

NET management has resolved to exit the majority of its Starfire holdings and has held discussions with Starfire management, major shareholders, and potential buyers regarding a sale. These discussions are of the highest priority for NET. Exiting is not easy or fast, and has to be done sensitively, and exiting a pre-revenue venture is even more so as we don't want to shoot ourselves in the foot by creating any problems for Starfire as we pursue an exit. We don't expect it to happen quickly, but we are working on it as the top priority.



Management currently view it as optimal to wait until Naco and Jolt complete the next capital raise and aim for a subsequent partial exit on each of those, subject to valuations and conditions at the time.

ASX IPO tech listing conditions are not forecast by analysts to improve significantly in 2024 from the terrible conditions of 2023, NET will continue to monitor for improvements.

Portfolio summary and outlook

NET's first three tech investments – Starfire, Jolt, and Naco - are up in value 14X, 11X, and 2.8X respectively, each within 12 to 18mths of investing. The fourth – Supercritical – is nearing a capital raise that will deliver an uplift also. Starfire is facing headwinds but continues to progress the technology. Jolt and Naco both plan to raise again this year at multiples.

Investment Pipeline

NET's leading candidate for investment during the December quarter was Vytas Resources, a startup out of Western Australia looking to use silicon with special properties as part of disruptive hydrogen production methodology that neutralises the extremely high mid-stream costs associated with transporting hydrogen. The NET team of specialists conducted full due diligence including on materials science, process engineering, financial modelling, IP, resource control, business model, scaling plan, and more. Difficult questions have been identified by NET during this DD, and we are currently seeking answers to those questions.

To reiterate the comment from above, during 2021-2022 NET focused on upstream insights and investments (we got 4 great investments), then in 2023 it was midstream (get got close but didn't find anything really worth investing in yet), and in 2024 we will be increasing our focus on downstream insights and investments.

The majority of our top-10 investment candidates at end of Dec and still now are downstream opportunities. Our view is that the green fuel value chain bottleneck is now the downstream demand due to retrofit and disruptive new technology not being ready to deploy yet at commercial standards and economically.

NET is shifting our focus to play a key role in unlocking this downstream bottleneck by finding the most promising technology ventures and supporting them with capital and commercialisation support to accelerate the green fuel value chain and reach net zero faster.

Consulting

NET continues to advise German energy major EnBW to support their entrance into the green fuel landscape, acting as strategic business model advisor, technology advisor, and also providing execution support such as green ammonia off-take procurement and infrastructure project origination.

Incubator/Accelerator



NET receives many targets enter the pipeline that have promising technologies but suffer from inadequate business plans or technical founders that are not able to lead commercialisation. NET is interested in partnering with, and supporting, a network of venture incubators and accelerators so we can plug these candidates in, see them nurtured through to investment readiness, and have first right to invest. Development of this support platform has been underway within NET throughout the December quarter and is expected to take until mid-2024 to be ready to realise. We expect the platform to open up an additional field of promising investment candidates that NET has privileged access to.

Summary

NET's mission remains the same – accelerating the global clean fuel value chain to reach net zero faster.

NET's business strategy remains the same – to identify future critical gaps across the entire clean hydrogen value chain and create value for shareholders by solving these gaps through:

- investing in the most promising technologies and helping to commercialise them,
- originating infrastructure projects to create strategic opportunities,
- advising ambitious entrants into the hydrogen value chain to create strategic opportunities.

2023 saw significant headwinds for capital markets, and hydrogen sentiment is softening. Our view is that the Dec quarter saw the worst of that, and we see the outlook from Q1 improving. NET conducted full due diligence on numerous investment candidates throughout 2023, including Vytas Resources in the Dec quarter. NET's philosophy of near-consensus very high conviction for FID is a high bar that has given us four wins out of four investments. Unfortunately, none of the pipeline candidates crossed that bar during 2023 but we are hopeful that we will close on some during 2024.

With venture capital markets opening up but valuations still a little soft, and with NET's expertise deepening into more and more granular foresight driven by detailed data-driven modelling, our DD and FID processes are increasingly tuned to pick the next most promising green fuel technology venture and provide them with the capital and commercialisation support they need to make a real difference to climate change.

Thank you for your support as we accelerate the green fuel value chain to reach net zero faster.

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About New Energy Technology Ltd

NET is a diversified hydrogen business led by a global team of green fuel experts. To fulfill its mission of accelerating the green fuel value chain to reach net zero faster, NET invests in and commercializes critical technologies, develops large scale infrastructure projects, consults with ambitious businesses seeking entry into the landscape, and introduces suppliers with customers.



NET is an Australian registered public company with staff, investments, clients, and projects across Europe, Australia, the USA, and Asia.