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FORTUNES

Three Masterkey Stocks That Could Erupt in 2021



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Three Masterkey Stocks That Could Erupt in 2021

I believe that energy storage is perhaps the most underappreciated segment in energy transition investing right now.

Before I get into the three stocks, allow me to outline why, in brief...

Governments are keen to spend their way out of the pandemic and lockdown-induced economic slump. A big part of many nations' spending plans dedicated to the green transition, from renewables to hydrogen...

But solar and wind capacity is already way out ahead of energy storage capacity. For solar and wind to function best, they will need energy storage...

The electric vehicle transition is also accelerating in 2020, driven by coronavirus among other factors. This will also see increased demand for battery solutions...

At the moment, though, battery and storage stocks have not received nearly as much attention from investors as other clean technologies, and so there's plenty of opportunity in these three battery stocks.

It's certainly been a volatile time for the sector, which enjoyed a good summer as several special purpose acquisition companies (SPACs) listed at multi-billion-dollar valuations before selling off in late September after Tesla's much hyped Battery Day.

That saw the firm openly announce its major plans were all 2-4 years away and says it was focusing on driving down costs with process innovations... all good common sense and business 101 success planning, but a disappointment to industry commentators who wanted splashy new gadgets and big reveals.

But the signs are now looking good for a fundamentals-based recovery, and I've identified the three best stocks out there, which will benefit in the years to come.

All three stocks listed below are current buys in the Exponential Energy Fortunes portfolio. To see the current buying instructions, including buy-up-to limits, [please click here](#).

1) Neo Lithium Corp

In the springs that feed the Rio Salado, high up in a volcanic region of the Andes in Argentina, starts one of the most important stories in energy transition today.

Due to the magma chambers lying dormant within the inactive volcanoes, the water comes out of the springs at a hot 40 degrees Celsius.

As it starts to flow downstream, the water interacts with the surrounding rocks

that form part of this extremely arid environment. Some rocks even dissolve, in a process called leeching.

The volcanic ash, which contains close to 1,000 milligrams/litre of lithium, spews across the area, some of which seeps into the water.

As the river winds down from the mountains, conditions become very hot and increasingly dry. The mineral-rich water is further concentrated by its interactions with the rocks along the riverbed, the volcanic ash, and from evaporation from the heat.



Source: Wikipedia

Further downstream, the river feeds lakes that have evaporated so much they've become "*salars*", or the salt flats. (Rio Salado, after all, means "salty river".)

This process of hot spring water flowing through mineral-rich rocks that leeches into the water, where evaporation concentrates it further, could be called the "Lithium Machine".

The Lithium Machine has been rolling 24/7 for thousands and thousands of years.

The water table beneath these *salars* is known as brine, a lithium-rich form of water.

And one of these *salars*, called Tres Quebradas, is home to one of the most exciting lithium mining projects in the world.

Tres Quebradas is in the Lithium Triangle in South America, specifically at the southern end of the triangle in northern Argentina.

Formed over millennia by the interaction between the river, the volcanoes, and the local terrain, the brine at Tres Quebradas - or 3Q - has got phenomenal

potential.

In fact, the congruence of factors described above make this forgotten part of the world home to one of the most lucrative opportunities in the world today. The local geography and topography is absolutely central to the firm's competitive advantage.

Indeed, to my mind, the producer's 3Q project – which has a very high lithium concentration that is very low in impurities – is *the* best lithium asset that isn't yet in production, anywhere in the world.

That gives it the largest upside with the lowest risk.

Importantly, the project is producing lithium carbonate, the dominant lithium chemical in the market, making it ideal for mass adoption, quickly.

No wonder, then, that the world's biggest electric vehicle battery manufacturer has recently made a multimillion-dollar investment in the producer.

I think we should follow the EV battery firm's lead and take our stakes in the producer before its project reaches commercialisation.

Although there are always risks that projects such as this fail to get off the ground, these risks lessen every day as it moves one step closer to completion.

Indeed, I think the company – called Neo Lithium Corp – could be *the* world's next major lithium producer.

Neo Lithium Corp

Canada-listed Neo Lithium Corp is a junior miner, which means it's not producing lithium yet but is developing a project.

The established producers outside of China are Albemarle, SQM and Livent.

From the range of junior miners though, I believe that Neo Lithium is far and away the best choice.

It has the pre-eminent project in Tres Quebradas; a powerful corporate partnership with the world's largest EV battery firm; it is already far along in its journey to production; but still has enough obstacles to overcome that we can get in at relatively low prices.

For me, it's the perfect balance between risk and reward.

First, though, let's look at exactly what's on offer at the 3Q project in Argentina.

Neo Lithium owns 100% of the *salar*, which is 25km long and 5km wide. This is quite unusual. Most projects such as this are owned by partners or separate groups that control different parts of the operation. That can cause complication, as extracting from one end can affect the resources at the other. Owning the whole asset will make it much easier for Neo Lithium to expand the project, should conditions allow.

According to a report by Ocean Wall, lithium brine deposits are accumulations of saline groundwater that are enriched in dissolved lithium. These are quite common in nature, but there are only select regions in the world that contain brines in closed basins in arid regions – conditions that must be met to extract lithium salts at a profit.

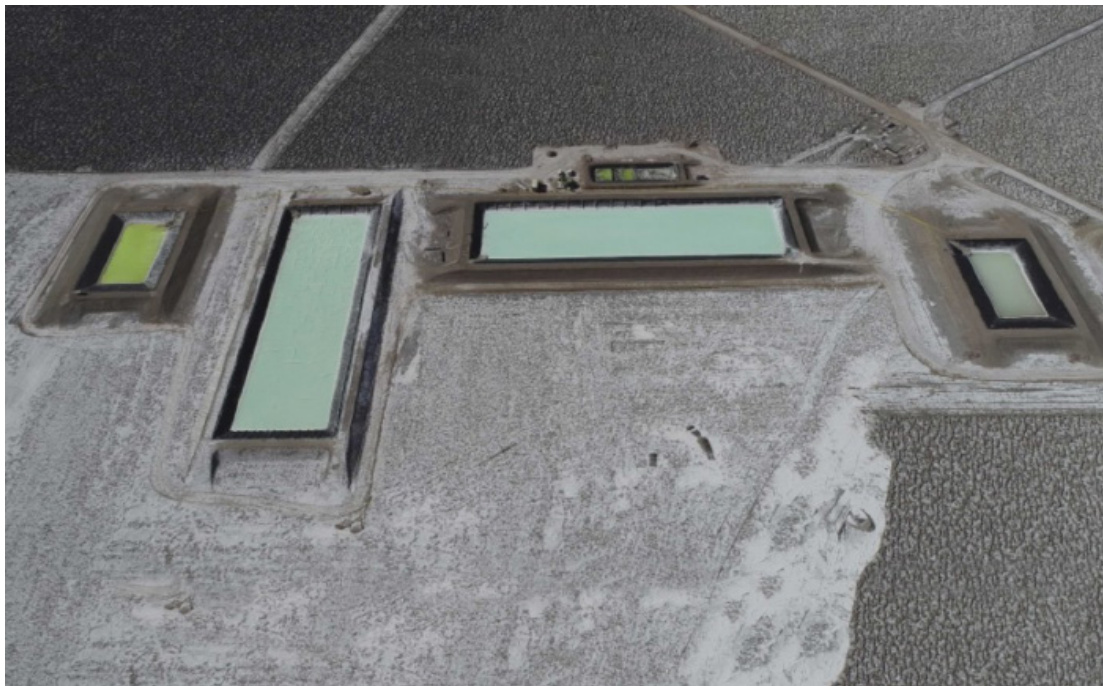
The 3Q project is one of those places.

When mining lithium, drilling is required to access the underground brine deposits, which can contain anything from 200 to 1,600 milligrams per litre (mg/L) of lithium.

The brine is then pumped to the surface and distributed into evaporation ponds.

The brine remains in the evaporation ponds for a period of months or years, depending on the climate, until most of the liquid water content has been removed through evaporation, each pond in the chain having a greater Li concentration.

The colour changes as the brine becomes more concentrated, as you can see below.



Source: Neo Lithium Corp

The project Neo Lithium is working on is very promising, to say the least.

Thanks to all the factors described above, it is in the top five largest lithium brine deposits in the world, and in the top three highest lithium brine grades in the world. Finally, it has the lowest combined sulphate and magnesium impurities of any project not yet in production, worldwide.

...continued on next page...

The highest grade, lowest impurity pre-commercial lithium project

As said above, Neo Lithium is aiming to produce lithium carbonate.

Carbonate is the cheaper of the two main lithium compounds. However, lithium hydroxide is the higher performing in battery technologies. But, as always, it's not a straightforward case of better or worse.

In fact, what this probably means is that the premium cost of hydroxide will make it the choice of premium electric vehicle manufacturers, with longer range but at a higher price.

Carbonate, meanwhile, looks like it's becoming the choice of the mass market – the everyday car 90% of people will be buying.

This is likely to be where the biggest demand will come from in terms of volume, and hence why we are targeting its supply through Neo Lithium Corp.

That last point about impurities is especially crucial as we move past the evaporation ponds and into the next stage of the process – refining.

One of Neo Lithium's key advantages is that the very low level of impurities lowers the operating costs of production.

Very low impurity is a critical issue – sulphate and magnesium – they combine with lithium and so they subtract the lithium from the brine, and you can't recover it.

Every project in the world needs to remove them, which costs money.

3Q project is the highest grade *and* the lowest impurity project not yet commercialised, which means it can be put into project at very low operational expenditure.

The grade allows Neo Lithium to build smaller ponds for the same production, so capex is low compared to other projects.

That's what attracted CATL, the world's largest EV battery manufacturer, to partner with Neo Lithium, which I'll get onto in just a moment.

This has all been tested by an independent pre-feasibility study.

The tests and modelling that was undertaken have validated a number of key metrics for the project. The results provide robust support for our investment case.

The 3Q project consists of brine extraction to produce 20,000 tonnes per year of battery-grade lithium carbonate for a 35-year period.

Total lithium reserves (proven *and* probable) are estimated at 1.29 million

tonnes of lithium carbonate equivalent (LCE), of which proven reserves make up approximately 328,000 tonnes of LCE, plus probable reserves of approximately 966,000 tonnes of LCE.

The average lithium grade predicted for the production period is 790 mg/litre.

The estimated net present value for the project over its lifetime, according to the CFO Julius Vicens study, is \$1.2 billion. For reference, the current market capitalisation is just CAD\$192 million.

Will there be a customer for all that lithium though?

A partner and a buyer

While it's clear that the electric vehicle megatrend and the coming boom in battery storage applications will increase demand, it's set to be a steady acceleration rather than coming in huge leaps and bounds in the next year or two.

One of the key developments for Neo Lithium is the arrival of CATL as a stakeholder and partner.

In September 2020, China's CATL entered into an equity subscription agreement to invest \$8.5 million in new equity in Neo Lithium, representing an 8% equity stake.

But CATL's role is going to be more than just as a shareholder.

You see, lithium markets operate quite differently to most.

Take gold, for example. Once it's been mined and produced, gold is gold and you are likely to find a buyer. Consumers don't have any particular needs, so you can sell it to pretty much anyone.

With lithium, it's a different story.

Each battery technology and battery maker is slightly different, and as a result has slightly more varied requirements.

That means that battery grade lithium can mean different things to different people.

CATL is involved, then, not just as a shareholder but as a process designer and future customer. The EV maker will be integral to making sure that a precise kind of lithium carbonate comes out of Neo Lithium – and, when it does, it will buy it.

As an investor, strategic partner and future buyer, CATL – the world's biggest battery manufacturer, remember – is certainly manna from heaven for Neo Lithium.

CATL will also aid Neo Lithium in completing the full feasibility study, which is the current focus of the company.

Neo Lithium CEO Waldo Perez points out that, prior to CATL's equity stake, the

company already had enough cash to get itself to production – around \$40 million – but that what it really wanted was a partner, and the sooner the better.

So CATL will boost the process of getting the incredible Tres Quebradas project into production and goes a long way to guaranteeing a willing customer for Neo Lithium's product once it is fully operational.

It's a fantastic sign for a company at this stage in its development, and a resounding endorsement of the project and the company.

Covid-19 allowing, the firms are hoping to have the full feasibility study finished within the first few months of 2021. Once the study is complete, the firm can start building up to full production.

If all goes well, and demand is there, then the picture is looking incredibly promising. Let's take a look at the financials to see why.

The financials

Financially, there are a couple of main things to look at.

The first thing to say is that the cash position is solid, and with CATL's recent stake, it has more than enough to get it to production.

More interesting, perhaps, is the expected future financials of the lithium market.

We know that Neo Lithium is planning on making lithium carbonate, the cheaper of the two main types (hydroxide being the other).

It is cheaper, but the production process is also less costly, so in terms of margin it's quite even.

The pre-feasibility study was done on the basis of Neo Lithium producing 20,000 tonnes of lithium carbonate per year.

In that case, with lithium carbonate prices currently at \$10,800/tonne, we can expect annual revenues in the region of \$216 million.

The average industry cost per tonne of producing lithium from brine was around \$5,600 in 2019.

So, margins for carbonate would usually be just below 50%, but with the cost advantages afforded by the high-grade and low-impurity brine deposits at the 3Q lake, I'm very hopeful that Neo Lithium will be able to capture more of that revenue as profit.

With this in mind, I believe that the quality of the deposit, combined with the CATL partnership making production more likely, means that the current market cap of CAD\$192 million undervalues the company's financial potential, and that over the next few years this could represent a fantastic entry price.

But it won't be plain sailing. Let's take a look at what could go wrong between

now and then...

This is a risky investment, no doubt

The primary risks are the nature of the business and Covid-19.

The nature of the business as a junior means that there are still plenty of obstacles to overcome.

The reason it's valued at CAD\$172 million – despite having a project with potentially 1.3 million tonnes of lithium – is that a lot can go wrong in the next 35 years.

Maybe there are problems with financing, with finding customers, with competition, with production, capacity – anything. Until it's churning out 20,000 tonnes of lithium carbonate year after year and delivering it to buyers, shareholders have few guarantees of success. What we are buying is promise and potential, and it's important to remember that.

Meanwhile, Covid-19 remains the primary risk to the company, at least in the short term. Argentina has been hit hard by the pandemic, like everywhere else, and has gone down the stricter route when it comes to lockdowns.

When the partnership with CATL was signed, they weren't even allowed to fly in and visit the project, for example.

CEO Waldo Perez has estimated a completion time for the full feasibility study of early 2021, but that is very Covid-19 dependent, he says. So, it remains the foremost risk in the short term.

Finally, there is the risk that miners are scrambling over one another to lead the race to supply the global battery and electric vehicle market.

Such a setup naturally lends itself to oversupply, if for some reason the take up of EVs doesn't keep pace with the supply of lithium.

Judging by Tesla's recent antics, intimating it would start its own lithium mining business, the concern from automakers is in the other direction. They are worried about undersupply.

In my view, both hydroxide and carbonate will be in short supply as demand – from grid-scale energy storage to electric vehicles – is set to go ballistic. I still see the future applications of lithium batteries to easily outweigh current supply.

In such a world, buying into a prime lithium supplier before it enters production is really an opportunity too good to miss.

2) 1414 Degrees

This South Australian company has been around for 10 years, and listed on the ASX in 2018.

Rather than using cobalt, nickel or lithium, 1414 Degrees has developed an energy storage device that uses silicon.

Silicon is the most abundant element on the Earth's crust, after oxygen. It's primarily found as a major component of common sand.

And silicon has an interesting property. It takes a good amount of heat and energy to melt silicon, so it's a good way to store lots and lots of energy, at very high temperatures.

1414 Degrees' patented thermal energy storage system (TESS) stores electrical energy by using it to heat a block of pure silicon to melting point — 1,414 degrees Celsius... hence the company name.

It then recovers the energy as very hot air through a turbine, which converts heat back to electrical energy, and recycles waste heat to boost efficiency.

The high melting point allows for high-efficiency energy recovery. That means energy stored within it can be released with very high efficiencies.

According to 1414 Degrees chairman Kevin Moriarty, the company's process can store 500 kilowatt (kWh) hours of energy in a 70-centimetre cube of molten silicon. That's about 36 times as much energy as Tesla's 14 kWh Powerball 2 lithium-ion home storage battery in more or less the same space.

The fact silicon is abundantly available means it's sustainable and affordable. It is also non-toxic. As silicon doesn't require a lot of space, it's extremely scalable. If you want to have more storage, you just add more silicon, or make a bigger container of silicon.

What's more, at the end of a typical battery's life, you're left with materials that potentially contain contaminants, and that are difficult to dispose of.

Bloomberg New Energy Finance forecasts that more than \$600 billion will be invested in stationary energy storage by 2040, transforming how grids operate.

All this is good enough, but the best thing about 1414 Degrees is that it isn't just looking at competing in the electricity storage market. It also has its eyes on something else too: the heating market.

In Australia, energy used for heating makes up 30% of total energy use. This is a larger share than electricity at 20%.

Globally, in 2018 heating accounted for about 50% of total energy consumption, according to the International Energy Agency. About half of that is used for industrial processes like manufacturing goods, while 46% goes to heating up buildings and water.

Because of the unique properties of silicon, the company's storage systems can produce both electric power and heat. That heat energy can then be recovered directly and supplied as hot water, steam or hot oil without having to convert back into electricity at all.

This form of energy will replace the need for gas and other electricity sources to be converted to heat or steam. It provides clean and cheap heat for industry, process heating, district heating, agribusiness and more.

In 2016, with the help of Australian government subsidies, the company built a prototype. It has four modular designs, which are a variation of that original model.

These are:

- The TESS-IND is designed for medium-scale industries and residential developments requiring reliable electricity and heat energy from renewable generation.
- The TESS-STEAM is being designed for industries with a high demand for heat compared to electricity. It will incorporate a high-efficiency steam generator for industries seeking to replace gas or other energy sources with renewable energy.
- The TESS-GRID is a grid scale storage technology providing bulk energy storage at very high current flows, and supply of electricity and heat for long periods. The device aims to provide energy security in electricity markets with substantial renewable generation.
- The GAS-TESS is designed to combust waste gas and store the energy for recovery as electricity and heat. The unit charges from highly efficient gas burners. The GAS-TESS market is waste management utilities and other entities requiring efficient gas management.

The company is looking at licensing, leasing and sales, but also generating revenues through time-shifting. That is, storing electricity when prices are low on the main grid and then releasing it when there is high demand, like in the evenings.

In 2018, 1414 Degrees partnered with South Australia Water to pilot the first unit of its GAS-TESS at the SA Water Glenelg Wastewater Treatment Plant.

The company built and installed a 10 megawatt-hour (MWh) GAS-TESS unit that stores energy generated from biogas harvested at the facility. SA Water is looking to capture and re-use energy at the plant, but also to time-shift energy as a way to cut costs.

While this has generated some revenues, the goal was to demonstrate the versatility of the GAS-TESS as a low-cost alternative to purchasing gas-burning engines.

In late 2019, 1414 Degrees bought the Aurora Solar Energy Project near Port Augusta in South Australia. The site has a SA government development approval for a 70 megawatt (MW) solar PV farm and 150 MW of generation from a concentrated solar thermal plant.

The company is looking to use the site to pilot its TESS-GRID technology to supply reliable power on demand to the national grid, but also to progressively increase generation. It also expects to generate revenues from battery storage and price arbitrage to strengthen its cash position.

The company has had a few hiccups this year though.

In mid-June, the company released a technology and commercial update, which revealed that its silicon-based technology fell short on key efficiency and reliability metrics.

A review of the tech, commissioned by executive chairman Kevin Moriarty, found that TESS required further development work to be “commercially robust”, that earlier expectations for sales were “optimistic”, and that a fully developed, electric charging TESS was not currently competitive with fossil fuel heating.

The technical and commercial status review found its prototype silicon storage technology could not sustain many cycles without degrading.

It also found that its third-party energy recovery system (ERS) could not perform to the required efficiency specifications.

Then the next day, the company announced that an initial business case evaluation for the GAS-TESS pilot at the Glenelg Wastewater Treatment Plant had been unsuccessful, for the reasons outlined in the review.

So while it's back to the drawing board in terms of the GAS-TESS pilot at the Glenelg Wastewater Treatment Plant, this is not unusual for early-stage technologies. According to 1414 Degrees, the GAS-TESS did demonstrate “significant improvements in electrical efficiency”, and the company will now work with SA Water on a plan to progress development on the pilot site, as well as continuing commercial discussions with wastewater treatment facilities.

Indeed, the company said its new storage technology and ERS improvements could be proved in the GAS-TESS pilot device and followed at larger scale in the first stage of the company's Aurora Project, where it is also piloting its TESS-GRID technology.

As chairman Kevin Moriarty said in June:

With the experience gained from the pilot installations, our now highly qualified technical team has mapped out a path to make the 1414 Degrees TESS technology competitive in the expanding long-duration energy storage market with comparable technologies such as pumped hydro and molten salt.

Following their wide-ranging customer assessments and surveys of growth markets, our business development team have identified major commercial opportunities for the TESS in the well-funded markets for long-duration, grid-scale storage, and hybrid power plants.

Further, in addition to preparing to service the utility market with the GAS-TESS, the commercial priority is to partner with utilities on large-scale innovative energy solutions.

The 1-2 year revenue potential for the company is to commence electricity sales from the first stage Aurora 70 MW solar farm. The 2-5 year potential is expansion of the Aurora Project to generate 400MW from PV with TESS (Silicon Power Plant) to sell firmed power and grid strength services, and sales of improved GAS-TESS to global utilities.

While the company has had some problems, it recently had some encouraging news, too.

This year, the company announced its SiBox technology, which will allow it to build large TES (thermal energy storage) units. The main advantage of SiBox is that it provides effective long-duration storage services at low cost. According to the company, SiBox can potentially provide “a levelised cost of storage currently available only in pumped hydro storage.” With the added advantage that its system isn’t limited to staying put in one spot.

The company will be using SiBox at Aurora.

1414 Degrees has also said that modelling of the hybrid renewable energy plant showed encouraging revenue potential based on the past five years of data. The company plans to start producing from the second half of 2021.

The company has recently gone on a share purchase plan, raising about AU\$3.1 million to invest in the development of its Aurora Solar Energy Project in South Australia. It’ll also be using the cash to advance the technology readiness of the GAS-TESS and TESS-GRID technologies.

With regard to revenues, it’s still very early days for this technology. In FY20, the company received AU\$24,991 from customers. As at 30 June 2020, it had AU\$4,395,479 in cash.

To sum up, there are a lot of risks, but the rewards could be huge too.

1414 Degrees has a technology that offers large-scale storage competing with lithium-ion batteries, with a material that is cheaper and also recyclable.

What’s more, it offers a storage alternative to a much larger market than electricity, industrial heating, which is 30% of Australia’s energy requirement and 50% globally.

If it can crack the commercialisation code, this could be big.

3) STEM

Star Peak Energy Transition (STPK) is a special purpose acquisition company (or SPAC). SPACs are essentially blank checks, listed on the stock market, with which a private company can merge. It’s an easy way to list on a stock market which became popular in 2020. [You can find out more here.](#)

STPK first came public in August 2020, when it raised \$350 million by selling 35 million units at \$10 each. The blank cheque company said it wanted to focus on acquiring businesses that aim to improve energy ecosystems and reduce emissions.

Earlier this month, it did just that.

On Friday 4 December, Star Peak Energy Transition announced it will acquire energy storage specialist Stem and bring it to the public markets.

Stem is a firm I've had on my radar for a while, hoping it would one day go public.

It's certainly not any old battery firm. Stem is a *smart* battery firm.

Effectively, Stem is in the business of providing battery systems and software and services to store and shift renewable energy, provide backup power and shape building loads to optimise utility bills.

Founded in 2009, the firm focuses on battery storage systems, network integration and battery optimisation – the latter using its proprietary, artificial intelligence (AI)-driven software platform Athena that is used to forecast energy demand.

By correctly optimising battery utilisation, it lowers energy costs for those using its batteries. Its offering also offers value by stabilising the grid and reducing carbon emissions.

Through Athena, Stem uses AI to optimise clean energy assets and supply its customers with digitally connected storage networks.

These customers and partners such as utility companies gain efficiency as their energy systems automatically switch between grid power, onsite generation and battery storage. The company provides the integrated storage systems, and its software platform delivers recurring software service revenue to Stem.

Effectively, Stem helps companies by charging when prices are low and helps utilities by discharging when prices are high.

Moving towards a software-centric model

Stem started life at the end of the noughties as power electronics startup Powergetics, before rebranding as Stem in 2012. It was one of the first pure-play battery providers to help building owners and operators shave peak demand usage and cut back on their utility bills.

Stem has been particularly successful in California, the largest energy storage market in the US where high demand charges proliferate. It has a 75% market share for industrial storage in the Golden State.

In 2013, the firm secured an 85 MW contract with Southern California Edison as part of the utility's first large-scale procurement of distributed energy resources to help replace grid capacity lost after the San Onofre nuclear power plant shut down.

Over time, the firm has gradually moved away from its initial model of owning the batteries, software, services and contracts to refocus on a more software-centric approach providing Athena to customers and project developers.

It now has a whole array of customers, all with different requirements.

Stem's systems, after all, control the energy storage system and use the storage capacity to optimise the overall profile of energy consumption to meet the individual needs of the consumer.

Some customers want to store up excess solar generation throughout the day and stretch that far into the evening and night so that they offset or eliminate the need to purchase any electricity from the grid.

Others just want to save money, soaking up cheaper power during off-peak hours and use it back from the batteries during peak hours, when power isn't so cheap.

That's what's so useful about Stem's Athena AI system; it's completely flexible and adaptable for each customer. It can dig into the nuances of the customer's specific situation and layer multiple value streams on top of each other.

Effectively, Athena keeps tabs on the unique load profile for the customer, balancing it against the instantaneous cost of power at any given moment. Athena's AI takes all of these disparate data streams into account and then predicts and executes to deliver the lowest cost output.

Stem operates the world's largest energy storage network

What I like about Athena, too, is that it can work with essentially any energy storage system.

Stem uses batteries from Samsung, Panasonic and Tesla Energy, as well as those from a number of other manufacturers.

Currently, Athena is offered in the US, Canada and Japan. There are 900 systems operating or contracted for Athena across 200 cities representing about 1GWh of storage capacity.

In fact, Stem now says it operates the world's largest energy storage network, with more than 360 customers and over 40 utility partners.

The firm is also moving more of its business from "behind the meter" (which refers to anything that happens onsite, on the energy user's side of the meter) to the "front of the meter" ie. everything and anything that happens on the grid side.

Last year, Stem launched its first front-of-meter, distribution grid connected projects, and expects them to account for roughly half of its business by 2023, according to Stem CEO John Carrington.

This is not to say it's forgotten its behind-the-meter roots, of course.

Stem's bread and butter remains bringing its technical expertise to customers being hit with large demand charges, time of use rates, high electric bills, or just looking to save some money month to month on their utility bills.

Behind-the-meter batteries are increasingly being installed not only to mitigate demand charges, but also to store and shift distributed solar with the aim of increasing its value. They also provide emergency backup power in microgrid formations.

Stem is still banking on behind-the-meter commercial and industrial storage to grow quickly in the coming years, as corporate customers committing to clean energy seek ways to balance on-site solar with batteries.

Which is all to say the firm is certainly not coming to the public markets from a standing start.

The deal with STPK will give Stem the war chest it needs

The merger with Star Peak is expected to raise \$608 million in gross proceeds, including the SPAC's \$383 million of cash held in trust and \$225 million from institutional investors.

These investors include big names like BlackRock and Van Eck, Adage Capital Management, Electron Capital Partners and Senator Investment Group. Shareholders of Star Peak Energy will own 28% of the new company.

The deal is supposed to close in the first quarter of 2021. If the transaction closes as expected, it will create a company with an equity value of about \$1.35 billion, listed on the New York Stock Exchange under the ticker symbol STEM.

Be clear: the proceeds will give Stem an ample war chest to invest in its burgeoning smart grid technology and grow its Athena software platform into new global markets.

According to CEO John Carrington, the funds will allow the company to expand its existing markets in the US, Japan and Canada, as well as target growth in Europe and other regions.

With the new funding, "we'll have the ability to go after larger projects," he said.

"We'll have the ability to expand our Athena platform. And we'll be able to look at some tech acquisitions" to address an increasingly complex and competitive energy storage market", he added.

Indeed, the company says it has a \$1.2 trillion market opportunity. After all, global energy storage is expected to grow by a factor of 25 by 2030, which is potentially even faster growth than even solar and wind energy.

Stem is certainly in the right place at the right time. It's tapping into a market growing at a record pace in the US and abroad.

US storage installations broke yet another record in the third quarter of 2020 with 476 MW installed, according to a report from Wood Mackenzie and the Energy Storage Association.

Post-merger, Stem will have a solid balance sheet with no debt

It's clear that the merger will give Stem a solid balance sheet, with no debt, to help in future growth.

Although the firm reported revenue of just \$17 million in 2019, the fact its bookings totalled \$88 million should allow earnings to almost double in fiscal 2020, Stem says.

The company expects revenue to grow at a compounded annual growth rate of 51% from 2021 to 2026. Indeed, Stem estimates that annual revenue will surpass \$1 billion by 2026.

Stem has a pipeline of \$2.7 billion in deals as of the end of the third quarter, a 125% year-over-year rise.

By going public, it's hoping to boost capital available to fund this growing pipeline of projects.

In 2020, the company expects bookings of \$145 million.

Revenue targets are \$147 million for fiscal 2021 and \$315 million for fiscal 2022.

According to its investor presentation, Stem expects to reach profitability on an EBITDA (earnings before interest, taxes, depreciation, and amortisation) basis by 2022 and becoming free cash flow positive by 2023.

This is certainly risky, but that shouldn't put us off

This is by no means a risk-free investment, make no mistake.

Competition amongst providers of battery systems and associated software platforms is heating up as the market grows, which could act as a tailwind on Stem's growth.

As well as well-known battery providers such as Tesla and Fluence, deep-pocketed European energy giants such as Enel, Engie, Shell and Total have entered the market by acquiring behind-the-meter battery companies.

Similarly, some big operators are lurking in the battery management software front, including Wartsila, which acquired Greensmith in 2017, Hanwha Q Cells, which bought Geli this summer, and Generac, which bought virtual power plant software and services provider Enbala in October.

Another risk pertains to the nature of investing in a SPAC itself. With so many SPACs coming to market, there is a danger that investor appetite wanes as

investors struggle to differentiate between the good, bad and ugly, dampening enthusiasm across the board. That would certainly limit upside or exaggerate potential downside.

And, of course, it's easy to raise eyebrows over the deal's valuation. The deal with STPK will create a company with an equity value of about \$1.35 billion, which is certainly high when set against Stem's relatively modest revenue of \$17 million last year. Earlier this year, before the SPAC craze took hold, it was rare to see billion-dollar purchases or exits in cleantech, particularly in the energy storage sector.

So Stem's valuation will need to be justified, or the shorts – some of whom have [Nikola Motor's blood dripping from their lips](#) – will soon come calling.

But that certainly doesn't put me off. The company is already revenue-generating and is confidently targeting rapid growth – not way into the future, but now, as soon as it has the war chest it needs to scale up.

It's feasible the STPK shares will meander until the merger with Stem is confirmed in Q1 next year and the firm relists under the ticker symbol STEM. Then, I'm confident we'll see a positive re-rating, potentially giving us the opportunity of an early exit.

However, equally, I'd be very happy to sit on this stock over the longer term as it rides the growth of distributed energy and smart grid technology.