# Liquidstar Pty Ltd

The Future. Switched On.



# **Crowd-sourced funding offer document**

OCTOBER 12, 2020

Offer of fully-paid ordinary shares in Liquidstar Pty Ltd at \$0.98 per share to raise a maximum of \$250,000 AUD. The minimum individual investment is \$250 and the maximum is \$10,000 for retail investors. Wholesale Investors may invest more than \$10,000

This crowd-sourced funding (CSF) offer document relates to the Offer of fully-paid ordinary shares in Liquidstar Pty Ltd This Offer is made under the CSF regime in Part 6D.3A of the Corporations Act 2001 (Corporations Act).

Issuer: Liquidstar Pty Ltd ACN 642 674 511

Intermediary: Birchal Financial Services Pty Ltd AFSL 502618

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# Section 1: Risk Warning

Crowd-sourced funding is risky. Issuers using this facility include new or rapidly growing ventures. Investment in these types of ventures is speculative and carries high risks.

You may lose your entire investment, and you should be in a position to bear this risk without undue hardship.

Even if the company is successful, the value of your investment and any return on the investment could be reduced if the company issues more shares.

Your investment is unlikely to be liquid. This means you are unlikely to be able to sell your shares quickly or at all if you need the money or decide that this investment is not right for you.

Even though you have remedies for misleading statements in the offer document or misconduct by the company, you may have difficulty recovering your money.

There are rules for handling your money. However, if your money is handled inappropriately or the person operating the platform on which this offer is published becomes insolvent, you may have difficulty recovering your money.

Ask questions, read all information given carefully, and seek independent financial advice before committing yourself to any investment.

# **Section 2: Information about the Company**

"Put simply, sustainable energy is the golden thread that links most of the SDGs and the pledge to leave no one behind." - UN Deputy Secretary -General Amina Mohammed

#### Thank you for your interest in Liquidstar Pty Ltd!

After coming to Australia in January as part of the Startupbootcamp Energy Australia 2020 cohort, we have decided that Australia has great potential to play a leading role in the global shift to sustainable energy ecosystems. We have established an Australian subsidiary (Liquidstar Pty Ltd) and are extremely excited to engage the local market and offer a chance to participate in the global challenge and opportunity we all collectively face to eliminate carbon emissions and switch to the next generation of energy usage.

Liquidstar Pty Ltd (Company) is the Australian subsidiary of parent company Liquidstar Limited.

The Company has been established to develop and deploy Liquidstar's first-gen Waypoint charging stations. These projects will allow us to develop the business, setting us up for the next steps in Liquidstar's 10 year goal.

The Company will be the owner of these initial Waypoints and will be involved in the border Liquidstar journey by supporting the deployment of Liquidstar's future planned Waypoints as well.

Under the Company's constitution, in the event that the parent company raises further capital outside of Australia, shareholders of the Company will be invited to participate as ordinary shareholders in Liquidstar's Hong-Kong based parent company.

"Something like this Liquidstar solution, if we are able to get it to them, it would be a game changer, a life saving game changer." - Fife Osikalu - Feed The Streets Lagos<sup>1</sup>

We envision Liquidstar powered Waypoints as the science fiction e-fuel station hubs that power the future of off-grid education, healthcare, mobility, and the electron based economies of the future. The Liquidstar software platform offers a new category of energy distribution, utilising Waypoint charge stations to deploy smart batteries for beyond-the-grid electrical power distribution using people to transport electricity instead of wires. Liquidstar's vision is to leapfrog off-grid markets to the 'wireless' battery powered sustainable ecosystems

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<sup>&</sup>lt;sup>1</sup> Individual has provided consent for inclusion of this statement.

of the future - solving energy access challenges for the powerless billion<sup>2</sup> and providing electricity for essential services during grid destroying disasters. The core Liquidstar software platform strings together various innovation layers provided by expert partners to manage the delivery of source-agnostic electricity through Power Ranger operators.

Co-founders - Conor Colwell, Scott Salandy-Defour, & Luke Johnson Liquidstar winning 'Most Innovative New Energy Startup' | World Future Energy Summit, Abu Dhabi 2020



At Liquidstar, we are focused on accelerating the implementation of the UN SDGs by 2030. The SDGs address the global challenges we face, including those related to poverty, inequality, climate change, environmental degradation, peace and justice. According to the UN not only are these SDGs critical to creating the future we all want, they also represent \$12 Trillion USD in market opportunities.<sup>3</sup> Our team believes that giving people access to clean and renewable electricity is a critical foundation layer for reaching our planetary climate goals and reducing global income inequality.

We would love for you to join the Liquidstar journey with us as we work to set planet earth on the right tracks for the future.

Thank you, Scott, Conor, Luke

<sup>&</sup>lt;sup>2</sup> "Access to Energy - Our World in Data." <a href="https://ourworldindata.org/energy-access">https://ourworldindata.org/energy-access</a>. Accessed 7 Aug. 2020.

<sup>&</sup>lt;sup>3</sup> "More than philanthropy: SDGs are a \$12 trillion opportunity for ...." 25 Aug. 2017, https://www.undp.org/content/undp/en/home/blog/2017/8/25/More-than-philanthropy-SDGs-present-a n-estimated-US-12-trillion-in-market-opportunities-for-private-sector-through-inclusive-business.html. Accessed 7 Aug. 2020.

# 2.1 Company details

This offer of shares is made by Liquidstar Pty Ltd ACN 642 674 511 (the **Company**). The Company was incorporated on 15 July 2020.

The Company is the Australian subsidiary of Liquidstar Limited (BRN 70648985-000-04-19-0), a Hong Kong incorporated company (**Liquidstar (Parent Co)**). Please refer to sections 2.5 and 2.6 below for further details about Liquidstar's operational and capital structure.

Company Name	Liquidstar Pty Ltd		
ACN	642 674 511		
Offer Type	Crowd-sourced funding		
Offer Date	OCTOBER 12, 2020		
Offer Details	Offer of fully-paid ordinary shares in Liquidstar Pty Ltd at \$.98 AUD per share to raise a maximum of \$250,000.		
Registered office and contact details	Registered office: 58 Gipps Street, Collingwood Victoria 3066		
	Postal address: PO Box 142, Abbotsford Victoria 3067		
Principal place of business	58 Gipps Street, Collingwood Victoria 3066		
Related companies	Liquidstar Limited (BRN 70648985-000-04-19-0), a Hong Kong incorporated company		

# 2.2 Description of the business

## 2.2.1 About the Company

Liquidstar Pty Ltd will be focused on supporting the development of initial Waypoint charge stations with Melbourne based Blackstump. Liquidstar Pty Ltd's help with Waypoints is critical to enabling the broader Liquidstar decentralized energy ecosystems to succeed. 1. Liquidstar is a next-gen electricity infrastructure and technology business. 2. Part of Liquidstar's business plan includes building and operating Waypoint power stations in developing markets with energy access issues. 3. Liquidstar Pty Ltd will develop the initial Waypoints to be deployed at Liquidstar pilot locations

The Liquidstar (Parent Co) goal is to provide electricity to 100 million people by 2030 - solving 10% of the 1 billion people without electricity 'problem'. In accomplishing this goal we aim to eliminate between 175 billion and 1 trillion pounds of carbon from the atmosphere and prevent as many as 2 million pollution-related premature deaths.

#### Liquidstar (Parent Co) 10 Year Goal:

- Deploy 120 THOUSAND Waypoints
- Prevent 2 MILLION premature deaths
- Remove as much as 1 TRILLION pounds of carbon
- Provide electricity to 100 MILLION people
- Help solve 10% of UN Sustainable Development Goal 7, "Ensure access to affordable, reliable, sustainable and modern energy for all"

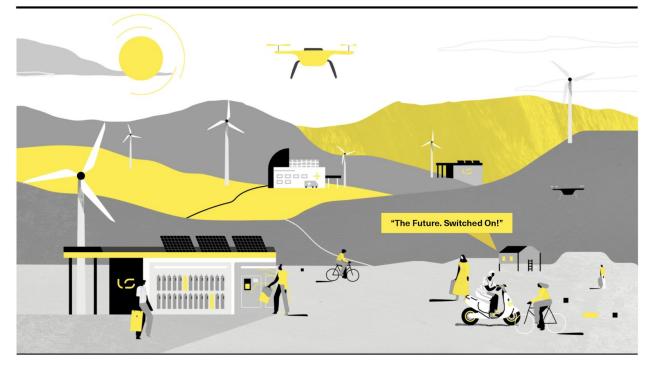
Liquidstar (Parent Co) uses a mobile application to distribute electricity and manage the electron e-fuel stations of the future. Using people to deliver electrons in (digital) 'jerry can' batteries instead of wires, we are committed to empowering the almost 1 billion people who don't have electricity as we believe sustainable energy access is the key to accomplishing the United Nations Sustainable Development Goals (**SDGs**).

Liquidstar's container-based solar 'Waypoint' charging stations and IoT connected smart batteries are managed by its secure text message based mobile application and blockchain based backend. Basically, mobile baby Tesla PowerWalls, the rentable batteries can be used for everything from charging phones and computers, to powering small businesses and enabling greater electric mobility. In this way, we aim to mitigate and eventually replace diesel generators, kerosene, and traditional transmission and distribution infrastructure.

We are at a unique point in time in which some of the biggest challenges we face can be solved with positive, altruistic solutions that are also highly profitable. While these challenges are not easy and cannot be accomplished alone, we are fortunate to have this opportunity - to be at the intersection of impact and sustainable business.

Liquidstar: Enabling the Electron Ecosystems of the Future

Charging batteries to power everything from education to healthcare to business to mobility to water & agriculture

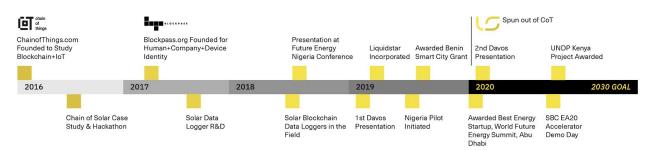


Liquidstar (Parent Co) is the result of four years of prototyping and research. Our initial investor and facilitator, <u>Chain of Things</u>, is a research lab and venture studio dedicated to leveraging the nexus between blockchain and IoT to solve fundamental problems in the connected devices space and to develop highly efficient futuristic applications to be leveraged against the most challenging environmental, humanitarian, and industrial challenges. Liquidstar is the result of five different Chain of Things research projects:

- Chain of Solar case study<sup>4</sup>
- Solar Bank one of the first projects in the world focused on solar blockchain
- Blockpass.org a blockchain-based self-sovereign identity protocol
- Blue Maru- a blockchain enabled pollution sensor
- Sunburning, a way to burn how much charge a battery has received, then transport and share this data with others by using an immutable blockchain<sup>5</sup> (here)

<sup>&</sup>lt;sup>4</sup> Chain of Things, 'Case Study 2: Chain of Solar' <a href="https://www.chainofthings.com/cs2chainofsolar">https://www.chainofthings.com/cs2chainofsolar</a>. Used with the permission of the authors.

<sup>&</sup>lt;sup>5</sup> Chain of Things, 'Sunburning Your Solar Charge Into Batteries With SolarCoin And Other Blockchains/DAG's'



Recent media featuring Liquidstar: Here











**Bloomberg** 

## 2.2.2 Opportunity

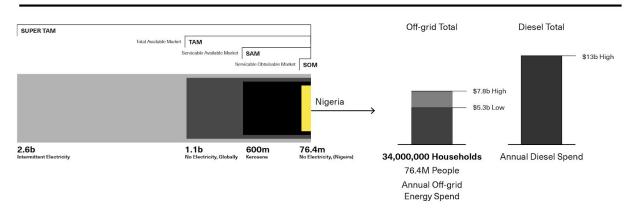
The specific focus of Liquidstar Pty Ltd will be to support Waypoint deployment within the Oceania region. With a population of over 41 million, nearly 30% struggle with access to electricity<sup>6</sup>. With many of these individuals living on remote islands and rural areas, there is little to no access to regional power grids, leaving most to rely on the burning of biofuels, kerosene, and diesel for electricity generation. Using the funds raised via this Offer, the Company will first aim to develop 2 Waypoints in Indonesia and Nigeria (the most immediate pilots to accelerate the project), the next stage jurisdictional opportunity for Liquidstar Pty Ltd is significant within its region of focus.

Electricity distribution is difficult and expensive. As a result, almost 1 Billion people don't have electricity and restoring electricity after natural disasters is challenging as distribution infrastructure has been destroyed. Additionally the energy sources used by people who don't have electricity and people who are suffering after a natural disaster are toxic and increase pollution (i.e. kerosene, diesel, etc).

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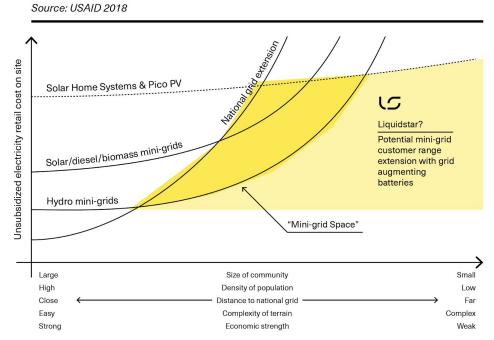
<sup>&</sup>lt;a href="https://www.chainofthings.com/news/2017/6/23/sunburning-your-solar-charge-into-batteries-with-solarcoin-and-other-blockchainsdags">https://www.chainofthings.com/news/2017/6/23/sunburning-your-solar-charge-into-batteries-with-solarcoin-and-other-blockchainsdags</a>> bliz

<sup>&</sup>lt;sup>6</sup> Off the grid: How can we optimise solar power in Oceania and beyond? https://www.thebigq.org/2019/12/09/off-the-grid-how-can-we-optimise-solar-power-in-oceania-and-be yond/#:~:text=As%20the%20world%20fights%20over,1%2C2%2C3%5D



These problems exist because the cost of building, operating, and maintaining the grid are too high. In many cases it's uneconomical to reach new customers or continue to serve existing customers after a disaster, and to maintain the grid in rural areas.

The Limits of Traditional On/off-Grid Power Distribution



Solving access to energy (SDG7) is the key to solving many of the other core SDGs around food, water, health and education. We believe access to electricity can save lives after natural disasters and save lives in developing countries by reducing pollution.

Mobile batteries (i.e.; baby Tesla PowerWalls) are the 'wireless' grids of the future, similar to how telecom has progressed from being wired to wireless. Liquidstar is starting small but as

batteries and energy storage systems become more energy dense and cheaper, providing electricity via portable movable batteries will become more economical.

Liquidstar is transforming the lives of many of the world's poor, but it also has significant potential applications for the "future" of energy and electron based economies in the developing world. Bigger picture given the interconnectedness of our world, replacing diesel generators and kerosene with cleaner more renewable friendly energy generation is critical to accomplishing our climate goals.

It's important to point out that being poor doesn't mean individuals have no money. In many of the regions we are working in people pay as much as 30 cents per day to charge their phone and 50 cents per day for usage of small solar home systems. This end customer prices include tremendous amounts of government subsidies and infrastructure development. Liquidstar is less expensive for customers and for governments.

Incumbents are often weighed down by legacy baggage in both their design and business models, making it difficult for them to quickly adapt. Gradual evolution or outright stagnation are often the results. Only a comprehensive, ground-up reinvention of both business and design thinking can address this.

In the case of Liquidstar, the legacy energy industry has reached the design and business model limits of physical grid based delivery of power. This prevents them from being able to profitably distribute electricity to almost 1 billion people who are, in result, left to sort out their own solutions. This is exactly why a future thinking approach is needed to reinvent and effectively bridge this industrial gap.

# Automotive Automotive Automotive FUTURE Z O O X Figs SolarCity DESIGN Legacy business model led Gradual technological augmentation Future thinking for the next 1 billion

Moderately evolutionary

2020

Industrial Evolution Spectrum

Source: Liquidstar 2019

Traditional & rigid

<2010

BUSINESS MODEL

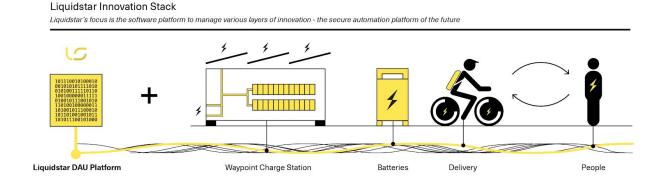
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Radical, adaptable, scalable

>2030

#### 2.2.3 Solution

The Liquidstar (Parent Co) solution is a blockchain-enabled mobile application and platform that manages the rental of batteries and charging stations. We use blockchain to manage user and device ID and to manage how energy generated is logged and accounted for in our solar charging stations. In the future we plan to utilise blockchain technology to manage the micro-transactions of the users on our platform.

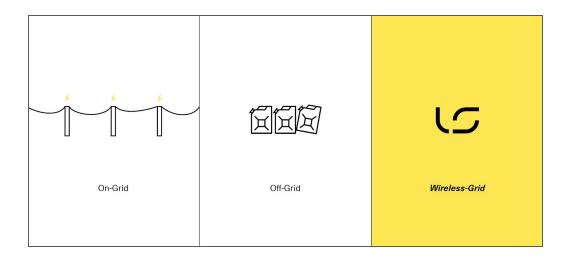


By giving people who don't have electricity access to small portable batteries, we provide them with a cheaper and more user-friendly energy access experience. Currently many people travel long distances to charge their devices on diesel generators or to retrieve fuel for lighting and their own personal generators. Our solution replaces the need for "dirty" energy sources in the developing world with renewable generated electricity from centralised charging points called Waypoints. At these Waypoints we use a combination of renewables and grid/microgrid (where available) to charge portable batteries. Allowing people to take energy with them in the same way they take liquid kerosene and diesel fuel.

In the developed world our solution can be rapidly deployed during outages to provide end users with access to electricity for essential appliances. Currently many utilities deploy diesel generators which are heavy pollutants and present logistical challenges in terms of keeping them fueled in a disaster. Using our mobile application to manage and deploy Waypoints, utilities can set up pickup/delivery energy services to affected customers.

# 2.2.4 Key Differentiators

The Liquidstar (Parent Co) is a platform used to connect a hardware innovation stack. Our strategy is to leverage our blockchain enabled mobile application to facilitate and manage the rental of smart IoT connected batteries and a blockchain enabled platform to manage the charging infrastructure for those batteries.



We designed our solution to piggyback on other technological advancements like the decrease in battery cost and the increase in battery density, the decrease in solar panel cost and the increase in efficiency, and the new technologies being developed to utilise recycled Electric Vehicle 18650 cells.

Liquidstar takes an asymmetric approach to storage and distribution of electrons by combining several relatively new technologies - blockchain, identity verification, next-gen batteries, computer vision, and global connectivity with energy arbitrage to create a highly elegant and modern platform for more efficiently and effectively delivering energy to people.

Additionally, Liquidstar has spent great time and care properly working with government agencies and energy companies across the globe. It is essential (and often very challenging) to understand the correct protocols for entering these markets, as well as fostering relationships with the correct partners on the ground.

Our goal is to help developing countries leapfrog developed countries by deploying quasi decentralised energy infrastructure. We believe that the energy market will mirror the broadband market which went from expensive wires to deliver internet to cordless phones, to wireless cellular base stations.

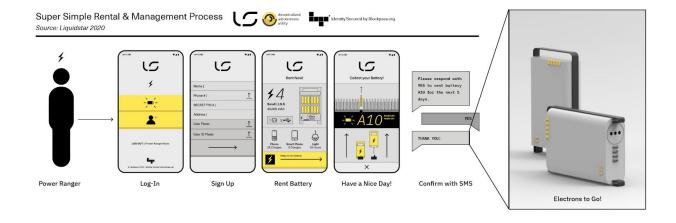
#### 2.2.5 Products & Services

The Liquidstar (Parent Co) offers a new category of energy distribution, utilising software to manage Waypoint charge stations to deploy smart batteries for beyond-the-grid electrical power distribution. Liquidstar's vision is to leapfrog current off-grid markets to the 'wireless' battery powered sustainable ecosystems of the future - solving energy access challenges for the powerless billion and providing electricity for essential services during grid destroying disasters.



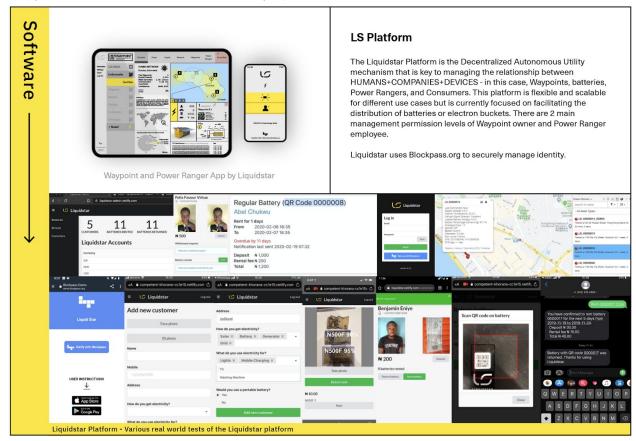
Liquidstar plans to work with our current hardware partners to push them to design solutions that fit our mobile applications use case. Taking an advanced approach designing our own fit for purpose hardware built by our partners, which they are free to sell to other customers. All of our hardware is managed and run by the Liquidstar platform.

The core Liquidstar Decentralised Autonomous Utility (DAU) platform, which is a utility represented by rules encoded as a computer program that is transparent and controlled by the organization members. The DAUs financial transaction record and program rules are maintained on a distributed ledger. It combines various innovation layers developed by our expert partners, to manage the charging and distribution of source-agnostic electricity through batteries delivered by Power Ranger operators.



#### **LS Platform**

The Liquidstar Platform is a gamified App to manage your Waypoint Network and batteries while monitoring your quantified impact in real time. It is the Decentralised Autonomous Utility mechanism that is key to managing the relationship between HUMANS + COMPANIES + DEVICES - in this case, Waypoints, batteries, Power Rangers, and Consumers. This platform is flexible and scalable for different use cases but is currently focused on facilitating the distribution of batteries or electron buckets. There are 2 main management permission levels of Waypoint owner and Power Ranger employee.



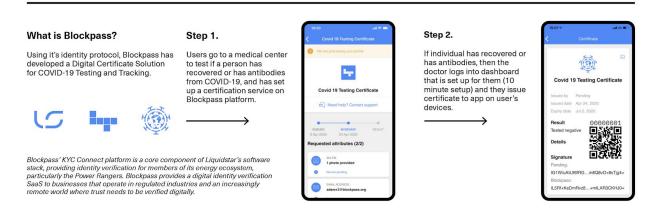
#### LS Signup and Covid Tracking

End customers sign up for Liquidstar using digital identity platform, Blockpass. To start this process customers meet a 'power ranger' or manager of the Waypoint. The power ranger collects the user's identification and payment information and the user's account is associated with their mobile phone and photograph. In order to rent batteries, a user will have several payment options. The first is using a text message based or digital payment managed by a smart contract, the second is a cash payment (with machine vision money counting), and the third is a tool we are exploring that would allow users to pay for services with phone credits.

User information is stored using Blockpass which provides a secure, private and reusable identity solution that gives users ownership of their digital identity and control over data accessed.

In response to these challenging times we've used Blockpass to incorporate a Digital Certificate Solution for COVID-19 Testing and Tracking into our signup process.





#### Liquidstar 'Chip'

The Liquidstar Chip will be a custom-designed, minimalist tracking device for batteries and other electricity assets. It links with the Liquidstar Platform to collect rich data from these assets, including location, health, the remaining charge in the batteries, and usage. This allows equipment operators to schedule maintenance, battery swaps, remote bricking/recovery, and detailed demand and scale forecasting. It is the identity hook for the device layer of the DAU.

#### **Partners & Service Providers**

#### **Batteries**

Batteries range in capacity from 10k mAh to 3kWh and act as smart UPS 'mobile outlets' and can power a variety of applications including smartphones, laptops, fans, TVs, e-motos/e-bikes. They are provided by different battery experts and can also include recycled 2nd life Electric Vehicle batteries (current partners SunSynk and Betteries). They utilise a QR code integrated with the LS Chip system that is verified by our mobile app. The LS batteries are charged in LS Waypoints, which may be owned by individuals, governments, commercial enterprises and non-profit organisations alike.



#### Waypoint

Waypoints are Automated Sustainable Oases that provide charging and distribution of electricity via mobile batteries and act as hubs for new electron driven economies (electric-gas stations of the future). A mobile cargo container (like the ones on cargo ships that we see on ships, trains, and on semi-trucks around the world) is converted into an off-grid or edge-grid mobile station for charging large smart batteries and providing other services (current partner BlackStump). The form factor allows it to be shipped and deployed easily almost anywhere in the world. The Waypoints charge batteries from a mix of 3 energy sources depending on the deployment situation - 1. grid-edge (where it is no longer economical to build traditional grid) or in conjunction with micro grids vs wires for electricity distribution 2. Solar or renewable self contained source 3. Diesel generator for backup. Waypoints can operate autonomously at the edge of the grid or completely off the grid.



#### **Waypoint Owner**

Owns the Waypoint or Waypoint Network. The key owners (B2B model) are governments, energy companies, communities, and emergency services. This individual or organization has full control over Waypoint and battery metrics along with management of Power Rangers.

#### **Power Ranger**

The Power Rangers don't set up the Waypoint. They operate it and manage the batteries and rentals of the batteries. The Power Rangers basically do everything from sign people up, manage payments, to deliver and pickup batteries. (Blockpass used to verify their identity as employees).

#### Consumer

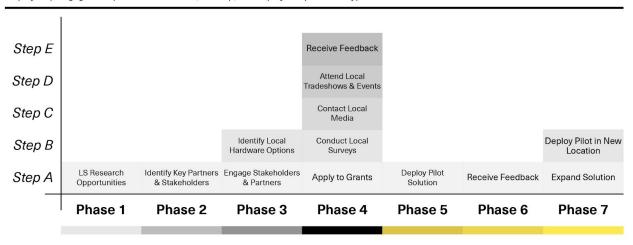
Rents the batteries to power devices and appliances in their home or office, etc. (most of the consumers have feature phones that are only capable of SMS based authentication). In future iterations of the product consumers will have the option to have the battery delivered to them. In the last interaction, consumers will have the ability to own a battery or charge a battery on their own and get paid when that battery is rented.

# 2.2.6 Marketing & Distribution

Marketing for Liquidstar is a lot different than other companies. At Liquidstar we have to work through a lot of different layers to get to our end customers. We have to first use our networks to find the right contacts in local government and the right partners. Then we have to find the correct local operators and we have to conduct surveys to really gain a granular understanding of how to tailor our solution to that specific region. Then finally we have to start the slow and difficult education process for a lot of our potential B2B customers. Explaining to them the benefits of the solution especially as compared to the 'traditional' way of doing business is challenging. This typical sales process takes between 18-24 months, while we are seeing interest pick up as a result of Coronavirus, we are using this crowd-equity round to accelerate that process by having Liquidstar focus on the B2C business model which requires us to own the Waypoint. This will allow us to take advantage of the current market opportunities provided to us by our partners.

#### **Entering New Markets**

Step by step engagement process to research, develop, and deploy a Liquidstar Waypoint Network



In Australia we plan to focus on marketing for projects in Papua New Guinea, in rural Australia for the indigenous population, and for regional disaster relief projects. Marketing the platform involves a tremendous amount of stakeholder identification and management, leveraging personal connections and unsolicited outreach. The former is why crowdfunding is such an integral part of our Australian strategy. Having hundreds of investor cheerleaders with a variety of connections will present us with access to opportunities in the Australian market. As the world returns to normal post Coronavirus our marketing strategy will include trade shows and events in addition to community site visits.

- Indigenous Energy Australia
- Startupbootcamp Energy Australia & Partners

More broadly speaking, during the early stages of our business we are focused on direct to consumer due to the long sales cycle associated with selling into utilities and government (we currently have 7 countries/governments in process). We believe as our solution matures we can eliminate the B2C aspects of our business and focus primarily on a B2B2C business model to the same end consumers.

Our larger simplified go to market strategy is to partner with utilities and governments as clients that utilise our solution to better reach end customers. Since our goal is to be B2B2C we are starting by testing our assumptions directly with customers through our local partners. We've currently conducted about 150 surveys in our target markets and have validated many of our assumptions in terms of willingness to pay. For rental in developing countries we charge based on the size of the battery rented, how much energy is used, and how long the battery has been rented. This gives us a payback period of 6 years on our charging station which has a +10 year lifespan.

Please find detailed information on our local partners in section 2.3.1

### 2.2.7 Market & Competition

Liquidstar (Parent Co) has granted Liquidstar Pty Ltd an exclusive licence to develop projects in Australia. More broadly, the Company's focus will be directed at helping the approximately 30% of the 41 million people in Oceania who do not currently have access to electricity. Current competition includes traditional off-grid solutions including, biomass, kerosene, and diesel<sup>7</sup>. Off-grid solar is also seen as a potential competitor but research has shown that most groups are focused on providing electricity to individual households instead of communities as a whole. Various issues including cost, durability, and questionable focus for maximum impact.

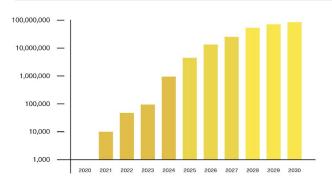
With developed countries via the Green Climate Fund agreeing to commit \$100 Billion per year for renewable deployments in developing countries<sup>8</sup>, global ESG assets hitting \$40.5 trillion<sup>9</sup>, and companies like JP Morgan committing to \$200 Billion a year in ESG<sup>10</sup> investments there are many institutional investors focused on investing in companies with ambitions like ours.

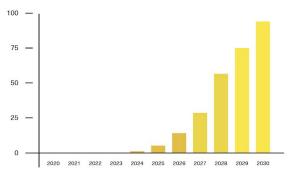
Besource Mobilisation | Green Climate Fund." https://www.greenclimate.fund/about/resource-mobilisation. Accessed 7 Aug. 2020.

<sup>&</sup>lt;sup>7</sup> Off the grid: How can we optimise solar power in Oceania and beyond? https://www.thebigq.org/2019/12/09/off-the-grid-how-can-we-optimise-solar-power-in-oceania-and-beyond/#:~:text=As%20the%20world%20fights%20over,1%2C2%2C3%5D

<sup>&</sup>lt;sup>9</sup> "Complete guide to ESG and socially responsible investing (SRI)." 14 Dec. 2019, https://www.cnbc.com/2019/12/14/your-complete-guide-to-socially-responsible-investing.html. Accessed 7 Aug. 2020.

<sup>&</sup>lt;sup>10</sup> "Sustainability | JPMorgan Chase & Co.." <a href="https://institute.jpmorganchase.com/impact/sustainability">https://institute.jpmorganchase.com/impact/sustainability</a>. Accessed 7 Aug. 2020.





Conservatively, by 2030, if we are able to accomplish our goal of serving 20,000,000 million households or 100,000,000 people with 120,000 Liquidstar Waypoint deployments, we estimate that Liquidstar will generate almost \$5,500,000,000 per year in revenue, excluding any other ancillary revenue generating services.

In terms of specifics, by 2030, if we are successful we expect to do the following:

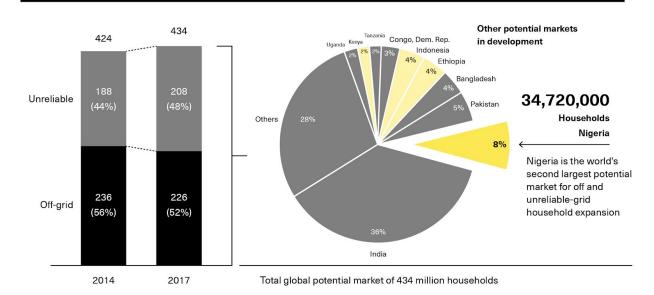
- Remove as much as 1 TRILLION pounds of carbon.
- Prevent 2 MILLION premature deaths
- Generate \$5.5 BILLION in revenue
- Provide electricity to 100 MILLION people
- Deploy 120 THOUSAND Waypoints

Mini grids, which are larger than Waypoints, have the potential to provide electricity to as many as 500 million people by 2030, with the right policies and about \$220 billion of investment to build around 210,000 mini grids<sup>11</sup>. At Liquidstar we believe that Waypoints are a better solution than mini grids due to their portability and scalability.

The United Nations Environment Programme (UNEP) estimates that consumers spend \$23 billion annually on kerosene for lighting and use a total of about 25 billion liters of kerosene every year. These numbers do not capture the full cost, as many governments subsidise kerosene, diverting funds from other critical government services. That's also only for lighting, this doesn't include other costs like diesel generators or the cost of premature deaths due to inhaling deadly fumes or the cost of the contribution to global warming.<sup>12</sup>

<sup>&</sup>lt;sup>11</sup> "Mini Grids for Half a Billion People: Market Outlook and ...." 25 Jun. 2019, https://www.worldbank.org/en/topic/energy/publication/mini-grids-for-half-a-billion-people. Accessed 8 Aug. 2020.

<sup>&</sup>quot;catalyzing global markets for off-grid energy access - Obama ...." <a href="https://obamawhitehouse.archives.gov/sites/default/files/docs/catalyzing global markets for off-grid energy access final cover.pdf">https://obamawhitehouse.archives.gov/sites/default/files/docs/catalyzing global markets for off-grid energy access final cover.pdf</a>. Accessed 8 Aug. 2020.



Our main competitors fit into four different categories:

- 1. SHS (Solar Home Systems)
- 2. Kerosene
- 3. Diesel generators
- 4. Traditional grid



We believe pay as you go electricity via batteries is the most cost efficient solution that doesn't change how people without electricity (during an outage or in a developing country) consume it. From our calculations and based on surveys and small pilots in the field, our solution from an installation, operations, and maintenance perspective over a 10 year period is 39% cheaper than small solar home systems, 90% cheaper than using a diesel generator, and 87% cheaper than the costs associated with grid based electricity. From an end consumer standpoint it's 75% cheaper than kerosene usage.

There are a lot of companies in this space, but there are very few that are focused on service model innovations that have taken the time to ensure they have the right local stakeholders

involved to design the appropriate solution. Our solution utilises distributed ledger technology, building upon the founders' considerable experience—working on other projects utilising this technology (such as Blockpass). We have developed the early framework for a Decentralized Autonomous Utility where identity, metering and transactions are managed via smart contracts significantly reducing costly fees and reconciliation associated with the infrastructure of old.

#### 1 Waypoint = 168 Households for 10 years /

Liquidstar cost advantage compared to existing solutions - Cheaper for users & owners (Nigeria)

Liquidstar Pilot	Liquidstar Scale	SHS Solar Home System	Kerosene & Other Fuel Sources	<b>Diesel</b> Generator	<b>Grid</b> Traditional	
\$218,772	\$226,800	\$258,720	\$386,669	\$705,600	\$201,600* *Grid cost is subsidized	End Users Pay
\$55,800	\$37,800	\$25,000		\$789,600	\$530,880	Operations & Maintenance
\$90,183	\$58,000	\$129,360	\$386,669	\$67,200	\$151,200	One Time Cost
\$145,983	\$95,800	\$154,360	\$386,669	\$856,800	\$682,080	Total 10 Year Cost

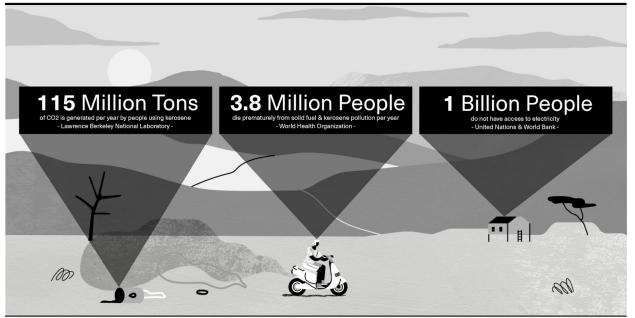
Company, Community, and/or Government Upfront/Investment Cost

## 2.2.9 Environmental, and social impact

At Liquidstar our main focus is impact. Specifically, social and environmental impact. This means that as a company we are driven to be contributors and to significantly improve the world we are living in.

The Future is not Switched On.

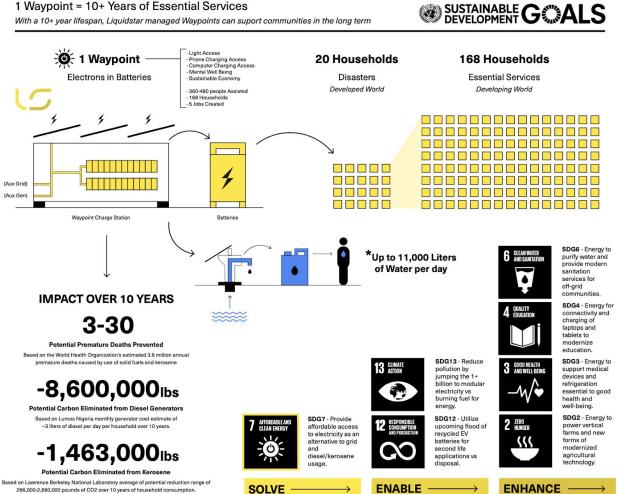
There significant potential for environmental, humanitarian, and economic impact



In terms of specifics, by 2030, if we are successful we expect to do the following:

- **Deploy 120 THOUSAND Waypoints**
- Remove as much as 1 TRILLION pounds of carbon.
- **Prevent 2 MILLION premature deaths**
- Provide electricity to 100 MILLION people

1 Waypoint = 10+ Years of Essential Services With a 10+ year lifespan, Liquidstar managed Waypoints can suport communities in the long term



## 2.3 Business and revenue model

#### **Australia Business Model**

266,000-2,660,000 pounds of CO2 over 10 years of household consumption

Liquidstar Pty Ltd will build, own and operate all equipment comprising the initial 1-2 Waypoint deployments, and will bear associated costs and retain revenues generated by these projects.

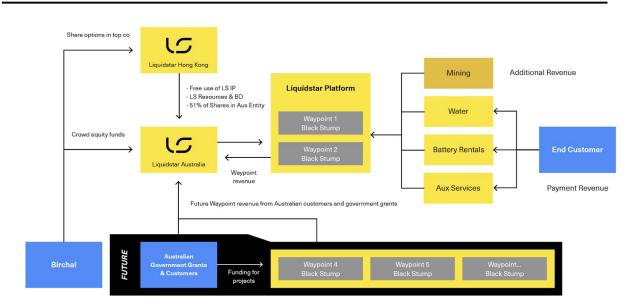
a perpetual and irrevocable licence to use Liquidstar's The Company will be granted intellectual property in perpetuity and at no cost to the Company.

The Company's initial value will be derived from this licence, the value of the assets acquired by the Company to deploy Liquidstar Waystations in Indonesia and/or Nigeria (depending on funding). The value of any future grants obtained by the Company, and projects signed in Australia and other countries by the Australian entity within Oceania.

The Australian entity will apply for grants, specifically focusing on deploying the Liquidstar ecosystem in Australia and other countries where those grants are applicable, with specific focus on the Oceania region. Any revenue generated by hardware purchased by the company, funds from government grants or business partners will also be retained by the Australian entity (as will any associated costs).

Any funding invested by Liquidstar Limited (Parent Co) to cover costs or overages associated with the Australian entity's deployments will be repaid to the Parent Company. This includes the costs of software modifications required for integration works - to serve the markets in which the Company deploys Waypoints. Intellectual property will reside in Liquidstar Limited, and be automatically licensed back to the Australian entity.

Liquidstar Australia Business Model
Business model depicting both Liquidstar owned and 3rd party B2B owned Waypoints



#### **Developing World Business Model**

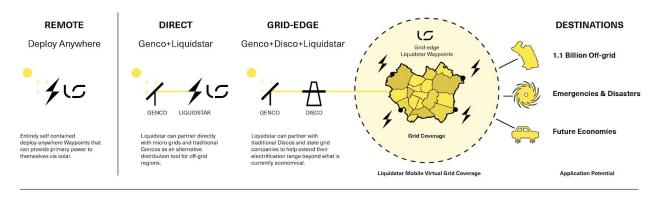
In the developing world our business model is essentially energy arbitrage. Our focus has been to find a cheaper way to deliver those electrons in buckets (batteries) more cheaply than other solutions (i.e. kerosene, diesel, and small solar home systems). In examining the problem we identified a few issues which our business model aims to address:

- 1. High levels of theft
- 2. Payment risk
- 3. Payment reconciliation
- 4. Currency risk
- 5. Extreme poverty
- 6. High fixed up-front generation, transmission and distribution costs
- 7. High end customer cost of energy
- 8. Regulation
- 9. Governmental rent seeking behavior

Liquidstar's primary source of revenue in the short term (B2C) will be the rental of batteries and in the long term (B2B2C) it will be access to its SaaS platform to manage container-based charging stations and the rental of those batteries.

#### Where the grid ends, Liquidstar begins.

The grids end where it is not economically feasable to continue. At this edge, Liquidstar Waypoints enable Mobile Virtual Grids to help electrify remote regions.



**B2C Business Model:** Our B2C business and revenue model involves purchasing a solar container based charging station with 208 batteries. The batteries are 20 Sunsynk 6.6 Ah batteries at 5 cents per day, 20 Sunsynk 8.8 Ah batteries at 10 cents per day, 80 Sunsynk 100 Wh batteries at 20 cents per day, 80 Sunsynk 200 Wh battery at 30 cents per day, 4 Betteries 1kWh battery at 65 cents per day, and 4 Betteries 2kWh batteries at \$1.00 per day. The batteries are all GPS and IoT connected to track, collect usage data and reduce theft.

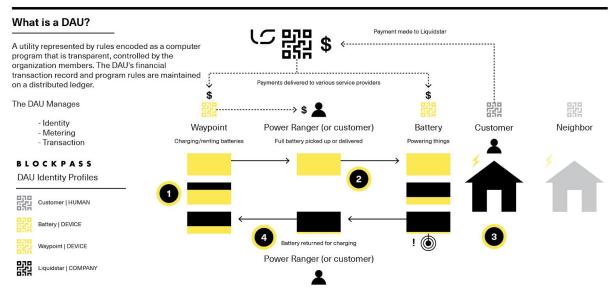
Why this battery configuration and distribution? We designed our business and revenue model to compete with a variety of different sources of energy while also understanding technological limitations and the economic reality of our customers. Currently as designed, the charging station can generate 40 kWh of electricity per day which effectively limits the number and size of the batteries. In the near future with the announcement of new solar panels, like the recently announced 600 Watt Trina panels, electricity output of the charging station could increase substantially.

End customers interact with Liquidstar and rent batteries by signing up with a Power Ranger using our Blockpass platform. We designed Liquidstar with the following tools to reduce theft: facial recognition, machine vision to count money, text message based authentication, localized data collection (i.e.; 'address' the way it is in the developing market), ID information, relatives, and/or any previous employment or payment information.

Using Blockpass to manage this data collection gives our customers the latest and greatest self-sovereign tool to control and own their data, but also gives Liquidstar a future way to monetize this data (with our customer in control). We are already experimenting with this by working with local governments to incorporate our Covid-19 Testing Tracker and eventually our Vaccine Tracker.

#### Automated Utility of the Future

Secure identity based Decentralized Autonomous Utility loop



After signup customers are eligible to rent batteries after putting down a 10-20% deposit (on which Liquidstar will generate interest). Understanding that customers may not be able to afford a 20% deposit we have multiple ways for customers to begin renting - the reason we include the smaller battery sizes. If unable to afford the deposit customers have two options: enter into a graduated rental plan as they prove their trustworthiness to gain access to larger batteries or sign up for group deposits with up to 10 people to one battery - almost like a battery rental timeshare.

With the excess energy generated by the station we are able to do two initial things. Firstly, where available, we can pump and purify water, selling this water for \$.05 per liter. There is a significant opportunity for us to increase this cost as the average family in Nigeria currently

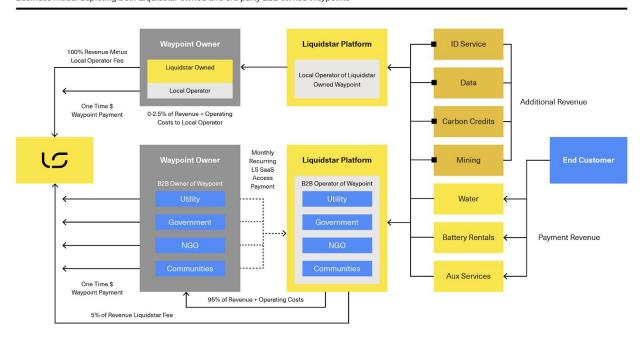
spends \$50 USD per month on water<sup>13</sup>. Secondly, we use excess energy to manage the blockchain components of our platform which in turn reduces currency risk by mining crypto.

Finally we plan to generate revenue by selling carbon credits generated by the charging station. Currently we are estimating \$10 per ton but after speaking to industry experts there is significant upside growth opportunity with one expert telling us we could generate almost \$30 per ton due to the attractiveness of our project<sup>14</sup>.

For our B2B model at scale we retain 100% of the additional revenue, take a minimum 5% premium on the upfront hardware sold, a monthly licensing fee, and 5% of each transaction (excluding deposits). The benefit of our B2B business model is two fold, the first is the use of a container based solution - if we are having issues with our partner we can change locations of the container. The second benefit is that we handle the cash and use a smart contract to distribute it to the other partners, reducing payment risk significantly.

Liquidstar Business Model

Business model depicting both Liquidstar owned and 3rd party B2B owned Waypoints



#### Liquidstar short term business model years 1-3:

- 1. Revenue from battery rentals
- 2. Revenue from selling purified water
- 3. Revenue from tracked battery energy usage analytics

<sup>&</sup>lt;sup>13</sup> "Rotten: Troubled Water | Netflix Official Site." <a href="https://www.netflix.com/title/80146284">https://www.netflix.com/title/80146284</a>. Accessed 7 Aug. 2020.

<sup>&</sup>lt;sup>14</sup> "Carbonbay." <a href="https://www.carbonbay.com/en/">https://www.carbonbay.com/en/</a>. Accessed 7 Aug. 2020.

4. Limited revenue from testing mining of crypto with excess energy

#### **Hardware Suppliers Pilot (Years 1-3)**

The following is what will be used for the first few locations in Indonesia, sourced from various partners in Australia.

- 1. Charging Container by Black Stump
- 2. Off the shelf Chinese tracker
- 3. 2.4 kWh Battery by Betteries
- 4. 200 Wh Battery by Sunsynk
- 5. 10,000 mAh Battery by Sunsynk
- 6. Digital Matter Tracker
- 7. Internet Transmitter by Echo
- 8. Water Filtration Unit by SkyJuice

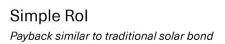
#### **Developed World Business Model**

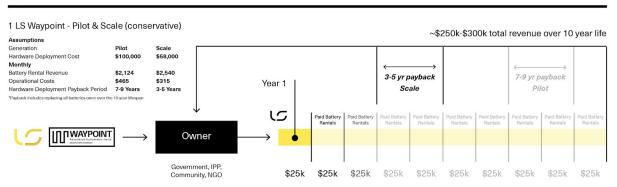
In the developed world, this solution presents an opportunity to reduce the negative economic effects of power outages while also enabling local utilities to still earn money during outages. In the US power outages drain the economy of over \$150B annually<sup>15</sup>. Deploying these microgrid charging stations during an outage would reduce some of that cost from the consumer side via a reduction in spoilage for example and for the utility via deployment of Liquidstar microgrids that would allow utilities to charge some amount per kilowatt hour of energy accessed by their customers from this system. Additionally for the utility, this presents a way to enhance customer experience and satisfaction which are critical variables for utilities when they are looking to increase rates. From a strictly financial perspective, in the USA the average price per kilowatt hour is around 12 cents with the average American household using about 30 kilowatt hours per day. Let's use the Washington DC area as a real world example for the deployment of this system. There was a recent storm that left 600,000 customers without power. In DC the price per kilowatt hour is 12.5 cents and the average home in the DC area uses 36.4 kilowatt hours per day meaning that the utilities charge each customer \$4.50 per day. An outage of this magnitude costs the utility \$2.7M per day from lost revenue alone. Deploying Liquidstar during an outage could have a substantial impact on the economics of power outages.

Localized solar and batteries can also reduce grid fire risk. To prevent the grid from causing fires, utilities have to worry about sag, the physical tendency of wires to drop closer to the ground when they heat up. When the lines sag, they can bump into other power lines or objects and cause sparks. Both hot weather and power flow contribute to sag. This phenomenon is not the only cause of wildfires linked to the grid, but it played a role in 2017, for

<sup>15</sup> "A Day Without Power: Outage Costs for Businesses | Bloom ...." 8 Oct. 2019, https://www.bloomenergy.com/blog/a-day-without-power-outage-costs-businesses. Accessed 7 Aug. 2020. instance, as the source of the deadly Cascade Fire in Yuba County, according to Cal Fire<sup>16</sup>. One way to avoid the risk of sparking is to cut power to a circuit when the utility predicts a high risk of fire. This approach suffers two major problems: It disrupts service to homes and businesses, violating the utility's central duty of delivering electric power; and the prediction mechanism for fire risk is fallible, as seen in PG&E's decision not to de-energize in the runup to the massive 2018 Camp Fire<sup>17</sup>. Utilities could call on solutions like Liquidstar to pick up some of the load, reducing the amount of power flowing through a circuit that is getting too hot. This would support a dynamic approach to thermal limits, allowing utilities to tweak distribution operations based on changes in conditions without shutting things down completely.

While it would require the distribution utility to develop localized sensors to identify when a circuit is heading into the danger zone, the utility could then deploy Liquidstar's Waypoint charging station, mobile application, and IoT connected batteries in the impacted region. The Waypoints will help improve the utility's customer satisfaction scores which could help it during rate cases with the customer forum. It will help customers be able to power devices that can use batteries that are 150Wh-3.2kWh. Reducing the impact of outages but also acting as a resource to power a small selection of devices for emergency staff.





# 2.3.1 Applications and customers

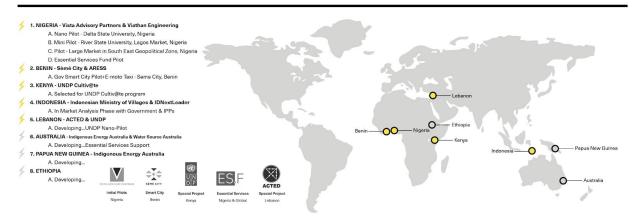
There is enormous market potential in the world, but due to potential risks and the general slow moving nature of governments and the energy sector, Liquidstar is developing a basket of different potential country customers. This broader spread of irons in the fire creates greater

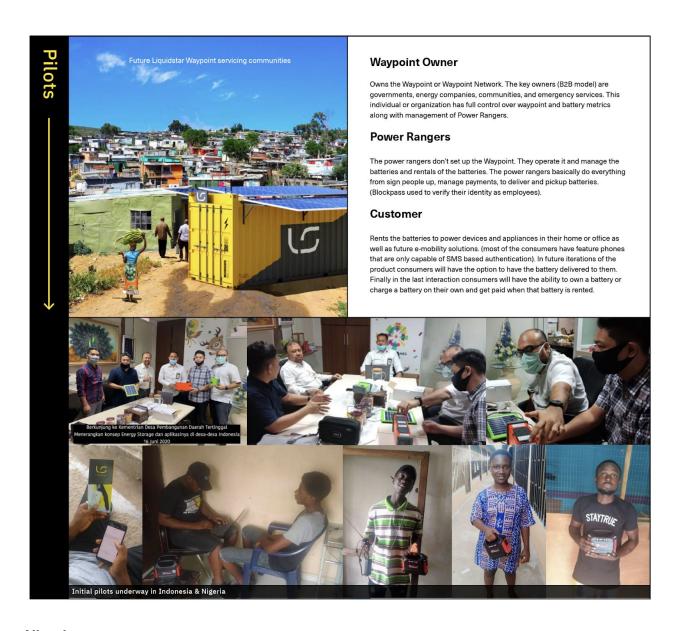
<sup>16</sup> 9 Oct. 2018. "Cal Fire: Deadly 2017 Cascade Fire In Yuba County Caused https://sacramento.cbslocal.com/2018/10/09/cascade-fire-cause-vuba-county/, Accessed 7 Aug. 2020. "Why PG&E Didn't Cut the Power Possibly Prevent to https://www.greentechmedia.com/articles/read/why-pge-didnt-cut-power-to-possibly-prevent-california s-deadliest-wildfire. Accessed 7 Aug. 2020.

probability that any single country could develop into a runaway success and generally better coverage to attack the broader problem from multiple angles.

Traction

Projects: 8 global projects in active or developing status





#### **Nigeria**

- Summary:
  - 2nd largest off-grid market in the world (8%) with over 90 million without access to electricity and currently reliant on burning various liquid and solid fuel sources. Liquidstar has conducted initial surveys and nano pilots with rental batteries to demonstrate demand for the service and to test the Liquidstar sign up, rental, payment, and management platform. Research with project partners has identified multiple locations for large scale up pilots in the coming future. Liquidstar will also be collaborating with Vista Advisory Partners and McKinsey on a World Bank commissioned study of Nigeria's off-grid electrification over the next 10 years. Liquidstar is lucky in that it is uniquely positioned with very good connections in Nigeria.
- Project partners:

- Vista Advisory Partners Vista Advisory Partners (VAP) is a boutique financial advisory firm with a focus on managing start-ups and medium scale enterprises in Nigeria and the rest of West Africa. Their wealth of experience affords stellar services and solutions within reach going beyond simple number churning.
- Viathan Engineering Viathan Engineering Ltd is the pioneer integrated energy services solutions company in Nigeria. We specialize in captive and embedded power generation, providing modular, last-mile, scalable power-as-a-service to the end user quicker, cheaper and more efficiently to governmental, industrial, commercial and other service markets. Our goal is to be the premier energy solutions provider and we are committed to producing and distributing uninterrupted and reliable power solutions to the vast number of the underserved across Nigeria.

#### Benin

#### Summary:

Liquidstar was selected with local partner company ARESS to deploy its solution for a government backed smart city project. The deployment of a Waypoint will focus on providing rental batteries for both home and business use as well as modular cartridge batteries for an electric motorcycle taxi fleet. This is especially exciting as modular batteries to enable off-grid e-mobility is a top goal for Liquidstar's ultimate vision of electron driven ecosystems.

#### Project partners:

- Sèmè City Launched as part of "Revealing Benin," the government's unprecedented investment and development program, Sèmè City is the only project of its kind in Africa. This city of innovation and knowledge brings together high-level training institutions, research and development centers, and incubators of innovative solutions to help solve the challenges facing Benin and Africa.
- ARESS ARESS is a Benin-based company specializing in the installation and distribution of certified products and services. Activities are divided into four areas: the distribution of existing solutions (pico and SHS), the management of solar stores throughout the country in order to bring our solutions closer to end users and local communities, training and development, and monitoring PPP investments.

#### Kenya

#### Summary:

Liquidstar was selected for the UNDP Cultiv@te program to explore the use of its energy distribution platform to provide off-grid solutions to agriculture innovations to be tested in Kenya. This program will give Liquidstar immediate access to government bodies that can help seed and accelerate its use cases while providing the opportunity to work across the global UNDP network for various deployment options.

#### Project partners:

UNDP Cultiv@te - Cultiv@te - an innovation initiative of UNDP supported by the Singapore Government - will curate multi-stakeholder coalitions to tackle key challenges faced by developing countries across the globe and explore opportunities in urban agriculture, climate resilience and livestock farming. The programme offers mature growth-stage startups and R&D teams from academic institutions a unique opportunity to work in a number of emerging markets with immense potential and needs. The global cohort will join local innovators, technology experts, corporate mentors, and financiers to co-design solutions with farmers and policy makers.

#### Indonesia

#### • Summary:

In development for over 1.5 years, Liquidstar has worked diligently to explore opportunities to extend energy access to some of the more remote regions of Indonesia's 17,000 islands. With initial focus on Sumba Island, Liquidstar is beginning surveys and assessments before plans to deploy Waypoints focused on 30 villages with potential to expand to 430.

#### Project partners:

- Indonesian Ministry of Villages, Development of Disadvantaged Regions, and Transmigration - The Ministry of Villages, Development of Disadvantaged Regions, and Transmigration (Kemendesa) (Indonesian: Kementerian Desa, Pembangunan Daerah Tertinggal, dan Transmigrasi Indonesia) has the task of assisting the President in regards to developing the rural and disadvantages areas in Indonesia. Through its community development, it would help to speed up the development of villages. It also has responsibility to the Transmigration Program.
- IDNextLeader IDNextLeader (IDNL) Is a Non-Profit Organization That Prepares a Support System for Future Leaders #Indonesia.

#### Australia

#### • Summary:

 Liquidstar is developing projects to provide extreme off-grid energy access and water access, as well as assessing the potential application of Waypoints to enable essential services during and after grid-damaging natural disasters such as bush fires.

#### Project partners:

 Indigenous Energy Australia - Indigenous Energy Australia (IEA) is an Indigenous owned and operated, profit-for-purpose organisation committed to improving the livelihood of remote, regional and Indigenous Australians. Our projects are the World's First indigenous owned, operated & constructed renewable energy and essential services company.  Water Source Australia - Water Source Australia is a recently established water technology business that has developed innovative water filtration and disinfection systems to supply potable water to homes and communities.

#### Lebanon

- Summary:
  - Currently in development.
- Project partners:
  - ACTED ACTED is active in 37 countries and implements more than 500 projects a year reaching over 14 million beneficiaries with over 300 international staff and 4,300 national staff. ACTED's mission is to save lives and support people in meeting their needs in hard to reach areas. ACTED develops and implements programs that respond to emergency situations, support rehabilitation projects and accompany the dynamics of development.

#### Papua New Guinea

- Summary:
  - Currently in development.
- Project partners:
  - Indigenous Energy Australia Indigenous Energy Australia (IEA) is an Indigenous owned and operated, profit-for-purpose organisation committed to improving the livelihood of remote, regional and Indigenous Australians. Our projects are the World's First indigenous owned, operated & constructed renewable energy and essential services company.

# 2.4 Business strategy

At Liquidstar we view our business strategy in the context of the year 2030 but we anticipate that the main inflection point for our business will be in 2023. From today until 2023 our main focus is proving to governments, NGOs, and utilities that our business model is viable. As such, Liquidstar will be responsible for a significant amount of the upfront cost associated with deploying our entire ecosystem. For the first three years Liquidstar will own and via local partnerships operate the entire ecosystem. This means two things, the first is that Liquidstar will not be profitable or focusing on profits for these initial three years as they are around credibility building and market penetration. The second is that we will have to access grant funding and additional equity rounds to sustain the business.

As our solution becomes more proven and more robust, we plan to rapidly implement custom designed hardware built by our partners but offload the upfront hardware and infrastructure costs onto our potential customers. We consider that this shift in the capital costs of our hardware should significantly improve the profitability of the business. We initially plan to focus on maximising the business' profit margin on its software products, and expect that the profit margin on hardware products will be comparatively smaller. In addition to this, we will

begin to focus on monetising our user base in the form of access to geographical energy usage, payment and identity data.

# 2.5 Organisational structure

#### **Corporate Group**

The Company is the Australian subsidiary of Liquidstar Limited (BRN 70648985-000-04-19-0), a Hong Kong incorporated company (**Liquidstar (Parent Co)**.

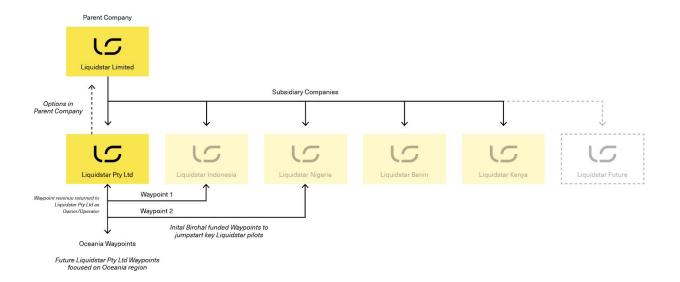
Under the terms of a licencing arrangement, Liquidstar (Parent Co) has granted the Company a perpetual, irrevocable and royalty-free licence to use and commercialise those intellectual property assets of Liquidstar (Parent Co) that are required by the Company to operate the business in Australia.

Liquidstar Limited
Hong Kong
BRN - 70648985-000-04-19-0

Liquidstar PTY LTD
Australia
ACN - 642 674 511

Figure: Ownership structure showing current licencing arrangement (pre- offer)

Liquidstar Pty Ltd will deploy its initial 2 Waypoints to support both Indonesia and Nigeria pilots, receiving revenue from those deployments, as a means to most rapidly move the project forward. Subsequent Waypoint deployments will focus on the Oceania region.



# 2.6 Capital structure

The Company is seeking up to \$250,000 in equity capital via this Offer.

## 2.6.1 Issued capital

Liquidstar Pty Ltd has 1,000,000 ordinary shares on issue. Table 1 below sets out the issued capital of Liquidstar Pty Ltd before the Offer.

Table 1: Issued capital of the Company before the Offer

Share Holder	Share Type	Shares	Options
Liquidstar Pty Ltd	Ordinary	1,000,000	Nil

## 2.6.2 Equity (pre-and post-offer)

Table 2 below sets out the issued capital of the Company following the Offer.

Shares	Minimum Subscription	Maximum Subscription	
Existing Shares	1,000,000	1,000,000	
Offer Shares	50,000	250,000	
Total shares on issue	1,050,000	1,250,000	

### 2.6.3 Rights and liabilities associated with securities

As at the date of this Offer, the only class of shares on issue are ordinary shares. There is no shareholders agreement between the existing shareholders and as such, the rights and liabilities associated with the shares are as set out in the Company's constitution. Under the Company's constitution, the Directors may refuse to register a transfer of Shares in the Company for any reason.

A more detailed description of the rights associated with the shares is set out in Section 3.3 below.

### 2.6.4 Debt funding and other sources of funding

To date, start-up costs for the Company have been funded by Liquidstar (Parent Co). As the Company is a new entity, costs to date have been negligible. The Company has no debt.

The Parent Company has previously raised funding by way of two Simple Agreement for Future Equity (SAFE) Notes on the customary terms published by Y-Combinator. These SAFE Notes will convert into a minority shareholding in the Parent Company if that entity carries out a qualifying equity round.

## 2.7 Directors and senior managers

## 2.7.1 Our directors and management

#### **Directors**



**Luke Johnson** - Luke, a Chain of Things founder, is a solar engineer with over 18 years of experience. Luke holds a Masters of Philosophy in Engineering, Solar Cell Research, from the Australian National University and a Bachelor of Engineering in Photovoltaics & Solar Energy (Hons.) from the University of New South Wales. Luke is the founder and CEO of Sunpulse K.K. in Tokyo, and has completed well over 4,500 MWp of design and technical due diligence on

1250+ solar photovoltaic plants in Japan. Luke originally developed and demonstrated the Liquidstar basis concept with the SolarCoin blockchain.



**Trevor Townsend** - Trevor is CEO and CoFounder of Startupbootcamp Australia (SBC). He is passionate about business and technology, and as an entrepreneur loves to help bring new ideas to life. He is interested in the big topics that shape our future, including energy, climate change and sustainability, finance and economics and the impact of technology on the future of work. Trevor is also passionate about sport and wellbeing. He is an experienced angel investor with a specific interest in technology investments in startups and early-stage companies. His diverse background includes industry experience in Finance, Telco, Energy and I.T. professional services markets.

#### **Senior Management**



Scott Salandy-Defour - Scott is a former management consultant with 8 years of experience at Booz Allen Hamilton and PA Consulting. Scott has conducted emerging technology consulting services for a variety of US utilities, helping them analyze and assess pilots that leverage the latest cutting-edge technologies. Specifically Mr. Salandy-Defour has worked with utilities to help them analyze how IoT, wearable devices, and big data can improve operations. Outside of the Utility space he has done emerging technology assessments for the UN, healthcare, and retail. Prior to Liquidstar, Mr. Salandy-Defour founded two startups one focused on using AI to detect bias and perspective in the news and a patent pending machine vision, IoT, and augmented reality solution to help reduce bias in interpersonal networking situations.



Conor Colwell - Conor initially worked in film, shooting the first 'HD' feature documentary in an active war zone, and developing commercial projects for the likes of Coca-Cola and BMW Designworks. Next he moved to Hong Kong to work for one of the world's leading independent macro investment research firms, focusing on long term implications of automation and alternative energy. Co-founding Chain of Things in 2016, as one of the first companies focused on blockchain & IoT, he is now focused on leveraging distributed technologies for positive environmental, humanitarian, and industrial applications. Most recently, Conor worked on Blockpass, a Chain of Things JV, focused on self-sovereign ZKP identity for regulated industries and the Internet of Everything.

## 2.8 Risks facing the business

An investment in the Company should be seen as high-risk and speculative. A description of the main risks that may impact our business is below. Investors should read this section carefully before deciding to apply for shares under the Offer. There are also other, more general risks associated with the Company (e.g. risks relating to general economic conditions or the inability to sell our shares).

Prospective investors should consider whether unlisted shares are an appropriate investment and, if in any doubt, should contact their accountant, financial planner, solicitor or other professional advisor. They should not be purchased by parties that cannot afford the loss of their entire investment.

#### **Geopolitical and Sovereign Risk**

1. Socio-economic headwinds, unpredictable regulatory regimes and other developing country idiosyncrasies (i.e. inflation and foreign exchange (**FX**) risk) may negatively impact the Company's operations.

#### **Entrenched Incumbent Risk**

1. The energy industry is full of entrenched incumbents who are naturally unwilling to cede ground to disruptive new entrants.

a. These incumbents range from traditional grid players to suppliers of off-grid solutions such as generators. They also include parties that provide inputs like diesel and petroleum.

### **General Risks**

### 1. Funding risk

- a. The Company is in the process of raising funds to achieve its strategic business objectives and to cover its projected operating expenses. The Company may not raise all of the required funding and therefore not achieve all of its business objectives.
- b. The Company may also need to raise additional funds in the future from investors or third parties. There is no assurance that the Company will be able to obtain additional rounds of funding on substantially the same terms as outlined in this Offer Document or at all. The Company's value may be materially affected if the required additional funding is not available.

### 2. Competition risk

a. The Company plans to operate in highly competitive markets, with several known competitors, and moderate barriers to entry that could give rise to new and unknown competitors. If the Company is unable to successfully compete with existing and/or new competitors, this would have a negative impact on the revenue, profitability and future prospects of the business.

### 3. Intellectual property risk

a. The Company has taken measures to protect its intellectual property. However, there is a risk that the intellectual property protection measures in place are inadequate or ineffective, which could have an adverse impact on the Company's ability to compete, control the representation of its brand, and pursue its business objectives.

#### 4. Supply risk

a. Disruption to the Company's supply chain could affect the Company's ability to acquire or produce inventory at commercially acceptable cost, and in a timely manner, which would have a direct impact on the Company's revenue and profitability.

### 5. Insolvency risk

a. The Company is not yet profitable. The company is seeking to obtain further funding to achieve its objectives. There is no guarantee that funding will be available on favourable terms or that the Company will receive any level of funding at all.

### 6. Project risk

a. The Company is undertaking a significant project to expand the business. As with any expansion project, there are risks that the new initiatives and programs may not perform as expected, or the project team does not execute effectively.

The failure of this project could affect the Company's profitability and the future prospects of its business.

### 7. Key person risk

a. As an early stage business, the Company is susceptible to the loss of key team members as they are considered critical to the continued success of the Company. If a key team member was lost, due to illness for example, this could significantly affect the Company's ability to continue its operations or achieve its business objectives as the case may be.

### 8. Technology risk

a. The Company utilises energy and data technologies in its business operations. Despite the Company's measures to effectively manage these systems and risks, if any of these technologies were to fail without notice, it could interrupt the Company's ability to sell or communicate with customers, which could have a direct impact on revenue and profitability.

### 9. Startup risk

- a. The Company is a pre-revenue startup and will build the business with the funds raised through this crowd-sourced funding offer.
- b. As an early stage business, the Company is subject to all of the risks associated with early stage companies, including uncertainty around the volume and origin of revenue streams, size and existence of repeat customers, and risks associated with evolving technology. In particular, the Company is not yet profitable and is yet to generate revenue through certain anticipated revenue streams.
- c. The commercial success of the business will depend on many factors including the Company's ability to attract and retain quality staff and loyal customers.

#### 10. Business model risk

a. The Company is at the proof-of-concept stage of the business cycle. As such, it carries the risks of a start-up business. Given the limited trading history of the company, no assurance can be given that the Company will achieve commercial viability through the implementation of its business plan.

### 11. Legal or regulatory risk

a. Political, taxation, economic, legislative or regulatory change in Australia or in other countries where the Company operates may have an adverse effect on the company's operations. This could include any changes in law made by governments in which the Company plans to operate projects that makes those projects no longer economically viable.

## 2.9 Financial information

Liquidstar Pty Ltd is a newly-formed company with no trading history to date. Accordingly, the financial statements reflect this situation. For the purpose of meeting the content requirements of the CSF regime, only a balance sheet has been included.

### 2.9.1 Balance sheet

Liquidstar Pty Ltd Balance Sheet As at 12 October, 2020

	2020 \$'000
Assets	
Total assets	
Liabilities	
Total liabilities	
Net assets	
Equity	
Total equity	

Note: Liquidstar Pty Ltd was incorporated on 15 July 2020 and has no financial activity to the date of this report.

# Section 3: Information about the Offer

## 3.1 Terms of the offer

Liquidstar Pty Ltd is offering up to 250,000 shares at an issue price of \$.98 AUD per share to raise up to a maximum of \$250,000 AUD.

The key terms and conditions of the Offer are set out in the Table below.

To participate in the Offer, you must submit a completed application form together with the application money via the Intermediary's platform. The Intermediary's website provides instructions on how to apply for shares under the Offer at www.birchal.com.

The Intermediary must close the Offer early in certain circumstances. For example, if the Maximum Subscription is reached, the Offer must be closed. If the Minimum Subscription is not reached or the Offer is closed but not completed, you will be refunded your application money.

Table 4: Terms of the Offer

Term	Details		
Price	\$0.98 per share		
Minimum Subscription	\$50,000 AUD		
Maximum Subscription	\$250,000 AUD		
Minimum parcel size	\$250		
Opening date	OCTOBER 12, 2020		
Closing date	NOVEMBER 5, 2020		

A description of the rights associated with the shares is set out in Section 3.3.

Investors may withdraw their application during the Cooling-off Period. Further information on investor cooling-off rights can be found in Section 4 of this CSF offer document.

The Offer is not underwritten.

### 3.2 Use of funds

The table below sets out the intended use of funds raised under this Offer based on the minimum and maximum subscription amounts.

	Good		Impact		Better!
	\$50k	\$100k	\$150k	\$200k	\$250k
Birchal Campaign Raise AUD	\$ 50,000.00	\$ 100,000.00	\$ 150,000.00	\$ 200,000.00	\$ 250,000.00
Birchal Campaign Raise USD	\$ 34,000.00	\$ 68,644.00	\$ 102,966.00	\$ 137,288.15	\$ 171,610.18
	-				
Birchal Fee	\$ 2,040.00	\$ 4,118.64	\$ 6,177.96	\$ 8,237.29	\$ 10,296.61
Birchal DD Fee	\$ 1,990.00	\$ 1,990.00	\$ 1,990.00	\$ 1,990.00	\$ 1,990.00
Campaign Advertising	\$ 2,000.00	\$ 2,000.00	\$ 2,000.00	\$ 2,000.00	\$ 2,000.00
Luna	\$ 5,834.76	\$ 5,834.76	\$ 5,834.76	\$ 5,834.76	\$ 5,834.76
Legal	\$ -	\$ -	\$ 5,000.00	\$ 5,000.00	\$ 5,000.00
Contractors	\$ 8,000.00	\$ 7,500.00	\$ 7,500.00	\$ 12,000.00	\$ 10,000.00
Marketing & Business Development	\$ 6,000.00	\$ 3,000.00	\$ 5,000.00	\$ 7,000.00	\$ 5,000.00
Water Source Purifier	\$ -	\$ -	\$ -	\$ 11,000.00	\$ 11,000.00
Waypoint Battery, Supplies, and Computers	\$ 3,290.00	\$3,290.00	\$ 8,360.00	\$ 22,760.00	\$ 22,760.00
Mini Waypoint	\$ 20,000.00	\$ -	\$ 20,000.00	\$ 20,000.00	\$-
Blackstump Waypoint 1	\$ -	\$ 57,661.02	\$ 57,661.02	\$ 57,661.02	\$ 57,661.02
Blackstump Waypoint 2	\$ -	\$ -	\$ -	\$-	\$ 57,661.02
Remaining	\$ (15,154.76)	\$ (16,750.42)	\$ (16,557.74)	\$ (16,194.92)	\$ (17,593.23)
Liquidstar Cash Balance as of July 1st	\$ 6,376.02	\$ 6,376.02	\$ 6,376.02	\$ 6,376.02	\$ 6,376.02
Liquidstar Cash Owed	\$ 9,500.00	\$ 9,500.00	\$ 9,500.00	\$ 9,500.00	\$ 9,500.00
Remaining Cash Balance	\$ 721.26	\$ (874.40)	\$ (681.72)	\$ (318.90)	\$ (1,717.21)
Benin Pilot App Development Revenue	\$ 4,000.00	\$ 4,000.00	\$ 4,000.00	\$ 4,000.00	\$ 4,000.00
Remain Cash Balance	\$ 4,721.26	\$ 3,125.60	\$ 3,318.28	\$ 3,681.10	\$ 2,282.79
	10 Years				
Waypoint Location	Nigeria	Nigeria	Nigeria & Indonesia	Nigeria & Indonesia	Nigeria & Indonesia
Battery Impact Nigeria	27	27	27	27	27
Battery Impact Nigeria + Birchal	10	10	10	10	73
Battery Impact Indonesia			37	141	100
Total Household Electrified	37	37	74	168	200
Potential Liters of Water per Day				11,000	11,000
Solar Energy Generated per Day	25 kWh per Day	40 kwh per day	60 kwh per day	60 kwh per day	80 kwh per day
Potential Pounds of Carbon Eliminated from Grid Charged Batteries	37,500-203,125	60,000-325000	97,500-528,125	97,500-528,125	120,000-750,000
Potential Carbon Eliminated from Kerosene	166250-1662500	266,000-2,660,000	432,250-4,322,500	432,250-4,322,500	532000-5320000
Potential Carbon Eliminated from Diesel Generators	5375000	8,600,000	13,975,000	13,975,000	17,200,000
Premature Deaths Prevented	1-15	3-30	4-45	4-45	6-60
40kwh = 364 lbs of CO2					

The Offer is not underwritten and there is no guarantee that these funds will be raised.

The cost of the Offer includes the Intermediary's fees under the hosting agreement between the Company and the Intermediary.

These fees are up to 6% of all funds raised by the Issuer through Birchal Financial Services Pty Ltd (**Intermediary**), plus \$2,800 for administration and setup costs.

Other than as specified above, no other payments from the funds raised will be paid (directly or indirectly) to related parties, controlling shareholders, or any other persons involved in promoting or marketing the Offer.

## 3.3 Rights associated with the shares

Immediately after issue, the shares will be fully-paid shares. There will be no liability on the part of shareholders and the shares will rank equally with the shares currently on issue.

The rights associated with the shares are set out in the Company's constitution. These rights are described below. A copy of the constitution is available on the Intermediary's platform.

## 3.3.1 Voting rights

Each shareholder has one vote on a show of hands and, on a poll, one vote for each share held.

### 3.3.2 Dividends

All shareholders have a right to receive any dividends declared and paid by the Company. The directors have a discretion and may resolve to pay dividends, subject to their obligations under the Corporations Act (for example, they cannot pay dividends unless the Company's assets are sufficiently in excess of its liabilities immediately before the dividend is declared and where it may materially prejudice the Company's ability to pay its creditors).

## 3.3.3 General meetings and notices

Directors have the power to call meetings of all shareholders or meetings of only those shareholders who hold a particular class of shares. Shareholders who hold at least 5% of the votes which may be cast at a general meeting of the Company have the power to call and hold a meeting themselves or to require the directors to call and hold a meeting.

### 3.3.4 Election and removal of directors

Shareholders may vote to elect and remove directors at a general meeting by way of ordinary resolution (50%).

## 3.3.5 Winding-up

If the Company is wound up and there are any assets left over after all the Company's debts have been paid, the surplus is distributed to holders of ordinary shares after secured and unsecured creditors of the Company. Holders of fully-paid ordinary voting shares rank ahead of other classes of shares (if any).

### 3.3.6 Restrictions on sale and transfer

Subject to complying with all requirements of the Company's constitution, a Member may transfer the Shares held by that Member. The Directors may refuse to register a transfer of Shares in the Company for any reason.

### 3.3.7 Option to acquire shares in Liquidstar (Parent Co)

Once the Company completes the initial Waypoint projects, the business will likely look to raise further capital investment in order to scale up its projects globally. It is anticipated that the business will seek to raise this capital from a jurisdiction outside of Australia, to gain access to broader pools of investors and opportunities for entry into new markets. If that is the case, then we may seek to conduct this subsequent raise in Hong Kong via the Liquidstar (Parent Co) entity (**Go-Global Raise**).

If we do so, then we want all our Aussie investors to come along!

In the event that Liquidstar (Parent Co)carries out a Go-Global Raise, then all investors who subscribe for Shares in the Company under this Offer will have the opportunity to subscribe for ordinary shares in Liquidstar (Parent Co) (**Go-Global Option**). If a shareholder exercises their Go Global Option, they will be granted the value of their investment in ordinary shares in Liquidstar (Parent Co). Of course, we would also invite you to participate in any Go-Global Raise.

The Go-Global is enshrined in the constitution of the Company, which has been made available via the Intermediary's platform.

### 3.4 Investor rewards

Investors in Liquidstar Pty Ltd (\$10,000 investment level) will receive a Liquidstar special kit.

Liquidstar special kit

## 3.5 What can I do with my shares?

Shares in the Company are considered illiquid as they cannot easily be transferred or sold. However, there are numerous possible circumstances that may create an opportunity for shareholders to exit the business. These include, but are not limited to:

- A trade purchase of the Company
- A listing on a registered stock exchange (eg the ASX)
- A private equity investment in the Company

• A share buy-back by the Company

In the event that Liquidstar (Parent Co) carries out a Go-Global Raise (as detailed in section 3.3.7), then investors who subscribe for Shares in the Company via this Offer will each be granted an option to acquire the same percentage of shares in Liquidstar (Parent Co).

There is no guarantee that any of the exit options will eventuate.

# Section 4: Information about investor rights

# 4.1 Cooling-off rights

You have the right to withdraw your application under this Offer and to be repaid your application money. If you wish to withdraw your application for any reason (including if you change your mind about investing in the Company), you must do so within five business days of making your application (the Cooling-off Period).

You must withdraw your application via the Intermediary's platform as follows: by following the link and instructions on the CSF Offer page on the Intermediary's platform.

After your withdrawal has been processed, the Intermediary will refund the application money to your nominated account as soon as practicable.

## 4.2 Communication facility for the offer

You can ask questions about the Offer on the communication facility available on the Intermediary's platform. You can also use the communication facility to communicate with other investors, with the Company and with the Intermediary about this Offer.

You will be able to post comments and questions about the Offer and see the posts of other investors on the communication facility. The Company and/or the Intermediary will also be able to respond to questions and comments posted by investors.

Officers, employees or agents of the Company, and related parties or associates of the Company or the Intermediary, may participate in the facility and must clearly disclose their relationship to the Company and/or Intermediary when making posts on the facility.

Any comments made in good faith on the communication facility are not subject to the advertising restrictions in the Corporations Act.

## 4.3 Proprietary company corporate governance obligations

### 4.3.1 Annual report

While the Company is currently a small proprietary company that is not required to prepare annual financial reports and directors' reports, if we successfully complete this Offer, then we will be required to prepare and lodge these annual reports with ASIC (within four months of the financial year end). The Company has a 30 June year end and its financial reports must be lodged by 31 October each year.

Our financial reports are currently not required to be audited as we are a small proprietary company. This means that the Company's financial reports will not be subject to auditor oversight and, therefore, there will be no independent assurance of the Company's financial statements. However, the directors are still required to ensure that the financial statements give a true and fair view of the Company's financial position and performance and that the financial statements comply with the accounting standards.

We may be required to have our financial reports audited in the future if we raise more than \$3 million from CSF offers (including this current offer and any future offers) or otherwise become a large proprietary company.

## 4.4 Related party transactions

If we successfully complete this Offer, the rules on related party transactions in Chapter 2E of the Corporations Act will apply to the Company (for so long as we continue to have CSF shareholders). This means that the Company is required to obtain shareholder approval before giving financial benefits to related parties of the company (e.g. directors and their spouses, children or parents), subject to certain exceptions (such as reasonable remuneration provided to directors).

### 4.5 Takeovers

If we successfully complete this Offer and have more than 50 shareholders, the takeover rules in the Corporations Act will only apply to the Company in a very limited way. If someone wants to buy more than 20% of the voting shares in the Company, they will be able to do so without complying with the takeover rules. This means a person may be able to get control of the Company without making a formal takeover bid to all shareholders or without seeking shareholder approval.

Shareholders will not have the benefit of the full protections under the takeover rules, which means you may not have the right to vote on or participate in a change of control of the

company. However, the general principles of ensuring shareholders have sufficient information and time to consider a change of control, and all have a reasonable and equal opportunity to participate in any benefits, will apply to the Company. In addition, the Takeovers Panel has jurisdiction to hear disputes relating to control of the Company.

# Glossary

Company means Liquidstar Pty Ltd ACN 642 674 511

**Cooling-off Period** means the period ending five business days after an application is made under this Offer, during which an investor has a right to withdraw their application and be repaid their application money.

**CSF** means crowd-sourced funding under Part 6D.3A of the Corporations Act.

**Intermediary** means Birchal Financial Services Pty Ltd AFSL 502618.

**Go-Global Option** means the option granted to investors who subscribe for this Offer, as defined in section 3.3.7.

**Maximum Subscription** means the amount specified in this CSF offer document as the maximum amount sought to be raised by the Offer.

**Minimum Subscription** means the amount specified in this CSF offer document as the minimum amount sought to be raised by the Offer.

Simple Agreement for Future Equity (SAFE) Note is a contract between an investor and a startup company where the investor provides capital to the startup company, and the startup company provides a warrant to issue shares to the investor at a later date, with the price of any shares issued determined at that date. The SAFE Note converts into shares in the startup company upon the occurrence of certain conversion events, such as the company completing a later raise of a certain size or a trade sale of the company.

**Offer** means an offer of fully-paid ordinary shares by the Company under this CSF offer document.