

# Delegate Information Booklet











Zac Gazit
Chief Executive Officer
zac@alvatech.co.uk
www.alvatech.co.uk



Yuval Chen Chief Agronomist yuval@alvatech.co.uk www.alvatech.co.uk

#### **Alvatech Limited**

ALVÁTECH is a tech and social venture which has developed a cuttingedge, green, affordable and powerful water treatment that effectively deals with water and soil salinization. The chemical-free and solar powered devices change water molecule behaviour so high salinity water can be used for irrigation and saline soil recovery. The treated water increase farms productivity and reduce irrigation water usage.

ALVÁTECH's innovation is in the way its technology is able to create unique electromagnetic patterns which, combined with a proprietary development, have a powerful effect on irrigation water without removing vital minerals or releasing harmful by-products. Years of field and lab trials and experience from Agri projects around the world resulted in water treatment devices that can treat a variety of crops in harsh climate, soil and water conditions. The products are currently in trial installations in 14 countries, tested on various soil and crops. The innovation is also in the next generation technology, currently being developed by ALVÁTECH's R&D, which will introduce a revolutionary crop customization functionality.



JP Dorgan Head of Growth jp.dorgan@aquagrain.co.uk www.aquagrain.co.uk

# **Aquagrain**

Aquagrain is a unique, organic based, biodegradable, soil improver that allows crops to be grown in sandy free draining soils with a fraction of the water ordinarily required, providing more crops with less water. Aquagrain takes organic food industry waste and converts it to a soil improver that also absorbs water. 500kgs of Aquagrain is sufficient to turn a hectare of arid dirt into crop producing soil. Aquagrain requires no specialist equipment and is so simple to use works with nature and regenerative farming with very little training required.

JP Dorgan has been part of the Aquagrain team since Sept 2020 with the main focus on business growth. Previous experience working in Agri/ food supply chain and AgTech sectors include Tate & Lyle, Tesco's, GEA, Map of Ag and running his own consultancy business. JP's resides in Suffolk but his family farm in Ireland.











Steve Hayden
Director
steve.hayden@aquapulse.tech
www.clearworldwater.co.uk

#### **Aquapulse**

We are the innovators of Aquapulse, a natural, non-chemical water technology which delivers environmental, sustainability, and commercial benefits across a number of market sectors. These include agriculture, fish farming, grown produce.

#### These include:

- Grown Produce
- Enhanced crop yield
- Improved quality of produce
- · More consistent batch colour
- Crisper fruit & vegetables
- Improved brix rating in fruit
- Reduced chemical input
- Reduced water consumption
- Extended post picking shelf life

#### Agriculture

- Enhanced milk yield (dairy)
- Improved protein gain (chickens & calves)
- Reduced medication and anti-biotic requirement (dairy & chickens)
- Naturally clean water lines without chemical use
- Reduced breast and foot diseases (chickens)
- Improved productivity (egg production)
- Removal or ammonia and sulphur in water storage tanks and pipes

The technology is at various readiness levels across the sectors with proof of concept achieved in each with case studies, both commercial and academic completed. The most advanced of these is grown produce where academic verification has been achieved, and a paper written.



Jonathan Lodge CEO jgl@cityfarmsystems.com www.cityfarmsystems.com

# **City Farm Systems**

One evening Jonathan found himself stuck behind a Tesco truck within sight of a store. Meanwhile the fresh produce shelves were bare. Rather than seek incremental improvement along complex supply chains a background in Design Technology, finance and resource efficiency suggested a disruptive business model. A data driven approach unlocks the potential made possible by growing to order at point of need. Thinking outside (above) the box avoids the most expensive final mile with distributed growing going beyond LEAN/6Sigma. A better match of supply and demand combines with a very low Minimum Efficient Scale. IP protected CloudGro® greenhouses can be installed on a modern retail warehouse roof or above a car park to give a carbon consuming supply chain and a major step towards Net Zero from 'Field' to Fork. Unlike alternatives the economics are compelling. Research shows half a retail roof is enough to grow more than needed of a wider range of short cycle crops powered by Solar PV to give a far greater overall return. The much reduced CapEx and OpEx per growing unit offers increased sales with improved margins to help feed whole city populations. Systems can be bought, leased or operated on a Salad-as-a-Service basis.











Chu Donald Obii
Director of Business Development
trade@dominioncapital.co.uk
www.dominioncapital.co.uk

# **Dominion Capital**

Dominion capital is a global commodities firm with a decades worth of experience in supplying multinationals and SME's. We specialise in the trading of raw cashew nuts, cashew kernels, fresh lime, exotic fruit tea, fresh herbs and avocado. Ashbo Fresh is the fresh produce trading arm of Dominion Capital that was established and trademarked early 2020. The business model is similar to the cashew trading operation however, Ashbo has added Vietnam as a product origin as well as Africa.

Our vision is to become a leader in commodities trading. We will continue to invest in local learning and development to ensure our impact on the ground can be felt for generations to come.

In every country we source product we continue to work with small holder farmers ensuring we manage food quality standards and ensure our produce is ethically sourced. Our expansion will aid our growth as we start exporting fresh produce to other countries. We serve our global client base with dedicated teams who have local knowledge.



Sean Peters CEO sean@drygro.com www.drygro.com

## **DryGro**

DryGro is an agriculture technology company focused on the production of alternative animal feed protein ingredients. It is designing and testing industrial-scale production facilities for a crop called Lemna (or 'duckweed') that can be used as an alternative to soybean meal in the production of tilapia, chickens, pigs and other animals. Soybeans are currently the market standard in animal feed protein, and by 2050 soy is the single crop expected to expand the most in land use. This is a problem, as the vast majority of soy is produced in just three countries, the US, Brazil and Argentina, and then shipped as export to the rest of the world. DryGro is developing production systems that can undercut this value chain by producing locally in Eastern Hemisphere countries. Further, DryGro can produce at least 8x faster than soybean meal, using only a fraction of the water required. Using DryGro technology, protein can be produced on otherwise arid land, opening up many new places for agriculture production. DryGro was founded at Oxford University and currently has operations in the UK and Kenya. It has research partnerships with the European Space Agency, EIT-Climate KIC, EIT-Food, and four additional universities.

#### **Farmer Charlie**











Betty Bonnardel CEO betty@farmer-charlie.com www.farmer-charlie.com

Farmer Charlie is on the mission to bring broadband internet to remote small hold farmers around the world, and especially in emerging countries, economically and sustainably, enabling the gathering of information from infield and weather sensors and access to an agribusiness app store: <a href="https://vimeo.com/464810772">https://vimeo.com/464810772</a>

Betty is CEO and Founder of Farmer Charlie. An award-winning Fellow and Chartered engineer, Betty uses her experience and skills in telecoms, tech and innovation, business and strategy to lead Farmer Charlie's team towards connecting remote smallholder farmers around the world. Originating from the French Alps, where rural agriculture can be challenging, she holds two Masters' in Science in aeronautical and space engineering (including telecoms), a diploma in international nuclear law and a MBA. Betty is a certified project manager. Betty is also engaged in society; she is a school governor and chair of the resource committee (£11M budget) at a prominent High School and participates regularly to school fairs and events to promote engineering with boys and girls.



Kate Hofman Co-Founder kate@growup.org.uk www.growup.org.uk

# **Grow Up**

We are problem solvers leading the next generation of high-tech food production. We use plants and science to grow the most ethical food on the planet. We are experienced growers of great food and experts in designing, building and operating large-scale infrastructure projects.

Controlled environment production, also known as vertical farming, controlled environment production (CEP) is indoor farming, growing delicious and high quality food whilst minimising environmental impact.

Our first farm was the UK's first commercial-scale vertical farm, growing award-winning fresh salads, herbs and farming fish, which we delivered by electric van to restaurants and shops across London.



Temi Oyewole Co-Creator temioyewole@hotmail.com

# **Health is Wealth Lifestyle**

Health is Wealth Lifestyle is an all natural superfoods company that provides affordable health products and natural herbal medicines to revitalise the body and immune system and help support cures for some of the worst diseases on earth today at relatively inexpensive prices. We believe good health should be accessible to all.











Alex Giles
Commercial Director
alexander@liberty-produce.com
www.liberty-produce.com

# Liberty Produce www.liberty-produce.com

Liberty Produce is a farming technology company, enabling the growth of local produce year-round, using a fully controlled, industry-leading, indoor vertical farming system. With expertise in lighting and nutrient delivery technology, Liberty develops and builds systems that reduce operational costs and improve quality and yield of crops grown in controlled-environment farms.

Our Future Farming Hub is the home of the next generation of AgTech and modern farming knowledge. The FFH is based at the James Hutton Institute in Scotland and offers a state-of-the-art fully contained and controlled vertical farming R&D facility. It also offers industry-leading vertical farming knowledge and expertise in the form of a vertical farming school. The FFH enables the development of next-generation food production technologies and knowledge sharing that will reduce barriers to adoption whilst working towards a sustainable and productive, net-zero emissions future.



Robert Orchard
International Sales Manager
robert@magnatechsavesenergy.com
www.magnatechenergysystems.com

## **Magnatech Energy Systems**

The Magnatech™ System offers proven energy savings (guaranteed a minimum of 6%) using the most powerful Neodymium magnetic material, manufactured to our specification from factories that are ISO 14001:2015 and TS Audited (TS16949). In brief, the System:

- √ Lowers carbon emissions and reduces carbon footprint
- Ensures there is no down time or interruption to service during installation
- ✓ Is a "Fit and Forget" installation
- √ Requires no maintenance
- ✓ Has a lifetime guarantee
- ✓ Provides return on investment within approximately 12-24 months.

In these times of climate emergency and the emphasis on reducing energy consumption and costs The Magnatech™ System is helping many organisations to achieve their environmental obligations and financial goals.











Tom Scrope
UK Manager
tom@nova-q.ie
www.nova-q.ie

#### Nova Q

Nova Q are an innovative biotech company with cutting-edge technologies in both agriculture and aquaculture. These include our range of bacterial products, which we use for both soil health and crop nutrition, as well as to drastically improve the quality and reliability of water in Recirculating Aquaculture Systems (RAS).



Jim McDougall Co-Founder jim@outfield.xyz www.outfield.xyz

# **Outfield Technologies**

Outfield provides a yield measurement and orchard management system for high value fruit crops. Outfield growers on four continents are deploying inexpensive drone systems to quickly survey orchards and gather high resolution images. Outfield uses machine learning to analyse this imagery, providing detailed maps of fruit loading and fruit counts that help you visualise and track the parameters that matter to you and your farm.



Shweta Jha
Founder
<a href="mailto:shweta.jha@pathfinder-ai.com">shweta.jha@pathfinder-ai.com</a>
<a href="mailto:www.pathfinder-ai.com">www.pathfinder-ai.com</a>

#### Pathfinder-Al

We are specialists in building cloud enabled Enterprise Platform products with integrated AI computing engine which enables rapid and cost effective Digital Transformation and Application development, compatible with all web platforms and devices. We are industry agnostic and with an enterprise architecture designed to be scalable and flexible. We have served an impressive array of clients within a variety of industry and are often engaged in large scale Government sponsored Digital Transformation programs.











Richard Gonzalez
Director
richardg@sensorit.co.uk
www.sensorit.co.uk

#### **Sensor IT**

Sensor IT is an innovative Technology Provider operating in the Internet of Things space, covering market verticals such as Smart Cities, Smart Mobility, Smart Agriculture, Smart Grid and Smart Industry, as their main areas of interest. Sensor IT creates, and owns, the technology and software they create, and we believe the systems and products should be created from the ground to meet specific requirements, rather than the requirements being adapted to existing products.

Sensor IT was founded in 2017 by Richard Gonzalez, a seasoned IT professional with extensive experience in designing and delivering complex solutions for a number of industries that include Intelligent Transport Systems, Telecommunications, Logistic, Banking and Defence.



Jennifer Bromley
Head of Plant Research &
Development
jen@verticalfuture.co.uk
www.verticalfuture.co.uk

#### **Vertical Future**

Founded in 2016, we design, build, and license market leading technologies for vertical farming. Our knowledge and experience is founded on years of running vertical farms and growing a consumer brand, which serves restaurants and homes across the UK.

Our Minicrops brand grows produce for restaurants in London and households across the UK, and supports top chefs and major food brands.

The knowledge acquired through building Minicrops from the ground up has allowed us to build a technology system that is suitable for growers. This experience allows us to offer much more to our customers beyond simply providing technology. We understand how to grow, market, sell, and distribute vertically-farmed produce and above all, how to build a successful vertical farming brand.

Our system includes sophisticated, adaptable lighting, nutrient delivery, and effective space utilisation, end-to-end automation, eliminating resource intensive production bottlenecks .All systems and processes require limited human interaction, limiting risk of contamination in the growing environment. This is achieved through our System-as-a-Service platform, "Diana," which offers a broad range of functionalities and services. Compared to other commercially available vertical farming systems, our systems provide a 172% increase in output per m3, and a 60% reduction in energy consumption.







