Welcome to Cleantech Innovate 2019

We Are Orchard is delighted to bring you Cleantech Innovate 2019, the UK’s leading showcase for game-changing cleantech innovation.

In its seventh year running, Cleantech Innovate 2019 will give the most promising cleantech entrepreneurs the opportunity to pitch their technologies to a room of impact investors looking for the next big low-carbon investment opportunity. These entrepreneurs are the best of the best in cleantech innovation, having been hand-picked by our Selection Committee from over 130 applicants.

We’re hoping to discover the next generation of game-changing technologies that can make a significant positive impact on climate change and connect them up with the investors who can take their concepts to the next level.

This year’s event also features a new open-venue layout designed to bring delegates to one dynamic space featuring two pitching areas, two presentation suites, innovation stands, a connectivity lounge, and places to meet. A series of workshops will also provide expert insight across a range of topics into how to secure investment for cleantech innovations.

We could not have produced this event without the outstanding support we have received from our sponsors and many partners, whose details you can find in this event guide and at their display stands – a huge thank-you to them all.

We hope you enjoy the day!

Charlotte Morton
Chief Executive, We Are Orchard

Cleantech Innovate 2019 will address environmental challenges in the following six interrelated areas:

Food
Feeding the world’s growing population is no easy challenge. Solutions to the availability of land and water, efficiency, lack of waste and a reduction in chemicals and emissions will make a critical impact.

Shelter
Sheltering our rapidly increasing population is one of our most urgent challenges, yet construction is one of the most damaging environmental impacts. We need construction techniques, materials and designs that provide more energy efficient homes.

Energy
There is a current global need for clean and renewable energy sources. Fossil fuels are non-renewable and require finite resources, which are dwindling because of high cost and environmentally damaging retrieval techniques. As a result we need solutions to source, produce, recover, supply and reuse energy.

Transport
Transport is a major user of energy, and burns most of the world’s petroleum. It creates air pollution, such as nitrous oxides and particulates, and is a significant contributor to global warming through emission of carbon dioxide. What cleantech solutions can crack these issues with low-carbon options such as electric vehicles, batteries, biomethane and better transport systems and urban planning?

Waste
The growing amount of waste in a modern society has a major environmental impact. Waste to landfill creates harmful emissions and leaks damaging chemicals into the soil. Incineration can create hazardous deposits and dangerous gases. Solutions to minimise, manage, treat, safely dispose of, and or prevent waste will make a huge difference.

Water
15% of the world’s population has no access to clean drinking water. Growing pressure on water resources – from population and economic growth, climate change, pollution, and other challenges – has major impacts on our social, economic, and environmental well-being. We need efficient solutions to providing safe, reliable, and easily accessible water, as well as reliable waste water treatment, sanitation and prevention of water wastage.

www.cleantechinnovate.com
Innovate UK
Innovate UK is the UK’s innovation agency. Innovate UK works with people, companies and partner organisations to find and drive the science and technology innovations that will grow the UK economy – delivering productivity, new jobs and exports. Our aim at Innovate UK is to keep the UK globally competitive in the race for future prosperity. For further information and to stay updated on our latest news visit www.gov.uk/innovateuk, follow us on Twitter at @innovateuk or subscribe to our YouTube channel at www.youtube.com/InnovateUK.

Climate KIC
CLIMATE KIC is Europe’s largest public-private partnership focused on climate change. Our UK & Ireland office is working with partners across the UK & I to stimulate the emergence of globally-relevant climate innovation clusters. Our innovation and education programming is aligned with this goal. Climate-KIC’s Accelerator Programme in the UK & Ireland is one of the world’s highest performing cleantech accelerators, and Europe’s largest.

Circular London Accelerator, Powered by LWARB & Carbon Trust
The London Waste and Recycling Board (LWARB) works in conjunction with the Mayor of London and London Councils and has a remit to improve resource management in the capital. LWARB is creating the conditions required to accelerate London’s transition to a low-carbon circular economy, an approach which the city’s economic and environmental future depends on. Its work includes business model development and piloting, policy consultation and guidance, building collaborative networks across the capital, and promoting and supporting emerging innovators. LWARB, in partnership with The Carbon Trust, is delivering an accelerator programme to drive circular economy innovation, with the first cohort focused on scaling innovative solutions in the built environment.

Key Partner

Better Futures
The Mayor of London is supporting the growth of cleantech businesses in our city.

Launched by the Mayor of London in 2017, Better Futures is here to stimulate accelerated growth for London’s growing cleantech marketplace. Leading London’s cleantech innovation cluster, Better Futures is working with cleantech innovators, investors and support organisations to expand our cleantech ecosystem. We want all of our cleantech stakeholders to be part of that and benefit from it.

Better Futures is also helping small businesses to develop new technologies that will help tackle our environmental challenges. If you have a clean technology product and want some fully-funded business support, you can access:

- Fully-funded business support and academic insight from our team of specialists
- Events, workshops and masterclasses
- Innovation and product development
- Process improvement, quality assurance and technology verification
- Public and private funding support
- Up to £6,000 to spend on the extra support you need.

To find out more, go to our web page www.london.gov.uk/what-we-do/environment/better-futures/about-better-futures or email BetterFutures@london.gov.uk

www.cleantechinnovate.com
# Programme

## North Annex, Game Changer Prize

<table>
<thead>
<tr>
<th>Time</th>
<th>Event</th>
<th>Details</th>
</tr>
</thead>
<tbody>
<tr>
<td>9.30 - 9.40</td>
<td><strong>Opening remarks</strong></td>
<td>Charlotte Morton, CEO We Are Orchard Limited</td>
</tr>
<tr>
<td>9.40 - 9.50</td>
<td><strong>Supporting solutions that protect the environment in a profitable way</strong></td>
<td>Willem van Hasselt, Investor Relations, Solar Impulse Foundation</td>
</tr>
<tr>
<td>9.50 - 10.00</td>
<td><strong>An introduction from Innovate UK</strong></td>
<td>Christian Inglis, Senior Innovation Lead – Growth and Scale Clean Growth and Infrastructure, Innovate UK</td>
</tr>
</tbody>
</table>

### 10.00 - 11.15 Energy

Panel: **Dr Jim Totty**, Managing Partner, Earth Capital  
**Mark Taylor**, Deputy Director of Energy Innovation, BEIS  
**Andy Kerr**, Director UK & Ireland, Climate KIC  
**Alexander Starchenko**, Managing Partner, First Imagine! Ventures  
**Nicola McCheyne**, Head of Ideas Lab and Commercial Director of Home Energy Management Ventures, Centrica Innovations  
Pitches from the following:  
- Cumulus Energy Storage Ltd  
- Lambda Stretch Ltd  
- Origen Power  
- Oxford PV  
- OXTO Energy  
- RFC Power

### 11.15 - 11.45 Coffee

### 11.45 - 13.00 Food

Panel: **Dr Rob Wylie**, Chairman, Five Seasons Ventures  
**Paul Roux**, Agri-tech investor, venture builder  
**Cam Ross**, Director, Green Angel Syndicate  
Pitches from the following:  
- Airponix  
- Climate Edge  
- Multibox  
- RootWave  
- Steam E Holdings Limited  
- Water Powered Technologies Ltd

### 13.00 - 14.30 Transport

Panel: **Chris Morris**, Partner, Sustainable Ventures  
**Jonathan Hampson**, General Manager, Zipcar UK  
**Joseph Seal-Driver**, Entrepreneur in Residence, IN Motion Ventures Jaguar LandRover  
**Rikesh Shah**, Head of Commercial Innovation, Transport for London  
Pitches from the following:  
- Addionics Ltd  
- Airrazor  
- Appy Parking  
- Esoterix  
- Meteor Power Limited  
- Signol

### 14.30 - 15.45 Water/Waste

Panel: **Adam Woodhall**, Adviser, Activator and Podcaster, Inspiring Sustainability  
**Jessica Brodrick**, Business Development Officer, LWARB  
**Arlene Goode**, Project Manager Hydro Nation Water Innovation Services, Arup  
Pitches from the following:  
- Deep Branch Bio  
- Evoco  
- FRUU Cosmetics LTD  
- Loowatt  
- Petit Pli  
- TIPA

### 15.45 - 16.15 Coffee

### 16.15 - 17.30 Shelter

Panel: **Julie Alexander**, Director of Technology and Innovation, Places for People  
**Charlotte Breen**, Head, Green Economy and Innovation, C40 Cities  
**Rupert Green**, Technology Architect, Lendlease  
Pitches from the following:  
- AirEx  
- AM Technology Ltd / Airlite  
- Boxergy  
- Rapiere Software Ltd  
- Senergy Innovations Ltd  
- Solar Options for Schools Ltd

### 17.30 - 18.10 Game-Changer Innovation Challenge

Including a presentation from **Kevin Tayebaly**, Co-Founder, ChangeNOW Summit

### 18.10 - 18.45 Drinks and Prize Giving

www.cleantechinnovate.com
### Programme

#### Theatre 2

<table>
<thead>
<tr>
<th>Time</th>
<th>Workshop</th>
<th>Speakers</th>
</tr>
</thead>
<tbody>
<tr>
<td>10:00 - 11:15</td>
<td><strong>Workshop 1: Navigating the entrepreneur ecosystem</strong></td>
<td>David Bent, Strategy Adviser, Futurist, Facilitator</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Lucette Demets, Head of Urban, London &amp; Partners</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Arlene Goode, PM Hydro Nation Water Innovation Services, ARUP</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Matthew Rhodes, Chair, Energy Capital West Midlands</td>
</tr>
<tr>
<td>11:45 - 13:00</td>
<td><strong>Workshop 2: What investors are looking for</strong></td>
<td>Jim Totty, Managing Partner, Earth Capital</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Julia Groves, Partner, Downing LLP</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Olivia Sibony, Head of Seed Tribe Investment, Angel Investment Network</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Susannah McClintock, Investment Director, Sustainable Ventures</td>
</tr>
<tr>
<td>16:45 - 17:30</td>
<td><strong>Workshop 3: Rapidly grow your business with storytelling</strong></td>
<td>Adam Woodhall, Adviser, Activator and Podcaster, Inspiring Sustainability</td>
</tr>
</tbody>
</table>

#### Theatre 3

<table>
<thead>
<tr>
<th>Time</th>
<th>Session</th>
<th>Speakers</th>
</tr>
</thead>
<tbody>
<tr>
<td>9:40 - 13:00</td>
<td><strong>GLA – Morning Session</strong></td>
<td></td>
</tr>
<tr>
<td>9:40 - 9:50</td>
<td><strong>Cleantech London: Creating the opportunities for cleantech growth in London</strong></td>
<td>Cassie Sutherland, Policy and Programme Manager, Greater London Authority</td>
</tr>
<tr>
<td>9:50 - 10:00</td>
<td><strong>Better Futures: supporting cleantech entrepreneurs</strong></td>
<td>Heather Hodgins, Better Futures Project Officer, Sustainable Development Team (Environment), Greater London Authority</td>
</tr>
<tr>
<td>10:00 - 11:15</td>
<td><strong>Workshop: Protecting your IP</strong></td>
<td>Carrie Johnson, Patent Attorney and Partner, Barker Brettell</td>
</tr>
<tr>
<td>11:45 - 13:00</td>
<td><strong>Encouraging Female Entrepreneurs</strong></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>Karen Lawrence, Vice Chair, London Sustainable Development Commission</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Richard Templar, Director for Innovation, Grantham Institute, Imperial College</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Nicola McCheyne, Head of Ideas Lab and Commercial Director of Home Energy Management Ventures, Centrica Innovations</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Florence Gschwend, Founder and CEO, Chrysalix Technologies</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Agnes Czako, Co-Founder, AirEx Technologies</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Brittany Harris, CEO, Qualis Flow</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Carolyn Hicks, Co-founder, Brill Power</td>
</tr>
<tr>
<td>13:00 - 17:30</td>
<td><strong>Innovate UK – Afternoon Session</strong></td>
<td></td>
</tr>
<tr>
<td>14:30 - 15:45</td>
<td><strong>Workshop: The Scaling Journey</strong></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>Christian Inglis, Senior Innovation Lead – Growth and Scale Clean Growth and Infrastructure, Innovate UK</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Gillian Harrison, White Fox Technologies</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Will Hill, Chief Story Officer, Stronger Stories</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Francesca Lavey, Programme Director, Mobility, Plexal</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Lucy Rands, Associate, ETF Partners</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Nigel Walker, Head of Innovation Loans, Innovate UK</td>
</tr>
</tbody>
</table>

www.cleantechinnovate.com
P1 Cumulus
Cumulus is approaching commercialisation with the lowest cost grid-level rechargeable Copper/Zinc battery energy storage. Copper/Zinc complements rather than competes with Lithium-ion, offering a high-energy long-duration (4-6 hour charge and discharge times) storage, ideal for time-shifting electricity generated by renewables to be delivered at the right time.

P2 Lambda
Lambda has built a thin-film prototype that has increased the efficiency of a solar cell by 2%, upon its application on the rear side of a PV glass panel.

P3 Origen Power
The process combines a fuel cell with a lime kiln to thermally decompose limestone to lime and CO2 whilst producing electricity. The CO2 produced in the process is pure and can be bottled or stored underground. When used, the lime sequesters CO2 from the air, making the process carbon negative.

P4 Oxford PV
Our lives are becoming electrified. Photovoltaics have a major part to play in providing a sustainable supply of clean, low-cost electricity. Key to enabling photovoltaics to become a core technology in an all-electric future, is perovskite. Our perovskite solar cell technology will enable mainstream solar to break its performance limits.

P5 OXTO Energy
OXTO Energy has developed an innovative flywheel energy storage system. A flywheel is a mechanical battery that stores kinetic energy in the form of a rotating mass. The design allows for working alongside any power application from wind turbines, heavy industry to EV-charging infrastructure.

P6 RFC Power
RFC Power is developing the next generation of grid scale energy storage solutions, combining optimised cell architecture and low-cost chemistry in a hybrid gas/liquid redox flow battery. RFC’s hybrid flow battery offers cost savings of up to 70% over existing systems, making long duration energy storage economically attractive.

P7 Airponix
Game-changing technology to grow high quality staple food crops almost anywhere globally with minimum inputs (eg 5% water consumption) and maximum yields (circa 20-fold). It is a smart, soil-less system that feeds roots with nutrient rich fog, overcoming the limitations & challenges of current farming to meet expected food shortages/demand.

P8 Climate Edge
Climate Edge is developing the Farm Tracker platform. Farm Tracker delivers novel agricultural research to the 500 million smallholder farmers in the world who have the greatest potential to feed the world by 2050, but are currently the least served by AgTech developers.

P9 Multibox
Multibox manufactures insect protein and insect fat. These are new, sustainable animal feed ingredients. We feed the Black Soldier Fly larvae food waste and byproducts of food and drinks manufacturing processes. We then extract the protein and fat from the larvae thereby reducing food waste and producing sustainable proteins.

P10 RootWave
RootWave improves health and the environment by zapping weeds with zero chemicals and offers a sustainable and scalable alternative to chemical herbicides which are under significant pressure to resist, regulate and litigation.

P11 Steam-e
Steam-e has patented cordless technology that produces heated water/steam. Powered by a lithium-ion battery, its chemical-free, low-water usage products are aimed at two markets: a steam cleaner for the commercial cleaning sector completely sanitising touch surfaces, a unit for controlling weeds to replace the use of herbicide glyphosate.

P12 Water Powered Technologies
Through Uk Innovate Energy Catalyst Support, we installed and operated in a live site the world’s largest zero energy water pump to prove the concept of distributed micro pumped hydro power. Now globally patented the new pumping system can help farmers and communities to store water for food and power.

P13 Addionics Ltd
Unique new types of battery electrodes are fabricated by Addionics. These are three-dimensional and designed to improve battery capacity, energy density, power, cycle-life, heat dissipation and safety which would offer significant advantage to existing battery technology and that produced in the UK.

P14 Airrazor
Aviation is being forced to address emissions. Drag over large surfaces has significant impact on economy and emissions. Our new technology significantly reduces drag over wings, etc., providing smoother air flow, reduces turbulence, etc. Exploration in rail suggests 10% - 15% saving, forecasts suggest 25% - 30% in aviation.

P15 AppyParking
AppyParking’s Parking Platform™ is the first connected car and kerbside management platform that bridges the gap between public and private sectors. The Parking Platform™ is a digital layer over existing road network offering a product suite to manage the kerb. One Click Parking™ is our flagship payasyoupark solution that reduces parking times from 20 minutes to 30 seconds.

P16 Esoterix
Esoterix creates smart city tools for the discovery, design and operation of extensions to the public transport network, from the data-mining of new bus routes through to the operation of 1st/last mile services. Its aim is to make it easier and more attractive to undertake door-to-door journeys using shared transport.

P17 Meteor Power
Significantly reduce drag and improve efficiency for aerospace, automotive and rail environments through the use of new state change materials to provide active aerodynamics, controlled electrically rather than mechanically, giving cheaper and easier transport integration for all type of vehicles.

P18 Signol
Signol is a new scalable software which uses smarter employee feedback to cut fuel waste and greenhouse gas emissions whilst improving job satisfaction. Signol builds upon our world-class behavioural science research where we saved Virgin Atlantic Airways $5.5m in 8 months and demonstrated the lowest ever abatement cost for carbon.
Water/Waste

P19 Deep Branch Bio
Evoco is shaped by a desire to preserve the natural environment without compromising quality. We’ve developed renewable technologies including Bounce, a high-performance replacement to petrochemical-based foams such as Polyurethane. It is designed with up to 74% renewable bio content reducing our carbon impact by 400% without any loss of performance.

P20 Evoco
Evoco is shaped by a desire to preserve the natural environment without compromising quality. We’ve developed renewable technologies including Bounce, a high-performance replacement to petrochemical-based foams such as Polyurethane. It is designed with up to 74% renewable bio content reducing our carbon impact by 400% without any loss of performance.

P21 FRUU
We design, develop and manufacture pioneering cosmetics formula that converts surplus fruit waste/byproducts into sustainable, affordable products.

Shelter

P25 AirEx
AirEx is a smart ventilation control (‘intelligent air-brick’) that reduces heat demand in homes without compromising damp and indoor air quality. It uses AI to predict occupants’ behaviour and weather patterns. It can be installed quickly, with minimal disruption and it pays back in 2-4 years through reduced energy bills.

P26 Airlite
Airlite is a nano material based paint that absorbs light and creates special ions which neutralises pollution by 88%, reduces bacteria on surface by 99%, removes odour, ensures cleaner surfaces and reflects 98% of incident solar heat encompassed with durability of 10 years.

P27 Boxergy
Boxergy will deliver energy independence to UK homes. We will quickly prove heating your home with electricity is cheaper and more comfortable than gas. Our easily retrofittable distributed storage solution is applicable to 85% of homes and will maximise the potential of renewables to meet the UK’s domestic energy needs.

P28 Rapiere
Rapiere enables rapid intelligent analysis of Lifecycle Carbon, Energy and Cost for architectural projects, as well as providing information on the circular economy of the design. Our tool calculates all the impacts from the cradle to the grave of the project using cloud computing to allow rapid building design optimisation.

P29 Senergy
Senergy is set to transform the future Solar Hot Water and Heating industry by bringing to market world leading advanced plastic solar thermal panels that can be manufactured and installed at a 50% lower cost with a significantly greater collection capability than current metallic solar thermal panels.

P30 Solar for Schools
Online platform enabling students to develop a solar project on their own school. The platform brings schools, investors and installers together to enable the school to cut its carbon footprint at no cost, while saving money and empowering students to fight climate change.
www.downingcrowd.co.uk

Crowdfunding business, instrumental in reforming regulation for crowd investors, renewable energy projects. She co-founded the UK and environmental sectors, including most recently 1994, Julia has invested a combination of her time London, holds an MA in Physics from the University of Investments, and before moving into private equity KPMG where he worked on numerous M&A and environmental investment opportunities. He then joined 1980s with Rothschild’s Bioscience unit investigating achieve their self-worth and aspirations. A chemist with helps disadvantaged children and homeless teenagers and resource efficiency in agriculture and founder several companies promoting reduced chemical use and Five Seasons VC. He is a board director of investment firms including WHEB, Cambridge Agritech is co-founder and Chairman of a number of impact sharers outnumber car owners.

Jonathan Hampson is the General Manager of Zipcar UK, the leading car club provider in the UK. He has worked for Zipcar and its predecessor Streetcar for over 10 years – originally coming to the company as a consumer of the service. Instrumental in Zipcar’s growth, Jonathan is a passionate advocate of the sector and what it can deliver to help London meet the challenges posed by congestion and poor air quality. His focus has been on how the public and private sector can work together to maximise the benefits of solutions like car sharing. Jonathan is responsible for leading on ensuring that Zipcar continues to pioneer new developments in the car club sector and realise a vision of cities where car sharers outnumber car owners.

Christopher J. Morris Co-Founder and Managing Partner, Sustainable Ventures

A serial entrepreneur with over 15 years experience in the sustainable startup space, Chris is the Co-Founder of Sustainable Venture Development Partners (“Sustainable Ventures”) and a lead shareholder in the 10 businesses they have launched since 2011. In 2012 he founded E-Car Club and quickly cemented the company as a significant new player in the sustainable transport space, raising over £2m in seed investment and forging national partnerships with household names including British Gas, Nissan & Renault. In July 2015 he managed the sale of the business to car rental firm Europcar for an undisclosed sum, delivering the world’s first exit for an equity crowdfunding business and a significant multiple return for investors. He is now Managing Partner at Sustainable Ventures where he and co-founder Andrew Wordsworth lead a team of some of the UK’s most talented venture development and investment professionals, united by a vision of the world where the twin challenges of climate change and resource scarcity are addressed by commercial solutions. Over the last 7 years they have founded 10 businesses, invested in 15 and provided co-working space for a further 30, transforming a disused warehouse in Central London into what is now Europe’s largest ‘Greentech Cluster’. Chris is a regular commentator on subjects including entrepreneurship, crowdfunding and sustainable transport. He holds an MA (Hons) in Geography from the University of Edinburgh, along with an MBA from London Business School, and was the 2016 BusinessGreen Entrepreneur of the Year.

Dr Rob Willie
Chairman, Cambridge Agritech

Rob has focused on technology commercialisation and impact investing in resource efficiency sectors for around 30 years. He is co-founder and Chairman of a number of impact investment firms including WHEB, Cambridge Agritech and Five Seasons VC. He is a board director of several companies promoting reduced chemical use and resource efficiency in agriculture and founder trustee of the Alexandra Wylie Tower Foundation which helps disadvantaged children and homeless teenagers achieve their self-worth and aspirations. A chemist with an MA and PhD from Cambridge, Rob spent ten years in Shell’s agrochemical business before working in the 1980s with Rothschild’s Bioscience unit investigating environmental investment opportunities. He then joined KPMG where he worked on numerous M&A and privatisation transactions as well as on the development of environmental funds in Central and Eastern Europe.

Joe Seal-Driver
Entrepreneur in residence, InMotion Ventures (Jaguar LandRover)

Joseph Seal-Driver is the Entrepreneur in residence for InMotion Ventures (Jaguar Land Rover). He has worked exclusively in ‘mobility’ for over a decade. Prior to InMotion Joseph was the UK General Manager for ofo bike sharing, the CEO for DriveNow UK (BMW and SIXT), and has also held positions at Zipcar. He has previously advised startup companies the Champion Agencies (Acquired by Addison Lee), and also holds a voluntary position as a trustee of Comshare the shared transportation charity. He read Environmental Science at the University of Leeds, before working at the Eden Project and at a sustainable communications consultancy Futerra.

Olivia Sibony
Head of Seed Tribe Investment, Angel Investment Network

Liv started left a career at Goldman Sachs to launch her foodtech startup, GrubClub, which she sold to Eatwith in 2017. As an ex-founder, she was only too aware of the challenges entrepreneurs face in raising funds and wanted to help make this process more efficient and transparent. So, she then joined Angel Investment Network (having raised money for Grub Club through them) to launch and grow SeedTribe, a spinoff platform focused specifically on connecting “impactful” businesses with investors. She is also a Board member of UCL’s Fast Forward 2030, which aims to inspire the next generation of entrepreneurs to try to address the UN’s Sustainable Development Goals (SDGs).

Adam Woodhall
Advisor, Activator and Podcaster, Inspiring Sustainability

Adam is an expert in storytelling, strategy & sustainability with a deep understanding of what generates business growth. He is dedicated to helping clients understand their key audiences and develop their narrative so it resonates with these audiences. Over the last 12 years he’s worked with some of the world’s largest organisations on their sustainability, but is now 100% focused on the planet changers: sustainable, low carbon, circular economy startups and scale-ups, helping them tell their story and turn commercial potential into exponential reality.
Speakers

Ariene Goode
Project Manager Hydro Nation Water Innovation Services, Arup

Ariene is a Chartered Engineer and a Chartered Water and Environmental Manager, and is Associate in Arup’s Water Advisory team. She has worked with and advised water solution providers in taking products to market and is currently leading Arup’s role as Network Integrator for the Hydro Nation Water Innovation Service for the next 3 years, providing support and opportunities for innovative businesses in Scotland to create and grow sustainable solutions for the global water and wastewater sector. The innovation service is designed to foster innovation, supporting Scotland’s vision to become a Hydro Nation.

David Bent
Strategy Adviser, Social Entrepreneur

David is passionate about playing his part in the generation that enacts a sustainable footing. Until 2016, David worked at Forum for the Future, an independent non-profit working globally to solve complex sustainability challenges, most recently as Director of Sustainable Business. He advised dozens of companies in the UK, USA and India on how they can be more successful by creating a sustainable future. Often that involved using futures techniques, such as scenario planning. He remains a contributing Affiliate. Now independent, David is working at the frontier of shaping economic transformation, including: the Institute for Global Prosperity at UCL, with a global programme on the practice of economic transformation for global prosperity, developing a ‘Gigatonne Lab’ to accelerate a rapid transition to a zero carbon world; as a Practice Advisor at the International Futures Forum, fostering practical hope and wise initiative in challenging circumstances; and, as Chair of EIRS Foundation, helping responsible investors make a difference.

Christian Inglis
Senior Innovation Lead – Growth and Scale Clean Growth and Infrastructure, Innovate UK

Christian leads our growth and scale programme for clean growth and infrastructure at Innovate UK and focuses on connecting our innovator community to follow on investment activities. This is delivered through a number of activities including investment showcases, entrepreneur missions and alternative finance with a focus on supporting clean growth businesses to enable them to grow and scale more effectively. Christian has been at Innovate UK since 2007 joining to develop and deliver the nanoscale technologies and advanced materials strategies utilising his materials science background. In 2012 Christian moved into the energy team to develop and lead its energy systems programme, before taking his current role in December 2016. His industry background focusses around research and business development with Rio Tinto Minerals predominantly in the materials sector. Christian holds a BEng in Materials Science and Engineering from the University of Surrey before he moved directly into industry with experience of working at Johnson Matthey as part of his studies.

Karen Lawrence
Director, KML Interim Ltd.

Karen is Director of the consultancy KML Interim Ltd. Karen has spent the past 30 years in several diverse sectors and a mixture of blue chip and SME organisations. Working for the Energy Saving Trust for over a decade provided Karen with broad sustainability knowledge, which was further strengthened in a role as a trustee and latterly Vice Chair of the community energy charity Pure Leapfrog. Karen has also recently provided key services for Grant Thornton to support the growth of small businesses in all sectors, with a particular interest in how smaller, ethically-driven entrepreneurial businesses can help drive a vibrant economy in London and deliver profits with purpose.

Susannah McClintock
Investment Director, Sustainable Ventures

At Sustainable Ventures Susannah leads investment and accelerator activities for early-stage startups. Susannah holds more than 20 years’ experience in startup development and finance. Prior to Sustainable Ventures, Susannah held cleantech finance and operations roles at Tamar Energy, where she worked on anaerobic digestion projects, and Carbon Trust Enterprises, where she successfully created a low carbon property fund. Susannah has also worked as a venture capitalist for Impax Asset Management, a private equity fund dedicated to changing resource economics, and as an International Manager at HSBC Bank Plc. Susannah is passionate about business models which aim to maximise the use of funds and resources to create sustainable enterprises that achieve specific environmental or social outcome, she holds Board and Trustee positions for both startups and charities focussed on environmental and social outcomes.

Riken Shah
Head of Commercial Innovation, Transport for London

Riken is accountable for TFL’s engagement with market innovators that includes startups, small and medium-sized enterprises, academics, R&D institutes, accelerators, venture capitalists and large corporates. By shaping this ecosystem of innovative companies and institutes, TFL’s multidisciplinary Commercial Innovation function which launched in 2017 – set up by Riken – to define clear problem statements, engage with the most innovative companies from across the world, curate and incubate the best ideas and then scale them to support the delivery of the Mayor’s Transport Strategy. A wide range of challenges have resulted in innovators solving some of London’s challenges in areas such as promoting active travel, delivering more homes and reducing the adverse impact of roadworks using a innovative procurement techniques. Riken has also overseen TFL’s first corporate programme with Bosch as an 18 month pilot which entailed TFL sharing key problem statements and data for Bosch to develop innovative prototypes and solutions. Riken was previously responsible for TFL’s world leading open data strategy and set up a digital and data partnerships function. As a result of TFL’s open data, there are nearly 700 apps used by 42% of Londoners with over 14,000 registered users, mainly developers. This also resulted in shaping innovative partnerships with leading platforms including Apple, Google, Waze and Twitter aligned to the city’s goals. A recent study illustrated the overall value of open data to London to be worth £130m per annum. Riken also is a member of the Smart London Board which is charged helping the Mayor shape his vision and strategy for London’s smart city agenda and investment in data infrastructure.

Brittany Harris
CEO, Qualis Flow

Brittany has spent 7 years in Civil Engineering and is a recognised thought leader, in building sustainable futures, within the Institution of Civil Engineers. She has experience in managing complex teams on challenging projects. She and Jade co-founded an international NGO in 2016 (WASHable International) which is now being run by their Canadian cofounders.
opportunities with the potential for attractive returns. This unique specialization, alongside the knowledge for more efficient and sustainable use of global resources. It is to influence the business world to drive increasingly more focus, resources and attention to business that generates revenues AND has positive environmental and social impact, encouraging the next generations of entrepreneurs and business professionals to build companies addressing world’s most pressing issues. Kevin holds an MBA from INSEAD.

Charlotte Breen
Head, Green Economy & Innovation, C40 Cities

As Head, Green Economy & Innovation, Charlotte works with C40 cities, the private sector, academics and international organisations to progress the debate on how cities can lead the transition to sustainable economic development and engage the private sector to implement innovative climate action. The C40 Cities Climate Leadership Group connects 90 of the world’s greatest cities, representing more than 650 million people and one quarter of the global economy. Prior to C40, Charlotte spent seven years in the private sector, as the Sustainability Manager in the international team of Grosvenor Group, a real estate investor and developer. Charlotte’s role was to accelerate innovation and responsible business practices across the 17 offices, and in turn 60 cities. This included supporting venture capital investments into cleantech startups. In 2014, Charlotte coauthored a research paper on ‘Resilient Cities’, ranking 50 global cities by environmental and social resilience, published in the Financial Times. Charlotte is a Chartered Environmentalist, Young Leader member of the Urban Land Institute and has been a guest lecturer at Henley Business School, University of Reading for five consecutive years. Charlotte holds a degree from Cambridge University in Land Economy, a multidisciplinary degree combining economics, policy and law, applied in particular, to the built environment and sustainable development in cities.

Cam Ross
Director, Green Angel Syndicate

Cam manages Technical Due Diligence for Green Angel Syndicate, a network of smart investors who are committed to the transition to a greener economy. We support early stage technology companies developing products and solutions for a more efficient and sustainable use of global resources. This unique specialization, alongside the knowledge and experience of our members, creates exciting opportunities with the potential for attractive returns.

Alexander Starchenko
Managing Partner, First Imagine! Ventures

Alexander is a seasoned professional in the energy industry and investment with over 25 years of experience. His past roles include participation in the Russian power sector reform, top-management positions in an energy industry association and a large industrial group. After realising the disruption potential which is brought by the new technologies in the power sector, Alexander and his partners decided to start a venture company to invest into the companies driving the Energy transition.

Nigel Walker
Head of Innovation Lending, Innovate UK

Nigel is part of the team delivering Innovate UK’s £50m innovation loans pilot programme. He is a director and member of the credit committee of Innovate UK Loans Ltd. Prior to this role, he headed the organisation’s support for innovative SMEs in gaining access to private sector capital to accelerate the journey from concept to commercialisation. Nigel has a background in the financial services industry, having qualified as a chartered accountant with Ernst & Whinney and spent over 10 years at each of Deutsche Bank and GE Capital. At GE, he established the European ‘Access GE’ programme, advising, coaching and mentoring management teams of businesses owned by private equity firms on operational excellence, acquisition integration, strategy development and leadership.

Will Hill
Chief Story Officer, Stronger Stories

Before co-founding Stronger Stories, to share storytelling power with good ideas, Will provided marketing consultancy to companies like Coca-Cola (where he was the UK representative on their global creative panel), Accenture, Diageo, DHL, Unilever and EDF Energy. He’s won numerous industry awards including PR Week’s Campaign of the Year and the Marketing Society’s Best Marketing Communications Award and spoken at several events including Sustainable Brands Copenhagen ’17 and Innovate 2017. Running Clean + Cool, the UK’s communications award, Will provided marketing consultancy to companies addressing world’s most pressing issues, helping them secure over £372m in private investment.

Lucette Demets
Head of Urban, London & Partners

As Head of Urban at London & Partners – the Mayor of London’s official promotional agency, Lucette leads the development of a company-wide strategy and programme for the urban sector, covering the ‘smart’ agenda and wider urban development/regeneration. Prior to this, Lucette was International Partnerships Manager for Future Cities Catapult, and from 2014 to 2017, Project Director for Global Cities Business Alliance – a unique forum where businesses and cities came together to address urban challenges and improve cities’ performance in the global economy.

Carolyn Hicks
Co-founder, Brill Power

Carolyn Hicks is the co-founder of Brill Power, a battery intelligence startup that uses electronics to improve performance and reduce battery waste. Her role as the Head of Finance and Operations and member of the Board of Directors involves her in all aspects of the entrepreneurial journey. She holds degrees in engineering and business, and before becoming an entrepreneur, worked in infrastructure engineering, economics, and finance in both Canada and the UK.

Prof. Richard Templer
Hofmann Professor of Chemistry at Imperial College London and the Director for Innovation at the Grantham Institute: Climate Change & Environment

Richard Templer is the Hofmann Professor of Chemistry at Imperial College London and the Director for Innovation at the Grantham Institute: Climate Change & Environment. He has spent the last decade supporting students, innovators and entrepreneurs address the challenges and opportunities of climate change through the creation of cleantech businesses. In doing this he co-founded the Climate-KIC in 2010 and more recently he has been working on a plan to create a cleantech innovation cluster in London.

Heather Hodgins
Better Futures Project Officer, Sustainable Development Team (Environment), Greater London Authority

Heather has led several projects to fund and develop clean technologies. She currently manages the Mayor of London’s flagship cleantech business support project Better Futures, which supports cleantech innovators in London to develop products and accelerate the growth of their business. Having worked in both public and private sectors, Heather has a wealth of expertise in bridging the challenges and opportunities between academia, public authorities and private sector innovators.

Cassie Sutherland
Policy Manager, Climate Change Adaptation and Water, Greater London Authority

Cassie Sutherland is the Policy Manager for Climate Change Adaptation and Water at the Greater London Authority, working to increase London’s resilience to severe weather and longer-term climate change impacts including flooding, heat risk and drought. She was the project manager for the development of the London Environment Strategy, the first fully integrated environment strategy for London that will combine policy and action to deliver multiple benefits for Londoners. Previous to the GLA Cassie worked at Ofgem, Britain’s energy regulator, as the policy and technical manager for household energy efficiency schemes.
Speakers

Paul Rous
AgriTech investor, venture builder

Paul Rous has over twelve years’ experience as an entrepreneur, investor and active supporter of early-stage businesses. His professional background spans the military, asset management, technology and agriculture. He has worked with Goldman Sachs, and co-founded Fuel Ventures, one of London’s first active seed venture capital funds focusing on early stage digital businesses, which he exited in 2016. Having spent 6 years diversifying the 4000 acre arable family farm in Suffolk, he returned to London and has been involved in commercialising academic IP with Imperial Innovations, co-founded another venture fund and helped both corporates and academic institutions build innovation businesses focusing on agriTech. Paul has represented farmers and rural businesses at regional and national level and is passionate about agriTech and innovation. He is currently completing an Executive MBA at Imperial College.

Francesca Lavey
Programme Director, Mobility, Plexal

Francesca is a programme director at Plexal, specifically focused on the future of mobility, working with clients to explore everything from cities, road networks to infrastructure and future connectivity. Her clients have included TRL and Innovate UK. Before joining Plexal, Francesca worked at EY, her roles ranged from working in the Ventures team to reinvent the consulting business, working closely with clients to help them identify how to respond to the opportunities and threats created by disruptive and emerging technologies and working with technology startups, scaleups and innovators.

Nicola McCheyne
Head of Ideas Lab and Commercial Director of Home Energy Management Ventures, Centrica Innovations

Nicola is responsible for internal venture creation in Centrica Innovations – a £100m investment fund targeted at changing the way we live, work and move through energy. Alongside this role, Nicola is the Commercial Director of Home Energy Management Ventures – a Centrica business created to transform the way energy is generated and managed in the home. In 2018, Nicola incubated Centrica Mobility Ventures, a business providing energy solutions for the electrification of the transport sector. Prior to her time at Centrica Nicola spent 7 years in a sustainable energy social enterprise and launched two new business opportunities through social accelerator programmes. Nicola joined Centrica three years ago, where she was responsible for designing, developing and securing investment in the £19m Cornwall Local Energy Systems demonstration project, and over the course of her career, has raised nearly £50m for innovation projects and business investment. Further to this, Nicola is leading efforts to establish a venture capital fund for women in cleantech, has a B.Eng (Hons) in Mechanical Engineering with Business, an MSc in Sustainable Development and is a student at Cambridge Judge Business School studying for an MSt in Entrepreneurship. In her spare time, Nicola is a long distance sea swimmer and in 2017 successfully completed a solo crossing of the English Channel.

Charlotte Morton
Chief Executive, We Are Orchard

A practising lawyer for 10 years, Charlotte Morton studied for her MBA at London Business School before setting up a car club business. Asked to establish the business side of ADMA in 2009, she saw the potential of an industry that can deliver huge potential and value to the UK. Given the even bigger global potential, which must be achieved if the Paris Climate Change targets and UN Sustainable Development Goals are to be met, Charlotte played a pivotal role in establishing the World Biogas Association in 2016 to promote and increase the rate of uptake of biogas globally. Charlotte is also on the board of Green Gas Trading Ltd, which runs the Biomethane Certification Scheme.

Matthew Rhodes
Chair, Energy Capital West Midlands

Matthew Rhodes is Chair of Energy Capital West Midlands. Energy Capital is a public-private partnership responsible to the Mayor of the West Midlands for delivering the West Midlands Regional Energy Strategy. Matthew’s career spans energy and manufacturing. From 2003 to 2017 he founded and led an engineering and building physics consultancy specialising in low carbon innovation, developing and delivering collaborative projects at the leading edge of the energy system transition, particularly in housing and community contexts. He’s a Board member of the Greater Birmingham and Solihull local Enterprise Partnership and the Sustainable Housing Action Partnership.

Andy Kerr
Director UK & Ireland, Climate KIC

Dr Andy Kerr joined EIT Climate-KIC in January 2019 as Director for its UK and Ireland activities. He focuses on supporting whole systems innovation – coordinated interventions on different levers of change, from early stage business support to regulatory innovation – to help city regions deliver resilient and zero carbon goals. Previously, he was founding Director of the Edinburgh Centre for Carbon Innovation (ECCI) at the University of Edinburgh, where he built Scotland’s leading climate and low carbon innovation centre, bringing together public policy, city-region transformation and early stage business support. Prior to ECCI, Andy worked in the private sector, helping develop emerging environmental and carbon markets, and advising organisations on how to respond to the climate imperative.

Jessica Brodrick
Business Development Officer
London Waste and Recycling Board (LWARB)

Jessica is currently managing LWARB’s Circular London Accelerator, helping circular economy startups to scale their businesses. LWARB is committed to ensuring the right ecosystem is in place to allow circular economy innovators to flourish, and since joining the organisation three years ago, Jessica has supported LWARB’s circular economy investment programme. An experienced project management professional, Jessica has previously managed several multi-million pound procurement projects in the waste industry, both within the public and private sector, where her interest in the circular economy was first formed.

Dr Florence Gschwend
CEO and Co-founder, Chrysalix Technologies

Dr Florence Gschwend is a co-founder and CEO of Chrysalix Technologies, an Imperial College spin-out company commercialising the BioFlex process, a circular bio-economy technology. A chemist by training, she co-founded Chrysalix after completing her PhD in Chemical Engineering. The BioFlex process enables the use of unwanted waste wood for the production of renewable chemicals, material and fuels. Dr Gschwend has won several awards in relation to it and was named by Forbes 30under30 as one of Europe’s most promising game changers under 30 in Science and Healthcare.

Agnes Czako
Co-Founder and Managing Director, AirEx

Agnes has been a Lead Assessor of an energy advisory organisation since 2011 where she led the delivery of 30,000 energy assessment across UK social housing sector. Agnes has 8 years of building physics expertise and is Passivhaus certified by the Darmstadt Institute. She has led numerous disruptive innovation project with the aim of mitigating fuel poverty, reducing carbon footprint and creating scalable business models. She is the Co-Founder and Managing Director of a London-based technology startup, AirEx, an award-winning, patent pending smart home technology that uses IoT to reduce heat demand whilst managing indoor air quality in homes. Agnes holds a masters in Interdisciplinary Design for the Built Environment from the University of Cambridge. She won the “Women in Innovation” Innovate UK national award in 2019.
Hotly anticipated, the Solutions Garden is new for 2019. A ‘quick fire’ pitching area for up to 50 technologies, still reviewed by our judges and deemed worthy of the chance to pitch their idea. A great chance to preview early stage technology ideas and spot potential for support and investment. Read more about the technologies selected to pitch in 2019 below.

**New for 2019!**

Once a presenter finishes their pitch and moves away from the pitching area they can be found on the floor throughout the rest of the day on a plinth in the main hall that matches their number in the programme.

11:00  
**Circular London Accelerator Introduction**  
Jessica Brodrick, Business Development Officer, LWARB

11:07  
P31 Biohm  
Biohm is a research and development led company that aims to revolutionise the construction industry by allowing nature to lead innovation. Biohm have developed a range of 100% natural materials including Mycelium (mushroom-based) Building Insulation, which consumes waste as it grows and Orb (Organic Refuse Biocompound), which combines agricultural and food waste with an organic binder to create a sheet material for use in building and interior architecture. The company is currently working on developing a Plant Based Concrete, future living materials and aims to expand their range of Mycelium construction products. All of Biohm’s materials will eventually be combined to form an interlocking construction system known as Triagomy. [www.biohm.co.uk](http://www.biohm.co.uk)

11:14  
P32 Chip[s] Board  
Chip[s] Board is a biomaterial innovation company that aims to find value where others see waste, utilising by-products from food manufacturing. Currently focusing on potato waste, the team have managed to produce a number of proof-of-concept materials which include a particulate composite board and a bioplastic. Whilst the uses for their materials are countless, Chip[s] Board are actively seeking industrial partnerships to ensure their use within fast moving industries such as visual merchandising, exhibit design, interior design and fashion. These materials whilst still in R&D have begun to be used by selected collaborators including sustainable fashion designers and eyewear manufacturers. [www.chipsboard.com](http://www.chipsboard.com)

11:21  
P33 GlobalHom  
GlobalHom brings a new product design for manufacturing approach to home building. Thanks to the product design background of its founders, the approach focuses on user experience and allows for flexibility, sustainability, and ease of upgrade in its connected smart home approach to future living. The modular design allows for fast and efficient on-site assembly, while the plug-and-play modular interior design solution allows for the home to be reconfigured with minimal disruption, at lower cost, with zero wasted material to reflect the evolving needs of the occupier. Every component is tagged and tracked from manufacture and using an open source approach supports an online marketplace where components can be traded as part of a circular economy. [www.globalhom.com](http://www.globalhom.com)

11:28  
P34 QFlow  
Sustainable construction demands better management of social and environmental impact. To achieve this, reliable, efficient tools are needed to make sense of large volumes of data across the range of related fields. Qflow is a cloud-based platform that enables construction projects to manage their environmental risk and stay compliant with environmental standards. Qflow brings together machine learning and the Internet of things to holistically capture and analyse environmental data, making it easier to identify and manage risk in construction projects. This drives productivity and cost savings while enabling a positive impact on the built environment. [http://qualisflow.com](http://qualisflow.com)

11:35  
P35 Sustainability Cloud  
Concrete is the second most used material in the world behind water. 10 billion tonnes are produced every year with up to 500 million tonnes wasted annually. This comes at a cost of around USD$20 billion and 84 million tonnes of carbon. The Sustainability Cloud platform offers real time on demand concrete that would normally be destined for landfill. When a delivery has surplus (waste) concrete due to onsite issues the key data is uploaded onto the app and matched to a customer. This reduces waste, lowers disposal cost and provides new revenue for the supplier, while offering a low cost concrete option for customers. [https://sustainabilitycloud.co](https://sustainabilitycloud.co)

11:40  
End of Circular London Accelerator
11:42 Innovate UK Introduction
Christian Inglis, Senior Innovation Lead – Growth and Scale Clean Growth and Infrastructure, Innovate UK

11:49 P36 Aeristech Limited
Aeristech has invented a variable speed electric motor technology, using its patented technology - Aeristech Control Technology “ACT”. An ACT motor is more power-dense than any other and coupled to a compressor wheel it spins at twice the speed of any competing Centrifugal Compressor. The Aeristech compressor boosts Internal combustion and hydrogen fuel cell engines at pressures, and in quantities previously believed impossible. Due to ACT’s higher speed and therefore pressure, the world’s most extreme engine downsizing, dramatically reducing emissions, has been made possible.

11:56 P37 ClearAirTech
Our technology is aimed at IC engines (Retrofit & OEM) it utilises the positive and negative wave energy in the exhaust manifold to create secondary fuels which are utilised during a period of exhaust gas reversion thereby obtaining more energy from the same amount of fuel, improving engine efficiency.

12:03 P38 Gravitricity
Gravitricity Ltd is developing a unique mechanical grid-scale energy storage technology using very heavy weights in deep vertical shafts and is supported by Dutch heavy-lift specialists Huisman Equipment BV. We’re raising £250,000 from EIS investors in 2019, alongside investment from our EPC partner and grant from Innovate UK.

12:10 P39 GreenSpur Renewables Limited
GreenSpur Renewables has invented a new generator for the wind turbine market. The generator is unique as it uses ferrite magnets (£1/kg) instead of scarce and expensive rare earth magnets (£45/kg). It can be scaled to multi-MW levels and has been identified as a game-changer by the ORE Catapult.

12:17 P40 GridDuck
GridDuck is a low-cost energy management system using wireless hardware, an online dashboard and API. We are offer consumption monitoring and analysis, remote control and automation. Utilising IoT technology, we are a wireless, cloud-based alternative to a traditional Building Energy Management System. Certified for cybersecurity (CyberEssentials), ISO270001 in preparation.

12:24 P41 Minibems
Minibems has developed an end-to-end IoT solution that delivers performance improvements in buildings using heat networks. Its controller and software enable building managers to monitor and control the heating system in real-time, optimising the performance of the whole network whilst delivering the heating and hot water required by individual tenants.

12:31 P42 Ventive
Ventive designs and manufactures the most innovative natural ventilation systems in the UK. Learn how we help architects and consultants build schools that reduce carbon emissions and running costs, simplifying the task of compliance with Building Regulations.

12:38 P43 Wind Farm Analytics Ltd
Converging beam LIDAR is an innovative patent-granted laser wind measurement technology for increasing the output of the global wind industry by around 10% or £6 million per large turbine at a cost of £100k. This device provides the big data to allow ethical neural network artificial intelligence of self-learning turbines.

12:43 End of Innovate UK Accelerator

12:45 P44 City Farm Systems
CFS’ CloudGro® technologies make urban farming economically viable. Patents cover the ability to install modular automated greenhouses on lightweight rooftops as used by retailers. Growing short cycle crops to order at the point of need offers game changing opportunities to reduce waste and costs while delivering better quality produce.

12:52 P45 CryptoCycle Limited
A new approach to deposit return schemes, using blockchain. It works by assigning an individual code to every drinks container and tracking them from manufacture to disposal, enabling consumers to get their deposit returned while eliminating fraud, delivering higher recycling rates and huge cost reductions.

12:59 P46 EMSOL
EMSOL is a leading innovator to solve transport pollution in our cities. Our platform is a real-time monitoring and analytics SaaS engine that is connected to a network of vehicle tracking, air and noise pollution sensors. We enable vehicle operators to provide compliance evidence for the growing regulation around local noise and air quality planning conditions.

13:06 P47 Energy International Systems Ltd
VSI technology. A Super thermal insulating barrier, from -150°C to +650°C with exceptionally long useful life. A Domestic House energy system providing all the electrical, cooling and heating energy it needs. Mobile and static refrigeration, ovens, furnaces, etc, etc. An integral part of a high temperature thermal storage device, etc.

13:13 P48 EV2O
Providing areas without grid-supplied electricity with 100% renewable off-grid power for charging electric vehicles and other infrastructure, supplied from a dispatchable proprietary system of patented hydroelectric technology, energy storage, and additional renewable generation. This technology will fill gaps in the EV charging infrastructure network that cannot otherwise be filled.

www.cleantechninnovate.com
13:20  **P49 ExoWave Aps**
ExoWave has the solution for converting the ocean energy into pressurised and flowing seawater, that can be converted in electrical energy, fresh water and also used for ocean cleaning, land reclamation, ocean oxygenation, industrial cooling, fish farms.

13:27  **P50 FocalSun**
FocalSun has developed the world’s first lightweight rooftop concentrated solar technology; that can produce more than four times more energy than standard solar panels. FocalSun rooftop concentrators can achieve 350-degree temperature, providing hot water and central heating and when combined with chillers, can provide air conditioning and refrigeration.

13:34  **P51 RheEnergise**
RheEnergise has developed a High-Technology Fluid with a density of 2.5 times that of water. This means 2.5 times the power density and 2.5 times the energy density. Projects are much smaller and less expensive than competing technologies. It provides for larger market, 300% more sites in Europe alone. It also addresses 75% of the world with insufficient rainfall for pumped hydro, which becomes a new market for the RheEnergise pumped energy storage solution.

13:41  **P52 SEAB Power Ltd (t/a SEAB Energy)**
First to market with a patented, highly mobile, modular power plant based on anaerobic digestion that converts bio waste into energy, while recovering the water and fertiliser value of the waste The systems can be integrated into a building to offer an urban solution or be free standing outside.

13:48  **P53 The Thames Deckway**
The Thames Deckway is a state-of-the-art, traffic-free, floating bicycle and pedestrian pathway designed for London and other global cities. The project is capable of generating renewable energy (solar, hydro, wind, kinetic) and will give users such as commuters, families and tourists the unique experience of walking and cycling on water.

13:55  **P54 uFraction8**
uFraction8 develops microfluidics-based filtration systems to help biomanufacturers, who use biological cells (yeast, bacteria, micro-algae, mammalian cells) in their production, to recover (harvest, dewater and concentrate) biomass with sustainable and scalable system outcompeting conventional filters and centrifuges.
Cleantech Innovate 2019
Investing in Cleantech for Game-Changing Outcomes | 30th April 2019, London
The Royal Horticultural Halls | The Lindley Hall | Elverton St | London | SW1P 2PB
Discover game-changing technologies
Meet the innovators
Invest in their solutions
Make a positive impact on climate change