



NURTURING THE  
PRECIOUS SEEDS  
OF GREEN TECH

Al Baird asks,  
"Why aren't we  
seeing more Green  
Tech scale-ups?"

CARBON  
CAPTURE  
COMMITMENT  
ONE YEAR ON

What evidence is there that  
the newly elected Labour  
government will continue  
to support the 2023 Spring  
Budget CCS pledge?

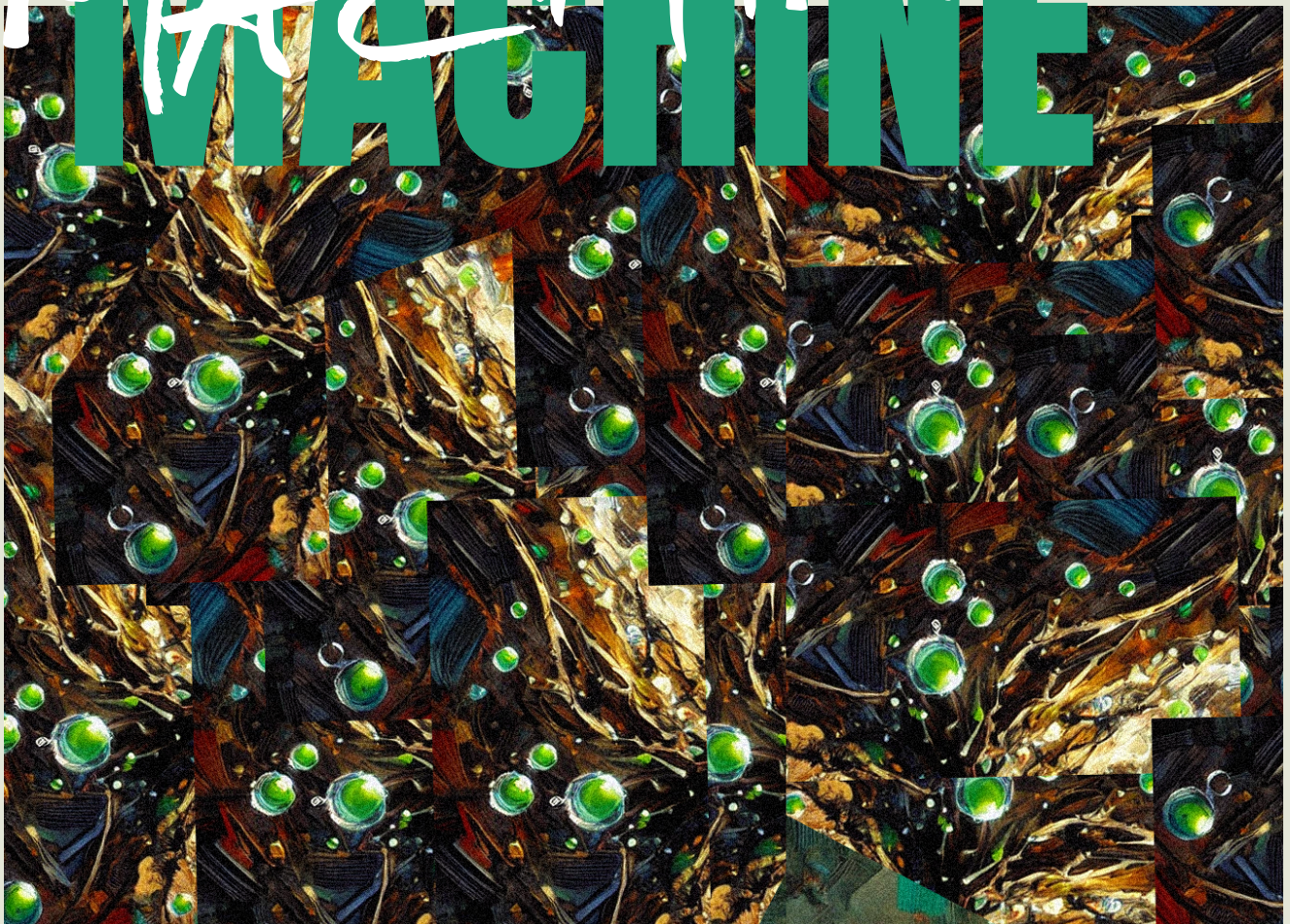
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for GreenTech Innovators

07/2024

# GREEN

# MACHINE



## Q&A

THE IMPORTANCE  
OF CASHFLOW

EFM Associate  
Edward Leek  
on managing  
and optimising  
cashflow.

## KINETIC POWER MACHINES

Kinetic Power Machines (KPM)  
create a range of problem-solving  
solutions across several project  
categories such as clean energy  
and electric vehicle technology

Dear Innovators,

As we stand at the forefront of technological advancement, the greentech sector holds unparalleled potential to catalyse positive environmental change. The journey toward sustainability is both an opportunity and an obligation to ensure that our innovations pave the way for a healthier planet.

The COVID-19 pandemic was a stark reminder of how swiftly we can come together to tackle grand challenges. In the UK, manufacturers, innovators, and various public and private sector organisations demonstrated extraordinary collaboration and agility in addressing time-critical problems. Companies swiftly pivoted operations to produce essential medical supplies, while innovators developed solutions ranging from tracking apps to treatment technologies, all in record time.

This same spirit of urgency and collaboration is now required in our fight against environmental degradation. The lessons learned from the pandemic—swift action, open collaboration, and shared expertise—should now be directed towards our planet's most pressing issues: climate change, pollution, and biodiversity loss.

We have the tools and the knowledge; what we need now is collective will. By fostering partnerships across sectors and disciplines, we can develop innovative solutions that not only mitigate our environmental impact but also enhance our quality of life. Whether it's advancing renewable energy technologies, creating smarter waste management systems, or innovating in sustainable agriculture, every step we take is crucial.

This is an invitation to each of you: Apply the lessons from our recent past to our present environmental challenges. Let's work together with the same speed and intensity to ensure a greener, more sustainable future for all.

Together, we can transform challenges into opportunities—for our businesses, our communities, and our planet.

Warm regards,

Richard Spears  
Editor

GREEN  
MACHINE



# CONTENTS

## NURTURING THE PRECIOUS SEEDS OF GREEN TECH PAGE 04

Why aren't we seeing more Green Tech scale-ups? That's the question asked and explored in detail by Al Baird of Wanted Studio.

## THE IMPORTANCE OF CASHFLOW: Q&A WITH EFM ASSOCIATE EDWARD LEEK PAGE 12

Edward Leek is an internationally experienced Finance Director and Chartered Accountant with an established track record of working with founders and helping steer their businesses through growth.

## THE CARBON CAPTURE COMMITMENT ONE YEAR ON PAGE 16

The traditional paradigms of investment are undergoing a profound transformation.

## KINETIC POWER MACHINES X PP PLUS PAGE 18

Kinetic Power Machines (KPM) create a range of problem-solving solutions across several project categories such as clean energy and electric vehicle technology

## PP PLUS PARTNER DIRECTORY PAGE 26

Hundreds of services and solutions to help you rise through seed investment to the flourishing market debut of your green technology.



PAGE 22  
PARTNER PROFILE

 **BRANDAUER**



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# Nurturing The Precious Seeds of Green Tech

## Why aren't we seeing more Green Tech scale-ups?

The dormant human lifeline that is secured deep in the Svalbard Global Seed Vault in Norway is a warning to us all about the need for continuous innovation. The Seed Vault provides long-term storage security for the world's food supply against the loss of seeds due to man-made or natural disasters. It's a last resort, so let's hope we never use it.

As the climate clock is ticking, we put our faith in science. But if Green Tech is the medicine, then what are we waiting for? Like the space race did in the 70s, Green Tech could also be the answer to low productivity and growth. But only if we break through barriers that are holding back investment.

## Growing pains

Despite the urgent need, the UK is not an attractive environment to some investors. We take more time to produce less than our rivals, leading to low growth and productivity. The government expects the public sector to do the heavy lifting in terms of investment, which isn't happening at the frequency that our climate targets need. The Green Tech markets are complex, have not fully developed, and will take time to do so. There is still debate among investors who question if you can have profit and purpose, with many delaying investments due to green premiums, slow speed to market, and scalability.

Against this backdrop, Green Tech founders still contend with several challenges: bureaucratic hurdles, navigating regulatory landscapes, securing funding for new projects, managing a rapidly growing company, and staying ahead of technological advancements.



**Al Baird**

Al is founder of Wanted Studio, experienced in brand, employer brand, communications and culture, connecting the often misaligned business functions of HR and Marketing.



## Wanted Studio

Empowering leaders by clarifying brand, fostering investor confidence, and uniting business functions.

# GREEN SHOOTS

However, investment in 2024 is ramping up, with investment in UK Green Tech at the end of Q1 valued at £408m ([Source: Beauhurst](#)). While this is not nearly as much as the £9bn in 2021, it makes us number three in the world for capital investment, way behind the US but with more deals than any other European country ([Source: Pitchbook](#)).

The Breakthrough Energy Summit in London recently showcased companies addressing the five biggest challenges behind the planet's greenhouse gas emissions: manufacturing, electricity, agriculture, transportation, and buildings. Bill Gates described it in a recent post as "A portfolio of climate technologies that aren't just theoretical or promising anymore, but proven and ready for the market today."

Looking at the breakdown overall, investment in renewables vastly outstrips other technologies because the market is more mature, the technology is proven, and returns are being seen. But newer, radical technologies are still nascent and flying under the radar. While we are making progress, there are not enough market-ready Green Tech businesses to meet our emissions targets.

## The UK has the ingredients

When you look at the UK's strengths, there is a lot to be optimistic about. We have the financial clout of the City, world-renowned universities, technological prowess, a deep heritage of engineering and manufacturing, proximity to Europe, and good relations with the US. So, what are we missing?

Green Tech needs more support and investment to get ideas from lab to market without the risk of failure. Investors are seeking risk mitigation, so this is all about building confidence and belief through a bold approach.

## Global talent magnet

Our UK universities attract the international crème de la crème of student academic potential. They are magnets for talent. So, there is no brain drain at this early stage. That might come later as founders try to scale, hit the barriers, and take their fledgling businesses to the US due to better conditions for investors. We must do more to keep them here, but that's a discussion for another time.

Oxford and Cambridge University spinouts get the lion's share of VC investment in the UK. Their academic reputations allow them to attract the world's brightest minds and the boldest investors.

These exciting spinouts have a major advantage over many businesses, with the potential to build strong brands from the very inception, but only if they can prove to investors they are market-ready and backed by due diligence conducted by business experts outside campus.

## What's the big idea?

A brand is what someone says about you when you're not in the room. So, brand building is an activity that positions yourself in the minds of your intended audience. To build successful businesses, Green Tech founders must also capture the imagination. To do this, they must leverage their genius and embrace the power of storytelling.

Take 'First Light Fusion', a spinout from the University of Oxford. Inspired by nature, with the story of the pistol shrimp that sends shockwaves from its claw to knock out its prey. The resulting bubbles fascinated the founder Dr. Nick Hawker and led him to his revolutionary theory about harnessing nuclear fusion, and the company was born.

**“Our universities are a national strategic asset. We need to connect the City a lot better with universities, make capital flow better to founders who are coming out of universities, and make university culture more open to business. It's all on our doorstep.”**

Gerard Grech, Chief Executive,  
Founders of Cambridge,

'How Britain could become Silicon  
Valley' | The Sunday Times, March 10

**“In the UK alone, there are almost 11,500 wind turbines and more than 810,000 fully electric cars on the roads. Globally, there are currently 314,000 turbines and an additional one million are needed to meet our energy needs. But the mining and processing of rare-earth materials to build them emits over eight million tonnes of CO2 plus other greenhouse gases in addition to using lots of water and toxic chemicals - and this will naturally increase as more of us switch over to green technologies. Our mission is simple - to discover more sustainable materials which governments and companies can use to build green technologies, in a way that's commercially viable.”**

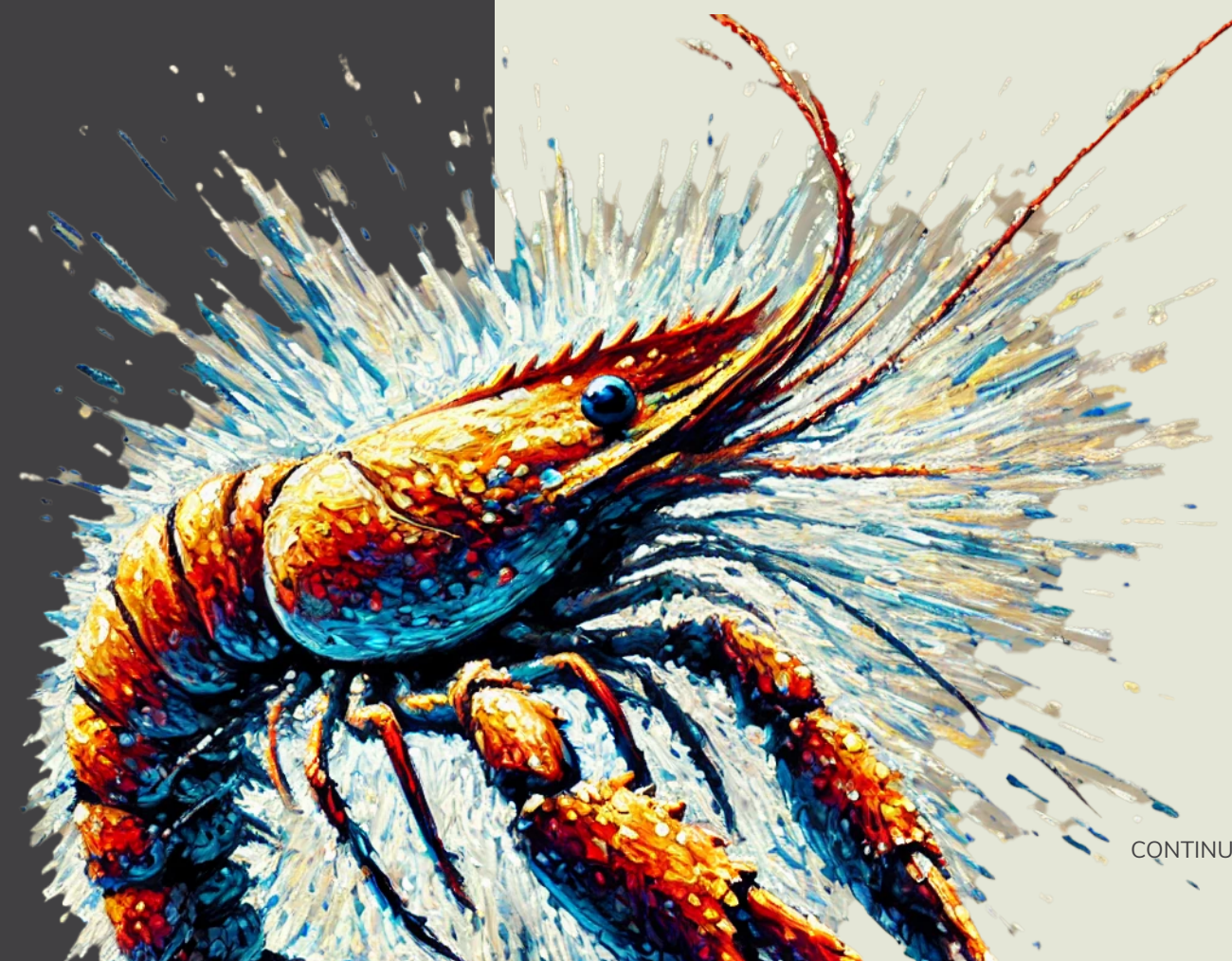
Jonathan Bean, CEO,  
Materials Nexus

**“It's huge claw makes a shockwave which stuns its prey, and it also produces bubbles. As the shockwave passes over the bubbles, it makes them collapse. When they collapse, you get these bright flashes of light. It's called shrimpoluminescence.”**

Dr. Nick Hawker,  
First Light Fusion

Another spinout, 'Materials Nexus' from the University of Cambridge, is using AI to accelerate research into new ground-breaking materials, reducing the time from decades to months. One notable discovery is the creation of a radical new magnet without rare-earth metals, which will have staggering implications for applications such as new electric motors.

**One thing is for sure, we are not short of ideas in the UK. Do not underestimate the power of stories to not only inspire invention but also to attract new audiences.**



### Fame means fortune

Most university spinouts operate in an academic bubble on campus and are relatively unknown beyond that. We need a better interface with the public (ultimately the end user) to raise awareness by promoting the ingenuity that is coming out of the UK. To do that, we need to make Green Tech brands household names by making them accessible and famous through building emotional connections. That's where storytelling comes in. Remember Brit Pop? The feel-good factor of the Olympics 2012? That led to the moniker Cool Britannia. It's all about brand positioning and creating appeal in the hearts and minds of a broader audience. Why can't we create UK Green Tech brands that are just as well-known as Dyson?

### Build a community

By telling a consistent and compelling story, you create a fan base of interested stakeholders who want your products to succeed. These communities are vital in growing your brand, so engaging with them frequently through events and social media is critical. This community becomes your lifeblood as you grow. These fans can become your future employees, business partners, investors and advocates. They can help to remove the barriers to your success, such as attracting young talent into the industry and potentially solving the tech skills gap in the long run.

Don't just focus your narrative on investors. Think about your workforce and the end user and make sure your narrative and messaging to them are consistent. You might have different touchpoints and messages tailored to different audiences but remember that the customer experience and employee experience are interconnected. When employees understand their role in the brand, they will deliver a better customer experience, which ultimately leads to growth.

### It's all about balance

A heavy technical narrative can risk alienating certain types of decision-makers, especially those swayed by human stories. So, when you're communicating, don't just push the functional aspects of your products.

Most business leaders in B2B are obsessed with product features and short-term sales. When your marketing is focused on the bottom of the funnel, you are talking to a very narrow audience.

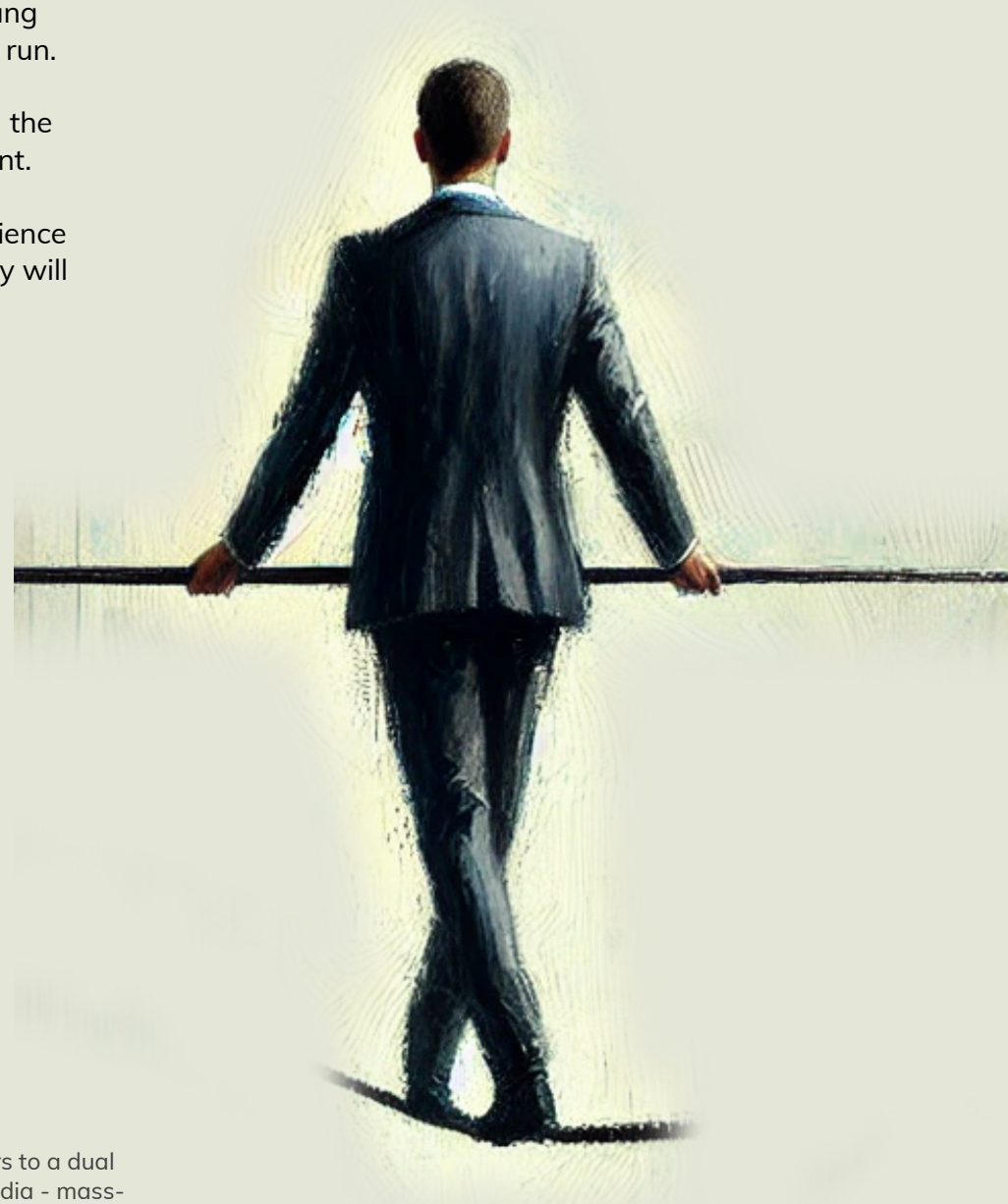
Potentially just 5% are ready to buy from you right now. To capture the other 95%, you need to build brand awareness at the top of the funnel using emotion. So, your story needs to work across the full funnel, using a 50:50 combination of emotional and rational messaging.

This is known as emotional branding, and it combines art and science, with a blend of storytelling, analytics backed up by data, and genuine customer understanding and empathy. It is essential for sectors such as Green Tech, where products and services benefit the lives of people.

#### The Long & Short of it

In marketing and branding, the long and short of it refers to a dual approach: Long-form, long-running campaigns, and media - mass-targeted and more emotional - works to build the brand with little or no call to 'sell' action. Shorter, multiple campaigns target specific segments for quicker activation, and almost always use a more rational message.

# Magic + Logic = business growth



Building any successful business is about getting the balance right between emotion and logic. Successful Silicon Valley tech founders such as Jobs and Gates managed to blend brilliant marketing with operational efficiency, which allowed them to scale exponentially. They had creative genius and money genius. This is supported by brand guru, Marty Neumeier, when he says that every successful brand has a combination of what he refers to as 'Magic + Logic.'

Like the big tech brands, it pays to think about your business model as a platform rather than a product. This allows the business to scale, with more room for market segments and products which future-proofs the business.

Investors are looking to mitigate risk and get the best risk-return profile possible. So, the business model needs to be stress-tested from all angles, which is where an expert support network comes in.

Getting a holistic left + right brain assessment with expert partners mitigates risk and builds confidence with investors.

How many times have you heard Steven Bartlett on 'Dragons Den' criticising the strength of the brand execution? Then on the other side of the room, you have Deborah Meaden scrutinising the numbers.

Your brand and your business model are inextricably linked and should be perceived as two sides of the same coin. Therefore, branding should be high on any business agenda, given that it is fundamental to a robust, long-term business strategy.

### Bringing together diverse minds mitigates risk

The green wave is inevitable, but we need to do more to remove the scale blockers by ensuring that businesses are embracing both creativity and logic.

On one side, it's about being inventive. Creating exciting new brands that become famous, are accessible, and get the support of a wider community. On the other side, it's about being rigorous. Bringing diverse experts together to mitigate the risk of failure that will give VCs the confidence to invest.

It's in all our interests to make sure these ground-breaking seeds of Green Tech businesses are given the best chance of success. By bringing the two hemispheres together, made up of the brilliant minds of founders, businesses, universities, lawyers, bankers, investors, and manufacturers, we will build confidence in market-ready brands that remove the barriers to bolder investment ■

# GREEN WAVE

## A strong brand removes barriers

■ **Securing Funding for New Projects:** While you have great ideas, attracting investors who share your vision can be challenging. That's where strong brand positioning and a narrative that appeals to potential investors can really help.

■ **Managing Rapid Growth:** As your company expands, maintaining a strong and consistent brand identity becomes more complex. Ensure that your brand message remains clear and cohesive across all segments and channels.

■ **Standing Out in a Competitive Market:** The Green Tech industry is only going to get increasingly crowded. You need to differentiate yourselves from competitors with a compelling brand that highlights your unique value proposition.

■ **Maintaining Company Culture:** With rapid growth, preserving your company's core values and culture is essential. Your brand needs to reflect and reinforce these values both internally and externally.

## The blueprint for a Green Tech brand

■ **Showcase Your Genius Credentials:** Create compelling reports, infographics, and articles that highlight your adherence to regulations and sustainability credentials. Well-designed, informative content can make complex regulatory information more accessible and engaging to our stakeholders. It also helps in building trust and credibility with our audience.

■ **A compelling brand can attract investors:** Craft a brand positioning and narrative that resonates with investors, showcasing your unique value and vision for a sustainable future. A strong, compelling brand narrative can strike a chord with potential investors. You'll need to articulate your mission, vision, and the impact of our innovations in a way that resonates with their values and investment criteria.

■ **Maintain Consistency During Growth:** Develop scalable brand architecture and playbooks, ensuring your brand remains strong and consistent as your company expands and your offerings become more complex. As you grow, a scalable brand architecture will help maintain consistency across all segments and touchpoints. An easy-to-use playbook with clear guidelines for stakeholders will ensure that everyone is aligned with the brand values and messaging. This consistency is crucial for reinforcing the brand identity internally and externally, with every stakeholder confidently telling the same story.

■ **Stand Out in the Market:** By benchmarking competitors, you identify gaps and opportunities to position yourselves distinctively. Highlighting the unique value propositions and dramatising your "unique genius" will help you stand out and attract your target audience more effectively.

■ **Engage Your Team:** The strongest brands are built from the inside out by involving employees in the branding process. This is key to maintaining the company culture as you grow. Effective internal communication ensures that your team understands their role in delivering a great customer experience and upholding your values. With them acting as ambassadors, this internal alignment can significantly enhance your external brand perception.

■ **Digital and Social Media Strategy:** A robust digital strategy is vital for reaching a broader audience with a well-designed website, engaging content, and a strong social media presence. These platforms can be used to highlight success stories, share industry news, and demonstrate thought leadership, all of which can attract and retain investor interest.



# The Importance of Cashflow: Q&A with EFM Associate Edward Leek



EFM Associate Edward Leek is an internationally experienced Finance Director and Chartered Accountant with an established track record of working with founders and helping steer their businesses through growth.

In this Q&A, Edward shares his thoughts on the importance of managing and optimising cashflow, and why this is an area in which businesses can particularly benefit from the expertise of a part-time, outsourced FD.

## Edward, if you had to sum up the importance of cashflow in one sentence, what would you say?

There's a good phrase that describes this: 'Revenue is vanity, profit is sanity, cash is reality.' It underscores the fact that generating cash is fundamental for the long-term survival and growth of the business. Founders may look towards a sale of the business, but businesses need cash to run day to day operations and fund investments.

## How do problems with cashflow arise, and what can companies do to prevent them?

Cashflow problems come in all shapes and sizes, but what's important in every case is to understand the root cause, and this is often one of the things EFM Associates like me help clients with.

Generally speaking, cashflow problems have one (or more) of these common causes: poor profitability, issues with working capital, capital investment requirements, and the overall longer term funding of the business, including investment by, and dividends to, the owner.

## MPA acquires EFM

In June of last year, PP Plus network partner MPA announced the acquisition of EFM Financial Management Limited as well as Outsource-FD Limited, both trading as EFM.

**"I am delighted to add the EFM companies to our group here at MPA. EFM and MPA complement each other perfectly, giving a more comprehensive package of services for SMEs from start-up through scale-up and on to eventual exit."**

Mike Price, Director MPA



MPA comprises a diverse team of technical experts, tax specialists, and industry-leading accountants, dedicated to fostering innovation in the UK economy since its establishment in 2004.



EFM is an experienced team of Finance Professionals who provide 'pay as you go' financial management services to businesses that want the benefits of experienced finance professionals, but without paying a full-time salary or needing a full-time resource.

## OK, let's start with a profitable business.

A profitable business, by definition, has a reasonable amount of incoming cash in the form of revenue. But it's important to look closely at working capital – this means how quickly you get paid for what you sell. Are you billing customers quickly enough? Are they paying quickly enough?

EFM FDs like me resolve issues with working capital by helping businesses to, for example, set up automated invoicing and invoice chasing, and develop clearer and more vocal contractual language around payment terms (particularly important for smaller businesses).

## What about dealing with late payers?

Late payers are obviously problematic for cashflow, and we can provide credit control services to help with that, but it's also important to understand customers' payment cycles and find ways of working with them.

They may not be late payers but long payers, with, 60- or 90-day terms, or payers who only ever pay at the end of the month and not before. If these are their stated ways of doing business, chasing them for earlier payment will be a waste of time, energy, and resources.

It's better and more effective to seek advice from an FD on measures like invoice finance, which improves your cashflow by getting you paid earlier, in return for a reduction in the total amount payable.

There are a lot of different invoice finance offerings, and a good FD can guide you through them and help you pick the best one.

## What else can profitable businesses do to improve their cashflow?

Look at how quickly you pay your suppliers. Establishing good credit limits with your suppliers can make a real difference, as it slows the need to part with your cash. For manufacturing businesses and similar, keeping close control of inventory and stock is also cashflow-critical. It's best to hold as little stock as possible, without harming availability for sale. More frequent deliveries, but of less stock – the so-called Just-In-Time (JIT) approach – can free up cash.

These businesses also need to take into account capital investments (e.g. in machinery and vehicles), and where the money for these is going to come from. Happily, there's no need to pay upfront – various asset finance and vehicle leasing packages are available, and the FD can steer you to the best choice for your business.

But these options are dependent on a healthy credit rating, so keeping up with payment arrangements with both suppliers and HMRC is a must.

CONTINUED ➡



## What about tax liabilities and dividends?

Corporation Tax and other taxes (e.g. VAT) can hit cashflow, but HMRC does offer some scope for negotiation to pay in instalments.

Maintaining sustainable owner dividends is also key to ensuring cashflow doesn't dip below where it should be, and as an EFM FD I work very closely with owners to help them understand how much cash they can realistically afford to take out of the business in this form.

## That's profitable businesses covered off - so what are the critical cashflow issues in non-profitable businesses?

A lot of the time, this is actually about new businesses that are pre-profit (or even pre-revenue). Take a software start-up, as just one example. It needs cash to develop its product, market it, and pay a sales team to sell it. In FD-speak, it has 'costs ahead of revenue', and not enough customers to cover those costs, so its cashflow will be coming principally from funding and investment.

This is where the concept of the 'runway' becomes important. This is the amount of time the company has left before it runs out of its investment and funding cash, and any additional cash it generates through sales. My role as an FD here is threefold. Firstly, to help the company secure further external funding and investment to boost cashflow.

Secondly, to understand the reality of how long it will take to win new customers, and to make sure the business is spending money sensibly in that time scale.

And thirdly, ensuring the business has given itself enough time to get to the next round of investment before it reaches the end of the runway.

## Can these companies take any steps to minimise their cash outgoings?

As with profitable companies, HMRC deferrals and instalment payments are also in scope here, as is paying other creditors in instalments – but you must communicate clearly, openly, and honestly with all these parties, upfront.

## We've spoken a lot about watching cashflow closely - where does forecasting fit into this?

Whatever kind of business you are, having a cashflow forecast is critical. Realism is a lot more useful than optimism, and realistic cashflow forecasting enables you to make sure that if things don't go to plan, you've still got 'wiggle room'.

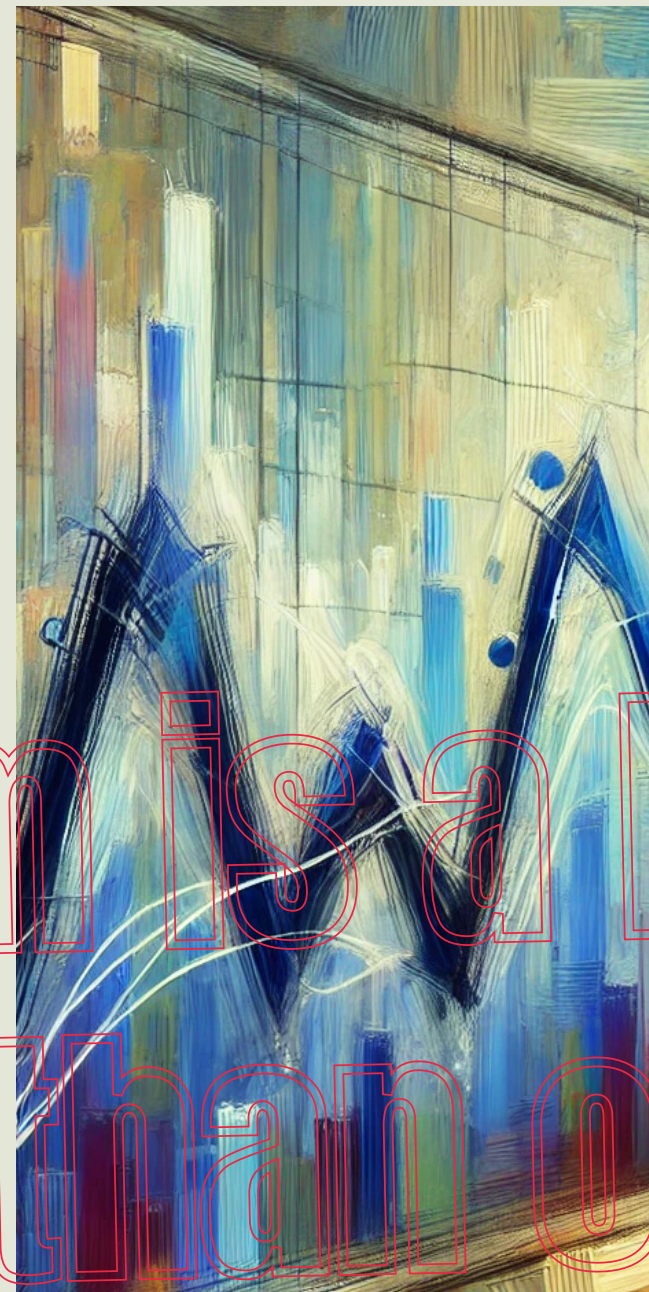
A good monthly (or sometimes even weekly) forecast is a solid basis for this. It should answer questions like: do you know what you're selling and paying for in the next six months, and when? What are the patterns of payment in the month (when do things like HMRC liabilities and payroll fall due, for example)?

Seasonality can also be really important, depending on your business type, and very seasonal businesses should forecast at least 12 months ahead). A good FD will understand the seasonality of your sector, and factor this into the cashflow forecast.

## Presumably, the right choice of software can also help considerably with cashflow forecasting?

Yes, software can help greatly – Enterprise Resource Planning (ERP) systems in larger businesses or good software add-ons to popular accounting systems for smaller companies.

Any software you use needs a champion to ensure it has the right inputs and data. It's often not the cost of the software that's the issue, it's the cost of making sure you've got the people to ensure the inputs are as they should be – and here, again, an FD can help ■



Realism is a lot more useful than optimism

- 1 Prioritise Cashflow Over Revenue and Profit
- 2 Improve Working Capital Management
- 3 Optimise Supplier Payment Terms
- 4 Use Cashflow Forecasting
- 5 Leverage the Right Tools and Expertise

## Need support optimising cashflow?

EFM has over 50 highly experienced Finance Professionals, with track records of delivering growth, control and profits for clients. With a broad range of skills across both Financial Management and business growth disciplines, backed by advanced management systems, the team has the ability to provide expert support to growing businesses, and to help you to drive the performance and value of your business, whatever your goals.

<https://efm.uk.com/>

# The carbon capture commitment one year on

Remember the 2023 Spring Budget, and the Conservative government commitment to investing £20bn to scale up UK carbon capture and storage (CCS) projects?

That roadmap detailed up to £210m for the Industrial Strategy Challenge Fund, £115m in new spending for CCS technology research and development, an estimated turnover of £8bn by 2050 secured by the UK CCS market, a target to capture 20 – 30 MtCO<sub>2</sub> per year by 2030, and the creation of 50,000 jobs in 2030.

What evidence is there that the newly elected Labour government will continue to support this pledge? On the face of it, things look positive in that regard, but it would be wise to look into this support, and specifically, the potential challenges, future potential, and costs, criticisms and concerns.

## The new Labour government

The new Labour government under Prime Minister Keir Starmer has expressed strong support for continuing and expanding the UK's commitment to carbon capture and storage projects. The Labour Party's election manifesto included a pledge to invest significantly in CCS, and the government has allocated an additional £1 billion from their National Wealth Fund to accelerate these efforts.

Labour's approach aims to build on the momentum established by previous investments, focusing on the development of CCS clusters, particularly in industrial heartlands. These efforts are expected to attract substantial private sector investment, estimated at around £30 billion by 2030, and create up to 70,000 new jobs, while preserving 77,000 existing ones in carbon-intensive industries.

Additionally, Labour plans to address some of the criticisms of the previous government's CCS strategy, which was seen as overly reliant on fossil gas and blue hydrogen projects. By prioritising the decarbonisation of electricity supply and supporting more projects aimed at reducing emissions from power generation, Labour aims to ensure that the UK meets its net-zero targets more effectively.

In Scotland, the CCS deployment could support over 3,000 jobs and contribute significantly to the UK economy. The Labour government plans to continue supporting initiatives like the Acorn CCS project, which are crucial for regional economic growth and meeting national climate goals.

# THREE KEY POINTS

1. Challenges
2. Future Potential
3. Costs, Criticisms & Concerns

Transitioning to a new government can change policy priorities and budget allocations. While the Labour Party supports Carbon Capture and Storage (CCS), their approach may differ, causing delays or shifts in focus. Scaling up CCS technology involves overcoming technical challenges. The infrastructure for capturing, transporting, and storing CO<sub>2</sub> is complex and costly. Regulatory approvals and planning permissions are also hurdles that can delay projects and increase costs.

Labour's commitment to clean energy and CCS could drive economic growth, creating thousands of jobs and revitalising industrial regions. Successfully implementing CCS projects could make the UK a global leader in climate technology, attracting investment and enhancing international influence. Continued investment in CCS can spur innovation in related technologies like hydrogen production and renewable energy storage.

Critics argue the substantial investment in CCS might be better spent on more impactful climate solutions. Environmental groups worry CCS could prolong fossil fuel use by allowing continued emissions. The success of CCS projects depends on meticulous planning and execution to avoid technical failures and cost overruns ■



## Landslide victory

The UK general election on July 4th, 2024, resulted in a decisive victory for Keir Starmer and the Labour Party. Overall, there seems to be a clear commitment from the new government to foster green industrial growth.

# Kinetic Power Machines X PP Plus

Kinetic Power Machines (KPM) create a range of problem-solving solutions across several project categories such as clean energy and electric vehicle technology, eGames, medical devices, conveyor systems and off-grid power.

Some of its technologies will be available to partnering organisations that need to solve technical challenges in their existing product portfolio, or those that want to enter new markets. It is a business on the cusp of new technologies, driving incremental innovation and using advanced manufacturing to solve some of industry's most pertinent challenges.

The business engaged with PP Plus through an initial discovery session and it wasn't long before they were benefiting from direct access to the partner network.

KPM introduced its technology to engineers at PP Control & Automation (PP C&A), founders of the PP Plus network, and Silverstone Technology Cluster (STC). Its innovative motor enhancement technology was encountering several challenges getting in front of the right people at a relatively early stage of its development.

STC's collaborative approach with Amazon Web Services through its Innovation programme, plus its Special Interest Groups (SIG), set up specifically to focus on digital manufacturing and future mobility was an ideal initial fit.

This new technology can be applied to any motor to double its load-carrying capacity or speed. For example, if an EV truck can carry 15 tonnes, then this technology will enable it to carry up to 30 tonnes.

**“PP Plus has unlocked the experience, engineering imagination, and resources we needed to proceed to demonstration of our product to key partners and academia experts in the field of EV motors.”**

Craig Morton  
Operations Director  
BEng (Hons) CEng MIET FIHE MIHE  
Kinetic Power Machines Limited (KPM)

## Partner Support



Strategic partner for module or assembly based, part or full machine build outsourcing.



A not-for-profit network driving advanced engineering with promotion, support & thought leadership.



C-ALPS is a Coventry University research centre for E-Mobility and Clean Growth acceleration.



The micron-precise metal stamped component & progression press tooling experts, founded in 1862.

Pim van Baarsen, CEO of the STC, impressed with the technology put KPM in front of Amazon Web Services, as well as Performance Projects and Saisetia. When KPM needed a clear path to key industry players in the market of clean and future mobility and electrification, these were exactly the types of organisations they had in mind.

During the discovery session, KPM also communicated that they were especially interested in working with researchers to ultimately provide the required scrutiny for its motor enhancement technology prior to revealing the product to market.

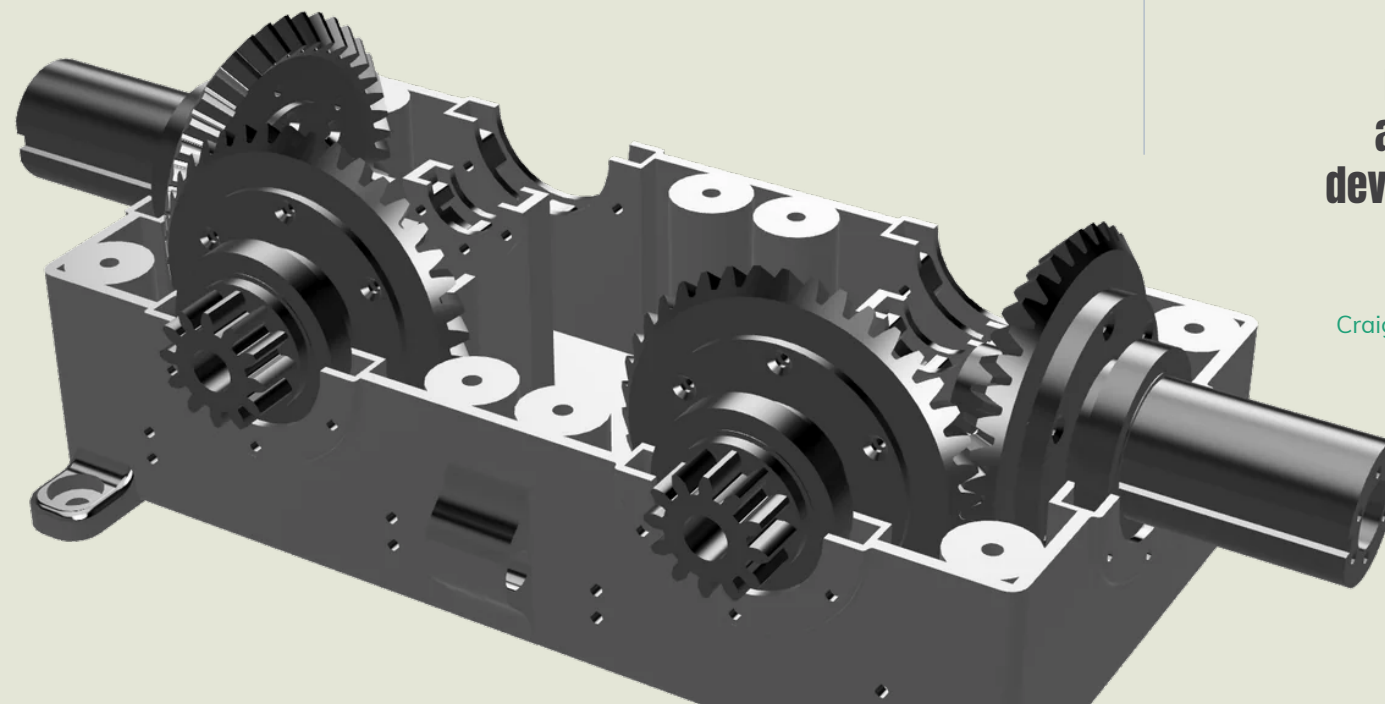
And there just so happened to be the perfect network partner for that too. KPM were connected to Coventry University and specialists from its Centre for Advanced Low Carbon Propulsion Systems (C-ALPS).

The £50m C-ALPS facility is a research centre within the Centre for E-Mobility and Clean Growth at Coventry University. C-ALPS brings together academic expertise and state-of-the-art facilities in battery and supercapacitor cells, hydrogen fuel cells, e-motors and drives.

In this environment, researchers and industry work collaboratively on the science and engineering behind the next generation of electrified propulsion systems for the automotive, aerospace, marine and rail industries.

**“Our relationship with the PP Plus has blossomed based on tangible success and individuals from the network are now an embedded part of our team. KPM highly recommends this hassle-free service to any start-up company that is planning to develop innovative products from inception of the idea to prototype and beyond.”**

Craig Morton, Operations Director, KPM



# Technology showcase

PP C&A has agreed to provide KPM with space on the shopfloor of its award-winning facility to host its technology, with the ability to demonstrate it to interested parties.

After this, KPM is looking to dig even deeper into the PP Plus ecosystem and start conversations with growth and marketing experts to see how it can exploit new market opportunities.

Furthermore, metal component stamping experts and PP Plus network partner, Brandauer has been an especially important connection, with their vast expertise in electrical steel lamination stamping and experience supplying the electrification, electric vehicle, and clean mobility markets with some of the industry's most ambitious projects and collaborations ■

**“KPM has quickly become an excellent example of how PP Plus is designed to operate and support organisations on their journey. It is the ecosystem at play that connects quickly and in productive ways, whatever an organisation's needs, that make it unlike any other network partnership in the world.”**

Tony Hague, CEO, PP Control & Automation



**Tony Hague**

Tony Hague says that he has seen first-hand that challenges are often down to a lack of available resource, advice and 'bandwidth' and PP Plus exists to do something to change that.

# Partner profile



## Precision metal stamping solutions since 1862

Precision is especially important when it comes to small components and metal stamping, and some of the world's emerging markets and most established alike are reliant on companies like Brandauer producing micron-accurate parts.

Brandauer prides itself on a unique ability to turn difficult and challenging precision metal stamping requirements into positive manufacturing outcomes.

Founded in 1862, Brandauer is now one of Europe's largest contract presswork and precision stamping manufacturers, offering the complete range of services required for the supply of pressed metal components: from prototyping, design and in-house tool production or specialist tool transfers, through to high-quality manufacturing and logistics.

Brandauer's 45,000-square foot manufacturing facility houses a Special Products Division, set up specifically to deliver low volume runs and projects spanning between 1 off and 20,000 metal components. Brandauer takes a consultative approach to every project, with in-house design experts working with customers on specified drawings to help deliver shorter lead times and more efficient long-term production.

A second location, a dedicated training academy is manufacturing new modular tools and upskilling the next generation of toolmakers.

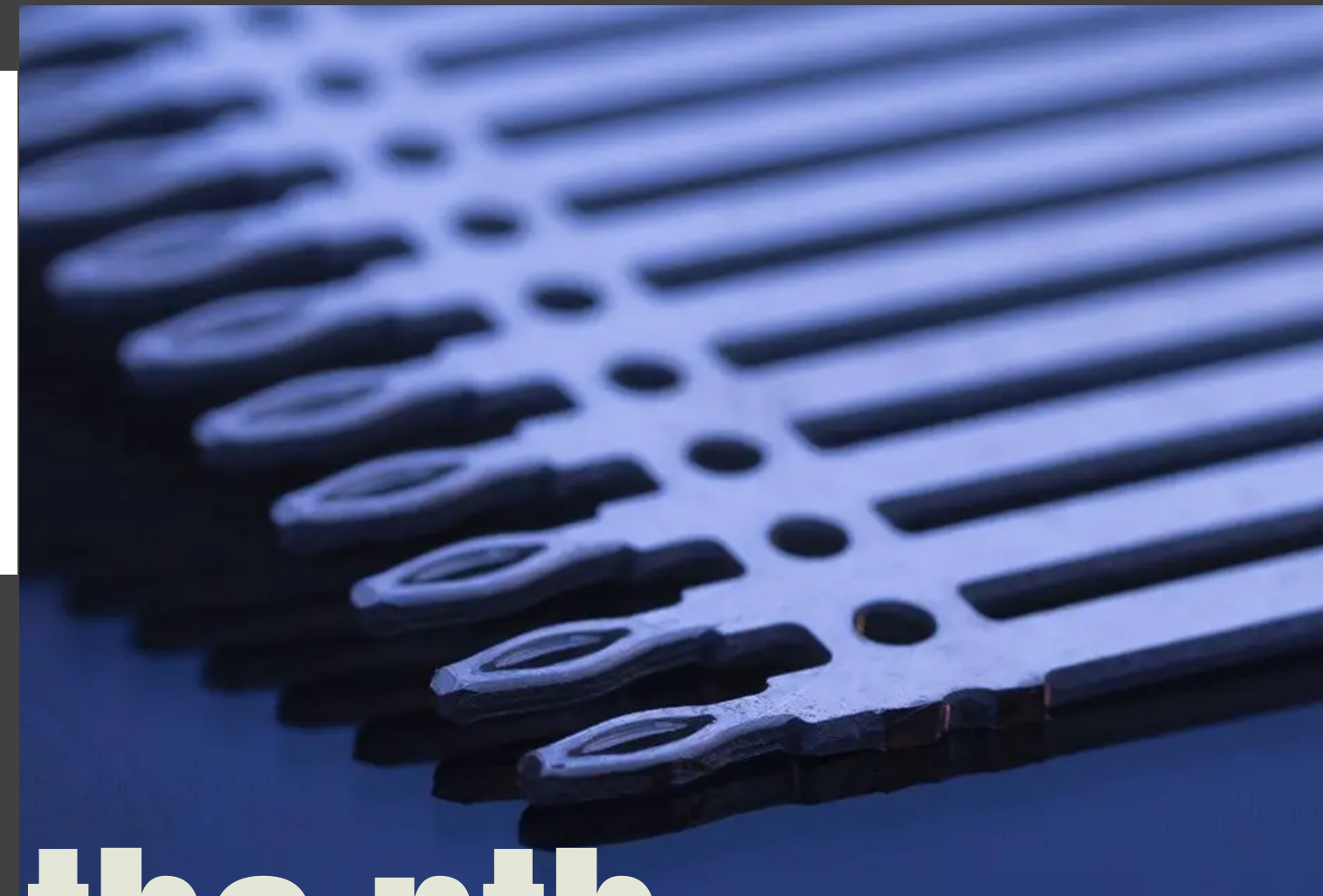
In May this year, Brandauer claimed a King's Award for Enterprise with a new tooling innovation that can produce micron accuracy components for use in high specification construction applications, battery assemblies, MedTech devices and electrification.

The 'Innovation' accolade comes just four years after Brandauer was presented with an International Trade Award from the then Queen's Award for Enterprise. It is somewhat rare for an SME to hold two of these prestigious awards concurrently.



### ELOPIN® PRESS-FIT

Brandauer is the proud, full-service supplier and the only UK supplier of EloPin® Press-Fit. A press-fit pin enables the solderless connection of the pins to a PCB. With elastically deformed or solid pins which are forced into the PCBs plated-through-holes with insertion-tools/machines, the result is a gas-tight and reliable connection between the press-fit-area of the pins and the PCB, used in applications such as 3 phase motor fret connections and inverters/ECUs.



# TO the nth degree

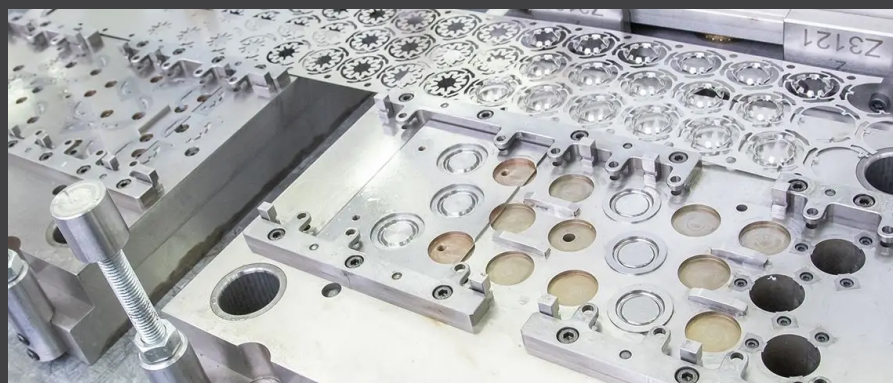
The kind of accuracy Brandauer deliver is rare in the UK but it's a capability derived from an overarching principle that has run through the business since its inception in 1862; precision and competence to the nth degree.

## Splitting microns

Brandauer is splitting microns at its facility in Birmingham and to put that into perspective, a single hair comprises 40 microns! It is this kind of precision that brings Brandauer's capabilities in the design and manufacture of pressed metal components to the fore.

Everything stamped by Brandauer fits in the palm of your hand and is often fundamental to the operation of products, devices and vehicles used all over the world, every single day.

Brandauer is capable of working with the widest range of metals and continue to invest in the best technology to manage the in-house design and manufacture of progression press tooling, vital in upholding the quality and accuracy of the components it produces. The design and manufacture of progression and precision tools are part of a promise to deliver a complete manufacturing solution ■



### ELECTRICAL STEEL LAMINATIONS

Brandauer's high-demand electrical steel laminations are integral in some of the world's most ambitious products

- From electric motors, renewables, defence and aerospace applications.

### TOOLING ACADEMY

The UK's first ever Precision Tooling Academy launched in 2022 thanks to a pioneering partnership between In-Comm Training and Brandauer. Over £1m has been invested by the two strategic partners to create a commercial toolroom in the training provider's facility in Aldridge, which will produce complex tooling, as well as acting as a professional training ground for the toolmakers and designers of the future.



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### Rowan Crozier

Rowan Crozier, CEO of Brandauer, was awarded an MBE for services to manufacturing and enterprise in January this year.

# Network founder



## Control & Automation

Complete manufacturing solutions

PP Control & Automation (PP C&A) is an award-winning strategic outsourcing partner to some of the world's most successful machine builders and OEMs.

Module or assembly based, part or full machine build outsourcing with PP C&A is a trouble-free process that lets machine builders and OEMs concentrate on core competencies and deliver their growth potential.

<https://www.ppcanda.com/>

<https://pp-plus.org/>

## A-Z

PP Plus is designed to help create a more sustainable and environmentally friendly future by supporting the growth of technological innovations in the UK.

PP Plus offers three pillars of support that give access to hundreds of capabilities, services and methods to help you rise through seed investment, to the flourishing market debut of your groundbreaking green technology.

### BRANDAUER

The micron-precise metal stamped component & progression press tooling experts, founded in 1862.

[brandauer.co.uk](http://brandauer.co.uk)

### C·ALPS

C-ALPS is a Coventry University research centre for E-Mobility and Clean Growth acceleration.

[coventry.ac.uk](http://coventry.ac.uk)

### cetix

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Over 35 years in contract electronics manufacturing, product development, and design support.

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A manufacturing collective leveraging expertise across several disciplines to help launch new products.

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Full service marketing agency for market research, strategy development, planning and campaign execution.

[s2fmarketing.co.uk](http://s2fmarketing.co.uk)



A global network of expert certified coaches, sharing a proven methodology for scaling up.

[scalingup.co.uk](http://scalingup.co.uk)



SiG specialists drive growth, transforming manufacturing, supply chains, people and processes.

[sig-uk.org](http://sig-uk.org)



A not-for-profit network driving advanced engineering with promotion, support & thought leadership.

[silverstonetechnologycluster.com](http://silverstonetechnologycluster.com)



Innovative robotics firm with 1,000+ employees shaping a world of human-robot collaboration.

[universal-robots.com/](http://universal-robots.com/)



Empowering leaders by clarifying brand, fostering investor confidence, and uniting business functions.

[wantedstudio.co.uk](http://wantedstudio.co.uk)



Department at University of Warwick, leveraging collaboration to drive future-shaping innovation.

[warwick.ac.uk/fac/sci/wmg/](http://warwick.ac.uk/fac/sci/wmg/)



## Contact the editor

For information, collaborations, opportunities to feature or offer feedback, contact **Richard Spears**.

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