

Innovator-academia-industry collaboration aims to accelerate development of renewable power technology through digital manufacturing principles

London, UK, 14th June 2022: IPG, the AME and SDE Technology announce a new collaboration to co-develop the manufacturing blueprint of a renewable power generation solution that will help accelerate product development and create value for all through shared IP.

IPG, developers of renewable generator technology; the Institute for Advanced Manufacturing and Engineering (AME), a collaboration between Coventry University and Unipart Manufacturing; and SDE Technology, tier-1 and tier-2 manufacturing experts, announce today a joint alliance to co-develop the blueprint for volume manufacture of the IPG Flameless Generator, IPG's clean-and-green replacement to the diesel generator.

This integrated approach is rooted in the principles of digital manufacturing developed by the AME, aimed at incentivising greater and earlier engagement between established manufacturers and start-ups. This collaboration unites academia, industry and innovators to demonstrate the potential for accelerating new product development, and securing greater value for all through manufacturing blueprints that are ready to scale.

Acting as a "test case" for Dr Marcos Kauffman's vision for the [future of manufacturing in Industry 4.0](#), the strategic collaboration with AME and SDE will allow IPG to 'ground truth' the co-developed digital twin blueprint into a real-world manufacturing setting, underpinning the route to cost-effective manufacture of their product.

This will be achieved through implementation of proposed manufacturing and assembly processes, and investigation into scaling methodologies to transition into high-volume production. Establishing this blueprint will also enable a further, more detailed, relationship to be formed between IPG and SDE Technology as IPG's route to market progresses.

"The traditional route to manufacture presents a number of challenges for early-stage hardware technology developers like IPG. Start-ups often find themselves in a seemingly impossible loop in which it is crucial to have a clear route to volume manufacture of their product to secure investment and customer backing, but unable to define this at the first stages of commercialisation," said **Toby Gill, CEO of IPG**.

"Establishing the digital twin for manufacture of the IPG Flameless Generator, with the AME and backed by industry-experts SDE, will not only give our investors greater confidence in the cost-effective manufacturability of our product. But looking a few years down the line, it will also give us a blueprint that can be reproduced across multiple geographies, facilitating a move into global markets, and also allowing for scaling at a national level," said **Gill**.

"Sharing in the IP of a co-created manufacturing blueprint establishes a framework that will allow all to share in the rewards of an accelerated route to market of a promising product offering. For climate tech start-ups such as IPG, early collaboration is invaluable as it allows them to draw on the expertise of industry experts like SDE to support and de-risk the route to scaled manufacturing. For manufacturing companies, providing this support sets the groundwork for an in-depth commercial relationship once the product demonstrates market success," said **Marcos Kauffman, Director of AME**.



“I am looking forward to bringing our track record of working with the industry, and our capabilities in digital manufacturing and digital twinning to accelerate the manufacture of the IPG Flameless Generator,” said **Kauffman**.

“We are very excited to be working with IPG creating their blueprint for volume manufacture of the IPG Flameless Generator,” said **Richard Homden, CEO of SDE Technology**. “Not only does this new way of working offer a route to expedite cost-effective manufacturing for start-ups like IPG. It will also allow for greater transparency across the entire process, allowing for an in-depth understanding of a product’s true carbon footprint. This marks a very important step towards aligning the industry with our net zero objectives, which is why I believe this to be an excellent opportunity in time to be working with IPG on their product to help us reach these goals.”

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Notes to Editors

About IPG

IPG is a British climate-tech company tackling the ‘dirty secret’ of the energy transition: the diesel generator. They’re delivering a clean, multi-fuel capable generator so that companies can finally end their reliance on diesel, without sacrificing energy security.

The IPG Flameless Generator uses patented flameless combustion technology to deliver pollutant-free power from any fuel. Dynamic fuel flexibility unlocks the use of hydrogen and biofuels, while allowing for the security of conventional fuel back up – disrupting the ‘chicken-and-egg’ scenario between supply and demand of renewable fuels.

IPG is currently raising EIS-eligible investment through Seedrs crowdfunding platform to enable their customers to replace their diesel generators. www.ipg.energy.com.

Charlotte Aylwin, Communications Officer at IPG, c.aylwin@ipg.energy

About AME

The Institute for Advanced Manufacturing and Engineering (AME) is a collaboration between Coventry University and Unipart Manufacturing, bringing together academia, industry and R&D in a factory setting deliver the “UK’s First Faculty on the Factory Floor”.

A centre of engineering excellence, the AME specialises in manufacturing teaching and research in areas such as Industry 4.0, Digital Manufacturing and Simulation, Automation and Control, Metrology and Uncertainty of Measurement, Surface Engineering, Wearables, Lasers, Welding and Joining.

The Institute for Advanced Manufacturing and Engineering has a proven track record for this approach, delivering over £50m of Research and Development projects since its launch in 2014. <https://www.coventry.ac.uk/ame/the-institute/>

About SDE

With over 50 years’ expertise using the very best in engineering practices, SDE Technology is one of the largest manufacturers of pressings and assemblies in the UK.

SDE Technology are passionate about using cutting edge technology to solve complex engineering problems associated with the manufacture of components, welding and assembly. <https://sde.technology/>

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