

Leading Innovation and Sustainability in Logistics

Discover how Welch's Transport is leading the way in sustainable logistics through cutting-edge technology and green initiatives.

Join Jamie Sands, Head of Solutions, as he shares his journey and the exciting projects transforming the future of transportation.

Learn how innovation is driving a greener, more efficient industry.

My name is Jamie Sands, and I am the Head of Solutions at Welch's Transport, a family-owned business based in Cambridge. When I was a teenager, I didn't imagine I would end up working in logistics. In fact, I had very little idea what a career in logistics would even look like.

The idea of working with trucks and deliveries seemed far removed from the exciting world of technology and innovation that I was passionate about.



Written by **Jamie Sands**Head of Solutions,
Welch's Transport

However, life has a way of surprising you, and my journey into logistics has been more exciting and fulfilling than I could have ever anticipated.

Today, I want to share how we are transforming our operations with new technology and green initiatives to make logistics not just about moving goods, but about moving forward into a sustainable future.

As Head of Solutions, my job is to make sure our business runs smoothly and profitably. I lead the development of innovative solutions that meet our clients' needs, using the latest technology and industry best practices. I work closely with clients to identify opportunities and present solutions that add value to their businesses.



I collaborate with various departments, including sales, marketing, operations and customer support, to align our strategies with overall business goals. I oversee the delivery of projects, ensuring they are completed on time and within budget. Additionally, I constantly improve our existing solutions based on feedback from clients and stakeholders.

My role also involves staying updated on new technologies and industry trends, providing technical expertise and guidance. I set key performance indicators to measure the success of our solutions and track our performance. I also contribute to our strategic planning by identifying market opportunities and recommending new solutions or improvements. I oversee partner projects, making sure commitments are met and progress is communicated effectively.

In December 2023, I was honoured to receive the Rising Star of the Year award from Logistics UK. This recognition highlights my dedication, innovation, and leadership in the logistics industry.



One of the most exciting projects I manage is our switch to electric heavy goods vehicles (eHGVs). In August 2023, we introduced the Renault Trucks E-Tech D Wide, the first fully electric HGV in Cambridge. This 19-tonne truck is a game-changer for our operations and the city's environment. The electric truck supports our Net Zero delivery service, drastically reducing our carbon footprint.

Welch's Transport has been chosen to join the prestigious eFREIGHT 2030 consortium, a major project in the transport industry's drive for Net Zero. This consortium is part of the UK Government's Zero Emission HGV and Infrastructure Demonstration (ZEHID) program, funded by Innovate UK. The project aims to demonstrate how battery-electric HGVs can replace conventional HGVs at scale, using British technology.

With heavy goods vehicles alone contributing 20% of all transport emissions across the UK, this project is crucial. It will showcase next-generation HGVs from Renault Trucks, DAF, and Scania, and use state-of-the-art British-designed 1MW charging technology. The project also includes the development of around 32 megawatt charging hubs, essential for helping the haulage sector decarbonize. As one of the few SMEs involved, our role is vital in testing these new systems in various operational settings.

Another fascinating aspect of my role is integrating smart technology into our logistics operations. We have partnered with Optimize by The Algorithm People, who provide Al-driven route optimization technology. This technology helps us plan the most efficient routes for our trucks, reducing CO2 emissions by 15% per vehicle. The Al analyses route data to find the best paths, ensuring our electric truck uses its battery efficiently. This not only makes our operations greener but also saves time and money. By leveraging smart technology, we are setting new standards in the logistics industry.

One of my favourite projects is Electric Vehicle Fleet Bi-directional Charging (FLEXET). This project is led by Otaski Energy Solutions Ltd, in partnership with Syselek and Leeds University. With a grant



of £1,517,682, we are piloting innovative bi-directional EV chargers that use a multiinput multi-output (MIMO) DC-DC converter. This technology, integrated with Syselek's telematics system, allows fleet EV operators to access energy flexibility and the prosumer market. The DC converter is designed to be cost and energy-efficient while adapting to variable loads, increasing grid reliability, resilience, and stability. With the University of Leeds, we will demonstrate Vehicle-to-Everything (V2X) technology through multiple use cases. This will show how V2X and energy flexibility can reduce the carbon footprint and improve energy efficiency.



Another innovative project I oversee is ENROUTE, in partnership with Innovate UK, Syselek, and the University of Cambridge. This project focuses on enhancing the operational efficiency of electric HGVs through real-time data sharing. By using advanced data-sharing technology, we can significantly reduce carbon emissions and improve our fleet's performance. The ENROUTE project aims to create a scalable, efficient solution for low-carbon freight operations. It involves mapping the existing logistics landscape, identifying opportunities for data sharing, and implementing a proof-of-concept to showcase the benefits. This project highlights how data and technology can drive sustainability in logistic.

The next big thing I am involved with is Welch's participation in the Freight

Innovation Fund Accelerator 2024. The UK Government has dedicated £7 million to this fund as part of its Future of Freight strategy, aimed at transforming the UK freight sector. Funded by the Department for Transport (DfT) and delivered through Connected Places Catapult, this program will accelerate the adoption of ready-tomarket solutions in the freight industry. As a partner, Welch's Transport will work with up to 10 Small and Medium-sized Enterprises (SMEs) selected for the program. These SMEs will join a 6-month accelerator program, receiving up to £150,000 in grant funding to trial their solutions in real-world environments. This initiative supports the development and implementation of innovative freight solutions to tackle pressing industry challenges.

My journey in logistics is not just about trucks; it's about technology, innovation, and sustainability. I believe these aspects can make logistics appealing to young people with diverse interests. Whether you are passionate about technology, environmental sustainability, or business efficiency, there is a place for you in the logistics industry. At Welch's Transport, we offer various career opportunities that go beyond traditional roles. From Aldriven route planning and electric vehicle maintenance to developing green strategies, the possibilities are endless. By working in logistics, you can be part of a dynamic field that is essential to everyday life and crucial for a sustainable future.

As Head of Solutions at Welch's
Transport, I am proud to lead our
company through this exciting period of
innovation and change. Our commitment
to electric vehicles, smart technology, and
sustainable practices positions us as
leaders in the green logistics movement. I



invite you to explore the world of logistics and discover how technology and innovation can make a difference.

About the author

I'm Jamie Sands, Head of Solutions at Welch's Transport. I started my journey in logistics as an Operations Supervisor and have worked my way up to a senior management position where looking after all things technology and innovation.

I blend my love of tech with logistics, and I'm passionate about using data to drive green solutions and improve efficiency. For me, sustainability isn't just a buzzword – it's a way to create a better future.



Information and suggested further reading:

Find out more:

Articles

Cambridge Network: Welch Group chosen to join prestigious project in the transport industry's drive for Net Zero

Information

Welch Group: <u>Haulage & Logistics Transport</u> <u>Company (welchgroup.co.uk)</u>

Welch's Net Zero Microsite: https://welchsnetzero.com/

eFreight 2030: https://efreight2030.com/

Optimize: https://optimizenow.ai/

Freight Innovation Cluster:

https://cp.catapult.org.uk/opportunity/freight-innovation-cluster/

Careers

Welch Group: https://welchgroup.co.uk/careers/

Generation Logistics - <u>Generation Logistics |</u>
<u>Where Talent Meets Opportunity</u>

