

Low Carbon Transport Technology

Inward Investment Opportunities
for Coventry and Warwickshire



Coventry City Council



Warwickshire
County Council



Why Coventry and Warwickshire?

The British Midlands is the heart of the automotive industry accounting for nearly half a million jobs and driving annual exports of around £9 billion. Famous names such as Jaguar Land Rover, Peugeot, TATA BMW and Aston Martin are all based here. Research has proven that Coventry and Warwickshire has a global reputation for automotive research and design, engineering, innovation and technology, with companies such as Ricardo, MIRA, WMG, and Prodrive all located here.

Driven by legislation and consumers, the industry is embracing technological change and investing heavily in research and development to provide low carbon transport options for the future. Climate change and carbon reduction are important cross-cutting themes for Coventry, providing a focus for the next 20 years.

Coventry & Warwickshire Local Enterprise Partnership

The Coventry & Warwickshire Local Enterprise Partnership (CW LEP) is a collaboration of the private and public sectors to take charge of the local economy, drive growth and create jobs. One of the key priorities of the CW LEP is to create a low carbon future, with local businesses and local councils coming together and committed to driving forward the low carbon agenda.

Coventry City Council spoke to Jonathan Shine, Vice President of Business Development for Evida about their decision to move to the city.

“It was a very easy decision to make, the convenient location, excellent transport links and the facilities here at Coventry University Technology Park are superb and offers excellent value for money. Most importantly for us the availability of skilled resources in the local area has been paramount. We have found it easy to recruit people with the necessary skills locally. Coventry University and the University of Warwick are recognised for the high calibre of their graduates along with the work they do in research and knowledge transfer. I think that Coventry is still recognised as the home of the automotive industry and being part of this hub has many advantages for us.”

Coventry and Warwickshire's commitment to a low carbon future

- Both local authorities signed the Nottingham Declaration in 2006.
- Coventry and Warwickshire published Climate Change Strategies which commit the Councils to deliver CO₂ savings that go beyond Kyoto targets.
- The Councils are working within UK national programmes for Climate Change; the Carbon Trust's Local Authority Carbon Management Programme; the Energy Savings Trust's One to One Programme; and the Climate Impacts Programme.
- Coventry was the first UK city to commit to the Covenant of Mayors aiming to meet the EU CO₂ reduction objective by 2020.



The area has been very active in low carbon vehicles for many years

- Coventry's Electric Vehicle project was established in 1995-96 providing the city council with an electric car pool.
- Partner in European FP5 Thermie Programme Zeus Project in 1998 in which the Council led a joint procurement project for low carbon vehicles. The City acquired 10 electric vehicles with a further 12 being acquired by partners.
- The city has introduced a 5% bio fuel mix to its fleet's fuel supplies with ongoing work to increase this proportion over the next few years.
- Coventry City Council is a member of the Coventry Low Carbon Fleet Partnership and has to date purchased 45 low carbon vehicles for its fleet under the DfT Low Carbon Vehicle Procurement Programme.
- Coventry City Council is a founder member of the CABLED consortium and has been an active member of the TSB funded programme. Ultra low carbon vehicles have been made available to real users and data collected on their everyday use. The data collected will be used to assist in the planning of further supportive infrastructure. 18 Charging stations have been installed in public places along with a hydrogen fuelling station at Coventry University Technology Park.
- Coventry City Council is a member of a consortium formed from local councils and businesses in the midlands who have secured up to £2.9 million of funding to become one of eight 'Plugged in Places'. The successful bid will support a programme to install more than 500 electric charge posts in high profile locations. Ensuring that electric vehicle travel across the region is increasingly accessible.

The British motor industry was born in Coventry and our vision is to play a major part in its transformation.

- Coventry City Council has been awarded funding to install electric charging stations for electric buses and other vehicles at its Park & Ride facility in the south of the city. With the installation of the infrastructure now complete, the services will commence in Summer 2011.
- The Warwickshire Low Carbon Vehicle Forum was set up in January 2010 to facilitate information exchange and best practise in the area of low carbon vehicles. The forum enables members to keep updated on government policy and strategies, grant funding and activity occurring across the country.
- In May 2011, Warwickshire County Council introduced a fleet of three state-of-the-art hybrid buses, which will be serving the Park & Ride at Stratford Upon Avon. These combined electric and diesel powered buses will deliver at least a 30 per cent fuel saving, and produce fewer emissions and less noise than conventional diesel buses.
- Environmentally-friendly buses at Warwick University have been given the green light to get more passengers on board. The low-emission bus service run by local supplier Travel de Courcey at The University of Warwick has proved so successful it is now being opened up to members of the public. Launched in April 2011, the 'green' buses have been running for staff and students as part of a unique partnership between the university and the bus operator. Now 20 new routes, linking many areas of Coventry to the University's main campus, became available from July 2011.



Low Carbon companies located in Coventry and Warwickshire

BMW

BMW have lowered CO2 emissions in the luxury vehicle segment. BMW's smallest, most efficient, petrol engines are produced in Warwickshire for the worldwide markets.

Jaguar Landrover

Global OEM with a range of hybrid and electric vehicle technologies under development including Limo Green and Hybrid Range Rover. Jaguar has already established green credentials by its own work and their involvement in 4 national low carbon vehicle projects.

LTI

Manufacturer of the iconic 'London Taxi' recently launched its demonstration hydrogen fuel cell taxi in association with Intelligent Energy. LTI provide the vehicles and assist with chassis change specification. Hydrogen taxis will be serving London for the 2012 Olympics Games.

Peugeot

The UK headquarters are located in Coventry. Peugeot launched their ION EV in the UK in January 2011.

Tata Motors – European Technical Centre (TMTEC)

A 100 per cent subsidiary of Tata Motors and provides design engineering and product development for the automotive industry. Capabilities extend from research and development, through all the disciplines required to take a vehicle programme from concept to production. The company has developed particular expertise in electric vehicles.

TATA Motors

Manufacture of the Indica Vista EV model from new premises in the city has recently started. The vehicle was developed by the team at Tata's European Technical Centre at the University of Warwick. Demonstrator models are available and the vehicle will go on sale in Europe in 2012. The Tata Pixel concept mini was unveiled recently and is the result of a partnership between Tata Motors and WMG. These announcements strengthen the city's reputation as a leader in low carbon manufacturing and design.

Supply Chain and Technology providers

ARUP

A global firm of designers, engineers, planners and business consultants with extensive experience of developing low-carbon transport systems.

Evida Power

Evida has recently opened their UK headquarters at Coventry University Technology Park. The company supply reliable and affordable battery packs to electric vehicle manufacturers whilst providing a holistic EV solution – analysing functionality requirements, providing suitable battery packs, installing and managing charging systems and/or battery swap stations, and supplying other integrated services.

Liberty Electric Cars

A clean technology company based in Coventry, which is designing, engineering and manufacturing leading edge electric vehicle technology. Liberty has recently secured the entire engineering team formerly employed at Modec. (Coventry based commercial vehicle manufacturer which entered administration earlier this year). This expansion has taken Liberty into the sector of commercial vehicles. Liberty have recently opened a new Innovation & Customer Support Centre in Coventry.

MIRA

A leading vehicle design, development and certification consultancy. MIRA provides particular expertise in low carbon technologies. MIRA have recently announced a £110 million investment in a new engineering centre to build on its reputation for engineering excellence and growth and have been awarded Enterprise Zone status by the government.

Ricardo UK

Developing advanced clean diesel technology, hybrid and electric vehicle systems, fuel efficient gasoline engines, efficient transmission systems and vehicle electronic systems integration.

Stadco

An international Tier 1 supplier of automotive Body-in-White products and services. Have recently produced prototypes for EV's and other niche vehicles. Core capabilities include aluminium and steel stampings, assemblies, painting and product and facility design.



Academic Research & Development

Coventry University

Coventry University has a world-wide reputation in the training of automotive and motorsport designers and engineers. The university is taking a leading role in driving innovation with a focus on enhancing the competitive advantage through its Low Carbon Vehicle Grand Challenge. The challenge will test, evaluate and design the vehicles and associate systems needed to establish low carbon vehicles as viable alternatives to traditional modes of transport. An extensive network of leading industry partners and a track record in automotive systems provide an integrated approach to this initiative.

Current projects include:

CABLED – Coventry University is a partner in the Coventry and Birmingham Low Emissions Demonstrator (CABLED) consortium running the UK's largest test of privately-owned low carbon vehicles. The university is responsible for identifying drivers and evaluating their experiences. 40 electric charge points will soon be available around the campus.

Microcab, a subsidiary of Coventry University – this project will produce 8 hydrogen fuelled vehicles at its Coventry assembly plant. Telematics will play a key role in the provision of information from the vehicles to a central system, in monitoring fuel capability and battery efficiency.

Coventry University are the managing partner in CENEX's Niche Vehicle Network. Supported by funding of £2.5million, a collaboration of manufacturers, suppliers and specialist technology companies promote the development and application of new technology to take advantage of market opportunities for low carbon vehicles.

University of Warwick

WMG (formerly Warwick Manufacturing Group) – a unique academic unit of the University of Warwick, which was established in 1980 to reinvigorate UK manufacturing through cutting edge research and knowledge transfer. WMG's hybrid vehicles research team has been established to provide automotive manufacturers and suppliers with guidance, technical knowhow and research relating to hybrid vehicle design, development and new product introduction.

WMG is to be part of the Government's first Technology and Innovation Centre (TIC). It is the first of an elite network and will focus on High Value Manufacturing (HVM). The government will be investing over £200 million in the project.

The university has recently been awarded a government research grant of £3million to enhance electrical drive systems of electric vehicles. Research will both improve their power density and reduce their cost allowing more electric vehicles to reach the mass consumer market.

February 2011, saw the opening of the unique Vehicle Engine Facility (VEF) at WMG at the University of Warwick that will be of vital importance to companies developing engines for hybrid vehicles. The VEF is the UK's only purpose built hybrid power train testing facility for the automotive sector that is not owned and operated by an individual automotive company. The VEF facility will give businesses access to the state-of-the-art equipment and research support.

Low Carbon Vehicle Technology Project (LCVTP), is a £29 million partnership project between government, academia and industry. WMG is leading the project and believes that working together with globally recognised organisations will accelerate the introduction of low carbon transport by four years. Partners in the project are Jaguar Land Rover, Tata, Zytec, Ricardo, MIRA, WMG and Coventry University.



Manufacturing Technology Centre

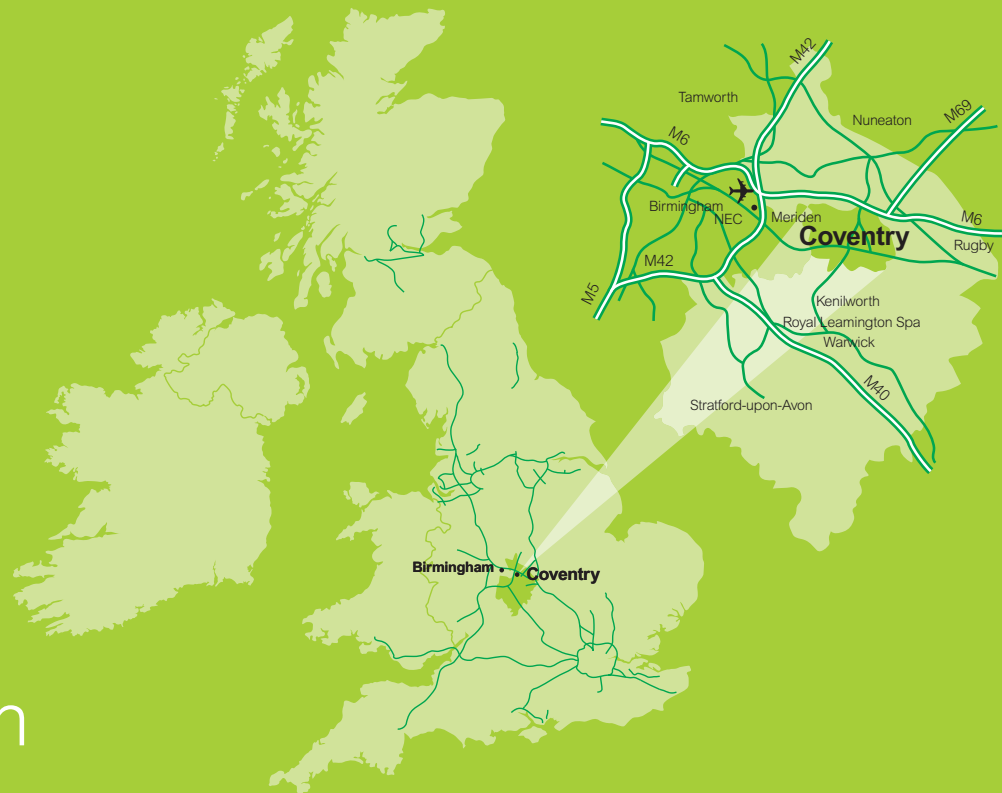
The Manufacturing Technology Centre (MTC) at Ansty Technology Park, will support manufacturing businesses in their pursuit of world-class performance. The £40 million investment supported by the regional development agency Advantage West Midlands will concentrate on assembly, fabrication and joining technologies, and act as a bridge between university development and testing work and full production business. The MTC is to be part of the first Technology Innovation Centre and will focus on the area of High Value Manufacturing (HVM) and will provide much needed access to technical expertise and state of the art equipment that would normally be out of the reach of individual businesses.

The centre will be the home of a collaborative partnership between industry, universities and research and technology organisations. Its role will be to support UK manufacturing companies and their supply chains to bring about improvements in their manufacturing competitiveness.

Construction commenced in April 2010 and was completed in summer 2011. The centre will specifically provide resources and a high quality environment for the development and demonstration of new technologies on an industrial scale.

Founder industrial members of the MTC are Rolls-Royce, Jaguar Land Rover, Aero Engine Controls and Airbus UK. Research partners include the University of Birmingham, University of Nottingham, Loughborough University and TWI Ltd.

Location



Coventry and Warwickshire is centrally located within the West Midlands. The perfect location of the region is highlighted by the links to many major road, rail and air networks.

Coventry and Warwickshire's location allows direct access to the M40, M45, M1, M6, M69, M42, A5, and A14.

As the **UK's most central region**, Coventry and Warwickshire is an **ideal location** to base a public sector body, large corporate business, or a small to medium enterprise.

Its practicality for managing business logistics is unparalleled. With most of the UK's regions within two hours by road and less than 60 minutes by rail to London.

This high level of infrastructure is beneficial on two levels as it

- Allows a wider geographical scope to access the city
- Is a base to reach other parts of the UK and International markets



Workforce

“Leading technical learning and innovation through advanced research; developing business ready specialists and solutions for today and tomorrow”

Coventry University School of Computing and Engineering

Coventry and Warwickshire's technical skill base is an ideal platform for the development of new technologies. Much of the traditional skills base in the automotive industry in the region are transferable to new applications in electric/hybrid vehicle technology and applied research, making Coventry and Warwickshire perfectly placed to exploit manufacturing opportunities in Low Carbon Vehicles.

The Faculty of Engineering and Computing at Coventry University is a large applied scientific and technological centre for learning and research. The faculty is very focused on the application of science and technology to the real world, offering employers a continual supply of sought-after and industry ready graduates.

It's not just about having the technical skills – Coventry believes that all graduates should be capable to work in and lead teams, are great communicators, know how to manage a project to successful completion and are creative in all that they do.

WMG at the University of Warwick offers a unique multi-disciplinary education programme, specifically designed for individuals who want to progress to high level management. Post Graduate and Masters degrees along with flexible, tailored modular programmes are also available.

Key benefits

- Coventry's historical technical skills base
- Two world-renowned universities supplying graduates with technical knowledge, a greater understanding of how to solve problems and who can contribute to your organisation from day one
- Over 1000 Engineers and Designers graduating every year from Coventry and Warwick
- Short courses, to 'top up' and further Continuing Professional Development opportunities available
- Bespoke and traditional engineering apprenticeships and NVQ's available throughout the region for young people.

Examples of potential sites in Coventry and Warwickshire

Ansty Park

40 hectares (98.8 acres)

Hi-tech | Technologies
Innovation Park

Ansty Park is the prestigious new home for science, technology and innovation. With planning consent for 1.5 million sq ft of Research and Design, Light Industrial and business space set across nearly 100 acres of landscaped parkland, occupiers interested in Ansty Park can choose from a range of development opportunities, and can either lease or acquire land or buildings.

Located adjacent to Junction 2 of the M6, the Park is already home to some of the world's most progressive organisations, such as Ericsson and the Manufacturing Technology Centre.

Banner Brook Park

36.35 acres

Office/Research and
Development/Industrial

Development land cleared and de-contaminated ready for development. Parcels of land available from 2 acres upwards.

Lyons Park

84,000 sq m/40.4 acres

Business Park | Industrial
Residential

The former Jaguar site at Browns Lane is being transformed by this significant Joint Venture regeneration project, between Advantage West Midlands and Goodman. As an acknowledgement to the heritage of Coventry, Jaguar and its founder, Sir William Lyons, the development has been named Lyons Park.

ProLogis Park

10 acres

Office | Industrial

ProLogis Park continues to go from strength to strength with over 1.5 million sq ft of accommodation now built and occupied on this flagship development by ProLogis. A further 10 acre site has now been released for development.

Whitley Business Park

102,000 sq m (1.1 million sq ft)
Industrial | Office

This development represents the changing face of Coventry. Creating commercial space on one of the city's key industrial regeneration sites. Whitley Business Park is aimed at local, regional and national companies, with buildings of up to 27,000 sq m (300,000 sq ft) to create a mix of employment on the site. In a prime business location, with great road connections and just a short distance from the city centre. Key occupiers include Jaguar Land Rover.

Coventry University Technology Park

The technology park offers an accommodating and prestigious location for forward thinking knowledge-based and hi-tech companies. The Enterprise Centre provides a supportive environment for innovative new and early stage companies and the Innovation Village offers flexible office space and terms to encourage growth and development. Wherever you are based on the technology park you benefit from a comprehensive support package and established links with the university's research and academic departments including the highly acclaimed School of Engineering and Computing.

University of Warwick Science Park

The University of Warwick Science Park provides property for knowledge and technology based businesses, whether they are, a business start up, a small to medium sized enterprise or an International company. In addition they can provide assistance in start-up financing, technology transfer, networking opportunities and marketing programmes. Well established links are in place to the University of Warwick's academic and research capabilities and to many of its services and facilities including Warwick Manufacturing Group.

Expert advice and support

We are here to help you. If you are thinking about moving your existing business or starting a new enterprise we can offer a range of advice and support:

- land and property searches and advice
- Programme of accompanied visits and familiarisation tours
- Introductions to networks of business support providers and professional services
- Introduction to universities, local research and technology providers
- Opportunity to join a business network specifically designed to meet your business needs
- Information on potential sources of financial assistance and other business support.

Contact us

For more information on relocating your business to Coventry and Warwickshire, please contact:

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