

## Innovation and R&D in the Black Country (November 2025)

Innovation and Research & Development (R&D) are often difficult to accurately define and measure within a business base, but using data that is available this briefing note highlights key data and challenges related to innovation & R&D in the Black Country area.

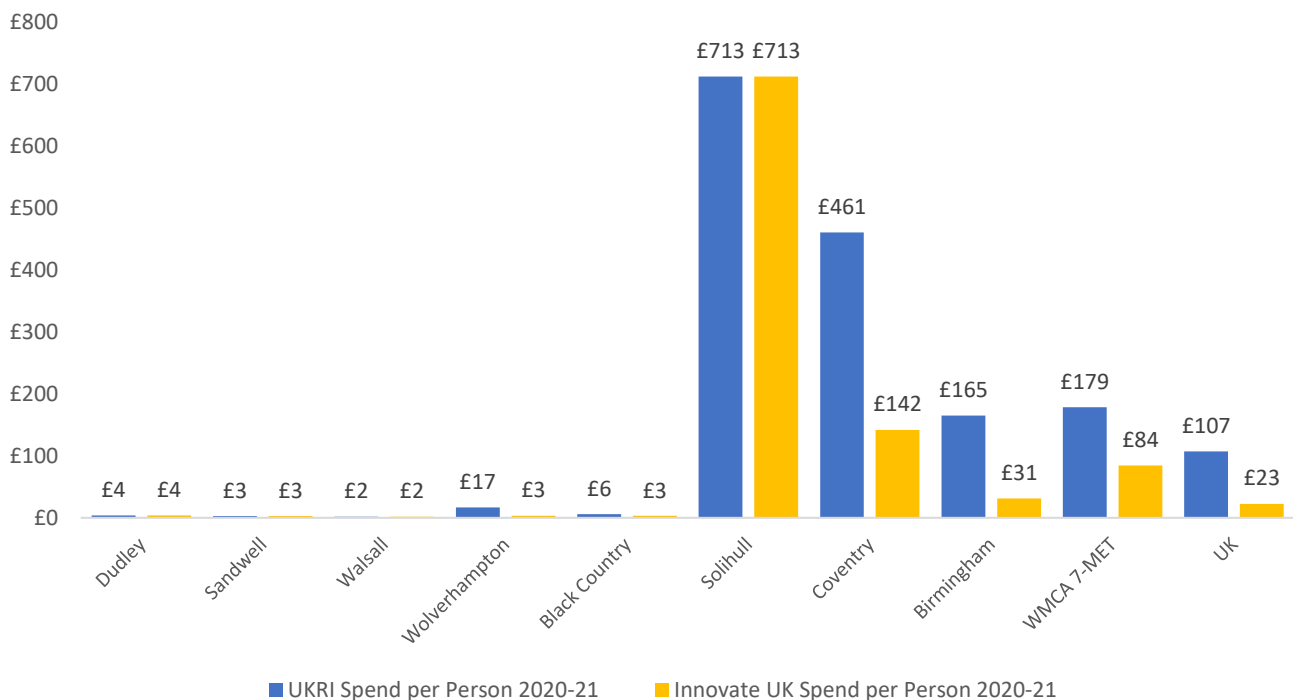
### Baseline Data

There is limited localised data related to innovation and R&D spend in the UK, however two main sources provide useful insight into government-led R&D and innovation spending at a local level:

- Innovate UK publishes all details of its funded projects on an ongoing basis, going back to 2004: <https://www.ukri.org/publications/innovate-uk-funded-projects-since-2004/>
- UK Research and Innovation (UKRI), covering Innovate UK, Research Councils and Research England, published data related to the geographical distribution of its funding (between 2017 and 2021), including local authority level data for 2020 to 2021: <https://www.ukri.org/what-we-do/what-we-have-funded/geographical-distribution-of-funding/>

The UKRI release demonstrates the stark gap between the Black Country and regional / national averages when it comes to investment in R&D and innovation, albeit only taking account of 1 year of data (2020-21):

**Figure 1: UKRI & Innovate UK spend per person, 2020-21**

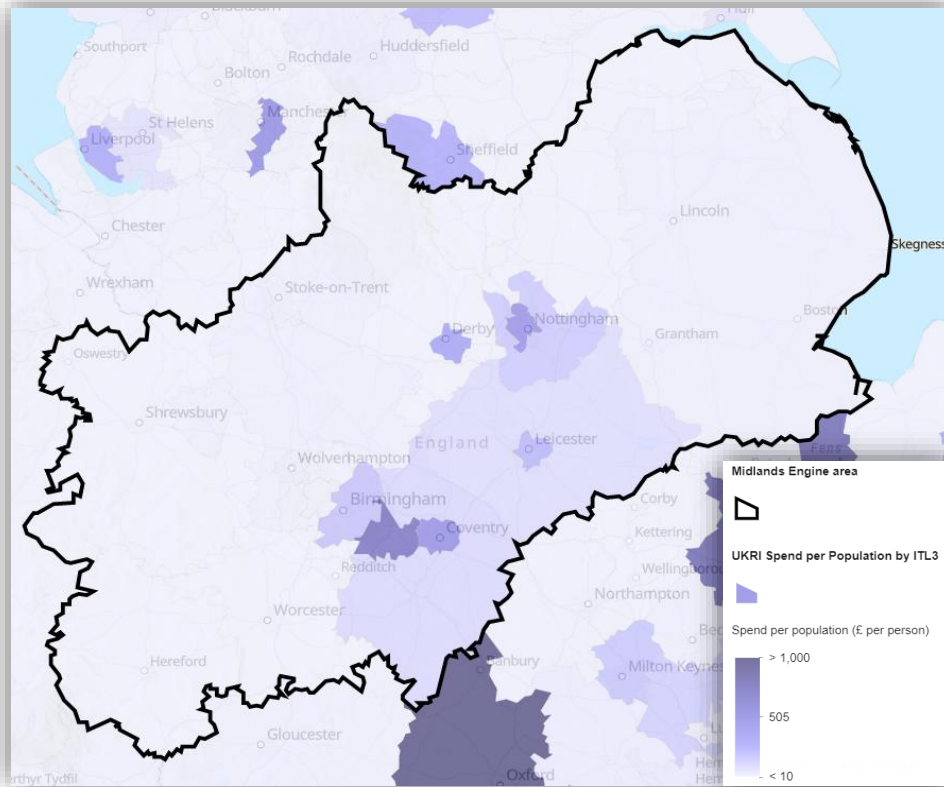


Source: UKRI

- Figure 1 shows that, in the year 2020-21, total UKRI spend in the **Black Country was equal to £6 per person**, significantly below the regional and national averages: £179 per person across the WMCA 7-MET area and £107 per person across the UK.
- For Innovate UK spend only (a sub-set of the UKRI total but excluding Research Councils and Research England), the **Black Country received the equivalent of just £3 per person**, again considerably lower than regional and national averages.

- All four Black Country local authorities suffer compared to the rest of the WMCA 7-MET region, but this disparity isn't unique to the Black Country – with many places across the country receiving much lower R&D / innovation investment than “hotspot” areas:

**Figure 2: UKRI Spend per Population in the Midlands**



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Focusing on the project-level Innovate UK data, since 2013/14, the **Black Country has received almost £50m worth of funding across 358 grant awards. This represents 2% of the total West Midlands region awards over this time period, and 0.3% of the UK total.**

Of the Black Country local authorities, Dudley has received the most funding (£23.6m from 99 awards), followed by Wolverhampton (£15.1m), which was the Black Country local authority with the most awards in total (138). Sandwell (£7.1m from 77 awards) and Walsall (£4.1m from 44 awards) have received a lower amount of R&D/innovation funding via Innovate UK programmes over the last decade.

**Figure 3: Innovate UK Awards, 2013/14 to 2024/25 (November 2025)**

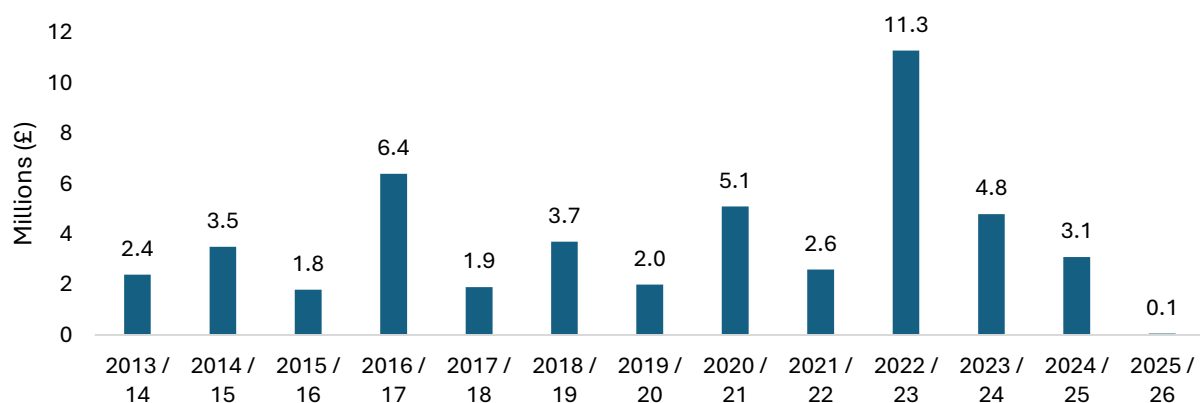
| Area                 | No. of Innovate UK Awards since 2013/14 | Value of Innovate UK Awards since 2013/14 | % of West Midlands region awards (value) | % of UK awards (value) |
|----------------------|---|---|--|------------------------|
| Dudley               | 99                                      | £23,550,471                               | 1.0%                                     | 0.1%                   |
| Sandwell             | 77                                      | £7,091,662                                | 0.3%                                     | 0.0%                   |
| Walsall              | 44                                      | £4,059,152                                | 0.2%                                     | 0.0%                   |
| Wolverhampton        | 138                                     | £15,072,205                               | 0.6%                                     | 0.1%                   |
| <b>Black Country</b> | <b>358</b>                              | <b>£49,773,490</b>                        | <b>2.0%</b>                              | <b>0.3%</b>            |
| West Midlands Region | 4,617                                   | £2,432,494,492                            | 100.0%                                   | 13.8%                  |
| UK                   | 57,800                                  | £17,649,164,135                           | -  | 99.6%                  |

Source: Innovate UK

The 2024/25 competition year for Innovate UK awards in the Black Country totalled £3.1m, this is lower than the level of funding secured in 2023/24 (£4.8m) and significantly below highest level of funding ever recorded in the Black Country, which was £11.3m in the 2022/23 competition year. Key funded innovation projects in the 2024/25 competition year include:

- **Improving Adult Social Care Cyber Resilience in the West Midlands:** Empowering West Midlands care associations to lead innovative, hands-on cybersecurity training and simulations
- **WAT - Warehouse AI-Enabled Tracker Solution:** Research examining the integration of advanced technologies such as Computer Vision and Large Language Models (LLMs) to design intelligent warehouses
- **Project PIVOT - Performance Integrated Vehicle Optimisation Technology:** Creation of a one-stop software that solves casting performance and manufacturing variables whilst allowing the adoption of fully recycled aluminium with 95% lower embedded CO2
- **SWIFT - Seaweed Innovation for Filter Technology:** Creation of eco-friendly air filters using seaweed-based materials
- **University of Wolverhampton - SoC4SMEs:** Delivering Open-Source Security Operations Center (SoC) Solutions as a Service to Strengthen Cybersecurity for SMEs in the UK.

**Figure 4. Innovate UK Awards by Competition Year, 2013/14 to 2025/26 (November 2025)**



Taking a closer look at the latest full data in the latest full year (2024-25 competition year), Figure 5 and 6, show that the Black Country received a total of £3.1m in awards (5.5% of the West Midlands region) whilst the West Midlands 7-met received £32.3m (57.6% of the West Midlands region). Within this Birmingham has received the most awards at £16m (28.5% of the West Midlands region), followed by Coventry with £12.2m (21.8% of the West Midlands region). In the Black Country it was Dudley which received a majority of the awards with £1.4m (2.5% of the West Midlands region).

Figure 5. Innovate UK Awards in the West Midlands 7-Met, 2024-25<sup>1</sup>

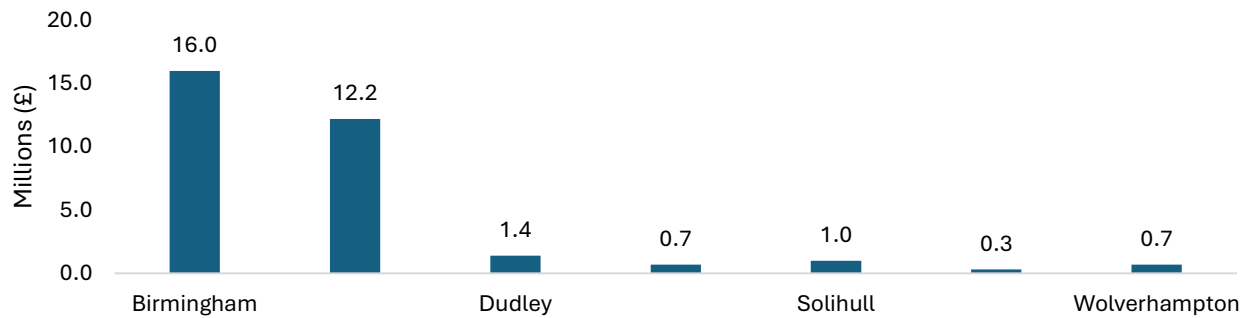


Figure 6. Innovate UK Awards in the West Midlands 7-MET, 2024/2025 Competition Year<sup>1</sup>

| Area                 | Innovate UK Awards, 2024/2025 (£m) | % of West Midlands region awards (value) | % of UK awards (value) |
|----------------------|------------------------------------|--|------------------------|
| Birmingham           | 16.0                               | 28.5%                                    | 1.4%                   |
| Coventry             | 12.2                               | 21.8%                                    | 1.1%                   |
| Dudley               | 1.4                                | 2.5%                                     | 0.1%                   |
| Sandwell             | 0.7                                | 1.3%                                     | 0.1%                   |
| Solihull             | 1.0                                | 1.8%                                     | 0.1%                   |
| Walsall              | 0.3                                | 0.5%                                     | 0.0%                   |
| Wolverhampton        | 0.7                                | 1.2%                                     | 0.1%                   |
|                      |                                    |  |                        |
| <b>Black Country</b> | <b>3.1</b>                         | <b>5.5%</b>                              | <b>0.3%</b>            |
| WMCA 7-MET           | 32.3                               | 57.6%                                    | 2.9%                   |
| West Midlands        | 56.1                               | 100.00%                                  | 5.1%                   |
| UK-wide              | 1,110.0                            | -  | 100.00%                |

In terms of ‘sizing up the prize’, the Black Country has a significant gap in Innovate UK awards compared to the UK. From 2004 until November 2024:

- **Per Head, the Black Country has a £316.2m gap** in Innovate UK Awards received
- **Per Business, the Black Country has a £216.3m gap** in Innovate UK Awards received

Figure 7. Innovate UK Awards by Business and Population

| Area          | Innovate UK Awards (£m) | Population (2024) | Business Count (2024) | Innovate UK Awards Per Head (£) | Awards per Head Gap (£) | Innovate UK Awards Per Business (£) | Awards per Business Gap (£) |
|---------------|-------------------------|-------------------|-----------------------|---------------------------------|-------------------------|-------------------------------------|-----------------------------|
| Black Country | 57.0                    | 1,262,719         | 36,365                | 45.1                            | 250.4                   | 1,566.81                            | 5,947.5                     |
| West Midlands | 2,729.3                 | 6,187,204         | 216,135               | 441.1                           | -145.6                  | 12,627.84                           | -5,113.6                    |
| UK            | 20,474.7                | 69,281,437        | 2,724,770             | 295.5                           | -                       | 7,514.28                            | -                           |

<sup>1</sup> Please note that there has been a significant drop in the level of Innovate UK awards in Birmingham and Coventry vs the previous competition year (2023/2024), this is due to a change in the method that Innovate UK uses to account for awards to Catapult centres. Catapult awards are now recorded to the specific location, rather than the previous method of recording them as a sum to the Catapult centre geography.

It should be noted that the data available on R&D / innovation spending is limited, with other forms of R&D / innovation not captured – for example businesses’ own investment in R&D / innovation, the use of R&D tax credits or external forms of support outside of UKRI / Innovate UK.

Nevertheless, the Black Country has **clearly received less than its fair share of funding awards from UKRI / Innovate UK overall, and there appears to be a longstanding challenge related to uplifting innovative activity across the 4 local authority areas.**

## Considerations

Although a clear view on innovation in a local economy is hard to obtain, Black Country businesses appear to be struggling to engage with the R&D / innovation ecosystem, or to secure funded support for potential projects. This is a missed opportunity.

There also seems to be little high-growth, innovative activity in the Black Country to drive productivity / spillover effects locally. This is reflected in the low scaleup density and low levels of high growth companies in the Black Country too, one potential reason for less “innovative” activity:

**Figure 8. High Growth Firms in the Black Country**

|                      | 2017       | 2018       | 2019       | 2020       | 2021       | 2022       | 2023       | 2017-2023 % Change |
|----------------------|------------|------------|------------|------------|------------|------------|------------|--------------------|
| Dudley               | 40         | 55         | 50         | 45         | 45         | 45         | 40         | 0.00%              |
| Sandwell             | 35         | 35         | 25         | 40         | 40         | 45         | 50         | 42.86%             |
| Walsall              | 45         | 40         | 40         | 35         | 35         | 20         | 30         | -33.33%            |
| Wolverhampton        | 45         | 45         | 35         | 35         | 20         | 20         | 30         | -33.33%            |
| <b>Black Country</b> | <b>165</b> | <b>175</b> | <b>150</b> | <b>155</b> | <b>140</b> | <b>130</b> | <b>150</b> | <b>-9.09%</b>      |
| UK                   | 13,120     | 13,925     | 12,560     | 12,045     | 10,695     | 11,485     | 13,750     | 4.80%              |

The Black Country’s **company and sector composition is also likely to be part of the reason for lower access to innovation funding**: fewer large firms and more reliance on firms in traditionally less innovative sectors (retail and health).

While low perceived innovation is possibly **impacted by a lack of grow-on space, a lack of diverse linkages to universities and other knowledge transfer assets and not having the right skills / culture** within business leaders and managers to access support.

Firms are also too busy surviving and dealing with other issues. According to the 2023 UK Innovation Survey, Covid-19, energy prices and availability of finance were highlighted as the biggest barriers to innovation for UK firms. **West Midlands firms also highlighted a higher-than-average score for many other barriers, particularly “lack of qualified personnel”, and “lack of information on technology”.**

More positively, there is an existing pool of innovative Black Country companies that can be utilised for sharing knowledge and ideas across other businesses locally. Furthermore, Innovate UK are working actively in the West Midlands through their [regional action plan](#). Working with organisations like Innovate UK and the WMCA to roll out relevant innovation programmes and link in companies with R&D / innovation grants will be important to uplifting the Black Country’s innovation performance.

Furthermore, considering extending private sector partnerships with university and college centres and focusing on exporting / high growth may provide more impetus for business innovation. Importantly, local authorities should engage with local businesses to understand key barriers to innovation and potential mechanisms to support more investment in innovation.

**Figure 9. UK Innovation Survey Results**

**% of businesses rating factors as highly important as barriers to innovation:**

| Factor  | UK   | West Midlands |
|---|------|---------------|
| Excessive perceived economic risks                      | 19.0 | 20.5          |
| Direct innovation cost too high                         | 17.3 | 20.2          |
| Cost of finance   | 20.5 | 22.2          |
| Availability of finance                                 | 21.2 | 22.4          |
| Lack of qualified personnel                             | 20.8 | 23.8          |
| Lack of information on technology                       | 6.9  | 11.3          |
| Lack of information on markets                          | 7.0  | 6.8           |
| Market dominated by established businesses              | 10.6 | 12.6          |
| Uncertain demand for innovative goods or services       | 13.6 | 12.5          |
| UK Government regulations                               | 16.5 | 15.5          |
| EU regulations  | 10.5 | 9.4           |
| Withdrawal of United Kingdom from the European Union    | 19.3 | 13.8          |
| Meeting technical, industry or service standards        | 9.9  | 9.9           |
| Issues arising from the coronavirus (COVID-19) pandemic | 33.4 | 33.9          |
| Recent increases in energy prices                       | 29.7 | 31.3          |

**Percentage of businesses where over 90% of innovations were protected by the following methods:**

| Region                   | Patents | Design registration | Copyright | Trademarks | Lead time advantages | Complexity of goods or services | Secrecy |
|--------------------------|---------|---------------------|-----------|------------|----------------------|---------------------------------|---------|
| England                  | 0.9     | 0.9                 | 2.0       | 2.2        | 1.0                  | 2.3                             | 2.2     |
| North East               | 2.1     | 1.2                 | 3.0       | 3.5        | [c]                  | 1.3                             | 1.7     |
| North West               | 0.8     | 1.3                 | 1.5       | 1.9        | 0.4                  | 1.8                             | 1.9     |
| Yorkshire and The Humber | 0.5     | 0.7                 | 1.4       | 0.8        | [c]                  | 1.9                             | 1.8     |
| East Midlands            | [c]     | 0.6                 | 1.3       | 1.2        | 1.4                  | 1.4                             | 1.2     |
| West Midlands            | 0.6     | 0.4                 | 0.8       | 1.8        | 0.3                  | 1.5                             | 1.6     |
| East of England          | 0.5     | 0.2                 | 2.6       | 2.2        | 1.9                  | 3.3                             | 2.2     |
| London                   | 1.3     | 1.2                 | 3.4       | 3.4        | 1.1                  | 3.3                             | 2.5     |
| South East               | 1.2     | 1.2                 | 2.1       | 3.0        | 1.8                  | 3.0                             | 3.9     |
| South West               | 1.2     | 0.9                 | 1.4       | 2.0        | 0.8                  | 2.1                             | 1.7     |

Source: UK Innovation Survey 2023 (DBT)

## Annex: UKRI Data Tables

### UKRI TOTAL

|                      | UKRI spend financial year 2020 to 2021<br>£ million | 2020<br>Population | Spend per<br>population |
|----------------------|---|--------------------|-------------------------|
| Birmingham           | £188.6  | 1,140,525          | £165.3                  |
| Coventry             | £174.9  | 379,387            | £461.0                  |
| Dudley               | £1.3  | 322,363            | £3.9                    |
| Sandwell             | £1.0  | 329,042            | £2.9                    |
| Solihull             | £155.0  | 217,487            | £712.7                  |
| Walsall              | £0.5  | 286,716            | £1.6                    |
| Wolverhampton        | £4.5  | 264,407            | £16.8                   |
|                      |   |                    |                         |
| <b>Black Country</b> | <b>£7.1</b>   | <b>1,202,528</b>   | <b>£5.9</b>             |
| WMCA 7-MET           | £525.6  | 2,939,927          | £178.8                  |
| UK-wide              | £7,265.4  | 67,837,391         | £107.1                  |

### INNOVATE UK ONLY TOTAL

|                      | UKRI spend financial year 2020 to 2021<br>£ million | 2020<br>Population | Spend per<br>population |
|----------------------|---|--------------------|-------------------------|
| Birmingham           | £35.7   | 1,140,525          | £31.3                   |
| Coventry             | £53.9   | 379,387            | £142.1                  |
| Dudley               | £1.3  | 322,363            | £4.0                    |
| Sandwell             | £1.0  | 329,042            | £3.0                    |
| Solihull             | £155.0  | 217,487            | £712.7                  |
| Walsall              | £0.5  | 286,716            | £1.7                    |
| Wolverhampton        | £0.9  | 264,407            | £3.4                    |
|                      |   |                    |                         |
| <b>Black Country</b> | <b>£3.7</b>   | <b>1,202,528</b>   | <b>£3.1</b>             |
| WMCA 7-MET           | £248.3  | 2,939,927          | £84.5                   |
| UK-wide              | £1,525.9  | 67,496,983         | £22.6                   |

Source: UKRI



## Appendix: Innovate UK Projects

| Competition Year | Participant Name                              | Project Title   | Award Offered (£) | Address Local Authority |
|------------------|---|---|-------------------|-------------------------|
| 2013/14          | Adas UK Limited                               | A pen side test for Schmallenberg virus exposure in sheep and cattle.   | 73,869            | Wolverhampton           |
| 2013/14          | Adas UK Limited                               | Development of a pen-side test for liver fluke in cattle and sheep.   | 124,947           | Wolverhampton           |
| 2013/14          | KENNAMETAL STELLITE UNLIMITED                 | ACcelerated CLAdding and Integrated Machining (ACCLAIM)   | 37,011            | Dudley                  |
| 2013/14          | WHISTON INDUSTRIES LIMITED                    | Automated Manufacturing Process Integrated with Intelligent Tooling Systems (AUTOMAN)   | 490,120           | Sandwell                |
| 2013/14          | CARILLION ENERGY SERVICES LIMITED             | S-IMPLER (S)olid Wall, (I)nnovative Insulation and (M)onitoring (P)rocesses using (L)ean (E)nergy efficient (R)etrofit                      | 131,879           | Wolverhampton           |
| 2013/14          | Adas UK Limited                               | Development of measurement technologies to increase productivity, nitrogen use efficiency and nitrogen management decisions for grass crops | 78,054            | Wolverhampton           |
| 2013/14          | Robinson Brothers Limited                     | NIRVANA - Near Infra-Red photoinitiated curing of industrial wood coatings and varnishes  | 127,286           | Sandwell                |
| 2013/14          | Midland Tool & Design Limited                 | Advanced Electrical Machines Technologies for Aircraft (AEMTA)  | 86,833            | Sandwell                |
| 2013/14          | KUKA ROBOTICS UK LTD                          | Innovative Linear Friction Welding technology for Near Net Shape manufacture of advanced Ti aerospace components                            | 435,090           | Dudley                  |
| 2013/14          | TEN Solutions Limited                         | Innovative Linear Friction Welding technology for Near Net Shape manufacture of advanced Ti aerospace components                            | 129,437           | Sandwell                |
| 2013/14          | Adas UK Limited                               | Oilseed rape rooting rapid assessment   | 45,000            | Wolverhampton           |
| 2013/14          | Robinson Brothers Limited                     | Property Propagation through Process to Product   | 22,008            | Sandwell                |
| 2013/14          | Lafarge Tarmac Trading Limited                | Floating photo-catalyst for environmental clean-up  | 51,327            | Wolverhampton           |
| 2013/14          | Weatherite Manufacturing Limited              | MOF BASED ADSORPTION SYSTEM FOR INTEGRATED ENERGY STORAGE AND POWER GENERATION  | 66,020            | Sandwell                |
| 2013/14          | Adas UK Limited                               | Development of a soil zoning algorithm to improve productivity of arable farmers  | 44,806            | Wolverhampton           |
| 2013/14          | Adas UK Limited                               | Using environmental data to improve great crested newt surveying.   | 81,073            | Wolverhampton           |
| 2013/14          | Carillion LGS Limited                         | Smart Clean   | 15,666            | Wolverhampton           |
| 2013/14          | Adas UK Limited                               | WheatScan: Tractor-mount sensing for precision application of Nitrogen and control of milling wheat protein content.                        | 76,642            | Wolverhampton           |
| 2013/14          | University of Wolverhampton                   | University of Wolverhampton and The Severn Partnership limited  | 90,750            | Wolverhampton           |
| 2013/14          | Clever Cherry Realisation Limited             | Elders-Up!  | 33,192            | Walsall                 |
| 2013/14          | oMbiel Limited                                | governmentM Platform Development  | 144,509           | Wolverhampton           |
| 2013/14          | S&B Waste Management & Recycling Limited      | RDF Production diverted Landfill  | 5,000             | Wolverhampton           |
| 2013/14          | Hinton Perry & Davenhill Limited              | HP&D BIM Modelling  | 5,000             | Dudley                  |
| 2013/14          | New Energy Contracts Ltd                      | NEC 1   | 5,000             | Sandwell                |
| 2013/14          | Secure IT Disposals Limited                   | Network Security Testing  | 5,000             | Dudley                  |
| 2013/14          | Simco External Framing Solutions (UK) Limited | BIM Development and implementation  | 5,000             | Walsall                 |
| 2013/14          | New Energy Management Limited                 | Water Treatment   | 5,000             | Sandwell                |
| 2013/14          | Secure Online Transact                        | Cloud Security App  | 5,000             | Sandwell                |
| 2014/15          | ADAS UK LIMITED                               | Develop an automated system for precision application of nitrogen fertiliser and plant growth regulators                                    | 97,376            | Wolverhampton           |
| 2014/15          | Adas UK Limited                               | Control of Botrytis in fresh produce pre- and post-harvest environments by integrated UV-B, -C and ethylene removal treatment               | 75,935            | Wolverhampton           |
| 2014/15          | Midland Tool & Design Limited                 | High Volume E-Machine Supply from the UK (HVEMS-UK)   | 360,727           | Sandwell                |
| 2014/15          | MuJo Mechanics                                | Connected orthopaedic rehabilitation devices for remote patient monitoring during post-surgery care   | 176,640           | Dudley                  |
| 2014/15          | Adas UK Limited                               | Targeted supply chain ethylene removal to control the development of fresh produce  | 87,402            | Wolverhampton           |
| 2014/15          | Sandvik Limited                               | GEMSTONE- GEAr Manufacturing - Supplier Technology Optimisation, iNtegration & Education  |                   | Dudley                  |



| Competition Year | Participant Name                         | Project Title  | Award Offered (£) | Address Local Authority |
|------------------|--|--|-------------------|-------------------------|
| 2014/15          | WESTFIELD SPORTS CARS LIMITED            | GATEway - Greenwich Automated Transport Environment  | 1,510,244         | Dudley                  |
| 2014/15          | Wolverhampton City Council               | Optimising regional clusters of smart electricity networks   | 25,000            | Wolverhampton           |
| 2014/15          | ELG Carbon Fibre Limited                 | Adapting Recycled Carbon Fibre Materials for Mass Produced Low Cost Automotive Structures                          | 42,170            | Dudley                  |
| 2014/15          | SERE-TECH INNOVATION LIMITED             | Novel Integrated EPS and PEF process for Dairy byproducts processing for use as high value ingredients             | 143,045           | Walsall                 |
| 2014/15          | Carillion LGS Limited                    | Data-driven Precision Surface Water Management for Urban Environments  | 34,995            | Wolverhampton           |
| 2014/15          | Somers Forge Limited                     | TransForge - Production of forged dissimilar metal transitions for improved reliability in new nuclear power plant | 50,974            | Dudley                  |
| 2014/15          | Adas UK Limited                          | Vaccination based control of fasciolosis in farmed ruminants   | -                 | Wolverhampton           |
| 2014/15          | Phoenix Calibration & Services Limited   | AliAnForm  | 20,732            | Dudley                  |
| 2014/15          | SERE-Tech Innovation Limited             | SERE Tech Innovation Ltd (add on to 102312)  |                   | Walsall                 |
| 2014/15          | Hydratight Limited                       | The University of Sheffield and Hydratight Limited   |                   | Walsall                 |
| 2014/15          | Higgs & Sons                             | Aston University and Higgs & Sons  |                   | Dudley                  |
| 2014/15          | University of Wolverhampton              | University if Wolverhampton and The Severn Partnership limited   | 38,600            | Wolverhampton           |
| 2014/15          | University of Wolverhampton              | University of Wolverhampton and Primary FlowPoints Limited   | 54,450            | Wolverhampton           |
| 2014/15          | Primary FlowPoints Limited               | University of Wolverhampton and Primary FlowPoints Limited   |                   | Walsall                 |
| 2014/15          | University of Wolverhampton              | University of Wolverhampton and Industrial Penstocks Limited   | 63,300            | Wolverhampton           |
| 2014/15          | Industrial Penstocks Limited             | University of Wolverhampton and Industrial Penstocks Limited   |                   | Dudley                  |
| 2014/15          | Phoenix Materials Testing Limited        | The University of Sheffield and Phoenix Materials Testing Limited  |                   | Dudley                  |
| 2014/15          | B E Wedge Holdings Limited               | The University of Sheffield and B E Wedge Holdings Limited   |                   | Walsall                 |
| 2014/15          | University of Wolverhampton              | University of Wolverhampton and i2r Packaging Solutions Limited  | 54,450            | Wolverhampton           |
| 2014/15          | University of Wolverhampton              | University of Wolverhampton and Syspal Limited   | 72,600            | Wolverhampton           |
| 2014/15          | University of Wolverhampton              | University of Wolverhampton and Whale Tankers Limited  | 108,900           | Wolverhampton           |
| 2014/15          | University of Wolverhampton              | University of Wolverhampton and Somers Forge Limited   | 80,088            | Wolverhampton           |
| 2014/15          | Somers Forge Limited                     | University of Wolverhampton and Somers Forge Limited   |                   | Dudley                  |
| 2014/15          | University of Wolverhampton              | University of Wolverhampton and Warrior Doors Limited  | 72,600            | Wolverhampton           |
| 2014/15          | University of Wolverhampton              | University of Wolverhampton and Wescol Limited   | 72,600            | Wolverhampton           |
| 2014/15          | Wescol Limited                           | University of Wolverhampton and Wescol Limited   |                   | Wolverhampton           |
| 2014/15          | Carwood Motor Units Limited              | The University of Warwick and Carwood Motors Units Limited   |                   | Sandwell                |
| 2014/15          | Industrial Penstocks Limited             | Flood Barrier that uses the flotation power of the flood to automatically erect itself.                            | 181,729           | Dudley                  |
| 2014/15          | Brockhouse Group Limited                 | Catapult Strathclyde   | 5,000             | Sandwell                |
| 2014/15          | Heat Genius Ltd                          | HG Cyber Security  | 5,000             | Dudley                  |
| 2014/15          | HumAnima CIC                             | Cyber Techno App   | 5,000             | Wolverhampton           |
| 2014/15          | My Life Information                      | My Life Info   | 5,000             | Sandwell                |
| 2014/15          | Grand Station                            | application 1  | 5,000             | Wolverhampton           |
| 2014/15          | : Krypton Electrical Wholesalers Limited | LED Lighting for Poultry Industry  | 5,000             | Walsall                 |
| 2014/15          | Intervate Limited                        | Intervate Paper Sludge   | -                 | Sandwell                |
| 2015/16          | METALLISATION LIMITED                    | FLARE - 'FLame spray Adder for in-situ patch Repair of aero-Engine combustors'                                     | 131,770           | Dudley                  |
| 2015/16          | Vacuum Furnace Engineering Limited       | Diffusion Bonded Aero Heat Exchanger   | 24,406            | Dudley                  |

| Competition Year | Participant Name                                 | Project Title  | Award Offered (£) | Address Local Authority |
|------------------|--|--|-------------------|-------------------------|
| 2015/16          | Virtechs Limited                                 | Insurance-backed warranty for whole life housing energy performance (I-LIFE)                 | 26,109            | Sandwell                |
| 2015/16          | WESTFIELD SPORTS CARS LIMITED                    | INSIGHT  | 621,640           | Dudley                  |
| 2015/16          | INDUSTRIAL POWER UNITS LIMITED                   | Low Temperature Waste Heat to Power Generation   | 50,267            | Sandwell                |
| 2015/16          | ORIGEN POWER LTD                                 | Balanced Energy Networks   | 233,134           | Walsall                 |
| 2015/16          | WESTFIELD SPORTS CARS LIMITED                    | High Performance Low Emission Hybrid Power Train For Motorcycles And Lightweight Sports Cars |                   | Dudley                  |
| 2015/16          | MIDLAND TOOL AND DESIGN LIMITED                  | MEGCAP   | 88,915            | Sandwell                |
| 2015/16          | GOODRICH ACTUATION SYSTEMS LIMITED               | Advanced Nacelle System  | 494,740           | Wolverhampton           |
| 2015/16          | Accord Housing Association Limited               | Refurbishment as a Manufacturing Industry (REMI)   | 12,000            | Sandwell                |
| 2015/16          | WESTFIELD SPORTS CARS LIMITED                    | Towards fully sustainable high-performance biocomposites for lightweight vehicles            | 15,543            | Dudley                  |
| 2015/16          | University of Wolverhampton                      | University of Wolverhampton and Crestwood Environmental Limited                              | 63,526            | Wolverhampton           |
| 2015/16          | Crestwood Environmental Limited                  | University of Wolverhampton and Crestwood Environmental Limited                              |                   | Wolverhampton           |
| 2015/16          | W H Tildesley Limited                            | University of Strathclyde and W H Tildesley Limited  |                   | Walsall                 |
| 2015/16          | University of Wolverhampton                      | University of Wolverhampton and Rozone Limited   |                   | Wolverhampton           |
| 2015/16          | Rozone Limited                                   | University of Wolverhampton and Rozone Limited   |                   | Walsall                 |
| 2015/16          | Griff Chains Limited                             | the University of Birmingham and Griff Chains Limited  |                   | Dudley                  |
| 2015/16          | University of Wolverhampton                      | University of Wolverhampton and Somers Forge Limited   |                   | Wolverhampton           |
| 2015/16          | Somers Forge Limited                             | University of Wolverhampton and Somers Forge Limited   |                   | Dudley                  |
| 2015/16          | University of Wolverhampton                      | University of Wolverhampton and Wescol Limited   |                   | Wolverhampton           |
| 2015/16          | Wescol Limited                                   | University of Wolverhampton and Wescol Limited   |                   | Wolverhampton           |
| 2015/16          | RSTYLE Services                                  | Travel Pal   | 5,000             | Dudley                  |
| 2015/16          | Lodge Cottrell                                   | Syngas Clean-up  |                   | Dudley                  |
| 2015/16          | Midland Impregnations Ltd                        | Monomer Recycling  |                   | Dudley                  |
| 2015/16          | Talbots Law Limited                              | We Will Innovate   |                   | Dudley                  |
| 2015/16          | Silks Solicitors                                 | Bespoke IT Solution  |                   | Sandwell                |
| 2015/16          | Origen Power Ltd                                 | CHESS Innovation Voucher Application   | 5,000             | Walsall                 |
| 2015/16          | R Future Solutions                               | 3RFit  |                   | Dudley                  |
| 2015/16          | THE ONE STOP PSYCHOTHERAPY SHOP LTD              | Cyber security @TOSPS.com  | 5,000             | Walsall                 |
| 2015/16          | Fboard   | fboard   |                   | Sandwell                |
| 2015/16          | West Midlands Solicitors                         | New Cloud  | 5,000             | Walsall                 |
| 2015/16          | Sundip Murria (Wolverhampton) Solicitors Limited | Remote Innovation  | 5,000             | Walsall                 |
| 2015/16          | Data Developments (UK) Ltd                       | OLGA data security   |                   | Wolverhampton           |
| 2016/17          | East End Foods PLC                               | Newton Fund - Enhanced rice milling and maximised valorisation of rice milling by-products   | 41,500            | Sandwell                |
| 2016/17          | METALLISATION LIMITED                            | Cost Reduction for Offshore Wind Now (CROWN)   | 16,019            | Dudley                  |
| 2016/17          | PHOENIX CALIBRATION & SERVICES LIMITED           | Rapid Aluminium Solutionising Technologies (RASTec)  | 170,825           | Dudley                  |
| 2016/17          | WESTFIELD SPORTS CARS LIMITED                    | Automated Connected and Electric Urban Transport Solutions (ACE UTS)                         | 618,749           | Dudley                  |
| 2016/17          | KUKA ROBOTICS UK LTD                             | RoboWAAM   | 330,652           | Sandwell                |
| 2016/17          | WESTFIELD SPORTS CARS LIMITED                    | Multi-Car Collision Avoidance  | 871,347           | Dudley                  |

| Competition Year | Participant Name                                      | Project Title   | Award Offered (£) | Address Local Authority |
|------------------|---|---|-------------------|-------------------------|
| 2016/17          | WESTFIELD SPORTS CARS LIMITED                         | CAPRI   | 1,239,602         | Dudley                  |
| 2016/17          | WESTFIELD SPORTS CARS LIMITED                         | Project Synergy   | 1,479,297         | Dudley                  |
| 2016/17          | WESTFIELD SPORTS CARS LIMITED                         | ESCIPODS (Electric Supercapacitor Integrated PODs)  | 395,964           | Dudley                  |
| 2016/17          | WESTFIELD SPORTS CARS LIMITED                         | Reducing Vehicle Carbon Emissions through Development of a Compact, Efficient, and Intelligent Powertrain | 803,897           | Dudley                  |
| 2016/17          | Adas UK Limited                                       | SHIFT: -Sentinel-2 -compatible Historical datasets for Future crop Targeting                              | 3,218             | Wolverhampton           |
| 2016/17          | Adas UK Limited                                       | GRASS improvement using Satellite TECHNOLOGIES: GRASS-TECH  | 4,536             | Wolverhampton           |
| 2016/17          | Adas UK Limited                                       | Integrating Satellite data to create an underpinning Crop Intelligence System                             | 28,245            | Wolverhampton           |
| 2016/17          | WESTFIELD SPORTS CARS LIMITED                         | LAVIS - Lake District Autonomous Vehicle and infrastructure Systems                                       | 68,754            | Dudley                  |
| 2016/17          | CHINA JEWEL LIMITED                                   | Modernisation of extruded wire filigree manufacturing to contemporary requirements                        | 31,749            | Dudley                  |
| 2016/17          | University of Wolverhampton                           | University of Wolverhampton and Scot Young Research Limited   | 110,385           | Wolverhampton           |
| 2016/17          | Scot Young Research Limited                           | University of Wolverhampton and Scot Young Research Limited   |                   | Dudley                  |
| 2016/17          | University of Wolverhampton                           | University of Wolverhampton and Mark Fenton Design Services Limited                                       |                   | Wolverhampton           |
| 2016/17          | University of Wolverhampton                           | University of Wolverhampton and Rozone Limited  | 88,308            | Wolverhampton           |
| 2016/17          | Rozone Limited  | University of Wolverhampton and Rozone Limited  |                   | Walsall                 |
| 2016/17          | University of Wolverhampton                           | Wrekin Products Steel Project and University of Wolverhampton   |                   | Wolverhampton           |
| 2016/17          | University of Wolverhampton                           | University of Wolverhampton and Johnson Test Papers Limited   | 110,385           | Wolverhampton           |
| 2016/17          | Johnson Test Papers Limited                           | University of Wolverhampton and Johnson Test Papers Limited   |                   | Sandwell                |
| 2017/18          | SONEMAT LIMITED                                       | RASCAL (Rate Scalable NDT for AM)   | 67,776            | Walsall                 |
| 2017/18          | OVIVO UK LIMITED                                      | Pristine - Production process enhancement for photocatalytic treatment system for water                   | -                 | Wolverhampton           |
| 2017/18          | SANDVIK LIMITED                                       | Digitally enabled ultrasonic assisted robotic machining demonstrator – RoboMade                           | -                 | Dudley                  |
| 2017/18          | DISULFICAN LIMITED                                    | Formulation and testing of PLGA-DS as an anti-cancer therapy for FDA and EMA new drug application         | 147,082           | Wolverhampton           |
| 2017/18          | University of Wolverhampton                           | Formulation and testing of PLGA-DS as an anti-cancer therapy for FDA and EMA new drug application         | 90,000            | Wolverhampton           |
| 2017/18          | SONEMAT LIMITED                                       | Smart Residual Stresses Monitoring for Metal Additive Manufacturing – EM-ReSt                             | 54,705            | Walsall                 |
| 2017/18          | W.H. TILDESLEY LIMITED                                | FAST STEP 3 - Swarf Titanium to Engine Parts in 3 Steps   | 177,460           | Walsall                 |
| 2017/18          | HS MARSTON AEROSPACE LIMITED                          | FAST  | 806,751           | Wolverhampton           |
| 2017/18          | University of Wolverhampton                           | Novel Nanoparticle Targeting of Antimicrobials to Infected Diabetic Foot Ulcers                           | 57,210            | Wolverhampton           |
| 2017/18          | ENVIRONMENTAL EXCELLENCE TRAINING AND DEVELOPMENT LTD | Upskilling Healthcare Cleaning Staff. A design investigation of approaches to training.                   | 32,000            | Sandwell                |
| 2017/18          | University of Wolverhampton                           | Violent and Sexual Offenders Online Monitoring System(s) Using GDPR Compliant Private Blockchain          | 15,889            | Wolverhampton           |
| 2017/18          | University of Wolverhampton                           | University of Wolverhampton & Wescol Limited  | -                 | Wolverhampton           |
| 2017/18          | Wescol Limited  | University of Wolverhampton & Wescol Limited  |                   | Wolverhampton           |
| 2017/18          | University of Wolverhampton                           | University of Wolverhampton & Mark Fenton Design Services Limited   |                   | Wolverhampton           |
| 2017/18          | University of Wolverhampton                           | University of Wolverhampton and Integrated System Technologies Limited                                    | 116,735           | Wolverhampton           |
| 2017/18          | Integrated System Technologies Limited                | University of Wolverhampton and Integrated System Technologies Limited                                    |                   | Walsall                 |
| 2017/18          | Excelsior Panelling Systems Limited                   | Birmingham City University and Excelsior Panelling Systems Limited  |                   | Dudley                  |

| Competition Year | Participant Name                        | Project Title   | Award Offered (£) | Address Local Authority |
|------------------|---|---|-------------------|-------------------------|
| 2017/18          | EDDYSENSE LTD.                          | Eddysense Ltd   | 350,000           | Walsall                 |
| 2018/19          | METALLISATION LIMITED                   | CROWN 2 - Cost Reduction for Offshore Wind Now 2  | 46,370            | Dudley                  |
| 2018/19          | EDDYSENSE LTD.                          | HiF-PD: Development of advanced performance eddy current testing technology based on high frequency phase discrimination. | 152,975           | Walsall                 |
| 2018/19          | WHG TRADING COMPANY LIMITED             | Collaborative knowledge-based DfMA approach to build cost-efficient, low-impact and high performance houses               | 317,968           | Walsall                 |
| 2018/19          | HADLEY INDUSTRIES HOLDINGS LIMITED      | Collaborative knowledge-based DfMA approach to build cost-efficient, low-impact and high performance houses               | 24,923            | Sandwell                |
| 2018/19          | AZETS HOLDINGS LIMITED                  | The Development of an Artificial Intelligence Recommender System for Advisory Service Provision at Scale                  | 233,560           | Walsall                 |
| 2018/19          | METALLISATION LIMITED                   | CHIMERA - Robotic Inspection of Pressure Vessels  | 103,838           | Dudley                  |
| 2018/19          | ZIMMER AND PEACOCK LIMITED              | Fertiliser on-farm decision tool: Optimising the use and reducing the environmental burden of fertigation                 | 809,103           | Sandwell                |
| 2018/19          | PYROGENESYS LTD                         | PyroPower Africa  | 48,092            | Dudley                  |
| 2018/19          | University of Wolverhampton             | Safe Internet surfing with an intelligent child-centred shield against harmful content                                    | 30,502            | Wolverhampton           |
| 2018/19          | University of Wolverhampton             | A GDPR compliant Private Permissioned Blockchain for Secure Distributed Data Storage and Processing                       | 15,970            | Wolverhampton           |
| 2018/19          | University of Wolverhampton             | Cydon: An intelligent decentralised data management platform  | 95,551            | Wolverhampton           |
| 2018/19          | J D WHITEHOUSE ENTERPRISES LTD          | Technical Feasibility Study (TFS) of Battery Remanufacturing for Electric Vehicles (BATREV)                               | 3,246             | Dudley                  |
| 2018/19          | TETRA DESIGN SERVICES LIMITED           | Zero Emissions capable Ready for Autonomous Urban Deliveries (ZERAUD)   | 39,348            | Dudley                  |
| 2018/19          | Liberty Performance Steels Limited      | University of Birmingham and Liberty Performance Steels Limited   |                   | Sandwell                |
| 2018/19          | Westley Plastics Limited                | University of Birmingham and Westley Plastics Limited   |                   | Dudley                  |
| 2018/19          | University of Wolverhampton             | University of Wolverhampton and Bromford Iron and Steel Company Limited   |                   | Wolverhampton           |
| 2018/19          | Bromford Iron and Steel Company Limited | University of Wolverhampton and Bromford Iron and Steel Company Limited   |                   | Sandwell                |
| 2018/19          | University of Wolverhampton             | University of Wolverhampton and Transicon Limited   |                   | Wolverhampton           |
| 2018/19          | University of Wolverhampton             | University of Wolverhampton and Wrekin Products Limited   | 123,785           | Wolverhampton           |
| 2018/19          | University of Wolverhampton             | University of Wolverhampton and Black Country Living Museum Trust   | 97,409            | Wolverhampton           |
| 2018/19          | The Black Country Living Museum Trust   | University of Wolverhampton and Black Country Living Museum Trust   |                   | Dudley                  |
| 2018/19          | University of Wolverhampton             | University of Wolverhampton and PKF Cooper Parry Group Ltd  |                   | Wolverhampton           |
| 2018/19          | University of Wolverhampton             | University of Wolverhampton and Eumar Technology Limited  |                   | Wolverhampton           |
| 2018/19          | University of Wolverhampton             | University of Wolverhampton and Wescol Limited  | 118,944           | Wolverhampton           |
| 2018/19          | Wescol Limited                          | University of Wolverhampton and Wescol Limited  |                   | Wolverhampton           |
| 2018/19          | Mechatherm International Limited        | Aston University and Mechatherm International Limited   |                   | Dudley                  |
| 2018/19          | University of Wolverhampton             | University of Wolverhampton and E Poppleton & Son Limited   | 106,219           | Wolverhampton           |
| 2018/19          | University of Wolverhampton             | University of Wolverhampton and Clear Architects Limited  | 116,805           | Wolverhampton           |
| 2018/19          | University of Wolverhampton             | University of Wolverhampton and Repose Furniture Limited  | 194,252           | Wolverhampton           |
| 2018/19          | Repose Furniture Limited                | University of Wolverhampton and Repose Furniture Limited  |                   | Dudley                  |
| 2018/19          | Conway Packing Services Limited         | Birmingham City University and Conway Packing Services Limited  |                   | Sandwell                |
| 2018/19          | WESTFIELD TECHNOLOGY GROUP LIMITED      | Disused Railway Project   | 1,000,000         | Dudley                  |
| 2019/20          | University of Wolverhampton             | Phos Cycle. Expired Fire Extinguisher Powder - Recycling Feasibility Project  | 112,915           | Wolverhampton           |
| 2019/20          | UV LIGHT TECHNOLOGY LIMITED             | Digital Servitization Demonstrator: From Sensor to Service to Business Success  | 29,786            | Sandwell                |
| 2019/20          | TARMAC TRADING LIMITED                  | Upgrading the value of BOS slag by addition of difficult to recycle glass or slags  | 10,606            | Wolverhampton           |

| Competition Year | Participant Name                           | Project Title  | Award Offered (£) | Address Local Authority |
|------------------|--|--|-------------------|-------------------------|
| 2019/20          | FOUNDRY MACHINERY & SPARES LIMITED         | Rapid Sand Casting Production  | 41,625            | Walsall                 |
| 2019/20          | East End Foods PLC                         | Enhanced Rice Milling and Maximised Valorisation of Rice Milling co product - Amendment 2 Extension for Impact   | 41,500            | Sandwell                |
| 2019/20          | TOTALLY MODULAR LIMITED                    | IGNITE (Integrated Intelligent Digital Tendering System)   | 123,397           | Sandwell                |
| 2019/20          | ERODEX (U.K.) LIMITED                      | Valid8 Turbine Inspection  | 33,008            | Dudley                  |
| 2019/20          | CHINA JEWEL LIMITED                        | Analysis of impurities arising from braising processes in thin wire filigree jewellery   | 24,637            | Dudley                  |
| 2019/20          | ALGORID LTD                                | Automatic Finger and Palm Print Matching Using Multiple Features   | 198,030           | Wolverhampton           |
| 2019/20          | TOTALLY MODULAR LIMITED                    | STELLAR  | 353,062           | Sandwell                |
| 2019/20          | University of Wolverhampton                | STELLAR  | 241,371           | Wolverhampton           |
| 2019/20          | TOTALLY MODULAR LIMITED                    | Enabling Housing Innovation for Inclusive Growth   | 122,823           | Sandwell                |
| 2019/20          | University of Wolverhampton                | CyberMIND: AI based application to monitor and predict stress levels in cyber security professionals and facilitate smart interventions to ensure good mental health | 31,713            | Wolverhampton           |
| 2019/20          | MIDLAND TOOL AND DESIGN LIMITED            | Aerospace Electric Propulsion Equipment, Controls & machines (AEPEC)   | 177,389           | Sandwell                |
| 2019/20          | University of Wolverhampton                | VACCYNE - an intelligent child-centred shield against harmful communications   | 58,932            | Wolverhampton           |
| 2019/20          | PYROGENESYS LTD                            | Energy Access Africa (EAA)   | 67,043            | Dudley                  |
| 2019/20          | PYROGENESYS LTD                            | Ethiopian Minigrid Extensions & Energy Storage (EMEES)   | 57,696            | Dudley                  |
| 2019/20          | PYROGENESYS LTD                            | Rural Industrialisation via Energy Technologies (RIVET)  | 39,172            | Dudley                  |
| 2019/20          | ECO RESEARCH LTD                           | Low cost filtered drinking water in the areas of struggle in Pakistan  | 24,990            | Dudley                  |
| 2019/20          | BLACK COUNTRY CONSORTIUM LIMITED           | Repowering the Black Country - Roadmap   | 22,767            | Dudley                  |
| 2019/20          | CR PLUS LIMITED                            | Repowering the Black Country - Roadmap   | 6,946             | Dudley                  |
| 2019/20          | University of Wolverhampton                | University of Wolverhampton and Integrated System Technologies Limited   | 156,433           | Wolverhampton           |
| 2019/20          | Hadley Industries plc                      | Brunel University and Hadley Industries plc  |                   | Sandwell                |
| 2019/20          | W H Tildesley Limited                      | University of Warwick and W H Tildesley Limited  |                   | Walsall                 |
| 2020/21          | BOC LIMITED                                | High Productivity Wire Arc Additive Manufacturing (HPWAAM)   | 77,606            | Wolverhampton           |
| 2020/21          | PYROGENESYS LTD                            | Virucidal Breathing Apparatus Filters (VBAF)   | 75,000            | Dudley                  |
| 2020/21          | NATIONAL GRID ELECTRICITY DISTRIBUTION PLC | South Wales Industry - A Plan for Clean Growth   | -                 | Sandwell                |
| 2020/21          | BLACK COUNTRY CONSORTIUM LIMITED           | Repowering the Black Country Phase 2 Cluster Plan  | 153,305           | Dudley                  |
| 2020/21          | CAMIRUS LIMITED                            | Repowering the Black Country Phase 2 Cluster Plan  | 99,894            | Dudley                  |
| 2020/21          | KEW PROJECTS LIMITED                       | Repowering the Black Country Phase 2 Cluster Plan  | 142,125           | Sandwell                |
| 2020/21          | WESTFIELD AUTONOMOUS VEHICLES LIMITED      | Synergy - 103289   | 182,793           | Dudley                  |
| 2020/21          | ECO RESEARCH LTD                           | COVID-19: Continuity grants  | 13,000            | Dudley                  |
| 2020/21          | ERODEX (U.K.) LIMITED                      | Valid8 Turbine Inspection  | 49,200            | Dudley                  |
| 2020/21          | EVER RESOURCE LTD                          | An improved method for producing lead oxides for enhancing performance of lead acid batteries  | 156,123           | Walsall                 |
| 2020/21          | DIAMOND COATINGS LIMITED                   | Optically enhanced antiviral transparent screen protection   | 91,326            | Dudley                  |
| 2020/21          | GEN 2 CARBON LIMITED                       | Sustainable Aerospace Seatback   | 82,354            | Dudley                  |
| 2020/21          | CROWNCRUISER MOTORS LTD                    | The RAPTURE E-Bike   | 138,196           | Wolverhampton           |
| 2020/21          | WESTFIELD SPORTS CARS LIMITED              | Cargo POD  | 207,972           | Dudley                  |
| 2020/21          | STAHT LIMITED                              | An Innovative IoT-based software platform utilising AI and Machine learning to optimise working practices within the construction industry                           | 167,939           | Dudley                  |

| Competition Year | Participant Name                           | Project Title   | Award Offered (£) | Address Local Authority |
|------------------|--|---|-------------------|-------------------------|
| 2020/21          | ADVANCED CONSTRUCTION TECHNOLOGIES LIMITED | TUPROOFS - The roof that pays for itself (TF)   | 82,012            | Sandwell                |
| 2020/21          | HADLEY INDUSTRIES HOLDINGS LIMITED         | TUPROOFS - The roof that pays for itself (TF)   | 83,816            | Sandwell                |
| 2020/21          | MIDLANDS HIGH GROWTH LIMITED               | TUPROOFS - The roof that pays for itself (TF)   | 50,000            | Sandwell                |
| 2020/21          | HINTON PERRY & DAVENHILL LIMITED           | Study of HP&D exhaust kiln heat conversion and use for drying bricks and tiles  | 102,334           | Dudley                  |
| 2020/21          | HADLEY INDUSTRIES HOLDINGS LIMITED         | Mass-produced Energy Pod for Mass Retrofitting  | 114,797           | Sandwell                |
| 2020/21          | MIDLANDS HIGH GROWTH LIMITED               | Mass-produced Energy Pod for Mass Retrofitting  | 27,782            | Sandwell                |
| 2020/21          | MIDLANDS HIGH GROWTH LIMITED               | DOORWAY - Roof and External Wall Insulation Cassettes   | 155,823           | Sandwell                |
| 2020/21          | HADLEY INDUSTRIES HOLDINGS LIMITED         | DOORWAY - Roof and External Wall Insulation Cassettes   | -                 | Sandwell                |
| 2020/21          | TIN SMART SOCIAL LIMITED                   | DOORWAY - Roof and External Wall Insulation Cassettes   | 39,827            | Sandwell                |
| 2020/21          | University of Wolverhampton                | Development of Innovative Off-Grid Energy Storage for Sub-Saharan Africa using portable and affordable Na-ion Battery System                                    | 315,912           | Wolverhampton           |
| 2020/21          | RSK ADAS LIMITED                           | Supporting the YEN Family through Covid-19 and beyond with an enhanced digital environment: Enhancing agricultural productivity, sustainability & profitability | 99,570            | Wolverhampton           |
| 2020/21          | ENVOREM LIMITED                            | Decarbonising the Oil Industry  | 99,880            | Dudley                  |
| 2020/21          | University of Wolverhampton                | CyberMIND: An AI-based platform helping cyber security professionals to detect, predict and manage stress.  | 59,150            | Wolverhampton           |
| 2020/21          | LISN LTD                                   | Lisn Dashboard for Staff Feedback using AI (Machine Learning)   | 12,410            | Walsall                 |
| 2020/21          | TATA STEEL UK LIMITED                      | CarbonVue - integrated carbon and productivity end-to-end supply chain management   | -                 | Wolverhampton           |
| 2020/21          | WESTFIELD SPORTS CARS LIMITED              | Digital Innovations for Niche Sector Industry Supply Chain Optimisation (DINS)  | 158,990           | Dudley                  |
| 2020/21          | CARRS TOOL STEELS LIMITED                  | Feasibility study of Hot Isostatic Pressing of tool steel powder with Alternative Particle size distributions (HIPAS)   | 35,296            | Sandwell                |
| 2020/21          | THE FLAME LILY HEALTHCARE LTD              | CheckUp Health - Saving Black, Asian and Minority Ethnic Lives  | 43,139            | Wolverhampton           |
| 2020/21          | A.F.BLAKE MORE AND SON LIMITED             | Smart logistics network cost optimisation   | 12,483            | Walsall                 |
| 2020/21          | FIRSTEEL LIMITED                           | Feasibility Study for the Energy Transition of Firsteel Limited   | 80,116            | Walsall                 |
| 2020/21          | University of Wolverhampton                | University of Wolverhampton and Johnson Test Papers Limited   | 112,896           | Sandwell                |
| 2020/21          | FENIX BATTERY RECYCLING LTD                | Development of innovative separation technologies for end-of-life Lithium Ion Battery recycling   | 245,250           | Walsall                 |
| 2020/21          | APTISENS LTD                               | Smart and high-efficient technologies for fruits and vegetable production in greenhouse and plant factory   | 142,354           | Wolverhampton           |
| 2020/21          | Made in the Midlands Limited               | Birmingham City University and Made in the Midlands Limited   |                   | Walsall                 |
| 2020/21          | Metal Assemblies Limited                   | Aston University and Metal Assemblies Limited   |                   | Sandwell                |
| 2020/21          | University of Wolverhampton                | FedCam: Secure Federation for Visual Sensor (Camera)  | 31,573            | Wolverhampton           |
| 2020/21          | University of Wolverhampton                | TrustMe: Secure and Trustworthy AI platform for FinTech   | 31,338            | Wolverhampton           |
| 2020/21          | WESTFIELD SPORTS CARS LIMITED              | RICHE - Robots In Controlled Healthcare Environments  | 244,742           | Dudley                  |
| 2020/21          | ADVANCED ELECTRONICS & LOGISTICS LIMITED   | Innovative discharging technologies for Lithium-ion battery recyclability (DISCOVERY)   | 235,410           | Sandwell                |
| 2020/21          | Birmingham City University                 | Birmingham City University and Malthouse Engineering Co Limited   | 126,540           | Sandwell                |
| 2020/21          | GOODRICH ACTUATION SYSTEMS LIMITED         | Novel Leading Edge Flap Actuator for Commercial Supersonic Aircraft   | 691,110           | Wolverhampton           |
| 2021/22          | Birmingham City University                 | Birmingham City University and Hadley Industries Holdings Limited   | 92,894            | Sandwell                |
| 2021/22          | Sandwell Metropolitan Borough Council      | Low-cost acoustic sensor to monitor, analyse and predict traffic and vehicular emissions with Spatiotemporal Context (Traffic Ear)                              | 3,637             | Sandwell                |
| 2021/22          | TETRA DESIGN SERVICES LIMITED              | Electric Module for Low Flat Floor (EMLoFF) for MCVs and Semi Trailers  | 154,524           | Dudley                  |



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|------------------|---------------------------------------|--|-------------------|-------------------------|
| 2021/22          | MEMBRACON (UK) LIMITED                | PigProGrAm – Developing a Circular Economy for UK Pig Production through Green Ammonia Harvesting  | 93,121            | Wolverhampton           |
| 2021/22          | WESTFIELD SPORTS CARS LIMITED         | SUPPORTIVE-SUPercapacitors for zero emission PORT-side VEHICLES  | 253,333           | Dudley                  |
| 2021/22          | BIGTOOTH STUDIOS LTD                  | Live Facial & Motion Capture Digital Avatars   | 24,396            | Wolverhampton           |
| 2021/22          | TEN STREETS LIMITED                   | Ten Streets Modern Sustainable Footwear  | 12,722            | Sandwell                |
| 2021/22          | University of Wolverhampton           | TrustMe: Secure and Trustworthy AI platform  | 59,899            | Wolverhampton           |
| 2021/22          | CAST METALS FEDERATION                | 3DCarbine  | 6,509             | Sandwell                |
| 2021/22          | University of Wolverhampton           | FeDCam: Secure Federation for Visual Sensors (Camera)  | 59,778            | Wolverhampton           |
| 2021/22          | ECO RESEARCH LTD                      | Feasibility study to deploy small scale waste to energy systems (through gasification) in Pakistan   | 20,999            | Dudley                  |
| 2021/22          | PHOS CYCLE LIMITED                    | Expired Fire Extinguisher Powder Recycling - Experimental Development Project  | 167,559           | Sandwell                |
| 2021/22          | University of Wolverhampton           | Expired Fire Extinguisher Powder Recycling - Experimental Development Project  | 45,669            | Wolverhampton           |
| 2021/22          | ROBINSON BROTHERS LIMITED             | Odourising Hydrogen Fuel Cells   | 7,448             | Sandwell                |
| 2021/22          | Sandwell Metropolitan Borough Council | Reducing Health inequalities and enabling self care for all  | 247,012           | Sandwell                |
| 2021/22          | FALLOUH HEALTHCARE LIMITED            | PerDeCT device (Pericardial Device for monitoring Cardiac output and the diagnosis of Tamponade)   | 214,653           | Walsall                 |
| 2021/22          | DIAMOND COATINGS LIMITED              | Self-sanitising coatings to reduce healthcare associated infections  | 95,884            | Dudley                  |
| 2021/22          | DISULFICAN LIMITED                    | Translational Development of a novel therapy for Malignant Mesothelioma  | 221,068           | Wolverhampton           |
| 2021/22          | University of Wolverhampton           | Translational Development of a novel therapy for Malignant Mesothelioma  | 147,092           | Wolverhampton           |
| 2021/22          | CONFEDERATION OF BRITISH METALFORMING | Scale-up and commercialization of an innovative forming technology for low-cost production of super-light automotive structural parts (SECA) | 31,102            | Sandwell                |
| 2021/22          | Birmingham City University            | Birmingham City University and Barton Storage Systems Limited  | -                 | Wolverhampton           |
| 2021/22          | BARTON STORAGE SYSTEMS LIMITED        | Birmingham City University and Barton Storage Systems Limited  | -                 | Wolverhampton           |
| 2021/22          | Aston University                      | Aston University and Brockhouse Group Limited KTP 21_22 R5   | 170,973           | Sandwell                |
| 2021/22          | Aston University                      | Aston University and Mechatherm International Limited KTP 21_22 R5   | 168,937           | Dudley                  |
| 2021/22          | Birmingham City University            | Birmingham City University and Crowe UK LLP KTP 21_22 R5   | 86,890            | Sandwell                |
| 2021/22          | BRIGHT STRUCTURES LIMITED             | EASIBridge: Ultra-Compact 4-Person Launchable Space-Frame Vehicle Bridge   | 168,767           | Dudley                  |
| 2021/22          | ELANSYS LIMITED                       | certain.1 - climate and environment risk through transparent analytics and intelligent networks phase 1                                      | 46,248            | Walsall                 |
| 2022/23          | METAL ASSEMBLIES LTD                  | ECO-SPRINT: Environment Centred Optimisation of SME Productivity using Realtime INTElligence   | 51,286            | Sandwell                |
| 2022/23          | SCANMETALS (UK) LIMITED               | Circular and Constant Aluminium (CirConAl)   | 232,419           | Walsall                 |
| 2022/23          | Birmingham City University            | Birmingham City University and Panic Deliveries Limited KTP 22_23 R1   | 122,082           | Sandwell                |
| 2022/23          | The Royal Wolverhampton NHS Trust     | Make healthcare safer by preventing accidentally retained surgical items   | 89,502            | Wolverhampton           |
| 2022/23          | University of Wolverhampton           | Envirosurface - Urban Heat Management Eco Paving (High Albedo Index PU-R Composite)  | 117,484           | Wolverhampton           |
| 2022/23          | The Royal Wolverhampton NHS Trust     | Make childbirth and surgery safer by preventing accidentally retained surgical items   | 89,502            | Wolverhampton           |
| 2022/23          | The University of Warwick             | University of Warwick (The) and Thomas Dudley Foundry Ltd KTP 22_23 R2   | -                 | Dudley                  |
| 2022/23          | THOMAS DUDLEY FOUNDRY LIMITED         | University of Warwick (The) and Thomas Dudley Foundry Ltd KTP 22_23 R2   | -                 | Dudley                  |
| 2022/23          | ECO RESEARCH LTD                      | Feasibility study for sustainable, affordable solar PV/T-biomethane energy solution for rural Pakistan                                       | 38,998            | Dudley                  |
| 2022/23          | SEPSIS ENTERPRISES LIMITED            | Development of the NeutroCheck diagnostic device to enable remote triage of chemotherapy patients at risk of neutropenic sepsis              | 35,110            | Walsall                 |
| 2022/23          | ENJOY THE AIR LIMITED                 | Sandwell Proof of Concept - Link Local Government Disease Prevention Planning to Community Behaviour Change                                  | 49,650            | Sandwell                |



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|------------------|---|--|-------------------|-------------------------|
| 2022/23          | DEEFORM LIMITED                                     | DeepForm: a new tool design for efficient car body parts   | 49,998            | Sandwell                |
| 2022/23          | AIRGUARD FILTERS LIMITED                            | Smart Sink   | 49,836            | Wolverhampton           |
| 2022/23          | Birmingham City University                          | Birmingham City University and King and Moffatt UK Limited KTP 22_23 R2  | -                 | Wolverhampton           |
| 2022/23          | KING & MOFFATT UK LIMITED                           | Birmingham City University and King and Moffatt UK Limited KTP 22_23 R2  | -                 | Wolverhampton           |
| 2022/23          | SOLUTIONS BY JIGSAW LIMITED                         | Infrared Electric Boiler   | 45,101            | Dudley                  |
| 2022/23          | GEN 2 CARBON LIMITED                                | R-LIGHTBIOCOM: New bio-based and sustainable raw materials enabling circular value chains of high performance lightweight biocomposites  | 288,724           | Dudley                  |
| 2022/23          | Connected Places Catapult                           | Clean Futures  | 3,632,479         | Dudley                  |
| 2022/23          | BLACK COUNTRY INNOVATIVE MANUFACTURING ORGANISATION | Clean Futures  | 2,554,193         | Dudley                  |
| 2022/23          | APTISENS LTD  | ECologically sustainable NUTRient management in agriculture aiming to prevent, mitigate and eliminate pollution in soils, water and air' | 115,389           | Wolverhampton           |
| 2022/23          | TEXTILE RECYCLING INTERNATIONAL LIMITED             | Autosort for Circular Textiles - ACT UK  | 42,246            | Wolverhampton           |
| 2022/23          | University of Wolverhampton                         | Systematic and orchestrated deployment of safety solutions in complex urban environments for ageing and vulnerable societies             | 365,621           | Wolverhampton           |
| 2022/23          | FLEXSEA LTD   | Microalgae as a biomanufacturing platform for bioplastics  | 13,488            | Wolverhampton           |
| 2022/23          | GEN 2 CARBON LIMITED                                | FURHY: Fully Recyclable HYbrid bio-composite for transport applications  | 228,039           | Dudley                  |
| 2022/23          | GEN 2 CARBON LIMITED                                | Advanced lightweight materials FOR Energy-efficient STructures   | 306,075           | Dudley                  |
| 2022/23          | IBIOTECH LTD  | Sustainable production of PHAs through valorisation of seaweed processing waste  | 20,318            | Wolverhampton           |
| 2022/23          | University of Wolverhampton                         | Cooperative and Interconnected Green delivery solutions towards an era of optimized zero emission last-mile Logistics                    | 522,901           | Wolverhampton           |
| 2022/23          | HS MARSTON AEROSPACE LIMITED                        | SWITCH   | 861,477           | Wolverhampton           |
| 2022/23          | GOODRICH ACTUATION SYSTEMS LIMITED                  | Hybrid Electric Regional Wing Integration Novel Green Technologies - HERWINGT  | 103,761           | Wolverhampton           |
| 2022/23          | GLOBUS METAL POWDERS LTD                            | Novel SOE architectures for hydrogen production  | 184,970           | Sandwell                |
| 2022/23          | JET ENGINEERING SYSTEM SOLUTIONS LTD                | 5G at sea: Providing Offshore Wind with Safety-Critical Communications   | 1,046,799         | Dudley                  |
| 2023/24          | ADAS UK LIMITED                                     | AGRONOMICS: spatial experimentation to transform research in agronomy worldwide  | 363,314           | Wolverhampton           |
| 2023/24          | SYMBIOTEX LTD                                       | Up-cycling industrial waste to produce home-compostable biocomposites for sustainable cosmetic pots                                      | 49,189            | Wolverhampton           |
| 2023/24          | Birmingham City University                          | Birmingham City University and Canterbury Tools Limited KTP 23_24 R1   | 119,719           | Walsall                 |
| 2023/24          | GOLDILOCK SECURE LIMITED                            | Goldilock Industrial - providing exponential increasing resilience of industrial and CNI networks.                                       | 203,368           | Wolverhampton           |
| 2023/24          | IBIOTECH LTD  | iBiotech: Upscaling of Microbial Cellulose Production for Fast Fashion and Agricultural Applications                                     | 49,011            | Wolverhampton           |
| 2023/24          | Birmingham City University                          | Birmingham City University and Barton Storage Systems Limited KTP 2023_2024 R1   | 119,304           | Wolverhampton           |
| 2023/24          | University of Wolverhampton                         | VPTaaS: Cyber Penetration Test as a Service for Future Vehicles  | 31,995            | Wolverhampton           |
| 2023/24          | Birmingham City University                          | A Generative AI-Enabled Design Tool: Analysing problematic projects for improved productivity and cost efficiency                        | 19,574            | Sandwell                |
| 2023/24          | APTISENS LTD  | FUELSSENS: Aircraft Integrated IoT Sensor for monitoring Sustainable Aviation Fuel quality   | 86,144            | Wolverhampton           |
| 2023/24          | GOLDILOCK SECURE LIMITED                            | Goldilock-Industrial: Pioneering Security Solutions for CNI  | 348,250           | Wolverhampton           |
| 2023/24          | GOODRICH ACTUATION SYSTEMS LIMITED                  | Development of Advanced Wing Solutions 2 (DAWS 2)  | 1,765,163         | Wolverhampton           |
| 2023/24          | GEN 2 CARBON LIMITED                                | High performance 3D-Li anodes with recycled and sustainably sourced carbon scaffolds   | 174,731           | Dudley                  |

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| 2023/24          | PALLET - TRACK LIMITED   | Carbon and cost reduction for hub-and-spoke logistics   | 7,435             | Wolverhampton           |
| 2023/24          | APTISENS LTD   | PROVIDE: Printed IoT Sensors for Vertical and Outdoor Farming Use   | 57,595            | Wolverhampton           |
| 2023/24          | ECO RESEARCH LTD   | Improving access to sustainable energy in rural Pakistan using food and fiber agro-waste as a renewable fuel (SAFER)  | 80,024            | Dudley                  |
| 2023/24          | MDCO LTD   | RADWIPEs - Performance and Cleaning Efficacy  | 7,505             | Wolverhampton           |
| 2023/24          | XSTRAHL LIMITED  | FLASH Pre Clinical Dosimetry  | 10,795            | Walsall                 |
| 2023/24          | Birmingham City University                                       | Birmingham City University and James Lister & Sons Limited KTP23_24 R4  | 113,603           | Sandwell                |
| 2023/24          | PHOS CYCLE LIMITED   | Expired Fire Extinguisher Powder Recycling - Process&Yield Innovations  | 181,002           | Sandwell                |
| 2023/24          | Walsall College  | Black Country FE Innovation Service   | 214,901           | Walsall                 |
| 2023/24          | City of Wolverhampton College                                    | Black Country FE Innovation Service   | 145,032           | Wolverhampton           |
| 2023/24          | Dudley College/Black Country And Marches Institute Of Technology | Black Country FE Innovation Service   | 145,032           | Dudley                  |
| 2023/24          | Halesowen College  | Black Country FE Innovation Service   | 145,032           | Dudley                  |
| 2023/24          | CHROMATWIST LTD  | Modulating the ChromaTwist Dyes' Brightness: An Innovative Approach to Increasing Multiplexing in Flow Cytometry  | 325,752           | Wolverhampton           |
| 2023/24          | University of Wolverhampton                                      | Cyber Cavalry: Unifying Cyber Ranges and SOC Operations through the Integration of Digital Twins and Generative AI  | 32,000            | Wolverhampton           |
| 2024/25          | NovNat Tech LTD  | Hybrid Heatpump   | 341,566           | Dudley                  |
| 2024/25          | MONTRES KLER LTD   | Aerospace hardened EDI titanium watches   | 50,000            | Sandwell                |
| 2024/25          | BIRCHILLS AUTOMOTIVE (PRESSWORK) LIMITED                         | Sustainable decorative stainless steel bollards and barriers  | 40,430            | Walsall                 |
| 2024/25          | FLEXSEA LTD  | Turning traction into transactions for novel Net Zero materials   | 48,737            | Wolverhampton           |
| 2024/25          | GES RECYCLING LTD.   | Project PIVOT - Performance Integrated Vehicle Optimisation Technology  | 400,992           | Wolverhampton           |
| 2024/25          | Birmingham City University                                       | Birmingham City University and In-Comm Training and Business Services Limited KTP24_25 R1   | 126,697           | Walsall                 |
| 2024/25          | CONWAY PACKING SERVICES LIMITED                                  | WAT: Warehouse AI-Enabled Tracker Solution: A Case Study at Conway Packaging  | 21,957            | Sandwell                |
| 2024/25          | MOBILITY VEHICLE HIRE LIMITED                                    | FleetfootAI for Driver Advancement  | 8,992             | Sandwell                |
| 2024/25          | NovNat Tech LTD  | Advancing Integration of Machine Learning for Optimized MOF Production, Enhanced Slurry Formation, and Novel Adsorption-based AWG Technology in Geothermal Power Plants (AI-POTENT) | 412,504           | Dudley                  |
| 2024/25          | Brunel University London   | Brunel University London and Hadley Group Holdings Limited KTP 24_25 R2   | 177,278           | Sandwell                |
| 2024/25          | FLEXSEA LTD  | SWIFT: Seaweed Innovation for Filter Technology   | 15,700            | Wolverhampton           |
| 2024/25          | Aston University   | Aston University and Metal Assemblies Limited KTP 24_25 R3  | 150,278           | Sandwell                |
| 2024/25          | Birmingham City University                                       | Birmingham City University and Jhoots Pharmacy Limited KTP24_25 R3  | 118,414           | Walsall                 |
| 2024/25          | DARVICK LTD  | Materials Certification in Hydrogen for Industrial Net-zero   | 608,952           | Dudley                  |
| 2024/25          | DIGITAL CARE HUB C.I.C.  | Improving Adult Social Care Cyber Resilience in the West Midlands   | 0                 | Dudley                  |
| 2024/25          | Birmingham City University                                       | Birmingham City University and Barton Storage Systems Limited KTP24_25 R4   | 139,743           | Wolverhampton           |
| 2024/25          | Birmingham City University                                       | Birmingham City University and Hadley Group Holdings Limited KTP24_25 R4  | 102,661           | Sandwell                |

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|------------------|------------------------------------|---|-------------------|-------------------------|
| 2024/25          | INTEGRATED SYSTEMS ENGINEERING LTD | CrownComm: Advanced Real-Time Rail Monitoring through Beyond-5G/6G Open-RAN and Optical Fiber Exploitation                              | 49,628            | Dudley                  |
| 2024/25          | INFINITY PROJECT ENGINEERS LIMITED | Asbestos Testing Optimisation – a progression from manual to automated material assessment  | 64,283            | Sandwell                |
| 2024/25          | Birmingham City University         | Birmingham City University and Panic Deliveries Limited (T/A PDS Direct Limited ) KTP24_25 R5   | 135,729           | Sandwell                |
| 2024/25          | University of Wolverhampton        | SoC4SMEs: Delivering Open-Source Security Operations Center (SoC) Solutions as a Service to Strengthen Cybersecurity for SMEs in the UK | 31,982            | Wolverhampton           |
| 2024/25          | University of Wolverhampton        | Cyber-R: Securing Businesses through Generative AI-based Adaptive Cyber Resilience Service  | 31,745            | Wolverhampton           |
| 2025/26          | University of Wolverhampton        | SOC4SMEs: Delivering Open-Source Security Operations Centre (SOC) Solutions as a Service to Strengthen Cybersecurity for SMEs in the UK | 59,991            | Wolverhampton           |