

INNOVATION FUNDING IN THE MIDLANDS



Contents

Executive summary	3
Introduction	4
European Regional Development Fund (ERDF)	4
Analysis of ERDF 2014-2020 funding period	5
UK Shared Prosperity Fund (UKSPF)	9
Impacts	10
Alternative mechanisms to address the ERDF gap	11
Annex 1: ERDF case studies	16
Annex 2: Diffusion, innovation and adoption	28

Executive summary

The Midlands has used the European Regional Development Fund (ERDF) and wider European Structural and Investment Funds (ESIF) to facilitate economic and social development across the region.

Overall, according to the latest official data, the Midlands Engine 9-LEP area received **£470m** from ERDF in the 2014-2020 funding period across 256 projects, accounting for **17%** of England's allocation. In particular, **27.8% of the overall funding was allocated to research and innovation**, 5.6 pp (percentage points) more than the national average (22.2%). The higher concentration of funding in these critical areas means that the cessation of the fund will have a particularly pronounced effect in the Midlands compared to the rest of the country, likely widening regional disparities and impacting long-term economic growth and innovation.

While nationally, universities received 61% of this research and innovation funding on average, in the Midlands, universities received 78%. A report from the National Centre for Universities and Business (NCUB) revealed that every £1 of ERDF income received by universities generated up to £7.53 of additional income for knowledge exchange.

£334m (71.0%) of the Midlands Engine ERDF allocation was dedicated to research and innovation and business support, spanning 165 projects and providing core funding to support business and innovation accelerators, catapults, SMEs and academia.

When considering the wider ESIF funding, which includes both ERDF and other funds such as the European Social Fund (ESF) and Cohesion Fund (CF) amongst others, the total allocation for the region averaged £565m over three years. Comparing this to the UK Shared Prosperity Fund, one of the domestic successors to ESIF funding, highlights an estimated gap of £211.7m. The £353.2m earmarked UKSPF funding over three years is 37.5% less than the £565m three-year average ESIF funding to the Midlands.

This shortfall in funding, and the fact that UKSPF has no ring-fenced funding for innovation, could present a real risk to the Midlands innovation ecosystem, particularly when it comes to knowledge transfer between universities and businesses.

Using case studies (see Annex 1), we demonstrate the positive impact of ERDF within the Midlands and reflect on the need for decisive action to safeguard innovation activity in the region.

By strategically leveraging alternative mechanisms, such as Innovate UK, and focusing efforts on enhancing innovation capacity via the UKSPF, there is a specific call for increased government investment in other innovation programmes and a targeted approach to harness the potential of the UKSPF.

However, we need to be careful that R&D funding isn't diverted solely to replace ERDF activity. Redirection should prioritise quality over replication, as the greatest risk of relocating funds is to do so without encouraging growth or investment.

This report acts as an evidence baseline and basis for further discussion across Midlands Engine partners.

Introduction

The European Regional Development Fund (ERDF) is a European Union investment programme and part of the wider European Structural and Investment Funds (ESIF) which aim to strengthen economic, social and territorial cohesion in the European Union by correcting regional imbalances. The European Structural and Investment Funds are:

- **European Regional Development Fund (ERDF)** – promotes balanced development in different regions of the EU through key priority axes including business support, R&D and innovation
- **European Social Fund (ESF)** – supports employment-related projects throughout Europe and investment into human capital
- **Cohesion Fund (CF)** – funds transport and environmental projects in Member States where gross national income (GNI) per inhabitant is less than 90% of the EU average
- **European Agricultural Fund for Rural Development (EAFRD)** – focuses on resolving rural challenges
- **European Maritime and Fisheries Fund (EMFF)** – supports the fishing industry to adopt sustainable fishing practices and coastal communities to diversify their economies, improving quality of life across European coasts

This report examines only the ERDF as this is the source of innovation funding, whereas other funds have different scopes. In the last funding period, [2014-2020](#), the ERDF focused on several areas of ‘thematic concentration’, including innovation and research, but also the digital agenda, support for small and medium-sized enterprises (SMEs) and the low-carbon economy.

The UK was a key beneficiary of this fund. However, its exit from the European Union in 2020 has meant a potential loss of funding for activities within its borders, including the Midlands Engine pan-region. This report will focus on the potential loss of capacity to support innovation activity.

Most notably, the ERDF and wider ESIF funds have been replaced by the [UK Shared Prosperity Fund \(UKSPF\)](#), a government-allocated fund which is intended to reduce inequalities between communities and is a central pillar of the UK government’s ambitious Levelling Up agenda. There are concerns that the UKSPF could lead to significant funding gaps compared to the previous settlement under ESIF. This means that Midlands firms and universities who need extra financial support, including innovation support, may not receive it to the same level as before. This could lead to a loss of key projects affecting the region’s innovation, growth, competitiveness as well as the loss of key staff across our universities.

Hence, the aim of this report is to showcase the importance of innovation funding for the region via a series of case studies, highlighting the gaps created by the loss of ERDF and current lack of sufficient replacement funding. This report will also investigate how innovation funding in particular could be especially vulnerable to the new settlement.

European Regional Development Fund (ERDF)

Drawing on published funding data, in this section we present findings on the level of innovation activity funded in the Midlands by ERDF.

As previously mentioned, the ERDF played a pivotal role in driving innovation activity both in the Midlands and across the UK. A report by the [National Centre for Universities and Business \(NCUB\)](#)¹ underscored the substantial contribution of the ERDF in fostering collaboration between universities and businesses. The report’s analysis covered all aspects of ERDF funding (not just the innovation priority axis) and relied on data from the Higher Education Statistics Authority (HESA). It also

¹ NCUB’s analysis was based on the Higher Education – Business and Community Interaction survey’s (HEBCI) data from HESA, spanning from 2014-2022.

highlighted that universities in Wales, the West Midlands, the North West, and the South West received the highest levels of ERDF funding. The report identified four key functions fulfilled by the ERDF:

- Engagement with SMEs through business support, upskilling and innovative initiatives
- R&D processes and infrastructure
- Technology transfer
- Support for entrepreneurship and social innovation

Notably, the report revealed that every £1 of ERDF income received by higher education institutions generated up to £7.53 of additional income for knowledge exchange.

Universities in the region have also identified various other forms of support that are currently unavailable post-ERDF including:

1. Access to technology support for companies unable to meet the Innovate thresholds for participation;
2. A type of 'knowledge seed funding' for new innovations;
3. Capabilities for building infrastructure to aid regional development;
4. Stability provided by ERDF's 3-4 year contracts, in contrast to the 1-year arrangements of the UKSPF that make planning and staff retention significantly more challenging.

The case study in Annex 1 from the University of Derby's ESIF spending illustrates the impact of ERDF and its crucial role in fostering innovation and collaboration, with £15m of funding to SMEs resulting in an additional £26.5m of investment in the region and nearly 2,000 new jobs.

Analysis of ERDF 2014-2020 funding period

Over the course of the [2014-2020 ERDF funding period](#)², England received a total of £2.7bn ERDF funding across 1,100 projects, of which almost **£1.7bn** was earmarked specifically for innovation and business support activities³ across 718 projects. Business support activities received the bulk of this funding at almost £1.1bn (40%) across 428 projects, while research and innovation received £604m (22%) across 290 projects.

In the same period, the Midlands Engine 9-LEP area received a total of £470m (17% of England's allocation) across 256 projects, accounting for 23% of England's projects. Notably, innovation and business support activities in the region amounted to £334m (71.0% of the Midlands Engine total⁴), spanning 165 projects (23% of ERDF-funded innovation and business projects in England).

² Data should be reflective of the full ERDF funding period 2014-2020, including spend up to December 2023.

³ Priority Axis 1 (Research and Innovation) and Priority Axis 3 (Enhancing the competitiveness of SMEs) were used in column D to identify innovation funding within the spreadsheet.

⁴ 71.0% was taken from adding the % for research innovation and business support funding from Table 1.

Figure 1: Total ERDF research and innovation and business support in the Midlands Engine and England, 2014-2020

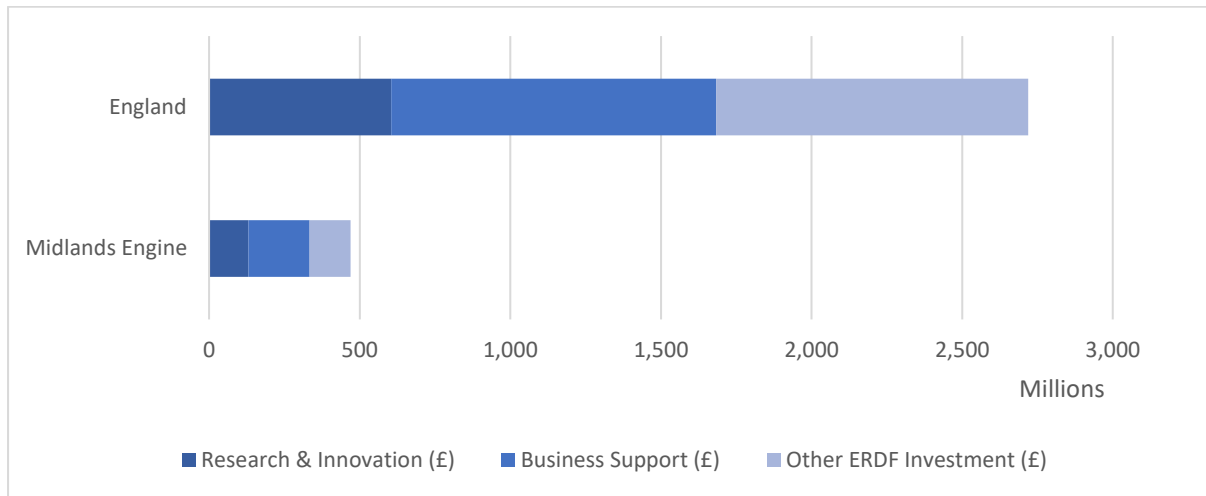


Table 1: Total ERDF and research and innovation and business support in the Midlands Engine and England, 2014-2020

Area ⁵	Research and innovation (£m)	%	Business support (£m)	%	Other ERDF investment (£m)	%	Total allocation (£m)
Black Country	12.1	32%	12.9	34%	13.2	34%	38.2
Coventry and Warwickshire	10.6	25%	17.3	41%	14.1	34%	42.0
D2N2	25.9	26%	39.1	40%	33.8	34%	98.8
Greater Birmingham and Solihull	23.9	25%	51.5	54%	19.9	21%	95.3
Greater Lincolnshire	14.6	32%	21.3	47%	9.1	20%	45.0
Leicester and Leicestershire	9.9	25%	16.4	42%	12.6	32%	38.8
Stoke-on-Trent and Staffordshire	19.9	34%	23.8	40%	15.1	26%	58.8
The Marches	8.6	30%	11.5	40%	8.5	30%	28.6
Worcestershire	5.3	22%	9.2	38%	10.0	41%	24.5
Midlands Engine	130.9	28%	203.0	43%	136.1	29%	470.0
England	604.3	22%	1,079.1	40%	1,036.2	38%	2,719.7
National LEP Average	15.9	23%	27.0	40%	25.1	37%	68.0

⁵ Figures presented in Table 1 have been rounded to the nearest million for simplicity and clarity. While this has aided readability, it could result in minor discrepancies when compared to exact calculations.

Figure 2: Total ERDF and research and innovation and business support investment in the Midlands Engine 9-LEP Areas, 2014-2020

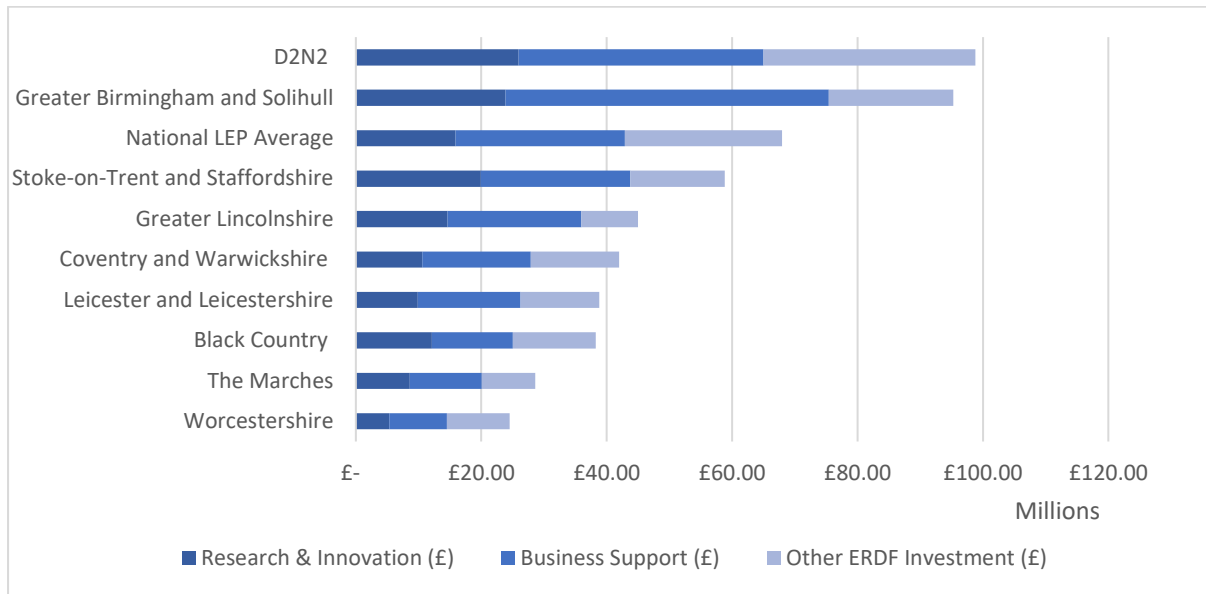
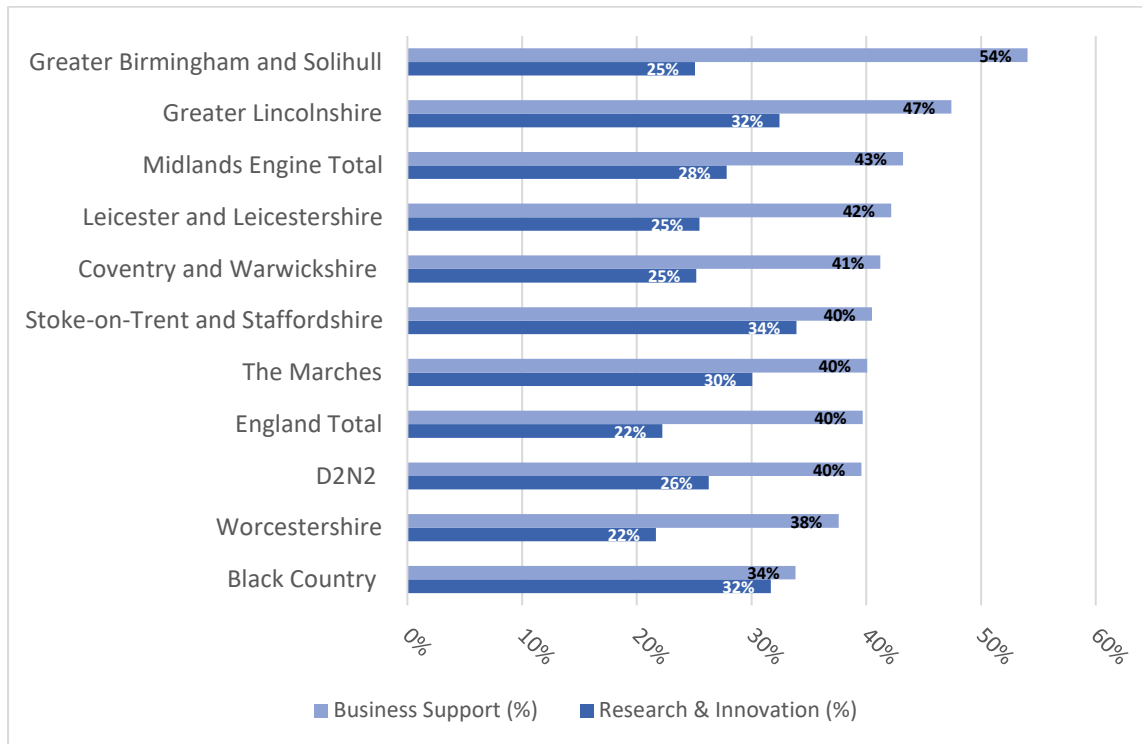


Table 1 alongside Figures 2 and 3 show that 71.0% of all Midlands Engine ERDF funding was allocated to research and innovation and business support – 9.7 pp more than the England average (61.3%).

In particular, 27.8% of overall funding was allocated to research and innovation, 5.6 pp more than the national average (22.2%). Business support received 43.2% of the funding, surpassing the national average (39.7%) by 3.5pp. The higher concentration of funding in these areas implies a larger gap within the Midlands now that the fund is no longer available, potentially exacerbating regional disparities and hindering economic growth..

This is especially true for Stoke-on-Trent and Staffordshire (33.9%), Greater Lincolnshire (32.4%), and the Black Country (31.7%), all of which had a high proportion of ERDF funding allocated within the innovation priority axis. Similarly, Greater Birmingham and Solihull (54.1%), Greater Lincolnshire (47.4%), and Leicester and Leicestershire (42.2%) which relied on ERDF to fund business support.

Figure 3: ERDF % of innovation funding and business support across the Midlands Engine LEP areas and England, 2014-2020



When examining the recipients of innovation and business support funding at national level, figures 4 and 5 reveal that:

- Nationally, universities received the most research and innovation funding from the ERDF at 61%; in the Midlands Engine, universities received 78% of research and innovation funding – 17 pp higher than the national average
- Local government received 19%; in the Midlands Engine this was 13% - 6 pp lower than the national average
- Other organisations (including individual businesses, incubators, and chambers of commerce) received 21%; in the Midlands Engine this was 8% - 13 pp lower

On the other hand, examining the recipients of business support revealed that:

- Nationally, it was predominantly other organisations which received ERDF support (47%), followed by local government at 42% and universities at 11%
- In the Midlands Engine, a different pattern was followed, whereby local government received the most funding at 66% (24 pp higher than the national average), followed by other organisations at 20% (12 pp more than the national average), and universities at 13% (2 pp higher than nationally). These bodies are more likely to be affected in the Midlands by a lack of business support funding, impacting their ability to drive regional growth and development.

Figure 4: Recipients of research and innovation ERDF funding across the Midlands Engine and England, 2014-2020

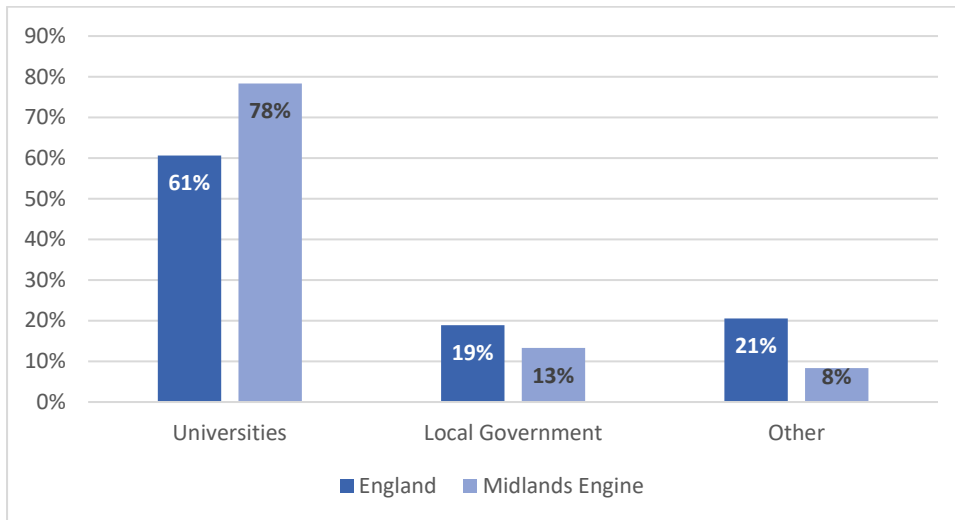
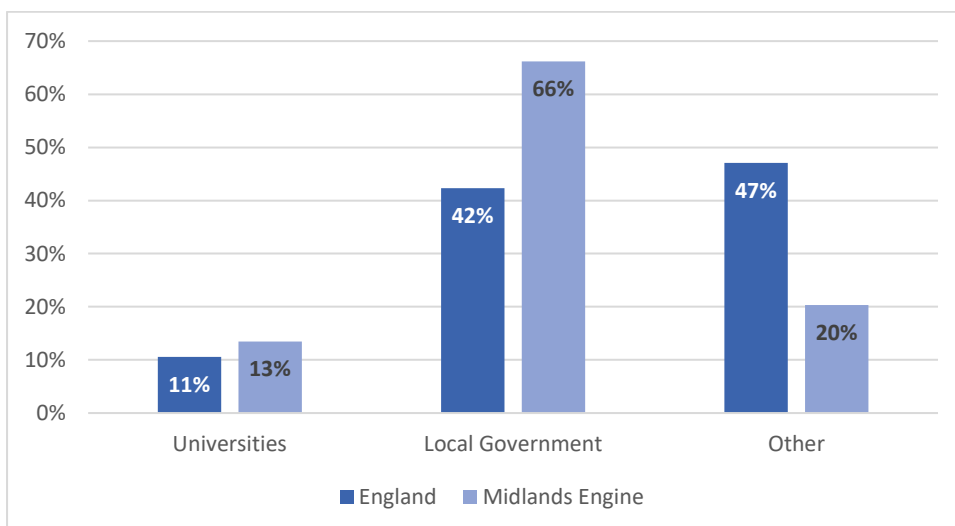


Figure 5: Recipients of business support ERDF funding across the Midlands Engine and England, 2014-2020



UK Shared Prosperity Fund (UKSPF)

With the cessation of ESIF funding, there are concerns that the UKSPF will not match previous allocations. [Over the next three years](#), the UKSPF will be allocated as follows: 2022/23 – £400m; 2023/24 – £700m; 2024/25 – £1.5bn with a portion of this dedicated to innovation support activity. However, it is important to note that the UKSPF isn’t exclusively earmarked for innovation purposes and does not have ring-fenced innovation funds like the ERDF.

This amounts to £2.6bn by 2024-25 across the UK. England’s allocation equals £1.56bn: £239m in the first year, £409m in the second, and £918m in the third. The Midlands will receive just over £350m (13.5% of the UK allocation), £210m for the West Midlands (8.1% of the UK allocation) and over £140m to the East Midlands (5.4% of the UK allocation)⁶.

⁶ Please note that these figures are estimates and may not exactly match those in Table 2 due to rounding, double counting, and variations in geographic definitions going beyond LEP geographies.

A comparative analysis of the UKSPF settlement with previous ESIF funding, which includes both ERDF and other funds such as the European Social Fund (ESF) amongst others, suggests an estimated loss of £211.7m in funding to the region – a 37.5% cut. This calculation reflects the difference between the estimated three-year average of £565m in ESIF funding previously received by the Midlands and the substantially lower £353.2m earmarked through UKSPF over three years.

This represents a significant shortfall affecting all regional development funding areas, including innovation support. The gap in funding, and therefore capacity, has the potential to weaken the link between universities, Research and Technology Organisations (RTOs) and small firms.

Table 2: Midlands Engine LEPs/regions UKSPF and ESIF allocations

LEP/region	Previous 3-year EU funding average (£m) ⁷	Announced UKSPF 3-year funding (£m) ⁸	Change (£m)	Change %
Black Country	72.70	42.10	-£30.60	-42.1%
Coventry and Warwickshire	50.70	32.10	-£18.60	-36.7%
Greater Birmingham and Solihull	90.00	70.50	-£19.50	-21.7%
Greater Lincolnshire	53.20	39.70	-£13.50	-25.4%
D2N2	120.10	66.80	-£53.30	-44.4%
Leicester and Leicestershire	47.40	30.10	-£17.30	-36.5%
Stoke and Staffordshire	65.10	44.30	-£20.80	-32.0%
The Marches	42.70	26.70	-£16.00	-37.5%
Worcestershire	23.00	21.70	-£1.30	-5.7%
West Midlands (3-LEP)	213.40	144.80	-£68.60	-32.1%
West Midlands (Region)	344.20	216.60	-£127.60	-37.1%
East Midlands (3-LEP)⁹	220.70	206.60	-£14.10	-6.4%
Midlands Engine	564.90	353.20	-£211.70	-37.5%

Impacts

Some potential risk areas have been identified regarding the funding deficit between the UKSPF and ESIF funding, with a focus on the ERDF. These risks, if left unaddressed, could have significant ramifications for the region:

- UKSPF is administered by DLUHC, which has no remit for research and innovation. Additionally, no resources have been directed to ensuring that innovation projects funded by the ESIF can continue. Without sufficient alternative funding, innovation and business support projects, many of which are university-led, will have to terminate or scale down¹⁰.

⁷ Please note that the EU funding average displayed in this table was calculated as a total of ESIF funding, including the European Social Fund, and not just the ERDF. This is because the UKSPF is not directly comparable due to a lack of full breakdown (i.e. % into innovation and business support). This is also why EU funding is significantly higher here than shown in Table 1.

⁸ Some double counting may be present in the UKSPF data given that some local authorities have been located in multiple LEPs.

⁹ East Midlands (3-LEP) includes D2N2 LEP, Greater Lincolnshire LEP & Leicester / Leicestershire LEP. Excludes Northamptonshire.

¹⁰ Universities UK (2023), "Can we save the research and innovation projects currently supported by European structural funds?". [Available here](#).

- Previous analysis based on modelling from the Conference of Peripheral Maritime Regions (CPMR) indicates that had the UK remained in the EU, its ESIF allocation for 2021-2027 would have been 22% higher than for 2014-2020. This projection underscores a more substantial disparity with the UKSPF, accentuating the loss of innovation opportunities for the nation and the region.¹¹
- While the UKSPF places investment decisions in the hands of devolved and local authorities, it hinders structural investment activity, potentially compromising long-term benefits, including those linked to innovation. It is possible that, with reduced resources, innovation support will need to compete with other priorities for local areas such as ‘community’, ‘supporting local business’ and ‘people and skills’ activities.¹²
- The scaling back of university placement schemes, such as the ERDF-backed Productivity through Innovation (PtI) initiative at universities like [Derby](#), [Nottingham Trent](#), and [Sunderland](#), is expected to have various drawbacks. These include a decrease in graduate experiential learning opportunities, skill misalignments, potential innovation decline, diminished talent availability and decreased university-SME collaboration, ultimately curtailing knowledge exchange.

Furthermore, the UK should invest in its research and innovation to address a continuous productivity crisis. The [UK Innovation Report 2022](#) identified that the UK’s gross domestic expenditure was below its OECD counterparts in 2019; UK expenditure was just 1.74% of GDP in contrast to the OECD average of 2.5%. The UK has faced significant delays in investing in R&D, for example, delaying targets in investing £22bn in R&D by 2024 and pushing them back to 2026/27. Likewise, compared to other countries like Germany, South Korea and Japan, the UK’s business sector was shown to contribute less to R&D funding (55% of all R&D expenditure) with universities contributing significantly more to the country’s R&D (22.3%) and the government significantly less (6.6%).

Alternative mechanisms to address the ERDF gap

Having established the disparity between funding from the ERDF/ESIF and UKSPF and the potential impact on innovation, it is apparent that there is a need to close this gap. Fortunately, there are funding sources other than UKSPF with a clearer remit and expertise relating to innovation, such as Innovate UK, that are already funding partners in innovation projects.

It is clear that businesses, universities, and other organisations will need to tap into other sources of innovation funding and the funding bodies may need to increase their innovation investment to meet the ERDF/UKSPF shortfall. Simultaneously, efforts should be directed towards identifying future sources and ways to capitalise on the UKSPF.

Below are some alternative mechanisms to address the funding gap. However, the possibilities are not limited to the options mentioned below.

Innovate Edge/Innovate UK/UKRI

[Innovate UK Edge](#) is an arm of Innovate UK operating across each region which directly supports SMEs to innovate through expert support, funding and finance. The body supports businesses to grow and scale up with the ‘right support at the right time, including investment readiness.’ Likewise, Innovate UK is the UK’s national innovation agency which supports business-led innovations across all sectors, technologies and UK regions. As part of the recent [UKRI budget](#), it was confirmed that, for the three financial years from 2022-23 and 2024-25, this will amount to £25.1bn. This represents a 14% increase in Innovate UK funding between the 2021-22 and 2024-25 budgets, rising from £7,785m to £8,874m,

¹¹ CPMR (2019), “UK entitled to €13bn regional funding if it remains in EU”. [Available here](#).

¹² HEPI (2023), “Innovation – Life After European Regional Funding”. [Available here](#).

of which £2,438m will be dedicated to Innovate UK; £6,227m for HEIs through Research England and £7,768m for core research budgets of Research Councils.

As part of its budget, UKRI offers various funds, grants, and schemes for innovators. One of these is the [Research England Development \(RED\) Fund](#), with a £27m annual budget aiming to support institutional-level innovative projects in research and knowledge exchange, including collaboration between education providers and business.

Previously, [UKRI total spend](#) (counting Research Councils, Research England and Innovate UK) in the 2020/21 period amounted to £452m in the East Midlands and £612m in the West Midlands. Altogether, the Midlands received £1.06bn or 14.4% of the UK total spend. Per capita, the East Midlands received £90 of UKRI spend, and the West Midlands received £102.

Table 3: UKRI total spend by region (2020-21)

ITL1	UKRI spend FY 2020–21 (£M)	UKRI spend by local population (£)	UKRI spend as a proportion of local GVA
East Midlands (England)	452	90	0.4%
East of England	821	137	0.5%
London	1,657	184	0.4%
North East (England)	251	84	0.5%
North West (England)	540	77	0.3%
Northern Ireland	49	25	0.1%
Scotland	396	79	0.3%
South East (England)	1,522	169	0.6%
South West (England)	492	82	0.4%
Wales	134	45	0.2%
West Midlands (England)	612	102	0.5%
Yorkshire and the Humber	468	78	0.4%
Midlands total	1,064	192	0.9%
UK total	7,395	1,152	4.6%

(Source: UKRI, 2022)

Similarly, Innovate UK funding to the region has also increased in recent years, with particular strengths in research and innovation funding. In 2020/21, the Midlands received 29% (£443m) of all Innovate UK spend nationally - £128m and £315m in the East and West Midlands respectively. On the other hand, Innovate UK spend per business in the East Midlands was £349 and £707 in the West Midlands, with Innovate UK spend per R&D active business being £23,245 in the East Midlands and £39,943 in the West Midlands.

Table 4: Innovate UK total spend by region (2020-21)

ITL1	Innovate UK spend FY2020–21 (£M)	Innovate UK spend per business (£)	Innovate UK spend per R&D active business (£M)	Innovate UK spend as a proportion of local GVA	Innovate UK spend by local population (£)
East Midlands (England)	128	349	23,245	0.12%	26
East of England	117	206	14,461	0.08%	19
London	234	224	13,599	0.06%	26
North East (England)	57	370	20,673	0.11%	19
North West (England)	49	94	5,544	0.03%	7

Northern Ireland	19	150	8,165	0.05%	9
Scotland	62	181	13,502	0.04%	12
South East (England)	315	360	24,744	0.12%	35
South West (England)	139	267	21,596	0.10%	23
Wales	40	191	13,440	0.06%	13
West Midlands (England)	315	707	39,943	0.24%	52
Yorkshire and the Humber	51	123	7,928	0.04%	8
Midlands total	443	1,056	63,188	0.36%	78
UK total	1,526	3,221	206,840	1.0%	251

(Source: UKRI, 2022)

However, looking deeper into the data suggests that much of this funding is concentrated within a small number of places and within a small number of companies.

Made Smarter

[Made Smarter](#) is a programme developed following an industry-led review of how UK manufacturing industries can prosper through digital tools and innovation. [Made Smarter Innovation](#) is a part of this programme looking to invest £300m to speed up delivery of digital projects, so far including over 320 participants and 80 projects, including £11,898,259 allocated for the East Midlands and £6,502,289 for the West Midlands. By 2034, Made Smarter Innovation aims to increase GVA by £2.3bn; create 4,000 skilled jobs; improve productivity by 30%; cut carbon emissions by 4.5%; and decrease waste by 25%.

Mayoral Combined Authorities (MCAs)

Despite not being a funding source per se, at regional level Mayoral Combined Authorities (MCAs) will support innovation [using devolved powers](#). In addition to innovation accelerators, the Levelling Up White Paper set out a clear ambition to increase public investment in research and development outside of the Greater South East by at least 40% by 2030, and by a third in the current Spending Review period. Additional devolution deals will provide further investment, some of which will be directed towards regional innovation including the aforementioned Innovation Accelerators.

As highlighted in this [HEPI blog](#), while this is positive for those larger city regions and should be celebrated, it is unclear whether there will be a path to accessing such investment in cities and regions without multi-authority devolution deals. This could result in a two-tier approach, with some regions unable to draw on their economies of scale and geography.

West Midlands Innovation Accelerator

An example of the MCA funding mechanism, announced as part of the Government's Levelling Up White Paper, the [West Midlands Innovation Accelerator](#) aims to grow regional clusters of excellence by co-designing a new relationship between the region and national government. This will ensure delivery on the commitment to increase overall UK public R&D funding to £20bn by 2024/25. Likewise, the Accelerator itself will be funded through a new share of £100m divided between three regional Innovation Accelerators over the next three years, bolstering the regions' innovation and R&D capability.

Defence Innovation Accelerator for the North Atlantic (DIANA)

The [Defence Innovation Accelerator for the North Atlantic \(DIANA\)](#) is an international innovation engine for security and defence sectors supporting start-ups, spinouts, scale-outs and innovators. DIANA is part of NATO and is thus accessible to all NATO member states. The programme grants

innovators access to its wide network of accelerators (10+) and test centres (90+), experts and non-dilutive grants. The UK hosts the European HQ of the programme.

Horizon Funding

UK-based researchers and innovators can still apply to most [European Horizon Funding](#) opportunities on the same terms as EU-based applicants. The programme supports research and innovation in Europe, has a budget of €95.5bn and runs until 2027. Despite Brexit, in January 2021 the government announced that the UK will become an associated country to Horizon Europe; researchers and innovators do not need to wait for the EU to formalise this association. The UK then successfully negotiated full association to the programme on 7th September 2023. This agreement allows UK researchers to apply for Horizon Europe funding, with the assurance that all successful UK applications will be covered through the UK's association for the remainder of the programme. The programme provides funding for:

- Excellent research in any field
- Researcher mobility
- Research infrastructure
- Global challenges and industrial competitiveness including:
 - Health
 - Culture, creativity and inclusive society
 - Civil security for society
 - Digital, industry and space
 - Climate, energy and mobility
 - Food, bioeconomy, natural resources, agriculture and environment
 - Innovation
 - The development of the European research and innovation systems

Regional Innovation Funding

Research England's [Regional Innovation Fund](#) (RIF) is a recent development welcomed by universities. Funded by the Department for Science, Innovation and Technology (DSIT), £48.8 million was allocated for the financial year 2023-2024. DSIT's priority for the RIF is to target high-performing universities in areas with lower levels of R&D investment and high performance in regeneration funding. In particular, the funding supports universities to focus on business engagement and economic growth.

RIF was allocated by applying a regional weighting to universities' main HEIF allocations. The East Midlands received a regional weighting of 22% and the West Midlands received a regional weighting of 52%, compared to 5% for the South East. Allocations had to be spent within the financial year 2023-24 following an announcement in October 2023.

The overall breakdown of the RIF revealed that the West Midlands was the largest recipient of the fund at £11.2m (23.0% of the total) whilst the East Midlands was the fifth largest at £4.7m (9.5%). This also means that the West Midlands was prioritised due to its high-performing universities, lower levels of R&D investment and high performance in regeneration funding.

Figure 6: Sum of Regional Innovation Fund grant funding across English universities by region, 2023 to 2024

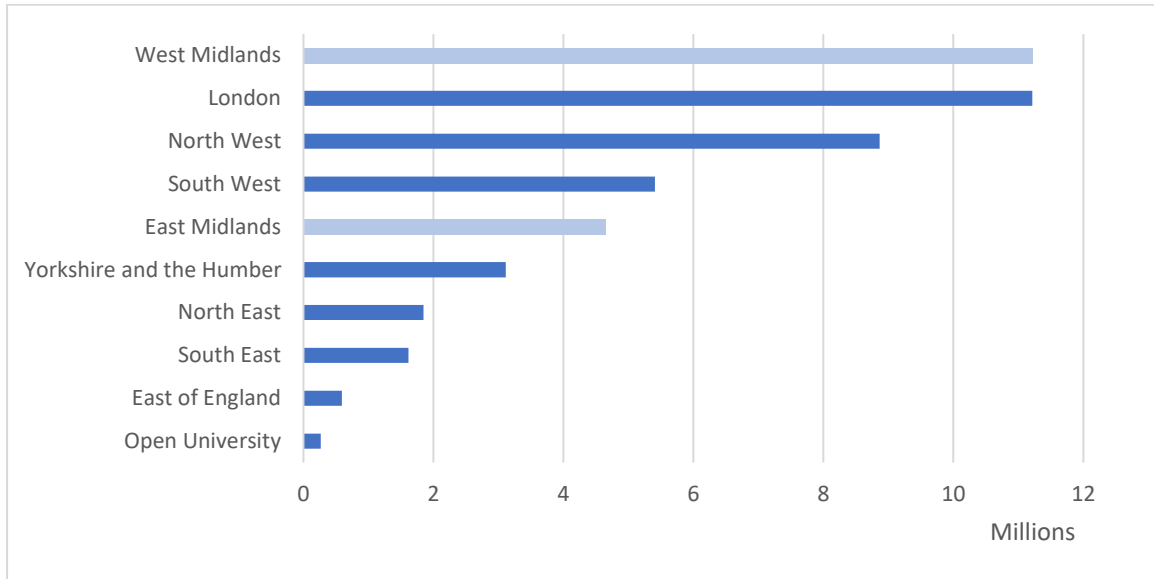


Table 6: Sum of Regional Innovation Fund grant funding across English universities by region, 2023 to 2024

	Sum of Regional Innovation Fund (£)
Open University	£266,943
East of England	£592,221
South East	£1,614,953
North East	£1,846,948
Yorkshire and the Humber	£3,114,698
East Midlands	£4,658,067
South West	£5,410,039
North West	£8,864,056
London	£11,212,261
West Midlands	£11,219,815
Grand total	£48,800,001

Annex 1: ERDF case studies

To effectively highlight the risk of diminished innovation funding within the region, below is a comprehensive list of case studies. These case studies tangibly illustrate the impact of the activities that the region benefitted from through ERDF funding and will lose if the gap is not addressed.

Case study: Digital Innovation for Manufacturing (DI4M)

Advanced manufacturing – Warwick Manufacturing Group, University of Warwick, West Midlands

Digital Innovation for Manufacturing (DI4M) has been a 5-year, £10m programme supporting digital innovation in manufacturing SMEs through short knowledge exchange projects, events, collaborative research and the provision of leading-edge workspace, equipment and expertise. Led by WMG's SME Group at the University of Warwick, it was funded by the Warwick Manufacturing Group (WMG) centre High Value Manufacturing Catapult and the European Regional Development Fund (ERDF), including [£2,627,234 \(52%\)](#) of the project between September 2018 and February 2021.

Overall, the impacts of the successful project included the digitalisation of 374 manufacturing businesses, 51 new products taken to market, 2,659 jobs safeguarded, 660 new jobs created, 224 new innovative processes developed, 204 companies going on to undertake further R&D with a university, and a staggering £220m of GVA added to the Midlands economy, generating £22 in value for every £1 invested. In addition, 45% of businesses involved reported an average increase in productivity of 22%.

SMEs involved included:

- JCM Fine Joinery – a bespoke commercial joiner
- Sarginsons Industries - a leading UK precision aluminium die caster

Case study: University of Derby ESIF Spend

ERDF and ESIF Portfolio - University of Derby, East Midlands

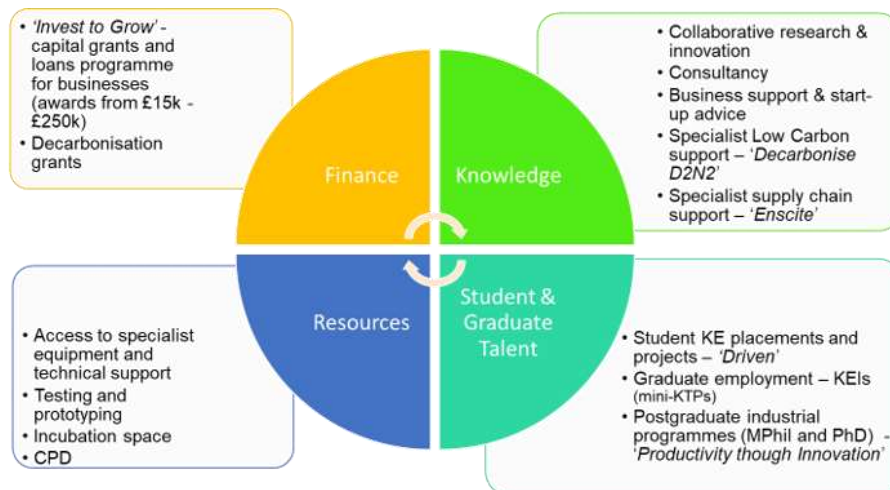
Over the past two ERDF project cycles (since 2016), the University of Derby utilised their share of ESIF funding to provide £15m worth of local growth support to SMEs; provided £26.5m of investment funding to firms in the East Midlands, creating 1,948 jobs; supported 622 businesses to employ an intern or a graduate; supported 100 students to start a business or register as a sole trader; interacted with 1,043 SMEs and enterprises across the D2N2 LEP area (Derby, Derbyshire, Nottingham and Nottinghamshire); completed 308 knowledge exchange interactions with SMEs and enterprises across the region; worked with 7 partners across 9 business support and innovation projects; and are actively involved in 100 long-term research collaborations.

The University’s ERDF programmes have included:

- Innovation support programmes available to all SMEs
- Specialist programmes targeting specific sectors relevant to the region i. e.g.. Rail and Transport Equipment Manufacturing
- A decarbonisation programme

Many of the projects have been delivered in partnership with other HEIs (both East and West Midlands) and local authorities. Furthermore, through their funded local growth programmes, the University was able to introduce business to collaboration with the HE sectors and subsequently support them to move along the R&I value chain and build their capacity to engage with other funding mechanisms like Innovate UK.

Their Local Growth project portfolio has enabled the University to provide a critical mass of support to SMEs in the East Midlands across a range of interventions illustrated as below:



Case study: Accelerating Thermal Energy Technology Adoption (ATETA) SME Engagement Programme

Energy and net zero - University of Birmingham, West Midlands

ATETA was an ERDF SME engagement programme which was designed to provide support for businesses in identifying opportunities for clean energy innovation. Over the course of its six-year programme, ATETA supported over 300 businesses across the West Midlands, generating a net income of over £25m for the local economy.

As part of the programme, businesses gained access to the University's world-leading expertise and facilities, including the Birmingham Energy Innovation Centre (BEIC), to test ideas, solve innovative challenges and create new business opportunities, which ultimately increased their productivity.

Moreover, Phase Two of the project alone helped SMEs generate £122m in additional revenue. A report conducted by Kada Research also found that every £1 spent out of the total £5.6m spend in Phase Two of the project created a net economic impact ranging from £11.5m to £43.3m. Between 2020-2023, the project supported 200 SMEs and led to the creation of 97 jobs; it was shown that 91% of respondents would recommend the project.

SMEs involved included:

- Voltempo – an electric vehicle charging station contractor
- Jigsaw Infrared – a central heating service provider
- Brockhouse Forgings – a machining manufacturer
- Winny's Kitchen – a healthy Caribbean food cooking delivery service
- Tyseley Energy Park – a development site
- Hogan's Cider – a cider maker
- Zero Industries – an early-stage vehicle manufacturer, developing zero-emission motorcycles
- Atomic Tractor – an early-stage farm machinery company developing innovative

Case study: The Advanced Services Group (ASG) Programmes

Advanced manufacturing - Aston University, West Midlands

The Advanced Services Group (ASG) is a centre of excellence specialising in research into servitisation, as well as advanced business models and application to the manufacturing sector. The group was founded at Aston University Business School in 2011. Its mission is to transform global manufacturers and technology innovators by developing models and frameworks that enable them to innovate and implement services-led strategies.

Projects delivered by ASG included the TRANS-IP project, which was funded by the ERDF and was designed to support technology-innovating firms to understand their customers' struggles in relation to their products or services and find novel ways of addressing those. The pilot project ran from May 2012 to December 2015 and received £804k of ERDF funding delivered £11.6m of additional GVA from 77 West Midlands SMEs. The main project received £1.2m of ERDF funding and ran as a continuity from the old ERDF programme in the Greater Birmingham and Solihull LEP area between January 2016 to December 2018, providing a GVA of £31.25m. Two further ERDF projects (worth £1.44M & £1.4M respectively) ran from January 2019 to December 2021.

Two of the most recent cases from the project include:

- CHH CoNeX – an electronics manufacturer. CHH CoNeX was able to benefit from the project by transforming its business model and value proposition through the power of advanced services to create product-service bundles, delivering more value to its customers and generating sustainable revenue streams for the business.
- Koolmill Systems – a cereal milling machine manufacturer. Koolmill benefited from the project by adapting its business model to make its technology accessible to small-scale millers in some of the poorest parts of the world. Thanks to working alongside the ASG, the company has developed a servitised model which offers milling-by-the-hour.

Case study: FuturEnergy Ltd

Net zero - Aston University, West Midlands

FuturEnergy Ltd is a Warwickshire-based specialist in the design, production and distribution of clean technology and renewable energy. It delivers a diverse range of own and contract design products and process solutions to industry and domestic users, specialising in wind turbines and waste-to-energy systems. Moreover, in 2015, FuturEnergy were approached by Waste to Energy Technology Ltd (WET) to prepare a feasibility study in line with their plans to build a Hybrid Energy-from-Waste (EfW) process using end of life tyres.

Despite being highly skilled mechanical engineers, FuturEnergy's diversification required additional expertise, which is when they looked for guidance into this area from the European Bioproducts Research Institute (EBRI) at Aston University by attending one of its Value from Waste Masterclasses, a two-day course part-funded by the ERDF. At this point, EBRI worked with FuturEnergy to shape a collaborative project to enable the company to provide technical guidance to WET. The EBRI team conducted a technical review of both companies' process designs for the pyrolysis of tyres and provided a detailed report which included recommendations on how to improve the operation process and the end fuel composition i.e., oil, gas and charcoal, and their potential uses and markets.

Case study: European Bioenergy Research Institute (EBRI) Successor Project*Net zero - Aston University, West Midlands*

The European Bioenergy Research Institute (EBRI) at Aston University is a world-leading centre for bioenergy research and technology development. The centre ran through three phases, from research to more intense SME support, with phase three concluding in June 2023 alongside the conclusion of ERDF funding. In total, the project is worth £3,505,803 and was awarded £1,752,902 from the ERDF as part of the European Structural and Investment Funds Growth Programme 2014-2020. This was matched with a £1.75m contribution from Aston University.

The project is now looking to launch a successor project post-ERDF. As part of an economic impact evaluation of the successor project, it was predicted that businesses involved in the project are expected to create an average of three new jobs in the next two years, with an average multiplier effect of 1.73 across different industry sectors, leading to an estimated total employment impact for LEP areas of 74 jobs over the same period.

Furthermore, with an average GVA per employee being £49,522, this means an additional £3.66m increase in GVA per annum for the area. Also, the potential increase to date in RD&I of businesses supported by the EBRI successor project is £35,000, with a potential £1.05m increase in investment in the next two years in RD&I of businesses supported by the EBRI Successor Project. Meanwhile, the potential increase in turnover for the business supported due to their involvement with the project is estimated to be circa £16.76m per annum over the next two years (total for all businesses).

Case study: Leicester Innovation Accelerator

SME innovation – University of Leicester, East Midlands

The Leicester Innovation Accelerator Programme, based at the Leicester Innovation Hub (at the University of Leicester), was a programme which ended in June 2023 and supported numerous SMEs to scale up through innovation-led growth by providing access to new knowledge and research, technical expertise, specialist equipment, collaboration opportunities and innovation support. Further support from the Innovation Hub also included innovation (consultancy) vouchers of £5k per business, part-funded one-year industrial MPhils (worth around £25k each), consultancy/business support sessions and sandpits, start-up consultancy, entrepreneurs in residence and more.

Overall outcomes and impacts of the Innovation Accelerator programme across 2,000 participants included the identification of 22 opportunities for future student projects; 38 university collaborations; 29 new-to-firm products; four new-to-market products; the creation of 10 jobs; and 77 businesses supported, including five early-stage enterprises. Wider outcomes included the creation of long-term university-SME partnerships; links to many projects; grants and investments; knowledge transfer partnerships; contract/research consultancy and more. The net GVA impact is around £2,676,500 in 2023 and £6,965,891 by 2025.

Individual SMEs which benefited from the programme include:

- Structural Adhesives – an adhesive manufacturer
- Draycir – a software development company
- Bluesky International – a leading aerial survey and geographic data company
- X&Y Fertility – a private fertility clinic
- Future We Want – an environmental organisation
- Green Tomato – a mobile greengrocery.

It is also worth noting that the Leicester Innovation Hub was funded from around £5.1m ERDF funding itself.

Case study: Leicester Life Sciences Accelerator

Life sciences – University of Leicester, East Midlands

The Leicester Life Sciences Accelerator Project is one of the projects delivered by the Leicester Innovation Hub (at the University of Leicester). The project enabled newly founded and established SMEs in Leicester and Leicestershire to achieve innovation-led growth by providing access to academic and clinical collaboration opportunities and innovation support.

Over the course of the project, the Accelerator engaged with 115 businesses, and by 7th June 2023 has supported 32 businesses including ten early-stage new enterprises, created 4 jobs and enabled 37 university-business collaborations and 12 new-to-market products and 15 new-to-firm products. Likewise, the project generated £1.3m+ of net additional turnovers throughout its tenure, and an additional £494k+ GVA.

Case study: BRIC Project – Dunton Environmental

Brownfield regeneration – University of Wolverhampton, West Midlands

The Brownfield Research and Innovation Centre (BRIC) project, supported by the ERDF, revolved around the challenge of finding a contaminated brownfield site to match the brief for a new facility using a range of data sets including the brownfield register, historical maps, traffic data and planning application information. The University of Wolverhampton supported this by determining the criteria for the site, using data sets to map sites onto Google Earth, selecting sites to meet criteria, investigating previous land uses and current planning status and identifying brownfield cluster sites. Overall, through expertise in Global Navigation Satellite Systems (GNSS), Robotic Total Station surveying and various other types of surveying, the project was able to narrow down the search to seven sites across the Black Country with cluster maps identifying a corridor of brownfield sites, showing connectivity to transport and partners.

Case Study: Hereford Cyber Security Project – Cyber Tzar

Cyber – University of Wolverhampton, West Midlands

The Hereford Centre for Cyber & Security (HCCS) supports businesses in increasing their cybersecurity awareness through collaboration and research. It provided ERDF part-funded business support for regional SMEs facing cybersecurity challenges, testing facilities for smart technology and infrastructure, and a platform for sharing best practice. The Centre opened in 2021 and received £2,877,069 ERDF funding aimed at supporting small and large businesses in maximising cybersecurity awareness.

Cyber Tzar were in early stages of development when they engaged with the Centre; throughout the HCCS' business support programme, Cyber Tzar was able to collaborate with the University of Wolverhampton on identifying market demand for support for businesses to identify their own supply chain; confirming a systematic and comprehensive approach to risk using a proven cyber-assessment framework; analysis of supply chain visibility software and vulnerability management, alongside competitor reviews and user interface expectations. This allowed Cyber Tzar to make changes to their platform, allowing them to introduce a new service to the market, while the university collaboration expanded their client base and partnership opportunities.

Case study: Smart Concept Fund Project – DHC Innovations Ltd

Med Tech – University of Wolverhampton, West Midlands

DHC Innovations' current project is the creation of Optishield: a product responding to the issue of double vision, for which there was no assistance available to patients. It was developed from personal experience in collaboration with the Universities of Keele, Wolverhampton and Aston. The project was initially explored through the University of Wolverhampton's Product Support Service (IPSS) programme (partially ERDF-funded), which supports businesses for free through the early stages of developing a new product or process and raised awareness of the Smart Concept Fund (ERDF-funded). Since the product launched in December 2019/January 2020, it has attracted worldwide business for DHC from Australia, Mexico, California, Finland, Germany, France and the Netherlands, with DHC looking into international trade to accommodate demand.

Case study: EnTRESS Project – Pym & Wildsmith

Advanced manufacturing – University of Wolverhampton, West Midlands

Pym & Wildsmith are Staffordshire-based leading specialists in metal finishers, who have been incorporating sustainability into their operations. However, recent price rises have made energy efficiency a priority. The EnTRESS project (partially ERDF-funded) was able to pinpoint areas for improvement over the short, medium, and long term to increase Pym & Wildsmith's energy efficiency. This was necessary amid high prices, especially for heavy energy users like them who use several high-temperature ovens for curing surface coatings. The projects utilised a thermographic study to highlight several areas for improvement, alongside cataloguing alternative technologies and sources of grant funding. This equipped the company with knowledge and tools to save energy and reduce costs. Moreover, the company has already put some recommendations into practice and are seeking to implement energy efficiency measures as part of a longer-term overall strategy.

Case study: Medilink Midlands ERDF Programmes

Life sciences – Medilink Midlands

Medilink Midlands is a life sciences industry association aiming to stimulate the Midlands life sciences sector. As part of their role, Medilink provides business support and delivers programmes, including three recent ERDF-funded programmes, INSTILS, SoLSTICE and ACTIS – achieving a total of £3.5m grants and leveraging investment equating to £47 of private investment for every £1 of public funding.

Each project was focused on improving the economic performance of the life sciences sector within their locality via Innovation Support Grants (of up to £20,000), Specialist Network Grants (of up to £3,000), and MedTech trials (of up to £50,000). INSTILS was D2N2-based (Derby, Derbyshire, Nottingham and Nottinghamshire), with a total project cost of £7,393,742 of which £3,696,871 comes from ERDF; SoLSTICE was LLEP-based (Leicester and Leicestershire) with a total project cost of £1,947,051.09 of which £973,525.54 comes from ERDF; and ACTIS in SEMLEP (South East Midlands) with a total project cost of £2,577,097.21, of which £1,288,548.61 comes from ERDF.

Moreover, Medilink Midlands' advisers deliver over 8,000 hours of innovation support to regional life sciences organisations, leading to the creation of over 208 high-level jobs, one-to-one support for 391 businesses and a total of 66 new enterprise births. The project also involved collaboration with 79 universities and delivery of 180 events.

Case study: Solar Vision Lighting Technologies

Energy – Coventry and Warwickshire Growth Hub, West Midlands

Solar Vision Lighting Technologies is a specialist in off-grid solar lighting and CCTV for streets, residential developments, industrial parks, leisure clubs, schools and shopping centres. The company, which has been active for two years, has been busy marketing a solar wrap which helps turn sunlight and daylight into energy. Their solar wrap is a 360-hexagonal structure which is placed into a column and generates up to 280 watts of power, compared to traditional flat panels which generate 80-100 watts, making it adaptable to the UK climate. However, the company wanted to develop and innovate further. Thus, Solar Vision was successfully awarded a £4,918 Proof of Concept grant as part of the Coventry and Warwickshire Business Support Programme, which is part-funded by the ERDF and is delivered by Coventry University Enterprises Limited to run a 12-week feasibility study and prototype testing at Exeter University.

Solar Vision have a five-year plan for a turnover of £2.5m, and for this year they have a target turnover of over £750,000 – just two months into their financial year (starting in February of this year), they have reached an excess of £200,000. The grant was match-funded and included 60% of Solar Vision's own funding – however, the extra support pushed them to develop a more efficient product, accelerate development and reduce financial risk.

Case study: Eatron Technologies

Energy – Coventry University, West Midlands

Eatron Technologies has created AI-powered software designed to be used with a range of electric vehicles (EVs), helping to detect when the batteries may fail, which could transform their durability. Likewise, this tool has potential to significantly reduce costs for EV manufacturers and fleet management companies, as diagnosing problems early is often the difference between quick, economical fixes or replacing a battery/vehicle entirely.

Coventry University introduced Eatron to the Proof-of-Concept programme, which is funded by the ERDF, resulting in the company being awarded a grant of £10,000 to test its algorithm on a battery at the Warwick Manufacturing Group before applying for its first patent in the USA. The grant allowed Eatron to finetune their algorithm and led to them earning a second grant worth more than £10,000 via the Innovation Networks Programme to improve its adaptive suspension software, which detects bumps or potholes in the road and automatically adjusts the vehicle's suspension. The success of the software even led the company to hire a technical specialist responsible for developing algorithms for the firm's battery management software.

Case study: RootWave

Food and Agri-tech – Coventry University, West Midlands

RootWave utilises an eco-friendly weed-killing system which uses electricity to treat orchards and vineyards, avoiding use of conventional herbicides which have a high carbon footprint and can damage the environment. Coventry University helped the company earn more than £30,000 to refine its hand-weeder products and purchase software to help it design systems for large-scale weed control. Furthermore, continued advice from the University on scaling its products and accessing grant money has seen RootWave grow its staff to 41 employees and develop a large-scale system for farming, set to launch later this year. This system is attached to the back of a tractor which drives between crops and has metal contacts which ‘zap’ any weeds growing near to vines or trees.

Case study: De-Carbonise, Carsuss Grab Hire

Net zero – University of Derby, East Midlands

The pursuit of clean and green growth is at the heart of the D2N2 Local Industrial Strategy. This is where the ERDF has enabled the University of Derby to support the region’s SMEs to reduce their carbon emissions and produce low-carbon products.

Carsuss Grab Hire is a firm specialising in waste removal and the delivery of aggregates and topsoil. The firm was keen to investigate how it could recycle the waste it collected, which led them to seek advice from the De-Carbonise team at the University, who identified that they could turn the waste into two reusable products: topsoil and an aggregate. The University calculated that this has the potential to reduce the company’s CO2 emissions by more than 14 tonnes each year and deliver annual cost savings of over £60,000. The ERDF-funded team produced an action plan for Carsuss Grab Hire which outlined six key steps. Over the course of an eight-week pilot project, their team screened and tested 600 tonnes of soil and was able to sell 90% of it.

Case study: Productivity through Innovation (Pti), SCITEK

Productivity – University of Derby, East Midlands

The University of Derby’s Productivity through Innovation (Pti) programme uses ERDF to provide support and expertise to eligible SMEs that want to increase their performance and productivity.

SCITEK provides engineering services to clients in sectors such as aerospace, defence, power generation and automotive. One of its services is image analysis of components, including the production of temperature maps. Traditionally, the analysis of images is carried out manually by skilled operators, but this is a slow and subjective process. Consequently, the temperature maps produced in this way can vary. SCITEK used support from the Pti programme to recruit a graduate to accelerate delivery of an R&D project.

The ERDF-funded graduate worked on the project for 12 months and was able to develop an improved image analysis workflow, reducing processing time by over 50%. The new process helped SCITEK win a contract with a major aerospace client. In addition, the graduate secured a permanent role at SCITEK.

Case study: Aerospace Up

SME support - University of Nottingham/Midlands Aerospace Alliance

The University of Nottingham's Aerospace Unlocking Potential (UP) programme supported more than 270 small and medium-sized enterprises (SMEs) across the Midlands over the past three years. The programme's independent summative assessment suggests that Aerospace Up's return on investment (ROI) to the public sector is estimated to be 12.78:1.

Designed to help smaller companies develop new technologies and solutions to make aviation greener, the £20 million programme was delivered by the University of Nottingham's Institute for Aerospace Technology (IAT) and the Midlands Aerospace Alliance (MAA) between 2020 and 2023, supported by the ERDF and Midlands Engine.

The programme not only provided funding for projects but also offered companies unique access to industry experts, academic support and university facilities that might otherwise have been unattainable.

Among the companies that have benefited from Aerospace UP is [Skyfarer Ltd](#) in Coventry, which used its funding to develop a prototype system for drone operations that has created the capability to deliver medical supplies to a radius that extends 40km beyond the pilot's line of sight.

The system is linked to an app that allows the customer to see everything about their deliveries, including position, temperature, and any shocks the payload has experienced. As part of the project, drones were successfully flown beyond the line of sight in remote areas of Wales, marking a UK first for drone operations over land.

Case study: Food & Drink Forum and the University of Nottingham's Food Innovation Centre

SME support - Nottingham, East Midlands

The [Food & Drink Forum](#) (an East Midlands based not-for-profit membership organisation that supports food and drink business) and the University of Nottingham's [Food Innovation Centre](#) have worked collaboratively in delivering successful food and drink manufacturing support activity over many years to enable business growth and create jobs in the sector.

Previous projects include the Food and Drink Innovation Network (iNet) (2007-2015) which brought together the Food & Drink Forum (lead), University of Nottingham, Nottingham Trent University, University of Lincoln and Loughborough University to respond to an innovation deficit in the sector and raise the number and quality of interactions between the universities and businesses to drive economic performance.

Working at the heart of the food and drink sector, the iNet developed an effective network that provided funding to bring businesses' ideas and academic expertise together to drive innovation. The Food and Drink iNet engaged with over 1,000 businesses and delivered over 400 instances of one-to-one advice.

Innovation support continued from 2016 through the University of Nottingham's Food Innovation Centre, working with the Forum to deliver the ERDF-funded Enabling Innovation and the Driving Research and Innovation projects. These have resulted in over 250 sector SMEs receiving scientific/technical support and accessing knowledge. Additionally, the centre has provided bespoke support to 70 SMEs long-term and led to the launch of 24 new products.

Other valued projects that focused on competitiveness include the FEAST, FEAST2 and Collaborate projects, operated by the Food & Drink Forum and working with University of Nottingham and other partners. These projects offer a range of useful services to food and drink manufacturers, including grant funding, business mentoring, industry events and technical support.

Case study: Food Innovation Centre (FIC)

SME support – University of Nottingham, East Midlands

On top of providing collaborative activity, the Food Innovation Centre at the University of Nottingham also provides leading scientific/technical advice to food and drink manufacturing businesses in the UK, supporting the development of new products and processes from conception to consumption. Support is offered through joint development projects, advisory services, workshops, and collaborative research for food and drink manufacturing businesses throughout the UK, allowing them access to high-quality and effective academic knowledge, people and facilities. The centre also nurtures talent via student mentorship in the sector, invests in local communities and provides community outreach.

Individual SME case studies which benefited from the centre include:

- Jampa's – Plant-based food
- Harrison & Griffiths – Premium Caribbean cakes
- Diistil – Bespoke spirits
- N-Ice Cream – Fortified ice cream
- Kitchen Prep – Nutritionally balanced frozen meals
- The Nutrition Advisory Team – Children's nutrition education

Annex 2: Diffusion, innovation and adoption

Diffusion refers to the widespread dissemination of knowledge, policy transfer and sharing of best practices and technologies. Although not explicitly stated within the ERDF, it has been a strong advocate of this process and has actively supported projects and programmes which fostered diffusion. ERDF seeks out projects with an ongoing impact, such as accelerators, testbeds and other knowledge exchange facilities. These projects include the Advanced Materials Characterisation and Simulation Hub (AMCASH) project at the University of Birmingham, which ran from March 2016 to December 2019, and the Smart Innovation and Networking for Growth project at Loughborough University which ran from October 2016 to September 2019.

Diffusion is inherent to innovative processes as it accelerates growth and demonstrates the value of working with its knowledge base. Likewise, the AMCASH project specifically aimed at promoting businesses investment in R&D and innovation by “significantly enhancing knowledge transfer between the University and local SMEs through in-depth technical assistance and collaborative research.” The same can be said for other projects in the above case studies such as the Leicester Innovation Hub, ATETA, Advanced Services Group and general business support provided by universities.

Adoption goes hand in hand with diffusion, as it is the decision-making process of utilising an innovation to the best of its capacity. The greater the uptake of an innovation, the faster the innovation can spread and, thus, be diffused further. An example was the ERDF-backed Innovative Coventry and Warwickshire: Place Test Bed, a project about ensuring that the benefits of innovation and new technology are felt throughout the local economy of Coventry and Warwickshire.

The real danger to diffusion comes with the reduction in funding, which will reduce capacity to deliver these programmes. In a [recent report from the Department for Science, Innovation and Technology](#) it was revealed that increased funding is an economic enabler of innovation diffusion, as it allows companies to scale up and bring new products to market more quickly. Likewise, there is a need to ensure supply chain readiness and resilience, factoring in manufacturing costs early and, if necessary, redesigning. Similarly, there is a need for the correct skills and infrastructure.

The loss of ERDF without a sufficient replacement risks the future of interventions which are critical to fostering economic growth. For example, some 54 of the 108 high-growth companies (Beauhurst) in the Midlands' cyber cluster have engaged an accelerator in the past five years.¹³ Spinouts and start-ups in other key industries, such as automotive and life sciences, have similar levels of engagement.

With the likely deficit between the UKSPF and previous levels of ESIF funding, the Midlands remains at risk of failing to innovate or ending up in the so-called “valley of death” – the space between initial research and successful innovations.

¹³ Midlands Engine Cluster Snapshot – Cyber.



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The Midlands Engine is a coalition of local authorities, local enterprise partnerships, universities and businesses across the region, actively working with government to build a collective identity, to enable us to present the Midlands as a competitive and compelling offer that is attractive at home and overseas.

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