

Sealing the 'Red Wall': How home energy retrofits could level up the post-Covid jobs market in the UK's hardest-hit areas

June 2020

EXECUTIVE SUMMARY

The UK has been hit hard by coronavirus, with damaging and likely long-term health, social and economic impacts. The economic shock of lockdown has wounded all sectors and all areas of the country, and the number of self-employed and employed staff being supported by the Government's unparalleled schemes shows the magnitude of employment impacts.

However, some areas have suffered more than others and it is the places that are already deprived, with less resilience, that will find it hardest to bounce back.

In its 2019 General Election manifesto, the Conservative Party promised to reduce regional disparities through its 'levelling-up' agenda and the Towns Fund, set up to deliver up to £25 million to 100 areas identified as vulnerable. However, coronavirus is proving to be, if anything, 'levelling down' in its impacts, hitting hardest employment, wealth and wellbeing in some of those areas that were targeted for 'levelling up'.

In this Briefing we examine the regional impact of coronavirus on jobs and the economy, and cross-reference it with a regional breakdown of opportunities when investing in low-carbon economy recovery measures. This includes reducing energy waste from people's homes (thus cutting energy bills), renewable energy and electric vehicles. We show that these sectors, particularly home energy retrofits, offer huge potential for levelling up, offsetting the specific damage done to local economies and jobs through coronavirus.

In particular, all of those 'Red Wall' seats that proved so important in the 2019 General Election have a lot to gain from a green recovery and would benefit from accelerating the retrofit of buildings to be more energy efficient with low carbon heating. Some would also benefit from development of alternative fuels or low-emission vehicles and support for shovel-ready low carbon electricity projects.

Gross-Added Value (GVA) lost in varying amounts throughout the regions could be given a boost by 2030 should an energy efficiency programme be rolled out. In fact, increasing all homes to EPC Band C rating by 2030 is shown to more than counteract the GVA decrease incurred during coronavirus, resulting in a net gain over the next decade.

Many deprived areas have high proportions of skilled tradespeople, like joiners, plumbers, and electricians, as well as a whole host of buildings ripe for upgrading. Many more areas have a high rates of youth unemployment and lower proportions of people skilled to NVQ levels 4 and above. These groups could benefit from low-carbon apprenticeships in sectors like electric vehicles that will set them up in skilled, lifelong green jobs ready for a net zero world.

Disadvantaged areas need not stay that way. Coronavirus opens up a unique opportunity to shake up the economy and boost the prospects of many living in areas apt for levelling up.

Progression on housing efficiency targets, renewable energy and decarbonised transport in the areas that need it most is shown to also boost skilled employment and GVA.

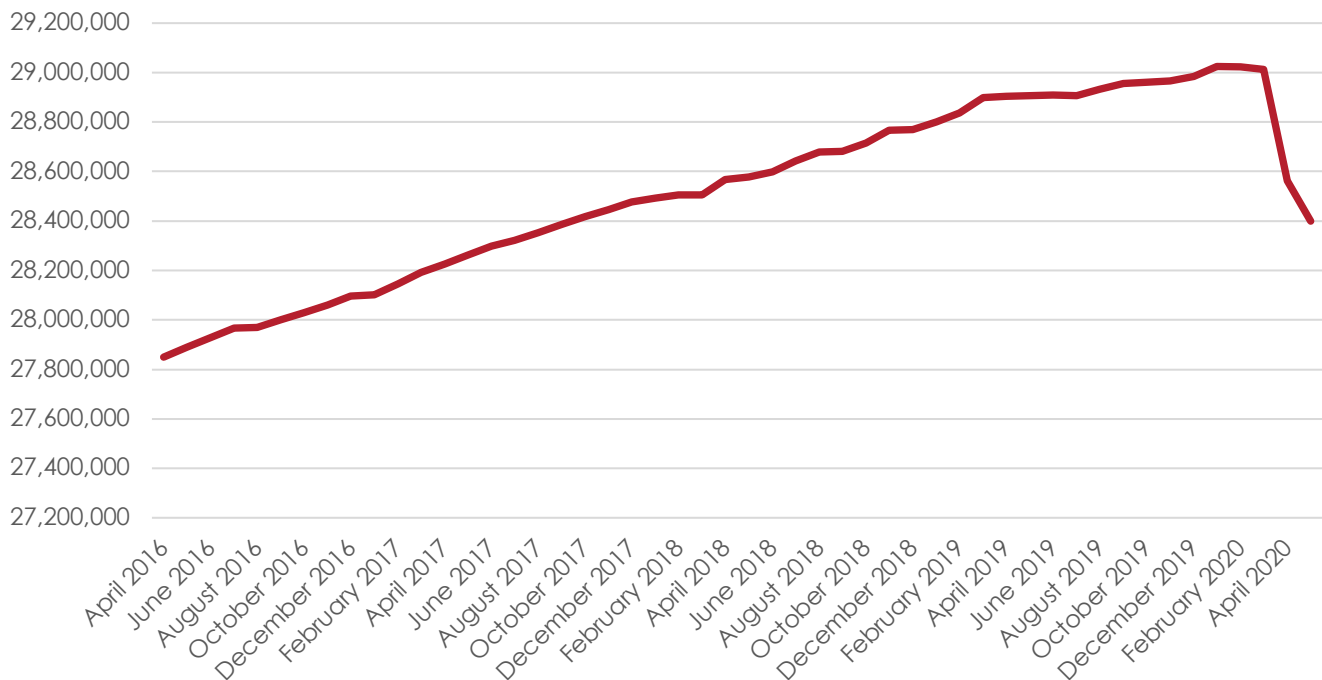
SETTING THE SCENE IN THE UK

CORONAVIRUS CAUSES DRAMATIC DROP IN NUMBER OF PAID EMPLOYEES

Before the coronavirus pandemic, things were looking good for UK employment. Rising numbers of people on the Pay-As-You-Earn (PAYE) system meant that **UK unemployment was at just 3.9% in the first quarter** of 2020, compared to around 8% in 2009 after the global financial crash.

However, since the economic effects of coronavirus have taken hold in regions and industries of the UK, the **number of people on the PAYE system is estimated to have fallen by 600,000** over just two months (May 2020). This equates to a 1.7% drop on May 2019 and a fall of 0.6% from April 2020. This takes us three large steps backwards in employment, to the levels last seen in October 2017.

UK paid employee counts from PAYE
(real time information (RTI), seasonally adjusted)



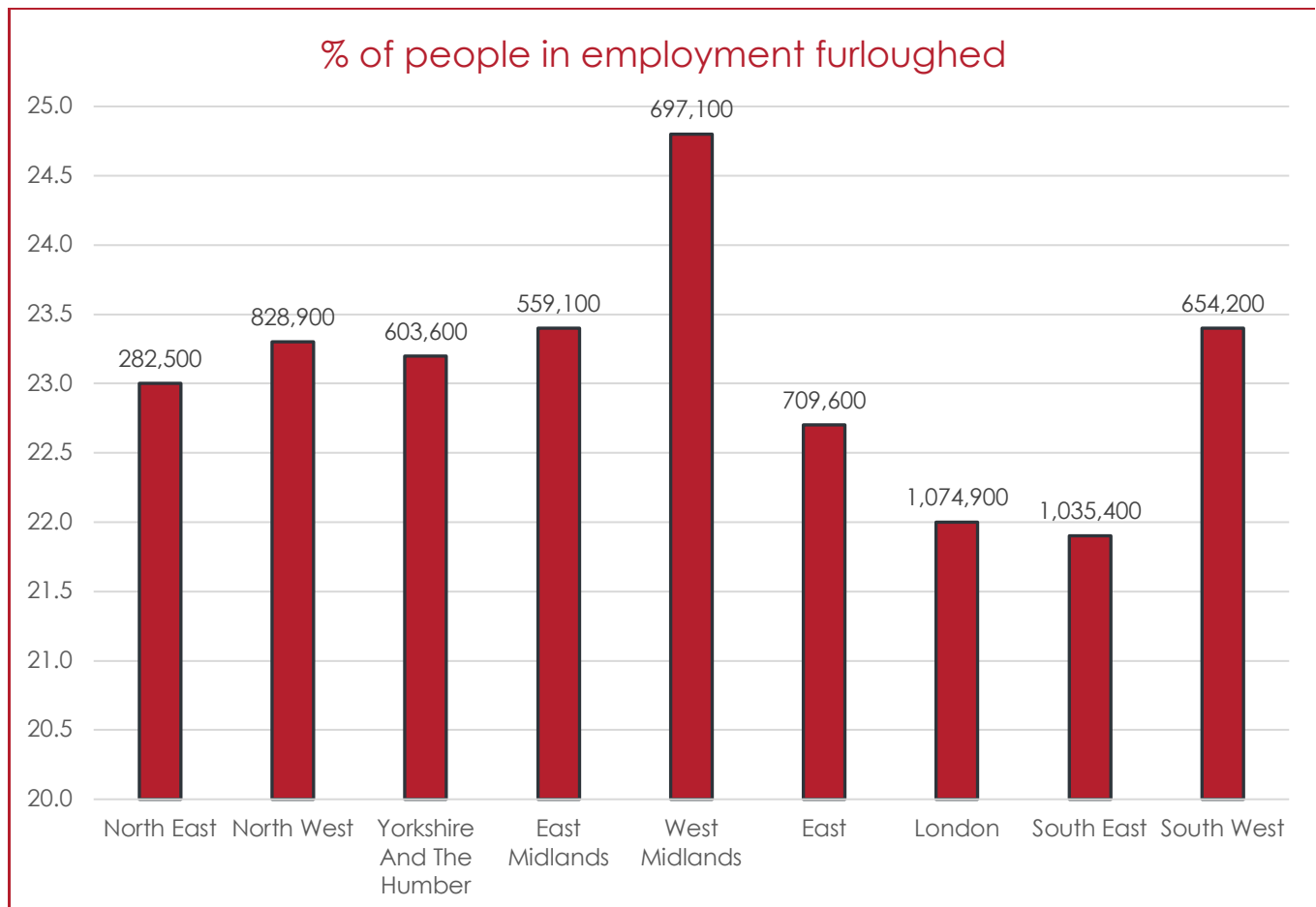
Source: ONS, [*Earnings and employment from Pay As You Earn Real Time Information, UK: June 2020*](#)

And this spells trouble for earnings, as not only are fewer people in employment, **but those that are still in a job are being paid less** – indications for May are that there is almost a 2% reduction in median monthly pay compared to the same month in 2019. This may be due to the furlough scheme, which pays employees 80% of their usual wage instead of making them redundant, a widely welcomed move and one of the most generous income support schemes during coronavirus in Europe.

However the noise from Westminster is that Government subsidy of wages cannot go on forever. From August, **employers will be expected to contribute 5%**, rising to 20% in October, which could place the 6.5 million jobs currently using the furlough scheme at risk and putting an added onus on job creation.

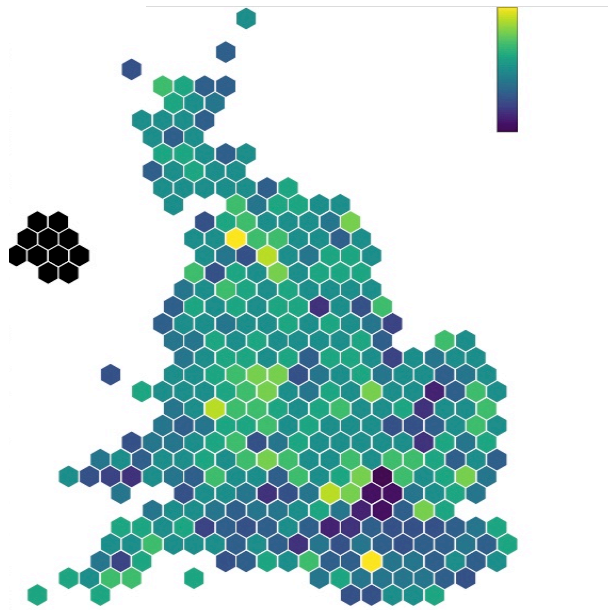
REGIONS OUTSIDE OF LONDON WORST HIT PROPORTIONALLY

The distribution of staff furloughed is not evenly spread across the country. When considering the actual numbers of people who have been furloughed, London and the SE seem the hardest hit numerically. But proportionally, the most jobs on hold and incomes affected are actually outside these areas, reaching their peak in the West Midlands and South West.



Sources: HMRC *Coronavirus Job Retention Scheme Statistics* (May 2020) and *nomis* for regional employment data.

Putting this on a map, the below graphic shows where the greatest proportion of the workforce is furloughed – the lighter colour being the larger percentage of the population, ranging right up to a third of the population in yellow areas. Darker blues and purple mean a lesser proportion of the workforce are furloughed.



Visualisation: Stuart Lowe, *ODI Leeds* / Data: *Coronavirus Job Retention Scheme statistics: June 2020 – sheet 5* (2020-06-11) and employment rate estimates from NOMIS (December 2019).

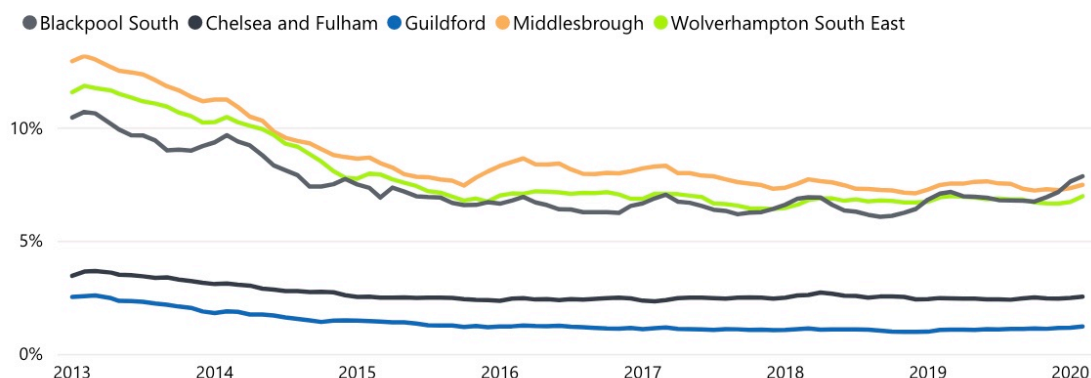
Broadly, the map shows that areas North of London appear to be hardest hit, bar the exception of Crawley that is home to large holiday companies such as Virgin and TUI that have, for obvious reasons, furloughed staff. There are standout areas such as South Lakeland and Pendle in the North West, and there is a high percentage of people furloughed in the Midlands, focussed particularly in areas like the Wyre Forest and Lichfield.

CONSTITUENCY LEVEL DATA REVEALS DISPARITIES

In terms of actual unemployment on a constituency level, even in February, before the worst of the coronavirus pandemic, there were stark differences between areas. For example, wealthier areas like Guildford and Chelsea and Fulham see unemployment benefit claims of just 1 – 3%, whereas Blackpool, Middlesbrough and Wolverhampton are more than double that at 7 – 8%.

People claiming unemployment benefits (alternative claimant count)

Alternative claimant rate (% of residents aged 16-64)



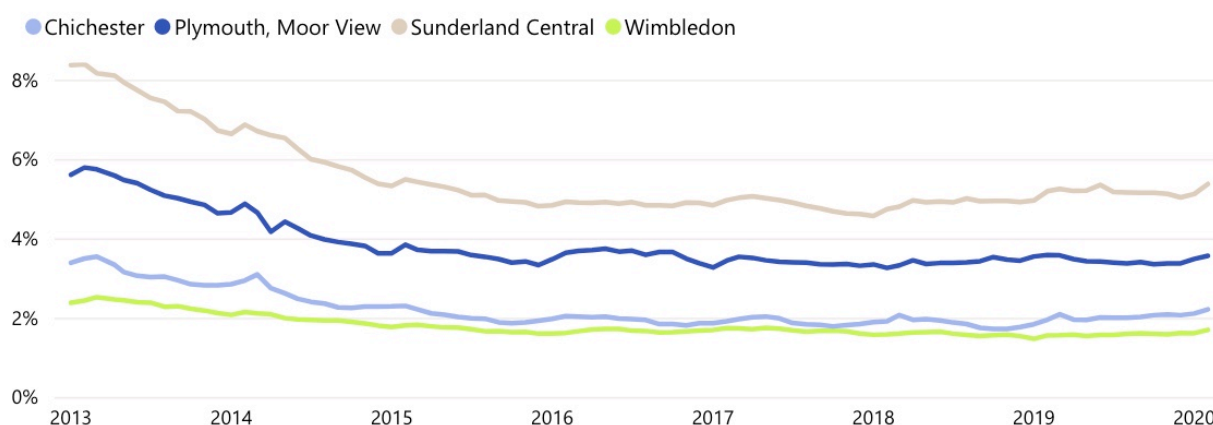
Source: *Commons Library*.

The story is similar for self-employed people. In Plymouth and Sunderland, two areas on opposite sides of the country, three-quarters of self-employed people are getting help from the Chancellor's support scheme. In these areas, unemployment claims are also higher, suggesting that there is an overall lack of opportunities.

Area	% self-employed using the Self-employment Income Support Scheme	% of population making unemployment claims (May 2020)
Plymouth, Sutton and Devonport	73%	7.6%
Sunderland	74%	8.5%
Chichester	68%	5.2%
Wimbledon	64%	4.6%
England average	70%	6.5%

Table 1: Selected areas and take up of Self-employment Income Support Scheme and proportion of population making unemployment claims. Sources: HMRC [SEISS data](#) and [Commons Library](#).

Alternative claimant rate (% of residents aged 16-64)



Source: [Commons Library](#).

LEVELLING UP IN 'RED WALL' AREAS

The [Centre for Progressive Policy](#) suggests that Red Wall towns, and those covered by the [Towns Fund](#) which was promised by the Government to level up in areas that are struggling, will actually be significantly more affected proportionately than more prosperous towns by coronavirus.¹

Defining 'resilient' as 'not being able to survive an economic shock as skill levels are low, unemployment high or there has been a slow recovery from a previous recession', the CPP states:

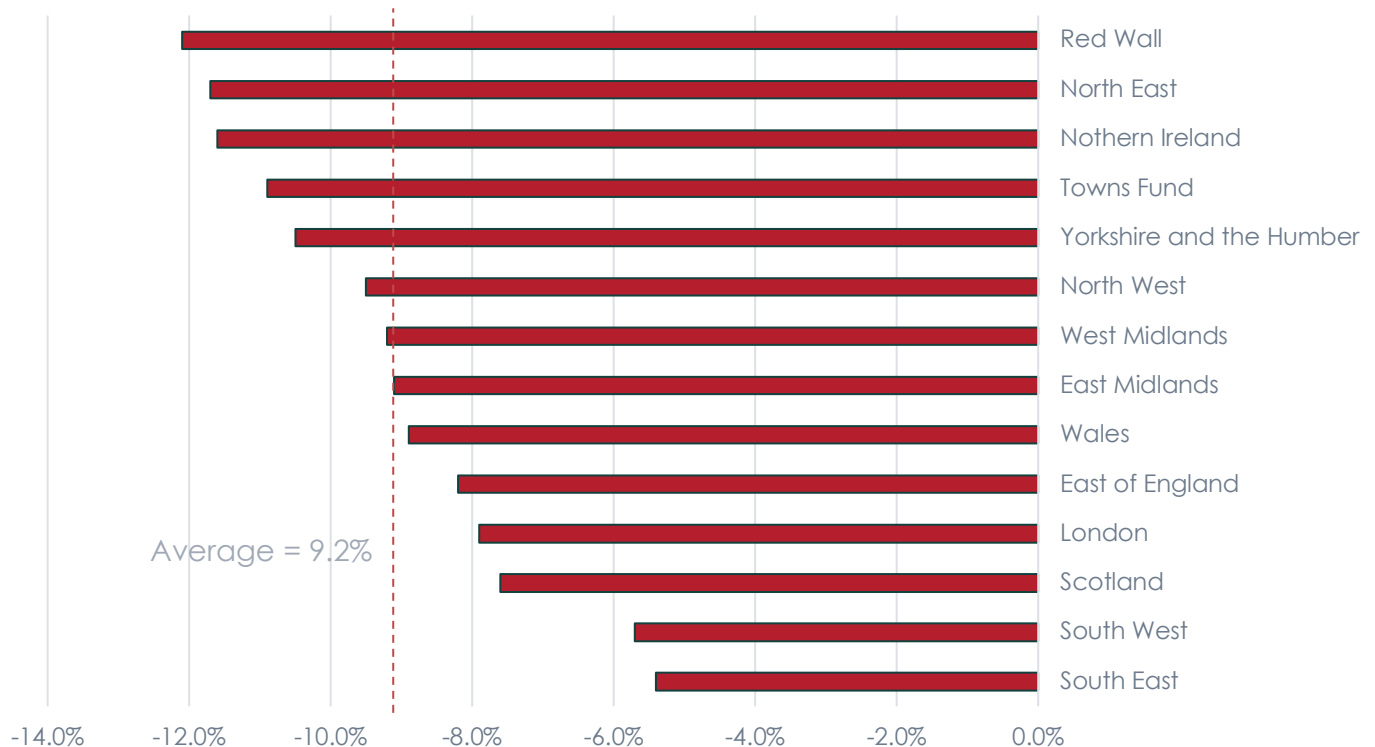
¹ The Towns Fund is essentially a £3.6 billion pot of cash for "levelling-up" in struggling towns, by awarding up to £25 million investment for up to 100 areas identified by the Government as "left-behind".

'Nearly 50% of Red Wall and 40% of Towns Fund local authorities are vulnerable, compared to 23% across the UK as a whole.

'There are only four Towns Fund local authorities that are "resilient" – out of a total of 90 – and none from Red Wall areas.

'On average, our scenario projects a 12% permanent output loss for Red Wall areas and an 11% loss for those covered by the Towns Fund. This compares to a permanent loss of 5% in the South East.'

GVA loss versus trend after 5 years in local authorities by region and for Towns Fund and Red Wall local authorities



Average GVA loss vs trend after 5 years in local authorities by region and for local authorities in the Red Wall and covered by the Towns Fund. (Source: CPP)

SELF-EMPLOYED CONSTRUCTION SECTOR IS YET AGAIN ONE OF THE HARDEST HIT

In terms of sectors, **construction has had by far the most claims** (500,000 more than the next highest sector) made under the self-employed scheme, reflecting that there are many self-employed tradespeople and builders.

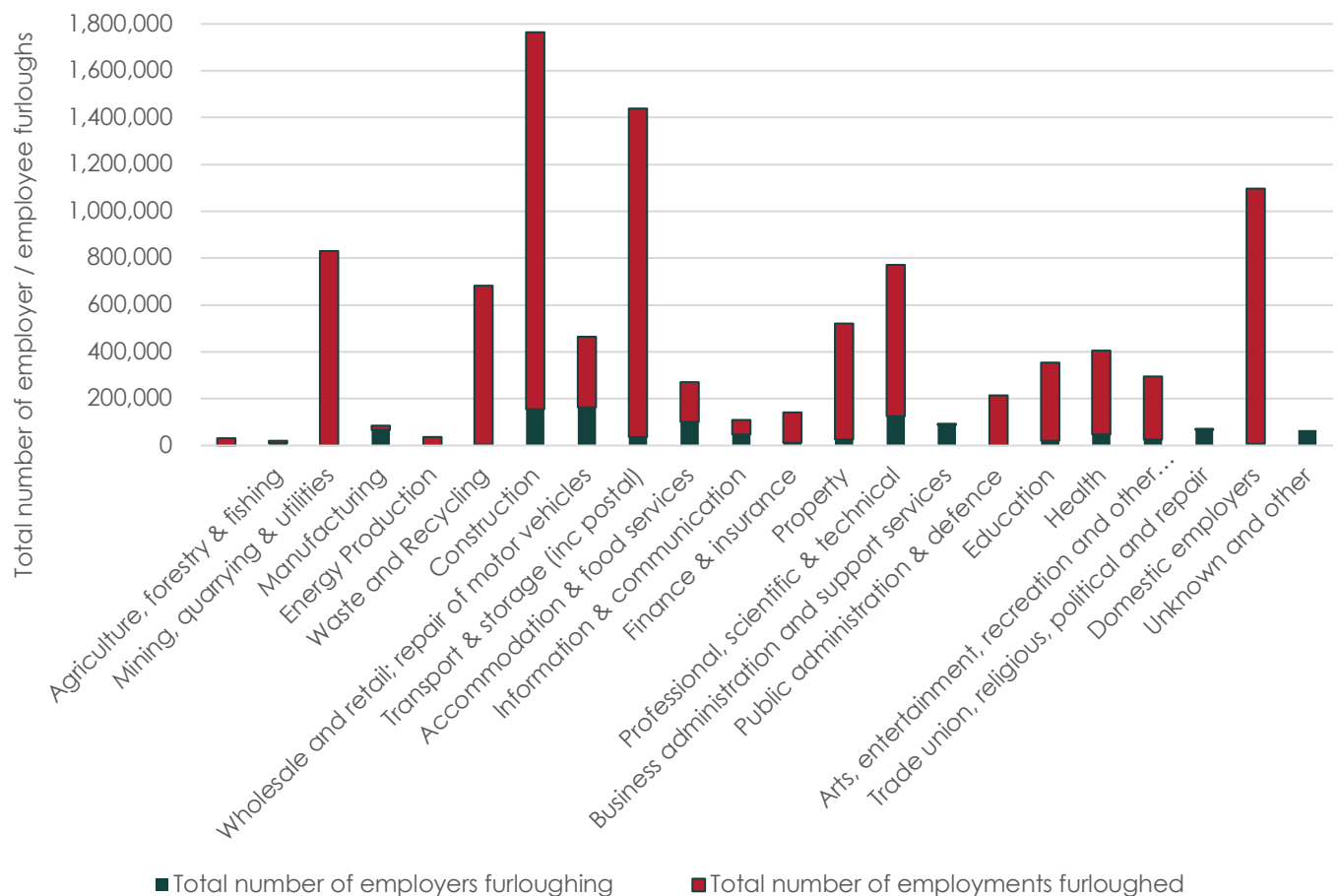
Payments made to the construction industry account for over 40% of the total money claimed under the self-employed scheme, which is by far the highest again. The next highest proportion is just 6%.

However, people employed by companies in the construction sector are also struggling, with the **second highest number of employers using the furlough scheme** (after wholesale and retail and repair of motor vehicles) and a total pay-out of £1.7 million, the 4th highest.

ONS data shows that **59% of businesses in the construction sector are laying off people in the short-term**, more than any other sector and almost a fifth above the average.

If not laid off, **over 40% of construction workers have been furloughed**, with **over 90% of construction businesses accessing support** to keep them going. To make things worse, despite restrictions from Government being lifted, **55% of companies in the sector** do not know when they will be going back to work.

Employers and employments using the furlough scheme, by sector

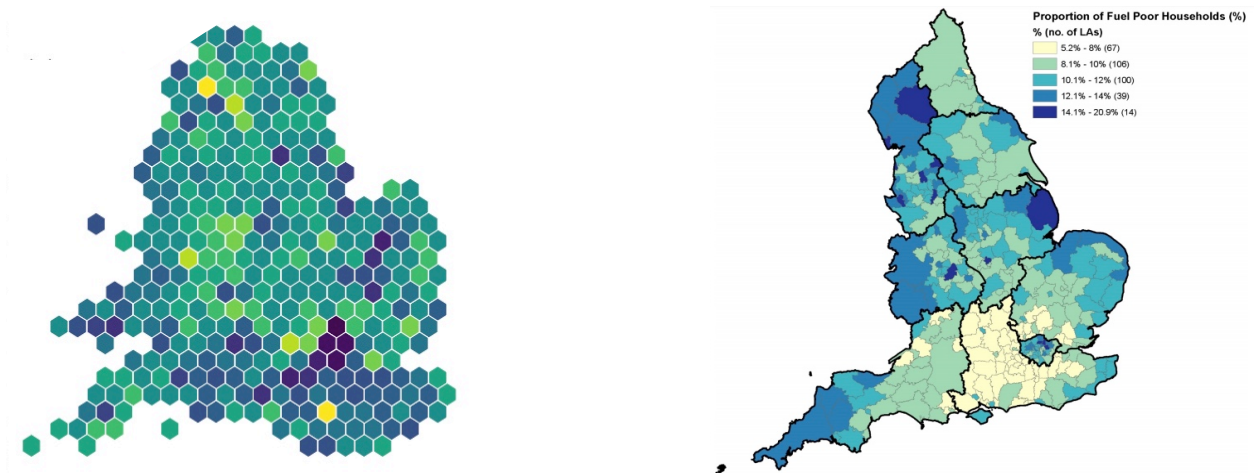


Source: HMRC *Self-Employed Income Support Scheme Statistics* (May 2020)

WHERE THE OPPORTUNITIES FOR 'BUILDING BACK BETTER' ARE

ALIGNING THE HOUSING STOCK WITH NET-ZERO

Looking back on the map of furloughed workforce, some areas in the North, particularly the North West, show high percentages compared to the South and South East. If we compare this with a map showing the proportion of households in fuel poverty (right), there are some clear similarities with the North West showing high, and South East showing low, rates of fuel poverty. Please note, colours are inverted so darker colours on the left infer low percentage of population furloughed whilst dark colours on the rate indicate high levels of fuel poverty.



Sources: left - Stuart Lowe, [ODI Leeds](#), data from Coronavirus Job Retention Scheme statistics: June 2020 – sheet 5 (2020-06-11) and employment rate estimates from NOMIS (December 2019). Right – [BEIS Fuel Poverty Sub-Regional Statistics 2020](#).

Fuel poverty is defined as households that “have required fuel costs that are above average (the national median level); and were they to spend that amount, they would be left with a residual income below the poverty line.” In reality, this often means families that live in poorly insulated, cold and damp homes, or have inefficient oil boilers that cost a lot to run.

Energy Performance Certificates are one indication of the energy efficiency of the home. Running from A to G, they categorise each household and are required when selling or renting a property. The Government has a target for all homes to reach EPC band C by 2035, but it is currently not on track. The average home in England is band D, with many falling lower at E, F and G.

The areas that have lighter colours on the map to the left, and darker colours on the map to the right, are areas that have a high percentage of furloughing and low standards of housing. As a select few examples, **Blackpool has about 30% of the workforce furloughed and almost 17% of households living in fuel poverty.** Likewise, Pendle in Lancashire has over 30% of the working population furloughed and fuel poverty rates of above 15%. For comparison, **the average fuel poverty rate in England is 10%.**

Homes below EPC band C and proportion of workforce furloughed, by region



Sources: HMRC *Coronavirus Job Retention Scheme Statistics* (May 2020) and BEIS *EPC Live Tables*.

And where incomes are lower, in many places the standards of housing are lower too. This is particularly true for Yorkshire and the Humber (where income is less than £18,000 and 67% of homes do not meet the Government's EPC band C target). Similarly, the average income in the West Midlands is a little more at just above £18,000 and 2% less homes of homes do not reach the target compared with Yorkshire. Whereas, in London the number of homes at that do not meet the target is a little over half, and incomes are much higher at nearly £30,000.

Homes with a lower EPC rating cost more to run, doing nothing for areas where incomes are low and the number of homes not achieving the Government's target is high. On average, a home at EPC band F costs over £700 more to run than one at EPC band B, which can have huge impacts on those that are already struggling.

	Mean gas consumption (kwh)	Mean gas cost (£, at 3.79p / kwh)	Mean electricity consumption (kwh)	Mean electricity cost (£, at 14.37p / kwh)	TOTAL (£)
Average	12,600	477.54	4,400	632.28	1,109.82
A	10,200	386.58	3,900	560.43	947.01
B	9,000	341.10	3,400	488.58	829.68
C	10,100	382.79	4,000	574.80	957.59
D	12,600	477.54	4,300	617.91	1,095.45
E	15,600	591.24	4,700	675.39	1,266.63
F	16,600	629.14	6,300	905.31	1,534.45
G	12,400	469.96	6,500	934.05	1,404.01

Table 2 – average energy bills per EPC band. Sources: BEIS *Energy Trends: December 2017* for consumptions, gas and electricity costs from UK power. Note: homes at EPC band A cost more than those at EPC B because there is a small sample size for homes at EPC A, and a high proportion of these properties use electric heating sources. Likewise, EPC F costs more to run than EPC G, as EPC band F

homes have higher gas demand than those in EPC band G because only 12% of homes in EPC band G use gas as their primary energy source, instead using fuels such as oil or coal.

In terms of potential to get people back to work on housing, there are several standout regions where a high proportion of homes need significant work to reach the Government's target EPC, and also where unemployment is high. For example, in Blackpool three quarters of homes do not meet the EPC target, and unemployment is more than double the average at 11%. This differs from regions like Kensington and Buckingham, where good quality housing is common (less than 60% of homes are EPC D or below) and the unemployment rate is also low.

Area	Homes EPC D or below (%)	Unemployment rate (%)
Blackpool	75%	11%
Middlesbrough	67%	9%
Wolverhampton	70%	9%
Kensington	60 %	6%
Buckingham	59%	4%
England Average	70%	3.9%

Table 3. Selected areas average EPC, and unemployment rate. Sources: [BEIS Live Tables](#) and [nomis](#).

BLACKPOOL CASE STUDY

Blackpool South was a Labour-held seat until the 2019 Election and is one deprived area ready to level up. 75% homes are below EPC band C in Blackpool, and fuel poverty is high at 17%.

Over 50% of the housing in inner Blackpool is privately rented, and on average rents account for a third of monthly salaries, reflecting that the area has the third lowest income in the UK at £17,900. Additionally, the proportion of Housing Benefit claimants in Blackpool living in the private rented sector is the highest in the country at 73%, and around 80% of all private tenants receive Housing Benefit.

This region saw the highest rate of take up for the self-employed loans throughout the whole of the North West at 76% and it has the highest rate of unemployment in the country at 11%



The Local Government Association's recent report indicates that in 2030, about 1,000 jobs could be created to retrofit homes with low carbon heat and energy efficiency measures in Blackpool alone.


















The costs of meeting EPC band C range of course depending on the property. But the Government's impact assessment for the private rented sector regulations which came into play this year indicate that average costs to bring homes EPC F and G to an E is between £1,200 and £2,000 – this compares to an average increase in property value of £8,500.

Typical measures include cavity and loft insulation, or solid wall insulation on relevant properties as well as double glazing. Often, solar PV is also recommended. The image below is an example of the measures recommended on an EPC band F home, and indicative costs of each, as well as the monetary savings from installing the measure.

Recommendations

The measures below will improve the energy performance of your dwelling. The performance ratings after improvements listed below are cumulative; that is, they assume the improvements have been installed in the order that they appear in the table. Further information about the recommended measures and other simple actions you could take today to save money is available at www.gov.uk/energy-grants-calculator. Before installing measures, you should make sure you have secured the appropriate permissions, where necessary. Such permissions might include permission from your landlord (if you are a tenant) or approval under Building Regulations for certain types of work.

Measures with a green tick  may be supported through the Green Deal finance. If you want to take up measures with an orange tick  through Green Deal finance, be aware you may need to contribute some payment up-front.

Recommended measures	Indicative cost	Typical savings per year	Rating after improvement	Green Deal finance
Internal or external wall insulation	£4,000 - £14,000	£ 510	 E51	
Floor insulation (suspended floor)	£800 - £1,200	£ 73	 E53	
Increase hot water cylinder insulation	£15 - £30	£ 94	 D56	
Low energy lighting for all fixed outlets	£70	£ 49	 D58	
Heating controls (room thermostat and TRVs)	£350 - £450	£ 108	 D62	
Replace boiler with new condensing boiler	£2,200 - £3,000	£ 314	 C72	
Solar water heating	£4,000 - £6,000	£ 46	 C74	
Replace single glazed windows with low-E double glazed windows	£3,300 - £6,500	£ 86	 C77	
Solar photovoltaic panels, 2.5 kWp	£5,000 - £8,000	£ 284	 B85	

Source: *Energy Saving Trust*

HIGHLY SKILLED, LONG-LASTING JOBS THROUGH ENERGY EFFICIENCY

Jobs in energy efficiency aren't just long-lasting and highly skilled but are also good quality too. Statistical bodies like the ONS break jobs down into different skill levels and occupation types. For skills, there are 4 levels which can be achieved:

- **NVQ 1 equivalent:** e.g. fewer than 5 GCSEs at grades A-C, foundation GNVQ, NVQ 1, intermediate 1 national qualification (Scotland) or equivalent
- **NVQ 2 equivalent:** e.g. 5 or more GCSEs at grades A-C, intermediate GNVQ, NVQ 2, intermediate 2 national qualification (Scotland) or equivalent
- **NVQ 3 equivalent:** e.g. 2 or more A levels, advanced GNVQ, NVQ 3, 2 or more higher or advanced higher national qualifications (Scotland) or equivalent
- **NVQ 4 equivalent and above:** e.g. HND, Degree and Higher Degree level qualifications or equivalent

At least NVQ levels 1 and 2 are needed for insulation fitters, and these qualifications can often be worked for alongside getting experience on the job. However some roles, like heating engineers installing a heat pump for example, require a higher level of NVQ3. In terms of occupation types, there are nine major groups:

- Managers, directors and senior officials
- Professional occupations
- Associate professional and technical occupations
- Administrative and secretarial occupations
- Skilled trades occupations
- Caring, leisure and other service occupations
- Sales and customer service occupations
- Process, plant and machine operatives
- Elementary occupations

In the construction and buildings industry, most of the workforce are defined as group 5, skilled trades occupations. According to the ONS, "this major group covers **occupations whose tasks involve the performance of complex physical duties that normally require a degree of initiative, manual dexterity and other practical skills**. Most occupations in this major group have a level of skill commensurate with a substantial period of training, often provided by means of a work-based training programme,". Example occupations include construction, agriculture, textiles and metal and electrical work.

There are examples of areas with highly skilled populations, like Bolsover in Derbyshire (24% workforce are skilled), which also have poor energy efficiency. A 'red wall' constituency that switched from Labour to Conservative in 2019, 73% of homes need upgrading to meets the Government's 2035 efficiency target. Making the link between providing a skilled workforce with skilled jobs in these areas could lie in boosting energy efficiency, while at the same time helping put the UK on track to the legally binding net zero emissions target.

	Homes EPC D or below	'Skilled trades' as proportion of workforce
Bolsover	73%	24%
Wellingborough	66%	21%
Pendle	78%	20%
Canterbury	60%	14%
Richmond	60%	3%
Average	62% (Eng)	10% (GB)

Table 4. Selected areas and homes below EPC C, and skilled trades. Sources: [BEIS Live Tables](#) and [nomis](#).

AN ENERGY EFFICIENCY PROGRAMME CAN BOOST EMPLOYMENT AND ADD GVA TO OFFSET THE DAMAGE OF CORONAVIRUS IN AREAS THAT NEED IT MOST

The Energy Efficiency Infrastructure Group estimates that a retrofit programme to bring all homes to EPC C by 2030 would result in widespread GVA and employment growth across the regions. The growth would actually more than counteract the GVA losses incurred as a result of coronavirus.

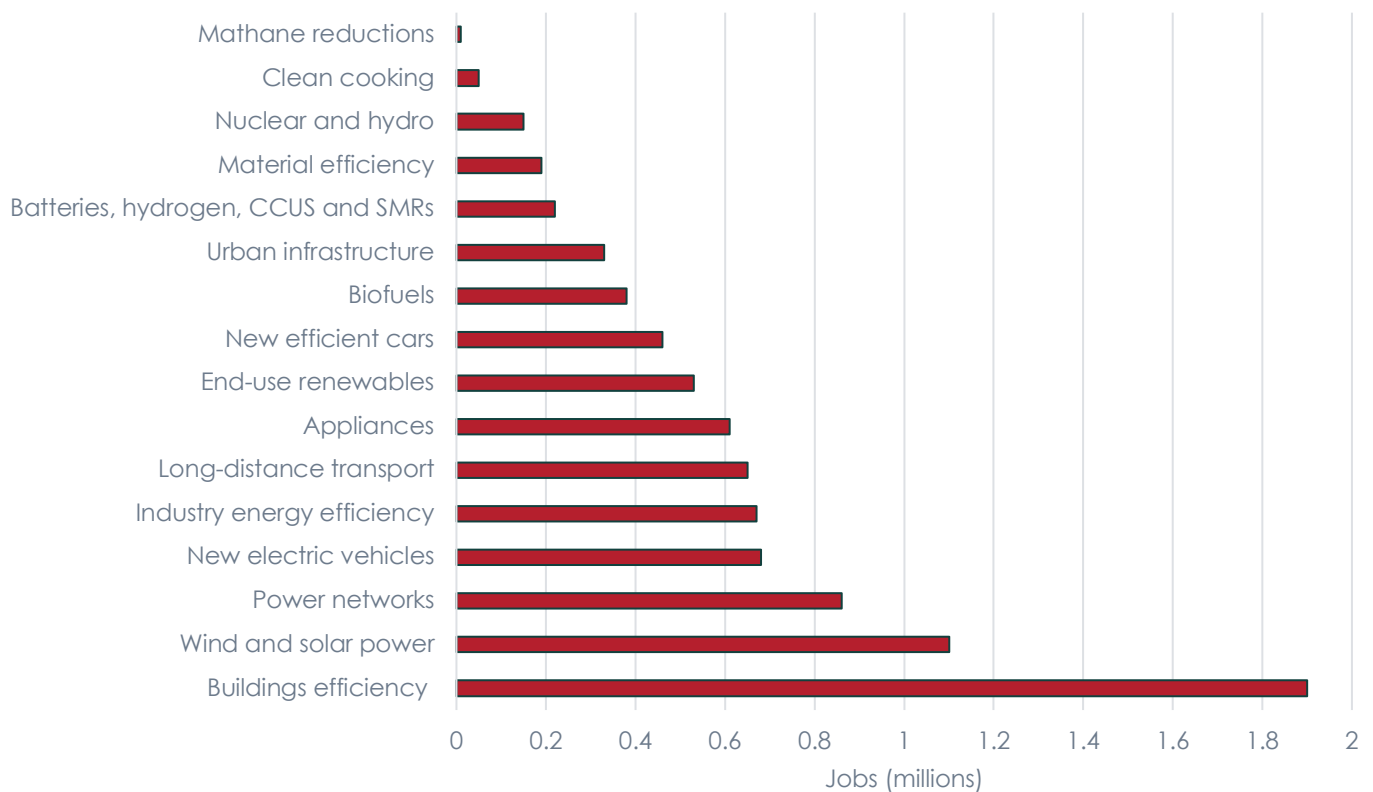
Region	Average GVA loss vs trend after 5 years in Local Authorities by region (%)	Average GVA added by EE retrofit programme (%)	FTEs	Total investment (public and private) (£ million)
North East	-11.7%	12.5%	6,600	£3,850
North West	-9.5%	12.1%	17,800	£10,430
Yorkshire And The Humber	-10.5%	11.9%	13,700	£8,020
East Midlands	-9.1%	11.8%	6,610	£6,610
West Midlands	-9.2%	12.2%	14,200	£8,320
East	-8.2%	12.2%	14,100	£8,240
London	-7.9%	12.0%	17,100	£10,040
South East	-5.4%	12.1%	20,500	£11,980
South West	-5.7%	11.9%	13,300	£7,820
TOTAL			110,610	£67,490

Table 5. Regional analysis of current GVA, expected GVA under a retrofit programme, full-time equivalent jobs created and total investment. Sources: GVA losses due to coronavirus from *Centre for Progressive Policy*. Other data from *EEIG: Building for Resilience*.

Reaching across regions, these highly skilled, lifelong jobs would bring a boost to those most affected by coronavirus, namely the North East, Yorkshire and the Humber, and North West. The EEIG suggests there is some danger that these jobs (over 110,000 in a time when 600,000 fewer people are being paid) will not materialise if the £9.2 billion Conservative Manifesto commitments are not adopted by Government.

This is backed up by data from the IEA, that showed of 9 million new green jobs created globally each year if governments invest in 'green' post-COVID packages, 1.9 million would be in the buildings efficiency field. Their recommended policies to achieve this include increasing incentives for building efficiency improvements, smart energy management solutions and on-site renewables, targeting efficiency improvement measures on those households and businesses most impacted by the crisis (such as low-income households, small businesses and hotels), and accelerating or expanding existing and planned efficiency programmes.

Annual worldwide jobs created in low-carbon sector (millions) – International Energy Agency data



Sources: *Guardian graphic, IEA data.*

RENEWABLES

In 2030, the **renewable electricity sector is predicted to account for nearly a quarter of all jobs** in the low carbon and renewable energy sector. This is particularly the case in regions like the North East, where large projects like the Dogger Bank offshore wind farm are under construction, and should provide lifelong direct jobs as well as boosting the supply chain locally.

Construction industry analyst Glenigan showed that the construction sector is poised to bounce back, with £4.1 billions worth of infrastructure projects securing planning permission and awaiting the go-ahead from Government. Of these 48 projects, a third are in the renewable energy sector including a 'waste to energy' facility in the North West.

And the opportunities don't stop there. The below map shows the solar, offshore and onshore wind, and battery projects that have had planning permission granted or submitted. These could be the types of projects that are deemed 'shovel ready' by policy makers.



Source: BEIS *Renewable Energy Planning Database*.

Not shown in the above map are some of the offshore wind projects, but under the Crown Estate offshore rounds there are a number planned in different areas of Great Britain, as shown in the map below.



Regions depicted – 1) Dogger Bank, 2) Eastern Regions, 3) South East, 4) Northern Wales and Irish Sea. Source: The Crown Estate *Renewable Energy Planning Database*.

DOGGER BANK COULD PROVIDE LIFE LONG, WELL PAID, SKILLED JOBS

In South Tyneside, unemployment is at 8%, and there are a higher than average number of younger people unemployed. Following the collapse in demand for coal, a new future in the energy industry could lie ahead for the area.

This is because off the coast, 200 offshore wind turbines are under construction at Dogger Bank, and there is permission for 480 more granted and awaiting construction. This indicates that shovel ready renewable projects can be found in the region.

The Dogger Bank wind farm should provide electricity for around 4.5 million homes from 2023, when the project is due to be completed and this could create as many as 200 jobs just in the operations and maintenance base, located in the Port of Tyne. There are further supply chain opportunities for the development, construction and operational phases which will be for approximately 25 years, providing secure and well-paid employment for the local area.

THE WRITING ON THE WALL FOR PETROL AND DIESEL CARS?

The ambition of the UK government, along with many others, is to switch to electric motoring – reducing carbon emissions, slashing urban air pollution and associated healthcare costs, and eventually resulting in cheaper travel. Economic recovery packages in countries such as Spain and France have linked support for the automotive industry to accelerating the electric transition.

For example, in Spain a roll out of 50,000 electric charging points by 2023 is part of the recovery plan, and €230 million is immediately available for a scrappage scheme that rewards swapping old motors for new low carbon vehicles. In this scheme, €4,000 will be available for electric battery or hydrogen vehicles, whilst €1,000 for cars that emit less than 120g of CO₂ per km. The Spanish bailout plan also expects EV manufacture to increase by 700,000 EVs per year, and for the industry to promote roll out of charging points as part of the bail out.

In the UK context, this idea gains added traction when we consider again the crossover between areas hit hardest by coronavirus job destruction and those with the biggest opportunity for job creation.

The West Midlands automotive cluster accounts for around 40% of the UK's whole automotive employment with almost 50,000 people in the region working in this sector. However, unemployment is high in the region. For example in NE Wolverhampton, the unemployment rate is over double that of the UK's and the level of highly skilled people at NVQ level 4 and above, is about half the UK average. JLR's plans to build a new engine plant near this area therefore likely provides a welcome boost.

Also in the West Midlands, Solihull is expected to get a boost from the low emission vehicle industry. In 2030, 55% of low carbon jobs are predicted to be in low emission vehicles, rising to 62% by 2050 according to the LGA. This is most likely linked to the JLR expansion into EVs and batteries signposted for the next few years.

However the potential benefits are not exclusive to the West Midlands. Sunderland is home to a large Nissan factory, building its flagship EV, the Nissan Leaf. Multinational taxi company Uber recently put forward a huge order for the Leaf to Nissan, which will bring about positive changes to the area. And if other large buyers come forward, it's likely that the market for EVs and other alternative fuel cars like hydrogen, will grow.

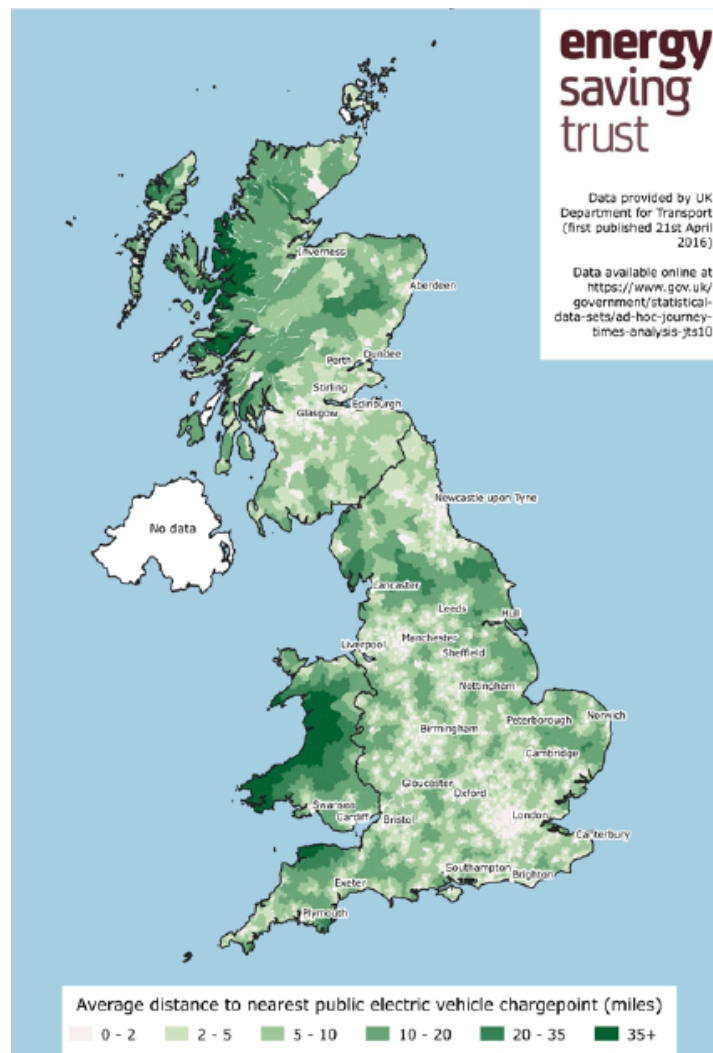
Manufacturing hubs where batteries can be built from scratch in one location, improving economic viability and efficiency known as "gigafactories" are another aspect of the EV supply chain that may result in regional growth. JLR boss Ralf Speth said last year that **"If batteries go out of the UK, then automotive production will go out of the UK."** suggesting the importance of getting the supply chain right for low emission vehicles close to manufacturing plants in the UK.

Following France and Germany, the UK Government has announced ambitions for a UK gigafactory to boost the industry and secure the supply of batteries. There have been a few sites suggested; South Wales, Bristol, the North East and more along the South West of England have been rumoured to be in line for the construction of a these battery hubs. This could have major employment impacts, as **Tesla's first gigafactory, in Nevada, employs over 7,500 people** and is not yet completed, suggesting that more jobs will be made in this region on completion of the factory.

WIDESPREAD, SKILLED JOBS IN BUILDING A CONNECTED CHARGE POINT NETWORK

In terms of skilled jobs, the European Association of Electric Contractors estimates that **phasing out petrol and diesel cars by 2030 would create 200,000 permanent jobs**. 57% of these will come from the installation, operation and maintenance of charging points which will need to be spread all over the country.

The below map indicates where the charge points currently are in the UK, and areas that have to drive significant distances to charge up an EV. Dark clusters in the South West, across the North East and North West suggest that these might be areas where jobs are created in years to come, in order to install charge points and create infrastructure crucial to reducing range anxiety. This may result in the take up of EVs increasing.

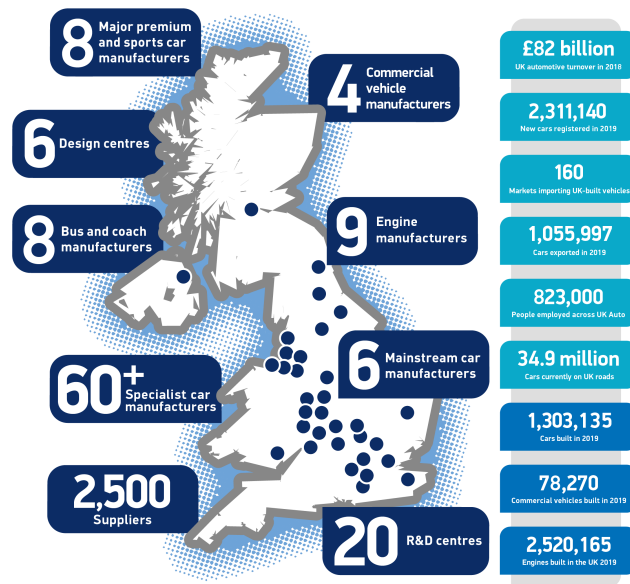


Source: [Energy Saving Trust](#)

Taking Barnstable in North Devon in the South West for example, **over a fifth of people are classed as skilled trades** and a quarter have been furloughed. Those seeking **unemployment benefits aged 18 to 21** are **3% higher than the average, at 11.5%**.

It's thought that younger people may have a greater interest in having a career in the low-carbon industry; linking together EVs and skilled apprenticeships and jobs may boost Devon's youth's prospects, in line with the **Prime Minister's pledge to 'guarantee apprenticeships' for younger people**.

These skilled apprenticeships in a sector that is destined for growth as the nation decarbonises transport, would be welcomed all over the country, especially in areas that need their connectivity levelling up. Not only would boosting EV charging roll out provide skilled jobs and help get younger people in work, it would also support connectivity and link regions like the South West up to the rest of the country in a way that is aligned with net zero.



Source: [Society of Motor Manufacturers and Traders \(SMMT\)](#)

CONCLUSION

TARGETING GREEN JOB CREATION AT AREAS HIT HARDEST BY CORONAVIRUS WOULD ESPECIALLY BENEFIT PEOPLE IN 'RED WALL' CONSTITUENCIES

This report highlights the crossover between areas of high unemployment and social deprivation, those hit hardest by coronavirus, and those where the biggest opportunity lies for job creation in fields such as energy efficiency. For example, of the 15 'Red Wall' constituencies won by the Conservatives in the 2019 General Election with the highest swing, 11 would substantially benefit from expansion of energy efficiency and low carbon heat programmes to buildings. Of the other four, alternative fuels and low carbon electricity will play a key role in delivering lifelong, skilled jobs.

There is significant work to be done on millions of houses across the UK to bring them up to EPC band C, and there is a skilled workforce in many of these areas ready to get back to work across the hard-hit construction sector. As shown, Blackpool exemplifies the social challenge and the opportunity.

The GVA and full time equivalent (FTEs) jobs created through accelerating the roll out of the energy efficiency and low carbon heat would more than offset GVA lost during coronavirus, and create tens of thousands in regions that have struggled to progress.

Giving the go-ahead to 737 'shovel-ready' renewable electricity projects – that is planning permission granted, awaiting construction – mainly in the North East and North West and Wales would provide lifelong jobs in places where unemployment rates are high. For example, Sunderland and close to Dogger Bank.

EV production, charge point roll out and the creation of gigafactories set up the UK's future mobility industry and could support low carbon apprenticeships in line with Government promises, in places like North Devon where youth unemployment is high and connectivity is poor.

APPENDIX A: TABLE OF “RED WALL” SEATS WON FROM LABOUR WITH BIGGEST VOTE SWING AND ANALYSIS OF EMPLOYMENT, HOME ENERGY PERFORMANCE, WORKFORCE SKILL LEVEL AND SECTOR, PLUS LGA ANALYSIS OF THE NUMBER AND SECTOR OF JOBS CREATED IN THE LOW CARBON AND RENEWABLE ENERGY (LCREE) ECONOMY IN 2030.

	Red wall seats won from Labour with biggest vote swing	Region	% population unemployed	% unemployed change since last year	Homes below EPC C (%)	Skilled tradespeople (%)	NVQ 4 and up (%)	% unemployed that are younger people (18 to 24)	Workforce in construction sector (%)	LCREE jobs in 2030	Main LCREE industry in 2030
1	Blackpool South	NW	13.5	7.3	75	11	27	18	2	1,156	Low carbon heat and energy efficiency
2	Wolverhampton NE	WM	10.4	4.6	70	15	18	16	2	1,966	Low carbon heat and energy efficiency
3	West Bromwich West	WM	9.1	4.9	62	13	19	14	5	2,656 (for Sandwell)	Low carbon heat and energy efficiency
4	Burnley	NW	9.0	3.9	78	13	27	15	3	754	Low carbon heat and energy efficiency
5	Dudley North	WM	9.0	3.9	69	15	16	14	7	2,599	Low carbon heat and energy efficiency
6	West Bromwich East	WM	8.9	4.8	69	12	23	14	6	2,656 (Sandwell)	Low carbon heat and energy efficiency
7	Great Grimsby	East	8.7	3.2	76	12	22	14	3	2,549 (NE Lincolnshire)	Alternative fuels
8	Stoke-on-Trent North	NW	8.3	4.4	69	9	23	12	7	2,151	Low carbon heat and energy efficiency
9	Hyndburn	NW	8.2	4.2	74	10	24	14	4	615	Low carbon heat and energy efficiency
10	Redcar	Y&TH	8.1	3.6	70	13	25	13	5	1,820	Low carbon electricity
11	Scunthorpe	East	7.4	3.5	70	16	28	12	6	2,549 (NE Lincolnshire)	Alternative fuels
12	Leigh	NW	7.3	3.5	68	11	27	12	11	2,564 (Wigan)	Low carbon heat and energy efficiency
13	Bishop Auckland	NE	7.2	3.0	71	14	30	13	7	6,314 (Durham)	Low carbon heat and energy efficiency, and alternative fuels
14	Sedgefield	NE	6.7	2.9	69	13	32	13	7	6,315 (Durham)	Low carbon heat and energy efficiency, and alternative fuels
15	NW Durham	NE	6.2	2.7	68	9	34	12	9	6,316 (Durham)	Low carbon heat and energy efficiency, and alternative fuels
	Averages		3.9 (UK)	0.1 (UK)	62 (Eng)	10 (GB)	40 (GB)	9 (GB)	5 (GB)	694,000 (UK)	Low carbon heat, energy efficiency and electricity

