

The Green New Deal in the North West

HOW WE CAN TACKLE THE CLIMATE EMERGENCY AND LEAVE NO ONE BEHIND





"I strike because we need to make people listen. One day, I want to live in a fair society where everyone has the same opportunities, where warming has been reduced or mitigated so that the world is safe for us and preserved for future generations.

I want my children to live in a world where polar bears are still alive and rainforests still exist. There is no simple fix for climate change – we need to fundamentally move away from our broken economic model. It's not good enough to just set long-term goals, because we are already feeling the effects of climate change today.

We must act before it's too late."

ROSIE MILLS, 18 / *Climate striker from Lancaster*



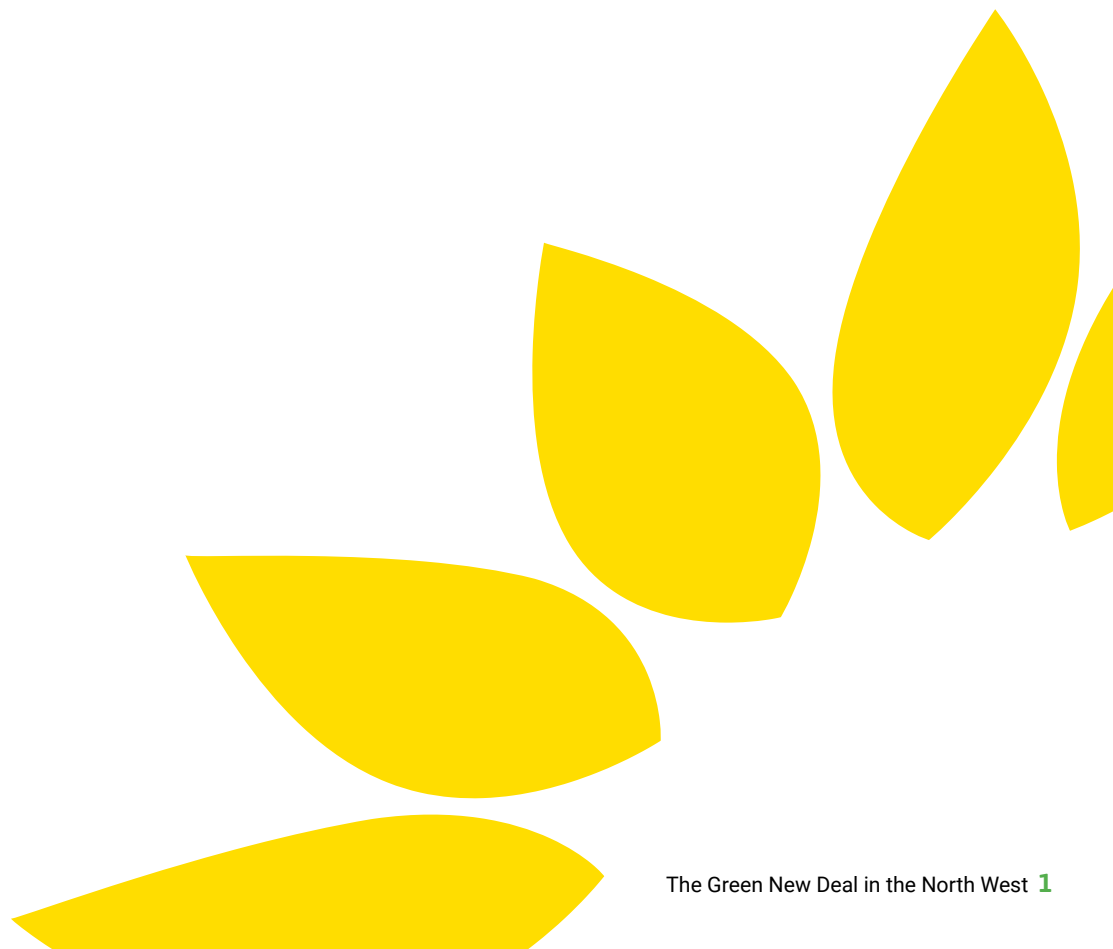
Written and researched by Laurence Adams on behalf of Gina Dowding MEP for North West England.

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Foreword



We are in the midst of a climate and ecological crisis. Globally and UK-wide, people are demanding change. Young people and climate strikers are leading the call to prevent a catastrophic climate breakdown.

As leaders and politicians, we owe it to our children, our communities, the vulnerable in society, as well as to all species, to do everything we can to reduce carbon emissions and restore, protect and enhance biodiversity. Governments at all levels, from local councils, to Westminster, to the EU, are declaring climate emergencies and recognising the urgent need to act.

The Green New Deal (GND) is a radical approach to restructuring our economy which, if implemented comprehensively, will help us to rapidly transition out of this crisis and at the same time improve quality of life for everyone in the areas that really matter – from warm homes and clean air to skilled local jobs and affordable public transport.

Promoted as a cohesive programme by The Green Party back in 2008, the GND is now being recognised in the UK, in Europe and over the Atlantic for its potential to transform society for the better.

This report shines a light on the positive impact a GND could have on the North West, focusing on five key areas: energy supply, industry, buildings, land use and food, and transport.

There are many other areas to which a GND could be applied. Some of the themes not explored in this report include: coastal issues and damage to our marine ecology; how waste management processes could be radically transformed; how to harness the digital revolution for democracy; how a GND together with a Basic Income Scheme can deliver a better balance between work and play; or how it could usher in a new era of arts and culture.

We have not explicitly explored the ways in which implementing a GND can support social inclusion and reduce racism, or how new democratic institutions like Citizens' Assemblies will play a part in the transformation. There is simply too much breadth in these critical issues to address them effectively in one accessible report.

Two of my MEP colleagues, Molly Scott Cato and Alex Phillips, are taking on some of these issues in their own work; focusing on how the GND can be financed and how it can tackle deprivation in coastal towns in the south.

This particular document focuses on the North West region and its long and proud history of industry and innovation; its pioneering spirit, leadership and of course its commitment to democracy and social justice. In the following pages, we examine what has to stop in our region, what needs to be expanded and which policies we can put in place at the local, national and European level to deliver change.

A transition to a more sustainable society can be found in the GND. It will rapidly propel us to a zero carbon, nature friendly economy; create hundreds of thousands of rewarding jobs; improve health and wellbeing; tackle inequality and redistribute wealth after years of austerity.

A just transition, where no community is left behind.

GINA DOWDING
MEP for the North West

What is the Green New Deal?

The GND is a plan to rapidly transform our broken economic system into one which can simultaneously avert the climate and nature crises, redistribute wealth and reverse inequality, provide hundreds of thousands of future-fit jobs, put workers and communities first, and raise the standard of living for all.

This can all be achieved through a radical overhaul of our financial institutions, a broad package of new policies and, most importantly, a huge mobilisation of investment – up to 5% of GDP annually for the next ten years. That's around £100 billion in the UK, or £750 billion in the EU.

There are six core principles a GND must live up to:



RECOGNISING THE EMERGENCY

Facing up to the enormous scale of the climate and nature emergency with unprecedented, rapid and radical action, starting now



MAKING A FAIR CONTRIBUTION

Supporting global climate justice and taking action in our own communities, rather than simply offsetting our emissions to the developing world



A JUST TRANSITION

Putting workers and those in need first, ensuring inclusion and diversity, creating good quality jobs for all and redistributing wealth to where it's needed most



PUBLIC MONEY FOR PUBLIC GOODS

Ensuring that public investment in new infrastructure returns benefits that can be shared by all, from cleaner air and water to improved health and wellbeing



LOCALISING DEMOCRACY

Devolving more powers to local areas, enabling participatory decision-making and encouraging new forms of public ownership



RETHINKING SUCCESS

Abandoning our attachment to endless economic growth by measuring what's more important, like security, equality and wellbeing

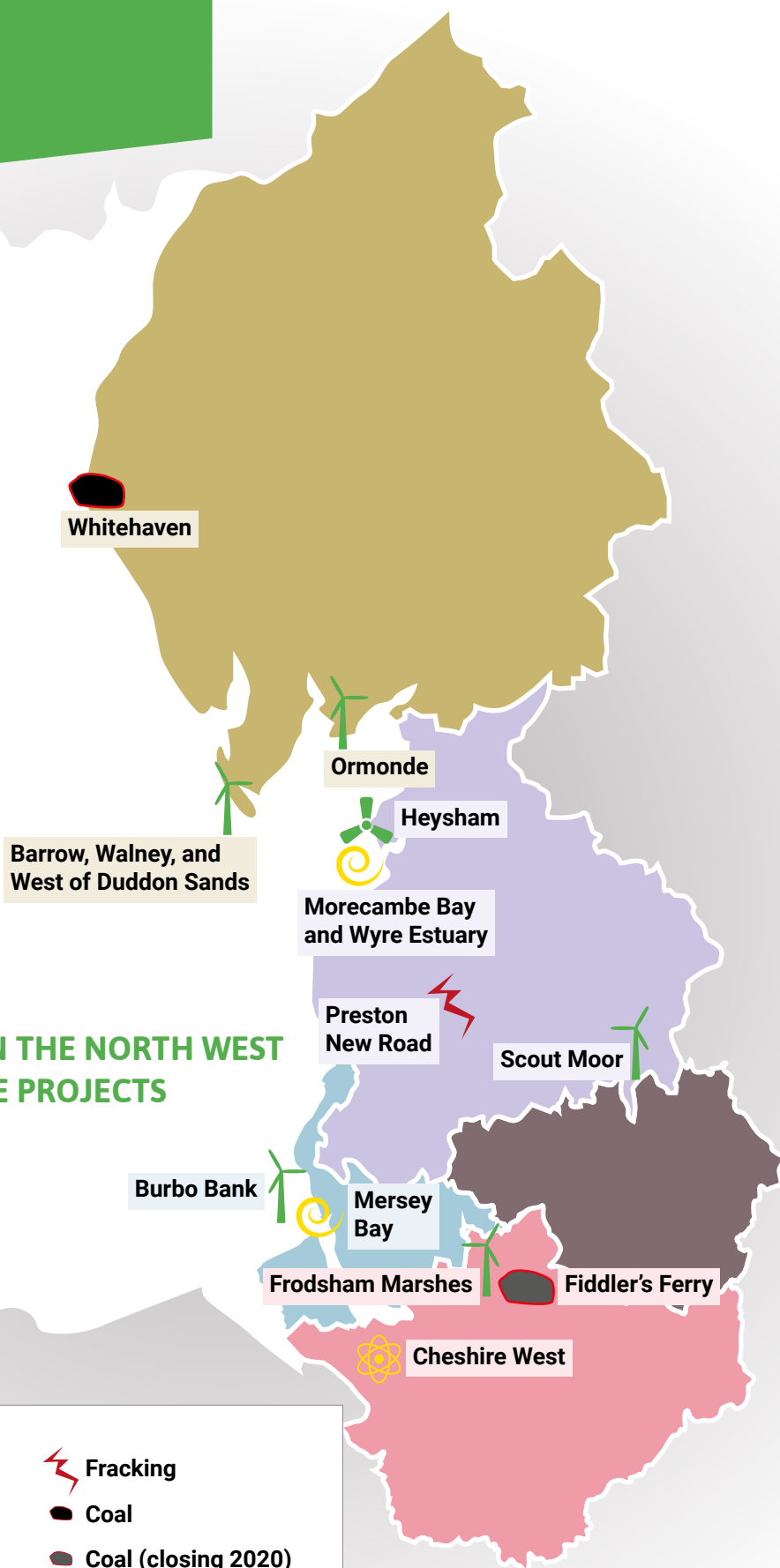
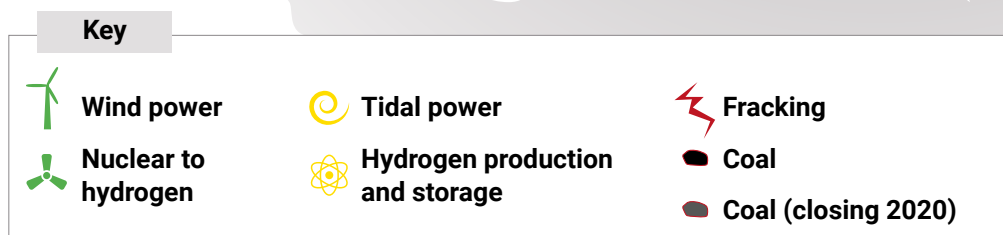
Energy

A Green New Deal in the North West means a rapid transition to a smart, zero carbon energy system that creates thousands of jobs – a true ‘Green Powerhouse’ in the North, with no more fossil fuels or expensive nuclear in sight.

WHAT'S THE PROBLEM?

- Fossil fuel developments still being approved
- Electrification of transport and heating requires network upgrades
- Expensive, untested new nuclear being financially supported over cheap, mature renewables
- Tidal power projects risk worsening the nature emergency
- Onshore wind going to waste due to financially senseless ban
- Community energy and public ownership remains small-scale

ENERGY IN THE NORTH WEST – NOTABLE PROJECTS



THIS has to STOP

Fossil fuels belong in the past and must stay in the ground. The only remaining coal power plant in the North West will close in 2020, and new fossil fuel developments still need to be stopped. Despite vigorous government support, the fracking industry can neither profitably nor safely progress in Lancashire. The evidence-based opposition of local people has proved correct.

In Cumbria, the first deep coal mine in the UK for more than three decades has been approved for development after promises to create 500 jobs in Whitehaven. This post-industrial coastal town has been hit hard by austerity and is heavily dependent on the nearby Sellafield nuclear facility, where around 3,000 jobs are set to be lost over the next few years.¹ But a GND will provide the alternative investment that Whitehaven really needs, such as building new public transport links or providing sustainable jobs and training opportunities in green energy.

Good examples of this already exist elsewhere: in 2018, the Spanish government agreed a £221 million investment package with unions to shut down most of the country's coal mines in return for giving miners opportunities to re-train in green industries, work in environmental restoration schemes or take early retirement.²

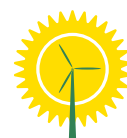
Nuclear is too expensive to remain a key part of our future energy mix. Our region's remaining two nuclear plants at Heysham in Lancashire will be phased out by 2024 and 2030, and the industry is already lobbying for a new age of untried, untested 'small modular' nuclear reactors.³ But renewables are far cheaper, come without any of the risks of new nuclear, and the argument that it is needed as a backup power source is out of date.⁴

TREAD with CAUTION

Three huge tidal power projects have been proposed on the Mersey in Liverpool, the Wyre in Lancashire and in Morecambe Bay. Massive artificial 'barrages' would trap tidal flows and then release them through turbines to produce clean, reliable electricity. However, barrages cause serious damage to local ecosystems – we cannot tackle the climate emergency at the expense of biodiversity. Furthermore, barrages are yet to prove they can compete with other renewables on price – the Mersey proposal alone will cost £3.5 billion.⁵ They also take many years to develop, and the climate emergency will not wait.

Hydrogen has strong potential in our region, but its environmental credentials depend on how it is produced. Hydrogen is the most abundant element in the universe, burns cleanly and has a wide range of applications. It can be used as a replacement for natural gas in heating or heavy industry, or in fuel cells to power electric vehicles where batteries are less feasible (such as lorries and emergency response vehicles). Unlike electricity, it can also be stored for long periods of time.

The North West has a number of characteristics which make it well-suited to becoming the UK's premier hydrogen producer and user, but the vast majority of hydrogen produced today uses natural gas. Carbon capture and storage (CCS) technology is being developed to capture the carbon emitted during production (known as 'blue' hydrogen), but it has not yet been proven at scale. The only truly 'green' hydrogen is produced through electrolysis – a chemical reaction which requires just electricity and water.



LEADING THE WAY

Hydrogen, from 'blue' to 'green'

Led by the North West Hydrogen Alliance, a number of developments are being pushed forward across the region. The largest aims to supply 'blue' hydrogen from natural gas to industrial users and the domestic gas network by capturing carbon from the production process and storing it in empty gas fields in the Irish Sea.

But far more sustainable schemes are also underway, including 'power to gas' projects which use excess electricity to produce 'green' hydrogen. This is being developed both in Cheshire and at the Heysham nuclear power plant in Lancashire. In future, excess electricity from wind farms could be used instead of needing to switch turbines off when power isn't needed – saving taxpayers millions in the process.

BEST PRACTICE

HySchools

HySchools is a EU Erasmus+ funded project led by Manchester Metropolitan University, in partnership with five other European countries. HySchools aims to help schools enhance the quality of Hydrogen Fuel Cell Technology (HFCT) education by giving teachers increased confidence to teach students about the applications of HFCT and equip them with the future skills required by this growing sector.



EXPAND and ACCELERATE

Across northern England, up to 46,000 jobs in low carbon energy could be created in the next 10 years, and as many as 100,000 by 2050.⁶ This is what the GND can achieve.

The North West is the UK's second biggest region for offshore wind capacity after the East of England,⁷ with well over 400 wind turbines in place off the coasts of Liverpool and Cumbria. More progress can be made – Liverpool City Region believes it can triple the volume of energy being generated by offshore wind in Liverpool Bay by 2032,⁸ capitalising on the projected 27,000 jobs the industry could support in the UK by 2030.⁹

The North West is a successful adopter of onshore wind, but it was effectively banned at scale by the Conservative government in 2015. Lancashire and Cumbria are both in the top ten counties in England for onshore wind generation,¹⁰ but despite the fact that it is by far the most cost-effective choice for new electricity,¹¹ just 29 additional turbines are currently in the pipeline for installation across the whole of the North West. For each installed megawatt of onshore wind power, £100,000 is thought to stay in the local community.¹²

Solar power provides a significant opportunity for our homes and businesses. Greater Manchester's plan to become a carbon neutral city region by 2038 requires more than 50% of its households – over 600,000 in total – to have solar panels fitted over the next few years, as well as an additional 5.5km² on commercial rooftops or ground-mounted installations.¹³ A substantial mobilisation of finance and new incentives is needed to get us there.

Green hydrogen can play a vital role in our energy future and provide thousands of jobs. There is a large cluster of industrial gas users in Cheshire ready to switch from natural gas, nearby salt caverns can be used to store hydrogen at scale and our regional universities are leading the latest cutting-edge research. The most important barrier to a thriving, green hydrogen economy in the North West isn't technological, or even financial, but educational. Hydrogen energy is not currently taught at any stage of the education system, from schools, to colleges, to apprenticeships, to professional training.

The electricity network is changing for the better. As more small-scale renewables are added to the network

and smart technologies give homes and businesses a 'two-way' relationship with the electricity grid, the power of large energy suppliers will wane. Individuals and communities will have the opportunity to feed into the energy system as well as draw from it.

The challenge is that electricity demand will increase as we electrify heating and transport. Investing in new network infrastructure won't be affordable. Instead, regional network operators like Electricity North West must help communities use less electricity, meaning lower bills, lower carbon emissions and less need for new network capacity.

Democratising the energy system as much as possible will ensure communities can take a leading role in driving the transition. For example, Denmark and Germany have some of the highest rates of wind power in Europe, partly because of extensive community ownership of wind turbines.¹⁴

There are more than 300 active community energy projects across the UK, supported by over 80,000 members. Community energy has been found to deliver eight times the value of projects owned by private companies,¹⁵ but the North West has a relatively low number of community energy organisations and the cutting and withdrawal of national subsidies for small-scale renewables has made it much more difficult for projects to get off the ground.

WHAT NEEDS TO BE DONE?

- Establish a northern 'Just Transition Commission' which can sit alongside Local Enterprise Partnerships (LEPs) to bring the public sector, employers and unions together to map out impacts on fossil fuel reliant jobs, and target green investments accordingly
- Put a hold on tidal power projects until the full environmental impacts and costs of each proposal are properly understood
- Reverse the de facto ban on onshore wind by providing national planning support and allowing developments to compete for national subsidies
- Require all new homes to be built with solar PV systems in place unless lack of feasibility is proven, provide interest-free loans for existing homes (like Scotland), reverse the rise in VAT on solar technologies and offer discounted business rates for organisations
- Develop a UK-leading green hydrogen economy, ensuring any public funding for large infrastructure projects is focused on electrolysis
- Pilot a large-scale vocational hydrogen training programme for workers in affected industries, such as gas engineers
- Use the new North West Local Energy Hub – created to increase public sector capacity to bring forward local energy schemes – to prioritise community energy and public ownership
- Make energy saving a national priority (see Buildings and Industry sections)

BEST PRACTICE

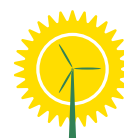
Energy4All

Energy4All is a co-operative in Barrow-in-Furness founded to help communities set up their own energy co-operatives. It has successfully launched a family of 27 member co-operatives with a total of 15,000 members and raised around £72 million from community share offers.

The organisation is part of REScoop MECISE, an EU Horizon 2020 funded project that is helping to mobilise citizens and municipalities to create 'citizen energy communities'.



“100,000
northern
green energy
jobs by 2050”



Industry

A Green New Deal in the North West means a green industrial revolution that revitalises our proud industrial history, supports small businesses through the transition and boosts R&D funding to world-leading levels.

WHAT'S THE PROBLEM?

- The North West is home to a cluster of carbon-intensive heavy industry
- 182,000 manufacturing jobs lost in the last 20 years
- Small businesses do not have the skills or resources for climate emergency
- National and regional Research & Development (R&D) spending far below what's required

SPREAD OF MANUFACTURING JOBS IN THE NORTH WEST

Cumbria

Lancashire

Greater Manchester

Liverpool City Region

Cheshire & Warrington

11%

27%

33%

16%

14%

Source: ONS/Nomis

THIS has to STOP

After decades of deindustrialisation, many communities across the North West have been left behind in terms of prosperity. Avoiding climate chaos requires nothing less than a wholesale transformation of industry in the UK. Rapid and deep cuts must be made to the consumption of energy, water and materials in production, and entire sectors will have to transition from current fossil fuels use and shift to circular, zero waste business models. Industry currently accounts for around 25% of the UK's carbon emissions, and more than two thirds comes from a small number of heavy, energy intensive sectors,¹ several of which have bases here in the North West.

However, cutting emissions doesn't have to come at the expense of the North West's proud industrial heritage. Jobs in manufacturing have plummeted by a third in the last twenty years,² and many communities in the region have never truly recovered from the last major industrial upheaval during the Thatcher years. Around 355,000 people in the North West still earn their living in manufacturing, more than any other UK region, with jobs spread across every county.³

Unlike the damaging deindustrialisation of the past, a GND offers new opportunities to revitalise our manufacturing communities by shifting to new, greener products and services. Energy intensive industry should be aided through the transition to zero carbon rather than pushed away. For example, Cheshire consumes over 5% of the UK's energy alone due to a cluster of heavy industry around Ellesmere Port and Runcorn,⁴ but rather than a drawback this is a huge opportunity to be at the forefront of change.

“London & South East gets 13x more R&D funding”

Being at the forefront requires innovation, but public R&D spending lags far behind most other developed countries. R&D funding in the UK is currently equivalent

to around 1.7% of GDP, far below the OECD average of 2.4%.⁵ Only a small portion is invested in climate-related research – for example just 0.03% of UK GDP was spent on public R&D for low carbon energy technology in 2018.⁶ In comparison, the EU has committed to ringfencing at least 35% of its €100 billion 2021-2027 R&D funding programme, Horizon Europe, for climate-related research.

There is also a clear disparity between north and south. Since 2004, the government's innovation agency, Innovate UK, has invested more than 10 times as much public R&D funding in London and the South East as it has in the North West, and 13 times as much on projects specifically designated as 'clean growth'.⁷

LEADING THE WAY

Glass Futures

Almost 80% of UK glass manufacturing stretches along a northern 'Glass Corridor' from Liverpool to Hull, employing 6,000 people. As a hugely energy intensive process, glassmakers need to rapidly shift to low carbon technologies, but the challenge is too big for any one organisation.

With the support of local government, the industry has come together to form Glass Futures, a not-for-profit R&D project aiming to eliminate carbon from the manufacturing process. The project will see a state-of-the-art experimental facility built in St Helens, which will act as a global hub of expertise and create new businesses in the region. Funding is currently being sought from government.



© Encirc



EXPAND and ACCELERATE

Major energy users are already setting out plans for zero carbon emissions. Rather than working in silos, companies in the Liverpool and Greater Manchester City Regions and Cheshire have teamed up to form a single entity seeking government support to become the UK's first 'zero carbon industrial cluster' by 2040.⁸

The North West Cluster would turn the density of the region's heavy industry infrastructure to its advantage by linking up multiple low carbon projects, such as carbon capture and storage (CCS), hydrogen fuel switching and smart grid connections to local green energy sources. However, the initiative is having to compete against bids from other regions, with just a single £170 million public investment pot made available by government. A much larger mobilisation of regional public funding will be required for the full benefits of sustainable industry to be realised.

Good work is being done to support small businesses in the North West, albeit at a small-scale. Despite the prevalence of major energy users in the North West, most workers are actually employed in small and medium-sized enterprises (SMEs) – 98% of the region's businesses employ fewer than 50 staff. Accessible support for SMEs is beneficial for the regional economy because smaller companies are far more likely to keep profit in the local community, and it is vital for a green industrial revolution. Unlike larger companies, busy SMEs rarely have the in-house resources or skills to respond to the climate emergency on their own, even if they wanted to.⁹ The rapid descent to zero carbon needs to be successfully navigable to even the smallest family business.

Since 2014, more than £232 million of public money – including £112 million from the EU – has been committed in the North West to support the shift towards a low carbon economy, including support for SMEs.¹⁰ Support programmes are unique to different catchment areas and can take a variety of forms, from expert advice on cutting carbon emissions to grant funding for clean technologies and assistance with developing greener products. Around two thousand businesses are expected to benefit from these support programmes by the end of 2021, but this is just a drop in the ocean: there are well over 260,000 SMEs in the North West – all of whom must decarbonise their operations and shift to greener business models to meet the demands of a sustainable, zero carbon economy.

While not all companies will need hands-on help, a GND will scale up the resources available to SMEs and branch out existing programmes to wider environmental concerns like zero waste and the circular economy.

Supporting businesses to reduce their environmental impact has the added benefit of generating local demand for green technologies. In Greater Manchester alone, the 'low carbon business' sector – which includes renewables, energy efficiency, alternative fuels and vehicles, building technologies, water and wastewater treatment, and recycling and waste management – grew by a quarter between 2012 and 2016, and now employs over 45,000 people.¹¹ Similar growth is being recorded in the Liverpool City Region, where the sector employs around 22,000 people.¹²

Low carbon business also drives innovation. Although most of the technologies needed to rapidly reduce emissions to zero are already here, more spending on R&D is needed to get us the rest of the way.

There can be no greener, fairer economy without expanding democratic forms of company ownership. Giving workers more input into the decisions that affect them is a key part of any just transition. Co-operatives, community enterprises and employee-owned businesses are growing steadily in the UK as awareness increases of the societal damage pursuing profit above all else can cause.

There are now at least 32 employee-owned firms in the North West, a number expected to rise quickly – over 60% of employee-owned companies nationally have made the switch in the last five years.¹³

“Low carbon business employs 67,000 people in Greater Manchester and Liverpool City Region”

LEADING THE WAY

Low Carbon Eco Innovatory (LCEI)

Led by Liverpool John Moores University in collaboration with two other universities in the region, the LCEI is a £5.4 million part-EU funded innovation programme offering small companies the opportunity to work with academic experts to develop low carbon goods, products and services.

Over 160 companies have so far received assistance, 51 of which have brought a new product to market. Beneficiaries have come from all parts of the economy, including a local climbing centre wanting to develop refurbishable and recyclable climbing holds.



WHAT NEEDS TO BE DONE?

- Use the Just Transition Commission (see Energy section) to ensure jobs are protected and enhanced as heavy industry transitions to zero carbon
- Establish a national Industrial Just Transition Fund to help heavy industry become more sustainable and worker-focused – expanding on the government's Industrial Energy Transformation Fund, which focuses just on energy efficiency
- Boost public R&D funding immediately to at least the OECD average of 2.4% of GDP, and ringfence at least 1% for climate-related activities
- Expand the national £170 million pot for launching a single 'zero carbon industrial cluster' so that every UK region can fund at least one each
- Rapidly ramp up publicly-funded advice and support for SMEs so that it can reach tens of thousands of businesses across the region
- Strengthen social value requirements in public procurement to reward companies which can demonstrate both reduced environmental impact and worker engagement and inclusion
- Pilot new measures of growth alongside GDP in the North West

BEST PRACTICE

Crystal Doors

Crystal Doors is a small manufacturer in Rochdale which employs around 30 people. Despite its size, the company has become a nationally celebrated example of environmental best practice, after using publicly-funded advice to calculate its carbon footprint and make changes to its operations.

In the space of just a few years, Crystal Doors has reduced its energy use by 75% by mounting hundreds of solar panels on its roof, installing a biomass boiler fuelled by factory wood waste, switching to energy efficient LED lighting, upgrading millions of pounds of equipment with smart technology and investing in an electric company car. Director Richard Hagan has also developed 'carbon literacy' training for staff, banned flying on business and plans to plant 11,000 trees in the local area.



“260,000 SMEs in the North West need to act”



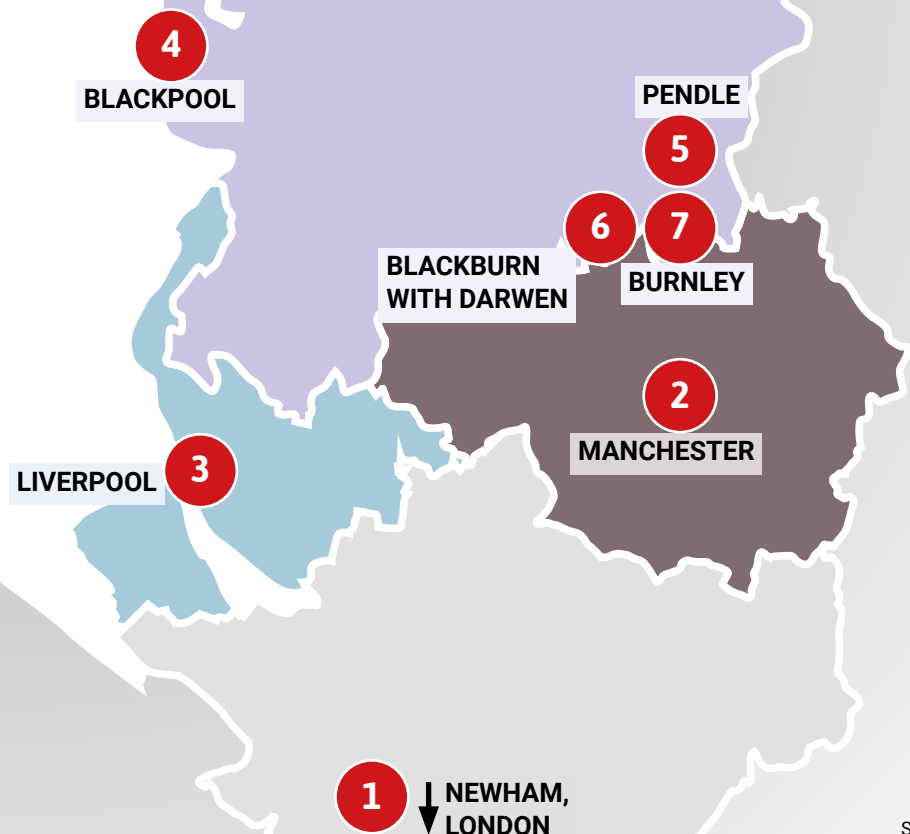
Buildings

A Green New Deal in the North West means eradicating fuel poverty and ensuring everyone has warm, comfortable buildings to live and work in – cutting emissions, saving money on bills and slashing costs for the NHS in the process.

WHAT'S THE PROBLEM?

- Fuel poverty higher than anywhere else in the country
- 29 million UK homes not fit-for-purpose
- Substandard homes still being built
- National policies either ineffective or completely missing
- Local authorities held back by lack of funding and support
- Private landlords not held to account

HIGHEST FUEL POVERTY IN ENGLAND:



Source: BEIS

THIS has to STOP

The energy efficiency of our housing is a national disgrace. Most of our homes were built without insulation and are among the most expensive to heat in Europe.¹ At least 11,400 people die each year from cold homes.² Related ill health costs the NHS £1.4 billion a year,³ and the impacts on the wider economy in terms of lower productivity and missed work or school days are estimated to be as high as £18.6 billion.⁴

Fuel poverty is higher in the North West than anywhere else in the country, and a third higher than in the South East. In Manchester, Liverpool, Blackpool and Pendle, nearly one in five households cannot afford adequate heating.⁵ The cost of housing for the poorest members of society has risen faster than anywhere in western Europe.⁶ We have seen a shocking increase in homelessness, more so in the North West than anywhere else, yet 40,000 homes across the region currently lie empty.⁷

Successive governments have spectacularly failed to act. Fuel poverty has remained static in England since 2014.⁸ There hasn't been a centrally-funded national energy efficiency programme in place since 2015. The Energy Company Obligation (ECO), which puts the onus on energy suppliers to help insulate fuel poor homes, has barely touched the surface of what needs to be achieved. The government's statutory target is to ensure as many fuel poor homes as possible reach a minimum Energy Performance Certificate (EPC) rating of Band C by 2030, but at the current rate of progress it will take nearly a century.⁹

“Over 3 million homes need energy retrofit”

EXPAND and ACCELERATE

Improving the energy efficiency of our building stock in the North West is the most obvious way of tackling the climate emergency while at the same time delivering social justice for all. Well-insulated, warm homes mean healthier and happier residents and, by extension, a more productive economy and less public spending on healthcare. They are also cheaper to heat, saving residents money on their fuel bills.

Heating our homes accounts for nearly a fifth of UK carbon emissions, and that's without including electricity use.¹⁰ In terms of the climate emergency, nearly 29 million homes are not fit-for-purpose nationally, or around 3.2 million in the North West.¹¹ These homes require retrofitting to a 'deep' whole house standard – insulating them from top to bottom, installing eco-heating technologies like heat pumps and adding solar panels to roofs.

Local projects in Greater Manchester have shown that deep retrofit is achievable in an average home at around £40,000.¹² The city region estimates that it has to retrofit 61,000 houses a year to this standard to keep up with its climate targets, but projects are currently in the tens rather than the thousands.¹³

Action at the scale required calls for unprecedented intervention at both a local and national level. A country-wide, centrally-funded retrofit programme is needed, but evidence suggests that delivery on the ground is best led from the bottom-up, building on local knowledge at the community level and supporting local supply chains.

Numerous schemes in Europe have already proved that progress is possible at speed and scale. The Netherlands' 'Energiesprong' initiative achieves whole house retrofit in one quick step by installing a thermally-efficient 'shell' around buildings along with solar panels and heating upgrades. In Germany, the state-owned development bank KfW has supported the retrofitting of millions of homes with favourable grants and loans.



Parts of the UK social housing sector have made good progress thanks to access to specialised funding mechanisms, but support for homeowners and tenants lags far behind. Homeowners must see whole house retrofit as a hassle-free, trustworthy and affordable proposition, and landlords need to be held to account through stricter regulation.

Our public and commercial buildings also need an upgrade. According to the Brussels-based Renovate Europe campaign, an 80% reduction in energy waste across our entire building stock is required by 2050 to keep up with global climate targets.¹⁴

Energy efficiency can save organisations like the NHS huge amounts of money on energy bills, but it's not only financial savings on offer – energy renovations in hospitals have been found to speed up patient recovery times. In schools, student health, attendance, concentration and learning can all benefit from higher performance buildings. In offices, more comfortable workplaces

improve morale and reduce staff turnover. In fact, every £1 invested in energy efficiency is estimated to return £3.20 to the economy in benefits.¹⁵ A national programme of investment in housing alone could deliver net economic and social benefits of around £8.7 billion over 10 years.¹⁶

At a neighbourhood and city level, sharing heat between buildings can also reduce emissions at scale in dense urban areas like Manchester and Liverpool, Blackpool and Warrington. Heat networks are common in hospitals, universities and some public sector buildings, but rare elsewhere. Our European neighbours are far ahead – 65% of Denmark's homes are connected to heat networks and 98% in Copenhagen, often run by community cooperatives.¹⁷

Upgrading our buildings would also create a huge number of skilled jobs in renovation, construction and related sectors. As many as 35,000 jobs could be created in the North West during the transition period to 2030, more than any other region outside London and the South East. The impact would be spread across the region – even rural Cumbria would benefit from an estimated 2,500 new jobs.¹⁸

This uplift in jobs will require a significant regional investment in skills to meet demand. Liverpool has made a step in the right direction by seeking national funding for a 'Clean Growth Vocational Training Hub', focused on post-16 provision and adult retraining in association with trade unions.¹⁹ Action also needs to be taken to update the construction sector's gender diversity and outdated image as a low paid, unexciting career.

Going forward, new buildings must achieve higher standards. Every building built to low standards locks the occupants into excessive energy demand and costs that last for decades. The government scrapped plans for a 'Zero Carbon Homes' policy in 2016 and only now intends to introduce a similar scheme from 2025, meaning hundreds of thousands of substandard homes being built in the meantime. Developers' complaints that higher standards increase house prices are being challenged and disproved.²⁰

BEST PRACTICE

Carbon Co-op

Based in Greater Manchester, Carbon Co-op is a unique, citizen-led organisation which provides tools, knowledge and training on whole house retrofits for people and communities.

It has successfully delivered a number of deep retrofit projects at the community-level, showing that a 'people powered' locally-led approach to retrofit can be more effective than traditional top-down programmes and can also help to develop skills in the local supply chain.



“35,000 jobs can be created over the next decade”

LEADING THE WAY

Salford Energy House 1.0 & 2.0

Built at the University of Salford in 2011, Salford Energy House was the world's first full-sized brick terraced house constructed inside an environmentally controllable sealed chamber, allowing companies large and small to test energy efficiency measures in almost any weather condition.

In 2021, the university will open Energy House 2.0. Backed by £8.2 million in EU funding, the new, larger facility will enable all sorts of buildings to be constructed, tested and demolished. The EU funding will give small businesses free access to the facility to develop exciting new innovations.



WHAT DO WE NEED TO DO?

- Declare the state of housing a national emergency and deliver a radical, multi-billion pound national deep retrofit scheme, working with local government and community groups to renovate every house, street-by-street, starting with those in fuel poverty
- Use fiscal measures to offer homeowners favourable financial incentives such as green mortgages, low or 0% interest loans and tying finance to the building rather than the occupier
- Provide more resources to local authorities so they have the capacity to lead local delivery and zone renovations into commercial packages to attract additional investment, as well as retrofit their own buildings to a leading standard
- Tighten Minimum Energy Efficiency Standards (MEES) to make sure private landlords can only let energy efficient buildings
- Establish vocational training schemes to build skills in the construction supply chain, and promotional campaigns to modernise the construction sector's image
- Immediately reinstate a national Zero Carbon Homes standard to force builders to deliver fit-for-purpose new homes, ensuring that local authorities can go over and above these standards if desired
- Prioritise refurbishing and bringing back into use the North West's empty homes ahead of new housing projects
- Use local planning rules to require developers to consider heat networks and other low carbon heating when building in dense urban areas
- Strengthen efficiency standards for commercial buildings and establish strict disclosure requirements for large businesses, while increasing advice and guidance for SMEs



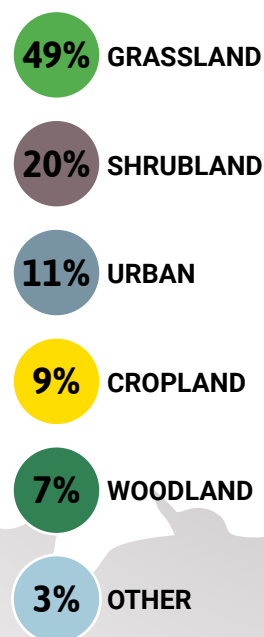
Land and Food

A Green New Deal in the North West means a fundamental transformation of our relationship to the land, our food and those who provide it.

WHAT'S THE PROBLEM?

- UK one of the most nature-depleted countries in the world
- Farming subsidies do not support nature, healthy food or small-scale local farmers
- North West forest cover the lowest in UK
- Peat bogs in poor condition and cannot do their job as a carbon sink
- Unprecedented flooding causing havoc in the north

LAND IN THE NORTH WEST



Source: Eurostat

THIS has to STOP

The UK is one of the most nature-depleted countries in the world. More than half of our wildlife species have declined since 1970 and soils are being depleted at an alarming rate.¹ This largely due to decades of intensive, industrial farming and overuse of harmful pesticides and fertilisers.

This industrialised food system is not only failing our planet but also our health and wellbeing. Poor diet has been identified by the WHO as one of the greatest threats to public health.² The health of the North West measured by early or preventable deaths is the second worst in the country – only just behind the North East.³ Dietary-related illnesses are increasing, with the cost of treating diabetes currently at nearly £10 billion a year nationally, and the cost of obesity projected to reach £50 billion by 2050.⁴

Our current farming subsidy system promotes an agri-business model focused on global markets and international companies. As a result, UK agriculture now provides less than half of the food we eat by value,⁵ and much of it is wasted. Instead of attempting to 'green' this system of agriculture, a profound and comprehensive reform is required to move to a new social and agroecological model. We need a radical review to reflect the finite limits of our environment and planetary resources, with agricultural policies designed to subsidise smaller scale producers of healthier, more nutritious food.

The number of people working the land is dropping, and those who do are getting older. Access to land is extremely difficult for new entrants. Nationally, 8% of public land has been sold off in the last 40 years.⁶ Half of England is still owned by less than 1% of the population,⁷ with land becoming increasingly unaffordable and small-scale farmers squeezed out.

“The 2009 and 2015 floods were the worst for 600 years”

Since 2007, nearly a quarter of council-owned 'county farms' – smallholdings let out to young farmers at affordable rates – have been sold off in the North West. Lancashire sold off the last of its smallholdings in 2015.⁸

The UK is one of the least forested countries in Europe and tree planting has all but stalled despite national targets. Forest cover in the North West is particularly poor at just 7.4% – the lowest of any English region outside London.⁹

What the North West lacks in trees it makes up for in peat, but we have failed to protect these vital ecosystems. Our region is home to a large proportion of the UK's peatland. Peat bogs are able to absorb millions of tonnes of carbon and are a natural haven for wildlife when in good condition, but three quarters of peatlands are in a degraded state and many are now emitting carbon rather than storing it.¹⁰ A widespread restoration programme is required, but one of the barriers to progress is the continued influence of grouse shooting. Wealthy owners of English grouse moor estates received over £10 million in public farm subsidies in 2018, yet there has been little evidence of public goods in return: the 'slash-and-burn' practices used to maximise grouse numbers dry out peat, releasing carbon into the atmosphere and increasing flood risk downstream.¹¹

Northern England has seen the largest increase in flooding in Europe, with flood levels increasing by 11% per decade since 1960.¹² The terrible floods that hit Cumbria and Lancashire in 2009 and in 2015 were the region's largest in over half a millennia, causing billions of pounds worth of damage.¹³ Extreme weather events are expected to become more frequent, with a fivefold increase in rainfall intensity predicted this century. A lack of woodland and functioning peat bogs is making the situation worse.

“Nearly a tenth of public land has been sold off in the last 40 years”



TREAD with CAUTION

Nearly two thirds of farmland in the North West is dedicated to livestock, with crops only making up a small portion of agricultural output – especially in the north where land is less suitable for horticulture.¹⁴

More than half of livestock farming is pasture-fed on the northern uplands, and while some of this will need to be rewilded in the face of the climate and nature emergencies, hill farming remains a celebrated part of our cultural heritage and identity.

Hill farming is highly dependent on public subsidy, and there is debate about the extent to which some of the land should be redirected to other uses such as tree planting. When managed effectively, low-intensity grazing can play an important part in maintaining healthy ecosystems in its own right. We need to listen to and work with all partners in the food supply chain, help to maintain small and diverse farm structures and assist farmers with diversifying into new forms of land management.

LEADING THE WAY

The Preston Model

In 2013 Preston embarked on a new economic model designed around 'community wealth building' – keeping wealth within the regional economy by buying local through public procurement, advocating for new forms of democratic ownership and redirecting investment into local schemes.

The 'Preston Model' has become a celebrated approach to local economic strategy and is an ideal model for supporting sustainable farming in the region.

EXPAND and ACCELERATE

With changes to our systems of farming support we can move food, farming and land stewardship in a radical new direction. Subsidies must be reformed to better provide the public goods we need: revitalised biodiversity; improved soil and water quality; nutritious, affordable food; good quality rural jobs; more resilience to extreme weather events; and increased ability to capture and store carbon from the atmosphere.

Regenerative, agroecological farming methods such as organic growing and agroforestry (mixing farming with forestry) can help to reverse our rising pesticide use and – due to being more diverse and labour-intensive – create large numbers of engaging and skilled jobs. Organic farming has been found to provide a third more jobs per farm in the UK than conventional agriculture, and is a far more attractive career path for young people.¹⁵ When accounting for the knock-on benefits to our health and the environment, it is also cheaper for society.

Regional support programmes to help new farmers to establish themselves, and reversing the trend of privatising public land, will help young people back onto the farming ladder and end the trend of depopulation in our rural areas.

Public and private bodies can do their part by increasing local food in procurement. Expanding on the celebrated 'Preston Model' of community wealth building pioneered in Lancashire, local government can use public procurement to prioritise agroecological food producers and reduced food miles. Planning powers can also be leveraged to encourage community food growing. The boost to the regional economy could be huge: every £1 invested local food returns £6-8 to society in social and economic benefits.¹⁶

Releasing a portion of our agricultural land back to nature will tackle more than just the climate and nature emergencies. Increasing forest cover, restoring peatlands and creating flower-rich meadows at an ambitious scale will revitalise biodiversity and deliver 'net negative' carbon emissions – helping to offset parts of the economy where decarbonisation is most difficult, such as aviation and heavy industry. But crucially for the North West, healthy woodlands and peat bogs will also 'slow the flow' of water upstream, reducing flood risk in our towns and cities.

BEST PRACTICE

FarmStart

FarmStart is an incubator programme providing access to affordable land, shared equipment, training and local customers to build a new generation of organic growers.

The first North West incubator was established in Cheshire and Manchester by social enterprise Kindling Trust in 2013, in partnership with local food co-operatives and buyers. Around twenty people have graduated through the programme to date and the model has subsequently been adopted in Lancaster.



© Kindling Trust

LEADING THE WAY

The Northern Forest

A partnership between the Woodland Trust and local community forest organisations, the Northern Forest is a plan to plant 50 million trees across the North from Liverpool to Hull.

The initiative could reduce the risk of flooding for up to 190,000 people, create thousands of direct and indirect jobs, provide a local source of timber and improve health and wellbeing for 13 million people. It will cost an estimated £500 million over the next 25 years, but the government has provided just £5.7 million to date.



© Phil Formby

WHAT NEEDS TO BE DONE?

- Reform of the EU's Common Agricultural Policy (CAP) must prevent hefty pay-outs to large landowners, by putting a cap on their payments and redistributing the rest to small-scale farmers. At least 50% of payments should be ringfenced for agroecological farming methods and nature restoration
- At the national level, a new National Food Strategy must prioritise local food networks, food sovereignty and affordable land initiatives for new farmers, including a national FarmStart scheme, low interest loans for 'starter farms' and a new era of county farm creation
- Take measures at the national level to promote a decrease in meat consumption from non-local sources, and reduce all food waste from farm to fork
- Establish a commission in partnership with conservation agencies to work closely with upland hill farming communities to better understand their unique needs in the face of the transition
- Adopt the Preston Model across the North West to support local, seasonal and organic food through public procurement, ensuring fair prices and reasonable profits for farmers
- Use local planning powers to require new residential and commercial developments to include accessible growing spaces for communities
- Provide for a properly funded national tree planting programme, enabling community forest organisations to get on with planting the Northern Forest rather than worry about fundraising
- Put an end to the destructive tradition of grouse shooting by banning the environmentally-damaging measures needed to maintain artificially high grouse stocks



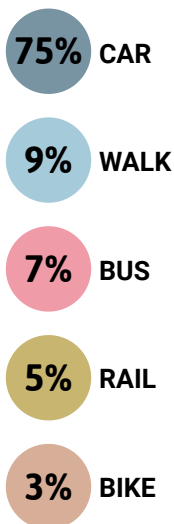
Transport

A Green New Deal in the North West means an overhaul of our inefficient transport system; cheaper, greener and more reliable buses and trains and redesigning our streets for cycling and walking.

WHAT'S THE PROBLEM?

- Transport policy assumes that cars will dominate despite climate emergency
- Air pollution killing thousands of people every year
- Rail and bus services expensive, inefficient and serve shareholders rather than passengers
- Air travel rising unsustainably
- Cycling and walking undervalued and under-funded
- Local authorities unable to establish effective, fair Clean Air Zones

COMMUTING IN THE NORTH WEST



Source: Transport statistics Great Britain 2018

THIS has to STOP

Roadbuilding is incompatible with the climate emergency.

The transport sector is now the UK's biggest source of carbon emissions, with road transport the main contributor. Despite declaring climate emergencies, many local authorities are still pushing for multi-million pound road investments. Between 2015 and 2020, the government expects to spend £1.5 billion on roadbuilding in the North West, leading to the biggest increase in road capacity for the region since 1971. This expenditure is usually incurred in the name of easing congestion, but building new road space simply encourages increased traffic.¹

Electrification of road travel will not be enough to solve the problem of transport emissions. Research shows that traffic needs to be reduced by at least 20% within a decade to keep up with emissions targets.² Furthermore, car travel contributes to sedentary lifestyles, and the associated diseases and mental health problems.

Our roads have caused an air pollution crisis. Poor air quality is responsible for around 40,000 early deaths a year in the UK, or over 4,000 in the North West.³ Road traffic is the main source of pollution in 96% of Air Quality Management Areas for nitrogen dioxide (NO₂) and 76% for particulate matter (PM₁₀) – both a risk to human health.⁴ In Manchester, our most polluted city, emergency hospital admissions for asthma are more than twice the national average.⁵ Nationally, the health and social care costs of air pollution are expected to reach £5.3 billion by 2035, with the poorest communities suffering the most.⁶

Privatised rail services have been a disaster, costing commuters more and more every year in return for lower and lower standards. If we want fewer cars on the road, public transport needs to be efficient, reliable and affordable. But a monthly rail season ticket from Manchester to Liverpool now costs 8% of the average person's earnings. In comparison, similar commutes in France, Ireland, Germany and Belgium cost as little as 2-4%.⁷ Rail fares have risen more than twice as fast as wages over the last decade.⁸ Punctuality is also persistently poor – just 55% of Northern Rail trains were on time in 2018/19.⁹

Despite being much needed for rail upgrades in the North West, nearly £90 billion of public money is currently heading towards HS2 – a vanity project which, if it goes

“Bus use has plummeted by 40%”

ahead, won't reach Crewe until 2031 and would only serve to widen the north-south wealth divide. London has received more than double as much public spending on rail infrastructure per capita than northern England over the last ten years, and the spending gap is growing.

National neglect of bus services has caused bus use to plummet. In the thirty years since bus services were privatised, their use has fallen everywhere outside London – the only place where deregulation didn't apply. Bus use in cities like Manchester has dropped by 40%.¹³

Private operators are able to cherry-pick the most profitable routes and decide the frequencies, timetables, fares and standards for their services. Necessary rural, evening and Sunday services have been cut, rather than paid for with the profits from busy routes. Fares have gone up by 55% on average since 2008. Cash-strapped local authorities have had to slash funding for lifeline services, and Cumbria County Council no longer pays for any public bus services at all.¹⁴

Poor public transport is reinforcing social exclusion and inequality. Low income households, female heads of house, black and minority ethnic (BME) and disabled people tend to have lower levels of car ownership, meaning they are more dependent on buses and trains to get around.¹⁵ Research in northern cities has found that unaffordable and unreliable public transport is severely limiting access to job opportunities in low income neighbourhoods.¹⁶

Air travel to and from the North West is steadily increasing. Aviation emissions in the UK have more than doubled since 1990 and the number of air passengers carried to and from our region is now over 60% higher than in 2000. During this time, passenger numbers at Manchester Airport have increased at nearly double the rate of London's airports overall.¹⁷ This growth rate is unsustainable even with strong progress on alternative fuels and more efficient aircraft. Demand will have to be reduced if we are to avert climate chaos.

Short haul flights must be prioritised for shifting from plane to train. From Manchester it's possible to fly to six other English cities despite the fact that five of them already have a direct rail link. Due to air fares being kept artificially low through tax breaks and rail fares artificially high through privatisation, flying is often cheaper than taking the train.

Aviation is also a social justice issue. Around 70% of flights are taken by a wealthy 15% of the population, so it would be unfair to hold back air travel for all when frequent flyers are causing most of the problem.¹⁸



EXPAND and ACCELERATE

The most sustainable modes of travel are also the healthiest; walking and cycling. Research shows that more than a half of car trips taken in the UK are under five miles.¹⁹ With the right infrastructure in place, most of these short journeys could easily be made by bike. This is the case in many European cities, such as Amsterdam, where two thirds of trips within the metropolitan area are made on foot or by bike.²⁰

As well as reducing greenhouse gas emissions and air pollution, switching to walking and cycling has major health benefits, potentially saving the NHS around £17 billion over the next 20 years, and creating safer neighbourhoods where children can play.²¹ The introduction of e-bikes has also made cycling an option for many more people.

To seriously encourage walking and cycling we need to create safe cycle paths that are physically separated from road traffic. Other measures include slowing traffic in urban areas, pedestrianising streets, restricting car parking, offering training to new cyclists, providing safe public and residential bike storage facilities, offering cycle hire schemes, and prioritising urban rather than suburban development.

Greater Manchester has shown perhaps the strongest support for walking and cycling in the UK after London, with £160 million invested over four years to support active travel and a further £1.5 billion planned for the future.

Where active travel is not feasible, clean and efficient public transport is the second priority. Transport for the North (TfN), England's first sub-national statutory transport body, already has a strategy in place for 'Northern Powerhouse Rail' – a new high-speed line connecting Liverpool, Warrington, Manchester, Bradford and Leeds, putting millions of people within an hour's journey of each city.²²

Greater Manchester is preparing to move to a London-style bus franchising system, meaning public representatives can set routes, fares, drivers' pay and integration with trains and trams. Liverpool City Region is due to make its own decision on franchising in 2020. Only combined authorities with directly-elected mayors currently have this power, but pressure is growing to devolve it to all local authorities.

BEST PRACTICE

Beelines network

Led by Greater Manchester's cycling and walking commissioner and former Olympic cyclist Chris Boardman, Beelines is a comprehensive plan for Greater Manchester to become the first city region in the UK to have a "fully joined-up cycling and walking network".

The city region is investing £15 per capita per year in walking and cycling, putting it on a par with famous cycling cities like Amsterdam and Copenhagen.

1,000 miles of Beeline routes have been identified to connect up quieter, bike-friendly roads and 'filtered neighbourhoods' with a network of segregated cycle paths and safe crossing points. It is estimated that the entire network could be completed as early as 2023.



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With funding redirected from roadbuilding budgets and HS2, there is no reason why a GND in the North West could not deliver a new era of sustainable, accessible and integrated mass transit, which allows almost everyone to meet their travel needs without owning a car.

In the longer-term, a GND can expand improvements still further. For example, if buses were re-regulated nationwide and local authorities given the power to plan their own networks and raise funds from local taxation, it would be possible to provide free bus travel to all.²³

This green vision for transport could create around 44,000 long-term jobs in the North West. This would include 24,000 jobs in bus driving and maintenance, 13,000 jobs in railway operation and maintenance and 7,000 in the maintenance of electric vehicles. The total is more than double the 17,000 jobs that could be lost

in the maintenance of conventional fossil fuel-powered vehicles, leading to a net gain of 27,000 jobs.²⁴

Clean Air Zones (CAZs) and electric vehicles can significantly reduce air pollution and carbon emissions.

CAZs discourage the use of older and more polluting vehicles in air pollution hotspots through fiscal penalties. Greater Manchester plans to introduce a city region-wide CAZ for commercial vehicles by 2021, with Liverpool and Warrington considering their own. Other cities like Birmingham intend to penalise non-compliant private cars as well.

To work fairly, CAZs must sit alongside policies to support home and flexible working and to help those less able to pay with the cost of switching to an alternative mode of transport or a cleaner vehicle. Leaders of the UK's biggest cities have called for £1.5 billion from central government and the car industry so that councils can offer, among other measures, scrappage incentives to help lower income families and small businesses upgrade to an electric vehicle. To date, the government has provided a pot of just £220 million.²⁵ A GND could provide the full funding required, ensuring our towns and cities capitalise on the estimated £6.5 billion worth of benefits this investment could unlock.

LEADING THE WAY

Arcola Energy

Arcola Energy is a leading engineering specialist in hydrogen and fuel cell vehicle technologies. The London-headquartered firm is building a new manufacturing facility in Knowsley to support the development of hydrogen-powered transport in the region, starting with the deployment of 25 hydrogen fuel cell buses in Liverpool in 2020.

The company plans to build a strong local workforce by employing people from a range of industries, establishing an apprenticeship programme with nearby colleges and linking up with schools to educate young people about hydrogen transport.



“A green transport revolution would directly create 27,000 net jobs in the North West”

WHAT NEEDS TO BE DONE?

- Push for a new Clean Air Act to enshrine in law the right for all to breathe clean air
- Axe HS2 and redirect its original £56 billion budget to improving local rail services in the north
- Ensure the next national road strategy starting in 2020/21 focuses on existing infrastructure and redesigning streets for walking, cycling and public transport, by embedding a 'road user hierarchy' into transport planning
- Require all national and local transport and planning departments to prioritise the climate emergency when assessing proposals
- Bring public spending on walking and cycling up to at least £10 per capita per year, on a par with leading 'cycle-friendly' countries
- Ensure new housing developments are designed with sustainable transport in mind so they are safe havens for walking and cycling, and are well connected by public transport
- Devolve further powers to local authorities so that every council has the option of franchising local bus services
- Provide towns and cities with the £1.5 billion they need to establish well-funded CAZs which support lower income families and businesses
- Push for a frequent flyer levy at the national level and introduce fiscal measures to reverse the cost difference between short haul air travel and rail travel
- Use Manchester City Council's position as shareholder in Manchester Airport to drive positive change



Summary of Recommendations



Energy

- Establish a northern 'Just Transition Commission'
- Put a hold on tidal power projects
- Reverse the de facto ban on onshore wind
- Launch new incentives for small-scale solar PV
- Develop a UK-leading green hydrogen economy focused on electrolysis and pilot a large-scale vocational training programme
- Use the new North West Local Energy Hub to prioritise community energy and public ownership
- Make energy saving a national priority



Industry

- Use the Just Transition Commission to protect and enhance jobs in heavy industry
- Establish a national Industrial Just Transition Fund
- Boost public R&D funding to at least 2.4% of GDP, ringfencing at least 1% for green technologies
- Expand 'zero carbon industrial cluster' funding so every UK region can establish at least one each
- Rapidly ramp up publicly-funded advice and support for SMEs
- Strengthen social value requirements in public procurement
- Pilot new measures of wellbeing alongside GDP



Buildings

- Declare the state of housing a national emergency and launch a multi-billion pound deep retrofit scheme
- Use fiscal measures to offer homeowners favourable financial incentives
- Ensure local authorities have the resources and capacity to lead local delivery and attract investment
- Tighten Minimum Energy Efficiency Standards (MEES) for private lettings to support tenants
- Establish vocational training schemes to build retrofit skills in the supply chain
- Reinstate a national Zero Carbon Homes standard
- Strengthen efficiency standards for commercial and public buildings



Land and food

- Support reform of the EU Common Agricultural Policy (CAP) to put a cap on payments and ringfence at least 50% for eco schemes
- Deliver a National Food Strategy that prioritises local food, food sovereignty and access to land
- Promote a decrease in meat consumption from non-local sources and reduce food waste from farm to fork
- Establish a commission to work closely with upland hill farming communities
- Adopt the Preston Model across the region to support local food through public procurement
- Use planning powers to require accessible community growing spaces in new developments
- Launch a properly-funded national tree planting programme, starting with the Northern Forest
- Put an end to the destructive tradition of grouse shooting



Transport

- Pass a new Clean Air Act to enshrine in law the right for all to breathe clean air
- Axe HS2 and redirect its budget to improving local rail services
- Embed the principle of a 'road user hierarchy' into transport planning
- Obligate planning departments to prioritise the climate emergency in project appraisals
- Bring public spending on walking and cycling up to at least £10 per capita per year
- Ensure new housing developments are designed with active travel and public transport in mind
- Devolve additional powers to allow local authorities more control over local bus services
- Provide the funding needed for fair, supportive Clean Air Zones in pollution hotspots
- Establish a frequent flyer levy at the national level
- Use Manchester City Council's position as shareholder in Manchester Airport to drive change

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Land and Food

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