

WWF CASE STUDY

SLEAFORD AND NORTH HYKEHAM

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SUMMARY

Sleaford and North Hykeham is perfectly positioned to benefit enormously from the government's ambition of reaching net zero carbon emissions by 2050. The area's natural geographic advantages, in particular its relatively flat landscape, make it well suited for electricity generation through utility-scale solar farms.

Extensive economic analysis has shown the benefits the green transition will bring to the constituency, including local job creation and investment in local infrastructure.

A green transition in Sleaford and North Hykeham will:



**CREATE
850 - 1050 LOCAL JOBS**



**SECURE £1,850 MILLION
IN LOCAL INVESTMENT**



**SEE £1,230 - 1,490 MILLION
TOTAL GROSS VALUE ADDED TO
THE LOCAL ECONOMY**

WWF-UK's [Net Zero Delivery Tracker](#) applied to government spending and taxation, will help ensure that Sleaford and North Hykeham secures the considerable benefits of the green transition.

BACKGROUND

Sleaford and North Hykeham is the safest Conservative seat by numerical majority. At the 2019 election the Conservatives received more than two-thirds of the vote and achieved a majority of 32,565 (that's more than the total turnout in some seats in England). It has always returned a Conservative MP since its creation in 1997.

The constituency is mostly rural with large areas of arable farmland. With relatively flat topology this area is ideal for solar PV farms (large scale installations of solar panels) to be located. For example, Elgin Energy has planning permission to install solar panels over a 68-hectare area at Gorse Lane and Ecotricity are applying to build a 500MW solar farm at Heckington Fen, both in the constituency.

The UK has seen rapid growth in utility scale solar PV electricity generation in recent years, with installed capacity having increased by more than 650% since 2012. The Sleaford and North Hykeham constituency will benefit from investment in solar PV and demonstrates the potential for solar plus storage to play a significant role in achieving net zero.



NET ZERO OPPORTUNITIES

Potential economic benefits from Net Zero investment

Total investment to 2050	£1,850 million
Direct GVA	£610 million - £750 million
Total GVA	£1,230 million - £1,490 million
Job creation	850 - 1050

Breakdown of jobs created in Sleaford and North Hykeham

Decarbonising Energy Supply Via Solar PV	60 - 160
Decarbonising Surface Transport	410 - 450
Decarbonising Residential Buildings	280 - 310
Decarbonising Non-Residential Buildings	110 - 120

THE RESULTING £450 MILLION OF LOCAL INVESTMENT, WILL ACT AS SIGNIFICANT ECONOMIC BOOST TO THE CONSTITUENCY AND THE REGION

SOLAR PV

The potential for Solar PV in Sleaford and North Hykeham is enormous.

For the UK to hit its net zero target, solar generation must increase from 10 Terawatt-hour (TWh) to 60 TWh in 2035 and 85 TWh in 2050.

Given the constituency's natural geographic advantages and the existing interest in installing solar farms in the area, it seems likely Sleaford and North Hykeham will have at least 1GW installed in the 2020s. **The resulting £450 million of local investment, will act as significant economic boost to the constituency and the region.**

ecotricity

Ecotricity sees real opportunities for net zero to benefit current and future generations as it pushes ahead with its Heckington Fen Solar Park, near Sleaford. The project would comprise solar panels with energy storage and a new grid connection.

Supportive government policy, that is transparently in line with the net zero target, will allow sites like this to reduce carbon emissions and power more homes with renewable energy, all whilst improving biodiversity and sequestering carbon, in addition to supporting the local economy via jobs and business rates. The project will also provide extra facilities such as a community orchard and a permissive path.

LOCAL BENEFITS OF DECARBONISING TRANSPORT

Transport is the biggest sectoral source of CO₂ emissions in the UK, accounting for around one-third of total emissions¹. Between now and 2050, around £50bn will need to be invested in new transport infrastructure to deliver the net zero target, but this cost will be more than offset by savings made as electric vehicles (EVs) are much more efficient to run.

The Autumn 2021 Budget and Spending Review provided £620 million to support the uptake of EVs and £817 million for the electrification of UK vehicles and their supply chains². These welcome investments were partially offset by high-carbon policies such as reducing air passenger duty for domestic flights which drive up emissions. Implementing WWF-UK's Net Zero Delivery Tracker (explained in detail below) would help government avoid policies that increase emissions or balance them out by delivering more ambitious emissions reductions elsewhere in the Budget.

Sleaford and North Hykeham will benefit from **£690 million of investment in low carbon transport by 2050**. Around three-quarters of this will relate to personal forms of transport such as cars, vans and motorcycles. Total surface transport investment will include both public investment (including on deployment of public charging infrastructure) and private expenditure (such as for purchase of vehicles³). Helping to significantly improve connectivity and mobility in the constituency. This investment will create an estimated 410 to 450 local jobs.

INVESTING IN BUILDINGS IN LINE WITH THE NET ZERO TARGET WOULD NOT ONLY MAKE HOMES WARMER AND LOWER BILLS, IT WOULD ALSO CREATE LOCAL EMPLOYMENT AND GROW THE LOCAL ECONOMY

LOCAL BENEFITS OF DECARBONISING HOUSING

Changes to the housing and non-domestic building stock will be a big part of the adjustments that the public sees as we target net zero. This will include retrofitting existing homes to improve their energy efficiency and install low carbon heating options such as heat pumps. New-build homes in the constituency will need to be future proofed and zero-carbon ready.

The Autumn 2021 Budget and Spending Review provided £3,900 million to decarbonise buildings and make homes warmer and more environmentally friendly⁴. This was welcome investment, but came in a package of announcements that WWF-UK's Net Zero Delivery Tracker (explained in detail below) found did not do enough to put the UK on track for net zero.

Investing in buildings in line with the net zero target would not only make homes warmer and lower bills, it would also create local employment and grow the local economy. In Sleaford and North Hykeham, improvements to housing in line with climate targets will require investment of **£470 million in residential housing and £180 million to non-domestic buildings**. This investment will create an estimated 220 to 330 local jobs.

1 BEIS, 2021 UK greenhouse gas emissions, provisional figures, 31 March 2022

2 HM Treasury, Autumn Budget and Spending Review 2021, October 2021

3 CCC, The Sixth Carbon Budget, December 2020

4 HM Treasury, Autumn Budget and Spending Review 2021, October 2021

CONCLUSION

The world needs to decarbonise to tackle climate change - but making these changes will deliver real local benefits too. This briefing outlines why supporting the net zero transition will have significant and tangible economic benefits in Sleaford and North Hykeham, particularly as it looks to take advantage of its strong positioning for solar generation.

Reaching net zero will require significant investment from the public and the private sector. In many cases, as has been seen for example in the offshore wind sector, early public sector investment will help leverage in private sector capital.

This will require government policy to incentivise the big changes needed across the economy in industry, power, buildings, transport etc. These policies will typically be announced by government at set piece events such as Budgets and Spending Reviews. Government should be transparent at each of these occasions as to whether the policies they announce are commensurate with the trajectory for emissions reductions proposed by the Climate Change Committee and legislated for by Parliament in the five-yearly Carbon Budgets.

WWF is calling for the government to apply a Net Zero Delivery Tracker to all spending and taxation decisions in Budgets and Spending Reviews. This will ensure that areas such as Aberavon receive the significant local benefits of the green transition identified in this note, including job creation, improved local infrastructure and faster economic growth.