



County Offices  
Newland  
Lincoln  
LN1 1YL

30 March 2023

**Environment and Economy Scrutiny Committee**

A meeting of the Environment and Economy Scrutiny Committee will be held on **Tuesday, 11 April 2023 at 10.00 am in the Council Chamber, County Offices, Newland, Lincoln LN1 1YL** for the transaction of the business set out on the attached Agenda.

Yours sincerely

A handwritten signature in cursive script that reads 'Debbie Barnes'.

Debbie Barnes OBE  
Chief Executive

**Membership of the Environment and Economy Scrutiny Committee (11 Members of the Council)**

Councillors I D Carrington (Chairman), M A Griggs (Vice-Chairman), A J Baxter, M D Boles, I G Fleetwood, A G Hagues, Mrs J E Killey, H Spratt, G J Taylor, L Wootten and R Wootten



**ENVIRONMENT AND ECONOMY SCRUTINY COMMITTEE AGENDA  
TUESDAY, 11 APRIL 2023**

<b>Item</b>	<b>Title</b>	<b>Pages</b>
<b>1</b>	<b>Apologies for Absence/Replacement Members</b>	
<b>2</b>	<b>Declarations of Members' Interests</b>	
<b>3</b>	<b>Minutes of the previous meeting held on 28 February 2023</b>	5 - 20
<b>4</b>	<b>Announcements by the Chairman, Executive Councillors and Lead Officers</b>	
<b>5</b>	<b>Theddlethorpe Geological Disposal Facility Working Group - 6 Monthly Update</b> <i>(To receive an update from Justin Brown, Assistant Director – Growth, on developments at the former Theddlethorpe Gas Terminal and the workings of the Community Partnership)</i>	21 - 26
<b>6</b>	<b>Energy for Growth - Energy Options Analysis for Greater Lincolnshire - Interim Report</b> <i>(To receive an interim report from Mick King, Head of Economic Infrastructure, and Johanna Rhoades, Project Officer – Utilities on Energy Options Analysis for Greater Lincolnshire)</i>	27 - 62
<b>7</b>	<b>Waste Engagement Initiatives</b> <i>(To receive a report from Mike Reed, Head of Waste, on the various Waste Engagement Initiatives in Lincolnshire and their impact)</i>	63 - 66
<b>8</b>	<b>Twin Stream Recycling Update</b> <i>(To receive a report from Mike Reed, Head of Waste, updating the Committee on the impact of the twin-stream paper and card waste collection project which has been introduced in four districts in Lincolnshire)</i>	67 - 70
<b>9</b>	<b>Environment and Economy Scrutiny Committee Work Programme</b> <i>(To receive a report by Tracy Johnson, Senior Scrutiny Officer, which enables the Committee to comment on the content of its work programme for the coming year to ensure that scrutiny activity is focussed where it can be of greatest benefit)</i>	71 - 76

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**Please note:** for more information about any of the following please contact the Democratic Services Officer responsible for servicing this meeting

- Business of the meeting
- Any special arrangements

Contact details set out above.

Please note: This meeting will be broadcast live on the internet and access can be sought by accessing [Agenda for Environment and Economy Scrutiny Committee on Tuesday, 11th April, 2023, 10.00 am \(moderngov.co.uk\)](#)

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<https://www.lincolnshire.gov.uk/council-business/search-committee-records>



**ENVIRONMENT AND ECONOMY SCRUTINY  
COMMITTEE  
28 FEBRUARY 2023**

**PRESENT: COUNCILLOR I D CARRINGTON (CHAIRMAN)**

Councillors M A Griggs (Vice-Chairman), A J Baxter, M D Boles, I G Fleetwood, A G Hagues, Mrs J E Killey, H Spratt, G J Taylor, L Wootten and R Wootten

Officers in attendance:-

James Baty (Senior Project Officer (Economic Research)), Justin Brown (Assistant Director Growth), Kiara Chatziioannou (Scrutiny Officer), Thea Croxall (Adult Learning and Skills Manager), Samantha L Harrison (Head of Economic Development), Phil Hughes (Strategic Planning Manager), Matthew Michell (Waste Strategy Manager), Chris Miller (Head of Environment), Kate Percival (Environmental Services Senior Officer, Strategy and Partnerships), Mary Powell (Place & Investment Manager), Mike Reed (Head of Waste), Vanessa Strange (Head of Infrastructure Investment) and Tanya Vaughan

**30 APOLOGIES FOR ABSENCE/REPLACEMENT MEMBERS**

There were no apologies received.

**31 DECLARATIONS OF MEMBERS' INTERESTS**

No declarations of Members' interest were made at this stage in proceedings.

**32 MINUTES OF THE PREVIOUS MEETING HELD ON 17 JANUARY 2023**

**RESOLVED**

- That the minutes of the previous meeting held on 17 January 2023 be confirmed and signed by the Chairman as a correct record.

**33 ANNOUNCEMENTS BY THE CHAIRMAN, EXECUTIVE COUNCILLORS AND LEAD OFFICERS**

Councillor Colin Davie, Executive Councillor for Economic Development, Environment and Planning, made the following announcements:

- Scrutiny Panel B continued to develop work in agricultural sector support and the Department for Environment, Food & Rural Affairs (DEFRA) were developing a framework for land use.
- Nominations were open for the Apprenticeship Champion Awards 2023 until Friday 10<sup>th</sup> March.
- The Made Smarter East Midlands Programme was successfully launched by LCC on behalf of the East Midlands Growth Hub Cluster and had attracted interest from multiple SME manufacturers in Lincolnshire and other counties. Over 200 companies had registered and over 50 companies had received support from the programme since December.
- Business Lincolnshire was holding the #GoDigital 'Customer of the Future' Conference at Bishop Grosseteste University on 8<sup>th</sup> March 2023; the event would focus on digital trends and how businesses can adapt to the modern needs of customers.

#### 34 LOCAL NATURE RECOVERY STRATEGY - A PARTNERSHIP APPROACH

The Committee received a report by Chris Miller, Head of Environment, Dan Clayton, Sustainability & Natural Environment Manager, and Kate Percival, Senior Natural Environment Officer, on the Formation of Partnership for the Delivery of the Local Nature Recovery Strategy (LNRS), prior to a decision being taken by the Executive at its meeting on 7 March 2023.

During consideration of the report, the following points were highlighted:

- Members enquired how nature recovery was being measured and how elements such as biodiversity net gain were benchmarked to allow for direct comparisons and establishment of performance; in addition, Members asked whether sanctions were being considered for not achieving targets. Officers explained that the Local Nature Recovery Strategy were used as a guide for Biodiversity Net Gain (BNG); there was a metric in development, a calculator set on a national level, used to measure the biodiversity value at set intervals (at the start, and when the development is implemented) which needed to indicate a net gain of at least 10% on site -ideally- and off site. Officers acknowledged that gains may not be always achievable onsite and offsite BNG would be necessary. Officers were collaborating with the strategic network of Green Infrastructure, Greater Lincolnshire Nature Partnership, and Lincolnshire Wildlife Trust towards setting up a registry of landowners who were keen on entering their land into the project as well as with developers who were interested in buying credits, within which they can negotiate prices for land (between landowners and developers). This was over a 30 year period, therefore robust monitoring and enforcement was essential in line with further guidance anticipated.

- Further clarity was sought on whether this was a framework for administering the strategy and raised a concern on how the framework would fit into the ad hoc way in which biodiversity net gain was being developed and delivered through the planning system. Officers elaborated on how the framework was guiding the biodiversity net gain; the document was identifying the best habitats and places for wildlife and would also help ensure that the right habitat creation and enhancement fell within the right place.
- Further concerns were echoed in relation to the 10% score to be achieved in terms of this being a potentially unrealistic benchmark. Officers explained that 10% was the mandatory minimum score.
- Members commended the framework being put forward, acknowledged that there were clear benefits derived from that, however noted concerns on the long-term deliverability of the programme, on the value of taking agricultural land out of production in order to provide biodiversity, net gain and emphasised on the need for more information around the process and mechanisms that were being developed, which was anticipated when detailed statutory instruments were published.

RESOLVED:

1. That the Committee supports the recommendations to the Executive set out on page 15 of the agenda;
2. That the Committee endorses the progression of the Local Nature Recovery Strategy through a partnership approach
3. That the comments made during the discussion of this item are shared with the Executive ahead of their consideration of this item on 7<sup>th</sup> March 2023.

35 PLANNING REFORM AND LEVELLING UP AND REGENERATION BILL (LURB)

Consideration was given to a report by Phil Hughes, Strategic Planning Manager, on proposed changes to the National Planning Framework (NPPF) and the planning system contained in the Levelling Up and Regeneration Bill (LURB) and the likely implications for Lincolnshire. It was reported that

- The Planning for the Future White Paper was published in August 2020 and its contents were considered controversial.

There were four main characteristics identified in the planning policy from Lincolnshire's perspective:

- It considered the standard method of calculating housing supply as only an 'advisory starting point'.
- It allowed a more permissive approach to the delivery of onshore wind farms.
- The need for retirement housing, housing with care and care homes.

**ENVIRONMENT AND ECONOMY SCRUTINY COMMITTEE**  
**28 FEBRUARY 2023**

- The availability of agricultural land used for food production should be considered when deciding which sites were available for development.

During consideration of the report, the following points were noted:

- Members raised questions about whether onshore wind farms were necessary in Lincolnshire.
- In some cases, homes in local villages had Victorian sewage systems and it was posited that any levy must be used to improve such outdated housing infrastructures.
- The implementation and results of the LURB were difficult to forecast given recent instability in government ministerial appointments.
- The Committee considered whether the LURB would provide support against the challenges of climate change, housing, and energy security; the Strategic Planning Manager assured it was in the governments interest to formulate a stable platform for planning based off these interests to create stability in the sector.
- Further clarity was required within the NPPF on wind power before a national standard of planning could be established.
- Members expressed concern regarding the imposition of national development management policy (NDMP). The Strategic Planning Manager acknowledged that a nationally set NDMP could undermine changes and the varied needs of local developments.
- 'Street vote' powers outlined in the LURB would allow residents to make proposals for planning permission to extend/redevelop their properties if they are accepted via referendum of residents on the streets. It was noted this could cause unnecessary neighbor conflict and competing interests were already mediated in the planning process.
- It was suggested that larger building firms prioritised profit over community development; the Strategic Planning Manager explained that smaller firms were decimated after the 2008 financial crash, which led to a decrease in quality and competition in the sector.
- The Executive Councillor for Economic Development, Environment and Planning was going to submit a formal response to government about the proposed changes to the NPPF and the planning system in the LURB. He agreed to capture the comments of the Committee in his response.

RESOLVED:

1. That the Committee receives the report;
2. That the comments from the debate as captured are shared with relevant leading Officers and Portfolio holders as needed.



36 THE ROLE OF LOCAL ENTERPRISE PARTNERSHIPS AND THE RELATIONSHIP WITH LINCOLNSHIRE COUNTY COUNCIL FOLLOWING GOVERNMENT GUIDANCE

The Committee received a report by Justin Brown, Assistant Director - Growth, on the role of local enterprise partnerships (LEP) and their relationship with LCC.

Councillor R Wootten highlighted he could no longer be the Director of the LEP Company and asked that a new member be sought.

It was reported that:

- A strategic approach was adopted in 2010 to align the LEP and LCC to prevent duplication which led to a productive working relationship.
  - There was a LEP company which included LCC members.
- The government had indicated that the role of LEPS could change; despite this, there was value in LCC continuing to support LEP and the alignment of economic priorities.
- The Greater Lincolnshire LEP was working with approximately 200 private businesses and LCC relied on this work for informing strategy; consequently, it was considered important to retain the same level of private sector input.

During consideration of the report, the following was noted:

- Members questioned the impact devolution could potentially have on LEP; the Assistant Director – Growth gave assurance that LEP had been supported in combined authorities who had a county deal elsewhere.
- Work undertaken alongside the Local Government Association (LGA) had highlighted the importance of the private sector as it generated wealth that allowed authorities to govern.
- Clarity was sought on how the LEP would provide funding, skills and support following cuts made to steelworks in Gainsborough. It was assured that the LEP had analysed potential business support programs to provide relief to those affected by the closure of steelworks; following mass redundancy, the government often created a ‘task force which drew on the LEP to support individuals, supply-chains and assets.
  - James Baty, the LEP Policy Manager, highlighted that Scunthorpe Steelworks had announced mass staff redundancy. Resultantly, the LEP brought together various government bodies, local authorities, and business experts to provide expertise to ensure supply chains and individuals received support.
- It was suggested that the LEP was unelected and unaccountable; therefore, the LEP should align with democratic representatives at LCC. The Assistant Director – Growth assured the LEP was a evidence-based symbiotic arrangement between LCC and partners.
  - As a LEP Directors Board Member, the Executive Councillor for Economic Development, Environment and Planning highlighted to the Committee that

LEP was an accountable body given that it's worked aligned with LCC. The LEP was subjected to audit, and all public money received by the LEP was accounted for.

- It was highlighted that collective working between sectors was vital because the economy of Greater Lincolnshire was interlinked.

RESOLVED

1. That the Committee endorses the continuation of the approach in which LCC supports the LEP in its production of the economic strategy, seeking to align and avoid duplication wherever possible;
2. That the Committee encourages Officers to continue to seek private sector input into priorities and initiatives by active engaging with the LEP Board and its sub-groups;
3. That the comments from the discussion as captured are taken under consideration by Officers responsible for informing and shaping the Committees activity.

37 LINCOLNSHIRE COUNTY COUNCIL'S RESPONSE TO LABOUR MARKET TRENDS

The Committee received a report from James Baty, Policy and Research Executive Manager and Thea Croxall, Adult Learning and Skills Manager on the common trends within Lincolnshire's Labour Market and the County Council's response. It was reported that:

There were four main, interlinked labour market challenges for Lincolnshire:

1. Economic inactivity had increased, which had led to reduced economic output and increased benefit claims.
2. Employers had increased challenges filling jobs due to a lack of appropriately skilled applicants.
3. The amount of young people not in education, employment or training was higher than the national average in Lincolnshire.
4. The training provider system was fragile in Lincolnshire which created gaps in provision locally.
  - Businesses in Lincolnshire were citing difficulties with labour market supply, despite that Lincolnshire historically benchmarked with national averages.
  - Lincolnshire's economy was vulnerable to circumstances as it drew labour from sectors most exposed to market risks such as hospitality, tourism, and food production.
  - The stop-starting of the economy during the pandemic had contributed towards challenges and had reconfigured the labour market. Resultantly, LCC had developed a range of opportunities to encourage employment such as work vacancies in the LCC restaurant and creating apprenticeships.
  - The challenge of the lack of appropriately skilled applicants was exacerbated by factors such as the funding landscape for training providers changing, the rurality of

Lincoln, and the national challenge of teaching retention. It was assured LCC was working with local training providers to develop a shared-approach strategy for government for capital support.

- The Learning and Skills Improvement Plan (LSIP) was being developed by the Federation of Small Businesses to guide longer term work.
- It was assured LCC continued to deliver projects effectively, although it was acknowledged that more could be done if there were more resources.

During consideration of the report, the following points were highlighted:

- Members considered whether Further Education (FE) providers could provide employment and skills training to address short falls in staff recruitment; the Adult Learning and Skills Manager informed the Committee that FE providers already had internal employer advisors which supported local employers to identify skill gaps and align training provision accordingly.
- An instance was cited whereby a resident experienced difficulty entering employment, and consistently failed to receive application/interview feedback from employers. The Adult Learning and Skills Manager assured that LCC provided a range of employability training and provided CV and interview support for applicants, but accepted this provision needed extending.
- The Policy and Research Executive Manager noted that LCC recognised challenges of employer engagement, but provided assurance that the Careers Hub bridged the gap between employers and individuals seeking work. Furthermore, it was suggested further employer engagement was required to ensure they were attracting appropriately skilled applicants.
- There was a shift in attitudes observed towards work-life balance after the pandemic; young people particularly became increasingly isolated in the recovering labour market.
- The COVID-19 pandemic had also contributed towards economic inactivity, especially amongst early retirees and those on long-term sick leave. Work was being undertaken with the Department for Work and Pensions (DWP) to establish further information on this trend.
- Committee members suggested that more government funding should be allocated to FE skills-based courses. The Adult Learning and Skills Manager acknowledged the closure of the Gainsborough campus was a casualty of, amongst other things, the changing funding landscape. Furthermore, the Assistant Director – Growth highlighted that post-16 education existed within the free market therefore it was difficult for LCC to intervene. In order to improve communication LCC regularly attended the board of Lincolnshire FE Colleges, and the LSIP skills improvement plan aimed to steer FE priorities in Greater Lincolnshire, and subsequently LCC could promote skills-based qualifications through this avenue.
- Members stated it would be useful to understand economic inactivity amongst young people; it was suggested this could be lack of qualifications, zero-hour contracts or

sub-standard working conditions. The Assistant Director – Growth advised that national employment policy was skills-based, however there was the difficulty in accessing employment was a more significant factor contributing towards economic inactivity.

- The work of Scrutiny Panel B attempted to address issues around skills-based work in the agricultural sector.
- Members highlighted the report did not mention the impact of Brexit or migration, although it was clarified that previous reports on labour market trends had focused on these factors; this report addressed issues of labour market borne from coronavirus.
- Members were directed towards the LEP skills report which provided an understanding of future requirements in the labour market, and where currently supply sat in Lincolnshire.
- It was highlighted that the report did not mention the impact of Brexit or migration on employment, however it was clarified that previous reports on labour market trends had focused on Brexit and its impact but this report illustrated the issues of labour market borne from Coronavirus.
- Members questioned which areas were more negatively impacted in the county and were guided towards the LEP skills report which provided an understanding of future requirements in the labour market and where currently supply sat by sector.

#### RESOLVED

1. That the Committee review and comment on the work taking place to deliver and support post-16 employment and skills activity across the county; comment on whether it tackles the recruitment and skills challenges councillors are hearing from local businesses;
2. That the Committee offers its views and comments on the Council's approach to supporting Lincolnshire training providers in the context of reducing gaps in provision at a local level;
3. That the Committee receives the report and endorses the work undertaken to deliver and support the skills development programmes across the county
4. The Committee requests that comments from the discussion in relation to the approach to supporting training providers to bridge gaps, as captured, are taken into consideration by Officers and relevant Portfolio holders.

The Committee received a report from Vanessa Strange, Head of Infrastructure Investment and Tanya Vaughan, Senior Commissioning Officer on the Local Electric Vehicle Infrastructure (LEVI) pilot being launched in Lincolnshire. It was reported that:

- The LEVI pilot scheme was the current national funding available to highway authorities; LCC was expected to use the funding to install more electric vehicle (EV) charging stations.
- The importance of policy work was highlighted by Officers as it allowed LCC to communicate its ambitions for the funding to the government.
- Initially, 100 EV charging ports would be installed across Lincolnshire; additional funding was expected in the future to expand upon this.

During consideration of the report, the following was highlighted:

- The pilot was widely welcomed by Members.
- Current funding facilitated standard EV chargers and covered 25% of the total cost. A hub facility comprised of rapid chargers was expected in the future but would require further funding.
- Members questioned the ease in which standard chargers could be upgraded to fast chargers, consequently the Senior Commissioning Officer informed the Committee that LCC was currently identifying a contract that would allow EV charging provision in Lincolnshire to evolve alongside technological innovation in the sector.
- Queries were raised about Tesla EV chargers that had already been installed in the county, and the Head of Infrastructure Investment highlighted the importance of LCC to balance the pilot with other activity emerging. Work was currently being undertaken alongside Highways colleagues which continued to monitor EV provision across Lincolnshire.
- Funding was also awarded to District Councils in Lincolnshire to install EV chargers; it was noted that Stamford District Council welcomed inclusion in the scheme.
- Consideration was given as to whether a traffic regulation order (TRO) would be required to take effect on parking spaces near chargers. The Senior Commissioning Officer clarified that LCC intended to install EV chargers in areas with limited/no off-street parking; TROs may be required however locations were chosen where traffic was already regulated such as two-hour parking bays, and she highlighted it was a priority to engage with residents throughout the pilot.
- According to current policy, LCC could not receive any payment to install an EV charging point outside a property upon a resident's request however it was noted that policy could change. The Head of Infrastructure Investment also highlighted that current EV policy was practical and addressed issues such as charging cables on pavements.
- LCC would not incur a cost from the scheme; the funding model revenue share from the installed chargers was part of the funding model itself and costs would be experienced for the commercial provider and pump priming from the LEVI fund.

- Some EV chargers were owned by petrol providers and were installed at petrol and service stations; these companies had identified a key shift in attitudes towards electric travel. This alleviated some practical issues in provision such as cables on roads and potential pedestrian disruption.
- Members acknowledged the rural nature of Lincolnshire, resultantly many locations could not be provided an EV charger. Despite this, the Senior Commissioning Officer gave assurance that a village-solution to EV travel was an aspiration in the future.
- Electric grid-supply was a concern, and Members considered whether an off-peak charging bonus could be awarded. The Head of Infrastructure Investment agreed and expressed that an electric car could work alongside the energy demand in homes in the future.

RESOLVED:

1. That the Committee endorses a continuation of the current approach, where pilot funding is used to understand the best way to deliver electric vehicle charging on the highway, in different geographical settings;
2. That the Committee provides comment that will shape future work on Electrical Vehicle (EV) infrastructure across Lincolnshire;
3. That the comments from today's discussion in relation to shaping future work on Electrical Vehicle (EV) infrastructure across Lincolnshire, as captured, are taken under consideration by Officers and relevant Portfolio holders.

39 VISITOR ECONOMY UPDATE

The Committee received a report by Mary Powell, Place and Investment Manager, on the visitor economy situation in Lincolnshire in 2022, prospects for 2023 and the County Council's subsequent response. It was reported that:

- Videos about attractions in Lincolnshire were now uploaded onto the Visit Lincolnshire website.
- The Coastal Bird Trail was a successful example of partnership working, and LCC drew on expertise from the Greater Lincolnshire Nature Partnership, RSPB, Lincolnshire Wildlife Trust and the Lincolnshire Bird Club.
- Skills training for businesses was being rolled out on topics such as Green Tourism and Pub Development; this was providing local businesses with information on how to attract tourists.

During consideration of the report, the following was noted:

- Members suggested specific promotion for events held in Lincolnshire, and the Place & Investment Manager assured that an 'events' section was being further developed for the Visit Lincolnshire website.

- Members identified long periods of time without events being held in Lincolnshire according to the website, and suggested communicating with Borough and Parish councils as they circulated local events lists. Further assurance was provided by the Place & Investment Manager that Visit Lincolnshire was in the process of uploading events for 2023, and it was noted that some quality control had to occur to ensure the right events were being advertised by LCC. It was also noted that the Visit Lincolnshire website was not intended to be comprehensive, it was intended to inspire potential visitors and to encourage them to visit relevant district and borough and private sector websites.
- LCC was working with smaller, local sectors such as aviation and birdwatching, with some organisations approaching LCC before Visit Lincolnshire had made contact.
- The Visit Lincolnshire website was comprehensive, and constantly adding more events and attractions. The Place & Investment Manager urged Members to contribute suggestions of events to be added in the future.

RESOLVED:

1. That the Committee reviews and comments on the current progress to date and provide input to assist officers to plan and facilitate future Visitor Economy interventions;
2. That the Committee supports the partnership approach to developing the Local Visitor Economy Partnership for Visit England endorsement and accreditation, and;
3. That the comments from the discussion as captured are taken under consideration by Officers responsible for the Committees representation at the working group.

40 SERVICE LEVEL PERFORMANCE REPORTING AGAINST THE PERFORMANCE FRAMEWORK 2022-23 - QUARTER 3

The Committee received a report from Samantha Harrison, Head of Economic Development, Chris Miller, Head of Environment, and Mike Reed, Head of Waste, which set out the performance of the Tier 2 Service Level Performance measures for 2022-2023 Quarter 3 for Economy, Flooding and Waste which were within the remit of the Environment and Economy Scrutiny Committee. The following was reported:

Economy

- The target for the measure of the number of businesses supported was exceeded.
- The target for adult qualifications was exceeded.
- The target for external funding to Lincolnshire was not met. This was attributed to the phasing of government grants as despite funding being secured, these packages were being delivered incrementally across multiple years.

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The report was considered by the Committee and the following was noted:

- Members considered whether the withdrawal of European funding would be a limiting factor in LCC's ability to interface and assist businesses in the future. The Head of Economic Development informed the Committee that previously, £8 million had been received in European funding which helped the business support programme delivery, LCC had requested £1.7m from the shared prosperity fund across the ten local authorities. Funding had been secured for West Lindsey, Rutland, and Lincoln City, and positive conversations were ongoing with South and North Kesteven. Expressions of Interest were submitted for North East Lincolnshire, North Lincolnshire and South East Lincolnshire and were awaiting the outcome. It was agreed an update on the final programme would be shared at the next Committee.
- Further information was requested in relation to the 'businesses by priority' target.
- The 'businesses assisted by location' data would be represented to show performance in all seven districts, and the Head of Economic Development clarified that due to an administrative error the data for the South East Lincolnshire Partnership was initially grouped; once it had been disaggregated, Boston did not feature in the data. She agreed to provide additional information about Boston at the next meeting.

### Flood

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It was reported that:

- In quarter 4, 20 section 19 investigations had commenced over 23 properties. This was an increase from 2021-2022 which saw five s19s affecting ten properties.

During consideration of the report, it was noted that:

- Despite there being a drier winter, there was an increase in section 19 investigations being initiated. This was historical data from the August 2022 flooding event.

### Waste

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It was reported that:

- The waste performance data in the report incorporated the waste hierarchy – the methodology used to treat the statutory obligation LCC has to manage waste. Waste minimisation was the main priority whereas waste disposal was at the bottom of the hierarchy.
- 'Household waste collected' had been reduced and was below target, which was in line with the waste hierarchy.



- ‘Household waste in landfill’ was reported as below the target and performing well.
- It was noted that the overall recycling rate and the performance of household waste recycling centres (HWRCs) can report better performance for waste minimisation whilst also reporting a lower recycling rate.
  - There were 8,000 tonnes less of garden waste; minimisation was highest on the hierarchy, but it consequently led to a lower recycling rate by approximately 1%.
- A separate collection of food waste was mandated which removed food material from the residual waste stream. This material was approximately 30,000 tonnes and relocating it in the hierarchy would lead to better recycling performance.

During consideration of the report, the following was noted:

- Members welcomed the utilisation of graphics in the report which were used to explain the waste hierarchy.
- LCC previously had a recycling rate of over 50% and Members questioned why it had decreased. The Head of Waste assured real improvements were observed in contamination rates were recycling collections were separate as materials were of a better quality. Members were also reminded that recycling rates did not accurately portray performance as public behaviour could not be controlled.
- DEFRA had announced that authorities had been mandated the ability to separate food waste collection and disposal by March 2025, although this posed challenges to overcome regarding improving infrastructure to facilitate this change. Waste collection authorities were going to receive new burden funding, whereas waste disposal authorities would be expected to meet any capital requirements.
- The Executive Councillor for Waste and Trading Standards further acknowledged that LCC had no control over the waste that was presented by the public. He informed the committee that rates of contamination were 31% before twin-stream rollout, and had decreased to around 14%. Assurance was provided that changes to public behaviour had been observed, albeit incremental.
- Clarity was requested regarding the definition of ‘reuse’ in the report. The Head of Waste informed the Committee that it referred to anything that was discarded which someone could have a use for. Lincolnshire was planning to introduce a reuse facility at Tattershall HWRC in partnership with Lincolnshire Air Ambulance. Furthermore, the memorandum of understanding would facilitate this project, and it was welcomed that there was a plan to increase an income source whilst also reducing waste.

**RESOLVED:**

1. That the Committee considers and comments on the detail of performance contained in the report and recommend any changes or actions to the relevant Executive Member and leading Officers, and;

2. That the Committee endorses the report and is satisfied with the performance achieved to date and the assurances provided where targets were not achieved.

41 THEDDLETHORPE GEOLOGICAL DISPOSAL FACILITY WORKING GROUP - INTERIM UPDATE

The Committee received an interim verbal update from Justin Brown, Assistant Director – Growth, on the workings of the Theddlethorpe Geological Disposal Facility Working group. It was reported that:

- A full report on the workings of the Theddlethorpe Working Group was expected at the next meeting of the Committee.
- A Community Partnership Working Group had been established and had held multiple meetings. This helped to coordinate community events which opened up avenues of communication with residents in Theddlethorpe. The Group had supported the establishment of the Grand Fund Programme, and further details on the partnership were also expected at the next Committee meeting.
- Members were directed to [Theddlethorpe.workinginpartnership.org.uk](http://Theddlethorpe.workinginpartnership.org.uk) for additional information.

During consideration of the verbal report, the following was noted:

- The Community Partnership facilitated the circulation of information which would eventually inform a public vote. Timescales of the working group would be impacted by technical advice, community feedback and government policy, although it was highlighted this vote would not be imminent given the complexity of the topic.
- Members were reminded that the residents in Theddlethorpe were the decision-makers in relation to the disposal facility, although LCC was represented in the working group to provide residents with help on how to ask appropriate questions.
- Nuclear Waste Services (NWS) had organised drop-in events where the community could ask questions and voice concerns, and it was reported that some residents were uncomfortable about the proposal whereas others were optimistic. It was noted that LCC was keen to maintain a role in the Community Partnership to ensure these widely ranging views were represented adequately.
- From an LCC perspective, it was important to view the situation as fluid and explore opportunities for locality and inward investment, as well as awareness of risks.

RESOLVED

1. That the Committee receives and makes comments on the update
2. That the Committee requests that the comments from the discussion as captured are taken under consideration by Officers responsible for the Committees representation to the working group.

42 ENVIRONMENT AND ECONOMY SCRUTINY COMMITTEE WORK PROGRAMME

Consideration was given to a report by Kiara Chatziioannou, Scrutiny Officer, which invited the Committee to consider and comment on the content of its own work programme for the year to ensure that scrutiny activity is focused where it can be of greatest benefit.

Members were informed that an inaugural meeting for the Campervans and Motorhomes Working group was being held on 8 March 2023.

RESOLVED

1. That the work programme be approved

43 ENERGY FOR GROWTH (UTILITIES PROVISION IN GREATER LINCOLNSHIRE)

It was noted that this item was for information only.

The meeting closed at 1.43 pm

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**Open Report on behalf of Andy Gutherson, Executive Director - Place**

Report to:	<b>Environment and Economy Scrutiny Committee</b>
Date:	<b>11 April 2023</b>
Subject:	<b>Theddlethorpe Geological Disposal Facility Working Group – 6 Monthly Update</b>

**Summary:**

This report provides an update on developments at the former Theddlethorpe Gas Terminal. Whilst the focus of the report is on the proposed geological disposal facility and on the work of the Community Partnership, the report also recognises that other parties are interested in the site.

The report explains that the Community Partnership has now met four times, has led on public engagement locally and has set strategic priorities for the Community Investment Fund. The report also explains that the opportunities for investment in strategic infrastructure, in employment, and in business supply chain are starting to be better understood and that Lincolnshire County Council is developing a position on each of these.

**Actions Required:**

It is recommended that the Environment and Economy Scrutiny Committee:

- (1) Reviews and comments on the progress of the Community Partnership and notes that its public engagement programme will continue throughout the siting process for the geological disposal facility.
- (2) Supports the work being carried out to take advantage of the opportunities for investment in strategic infrastructure and for employment and business supply chains.

**1. Background**

**Lincolnshire County Council's position on geological disposal facility proposal for Theddlethorpe**

At its meeting in November 2021 the Executive of the Council agreed to three recommendations in a paper concerning a geological disposal facility. These were that the Executive:

- (1) approves acceptance by the Council of the invitation from Radioactive Waste Management (RWM) to join a Working Group to explore the potential for a geological disposal facility in eastern Lincolnshire;
- (2) approves the Council taking up membership of any subsequent Community Partnership that may be formed; and,
- (3) identifies a Councillor to represent the Council on the Working Group and, if it is formed, the Community Partnership. Councillor Martin Hill OBE was identified as the councillor to represent Lincolnshire County Council (LCC).

The Committee is asked to remember two critical points regarding Geological Disposal Facilities (GDF):

- Firstly - joining the working group does not mean that LCC supports the concept of a geological disposal facility.
- Secondly – the working group is not where any decision about locating a geological disposal facility would be taken. It is the local community, through a Public Test of Support, who would determine whether a geological disposal facility should be located in the area.

According to the government's policy on geological disposal facilities a Public Test of Support is currently some years away.

Officers have engaged with Nuclear Waste Services (NWS) as we would with any other potential inward investor, providing local advice and information but recognising that our role must remain neutral. This is similar to the way that we have worked with major businesses like Siemens and Princes when they were considering leaving central Lincoln and Long Sutton respectively and it is also similar to the way that we are working with potential major investors in the Holbeach Food Enterprise Zone.

### **Theddlethorpe Community Partnership**

LCC's involvement in a working group and subsequent community partnership has been concerned with communication of the facts relating to geological disposal facilities, their impact on the local community, and the investment that they may be able to lever.

The Community Partnership has now been formed, the interim chair is Jon Collins who chaired its predecessor, the working group. The Leader of the Council, Councillor Martin Hill OBE, is also a member of the community partnership. LCC had recommended to NWS that the partnership included parish council representatives, and that has now happened. Other members of the Community Partnership include local business, Wildlife Trust, and GOTEK, the local organisation which has been established to oppose the geological disposal facility.

The Community Partnership has now met four times. The primary focus of meetings so far has been on the establishment of an engagement programme with the local community and on setting high level priorities for the community investment fund.

The Community Partnership has produced a website with significant detail about geological disposal facilities ([Theddlethorpe GDF Community Partnership \(workinginpartnership.org.uk\)](http://Theddlethorpe_GDF_Community_Partnership_workinginpartnership.org.uk)) and which members of the Committee are encouraged to explore. At the time of writing Nuclear Waste Services have held 31 engagement events with the local community which have had 292 attendees; they have produced three newsletters which have been distributed to residents in the search area; and they attend the Mablethorpe Coastal Centre on a regular weekly basis. The newsletter can be accessed via the website which is referred to previously. The website has not been updated as regularly as we would advise – it is essential that Nuclear Waste Services are as transparent as possible – and we continue to press for regular updates to be posted on the site.

Earlier in the process the Theddlethorpe Residents Association produced a questionnaire which was distributed to 576 properties in the village. 291 questionnaires were returned with 247 against the proposed geological disposal facility. 99 responders had attended the early Nuclear Waste Services engagement events and 158 had not.

Nuclear Waste Services tell us that the feedback from more recent community engagement events is far more curious – with a good number of residents wishing to understand about the proposal and its potential impact. One resident has been quoted as saying that the event had “opened my mind, I came in blinkered”.

### **Community Investment Fund**

A Community Investment Fund which will provide an annual grant budget of £1m is now open for community groups, businesses, and schools to apply to. So far, a small number of submissions have been made. It is expected that a subgroup of the Community Partnership will be formed with the expectation of the first decisions on bids to be made in late June 2023.

### **Economic impact**

As mentioned earlier in the report, one of the issues which LCC wishes to understand better -and which we are keen to ensure is communicated to others- relates to the economic impact of any geological disposal facility investment.

Nuclear Waste Services tell us that “A GDF will create at least 4,000 jobs over the next 25 years during the early stages of siting and initial construction. And we would aim to recruit many of the roles – such as construction, engineering, science – from the region local to the site chosen for a GDF.” A generic report on the economic impact of geological disposal facilities was published by Nuclear Waste Services during autumn 2022, and work is currently underway on a more locally contextualised report too. The local report is based on building a detailed understanding of the skills which are

required, the skills and training provision, which is available locally, and some of the other initiatives which are taking place and which would need the same skills. The document, which reaffirms the figure of 4,000 jobs, should prove extremely useful for education and training providers to plan new provision.

LCC has also convened meetings of Nuclear Waste Services, Lincolnshire Chamber, East Lindsey District Council, East Midlands Business, and the Nuclear Advanced Manufacturing Research Centre to explore how Lincolnshire businesses can be made aware of supply chain opportunities.

### **Significant Additional Infrastructure**

Part of the government's policy for geological disposal facilities makes provision for the area which hosts a facility to receive "Significant additional investment". This is investment in the area which is over and above the investment that is required by the developer.

There is no formal process for pursuing Significant Additional Infrastructure, but officers have started to prepare an initial list of some of the investment that might be sought. Given that Significant Additional Infrastructure will be the responsibility of several government departments, we are likely to need to be opportunistic rather than setting out a clear set of tactics to secure the investment and then following those tactics. Nonetheless, officers will produce some very early business cases for items relating to flood protection, transport improvements, rail, power, and environment, and education.

### **Other interests in Theddlethorpe Gas Terminal and beyond**

As mentioned previously, the former gas terminal site is owned by National Grid and other organisations are also interested in the site.

For example, Harbour Energy is part of a consortium which is pursuing a scheme called V Net Zero ([Homepage - V Net Zero \(vnetzerocluster.co.uk\)](http://vnetzerocluster.co.uk)). Harbour Energy -who were the last commercial operator on the site and still hold the lease on the site- recently attended the Council's Planning and Regulation Committee. Their project is to install a purpose-built onshore pipeline from Immingham, bringing CO<sub>2</sub> from multiple emitters to the Theddlethorpe site. The scheme targets storing 10 million tonnes per year of CO<sub>2</sub> by 2030, supported by an initial investment of £3bn across the capture, transportation, and storage projects, with first CO<sub>2</sub> injection potentially as early as 2027. The initial investment of £3bn is forecast to support or create approximately 6,000 jobs (in northern Lincolnshire and the Humber, not in Theddlethorpe itself).

Finally, and on a separate but related basis, The UK Atomic Energy Authority has now confirmed that West Burton in Nottinghamshire, but just a few miles from Gainsborough, will be the location of their Tokamak fusion facility. Whilst they have not done the same amount of detailed analysis on jobs and business supply chain as Nuclear Waste Services, their investment -which will start in earnest in the early 2030s- will be of a similar scale to a geological disposal facility. The UK Atomic Energy Authority have



started to develop a range of innovation, business, and training initiatives which could also have a significant impact on the Lincolnshire economy. Officers are working with their counterparts at West Lindsey District Council and at Nottinghamshire County Council to pursue this further.

## **2. Conclusion**

The developments at Theddlethorpe Gas Terminal are continuing to progress.

The Community Partnership has now been formed and is starting to meet regularly, developing and implementing a community engagement strategy, shaping up the priorities of the Community Investment Fund, and moving towards the preparation of a community vision. The opportunities associated with the scale of investment for a geological disposal facility are starting to be understood both from an employment and business perspective and from a significant infrastructure perspective.

There remains active interest from other parties in the site, and we continue to engage with those other parties as we would with any other investor.

The separate investment in West Burton, the Tokamak fusion facility, provides similar opportunities for employment and business in the west of the county.

## **3. Consultation**

### **a) Risks and Impact Analysis**

N/A

## **4. Background Papers**

No background papers within Section 100D of the Local Government Act 1972 were used in the preparation of this report.

This report was written by Justin Brown, Assistant Director (Growth), who can be contacted on 07887545356 or by e-mail at [justin.brown@lincolnshire.gov.uk](mailto:justin.brown@lincolnshire.gov.uk).

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**Open Report on behalf of Andy Gutherson, Executive Director - Place**

Report to:	<b>Environment and Economy Scrutiny Committee</b>
Date:	<b>11 April 2023</b>
Subject:	<b>Energy for Growth - Energy Options Analysis for Greater Lincolnshire - Interim Report</b>

**Summary:**

An Energy for Growth (Utilities Provision in Greater Lincolnshire) report was presented to the Committee in October 2022, and an information report containing an update on progress was circulated for the February 2023 meeting of the Committee. This report expands on one of the intelligence work streams included in the work programme, the Energy Options Analysis for Greater Lincolnshire study, and the Interim Report completed by the consultants is attached.

The report includes an overview of the Interim Report and any comments that the Committee may have on the Interim Report can be given to the consultants and be considered for the Final Report.

The Economic Infrastructure Team has successfully engaged with Distribution Network Operators (DNOs) that operate in the Greater Lincolnshire area. Meetings have been set up throughout the year to discuss Local Authority and DNO strategies that include areas of Growth. These meetings enhance our local intelligence when bringing forward economic initiatives.

**Actions Required:**

The Environment and Economy Scrutiny Committee is invited to review and comment on the content of the Interim Report on the Energy Options Analysis for Greater Lincolnshire.

**1. Background**

Rider Levett Bucknall (RLB) has been commissioned by the Greater Lincolnshire Infrastructure Group (IG) to undertake an Energy Option Analysis (EOA) for Greater Lincolnshire. The commission started in June 2022, and the final report will be presented to the IG by June 2023.

## **Project Brief**

The commission will support and address the Key Lines of Enquiry (KLOEs), see 'Deliverables' below, and then assess the ability of the energy approach identified to meet the demand from growth in the immediate term, and over the next 20 years (incorporating upper employment growth scenarios, which may come forward within Greater Lincolnshire).

## **Deliverables**

The main outcome of this Commission is to answer the following key lines of enquiry (KLOEs):

- To challenge whether the provision of energy genuinely affects viability, differentiating between the levels of National Grid, Local Distribution Network Operator (DNO) and local energy operators – and whether a decision to implement local innovative solutions could deliver necessary local requirements;
- To identify how authorities could work together to build the scale to make an alternative energy offer attractive to the private sector;
- To strengthen the connection between energy and other utility provision, notably digital infrastructure and the internet of things; and,
- To provide a forum for the private and public sectors to collaborate on specific schemes, creating the environment for a strong dialogue that leads to investment in priority sites.

The work will also:

- Identify any significant barriers and/or opportunities relating to the underlying energy provision infrastructure within Greater Lincolnshire (taken at District/Unitary scale as well as Greater Lincolnshire), and provide strategic recommendations on how to redress / maximise those barriers/opportunities including consideration of best practice or emerging examples;
- Identify any significant opportunities within the existing, or potential future energy networks, within Greater Lincolnshire to maximise the opportunity of increased Green Energy/Renewables within the area, including best practice/forward looking examples on how infrastructure development could be forward funded;
- Provide analysis (and increased understanding) of the energy requirements associated with key employment sectors within Greater Lincolnshire (for example Agriculture) and seek to quantify the future impacts as a result of growth within those sectors, or significant changes within them, for example Carbon Reduction in the Food Chain;
- Scope two housing site (suitable examples to be established by the Consultant via discussion with IG Reference Group) opportunities in Greater Lincolnshire where a more collaborative energy approach can deliver commercially viable net zero carbon development and achieve the wider objectives of this brief; and,
- Produce a RAG rating map/GIS layer of Greater Lincolnshire for the network (particularly access to high V lines/infrastructure) that can be used to develop

key/targeted decisions based on the need to secure significant inward investment where this is needed from National Grid/DNOs based on what we know as our overall aims for Growth.

### **Interim Report**

The Interim Report has been prepared by RLB and is included at Appendix A. The key findings are detailed below:

- There is a clear shift towards innovation and alternative energy sources across the region.
- Net zero is a common theme across all sectors, echoed by the shift in energy providers and increase in private investment.
- There is inconsistent collaboration across the region.

In addition to this, the commission has enabled a good working relationship with the two electricity Distribution Network Operators (DNOs), who operate in Lincolnshire and distribute electricity to the end user, Northern Powergrid (NPg) and National Grid Electricity Distribution (NGED, formerly Western Power Distribution) to develop. This two-way dialogue will have positive benefits to Lincolnshire County Council (LCC) in terms of increasing awareness and intelligence, and in turn will give the DNOs an understanding of where growth priorities are in Lincolnshire in the short, medium, and longer term.

### **Next Steps**

The Interim Report has been prepared by RLB at a point where they have completed 50% of the commission. The report details additional areas that will be included, and expanded on in the Final Report, to ensure that the project outputs are delivered. Any comments that the Committee might have on the Interim Report can be forwarded to the consultants for consideration in the Final Report (note comments need to be received by 12 April 2023).

A draft Final Report was issued in March 2023, with the final report due to be issued in May 2023. LCC staff will work with members of the IG to explore ways to utilise the information presented in the report to produce a plan of action that will help optimise the benefits to residents and businesses in the area going forward.

## **2. Conclusion**

The commission looks at current and proposed developments in the Greater Lincolnshire area to estimate future electricity demands. These demands have been mapped onto the electricity network to see where infrastructure may have limited capacity in future. This will enable early conversations with appropriate DNOs, and the potential of exploring local innovative solutions to enable 'clean' growth.

The Greater Lincolnshire Energy Options Analysis has allowed the three tier-one, and seven tier-two local authorities in the Greater Lincolnshire area to collaborate, share

knowledge and work together. The outcomes of the Interim Report are relevant to the whole of the Greater Lincolnshire area and this partnership approach has successfully allowed knowledge and understanding about the electricity provision within the area to be gained and shared to support the creation of thriving environments across the area.

### 3. Consultation

#### a) Risks and Impact Analysis

N/A

### 4. Appendices

These are listed below and attached at the back of the report	
Appendix A	Energy Options Analysis for Greater Lincolnshire – Interim Report. Prepared by RLB

### 5. Background Papers

The following background papers as defined in the Local Government Act 1972 were relied upon in the writing of this report.

Document title	Where the document can be viewed
Energy for Growth (utilities provision in Greater Lincolnshire) Environment and Economy Scrutiny Committee - 25 October 2022	<a href="#">Agenda for Environment and Economy Scrutiny Committee on Tuesday, 25th October, 2022, 10.15 am (moderngov.co.uk)</a>
Report for Information – Energy for Growth (utilities provision in Greater Lincolnshire) update Environment and Economy Scrutiny Committee - 28 February 2023	<a href="#">Agenda for Environment and Economy Scrutiny Committee on Tuesday, 28th February, 2023, 10.00 am (moderngov.co.uk)</a>

This report was written by Johanna Rhoades, Project Officer – Utilities, who can be contacted on 07920 576720 or [johanna.rhoades@lincolnshire.gov.uk](mailto:johanna.rhoades@lincolnshire.gov.uk).

REPORT

MARCH 2023

## **ENERGY OPTIONS ANALYSIS FOR GREATER LINCOLNSHIRE**

INTERIM REPORT  
GREATER LINCOLNSHIRE

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Appendix A: References

Appendix B: Development Demand and Supply Data

## VERSION

Version	Authorised	Date
V1	HE	27 Feb 2023
V2	HE	10 March 2023



## AUTHORISATION

This report has been prepared by:



Verity Topham



Barry Malone

and authorised for issue by:



Heather Evans  
Partner, National Head of Sustainability

## 1.0 EXECUTIVE SUMMARY

This report is intended to support Greater Lincolnshire Local Authorities and the Greater Lincolnshire Infrastructure Group through conducting an energy option analysis of the region and to identify where investment may be required, to meet not only net zero targets but to enable economic growth.

The Key Line of Enquires (KLOE) are detailed below:

- To challenge whether the provision of energy genuinely affects viability, differentiating between the levels of National Grid, Local Distribution Network Operator (DNO) and local energy operators – and whether a decision to implement local innovative solutions could deliver necessary local requirements.
- To identify how authorities could work together to build the scale to make an alternative energy offer attractive to the private sector.
- To strengthen the connection between energy and other utility provision, notably digital infrastructure, and the internet of things.
- To provide a forum for the private and public sectors to collaborate on specific schemes, creating the environment for a strong dialogue that leads to investment in priority sites.

This paper outlines the Key Lines of Enquiries alongside analysis of the demand from growth in the immediate term, and any further energy requirements to deal with the growth over the next 20 years.

This study, managed by Lincolnshire County Council and completed by RLB, looks at current and proposed developments in the Greater Lincolnshire area to estimate what their energy demands are likely to be in terms of electricity. These demands have been mapped onto the electricity network to see where infrastructure, including sub-stations and power lines may have limited capacity in future. The local distribution network operators have been consulted on the information and various options for providing additional capacity have been investigated and outlined.

Recommendations (placeholder, to be summarised in final report)

## 2.0 PROJECT SCOPE

The project scope was to deliver a fully coordinated, intelligence-led and targeted report into an Energy Options Analysis for Greater Lincolnshire that incorporates the outputs below and shows any current legislation implications.

The key project objective was to develop a report that will support the Greater Lincolnshire Local Authorities and the Greater Lincolnshire Infrastructure Group through providing an energy option analysis of the area, and to identify where investment may be required, to meet not only net zero targets but to enable economic growth.

RLB have developed this study to support and address the Key Lines of Enquiries and then assess the ability of the energy approach identified to meet the demand from growth in the immediate term, and any further energy requirements to deal with the growth over the next 20 years.

### 2.1 PROJECT OUTPUTS

A report detailing the key lines of enquiry below;

- To challenge whether the provision of **energy genuinely affects viability**, differentiating between the levels of National Grid, Local Distribution Network Operator (DNO) and local energy operators – and whether a decision to implement local innovative solutions could deliver necessary local requirements.
- To identify how **authorities could work together** to build the scale to make an alternative energy offer attractive to the private sector.
- To strengthen **the connection between energy and other utility provision**, notably digital infrastructure, and the internet of things.
- To provide **a forum for the private and public sectors to collaborate** on specific schemes, creating the environment for a strong dialogue that leads to investment in priority sites.

Study outputs to include;

- Consideration of how vital is energy for investment?
- **Explore Opportunities within present/future energy networks** including Green Energy, Renewables, Energy from Waste, Agricultural & Forestry energy, and forward funding.
- Analyse **requirements for key employment sectors** including future impact of growth e.g. food chain carbon reduction.
- 2 x pilot **Residential Development Scheme case studies**.
- **RAG GIS Mapping overlay of DNOs** - National Grid: Energy Distribution and Northern PowerGrid.

### 2.2 STAKEHOLDERS

This report has been commissioned by Greater Lincolnshire authorities, with the main stakeholder for the Project being the Greater Lincolnshire Infrastructure Group (IG). Management and key decision making for this project is by the Infrastructure Reference Group (IG Reference Group).

## 2.3 APPROACH

This study has used projected growth plans from each local authority and developed a trajectory of energy usage, to enable analysis of requirements for energy patterns. Within this study, area wide transportation plans, such as the freeport on the Humber and other infrastructure requirements which would contribute to the overall energy demands have been considered.

It has been widely acknowledged that there is a shortfall in electrical capacity within the Greater Lincolnshire area of power capacity and this has been determined by several developments providing advice and evidence to that effect. RLB have engaged with the licenced distribution network operators (National Grid ED & Northern Powergrid) with a view of aligning the need for additional capacity and generation. As part of this study, consideration has been given to how private generating companies could assist the long-term objective of growing and investing the local areas.

## 3.0 ENERGY OPTIONS ANALYSIS

### 3.1 NATIONAL ENERGY CONTEXT

Holder, to be expanded

### 3.2 LOCAL CONTEXT

The Greater Lincolnshire area covers three tier one local authority areas of Lincolnshire County Council, North Lincolnshire Council and North East Lincolnshire Council. The Lincolnshire County Council area comprises the following seven tier two districts each serviced by a district or borough council: City of Lincoln, North Kesteven, South Kesteven, South Holland, Boston Borough, East Lindsey and West Lindsey. The Greater Lincolnshire Local Enterprise Partnership (LEP) covers the Greater Lincolnshire area included within this study.

Greater Lincolnshire has seen significant population growth, with the 2021 Census data showing a 10% increase in some areas, with Lincoln’s population rising to over 100,000.

Following the Covid-19 pandemic, Greater Lincolnshire has experienced significant economic impact. The Greater Lincolnshire LEP has released a strategy “Protecting, Progressing, Prospering: Greater Lincolnshire Plan for Growth”. The intent to grow the local economy will drive a different requirement for energy demand and supply

District	Population	Growth since 2011
Boston	70,500	9.1%
East Lindsey	142,300	4.3%
Lincoln	103,900	11.1%
North Kesteven	118,000	9.5%
South Holland	95,100	7.7%
South Kesteven	143,400	7.2%
West Lindsey	95,200	6.7%
North Lincolnshire	169,700	1.3%
North East Lincolnshire	156,900	-1.7%

Source: Census 2021

requirements, particularly in the context of a rising population with a key goal to improve economic equality across the wider region.

RLB note: expand on economic drivers and goals



Figure 1 Greater Lincolnshire Map, GLLEP Revival Plan

### 3.3 ENERGY STAKEHOLDERS

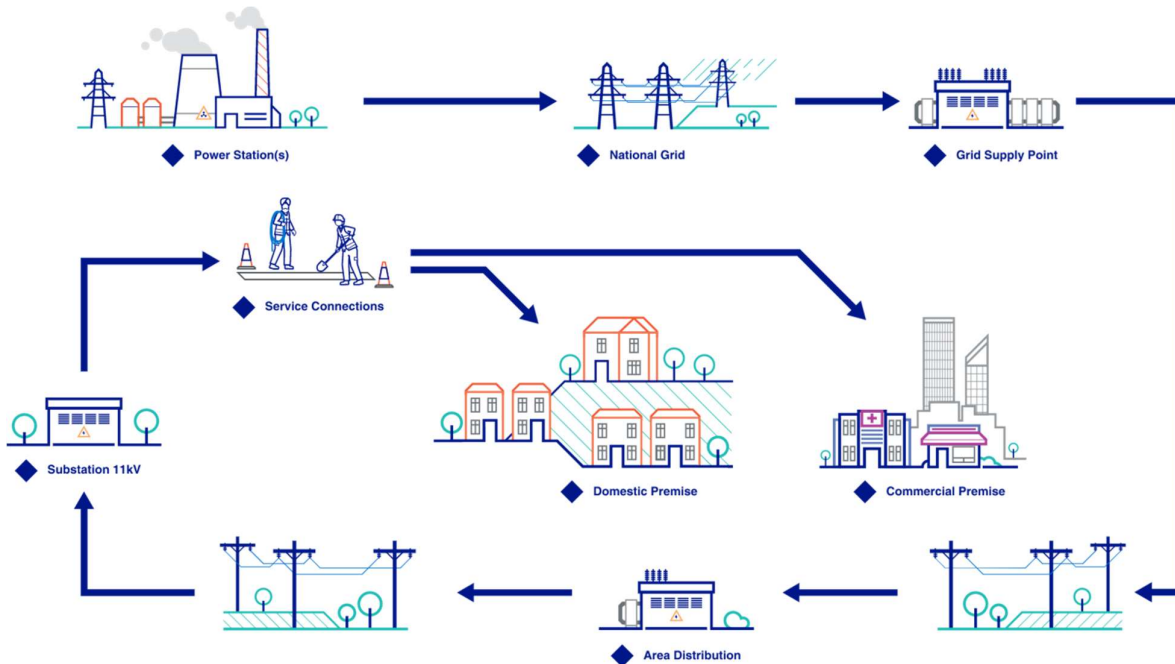


Figure 2 Energy provision structure, National Grid

#### **NATIONAL GRID**

The National Grid is the system operator of UK electricity and gas supply. It is the company that manages the network and transmission of electricity and gas to properties nationally. The National Grid network is made of high-voltage power lines, gas pipelines, interconnectors and storage facilities that together enable the transmission of electricity. The grid ensures that all areas of the UK have power supply. Within the network, there are many electricity distribution companies called Distribution Network Operators (DNO).

#### **LOCAL DISTRIBUTION NETWORK OPERATOR (DNO)**

Distribution Network Operators manage the electric power distribution system which delivers electricity to end users. There are 14 licensed DNOs owned by six different groups that cover specific geographically defined regions across the UK all regulated by Ofgem, and the two covering Greater Lincolnshire are Northern Powergrid and National Grid ED (previously Western Power Distribution). All DNOs are licensed companies that own and operate the network of towers, transformers, cables and meters that carry electricity from the national transmission system and distribute it throughout Britain.

DNOs manage distribution networks from 240V to 400 kV through underground and overhead power lines, this covers commercial, industrial and residential properties.

**Northern Powergrid (NPg)** – Transports electricity across the North East, Yorkshire and northern Lincolnshire to provide electricity supply to 3.9million homes and businesses across the regions. NPg are part of Berkshire Hathaway Energy. NPg business plan for 2023-2028 states;

*“Our plan positions us to take a leading role in enabling decarbonisation in our region and support future uptake in low carbon technologies such as electric vehicles and heat pumps. Our network will be instrumental in efficiently facilitating this transition, sitting at the heart of a decentralised, low carbon energy system that enables customers to be increasingly flexible with their energy use.”*

**National Grid Electricity Distribution (NGED)** (previously Western Power Distribution) – Transports electricity across Midlands, South West and Wales. NGED business plan (RIIO-ED2) for 2023 – 2028 is under consultation, but states that investment proposals are circa £6billion (increase of £1bn compared to present) with a goal towards net zero.

RLB note: transition of DNOs to DSOs. Map of NPg and NGED split across Greater Lincs to be included

### **INDEPENDENT DISTRIBUTION NETWORK OPERATORS (IDNOS)**

IDNOs provide an alternative route for businesses that want to connect to the electricity grid in the UK. Both distributors have many similarities, starting from the main concept - they own, run and maintain electrical infrastructure. The main difference is that IDNOs operate nationwide, without regional restrictions, to manage local networks. They are also regulated by Ofgem.

DNOs distribute electricity from the transmission grid for a large geographical area, whereas IDNOs distribute electricity from either DNOs, or the transmission network, to smaller local areas. Both DNOs and IDNOs are responsible for connection line faults and maintenance.

RLB note: Summary of importance and engagement to be included

### **SUBSTATIONS**

A substation is a part of an electrical generation, transmission, and distribution system. Substations transform voltage from high to low, or the reverse. Substations contain equipment that help keep our electricity transmission and distribution systems running as smoothly as possible, without repeated failure or downtime. Specialist equipment within the substation site can help prevent local network failures or power cuts.

There are two main types of substation; transmission and distribution. Transmission substations are where the electricity enters the power grid and convert it to a level that can be transmitted. Increasing or decreasing the voltage as it is transmitted ensures it meets the local distribution networks safely whilst minimising energy loss. Distribution substations then lower the voltage so it can be used in buildings safely.

National Grid owns more than 300 large substations, where 275kV and 400kV overhead power lines or underground cables are switched and where electricity is transformed for distribution to

surrounding areas. Smaller substations are owned and maintained by local distribution networks such as NGED and NPg.

### 3.4 SECTOR FOCUS

Within Greater Lincolnshire there are significant sectors where energy demand and supply is critical to development. Greater Lincolnshire LEP (GLLEP) have identified key sectors which are Agri-Food, Manufacturing, Visitor Economy, Energy, Health and Care, Ports and Logistics. Additionally, residential sector has been deemed as a sector where energy is critical to ensure ongoing investment.

Each of the above have been engaged with to understand the current situation and gain an insight into predicted development and significant changes.

#### 3.4.1 RESIDENTIAL

The residential sector is influenced by existing demand, predicted growth through direct population growth and through attracting those from other regions. Housing and the economy in Greater Lincolnshire are inextricably linked, contributing significantly to the local economy by creating two jobs for every house built<sup>1</sup>.

Greater Lincolnshire is committed to housing growth, with Local Plans working towards the delivery of 100,000 new dwellings by 2031<sup>1</sup>. The right mix of housing helps to attract and retain the workforce needed to enable growth, whilst new development generates employment opportunities and encourages spending in the local economy. Planned new developments will provide major growth opportunities along nationally important investment corridors. Our study has tracked all developments given to us by local authorities and planning portals.

All residential housing developments have been categorised into the following planning priorities;

- Short term, 1-3 years
- Medium term, 3-10 years
- Long term, 11+ year

Further engagement with key developers across the region required

#### Outcomes and recommendations

To be developed further by final report issue

### RESIDENTIAL DEVELOPMENT CASE STUDY SELECTION

An outcome required from this study was the identification of opportunities in Greater Lincolnshire where a more collaborative energy approach can deliver commercially viable net zero carbon development and achieve the wider objectives of this energy options analysis.

In order to establish the two housing sites a short list of twelve housing sites was formed based on the following criteria:

- Greater than 50 units by 2025



- The development has planning permission
- Construction has not begun and will begin in the next two years.

Following review between RLB and the IG it was confirmed that the two development schemes to be used as case studies for wider application of learned issues across the Greater Lincolnshire area are the **Lincoln Western Growth Corridor** and **Boston Toot Lane**.

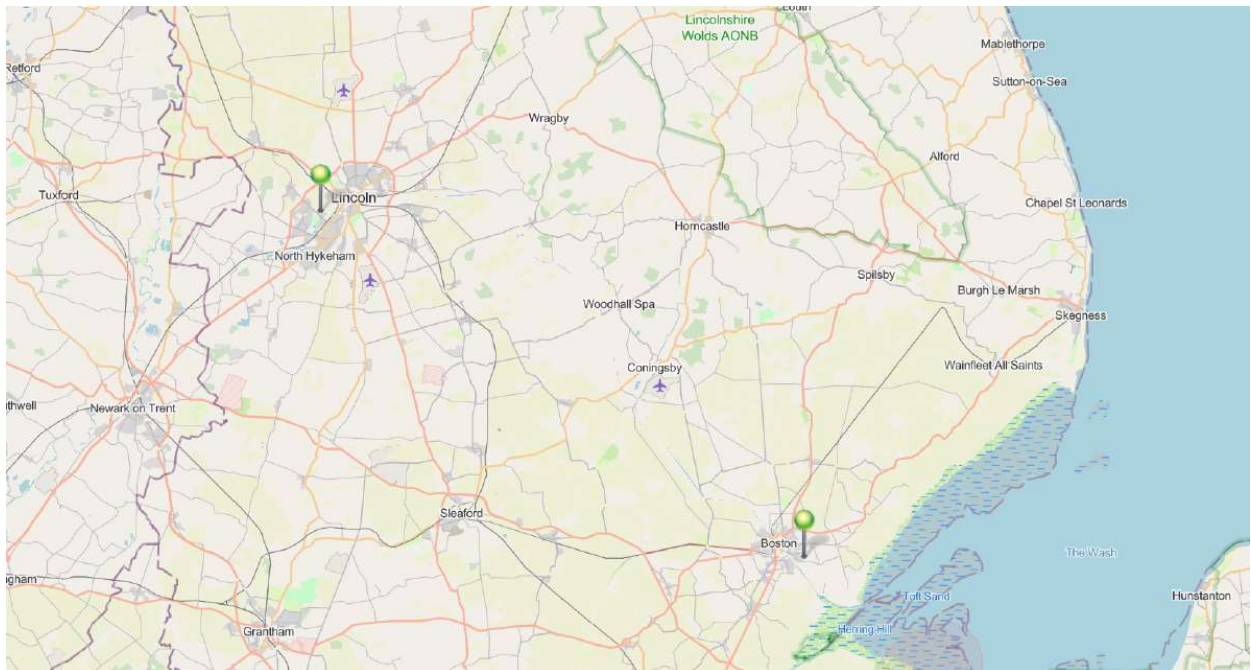


Figure 3 Location of chosen housing sites

These sites were selected based on the following factors:

- Ability for learning from the sites to add value to the overall commission / study
- Ability for this learning to be replicated through Greater Lincolnshire
- One Brownfield and one Greenfield site
- One Sustainable Urban Extension and one edge of town / semi-rural site
- Predicted housing values close to the Lincolnshire average
- Substation availability
- Scale and nature of development

Although the two sites do not reflect the full range of housing units, the combination of both provides a large site with great diversity and a smaller less diverse development. The main driver for the two sites selected is to capture as many aspects of housing developments as possible to have the greatest breadth of potential learning that can be applied to all new developments across the whole of Greater Lincolnshire – including future developments that are not yet scheduled, confirmed, or granted planning consent. This is intended to provide Greater Lincolnshire with the necessary tools and institutional capacity for future actions without the same level of need for external assistance. This has necessarily required some optimisation, being restricted to two case studies.

Further rationale is provided below for the site selections;

**Boston Toot Lane - 200 units**

- Low sub-station availability
- The development consists of greater than 50 units built by 2025
- Obtained full planning permission
- Construction has not yet commenced
- The area is representative of the average Lincolnshire housing price.
- The development is located in an area that can provide access to affordable housing

**Beaver Street (Lincoln Western Growth Corridor) 3,200 units**

- 4.679 MVA estimated demand, 5.2kW/unit
- Residential and commercial demand, challenges and constraints
- Planning consent granted
- Brownfield city site
- A Sustainable Urban Extension site, the findings/opportunities from the study could be replicated across GL, including at 7 SUEs in Central Lincs
- Outline planning permission awarded with start on site for phase 1 and infrastructure (spine road and new rail bridge) expected before 2025
- The largest site on the shortlist, 3200 homes
- An urban brownfield and greenfield site with a range of infrastructure challenges/opportunities.
- Utility strategy report available to provide energy requirement for the site
- Substation demand headroom 7.14 MVA and residential site will require 27MVA. Additional demand from surrounding commercial, residential and leisure developments threaten to stagnate development in this area in the medium/long term phases
- An agreed commitment between the 2 major landowners (City Council and Lindum) to deliver a commercially viable net zero carbon development.
- Large areas of land that is not suitable for housing has the potential for renewable energy generation/heat network

**3.4.2 INDUSTRIAL**

RLB held engagement workshops with a range of commercial / industrial organisations across the region. The key outcomes are detailed below.

**ABLE HUMBER PORT**

Able Logistics Park has now changed to Able Energy Park (AEP), with Able Marine Energy Park



being Able Humber Port (AHP). It is situated on the south bank of the Humber Estuary, which has been described as the Energy Estuary and in recent years it has been one of the UK's fastest growing port and logistics centres. AHP is potentially Europe's largest new port development as part of the growing marine renewable energy sector; this includes [Able Energy Park<sup>2</sup>](#) (AEP) providing an additional c. 1,000 acres of hinterland development to support a wide variety of port centric logistics functions.

The UK Government has identified AHP as a strategic location in the National Renewable Infrastructure Plan and HMG UK Treasury has confirmed AHP as the UK's largest Enterprise Zone, attracting 100% enhanced capital allowances.

### ABLE ENERGY PARK

Able Energy Park (AEP) is located at the top of the Humber Low Carbon Pipeline (as shown in Figure 3) close to the nearby Humber Ports.

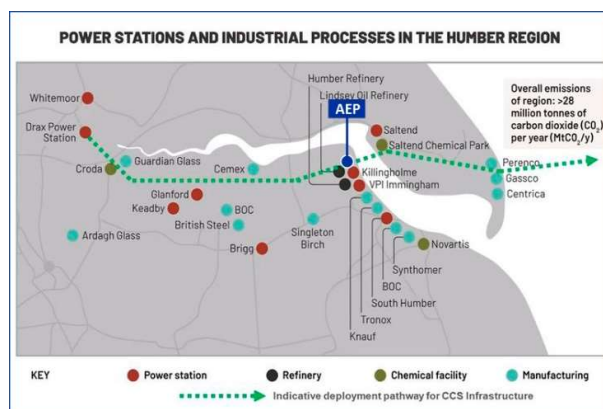


Figure 4 Able Humber Port / Humber Region

The site has local sources of electricity, including power supplied from renewable sources, most notably the Hornsea offshore wind farms, with a potential of a new carbon capture pipeline adjacent to the site. AEP states; “the Energy Estuary is pursuing the option to deliver the UK's first zero carbon cluster and help position the North of England at the heart of the global energy revolution”<sup>3</sup>.

AEP has a significant predicted demand with an investigative exercise being undertaken to determine if the local converter station can provide green supply from the substation or if there is an existing agreement to feed green energy back to the grid. There is an intent that green hydrogen will be produced; this is dependent on there being sufficient renewable energy supply. If there is not, then blue or grey hydrogen would be produced. Blue or grey hydrogen will not align with net zero aspirations as well as green hydrogen, however it will provide energy supply to the region. Additionally, there are numerous solar proposals surrounding both sites, many of which are seeking battery storage sites.

At present, the quoted dates required will be at the earliest 2.5 years before demand kicks in, with AEP clients requiring energy from 2026 of c. 200MW with the remaining anticipated energy demand within the next 5 years.

There are challenges not only for energy supply to the site, but water supply too on a clean, industrial scale. As Greater Lincolnshire moves towards attracting industry, it is likely that resource intensive industrial developments will require linked utility management supply and demand.

From the engagement with Able, there is potential for both significant energy demand and energy supply. However, until the developments progress further it is difficult to accurately predict either

demand or supply. A key item from engagement is that Able have been in discussions with IDNO management companies for both energy and water supply rather than the DNOs (NGED and NPg).

### **BRITISH STEEL**

British Steel’s headquarters are in Scunthorpe, Lincolnshire employing the majority of their 4,000 employees within North Lincolnshire. There is a period of significant investment ahead, aligned to their overarching decarbonisation strategy; committing British Steel to deliver net zero steel by 2050 and significantly reduce CO2 intensity by 2030 – 2035. This includes a £14.6million investment to enhance energy operations including projects to improve electricity and process gas usage. Due to soaring energy prices, the steel manufacturing industry has been hit hard.

The Scunthorpe manufacturing site imports 500M kWh of gas per year. The site has 2 CHP and a central power station to generate steam for the site which produces 19MW baseload, with 35MW generated internally. British Steel confirmed that grid connection is key to maintain the manufacturing plant, with a key risk being any issues with grid transmission connection. Relocation of the British Steel plant would need to be considered in respect of energy supply and energy cost, alongside their decarbonisation strategy. At present, they are reliant on market prices for low carbon energy. It is likely that hydrogen technologies will be adopted early for steel manufacturing.

Electrical requirements - 3 incomers from local network supply, not transmission connected - 220MW has been calculated to be the new upgraded supply requirements, with a need to upgrade the connections, this will likely be a transmission connection via National Grid.

National Grid Electricity Transmission (NGET) and British Steel have held informal discussions for the last five years. National Grid engagement is intended to restart after further feasibility studies for equipment requirements and private wire network assessments.

To note, at the time of interim report issue, British Steel have warned of potential reductions in workforce. It is unknown whether there will be government support to avoid this, and additionally unknown as to whether this will impact their energy requirements going forward.

**RLB note: IG to provide further contacts for commercial sector**

### **3.4.3 HEALTH AND CARE**

**Engagement with NHS attempted, to be actioned prior to final report**

### **EDUCATION**

**Engagement with universities attempted, to be actioned prior to final report**

### **3.4.4 AGRI-FOOD**

As part of the Greater Lincolnshire LEP Growth Strategy, agrifood/agriculture is a key sector for economic growth with an ambition to deliver sustainable, healthy food from land and sea by championing supply chain efficiency, the delivery of a Net Zero food chain and food which is naturally

healthy. This is intended to reinforce the position as the UK Food Valley and an internationally competitive food cluster.

Greater Lincolnshire is responsible for growing 30% of the nation's vegetables and producing 18% of the poultry, with a total agricultural output of over £2bn in 2019, representing 12% of England's total production. In total the food chain provides 24% of jobs throughout Greater Lincolnshire (as compared with just 13% nationally) and 21% of its economic output (7% nationally). The future of the food chain is therefore absolutely vital to Lincolnshire and its population, with the region being strategically important to national food security<sup>4</sup>.

The food supply chain accounts for circa 75,000 jobs within the region, therefore a significant sector for both employment and energy consumption. This sector is experiencing growth, with high levels of predicted investment. There are three key factors behind the sectors growth;

1. Brexit: increased costs to import food results in preference for local
2. Covid: global food supply chain impacted by disrupted labour supply
3. Low carbon supply chain: local food reduces carbon miles, reducing food wastage.

As part of the growth and investment in the agricultural sector, new facilities such as large scale greenhouses will be required. This can be to the scale of 150hectacre greenhouse, which would consume 150 MW.

As the transport sector looks to decarbonise, this will result in increased demand for EV facilities and hydrogen fuelled transportation. This will therefore increase energy demand. This will not be a wholesale switch to EV, as it is deemed inefficient in larger trucks due to weight and recharge times; with EV preferred option for small vehicles and machinery.

As there is more Grade 1 agricultural land than in any other LEP area in England, the Greater Lincolnshire agri-food sector is anticipated to double its contribution to the economy by 2030 through an ambitious programme of investment in productive capacity. This increase in productive capacity will have an impact on energy requirements, as technology investment grows.

The strategy for the sector includes building an economic case for investment in the strategic transport infrastructure to support agri-food sector growth, with a particular focus on road freight.

### **Outcomes and recommendations**

#### **To be developed further by final report issue**

A recommendation from this study is to integrate energy demand from the sector into Agricultural sectors strategy and collaborating on transport strategies where there is anticipated increase in EV demand.

Alternative technologies for energy generation such as Energy from Waste and Biofuels could be of significant benefit to the region; reducing grid energy demands for producers and allowing income through exporting back to the grid.

### 3.4.5 PORTS AND LOGISTICS

Greater Lincolnshire is expected to experience projected population growth, alongside economic growth across key sectors. To facilitate this, transport infrastructure requires investment. This impacts energy in two ways;

- Switching to lower carbon transport resulting in increased demand for EV charge points, particularly for strategic transport hubs
- Economic growth particularly across low carbon energy generation / carbon capture which requires operations and maintenance, and across agriculture, chemicals, ports and logistics increasing transport demand and improvements.

From analysis of Transport for North and Local Authority transport strategies, it is clear that the move towards sustainability and enhancing active travel in urban areas are key for the next decade. Increasing the opportunities for sustainable modes of transport such as public transport, cycling and walking for commuting, leisure and recreation is intended to reduce private car demand.

When considering road networks and private transportation, there are developments both current and scheduled for EV charging networks across the wider region. An example of this is the rapid charging fund (RCF), which is a £950 million fund to future-proof electrical capacity at motorway and major road service areas to prepare the network for 100% zero emissions vehicles (ZEV) uptake. A local case study is the LEVI scheme (Local EV Infrastructure) pilot – Lincolnshire County Council advised that as part of this successful bid 109 EV charging points will be installed across the Lincolnshire area, site locations are being reviewed, subject to approval. Locations have been selected primarily due to their proximity to areas highly reliant on on-street parking and with a lack of current charge point provision. The charge points themselves will include slow and fast charging. The project will go out for tender in January 2023, and it is anticipated that Charge Point operators will be talking to DNOs from January - March to discuss the best way forward.

It is worth considering that the additional wider infrastructure for EV is likely to increase the attractiveness of private EV ownership, which can then result in additional demand both at a local residential unit level and across the wider infrastructure network.

#### Outcomes and recommendations

To be included in final report issue

### 3.4.6 ENERGY

Greater Lincolnshire has significant ambitions in the energy sector, aligning to the Humber Estuary Plan; the acceleration of clean growth and the potential to be a global leader in the transition to net zero carbon emissions in line with the ambition of the Green Industrial Revolution presents a significant opportunity. In more rural parts of Greater Lincolnshire there remains huge potential to provide an innovation test bed for clean energy and whole system technologies.

This study has considered the below energy initiatives; these have the potential to significantly impact the energy landscape across Greater Lincolnshire over the next decade. A note of caution should be

applied to predicted growth of energy industry where there is non-confirmed funding, planning or agreements in place.

It is clear to see that the region has the potential for huge growth, but is not maximising partnerships across the region to the fullest possible extent.

### **EAST COAST CLUSTER**

The East Coast Cluster (ECC) is a collaboration between Zero Carbon Humber, Net Zero Teesside and Northern Endurance Partnership.

The ECC is enabled by the Northern Endurance Partnership (NEP) comprising BP, Equinor, National Grid Ventures, Shell and TotalEnergies. Together the partnership will develop the infrastructure needed to transport CO<sub>2</sub> from across the Humber and Teesside to the Endurance Carbon Store, located 145km offshore in the Southern North Sea.

Survey works have commenced, which will inform engineering plans for pipelines connecting the onshore CO<sub>2</sub> transportation and storage network with the offshore Endurance Carbon Store. The ECC is intending to deliver the following which will impact Greater Lincolnshire;

- Decarbonise industry: potential to tackle almost 50% of the UK’s total industrial cluster CO<sub>2</sub> emissions – *significant area of North Lincolnshire*
- Support levelling-up: creating and supporting an average of 25,000 jobs per year to 2050 and underpinning new low carbon industries in the north of England – *significant area of job creation in Greater Lincolnshire*
- Kick-start a hydrogen economy: supporting the creation of low-carbon hydrogen projects to deliver 70% of the UK’s hydrogen target for 2030 – *job creation and energy generation across the region*

### **ZERO CARBON HUMBER**

Zero Carbon Humber is a collection of international energy producers, major regional industries, leading infrastructure and logistics operators, global engineering firms and academic institutions. The group are working to deliver low carbon hydrogen production facilities and essential carbon capture usage and storage (CCUS), together with region-wide infrastructure that will enable large-scale decarbonisation across the country’s most carbon intensive region.

Hydrogen to Humber (H<sub>2</sub>H) Saltend is intended to be the worlds largest hydrogen production plant with carbon capture at Saltend Chemicals park. It will be the starting point for a carbon dioxide (CO<sub>2</sub>) and hydrogen pipeline network developed by National Grid Ventures, connecting energy-intensive industrial sites throughout the region, offering businesses options to directly capture emissions or fuel switch to hydrogen.

All captured CO<sub>2</sub> will be compressed at Centrica Storage’s Easington site and stored under the southern North Sea using offshore infrastructure shared with the East Coast Cluster. It is expected that this will be available to organisations in Greater Lincolnshire. Hydrogen production requires significant energy supply to produce either blue or green hydrogen – the wider benefits of energy supply and economic generation will be particularly relevant to this study.

## HUMBER LOW CARBON PIPELINES

Nearby to and of significance to Greater Lincolnshire, is the UK’s largest industrial cluster, the Humber which is responsible for producing 12.4 million tonnes of CO<sub>2</sub> emissions per year. It’s home to a high concentration of fossil-fuel power stations and large industrial plants that release millions of tonnes of carbon dioxide (CO<sub>2</sub>) every year. This makes it an ideal and important location for clean growth projects using carbon capture, usage and storage (CCUS) and hydrogen. The intent from this project is to play a crucial part in helping the UK to transition to a low-carbon economy and reach its ambitious net zero targets by 2050.

The Humber Low Carbon Pipelines project is a significant part of the Zero Carbon Humber vision, to become the UK’s first net zero carbon cluster by 2040. The project aims to deliver new onshore pipeline infrastructure to transport the captured carbon emissions from the regions industrial emitters for safe storage in the North Sea, and enable industries to fuel-switch from fossil fuels to low-carbon hydrogen.

## KEADBY 3 CARBON CAPTURE POWER STATION – SSE THERMAL

Carbon capture and storage (CCS) is a technology that has the potential to capture at least 90% of the carbon dioxide emissions produced from the use of fossil fuels in electricity generation and industrial processes, preventing the carbon dioxide from entering the atmosphere.

The CCS chain consists of three parts; capturing the carbon dioxide, transporting the carbon dioxide, and securely storing the carbon dioxide emissions underground, in depleted oil and gas fields or deep saline aquifer formations.

Keadby 3 will connect to the shared infrastructure being developed by the East Coast Cluster to transport the captured CO<sub>2</sub> and store it safely offshore. The installation of CCS into a power station utilises a significant amount of energy to run therefore has the potential to significantly reduce the efficiency of the power station.

Whilst CCS does not generate energy, it is a key part of this study as it will enable decarbonisation of energy across the region; which has been a theme throughout all stakeholders engaged with. It is likely that CCS will be required to decarbonise the energy consumed by heavy industry such as steel within the region, where demand is consistently high and renewables will not provide sufficient supply and continuity in the short term.

## ALTERNATIVE TECHNOLOGIES

RLB: further expansion of this sector including engagement summaries to be included in final report

- Geothermal - Geothermal projects are occurring across Greater Lincolnshire, ranging from geothermal heat pump drilling of boreholes in Lincolnshire to Scunthorpe General becoming the first NHS Hospital in England to use renewable geothermal power for heating and hot water.
- [Biomass](#)
- [Energy From Waste](#)
- [Hydrogen](#)



- Solar PV
- Anaerobic digestion (AD)
- Nuclear
- Onshore wind
- Offshore Wind - Offshore wind has been excluded from this study, as it connects at National Grid level above the DNOs 132 kVA level.

## 4.0 KEY LINES OF ENQUIRY

The sources of information from various stakeholders are ever changing as the developments are constantly in a state of flux. Regarding energy networks, the main challenge has been to provide a robust and up to date analysis of the capacity in the networks. As network operators are constantly under scrutiny by the regulator, they are tasked with exploring innovation to provide a flexible network and alleviate, where possible, reinforcements. However, this is not always possible especially where networks have been underfunded and not maintained due to license constraints.

RLB have reviewed local energy networks alongside how national transmission could benefit the county and local areas, with the intent of understanding how new opportunities for generation and distribution could promote private investment.

RLB note – final report will focus on expansion of KLOE, playing back initial findings to stakeholders (public and private) and summarising research concluding during this period.

- **To challenge whether the provision of energy genuinely affects viability, differentiating between the levels of National Grid, Local Distribution Network Operator (DNO) and local energy operators – and whether a decision to implement local innovative solutions could deliver necessary local requirements.**

Engagement with key energy stakeholders

Developed an analysis of current energy supply, future strategies for increasing

Blockers, constraints and risks included in the report

It has been acknowledged that there is a shortfall in electrical capacity within the Greater Lincolnshire area of power capacity and this has been determined by several developments providing advice and evidence to that effect. RLB have engaged with NGED and NPg, with a view of aligning the need for additional capacity and generation. As part of this study, consideration has been given to how private generating companies could assist the long-term objective of growing and investing the local areas.

NGED and NPg both have future growth strategies in place, which are currently out for consultation.

There are methods of managing energy demand which are driven by monitoring limits on networks and allocating maximum capacity to customers in that area, typically based on connection application dates. This method is called Active Network Management (ANM). This Last In, First Out (LIFO)

hierarchy prioritises the oldest connections when issuing capacity, but is scalable so that new entrants will get access to the capacity when it becomes available.

Where constraints are driven by DNO limits they may be referred to as Distribution Active Network Management (DANM) and for National Grid constraints Transmission Active Network Management (TANM). Both DANM and TANM constraints are handled by the same ANM systems per zone.

- **To identify how authorities could work together to build the scale to make an alternative energy offer attractive to the private sector, and to provide a forum for the private and public sectors to collaborate on specific schemes, creating the environment for a strong dialogue that leads to investment in priority sites.**

Sector analysis carried out to understand current risks and constraints that may be preventing private / public sector development

Next stages will include detailed suggestions for energy offers based on local position and opportunities

The opportunity for alternative energy supply at scale within the region is significant – from a review of economic activity across the region, the energy sector has held steady during the recent turbulence caused by the pandemic. This bodes well, particularly paired with the investment (private and publicly funded) into the Humber region to generate energy supply and industrial economic market increase; this will not only impact the regions energy supply and demand, but the wider economy through employment, infrastructure requirements and innovation.

To progress the energy analysis of the region, it is suggested that utilising local authority leadership and central government relationships to drive insight, funnel investment and create an attractive, local centric environment for energy generation and investment would be of benefit. This could be driven through Greater Lincolnshire LEP, ensuring links to central government are integrated to create insight into funding, future strategies and policy. This streamlined approach of generating a forum of collaborative, shared knowledge can facilitate a centre of excellence and innovation, to attract private investment into the region and strengthen the robustness of energy supply in the future.

Prior to deregulation of the utility market, developers and investors could only engage with the monopolistic incumbent statutory utility providers. These organisations still exist today but are all now in private ownership. However, the obligation to provide a connection to a customer remains. It is suggested that any forum/committee reviewing the energy market going forward should appraise different models available since de-regularisation, to include but not limited to Asset leasing, Asset SPV, Asset sale, adoption, and concession arrangements. All of these have the potential to attract private investment and innovation; this has been demonstrated by commercial organisations reaching out for information beyond DNOs to explore other options.

Existing groups and forums do not currently have consistent structured engagement with NPg and NGED. A key recommendation from this study is to integrate all DNOs into energy forums and committees to improve information sharing, collaboration and continuous improvement. There are NGED Local Investment Workshops, one of which covers Lincolnshire. At present, this appears to be

the main opportunity to provide feedback on local investment. It is clear that a coordinated approach between Greater Lincolnshire and local DNOs would be of significant benefit.

- **To strengthen the connection between energy and other utility provision, notably digital infrastructure, and the internet of things.**

All sectors are predominantly focused on energy supply rather than other utility provision

Significant investment into digital accessibility for energy providers

Key focus area for next stage of the report

Through this study, it is clear that two main focus points have been shown by the stakeholders engaged with – residential demand through the region, and industrial development across the north. Considering strategic districts like Boston and the wider agricultural areas where alternative energy production could be utilised should be prioritised (RLB will progress this area of focus throughout the next stage of the report). These could be Energy from Waste and biomethane; both options can be linked to the thriving agrifood industry. The growth in agrifood presents a challenge of finding net zero/carbon negative networks by providing a secure, reliable, and affordable energy systems. Creating an attractive environment for innovation and investment in this area will address this challenge and further, the ability to export energy (heat and/or power).

There are many options for alternative energy generation. Through a focused, strategic approach per sector options can be considered within the remit of current policies and charters; sustainability long term; with opportunities to work collaboratively to provide a holistic approach to energy generation and distribution; and offering opportunities for end-user cost savings as well as income generation.

Water supply has been noticeably less concerning for developments across most sectors. However, with the increasing investment in industrial hubs across Greater Lincolnshire and the Humber, the focus of water supply to industry is becoming critical. Engagement held during this study have shown developers reaching out to independent DNOs for both energy and water supply.

The National Grid is commencing with the next stage of a new Government-backed project to explore how satellite imagery and data analytics can improve the resiliency of the UK’s gas and electricity infrastructure, potentially helping to reduce blackouts while cutting emissions.

- **To provide a forum for the private and public sectors to collaborate on specific schemes, creating the environment for a strong dialogue that leads to investment in priority sites.**

Engagement held with public and private stakeholders

Existing forums are not providing an environment for specific scheme collaboration

Focus to be on investment specific to region opportunities e.g. clean energy generation

ToR and detailed forum guidance to be provided in next stage

## 5.0 FUTURE DEMAND ANALYSIS

A large quantity of data on the future developments was obtained from the seven district and two unitary authorities in the Greater Lincolnshire area. The intent behind the GIS mapping exercise is to enable the ability to develop key/targeted decisions based on the need to secure significant inward investment, where this is needed from National Grid/DNOs based on what we know as the regions growth areas.

The data collected was via documents submitted from the seven district and two unitary authorities as well as further investigation by the RLB team. Circa 250 documents were gathered in the data analysis phase. On top of the analysis of documents, research, engagement via email and virtual meetings was undertaken in search of further information that was not contained in the submitted documents.

The bulk of the information was gathered from the Local Plans adopted by the various councils and each district into each council. The local plans contained planning data on residential, commercial and industrial developments. There was also information on projected future energy demand. Based on this information, further research was carried out by the RLB team into obtaining further details on the developments contained in the plans and also other developments that were relevant. Further consultation was sought with each district on any developments that considered would be relevant to the project.

There were consultations with third party stakeholders that were considered large energy users in the council areas about the projects for their future energy use. This type of data was not available to the districts councils and required a direct approach.

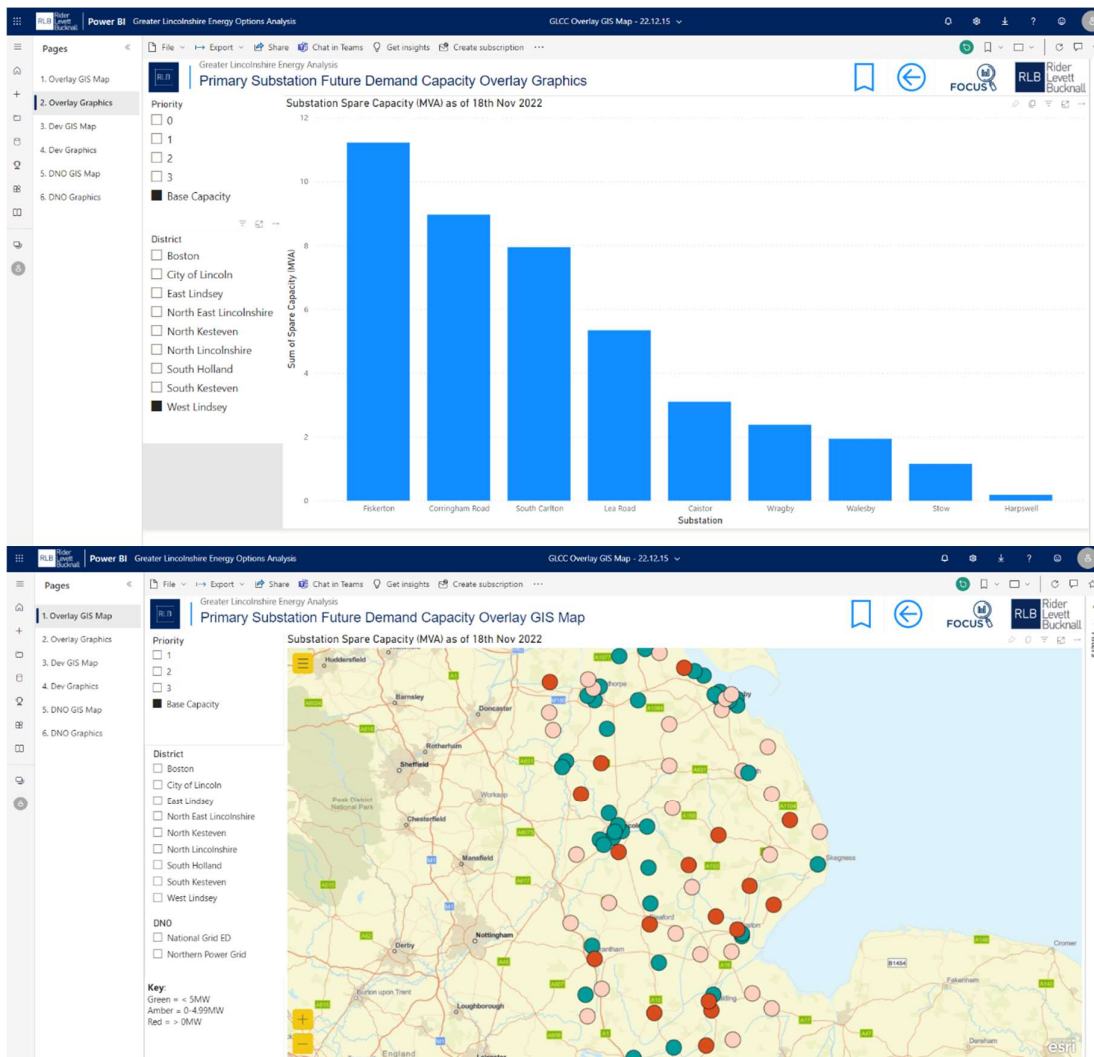
The data was compiled into a spreadsheet and the total energy load was calculated based on the number of residential units or area of development. This information was then used to gather a picture of the future energy demand for the region.

This data was analysed for relevant information relating to energy demand from future developments. The data was inputted into a detailed spreadsheet that calculated the electrical demand in load and over a predetermined timeframe. Concurrently, data was gathered from the two Distribution Network Operators (DNOs), Northern PowerGrid and National Grid ED.

Each primary substation in the Greater Lincolnshire area was assessed to determine the demand headroom availability for each. This information was inputted into a spreadsheet to allow for the analysis of the demand availability in the Greater Lincolnshire area. Both sets of data were overlaid on top of each other to determine the amount of demand headroom that would be available in each primary substation with the introduction of the future developments. This information can be found here;

- Greater Lincolnshire Priority demand: [LCC Energy Demand - Priority 1 – Google My Maps](#)
- Northern PowerGrid demand availability: [Demand Availability Map | Northern Powergrid](#)
- National Grid: Energy Distribution network capacity: [National Grid - Network Capacity Map Application](#)

To provide a visual representation of the data, Microsoft Power BI was used to create a GIS map with a red, amber, green representation that allowed the client a clear image of where there will be a shortage of demand in the future.



An analysis of the information gathered gives a picture of the energy demand and availability in the Greater Lincolnshire regions over the next twenty years.

There are a number of areas that will require significant investment in the electrical infrastructure while other areas have adequate supply for the future. In North Lincolnshire and North East Lincolnshire there will be a large investment in industrial developments that will require a similar investment in the electrical infrastructure. Similarly in the City of Lincoln, there will be a significant increase in the number of residential dwellings that will impact on the electrical infrastructure. Other large towns in the region will see similar growth while rural areas of Greater Lincolnshire will see less of an increase in demand.

General rules of thumb and industry standards have been used to calculate the anticipated power demand for each area. It was explained that large power users in the area e.g., British Steel and the NHS had also been engaged with.

The mapping has been based on worst case scenario and maximum demand, based on 5.4 kVA per house (considering low carbon technologies).

The housing sites have been grouped in terms of priority based on the below:

Priority number	Justification
1	High priority - LCC Partner with live requirement - 1 - 3 years
2	High priority - confirmed 3rd party demand, LCC sites requiring future proofing, 4 - 10 Years
3	Consented development - status unknown, Unconsented but highly likely to come forward, 11+ years
4	Potential future demand

RLB note: final report to include analysis of the following;

Project Energy Demands

Project capacity short falls

Infrastructure investment

## 6.0 SUMMARY & RECOMMENDATIONS

### 6.1 KEY FINDINGS

Clear shift towards innovation and alternative energy sources across the region

Net zero is a common theme across all sectors, echoed by the shift in energy providers and increase in private investment

Inconsistent collaboration across the region

**RLB note: findings and recommendations to be developed and enhanced throughout next stage. Please note: this will include local specifics for Greater Lincolnshire.**

Greater Lincolnshire

#### **Outcomes and recommendations**

#### **RECOMMENDATION A – FUTURE ENERGY FORUM**

Facilitation of a private and public future energy forum / committee, focused on demand vs supply. Throughout the data analysis it was found that significant developments often hadn't engaged with the local DNOs. This impacts the viability of future development, the robustness of predicted future demand, and slows down the process of enabling new developments through lack of early engagement.

As part of this forum, it is recommended that beyond energy demand and supply, consideration of energy intensity reduction initiatives are included alongside efficient resource management. The management of resources such as electricity will benefit society and reduce costs as well. The more energy efficiency and resource management that is undertaken the greater benefit that will transpire. Reducing of existing demand and improving efficiencies whilst identifying new energy infrastructure requirements to promote growth will be critical to robust, resilience energy for the region.

Energy supply is critical to commercial developments, therefore engagement with Greater Lincolnshire energy stakeholders (private and public) will be key to enabling development. Organisations such as British Steel are engaged with UK government, as UK wide policy driving decarbonisation is integral to achieving targets. Smaller scale organisations will also require not only access to support, but a forum to understand capacity across all levels of energy infrastructure in the area, and are less likely to have existing relationships.

Organisations such as British Steel are engaged with UK government, as UK wide policy driving decarbonisation is integral to achieving targets. Smaller scale organisations will also require not only access to support, but a forum to understand capacity across all levels of energy infrastructure in the area, and are less likely to have existing relationships.

It is recommended that a Greater Lincolnshire Energy Committee/Forum is created. Our recommendation is to consider the following to participate;

- Key relevant and influential members of each local authority
- Representatives of each DNO
- Representatives of significant future demand / development
  - Able Energy Park
  - Humber

Benefits analysis to be included

### **RECOMMENDATION B – ENERGY PUBLIC / PRIVATE PARTNERSHIP**

Whilst public-private partnerships (PPPs) can be challenging to deliver and not without controversy, robust and well-coordinated partnerships present opportunities to bring together the resources, expertise, and powers available in ways that cannot be achieved by either sector in isolation. As such, councils are now rightly exploring how this investment could unlock a range of social, environmental, and economic benefits aligned to local and national priorities.

When considering PPPs from a collaborative angle, there are two impacts that the energy sector can have. These are net zero and energy security/fuel poverty. “The cost of achieving net zero is calculated to be at least £200 billion. If we can find the right financing models we can turn this cost into an investment opportunity, and a ‘skills and jobs dividend’. Local and national government need to work together with the investment community to realise this massive dividend.”

An example of this is Energetik, an energy company that was established by Enfield Council and has wide ambitions to service residents across the borough with low carbon energy, with surpluses reinvested into infrastructure and education programmes. Energetik highlighted that councils are well placed to deliver more affordable energy solutions for residents. Where the private sector would seek to return a margin, the public sector can elect to reinvest surpluses to deliver low and transparent tariffs.

Recommendation to be developed with further details.

### **RECOMMENDATION C - DRIVING FORWARD CLEAN ENERGY**

Shifting focus from energy supply to integrate sustainable energy as a fundamental shift. Previously focused on cost and risk, sustainability is viewed as investment and opportunity.

The emphasis is now on Energy capacity generation innovation, differential and growth.





**APPENDIX A:  
REFERENCES**

## Figure references

Figure 1 Greater Lincolnshire LEP

[https://www.greaterlincolnshirelep.co.uk/assets/documents/2875\\_GL\\_LEP\\_Revival\\_Plan\\_ART\\_-\\_No\\_logos\\_page.pdf](https://www.greaterlincolnshirelep.co.uk/assets/documents/2875_GL_LEP_Revival_Plan_ART_-_No_logos_page.pdf)

Figure 2 Energy provision structure, National Grid [National Grid - About us](#)

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1. Greater Lincolnshire LEP <https://www.greaterlincolnshirelep.co.uk/priorities-and-plans/priorities/priority-2/>
2. Able Energy Park <https://www.ableuk.com/sites/port-sites/humber-port/able-logistics-park/>
3. Able Energy Park <https://www.ableuk.com/sites/land-sites/able-energy-park/>
4. Greater Lincolnshire LEP <https://www.greaterlincolnshirelep.co.uk/priorities-and-plans/sectors/agri-food-sector/>



**APPENDIX B:  
REGIONAL DEMAND AND SUPPLY ANALYSIS DATA**

Development demand and supply data to follow



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**Open Report on behalf of Andy Gutherson, Executive Director - Place**

Report to:	<b>Environment and Economy Scrutiny Committee</b>
Date:	<b>11 April 2023</b>
Subject:	<b>Waste Engagement Initiatives</b>

**Summary:**

The Environment Act 2021 will potentially see a number of changes to household waste collections and other initiatives that will provide the biggest changes in the waste sector for over 20 years. As a result, the service understands that this will require behaviour change to meet the changes from both within the service, and also from the general public as our customers.

In order to both meet the changing needs that the legislation will bring about, and to support residents to be accountable and responsible for their actions in meeting the waste hierarchy, Lincolnshire County Council (LCC) has invested time and effort in public engagement to help meet these changing demands. This report summaries those activities to date and details actions going forward.

**Actions Required:**

The Environment and Economy Scrutiny Committee is invited to review and comment on the contents of this report and seek assurance that action is taken that allows Lincolnshire County Council to adhere to its statutory obligations as Waste Disposal Authority and continue to improve the efficiency of the service.

## **1. Background**

Lincolnshire County Council Waste Services introduced the role of the Performance and Improvement Officer as part of the Twin Stream roll out trial in 2019. Building on the success of the trial and the decision to roll out the initiative county-wide, this role and its effectiveness was reviewed. Data and feedback from the trial showed that the public were very keen to engage and play their part in recycling and waste minimisation and therefore it was agreed that engagement was an integral part to this and has grown from then onwards.

In order to deliver sustainable engagement a number of activities and initiatives have been put into place including:

## Lincolnshire County Council Performance and Improvement Team

A team of officers directly employed by the Waste Service has been established and their successful interventions include:

- Supporting the rollout of waste improvement projects including the Twin Stream initiative and also engaging with members of the public at our Household Waste Recycling Centres (HWRCs) and numerous community events.
- Directly engaging with members of the public subject to the roll out of Twin Stream; in excess of 3000 direct reactive visits to householders have taken place over the last two years, helping residents to put the right thing in the right bin and improve the quality of waste collection and disposal.
- Proactively working with the waste collection authorities (WCAs) to support the collection rounds and engage on-street with residents to help address queries and concerns.
- Sustainment plans to continue to work with the WCAs that have implemented the twin stream rollout to help to maintain improvements to the quality of the recycling collected which has shown that contamination levels have reduced from 32% to below 15%.
- Development of a community and schools programme “Let’s Talk Rubbish” which delivers presentations, talks and activities to bring to life the importance of the waste hierarchy and encourage participants to think about and change their behaviour towards waste creation and disposal. Over 250 primary schools in Lincolnshire have been contacted and in the last 12 months the team have worked with over 30 of these schools and engaged with over 600 children. A further 23 schools have already signed up to the programme in the current year.
- Delivering talks and engagement sessions to with wider community groups such as Residents Associations, Women’s Institute, Cubs and Scouts.
- Delivering engagement via market stalls to residents.
- Engaging at community events including Lincolnshire Show, Revesby County Fair, Lincolnshire Wolds Festival.
- Working alongside FCC Environment Ltd to facilitate over 20 schools and community visits to the Energy from Waste facility at North Hykeham as well as welcoming over 600 visitors to the successful open day.

The demand on the team to support activities is growing on a daily basis and therefore shows the effectiveness of public engagement. Feedback from schools and community groups is sought and examples are shown below:

*“The afternoon was fantastic. It was amazing hearing all the interesting things that the children learned from your visit. Every aspect was engaging for the class, you could see they were all hanging off your every word. Some children that don’t normally engage and put themselves out there were fully engaged and interacting. This was amazing.”*



*“Positive across the school was overwhelmingly positive with both adults and children stating that they had learned something new. Thank you so much for coming!”*

*“A fabulous learning experience for all pupils. All were engaged throughout, and they were keen to share prior experience and ask questions. Thankyou”*

*“Great presentation and very engaging for the children.”*

### **University of Lincoln Engagement**

The service has established a relationship with the School of Geography and wider Student Services at the University of Lincoln to support students within the campus and wider community. For the last four years we have been invited to deliver a lecture to the third year students on the subject of Waste Management in Lincolnshire which has been well received and now forms a core part of the final semester for students.

In addition, we have successfully hosted a student placement to support Year 2 of the Geography course and have been approached to host further students in both Years 2 and 3 along with potential opportunities to host work experience placements.

We are also planning activities for the new academic year to work with the Student Services division and the Student Union to support new and returning students to the city in ensuring they minimise waste and maximise recycling in both student accommodation and across the wider city. These will include engaging at freshers’ fairs, open days and wider university events.

### **Customer Digital Strategy (CDD) and Website Improvements**

As part of the CDD project Waste Services has been engaging with the project leads to improve customer access to the service. Having undertaken an initial analysis of customer interactions by both telephone, email and via the website the Waste Services pages of the website have been redesigned to best meet the needs of our residents, making it easier to access the most sought-after information, introducing regular Twitter and social media notifications where there are any service disruptions and updating the telephony IVR messaging to address the most common enquiries.

To this end a new page giving a comprehensive A-Z of waste types has been introduced to the website to allow residents to understand how to correctly dispose of waste both at kerbside and at the HWRCs and the interactions with this continue to be analysed and ongoing improvements made to the service.

The next steps include ongoing use of data and analytics to understand how best to meet customers’ needs and, where appropriate, support them to self-serve for most common enquiries.

## **Communications Campaigns and Strategy**

As part of the Lincolnshire Waste Partnership the importance of providing a clear, concise, and effective communications package is imperative. The current focus is the 'Right Thing, Right Bin' campaign, enabled by achieving our Joint Municipal Waste Management Strategy (JMWMS) objective "to move towards a common set of recycling materials".

In line with the Consistent Collections identified in the Environment Act 2021, the list of recyclables accepted across Lincolnshire has been reviewed and used to focus the 'Right Thing, Right Bin' campaign making it easier to explain to residents what should go in which bin. Using the Residents Recycling Panel, assets and materials have been created in written, pictorial and video form to help provide clear, consistent and recognisable messaging across the county. The campaign is now being used across the partnership on marketing materials and social media platforms to convey ongoing messages.

### **2. Conclusion**

We continue to build our community presence and working with partners in the Lincolnshire Waste Partnership to deliver programmes and engagement to ensure that there is consistency and improvements across Lincolnshire.

In this direction, we ask that the Environment and Economy Scrutiny Committee review and comment on the contents of this report and seek assurance that action is taken that allows Lincolnshire County Council to adhere to its statutory obligations as Waste Disposal Authority and continue to improve the efficiency of the service.

### **3. Consultation**

#### **a) Risks and Impact Analysis**

N/A

### **4. Background Papers**

No Background Papers within section 100D of the Local Government Act 1972 were used in the preparation of this Report.

This report was written by Rachel Stamp, Waste Partnership and Projects Manager, and Mike Reed, Head of Waste, who can be contacted on [Rachel.stamp@lincolnshire.gov.uk](mailto:Rachel.stamp@lincolnshire.gov.uk) and at [mike.reed@lincolnshire.gov.uk](mailto:mike.reed@lincolnshire.gov.uk).



**Open Report on behalf of Andy Gutherson, Executive Director – Place**

Report to:	<b>Environment and Economy Scrutiny Committee</b>
Date:	<b>11 April 2023</b>
Subject:	<b>Twin Stream Recycling Update</b>

**Summary:**

In July 2019, the Lincolnshire Waste Partnership agreed to commence a trial to collect paper and cardboard separately from the rest of the mixed dry recycling (MDR). The aims of the trial included:

- Improving the quality and volume of paper and card recycled.
- By reducing contamination, the separated paper and card will be made into paper again, which can be repurposed many times, rather than just into a single use product.
- Changing customers' behaviours.
- Using the opportunity to improve quality of the MDR stream.

Following the success of the trial a decision was taken in 2020 to implement the model across the whole of the county on a district-by-district basis.

**Actions Required:**

The Environment and Economy Scrutiny Committee is invited to review and comment on the contents of this report and seek assurance that action is taken that allows Lincolnshire County Council to meet objectives defined within the Joint Municipal Waste Management Strategy and help contribute towards the Lincolnshire Waste Partnership objective of "seeking the best environmental option to provide innovative, customer-friendly waste management solutions that give value for money to Lincolnshire."

**1. Background**

An initial trial to prove a concept and provide learning began in 2019 with Lincolnshire County Council working in partnership with three of the waste collection authorities as part of the Lincolnshire Waste Partnership (LWP). Following the success of the trial, the Lincolnshire Waste Partnership initiated the implementation of a county-wide roll out on a district-by-district basis commencing in 2021.

The implementation of the Twin Stream Programme has now been rolled out in four of the seven districts across Lincolnshire as follows:

- Boston Borough Council – commenced April 2021
- North Kesteven District Council – commenced October 2021
- West Lindsey District Council – commenced April 2022
- East Lindsey District Council – commenced October 2022

A team of Lincolnshire County Council officers, the Performance and Improvement Team, have worked in partnership with each of the Waste Collection Authorities (WCAs) to enable the successful implementation across each of the districts listed above. With each sequential roll in, lessons from previous implementations have been reviewed and learned and each phase of the project adapted accordingly taking these learnings into account and also taking into consideration the unique characteristics of each authority’s area and demographic. The Performance and Improvement Team is now working with each of these authorities to embed and sustain the improvement achieved. Opportunities and challenges are addressed on a regular basis to revisit specific areas of the districts where there is high prevalence of contamination in either the mixed dry recycling or the paper and card collections.

The programme has been supported by a robust and combined communications and engagement plan with ‘Right Thing, Right Bin’ messaging being adopted by all of the WCAs in order to improve quality overall in the materials collected in Lincolnshire for recycling.

**Performance data to date:**

Since the inception of the roll in of separate paper and card collections, a total of 13,909 tonnes of separate fibre has been collected (up to February 2023) with a breakdown as follows:

<b>Authority</b>	<b>Date commenced</b>	<b>Total tonnage collected</b>
Boston BC	April 2021	3,845
North Kesteven DC	October 2021	5,980
West Lindsey DC	April 2022	2,700
East Lindsey DC	October 2022 (phased)	1,384

Quality metrics show an average of 1.5% contamination in the paper and card collected, reported by the paper re-processor, Palm Recycling, as being the highest quality material presented to them by any local authority client in the country.

In respect of the quality of the mixed dry recycling, combining the quality of the remaining fractions (metals, glass, and plastics) with the paper and card shows that prior to the commencement of the implementation the average contamination rate was 31%. Reports at the end of Quarter 3 show contamination rates combined for the two kerbside bins (MDR and Paper and Card) as follows:

- Boston BC – 16.72%
- North Kesteven DC – 14.98%
- West Lindsey DC – 14.02%
- East Lindsey DC – TBC as roll in has been phased, a full quarter's data will be available at the end of Quarter 4.

In addition to the support to the waste collection authorities, a programme of engagement with Schools and Community groups is now well established and demand on this programme is growing. Over 250 primary schools in Lincolnshire have been contacted to offer the schools engagement programme to. The offer ranges from school assemblies through to workshops on a group or class basis. 21 schools have received direct engagement sessions so far plus two full days at the Lincolnshire Showground schools event meaning over 500 primary school children have taken part in the "Let's Talk Rubbish" engagement programme.

Over 20 community groups and resident groups have also received engagement sessions. A further 20 schools and community groups have booked sessions over the coming months. In addition, we have also delivered engagement at a number of markets across the county.

Examples of feedback:

*"The children and staff enjoyed the day very much! Thank you so much!"*

*"The afternoon was fantastic. It was amazing hearing all the interesting things that the children learned from your visit. Every aspect was engaging for the class, you could see they were all hanging off your every word. Some children that don't normally engage and put themselves out there were fully engaged and interacting. This was amazing."*

## **2. Conclusion**

LWP is now working to establish the next steps with the remaining Waste Collection Authorities and updates will be provided as to this at future meetings. A programme of engagement and sustainment is being developed to ensure that the consistency and improvements across those WCAs already in implementation continues to grow and embed as business as usual.

In line with the above, the Environment and Economy Scrutiny Committee is invited to review and comment on the contents of this report and seek assurance that action is taken that allows Lincolnshire County Council to meet objectives defined within the Joint Municipal Waste Management Strategy and help contribute towards the Lincolnshire Waste Partnership objective of "seeking the best environmental option to provide innovative, customer-friendly waste management solutions that give value for money to Lincolnshire."

### **3. Consultation**

#### **a) Risks and Impact Analysis**

N/A

### **4. Background Papers**

No Background Papers within section 100D of the Local Government Act 1972 were used in the preparation of this Report.

This report was written by Rachel Stamp, Waste Partnership and Projects Manager, and Mike Reed, Head of Waste, who can be contacted on [Rachel.stamp@lincolnshire.gov.uk](mailto:Rachel.stamp@lincolnshire.gov.uk) and at [mike.reed@lincolnshire.gov.uk](mailto:mike.reed@lincolnshire.gov.uk).

<b>Open Report on behalf of Andrew Crookham, Executive Director - Resources</b>	
Report to:	<b>Environment and Economy Scrutiny Committee</b>
Date:	<b>11 April 2023</b>
Subject:	<b>Environment and Economy Scrutiny Committee Work Programme</b>

**Summary:**

This item enables the Committee to consider and comment on the content of its work programme for the year to ensure that scrutiny activity is focused where it can be of greatest benefit. The work programme will be reviewed at each meeting of the Committee to ensure that its contents are still relevant and will add value to the work of the Council and partners.

**Actions Required:**

Members of the Committee are invited to review the work programme and highlight any additional scrutiny activity which could be included for consideration in the work programme.

## 1. Background

Overview and Scrutiny should be positive, constructive, independent, fair and open. The scrutiny process should be challenging, as its aim is to identify areas for improvement. Scrutiny activity should be targeted, focused and timely and include issues of corporate and local importance, where scrutiny activity can influence and add value.

All members of overview and scrutiny committees are encouraged to bring forward important items of community interest to the committee whilst recognising that not all items will be taken up depending on available resource.

Members are encouraged to highlight items that could be included for consideration in the work programme.

## 2. Work Programme

<b>11 April 2023</b>		
	<b>Item</b>	<b>Contributor</b>
1.	<b>Theddlethorpe Geological Disposal Facility Working Group – 6 Monthly Update</b>	Justin Brown, Assistant Director Growth
2.	<b>Energy for Growth - Energy Options Analysis for Greater Lincolnshire - Interim Report</b>	Mick King, Head of Economic Infrastructure Johanna Rhoades, Project Officer – Utilities
3.	<b>Waste Engagement Initiatives</b>	Mike Reed, Head of Waste
4.	<b>Twin Stream Recycling Update</b>	Mike Reed, Head of Waste

<b>30 May 2023</b>		
	<b>Item</b>	<b>Contributor</b>
1.	<b>Scrutiny Panel A: Town Centres Improvements Review – Report Overview/ Outcomes and Recommendations</b>	Cllr Phil Dilks, Chairman of SPA Vanessa Strange, Head of Infrastructure Investment Kiara Chatziioannou, Scrutiny Officer
2.	<b>Scrutiny Panel B: Agriculture Sector Support Review – Report Overview/ Outcomes and Recommendations</b>	Cllr Taylor, Chairman of SPB Vanessa Strange, Head of Infrastructure Investment Kiara Chatziioannou, Scrutiny Officer
3.	<b>Lincolnshire County Council Carbon Report 2022-2023</b>	Chris Miller, Head of Environment Dan Clayton, Sustainability Manager
4.	<b>Business Premises Portfolio Performance</b>	Simon Wright, Regeneration and Portfolio Manager, Economic Infrastructure Kelly Owbridge-Tasker, Portfolio Team Leader, Economic Infrastructure
5.	<b>Horncastle Industrial Estate extension</b>	Mick King, Head of Economic Infrastructure & Ian Walker, Infrastructure Team Manager Ian Walker, Infrastructure Team Manager
6.	<b>Motorhomes &amp; Campervans Working Group – Outcomes and Recommendations</b>	Justin Brown, Assistant Director -Growth Chris Miller, Head of Environment Samantha Harrison, Head of Economic Development

<b>11 July 2023</b>		
	<b>Item</b>	<b>Contributor</b>
1.	<b>Adult Skills &amp; Family Learning Programme 2022/23- Annual Position Report</b>	Thea Croxall, Adult Learning & Skills Manager- Economic Development



11 July 2023		
Item		Contributor
2.	<b>Growth Hub Annual Performance 2022 and future plans for business support initiatives -23 - <i>Annual Position Report</i></b>	Samantha Harrison Head of Economic Development Angela Driver Enterprise Growth Manager - Economic Development
3.	<b>Provision of Careers Advice to All Age Groups in Lincolnshire</b>	Thea Croxall, Adult Learning & Skills Manager Clare Hughes, Employment and Skills Executive Manager
4.	<b>Broadband Programme - <i>Interim Verbal Update</i></b>	Justin Brown, Assistant Director – Growth Stephen Brookes, Broadband Programme Manager
5.	<b>Energy Option Analysis for Greater Lincolnshire Final Report, Outcomes, and Next Steps</b>	Mick King, Head of Economic Infrastructure Johanna Rhoades, Project Officer – Utilities
6.	<b>Service Level Performance Reporting Against the Performance Framework 2022 - 2023 – Quarter 4:</b> <ul style="list-style-type: none"> <li>• Economy</li> <li>• Flooding</li> <li>• Waste</li> </ul>	Samantha Harrison, Head of Economic Development Chris Miller, Head of Environment Mike Reed, Head of Waste

12 September 2023		
Item		Contributor
1.	<b>Service Level Performance Reporting Against the Performance Framework 2023 - 2024 – Quarter 1:</b> <ul style="list-style-type: none"> <li>• Economy</li> <li>• Flooding</li> <li>• Waste</li> </ul>	Samantha Harrison, Head of Economic Development Chris Miller, Head of Environment Mike Reed, Head of Waste
2.	<b>Sutton Bridge place-making Scheme</b>	Hayley Redford, Project Officer – Economic Infrastructure Mick King, Head of Economic Infrastructure & Ian Walker, Infrastructure Team Manager

23 October 2023		
Item		Contributor
1.	TBC	

28 November 2023	
Item	Contributor
<b>1. Service Level Performance Reporting Against the Performance Framework 2023 - 2024 – Quarter 2:</b> <ul style="list-style-type: none"> <li>• Economy</li> <li>• Flooding</li> <li>• Waste</li> </ul>	Samantha Harrison, Head of Economic Development Chris Miller, Head of Environment Mike Reed, Head of Waste
<b>2. Draft Lincolnshire Minerals and Waste Local Plan: Preferred Approach [Pre-decision Scrutiny] (Executive Decision 5 Dec 2023)</b>	Adrian Winkley, Minerals and Waste Policy and Compliance Manager

### 3. Items to be Programmed

Topic/Author	Est Date
Alternative Fuels	TBC
Climate Change Impact [Chris Miller, Head of Environment]	TBC
Food Waste Collection- (Waiting for Env Act Updates)	Winter/Spring 2023
Elements of Environment Act- (Waiting for Gov Guidance/Updates)	2023
Green Technology Grant	TBC
Historic Places Team Strategy	TBC
Lincolnshire Reservoir– Progress Updates [Matthew Harrison, Flood Manager]	Spring/Summer 2023
Local Nature Recovery Strategy (inc. Greater Lincolnshire Nature Partnership Update) [Chris Miller, Head of Environment & Dan Clayton, Sustainability Manager]	TBC
Property Green Agenda – potential guest presentation facilitated by Sustainability [Chris Miller, Head of Environment & Dan Clayton, Sustainability Manager]	TBC
Verge Biomass Management	TBC
Waste Performance Targets - Setting of Targets [Mike Reed, Head of Waste]	TBC

### 4. Conclusion

Members of the Committee are invited to review and comment on the work programme and highlight any additional scrutiny activity which could be included for consideration in the work programme.

### 5. Consultation

#### a) Risks and Impact Analysis

N/A

## 6. Appendices

These are listed below and attached at the back of the report	
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Appendix A	Forward Plan of Decisions relating to the Environment and Economy Scrutiny Committee.
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## 7. Background Papers

No background papers within Section 100D of the Local Government Act 1972 were used in the preparation of this report.

This report was written by Kiara Chatziioannou, Scrutiny Officer, who can be contacted on 07500 571868 or by e-mail at [kiara.chatziioannou@lincolnshire.gov.uk](mailto:kiara.chatziioannou@lincolnshire.gov.uk).

## Forward Plan of Decisions relating to the Environment and Economy Scrutiny Committee

MATTERS FOR DECISION	DATE OF DECISION	DECISION MAKER	PEOPLE/GROUPS CONSULTED PRIOR TO DECISION	HOW AND WHEN TO COMMENT PRIOR TO THE DECISION BEING TAKEN	KEY DECISION YES/NO	DIVISIONS AFFECTED
<b>Draft Lincolnshire Minerals and Waste Local Plan: Preferred Approach [I028138]</b>	5 Dec 2023	Executive	Environment and Economy Scrutiny Committee	Minerals and Waste Policy and Compliance Manager, E-mail: <a href="mailto:adrian.winkley@lincolnshire.gov.uk">adrian.winkley@lincolnshire.gov.uk</a>	No	All Divisions