

BETTER UTILITIES GREATER PROSPERITY GREATER LINCOLNSHIRE

SUMMARY OF THE 'FUTURE PROOFING UTILITIES IN GREATER LINCOLNSHIRE' REPORT

FOREWORD

PUTTING OUR FUTURE UTILITY REQUIREMENTS IN PLACE

Providing the utility infrastructure to support existing and new commercial and housing sites is critical for the continued prosperity of Lincolnshire. The experience of developers, businesses and local authorities across Greater Lincolnshire suggests that utilities constraints are stalling and holding back development.

Government has recognized that utilities provision has the potential to constrain developments, this has been highlighted in the Housing White Paper, the Industrial Strategy Green Paper and the recently launched Clean Growth Strategy.

Here in Greater Lincolnshire, we have ambitious plans for future growth and productivity. We aim to increase the value of the economy by £3.2 billion by 2030, and help deliver 100,000 new homes. Ensuring we have a long term effective and functioning system of utilities, is therefore critical to the future economic success of the area. This growth will rely on new utility infrastructure being put in place at the right time so that development sites can go ahead when the market requires.

The 'Future Proofing Utilities in Greater Lincolnshire' Report commissioned by the Greater Lincolnshire LEP and the local authorities of Lincolnshire, therefore has looked at the existing capacity across 25 development sites and made an assessment of the cost for abnormal reinforcement works. There is much to do on this agenda, nationally and locally, however this report gives us for the first time an assessment of utilities provision across Lincolnshire.

URSULA LIDBETTER

Chair | Greater Lincolnshire Local Enterprise Partnership



IGNITING CHANGE: BUILDING THE CASE FOR BETTER UTILITY INFRASTRUCTURE

The future proofing of the capacity of utilities in Greater Lincolnshire is greatly needed. Many partners locally are increasingly aware that development activity within the Greater Lincolnshire area is being hampered, because of constraints on the supply of utilities (electricity, water (supply and drainage), and gas infrastructure).

A long-term commitment to infrastructure investment is critical in efforts to accelerate employment and housing, and productivity growth across Greater Lincolnshire. However action is also needed immediately, to deal with network infrastructure capacity shortfalls being encountered on a regular basis, to ease the pressures on land development. In addition new solutions will be needed for the inter-related system challenges, which will need to be faced by Greater Lincolnshire into the future. Providing a reliable infrastructure will allow Greater Lincolnshire to achieve its ambitions and potential.

Many partners are stating that investments can stall due to the limited availability of utilities and the relative cost of upgrading them, so there is a need for a strong dialogue between the utility companies and others, particularly at a local level.





estimated for abnormal utilities for all planned development in Greater Lincolnshire over the next 20 years.

WHAT HAVE WE DONE SO FAR?

A study commissioned by LEP and Local Partners, with significant local consultation and a local Utility Summit Event, to engage both the public and private sectors.

The study

- Provides evidence that there is an issue of utilities capacity hindering the full development potential of Greater Lincolnshire
- Shows that there is a lack of existing utilities capacity at proposed development sites and the associated cost and time implications of necessary reinforcement works
- > Shows that there is also a relatively high percentage of smaller developers who are less able to bear the high costs of reinforcement
- > Shows that the process of engagement between developers, local authority planners and utilities firms to establish the nature, scale and cost of required reinforcement works is complex, un-transparent and lacks consistency

The issue appears to be partly a result of Greater Lincolnshire's natural characteristics. These factors include the relatively peripheral and rural nature of the area, and relatively low property values leading to issues of viability.

The costs for the abnormal reinforcement works for the 25 strategic sites assessed was estimated to be around £125m in total.

If this figure was applied to all development planned to be delivered in Greater Lincolnshire in the next 20 years or so it would equate to abnormal utilities costs of around £250m, which is a significant upfront investment.

WHY DID WE THINK THIS WAS NECESSARY?

The following case studies highlight the many types of examples that we were becoming aware of:

PEPPERMINT PARK

The scheme at Holbeach in Lincolnshire will provide a brand new Food Enterprise Zone (FEZ) of approximately 59,500 m² of employment space, as well as circa 900 new homes. Employment space created will be for small to medium sized enterprises, specialising in the agri-tech sector, including a new Food Centre of Excellence. It was found that the costs of providing the necessary infrastructure, particularly water and electricity were in the region of £12.5m, with long lead in times adding to the costs. This impacts on the viability of the scheme, jeopardising development proposals.

Without major public sector investment and involvement to identify innovative solutions to the provision of infrastructure, the FEZ may take many years to deliver.

TEAL PARK

Following issues identified at the 87 acre employment land site at Teal Park in North Hykeham, Lincoln, a shared commitment to the growth agenda has seen the Central Lincolnshire Local Authorities working closely with Western Power Distribution. This has promoted greater knowledge and engagement of the issues affecting the site, giving confidence to the private sector that a long term solution in place. In the interim, engagement with businesses and developers at Teal Park is ongoing to manage and accommodate shorter term, bespoke solutions to supply requirements.

Now as part of a suite of circuit reinforcements for Lincoln, additional supply to the site remains on track for Spring 2019.



KING 31 IN GRANTHAM

The budget estimate for connection of power supplies to the site at Tollemache Road North, Grantham, has been quoted by the utility supplier at just under £1m to bring a supply to the site. This is based upon a very low level of electrical requirement. Even though this is a budget for guidance only, the scale of these charges for connection exceed even the investor's highest investment estimates, and threaten the viability of the proposed development regardless of which developer is involved.

COASTAL UTILITIES

Whilst trying to resolve the challenges locally around the water supply and sewage for Skegness Country Business Park, it became apparent that the problem was wider on the coast, than just this project. Anglian Water indicated a lack of overall capacity in the existing network was causing this, and it had the potential to be a significant block to new development on the coast.

A number of developers were approached, asking for evidence of projects which had faced similar challenges, and through discussions a resolution was found. Anglian Water will deliver a programme of works which will increase potable water capacity in Skegness in late 2017/2018, which will remove water capacity constraints on development in Skegness for the foreseeable future.

ENGAGEMENT UNDERTAKEN

This summary is a broad and independent review of our collective efforts to plan and design our future utility provision. This in turn will shape the way in which we position our economy and energy provision into the future, within Greater Lincolnshire.

Conclusions are based on extensive consultation that has taken place, through independent consultant review, workshops, and a Utility Summit Event.

Extensive consultation was also carried out with the Private Sector companies, providing utility services for Greater Lincolnshire, who are:

- > ELECTRICITY DNOS: Western Power Distribution; Northern Power Grid
- WATER: Anglian Water (water supply and wastewater) and Severn Trent Water (wastewater); and
- > GAS GDN: Cadent (formerly National Grid Gas Distribution).

25 STRATEGIC SITES INVESTIGATED OVER 90 BUSINESSES CONSULTED

REGULATORS ENGAGED **415** ATTENDING PEOPLE EVENTS

WHAT ELSE WILL AFFECT OUR ECONOMY?

The study identified other issues in relation to the utility infrastructure provision, and these are the fundamental changes currently occurring in the utilities markets. This also needs to be set against recent Government initiatives to increase infrastructure spending to speed up delivery of housing and employment sites.

Experiences of local authorities and developers in Greater Lincolnshire have suggested that utilities are a particularly critical sector, with limited availability and the relative cost of upgrading the necessary infrastructure stalling development.

The planning and utilities investment processes are sometimes complex and there are few people who have an overall understanding of what is required to meet the local planning conditions and also to navigate the utilities processes for connections, costs and sites. In terms of addressing recent Government strategies, we have the following positions:

INDUSTRIAL STRATEGY

The Modern Industrial Strategy's ground-up approach – led and owned by industry and localities – is an important shift, if we are to put in place structures and plans with longevity.

In terms of a local industrial strategy, one of our biggest challenges is power. Supply into Lincolnshire is limited and some major power users in Lincoln city are asked for flexibility on their power usage where necessary, to allow for servicing so as not to affect domestic users.

Water supply is also a vital issue, not least because of the strength of our agri-food sector. The LEP has a sub-board specifially focused on this issue, and has delivered a water management approach that is gaining national recognition. We have identified that there is a gap between the regulation system, designed to ensure efficiency in the utilities market, and economic development objectives.

We need better engagement to this complexity and also a better way of supporting stakeholders in accessing information and overcoming issues around early engagement of utilities with planning authorities. This needs to be seen together with the reliability of cost and timescales estimates given to developers, for reinforcement works.

We need to develop a shared agenda with utility providers and regulators that takes into account economic growth, improving the dialogue between providers and local authorities. This could go a long way towards resolving many of the issues, without drawing on the public purse.



HOUSING WHITE PAPER

The Housing White paper states that:

- > We (the Government) will improve the coordination of public investment in infrastructure, and support timely connections to utilities, so that this does not hold up getting homes built
- Where communities have planned for new homes, we want to ensure those plans are implemented to the timescales expected

It also goes on to propose the following points:

Ensure infrastructure is provided in the right place at the right time by coordinating Government investment, and through the targeting of the £2.3bn Housing Infrastructure Fund

In areas of low land values, like much of Greater Lincolnshire, development gain will never be enough to justify major infrastructure investment, even though there is significant demand for housing. So we need continued access to growth funds to gap fund priority schemes, as a significant issue is that the costs of the necessary infrastructure (roads, schools, health, etc.) fall to the developer. WILL NEED TO TAKE A STRONGER ROLE IN DIALOGUE WITH UTILITY PROVIDERS

so that the case for investment in Greater Lincolnshire's utilities is better stated, promoted and understood.

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WHAT ELSE IS CHANGING?

The UK utilities system developed in the late 1980s and early 1990s after the main utilities were privatised. Since that time the system has remained relatively stable. However, in recent years new trends are driving fundamental changes to the market.

These changes present challenges but also opportunities to improve the system, so that a lack of utilities capacity is less likely to hinder development happening at the right time and place in the future.

There are fundamental changes that are occurring within the utilities market. These relate to the push for greater sustainability and regulatory improvements to provide more choice and a better service to consumers. These changes present an opportunity for those involved in the development sphere (planners, developers and utilities) to work more closely together and earlier to help plan and deliver appropriate utilities infrastructure to enable development. What is important to note from this is that the productivity of every company in the Greater Lincolnshire, and the standard of living of every individual, is affected by the quality of the utility infrastructure that people and businesses can access. Ensuring there is adequate investment in infrastructure, to meet our current and future needs and priorities, should be one of the immediate strategic priorities for our area.

The future changes and challenges from a utility company perspective are broadly linked to the drive for greater sustainability and carbon reduction and regulatory reforms, to improve market competition and customer service. However when this happens a regulated asset base (RAB) approach to utilities, defining the assets needed to run the business in a natural monopoly, is one which should be more widely used. In addition infrastructure appraisal methods and practice for these aspirations, should properly take account of other related economic issues in our area, together with regional/LEP distribution of spending.

ELECTRICITY

The key trends affecting the electricity market are as follows:

- Increase in demand of significant amounts of electricity at non-traditional times for electric vehicles and heat pumps
- Increase of micro-generation of electricity by households and small businesses, e.g. solar panels, which the electricity companies (DNOs) are required to feed any excess into the network
- > Increase in use of energy storage e.g. batteries

Each of these factors mean the traditional way of managing supply and demand of electricity, i.e. linear flow from the point of generation to the end user, is changing.

This more complex and dynamic system means that DNOs are forced to understand the new supply and demand patterns more closely and to develop systems to match them more efficiently.



WATER

The water sector is slightly different to the energy sector in that it does not have the more fundamental underlying pressure for modal change.

However, there is a drive to use water more efficiently and to reduce the carbon produced in the water process. The key future trends that could affect utilities planning are likely to be the following:

- > Resilience
- > Economic and Regulatory Pressures
- > and Environmental Pressures



Gas in the UK is primarily used to provide heat. Along with the transport sector, heat is the single largest consumer of energy in the UK. Gas provides approximately 80% of the UK heat needs at peak times. It also produces similar amounts of carbon currently as electricity and transport.

The gas sector is expected to change significantly in the next 20 years.

The decarbonisation agenda is likely to mean that gas will have an increasingly critical role in delivering energy reliably when it is required to support growth. Add to this the more fundamental changes such as the use of biogas, hydrogen and district heating networks and it is clear that the current system is likely to evolve considerably.

As with the electricity sector this presents an opportunity for closer engagement between all parties in the development sphere (planners, developers and utilities) to work closer together to plan where growth is likely to occur and ensure the infrastructure is in place to meet those needs.

The key trends affecting the gas market includes:

- > Green waste gas for heat and transport
- > Converting the Gas Network to Hydrogen
- > District Heating Network

HOW ARE WE PROPOSING TO TAKE THIS ISSUE FORWARD?

The LEP are looking to concentrate the energies into three main areas. Within each of these areas there are important themes, which will underpin their viability.

CONSOLIDATING

- 'Building' visibility to stakeholder of the importance of utility infrastructure provision
- 'Vitalising' energy supply & systems
- Simplifying' the utility infrastructure offer

COMMUNICATING

- 'Energising' our sector and business groups
- > 'Illuminating' the data information flow
- 'Powering' our strategic networks

FINANCING

 'Managing' our risks and embracing our opportunities effectively

In terms of how these themes will fit within existing operating frameworks:

- > 'Enabling' our networks
- > 'Building' visibility
- > 'Empowering' our strategic networks
- > 'Vitalising' energy supply & systems
- > 'Simplifying' the utility infrastructure offer
- > 'Managing' our risks and embracing our STRATEGICINATIONAL ENGAGEMENT opportunities end RECIONAL PARTNERSHIP COOPERATION
- > 'Energising' our sector and business groups
- > 'Illuminating' the data information flow EVEL SUPPOR

SUMMARY

Greater Lincolnshire has to find a solution to its long term utilities needs in order to fulfil its potential for the UK and locally.

This will involve working on a number of areas, innovative local solutions, significant investment in our utility infrastructure, and regulatory framework changes. The 'Future Proofing Utilities in Greater Lincolnshire' report starts this conversation, and identified a number of conclusions:

BUILDING VISIBILITY TO STAKEHOLDERS OF THE IMPORTANCE OF UTILITY INFRASTRUCTURE PROVISION

Access to utilities like water, gas and electricity is one of the main issues facing businesses in Greater Lincolnshire, and in some cases development and investment opportunities have been lost because of the poor provision and cost of utilities in some areas. There is an urgent need to raise awareness of utility infrastructure in Greater Lincolnshire even further, encouraging more businesses to work with us and partners to contribute to Greater Lincolnshire's economic growth.

VITALISING ENERGY SUPPLY & SYSTEMS

The development of solutions that can help deliver affordable, sustainable options, and secure energy for Greater Lincolnshire is highly important. This will include the support the development of partnerships and enabling technologies that can provide flexibility and resilience to the future energy system of electricity, water and gas.

SIMPLIFYING THE UTILITY INFRASTRUCTURE OFFER

There is a need to make it easier for companies to engage and work with us and the utility infrastructure sector, to understand the offer and access funding and support through collaborations and partnerships where appropriate.

ENERGISING OUR SECTOR AND BUSINESS GROUPS

Communication is essential, to build sector links across Government and research, to listen to business and understand their needs. This will also highlight future opportunities and technological directions in each area, and to promote the funding opportunities we offer businesses to help them grow.

ILLUMINATING THE DATA INFORMATION FLOW

The utility companies need to make data on infrastructure in our area available, and the impact it has more visible, which in turn will help inform strategic investment decisions

EMPOWERING OUR STRATEGIC NETWORKS

We will be evolving our networks and strengthening our own local presence in the utility infrastructure debate, as part of a coordinated cross LEP, regional and national approach

MANAGING OUR RISKS AND EMBRACING OUR OPPORTUNITIES EFFECTIVELY

Assessing the viability of shared risk and innovative financial investment – aimed at supporting an overall strategy, of looking at available options and solutions in this area, whilst also supporting local opportunities

UNDERPINNING THESE ARE THE FOLLOWING:

PLANNING AND PREDICTABILITY

Engaging planning process to overcome issues around early engagement of utilities with planning authorities, reliability of cost and timescales estimates given to developers for reinforcement works. This is particularly important, due to noted uncertainty over commercial development

REGULATORY ISSUES

There is a gap between the regulation system, designed to ensure efficiency in the utilities market, and economic development objectives. Short of regulatory reform, an active approach from providers and local authorities is required to meet this gap in the short term to progress activity, that can be followed up within regulatory processes at a later date if necessary.

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Greater Lincolnshire Local Enterprise Partnership

Lancaster House 36 Orchard Street | Lincoln LN1 1XX

T: 01522 550540 E: enquiries@greaterlincolnshirelep.co.uk

GreaterLincsLEP

WWW.GREATERLINCOLNSHIRELEP.CO.UK





















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