

Healthy Ecosystems East Anglia

A Landscape Enterprise Networks approach Making Landscapes work for Business and Society This document sets out a new way in which businesses can work together to influence the assets in their local landscape that matter to their bottom line. It's called the Landscape Enterprise Networks or 'LENs' Approach, and has been developed in partnership by BITC, Nestlé and 3Keel.

Underpinning the LENs approach is a systematic understanding of businesses' landscape dependencies. This is based on identifying:

LANDSCAPE
BENEFICIARIES
Organisations that are
dependent on the landscape.
This is the 'market'.

LANDSCAPE FUNCTIONS

The outcomes that beneficiaries depend on from the landscape in order to be able to operate their businesses. These are a subset of ecosystem services, in that they are limited to functions in which beneficiaries have sufficient commercial interest to make financial investments in order to secure them.

LANDSCAPE ASSETS

The features and characteristics in a landscape that undepin the delivery of those functions. These are like natural capital, only no value is assigned to them beyond the price beneficiaries are willing to pay to secure the landscape functions that the Natural Asset underpins.

Funded by:



Making landscapes work for business and society in East Anglia

East Anglia has always had an economy with roots in its productive agricultural landscapes, with its rich soils, aquifers and easy-to-work topography. As the economy grows into more diverse knowledge and tech-based industries, the economy of East Anglia continues to depend on its landscape: in order to manage risk in food supply chains, for example, and to provide housing for the growing population. The landscape also needs to remain beautiful and accessible, so that businesses can compete to attract and retain the best talent.

The landscape enterprise networks approach (LENs) uses commercial interest to drive investment in the landscape assets that help underpin the East Anglian economy. LENs works with businesses to identify functions that local landscape assets provide for them; whether that's soil in the fields that produces barley with which they brew beer, or greenspaces where their workers take their children at the weekend. It uses a stakeholder network analysis to identify and convene businesses with shared interests in working with the same assets, in the same place. When we know suggestion: 'which assets, where, matter to whom, then we can start to build value propositions that secure benefits for East Anglian businesses.

In this document we identify some examples of how different businesses share an interest in three different sorts of landscape asset, in three different locations. We look at how a brewer, a sugar manufacturer and landowners share commercial interest in soil conservation in a landscape that is a blackspot for soil

run-off into watercourses. We look at how property developers, tech industry, food manufacturers, and food retailers have an interest in investing in seasonal reservoirs in a water stressed region east of Cambridge. Finally we consider the network of businesses that have an interest in green infrastructure and quality of life in the eastern sector of the East Anglia Tech Corridor.

LENs is about starting with small, mutually beneficial business clusters investing to protect a few simple assets. It is designed to grow incrementally, to create a network where multiple businesses are collaborating to invest in multiple assets, which deliver multiple functions across the landscape. It's about rewiring the land economy, so that it can provide the sophisticated range of functions and services that are required by modern businesses, and modern society.

Benefits of LENs

- 1. It provides a mechanism for businesses to start intervening to landscape-derived risk in their 'backyards';
- **2.** It moves on from theoretical natural capital valuations, to identify real-world value propositions and transactions;
- **3.** It pulls together coalitions of common interest, pooling resources to share the cost of land management interventions;
- **4.** It provides a mechanism for 'next generation' diversification in the rural economy something that may be especially relevant post-Brexit.



Gudrun Cartwright, Environment Director, BITC

I am delighted that we have been able to develop such an innovative approach to incentivising collaborative action that can underpin a truly restorative food economy for the UK. The opportunities to enable

farmers to build their resilience and prosperity by making landscape stewardship a core business requirement, attractively incentivised, has great potential to transform the sector and the landscapes we depend on.

Thank you to Defra for investing in the project, and to Nestlé and 3Keel for pioneering the model with us.



Peter Simpson Chief Executive, Anglian Water

"I welcome Business in the Community's latest report that shows how collaborative action to tackle a significant shared challenge could

transform the way the market operates by creating a new model that makes restoring the health of water, land and biodiversity, business as usual. BITC's Water Taskforce has been spearheading cross sector collaborations that find innovative ways to address key issues. Our ability to provide life's essentials - food and water - is at the top of the list. We are grateful to Defra for their continuing support of BITC's Healthy Ecosystems programme and to the many businesses and partners who have lent their expertise and enthusiasm to help bring our ideas to life."

Business perspectives

Key sectors in the East Anglian economy have roots in the local landscape...

When people think of East Anglian landscapes, they often think of a highly productive agri-food sector.

Indeed, food and drink manufacturing in East Anglia. These businesses depend on a consistent supply of quality raw materials from local farmers, who produce a significant proportion of the UK's crops and livestock products – for example a third of all field veg, and two-thirds of the UK's sugar beet.¹

However, if you look at the region's economy, other sectors emerge as equally, or more significant to local prosperity. For example, knowledge-intensive sectors such as advanced manufacturing, the digital economy and life sciences are a strategic priority for cities such as Cambridge and Norwich.²

While there are obvious and direct links between the landscape assets in East Anglia and food production, other sectors in the economy have different dependencies on the landscape. For them, investing in shared landscape assets - such as soils, water, and natural greenspace - will help ensure the region is an appealing place to live and work, visit and invest.

Adnams

Adnams have an award-winning ecoefficient brewery and distribution centre in Southwold and work with Simpsons Malt, Openfield, and 15 local barley farmers to source malt for brewing and distilling. Water is critical for the long-term sustainability of the brewery and wider supply chain. The Adnams Community Trust has also donated £1.2m to local causes.

Anglian Water

Anglian Water faces serious challenges to delivering water and wastewater services due to population growth, economic development, and climate change. The company invests in a mixture of measures including catchment-based partnerships (such as in the Cam and Ely Ouse) as well as demand-side initiatives. Collaboration is seen as critical to success.

Nestlé

Nestlé UK has identified wheat as a strategic raw material that has potential supply vulnerabilities. Nestlé works with Camgrain to source wheat and other crops from East Anglia for its operations in Sudbury, Wisbech and beyond. The business recognises natural capital and soil health as critical for the long-term viability of their agricultural supply chains.

Marks & Spencer

Marks & Spencer has more than 20 food and drink suppliers in East Anglia, many of whom who will source ingredient raw materials regionally. In June 2017, M&S made ambitious new commitments to increase sourcing transparency, support regenerative agriculture, and help transform communities where they have stores and depots – including Norwich.

Farmcare

Farmcare is a UK-wide agricultural business with a 1000-acre farm at the Coldham Estate in the Cambridgeshire Fens. The farm grows potatoes, onions, sugar beet, and wheat for customers including regional food processors and UK retailers. The business is exploring how to build resilience through improved water and soil management and industry collaboration.

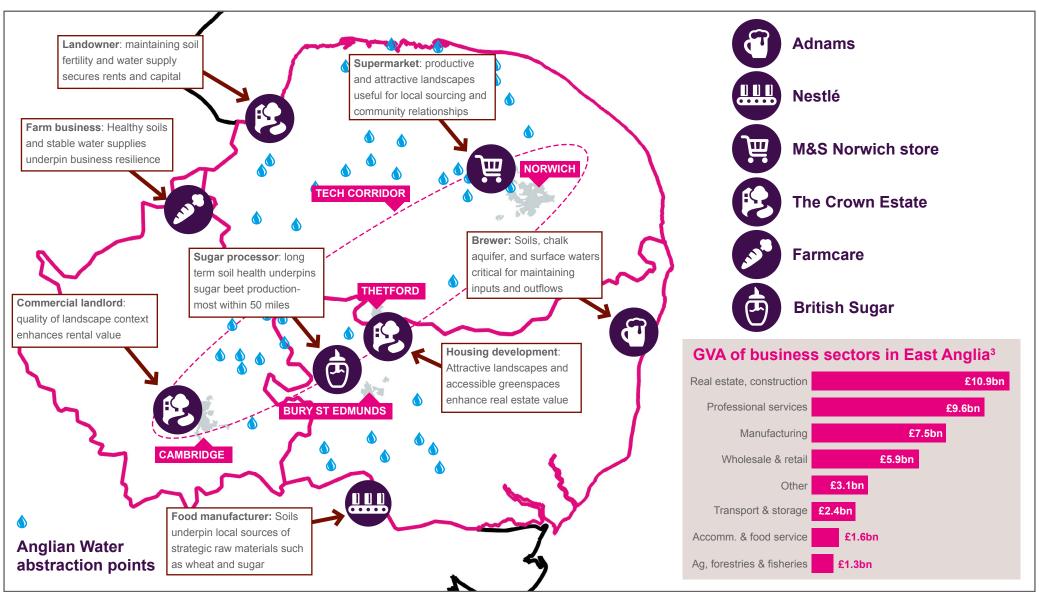
The Crown Estate

The Crown Estate's holdings in East Anglia include let agricultural land, as well as a site identified for housing provision. Through its 'Project Soil', The Crown Estate is working with its tenant farmers to help protect its significant capital interest in soils, helping to preserve and enrich soil quality over the long term.

Business perspectives continued

"It's great to see this project taking shape, bringing local organisations together to help strengthen environmental sustainability and with it, business resilience."

Claudine Blamey, Head of Sustainability for The Crown Estate



East Anglia's landscape assets

Stresses on landscape assets translate into commercial risks for businesses

Much of East Anglia's prosperity has historically been built on its wealth of natural resources. Its climate, landscape and soils make it well-suited to the production of combinable crops, like wheat and barley. It's often referred to as the UK's breadbasket.

But over time the range of functions or services that businesses and society have demanded from those assets has evolved, and increased. As much as we still need fertile growing land, we need assurance that the land and its soils will continue to be productive into the future. For the wider economy to compete, grow, and prosper, we need landscapes that deliver clean water, fresh air, and attractive places for people to work and bring up families.

Those landscape assets are under pressure. Competition for resources and the impact of pollution have undermined the quality and quantity of water, soils, and habitats across the region (see map, right). Over time the stresses on these landscape assets can translate into limitations on the ability of businesses to operate, and therefore to compete.

Natural greenspace
East Anglia hosts more than half of the UK's priority habitats – ranging from species-rich lowland grass and heath to semi-natural woodland, coastal marshes and freshwater reed beds. The region has 249km² of open access land,

including large areas of Breckland forest in Norfolk.4



Soils & agricultural land
East Anglia has 17% of England's arable land, despite having only 9% of the country's total land area. The region also has one third of the country's stock of the most productive Grade 1 and 2 soils, much of this in a band stretching from The Wash through The Fens into the southern parts of Suffolk.



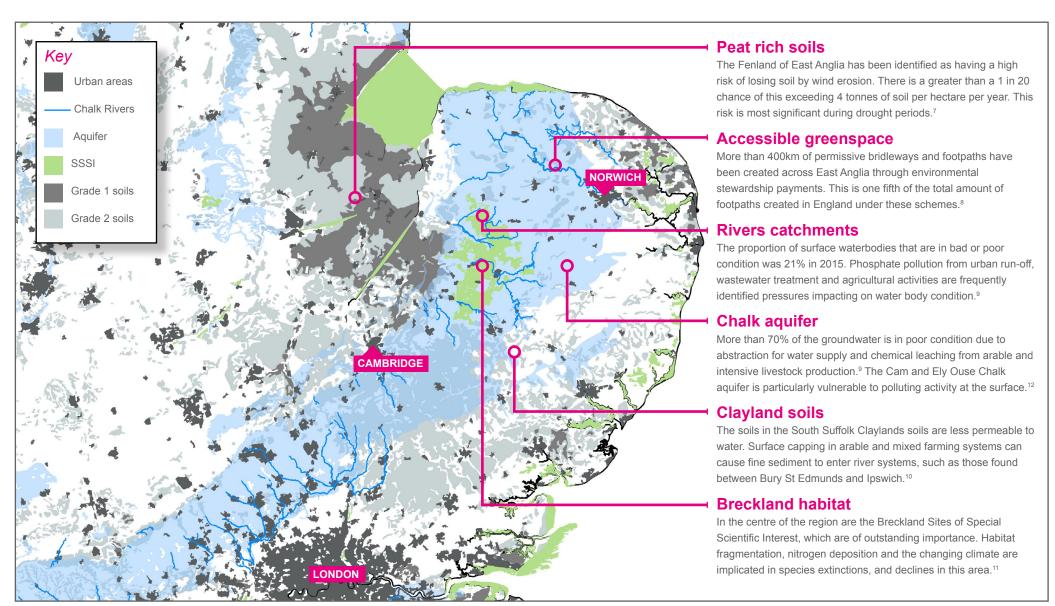
Water resources

A key water source for East Anglia is the large chalk aquifer that stretches from the north east to the south west of the region. Above the aquifer is 16% of England's globally rare chalk river habitats. In all, the region has almost 10,000 km of rivers. These feed into internationally important wetland habitats such as The Broads.



The status of East Anglia's landscape assets

Stresses on landscape assets translate into commercial risks for businesses



See references section for map data sources

The LENs approach

A framework for focusing business investment and action on shared landscape assets

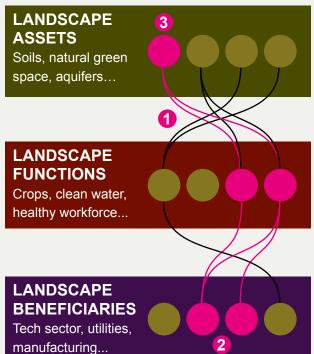
LENs provides a framework for business collaboration, by identifying shared interests in landscape assets and developing enterprisebased solutions for improving the health of those assets (see figure, right).

The first step is to identify a small group of businesses with overlapping interests in a landscape. By understanding in detail the landscape functions that each of those businesses have a commercial interest in. as well as the landscape assets that underpin those functions, we can start to see how and where their interests overlap. Once we know what and where the shared assets are. we can work on identifying the sorts of investments, market opportunities, or agreements that could secure and enhance those assets. The process also identifies enterprise(s) in the landscape that could deliver the right outcomes.



Business operating environment

Landscape Enterprise Network





Enhance supply chain, community and natural asset resilience.

outcomes

LENs

Meet sustainability commitments and ensure license-tooperate.

Create opportunities to engage with business customers and consumers.

LENs process

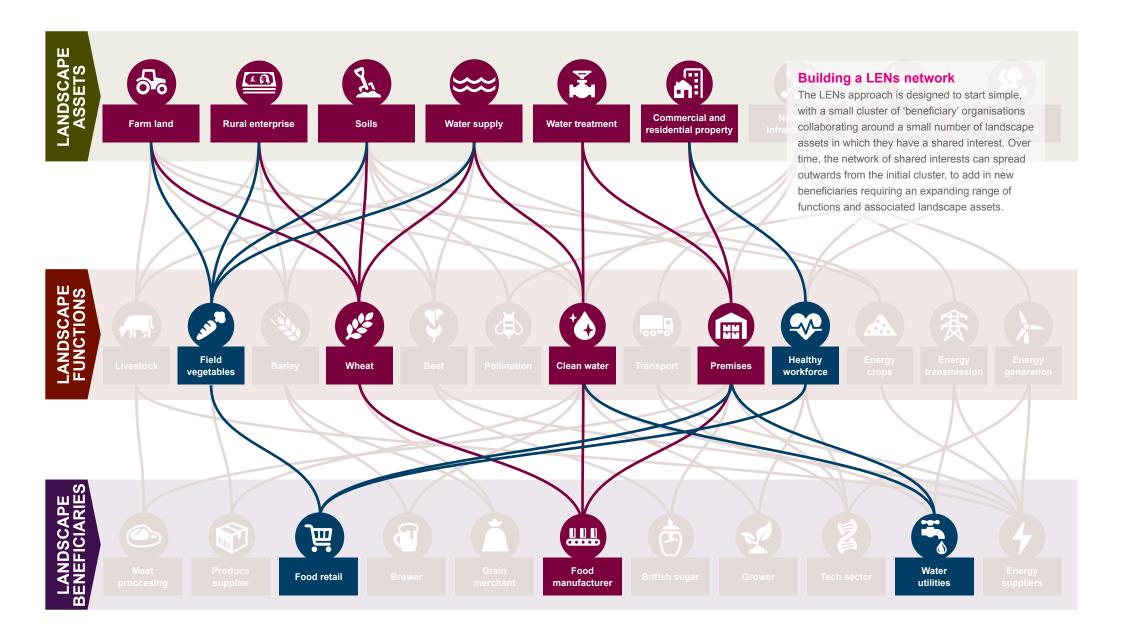
- 1 Identify shared interests and dependencies on local landscape assets.
- 2 Build coalition to focus investment and co-ordinate action on improved landscape asset health.
- Identify, broker, and manage innovative enterprise-based solutions.



Business operating environment



The LENs approach continued



What LENs might look like in practice

Three examples of businesses having a shared interest in East Anglian landscape assets

LENs collaborations start with a set of organisations with a shared interest in the protection of the same natural asset, in the same place. If there is a business case for an organisation to take steps to protect its natural asset base, then there is certainly a business case when more than one organisation shares an interest in the same natural asset.

Over the next few pages, we show the results of some very simple spatial analyses of locations where these conditions might come together. They relate to shared interests in soils, water, and natural greenspace. It's not an exhaustive list of the opportunities – these are just illustrations. There will be many more opportunities in the landscape, for different sorts of landscape assets and for different sorts of organisations.

Cross-over benefits and synergies

The examples over the next few pages focus on businesses' shared interest in individual landscape assets. This is a good starting point. But of course, in many cases, there will be cross-overs and interactions between landscape assets. By protecting soils, we'll often be protecting water quality, too. And in the process we might well be adding natural habitats into the landscape, providing a range of knock-on functions and benefits. The LENs approach isn't about trying to plan for all of those interactions. But it is designed on the understanding that as more assets, functions and beneficiaries are added into the network, and the system gains complexity, then more of these cross-over benefits and synergies will occur.



LENs Focus Area - Example 1

Soil protection in the South Suffolk Claylands

Context

The productivity benefits that healthy, stable soils deliver are well established, however loss of soil and soil organic matter remain a serious issue for this key landscape asset. Furthermore, extreme rainfall and temperatures will make healthy soils even more critical for water infiltration and retention.

Example area of interest

The area around the Blackbourne River, between Bury St Edmunds, Ixworth, and Stowmarket is an important growing area for wheat, sugar beet, potatoes, and barley. It also shows up as a hotspot for soil sedimentation in water bodies, which means that, one way or another, the growing area is losing soil.

Lost into water courses **BURY ST EDMUNDS** Geographical data indicate that soil is being lost into watercourses in this part of the region. Businesses that source from the region, like Adnams and British Sugar, as well as landowners, all share a driect commercial interest in protecting and enhancing soil in this area.

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Why soil protection in this location matters to businesses

Protecting capital assets. It can take 1,000 years to develop 6cm of soil. So In most practical senses, therefore, soil is a finite resource, which underpins the productive potential - and by extension the capital value - of land. That matters if you are a landowner; losing soil means losing capital.

Creating more resilient supply chains. The question of how much soil, and therefore how many harvests there are left from the land, represents a long-term strategic risk to buisnesses in the food supply chain. For agri-food processors like British Sugar, who source beet from farms on average 28 miles around its plants in Bury St Edmunds and Wisbech, this gives them a direct interest in regional soils and soil health. In short, they need soils to ensure their multimillion-pound production assets have a long-term secure source of feedstock. The story is similar for buyers of more other combinable crops, such as barley for brewers like Adnams in Southwold, or wheat supply to different parts of Nestlé's UK business. In both cases the businesses are increasingly seeking to secure stronger relationships with a regional supply-base, and therefore ultimately with their soils.

Landscape collaboration concept

Businesses with a stake in soil health in this landscape could back a start-up 'eco-contracting' enterprise that delivers cover-cropping services to farmers and growers. One of the barriers to using this technique is timely availability of equipment and labour post-harvest. The initiative could use new high resolution crop and soils mapping data to identify locations of greatest potential to protect soils and watercourses. For those farmers in high priority areas, preferential rates could be secured through an industry-subsidised funding stream. With the backing of large businesses, the new enterprise could find it easier to secure capital for investing in machinery. Links to regional agricultural colleges and research institutions could help leverage the existing expertise in soil science and agricultural technology.

Securing water resilience in East Cambridgeshire

Context

Parts of East Anglia are notoriously arid - recording lower annual rainfall than Jerusalem in places. After the droughts of the early 1990s, and re-energised by those in 2010-12, the region is now tuned in to 'water risk' and hosts several initiatives – such as Water Resources East and the CamEO partnerships.

Location

East Cambridgeshire district is a water-stressed region, which stradddles the Cambridge-Norwich Tech Corridor – an important initiative to promote inward investment. Linked to this it has one of the fastest growing populations in the UK. It is also an important vegetable and crop growing location.

Water stress in East Cambridgeshire creates two strands of commercial risk for businesses in the region. It restricts housing development, which is of practical interest to to developers, and more generally to businesses needing more Anglian Water workers. It also restricts crop productivity, which concerns the food supply chain. abstraction points

Why water in this location matters to businesses

Enabling growth. The Cambridge Norwich Tech Corridor aims to enable £500m of growth and investment. Growth like this needs people, and people need homes, with 20,000 new units expected along the corridor. 12 New homes require a resilient water supply. This is important for the expanding agri-tech, engineering, and biomedical industries. It's also important for the construction and development businesses that will do the building.

Food supply chain resilience. Although faced with water stress, many farms are without irrigation systems and are exposed to yield losses, while for others abstraction licences are constrained and in dry years not sufficient to meet their needs. For the high value field vegetable and potato producers, water supply is crucial and shortages have the potential to disrupt supply chains to local manufacturers and national retailers.

Meeting the water supply-demand challenge. Anglian Water is responsible for keeping the taps running by servicing growing demand while conserving the natural environment. Anglian's latest water resource management plan lays out the combined challenges of growing demand, with supply pressures from climate change. This challenge exists for all water users, and cannot be resolved by the utilities alone

Landscape collaboration concept

A collaboration of businesses with shared interests in a resilient water supply could support the development of a new landscape enterprise that creates and manages a network of winter-filled on-farm reservoirs. Some 28% of all abstracted water in the East of England already comes from farm reservoirs and in the future these resources will become increasing important. 13 The enterprise could also deliver irrigation technologies and training: agricultural demand can be tackled through irrigation efficiencies, with a win-win in terms of cost and water savings.

LENs Focus Area - Example 3

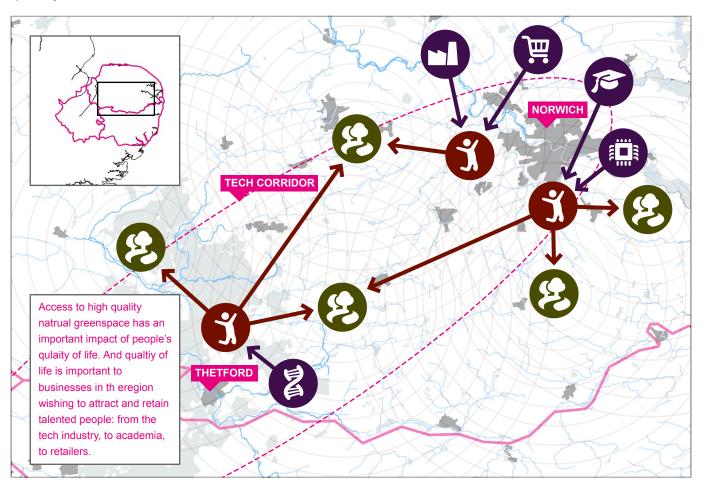
Natural greenspace and quality of life around Norwich

Context

The New Anglia LEP has identified the importance of quality of life as key to the future propserity and health of the region. It promotes natural resources as key assets underpinning this, and is building a strong regional brand that reflects these strengths and aims to enhance them by creating 1,000 hectares of additional wild spaces by 2020.¹⁴

Location

Norwich and towns such as Thetford have been identified as having significant innovation potential because of the quality of knowledge-based enterprises doing business there. The area hosts some of the most important natural habitats in the UK and borders the Norfolk Broads. It is also an important barley, poultry, and pig producing area.



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Why natural greenspace here matters to businesses

Improving customer, staff and community wellbeing.

Businesses are increasingly interested in helping improve staff and customer wellbeing. Mental health, in particular, is high on policy and heathcare agendas. Access to outdoor space is recognised as having an important potential role in improving physical and mental health outcomes. Marks & Spencer has a large store in Norwich and has made new corporate commitments to help transform the environmental and social outcomes of similar communities.

Attracting and retaining talent. The Tech Corridor promotes itself in terms of three things: 'Growth. Knowledge. Quality of Life'. The prioritisation of quality of life reflects the fact that attracting and retaining the most skilled staff is critical in the internationally competitive tech sector. 'Liveability' has a big role in this, and having accessible and beautiful outdoor spaces will be a factor in many people's decisions about where they will move to work. That makes natural greenspace a commercially important asset for companies.

Securing real estate values. With hundreds of millions of pounds worth of investment due to go in to real estate development in the region, the companies involved – developers, construction firms, housing associations - have a strong interest in the way green infrastructure can influence the value of commercial and residential property. That includes greenspace in and around developments, but also within the wider region.

Landscape collaboration concept

A significant amount of public money has been invested through agri-environment payments in creating new footpaths and areas of open access in this region. However the future of this funding is extremely uncertain. Businesses with a stake in this landscape could support the development of a social enterprise that works with local landowners to provide educational and health-related access to greenspace. With the commitment to use and pay for these services, the landscape enterprise could secure existing accessible greenspaces and create more - helping to deliver the Local Enterprise Partnerships environmental targets.

What next?

Starting to build a network

LENs is designed to focus and combine the efforts that individual organisations might make to protect strategic landscape assets. It is also intendend as a complement to existing landscape-wide and catchment initiatives, helping them to harness commercial drivers for their objectives.



Our plan is to build on the interest created in the development phases of LENs to start to build a LENs business network in East Anglia. This will involve the following process...

The LENs Process

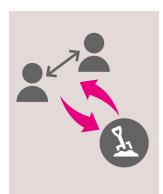


1. Engaging LENs leader organisations

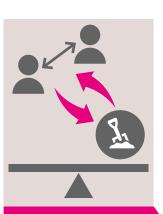
- ▶ Identifying the first cohort of organsiations with an interest in forming LENs relationships to manage landscape assets
- ► Carrying out analyses to understand the landscape dependencies of these 'leader' organistions



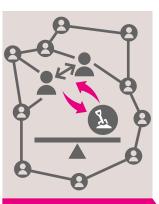
- 2. Establishing shared interests
- ▶ Identifying LENs focus areas where leader organisations' interests in landscape assets cross over



- 3. Developing a land enteprise response
- ► Identifying practical land management and business interventions to protect the asset
- ► Finding or establishing land enteprises to deliver the work



- 4. Establishing a LENs broker organisation
- ➤ Drawing relevant parties into a governance structure
- ► Establishing methods for combining demand and coordinating supply
- ► Incorporating or finding a 'parent' organisation



5. Expanding the LENs Network

- ▶ Identifying the next cohort of businesses, with potential LENs network links to the original cohort of 'LENs leaders'
- ► Engaging nextgeneration organisations in the LENs process

How to get involved

Starting to build a network

If your organisation is interested in getting involved in a LENs business network, or you would like more information, please get in contact directly with Katherine Spooner at Business in The Community: katherine.spooner@bitc.org.uk

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Business in the Community 137 Shepherdess Walk London N1 7RQ

T: +44(0) 20 7566 8650 E: information@bitc.org.uk

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