Tees Valley

Local Environment and Economic Development – Report of the Level 1 Workshop

Held at the Tees Valley Combined Authority, Stockton-on-Tees 24th May 2017



Produced on behalf of the Tees Valley Combined Authority

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1. Purpose of report

This report is a note of a Level 1 workshop which used the Local Environment and Economic Development (LEED) process. LEED is a toolkit designed to support Local Enterprise Partnerships (LEPs), and in the Tees Valley situation the Combined Authority, identify key *opportunities and threats* to *local economic plans* that stem from the *economy's dependence on the environment*. These are significant, but often given insufficient consideration in economic development planning, partly because the complexity of the evidence base makes them hard to assess. LEED was developed by Natural England, the Environment Agency, the Forestry Commission and Defra in conjunction with four LEPs.

Level 1 of the LEED process is designed to gather local experts in the environment and the economy, to arrive at an interim list of opportunities and threats, via a structured process. The evidence base behind these opportunities and threats can then be tested further and refined through Levels 2 and 3 of the toolkit if required. More information on LEED can be found here.

2. Summary of the workshop

The Tees Valley Combined Authority (TVCA) was established in April 2016 at the same time the Tees Valley Nature Partnership was re-launched. They share the same geographical boundaries and, following discussions, agreed to work together to hold a LEED workshop on the 24th May at Cavendish House to consider how the economic growth plans for the Tees Valley area are impacted by the economy's dependencies on the natural environment.

Attendee list:

- Andrew Lewis, Tees Valley Combined Authority
- John Leer, Tees Valley Combined Authority
- Keith Wilson, Tees Valley Combined Authority
- Linda Tuttiett, Tees Valley Combined Authority
- Sarah Walker, Tees Valley Combined Authority
- Ben Lamb, Tees Rivers Trust
- Professor Ed Maltby, Independent contributor
- Eddie Halstead, Environment Agency
- Glyn Bateman, Natural England
- Graeme Hull, Environment Agency
- Graham Megson, Hartlepool Borough Council
- Jeremy Garside, Tees Valley Wildlife Trust
- Liz Small, North Yorkshire County Council
- Paul Clarke, Middlesbrough Borough Council
- Rachel Murtagh, Tees Valley Nature Partnership co facilitator
- Dr Robert Woods, INCA (Industry & Nature Conservation Association)
- Rory Hunter, Environment Agency
- Timothy Crawshaw, TVNP Chair/ Darlington Borough Council
- Tim Sunderland, Natural England lead facilitator

The workshop produced a list of opportunities and threats and ways to address them. Opportunities are areas where improving, or maintaining, local natural capital will boost economic growth. Threats are areas where declining natural capital could reduce economic growth. The LEED workshop brought together experts in economic development and ecosystem services to do this, generating new insights and shared understanding.

Economic context and plans

The ambition of the TVCA "is for Tees Valley to become a high value, low carbon, diverse and inclusive economy". Underlying this ambition is a commitment to improving the lifetime opportunities for local people, tackling some of the difficult challenges of social exclusion, providing opportunities across all the Tees Valley, including rural areas and disadvantaged communities, thereby ensuring that all citizens are able to share in the benefits of economic growth.

The refreshed <u>Strategic Economic Plan (SEP)</u>: Industrial Strategy for the Tees Valley coincides with the establishment of the Tees Valley Combined Authority and its associated new powers and funding. The plan sets out the growth ambitions and priorities for the Tees Valley over the next ten years to 2026. The SEP is focused around six thematic building blocks which reflect the main priorities and areas of activities over the next ten years to unlock transformational growth:

- 1. Business Growth
- 2. Research, Development, Innovation & Energy
- 3. Education, Employment & Skills
- 4. Place
- 5. Culture
- 6. Transport & Infrastructure

Since 2011, Tees Valley and local partners have secured £223 million of investment which is set to deliver: 11,620 jobs; and £1.47 billion of public/private investment (including £773 million of capital investment in the enterprise zones)¹

Other key elements influencing the refreshed SEP include the role the Tees Valley has in The Northern Power House, a commitment to investing in the 'circular economy' which 'forms the central tenet of Tees Valley's productivity led growth agenda' and the new The South Tees Development Corporation. The latter is the new Mayoral Development Corporation which is taking leadership of a land commission to examine what publicly owned land and other key strategic sites should be vested in the development corporation.

Tees Valley: Opportunity Unlimited An independent report by Lord Heseltine

Further information on the workshop can be found on the TVNP website: http://teesvalleynaturepartnership.org.uk/events-meetings/workshops/

¹ <u>Tees Valley Strategic Economic Plan the Industrial Strategy for Tees Valley 2016-2026 Executive Summary</u>

3. Workshop Methodology

Aim



The aim of the workshop was to support strategic economic planning through the identification of opportunities and threats to the economy of the area, which stem from the economy's dependence on the environment. To do this we used the LEED process, which is designed to help LEPs make sense of the mass of complex environmental information and distil it into key points demanding action.

Process

The process starts with standard economic planning. For this study, we considered the current situation and the LEP's strategic growth plan. This is available from economic planning documents. In section 2 we looked at what this means in physical terms, particularly in terms of inputs and outputs. This put us in a position to consider how the economy relates to the environment and identifies the economy's main environmental dependencies. We did this from an *ecosystem services* perspective (explained below). Finally, we could list opportunities and threats to the economy, and consider strategic and tactical solutions.

Ecosystem Services

This study makes use of the Ecosystem Services Framework, which is recognised as best practice in scientific and policy terms for considering the environment/economy relationship. The Ecosystem Services Framework considers the dependence of the economy on the environment in four categories;

- Provisioning services material such as timber, water and crops.
- Regulating services the ways in which the environment provides order and structure, such as flood control. Regulating services are normally taken for granted until damaged.
- Cultural services non-material dependencies, such as the dependence of tourism on the attractiveness of a destination.
- Supporting services the natural cycles that the other services depend upon, such as the water cycle.

This approach ensures that the work is systematic and rigorous, and allows it to be compared to other work in this area.

4. Opportunities and Threats

The opportunities on this page are the top ten identified by the workshop, ranked in order of popularity.

A one-day workshop can only produce an interim list, due to both constrained time and the need to consult experts who were unable to attend. More specific and worked through opportunities and threats are produced by Levels 2 & 3 of the toolkit.

Opportunities



01: River catchment/estuary

- Undervalued asset. Support economic growth; shared plan with existing industries & new opportunities e.g. improved water frontage, tourism etc.
- The work of Tees Estuary Partnership provides clarity around regulation with more certainty and opportunities for industry.



02: Redcar SSI Steelworks Site

- Unique location & opportunity to repurpose some/all of existing infrastructure. Potential for mixed use development providing high quality business infrastructure & recreational natural space.
- Demonstration area of circular economy with emerging industries e.g. graphene/hydrogen



03: Green Infrastructure (GI)

- Rationalise the GI offer across the whole of the Tees Valley and across all the borough boundaries.
- Opportunity through new developments to improve the quality of GI and connect new areas with the existing network thus enhancing value of new & existing housing stock.



04: Phytoremediation & sustainable urban carbon capture

- Large areas of contaminated land exist across the area. Use vegetation to decontaminate and remediate land and engineer soils to capture carbon.
- Create temporary habitats whilst awaiting development, improve the offer to developers, create positive image of the area.



05: Industrial Archaeology

- Use the extensive industrial archaeology of the area to support tourism and leisure activities.
- Create a better tourism offer and sense of place, destination points along river/coast e.g. Redcar blast furnace.



O6: Improving access

- Improve the network of PROW and cycle paths to support active travel by linking economic development opportunities.
- Better tourism offer link into new England coast path and longdistance footpath the Teesdale Way.



07: Managing flood risk

- Increasing housing and commercial development across the area could build in help to improve management of surface water.
- Co-ordinated approach including natural flood management across the TV to alleviate risk and provide wider environmental benefits.



08: Decommission oil rigs

- Become the centre for 'greener' decommissioning using the principal of the circular economy.
- Market opportunity, re-use and recycle materials from the rigs to be used in local heavy industries and new developments.



09: Social Inclusion -Improving Access

- More attractive place to live and work. Increase safe and easy access to green spaces and increase opportunities for social prescribing.
- TV has some of most socially deprived areas in the country. Work smarter with health sector to promote, and make better use of GI



010: TV Centre of excellence for renewable energy

- Build on emerging renewables sector to integrate renewables into local new developments.
- Create demonstration projects, generate a local market & support this sector.

Threats



T1: River catchment & estuary

- Less water frontage land available and possibly less desirable land because of 'coastal squeeze'.
- Development pressure up to estuary edges & impact of climate change (sea level rise, more storm surges, invasive species) leads to less land.



T2: Not realising the significant opportunity at the SSI site

- Large and unique site, opportunity to identify and work with the natural and cultural assets could be over-looked for a more conventional solution.
- Limited 'window of opportunity' chance to be creative



T3: Resilience to effects of climate change

- Extreme weather events e.g. tidal flooding risk in estuary port and drought. Process industries infrastructure particularly vulnerable
- Sufficient planning and investment needed to adapt.
- Update TVU Climate Change Strategy & link to SEP and Investment Plan.



T4: Overlooking our natural assets

- Not recognising 'wild spaces' in the Tees Valley that have wildlife value but not conventional aesthetic value.
- Restricts the ability to fully realise cultural value, timely as the production & publication of local plans.



T5: Flood Risk to and from new developments

- Inappropriate developments on or close to floodplain increasing risk of flooding and diffuse pollution as climate change proceeds.
- Rapid & large increase in the next 10-20 years of housing developments placing strain on water storage capacity, drainage and run off to rivers.



T6: Development strategies risk being short term

- Rapid development may not fully consider long term effects of resource availability, flooding, GI provision.
- Adverse impact on the sustainability of business growth, attractiveness of the area, tourism & relocation to the area.



T7: Changes to regulations post EU

- Possible relaxation of environmental legislation less protection.
 More focus on productivity & growth change in import/export availability of goods/services.
- Less protection of the environment, less resources protect & invest.



T8: Peripheral business parks - short life

- Perceived numerous small and medium business parks not fit for purpose lie fully or partially occupied across the Tees Valley.
- Wasteful use of resources and land.



T9: Air Pollution

- Perceived high levels on local air pollution. Actual is better than national average for urban areas.
- Particulates PM₁₀ and ozone from traffic pollution are of main concern and set to rise because of climate change.



T10: Sedimentation upstream of the barrage

- Sedimentation occurs due to increased flooding, especially after extreme weather events. Impacting on amenity spaces and structural integrity of affected buildings
- Sufficient planning and investment needed to adapt.

5. Opportunities in Detail

01: River catchment/estuary



The Combined Authority commissioned Lord Heseltine to undertake an independent comprehensive review of the Tees Valley economy. In this he acknowledged that the River Tees 'is a key natural asset which makes a significant contribution to quality of life and the local economy, offering a wide range of recreational activities and providing a high-quality setting for businesses and new development'. This asset has many elements; an industrial corridor, a recreational resource, a setting for many of the

Tees Valley towns and villages and internationally protected wetlands, nature reserves and rare 'brown-field' habitats and species. It also has a hugely significant role in the cultural heritage of the Tees Valley as a major player in the industrial revolution, advancement of heavy industry and the development of the Tees Valley communities. More recently the river has played a more contemporary role in culture such as Stockton's Riverside Festival and the international white-water centre at the Tees Barrage.

Much has been achieved to date to enhance the river corridor through the creation of new nature reserves at locations such as Preston Farm and Bowesfield. The Heritage Lottery Funded 'River Tees Rediscovered' 5-year Landscape Partnership programme has involved local people in the life of the river through countless volunteer hours working with organisations such as the Tees Valley Wildlife Trust, the Tees Rivers Trust, the Canal and Rivers Trust. The on-going regeneration along the river at sites such as Northshore in Stockton and the new England Coastal Path. The section of route due to open soon along the north shore of the Tees Estuary connects three of the area's key attractions: Teesmouth National Nature Reserve, RSPB Saltholme and the Transporter Bridge and will then be the longest continuous stretch of the path open.

New and innovative opportunities for the economy and environment are being developed through the work of the Tees Estuary Partnership. The partnership was formed in response to the proposed extension to the Teesmouth and Cleveland Coast Special Protection Area. An approach unique to the Tees Estuary has been taken as conservation bodies working alongside industry are developing a Tees Estuary Management Plan. By working together for a shared vision industry has more certainty over the regulatory process and the sites across the Tees Estuary can be seen in totality rather than on an individual site/company basis. Options for strategic mitigation and land banking are being explored i.e. when development does occur mitigating for this in the most appropriate area rather than a piece of land that is owned by the company carrying out the development. This ultimately gives a win-win for nature and business.

Moving forward there is so much potential to develop the Tees Estuary in particular as a cultural and natural asset for the area for the benefit of people, business and wildlife. To this end the Combined Authority with the Tees Valley and the Tees Estuary Partnerships are exploring the possibility of developing a Landscape Partnership for the Tees Estuary, building on the legacy of River Tees Rediscovered. This will help to realise on of Lord Heseltine's key recommendations that 'the Combined

Authority should take the lead on the natural environment agenda, recognising the significance of the river corridor and enabling increased access...and they 'should set a local commitment that within 25 years all capital investment (machinery, industrial equipment, etc.) that contributes to pollution, or loss of river habitat and bio-diversity, will have been replaced, sustaining the continued improvement in Tees water quality'.

These solutions will help deliver the following priorities and core activities in the SEP:

- Research, Development, Innovation & Energy: Further enhance productivity in all core sectors through the commercialisation of knowledge - Promote low carbon/Circular Economy support to SMEs to become more energy efficient
- Place: Promote the Tees Valley... and create the conditions necessary to attract businesses and individuals...Improve the quality of the housing offer; Revitalise areas of poor quality housing and deprivation and Establish a Land Commission to capitalise underutilised assets
- Culture: Change the external perceptions of Tees Valley through the arts, cultural and leisure
 offer, create places that attract and retain businesses and business leaders, and make the area
 an attractive place to live, work and visit.

02: Redcar SSI Steelworks Site

The site of the former steel works sits in a unique location at the mouth of the Tees Estuary on the south bank adjacent to PD Ports. It is not one unified site, but a large complex one with shared services, public roads, a National Rail railway and public footpaths. Since the closure of SSI in October 2015, the site has been in compulsory liquidation and in May 2017, with the election of the new mayor, has passed over to the new South Tees Development Corporation to manage and run the site.

Funding for a Resilient Heritage HLF grant to look specifically at the steel heritage has recently been secured. Initially focusing on the SSI site, it has been broadened out to include the whole of the Tees Valley. A business plan 'Tees Steel: Bridging the World' is currently being written.

As well as being strategically well placed for industrial use the site has phenomenal wildlife and possibly even tourism potential too. At this point in time there is a rare opportunity to evaluate the future of the site in a creative way. There may be potential for mixed use development providing high quality business infrastructure & recreational natural space. Demonstration area of circular economy with emerging industries e.g. graphene/hydrogen, repurpose some/all of existing infrastructure. Seen in conjunction with the as yet un-tapped potential of the Tees Estuary this site could form a key element in an exciting 'master plan for the estuary' for the benefit of the economy, people and wildlife.





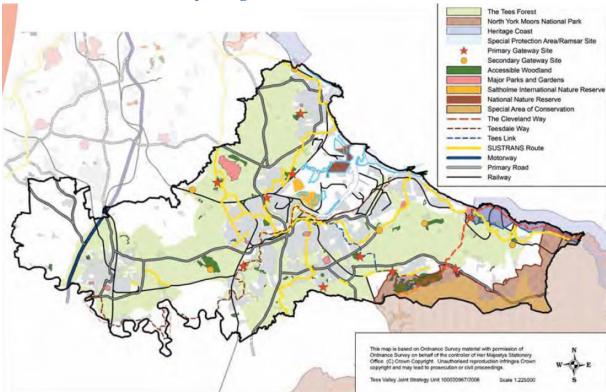


Emscher Landscape Park, Rhur district, Germany. Former steel and coal centre now regenerated and re-purposed.

These solutions will help deliver the following priorities and core activities in the SEP:

- Business Growth: Further increase jobs and business density through targeted support to create and attract new companies... - Utilise Circular Economy approach to promote 'low cost/high productivity proposition'
- Place: Promote the Tees Valley... and create the conditions necessary to attract businesses and individuals... Establish a Land Commission to capitalise underutilised assets
- Culture: Change the external perceptions of Tees Valley through the arts, cultural and leisure offer, create places that attract and retain businesses and business leaders, and make the area an attractive place to live, work and visit. Support creative, cultural and digital businesses.

O3: Green Infrastructure (GI); including: O6: Improving access; O7: Managing flood risk; O9: Social Inclusion -Improving Access



Tees Valley Green Infrastructure Strategy – Map 5. Note large pale green area 'The Tees Forest' no longer exists.

Tees Valley Unlimited, the Local Enterprise Partnership now subsumed into the Combined Authority published a <u>Tees Valley Strategic Infrastructure Plan</u> 2014 which has a section on flood risk and water management but not Green Infrastructure. Prior to this a former incarnation of the LEP the Tees Valley Joint Strategy Unit published a <u>Tees Valley Green Infrastructure Plan</u> in 2008 which has not been adopted by the Combined Authority.

Since these plans were published the governance of the Tees Valley has changed. The new Combined Authority was launched in 2016 with the new mayor elected in 2017. The government aims for every local authority area to have an adopted Local Plan by 2017 with commitments to extensive new housing development land allocations. It seems an opportune moment to review the GI offer across the whole of the Tees Valley and across all the borough boundaries and integrate these assets more clearly into the SEP and investment Plan.

Increasing housing and commercial development across the area could actually provide an opportunity to improve the quality of GI by connecting new areas with the existing network and create new natural flood management schemes. This co-ordinated approach across the area could improve the management of surface water, help to alleviate flood risk and provide wider environmental benefits thus enhancing the value of new & existing housing stock.

The SEP states its 'commitment to improving the lifetime opportunities for local people, tackling some of the difficult challenges of social exclusion, providing opportunities across all of the Tees Valley including rural areas and disadvantaged communities, and thereby ensuring that all citizens are able to share in the benefits of economic growth'.

There is significant and growing evidence on the physical and mental health benefits of green spaces. Research shows that access to green space is associated with better health outcomes and income-related inequality in health is less pronounced where people have access to green space²

There is an opportunity to work smarter with the health sector, Public Health England are keen to work with partners to promote, and make better use of GI. <u>Natural Health and Wellbeing, Denise</u>

<u>Orange 16/6/17</u>

Improve the network of PROW (Public Rights of Way i.e. footpaths and bridleways) and cycle paths to support active travel by linking economic development opportunities. Better tourism offer link into new England coast path and long-distance footpath the Teesdale Way

These solutions will help deliver the following priorities and core activities in the SEP:

- Place: Promote the Tees Valley... and create the conditions necessary to attract businesses and individuals... Rejuvenate our town centres; Improve the quality of the housing offer; Revitalise areas of poor quality housing and deprivation and Establish a Land Commission to capitalise underutilised assets
- Culture: Change the external perceptions of Tees Valley through the arts, cultural and leisure
 offer, create places that attract and retain businesses and business leaders, and make the area
 an attractive place to live, work and visit.

04: Phytoremediation & sustainable urban carbon capture

The SEP recognises that there is a 'surplus of brownfield sites and 'a need for public sector intervention, and through our devolution agreement with Government we have developed mechanisms...to coordinate public sector investment and act as a catalyst for further private sector support'

The Combined Authority are now well placed to seize opportunities to improve these sites and make a better offer to future developers and investors.

Firstly, waste land 'in transition' to developed land can be put to use. Temporary habitats can be created whilst awaiting development improving the offer to developers and creating a positive image of the area. A stunning example is The Sheffield City Council Cleared Sites Programme. In

² Institute for Health Equity: Natural Solutions to Tackling Health Inequalities

instances where the land is contaminated, the use of vegetation to decontaminate and remediate land is a tried and tested method for the preparation for development.

Secondly, there is the opportunity to use soil on urban/brownfield sites as a tool for carbon capture to contribute to cutting CO2 emissions. The economic opportunity comes from ability to use these sites for carbon trading. 'Soils are the greatest land-based reservoir for carbon on the planet... (with) a very significant role in controlling atmospheric CO2 levels...we have an opportunity to engineer soil systems so that the amount of CO2 that they take up is maximised. This is a form of carbon abatement that is inexpensive because it is passive (energy inputs are minimised once constructed)'³.

Work is already being done in the Tees Valley with Carbon Capture and Storage (CCS). Led by Teesside Collective, a cluster of leading industries using ground-breaking 'technology that can capture, transport and permanently store up to 90% of the CO2 emissions produced by industrial facilities'. It is their ambition 'to establish Tees Valley as the go-to location for future clean industrial development by creating Europe's first CCS equipped industrial zone'. Could SUCCESS be a part of or an extension of this?

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- Research, Development, Innovation & Energy: Further enhance productivity in all core sectors
 through the commercialisation of knowledge Develop nationwide/European multi-disciplinary
 innovation knowledge networks; Promote low carbon/Circular Economy support to SMEs to
 become more energy efficient; Increase availability of demonstration/incubation space
- Place: Promote the Tees Valley... and create the conditions necessary to attract businesses and individuals... Revitalise areas of poor quality housing and deprivation; Establish a Land Commission to capitalise underutilised assets.

06: Industrial Archaeology

The Tees Valley has a rich industrial heritage intimately linked with the natural assets of the area. As well as the steel heritage which is being researched and developed through the Tees Steel project there is railway heritage of international importance and extensive industrial archaeology in the area too. This includes the historic ironstone and alum workings of East Cleveland and first and Second World War installations around the Tees Estuary. Much of this heritage is unexploited, undervalued and not scheduled. Hidden-Teesside gives some great examples. There could be scope to explore these assets to support tourism and leisure activities, create a better tourism offer and sense of place, such as destination points along river/coast.

These solutions will help deliver the following priorities and core activities in the SEP:

³ <u>Newcastle University Success project</u> - SUCCESS are working across the north east and have used some test sites within the Tees Valley.

- Place: Promote the Tees Valley... and create the conditions necessary to attract businesses and individuals.
- Culture: Change the external perceptions of Tees Valley through the arts, cultural and leisure
 offer, create places that attract and retain businesses and business leaders, and make the area
 an attractive place to live, work and visit. Undertake a cultural conversation with communities
 and businesses; Support creative, cultural and digital businesses

09: Decommission oil rigs

North Tees currently has an operation to decommission oil rigs. Is there potential to develop this to become the centre for 'greener' decommissioning using the principal of the circular economy This could generate market opportunities in the re-use and recycling of materials from the rigs to be used in local heavy industries and new developments.

These solutions will help deliver the following priorities and core activities in the SEP:

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- Research, Development, Innovation & Energy: Further enhance productivity in all core sectors
 through the commercialisation of knowledge Develop nationwide/European multi-disciplinary
 innovation knowledge networks; Promote low carbon/Circular Economy support to SMEs to
 become more energy efficient;

010: TV Centre of excellence for renewable energy

Tees Valley has become established as a national hub for advanced manufacturing with particular specialisms in low carbon holding expertise in offshore wind and waste to energy. Part of the Tees Valley's 2025 vision is to play a major part in developing, manufacturing and delivering technologies to support a low carbon UK economy. One of the aims in the SEP is 'To introduce new processes and practices which reduce carbon emissions, increase productivity and the availability of high value jobs. 'Promote low carbon/Circular Economy support to SMEs to become more energy efficient'

These solutions will help deliver the following priorities and core activities in the SEP:

- Business Growth: Further increase jobs and business density through targeted support to create and attract new companies... - Utilise Circular Economy approach to promote 'low cost/high productivity proposition'
- Research, Development, Innovation & Energy: Further enhance productivity in all core sectors
 through the commercialisation of knowledge Develop nationwide/European multi-disciplinary
 innovation knowledge networks; Promote low carbon/Circular Economy support to SMEs to
 become more energy efficient.

6. Next Steps

The workshop and this report is Level 1 and only the beginning of the toolkit. To further the work the recommendation is to progress to Level 2. This involves a more formal research process, which produces a report which is followed by a final workshop. A small working groups or formal Local Area Consortium can be appointed to manage the research, provide staff and/or funding for it, and agree sign-off any publications and procedures.

In level 2 the initial ideas from level 1 about the opportunities and threats are checked with key partners and experts in a systematic manner. One option is to use consultants. If consultants are appointed it is essential to ensure that they have the appropriate expertise in environmental science and economic planning required to deliver the project.

END