

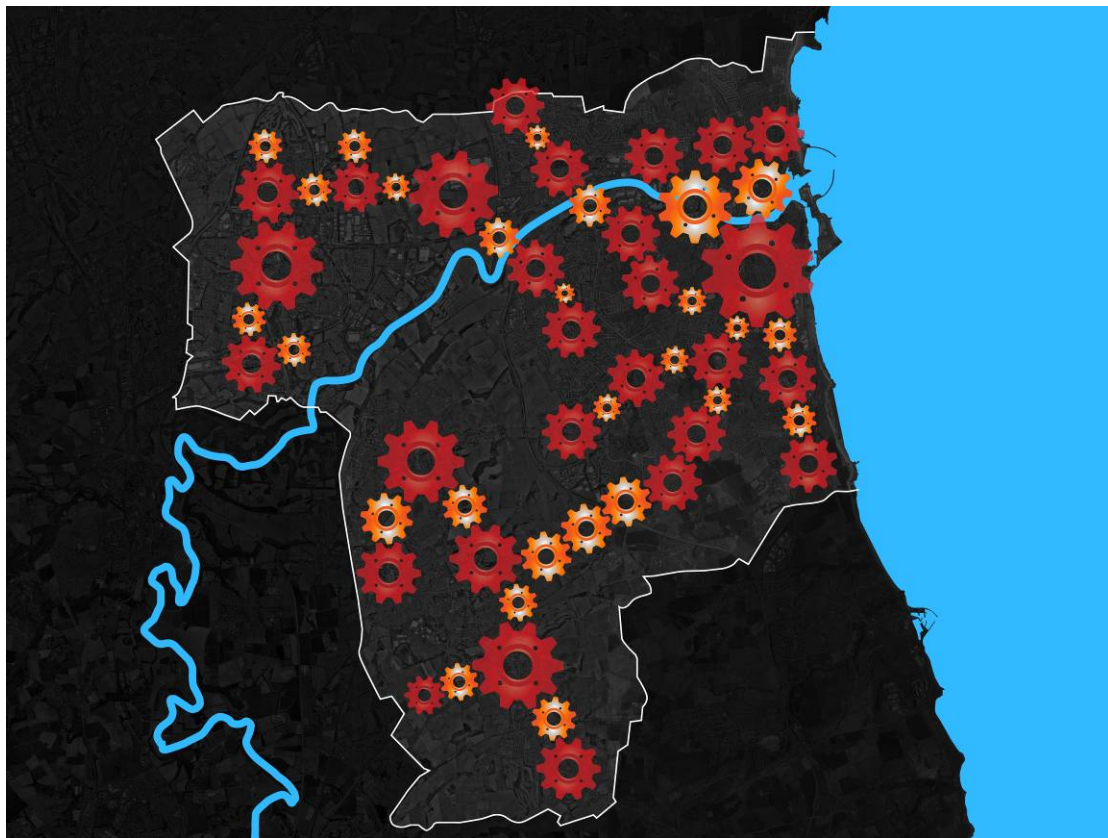
1. A Sequenced Spatial Response to the Masterplan

The vision and aims of the masterplan will lead to a spatial outcome for the city that will evolve over a period of at least 15 years.

Thinking behind the Spatial Response

Presently, the individual settlements and neighbourhoods in Sunderland work to varying degrees within their own right, almost like cogs in a gearbox. However, these places (cogs) are often disconnected from others and from the main central engine (the city centre) which ultimately means that the city as a whole is not working as effectively as it should and is “in neutral.”

The logic behind the Spatial Response is to create new cogs in the chain – physical, social and economic initiatives to put the gearbox and the city as a whole “in gear”, to work more effectively for its residents and business.



The Gearbox Analogy

This paper seeks to describe how the spatial outcomes of the masterplan will progress over a sequence of three phases, as follows:

Phase 1: Pioneering the new Sunderland economy by:

- ❑ Strengthening the city centre
- ❑ Establishing the Low Carbon Economic Area
- ❑ Embedding benefits locally

Phase 2: Growing the new Sunderland economy by:

- ❑ Diversifying the city centre
- ❑ Nurturing the Low Carbon Economic Area
- ❑ Connecting communities to economic opportunities

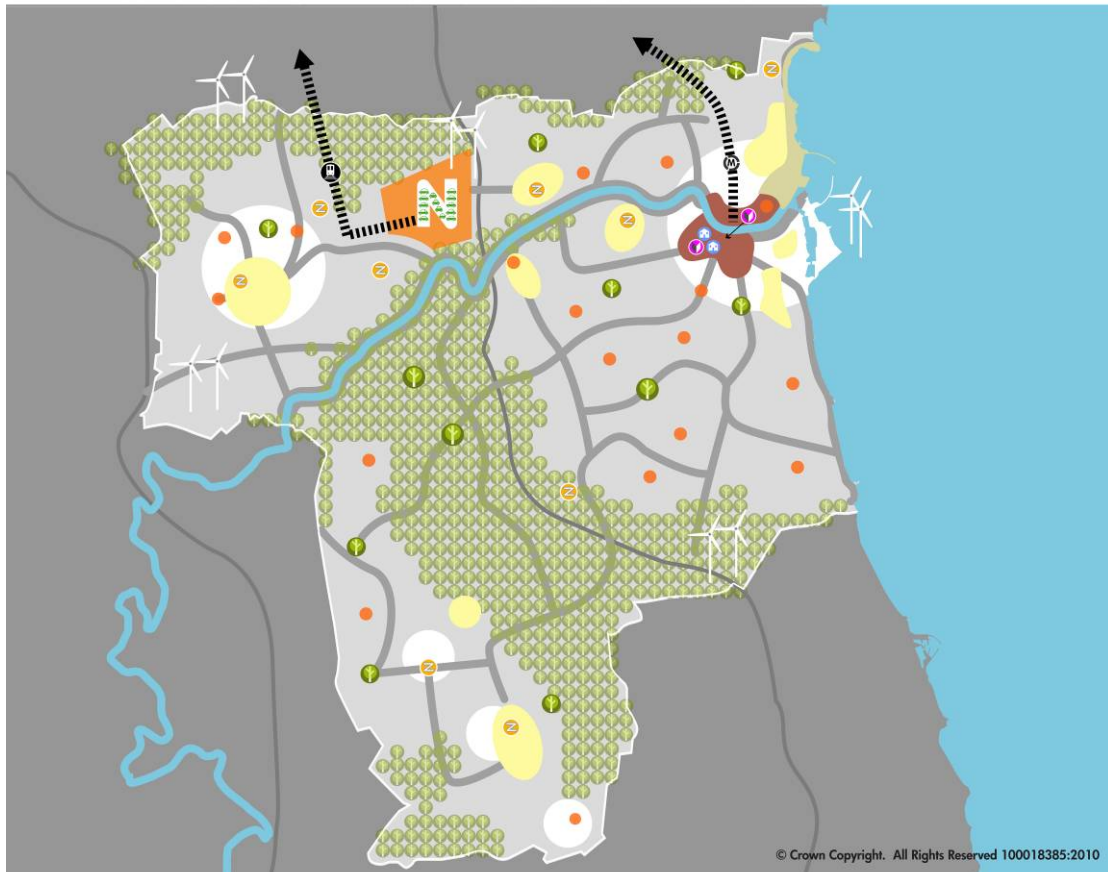
Phase 3: Sustaining the new Sunderland economy by:

- ❑ Growing the city centre
- ❑ Strengthening the Low Carbon Economic Area
- ❑ Transforming external perception.

1.1 Phase 1: Pioneering the new Sunderland economy

Phase 1 is focused on strengthening the city centre, establishing the LCEA and embedding benefits to local communities. It is designed to put in place the mechanisms for developing the Low Carbon City and implementing a series of early action regeneration projects which are already planned or underway. This will take place over a 5 year period, towards 2014.

Phase 1 : Pioneering New Sunderland



a) Strengthening the city centre

The New Kind of University City Centre

The initial focus in the city centre should be on creating a 'University City' environment through improvements to the quality and connection of key assets within the City Centre. Physical enhancements should be made throughout the City to improve its perception and use, support new employment, retail and leisure development and promote a University City 'feel and 'buzz'. Two investment spines are proposed: the University Axis and Park Axis, both which focus on linking University campuses and green assets to one another, to the city centre and growing the city centre along the waterfront. (See separate City Centre Strategy for more detail.)

The University Campus must be better integrated into the City Centre with improvements to the pedestrian experience and physical environment along key approach routes. A new Electric Bus shuttle is being promoted to link the city centre, university campuses, the Hospital and the coast, which could make a significant contribution to improving integration of these key assets.

A new Quarter should be created around the University Campus and the Minster area, which could be facilitated by the removal of the impenetrable Leisure Centre which at present is underused, of poor quality and creates a barrier between these areas. The planned delivery of the New Business Quarter at the Vaux site, Holmeside and the continued regeneration of Sunnyside would be accelerated during in Phase 1.



Focus is also given to linking the City Centre assets of the Holmeside Quarter through the Minster to the New Business Quarter on the Vaux site, by improving the quality of public realm with new great streets and spaces and creating unifying physical elements. This would essentially become a spine of improvements and will contribute to improve the overall perception and enjoyment of the City Centre.

Physical enhancements would also need to be prioritised to the Station building and other key gateways and corridors into the city to create a positive and memorable gateway arrival experience.

Further investment is required along the river weir to create a new riverside environment that capitalises on already present development and new planned sites to create a vibrant riverside destination.

b) Establishing the LCEA

Low Carbon Technopole Hub

The area around the Nissan plant would become the hub of the Low Carbon Technopole for the city. Nissan would fulfill its commitment to produce batteries for electric cars. Technological research would begin with a view to manufacturing electric cars on-site in Phase 2. Land assembly and infrastructure planning would also begin towards opening the Leamside Line northwards to the Tyne Port.

On-site renewable energy generation, through wind power, would also be explored within Phase 1, where in Phase 2 electric cars can be produced with the contribution of renewable energy.



Low Carbon Icons: Wind Turbines

Wind turbines should be installed within Phase 1 to contribute to the energy needs of both the Technopole and City Villages, adding to the low carbon agenda. Wind turbines will create a positive imagery at key gateways into the City, although their location will require less sensitive landscapes to be defined.



LCEA Green and Waterfront Infrastructure

In Phase 1, improvements would be made to existing green assets such as Hylton Castle, Fulwell Mill, Penshaw Monument and Herrington Country Park to offer an enhanced leisure and cultural offer. The planning of improvements to the wider green infrastructure would begin, examining the creation or enhancement of connections between green assets, routes into the City Centre and to the Technopole and between City Villages, through the creation of pedestrian, cycle and guided bus routes.

Infrastructure planning towards the reopening of the presently disused Leamside Line would begin with a view to opening the line to provide a northern freight link to the Tyne Port.



Express Link to and from Newcastle

Improvements would be made to the frequency and speed of rail links to Newcastle/Gateshead and Newcastle Airport in the form of a new express service, to link Sunderland City to the rest of the UK and beyond and supporting the Grand Central Line south to London.



c) Embedding benefits locally

Low Carbon City Villages – Pioneers

Sunderland was originally made up of almost 100 separate villages and as it grew over time, many of these villages merged to create larger suburbs of the city centre. The aim of the Low Carbon City Villages is celebrate the historical ‘village’ character by helping those most at need to become city villages with a new purpose, character and real quality of environment.

A range of low carbon related development would take place within the city villages which are already under stress from deprivation and part of ongoing regeneration initiatives. Development would include new enterprise facilities and low carbon housing to facilitate the inward migration of workers associated with the expansion of the Low Carbon Technopole and to create more attractive housing opportunities for local people. New training, learning and employment opportunities associated with University City and the Low Carbon Technopole would be created within new enterprise incubation facilities.

New standards will be set in terms of social and economical inclusivity, place-making and the sustainable credentials of buildings and construction methods in order to create places with a focus on both people and place.

These pioneering City Villages would become showcases for low carbon living and working and will be the model for further development of City Villages in Phases 2 and 3.



Charging points

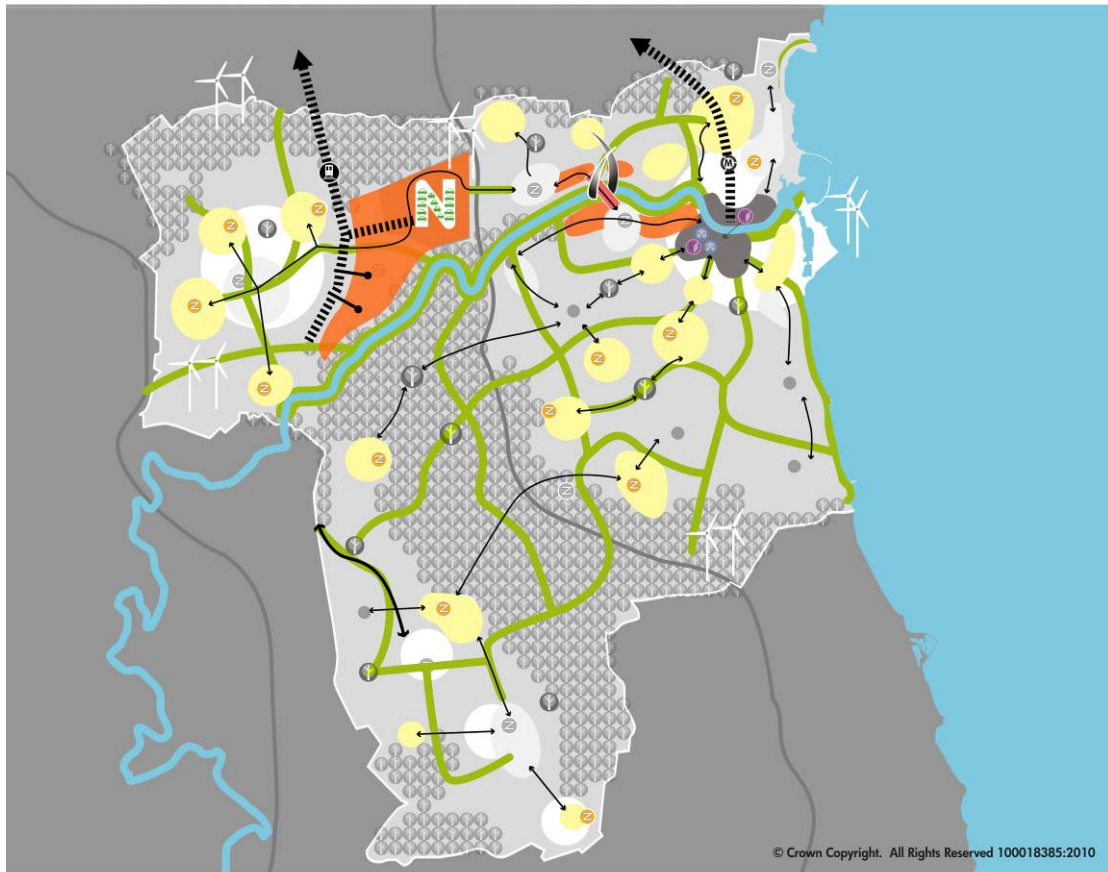
Linked to the progression of low carbon living, facilitated by the activities at the Technopole, electric car re-charging points and associated commercial areas would be developed within the pioneering City Villages a with a view to, in time, allowing residents and businesses to use electric cars on a daily basis.



1.2 Phase 2: Growing the new Sunderland economy

Phase 2 is based around nurturing and expanding the LCEA and Technopole, diversifying the City Centre, rolling out the City Villages and connecting up local communities.

Phase 2 : Growing New Sunderland



NURTURING THE LCEA TECHNOPOLE HUB
EXTENDING LCEA SITE & INFRASTRUCTURE AROUND NISSAN



EXPANDED TECHNOPOLE
ADVANCING WEAR SIDE EMPLOYMENT, LOW CARBON HOUSING, 'RIVER WEAR CANYON ADVENTURE PARK', LINKED NORTH & SOUTH BANK VIA NEW BRIDGE



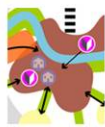
CHARGING POINTS
ROLLED OUT THROUGHOUT



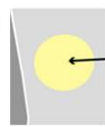
LCEA RAIL LINK
EXTEND LEAMSIDE LINE TO SERVE BIGGER TECHNOPOLE



LCEA GREEN & WATERFRONT INFRASTRUCTURE
REALISE THE LANDSCAPE, WALKING/CYCLING & QUALITY BUS INFRASTRUCTURE TO INTEGRATE CITY VILLAGES INTO CITY CENTRE AND TECHNOPOLE



CITY CENTRE
CITY CENTRIC GROWTH FOCUSED ON LINKING UNIVERSITY TO CITY CENTRE AND WHOLE CITY TO WATERFRONT

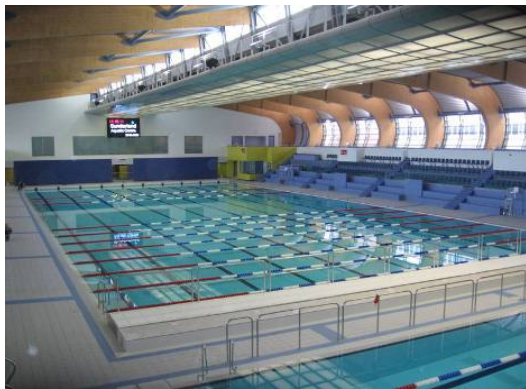


LOW CARBON CITY VILLAGES (SECOND WAVE)
PRIORITISED GROWTH - NEW ECONOMIC, LEARNING & LIVING OPPORTUNITIES & UNIVERSITY PRESENCE

a) Diversifying the city centre

University City Waterfront

In Phase 1 plans for the creation of a ‘special place’ University City Waterfront would have been developed with a focus on the north banks of the river, linking the major City assets of the Stadium of Light, University Campus and National Glass Centre through to St Peters Church. In Phase 2 delivery of the Waterfront would progress, building on the successful delivery of the New Business Quarter at the Vaux site, Holmeside and the improvement to the core of the city centre.



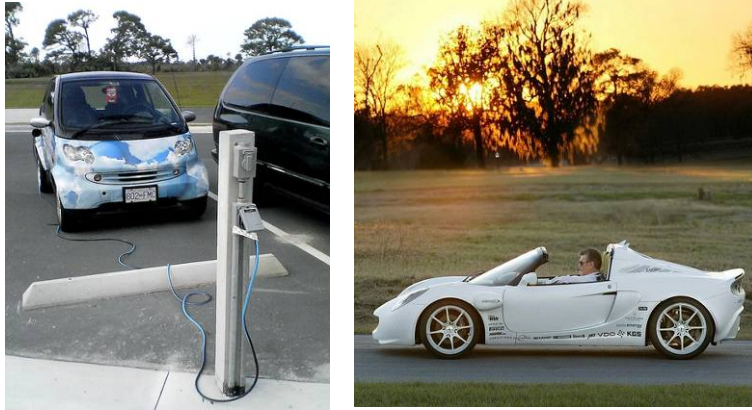
Improvements would be made to the pedestrian and public realm environment and creating pleasant linkages and arrival points to the river from the areas to the north. Development would be intensified through the introduction of new hotels, restaurants and University City conference facilities, to create a mixed use visitor destination. New housing and employment opportunities will also be explored along the waterfront. Key gateways would be developed including delivery of the iconic Bridge.



b) Nurturing the LCEA

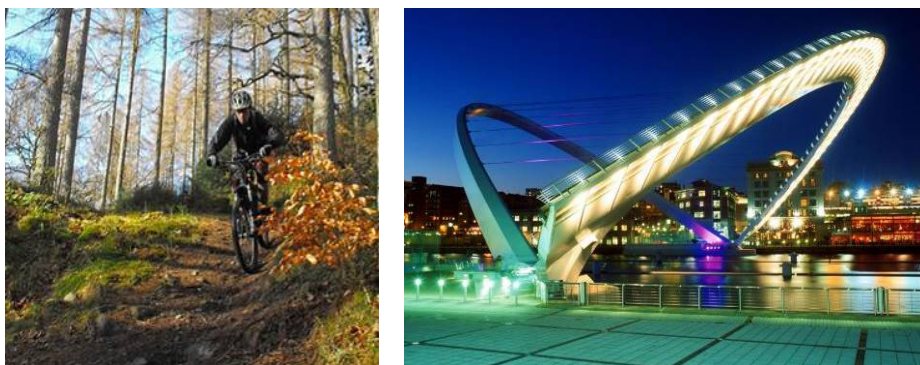
Expanding the Technopole Hub

Phase 2 would see the physical and technological expansion of the Technopole hub at Washington to facilitate the on-site production of electric cars, thus creating a World Centre for electric car production. Electric cars would also be promoted throughout the City, including through traffic management measures to support the low carbon lifestyle promoted within City Villages.



With the development of a new bridge crossing, the riverside area between the City Centre and the LCEA Technopole hub at Washington would become a key location and therefore low carbon development will take place to further promote and support the low carbon market and concentrate business, employment and housing opportunities within City Centre accessible locations.

Development would take the form of new low carbon housing and employment opportunities to complement and support the Technopole. 'Great outdoors' leisure and recreation offers would also be promoted, such as a River Wear Canyon Park with climbing, mountain-biking and other outdoor pursuits focused around the river asset. This area will be further supported by the existing Metro link to Pallion, making this area accessible for the whole City to enjoy.



This phase could see the expansion of the Port in its activities to add value to the City, through the development of activities that support key sectors, notably the offshore wind energy industry, subject to market outcomes in this sector at the regional level.



Low Carbon City Villages

The concept of low carbon City Villages would be rolled out across the City. Recharging points would be installed into all City Villages.



c) Connecting communities to opportunities

LCEA Transport and Green Infrastructure

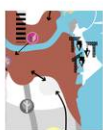
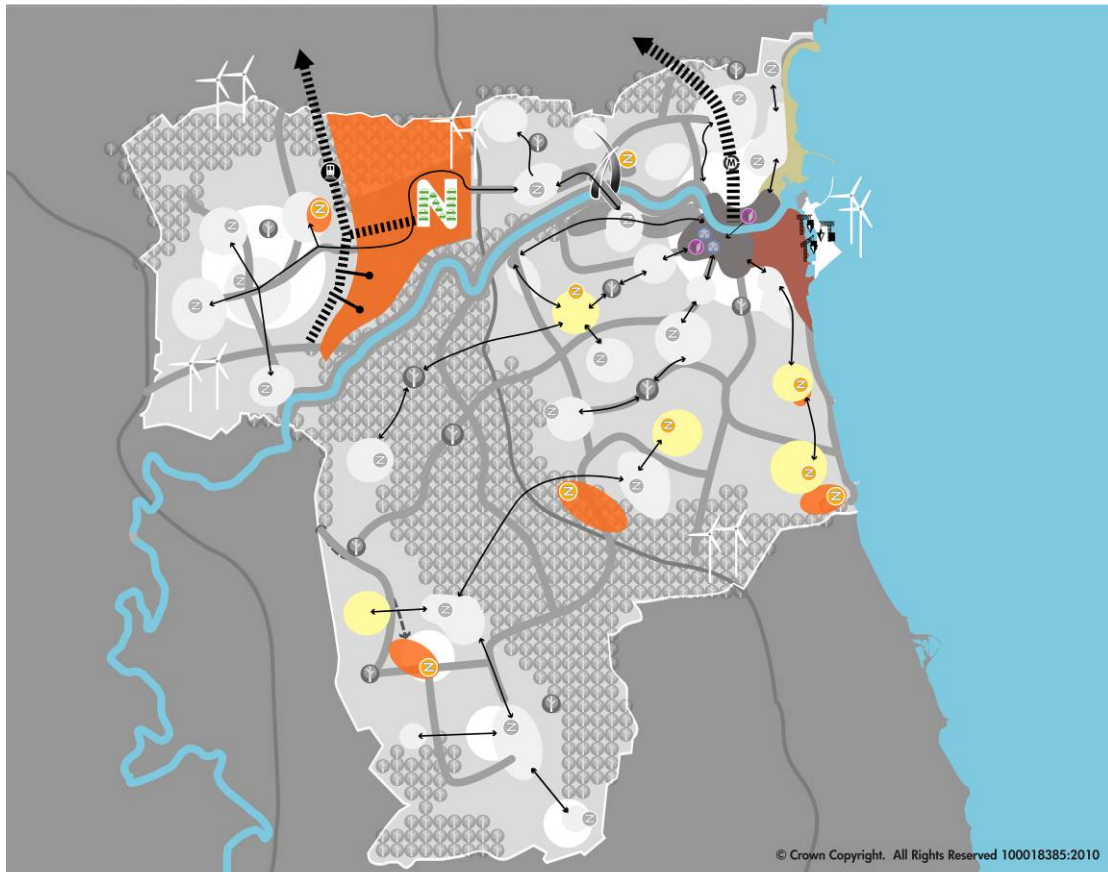
This Phase would see the realization of the planning of the green infrastructure with the implementation of new pedestrian, cycle and new guided bus routes linking the City Villages, City Centre, Technopole and other green assets. Connections from the LCEA green network would be explored to the Leamside Line and the existing Metro service.



1.3 Phase 3: Sustaining the new Sunderland economy

This Phase is designed to sustain the City Centre and the LCEA growth and transform external perception of the city.

Phase 3 : Sustaining New Sunderland



SEAFRONT CITY
GROW THE CITY CENTRE ALONG THE SEAFRONT TO EXTEND UNIVERSITY OFFER & RADICALLY TRANSFORM PERCEPTIONS. LINK CITY ON NORTH BANK WITH WEAR BRIDGE.



CHARGE POINT COMMERCIAL ZONES
EXTENDED & NEW ZONES CREATED.



FOCUSSED VALUE ADDED PORT
MAINTENANCE HUB FOR OFFSHORE RENEWABLES-NEW ROLE: LEISURE/MIXED USE.



REINVIGORATED SEASIDE TOWN
A SEASIDE RESORT & FOCUS ON SUPPORTING UNIVERSITY CITY.



CITY VILLAGES - FINAL WAVE
EXPANSION OF CONCEPT TO SMALLER NEIGHBOURHOOD & NEW SETTLEMENTS.

a) Growing the city centre

The Seafront City

Phase 3 would see the growth of the City Centre to address the coast, to create a Seafront City with iconic development including new homes, employment, recreation and leisure uses.



Links to the north would be facilitated with a new Wear crossing at the estuary, creating direct connections between the expanded City Centre and a new complementary seaside resort at Roker focused around the beach.



b) Strengthening the LCEA

Completing the symbol of the low carbon economy by completing the installation of recharging points within City Villages and the LCEA and providing recharging points within existing employment centres such as Doxford and Rainton Business Parks.

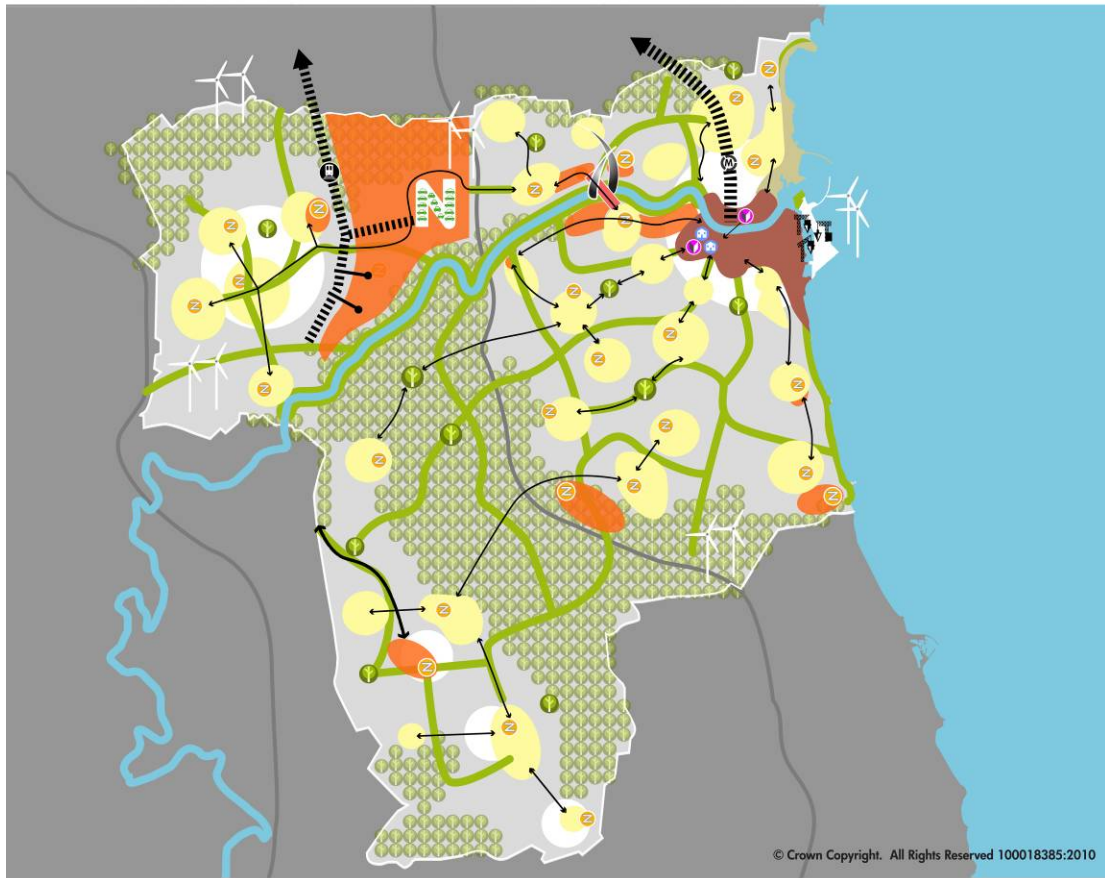


c) Transforming external perceptions

Demonstrating a commitment to sustainable regeneration of the whole city and securing long term positive change in external perceptions of Sunderland as a regional focus for living, working, learning and investing. This phase will also secure ongoing removal of the spatial barriers to employability to support transformation of the workforce through improving access to local employment opportunities and learning and skills training within City Villages.



All Phases



CITY CENTRE TRANSFORMATION
UNIVERSITY, LOW CARBON SHOWCASE,
WATERFRONT & SEAFRONT



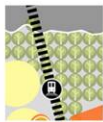
LOW CARBON CITY VILLAGES
ECONOMIC, LEARNING & LIVING
OPPORTUNITIES



LCEA TECHNOPOLE HUB



**LCEA GREEN & WATERFRONT INFRASTRUCTURE
& ASSETS**
MOVEMENT, HEALTH & BIODIVERSITY SPINES



TECHNOPOLE HUB RAIL LINK



EXPRESS LINK
SUPER RAIL LINK TO NEWCASTLE