

Presentation to Land Use, Planning & Transport SPC



South Dublin County Council
23rd September 2021



Comhairle Cathrach
Bhaile Átha Cliath
Dublin City Council



Rialtas
na hÉireann
Government
of Ireland

Tionscatal Éireann
Project Ireland
2040

Introduction

PRESENTATION

What is the Project About?

Work to Date

- Key Findings
- Emerging Objectives
- Development Scenarios

Emerging Preferred Scenario

- Land Use Themes
- Big Moves

Programme Overview

Q&A

What is the Project About?

WHAT IS THE PROJECT ABOUT?

- SDCC and DCC are working collaboratively to produce a planning framework for the Naas Road area.
- At 700ha, this land is set to become one of Europe's largest regeneration opportunities, referred to as the City Edge project.
- The area is located on the western edge of Dublin City and has the potential to shape the future growth of Dublin over the next 50 years.
- The City Edge project seeks to deliver on the National Planning Framework objective of Compact Growth, whereby we make the best use of our existing land to create a new livable quarter for Dublin with sustainability and climate resilience as a cornerstone of the plans.



Study area in its immediate context

Work to Date

HOMES

There is an existing residential population of just over **5,000 people**, approximately **1,600 households** are peppered throughout the Study Area, these communities are well established, many in place since before the current industrial businesses emerged.

However, given the proximity of these lands to the City, there is huge scope to provide much needed new homes. Homes that should be accessible for people of all ages, abilities and income levels. Homes that offer people choice, about where and how they want to live and homes that ultimately need the increasing needs of our city's growing population.



PLACE

At 700 hectares in size, the Study Area is home to a plethora of hidden gems that can be unearthed to become focal points for the future of the place. The Grand Canal, the Camac River and Drimnagh Castle are important identity and amenity features that can be also promoted and integrated as part of this regeneration.

Our approach is to develop a framework to guide the future development of the Study Area based on the principles of the Liveable City that embed climate resilient measures from the outset of the regeneration programme. We believe that this will create the opportunities to that people want to live and that will knit together our existing and new communities.



Existing Canal Corridor



Existing heritage of the area



Coal Drops Yard – Shopping Complex, Kings Cross, London



Opportunities for new and existing communities

EMERGING OBJECTIVES

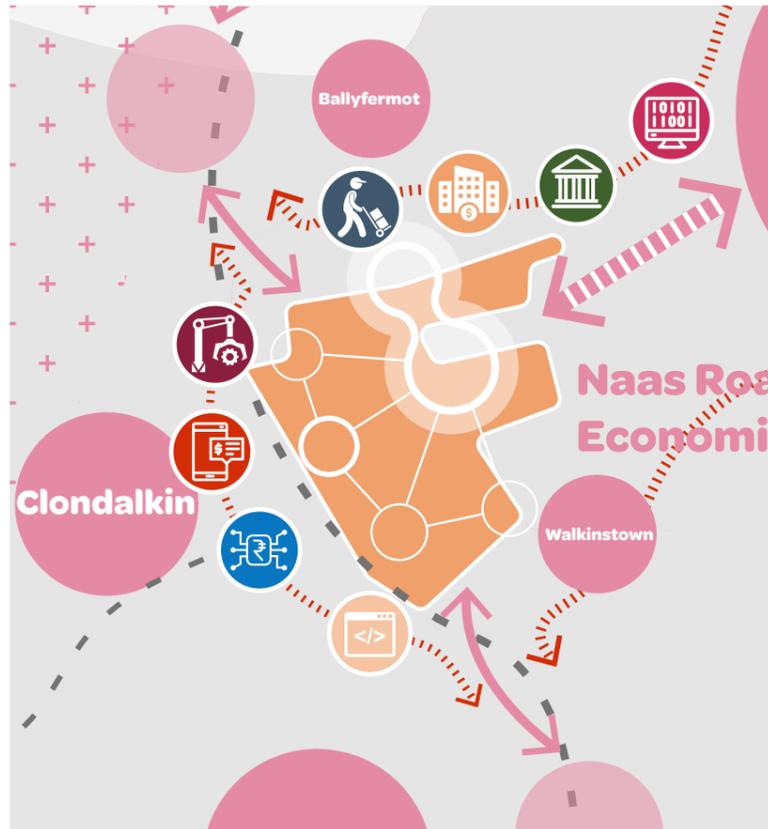
'The vision is to create a new mixed use and climate resilient high density urban quarter in the city, where the citizens of the Greater Dublin Area will be able to access affordable homes, live close to where they work, in an area home to outstanding public amenities and public transport services

Building upon its rich history of employment, the Study Area will support consolidation and the creation of new employment opportunities, culminating in the creation of a self-sustaining and integrated part of city, where family, community, visitors and the economy can prosper in a distinctive Dublin setting.'

Liveable City	Follow compact growth & 10-minute city principles
Economy	Create a resilient and diverse employment offer with scope for up to 65,000 - 75,000 jobs
Housing	Accommodate a range and variety of new homes for up to 75,000 - 85,000 people
Environment	Target 50% green cover
Movement	Focus development on the provision of active and public transport
Character & Urban Design	Knit into existing neighbourhoods and create a series of character areas that enhance Dublin
Sustainability	Fast-track to zero carbon and zero waste
Deliverability & Credibility	Create a deliverable and credible framework

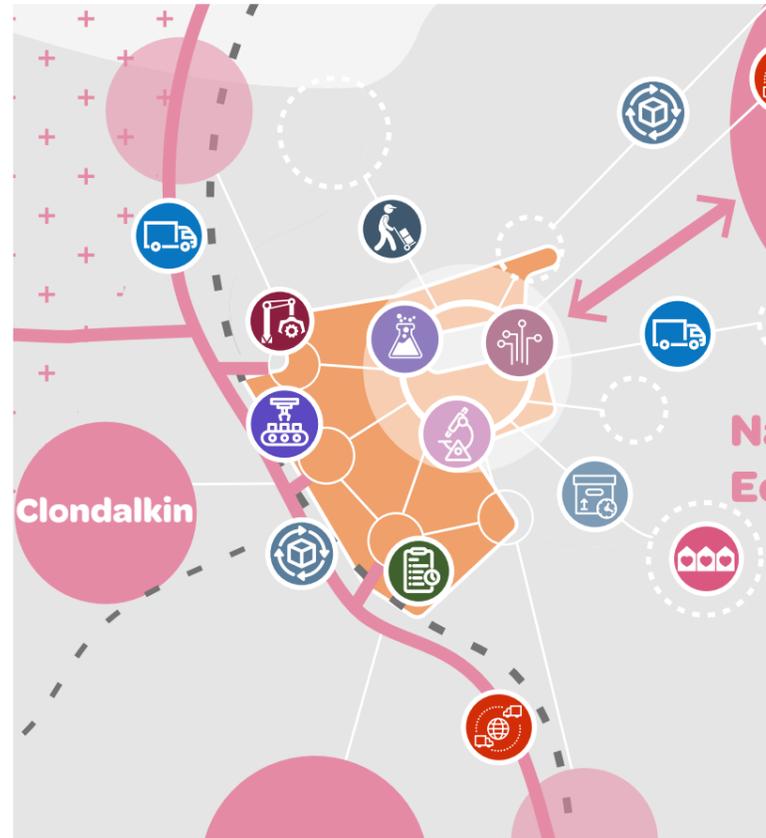
DEVELOPMENT SCENARIOS

Before identifying a preferred approach to the development of the Study Area, three high level scenarios were initially identified. These three scenarios were as follows:



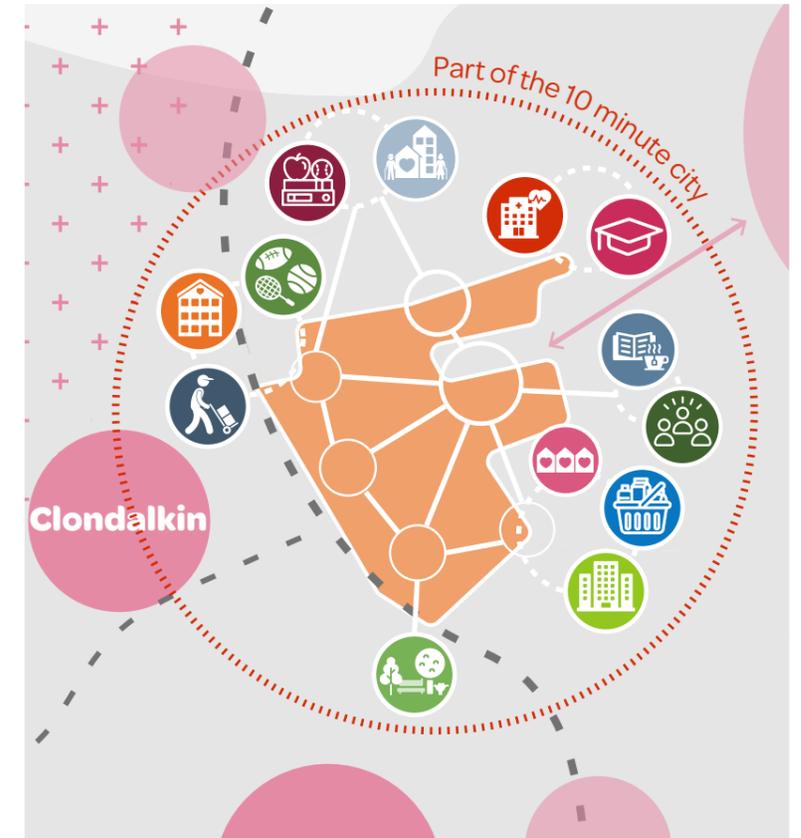
1. Major commercial centre at a national scale

- A new commercial centre operating at a National & international scale
- A centre incorporating High density employment space
- Attracting major institutional employers
- Intensification focused around one large town centre and nodes



2. Enterprise & urban industry-led mixed-use

- Complement existing employment with high end/ advanced manufacturing
- Retain and promoting current industrial uses and locations
- Smaller scale interventions to facilitate intensified development at specific locations
- Multiple nodes of varying scales with residential supporting employment



3. Residential-led mixed-use

- An intensified employment offer but operating at a local level Residential-led mixed-use development
- Dispersed growth across multiple nodes
- Accommodating and promoting supporting resources and social infrastructure

Emerging Preferred Scenario

EMERGING PREFERRED SCENARIO

Major centre & employment

Capacity for 65,000 – 75,000 jobs



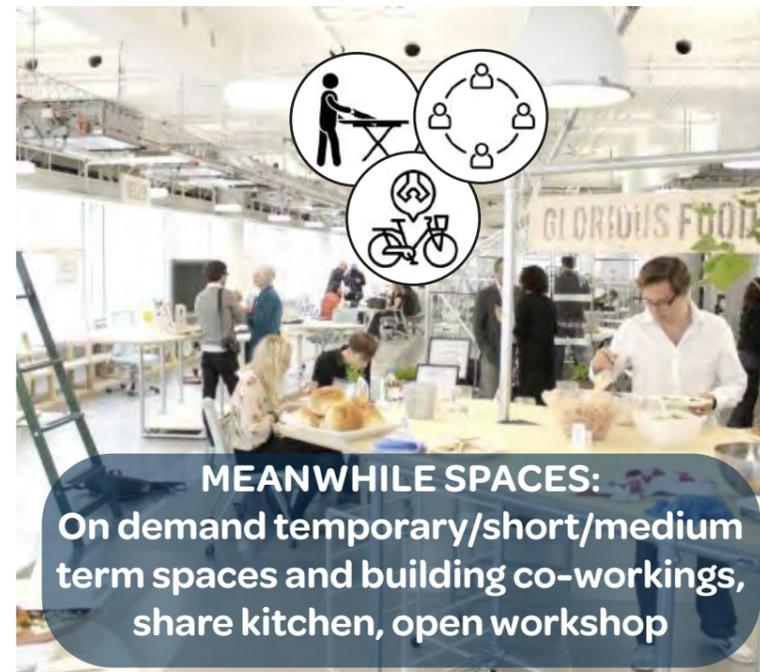
Urban industry

Capacity for range of employment types



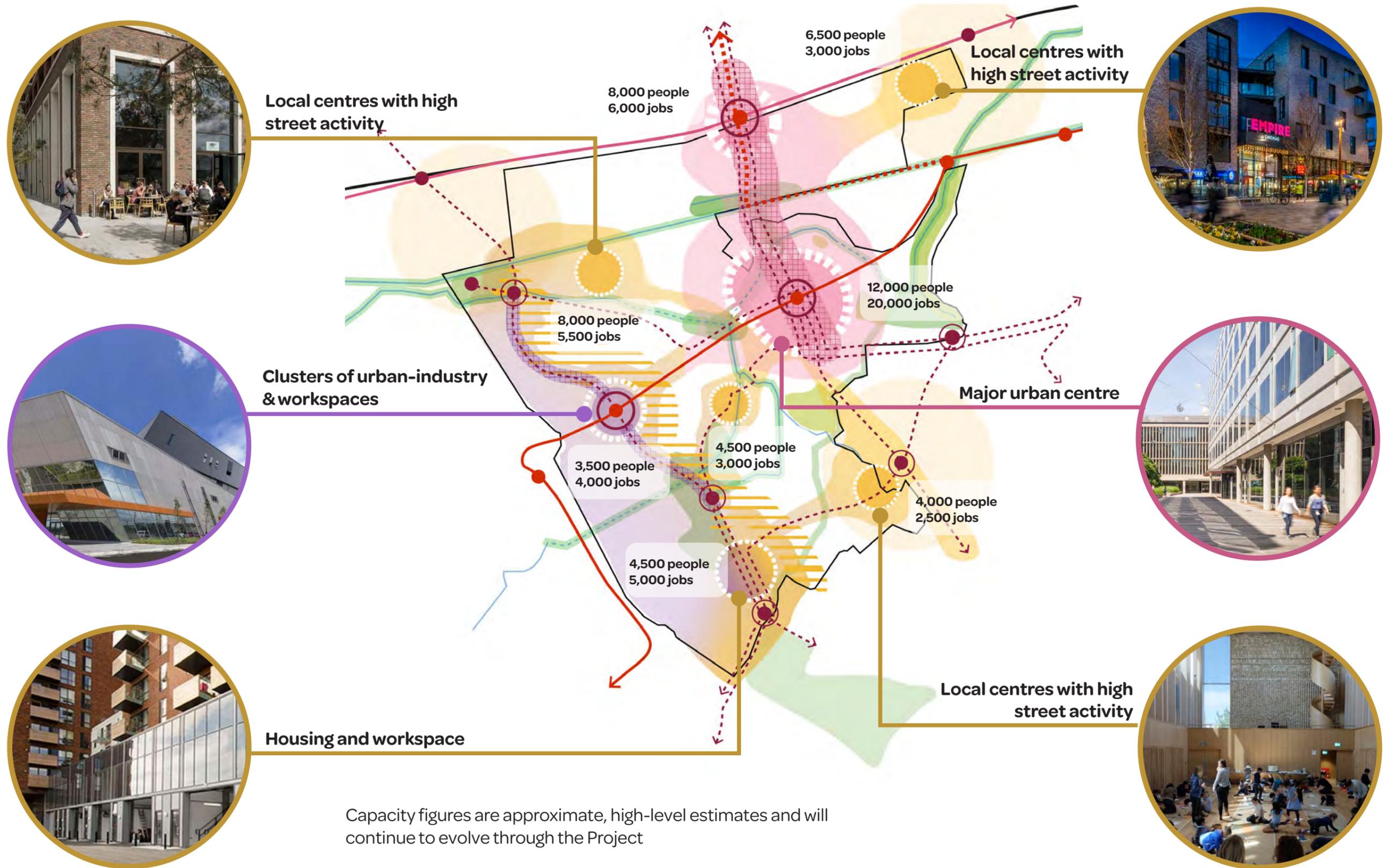
Residential-led mixed-use

Capacity for 75,000 – 85,000 people



EMERGING PREFERRED SCENARIO - KEY CHARACTER AREAS

Opportunity: up to 75,000 – 85,000 people and 65,000 – 75,000 jobs



Capacity figures are approximate, high-level estimates and will continue to evolve through the Project

LAND USE THEMES

HOUSING

Context & challenges

There are inherent issues with delivery and affordability of housing. The Project will investigate what role the study area can have in addressing these issues such as:

Affordability

- Investigating different approaches to affordable homes and subsidisation through case studies
- Emphasis on solutions for first-time buyers and downsizing

Role of the state

- The state's role in delivery and unlocking opportunities
- Coordinating the provision of social housing

Housing at scale

- A sustainable unit mix at higher density
- Addressing the provision of family size units within high-density urban blocks
- Identification of typologies to support building at scale

Liveability

- A healthy social mix of people of all ages and backgrounds
- Compact urban form to support the 10-minute city
- Investigating block typologies that can support different tenures and types of housing

Ongoing Planning Activity

- Significant residential proposals in the study area – permission granted for circa 3,500 units



Residential-led mixed-use neighbourhoods
circa 4,000–8,000 people per neighbourhood



Potential capacity
circa 75,000 – 85,000 population



Mixed-use neighbourhoods integrating employment space
Great Eastern Quays, London

ECONOMY & EMPLOYMENT

Context & challenges

Attracting and accommodating growth

- Potential opportunities being identified, and what is needed to make them successful
- Cross-section of potential economic activity:
 - Office/innovation cluster for high intensity employment
 - Highly accessible and sustainable industrial environments
- Relocation/retention of existing businesses and four Seveso sites



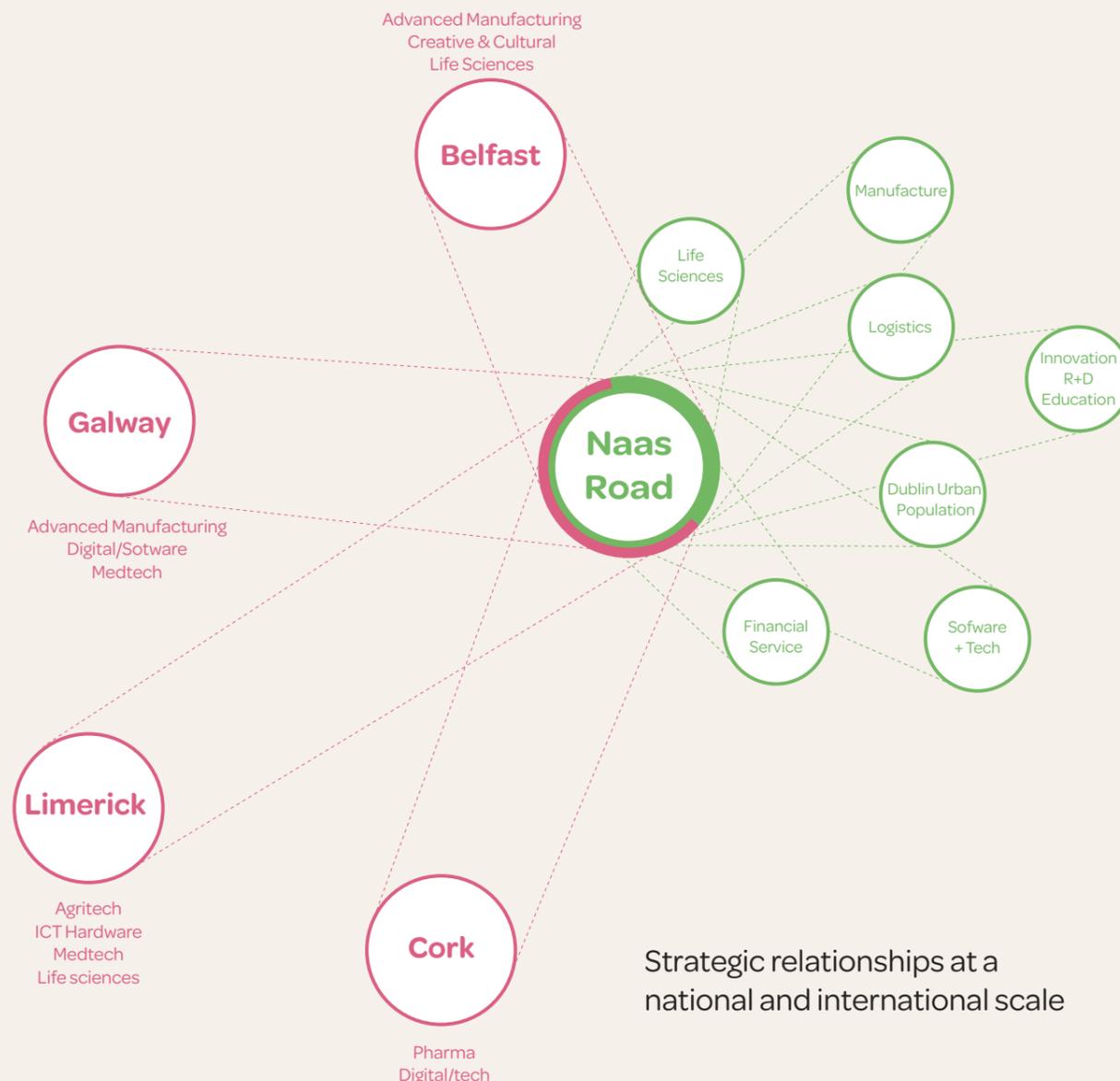
Major Urban Centre

circa 20,000 jobs



Commercial Centre + Local Centres + Urban Industry Area

circa 65,000 – 75,000 jobs



Future growth sectors

Considerations

Short-term

Construction
Logistics & storage
E-gaming

Construction & logistics are established sectors that will grow
E-gaming has no other competing location at present

Medium-term

FinTech
Green(er) Energy & Tech
MedTech

FinTech & MedTech have competition from other clusters
Green sector requires improved access to workforce

Long-term

Aviation
Biopharma

Connectivity to airports
Reliant on arrival of institutions

NATURAL INFRASTRUCTURE

Context & challenges

Camac flood alleviation

- Coordination with the Camac FAS team, and to renaturalise and de-culvert the river

Surface water

- Much of the site is hard standing with very low permeability, placing pressure on the sewer network

Green & blue network

- Notable green areas in the study area at Landsdowne Park and around Drimnagh Castle
- Opportunity to improve amenity, biodiversity, and increase climate resilience

Spatial components

1. Tymon to Phoenix Greenway
2. Camac Flood Alleviation
3. Flagship Parks
4. Grand Canal



-  Renaturalised river within park with a soft interface with the park surroundings
-  Renaturalised river edges to encourage ecosystem growth for plants and animals
-  Delculverted river with hard or soft edges responding to context
-  Hard river edge with activity
-  Cycling and walking along the greenway

MOVEMENT

Context & challenges

This includes stage 1 findings from investigations of the area, review of scenarios, and indicative proposals that are being suggested under this project to serve the emerging preferred scenario.

Public transport

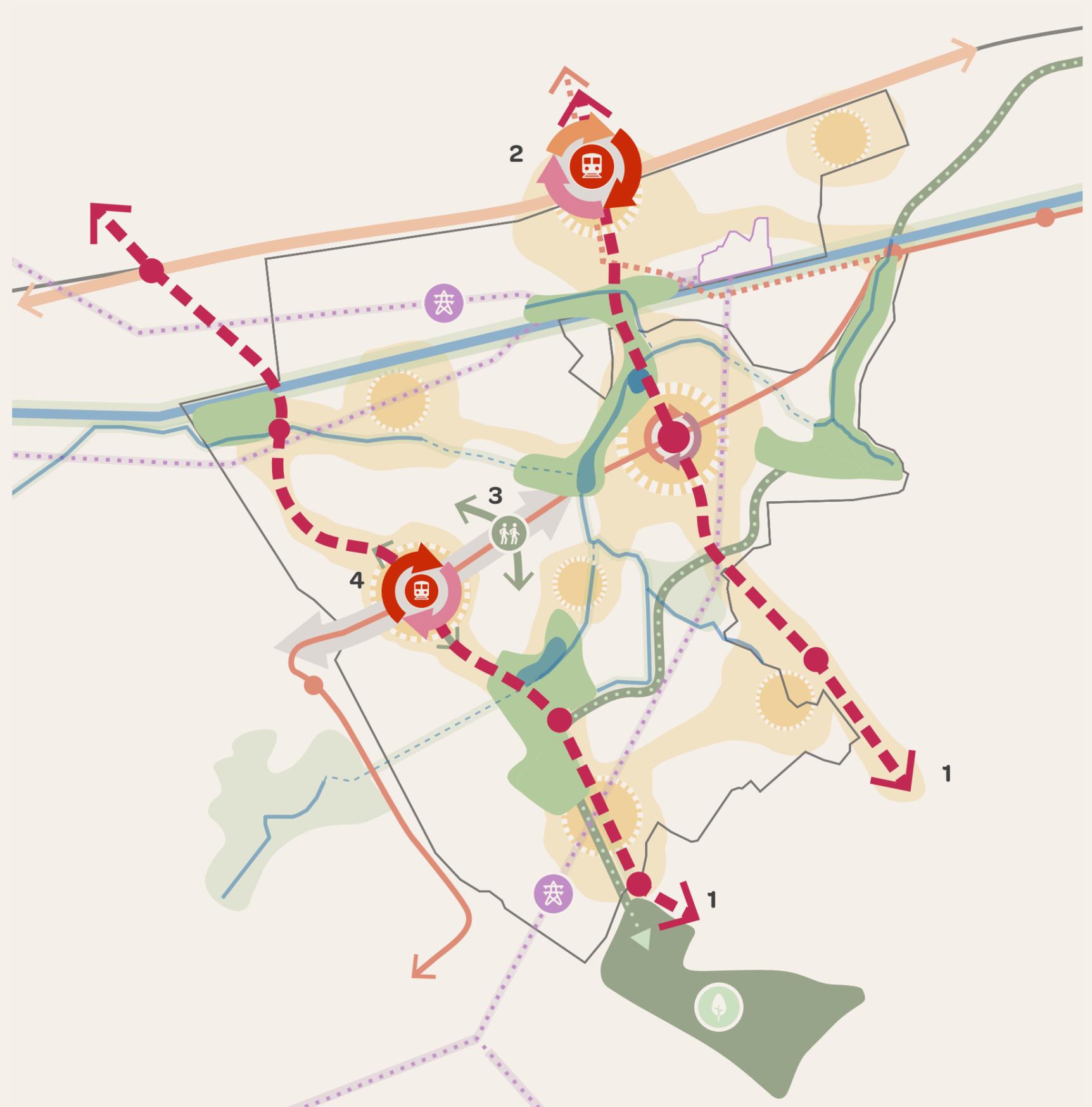
- The study area is well connected by the Luas Line, rail network and bus network, however much of this is at capacity at peak times
- New stops as well as new infrastructure will be needed to support growth

Streets and movement hierarchy

- The Naas Road is an important artery and is often reaches capacity at peak times
- Alternatives such as active travel can offer opportunity to deal with Naas Road as a barrier to movement.

Emerging Proposals

1. Western Orbital Public Transport
2. Kylemore Rail Interchange
3. Naas Road Crossings
4. Naas Road Luas Stop



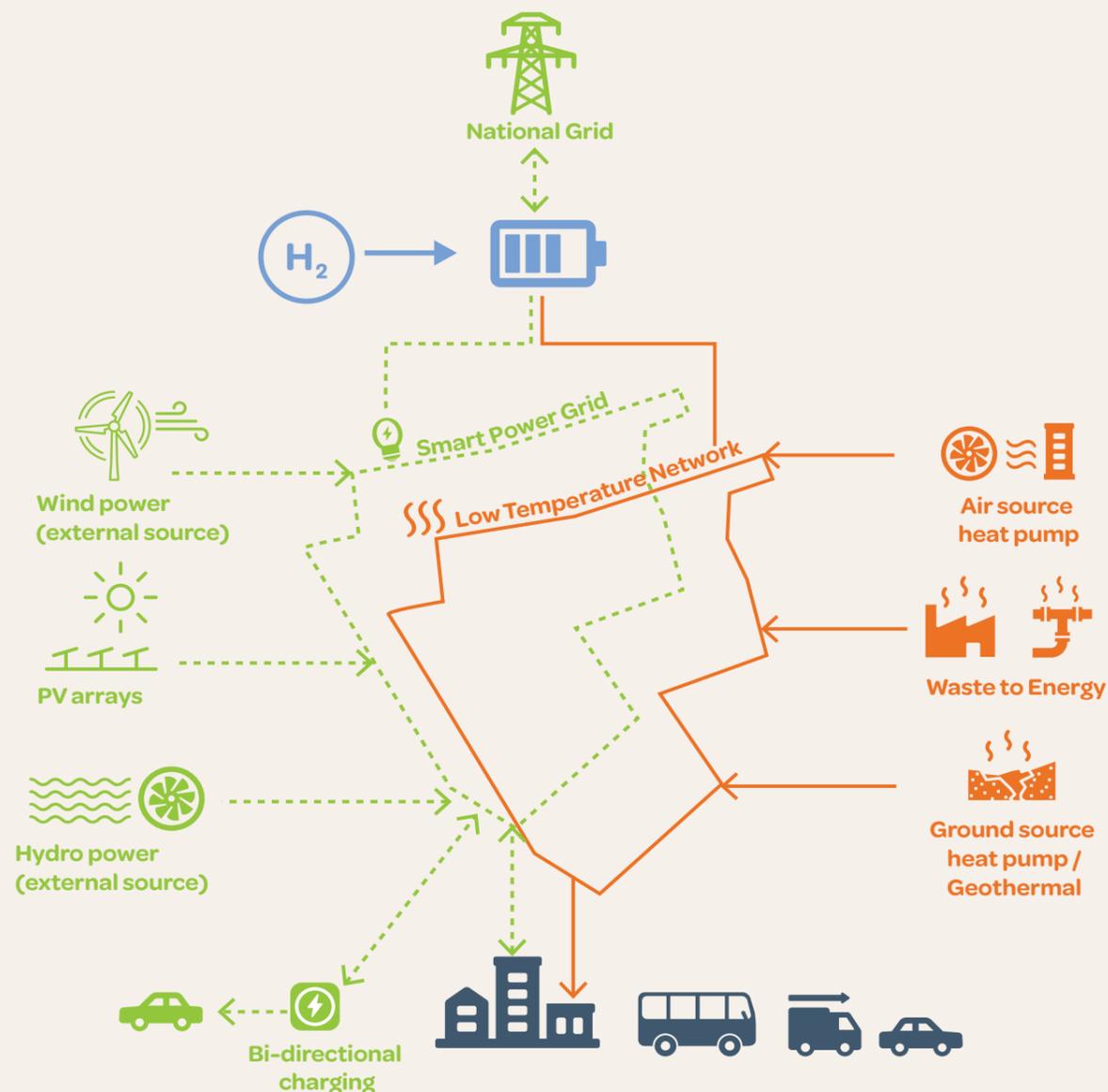
ENERGY & UTILITIES

Energy, heat and water

Existing challenges include overhead power lines, the ESB substation and CIE Works.

Primary target: fast-track to zero-carbon

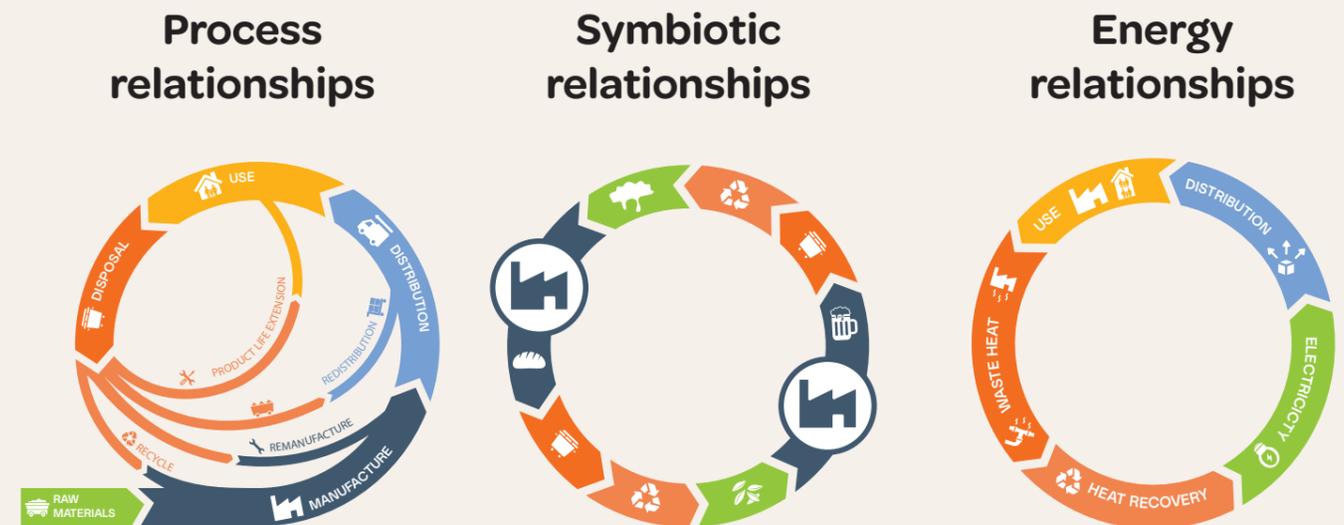
- Energy: potential to store energy from renewables in the form of hydrogen, and to generate energy and feed back to the grid



- Heat: potential for a district heat network, neighbourhood-scale air source heat pumps, and waste heat utilisation from sewers and industry / buildings
- Utilities: requirement for a new trunk sewer & water storage identified as part of initial capacity testing

Waste & Circular

- Capturing the opportunities to be waste positive and creating a circularity ecosystem
- Opportunity to use waste as a commodity as part of circular systems within the study area and across the city
- Opportunity to coordinate uses and processes to fit into a circular economy.



Harness existing systems on site, integrate these, and introduce new systems

SUSTAINABILITY

Opportunity

Scale of development

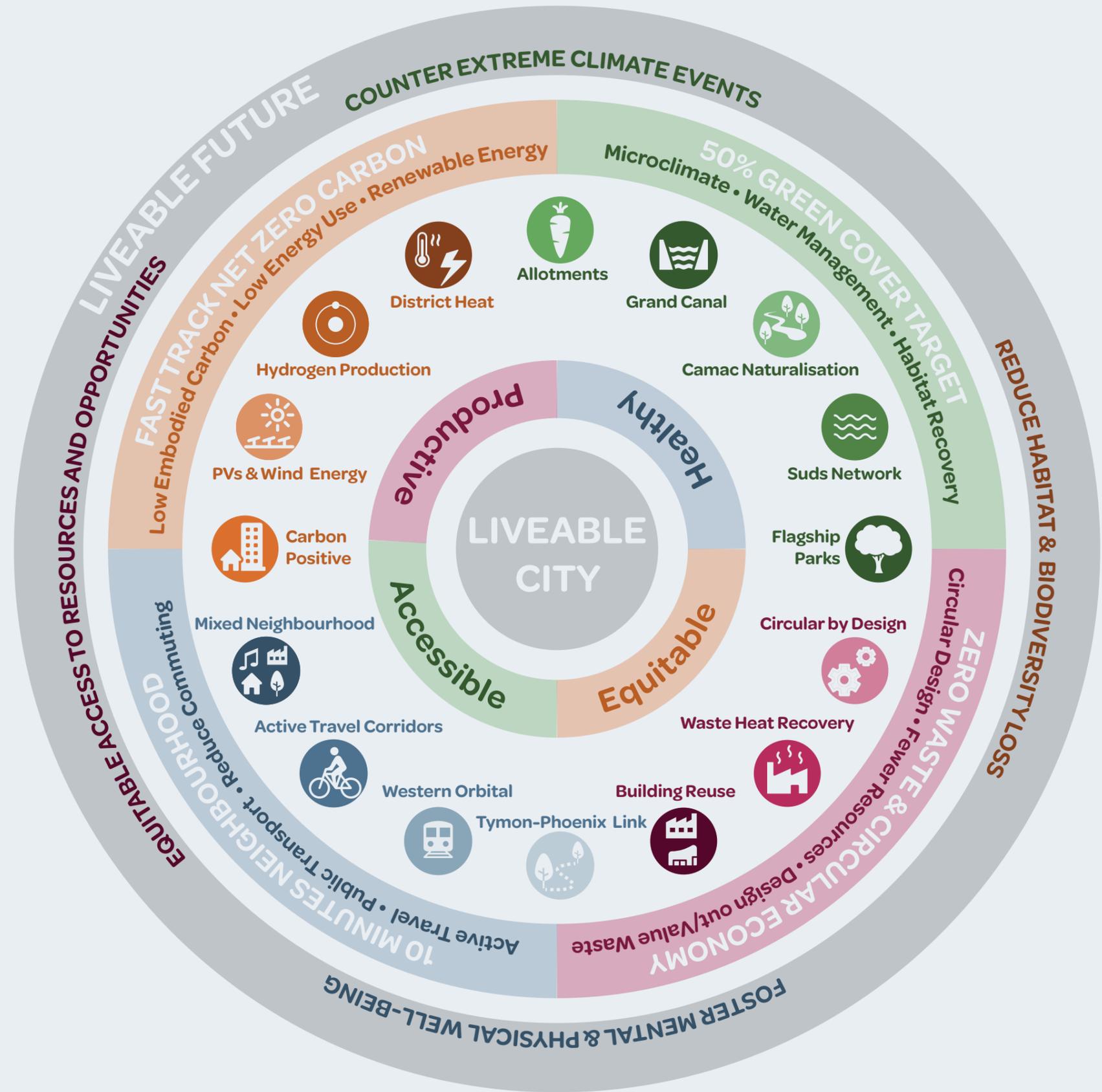
- Holistic approach to different aspects of sustainability - environmental, social and economic - allowed by the scale of the opportunity

Co-benefits

- Benefits from integration and interaction – e.g. co-benefits SuDS network and active travel corridors

Economic opportunity

- Sustainability is a significant opportunity for the future in the study area, especially for the construction sector as well as other potential future sectors



* the work has been subject to/and informed by compliance with EU Directives in relation to SEA/AA/SFRA.

BIG MOVES

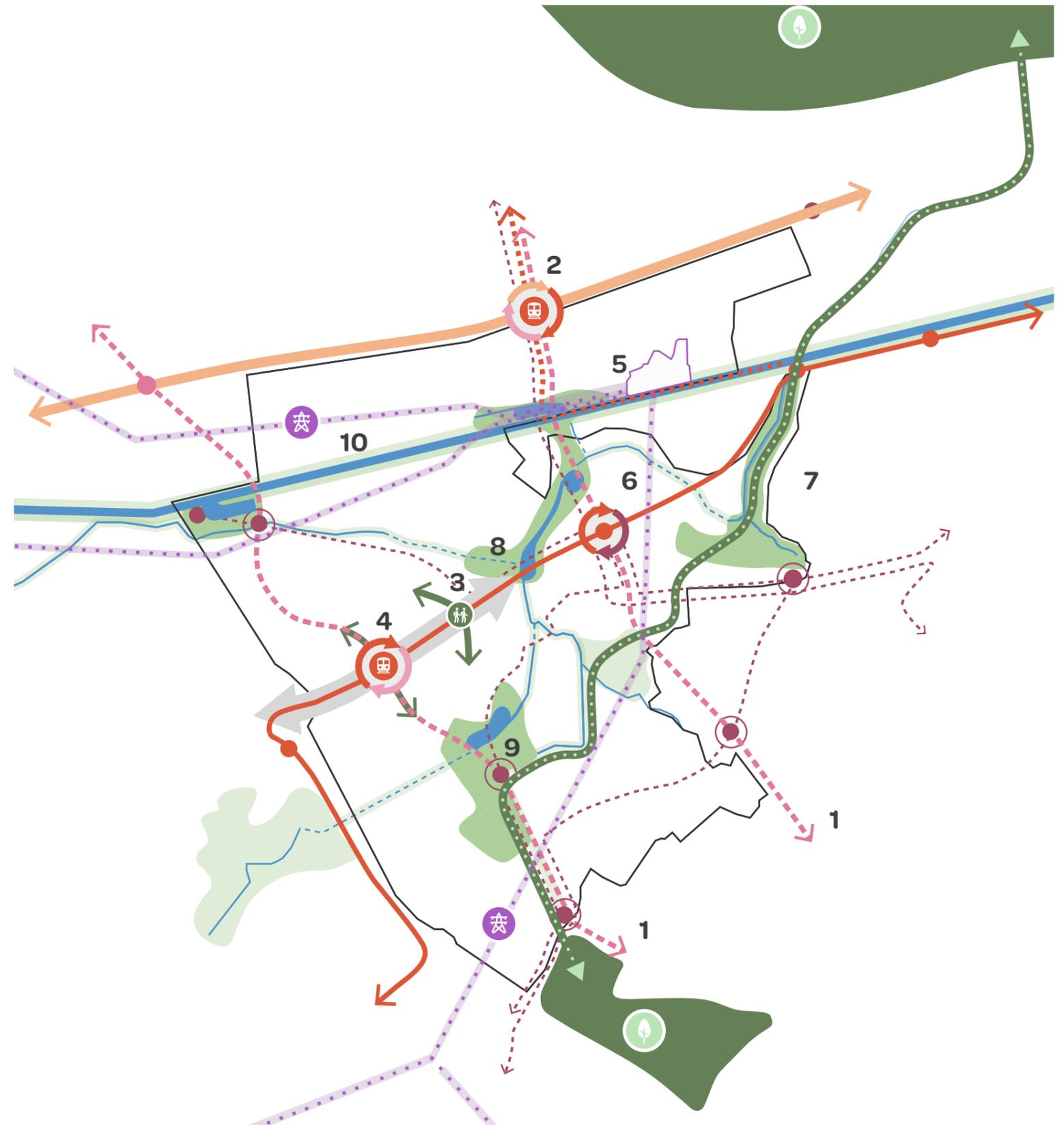
SPATIAL COMPONENTS

Creating a framework

The regeneration of the Naas Road area, could take over 30 years. At this stage of the plan making process, we are looking to set out a spatial framework that will guide how this development will take place during that timescale. At this early concept stage we are proposing a set 'Big Moves' that will be cornerstones for how the area develops over time. Whilst the detail design and arrangement of the place will need to be flexible, the intention is that these Big Moves are constant and will be the anchors around which new development happens.

The exact nature of these 'Big Moves' will evolve in parallel with the development of the strategic framework, but represent the key infrastructure that support and catalyse growth.

1. Western Orbital Public Transport
2. Kylemore Rail Interchange
3. Naas Road Crossings
4. Naas Road Luas Stop
5. Energy & Heat Network
6. Undergrounding Overhead Lines
7. Tymon to Phoenix Greenway
8. Camac Flood Alleviation
9. Flagship Parks
10. Grand Canal



SPATIAL COMPONENTS: WESTERN ORBITAL PUBLIC TRANSPORT

Current situation

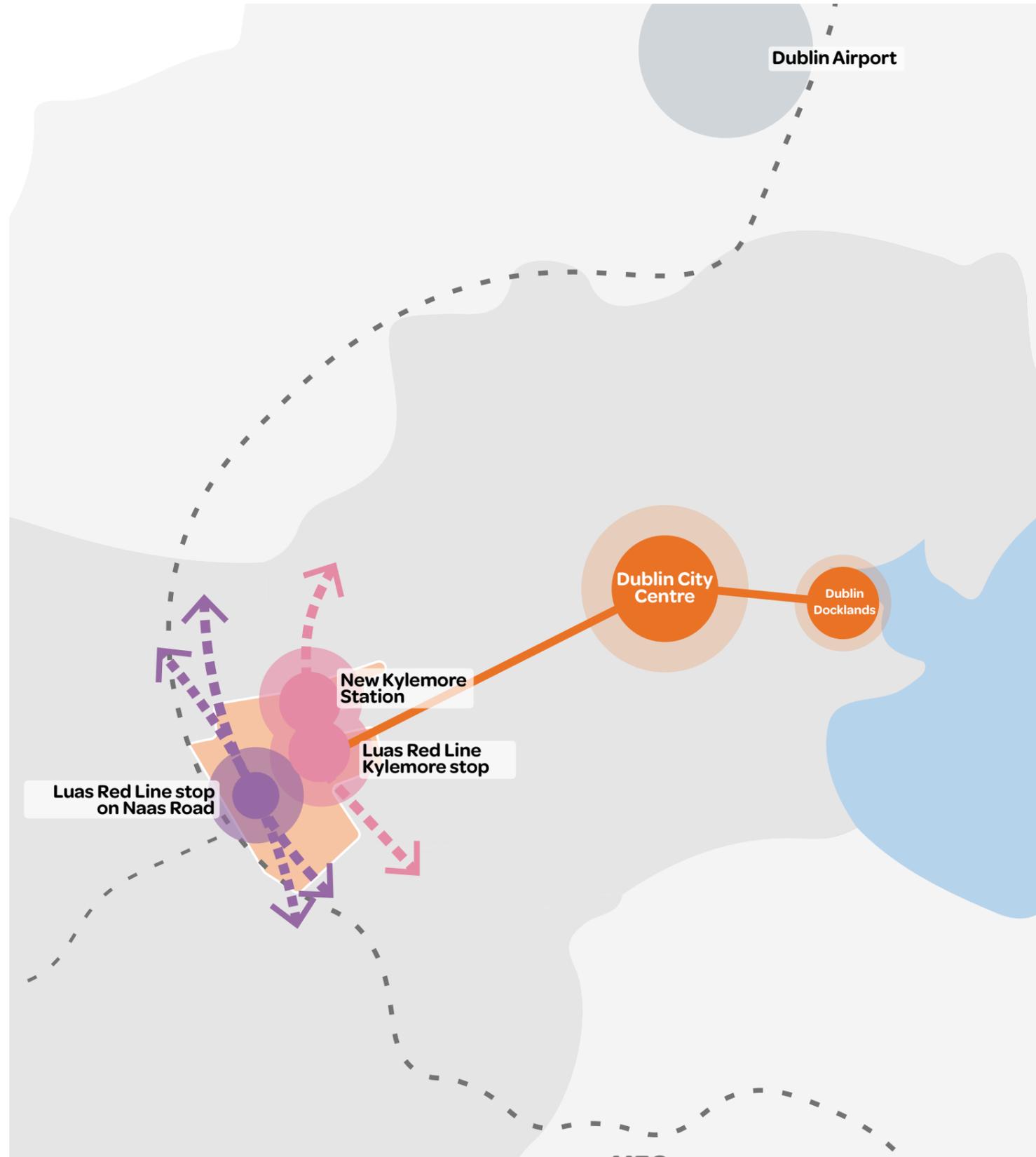
- No high-capacity orbital public transport connection around Dublin.

Opportunities

- There is scope to provide two new public transport orbital routes, an inner and an outer route.
- These routes would accommodate public transport and whilst they may begin with higher frequency bus routes, they would retain the ability to accommodate rail in the future.
- This additional public transport would connect the Naas Road into its surroundings and act as a catalyst for growth along these new transport corridors.

Challenges

- Delivery



Potential to be part of DART underground.



Potential to integrate orbital connectivity with existing infrastructure



Potential for mixed use and multi-modal interchanges Utrecht, The Netherlands

SPATIAL COMPONENTS: KYLEMORE RAIL INTERCHANGE

Current situation

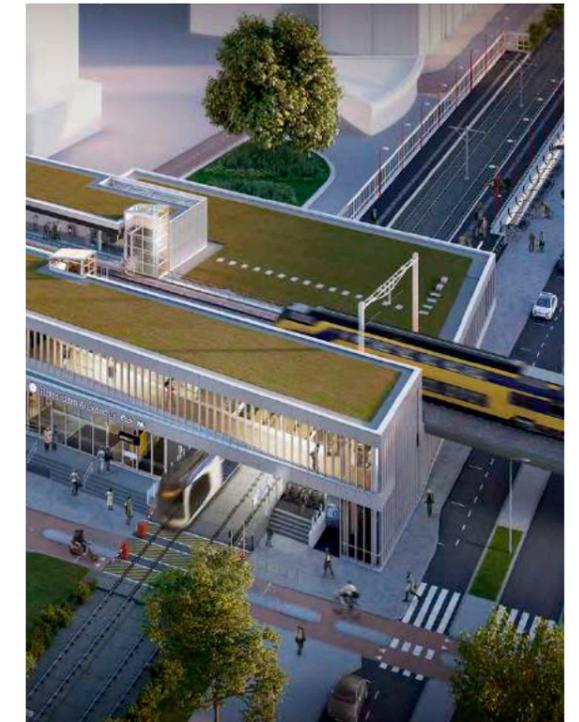
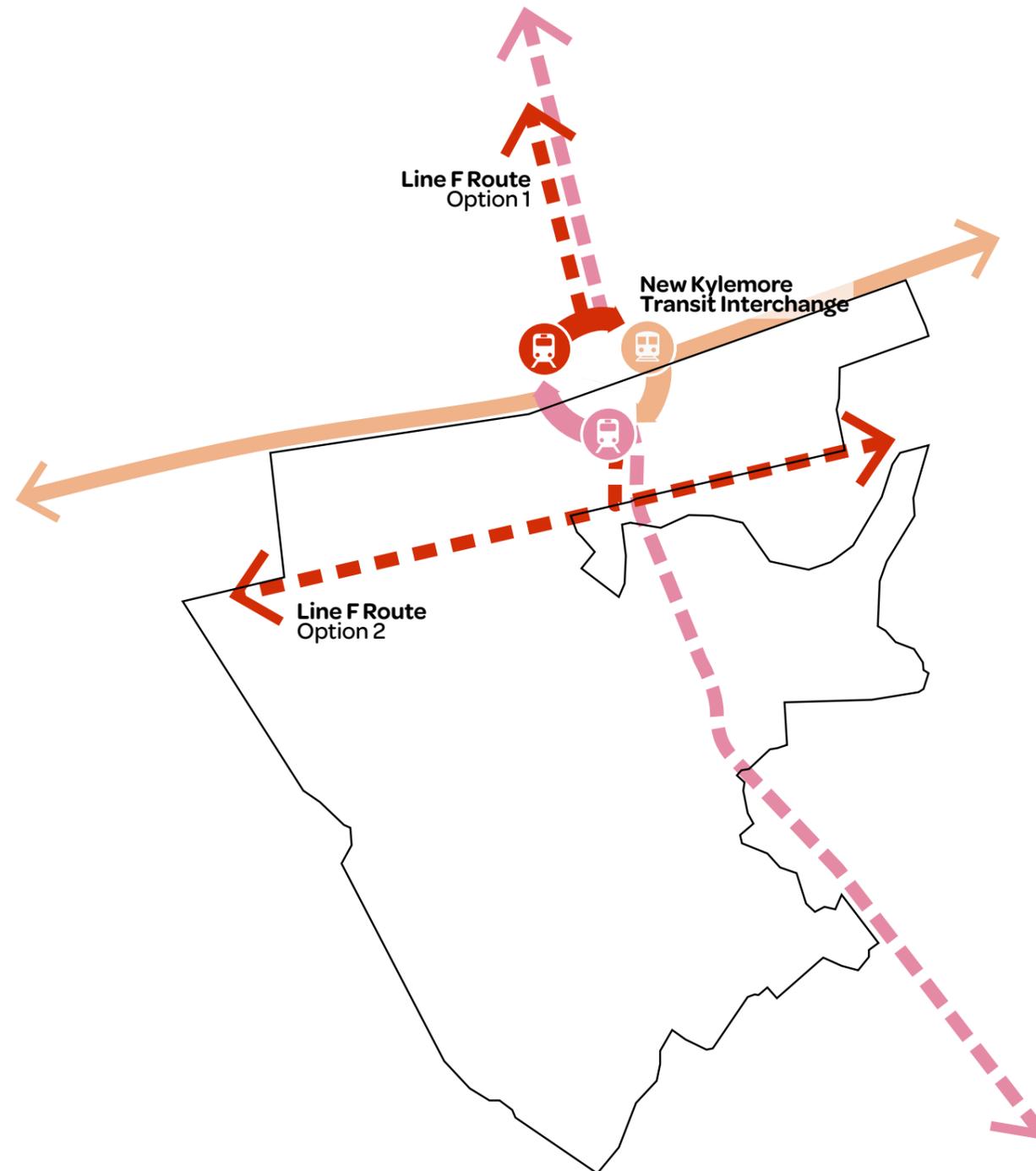
- Potential for Kylemore Station on heavy rail line
- Potential for Luas extension to Lucan

Opportunities

- Create a new high capacity rail station and public transport interchange
- Create a new mixed use centre focussed around a new heavy rail station with direct access to high frequency DART lines

Challenges

- Coordinating new transport hub with development to create new local centre



Integrated modes alongside neighbourhood resources
Rotterdam-Alexander metro & rail interchange



Railway station with integrated bicycle parking
Utrecht Central Station, The Netherlands

SPATIAL COMPONENTS: NAAS ROAD CROSSINGS

Current situation

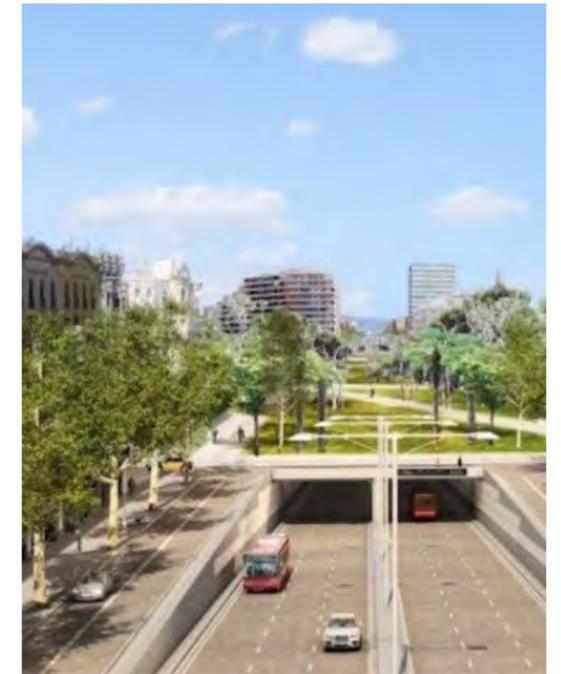
- Poor connectivity across Naas Road

Opportunities

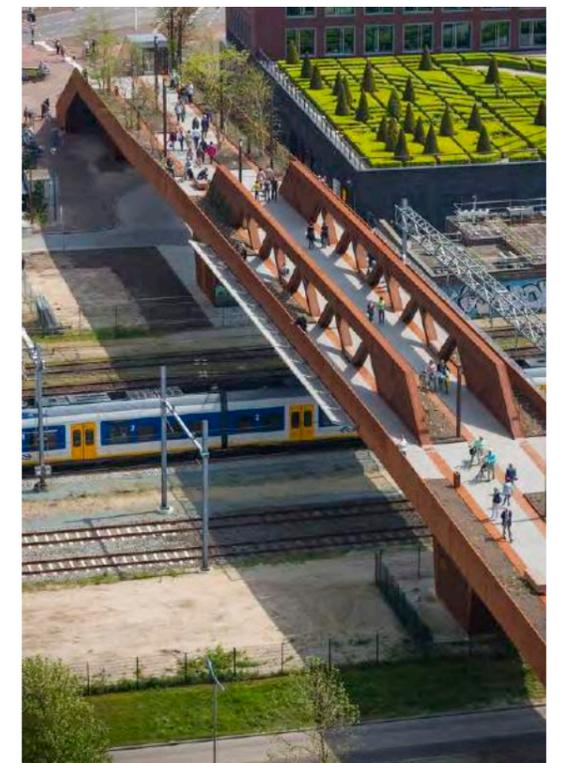
- Integrate BusConnects crossing
- Enhance active travel crossing options
- Integrate orbital routes
- Integrate vehicular crossings, potentially grade separated

Challenges

- High capacity highway
- Providing new crossings across the busy N7



Continuous public realm with vehicular underpass
Glories Tunnel, Barcelona



Land bridge with planting
The Paleisbrug, 'S-Hertogenbosch, The Netherlands

SPATIAL COMPONENTS: NAAS ROAD LUAS STOP

Current situation

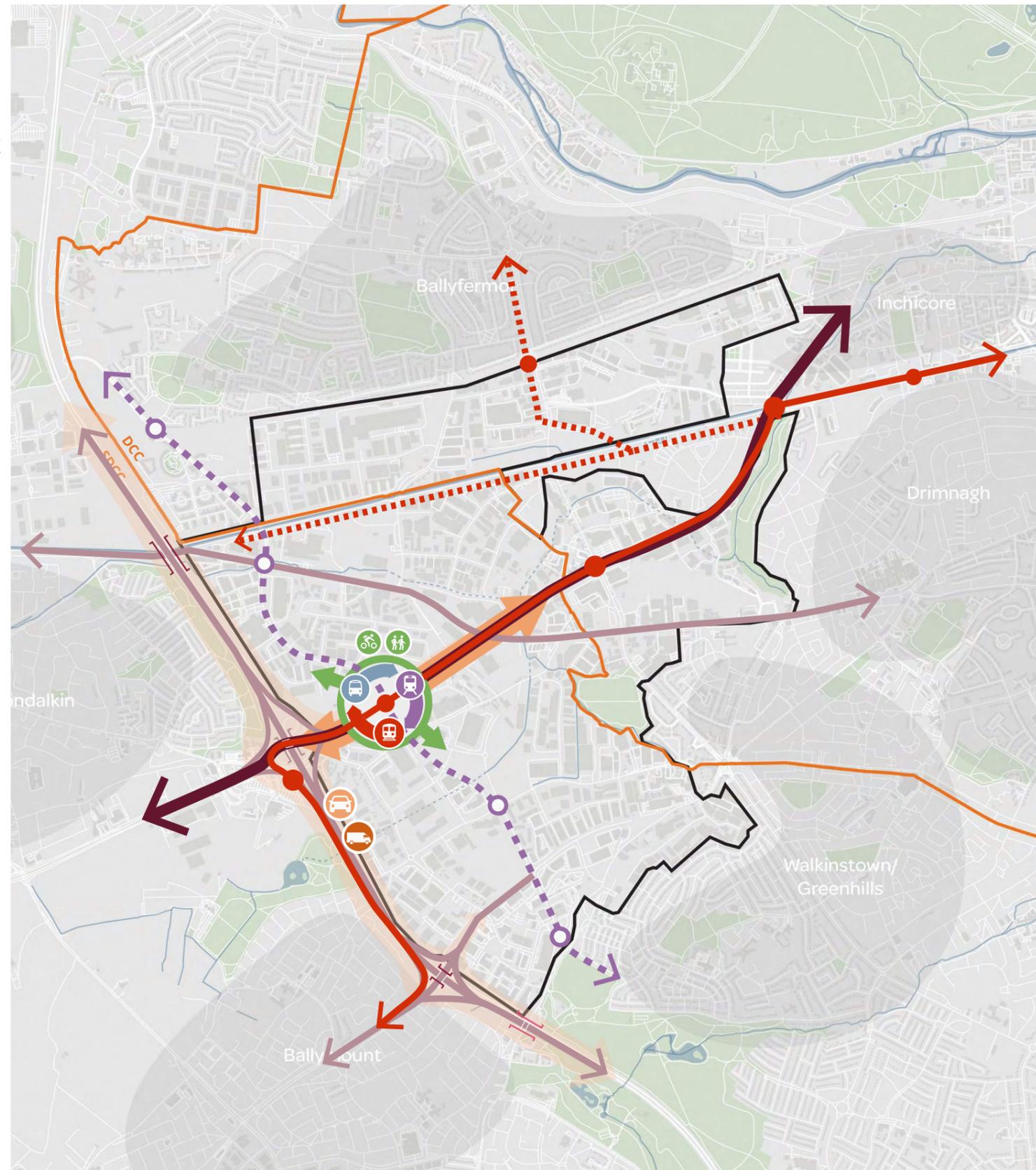
- Reduced access to Public Transport in this location which is needed to support transport orientated development

Opportunities

- Create a new hub around the station and concentration of activity
- Create a new crossing over the Naas Road for pedestrians, cyclists and potentially also vehicles
- Create interchange with new western orbital public transport link

Challenges

- Creating a crossing over a regionally significant piece of highway infrastructure whilst maintaining its capacity



Cross-city tramway boulevard
Barcelona, Spain



Public transport interchange
Tilburg, The Netherlands

SPATIAL COMPONENTS: TYMON TO PHOENIX GREENWAY

Current situation

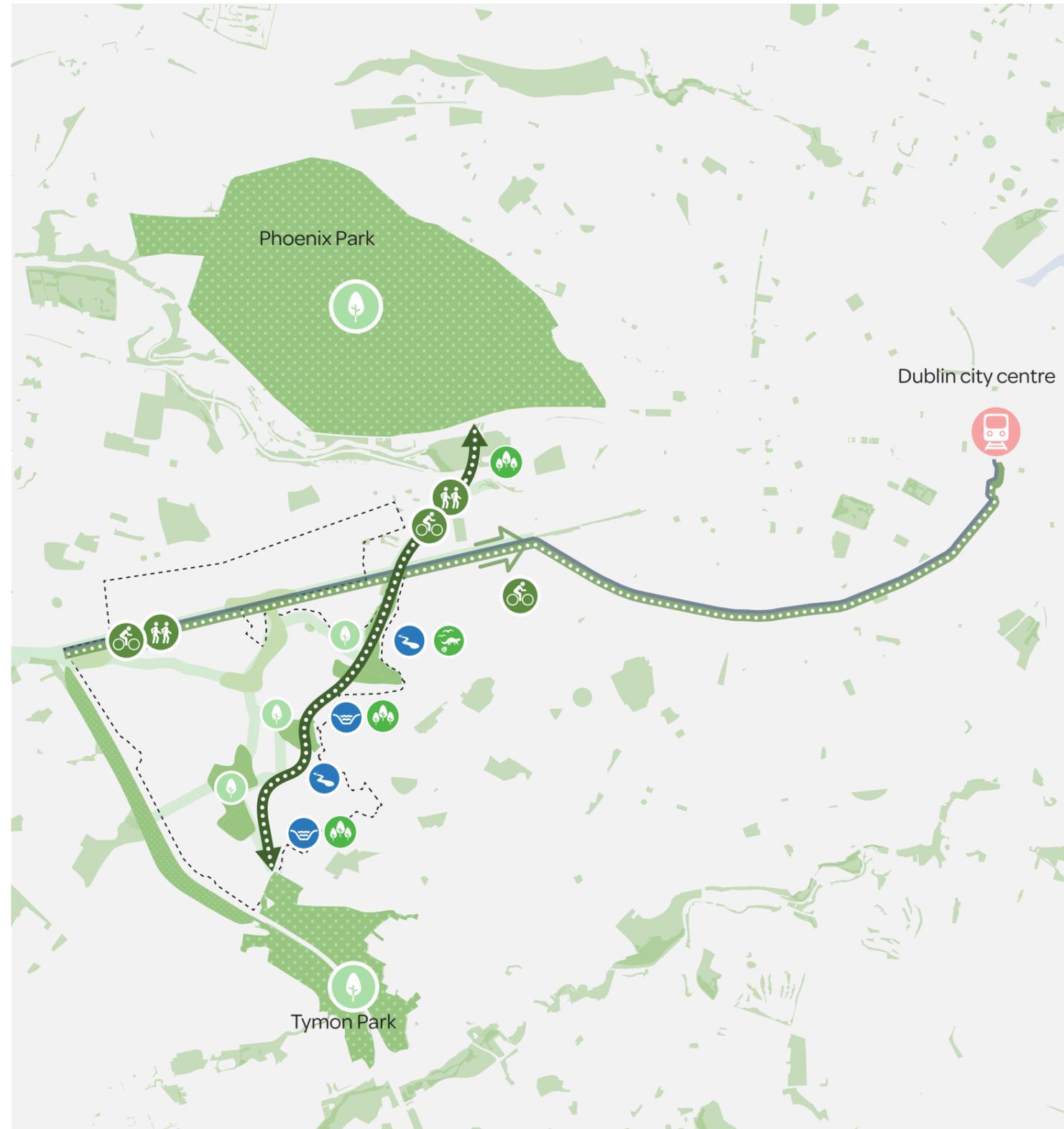
- Lack of direct, safe north / south active travel routes across this part of Dublin in particular limited connections between Tymon and Phoenix Park
- The railway corridor creates a barrier to northern connections

Opportunities

- Create a greenway connection and a continuous ecological corridor between the two parks

Challenges

- Land take required
- Balancing amenity & ecology



Urban green cycling route



Cycling through flagship parks



Cycling along the water and wild green areas

SPATIAL COMPONENTS: UNDERGROUNDING PYLONS

Current situation

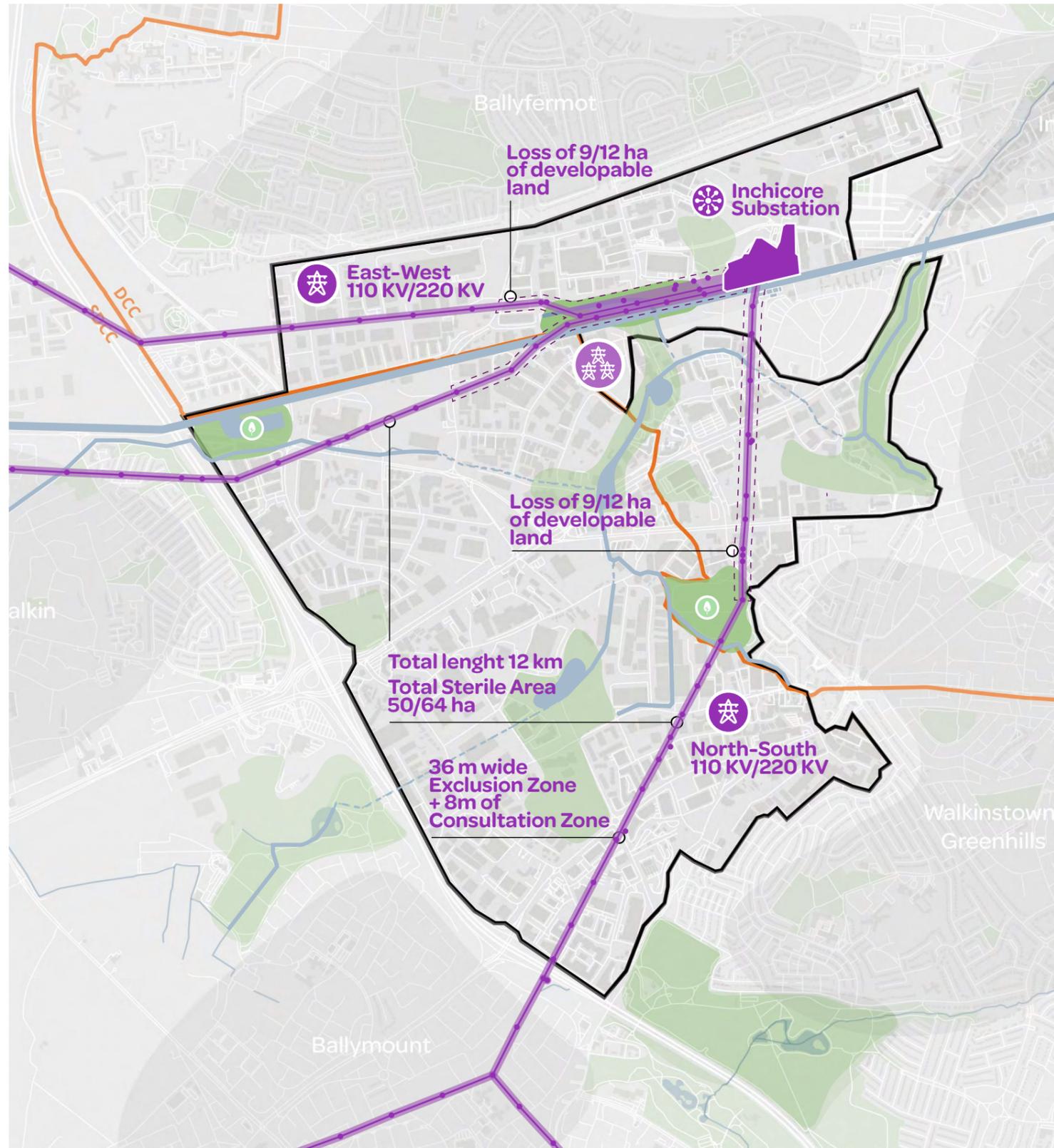
- Perceived as undesirable urban obstacles
- Perception of negative health implications
- Loss of 50 - 64 Ha of developable land (Current corridor area)

Opportunities

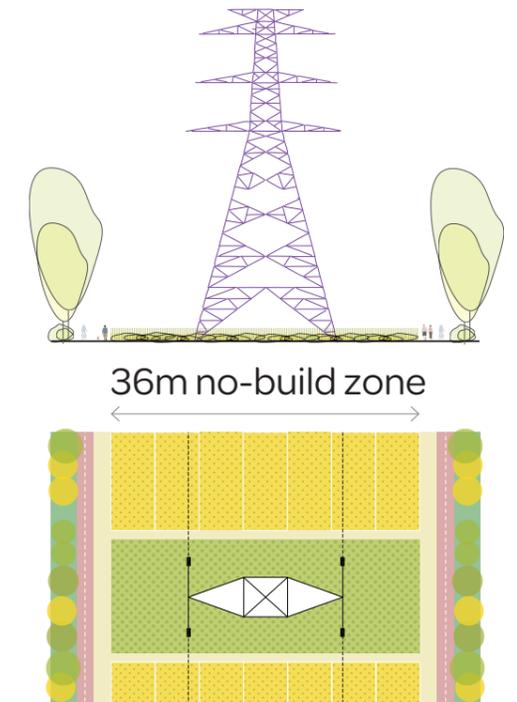
- Increase developable area
- Create a more attractive setting

Challenges

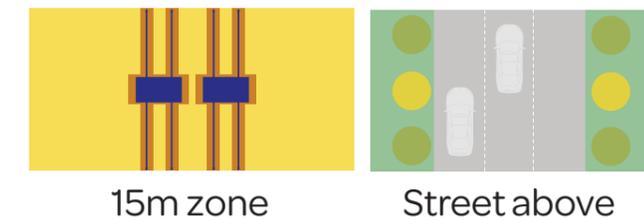
- Continuity of supply
- Maintenance
- Delivery
- Range of costs depending on length and nature of undergrounding



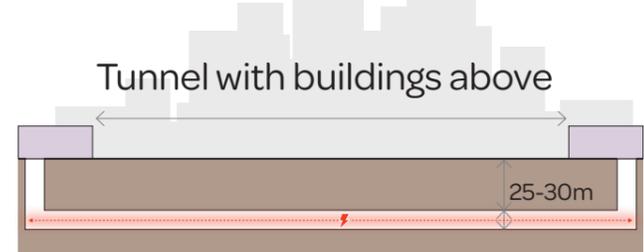
Current situation



Direct Buried Cables Option



Deep Bore Tunnel Option



SPATIAL COMPONENTS: CAMAC FLOOD ALLEVIATION

Current situation

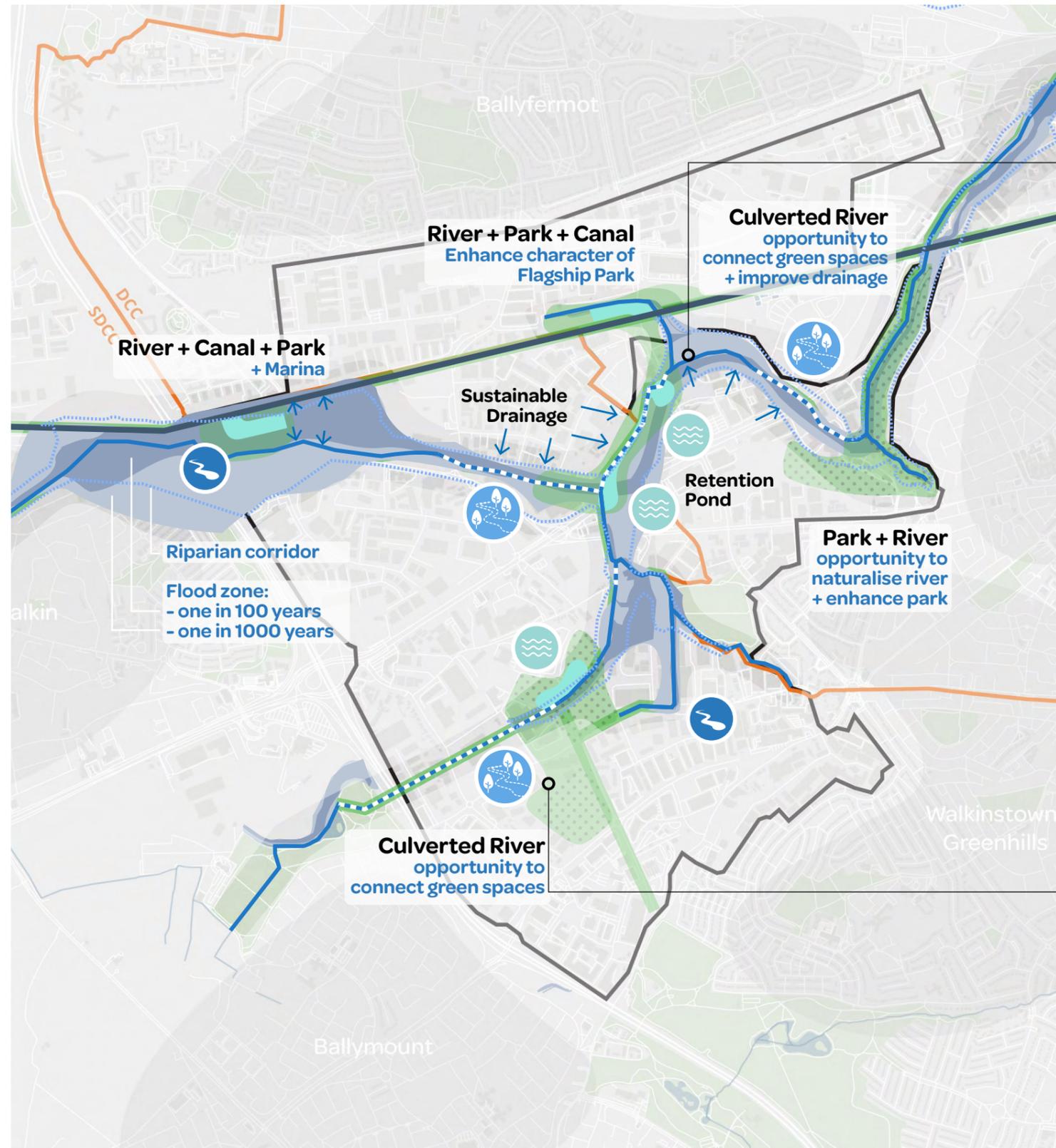
- Culverted in places
- Significant flooding issues across the Naas Road area in particular within the catchment of the Camac, which need to be addressed to unlock future regeneration potential
- Live Camac project underway

Opportunities

- Reduce flood risk
- Enhance biodiversity
- Increase amenity & improve setting

Challenges

- Land take required
- Balancing amenity & ecology



Creating a flagship park as part of the river corridor



River with Potential Urban Centres



River within Flagship Parks



River as a soft path next to the existing urban edge

SPATIAL COMPONENTS: FLAGSHIP PARKS

Current situation

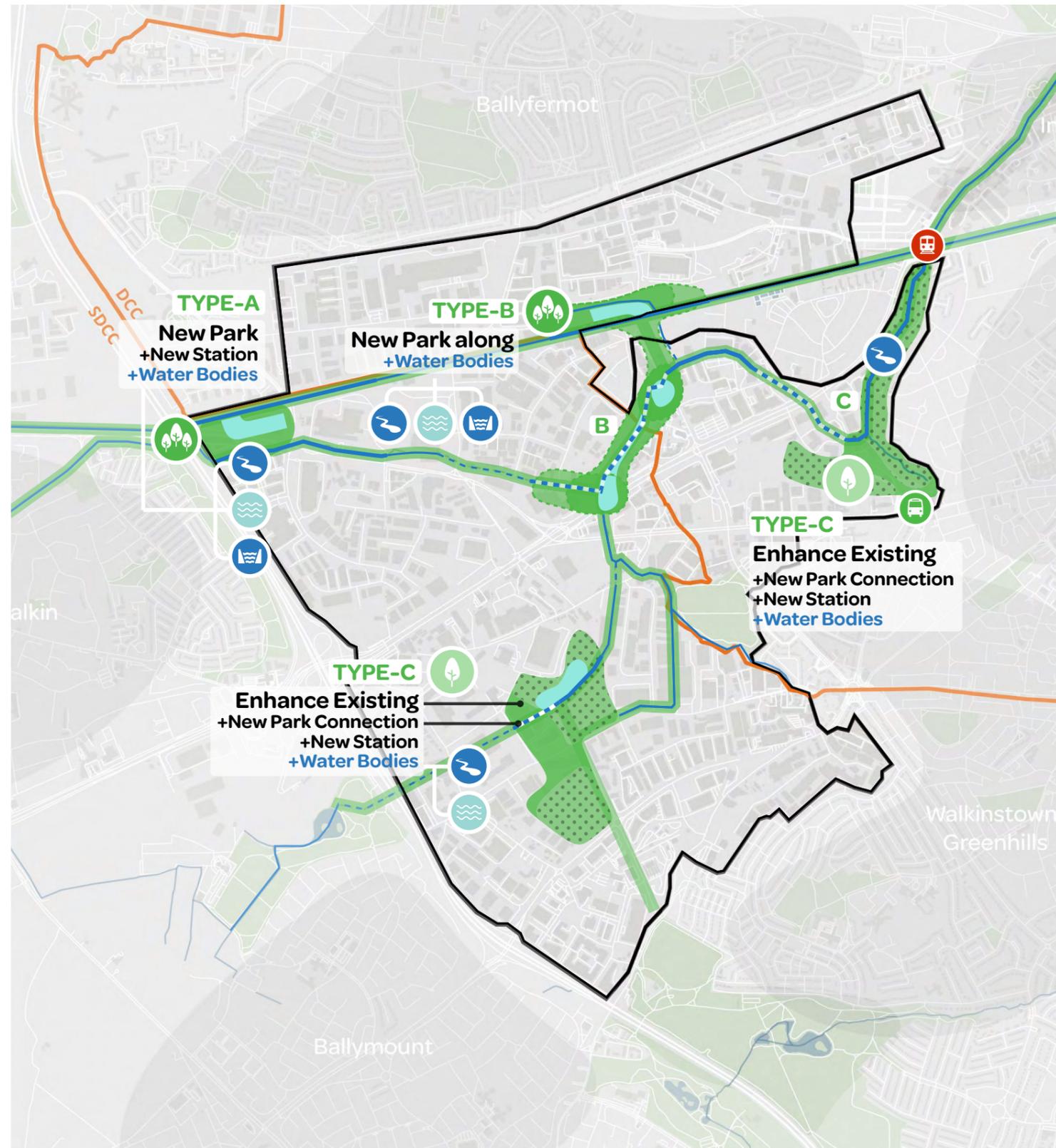
- Limited quantum, quality and diversity of public open spaces

Opportunities

- Create a destination park(s)
- Incorporate SuDS
- Enhance biodiversity and ecology

Challenges

- Land take required
- Balancing amenity & ecology



Flagship Type A & B - New Park/ Water Body



Flagship Type A & B - New Park Bus Station



Flagship Type C - New Linear Park

SPATIAL COMPONENTS: GRAND CANAL

Current situation

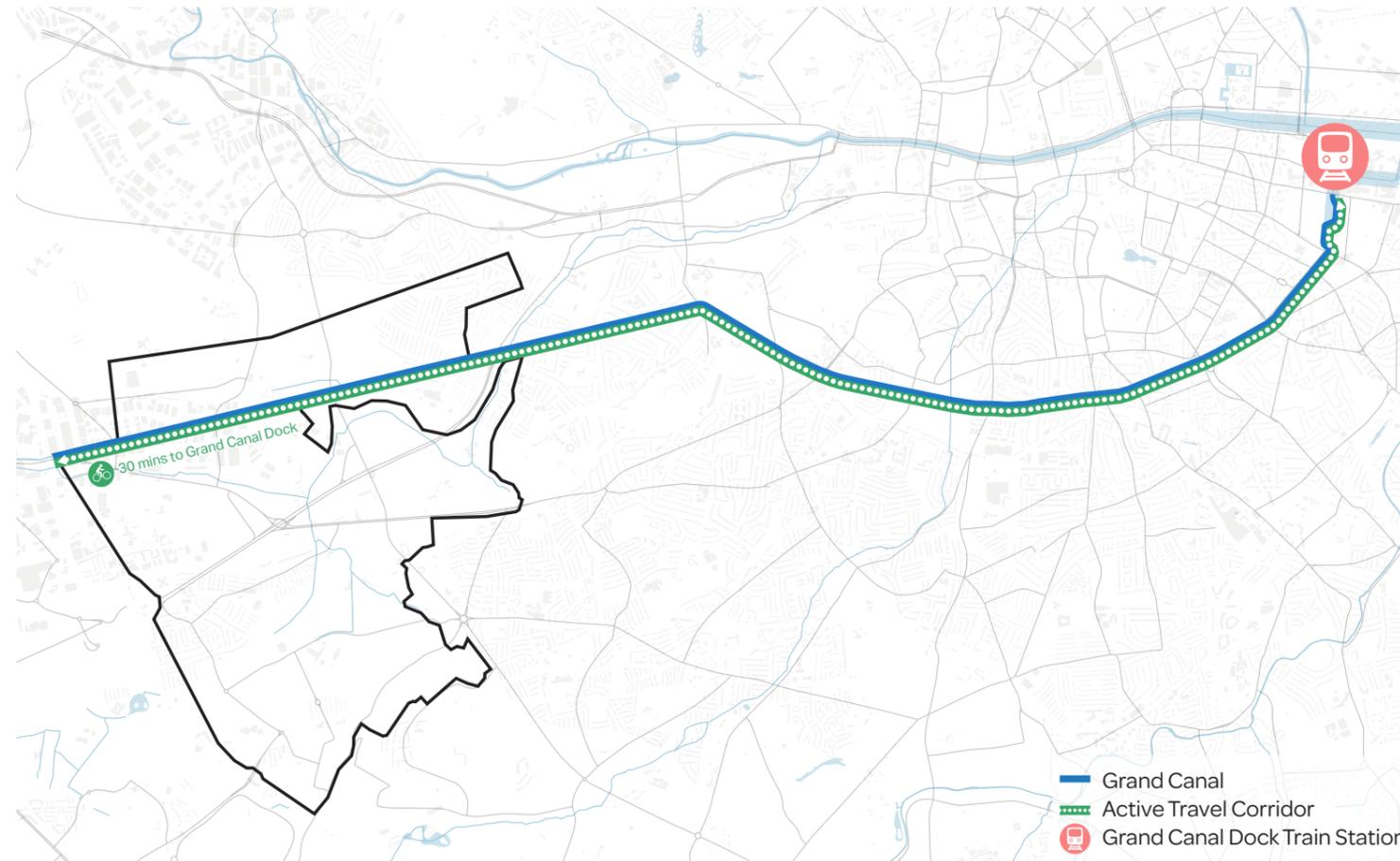
- Lack of engagement with the water

Opportunities

- Create a destination and attraction
- Create an active travel and ecological greenway
- Introduce amenity and recreational uses

Challenges

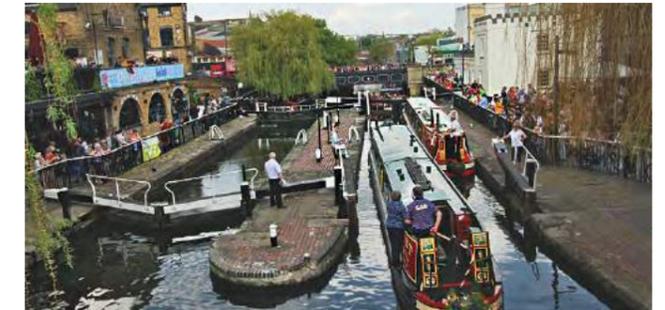
- Land take required for basins and marinas
- Balancing amenity & ecology



High density of activity - Paddington Basin, London



Canal Side Mooring - Angel, London



Water and Canal-side Activity - Camden, London

ENERGY & HEAT NETWORK

Current situation

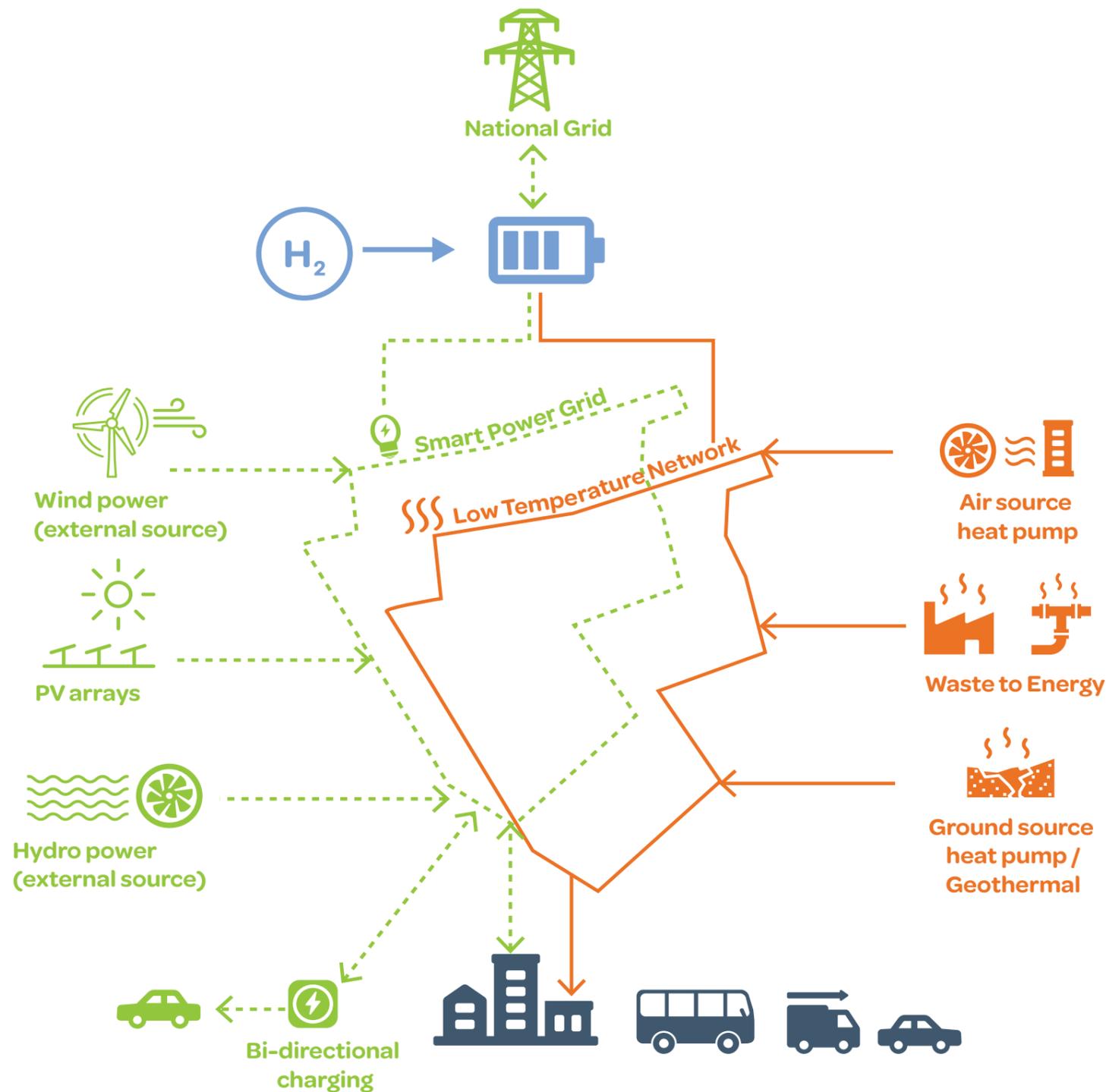
- Current energy provision is heavily dependent on carbon intensify energy generation and there is no connected network in place
- Waste heat currently available from buildings, sewers, and processes within the study area

Opportunities

- Create a coordinated heat and/or energy network
- Capitalise on shift toward renewable energy to store and/or capture excess energy
- Capture and utilise waste heat from buildings / processes / sewage

Challenges

- Space for neighbourhood-scale infrastructure
- Coordinating infrastructure instalment at a strategic level with individual plots



Energy Lab: neighbourhood scale energy and heating Nordhavn, Denmark

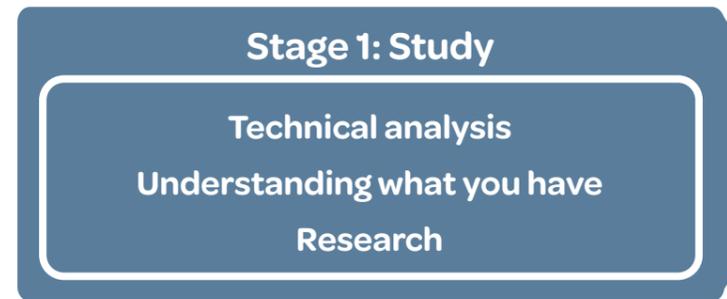


Hydrogen Production within the city Repsol HQ, Madrid

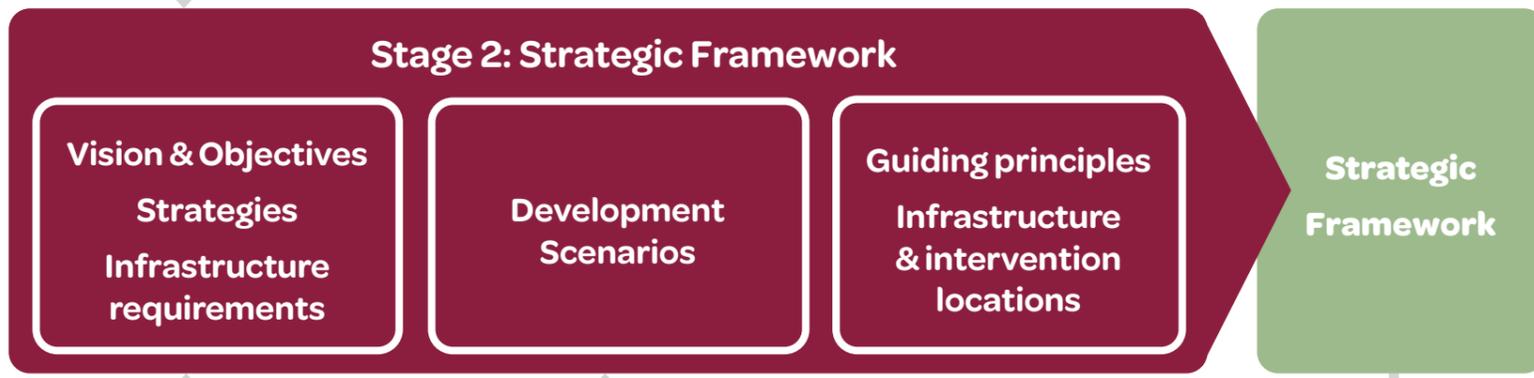
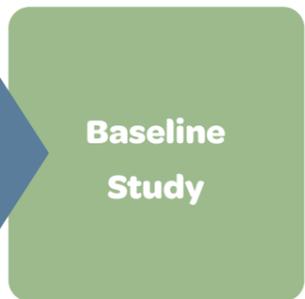
Programme Overview

PROGRAMME OVERVIEW

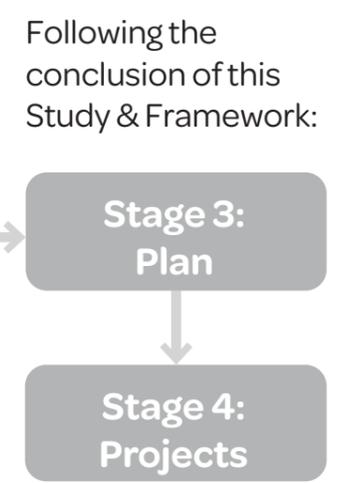
2020
July-December



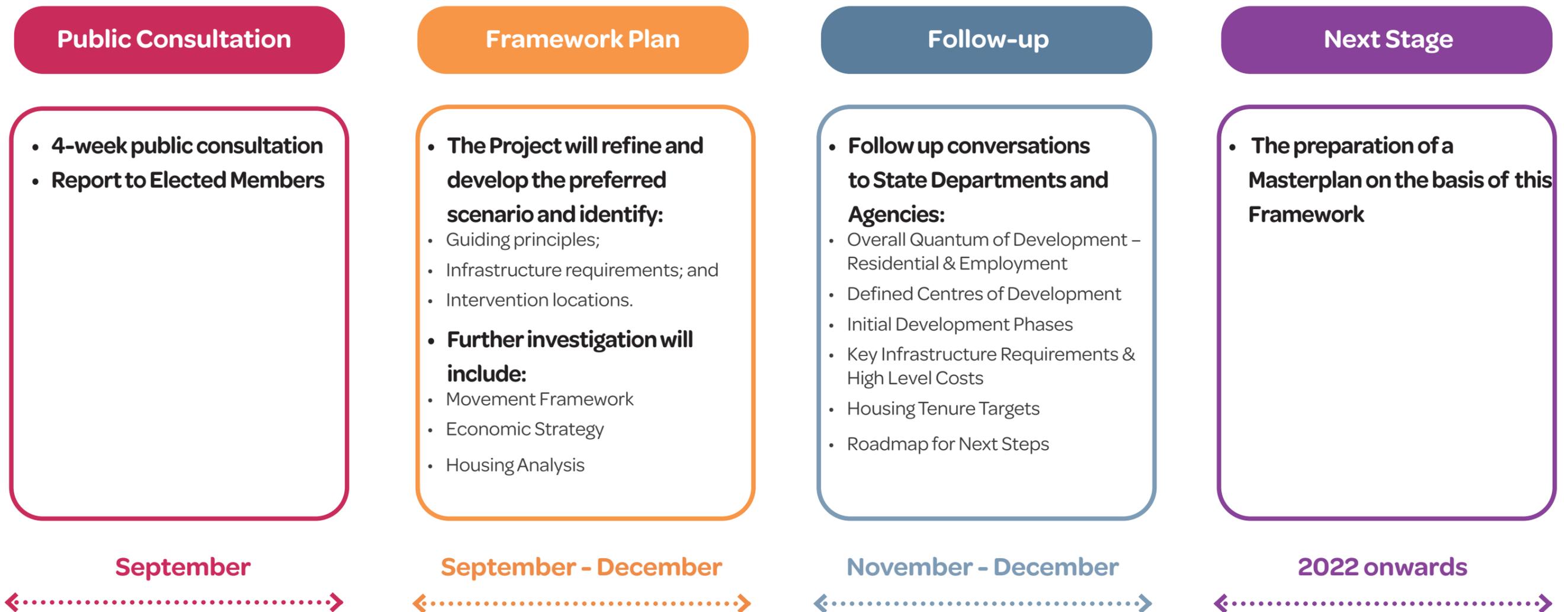
2021
January-December



2022 onwards
Future work



NEXT STEPS



* the work has been subject to/and informed by compliance with EU Directives in relation to SEA/AA/SFRA.

Q&A