

The 'Industrial' place represents many of the industries, infrastructure and services that our urban areas are built around, and which our society relies on. These are the motorways, ports and bridges that connect us, the powerlines that provide our electricity and ICT solutions, and the treatment plants that manage our waste and water.

It is essential that infrastructure, services and networks are climate resilient and able to cope with an increase in disruptive weather events. This means securing existing assets, as well as developing new infrastructure that can service a climate ready, low carbon future.

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Connected Transport

Connecting different modes of transport increases travel options, making us less reliant on a single form of transport. This can increase network resilience. Here a new train station is linked to active travel routes, reducing the need to use a car to get to the business park.

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Replace Carparks

Improving public transport and active travel links can reduce demand for parking. Hard-standing surfaces can be made permeable and make room for more greenspace. This can make local buildings more resilient by improving surface water drainage, providing shade from trees and reducing local overheating.

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Redevelop Derelict Sites

Redeveloping derelict sites can provide new homes and commercial space, while protecting heritage buildings. Climate resilience can be increased by designing for ventilation, weather resistance and water management. It can also include green infrastructure like green walls and roofs.

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Ferry Connections

Passenger ferries are a critical transport link, especially when they connect island communities. Harbour design is critical to secure that the port can operate in all but the most severe weather condition.

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Offshore Renewables

There is a growing offshore renewable energy sector that needs to be supported by resilient onshore infrastructure, including servicing at key ports.

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Green Bridge

A green bridge spanning the motorway reduces a barrier to active travel in the urban area – connecting the new train station and business parks. This provides more travel options and increases network resilience.

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Restored Ecosystems

Wasteland and disused sites can be restored to functioning ecosystems. For example wetlands can provide a range of benefits to the surrounding area, including surface water management, biodiversity, and improving water and environmental quality.

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Smart Travel

Smart travel advice can be provided on route selection and travel options on-road, in-car and before leaving home. Transport disruption from severe weather can be managed through real-time information.

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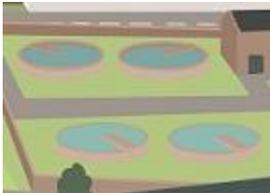
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Data Centre

A new technology industry data centre on a previously derelict site can take advantage of local energy and heat networks. It can be designed to stay cool during hot summers and to be resilient to on-site flood risk.

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Waste Water Treatment

Investing in waste water treatment works has given rise to bio-refineries, which recover energy, nutrients and other valuable products from our waste resources, making them available for local reuse – enhancing the resilience of nearby building and infrastructure.

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Coastal Defences

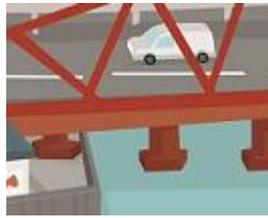
Sea level rise increases risk to critical infrastructure near the coast. Some sites may need protection with hard coastal defences, although nature-based solutions can make a significant contribution in many locations.

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Strengthened Structures

Storm surges, exacerbated by sea level rise, could undermine structures such as bridges. Where necessary, we can strengthen support structures to increase resistance to damage.

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Resilient Harbours

Ports are critical infrastructure providing passenger and freight transport connections. They also support fishing and offshore energy industries. Designing and maintaining harbours to withstand long-term sea level rise and extreme weather means they can stay open in all but the most severe weather.

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