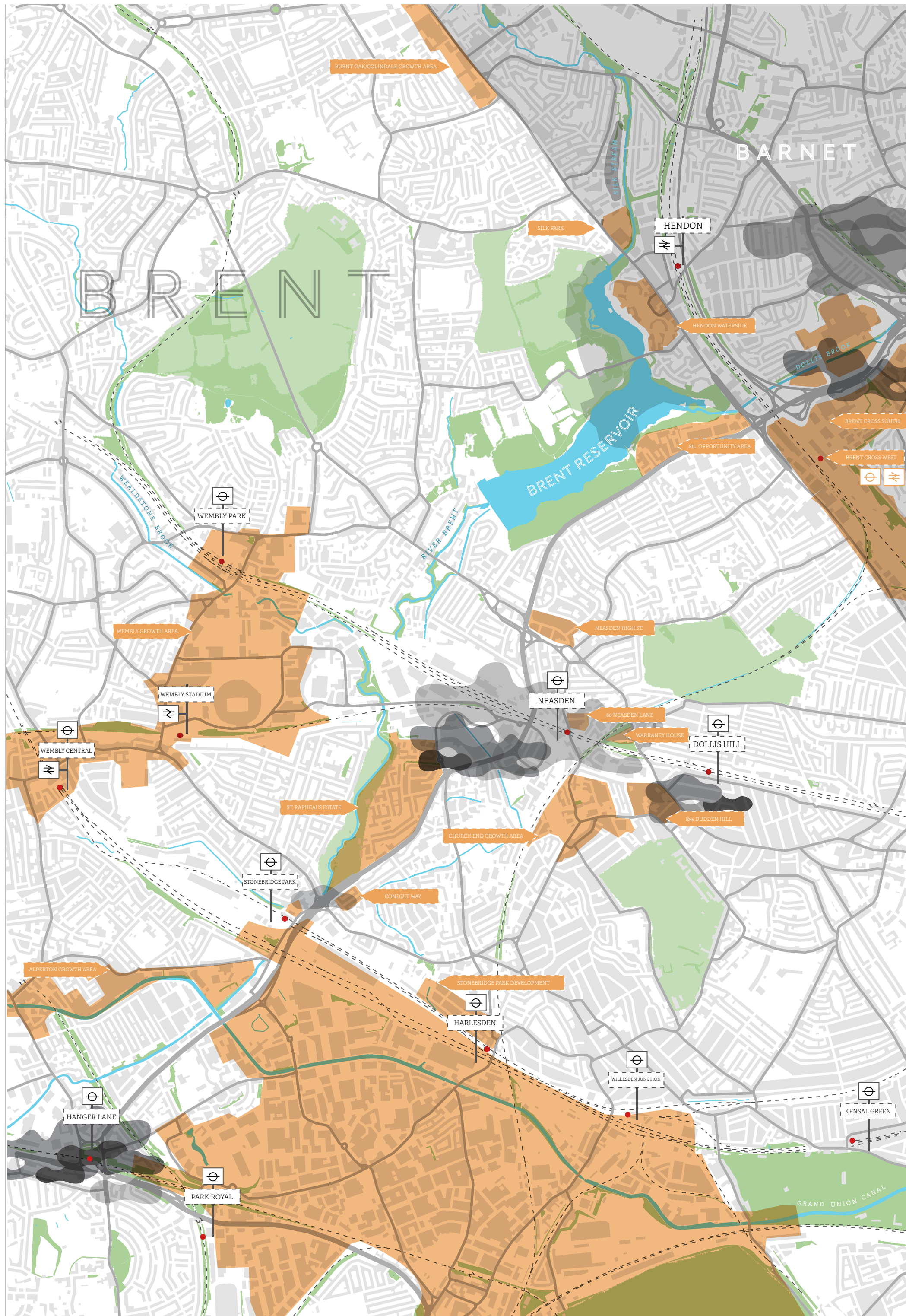


# URBAN FARM BRENT

A Green Regeneration  
For Staple's Corner Industrial Zone

Curl la Tourelle Head Architects &  
archineers





The many water-ways of West London have been born out of the central London industrial canal network and to provide the expanding population and greenspaces of London with water reserves.

The benefit of these spaces environmentally and socially has created attractive inner-city sites to developers and homeowners.

We've been looking at the area known as the 'Brent Corridor', following the River Brent, from Hendon to Hanger Lane. The site has high-levels of poverty and pollution which is exacerbated by the dense network of roads and railways.

In line with the Mayor of London Infrastructure Plan (Green Infrastructure), we've developed a speculative plan for an environmentally-focused regeneration of the Staple's Corner industrial land next to the Brent Reservoir.

This speculative masterplan has been undertaken by Curl la Tourelle Head Architect's Research Team in collaboration with Archineers and 2020 Engineering.

Curl la Tourelle Head Architecture works to achieve exemplary, innovative, sustainable and practical designs through a creative dialogue with its clients, consultants. This collaboration with Archineers, an international environmental design and engineering company focussing on regenerative design.

We recently collaborated with Brent Council in a major mixed use scheme, Moorland Gardens. Located at the centre of Stonebridge, the project proposes a new and bigger Adult Education facility, 750 sqm of affordable workspace and 65 affordable homes.

Left - Map of Brent and Barnet 'Opportunity' Corridor





The Industrial land next to the Welsh Harp has been designated as Strategic Industrial Land (SIL) Protection Zone for Industry, maintaining the legacy and value of inner-city production.

We've developed 5 key priorities for to the Staple's Corner regeneration:

1. To enhance and preserve the environment of the Welsh Harp for the population of London Brent and prospective new investors to Brent and Barnet.
2. To maintain the industrial use of the site, by proposing a programme of Green Infrastructure development - in line with national environmental and urban policy.
3. To strengthen the connection across the north and south sites, divided by the North Circular
4. To provide infrastructure to connect the site to the new Brent Cross West Station. Including extending the local London Cycle path route.
5. To work with local stakeholders to provide a mixed tenure, carbon neutral housing development which can contribute towards offsetting the purchase of industrial land on the site.

Left - Analysis of Staple's Corner and the Welsh Harp area

(Based on information provided in the Brent Industrial Audit)





Above - Analysis of Staple's Corner potential vacant properties  
Below - Overlay of the Danish Agri Food Park (the 'Silicone Valley of Agriculture')

We propose a new agricultural-focused masterplan, utilising urban food growing technology as seen across European cities today.

Bringing food production to the centre of London provides a number of benefits and opportunities for businesses and the community, with learning opportunities, readily available fresh produce and environmentally-friendly technologies.

*Relevant Case Studies:*

## 1. Agri Food Park

Denmark / The Silicone Valley of Agriculture (Danish Agriculture & Food Council)

A 292,000m2 area comprising of:

- Green houses, Biodigesters, aquaculture, shops, showrooms
- Ecological regeneration
- Commercial space
- Workshop space
- Bio Engineering
- Food Manufacturing
- 75 food and agriculture companies move in together on 110 hectares of farmland.
- 3,000 people, all employed within food and innovation.

**Food Production Fact:**

The central part of Denmark is also known as the country's "pantry" – more than 33% of Denmark's total export from the food industry is produced in this region!

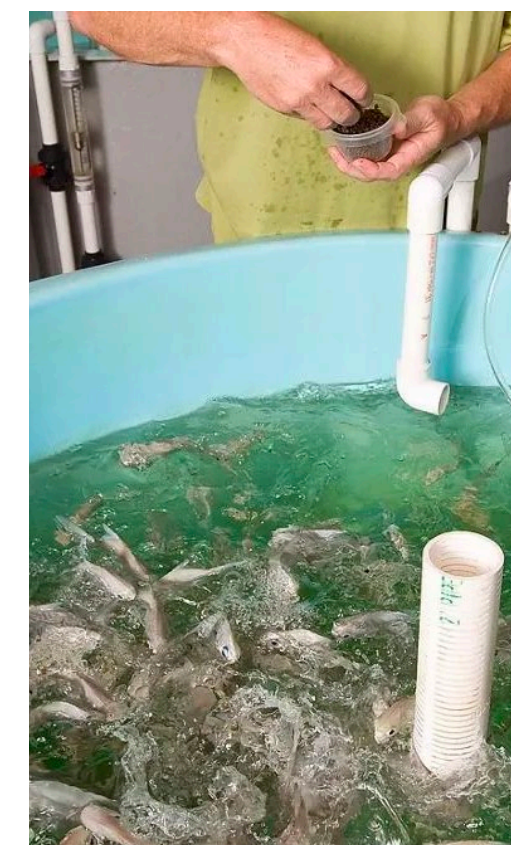
***Brent would become the UK's first centre for Hydroponic Farming - creating savings on the commercial import of food products to the UK.***

## 2. The Bridge

USA / Pittsburgh, Seattle, Detroit, Alanta, Philadelphia, Houston

The Bridge acquires old industrial and commercial properties, then turns them into "eco villages" in the inner city. Their properties are intended to be totally sustainable and self-contained mixed-use "Eco-Villages" with housing, commercial/retail space, co-working, urban agriculture, innovation/education center and entertainment.

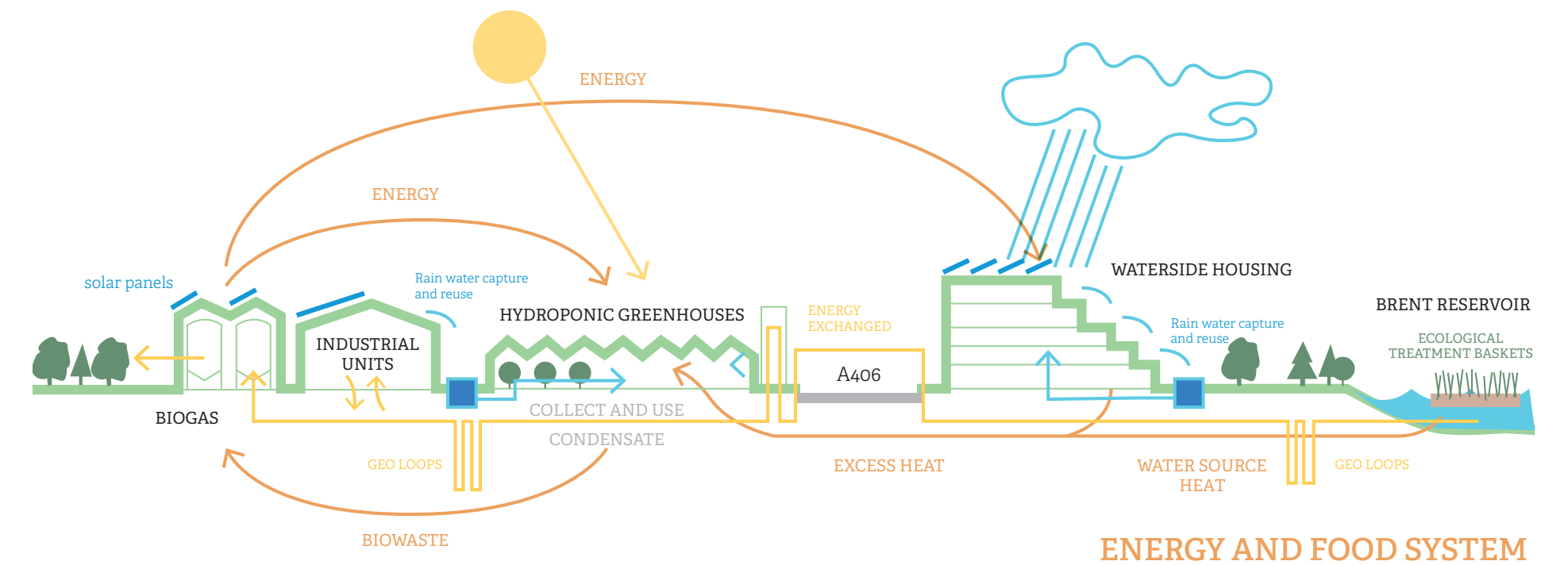
Aquaponic fish farming



Hydroponic tomatoe crop







### What is Hydroponic Farming?

Hydroponics is a non-traditional method of farming, which is a method of **growing plants without soil**, by using mineral nutrient solutions in a water solvent.

It is primarily used vertically - whereby crops are stacked in greenhouses - which results in high crop yields and fast production - all year round!

It is a high-quality and efficient farming method, **utilising renewable resources** such as waste heat recovered from biogas energy collected and condensed from the waste and composting

Left - Hydroponic Farming Outputs Area map  
Above - Energy and Food System Diagram for Brent's Pantry

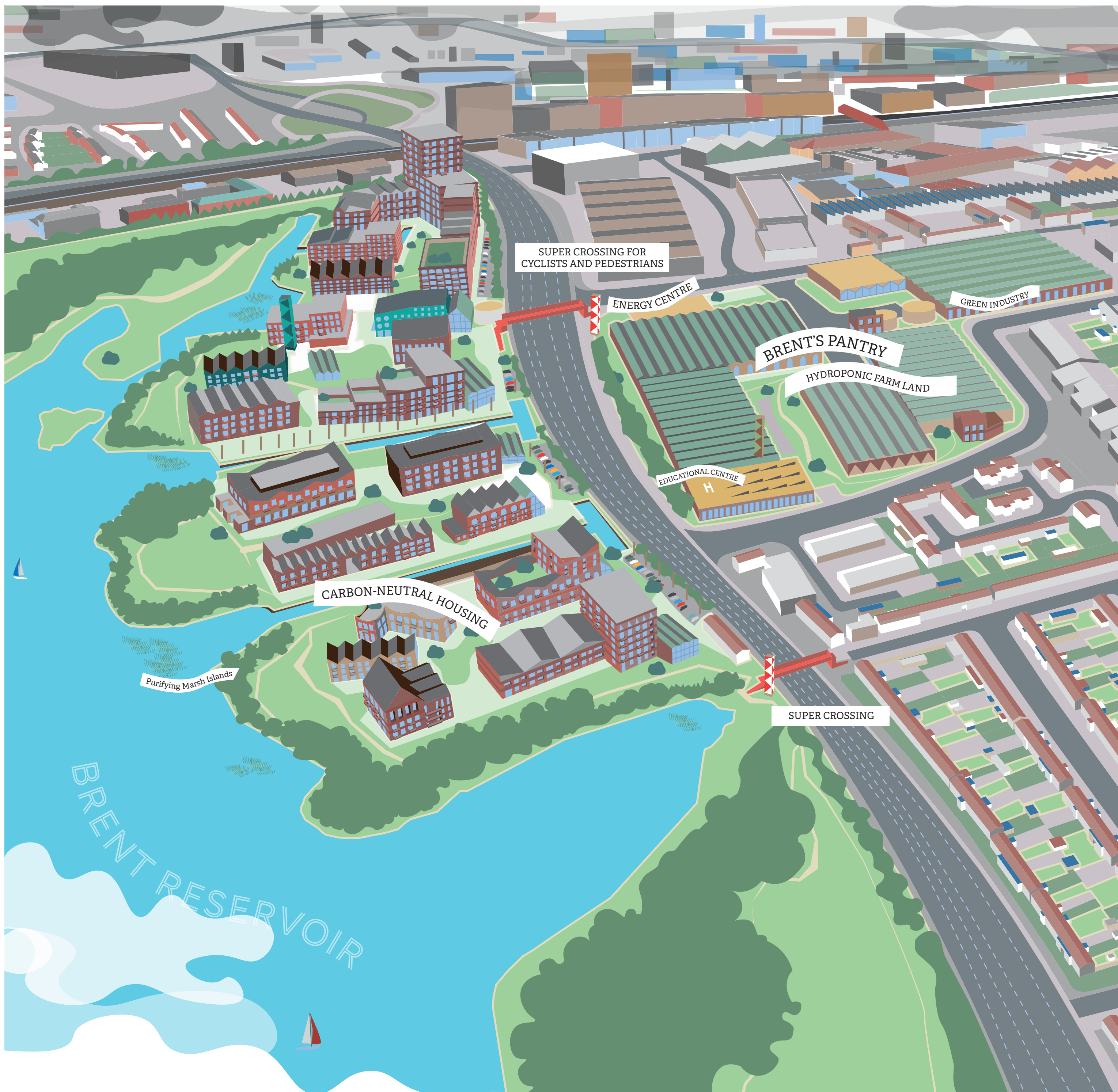
process.

Our plan integrates the hydroponic industry alongside a mixed-used waterside-housing development with district energy centre and food-technology centre to meet the following ambitions:

1. 2000 carbon-neutral homes
2. 80,000 sq m of agricultural space
3. 5,000 sq m of educational space
4. A Healthy-Eating Campus
5. Leisure and Fitness Suites

The efficiency of hydroponic systems has been mapped on the adjacent page. This map shows the total area needed to farm the recommended intake of vegetables and protein to feed the population of Brent - 330,000 people - in just 75,200 sq m area of vertical hydroponic crops and aquaponic fish farming!





Our vision for Staple's Corner includes the regeneration of the waterside site to provide 2000 new, carbon neutral cross laminated timber (CLT) homes, set in an ecologically beneficial, purifying island of reedbeds and marshland.

This is connected to the South site of 'Brent's Pantry' a new hydroponic farmland, food-production and education centre, unprecedented in the U.K and London. These sites are connected via strengthened footbridge and cycle way.

Left - Our vision for the speculative Staple's Corner regeneration

