

- Eliminate on-site combustion for heating homes, businesses and water through improving efficiency and reducing carbon intensity of fuel.
- The council will radically improve energy efficiency within its corporate and housing portfolios through deep retrofit and high-performance new build.
- With energy consumption minimised, on-site renewable energy generation from e.g. solar PV is able to generate a good proportion of the council's energy requirement, with Power Purchase Agreements from other renewable generators providing the balance.

- The redeveloped Perceval House should be designed and built to be an exemplar of carbon neutrality.
- Expand low carbon district heating networks in the borough.
- As the emission factors of electricity reach parity with gas, natural gas heating and hot water systems will be replaced or made more efficient with ground/air/water heat pumps.
- Strengthen our planning policy so that all new developments are built to be as carbon neutral as possible.
- Increase communication and education so local businesses and residents are aware of the

- Improved Air quality through cleaner energy sources, increased ventilation and building fabric, and incorporation of greening methods (such as green roofs and walls) into regeneration projects.
- Fewer disruptive maintenance visits to council housing
- A growing low carbon sector creates jobs and opportunities for Ealing residents to reduce poverty and increase incomes, a Future Ealing outcome.
- Meets Future Ealing targets for apprenticeships and empowering residents seeking career changes and upskilling.

- Leadership
- Regulation
- Policy Setting
- Incentivising
- Signposting
- Communications
- Procurement
- Planning
- Planning Enforcement
- Housing Asset Management
- Maintenance/Repair/Voids
- Housing Regeneration
- Building Control
- Sustainability/Energy Manager
- HR

- Viability Studies on fabric-first regeneration (EnergieSprong, EnerPhit, Airspace transformation)
- Integrating Energy Efficiency measures into routine maintenance and Handy Person visits
- Replacing lighting with LED and motioncontrolled lighting
- Taking part in the Mayor's Energy for London energy company (begins Dec 2019)
- Upgrading Ealing's street lighting to LED, decreasing electricity consumption by more than a half.
- Installing 288.53kWp solar PV capacity at Ealing's Corporate sites,

- importance of carbon reduction and the steps needed to achieve it.
- Switch off/power down days
- The Council should be seeking to gradually increase the EPC rating of its own buildings through energy efficiency upgrades.
- Divest from fossil fuels in pension schemes
- Renewable generation capacity should be maximised throughout the borough, including on the Council's own buildings, schools, shopping centres and other available roof spaces. Policy should ensure that all new developments, even single units, will require maximum renewables generation capacity.
- Where carbon emissions cannot be decreased further through reduction or efficiency measures, borough emissions will be offset through investment in renewable generation capacity outside of the borough.

- Fuel poverty alleviation through energy efficiency measures, lower energy costs achieved through collective switching programs, and behavioural counselling to ensure that residents understand how best to use their heating controls
- Energy efficiency improvements to the Council's own buildings have many co-benefits such as thermal comfort, improved lighting levels and elimination drafts which can be significant improvements for staff and service users in the buildings. This can make a real contribution towards the Future Ealing outcome of children and young people fulfilling their potential at sites serving children.
- Increased flexibility in ways of working, telecommuting, homeworking can improve wellbeing and staff morale
- Minimising carbon emissions from the Council's own buildings

- capable of generating 269,000kWh electricity a year
- Installing solar PV at 500 Council owned domestic properties
- Using the RE:FIT programme to improve the energy efficiency of Perceval House and Ealing Town Hall, saving 3GWh a year and £1.2m overall spend.
- Upgrading boilers and heating controls to modern, energy efficient systems at sites across the corporate portfolio, saving around a third gas consumption each time.

reduces Ealing's
environmental footprint, a
Future Ealing outcome
and leading by example
provides a pathway for
the rest of the borough.
With appropriate policy
and support there could
be an industrial boost to
the UK from being one of
the early movers in some
key sectors (e.g.
engineering for low-
carbon technologies,
carbon capture and
storage), with potential
benefits for exports,
productivity and
employment.

Green Spaces & Food **Transport** Waste Energy Green **Systems** Infrastructure Vision Cobenefits Council's Role Ideas **Progress to Date** Replacing ICE vehicles Improve cycling facilities Reduce the dependency Leadership 20mph borough across the borough with electric and on motorised vehicles by Regulation EV charging points including segregated hydrogen powered moving trips, particularly **Policy Setting** 130+ (May 2019) lanes, enforcement of novehicles will be an the shorter ones, to Parking charges Incentivising immediate improvement active travel using more stopping on cycle lanes, Signposting commensurate with sustainable modes more and secure cycle in air quality and vehicle emissions Communications (walking, cycling and respiratory health for parking. Cycle library & cargo bike Replace fleet cars with public transport) through residents. hire schemes **Transport Planning** behaviour change. Electric vehicles with electric vehicles and Cycle training – adults Highways large enough batteries Electrify all new cars and other low carbon and children Parking and sufficient recharging vans (or use a lowtechnology, replacing Successful bid to update Parks infrastructure provide a vans and HGVs where carbon alternative such our understanding of **Procurement** superior driving as hydrogen) and expand possible, serving as a critical drainage areas in Planning experience, including a charging infrastructure to driving force in Ealing (SUDs) Planning Enforcement quieter journey and with include innovative energy encouraging and Flexible working **Regulatory Services** significantly lowered incentivising boroughstorage. encouraged as part of the Housing Regeneration health impacts as wide fleet replacement. Minimise flying, New Ways of Working compared to ICE **Building Control** especially long-haul, Continue to utilise strategy Sustainability/Energy vehicles. where possible. Opting commercial partners to Electric vehicles currently Manager implement EVCPs, as for rail or nonbenefit from capital HR combustible fuel public this lessens the financial transport options, where risk to the council subsidies and lower fuel and vehicle taxation. possible. Plant trees and hedges at Each of these may be the sides of roads to phased out in the long capture pollutants.

run as electric vehicles

mitigate road run off and

- prevent flooding on transportation routes.
- Install Sustainable Urban Drainage Systems (SUDS) or swales on roads to mitigate flood risk and the environmental effects of stormwater and rainwater runoff, including drainage of emissions from internal combustion engine (ICE) travel into the water table.
- Encourage remote
 working and flexible
 working hours to reduce
 travel to and from offices,
 as well as non-peak time
 travel.
- Enforce planning policy requiring cycling parking and EV charge points on all new developments including homes to encourage the transition to EVs throughout the borough.
- Create car-free estates, increased walkability and pedestrianisation of communities, emphasising biodiversity and the urban ecosphere in both new builds and regeneration projects.

- reach cost parity. By 2050, the Climate **Change Commission** expect the shift to lowcarbon options like electrification to cut the annual costs of UK transport by around £5 billion. That can be achieved while maintaining transport's tax contribution and allows for the costs of charge-points and other infrastructure. Increased modal transportation will contribute both to improved air quality and increased health in those taking part in active transport, including cycling and walking.
- Sustainabile transportation reduces noise pollution, impact on the built and natural environment, and requires less infrastructure maintenance than vehicle travel.
- The UK cycle industry is worth three times more than the UK steel industry and employs twice as many people. Cycling related

- Restructure cycle lanes to be more visible, segregated, and safer for cyclists and motorists alike.
- Promote cargo cycles as an alternative to motorised delivery scooters, targeting recent uptick in food delivery services.
- Increase the number of car-free days, pedestrianising main thoroughfares in the borough, allowing only buses and emergency vehicles.
- Introduce work-place parking charges, congestion charging and/or emission based road charging, recycling funds into active travel and public transport initiatives.
- Require all taxis to be EVs through a licensing program.
- Ensure that all buses operating within the borough are either electric or hydrogen fuel (used making electrolysis powered by renewable energy) through the

- businesses currently generate at least £5.4 billion for the UK economy each year, and they sustain 64,000 jobs.
- Traffic congestion will be lessened as modal transportation increases and carpooling and sharing become more embedded into urban settings, minimising time lost during travel, reducing traffic noise and GHG emissions, and increased health of travellers.
- Decreased reliance on fossil fuels and displacement of existing import networks from unstable global regions through the promotion of biofuels and electric vehicles will result in a safer global market and healthier environment as carbon intense oil extraction is reduced.
- A substantial number of people are employed in the formal and informal public transport sector. A shift to public and shared transport modes is likely to generate additional

Division And Co.			
Buses Act to work in partnership with existing bus companies. Repair and update pedestrian walkways, increasing uniformity of surfaces over cobblestones/pavers, to increase safety and accessibility. Increase safe crossing points for pedestrians. Create car-free residential areas as part of filtered permeability schemes (bollards which close roads to vehicle traffic using bollards, but which allow cyclists and pedestrians to cross and can be lowered for emergency vehicles). Expand Ultra Low Emission Zones (ULEZs) in town centres, minimising or banning deliveries during the day or on low air quality warning days. Create "Mini-ULEZs" around schools, where	employment opportunities in this sector. Focusing on sustainable transport and tackling congestion can create a better place to do business. Mitigation strategies that foster multi-modality are likely to foster improved access to transport services particularly for the poorest and most vulnerable members of society. Improved mobility usually helps provide access to jobs, markets, and facilities such as hospitals and schools.		
 Create "Mini-ULEZs" 			

bus services for		
accessing local services		
and businesses.		
Discourage idling		
vehicles and loitering		
through expanded		
reporting networks and		
public information		
campaign.		
Oppose expansion of air		
travel and airports within		
local plans.		

Green Spaces & **Food Systems Transport** Waste Energy Green Infrastructure Vision Ideas Cobenefits Council's Role **Progress to Date** Ealing residents and Rethink allotment Local food production New orchards have been Leadership businesses will strive for management to enhance, contributes to the Future **Policy Setting** created, notably through protect and give more Ealing outcome of zero food waste and the Hanwell and Signposting people access to food Norwood Green Orchard choose to eat within the helping residents to stay Communications **EAT-Lancet** active, healthy and Trail. growing. Commission's Planetary independent. Nearly a Review open spaces for Supporting and working Parks Health Diet to contribute opportunities for fifth of parents say that to sustain existing and **Procurement** to the global 1.5-degree they regularly go without community food growing new food growing **Planning** climate target. food to ensure that their and orchards: support provisions with Planning Enforcement Locally grown food will be local communities to children have enough to organisations, such as Housing Regeneration eat, according to Public plentiful and accessible lead; connect to the Horsenden Farm, Schools - Ealing Transform Your Space to Health research. Ealing Transition and to all residents to Learning Partnership purchase or help Providing opportunities to **Ealing Allotment** access support grow food locally can produce. Require all new Partnership. provide access to fresh. developments to give healthy food for access to food growing through the provision of everyone. Small scale, locally allotments or community produced food can gardens. • Use only peat-free support biodiversity Food growing compost. programmes contribute to Ensure all publicly community building by procured food meets providing places to learn, criteria that supports the exchange information Planetary Health Diet.

and take pride in the

Expand access to market for local food suppliers by encouraging more farmers markets and direct connections to local businesses. Support food distribution organisations currently operating in the borough to ensure local connections between Ealing businesses and Ealing residents in need. Communications and community engagement: provide robust information on home composting; provide information on the Planetary Health Diet; encourage home grown food growing with information and workshops; work with Ealing Transition and other local "friends" groups to support food growing across communities	outcomes. This directly relates to Future Ealing outcome of a clean and great place to live. Local small-scale farming supports small business and directly relates to the Future Ealing outcome of growing the economy, creating jobs and opportunities. Excess food that is redistributed can help tackle food poverty and hunger in disadvantaged communities. This directly contributes to the Future Ealing outcome to help residents to stay active, healthy and independent. Eliminating food waste from our waste stream greatly reduces carbon emissions released when food decomposes.

minimise fleet journeys.

be recycled easily.

Green Spaces & Food Waste Energy **Transport** Green Systems Infrastructure Vision Cobenefits Council's Role Ideas Progress to Date Recycling rate of over Ealing's overall waste Examine the potential for Carbon reduction, waste Leadership tonnage will be reducing the carbon reduction, increased 50% and on target to Regulation emissions of Ealing's recycling and quality of reach 60% by 2022. minimised due to a Policy Setting reduction in avoidable waste collection fleet and recycling all reduce Second best recycling Incentivising Ealing's environmental waste generation and an the circular economy rate in London Signposting effective circular footprint and make opportunities for the fuel. Over 7.000t food waste Communications economy, within and Increase the capacity and Ealing a clean and highdiverted from landfill in outside of the borough. quality place people reach of Ealing's circular 2018 and anaerobically Street Services Recycling rates will be economy including want to live in - a clear digested to biogas to **Procurement** maximised with end of seeking circular economy Future Ealing outcome. produce clean electricity Planning statements from all major life plastics diverted from Clean and healthy and soil fertiliser. **Economic Regeneration** incineration and planning applications, spaces can play a role in LATCO Vehicles will be Regulatory Services shops selling salvaged discouraging anti-social degradable materials ULEZ compliant as a first Sustainability such as food waste and building materials, behaviour, contributing step Highways paper diverted entirely furniture restoration and towards the Future Transport Planning from landfill. repair workshops and Ealing outcome of Ealing's waste collection swap shops. reducing crime and making residents feel fleet will strive to be zero Enact robust measures to emission and circular prevent litter and safe. Expansion of the economy, for example. particularly plastics, from entering our waterways. reuse/circular economy hydrogen fuelled vehicles fuelled by hydrogen Single-use plastic use will sector creates jobs and derived from food waste be minimised and plastic opportunities for Ealing biomethane. Smart packaging in use will residents, another have been produced to collection systems will Future Ealing outcome.

l and representation	ov all a Zava amission vahislas
Local reprocessing to a section in the section	
appropriate material	have benefits for local air
streams to minimise	
transport emissions	health and wellbeing of
associated with	residents, contributing to
reprocessing.	the Future Ealing
Reduce plastic	outcome of a clean and
consumption includi	ng high-quality place to live.
supporting incentive	s for
zero/ reduced plasti	
packaging for shops	and
restaurants; banning	
some single use pla	
items such as bags	
straws; adult learnin	
cooking classes to s	
how easy it is to coo	
from scratch rather to	
purchasing package	
meals.	
Minimise food waste	and
maximise recycling	
unavoidable food wa	
including commercia	
food waste recycling	
support unused food	
distribution hubs and	
food banks.	
Ensure the Council	
from the front, include	ling
minimising waste;	
maximising recycling	g and
banning single-use	
plastics from counci	
facilities and events	

 Increase awarenes reducing, repairing reusing as well as recycling; business recycling; recycling schools; Love Food Waste and how to recycle better to recontamination. Support reprocessi capacity including anaerobic digestion the production of billocally or nearby to reduce the emission associated with training. 	and in d Hate duce ng n for iogas	
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Green Spaces & Green Food Waste Energy Transport Systems Infrastructure Cobenefits Vision Ideas Council's Role **Progress to Date**

- The council and residents will create and maintain high quality, climate resilient open spaces. Green spaces of all sizes will provide carbon storage, water retention, urban cooling and habitats that enhance biodiversity.
- Restore habitat on a large scale to create or improve biodiversity corridors. Look at opportunities along waterways and identify keynote species as indicators of healthy habitats and biodiversity.
- Scale up tree planting (2017 data shows 43.947 council-owned trees: representing a 2.7% canopy cover)
- Expand wildflower meadows and rough grassland management schemes to store carbon and reduce emissions associated with grounds maintenance
- Measure the full carbon storage of parks
- Implement pocket parks through street closures
- Eliminate the approval of crossovers into gardens

- High quality green spaces benefit physical and mental health within communities. Parks, allotments, cemeteries and conservation areas encourage active lifestyles and community connections. This relates directly to the Future Ealing outcome of helping residents to stay active, healthy and independent.
- According to Defra's Climate Change Plan, if everyone had access to sufficient green space, the benefits associated with increased physical activity could save the UK health system £2.1 billion per year.
- Green spaces work hard as "green infrastructure" providing clean and cool air and retaining water after rainfall. Greening cities will help communities deal with

- Leadership
- **Policy Setting**
- Communications
- **Parks**
- **Planning**
- Sustainability
- Highways
- Transport Planning
- Ealing has 8.4 square kilometres of parks and green spaces, 15% of the total borough area and an average of 1.97 ha per 1,000 people.
- Introduction of 200,000m² of flowering meadows in Parks and Housing sites
- Sourced £375k funding and started delivering the Greenford to Gurnell project to improve access to nature and increase biodiversity through wetland habitat and tree planting.
- Planted more than 50,000 trees through Trees for Cities partnership agreement
- Introduction of multiple SUDS schemes to capture and retain rain and ground water in Parks.

to protect habitat in front	fluctuations in temperature,	•	Wetland planting has
garden; support the	especially as our		also been introduced to
restoration of paved	temperatures increase.		increase the variety of
gardens to expand	Greening the boroughs		habitats and biodiversity.
habitats	streets and town centres		,
 Planning applications: 	contributes to the Future		
maintain a policy of no net	Ealing outcome of creating a		
loss of green space; apply	clean and great place to live.		
a local urban greening	Research from Yale		
factor to increase new	University evidenced that an		
green amenities rather	increase in the number of		
than no net loss position,	trees related to a decrease		
clear ask	in violent and property crime.		
 Communications and 	This supports two FE		
community engagement:	outcomes to reduce crime		
develop a schools'	and help residents to feel		
curriculum to support the	safe and to keep young		
• •	people safe.		
protection of green	<u>'-</u> ' .		
spaces in the borough; maintain close	 Ealing's green spaces hold tremendous value to 		
relationships with Ealing	sustaining biodiversity.		
Wildlife Group and Ealing	According to the World		
Transition to generate	Health Organisation, human		
community ownership and	health depends upon		
action; create a street	ecosystem products and		
warden programme to	services (such as availability		
promote urban greening	of fresh air, water, food and		
and resident responsibility	fuel sources) which are		
for verges, pocket parks	fundamental to good human		
and other localised green	health.		
spaces.	The borough's green spaces		
 Promote and deliver the 	provide numerous spaces		
installation of green roofs	for local food growing, which		
through planning policy	contributes to reducing "food		
and retrofitting council	miles" – and therefore		
buildings.	carbon - associated with		
-	for all managers attack		

food production.