

DRAFT HOUNSLOW CLIMATE EMERGENCY ACTION PLAN:

Acronyms, Notations and Glossary of key words

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ACRONYMS

AQMA	Air Quality Management Area
AQAP	Air Quality Action Plan
ASHP	Air Source Heat Pump
BEIS	Department for Business, Energy and Industrial Strategy
BEMS	Building Energy Management System
BMS	Building Management System
CEAP	Climate Emergency Action Plan
CCC	Committee on Climate Change
CIV	London Collective Investment Vehicle
CCL	Climate Change Levy
CHP	Combined Heat and Power
CRCEES	Carbon Reduction Commitment Energy Efficiency Scheme
CRG	Community Reference Group
CROHM	Carbon Reduction Options for Housing Managers
ECO	Energy Company Obligation
EPC	Energy Performance Certificate
EV	Electric Vehicle
GHG	Greenhouse Gas
GLA	Greater London Authority
GSHP	Ground Source Heat Pumps
HGV	Heavy Goods Vehicle
HRA	Housing Revenue Account
ICT	Information Communication Technology

ISO	International Organisation for Standardisation
IPCC	Intergovernmental Panel on Climate Change
LEDNet	London Environment Directors Network
LIP	Local Implementation Plan
LPA	Local Planning Authority
LULUCF	Land Use, Land Use Change and Forestry
MEEF	Mayor's Energy Efficiency Fund
MEES	Minimum Energy Efficiency Standard
NPPF	National Planning Policy Framework
PHEV	Plug in Hybrid Electric Vehicle
PV	Photovoltaics – solar electricity generation
PDA	Personal Development Appraisal
RHI	Renewable Heat Incentive
RRP	Reduction and Recycling Plan
S106	Section 106
SINC	Site of Importance for Nature Conservation
SME	Small and Medium sized Enterprise
SPG	Supplementary Planning Guidance
SUDs	Sustainable Drainage Systems
TEC	London Councils Transport and Environment Committee
TfL	Transport for London
ULEV	Ultra Low Emission Vehicle
ULEZ	Ultra Low Emission Zone
WRAP	Waste and Resources Action Program
WEEE	Waste Electrical and Electronic Equipment
WIM	Western International Market
WPL	Workplace Parking Levy

NOTATIONS

°C	Degrees Celsius
kWh	Kilowatt hours – unit of energy such as electricity or gas
CO ₂	Carbon Dioxide
CO ₂ e	Carbon Dioxide Equivalent – the amount that has the equivalent or amount of carbon dioxide
tCO ₂ e	Tonnes of Carbon Dioxide Equivalent

GLOSSARY OF TERMS

A

Adaptation Action that helps cope with the effects of climate change - for example construction of barriers to protect against rising sea levels, or conversion to crops capable of surviving high temperatures and drought.

Air Source Heat Pump ASHPs take heat from the outside, absorb it and is they used to heat up and power your home. For example the heat absorbed can be used to heat radiators, underfloor heating systems, hot water etc.

Air Quality Action Plan AQAPs provide the mechanism by which local authorities, in collaboration with stakeholders will state their intentions for working towards the air quality objectives through the use of the powers they have available.

Anthropogenic climate change Man-made climate change - climate change caused by human activity as opposed to natural processes.

B

Biofuel A fuel derived from renewable, biological sources, including crops such as maize and sugar cane, and some forms of waste.

Business as usual A scenario used for projections of future emissions assuming no action, or no new action, is taken to mitigate the problem. Some countries are pledging not to reduce their emissions but to make reductions compared to a business as usual scenario. Their emissions, therefore, would increase but less than they would have done.

C

Carbon capture and storage The collection and transport of concentrated carbon dioxide gas from large emission sources, such as power plants. The gases are then injected into deep underground reservoirs. Carbon capture is sometimes referred to as geological sequestration.

Carbon dioxide (CO₂) Carbon dioxide is a gas in the Earth's atmosphere. It occurs naturally and is also a by-product of human activities such as burning fossil fuels. It is the principal greenhouse gas produced by human activity.

Carbon dioxide (CO₂) equivalent Six greenhouse gases are limited by the Kyoto Protocol and each has a different global warming potential. The overall warming effect of this cocktail of gases is often expressed in terms of carbon dioxide equivalent - the amount of CO₂ that would cause the same amount of warming.

Climate emergency A situation in which urgent action is required to reduce or halt climate change and avoid potentially irreversible environmental damage resulting from it

Carbon footprint The amount of carbon emitted by an individual or organisation in a given period of time, or the amount of carbon emitted during the manufacture of a product.

Carbon neutral A process where there is no net release of CO₂. For example, growing biomass takes CO₂ out of the atmosphere, while burning it releases the gas again. The process would be carbon neutral if the amount taken out and the amount released were

identical. A company or country can also achieve carbon neutrality by means of carbon offsetting.

Carbon offsetting A way of compensating for emissions of CO₂ by participating in, or funding, efforts to take CO₂ out of the atmosphere. Offsetting often involves paying another party, somewhere else, to save emissions equivalent to those produced by your activity.

Carbon sequestration Also referred to as Emissions Sequestration. The process of storing carbon dioxide. This can happen naturally, as growing trees and plants turn CO₂ into biomass (wood, leaves, and so on). It can also refer to the capture and storage of CO₂ produced by industry. See Carbon capture and storage.

Carbon sink Any process, activity or mechanism that removes carbon from the atmosphere. The biggest carbon sinks are the world's oceans and forests, which absorb large amounts of carbon dioxide from the Earth's atmosphere.

CFCs The short name for chlorofluorocarbons - a family of gases that have contributed to stratospheric ozone depletion, but which are also potent greenhouse gases. Emissions of CFCs around the developed world are being phased out due to an international control agreement, the 1989 Montreal Protocol.

Circular economy An economic model in which resources are kept in use at the highest level possible for as long as possible in order to maximise value and reduce waste, moving away from the traditional linear economic model of 'make, use, dispose'.

Climate change A pattern of change affecting global or regional climate, as measured by yardsticks such as average temperature and rainfall, or an alteration in frequency of extreme weather conditions. This variation may be caused by both natural processes and human activity. Global warming is one aspect of climate change.

Community Reference Group Three Community Reference Groups are being formulated to deliver the Hounslow Green Borough Framework. These are: Cleaner Borough CRG, Greener Borough CRG and the Climate and Clean Air CRG.

Council Direct Emissions Defined as those in which the Council has a direct significant influence over

CO₂ See carbon dioxide.

Consumption Based Emissions Consider the direct and lifecycle GHG emissions of goods and services (including those from raw materials, manufacture, distribution, retail and disposal) and allocates GHG emissions to the final consumers of those goods and services, rather than to the original producers of those GHG emissions.

Co-benefits These are defined as the positive effects that a policy or measure aimed at one objective might have on other objectives. Co-benefits are also referred to as ancillary benefits.

Culture Change A process that leads to people acting differently over time when influenced by changes taking place across society e.g. charging for plastic carrier bags at the supermarket to raise public awareness of the impact of plastics on the local and global environment.

D

Decarbonise To remove or reduce the amount of carbon.

E

Energy efficiency Using less energy to perform the same task in order to eliminate energy waste.

Emissions Pollutants produced by mechanical, industrial or combustion processes that are released into the atmosphere.

Emissions Sequestration See meaning for Carbon Sequestration.

F

Fossil fuels Natural resources, such as coal, oil and natural gas, containing hydrocarbons. These fuels are formed in the Earth over millions of years and produce carbon dioxide when burnt.

Fuel Poverty A household is considered to be in fuel poverty if the fuel costs required to heat and power the home adequately are above average (the national median level) and if they were to spend that amount, they would be left with a residual income below the official poverty line. It is caused by the combination of three factors: low incomes; the poor energy efficiency of homes; and high energy prices.

G

Global average temperature The mean surface temperature of the Earth measured from three main sources: satellites, monthly readings from a network of over 3,000 surface temperature observation stations and sea surface temperature measurements taken mainly from the fleet of merchant ships, naval ships and data buoys.

Global warming The steady rise in global average temperature in recent decades, which experts believe is largely caused by man-made greenhouse gas emissions. The long-term trend continues upwards, they suggest, even though the warmest year on record, according to the UK's Met Office, is 1998.

Greener Borough Framework This is a high level plan that once implemented will improve the London Borough of Hounslow's environment and reduce the borough's reliance on the use of the earth's resources. The framework contains a number of action plans that will contribute to the health and wellbeing of Hounslow's communities while ensuring Hounslow plays its part in addressing the global climate emergency. There will also be wider benefits, for example financial savings through increased recycling rates, less waste and through the development and expansion of the green economy.

Greenhouse gases (GHGs) Natural and industrial gases that trap heat from the Earth and warm the surface. The Kyoto Protocol restricts emissions of six greenhouse gases: natural (carbon dioxide, nitrous oxide, and methane) and industrial (perfluorocarbons, hydrofluorocarbons, and sulphur hexafluoride).

Greenhouse effect The insulating effect of certain gases in the atmosphere, which allow solar radiation to warm the earth and then prevent some of the heat from escaping. See also Natural greenhouse effect.

Green infrastructure A network of green spaces – and features such as street trees, green roofs and blue spaces – that is planned, designed and managed to deliver a range of benefits. These include mitigating flooding, cooling the urban environment and enhancing biodiversity and ecological resilience, as well as providing more attractive places for people.

H

Housing Revenue Account This covers the costs of running the Local Authorities own housing stock and closely related services. It is primarily for the benefit of the council's own tenants.

I

IPCC The Intergovernmental Panel on Climate Change is a scientific body established by the United Nations Environment Programme and the World Meteorological Organization. It reviews and assesses the most recent scientific, technical, and socio-economic work relevant to climate change, but does not carry out its own research. The IPCC was honoured with the 2007 Nobel Peace Prize.

K

Kyoto Protocol A protocol attached to the UN Framework Convention on Climate Change, which sets legally binding commitments on greenhouse gas emissions. Industrialised countries agreed to reduce their combined emissions to 5.2% below 1990 levels during the five-year period 2008-2012. It was agreed by governments at a 1997 UN conference in Kyoto, Japan, but did not legally come into force until 2005. A different set of countries agreed a second commitment period in 2013 that will run until 2020.

L

London Councils An organisation that represents London's 33 local authorities, and lobbies on their behalf. London Councils also runs a number of pan London services.

Low carbon economy A functioning economy that continues to minimise the carbon intensity of the activity that drives it.

LULUCF This refers to Land Use, Land-Use Change, and Forestry. Activities in LULUCF provide a method of offsetting emissions, either by increasing the removal of greenhouse gases from the atmosphere (i.e. by planting trees or managing forests), or by reducing emissions (i.e. by curbing deforestation and the associated burning of wood).

M

Methane Methane is the second most important man-made greenhouse gas. Sources include both the natural world (wetlands, termites, wildfires) and human activity (agriculture, waste dumps, leaks from coal mining).

Mitigation Action that will reduce man-made climate change. This includes action to reduce greenhouse gas emissions or absorb greenhouse gases in the atmosphere.

N

Natural greenhouse effect The natural level of greenhouse gases in our atmosphere, which keeps the planet about 30C warmer than it would otherwise be - essential for life as we know it. Water vapour is the most important component of the natural greenhouse effect.

Net zero emissions Refers to achieving an overall balance between emissions produced and emissions taken out of the atmosphere. Like a bath with the taps on, an approach to achieving this balance can either be to turn down the taps (the emissions) or to drain an equal amount down the plug (removals of emissions from the atmosphere, including storage for the emissions such as 'carbon sinks')

P

Passivhaus Standards An international energy performance standard which aims to reduce the requirement for space heating and cooling, whilst simultaneously creating indoor comfort levels. This is achieved by adopting a fabric first approach to the design by specifying high levels of insulation to the thermal envelope with exceptional levels of airtightness and the use of whole house mechanical ventilation.

Per-capita emissions The total amount of greenhouse gas emitted by a country per unit of population.

Pre-industrial levels of carbon dioxide The levels of carbon dioxide in the atmosphere prior to the start of the Industrial Revolution. These levels are estimated to be about 280 parts per million (by volume). The current level is around 380ppm.

R

Renewable energy Renewable energy is energy created from sources that can be replenished in a short period of time. The five renewable sources used most often are: biomass (such as wood and biogas), the movement of water, geothermal (heat from within the earth), wind, and solar.

Resilience This is the ability of a system to recover from the effect of an extreme load that may have caused harm.

Retrofit To modify infrastructure that is already in-service using parts developed or made available after the time of original manufacture with the aim of reducing the infrastructures impact on the environment e.g. installing solar panels on an existing house.

S

SALIX funding This is interest-free Government funding that is made available to the public sector to improve energy efficiency, reduce carbon emissions and lower energy bills of corporate buildings.

Smart Meter A meter which measures how much gas and electricity is being using, as well as what it's costing consumers in pounds and pence which is displayed within the home and provides accurate meter readings.

Social Housing Refers to rental housing which may be owned and managed by the council or a not for profit organisation with the aim to provide affordable housing.

Supplementary Planning Guidance Planning guidance gives further detail on certain policies found in the London Plan.

Sustainable To ensure it causes little or no damage to the environment or economy and therefore is still able to continue for a long time.

T

Technology transfer The process whereby technological advances are shared between different countries. Developed countries could, for example, share up-to-date renewable energy technologies with developing countries, in an effort to lower global greenhouse gas emissions.

Tipping point A tipping point is a threshold for change, which, when reached, results in a process that is difficult to reverse. Scientists say it is urgent that policy makers halve global carbon dioxide emissions over the next 50 years or risk triggering changes that could be irreversible.

U

Ultra Low Emission Zone Charging zone in which vehicles that do not comply with the emissions standards for air pollutants will be subject to a daily charge.

Urban Heat Island The height of buildings and their arrangement means that while more heat is absorbed during the day, it takes longer to escape at night. As a result, the centre of London can be up to 10°C warmer than the rural areas around the city. The temperature difference is usually larger at night than during the day. The UHI effect is noticeable during both the summer and winter months.

W

Weather The state of the atmosphere with regard to temperature, cloudiness, rainfall, wind and other meteorological conditions. It is not the same as climate which is the average weather over a much longer period.

Wider Borough Emissions. Sometimes referred to as Borough Wide Emissions. These are carbon dioxide emissions calculated by the Department for Business, Energy and Industrial Strategy for the local authority area (in this case Hounslow) and are a subset of the annual inventory of greenhouse gas emissions from the country.

Z

Zero carbon This is an activity that causes no net release of carbon dioxide and other greenhouse gas emissions into the atmosphere.

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