



A One Planet Action Plan for Chobham Mincing Lane development

December 2018



Introduction

This is a first iteration of the One Planet Action Plan for a proposed development of 30 homes at a site in Mincing Lane in Chobham, a large village in the district of Surrey Heath. It has been prepared by Bioregional Homes in collaboration with Sustaining Chobham, a not-for-profit Community Land Trust set up to enable affordable and sustainable housing in the village.

The plan sets out a sustainability strategy for the development covering its planning and design, its construction and the use of the homes for many decades after they are built and occupied. It is based on the One Planet Living framework devised by Bioregional.

The key sustainability features set out in this One Planet Action Plan are:

- Provide permanently discounted homes that are locally affordable and can be customised for individual home-owners needs
- Create a Community Land Trust (CLT) governance structure to own and manage the land
- Long term conservation management of most of the woodlands on the site, enabling residents to live close to nature among the trees while supporting wildlife and habitat.
- Homes for a diversity of households – families, couples and singles - where neighbourliness and community is designed-in, including a balance of shared and communal outdoor space.
- Encouragement for healthy, low-impact lifestyles – support for walking and cycling, ample outdoor space for play and exercise, land dedicated for grow-your-own fruit and vegetables.
- New, attractive pedestrian links across the site to the new neighbouring park, the Little Heath Suitable Alternative Natural Green Space, and the pet cemetery adjoining the site. This benefits the wider Chobham community.
- Homes with low energy bills and net zero carbon emissions, no on-site fossil fuel combustion, rooftop photovoltaic arrays on almost all homes to generate zero-carbon electricity.
- Support for alternatives to private car use through a Green Transport Plan and individualised transport advice for residents. Attractive access for cycling and walking to and from the site, nearness to public transport links, charging points for electric vehicles, encouragement for car sharing.



Implementing the One Planet Action Plan

The plan is laid out under each of the ten One Planet Living Principles, set out below. For each principle there are desired outcomes, proposed targets, actions and key performance indicators (KPIs). Some of the actions are cross-cutting, contributing to objectives under more than one principle.

The Sustaining Chobham CLT is emphasising the One Planet ambitions of the proposed development from the outset. It aims to ensure that everyone who buys a home on the site – be it an open market or affordable one – sees this as an opportunity to lead a healthy, happy life in attractive green surroundings while reducing their environmental impacts.

We envisage that all prospective purchasers will read, and discuss, a Green Charter summarising this One Planet Action Plan and the key contribution that residents will make to implementing it.

For those who go ahead and buy a home, an information pack will guide them to all of the resources and knowledge required to make their contribution while accessing all of the benefits provided by their new home and its surroundings. They will be encouraged to share knowledge about living on the site and to collaborate, through social media and face-to-face meetings, in sustaining a One Planet community.

Reviewing progress and updating the plan

Sustaining Chobham will regularly review progress in implementing the One Planet Action Plan and revise it as circumstances change. Gathering the data required to measure performance (the KPIs) is an important part of the review process, but confidentiality will be respected and the amount of time and effort that residents need to put in will be minimised.

There will be a baseline survey of residents carried out within three months of all of the homes being occupied, with follow up surveys at least once every three years. There may be additional ad-hoc surveys on particular topics and residents will be encouraged to share and compare performance data online. The importance of reviewing progress and gathering performance data in achieving a sustainable community will be emphasised from the outset.

Health and happiness	
Objectives (Outcomes)	<p>A new community:</p> <ul style="list-style-type: none"> • Where residents are content and satisfied with their homes, their surroundings and their neighbours • Which encourages healthy lifestyles – cycling and walking, outdoor play and leisure for all ages, gardening and local food growing, closeness to nature
Proposed targets	<p>95% of residents report their quality of life as good, very good or excellent</p> <p>90% cycle or walk to access local services and leisure opportunities</p> <p>33% of adults participate in food growing or on-site nature conservation work</p>
Actions	<ul style="list-style-type: none"> • A walking and cycling-friendly development – cars parked away from homes, cars not prioritised over walking and cycling on internal streets and roads, ample secure storage space for bicycles. • Residents able to customise the interior layout of their homes to meet their family's needs • A balance of private and communal outdoor space encourages neighbourliness and collaboration to look after the surroundings • Children's play encouraged in shared, overlooked space close to front doors • A communal outdoor area on-site for socialising, sitting, picnicking and playing • Consideration of a woodland fitness trail/green gym on-site • Food growing on site encouraged with an area dedicated to easily-managed mini-allotments • Residents given opportunities to participate in managing the on-site woodland and meadow/glade • Low VOC materials and finishes to protect interior air quality • Absence of gas boilers and car restraint contribute to protecting outdoor air quality • Social media used to build community, collaboration, neighbourliness with an online network established from the start.
KPIs	<p>KPI survey: The CLT runs an online and paper-based household survey three months after residents move in to establish baseline levels of:</p> <ul style="list-style-type: none"> • resident happiness/contentment, which can be compared to national averages • satisfaction with their surroundings, their neighbours, their homes • health • exercise including cycling and walking • participation in communal activities on-site and within Chobham including using social media related to the community, nature management, food growing. <p>Follow up surveys at least once every three years. Residents actively encouraged to take part in these surveys through incentives, aiming for a >50% response rate. The data enables progress to be measured against the targets.</p>

Equity and local economy

Objectives (outcomes)	<ul style="list-style-type: none"> • Provide 22 affordable homes, in perpetuity, for local people who want to stay in the area but are priced out of home ownership • Support local employers in recruiting and retaining locally-based staff by providing affordable housing • Maximise opportunities for using locally-based employees and local enterprises during the construction phase
Proposed targets	<p>Over 70% of the 30 new homes are affordable, sold at deep discounts to open market values (OMV)</p> <p>Significant proportion of construction materials spend to be from within 50km radius</p>
Actions	<ul style="list-style-type: none"> • Permanent affordability of the homes guaranteed by covenant • Allocations policy favours households with members already living or working in the area who can demonstrate that they are unable to afford local market prices • Lead construction contractor accepts target for employing locally based staff during construction, produces policies for delivery, ensures monitoring of its own and sub-contractors' workforces to measure performance • Developer accepts target for locally sourced goods and services purchased for construction, prepares a delivery plan and monitors local spending • Aim to support apprenticeships on site during construction • Foster a culture of supporting the local economy among residents from the outset through the online network and information pack, encouraging purchase of local and seasonal foods, favouring local shops and suppliers, to benefit the wider community and reduce travel demand.
KPIs	<ul style="list-style-type: none"> • Level of discount on properties sold compared to Open Market Values • Distance from previous home and existing workplace for residents purchasing the affordable homes • % of construction staff who live within a 50 km radius • % of total value of goods and services purchased during construction from businesses based within a 50 km radius.

Culture and community

Objectives (outcomes)	A new community which contributes to local identify and heritage, promotes local community engagement and a culture of sustainable living
Proposed targets	<ul style="list-style-type: none"> • Affordable homes to be prioritised for households with a living, familiar or working connection to the Parish • Within 2 years of occupation, 90% of residents of all ages, including children and senior citizens, have a friend(s) living within the Parish. • 75% of households have at least one member regularly taking part in an on-site or Chobham-based communal activity – including food growing, nature conservation, exercise/sport, volunteering, art and culture and CLT governance
Actions	<ul style="list-style-type: none"> • Allocations policy favours households with members already living or working in the area who can demonstrate that they are unable to afford local market prices • Generous provision of shared outdoor space, with residents enabled and encouraged to care for it via the CLT • Design and maintenance of multi-purpose, flexible outdoor space encourages neighbourliness, companionship and children’s play • Private garden space clearly delineated from the outset, but restraint encouraged on creating high private walls/fences • Naming of the development and streets based on local history and culture • Online network established from the start of resident occupancy to foster communal life (e.g. Next Door) • Information pack gives new residents ‘taster, find out more’ information about local culture and history and opportunities for community activities/involvement on the development and within Chobham • Information pack and online network used to foster a culture of sustainability and good neighbourliness, role of CLT explained, residents encouraged to join and participate in governance • Residents given Green Charter when they first express interest in buying a home, outlining sustainability ethos of the development • Shared shed for food growers, shared equipment etc at the delivery bay • New through pedestrian routes created to the adjacent SANG, pet cemetery.
KPIs	<ul style="list-style-type: none"> • Number of neighbours known by name • Distance from previous home and existing workplace for residents purchasing affordable homes • Attendance at occasional all-resident meetings of the CLT, both social/informal and business • % of residents taking part in community activity within the Parish <p>KPI surveys: The CLT runs an online and paper-based household survey three months after residents move in to establish baseline levels of:</p> <ul style="list-style-type: none"> • Neighbourliness and friendship within/close to the development • Participation in communal activities on-site and within Chobham including using relevant social media, nature management, food growing. <p>Follow up surveys at least once every three years. Residents actively encouraged to take part in these surveys through incentives, aiming for a >50% response rate. The data enables progress to be measured against the targets.</p>

Land and nature	
Objectives (outcomes)	<p>A new community:</p> <ul style="list-style-type: none"> • Which contributes positively to local biodiversity • Whose residents benefit from being surrounded by nature • Which engages people in valuing nature
Proposed targets	<p>40% of the site area managed primarily for nature conservation in perpetuity, retaining and possibly enhancing its biomass and biodiversity</p> <p>Net positive biodiversity gain on site</p>
Actions	<ul style="list-style-type: none"> • Retain and enhance the ‘best’ of the existing woodland, and set aside areas primarily for biodiversity enhancement and conservation • A management plan is prepared in association with local nature conservation bodies. CLT is responsible for plan implementation, finance and monitoring, with input from local nature conservation bodies • Residents encouraged to participate in managing this woodland through CLT • People and pets excluded from the protected woodland area, using soft fencing and signage • Consideration given to wildlife-friendly grassland area as part of landscaping outside of the woodland area and/or a communal pond/wetland • Residents wishing to delineate their private gardens are supported in planting wildlife-friendly hedges instead of hard fencing • All management of shared areas to be wildlife friendly and pesticide-free. • Pesticide free on-site food growing, composters next to mini-allotments • All felled timber with diameter >30 cm retained on site during construction, then used on-site for log piles or sawn to make structures and materials (e.g. benches, woodchip surfacing) • New pedestrian access for residents and non-residents to adjoining Little Heath SANG • The Green Charter given to all potential residents when they first express interest outlines the development’s nature conservation and biodiversity aims and asks for their support • Information pack for new residents sets out opportunities for engagement with on-site nature conservation, provides ‘find-out-more’ information about local wildlife and nature reserves – including the need to reduce human impact on the Thames Basin Heaths SPA areas nearby • Online network established from the start of resident occupancy encourages engagement in on-site woodland management • It also encourages residents to take part in wildlife surveys and report on what they see, including participating in national surveys like RSPB Big Garden Birdwatch and Butterfly Conservation’s Big Butterfly Count, sharing their sightings with neighbours online • Consideration given to providing nest boxes, bat boxes etc on homes and in woodland to enhance biodiversity, where supported by expert advice.
KPIs	<ul style="list-style-type: none"> • Total area of woodland retained • Total area of woodland managed for nature conservation • Net increase in biodiversity value of site against pre-development baseline • Baseline residents’ survey (three months after occupation) and subsequent surveys (at least once every three years) by CLT monitoring engagement with nature conservation and appreciation of woodland surroundings.

Sustainable water	
Objective (outcome)	A development which helps to conserve water in a water-stressed area and reduces flood risks by absorbing rainwater on site
Proposed targets	Average of <110 litres per person per day water demand Low rainwater run-off from the site
Actions	<p>Low water consumption, average of <110 litres per person per day, achieved by:</p> <ul style="list-style-type: none"> • Highly water-efficient taps, showerheads, baths and lavatories • Highly water efficient appliances installed in homes • Every house will have a water butt at the rear for garden watering • Landscaping planting to be native and drought resistant, to minimise irrigation requirements • The Green Charter issued to all potential residents when they first express interest outlines the need to conserve water in the area, and the water saving ethos • The information pack for all new residents provides more information on the need to conserve water and how to do it, and asks residents to measure, share and compare their water consumption – using their own water meter readings and water company bills • All homes have water meters mounted so as to be easily visible • Data on water consumption across the site, compared to local and national averages, shared with residents by the CLT using the online network • Water from the communal tool shed next to mini allotments has rainwater collection and water storage for food growers. <p>Large area of surrounding woodland, extensive use of highly permeable ground surfaces reduces run off and mitigates risks of surface water flooding.</p>
KPIs	<p>Water consumption per household per annum – data collected at least every three years.</p> <p>The CLT’s initial, baseline survey of residents three months after they move in asks for water meter readings and the number of people in the household. Follow up surveys carried out at least every three years repeat the request. This data can then be used to estimate water litres consumed per person per day, with the average figure and range reported to residents.</p>

Local and sustainable food

Objectives (outcomes)	A new community where local food-growing and healthier, lower-impact eating are encouraged and supported
Proposed targets	<p>25% of households grow some food locally, either on the site or at a nearby allotment</p> <p>Residents' average diet has a lower environmental impact, and is healthier, than the national average – less meat and dairy</p>
Actions	<ul style="list-style-type: none"> • One of the sunniest parts of the site will be allocated for food growing • Residents, via the CLT, will decide on the best way for the community to use this food-growing space. Initial thinking is that it might predominantly consist of easily-managed mini-allotments allocated to individual households who want to grow food. If residents want larger allotments, or communal food-growing areas (including a polytunnel) they can collectively agree on this, but should also consider the nearby allotments in Chobham • The food growing area will be supported by a communal tool shed, rainwater collection and storage and communal compost bins for allotment and garden waste • The CLT may also collectively request communal fruit trees, fruit-bearing shrubs and hedgerows in the landscaping • An appropriate veg-box delivery scheme will be identified and promoted to incoming residents • The Green Charter issued to all potential residents when they first express interest outlines the local food growing opportunities and the new community's local and sustainable food ethos • The information pack for all new residents provides information on the development's food growing potential, local opportunities to purchase local and seasonal food (including pick your own and veg box schemes) and nearby allotments • Residents use the online network to share surplus home grown produce and to collaborate on food growing.
KPIs	<ul style="list-style-type: none"> • Total area of food growing space in use • How often residents eat meat, dairy and fish. The baseline residents' survey and follow-up surveys carried out at least once every three years will collect basic information about diets which can allow comparisons to be made with national averages • Number of residents growing some of their food on-site or in a nearby allotment • Number of residents regularly purchasing food that they know has been grown or produced locally.

Travel and transport	
Objectives (outcomes)	A new community which encourages people to travel by walking, cycling and using public transport, which reduces car dependency and supports residents who opt for ultra-low emission vehicles
Proposed targets	<ul style="list-style-type: none"> • Significant reduction in % of all journeys to and from the development by car, compared to a national baseline for this type of location • 90% cycle or walk to access local services and leisure opportunities • Ambition for >20 % of cars owned/leased by households to be ultra-low emission vehicles within 2 years of occupation
Actions	<p>The CLT will draw up and implement a Green Travel Plan. This will include:</p> <ul style="list-style-type: none"> • A substantial green travel section in the Green Charter issued to all potential residents when they first express interest, setting out the green travel ethos of the new community, including limits on car parking space • Information pack for all new residents covers local walking, cycling, public transport, car sharing and lift sharing options for all transport needs, including a map and details about where to find out more • The offer of a face-to-face consultation on transport options with an informed transport adviser for every resident • Reducing travel demand by facilitating and encouraging working from home – ultra-high-speed broadband, flexibility in-home layouts which allow for office/work space. Attractive woodland surroundings and warm, light, cheap-to-run homes to work from • Promote walking to services within 1.25 km (a 15-minute walk), e.g. local shops, nearest primary school, by creating attractive, safe pedestrian routes in and out of the development • Promote cycling to local services, to workplaces and to rail stations within 6 km (a 20-minute cycle ride). Attractive, safe cycle routes in and out of the development. Every home has its own sheltered, secure space near the front door where two bicycles can be secured. Cycle stands for up to six visitor bicycles. E-bike use promoted, including a discount scheme, offering residents >20% off the price of a new e-bike if they purchase within six months of moving in • Commitment to continue working with local cycling stakeholder in the pursuit of better, safer cycle routes from Chobham to Woking • Promote car sharing/car pooling/car club. Consideration given to an onsite car club with parking space for at least one vehicle. Online network used for car and lift sharing arrangements among residents • Promote use of ultra-low emission cars. All car parking spaces will be charging point-ready with appropriate mains cable running past. Over 20 of the 46 parking spaces will have car charging points installed • Car parking constraint to maximise land use for housing, communal outdoor space and biodiversity and to encourage residents/visitors to use sustainable transport. A total of 46 car parking spaces for 30 homes with 22 homes allocated one car parking space each. 10 of the 46 spaces will be divided between visitor car parking and extra space rented by individual households. Rental income into a Green Transport Fund overseen by CLT.
KPIs	<ul style="list-style-type: none"> • Modal split of residents' daily journeys • Number of cars owned/leased by residents • Number of ultra-low emission vehicles owned/leased by residents

	The data will be collected in a an online and paper transport survey taking place at least once every three years. dissemination of the survey findings, will be used to promote green transport choices and reinforce the green travel ethos.
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Materials and products	
Objectives (outcomes)	<p>Minimise the environmental impact of the materials and products used in constructing the new homes</p> <p>Minimise the environmental impact of the materials and products which residents use in their homes</p>
Proposed targets	<p>40% reduction in embodied carbon of homes compared to national baseline for new homes</p> <p>100% of timber (including temporary works) from reclaimed, recycled and FSC/PEFC-certified sources</p> <p>25% of residents regularly engage in sharing/donating/exchanging goods and services with other residents</p>
Actions	<p>During design and construction:</p> <ul style="list-style-type: none"> • Lead construction contractor accepts a target for total embodied carbon in the new homes (kg CO² equivalent/m²), and commissions data collection and analysis to estimate the embodied carbon achieved • The lead construction contractor accepts a target for all timber used in construction (including temporary works) to be from reclaimed, recycled and FSC/PEFC-certified sources, and implements robust systems in place to deliver this • All timber felled on site with diameter >30 cm retained during construction, then used on-site for log piles or sawn to make structures and materials (e.g. benches, woodchip surfacing) • Opportunities sought to use natural, renewable, re-used and low-impact materials for construction, e.g. timber frame, natural insulation, reconstituted slate used for roof tiles • Explore options for using lower-impact concrete in foundations, floor slabs • Use of non-toxic, low VOC materials and finishes. <p>Post-construction:</p> <ul style="list-style-type: none"> • Locally made compost will be used for good growing on-site instead of imported compost or artificial fertiliser • Green Charter issued to potential residents when they first express interest will outline the ethos for reducing the damaging impacts of over consumption, advocate circular and sharing economies • The online network established when residents move in will be used for sharing, exchanging and donating products and services • The information pack for all new residents will provide basic advice on local and national sharing/exchanging/donating schemes, with information about how to find out more.
KPIs	<ul style="list-style-type: none"> • Embodied carbon - kg CO² equivalent/m² across all 30 homes • Inventory of exemplary low impact products and services used in construction, including locally sourced and reused materials • Total volume of timber used in construction, volumes from FSC-certified, PEFC-certified, reclaimed and recycled sources • % of residents who regularly engage in sharing/donating/exchanging goods and services with other residents, as measured by initial residents' survey and subsequent surveys at least every three years.

Zero Waste

Objectives (outcomes)	<p>Minimise the quantity of waste materials during construction to very low levels</p> <p>Reduce the amount of waste produced by the residents by promoting waste avoidance, reuse, repair, composting and recycling</p>
Proposed targets	<ul style="list-style-type: none"> • Stretch target - for zero non-hazardous construction waste to landfill during construction • Stretch target - 70% average recycling, reuse and composting rate achieved by residents
Actions	<p>During construction</p> <ul style="list-style-type: none"> • The lead contractor will prepare a construction waste management plan including a stretch target of zero waste to landfill. It will set up systems to monitor implementation of the plan, including by sub-contractors. It will include a waste hierarchy to prioritise: 1) Avoiding waste 2) Reuse 3) Recycling 4) Energy recovery • Use of factory- built panels will reduce waste • All timber felled on site with diameter >30 cm retained during construction, then used on-site for log piles or sawn to make structures and materials (e.g. benches, woodchip surfacing). <p>In use</p> <ul style="list-style-type: none"> • Kitchens will be designed to encourage recycling by providing ample under-counter space and built-in segregated waste/recyclables bins which align with local authority collection systems • Recycling will be made easy and attractive for residents by having adequate, screened space for waste/recyclables bins close to front doors • The food growing area will have adjacent compost bins • The Green Charter will outline the new community's waste reduction ethos and the avoid waste, reuse (and repair), compost, recycle and energy recovery hierarchy • The information pack will repeat this, and detail local council collections of waste and recyclables including food waste and local household waste recycling facilities • The online network established when residents move in can be used for sharing, exchanging and donating products, reducing waste output, explaining what happens to waste, discussing alternative options.
KPIs	<ul style="list-style-type: none"> • Total quantities of construction waste generated, by broad category, and destination • Average quantity, kg, produced per household per week • % of average household waste that is landfilled or incinerated (with energy recovery) <p>The CLT will recruit a panel of >5 households to take part in a waste and recycling survey at least once every three years.</p>

Zero carbon energy

Objectives (outcomes)	Net zero carbon emissions associated with energy use in the homes
Proposed targets	<ul style="list-style-type: none"> • Aim for there to be Net Zero CO2 emissions per annum across the development from energy use in the homes [taking into account grid intensity of actual electricity tariffs] • EPC A rated buildings • >30% of total in-use (regulated and unregulated) energy demand generated on-site
Actions	<ul style="list-style-type: none"> • High levels of building fabric insulation, low U values, triple glazing where possible – all above current Building Regulation standards • Low air leakage rates – maximum of 2.5 ach/h • Passive ventilation measures in all homes with the option of Mechanical Ventilation with Heat Recovery if required • LED lighting throughout the homes and for communal lighting • No fossil fuel combustion on site • >90% of homes have rooftop solar PV arrays. Combined peak output of 80kWp • Households will have the option of having battery storage installed, so that they can meet more of their electricity demand from PV • All of the homes to achieve an ‘A’ rating for their EPCs • This development has all-electric homes, so the carbon savings will continue to grow as the UK grid continues to decarbonise • Taking net zero emission down to zero will depend on all of the homes being on 100% green electricity tariffs, backed by REGO certificates • We will explore options for the CLT to negotiate ‘bulk purchase’ energy supply contracts • We will explore the option of ‘peer-to-peer’ energy sharing through Energy Local or similar. • All homes will be on a 100% green electricity tariffs when residents move in. The Green Charter will set out the new community’s zero carbon ambition and energy conserving ethos, stressing the key contribution that 100% green electricity suppliers and tariffs will make to achieving this ambition • The information pack will repeat this information, setting it out for any household which is examining its electricity bills and considering changing supplier • All residents will be encouraged to be energy aware, tracking their consumption and costs using their smart electricity meters. The community’s online network can be used by residents and the CLT to discuss green electricity options and electricity consumption.
KPIs	<ul style="list-style-type: none"> • % of residents who have 100% green electricity tariffs • Total grid electricity consumption across the development, per annum • Total kWh/m2 per dwelling • Total PV generation across the development, per annum • Total PV exports from the development, per annum.