



## **One Planet Communities - Common International Targets**

The Common International Targets consist of:

- 3 Overarching Targets and
- 10 One Planet Living Principles

## **Overarching Targets**

Principle	Overarching Targets
Greenhouse Gases (GHG)	For One Planet Communities, GHG emissions are defined as both direct and indirect emissions based on consumption per person. They include the embodied emissions of food, goods and construction materials. They include emissions from shared activities such as government services as well as emissions from energy use in buildings and all transport. The target is to contract and converge rapidly, showing consistency with the most up to date climate science and the GHG reductions necessary to avoid dangerous climate change.
	<ul> <li>We have divided GHG emissions into two categories:</li> <li>Attributable emissions (typically around 80%) are those directly related to a community and it's occupants eg. embodied impacts of construction, household emissions, emissions from goods or services consumed on site.</li> <li>Shared emissions (typically around 20%) are those that are outside the sphere of influence of either the Developer or its occupants (eg. government services, national highway construction etc).</li> </ul>
	The Attributable emissions of residents of a One Planet Community must follow a country specific reduction curve that approaches 0.8 tonnes $CO_{2(eq)}$ per person by 2050 and is compatible with a globally equitable target of stabilising at 350ppm. Typically for any country being built to the standards of developed countries, this requires a 50% reduction as soon as possible, a 70% reduction by 2020 and a 90% reduction by 2030 compared with a 2000 baseline. Guidance Notes for this principle help Developers to generate suitable GHG reduction curves for their specific situation.
	Shared emissions cannot be directly influenced by a Developer or the residents of a One Planet Community. However, One Planet Communities should look to contribute in an appropriate way towards reducing wider shared impacts e.g. working with local authority to achieve OPL across a wider area, lobbying government using lessons learnt from OPL experiences.
Ecological Footprint	One Planet Communities will strive to show consistency with the concept of living within our fair share of the earth's renewable and replenishable resources. They will enable residents to achieve ecological footprints of 1.7gha or less, based on a biocapacity budget of 2.1gha per person <sup>1</sup> and allowing 20% space for wildlife. This footprint budget will require periodical review to take account of global population increase and changes in global biocapacity. Based on current population predictions, footprints need to reduce from 1.7 to 1.25gha by 2050.
	As for GHG emissions, ecological footprint can be subdivided into Attributable and Shared footprint. One Planet Communities must achieve country specific reductions in their Attributable footprints and they should seek appropriate ways to contribute towards bringing about reductions in the Shared footprint.





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Clean Activities	One Planet Communities must have an ongoing and evolving strategy for avoiding any pollution to air, land or water as a result of activities associated with the community. Energy generation equipment, construction or refurbishment activities, transport vehicles, domestic and non-domestic activities should all meet international best practice on pollution prevention. Purchasing systems for materials, equipment, goods or food should check for upstream pollution impacts and choose suppliers with strong environmental track records.

## 10 One planet Living Principles

Principle	Common International Targets
Zero Carbon	All buildings and structures should be 'net zero carbon'; powered and heated by a combination of on and off site renewable energy, using fossil fuels only as back up.
	All buildings and structures should be designed or retrofitted to be energy efficient to country- specific best practice standards or better. Where such standards do not exist, a suitable standard from a neighbouring country or from a country with similar weather patterns should be applied.
	Having minimised energy demand through energy efficiency measures, projects should meet these reduced demands from onsite renewables as far as possible. Adequate levels of onsite generation will be assessed on a project by project basis but all opportunities for renewable generation should be investigated.
	There should be no fossil fuel energy supplies onsite except as backup to a renewable supply. Any remaining energy demands may be met from offsite renewable energy that represents new capacity.
	The accompanying Guidance Notes for Zero Carbon provide advice about permitted renewable energy sources and about appropriate use of green tariffs and Renewable Obligation Certificates.
Zero Waste	The long term aim of a One Planet Community is to achieve waste levels approaching zero and ultimately to eliminate the concept of waste.
	The waste management system for a One Planet Community must be designed around the waste hierarchy, prioritising waste prevention first, then re-use, recycling and composting, then lastly energy recovery or disposal to landfill.
	There should be a presumption of resource efficiency with care taken to ensure that recycling is applied at the highest possible level, avoiding down-cycling where possible and promoting closed loop recycling.
	Overarching this hierarchy is the requirement that the waste management strategy must have regard for its effect on greenhouse gas emissions. It must show how the resource efficiency it brings about is compatible with the overarching GHG target.
	Clean energy from waste plant may form part of the zero waste strategy provided careful monitoring of emissions is in place and international best practice standards on operations are employed.
	By 2020, the following targets must be achieved:
	1. Domestic waste





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	<ul> <li>Country specific targets for total waste production per capita (including recycling and composting) should be set using the Guidance Notes for Zero Waste.</li> <li>At least 70% of waste by weight generated by residents within the developments should be reclaimed, composted or recycled;</li> <li>At least 70% of dry waste should be recycled</li> <li>Ideally no more than 2% of waste by weight should be sent to landfill</li> </ul>
	2. Business waste
	<ul> <li>Business and service providers on site must be engaged with to set specific waste reduction targets and measures to reduce the use of non-recyclable materials</li> </ul>
	<ul> <li>At least 80% of waste by weight generated by commercial operations within the developments should be reclaimed, composted or recycled;</li> <li>Ideally no more than 2% of waste by weight should be sent to landfill by 2020</li> </ul>
	<ul> <li>3. Construction &amp; demolition waste <ul> <li>Existing buildings should be retained and reused in situ wherever possible</li> <li>Country based best practice standards in waste minimisation during construction should be employed</li> <li>At least 95% of waste by weight generated by construction and demolition of the</li> </ul> </li> </ul>
	<ul> <li>development should be reclaimed or recycled;</li> <li>A Reuse - Deconstruct - Demolish hierarchy should be applied</li> </ul>
	<ul> <li>Industrial waste         <ul> <li>If any industrial activity is taking place as part of a One Planet Community, the developer should engage with the business to ensure they are using the principles of the waste hierarchy. Waste arisings should be monitored, and benchmarked against good practice in their sector. They should be following a trajectory towards zero waste by 2020.</li> </ul> </li> </ul>
	Project specific agreements on the profile to meet the 2020 target can be negotiated, but the profile must demonstrate a rapid and clear progression to the zero waste target, especially given current rapid advances in the introduction of waste processing globally.
Sustainable Transport	Country specific targets for carbon emissions from personal transport must be consistent with the overarching GHG target e.g. in the UK, personal transport emissions must reduce from a current average of 2.64t/yr to 0.80t/yr by 2020 and 0.26t/yr by 2030.
	Developers are required to develop a green transport plan and to consider how best to reduce the need for people to travel. Site selection must consider the proximity of local services such as schools, healthcare, business districts, shops and leisure facilities. On site facilities must complement local facilities as appropriate.
	Having reduced the need to travel, the development must provide access to sustainable transport modes. Access to pedestrian and cycle networks, public transport hubs and car sharing must all be prioritised.
	Consideration should also be given to future technologies and how the site could be developed to enable these technologies to be incorporated at a later date.
	Biofuels may be used to help meet the transport target, but there must be robust proof it is coming from sustainable sources, to be assessed on project by project basis e.g. locally grown on marginal land could be considered sustainable.





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Sustainable materials	The sustainable use of materials covers both construction and refurbishment materials and also consumer goods.
	<b>Construction and Refurbishment Materials</b> In order to reduce global carbon emissions sufficiently, national emissions from construction and refurbishment activities in most countries will need to reduce e.g. in the UK, this sector needs to reduce from 2.23tCO2/cap/yr to 0.67t by 2020.
	It would be exceedingly difficult to achieve this kind of reduction within a single project. This kind of change will require a reduction in construction activities overall. It will require a shift from new build to refurbishment and it will require decarbonisation of the supply chain. These changes are beyond the scope of a single One Planet Community. One Planet Communities should set project specific targets to minimise the embodied CO2 of any construction and refurbishment work in their scheme. Developers must make optimum use of all existing buildings and infrastructure and think creatively about designing out the need for some conventional built requirements.
	<ul> <li>OPL developers should:</li> <li>Measure the embodied CO2 of their project throughout the design and construction processes and use this as one of the decision making criteria from the outset.</li> <li>Design to minimise the impact of construction and estate management: <ul> <li>use low impact, durable/robust construction materials; timber products and local reclaimed and reused materials</li> <li>design for reuse so the impact of materials can be spread over many building lifespans, design for deconstruction (e.g. lime mortar for brick wall construction)</li> <li>retain and utilise as much existing built environment as possible</li> <li>design for easy maintenance and longevity</li> <li>avoid high impact or polluting materials (e.g. PVC, aluminium)</li> </ul> </li> </ul>
	Using the Guidance Notes on Sustainable Materials, project specific targets should be determined for each of these strategies e.g. 40% reduction on embodied carbon compared with typical base case, 10% reclaimed materials, 30% recycled content, 100% FSC timber.
	<b>Consumer Goods</b> For consumer goods, the target must be to reduce embodied GHG impacts in line with the overarching GHG target e.g. in the UK, emissions from consumption of consumer goods must reduce from a current average of 1.66tCO2/cap/yr to 0.5t by 2020.
	<ul> <li>Suggested strategies for achieving this are in the Guidance Notes for Sustainable Materials and should include:</li> <li>Providing access to durable goods with low impact in manufacture</li> <li>Providing information on reducing the impact of goods through community information services e.g. welcome packs, community intranet</li> <li>Providing information on the embodied CO2 of goods</li> <li>Attracting service providers to the community who conform to this approach</li> </ul>
	Progress against the Consumer Goods target should be monitored on an ongoing basis. The Generic Monitoring Plan gives guidance.
	As knowledge on embedded water of products and materials grows, communities should seek to avoid materials or goods with high embedded water inputs from water stressed regions.
Local and sustainable food	Country specific targets for ecological footprint and embodied GHG emissions of food must be consistent with the overarching OPL targets e.g. in the UK, food emissions must reduce from a current average of 1.5tCO2/cap/yr to 0.45t by 2020. Strategies for enabling residents to meet these targets should include measures to encourage healthy diets high in local,





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	seasonal and organic produce. On site facilities, including retail and catering facilities, must encourage lower meat and dairy consumption, less packaging and less processed food.
	Food growing should be integrated onsite where appropriate and food waste from all residents, tenants, businesses, restaurants and shops should be minimised. Country-specific local food mapping must be undertaken and links should be developed with local producers to establish regular supplies and also to work with them to further reduce their impacts.
	Transparent purchasing systems should be established to ensure food provided does not contribute to deforestation, over-fishing or pollution and minimises other negative impacts, for example, through Marine Stewardship Council seafood or palm oil free certification. Food types with notably high embedded water implications must be avoided.
	Progress against the food targets must be monitored on an ongoing basis. The Generic Monitoring Plan gives guidance on monitoring food footprints.
Sustainable water	Best practice standards in water conservation, water efficiency and recycling, and surface water management must be adopted. As a minimum, country specific best practice should be achieved. Where there is no country specific best practice, apply a suitable standard from a country with similar levels of available fresh water eg. the UK target is 80l/p/day.
	<ul> <li>All residents must have access to safe potable water</li> <li>Projects must assess the carbon impacts of their water strategy.</li> <li>Projects must implement a water reduction and re-use campaign appropriate to the local context.</li> <li>Projects in areas of flood risk should have an acceptable 200 year flood risk strategy.</li> <li>Projects must be designed to adapt to climate change in their local context.</li> <li>Projects should adopt best practice SUDS ensuring that peak run off rates and annual run off volumes will be no greater than the previous conditions for the site.</li> </ul>
Natural Habitats and Wildlife	The development must make a net positive contribution to local native biodiversity and natural habitats. Any key species that are either protected or locally significant should be identified and monitored to increase their presence through a resourced management plan. Such a plan should support collaboration between ecologists and project landscape architects with sustained input from local conservation groups and be conducted and financed alongside the property management plan. The plan should include a comprehensive planting scheme with a selection process that demonstrates benefit to local wildlife, drought tolerance, non-invasiveness and will make demonstrable use of ecosystem services <sup>2</sup> for educational purposes.
	One opportunity must be identified to publicly report on actions taken and lessons learned to benefit biodiversity within the development. In addition, at least one opportunity must be identified to regenerate degraded local natural resource stocks (soils, trees, fisheries, etc) and a plan implemented.
	The Developer should look for ways to facilitate the establishment or enhancement of valuable wild space consistent with the global need for 20-30% of biologically productive land. If 20% of the earth's biocapacity is to be left for wildlife, then a One Planet Community should think in terms of enabling 0.4gha of wildlife habitat per resident, either on site or elsewhere in an appropriate place.
Culture and Heritage	A site specific action plan to maintain and enhance or revive valuable aspects of local culture and heritage must be developed. Community involvement in the writing and delivery of the

<sup>&</sup>lt;sup>2</sup> Benefits people obtain from ecosystems eg. provision of food, timber, fibre; regulating services that affect climate, floods, water quality; recreational, aesthetic, and spiritual benefits; soil formation, photosynthesis, and nutrient cycling. Date printed: 09/03/2009 V1.0 (2008.11)





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	plan should be considered as central to the process. Guidance notes are provided to assist developers.
	Each One Planet Community should develop a thriving sense of place and sense of community. In addition, two locally specific showcase projects should be identified and delivered that deepen the local sense of culture and heritage. The approach and scale of the showcase projects will be agreed on a project by project basis and should be at a scale compatible with the scale of the One Planet Community.
Equity, Fair Trade & Local Economy	<ul> <li>One Planet Communities are expected to adopt an exemplar approach to the four key themes below, exceeding legal requirements and international basic practice, and aspiring to global best practice. Guidance notes are provided to assist developers.</li> <li>Employment;</li> <li>Inclusiveness;</li> <li>Participation and democracy;</li> </ul>
	Ownership and affordability.
	Each community should contribute towards a thriving, equitable future for all. In addition, One Planet Communities are expected to improve the welfare of selected disadvantaged populations. Two priority groups within the local context should be identified and through discussion with them or their representatives, actions should be taken to improve their welfare. The approach and level of support will be determined on a project by project basis but should be provided at a scale compatible with the scale of the One Planet Community.
Health and Happiness	A plan for promoting the health and happiness of residents must be produced, building on emerging findings from health promotion and happiness research. One Planet Communities are expected to adopt an exemplar approach to the four key development phases below, exceeding legal requirements and international basic practice, and aspiring to global best practice. Guidance Notes are provided to assist developers in creating a thriving community. • Construction phase • Built environment • Neighbourhoods and place making
	<ul> <li>Litestyles and community</li> <li>In addition, One Planet Communities are expected to complete two showcase initiatives to improve the health and happiness of the community. Suitable projects should be identified using base-line data to benchmark the local context, identifying specific areas of need. The approach and level of support will be determined on a project by project basis but should be provided at a scale compatible with the scale of the project.</li> <li>The aims of the showcase projects should be</li> </ul>
	<ol> <li>To support people in overcoming chronic illness and unhealthy lifestyles.</li> <li>To enable people to learn new skills.</li> <li>To improve people's wellbeing.</li> <li>To provide the tools to create an enterprising community.</li> </ol>
	Residents' satisfaction levels must be monitored on an ongoing basis. The Generic Monitoring Plan gives guidance.