



One Planet Regions

UK Targets



BioRegional

solutions for sustainability

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Introduction

The aim of the One Planet Initiative is to create a future where it is easy, attractive and affordable for people to lead happy and healthy lives within a fair share of the earth's resources – One Planet Living. The initiative uses 10 guiding principles as a framework to help our partners examine the sustainability challenges they face and to develop appropriate solutions.

As part of the One Planet Regions programme, BioRegional uses the 10 One Planet principles to support the development of flagship sustainable regions across the UK. These One Planet Regions are intended to be places where it is easy for residents to live a one planet lifestyle by 2025, should they choose to.

This document is aimed at local and regional government and strategic partnerships starting out on the journey of joining the One Planet Regions network and as a reference document for existing members. Although local authorities are typically the lead partners, One Planet Regions can also be led by local strategic partners. The UK Targets are supported by a set of detailed guidance notes and position papers which cover the application of these targets in more detail.

Environmental drivers behind the One Planet initiative

A sustainable future will need to consider environmental, social and economic factors and the 10 One Planet principles and their associated targets have been developed in recognition of this. However, we subscribe to the view that society and the economy cannot exist long-term outside a healthy environment. Consequently there are three overarching environmental drivers behind the One Planet initiative:

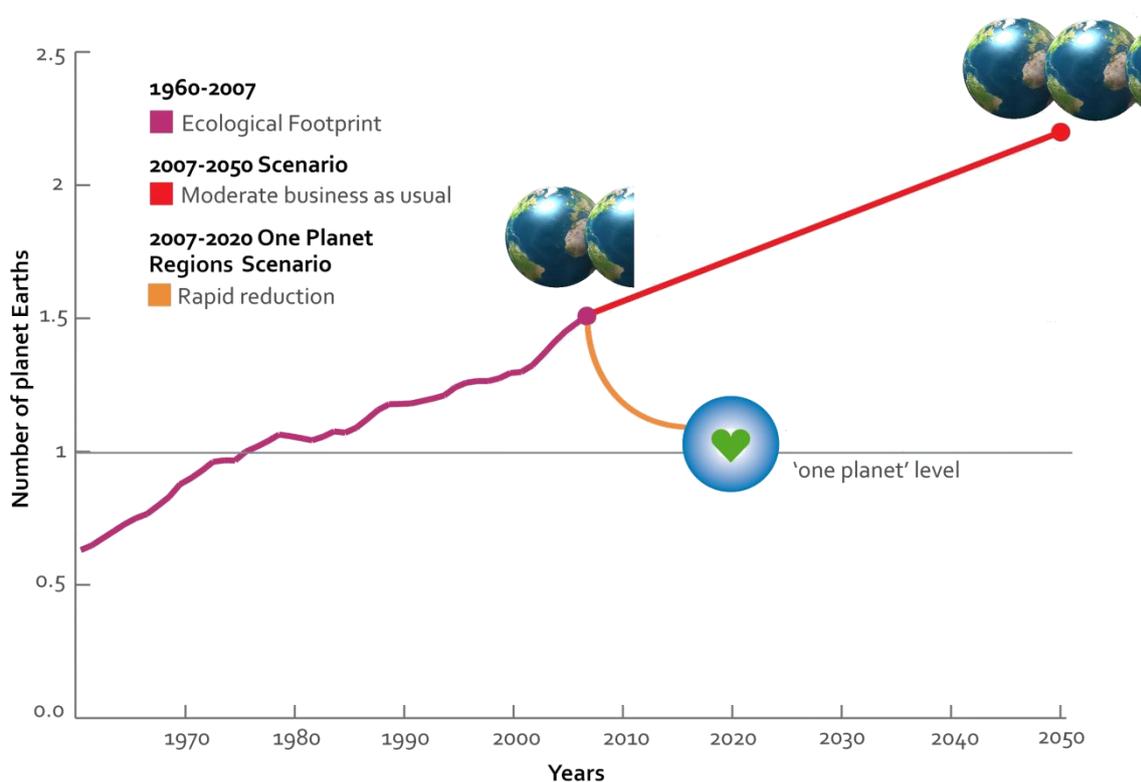
- Sustainable ecological footprint;
- Sustainable carbon footprint; and
- Clean (non-polluting) activities

Sustainable ecological footprint

Ecological footprinting measures our consumption of natural resources in global hectares of land and sea – its biocapacity. Research tells us that our global footprint now exceeds the Earth's capacity to regenerate its biocapacity, by about 50%. If our demands on the planet continue at the same rate, by 2030 we will need the equivalent of two planets to maintain our lifestyles.

One Planet Regions make it easy, attractive and affordable for their residents to live within a fair share of the Earth's resources which, according to current calculations, will be no more than 1.2gha per person by 2025¹. In the UK, the current average footprint is 4.9 gha/cap; this compares to China where it is 2.2 gha/cap and USA where it is 8.0 gha/cap.

The graph below shows the trajectory for the global ecological footprint if we continue to consume at current levels in comparison to a rapid or slow reduction in footprint.



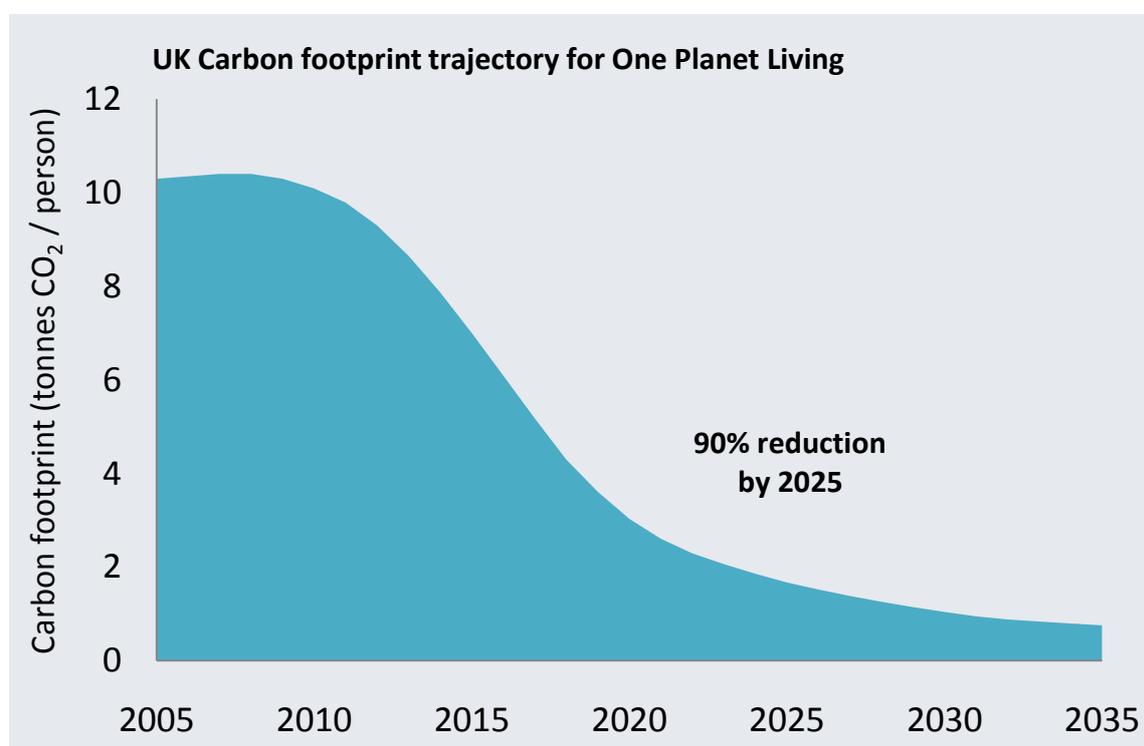
¹ based on a population of 7.67 billion, a biocapacity of 1.6gha per person and allowing 20% space for wildlife

Sustainable carbon footprint

The One Planet Initiative uses 'consumption-based' carbon footprinting to inform a holistic picture of what causes our greenhouse gas emissions and the most appropriate strategies for reducing them. Consumption-based emissions are those that arise all the way through the supply chain. These include not just 'direct emissions' caused by fuel and energy consumption, but also embodied emissions in goods and services purchased, for example food, manufactured items and construction materials.

The reduction in global carbon emissions, which is needed to stay within acceptable limits of climate change, is between 50-85% by 2050². Subscribing to the idea of "contraction and convergence," which means that all countries aim eventually to have equal per-capita emissions, the UK would need to aim for cuts above 80. The Committee on Climate Change suggests an 80% target by 2050 – and this target has been enacted in law through the Climate Change Act 2008, with an interim target of 40% by 2020³.

We know that emissions are building up cumulatively in the atmosphere. Therefore the faster emissions cuts can be made, the greater chance there is of stabilising atmospheric concentrations⁴. As the aim of the One Planet Initiative is to lead the way and achieve the highest levels of sustainability, in the case of the UK, endorsed One Planet Regions will enable a trajectory resulting in a 90% cut in consumption-based emissions by 2025.



² Climate change publications often suggested 50%, although some suggest 70-80%. McKay, D. Sustainability without the hot air (2010), <http://bit.ly/ghmaDk>

³ Climate Change Committee (2010), Climate targets and global emissions trajectories. Available at: <http://bit.ly/fW3ZDV>

⁴ Based on work done by both the Tyndall Centre on UK carbon budgets and Meinshausen et al. on the global budget.

Clean technologies

Each One Planet Region has an ongoing and evolving strategy for avoiding pollution to air, land or water as a result of activities associated with the region. Energy generation equipment, construction and refurbishment activities, transport vehicles, domestic and non-domestic activities all aim to meet international best practice on pollution prevention. Purchasing systems for materials, equipment, goods or food should check for pollution impacts upstream and choose suppliers with strong environmental track records supporting the emergence of a green supply chain.

Climate change adaptation

One Planet Regions will have a strategy for climate change adaptation that is updated regularly. The strategy will assess the vulnerability of the region to current and future climate change, including consideration of flooding, drought and heatwaves. The community groups, activities and natural resources most vulnerable to climate change should be recognised and recommendations put forward for helping adaptation measures.

For further information about climate change adaptation, please refer to BioRegional's briefing paper on Climate Change Adaptation.

Behaviour change

One Planet Regions explore ways to help the local community make decisions that have a positive impact on the environment, together with improving health and wellbeing. Local authorities will draw from best practice in their approach to behaviour change, considering how methods such as 'choice architecture' can be used fairly, and social and culture norms developed to achieve a One Planet economy.

For further information about fostering pro-environmental behaviour, please refer to BioRegional's briefing paper, outlining best practices approaches to behaviour change.

Communications

The success of a One Planet Action Plan is often determined by the way it is communicated – this might be across the organisation, or to outside audiences. Sustainability communications is a specialist area and it is expected that endorsed partners will pay careful attention to communication and audience engagement. If done correctly, the One Planet approach can be an extremely powerful communications tool. BioRegional can provide some communications guidance however do not specify particular approaches, as partner regions will be best placed to consider this. However One Planet Regions will always ensure communications are honest and free of jargon and greenwash.

Applying the targets

The programme uses a set of common targets against each of the 10 One Planet principles to ensure regions are guided towards a shared goal. These also determine what level of performance is required for a region to be eligible to be an endorsed One Planet Region. The targets in this document are consistent with that of One Planet Communities and One Planet Companies but variations that do exist are due to communities and businesses having different degrees and spheres of responsibility, flexibility and influence.

In recognition that the solutions for a sustainable future are context specific, the targets are not intended to be prescriptive but instead provide directions of how the vision of a One Planet Region can be translated into reality. The targets can be applied flexibly to cope with the unique challenges faced and be expanded upon to develop more detailed targets for specific regions.

Applying the targets is achieved through a One Planet Action Plan that sets out the short and long-term aspirations across each of the principles.

Writing a One Planet Action Plan

One Planet Regions should have a published work plan that addresses each of the 10 One Planet principles and the associated UK Targets detailed in this document. This Action Plan, and its response to the UK Targets, forms the basis of BioRegional's decision to grant endorsement and the 'planet with a heart' logo to partner region.

Endorsement is a stamp of recognition and reserved for exemplary communities, businesses and regions. However, the One Planet principles are freely available for anyone to use and it is not a requirement for organisations that use the One Planet approach to seek endorsement.

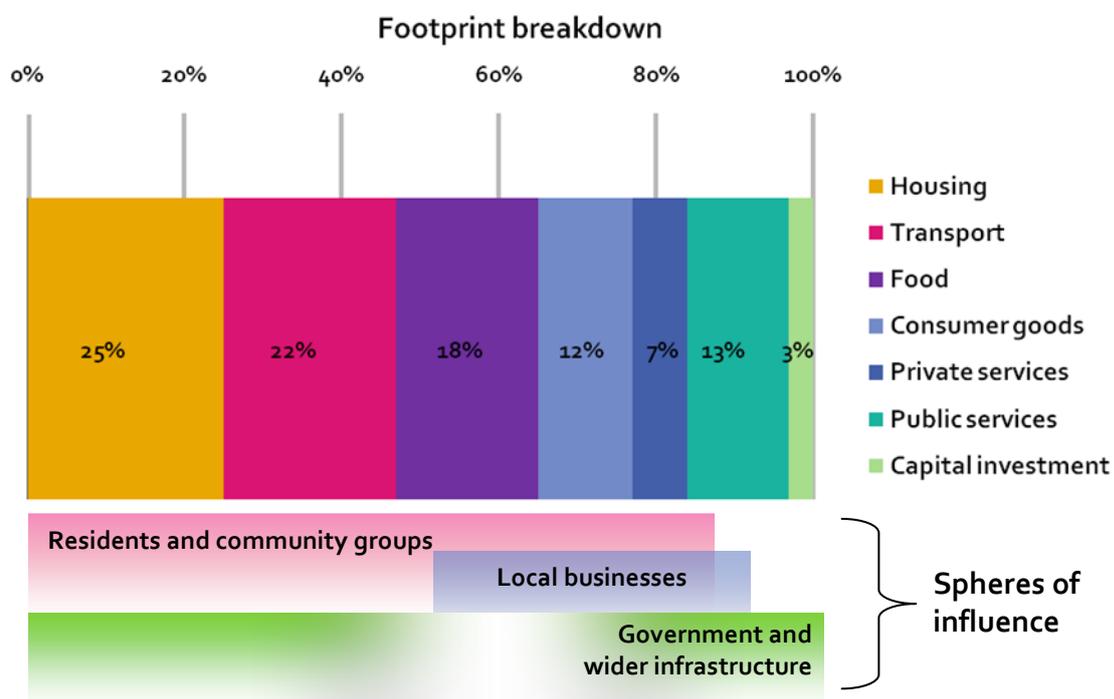
For regions that are endorsed, monitoring is essential to understand and evaluate progress. To ensure minimal additional workloads for partners, wherever possible monitoring a One Planet Action Plan uses the partner's existing environmental performance management systems. A separate guidance note covers development of a monitoring plan.

For full details on the endorsement process and progress monitoring please refer to the One Planet Endorsement and Quality Assurance document.

Spheres of influence

It is understood that in some cases it may not be possible for our partners to meet some aspect of the targets because of factors outside their control. In these instances, BioRegional’s approach is to document the barrier and support the partner in their attempts to overcome it, for example by engaging with central government or by disseminating information and securing wider support.

Where necessary, UK Targets distinguish between the performance of the local authority (or other local bodies such as a Local Strategic Partnership) and the role they take in influencing the activities of other stakeholders in their region. This is in recognition of the fact that the One Planet Living vision requires participation from companies, community groups and individuals, as illustrated in the diagram.



The UK Targets

Zero carbon



The One Planet vision is that all buildings will be energy efficient and run completely from renewable energy.

Local authorities endorsed as One Planet Regions will lead by example in addition to working with the rest of the community in a transition towards zero carbon buildings. There are targets for local authorities outlined below that cover their own operations, after which local authorities are expected to promote and enable zero carbon targets for all new and existing infrastructure in their region.

Local authority operations

All buildings and structures over which the local authority has direct influence will be 'net zero carbon' powered and heated by a renewable energy supply, using fossil fuels only as back up by 2025. A detailed pathway to achieving zero carbon by 2025 will be put in place within 3 years of writing the One Planet Action Plan.

New buildings

Any new buildings and structures will be designed to meet energy efficient good or best practice standards. Having minimised energy demand through good design and energy efficiency measures, all the remaining energy demand should be met by renewables, for example wind, solar and biomass. Consideration should be given to energy generated by onsite renewables, particularly heat and hot water, as far as is practically and economically feasible. Adequate levels of onsite generation will be assessed on a building-by-building basis but all opportunities for on-site renewable generation should be considered.

There should be no fossil fuel energy supplies onsite, except as backup to a renewable supply. Any remaining energy demands may be met using offsite renewable energy that, where possible, represents new installed capacity, or through renewable energy power purchase agreements which are guaranteed through mechanisms such 'renewable energy guarantees of origin' or purchase of 'renewable energy certificates'. Many green electricity tariffs do not stand up to scrutiny so One Planet Regions are advised to exercise due care, with further information is given in a guidance note.

Existing buildings

For existing buildings, a quantified baseline is expected with a work plan to retrofit buildings with energy efficiency and renewable energy technologies, to reduce demands as far as is economically and technically feasible. Measures delivering a pay back on investment within 10 years would be expected. Guidance notes provide more detailed advice about permitted renewable energy sources and feed in tariff mechanisms which may apply.

Community engagement

Local authorities will support projects that help individuals, local community groups and companies adopt a trajectory towards zero carbon. The support helps enable zero carbon lifestyles and the local context will determine the types and level of support required by the community; this will be taken into account during the endorsement process.

Zero waste



The One Planet vision is of a future where resources are used efficiently, waste levels are close to zero and ultimately zero waste is sent to landfill.

The waste management systems in a region must be designed around the waste hierarchy, prioritising waste prevention first, then re-use, recycling and composting, before energy recovery and lastly disposal to landfill.

Local authority operations

There is a presumption of promoting resource efficiency and avoiding wasteful consumption. Local authorities will lead by example, achieving an 85% recycling rate on internal operations within 3 years of endorsement.

Construction activities

For Council funded construction projects, the approach to construction waste will include application of a Reuse - Deconstruct - Demolish hierarchy, meaning waste from existing buildings will be retained and reused in situ wherever possible. Best practice standards in waste minimisation during construction will be promoted and employed. At least 95% of waste by weight generated by construction and demolition will be reclaimed or recycled. The Council will also promote this approach to all construction projects taking place in the region.

Community engagement

Endorsed regions promote reuse and recycling of waste to high value uses, promoting 'closed loop' recycling and avoiding down-cycling to lower value uses. By 2025, at least 70% of domestic waste by weight generated will be reclaimed, recycled or composted. Ideally no more than 2% of waste by weight will be sent to landfill.

Clean energy from waste plants may form part of the zero waste strategy, provided international best practice standards on operations and emissions are employed. Energy from waste treatment methods are only appropriate if treating truly residual waste and therefore not compromising reuse or recycling.

Businesses and industries

Businesses and industries can typically achieve even higher recycling rates than domestic properties. For local businesses, consideration will given to the provision of recycling facilities and training provided to ensure the waste hierarchy is followed and the local authority is expected to ensure the enabling infrastructure is provided and promoted so that organisations in the region can follow a trajectory towards zero waste by 2025.

Sustainable transport



The One Planet vision of the future is one where walking and cycling are the norm, the need to travel has been reduced and low and zero carbon modes of transport are provided. Regions create a green transport plan that results in carbon emissions consistent with the overarching greenhouse gas emissions reduction target.

A sustainable transport strategy is heavily dependent on planning and providing public transport and One Planet Regions commit to promoting an integrated, long term approach in their own operations and with stakeholders in their region.

Local authority operations

The local authority will promote good practice in reducing the need for staff travel (such as when deciding on locations for offices) and providing sustainable alternatives. This is applicable for the Council's own fleet and transportation used by employees and contractors. Monitoring - including of emissions where appropriate - is expected, with targets that align or exceed the long term vision for sustainable transport in the region.

Community engagement

Transport plans will consider how best to promote walking and cycling and reduce the need for people to travel. This considers how the local community can live in close proximity to local services such as schools, healthcare, business districts, shops and leisure facilities. In any new build developments, on site facilities must complement local facilities as appropriate.

Having reduced the need to travel, One Planet Regions provide access to sustainable transport. Pedestrian and cycle networks, public transport hubs, car clubs and car sharing will be prioritised.

Consideration is also given to future technologies and how the region could be developed to enable these technologies to be incorporated at a later date – for example by installing electric vehicle charging points.

Biofuels may be used to help meet the transport target, but there must be robust proof it is derived from sustainable sources, to be assessed on project by project basis. For example biofuels locally grown on marginal land or waste cooking oil could be considered sustainable.

Sustainable materials



The One Planet vision is one where all goods and materials used - for construction or consumer goods - are made from renewable or waste resources with low embodied energy and, wherever possible, sourced locally.

Local authority operations

One Planet Regions recognise the environmental impacts of goods and services procured. They will establish mechanisms to record and reduce these impacts by having a robust strategy for sustainable materials and procurement. Guidance, promotion and case studies of sustainable procurement activities will be disseminated across employees, suppliers and other partners.

Community engagement

Households

Strategies to enable households and businesses to reduce consumption and choose low impact goods will be implemented. Options include:

- Making sure information on reducing the impact of goods is disseminated effectively through community information services;
- Attracting, promoting or providing services that facilitate the reuse and sharing of goods, especially goods that are used infrequently but have a high embodied energy for example power tools and cars. Examples of services that may be promoted include Freecycle, charity shops, car clubs, repair and reuse centres.

Construction activities

Construction and refurbishment activities are designed to minimise the impact of the materials used and the long term management required. Project specific targets should be developed for these strategies. Wherever possible local authorities will use planning powers and information to:

- Make optimum use of all existing buildings and infrastructure;
- Promote creative thinking to design out the need for some conventional built requirements which often save money as well as reduce environmental impact – e.g. reducing paved areas and hard landscaping, avoiding suspended ceilings, etc;
- Promote and enable construction projects to have access to construction materials that are low impact, durable, local and reclaimed. Where possible high impact or polluting materials (for example PVC, aluminium) should be avoided. The key impact areas should be identified and plans developed to reduce the impact of these materials;
- Consider the life cycle impact of buildings in design. This means design and materials choices that enable easy maintenance and longevity. Buildings will be designed considering deconstruction, so that on decommissioning, the materials can be recovered and re-used or recycled.

Local and sustainable food



The One Planet vision is one where people are able to eat diets high in local, seasonal and organic produce, as well as healthy diets high in vegetable protein and lower in animal protein than is the norm in the UK.

Local authority operations

Transparent purchasing systems will be established by local authorities and Public Health Trusts to ensure that the food provided does not contribute to deforestation, over-fishing or pollution and minimises other negative impacts, for example, through sourcing Marine Stewardship Council seafood or sustainably sourced palm oil. Local authorities will also work with local suppliers through the procurement process, ensuring the process is accessible and not prohibitive for smaller, local businesses and suppliers.

Catering facilities provided or procured by local authorities will minimise packaging, in line with zero waste targets, and minimise consumption of processed food which is shown to have a high ecological footprint.

Community engagement

Endorsed regions will develop strategies to enable and encourage businesses and the community to adopt a sustainable food practices that lead to a low impact diet, through education, innovative projects and agreements with retailers and caterers.

Food waste is minimised and targets are put in place to enable the region to recycle all food waste generated. Food growing is to be integrated across the region where appropriate, such as through space for 'urban farming', allotments and window boxes. Strategies will enable and encourage residents to take up food growing by providing the resources where possible. Local food mapping will be undertaken and links developed with local producers to establish regular supplies and also to work with them to further reduce their impacts.

A One Planet Region will have on-going initiatives that promote healthy low-impact eating, aiming to reach out and influence all members of the community.

Sustainable water



The One Planet vision is one where we use water much more efficiently in buildings and in the products we buy; and manage water in such a way as to support healthy land-use, avoid local flooding and avoid pollution to watercourses.

Local authority operations

Local authorities are expected to implement a water reduction and re-use strategy for all properties. This includes a strategy for monitoring and detecting leaks.

Community engagement

Best practice standards in water conservation, water efficiency and recycling, and surface water management are adopted taking into account the local context. Key activities include:

- Ensuring that water reduction and re-use targets and activities exist for the local community. This may be facilitated by the local authority or local water company;
- Regions in areas of flood risk have in place an acceptable 200 year flood risk strategy;
- Regions consider adaptation to climate change and the effects it will have on water supply and management;
- Where possible, water treatment techniques that have minimum environmental impacts;
- In refurbishments and new build developments, particularly in areas prone to flood risk, One Planet Regions will adopt a best practice approach to water drainage and storm water, ensuring that peak run off rates and annual run off volumes will not cause any increase in environmental rise. Examples of these systems include Sustainable Urban Drainage Systems, Water Sensitive Urban Design and Best Management Practice.

It is acknowledged that the emerging concept of 'embodied water' (water used in the production of food and manufactured goods) is becoming more important and should be a consideration as part of the Sustainable Food and Sustainable Materials principles.

Land use and wildlife



The One Planet vision is of regions that contribute to an overall increase in biodiversity and biological productivity, as well as supporting beautiful landscapes.

Local authority operations

Local authorities will identify and protect locally significant species on managed sites, and ensure a comprehensive planting scheme and selection process exists that benefits local wildlife, addresses local climate issues (e.g. drought tolerance) and avoids invasive species.

Community engagement

To ensure a net positive contribution to local native biodiversity and natural habitats, a Biodiversity Action Plan will exist to:

- Support collaboration between professional ecologists/biodiversity officials and local conservation groups;
- Ensure that local groups are identifying key species that are either protected or locally significant and monitoring these to increase their presence;
- Ensure projects have a demonstrable positive impact on of the ecosystem services⁵ provided by the region such as carbon sequestration or water management;
- Provide educational materials on land-use and ecosystems available to all in the region.

At least one opportunity must be identified as a major showcase project, to publicly report on actions taken and on lessons learned, to benefit biodiversity within the region. In addition, at least one major opportunity must be identified to regenerate degraded local natural resource stocks (soils, trees, fisheries, etc) either and a plan implemented.

Leading ecologists suggest that there is a global need for 20% of biologically productive land to be left for wildlife, this would equate to 0.3 ha of wildlife habitat per resident somewhere in the world. Regions should look for ways to showcase how they are contributing to this global target by facilitating the establishment or enhancement of valuable local wild space either within the region or by twinning with a project further afield.

⁵ Benefits people obtain from ecosystems e.g. provision of food, timber, fibre; regulating services that affect climate, floods, water quality; recreational, aesthetic, and spiritual benefits; soil formation, photosynthesis, and nutrient cycling.

Culture and community



The One Planet vision is one where a culture of sustainability, community and a sense of place has been nurtured. Endorsed regions build on local cultural heritage to foster social capital and connectedness.

Local authority operations

All major culture and heritage venues and destinations owned or managed by the Council should be working towards sustainability through a One Planet Living plan or other robust environmental management system.

Community engagement

It is essential that a local plan to maintain and enhance or revive valuable aspects of local culture and heritage exists. Community involvement in the writing and delivery of the plan will be considered as central to the process.

A One Planet Centre or equivalent environmental exhibition will be provided to inform local residents and help create a culture of sustainability.

Each One Planet Region endeavours to develop a thriving sense of place and sense of community. In addition, two locally specific showcase projects will 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 will be at a scale compatible with that of the region.

Equity and local economy



The One Planet vision is where thriving, diverse and resilient local economies support fair employment, inclusive communities and international fair trade.

Local authority operations

The council and its key partners will be Living Wage employers, appropriate to that region, and aspire to create a working environment that supports equity and inclusiveness. One Planet Regions will support and promote and purchase certified Fairtrade goods and take action by choosing products that adhere to its principles.

Community engagement

One Planet Regions promote activities to support the key themes below, aspiring to global best practice:

- **Employment, in particular promoting jobs in the green economy.** Local authorities promote projects and activity that creates local jobs supporting the transition to a low carbon economy.
- **Equity and inclusiveness - physically and socially.** Responses to environmental sustainability and climate change will be fair, equitable and socially just. A project appraisal process will include evaluation of equity and inclusiveness on the community.
- **Living Wages.** If there is a regional Living Wage, it should be promoted across the region, with a method for promoting the Living Wage in place, for example, via an employer's certification or awards process.
- **Participation.** Local authorities will promote exemplary approaches to enable the community to influence decisions affecting their neighbourhoods. To ensure this process occurs, local authorities will have a clearly defined engagement strategy⁶.
- **Supporting Fair Trade.** Local authorities should support and promote the principles of Fair Trade and purchase and promote certified Fairtrade goods.

One Planet Regions will ensure there is always at least one major showcase project that is working to narrow an inequality gap within the local context, identified through discussion and community engagement, with actions taken to improve 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.

⁶ For further guidance, refer to Briefing Paper: BioRegional's approach to fostering pro-environmental behaviour.

Health and happiness



The One Planet vision is to create a future where it is easy, attractive and affordable for people to lead happy and healthy lives within a fair share of the earth's resources.

Local authority operations

Local authorities will encourage employees to take responsibility for their wellbeing, health and happiness, as well as supporting this through provision of activities and resources. A methodology for monitoring employee wellbeing and satisfaction will exist, with evidence of work-based improvements where appropriate.

Community engagement

Local authorities will design services with well-being in mind and encourage the community in activities that increase health and happiness, with the following measures in place:

- **A method for monitoring and improving both community and employee wellbeing and satisfaction.**
- **Evidence of embedding wellbeing into the design of services across major service areas.**
- **Community involvement and participation in shaping well-being.**

One Planet Regions are expected to complete two showcase major initiatives to promote health and happiness in the community. Suitable projects should be identified using baseline 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 will be provided at a scale compatible with the scale of the region.

Examples of showcase projects could include:

- Helping the community take greater responsibility for supporting each other and the local environment;
- Supporting people in overcoming chronic illness and unhealthy lifestyles through promoting active travel and healthy diets;
- Facilitating inter-generational skills sharing or activities;
- Promoting positive psychology, meditation and other scientifically proven ways to increase mental well-being; and
- Provide the tools and facilities to create an enterprising community that benefits the local economy.

Further reading

This document is also supported by a set of guidance notes and position papers that cover the application of these targets in further detail. To obtain copies of these documents, please contact BioRegional:

- **Guidance:** Ten steps to becoming a One Planet Region (2010)
- **Information:** One Planet Endorsement and Quality Assurance (2010)
- **Guidance:** Development of a monitoring plan for developments (2010)
- **Briefing paper:** Climate change adaptation – recommended approaches (2010)
- **Briefing paper:** Fostering pro-environmental behaviour: BioRegional's experience and approach to behaviour change (2010)