

1 The One Planet Communities Approach

The vision of One Planet programme is of

“A world in which people everywhere can lead happy, healthy lives within their ‘fair share’¹ of the Earth’s resources”.

The programmes aim is to make sustainable living easy, attractive and affordable throughout the world. The One Planet Communities programme contributes to this by creating a worldwide network of neighbourhoods that demonstrate One Planet Living in action.

The One Planet Communities programme aims to communicate the challenge we all face in reducing our environmental impact, and to facilitate change at local and global levels by working with partners to create demonstration projects that can serve as national models.

The overall aim of the One Planet Communities is to help create a ‘tipping point’ by 2012 where current unsustainable trends begin to reverse and move towards a sustainable level for humanity and our planet. Specific aims are:

1. Bring together partners to build a world-wide network of **One Planet Communities** to demonstrate how people everywhere can improve their quality of life while living within a fair share of the earth’s resources.
2. Establish **One Planet Centres** in each One Planet Community as a focus for education and continuous professional development.
3. Promote the successes of participating developers in creating One Planet Communities to **catalyze sweeping change** with governments, business and individuals and transform the real estate marketplace.

The One Planet Communities is underpinned by a range of approaches that combine to deliver the holistic vision of true sustainability.

Ecological Footprint analysis

Ecological Footprint analysis² provides a valuable tool for measuring consumption of renewable natural resources in a way that is easy to understand and communicate. One Planet Communities uses Ecological Footprint analysis for both communication and to measure impacts that the indicator represents. There are numerous other indicators of environmental and sustainability performance that should be used for specific situations and materials. The One Planet Communities approach encourages use of any or all of these other indicators to measure environmental performance, where appropriate e.g. carbon footprint, mass balance, LCA etc.

Ecological Footprint analysis allows calculation of the amount of biologically productive land and sea needed to support a particular lifestyle. With a global population of 6 billion, the target should be for the average person to live within 1.8 hectares of biologically productive land, which with growing global population will need to be 1.5 hectares per person by 2020.

Sustainable Lifestyles

Ecological Footprint analysis can also help to understand the relative contributions of different aspects of lifestyles towards total impact. For instance, the various components of the 5 planet lifestyle of a typical US resident are represented below.



¹ ‘Fair share’ resource use involves consuming and producing in such a way as to leave sufficient ecological capacity to satisfy the core needs of other communities, future generations and other species.

² Refer to <http://www.footprintnetwork.org/> for further information on the methodology

The diagram highlights the relative importance of lifestyle choices compared to the impact of buildings (e.g. Footprint associated with food consumption compared to the impact of the materials used in homes). The diagram also shows the importance of shared infrastructure and services (e.g. the impact of airport buildings, hospital, financial services etc.) which are difficult to address as individuals, in terms of reducing their own environmental impact.

In striving to achieve a sustainable future, we need to consider designing communities which enable people to choose to live sustainably. In such communities, the commuting distance between home and work, where the food comes from and how waste is dealt with will be as important as, if not more important than, the energy performance of the buildings.

Sustainable Infrastructure

To enable these sustainable lifestyle choices it is fundamental that communities are provided with appropriate efficient infrastructure (e.g. district heating solutions) and service provision (e.g. access to car clubs). In this regard, the greatest opportunities are achievable in new communities and those benefiting from extensive regeneration.

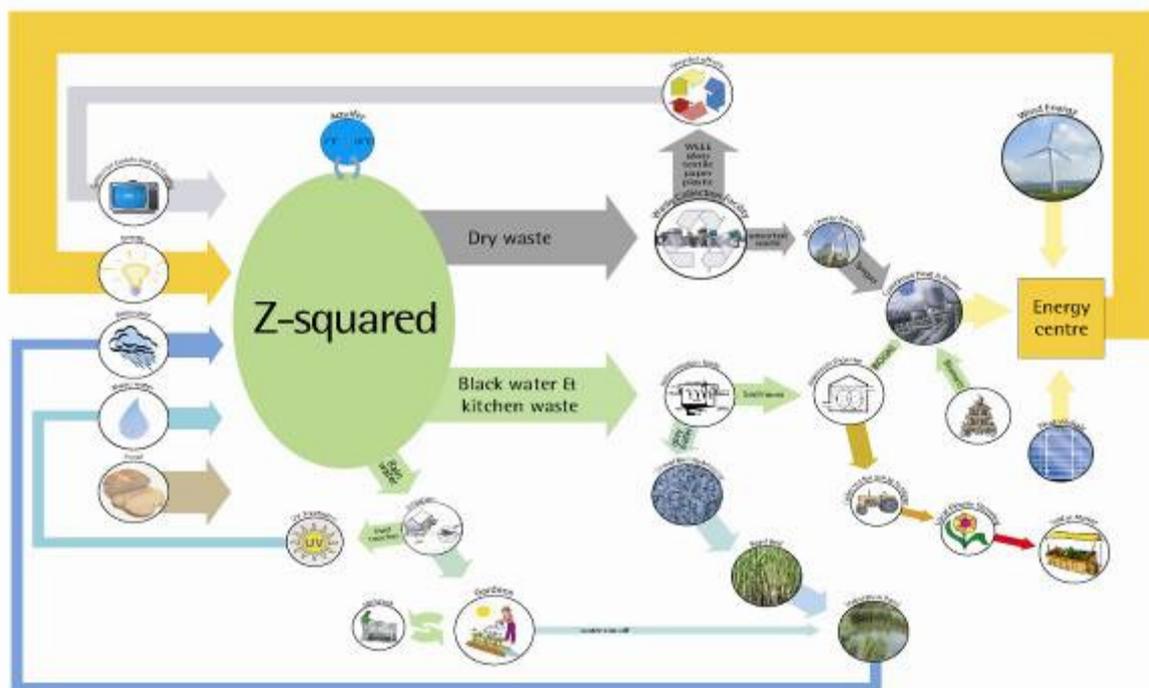


The One Planet Communities approach: Ten holistic principles

One Planet Communities are underpinned by ten sustainability principles. Each One Planet Community project interprets these principles in a manner appropriate to the local context.

Local and closed loops

The OPC framework splits out different environmental aspects to ensure that a holistic plan is created for each development. However, the risk that is run here is of segregation and the consideration of different aspects separately. To guard against this OPC also promotes the concept of local and closed loops (integral to the concept of 'bioregionalism') which encourages the formation of total system strategies. For example, the Z-squared (zero carbon zero waste) study for a One Planet Community in London³ examines all material inputs coming into the development, analyses the waste streams arising and proposes useful recycling and re-use mechanisms for each one of the waste streams to form new material inputs streams resulting in a closed loop system. This approach is diagrammatically represented below.



³ http://www.bioregional.com/programme_projects/opl_prog/zsquared/Z_squared_report_19.04.05.pdf

Monitoring until 2020

Monitoring with reporting against indicators can help define the level of success of a project, can help disseminate successes to stakeholders, and can provide a powerful learning tool for future communities. General requirements of OP Communities are:

- monitoring and reporting is published to allow people to compare and compete for better results (e.g. some BedZED residents reduced energy use on realising it would be public)
- a monitoring plan must avoid 'monitoring fatigue' - BedZED residents have been monitored too often, and they are not sure as to how the information will be used, so the plan must respect privacy
- not all elements of the lifestyles program can be easily distilled down to a metric, (e.g. Culture and Heritage) but a strategy to tackle this should be put in place.

There are several notable benefits of a rigorous monitoring program. Most importantly it provides relevant parties with information on which they can base decisions upon. It has long been said that what gets monitored, gets managed. Monitoring results can indicate water leakages, problems with energy performance or general dissatisfaction (unhappiness). On the plus side, monitoring can show programs that work well, and can be used to gently encourage residents onward in the quest for one planet living.

2 Defining traits

Scale

BioRegional wish to show the full scope of what a sustainable community would look like. As such, OP Communities will be of a scale that can support the provision of at least some shared services and infrastructure, such as schools, shops, community facilities and health services. This enables the community to influence their operations in a substantial manner, thereby reducing their contribution to residents' Footprints while also reducing residents' travel needs. Where this is not possible a strategy for engaging and influencing the wider area should be developed.

In the UK it has been estimated that a development of at least 2,000 homes (with approximately 5,000 residents) is necessary for the provision of a primary school to become financially and technologically viable. Developments of this scale are rare and make up a small percentage of new build, and therefore projects with a smaller level of new build, but that also aim to reduce the impact of the wider area can also enter the OP programme.

Target countries

In response to the global need and to develop and demonstrate One Planet Living in action throughout the world, our target is to establish at least one OP Community on each inhabited continent. We will address populations that currently have among the highest Ecological Footprints such as in Europe and North America as well as populations with small Footprints such as in Africa. We will also work in countries with large populations and growing Footprints, such as China and India.

Locations within countries

With approximately 50% of the global population living in cities, and this expected to rise to 70% by 2050, OP Communities are primarily envisaged as being located in urban or peri-urban areas in and around high-profile cities. Chosen sites should be readily accessible via public transport to encourage visits by policy makers, interested professionals and the wider public. This does not preclude the development of rural OP Communities in appropriate locations.

2.1 Different types of One Planet Communities

The OP Communities programme aims to establish a set of OP Communities, some of which will be 'Flagship' Communities, which must have a visitor centre and be in a high profile location to facilitate visits from politicians and decision makers.

Common traits of all OP Communities

- Have an endorsed SAP addressing all 10 One Planet Living principles
- Report against the SAP annually and submit to periodic monitoring by BioRegional.
- Elaborate a holistic sustainability vision and set ambitious targets, including for sharing lessons learned

Distinguishing traits of "flagship" communities

- Large scale mixed-use developments (e.g. exceeding 2,000 housing units)
- Located in or near to a leading city for maximum visibility and ready access by decision makers and the public
- Aspirational new-build developments with socially inclusive component and possibly also refurbishment / retrofit component.
- Hosts a high-profile visitor and information centre that provides training activities

The initial focus of the OP Communities programme is on new build communities, but given the challenge of the existing stock we are open to include retrofitting and urban regeneration into the programme. The OP programme is working with the London Borough of Sutton, to develop a retrofit plan for the entire borough, and so where OP Communities can contribute to a wider retrofit programme this will be actively encouraged.

Open source

Given the appeal of the 'One Planet Living' concept (and because BioRegional want the principles to become widely adopted), it is inevitable that projects will arise that will want to follow the ten principles yet have no formal relationship with the OP Communities programme. In anticipation of this, there are a set of guidelines for "affiliated" initiatives.

- Affiliated initiatives will be welcomed as the programme evolves, but such initiatives will not be allowed to use the One Planet logos on any promotional or published materials.
- Affiliated initiatives will be requested to post a short summary SAP with the key project targets on the OPC website.

2.2 Brief guidelines for site selection and project design of One Planet Communities

The following is a list of general guidelines for site selection and project design for prospective partners interested in launching an OP community. The emphasis is on flagship communities which are the key target for the programme. This list is not comprehensive, and OP endorsement can only be granted following submission and positive assessment of a detailed SAP, while continued One Planet status depends upon periodically verified progress towards implementation. Moreover, some of these guidelines may conflict in particular cases, underlining the need for case-by-case assessments.

For further information on site selection see the Site Assessment Template.

2.2.1 Positive criteria

Large-scale

- OP Communities should be of sufficient size and scale to support local services (shops, schools and healthcare facilities), and infrastructure (renewable energy, water treatment),
- While large-scale is a key criteria for flagship projects, other OP communities may be smaller.

Sustainable design

- The community should be designed and developed by private/public partners working together with OP staff and a local design team to ensure locally appropriate solutions.
- Design should be based on 'compact city' principle; building mixed-use schemes at high densities around transport nodes with convenient walking/cycling access to local services.
- Site to include areas of open space and/or water for both amenity and wildlife.

Good connectivity

- The selected site should be located in or within easy access to/from a high-profile city, preferably the country's capital or leading city.
- The site should be easily-accessible via local transport infrastructure, existing or planned.
- The site should also be readily accessible to key decision makers

Replicability

- Each OP Community must be an exemplar development demonstrating viable sustainable solutions for the mainstream. OP Communities should not have exceptional characteristics that restrict its relevance to mainstream application (e.g. unique geophysical location).
- The community should be representative of the country's wider population; (i) whether the community is urban, or rural, (ii) whether it is high-income, or low-income.

Job creation

- While OP communities have a residential focus, it should also aim to create jobs. Tourism is a critical sector (10% of global jobs, 11% of global GDP, growing at 4.5% annually), this is a key opportunity for making positive change through genuinely sustainable tourism.

Ecological value

- Selection of previously developed 'brownfield' sites is encouraged, but a 'greenfield' site need not exclude OP endorsement, however sites must be assessed on a case-by-case basis.
- The impact of OP Communities on local ecology is key to site choice, sites may be chosen for their proximity to areas of high ecological value or for their paucity of ecological value.
- In sites near areas of high conservation value OP projects should help protect them where development is already approved, by sensitive development and habitat conservation.
- In sites in areas of low ecological value there are abundant opportunities for habitat restoration and/or creation.

Social integration

- Community location and design should reflect a commitment to generating a socially mixed and integrated community.
- The project should provide affordable housing within the site or in neighbouring areas

Equity impacts

- Projects should deliver positive equity impacts, both locally and more widely
- A particular emphasis is positive economic impacts on disadvantaged populations
- Means to achieve such positive impacts include:
 - a) Preferential purchase of local products and services or certified 'fair trade' imports.
 - b) Initiatives to preserve local cultural heritage.
 - c) Initiatives to directly address deprivation via sustainability interventions.

2.2.2 Negative criteria

We will be promoting OP communities in a wide range of countries and contexts and the programme wants to find solutions to problems and to adapt to local conditions, rather than specify negative conditions.

The one area where there is clear potential for conflict in biodiversity conservation. Any threat to biodiversity conservation is likely to prevent a site being endorsed as an OP Community, regardless of its other merits. It can be ambiguous whether a development poses a threat to conservation. In these cases, the developer must seek an early response from the OP programme but no areas where development is prevented in regions legally designated for wildlife conservation, or likely to be designated, will be considered for OP developments.

2.3 Components of a One Planet Community

One Planet Communities should be mixed use communities and ideally have the following components:

- Homes
- Community facilities
 - Commercial space including offices and retail
 - Shared services such as schools and health centres
 - Landscape and leisure facilities
- Sustainable infrastructure services
- An One Planet information centre

2.3.1 Components in detail

COMPONENT: HOMES	
Reason for inclusion	<ul style="list-style-type: none"> • Provide homes which offer the chance to live attractive, affordable lifestyles within a fair share of the earth's resources, demonstrating aspirational and sustainable living.
Specific characteristics	<ul style="list-style-type: none"> • Homes provided should cater to a variety of income groups and should contain some 'social housing' / 'affordable homes'. These should not be all in one area. • The homes should be designed and fitted out in such a way that they optimise their energy and water demands. • The homes should also be designed to encourage sustainable behaviour, e.g. the kitchens should encourage food preparation from fresh produce and recycling.
COMPONENT: COMMERCIAL SPACE, SHOPS, SCHOOLS, HEALTH FACILITIES, LANDSCAPE & LEISURE, OTHER COMMUNITY FACILITIES	
Reason for inclusion	<ul style="list-style-type: none"> • To ensure that as many common facilities and shared services as possible are included in the sustainable infrastructure and facilities provided on site • To reduce residents' travel needs by providing on site opportunities for employment, shopping, education and other activities.
Specific characteristics	<ul style="list-style-type: none"> • In all cases, the infrastructure and facilities should be provided such that energy and water demands of all the types of space on site are minimised.
	COMMERCIAL SPACE
	<ul style="list-style-type: none"> • There should be a mixture of office, size, types and tenures. Specific smaller incubator units should be considered with communal meeting rooms and reprographics facilities.
	RETAIL SPACE
	<ul style="list-style-type: none"> • Retail spaces must also offer opportunities for different types of outlets which encourage the sale of products and services which meet the ethos of One Planet Living • Retail spaces tend to renew their internal fit-outs often – steps should be taken to minimise this and to be able to offer solutions emphasising reclaimed materials. • Fair trade / local suppliers would be encouraged to take space in OP Communities.
	SCHOOLS
	<ul style="list-style-type: none"> • Schools should serve the following functions: <ul style="list-style-type: none"> ○ Act as living examples of sustainable design, ○ Have sustainability integrated within their curriculum ○ Act as community hubs by hosting community-level facilities and activities • The basic aims of the design should be to; create action learning, participation and be at the human scale etc for more information contact info@bioregional.com.

	HEALTH FACILITIES
	<ul style="list-style-type: none"> • The aim of OP communities is to enhance health and quality of life. The on-site health facilities should act as centres of health promotion rather than just treatment. • Health facilities should address mind care as well as physical healthcare. • Health centres could lobby for ethical purchasing within the wider system,
	LANDSCAPE, LEISURE & PLAY
	<ul style="list-style-type: none"> • Positive, attractive landscape, leisure and play areas should be provided in all OP communities, helping foster community spirit. • Soft landscaping on site should also be designed to enhance biodiversity of the site and or food production/

COMPONENT: SUSTAINABLE INFRASTRUCTURE	
Reason for inclusion	<ul style="list-style-type: none"> • To help reduce the environmental impacts of shared infrastructure, which is difficult to achieve at individual level but can be achieved at larger scales.
Specific characteristics	<ul style="list-style-type: none"> • The main aims of sustainable infrastructure should be that from day one, it uses the most sustainable technologies practicable for the provision of energy, water and waste services; and is flexible enough to take advantage of more sustainable technologies in future. • For more details see: "Z-Squared: Enabling One Planet Living in the Thames Gateway"

COMPONENT: INFORMATION CENTRES	
Reason for inclusion	<ul style="list-style-type: none"> • To provide a focus for education and training. • To act as a hub for outreach activities. • To promote One Planet Living and its guiding principles to bring about change among governments, businesses and individuals.
Specific characteristics	<ul style="list-style-type: none"> • The One Planet information centre should showcase the different sustainable technologies and strategies used on site, as well as other strategies potentially useful in the area. • It should preferably have an exhibition area, small office space and a café area