

# Eco-towns, Garden Cities & One Planet Communities - policy and practice, opportunities and challenges



Sue Riddlestone and Pooran Desai  
Co-founders, BioRegional

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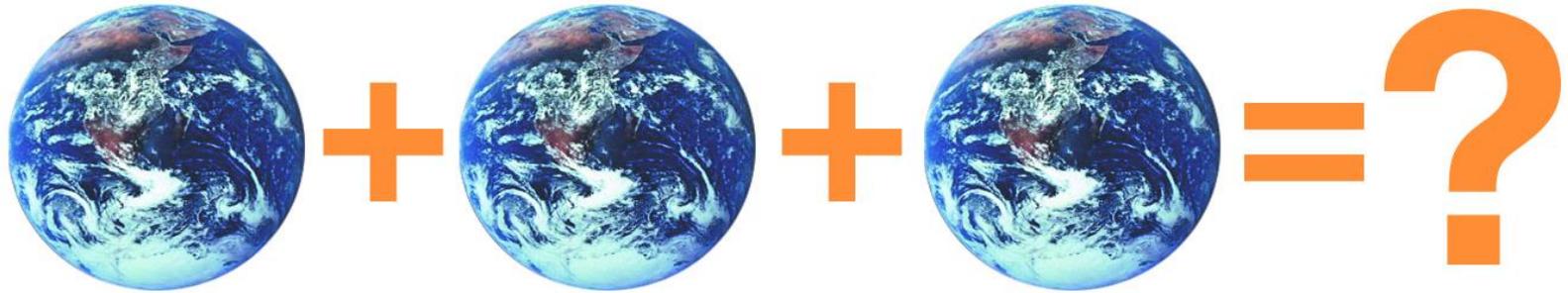
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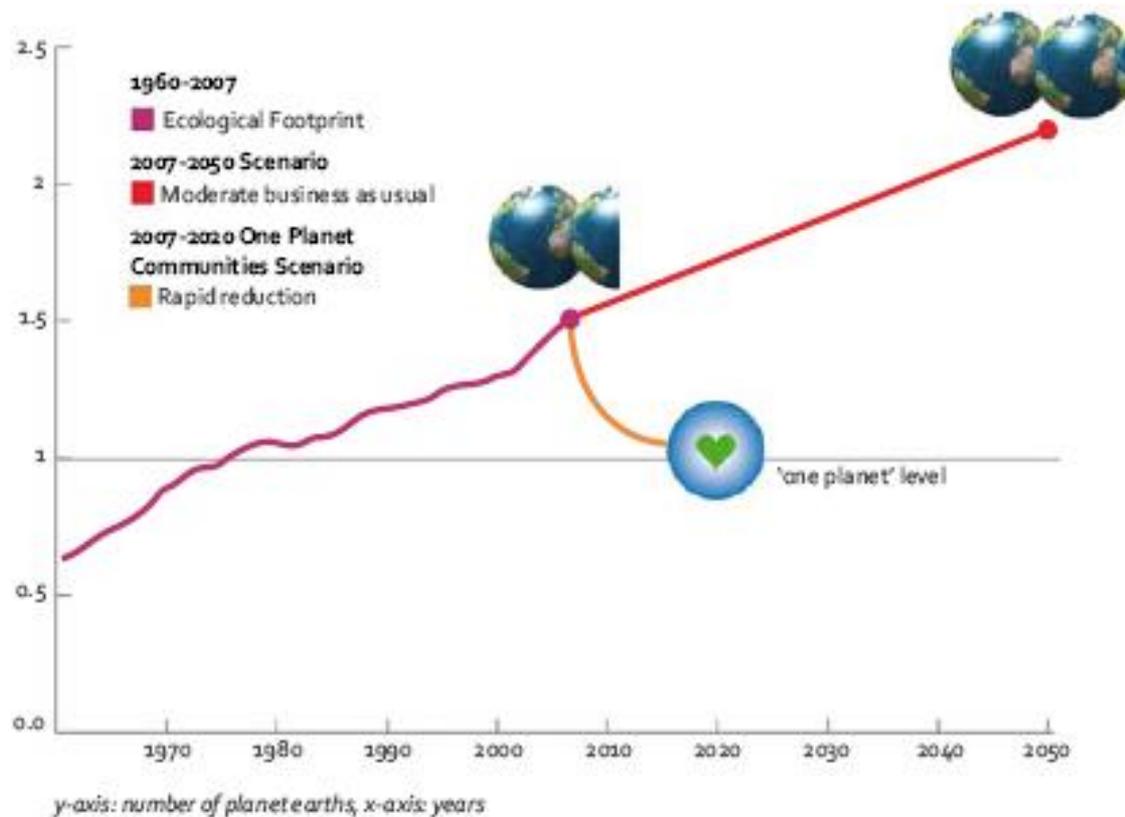
BioRegional is a social enterprise which invents & delivers more sustainable ways to live & work

London, Oxford, Brighton and sister organisations in China, South Africa, Mexico, Greece, Australia, North America





# one planet living



A world where we can live happy, healthy lives within our fair share of the world's resources, leaving space for wildlife and wilderness.

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An aerial photograph of a modern residential building's courtyard. The building has a mix of brick and dark grey panels, with large windows and decorative elements like colorful flags on the roof. The courtyard is paved with grey stone tiles and features a set of stairs with a metal railing. Numerous people are gathered in the courtyard, some with bicycles, a stroller, and a small car. The scene is bright and sunny, with trees and greenery interspersed throughout the space.

*"Social side is spectacularly good"*

*"Nice community spirit, non-isolating"*

# Ten principles of one planet living

- 1 Zero carbon
- 2 Zero waste
- 3 Sustainable transport
- 4 Sustainable materials
- 5 Local and sustainable food
- 6 Sustainable water
- 7 Land use and wildlife
- 8 Culture and community
- 9 Equity and local economy
- 10 Health and happiness

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# One Planet Living process

## 1. Gather information



## 2. One Planet Action Plan



- 1 Zero carbon
- 2 Zero waste
- 3 Sustainable transport
- 4 Sustainable materials
- 5 Local and sustainable food
- 6 Sustainable water
- 7 Land use and wildlife
- 8 Culture and community
- 9 Equity and local economy
- 10 Health and happiness

## 3. Implement and report progress annually



### Zero carbon

Performance against targets	
✓	Reduce energy use in line with CO <sub>2</sub> reduction target of 20% by 2012
✓	New stores zero carbon by 2012
✓	Zero carbon across existing estate by 2013 in line with 90% target

**Key activities and achievements in 2010**

- ▶ Invested £2.3 million in lighting upgrades for 39 stores.
- ▶ Absolute reduction in CO<sub>2</sub> from store energy use of 12% compared to the 2006 baseline.
- ▶ Played a leading role in the provision of support to government to develop the Green Deal following the successful PAYS pilot with the London Borough of Sutton.

**Plans for 2011**

- ▶ Trial measures to reduce heat loss for example building lobbies onto existing stores and thereby reducing gas consumption.
- ▶ Further investment in lighting upgrades with £2.9m already approved to spend on lighting upgrades in 25 stores including installing energy efficient lighting and new lighting controls.
- ▶ Develop concept for zero carbon store and identify suitable offsite renewable energy supply that could be secured to meet any residual demand.

# Policy - Zero carbon homes and eco-towns

“Within 10 years, every new home will be a zero-carbon home and we will be the first country ever to make this commitment”  
6<sup>th</sup> December 2006



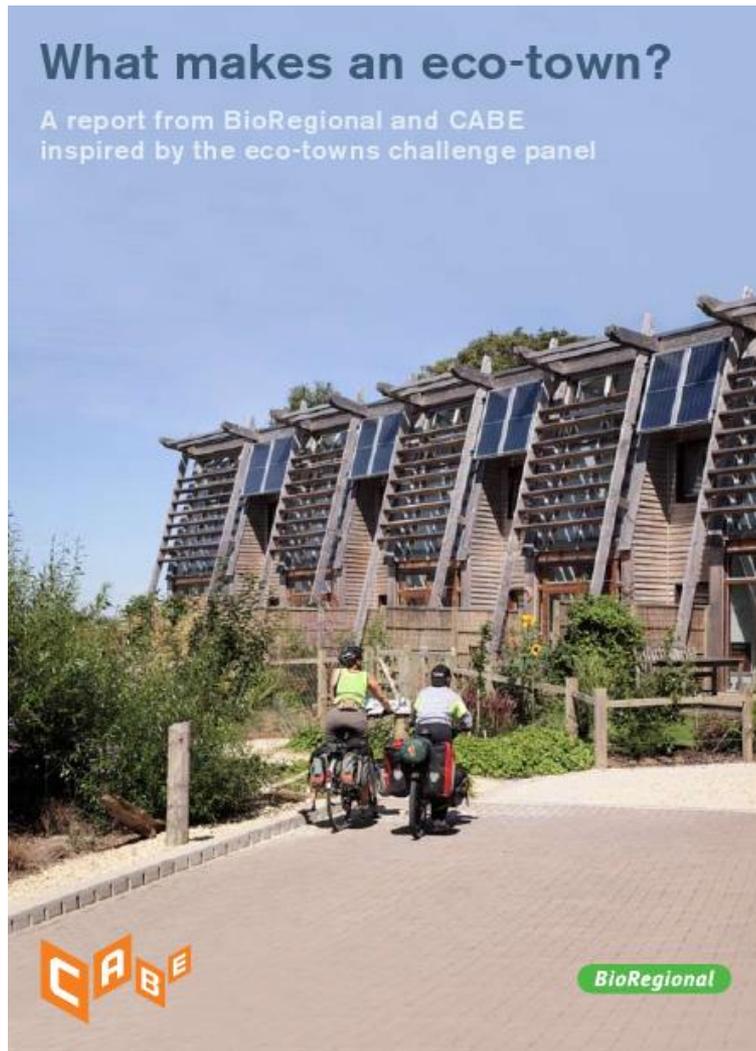
“New eco-towns could build low carbon design into the fabric of the community, not just into individual houses”  
7<sup>th</sup> March 2007



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# Eco-towns challenge panel



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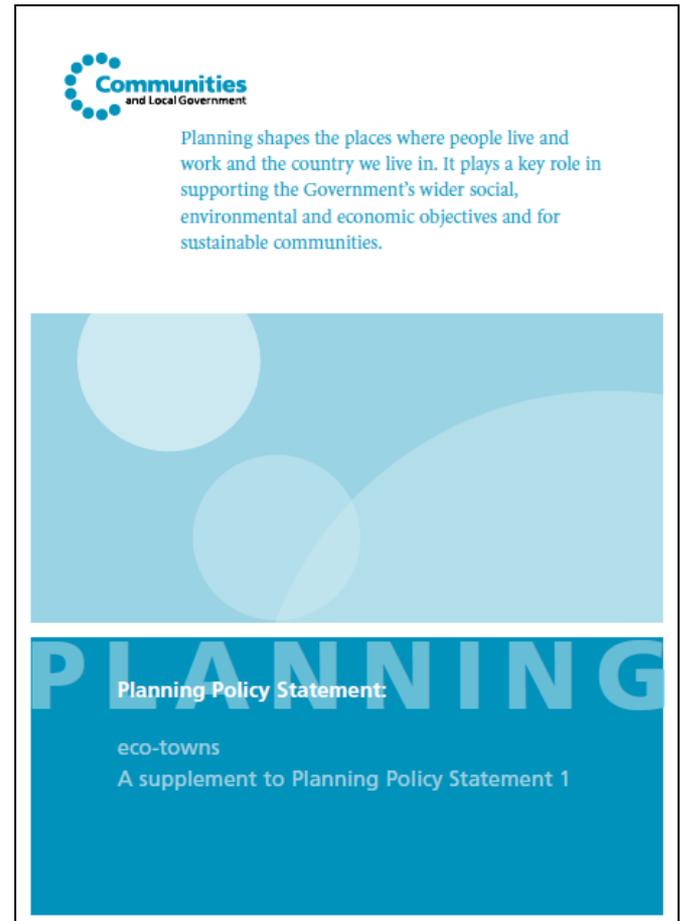
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# Eco-towns planning policy statement

## Eco-towns should

- make a significant contribution to two government policies:
  - 240,00 new homes by 2016
  - 80% reduction in CO<sub>2</sub> by 2050
- be exemplar projects which enable residents to live within environmental limits

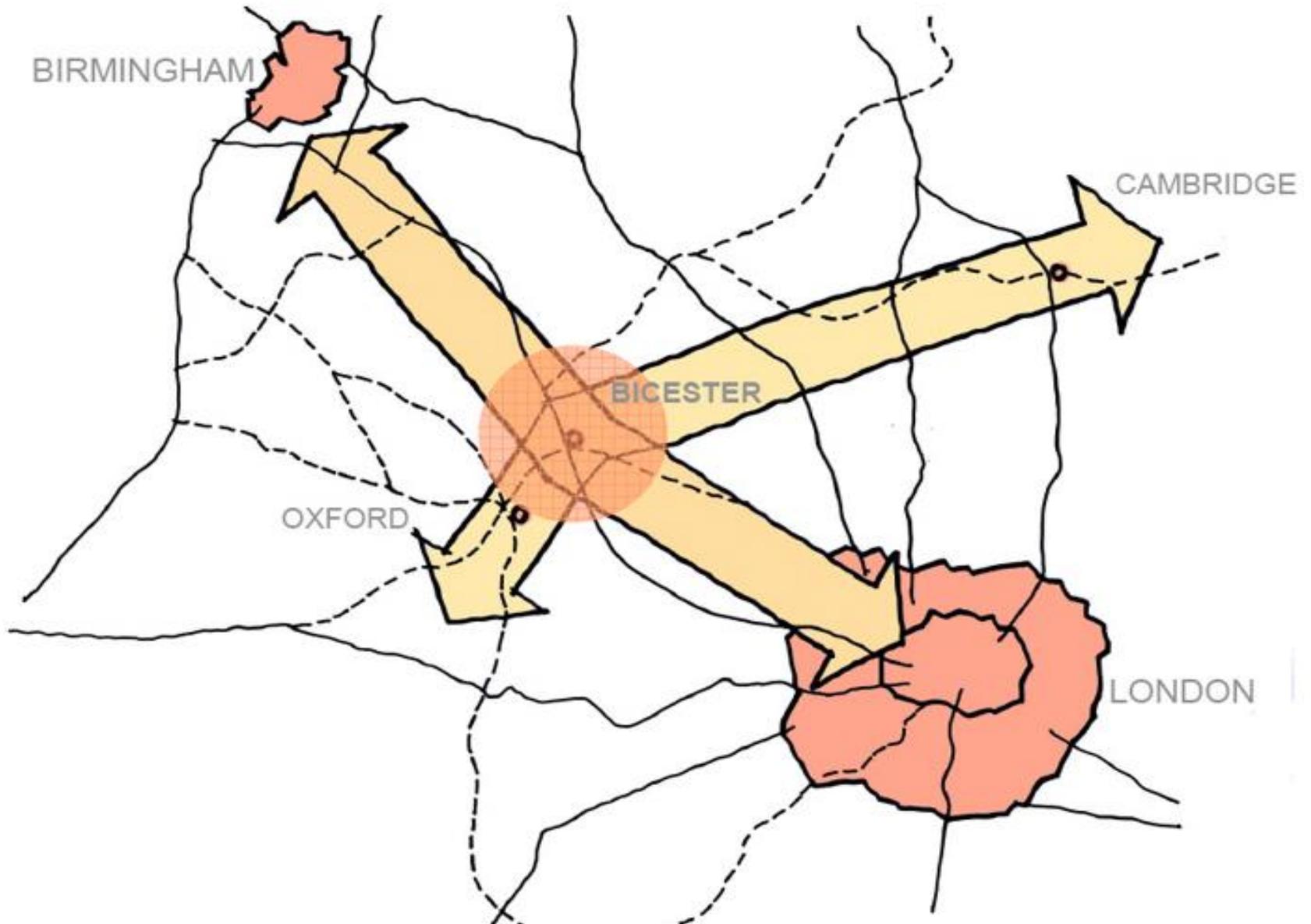
*Eco-towns Planning Policy Statement, July 2009*



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# 1. Bicester's strategic position





**The Site**

100

95

90

85

**South West Bicester Development**

**Town Centre**

Bicester North RR Station

Bicester Town RR Station

**Bicester Business Park**

Rail Line

# Bicester eco-town 400 home exemplar



Aerial view  
of the site

# Bicester eco-town



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# Bicester Eco Town goes further than most

One of the largest developments to be built to code for sustainable home level 5 and zero carbon

The largest residential solar array in the country

It is a true zero carbon scheme

Creation of one job for each home

A unique governance structure

Commitment to use local business

Significant reduction in embodied carbon within the build

One Planet Community

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# Politics! Garden cities



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# One Planet Living



**One Planet  
Communities**



**One Planet  
Regions**



**One Planet  
Companies**

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**London 2012 Olympic and Paralympic Games**  
*London 2012*



**One Brighton, UK**  
*Crest Nicholson  
BioRegional Quintain*



**Masdar City, Abu Dhabi**  
*Mubadala*



**The Hills, Guangzhou, China**  
*China Merchants Property Development*



**BedZED, UK**  
*Peabody / BioRegional*



**One Planet Sutton, UK**  
*London Borough of Sutton*



**One Planet Middlesbrough, UK**  
*Middlesbrough Council*



**Riverside One, UK**  
*BioRegional Quintain*



**North West Bicester, UK**  
*A2 Dominion*



**Barangaroo, Australia**  
*Barangaroo Delivery Authority /  
Lend Lease*



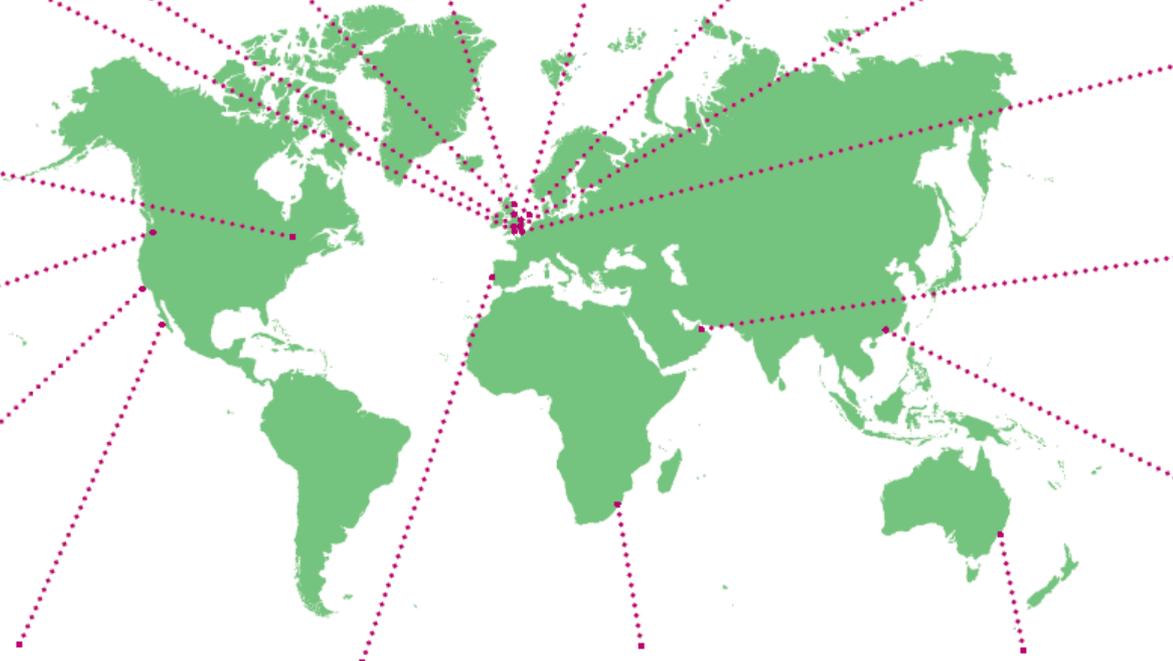
**Ivory Park / Sibaya, South Africa**  
*Johannesburg EcoCity Trust /  
Tongaat Hulett Developments*



**Mata de Sesimbra, Portugal**  
*Pelicano*



**Imbera**  
*Queretaro, Mexico*



**B&Q One Planet Home, UK**  
*B&Q plc*



**Petite Rivière, Canada**  
*Groupe Pacific*



**Grow Community  
Bainbridge Island, USA**  
*Asani*



**Sonoma Mountain Village, USA**  
*Coding Enterprises*

# Masdar City – Abu Dhabi



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# Sonoma Mountain Village, California

Developer, Coddling Enterprises  
Approximately 2000 homes



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# '5 minute living'

Housing

Work

Groceries

Restaurants

Services

Sports, gardens, gym

Shops, theater, hotel



SONOMA MOUNTAIN VILLAGE 

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# One Planet Living to the United Nations



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Securing a sustainable and equitable future through One Planet Living

**One planet living - a practical solution**

One planet living is a positive vision of a world in which we are living happy, healthy lives within the natural limits of the planet - wherever we live in the world - having left sufficient space for wildlife and wilderness. At BioRegional we know that one planet living is possible.

Working with partners we've developed inspiring, real life examples of sustainable communities and businesses which show one planet living in practice. From this experience we've developed a simple approach and sustainability framework based on ten principles, which enables others to implement one planet living.

**An international framework**

The one planet living framework is being formally used in projects and initiatives in 12 countries: Australia, Canada, China, France, Greece, Ireland, Mexico, Portugal, South Africa, UK, United Arab Emirates and USA. An on-line toolkit, available since 2010, has been used in at least 40 other countries.

- Zero carbon
- Zero waste
- Sustainable transport
- Local and sustainable materials
- Sustainable water
- Land use and wildlife
- Culture and heritage
- Equity and local economy
- Health and happiness

The ten principles of One Planet Living

**ONE PLANET LIVING**

Globally, the rate at which we are consuming resources and pumping our pollutants is racing way ahead of the planet's ability to replenish or absorb them. To put this another way, we are now consuming the equivalent of 1.5 planet's worth of resources each year - whatever way you define sustainability, this is not it. The proof is all around us, from the impacts of climate change, disappearing forests, over-exploited fisheries and the loss of biodiversity on a massive, and rapid scale.

Around the world people consume at different rates. If everyone in the world lived like the average European we'd need three planets to support us and yet a citizen of Bangladesh only uses the equivalent of a third of a planet. We clearly need a more equitable spread of the world's natural resource use.

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