



Sustainable Lifestyles 2050 One planet living in Eco- communities

Sue Riddlestone
Executive Director & co-founder
BioRegional Development Group

BioRegional

solutions for sustainability

This afternoon

- BioRegional approach to communicating and delivering sustainability
- Case studies of sustainable living
- Policies to scale?

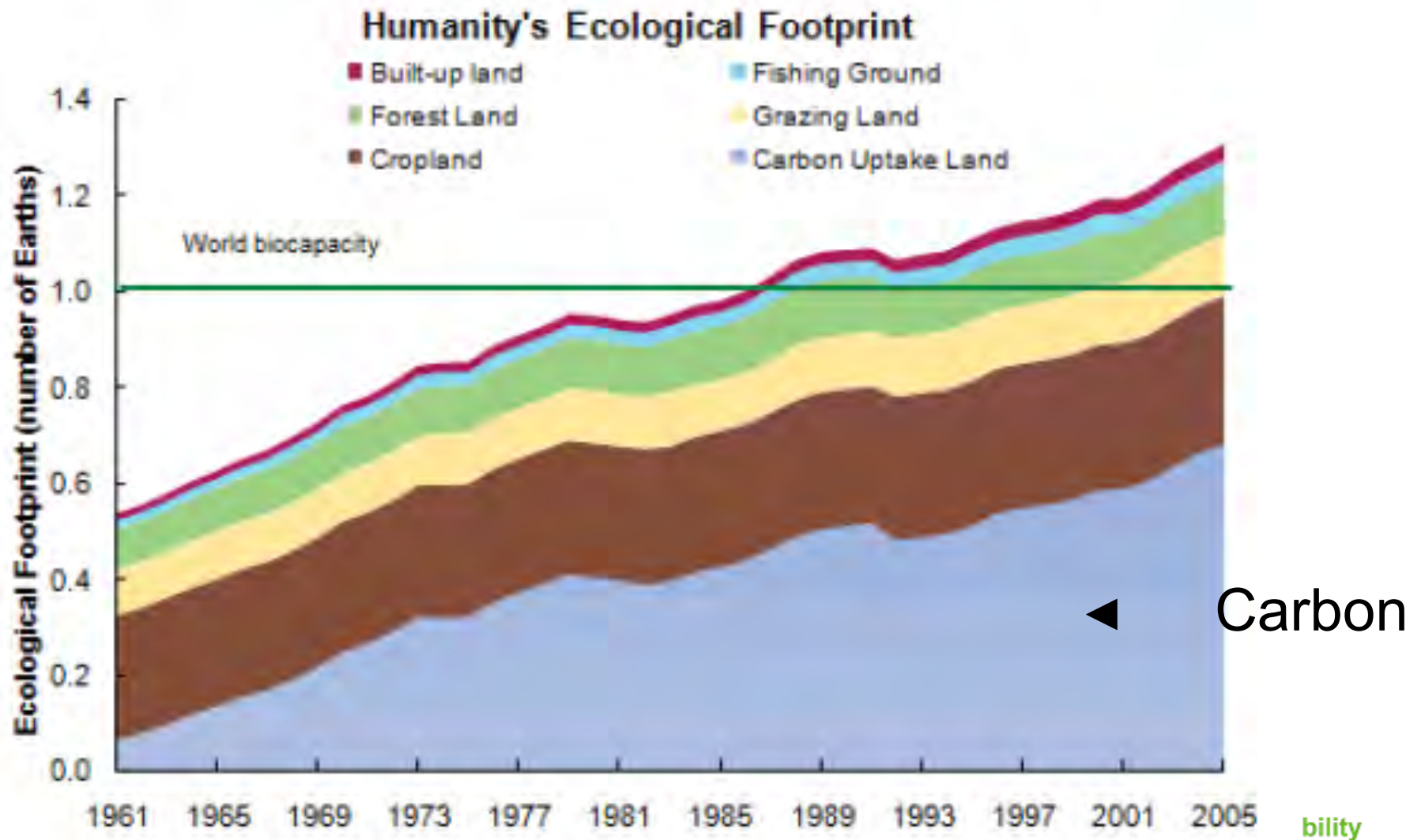


**Entrepreneurial charity which invents and delivers solutions for sustainability Est. 1994, 40 staff
6 associated companies & sister organisations or reps in China, South Africa , Mexico, Greece and North America**

BioRegional

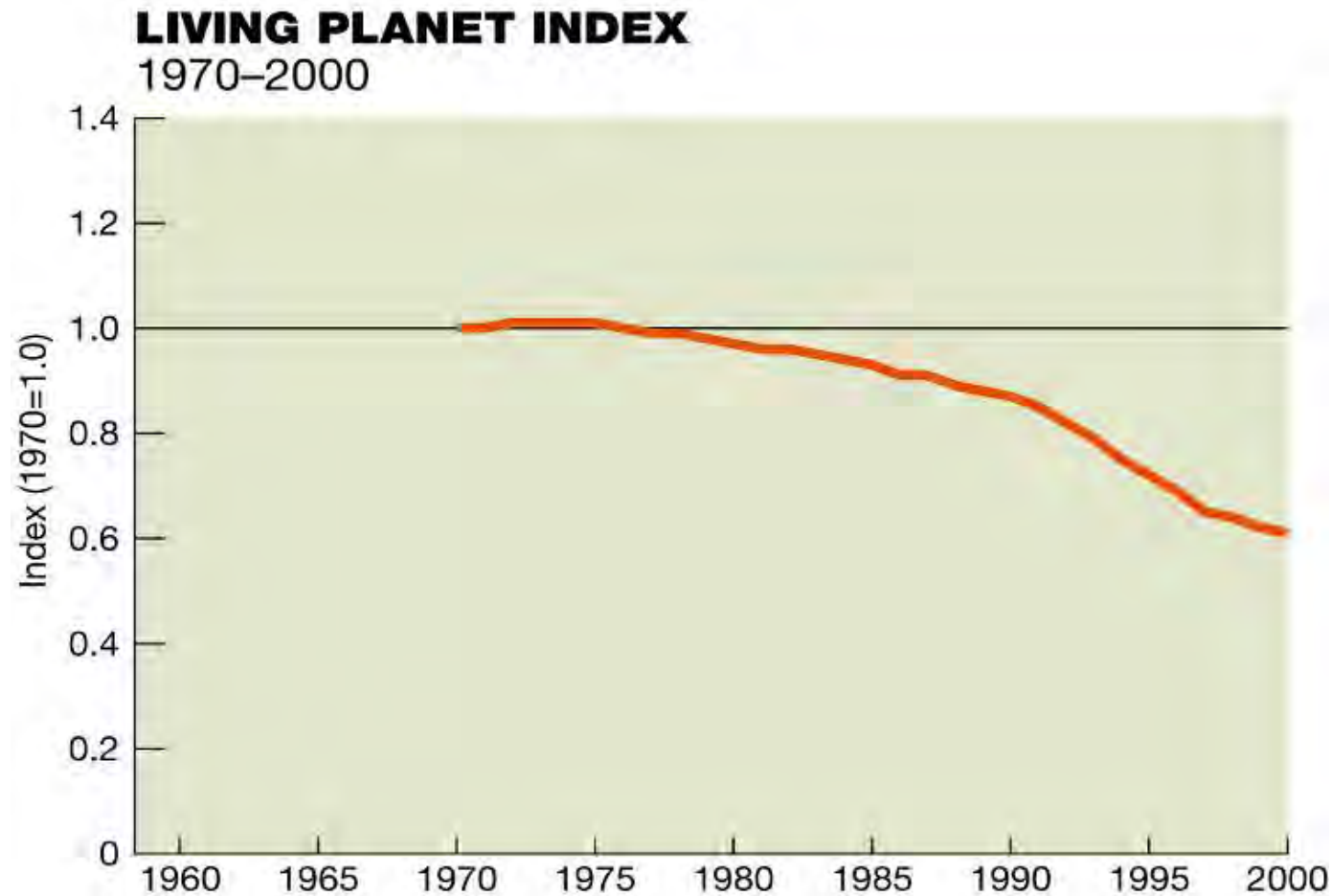
solutions for sustainability

The Challenge - Ecological Footprint



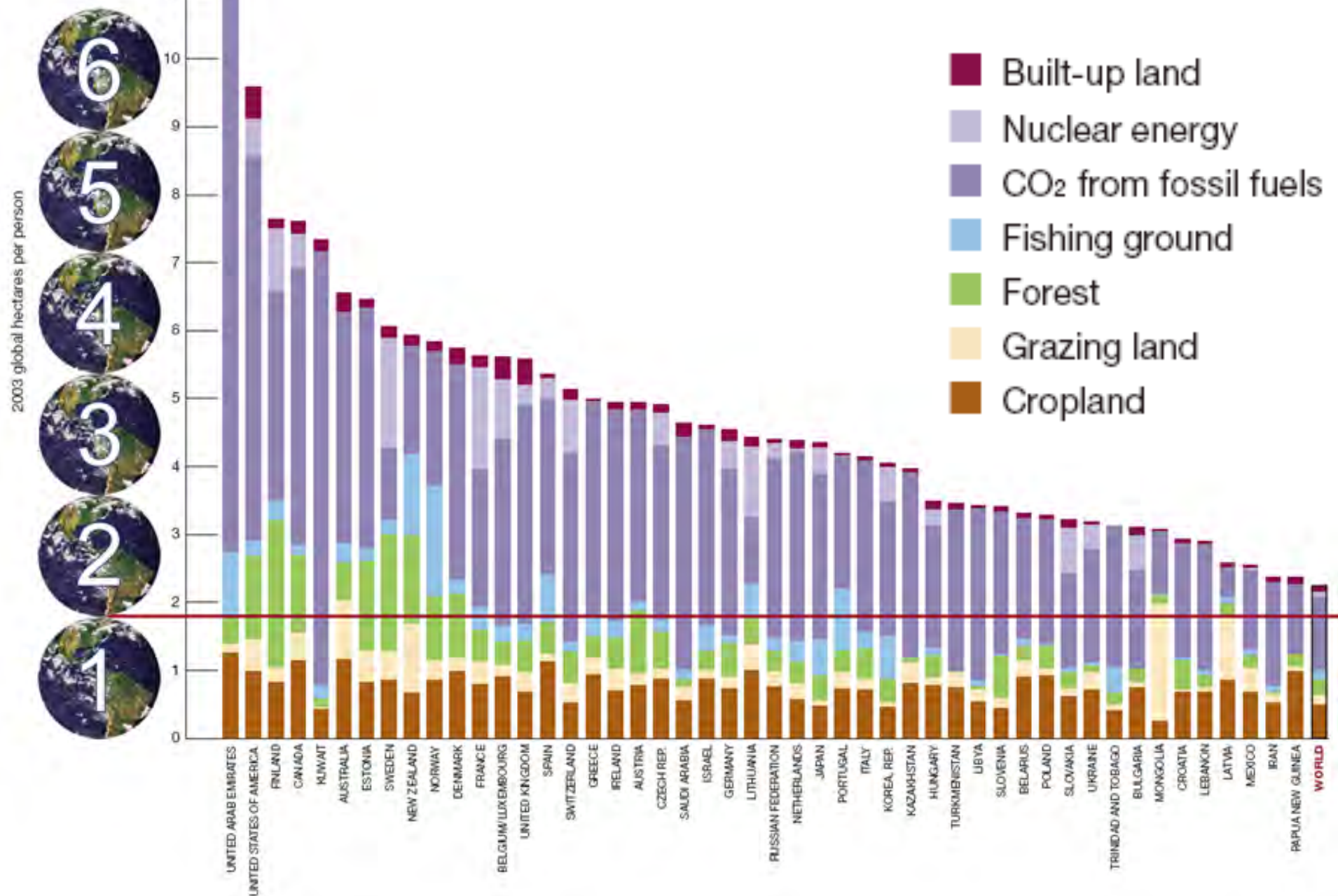
Ecological Footprint Atlas 2008, Global Footprint Network

The challenge - decline of Biodiversity

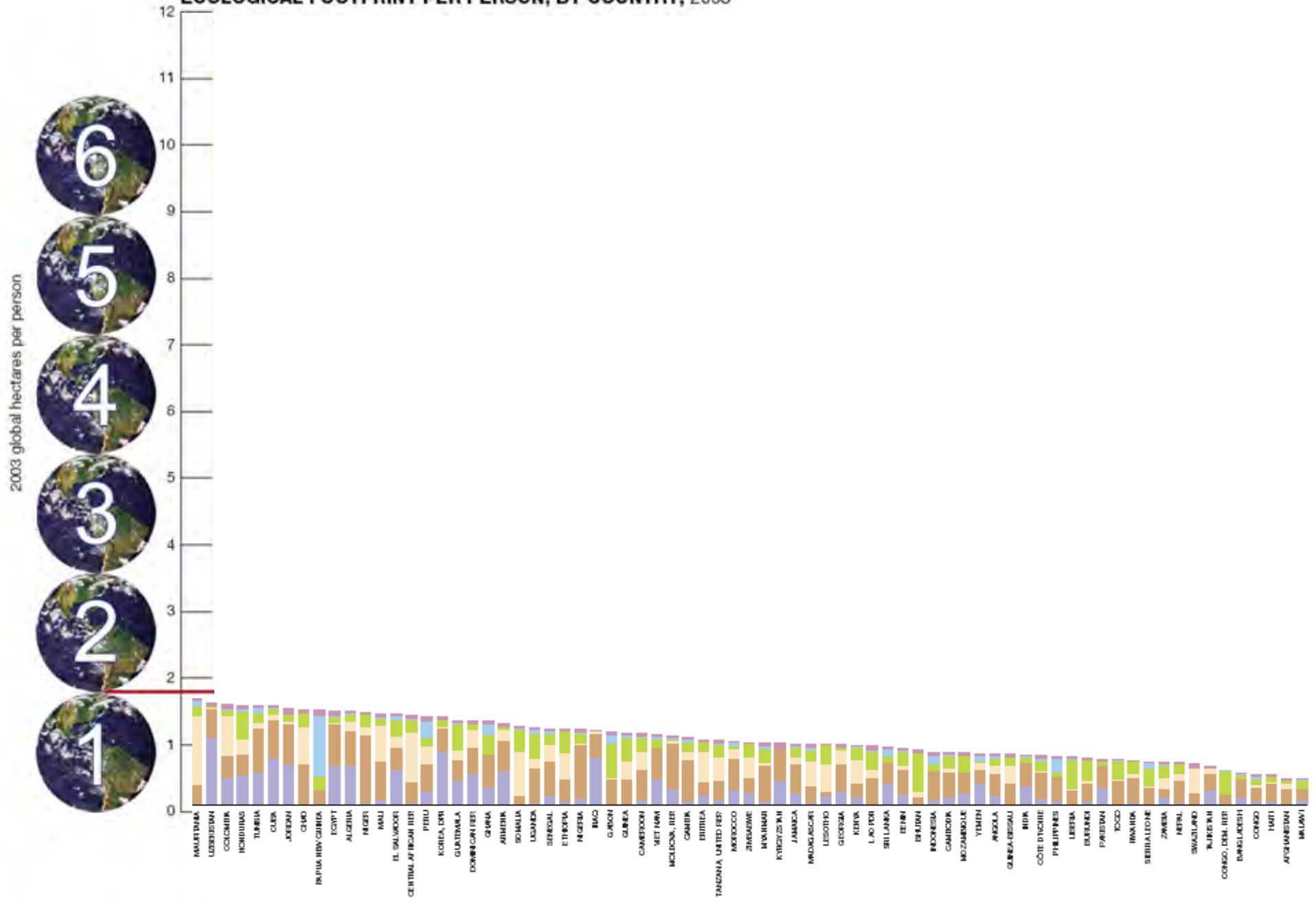


Source: Living Planet Report, Zoological Society London, Global Footprint Network, WWF

ECOLOGICAL FOOTPRINT PER PERSON, BY COUNTRY, 2003



ECOLOGICAL FOOTPRINT PER PERSON, BY COUNTRY, 2003





Housing	Home energy	Transport	Food	Consumer goods	Gov't.	Business	Capital assets
8%	18%	15%	23%	14%	7%	9%	6%

BioRegional

solutions for sustainability



BioRegional

solutions for sustainability

BioRegional projects: one planet living is possible



- BioRegional projects and companies
- Local Paper for London (93% EF)
 - Local charcoal (85% transport CO2)
 - BedZED eco-village (71% personal CO2)

BioRegional

solutions for sustainability

BedZED eco-village - Sutton, south London

Peabody Trust – Bill Dunster architects –
BioRegional



BedZED Eco-village

Designing in sustainability at the start

- Zero carbon strategy
- Sustainable building materials
- Green Transport Plan
- Water strategy
- Composting & recycling
- Local sustainable food



BioRegional

solutions for sustainability

Our approach to implementing sustainability

One planet living and ten principles

A simple, holistic concept & framework to communicate & implement sustainability

Developed by BioRegional from experience - scalable, cross-sectoral

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

BioRegional

solutions for sustainability

Guiding approaches



- Measure and analyse consumption based impacts
- Truly sustainable targets
- What do people need? What resources do we have locally?
- Make it easy to do right thing & difficult to do the wrong thing
- Action Plan to implement using ten principles
- Do it yourself & enable clients/customers

BioRegional

solutions for sustainability

Process: co-create & implement an Action Plan



Workshops - engaging stakeholders

Training - Project & staff using one planet living principles

Process naturally addresses issues e.g. cost, technical and delivers innovation

1. Zero carbon ..energy use in buildings



2. Zero waste ... to landfill



Monitoring at BedZED showed;

- 60% recycling rate by weight (70% possible)
- 68% reduction in residual waste/person/yr; 104kgs (local average 324kg)
- 87% recycling at offices at BedZED

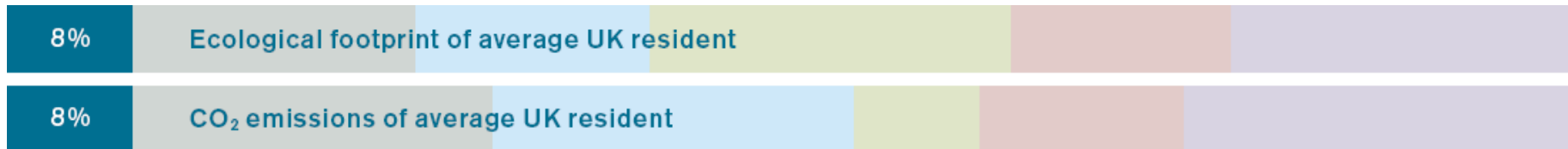
3. Sustainable Transport



- Alternatives to private car; car club, public transport, cycling
- Planning to reduce road space & offer facilities
- Homes & office alternative to commuting
- Monitored 50- 65% reduction in car use at BedZED



4. Sustainable materials.. in construction



- 98% of structural steel locally reclaimed
- 83% of all timber reclaimed or FSC certified
- 52% of materials sourced within 35 mile radius
- 3404 tons from reclaimed & recycled sources

4. Sustainable materials.. consumer goods

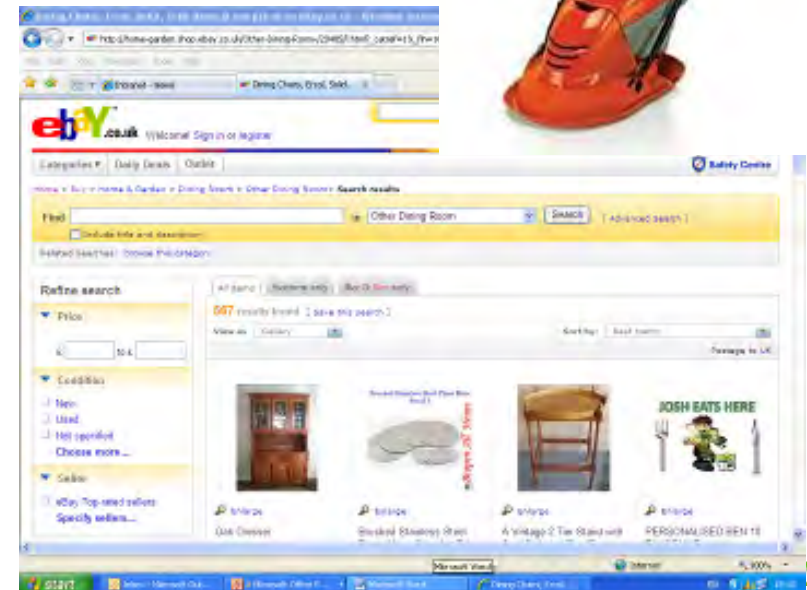
Ecological footprint of average UK resident

14%

CO₂ emissions of average UK resident

13%

- Culture of re-use and tool sharing
- Sustainable products



5. Local and Sustainable Food

Ecological footprint of average UK resident

23%









CO₂ emissions of average UK resident

8%

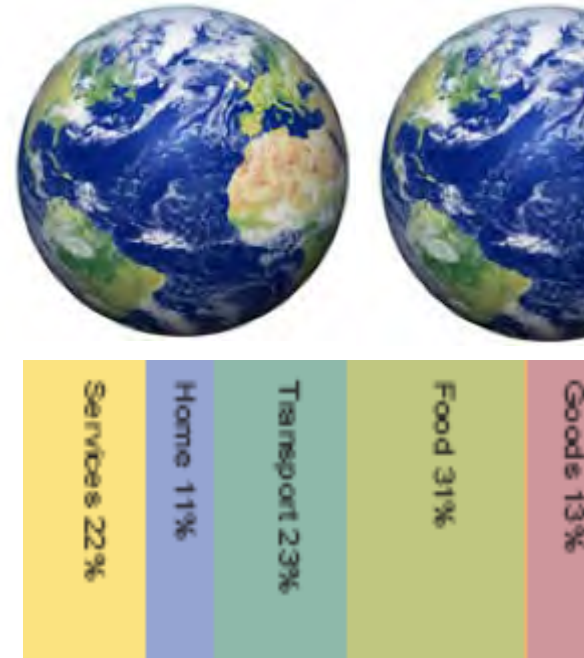


BioRegional

solutions for sustainability

Zero carbon		making buildings more energy efficient and delivering all energy with renewable technologies
Zero waste		reducing waste arisings, reusing where possible, and ultimately sending zero waste to landfill
Sustainable transport		encouraging low carbon modes of transport to reduce emissions, reducing the need to travel
Sustainable materials		using sustainable products that have a low embodied energy
Local and sustainable food		choosing low impact, local, seasonal and organic diets and reducing food waste
Sustainable water		using water more efficiently; tackling local flooding and water course pollution
Land use and wildlife		protecting and expanding old habitats and creating new space for wildlife
Culture and heritage		reviving local identity and wisdom; supporting and participating in the arts
Equity and local economy		inclusive, empowering workplaces with equitable pay; support for local communities and fair trade
Health and happiness		encouraging active, sociable, meaningful lives to promote good health and well being

BioRegional Solutions - BedZED eco-village



Nicole's eco-footprint is 1.7 planets and her carbon footprint is 6 tonnes per year

BioRegional

solutions for sustainability

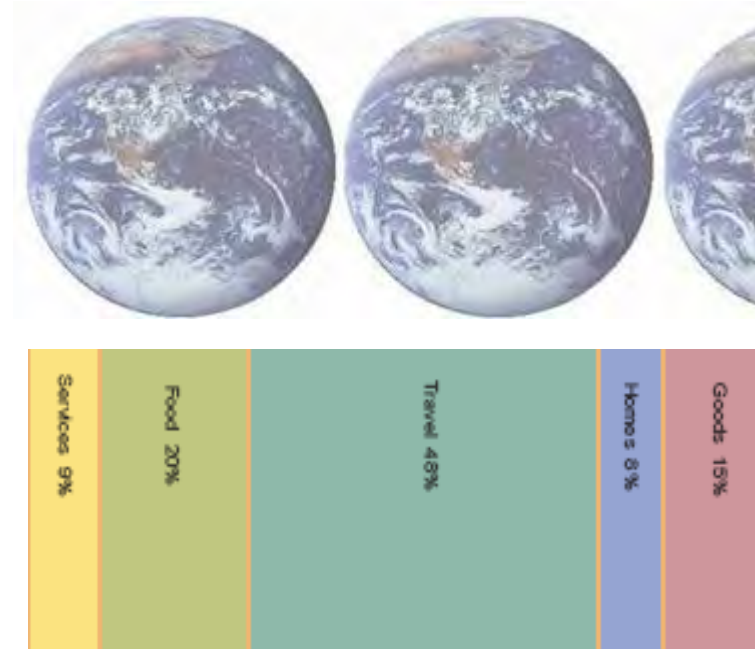
Carbon Savings @ BedZED:

5.1 tons CO2 per person p.a.

- 50% building design and renewable energy :
 - biomass CHP
 - PV
 - in building efficiency/passive solar
- 44% of total carbon savings in ***lifestyles***:
 - Transport
 - Waste
 - Food

**Lifestyles are *as important*
as green buildings**

BedZED – importance of lifestyle choices



Steve's Eco-Footprint is 2.3 planets and his carbon footprint is 7.6 tonnes per year

BioRegional

solutions for sustainability

Breakdown of average UK residents impact



Ecological Footprint of average UK resident: 5.45 Gha




CO₂ emissions (including embodied CO₂) of average UK resident: 11.87 tonnes



Figures derived from REAP by BioRegional
 "What makes an eco-town" BioRegional & CABE Sept 2008

Ref: **BioRegional**
 solutions for sustainability

An aerial photograph of a modern residential courtyard. The courtyard is paved with light-colored stone tiles and features a central staircase with a metal railing. Several people are walking or standing in the courtyard, some with bicycles. A white car is parked on the left side. In the background, there are modern buildings with large windows and colorful flags flying from the roof. The scene is bright and sunny, with trees and shrubs adding greenery to the urban environment.

***“Social side is
spectacularly good”***

***“Nice community
spirit, non-
isolating”***

Retrofitting sustainable living...





Fig 12-3: Aerial view of illustrative masterplan

Community visioning



Projects and initiatives underway



One Planet Communities



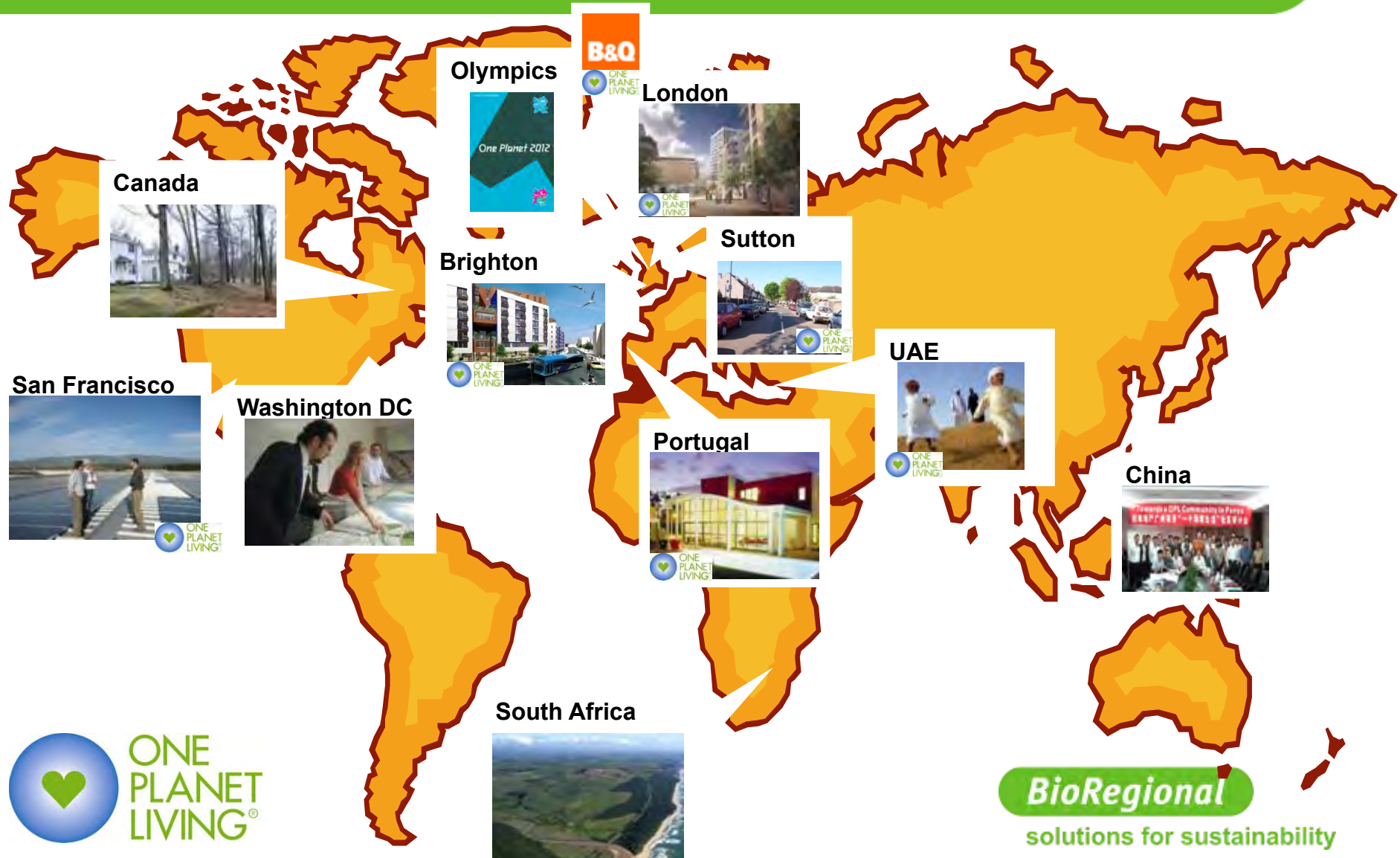
one brighton

one planet | one address

**170 apartments -Built within
normal range of build costs**



One Planet Living around the world



Real examples can change policy & practice



What makes an eco-town?

A report from BioRegional and C&BE inspired by the eco-towns challenge panel



BioRegional

solutions for sustainability

Our Rio+20 Proposals



RIO+20
United Nations
Conference on
Sustainable
Development

Globally, we want to achieve one planet living by 2030, and this campaign will contribute to that through simple aims:

1. That the Rio+20 treaty and policy outcomes include solutions to overcome the barriers to one planet living.
2. That during the Rio+20 process 40 countries from both the global south and north commit to producing a roadmap to enable their citizens to achieve one planet living by 2030.



BioRegional

solutions for sustainability

Proposal: At Rio+20 UN and civil soc



1. **Positive Vision of future** – a world where we live happy, healthy lives within our fair share of the World's resources, wherever we live in the world, leaving space for wildlife & wilderness;
2. **Roadmaps & Sustainable Development Goals & indicators** simple common language for sustainability, global to local
3. **Support and Guidance**
 - i) **Resources Panels** ii) **Solutions Bank** iii) **Education & training**
4. **Enable & Remove barriers** through policy & regulation
 - Renewable energy
 - Human settlement & urbanisation
 - Circular economies

BioRegional

solutions for sustainability

Policy Proposal for Rio+20 (2)

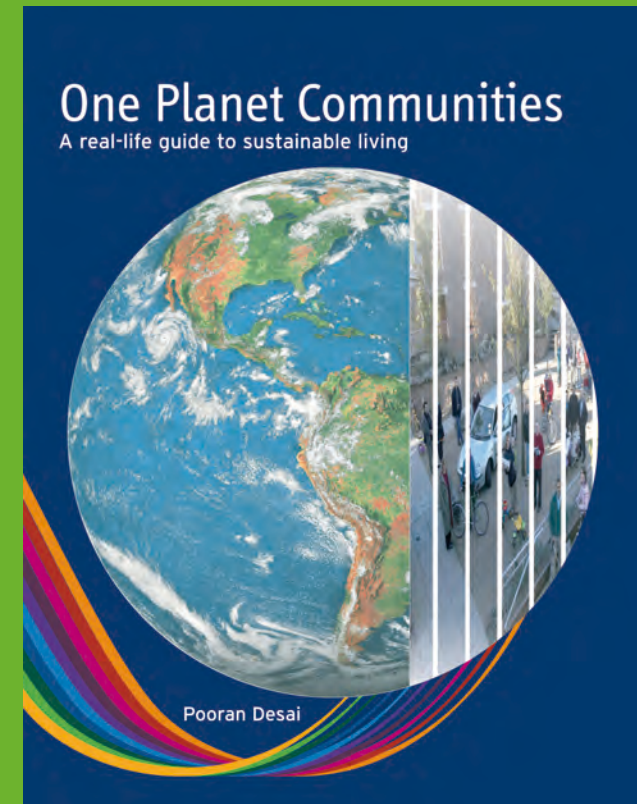
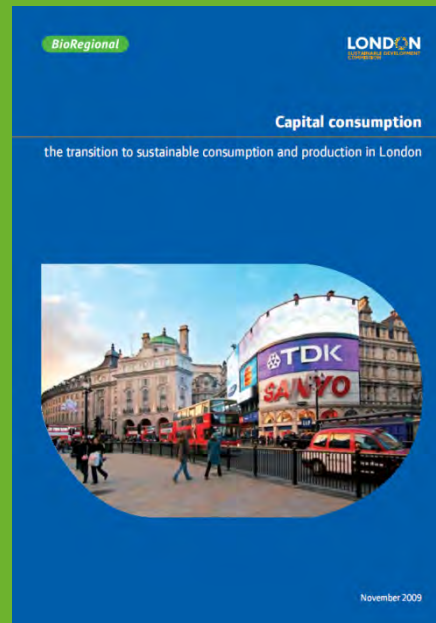
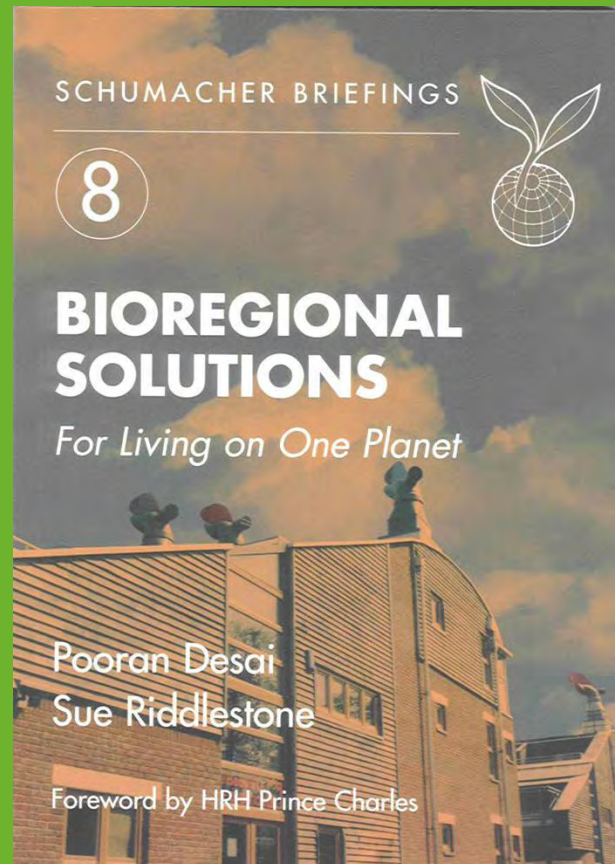


4. **Enable & Remove barriers** through policy & regulation

- **Renewable energy** –grid connection; ownership; carbon price; remove subsidy for fossil fuels; Feed in Tariffs;
- **Human settlement & urbanisation** Planning policies to promote walk-able & cycle-able cities;
- **Circular economies** – incentives towards circular resource efficient and zero waste economies;
- **Biodiversity and natural capital** – agreements and financial and regulatory mechanisms;
- **Economic & Monetary Policies** expert UN Economic & Monetary Panel; supranational reporting & enforcement mechanisms under the IMF; treaties to avoid liquidity & capital flow crises; local currencies.

BioRegional

Solutions for sustainability



www.bioregional.com

BioRegional

solutions for sustainability