

Sustainability Towards a One Planet Olympics

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Today's presentation

- BioRegional
- The Global Sustainability Challenge
- One Planet Living
- The Olympics' Track Record
- London Games - One Planet Olympics Sustainability Strategy



BioRegional Development Group

- Independent environmental organisation with ethos of *bringing local sustainability in the mainstream*
- Work with partners to implement real-life, commercially viable solutions for sustainable living
- Demonstrating that it is possible to reduce our environmental impact in areas such as:
 - Forestry and wood products
 - Paper and textiles
 - Food
 - Transport
 - Housing



The Sustainability Challenge

“Our biggest challenge this new century is to take an idea that seems abstract – sustainable development – and turn it into a reality for all the world’s people”

Kofi Annan, UN Secretary General, 2001



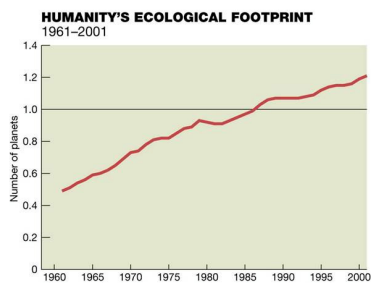
Ecological Footprinting

- Human consumption - food, materials & energy - can be converted into areas of biologically active land to support them
- Examples: Per annum
 - 25 hectares of fishing grounds / tonne of fish
 - 1.3 hectares of forest / m³ timber
 - 0.35 hectares forest / tonne CO₂ from fossil fuels
- Planet Earth's Productive Capacity

– Cropland	1.3	billion hectares
– Grazing land	4.6	"
– Forest	3.3	"
– Fishing grounds	3.2	"
– Built up areas	<u>0.2</u>	"
– TOTAL	12.6	billion hectares



The challenge



The UK's challenge

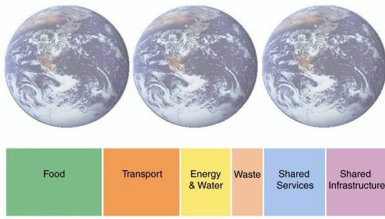
- Global biocapacity 11.3 billion hectares (allowing 10% for nature)
- Global population 6 billion
- Fair share 1.9 hectares per person
- UK footprint 6.3 hectares per person



If everyone consumed as much as the average person in UK we'd need 3 planets to support us

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The challenge



Adapted from "Taking Stock" - An Ecological Footprint of the South East, 2003, SEI et al

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One Planet Living



A joint initiative of BioRegional and WWF

- Global network of communities
Portugal, UK, China, Australia, South Africa, North America
- to catalyse change govt, business and individuals

a joint initiative: **BioRegional** 

Ten One Planet Living Principles

Zero Carbon	Sustainable Water
Zero Waste	Natural Habitats and Wildlife
Sustainable Transport	Culture and Heritage
Local and Sustainable Materials	Equity and Fair Trade
Local and Sustainable Food	Health and Happiness

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Olympic Vision

To place everywhere sport at the service of
the harmonious development of man....

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OGGI

- "Olympic Games Global Impact" programme
 - 150 indicators including
 - CO2 emissions
 - waste treatment
 - road congestion
 - jobs created
- Beijing first Games benchmarked against OGGI

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Sydney 2000 - wins



- Active involvement of Greenpeace
- PV/Solar Thermal for the Olympic Village, contributing to 50% reduction in energy load
- Waste heat from hockey centre used to provide hot water
- CFC-free fridges
- Rainwater collection reducing showground's mains water consumption by 50%



Sydney 2000 - losses



- Veneers from timber from Tasmanian old growth forests
- Not all sites used PV or solar thermal
- Very limited cycle parking
- Legacy community slow in being delivered



Some lessons from Sydney



- Make specific commitments - non-negotiable
- Independent auditing
- Clear process for conflict resolution with local community



Athens 2004 - wins



- Figures hard to get hold of
- Improvements to public transport infrastructure and low emissions vehicles
- Good for civic pride



Athens 2004 -losses



- Overall not good from environmental perspective
- Schinias wetlands damaged by the construction of the Olympic Rowing and Canoeing Centre
- Promises to plant 100 million trees and bushes did not happen
- No Solar thermal or PV at venues



Beijing 2008



- "Committed to a zero net emissions Games"
- Major public transport infrastructure and CNG buses as part of cleaning Beijing
- Energy efficiency targets in tenders for buildings



London - serious about sustainability from the start

- Mayor asked London Sustainable Development Commission to work with the bid team; 2012, EDAW & Buro Happold
- London 2012 employed dedicated Sustainability Manager
- Community consultation and engagement with NGO stakeholder group

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London 2012 Towards a One Planet Olympics

- Vision for One Planet Olympics
- BioRegional / WWF with London 2012
- Sustainability Framework for the Games using the ten principles
- Embedding sustainability within design and operation of event & legacy



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Zero Carbon

- *Reducing carbon dioxide emissions by minimising building energy demand and supplying from zero / low carbon and renewable sources:*
 - Maximise energy efficiency
 - Maximise use of low carbon and local renewable energy sources
 - Distributed heating, cooling and power network

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Zero Waste

- *Developing closed resource loops. Reducing the amounts of waste produced, then reclaiming, recycling and recovering:*
 - No Games waste direct to landfill
 - Zero waste a pivotal procurement driver
 - Closed-loop waste management at all venues and to become standard practice for major sports events
 - Public information campaign to promote high quality front-of-house waste separation
 - Increased market for recycled products

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Sustainable Transport

- *Reducing the need to travel and providing sustainable alternatives to private car use:*
 - All spectators travelling by public transport, walking or cycling
 - Low / no emission Olympic vehicle fleet
 - Carbon offset programme for international travel
 - Individualised travel plans as part of integrated ticketing process
 - Car-free events policy adopted for other major events
 - Greater market for zero carbon transport

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Local and Sustainable Materials

- *Materials chosen to give high performance in use with minimised impact in manufacture and delivery. Using local materials can have further benefits to local economies and in supporting traditional solutions*
 - Reclaimed, recycled, local construction materials used
 - Temporary buildings made for reuse elsewhere
 - Healthy materials used for construction and merchandise
 - Robust procurement and management systems implemented

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Local and Sustainable Food

- *Supporting consumption of local, seasonal and organic produce, with reduced amount of animal protein and packaging*
 - Promotion of local, seasonal, healthy and organic produce
 - Promotion of links between healthy eating, sport and wellbeing
 - Partnerships established with key caterers, suppliers and sponsors
 - Composting facilities integrated into closed-loop food strategy
 - Increased markets for farmers in the region

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Sustainable Water

- *Reducing water demand with sustainable management of rain and waste water*
 - Olympic Park incorporating water recycling, rainwater harvesting and water conserving appliances
 - Dual water quality supplies to new buildings
 - Recycled water used for irrigation or vehicle washing
 - Sewage and grey water fed into energy production
 - Long term sustainable water supply and management with water-efficient homes and infrastructure

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Natural Habitats and Wildlife

- *Existing biodiversity conserved with opportunities taken to increase ecological value and access to nature*
 - Remediation of land and creation of large new urban park
 - Waterways rejuvenated to provide amenity and wildlife habitats
 - Buildings and infrastructure designed to minimise ecological impact
 - Landscaping, planting and building design to increase biodiversity
 - People have greater local access to nature with biodiversity an integral component

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Culture and Heritage

- *Cultural heritage acknowledged and interpreted. Sense of place and identity engendered to contribute towards future heritage*
 - Development of Olympic Park to reflect local heritage and contemporary culture
 - Facilities to acknowledge, reflect and support diversity of local audience and global visitors
 - Creation of a vibrant and diverse legacy community

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Equity and Fair Trade

- *Create a sense of community and local economic development. Provide accessible, inclusive and affordable facilities and services*
 - Fully accessible facilities for all
 - Equity and Fair Trade an integral element of Procurement and Management Systems
 - Affordable ticketing and accommodation
 - Commitment to ethical business transactions
 - High proportion of affordable housing
 - Mixed use development to create sense of community
 - Opportunities for local employment and education

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Health and Happiness

- *Promote health and wellbeing. Establish long-term management and support strategies*
 - Extensive public and stakeholder consultation
 - Programme to promote the health benefits of sport and exercise
 - Healthy internal and external environments in the Olympic Park with improved air quality, visual amenity and soundscape
 - Safe and secure facilities and environments provided
 - Community facilities to provide healthcare and support structures to facilitates long-term sustainable living

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Responsibility for Sustainability

- One Planet Olympics Sustainability strategy - a legally binding commitment between London and the IOC
- London Olympic Board
- ODA – construction & legacy
- LOCOG – operations
- WWF & BioRegional commit to support delivery of One Planet Olympic strategy
- Audit by London Sustainable Development Commission
- Report to OGGI on indicators

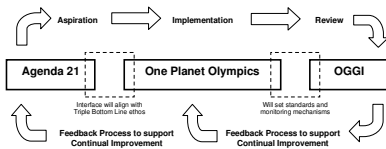
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Implementing Sustainability

- ODA Interim Sustainability Statement (Jul 06)
- London 2012 overarching Sustainability Strategy to be published late 2006
 - Procurement
 - Sustainability Management Systems

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Olympism & Sustainability



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Legacy



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One Planet Living



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- Raise awareness to catalyse change govt, business and individuals

a joint initiative of  

OPL in UK - Z-squared



- One Planet Living in the Thames Gateway
- Concept design for 2000 home mixed-use community for up to 5000 people
- Shops, schools, offices, health and leisure facilities
- Zero carbon and zero waste
- Future-proofing – new technologies, climate change



BioRegional Quintain

- JV with Quintain Estates & Developments
- Projects confirmed: Brighton (170 units – EcoHomes Excellent & OPL)
- Projects in pipeline: Middlehaven, Slough, Bradford



OPL in Portugal - Mata de Sesimbra



- 6000 homes
- €1 billion privately-funded
- Awaiting planning permission



One Planet Living in China



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Making sustainability real for people

- One Planet Living story – more engaging than statistics



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