

Developing Car Free Housing in the UK

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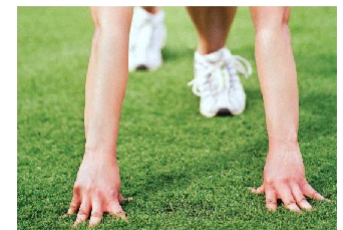
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BioRegional Development Group

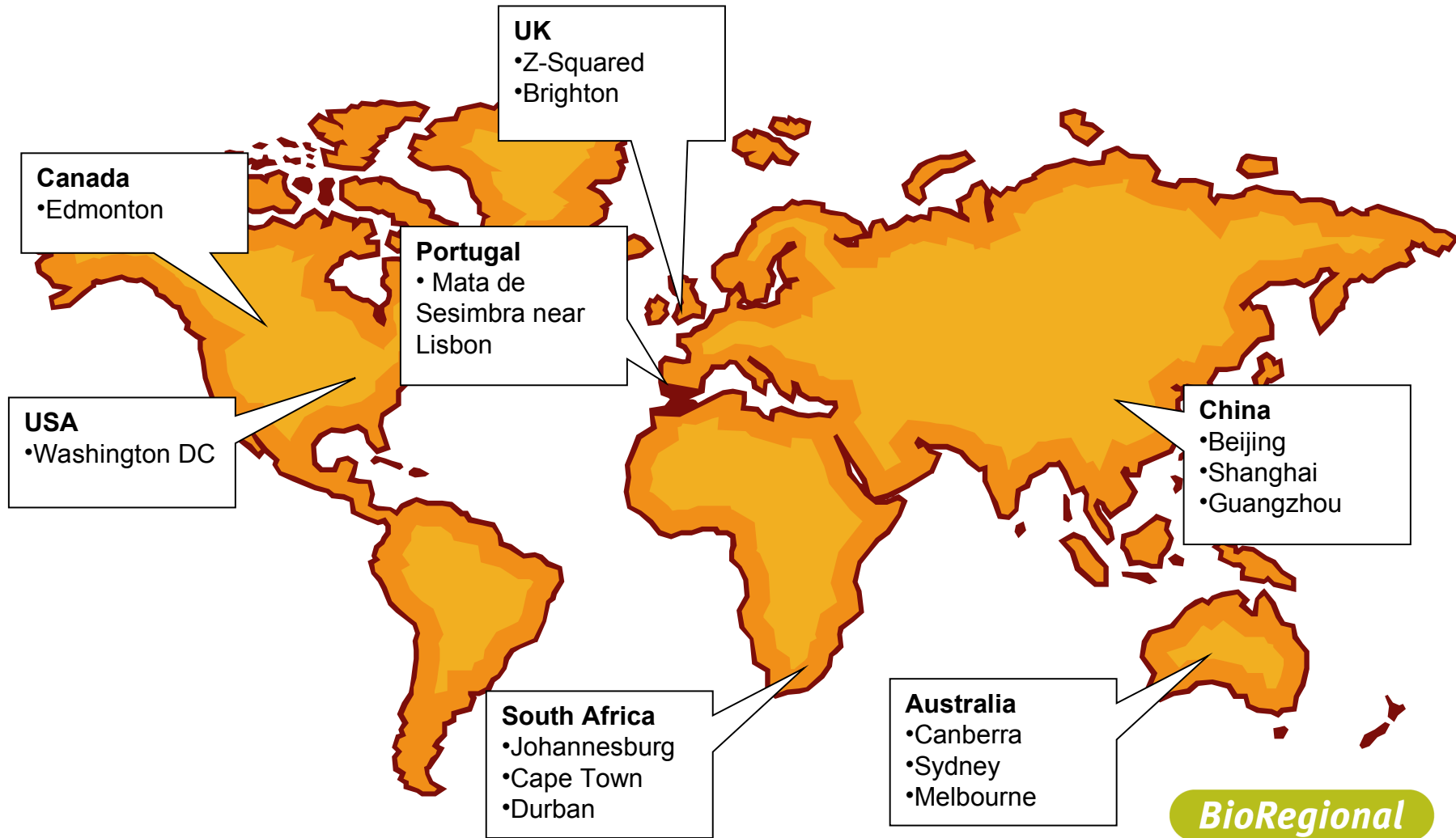
- Solutions for sustainability
- Production, sustainable communities, education
 - Forestry – FSC charcoal, biomass
 - Paper recycling
 - Hemp textiles
 - Consultancy
 - Sustainable transport
 - One Planet Living international communities



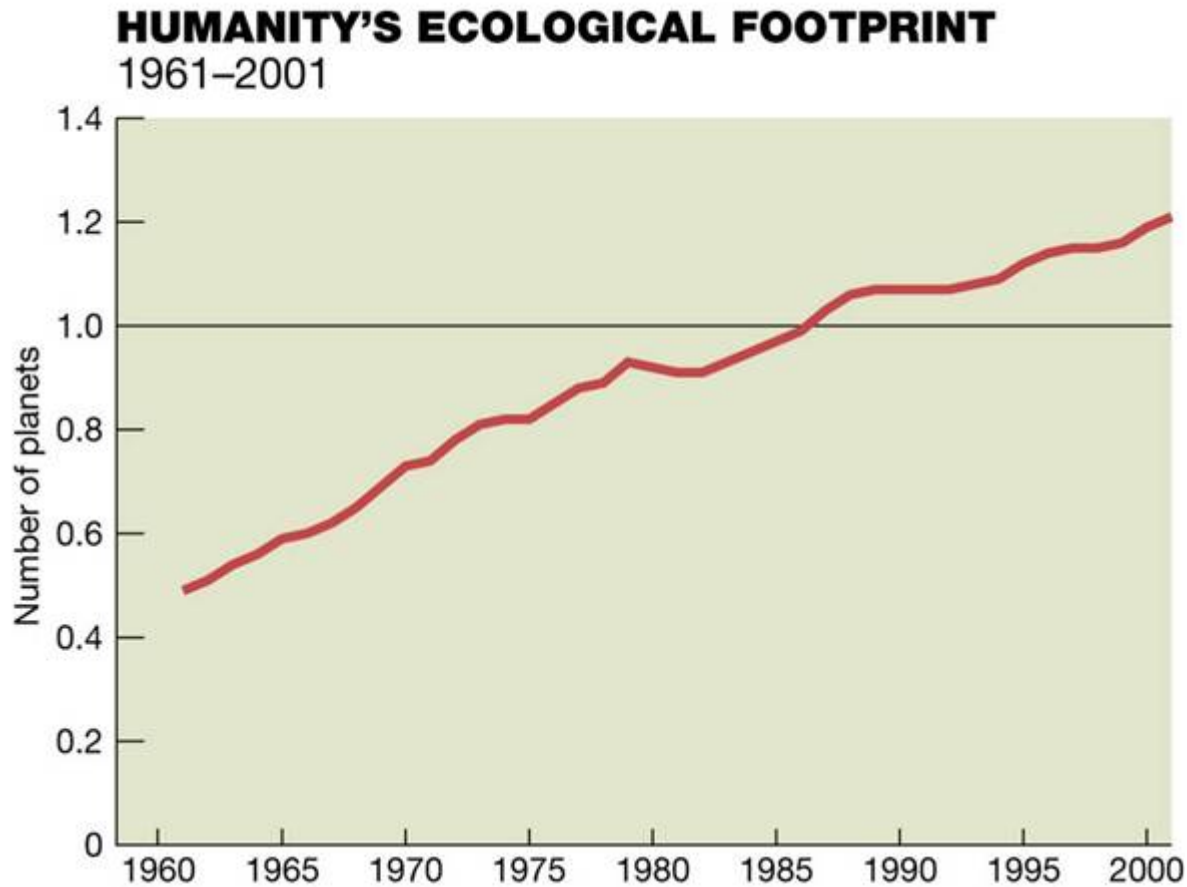
Towards a One Planet Olympics
Achieving a sustainable and green Olympic and Paralympic Games



One Planet Living Communities



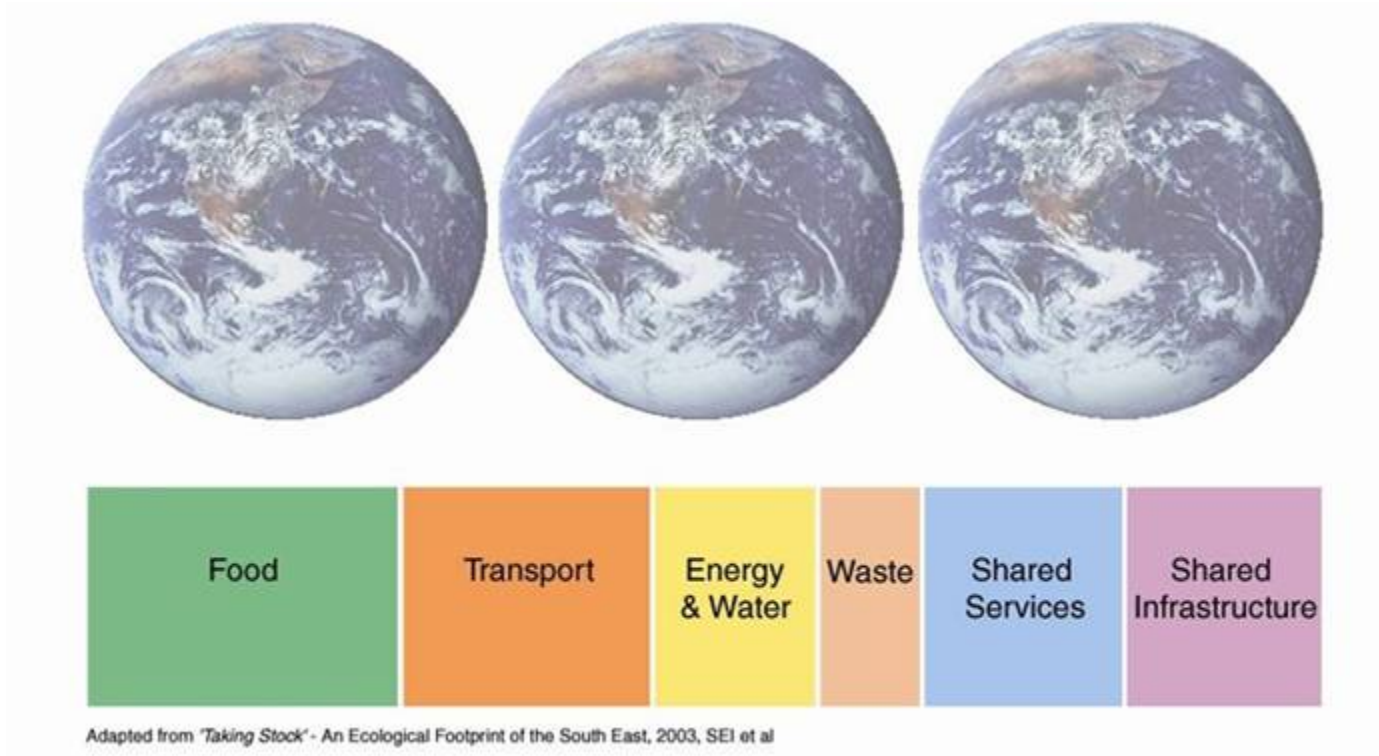
The sustainability challenge



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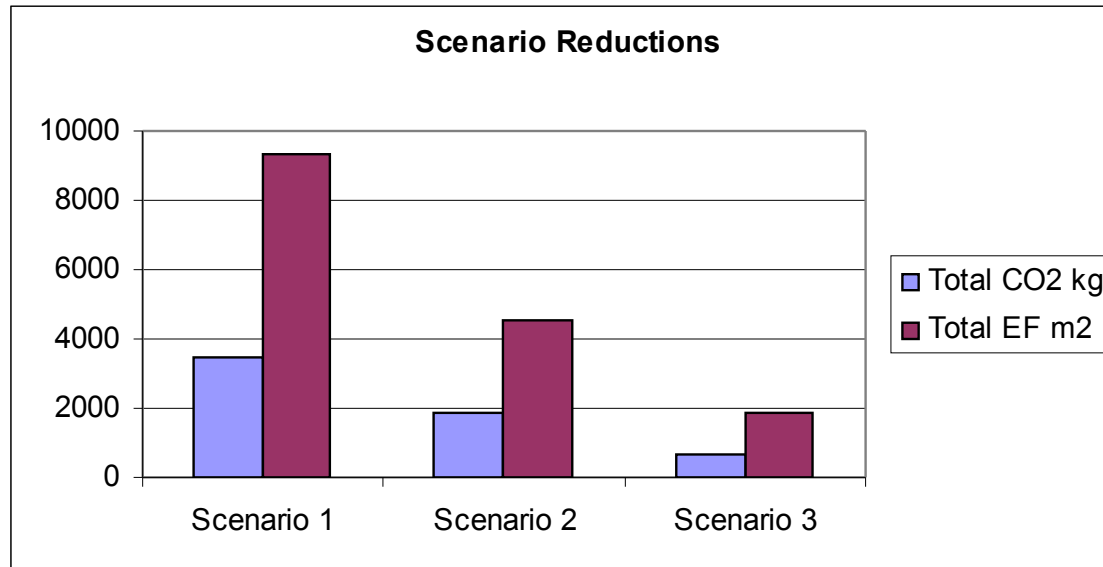
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The UK's challenge



Transport 20% of footprint

Sustainable Transport Targets



Kms per day	Target	Car	Per day	Train	Per day	Local bus	Per day	fly	Per day
60% global cut	276	1608	4.4	4605	12.6	2156	5.9	1528	4.2
90% cut and pop 9bn	50	291	0.8	834	2.3	391	1.1	277	0.8

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

Case Studies

- BedZED
- Brighton
- Clay Farm
- International examples

BedZED



Green Transport Plan

- Legal obligation under planning agreement
- 50% parking reduction
- Target 50% reduction in car use over ten years
- Tailored to location
- Monitoring results

Green Transport Plan

Key Aims

- Reduce the need to travel
- Promote public transport
- Offer alternatives to private car travel



Reducing the need to travel

- Mixed use
- Home working facilities
- Facilities on site
- Co-ordinated deliveries



Promoting alternatives

- Home zone design
- Cycle facilities, events and information
- Electric charging points
- Car Club
- Parking provision



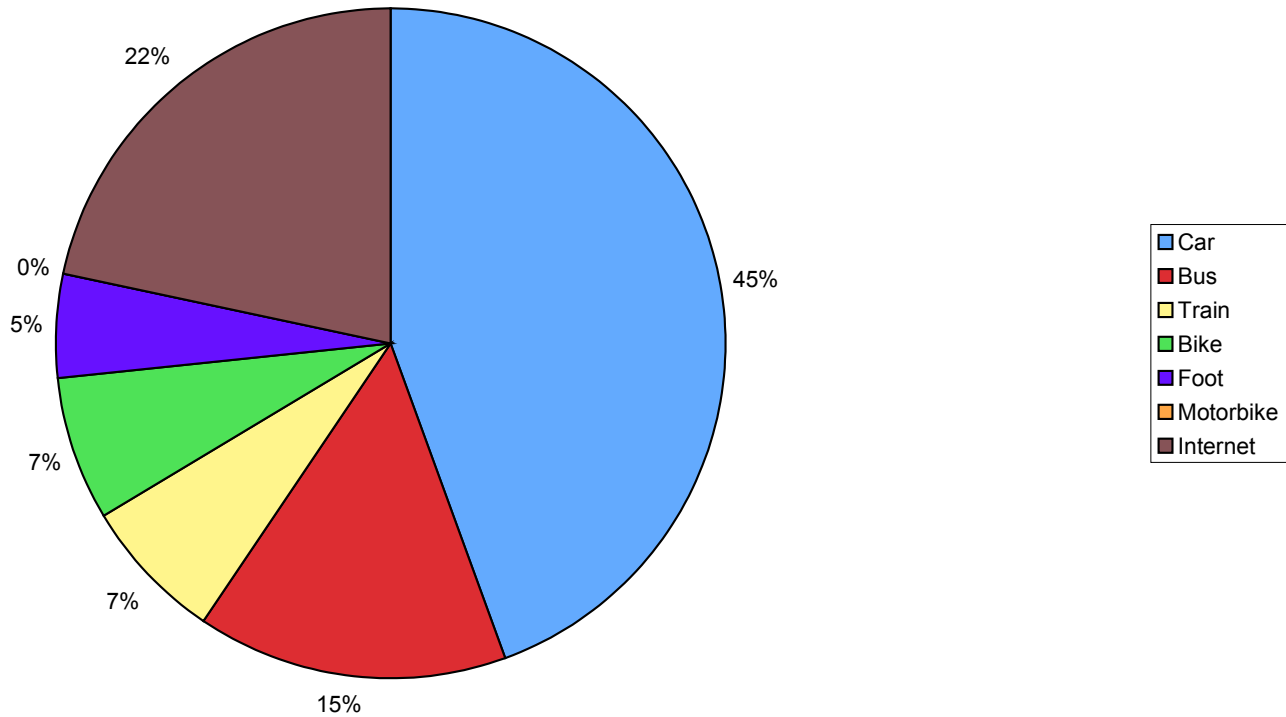
Monitoring - Results

- Car ownership: BedZED 59% (Sutton 71%)
- Bike ownership: 49%
- BedZED households drive 3,708 kilometres per year (approx 64% lower than national average)
- 27 households didn't fly, 44 fly 16,000km each!

Travel to work

Travel for shopping

Transport mode for shopping



Issues

- Parking
- Bike security
- Electric vehicles
- Flying



Financial Costs and Benefits

Costs:

Infrastructure:	£23,805
Staffing:	£45,000
Total:	£68,805

Benefits:

Planning gain	£1.16m
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Added value

OPL Brighton

Reducing the need to travel:

- Broadband and communal internet ordering point and collection facilities
- Mixed use
- Existing facilities and employment opportunities



Sustainable Alternatives

- No private parking
- Brighton station
- Green lifestyle pack and community extranet
- Discounts for public transport and car club
- Charging points for electric vehicles for use by car club and/or disabled drivers vehicles
- Secure bike parking
- Shower facilities in commercial units
- Cycle club
- Sustainable travel guidance
- PTP
- Green Transport coordinator

Cost savings

- BedZED: £1.16m
- Z Squared 2.5% construction saving (30% less parking)
- Cambridge Clay Farm – car free, £7m saving

OPL Portugal

- €90 million sustainable public transport network
- Hybrid eco-shuttles
- Car sharing scheme
- Free bicycles and car clubs on-site
- Eco points card



Masdar

- Zero emissions zone
- Preferential parking for high occupancy vehicles (HOV) and low emissions vehicles (LEV).
- City and regional train lines, LRT and hybrid / LEV buses.
- Coordinated deliveries
- Video conferencing
- Annual survey
- Car club
- Car sharing / intranet



Conclusion

- Car free is way forward
- Reducing need to travel is key
- Integrated public transport system
- On going monitoring
- Cost savings
- Awareness, discounts, coordinated delivery
- Bike security