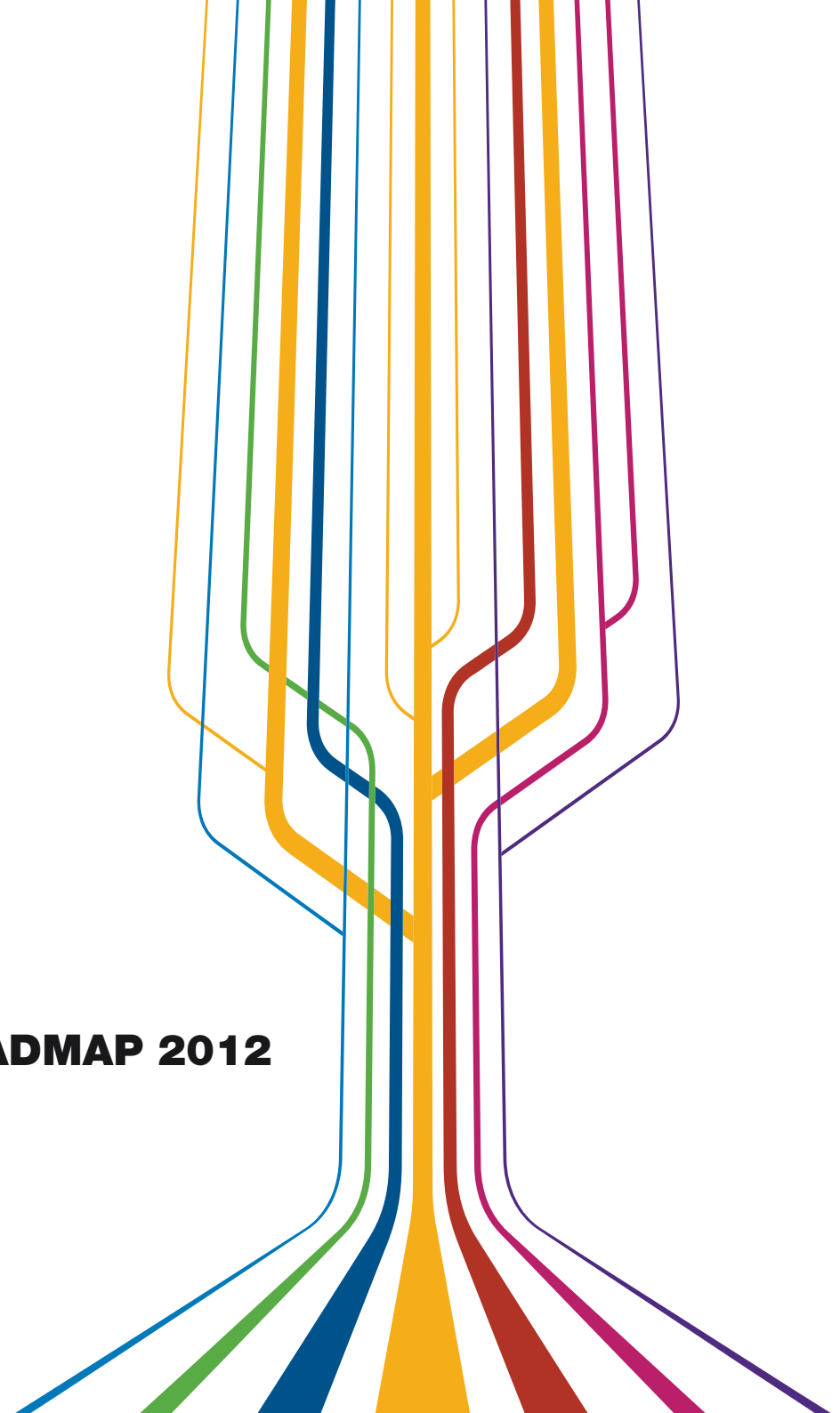


**CUNDALL**

**SUSTAINABILITY ROADMAP 2012**



Zero carbon

Making buildings more energy efficient and delivering all energy with renewable technologies

Zero waste

Reducing waste, 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 and selling sustainable products, that have a low embodied energy

Local and sustainable

Choosing low impact, local, seasonal and organic diets and reducing food waste

Sustainable water

Reducing water usage in buildings and in the products we buy; preventing flooding and pollution

Land use and wildlife

Protecting and expanding existing natural 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

Creating local economies that support fair employment, and international fair trade

Health and happiness

Encouraging active, social, meaningful lives to promote good health and well being



## 1.0 Introduction

Cundall is committed to reducing the environmental and social impact of our business, and to providing people with the knowledge, skills and enthusiasm to make a difference: at home, and at work, on our projects, and in the community.

Over the past 10 years we have delivered many exemplar green buildings and built up international expertise in sustainable design that is second to none. However, we recognise that we can do even more to embed sustainable thought and action into everything we do.

This Sustainability Roadmap illustrates our journey so far and sets out how we will deliver the core commitments contained in our Sustainability Policy. These relate to:

**Projects** - reducing the environmental impact of the buildings we design.

**People** - giving our staff the skills and enthusiasm to deliver sustainable solutions and make a positive impact on communities.

**Business** - monitoring and reducing our direct impacts including energy, travel and paper.

**Leadership** - actively involving ourselves in shaping the built environment for the future.

To define what we mean by “sustainability” we have adopted the One Planet Living practical vision of “a world in which people everywhere can enjoy a high quality of life within the productive capacity of the planet, with ample space remaining for wildlife and wilderness.”

In 2012, Cundall became the world’s first consultancy to be formally endorsed as a One Planet Company by BioRegional. This is based on a detailed Action Plan (a summary of which is included in this roadmap), which sets challenging and measurable, short and long term targets against each of the 10 One Planet Living principles, and the actions we will undertake to achieve these.

We are justifiably proud of our achievements to date in reducing the environmental and social impact of our business and our projects, and in driving change in the property industry. We look forward to continuing to play a full and active role in creating a built environment able to respond positively to the many challenges ahead.



David Dryden, Managing Partner - July 2012



### Awards

The sustainability of our business has been recognised through numerous awards including:

**Building/UK-GBC Sustainability Awards 2010**  
Sustainable Consultant of the Year

**Romanian Green Building Council Awards 2011**

Sustainable Company of the Year and Green Service Provider of the Year

**Building Services Awards 2009**

International Achievement of the Year and Innovation of the Year (Task Air workstation)

**West Midlands Constructing Excellence Awards 2012**

The Legacy Award: Sustainability

**Constructing Excellence in the North East Awards 2012**

Consultancy Practice of the Year Award

**ACE Engineering Excellence Awards 2010**

Research Studies and Consulting Award

**NE chamber of Commerce Awards 2010**

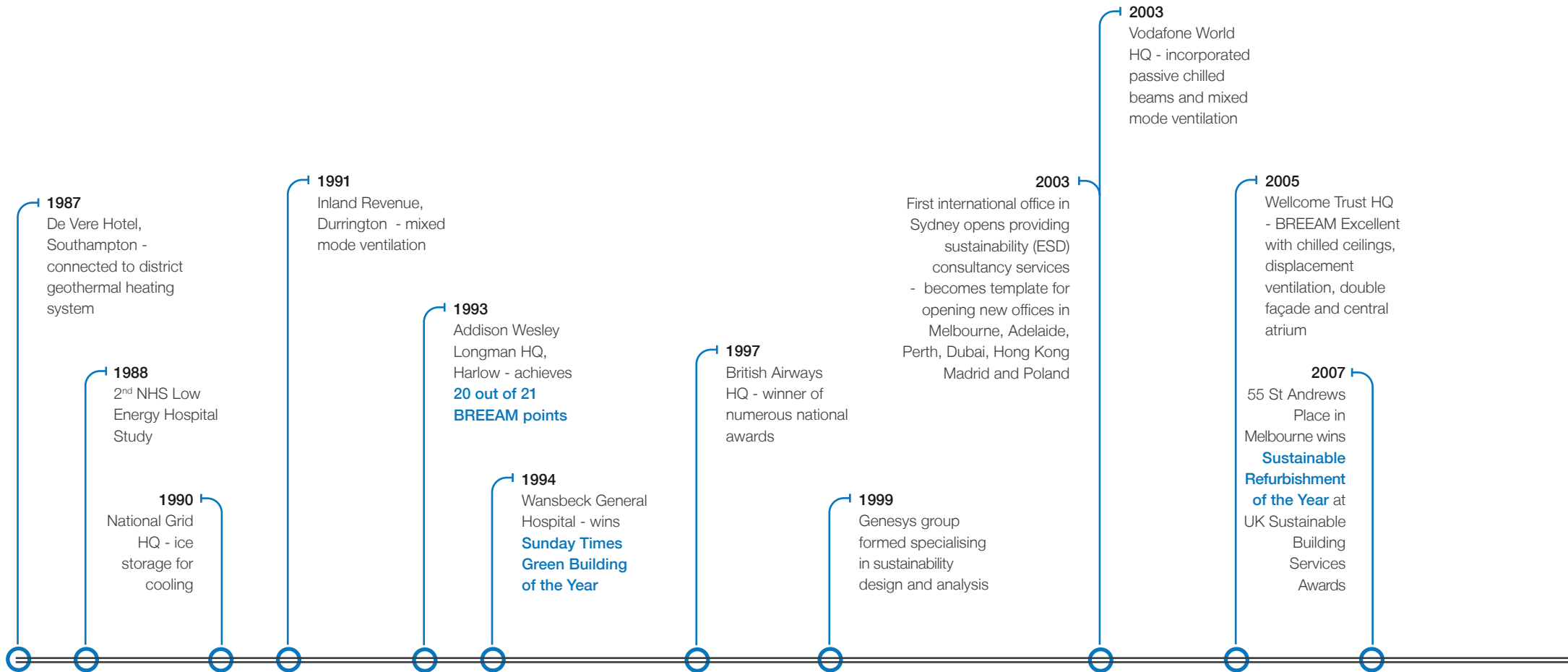
Green Business Award

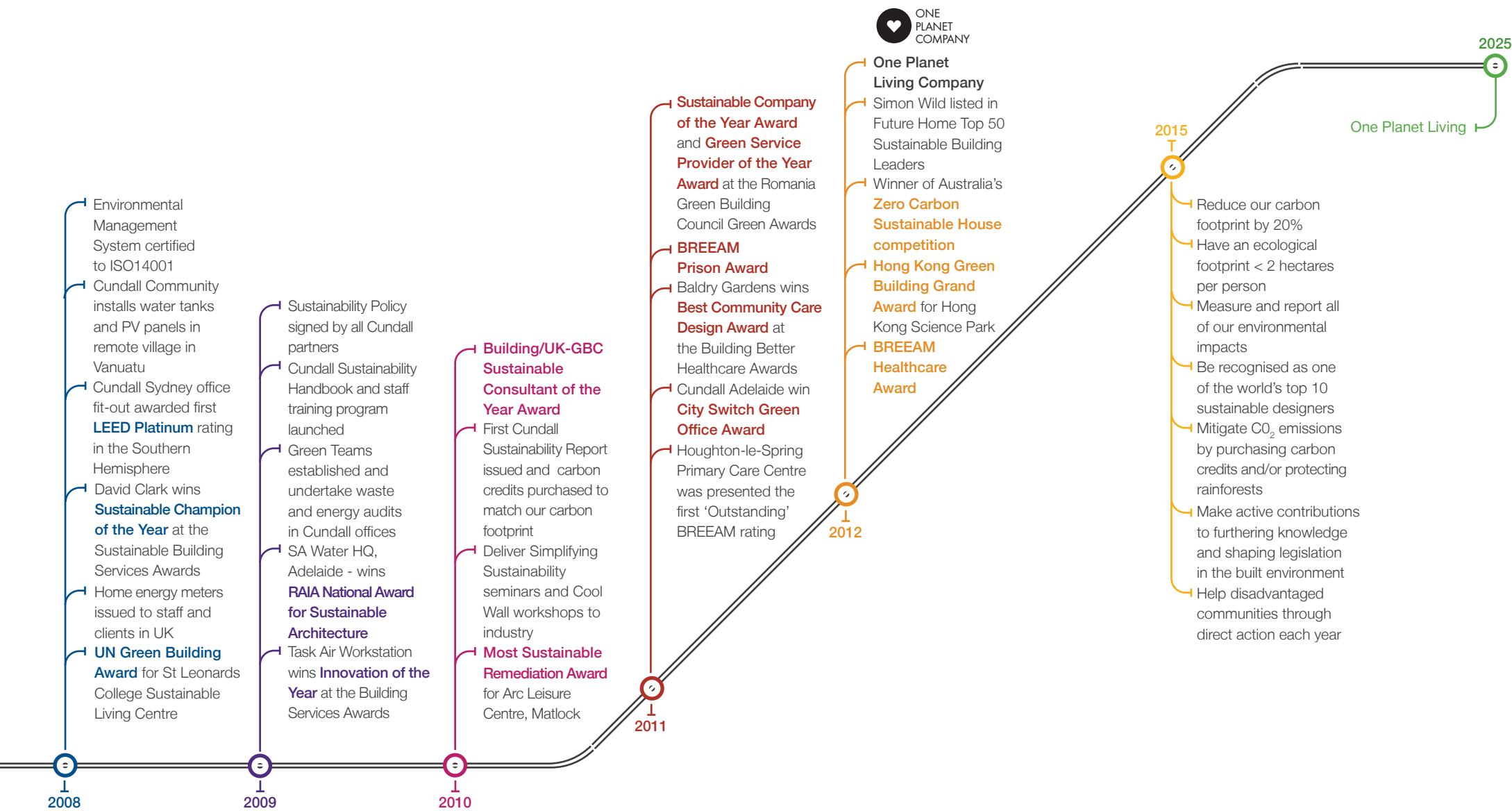
**Environment and Energy Awards 2011**

NQA Environmental Leadership Award for Cultural Change (finalist)

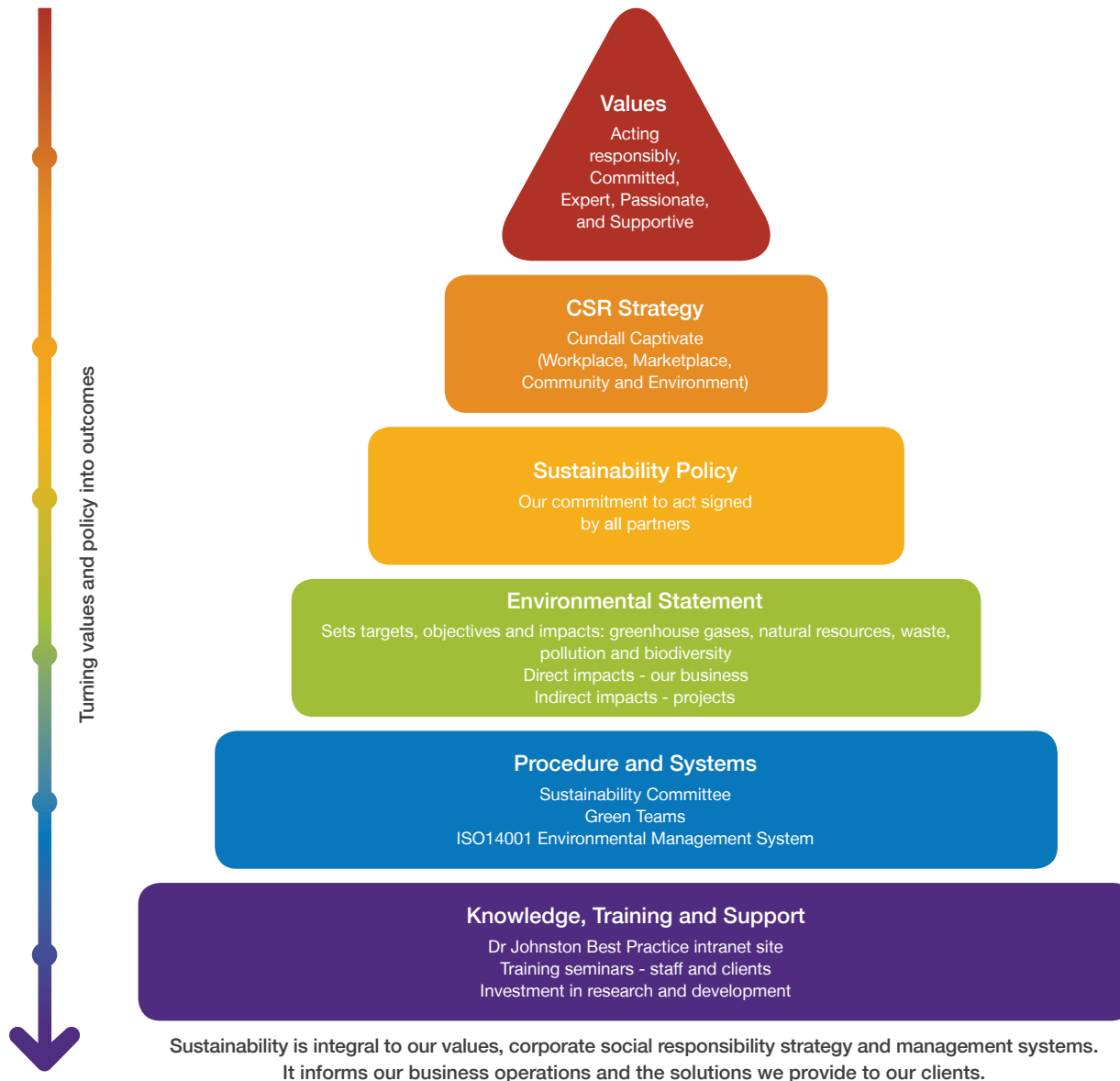
## 2.0 Our Sustainability Journey

---





### 3.0 A Framework to deliver



#### Environmental Statement

The Cundall Environmental Statement defines targets and actions to achieve our sustainability strategy each year and forms a core component of our Environmental Management System (EMS). It is reviewed and updated annually by the Sustainability Committee and then endorsed by the Management Board.

#### Environmental Aspects, Impacts and Actions

- identifies our direct and indirect environmental impacts and sets out the steps we will take to reduce these.

**Legal Requirements** - describes how we identify and access the applicable legal requirements related to our environmental aspects.

**Objectives, Targets and Programme** - establishes measurable targets consistent with our sustainability policy and describes our plan to achieve these.

**Responsibility** - describes who is responsible to establish, implement, maintain and improve the EMS.

**Training** - sets out the training we will provide to staff.

**Communication** - describes how we will communicate our environmental performance and EMS with staff, clients and interested parties.

**Monitoring Performance** - defines how we measure and report our environmental performance.

## 4.0 Sustainability Policy

### Our Sustainability Policy sets out our sustainability vision:

*“We will provide our clients with practical advice and solutions which: reduce the environmental impact of buildings, and; provide better spaces for the people who inhabit them. We will do so while providing safe, comfortable and healthy workplaces for our employees and believe that all employees play a key role in achieving our social and environmental goals.”*

### To achieve this we will:



#### Projects

Develop and encourage solutions to improve the environmental performance of every project we work on by considering practical ways to reduce greenhouse gas emissions, energy and water consumption, natural resource depletion, waste to landfill and pollution.

Develop and encourage solutions that provide better spaces for people through consideration of daylight, comfort, glare, internal air quality, noise and connectivity to nature.



#### People

Provide our staff with the skills, knowledge and enthusiasm to deliver practical environmental solutions through a strong commitment to training and knowledge sharing.



#### Leadership

Provide environmental leadership to the building industry through an active contribution to research and development, presenting at conferences and seminars, lecturing at universities and participation in key industry bodies.



#### Our Business

Reduce the environmental impact of our own operations by managing our energy and water consumption, encouraging use of cycling and public transport, recycling waste, implementing an eco-friendly purchasing policy and ensuring our new office fit-outs are a practical demonstration of environmental sustainability.

#### ISO14001

#### Management




Implement and maintain an Environmental Management System and seek to continually improve our environmental performance, comply with applicable legal requirements and prevent pollution.



#### Report

Report transparently on our environmental and social performance and make this available on our website.

## 5.0 Targets: People and Community


Target	Monitoring	Annual Indicator	Baseline	2015 Target	2025 Target
<b>Culture and Heritage</b>					
 Positively contribute to communities less fortunate than our own by donating time and skills	Community projects undertaken	No. of community projects undertaken (cumulative since 2009)	-	3	10
Increase financial support for local and international charities	Money raised by staff and / or donated by business	Money raised as a proportion of turnover	-	0.25%	0.5%
Install works by local artists in reception of each office		% of offices (with more than 10 staff) with local artworks	0%	25%	100%
<b>Equity and Local Economy</b>					
 Compliance with Ethical Business Policy	Human Resources Departments	No. of incidents of noncompliance with policy	0%	0%	0%
Pay all staff a "living wage"	Human Resources Departments	% of staff paid on an hourly rate less than "living wage"	5%	2.5%	0%
Extend existing flexible working policies to more members of the business	Human Resources Departments	% of staff with access to flexible working options	-	50%	100%
<b>Health and Happiness</b>					
 Measure and improve staff health and happiness at work	Great Place to Work survey (or equivalent)	% of staff agreeing its a great place to work	-	50%	85%
Workplace to have natural ventilation and/or connectivity to outdoors	Annual office survey	% of office floor area with natural ventilation or access to external work spaces	75%	75%	90%
Workplace to have good day lighting and/or external views	Annual office survey	% of office floor area within 7m of a window	80%	80%	90%
Sustainability training of staff	Training records	No. of sustainability training seminars held each year in Cundall offices	15	30	50
<b>Our People *</b>					
Increase skills in sustainability	Qualifications	No. of sustainability qualifications as % of staff	-	20%	40%
Industry recognition for our people	Awards	No. of awards for individuals (cumulative since 2009)	-	1	5

### Summary of actions

- Provide regular training for all staff in sustainability and One Planet Living.
- Make sustainability a core requirement for recruitment and career progression.
- Undertake regular staff satisfaction surveys to identify improvement opportunities.
- Incorporate sustainability into graduate training program for all disciplines (structural, civil, building services, etc).
- Further develop flexible working opportunities.
- Undertake Cundall Community projects each year.
- Provide matched funding for money raised through staff charity activities.
- Support relevant charities at an organisational level.
- Give preference to purchasing Fair Trade and local/organic products.
- Implement cycle to work schemes.






## 5.0 Targets: Our Business

Target	Monitoring	Annual Indicator	Baseline	2015 Target	2025 Target
<b>Zero Carbon</b>					
 Reduce tenant office energy (light and power)	Energy bills	kWh / m <sup>2</sup> of GIA	165	150	100
Reduce total office energy (incl landlord)	Energy bills and landlord statements	kWh / m <sup>2</sup> of GIA	280	250	200
Reduce CO <sub>2</sub> emissions due to total office energy consumption (including landlord)	Energy bill and landlord statements	tonnes CO <sub>2</sub> e	567	500	0
Procure electricity from renewable energy sources	Energy bills audit	% of direct renewable energy	0%	50%	100%
<b>Zero Waste</b>					
 Reduce waste generated	Waste audit	tonnes of waste	64	58	45
Reduce waste sent to landfill by reuse and recycling	Waste audit	% of recycled or reused by weight	60%	80%	95%
Purchase UK renewable energy credits to offset CO <sub>2</sub> emissions from waste	Audit	% of CO <sub>2</sub> emissions offset	0%	100%	100%
<b>Sustainable Transport</b>					
 Reduce emissions due to business travel	Audit	tonnes CO <sub>2</sub> e	496	450	325
Reduce emissions due to staff commuting	Travel survey	tonnes CO <sub>2</sub> e	510	450	325
<b>Sustainable Materials</b>					
 Reduce paper consumption	Accounts	kg of paper / person	-	tbc	tbc
Purchase recycled or FSC certified paper	Accounts and audit	% FSC or recycled	30%	100%	100%
Fit-out our offices sustainably	SKA or LEED ratings for new fit-out >1000m <sup>2</sup>	% of new fit-outs with Gold rating or equivalent	-	75%	100%
Use natural cleaning products to reduce ecological impact	Audit	% of offices using natural products	-	50%	90%

### Summary of actions

- Establish Green Teams in offices outside the UK.
- Develop and implement a Low Energy Action Plan for each building.
- Develop IT Energy Efficiency Action Plan.
- Discuss with landlords how to reduce their energy and water consumption.
- Display monthly energy consumption charts in all offices.
- Undertake waste and water audits annually
- Install composting facilities where space available.
- Eliminate use of plastic/paper cups.
- Active staff training in energy, waste and water conservation.
- Prepare Green Travel Plans for each office.
- Install VC systems in all offices and enable web conferencing on all PCs and laptops.
- Develop and implement a Sustainable Purchasing Policy for office consumables.
- Provide cleaners with natural cleaning chemicals.

## 5.0 Targets: Our Business

Target	Monitoring	Annual Indicator	Baseline	2015 Target	2025 Target
<b>Local and Sustainable Food</b>					
 Buy organic and / or Fair Trade tea, coffee, sugar for staff and meetings	Audit	% of food by cost	50%	75%	90%
Request our suppliers provide local, seasonal and / or organic food for meetings and functions	Forms reformed from our suppliers	% of food by cost	0%	50%	75%
Reduce amount of meat and fish in food we purchase	Audit	% of vegetarian food purchased	-	30%	60%
<b>Sustainable Water</b>					
 Reduce water consumption	Water meters (where installed)	m <sup>3</sup>	3260	3000	2150
<b>Land Use and Wildlife</b>					
 Provide native habitat for birds and insects outside our offices (where possible)	Visual inspection	% of viable offices with habitat provided	-	25%	75%
Participate in tree planting or other local wildlife/conservation activities	Green team	% of staff participations each year	-	5%	5%
<b>Our Business *</b>					
Reduce carbon footprint	Cundall carbon footprint report	tCO <sub>2</sub> / person (before carbon offsets)	2.3	2.0	1.5
Purchase carbon credits or mitigation measures	Carbon offset certificate	% of total CO <sub>2</sub>	-	100%	150%
Win awards recognising the sustainability of our business		No. of corporate awards since 2009	-	5	20
Obtain certified energy ratings for offices with more than 10 staff	DEC / NABERS ratings	% of offices with certification	-	80%	100%

### Summary of actions

- Send questionnaire out to all food suppliers.
- Prepare fit-out guidelines for new offices.
- Install water efficient products in tenancy areas.
- Identify opportunities to create native habitat on or near our buildings.
- Obtain and display annual energy ratings (DEC/NABERS) in office receptions.
- Install low flow showerheads in tenancy showers.

## 5.0 Targets: Projects and Leadership

Target	Monitoring	Indicator	Baseline	2015 Target	2025 Target
<b>Projects *</b>					
<b>Environmental ratings</b>	Rating tools	No. of buildings with certified BREEAM, LEED and Green Star ratings (cumulative since 2009)	-	50	200
<b>Industry recognition of our work</b>	Awards	No. of awards for sustainability projects (cumulative since 2009)	-	20	50
<b>Top 20% building performance</b>	NABERS, DEC / EPC, Part L, BCA, relevant country legislation or benchmarks	% of buildings in top 20% compared to national energy benchmarks	-	50%	75%
<b>Leadership *</b>					
<b>Investment in R&amp;D</b>	Accounts	% of turnover invested in R&D	-	1%	1.5%
<b>Representation on industry committees</b>	Audit	No. of committees / groups we are members of	-	10	20
<b>Leaders in innovation</b>	Awards	No. of innovation awards (cumulative since 2009)	-	5	15

### Notes

\*These targets are additional to our One Planet Company Action Plan

### Summary of actions

- Identify and champion sustainability improvement options on all projects for client consideration.
- Obtain input / advice from our specialist teams (energy, lighting, environmental, etc) on projects.
- Implement practical and robust environmental solutions on all of our projects.
- Maintain ISO14001 in all offices with more than 10 staff.
- Establish process to obtain actual energy consumption of buildings we design during their operation.
- Continually update our or Dr Johnston best practice intranet site.
- Provide regular training for all staff in sustainability.
- Establish stronger links with universities
- Identify and undertake R&D projects to further knowledge and develop new techniques / solutions.
- Regularly speak at conferences and prepare articles / papers.
- Write and publish books and guides on sustainability.

## 6.0 Reporting our performance

Cundall is fully committed to publicly reporting progress and performance against our policies and targets. This is critical to maintaining momentum and demonstrating to our stakeholders (clients and employees) that we are serious about making a difference.

Our sustainability reports describe what we have achieved each year, where we have made progress, where we need to improve and what actions we will take to achieve our vision and targets for:

- Our Business
- People
- Projects
- Leadership

Our Sustainability Report will also include:

- A summary of our One Planet Company report audited annually by BioRegional.
- A carbon footprint supplement showing how we calculate our carbon emissions.
- A Level 2 report containing all core aspects in the Global Reporting Initiative:
  - Environmental
  - Economic
  - Human Rights
  - Labour Practices
  - Product Responsibility
  - Society

### Extract from sustainability report establishing baseline

#### Summary



#### Our Business

monitoring and reducing direct impacts such as energy, travel, paper and waste

**2007/08**  
1118 tCO<sub>2</sub>e  
2.28 tCO<sub>2</sub>e/person

**2008/09**  
1104 tCO<sub>2</sub>e  
2.27 tCO<sub>2</sub>e/person  
35kg of paper/person

- Set a target of 10% reduction in tCO<sub>2</sub>e and tCO<sub>2</sub>e/person for 2009/10.
- Established Green Teams in each office with staff volunteers to identify and implement ways to reduce our environmental footprint.
- Achieved first LEED Platinum rating in the southern hemisphere for our Sydney office fitout.
- Melbourne and Sydney office fitouts were both highly commended in BPN Environ Sustainability Awards (2007 and 2008).
- Made extensive use of video conferencing and smart boards to reduce travel between offices.
- Purchased carbon credits to offset 2008/09 global emissions.
- Purchased government accredited green power (100% wind and solar) for our offices in Australia.
- Achieved ISO14001 certification for our Environmental Management System in UK offices.

tCO<sub>2</sub>e = tonnes of carbon dioxide equivalents



#### Our People

giving our staff the skills and enthusiasm to deliver sustainable solutions

**2008/09**  
81 qualifications for green rating assessors/advisors

- Cundall Community initiative established to put something back into disadvantaged communities in 2008. First projects were in Vanuatu and South Africa.
- Became a patron of charity RedR.
- 1 green building rating qualification for every 6 members of staff.
- Cundall Captivate launched to inform staff about our approach to Corporate Social Responsibility (CSR).
- Comprehensive in-house sustainability training program developed (to be rolled out in 2009/10).
- Sustainability to form part of staff appraisals from 2010 onwards.



#### Our Projects

reducing the environmental impact of the buildings we design

**2007-09**  
29 projects certified using BREEAM, LEED and Green Star (38% of these projects with highest rating\*)

- Won numerous sustainability awards between 2007/09 including Sustainable Refurbishment of the Year 2007.
- 115 projects registered with BREEAM, LEED and Green Star.
- Provided design/advice on first certified 6 star Green Star projects in Queensland and South Australia.
- A Building Design survey in 2008 identified Cundall as being in the top 7 Engineers worldwide who Architects most like working with.

\* BREEAM Excellent, LEED Platinum and 6 Star Green Star.



#### Leadership

actively involved in shaping the built environment for the future

- Task Air Workstation won Innovation of the Year at Building Services Awards 2009.
- 180 Great Portland Street won Innovation Award at BCO Awards 2008.
- David Clark won Sustainability Champion of the Year at the Sustainable Building Services Awards 2008.
- The "Cundall Sustainability Seminars" launched to provide information, guidance and case studies about current and future sustainability issues in the built environment.
- Active participants on various industry committees.
- Presentations on sustainability at numerous conferences and seminars in UK, Australia, Asia, South Africa and Europe.



## 7.0 Cundall projects



**Hong Kong Green Building Grand Award 2012**

Hong Kong Science Park, Phase 3  
Hong Kong

**BREEAM 'Excellent' and CEEQUAL Excellent ratings**

Lee Valley White Water Centre,  
Hertfordshire, UK



**Winner of 2012 Zero Carbon Challenge**

Australia's Zero Carbon Sustainable House Competition



**BREEAM 'Excellent' data centre**

Cobalt Data Centre 1, Newcastle,  
UK



**BREEAM España 'Excellent'**

Prado Business Park, Madrid, Spain



**BREEAM Refurbishment 'Very Good'**

Toffee Factory Incubation Units,  
Newcastle upon Tyne, UK



**First healthcare project to achieve a BREEAM 'Outstanding' rating**

Houghton le Spring Primary Care Centre, Tyne and Wear, UK



**The Milo Dunphy Award for Sustainable Architecture**

1 Bligh Street, Sydney, Australia

**Living Building Challenge - aiming to be Europe's first**

Ecobiblioteca, Cacica, Romania

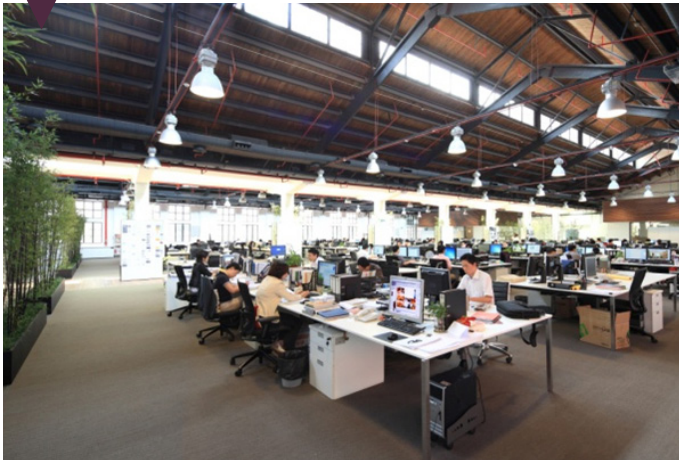




## 7.0 Cundall projects

### LEED Gold

Regulation and Supervision Bureau (RSB) Office, Abu Dhabi, United Arab Emirates



### 6 Star Green Star

SA Water House, Adelaide, Australia



### BREEAM 'Excellent' Rating

Basepoint Business and Innovation Centre, Luton, UK



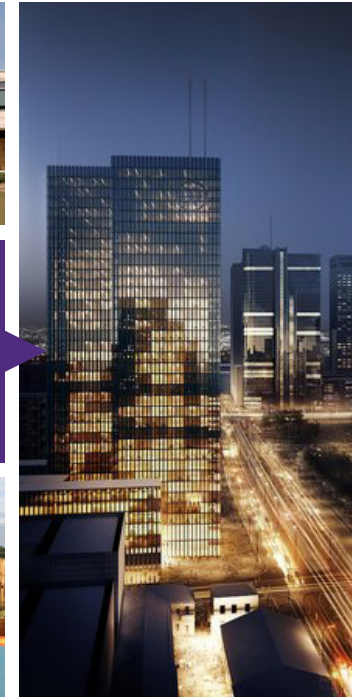
### BREEAM 'Very Good'

Knowsley SEN, Liverpool, UK



### LEED Project

Stara Mennica, Warsaw, Poland



### LEED-CS Gold rating

Ascendas iHub Suzhou, Suzhou, China



### 5 Star Green Star

Westfield Sydney City, Sydney, Australia





## 7.0 Cundall projects



### Green Hospital

Royal Children's Hospital,  
Melbourne, Australia

### 5 Star Green Star

Suzanne Cory High School,  
Melbourne, Australia



### BREEAM 'Very Good'

Waverley Court, City of Edinburgh  
Council Headquarters, Edinburgh,  
UK

### Sustainable Remediation Award

Arc Leisure Matlock, Matlock,  
Derbyshire, UK



### 'A' rated EPC

Luton Academies, Luton, UK

### NEAT 'Excellent'

Cleadon Park, South Tyneside, UK



### 5 Star Green Star

Plumbing Industry Climate Action  
Centre (PICAC), Melbourne, Australia



### Green Star Consultant

Insurance Australia Group (IAL)  
Parramatta, Sydney, Australia



**Core services**

Building services engineering  
Structural engineering  
Civil engineering  
Sustainability

**Specialist services**

Acoustic engineering  
Building automation  
CDM Coordination  
Critical systems  
Fire engineering  
Geotechnical engineering  
IT and communications  
Lighting design  
Planning  
Survey solutions  
Transportation  
Vertical transportation

For further details on this roadmap please contact  
David Clark - [d.clark@cundall.com](mailto:d.clark@cundall.com)

Asia Australia Europe MENA UK

[www.cundall.com](http://www.cundall.com)  
© Cundall Johnston & Partners LLP

