

United Nations Global Compact:
Communication on Progress 2008



ARUP

United Nations Global Compact: Communication on Progress 2008

A report on Arup's position in relation
to the Compact and its Principles



Introduction

Arup is a global firm of planners, designers, engineers and business consultants. We provide a diverse range of professional services to clients around the world, exerting a significant influence on the built environment. The firm is the creative force behind many of the world's most innovative and sustainable building, transport and civil engineering projects and design technologies.

Since 1946, we have been helping clients create a more sustainable future by integrating environmentalism and social purpose into our projects. This commitment to sustainability influences the way we conduct our business, the way we treat our staff and the way we interact with the community and society as a whole. Our mission to 'shape a better world' defines our purpose.

We have over 10,000 employees based in more than 90 offices across 37 countries, working on up to 10,000 projects at any one time. Our unique structure, with the firm held in trust on behalf of its employees, gives us complete independence. Our multidisciplinary approach means that any given project may involve people from any or all parts of Arup. Our aim is to achieve excellence in all we do by bringing together the best professionals in the world to meet our clients' needs.

At the heart of our business – and the way we do business – lies the Key Speech and our core values. These are the ways of working that were defined by our founding partners in 1946 and expressed (in the Key Speech) by Ove Arup in 1970. The principles which we try to work by comprise six aims (quality of work; holistic approach; humane organisation; straight and honourable dealings; social usefulness; and reasonable prosperity of members); four means (a membership of quality; efficient organisation; solvency; and unity and enthusiasm); and three results (satisfied members; satisfied clients; and good reputation and influence).

The Key Speech is the high-level framework that guides appropriate behaviour within the firm. Our Global Codes of Practice support this with appropriate policy-level statements, which are supported by local procedures as necessary.

Our culture, values and ethos have always defined how we operate all aspects of our business. They reflect how we have always endeavoured to be: holistic, innovative and creative, while also being socially responsible. But Arup is on a journey of continuous improvement. Rapid growth over the last few years has meant that we have had to look at our position in more procedural ways so as to be consistent about our approach to it across the firm and to effectively measure our progress. We launched our Sustainability Policy in September 2007. Owned by our Group Board and born out of staff engagement, it calls for a systematic approach to sustainability across all areas of business, highlighting our objectives and outlining the actions that we will take in four key areas: our business, our people, our facilities and our external relationships. The Policy provides a shared language to talk about and implement sustainability across the firm, influencing our firm for the better. See **Attachment 1** for our Sustainability Statement 2007.

In October 2005, Arup Group became a signatory to the UN Global Compact. The Compact has successfully engaged thousands of companies globally in considering their responsibilities towards labour standards, human rights and environmental management. These are all areas which Arup believes need active consideration and management, and our Communication on Progress aims to set out our position on the themes that the Compact highlights and identifies areas where we are aiming to develop our performance.



Human Rights

Principle 1:

Businesses should support and respect the protection of internationally proclaimed human rights within their sphere of influence; and

Principle 2:

make sure that they are not complicit in human rights abuses.

Arup approach

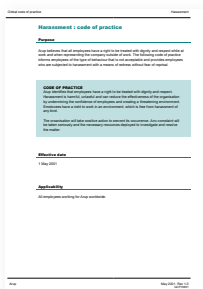
Our people are our most significant asset. The goals set out in our Sustainability Policy are closely aligned to our human resources goals. It is vitally important to ensure that we employ staff that share our vision for a sustainable future and that we retain staff by giving them the opportunity to fulfil their potential.

We operate globally; our services and advice are developed and delivered across the world. In the course of conducting business in 'high risk areas', we are committed to ensuring that we are not complicit in human rights abuses and monitor this within our sphere of influence. Consultation and interplay between management and staff are managed on a country-by-country basis to ensure cultural appropriateness.

We aim to act honourably in our dealings with our own and other people; treating people fairly, respecting the sanctity of human life and allowing gifted people to unfold. We are also committed to providing a work environment that is free from any form of harassment or intimidation by eliminating any form of behaviour or abuse that could affect an individual's self esteem, including bullying and victimisation. We aim to operate in an environment where we demonstrate consideration for people and respect for the job they do when they are striving to achieve the best that they can.

If we were to find ourselves inadvertently implicated in abuses of human rights, we would take immediate steps to rectify such a situation.

Implementation



See **Attachment 2** for our Global Code of Practice for Harrassment.

We are currently developing our Global Code of Practice for Human Rights.



Labour Standards

Principle 3:

Businesses should uphold the freedom of association and the effective recognition of the right to collective bargaining;

Principle 4:

the elimination of all forms of forced and compulsory labour;

Principle 5:

the effective abolition of child labour; and

Principle 6:

eliminate discrimination in respect of employment and occupation.

Arup approach

We recognise that to produce work of high quality, to maintain our reputation for innovation and creativity and to understand and delight our clients we need to fully embrace the skills, talents and knowledge that only a diverse workforce can deliver.

We work to ensure that everyone feels their contribution is valued and their successes are celebrated through our processes and through our training and development, which will encourage knowledge sharing, intellectual growth and stimulation.

We recognise that labour standards and conditions may vary from country to country. Our employment and recruitment practices will adhere to, and strive to exceed, local legislation wherever we work in the world. We aim to ensure that our people have satisfactory wages and working conditions, and that there is no exploitation of labour that we are aware of and don't knowingly condone. We comply with the relevant laws relating to employment and employment conditions in each country we work in. Subject to relevant laws in the countries where we operate, we fully respect the right of our people to freedom of association and representation. We have developed peer-to-peer communications channels and we have effective formal and informal channels between management and staff. *(continued overleaf)*



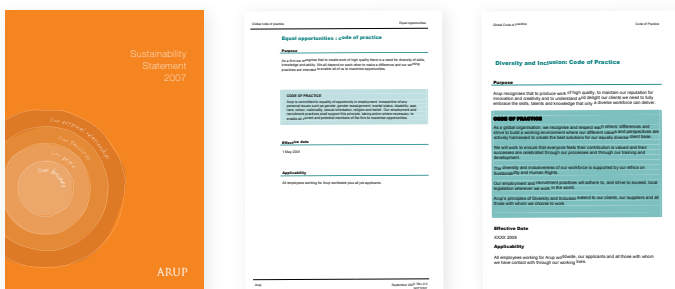
Labour Standards (cont.)

We ensure that Arup people work in an environment that is free from all forms of discrimination – gender, race, origin, background, religion, marital status, sexual orientation, disability or age – and that they are valued as individuals and treated with dignity and respect. We offer equal employment opportunities to all. The people we recruit and promote are selected on merit and suitability.

The goals set out in our Sustainability Policy are closely aligned to our human resources goals, which include increased diversity to reflect the communities in which we operate and the desire to facilitate appropriate work-life balance.

If we were to find ourselves inadvertently implicated in abuses of labour standards, we would take immediate steps to rectify such a situation.

Implementation



See **Attachment 1** for our Sustainability Statement (the 'Our people' section).
See **Attachment 3** for our Global Equal Opportunities Code of Practice.
See **Attachment 4** for our Global Diversity and Inclusion Code of Practice.



Environment

Principle 7:

Businesses should support a precautionary approach to environmental challenges;

Principle 8:

undertake initiatives to promote greater environmental responsibility; and

Principle 9:

encourage the development and diffusion of environmentally friendly technologies.

Arup approach

Our line of business means that we have a particular interest in the environmental aspects of development and redevelopment. We feel that we are in an excellent position to work with our clients to improve environmental impacts of our projects for them, as well as working to maintain high standards in the way that we undertake our business.

We have embraced the concept of a combined management system, which involves the alignment of our processes and management systems to incorporate quality and environmental best practices.

We work with our clients to pursue, promote and develop sustainable outcomes that support their businesses. It is our intention to incorporate sustainability into all our projects: to provide value to our clients by building upon our reputation for integrated design and a holistic approach.

We evaluate our service offering, skill sets and clients from a sustainability perspective. We look at the risks and opportunities of our projects and, most importantly, commit to discussing these with our clients. We continually assess our performance to ensure the long-term economic, environmental and financial viability of the firm. In all instances we will support innovative approaches. Our Sustainability Policy will be implemented through local strategies and will not be prescriptive. In order to maximise the opportunity for us to give excellent sustainability advice to our clients, we will strive to find ways to embed this thinking into everyday consulting life for all staff.

Our facilities and operations reflect our values and commitment to sustainability. All business activities have an impact on the environment and it is crucial that decisions made in this area minimise this impact.

We are working towards a clearer understanding of our environmental impacts due to travel and operations. By putting in place a coordinated management approach and by setting targets for usage of energy, water and other consumables in the office environment, we can begin to measure our progress in these areas. We are taking steps to minimise the carbon emissions associated with our operations and will endeavour to prevent pollution within the scope of our activities. Sustainable procurement of goods and services will also be addressed. *(continued overleaf)*



Environment (cont.)

We continue to create a working environment that is conducive to our designers, engineers, planners and consultants working together to create cost-effective sustainable outcomes. Our goal is to have facilities of a high standard, with minimal environmental impact. Furthermore, these facilities should be designed to help improve productivity, morale and staff health. They should be places that we are proud to bring our clients to, where we can demonstrate we are 'walking the talk' as far as sustainability is concerned.

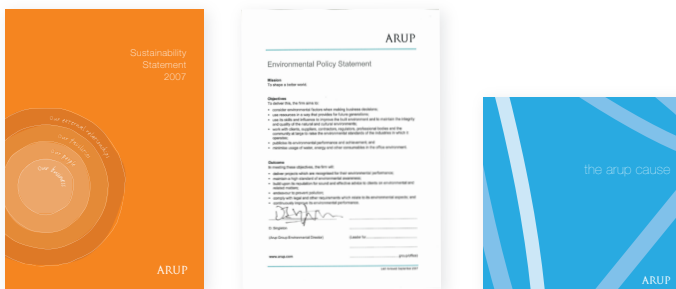
Our Design and Technical Executive promotes the highest standards of design and technical excellence in all that we do to ensure that the firm is one of the world's leading practitioners in its chosen fields.

Our Research and Development Team provides the focus for research, development and foresight across the firm and plays a fundamental role in the development of our most valuable product – our collective knowledge.

Our Foresight and Innovation team is dedicated to managing the firm's global innovation programme, gathering and taking views on emerging technologies, and sharing these experiences with Arup offices and our clients around the world. The team is charged with maintaining a focus for logical, analytical thought about the many possible futures that we confront. The aim is to create tangible solutions through the implementation of change. The output of the work is threefold: to gain insight into 'new' and 'next' technologies and their potential impact, to gain enhanced insight into the forces influencing future business, and to create a roadmap of a future world from the perspective of those experiencing it.

Our *Working at Arup Survey* (2007) revealed that 83% of our staff believe that the company makes a positive difference to the world we live in. We recognise that the firm must live up to staff expectations and continue to make a difference.

Implementation



See **Attachment 5** for our Global Environmental Policy Statement.

See **Attachment 6** for the Arup Cause brochure.

See **Attachment 1** for our Sustainability Statement 2007.

Business practice

Principle 10:

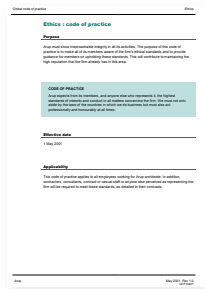
Businesses should work against corruption in all its forms, including extortion and bribery.

Arup approach

Our work takes us to locations where corruption can be considered a normal part of doing business. The firm is adamant that none of our members should be involved, or feel pressured to be involved, in such practices and we make clear our position on these matters to all who may be in such a situation.

Overall, the firm adheres to an Ethics Code of Practice that rejects corruption absolutely. We expect from our members, and anyone else who represents the firm, the highest standards of integrity and conduct in all matters concerning the firm. We must not only abide by the laws of the countries in which we do business but must also act professionally and honourably at all times. We endeavour to maintain our high standards and work with others who have similar views.

Implementation



See **Attachment 7** for our Global Ethics Code of Practice.

10

Attachment 1:
Sustainability Statement



Sustainability
Statement
2007



ARUP

Influencing the future together

Following Arup's adoption of a Sustainability Policy in 2007, we now provide a summary of Arup's sustainability approach and performance. Much of the content anticipates our future; however we have provided a series of performance indicators to compare our performance in the last year (1 April 2006 to 31 March 2007) to previous years.

Living by our values

Since 1946, Arup has been helping clients create a more sustainable future. Our founder, Sir Ove Arup, was an engineer and philosopher who believed in integrating environmentalism and social purpose into our projects. This commitment to sustainability influences the way we conduct our business, the way we treat our staff and the way we interact with the community and society as a whole. Our mission to 'shape a better world' defines our purpose.

Our approach

Our approach to business has always aimed to deliver solutions based on the cornerstones of sustainability: environmental integrity, economic viability, social welfare and efficient resource utilisation. It embodies our spirit of teamworking and creativity, our fundamental belief in sustainability and our global reach. It also highlights the key role that we, along with our clients and collaborators, play in shaping the built environment.

A history of innovation

Arup has a history of innovation. The team that manages our global innovation programme has carried out pioneering work in determining 'drivers of change' that affect the environment in which we live. These global themes include climate change, energy, water, urbanisation, waste, demographics and poverty. Understanding what drives them is key to influencing the future that we all face.

These insights have been pivotal to guiding our understanding of sustainability and form the context for our Sustainability Policy.

On a journey

Our approach to our business has been assisted by our focus on innovation and research and this has given us particular insight; however, we recognise that we are on a journey of improvement. Our journey started in 1946 with the inception of our firm. The purpose of this journey was then captured in 1970 in our founder's *Key Speech*, which outlines our principles, our ethos and our culture – ideas which continue to shape our firm today. This journey is now entering a new phase as we formalise our commitment to a published Sustainability Policy.

The Sustainability Policy will build on work that is already underway and will enable us to influence the future together.

Envisioning a future state of sustainability

The Sustainability Policy is expected to evolve and support a process of continuous improvement. Arup has always taken a long-term view of its business. Our unique ownership structure – we are wholly independent and owned in trust on behalf of our staff – means that we are not obliged to focus on short-term gains to the detriment of our long-term sustainability goals.

Our Sustainability Policy as a framework

The Sustainability Policy is intended to provide a framework within which we can fulfil the aspirations of our staff, and live up to our core values.

The Policy represents our commitment to the implementation of sustainability at all levels within our organisation, from our Board to all of us as individuals, across all of our geographical boundaries.

The Policy has been developed through a process of consultation with a team of key Arup experts whose experience crosses skill-sets and borders. A discussion at the firm's annual leadership conference provided further input to a Policy that is both comprehensive and representative. As such, the Policy has been developed both on behalf of, and in consultation with, the firm.

Transparent and accountable

Transparency is of the utmost importance in this process and we aim to practice the advice that we provide to others and hold ourselves accountable to our staff through objective measurements relevant to our business. Furthermore, we will publicise our sustainability performance and achievement.

Influencing change from within

Influencing change from within is part of our ethos and our Policy provides a catalyst for ensuring sustainability practices become embedded in everything we do. In essence, it relies on an integrated effort by all of our staff.

Determining our priorities

The Policy puts clarity and direction around many of the activities that are already occurring within Arup.

The firm will focus on outcomes and appropriate measurements, rather than be prescriptive about delivery. We will create a global framework that sets out the focus areas, goals, strategies and targets for improving sustainability performance at a corporate level. These will then be implemented across our offices in a way that is appropriate, taking into consideration the uniqueness of each.

What underpins our corporate and regional strategies?

Our Sustainability Policy sets out a framework to reflect the integration of our sustainability values across the four key areas below.

As a professional services firm, it is in our work for our clients – our business – that we naturally have the largest impact:

Our business: delivering innovative, sustainable solutions to clients to address global challenges, such as climate change, natural resource degradation and resource depletion.

Our people: creating a stimulating, equitable and rewarding work environment, while supporting the development of diverse, talented staff.

Our facilities and operations: incorporating resource-efficient, sustainable approaches in our offices and our operating practices.

Our external relations: promoting sustainability, providing leadership in our local communities and helping to minimise the environmental impacts on society.



Our business

We will work with our clients to pursue, promote and develop sustainable outcomes that support their businesses.

We will also set a proactive, market-facing business strategy for each region that will complement our Sustainability Policy.

It is our intention to incorporate sustainability into all our projects: to provide value to our clients by building upon our reputation for integrated design and a holistic approach.

We will evaluate our service offering, skill sets and clients from a sustainability perspective. We will look at the risks and opportunities of our projects and, most importantly, commit to discussing these with our clients.

We will continually assess our performance to ensure the long-term economic, environmental and financial viability of the firm.

In all instances we will support innovative approaches. Our Policy will be implemented through local strategies and will not be prescriptive.

In order to maximise the opportunity for us to give excellent sustainability advice to our clients, we will strive to find ways to embed this thinking into everyday consulting life for all staff.

During the past year we have continued to be an industry leader in design of high-performance green buildings, in planning healthy, vibrant, eco-communities, and in the design of sustainable infrastructure. For example, we were recently named *Sustainability Engineer of the Year* at the 2007 Building Sustainability Awards in London, in recognition of our work in sustainable development across Arup.





Arup is designing and planning the **Dongtan eco-city** on Chongming Island close to Shanghai, China. An integrated approach will create a city with low energy consumption and one which is as close to being carbon neutral as possible within economic constraints. The project will increase bio-diversity on Chongming Island, and will create a city that runs entirely on renewable energy for its buildings, its infrastructure and its transport needs.



High Speed 1, formerly known as the Channel Tunnel Rail Link, is the UK's first high speed railway and its largest single infrastructure project. Arup, as part of the Rail Link Engineering team, was charged with the design and construction management of the project which opened in November 2007. We led the design and delivery of many sustainability initiatives including an integrated design and environmental management process. During construction, community engagement and management of environmental and cultural resources were dealt with in a highly sustainable manner. Through careful stewardship of sustainability, High Speed 1 became an award-winning, exemplar project, redefining best practice for delivery of major transport infrastructure.



Arup has been developing the Australian **FEX Climate Voluntary Protocol**, an interactive, web-based tool and recognition program that corporate subscribers and their teams can work through at their own pace to develop, pilot and implement a voluntary emissions-reduction plan. Arup developed the Voluntary Protocol following an extensive review of existing protocols and relevant greenhouse gas reduction literature globally. It is designed to be accessible, affordable and useful to all types and sizes of businesses.



Treasure Island, San Francisco (including Yerba Buena Island), is a 182 hectare brownfield site with a small existing community that is due to be transformed into a 'smart' urban design, low-impact development with green buildings. Over 80 hectares will revert to green space and farms and 50% of energy needs will come from renewable sources. Arup is advising on transport planning, site infrastructure and sustainability strategies for the development, in collaboration with an external design team. It will aim for certification under the forthcoming LEED® for Neighborhood Developments and will support the intention of the United Nations Urban Environmental Accords.

Our people

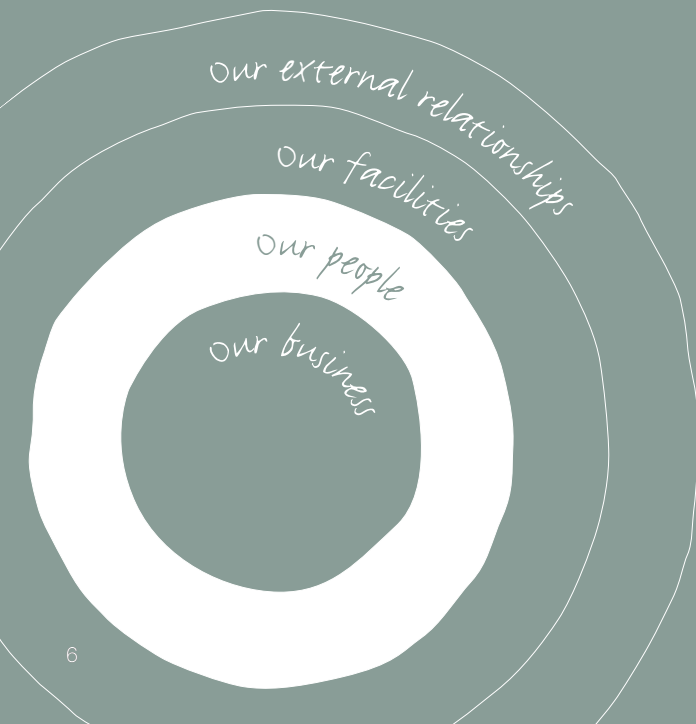
Our people are our most significant asset. It is vitally important to ensure that we employ staff who share our vision for a sustainable future and that we retain staff by giving them the opportunity to fulfil their potential.

Learning is a key aspect of this and, as part of Continuing Professional Development, we encourage knowledge sharing, intellectual growth and stimulation.

The goals set out in our Sustainability Policy are closely aligned to our human resources goals, which include increased diversity to reflect the communities in which we operate and the desire to facilitate appropriate work-life balance. We look at the deeper motivations an individual has for joining our organisation and aim to create an environment that supports this.

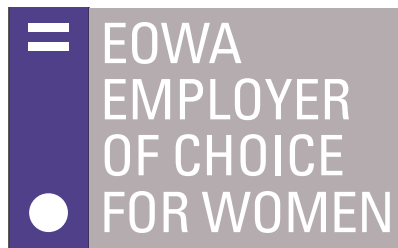
This is reflected in opportunities created through the Register of Engineers for Disaster Relief (RedR) and through initiatives such as the Arup Cause (described further on in this document), as well as our support of charities such as WaterAid. Allowing staff to satisfy their social responsibility aspirations is a high priority for the firm.

Our *Working at Arup* Survey (2007) revealed that 83% of our staff believe that the company makes a positive difference to the world we live in. We recognise that the firm must live up to staff expectations and continue to make a difference.





For the sixth year running, Arup has been recognised as an **Employer of Choice for Women** with the Australian Government's Equal Opportunity for Women in the Workplace Agency (EOWA). Arup was one of 131 Australian employers recognised for practices that support women within their organisations. The EOWA citation is awarded to organisations with more than 100 employees that have demonstrated policies and practices that support women across the organisation, providing a positive outcome for both women and the businesses they work in.



Arup was named as one of *The Sunday Times* **100 Best Companies to Work For** in 2007, coming 37th overall in the biggest and most comprehensive survey of employee opinion in the UK. We jumped an impressive 37 places from 74th position in 2006. The survey revealed that 83% of our people believe the company makes a difference to the world we live in; that 86% are proud to work for the firm; and that we have a working culture with strong ethics, consistent values and a holistic approach to work and home life.



caringcompany 2005-08

Awarded by The Hong Kong Council of Social Service
香港社會服務聯會頒發

We were recently awarded the Hong Kong Council of Social Service **Caring Company Logo** for the third consecutive year. This was in recognition of our corporate citizenship. In particular, we were recognised for our contribution to the areas of volunteering, being employee friendly, employing vulnerable groups, caring for the environment and giving.



In 2007 Arup was declared one of the **Best Architectural, Engineering and Construction Firms to Work For** in the United States by *Building Design & Construction Magazine* for its "top-notch benefits and multiple training and education programs". The magazine noted that we back up the statements we make about attracting and retaining the best and brightest with programmes that achieve our aims.

Our facilities

Our facilities and operations reflect our values and commitment to sustainability. All business activities have an impact on the environment and it is crucial that decisions made in this area minimise this impact.

We are working towards a clearer understanding of our environmental impacts due to travel and operations. By putting in place a coordinated management approach and by setting targets for usage of energy, water and other consumables in the office environment, we can begin to measure our progress in these areas.

We are taking steps to minimise the carbon emissions associated with our operations and will endeavour to prevent pollution within the scope of our activities. Sustainable procurement of goods and services will also be addressed.

Such initiatives will be put in place within each office and then be reviewed at a global level to ensure we fulfil our obligations in this area.

OvaGreen is an employee-driven effort that focuses on raising environmental awareness among staff. It has a vital role as a vehicle for local implementation of many of our office-based sustainability initiatives.

We will continue to create a working environment that is conducive to our designers, engineers, planners and consultants working together to create cost-effective sustainable outcomes.

Our goal is to have facilities of a high standard, with minimal environmental impact. Furthermore, these facilities should be designed to help improve productivity, morale and staff health. They should be places that we are proud to bring our clients to, where we can demonstrate we are 'walking the talk' as far as sustainability is concerned.

For example, we are seeking sustainability ratings for many of the new office buildings that we own around the world. We are also seeking to fit-out our existing offices in accordance with best practice Green Building rating schemes in the office's respective country, including: Green Star in Australia, the Leadership in Energy and Environmental Design (LEED) Green Building Rating System™ in the United States, and the Building Research Establishment Environmental Assessment Method (BREEAM) in the United Kingdom.





We have completed and are undergoing major fit-out and renovation projects of our **New York, Los Angeles, Seattle and Boston offices**, all of which have been designed to meet LEED® standards in areas such as day-lighting, energy efficiency and sustainable materials. For example, the fit-out of our Los Angeles office included sustainable design features such as waterless urinals, low-flow fixtures, daylight sensors, occupancy sensors and turn-off circuits.

Across Europe our plans for certification of all offices to **ISO 14001** are nearing completion. We have estimated the carbon footprint from the energy use in our offices, non-business travel and commuting, as input to a plan to seek reductions in our carbon emissions. We have also implemented travel plans for many of our offices, encouraging increased use of public transport, walking and cycling. We are designing new arrangements for monitoring energy consumption and, within the UK, are seeking to purchase electricity from a climate change levy-exempt source when practicable. Waste minimisation and recycling initiatives exist across the majority of our offices; a Waste Management Policy has been implemented in our London campus.

Our Hong Kong office obtained ISO 14001 certification in 2001 and our Shanghai office was recently certificated. The same management systems are applied in our other offices in our East Asia region although they have not yet been certified. Implementation of ISO 14001 for certification is currently taking place in our Manila office.



We are in the process of developing an ISO 14001 compliant **Environmental Management System (EMS)** for all of our Australian offices, with implementation to be undertaken nationally. Data will be collated and fed back to staff to assist in the process of reaching targets and continual improvement. Considerations of the EMS include office purchasing policies, green travel incentives and travel plans, and gradual implementation of visible building management system monitoring for water and energy.



Our external relations

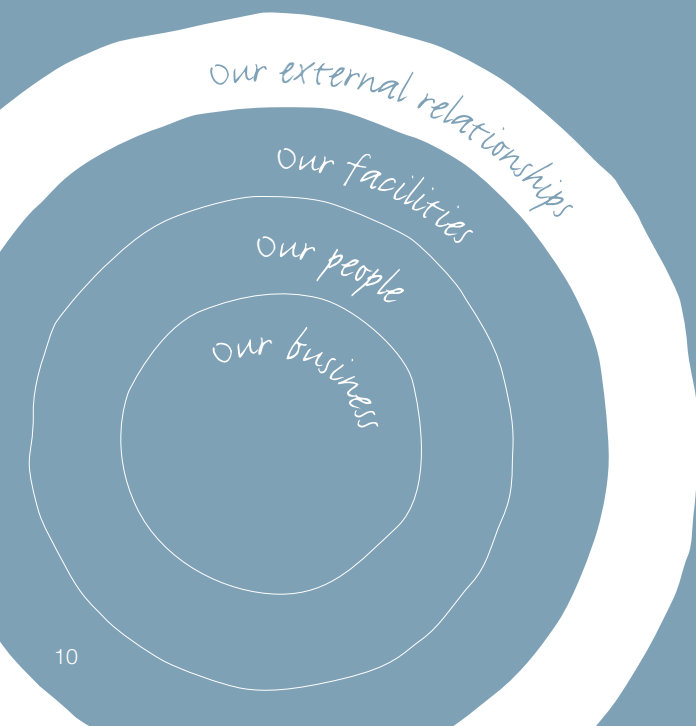
Arup's sustainability philosophy extends across our business dealings and community relations, and encourages us to be leaders in driving sustainable development.

We understand our impact on the communities we live and work in and we contribute to good external relations through community investment and interaction. We partner with organisations that enable us to exchange ideas and promote sustainability leadership across our businesses.

We marked our 60th anniversary in 2006 with the launch of an initiative called the Arup Cause. This involved a range of activities to celebrate our commitment to 'shape a better world'. Making full use of our core values and skills, our aim was to effect positive change in the developing world.

In our anniversary year, the Arup Cause focused on water and we formed a strategic partnership with the international charity WaterAid. Since 2006, the Arup Cause continues to encourage and leverage the individual abilities of our staff to reduce suffering and improve people's lives, reflecting our unique culture, our founder's vision and our humanitarian attitude.

Our Poverty Action Network (PAN) is a key enabler for the Arup Cause. PAN is an umbrella network for all those in Arup who are interested in poverty alleviation, human development and disaster relief work. PAN is now a global network with a vision for Arup to engage effectively with the challenge of poverty, globally and locally.





We were recently commissioned, on a semi-voluntary basis, by the Mongolian Children's Aid Foundation to masterplan and design **the Lotus Children's Centre** – a centre for homeless children in a suburb of Ulaanbataar, Mongolia. Arup was recommended for the project because of our successful design of the Druk White Lotus School in Ladakh, north-west India. The design team for the Lotus Centre will aim to achieve a safe and economic design, minimise maintenance cost, maximise use of local materials and local skills, and set a local example for utilisation of renewable energy and sustainable design in this demanding environment.



Through our community partnering initiative, Arup has been working with **The Cancer Council Queensland (TCCQ)** in Australia to provide in-kind support through professional services to provide it with a corporate sustainability policy. TCCQ was established in 1961 as the Queensland Cancer Fund and is the largest non-government, anti-cancer organisation in the state. Having grown steadily since its inception, TCCQ wanted to manage continued growth and expansion in a more sustainable way. In early 2007 it approached us to assist with the development of a corporate sustainability strategy. Working closely with TCCQ, we have developed a Sustainability Policy for it based on its existing policies, mission, goals and value statements and additional fundamental principles.



We are a founding member of the **UK Green Building Council** and our work has been pivotal in steering the UK construction industry towards a more sustainable future. We have contributed leadership and staff to the UK Green Building Council's groundbreaking work on the consultation document for the *Code for Non-domestic Buildings*. We have also supported them by managing and providing technical contributions for the production of their first major piece of work: *Carbon Reductions in New Non-Domestic Buildings*.



As part of our work with WaterAid, we are providing technical assistance and leadership for implementation of a **sustainable development plan in Paposo**, a rural desert community in Chile. The plan addresses options for improving the town's water supply and wastewater handling systems, as well as opportunities for supporting local small businesses, improving the area's infrastructure and promoting environmental stewardship.

Reporting our performance

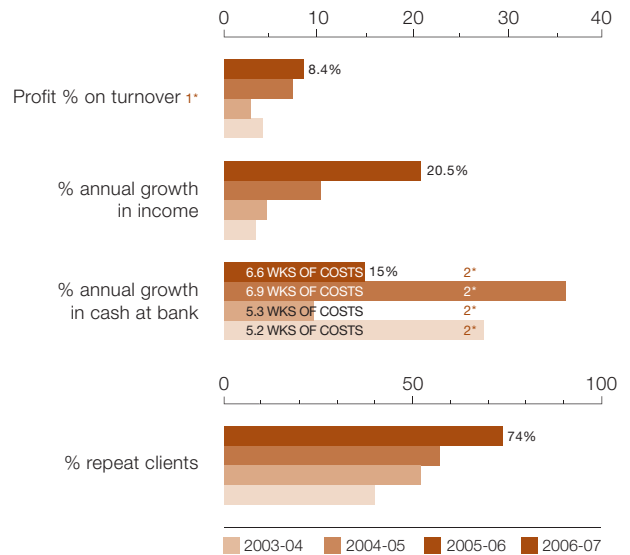
The implementation of our Sustainability Policy will provide us with data and information that can be reported on annually.

We recognise the need to set ourselves challenging targets to improve our sustainability performance. The identification of Key Performance Indicators will form part of the process of developing a strategy for each of the areas in which we operate.

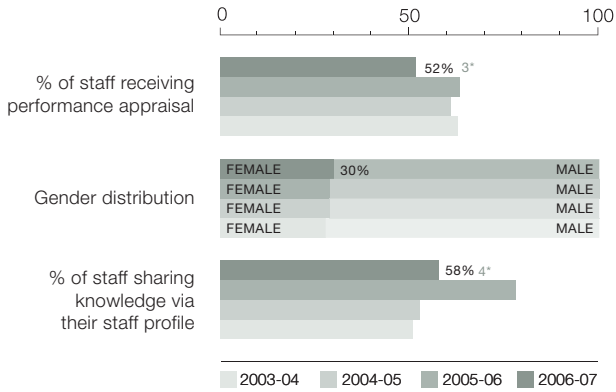
In the past, we have reported against a set of metrics on a fiscal year basis in our Annual Reports. On this page you will see that we continue to report on those same metrics, but against the new framework set out in our Sustainability Policy. These metrics are very likely to change as we develop our corporate and regional strategies further, but we are including them in the interim to measure our progress over the past year.

We plan to report further on the implementation of our Sustainability Policy and Strategy at the end of 2008.

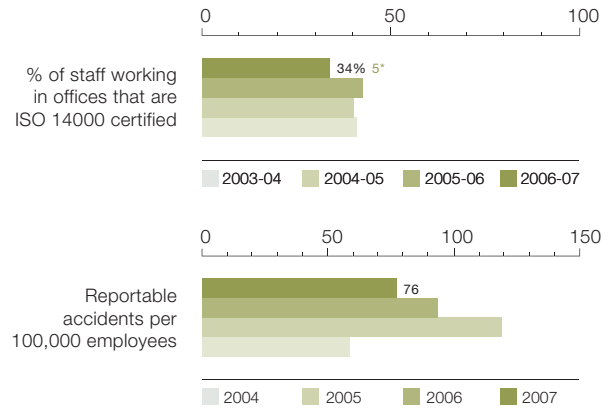
Our business



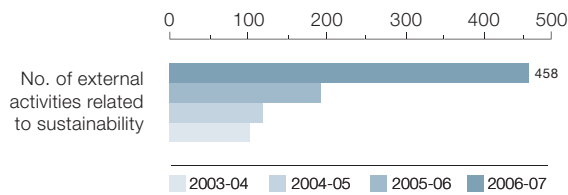
Our people



Our facilities



Our external relations



1* Before tax and profit share

2* Cash at bank as a value of weeks of operating costs (before profit share)

3* Reduction in the proportion of staff receiving a performance appraisal in 2006-07 by comparison to 2005-06 can be attributed to significant growth in staff numbers and to the busyness of all staff, particularly leaders. The firm will address these factors to ensure improved performance in 2008-09.

4* Reduction in the proportion of staff sharing knowledge via their staff profile in 2006-07 by comparison to 2005-06 is attributable to significant growth in staff numbers and to the adoption of a more precise measure of knowledge sharing in 2006-07.

5* Reduction in the proportion of staff working in offices certified to ISO 14000 in 2006-07 by comparison to 2005-06 is a result of the firm's growth in mainland Europe, America and Australia, where the majority of offices were not certified in 2006-07. The firm expects to significantly increase the number of its offices certified to ISO 14000 during 2008-09.

What will the future look like?

Our business

In the next few years we will increase our efforts to integrate sustainability considerations into our work with our clients. One of the major challenges we will face is how to evaluate our work with our clients to determine the sustainability risks and opportunities of the projects that we may undertake.

Our people

We will continue to focus on improving staff awareness of sustainability, particularly on the issues which are most relevant to our business. One of the key challenges will be to keep staff informed of the rapidly changing sustainability agenda.

Our facilities

The way we select and use our facilities has a significant impact on the extent to which we are able to implement our sustainability objectives. The nature of some of our existing offices means that it is sometimes difficult to use resources as efficiently as we would like to. Where we are moving to new facilities, we recognise that we will have the opportunity to consider sustainability solutions more explicitly.

Our external relations

We value collaboration with organisations that embrace the principles of sustainability. We will focus on developing new partnerships to enable the exchange of knowledge and ideas. The challenge will be to ensure that such partnerships drive further improvements in sustainability within Arup and more widely.

The outcome

The implementation of our Sustainability Policy in each of our regions will assist us in developing a sustainable business and it will ensure that we continue to be aligned with core Arup values. A sustainability-focused approach to our business, our people, our facilities and our external relations will ensure the long-term success of our firm.

Sustainability Policy Statement



Sustainability Policy Statement

Mission

To shape a better world

Objectives

The firm will implement practices that promote economic security, social betterment and environmental stewardship and will strive for continuous improvement of performance in these areas.

To deliver this, the firm aims to:

- set a sustainability business strategy;
- be a leader in sustainable development in areas relevant to its business;
- work with its clients to pursue, promote and develop sustainable business outcomes;
- promote sustainable practices;
- hold its performance accountable to its staff through objective measurements;
- report on its sustainability performance and achievements; and
- ensure that leaders of the firm are involved in implementation of this policy and in reviewing sustainability performance.

Actions

In meeting these objectives, the firm will:

For its core business

- provide value to clients by building upon its reputation for integrated design and a holistic approach to projects;
- deliver projects recognised for their sustainability credentials, in line with client expectations;
- evaluate projects with respect to their sustainability risks and opportunities and, where appropriate, discuss these with the client; and
- achieve performance that ensures the firm's economic, environmental and financial viability.

For its people

- employ and retain staff who have a high degree of awareness and expertise in sustainability for all disciplines practiced;
- provide continual education and training for all staff on sustainability issues relevant to the firm's businesses; and
- support innovative approaches to implementation of sustainability strategies on projects.

For its facilities

- maintain management systems to assist with implementation of sustainability objectives;
- aim to use resources efficiently and to minimise waste, usage of water, energy and other consumables in the office environment;
- develop a strategy to move towards minimising carbon emissions in its operations;
- endeavour to prevent pollution within the scope of its activities; and
- develop a strategy for the firm to move towards sustainable procurement of the goods and services used in its operations.

For its external relationships

- partner with organisations that practice sustainability and that enable the exchange of ideas and the promotion of sustainability leadership across its businesses; and
- fund and work on community projects that achieve sustainability goals.

David Singleton

Arup Group Sustainability Director
18 September 2007

ARUP

About us

Arup is a global firm of planners, designers, engineers and business consultants. We provide a diverse range of professional services to clients around the world, exerting a significant influence on the built environment. The firm is the creative force behind many of the world's most innovative and sustainable building, transport and civil engineering projects and design technologies.

Established in 1946, Arup has over 10,000 employees based in more than 90 offices across 37 countries, working on up to 10,000 projects at any one time. Its unique structure, with the firm held in trust on behalf of its employees, gives us complete independence. Our multidisciplinary approach means that any given project may involve people from any or all parts of Arup. Our aim is to achieve excellence in all we do by bringing together the best professionals in the world to meet our clients' needs.

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Attachment 2:
Global Code of Practice for Harrassment



Harassment : code of practice

Purpose

Arup believes that all employees have a right to be treated with dignity and respect while at work and when representing the company outside of work. The following code of practice informs employees of the type of behaviour that is not acceptable and provides employees who are subjected to harassment with a means of redress without fear of reprisal.

CODE OF PRACTICE

Arup identifies that employees have a right to be treated with dignity and respect. Harassment is harmful, unlawful and can reduce the effectiveness of the organisation by undermining the confidence of employees and creating a threatening environment. Employees have a right to work in an environment, which is free from harassment of any kind.

The organisation will take positive action to prevent its occurrence. Any complaint will be taken seriously and the necessary resources deployed to investigate and resolve the matter.

Effective date

1 May 2001

Applicability

All employees working for Arup worldwide.

Attachment 3:
Global Equal Opportunities Code of Practice



Equal opportunities : code of practice

Purpose

As a firm we recognise that to create work of high quality there is a need for diversity of skills, knowledge and ability. We all depend on each other to make a difference and our working practices are intended to enable all of us to maximise opportunities.

CODE OF PRACTICE

Arup is committed to equality of opportunity in employment, irrespective of any personal issues such as gender, gender reassignment, marital status, disability, age, race, colour, nationality, sexual orientation, religion and belief. Our employment and recruitment practices shall support this principle, taking action where necessary, to enable all current and potential members of the firm to maximise opportunities.

Effective date

1 May 2001

Applicability

All employees working for Arup worldwide plus all job applicants.

Attachment 4:
Global Diversity and Inclusion Code
of Practice



Diversity and Inclusion: Code of Practice

Purpose

Arup recognises that to produce work of high quality, to maintain our reputation for innovation and creativity and to understand and delight our clients we need to fully embrace the skills, talents and knowledge that only a diverse workforce can deliver.

CODE OF PRACTICE

As a global organisation, we recognise and respect each others' differences and strive to build a working environment where our different values and perspectives are actively harnessed to create the best solutions for our equally diverse client base.

We will work to ensure that everyone feels their contribution is valued and their successes are celebrated through our processes and through our training and development.

The diversity and inclusiveness of our workforce is supported by our ethics on Sustainability and Human Rights.

Our employment and recruitment practices will adhere to, and strive to exceed, local legislation wherever we work in the world.

Arup's principles of Diversity and Inclusion extend to our clients, our suppliers and all those with whom we choose to work.

Effective Date

XXXX 2008

Applicability

All employees working for Arup worldwide, our applicants and all those with whom we have contact with through our working lives.

Attachment 5:
Global Environmental Policy Statement



Environmental Policy Statement

Mission

To shape a better world.

Objectives

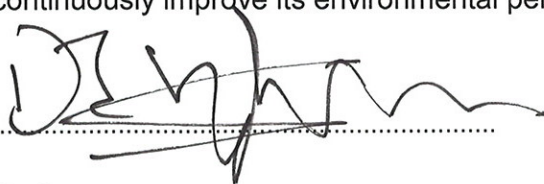
To deliver this, the firm aims to:

- consider environmental factors when making business decisions;
- use resources in a way that provides for future generations;
- use its skills and influence to improve the built environment and to maintain the integrity and quality of the natural and cultural environments;
- work with clients, suppliers, contractors, regulators, professional bodies and the community at large to raise the environmental standards of the industries in which it operates;
- publicise its environmental performance and achievement; and
- minimise usage of water, energy and other consumables in the office environment.

Outcome

In meeting these objectives, the firm will:

- deliver projects which are recognised for their environmental performance;
- maintain a high standard of environmental awareness;
- build upon its reputation for sound and effective advice to clients on environmental and related matters;
- endeavour to prevent pollution;
- comply with legal and other requirements which relate to its environmental aspects; and
- continuously improve its environmental performance.



.....
D. Singleton

(Arup Group Environmental Director)

.....

.....

(Leader for.....)

.....

www.arup.com

.....group/office)

Attachment 6:
Arup Cause brochure



the arup cause

ARUP



Mission

- As a global organisation, we choose to work together to further our humanitarian aims in a way that is central to our shared values and our overall mission to 'shape a better world', seeking to reduce suffering and to improve people's lives.
- The Arup Cause provides a focus for our activity, encouraging and leveraging the individual abilities and contribution of our staff for maximum impact.

Objectives

- To enhance the capacity of humanitarian and development organisations by providing technical assistance or fundraising for specific **projects**.
- To improve awareness and understanding of poverty and its alleviation by capturing, sharing and disseminating **learning**.

Foreword

In 2006, Arup celebrated its 60th anniversary. Naturally, we recognised Sir Ove Arup, our visionary founder whose values, as articulated in his *Key Speech* of 1970, still inspire us today. The firm has developed into a global community with a concern for society and the environment at its core. A significant percentage of our people volunteer their time, money or expertise to humanitarian causes.

We wanted to mark six decades of this kind of commitment with a lasting legacy. We also wanted to provide a focus for the many community-centred and educational activities being carried out with energy and enthusiasm by people within Arup, who are keen to share their knowledge and time to benefit others.

The firm decided to invest in a global initiative, the **Arup Cause**. We sought to reward and encourage our people's abilities and interest, and to apply our collective technical expertise and creative ability to reduce suffering and improve people's lives. By bringing together a wide range of individual initiatives under a common global theme, we hoped to ensure that the many individual activities initiated by our people across the firm worked in concert and to maximum effect. We also wanted to provide more structured opportunities to

allow people to develop personally, deploy their professional skills and contribute to development globally.

Our research into the 'drivers of change' – key issues that play a role in our future – identified lack of water and basic sanitation as a fundamental cause of poverty, which affects almost all of the UN's Millennium Development Goals. Water was the theme and focus of the Arup Cause in 2006. In 2007, we added a second theme of shelter. Both are an essential need and also a focus for social networks and communities. Over time, we expect these key issues to evolve, and so our approach will too.

The groundswell of support for the Arup Cause across all our regions has exceeded our expectations. You can read in this booklet about some of the diverse projects that Arup people have undertaken, supported by this initiative. These people inspire me. I hope that we experience another six decades of commitment to humanitarian causes at Arup.

David Singleton

Chair, The Arup Cause
Member, Arup Group Board



Larry Pitt

The Arup Cause

We shape a better world

Arup is the creative force behind many of the world's most innovative projects in the built environment. As a global design and business consultancy of over 10,000 people in 37 countries, we have significant expertise which can be harnessed to reduce suffering globally. We also have a strong tradition of commitment to humanitarian causes at the core of our values and culture.

The aim of the Arup Cause is to create structured opportunities for our people to become involved in development. In so doing, it celebrates our determination to effect positive change in the developing world, particularly where a lack of access to safe water and sanitation or shelter perpetuates poverty.

An evolving approach

During our anniversary year we focused on the theme of water, access to which is a key issue for millions of people globally. To help focus our efforts, we formed a strategic partnership with the international charity WaterAid. The Arup Cause, launched on World Water Day in March 2006, has given us the chance to be as much an intellectual partner as a fundraising partner of WaterAid.

We set ourselves five distinct objectives for our first year – to **collaborate** with international aid agencies and charities, like WaterAid; to **donate** to worthy projects; to **participate** in activities and technical projects; to **educate** others and raise awareness of the issues; and then find solutions to these challenges and to **innovate** to bring about positive change – and we achieved all of them, exceeding our most optimistic expectations. In our second year, we added the theme of shelter.

To date, we have supported 30 projects around the world through the Arup Cause, bringing about positive change to the lives of many and working in-country, in collaboration with mainly local NGOs. We have also raised substantial funds for several WaterAid projects, some of which you can read about in this booklet, which have enabled more than 8,000 people to have access to water for life.

An awareness and understanding of what perpetuates poverty and how individual action can help to combat it is a critical part of the Arup Cause. 1.1 billion people do not have access to safe drinking water and 2.6 billion people do not have access to adequate sanitation. During its inaugural year, the Arup Cause developed educational material targeting our staff as well as our clients and the communities in which we operate, raising awareness of

poverty and, in particular, the fundamental need for safe water and sanitation. Some of our staff were also selected to take part in WaterAid's Supporters' Visits in Burkina Faso and Northern India in 2006 and 2007, respectively. This year several staff will gain hands-on experience with Habitat for Humanity, helping them to understand the importance of shelter.

The Arup Cause embodies our commitment to 'shape a better world' and to bring about positive change through **projects** and through **learning** more about the world and its challenges. It is an opportunity for staff to commit their energy and expertise to combating some of the big issues the world faces.

Arup has always been a collaborative organisation, exchanging ideas, sharing information and creating ideas and knowledge. The Arup Cause builds on this tradition, allowing our staff to develop skills and knowledge which will allow them to influence the future positively.



Pictured (top to bottom): **Ruth McBain**, **Isobel Byrne Hill** and **Dorothee Richter** all served as project managers for the Arup Cause, responsible for managing and coordinating all aspects of this initiative and for galvanising staff around the world.

Two heads are better than one

The power of collaboration

Our relationship with WaterAid goes beyond a traditional corporate partnership. As well as raising awareness and funds to help them carry out their valuable work, we offer a new dimension to this partnership, bringing long-term value through problem solving, creative thinking and knowledge sharing. Many Arup people observe that devoting their expertise to tackling problems, such as the lack of water for people struggling against poverty, ranks as one of the most satisfying experiences of their lives.

“Arup and WaterAid have enjoyed a long-standing relationship that continues to grow from strength to strength. The commitment of Arup extends across the entire organisation; the breadth of support starts at the grass roots with employees from across the world raising vital funds, and extends through to Arup’s considerable technical and strategic expertise directly benefitting our work in the UK and in our country programmes. WaterAid’s work now enables over one million people a year to access both water and sanitation, and the partnership with Arup will continue to help us grow and develop to enable even more of the world’s poorest people to escape poverty.”

Barbara Frost
CEO, WaterAid



Working with WaterAid in Bangladesh

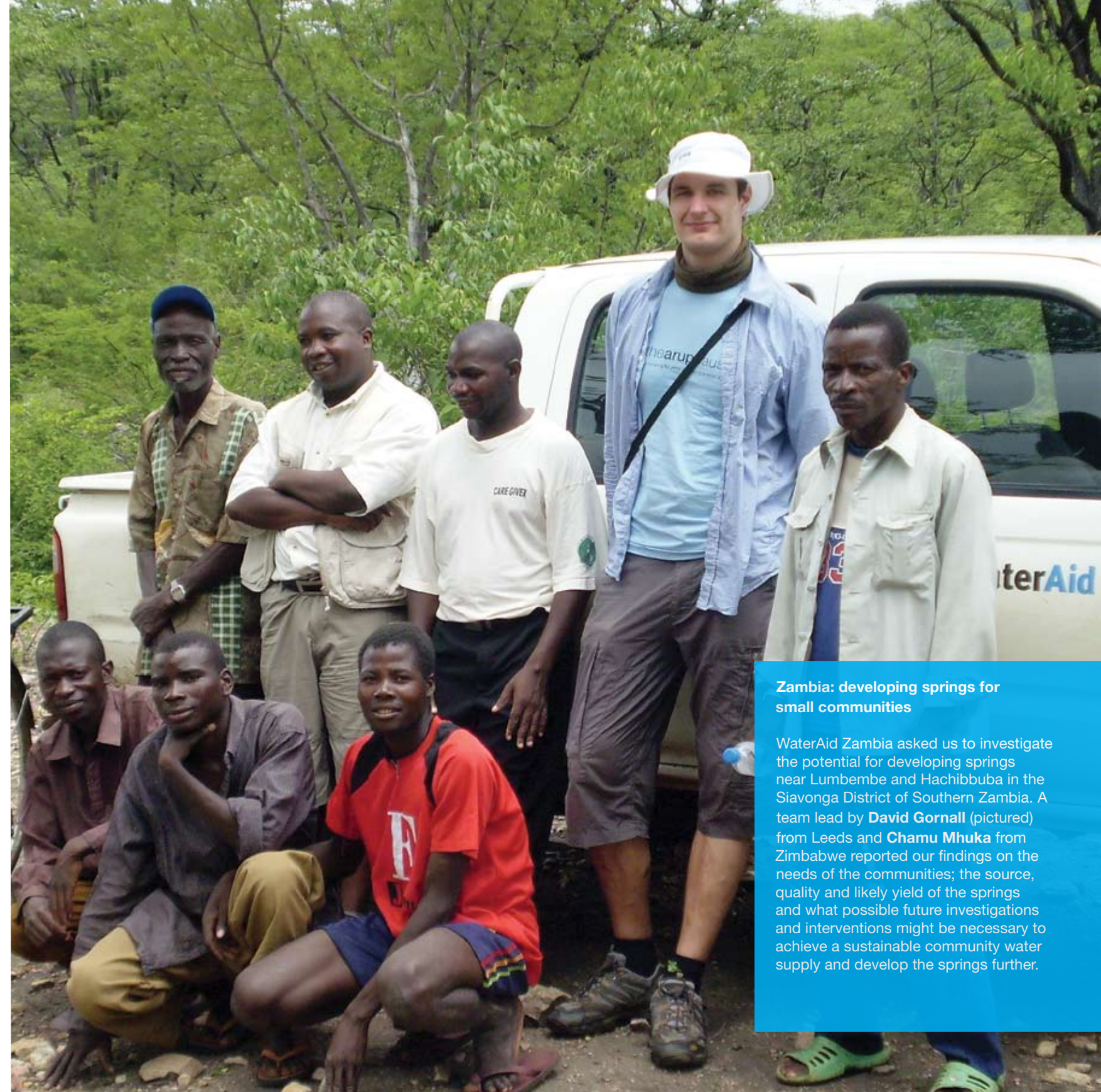
Bangladesh: investigating fresh water sources for saline areas

Saltwater shrimp farming, saline intrusion from the sea and arsenic contamination make freshwater scarce in the Satkira region of Bangladesh. Together with WaterAid Bangladesh, an Arup team, led by **Nick Swain** from our Adelaide office, assessed current water sources, identifying where alternative options such as rainwater harvesting might be viable and assessing the merits of various treatment options to improve water quality, including filters, solar distillation and desalination technology. We took account of traditional social structures, available skills and limited financial resources, recognising

that these are key issues in managing community-based schemes in less developed areas. Currently we are investigating reverse osmosis as a possible long-term solution and plan to develop case studies, with preliminary research, following a second, three week-long country visit.

Madagascar: improving construction and quality control of wells and latrines

WaterAid Madagascar identified examples of inadequate construction and quality control in wells and latrines in the area. **Alan Sam-Sun**, a Port Louis, Mauritius-based civil engineer, conducted a technical audit, reviewing technical designs and project approaches. Our recommendations included improvements in procedures for project selection, as well as how future monitoring and audits could be carried out most effectively, all of which are being implemented.



Zambia: developing springs for small communities

WaterAid Zambia asked us to investigate the potential for developing springs near Lumbembe and Hachibbuba in the Siavonga District of Southern Zambia. A team lead by **David Gornall** (pictured) from Leeds and **Chamu Mhuka** from Zimbabwe reported our findings on the needs of the communities; the source, quality and likely yield of the springs and what possible future investigations and interventions might be necessary to achieve a sustainable community water supply and develop the springs further.

Raising funds

The power of collaboration

Arup people throughout the world at all levels devote their time and energy to fundraising activities supported by the Arup Cause.

The creativity, the level of participation across the firm and the sheer range of activities are testament to the commitment of our people to humanitarian causes.



How did the money help?

Funding projects that make a difference



© WaterAid/Marco Betti

Nepal: water for life for 214 households and 1,289 people; sanitation installations for 1,560 people in 330 households in four communities

“I used to collect my water from the river – it was an hour away. I collected the water in the baskets on my head; it was very hard. I used to get up between 3am to 4am at night to collect the water otherwise there wasn’t any. I needed six to eight buckets per day. Each time I could carry two buckets so I had to go many times. It was two hours each time. There was no water before but now I have enough to grow vegetables to sell. Now I feel happy; it is very convenient with the water as we can sell the vegetables. I am very happy. I spend the money on the children and to purchase oil and salt, clothes and meat from the market, and for when guests come.”

China Maya B K
Tap volunteer, Terai community, Nepal

All money raised in 2006-07 was used to fund a range of WaterAid projects to improve, change and, often, save lives. These are just some of the projects funded with the **£103,213** raised by the Arup Cause in its first year:

Madagascar: building local skills and the capacity to deliver projects

We are working with WaterAid in Madagascar to build the capacity and the

skills of local staff in Madagascar. Part of this requires undertaking baseline studies and evaluating potential future projects.

Papua New Guinea, East Sepik Province: our next project

The project we will fund for WaterAid in 2008 will mean that over 400 people in Kumagora village will have access to sanitation and drinking water. Thanks to a project managed by Help Resource, a local

NGO, and jointly funded by WaterAid and the European Union, the village will now benefit from a gravity flow system of five community tap stands and four demonstration latrines, and villagers will receive hygiene education to gain maximum benefit from the new facilities.



© WaterAid/Suzanne Porter

Nigeria: a well serving 4,200 people

“Before the well was installed I had to go to the river at least three times a day for water. Each trip would take an hour to scoop and wait your turn, so three hours a day was spent just collecting water. My family got cholera and other sicknesses from drinking the water. One of my children died from this. After the intervention, all this has changed. I have more time and can make some extra money. We are not in debt from the medication and the extra money goes towards the cost of education and uniforms. All my school-age children are in school now. I used to have to keep them home to help me. Since the well I have more time to rest, the children don’t feel sick, and I am able to make things better for my family.”

Adana Haruna
30 year old mother of six
from Birnin Gaye, Nigeria

Building capacity

Helping organisations to achieve their objectives

Some Arup Cause projects aim to build the capacity of NGOs and other organisations in order to increase their sphere of influence and their effectiveness in achieving their objectives.

Maji na Ufanisi and the Freshwater Action Network (FAN)

Communications specialist **Karen Patey** and development expert **Jo da Silva** helped Kenya-based NGO Maji na Ufanisi to develop its capacity with strategic communications advice and a new visual identity. Following the project's success, the Freshwater Action Network (FAN) sought our advice on developing a global communications strategy to support their aim of providing a voice for civic society to influence global policy on water and sanitation. This was developed in conjunction with FAN at their Annual Advisory Committee meeting in Nairobi in October 2007 (pictured right), with guidance provided on implementation of that strategy.



A general brochure for IDE-UK

A key communication tool for International Development Enterprises (IDE)

Graphic designer **Nadia Georgiou** designed IDE-UK's general brochure, which is its key communication channel for its supporters. She used the opportunity to reinforce its brand and ultimately to raise its profile through design with potential sponsors and supporters.

WaterAid's website

Our corporate communications team helped WaterAid's web team to redevelop their internet site. We conducted a peer review of the site and surveyed web users from our own global network of activists. We compared it to those of key competitors, and our recommendations were given to WaterAid's external agency to develop further.



“Working with Arup on reinvigorating the Maji na Ufanisi website helped us to engage in a very deep reflection of the work we have done in the urban slums of Nairobi. The modern artwork and wonderful messages which resulted have literally given Maji na Ufanisi a much needed new look. We appreciate their professionalism and look forward to working together in the future”.

Edward Kairu
Executive Director, Maji na Ufanisi

Focus on water

Providing access to clean water and safe sanitation

Access to safe drinking water and sanitation is vital for the success of any community. Although water is an issue for communities all over the world, the problems are not the same: some people have too little water, others too much, or the wrong sort of water. An individual approach to each is essential. We have been involved in a range of water projects, from an assessment of water and sanitation on Wasini Island in Kenya to researching filtration technology for a community in Ghana. Read more about some of our work:

“It’s a humbling experience to meet entire families who struggle each day just to fill a single calabash. I left Benue with a renewed sense of what our collective resources can achieve and how many people we can impact.”

Gregory Hodkinson
Chair, Arup’s Americas Region and Chairman of WaterAid America, on his trip to Benue State, Nigeria

Nigeria: making existing WaterAid programmes more effective

On a three-month assignment to WaterAid Nigeria in late 2007, engineer **Zak Kostura** visited many communities where WaterAid is working with local communities to provide clean water and safe sanitation. With the



Zak Kostura working with WaterAid in Nigeria

support of Arup colleagues, he developed solutions to a number of technical and logistical challenges, including the innovation of lining household latrine pits with indigenous materials in areas where poor soil conditions have caused them to collapse. Zak is now back in New York, working to engage other Arup staff in support of WaterAid’s work in Nigeria and elsewhere.

Zambia: an ambitious hydroelectric scheme on the Zambezi

Sponsored by the North West Zambia Development Trust, this project created infrastructure to provide the clean water, sanitation, electricity and employment that the area lacked. It is small enough to avoid the environmental impacts of storage dams and only a small section of the



Borehole monitoring by Vicky Coy at Abonkosu

river experiences a change in flow. When complete, the project will operate as a private utility company, selling power to sustain itself. An Arup engineer and project manager took a year of unpaid leave of absence to provide design and design development on-site for the civil works during 2005/6.

Peru: combating high water levels in Lima

Around 12,000 people live in El Pinar, part of the Comas district of Peru’s capital Lima,



Children in Paposo, Chile



Sustainable development in Paposo, Chile

which is located in a natural, local depression of the ground. Since an extraction scheme for the city’s drinking water ceased, water levels have risen to their pre-settlement high, causing structural damage to dwellings and serious health problems for their occupants. Engineer **Alex Ramos** from our Madrid office provided technical and contractual engineering advice on solving the high water level problem. Excess water collected in four kilometres of new drains will feed a

lake within parkland at the lowest point of the depression, resolving the water table problems while providing a rare public amenity to residents.

Ghana: a sustainable water supply strategy for Ashanti

Hydrogeologist **Vicky Coy** and geochemist **Catriona Neath** from Arup’s London environmental team surveyed the water resources of villages in the Ashanti region of Ghana. Working with Ashanti Development, a registered charity that promotes health and development around the village of Gyetiase in Ashanti, Vicky and Catriona completed an initial desk review of available information followed by a site visit to Ghanaian institutes and around 20 visits to view community water sources such as boreholes, springs and streams. Their findings will inform a long-term strategy for the charity to provide water in this remote region.

Chile: sustainable development for Paposo

South American development specialist **Ignacio Barandiaran** from our San Francisco office heads a team that is providing technical advice and project leadership for a sustainable development plan for Paposo, a rural desert community in Chile. The plan aims to improve the town’s water supply and wastewater handling systems, encourage local businesses, improve the area’s infrastructure and promote environmental stewardship.

Focus on shelter

Improving living conditions for many

Shelter, a basic need for all, can be a literal building block for a community. Approximately one billion people are living in inadequate housing in urban areas, and about 100 million people worldwide are homeless. Shelter provides people with immediate health benefits and offers not only physical safety, but emotional and social safety as well. We have been involved in a range of shelter projects, from assisting orphanages in Uganda and Sri Lanka to the rebuilding of homes post-Hurricane Katrina in New Orleans. Read more about some of our work:



Nezi Gumpa structural survey team

India: Nezi Gumpa Monastery structural survey

The Nezi Gumpa monastery, located near Darjeeling in the foothills of the Himalayas, has been at the spiritual heart of its community for centuries, but is now crumbling. The Arup Cause supported a project where engineers **Brian Murrhly**, **Walied Jassat** and **Claudia Groth** surveyed the monastery and identified the repairs needed to preserve the 200-year old monastery building. They mapped the building and surrounds, undertook a mini-ground investigation and investigated the internal structure. Only local resources and skills will be used to carry out

the essential repair, to preserve this historic and spiritual centre for many more years to come.

Uganda: construction of a health centre

Five engineers from Arup's Cardiff office are taking part in the Institution of Civil Engineers Wales, Engineers for Overseas Development (EFOD) programme, which aims to assist in the development and training of engineers through working on public health programmes with local people in developing countries. The Arup team will be travelling to Soroti, Uganda to work with local partners on the construction of a medical centre. The team will help select

and procure materials for the centre and will be aiming to ensure that good safety and quality standards are adopted during the centre's construction.

India: digging foundations for homes in Bangalore

Building engineers **Hayley Gryc** and **Alfonso Senatore** from Arup's London office dug foundations, mixed concrete and helped with roofing, plastering, and painting the buildings as part of the Habitat for Humanity Community Challenge. The programme provides homes for poor families in Bangalore, India. The trip has contributed to strengthening Arup's relationship with Habitat for Humanity and we hope to assist on future projects.

Peru: post-earthquake mission

After an earthquake hit central Peru in August 2007, flattening about 90% of non-engineered structures in the area, the Earthquake Engineering Field Investigation Team (EEFIT), part of the UK Institution of Structural Engineers, undertook a post-earthquake field survey of structural damage with a view to understanding better the way in which non-engineered buildings respond to earthquake-induced loads.

The Arup Cause supported geotechnical and seismic engineering expert **Dr John Alarcon** to join the EEFIT mission and travel to Peru in September 2007. The survey was wide-ranging and included interviews with those affected and those in charge of relief operations. The resulting report was published on the Institution of Structural Engineers' website home page and was sent

to Peruvian authorities and to the European Commission to inform reconstruction.

South Africa: low-cost housing design

Mike Edmonds from Arup's Cardiff office is supporting Interactive Africa with their Design Indaba 10x10 Housing Project in Cape Town, South Africa. The aim of the project is to develop innovative designs, suitable for low-cost housing. We are providing technical advice on materials and construction, and we will assist in the capturing of the design principles of the project in a manual to be presented to South Africa's Minister of Housing. The information will be shared on an open-source, online space for architectural design, which will add to the international low-cost housing database.



Low-cost housing design in South Africa

Focus on learning

Raising awareness internally and externally



Daniel Lambert on a 'WaterAid Supporters' visit in Galior, Western India

Learning is crucial to the Arup Cause. When people understand the underlying cause of poverty and the impact they can have as individuals through their own actions and by influencing others, positive change can happen. Our staff have attended training courses on water and sanitation in Hong Kong and staff have taken to the streets of Leeds city centre in the UK to raise the general public's awareness of the issues of water, sanitation and hygiene in developing countries. Read more about some of our other initiatives:

World Water Day

The Arup Cause was launched with a series of global events on World Water Day – 22 March 2006. Nearly every employee wore blue for the day to raise awareness of World Water Day, and staff were encouraged to give a

donation for the use of taps and lavatories on that day. Over 540 people in 49 of our offices were connected electronically for a shared lunchtime educational presentation in a 'virtual wave' of learning across the Arup world.

Raising awareness of water issues: the drawing water exhibition

Arup engineers **Alistair Law** and **Will Laird** conceived *drawing water* – an exhibition where our architect and designer friends from around the world created hand-drawn postcards for auction on 'the meaning of water'. Over 300 original works of art were displayed at the Bargehouse at Oxo Tower Wharf in London, raising over £6,000 for WaterAid and setting the scene for the *drawing water challenge* described on the next page.



Raising awareness in Leeds city centre

WaterAid Supporters' Visits

Arup engineer **Sarah Hindle** spent two weeks in Burkina Faso with WaterAid in 2006. In 2007, engineers **Daniel Lambert** and **Claire Moore** attended the WaterAid Supporter's Visit to Gwalior in Western India, spending a fortnight visiting villages in the states of Madhya Pradesh, Uttar Pradesh and Chhattisgarh. All three engineers gained first-hand experience of the way in which WaterAid addresses the issues of need, poverty and equity in terms of water, sanitation and hygiene in the poorest and most vulnerable communities. They came back inspired by the way in which WaterAid helps communities, the context in which WaterAid operates and the challenges it faces.



Arup's drawing water challenge:

Supported by WaterAid, an Arup team created this international competition to find new ideas and concepts to help deliver clean water and sanitation. It attracted 91 entries from 19 different countries. Israeli architects Joseph Cory and Eyal Malka were the winners, for their design called *WatAir* (pictured) – an inverted pyramid that collects dew from the air, providing 48 litres of fresh water each day in almost any climate. The flurry of interest and activity around the challenge has culminated in many such successes for our entrants ranging from publicity in such prestigious media sources as the *New Scientist* to another entrant winning funding from multi-millionaire venture capitalists on the BBC programme *Dragons' Den* in the UK.

Enabling participation

Making connections

The **Poverty Action Network (PAN)** is a global network for Arup staff who are interested in poverty alleviation, international development and disaster relief work. PAN provides infrastructure support for the Arup Cause, with 24 coordinators globally. Talks from Arup people and speakers from universities and NGOs are teleconferenced monthly and attract up to 150 attendees. Some speakers give technical lectures; others share their personal experiences of working in developing countries. Some initiatives recently coordinated by PAN include:

Engineers Without Borders UK (EWB-UK)

EWB-UK is a charitable organisation based at British universities which draws together students, academics, and professionals to facilitate human development through engineering. Arup volunteers gave keynote speeches, coordinated role playing and training sessions about water and sanitation, management and marketing at EWB-UK's National Conference 2006, Sharing Skills for Development, pictured far right. Arup gave support to the National Conference for the second year in October 2007 which focused on building the capacity of the individual EWB-UK programme teams and university branches for the coming year. Ten Arup staff attended the event, supporting or presenting at workshops on project/placement planning, organisational management, fundraising, publicity and the professional network.



Stand Up Against Poverty

Arup staff joined over 38.8 million people in 110 countries on 16-17 October 2007 in support of a 24-hour global event – Stand Up Against Poverty – coordinated by the United Nations in support of the Millennium Development Goals (MDGs). It was the largest single coordinated mobilisation in history, exceeding last year's 23.5 million people in 87 countries. From all parts of the world, millions stood and spoke out to demand a more urgent political response to the growing crisis of global poverty and inequality. PAN coordinated 'Stand Up' events in Arup offices in Brisbane, Cardiff, Darwin, Gaborone, Leeds, London, Los Angeles, Manchester, Manila, New York, San Francisco and Sheffield which raised awareness of the MDGs, encouraged action by world leaders and highlighted opportunities to act.

World Scout Jamboree

Between the 27 July and the 8 August 2007, the World Scout Jamboree brought together 28,000 young people from all over the world. An Arup team organised the event and worked together with EWB to organise and run a workshop on water and sanitation in

slum communities. More than 200 scouts took part in the workshop over the eight days and it was great to see the different reactions of the groups from countries as diverse as Iceland, Trinidad and Tobago and the Sudan.



Going forward

Evolving with the issues



The Arup Cause has achieved so much. By focusing on water, sanitation and, more recently, shelter as key factors associated with poverty, and by joining together with partner organisations, we have been able to make a real difference to those most in need around the world.

We have done so in a number of ways, but most significantly we have done so by engaging the collective enthusiasm and commitment of our people. Learning from our efforts, being open to new ideas and changing direction if we need to are key to maintaining this positive contribution. We have learned that the most effective way for us to give something back is to provide our people with experiences and opportunities that enable them to contribute to society in broader ways than their day-to-day jobs might allow them to. In the process, we have developed new and rewarding relationships internally and externally.

As Arup's involvement with humanitarian causes evolves over the next few years to address new themes and key global issues, we hope to continue to provide a unique space for our staff to unite their energy, skills and experience to raise awareness and to tackle today's global challenges.

Jo da Silva

Arup Cause Steering Group



Printed by Beacon Press using their **pureprint** environmental printing technique

The background is a solid bright blue color. Overlaid on this are several large, abstract, white and light blue shapes. These shapes are composed of thick, rounded lines and curves, creating a sense of movement and depth. One prominent white shape is a thick, curved line that starts near the bottom left and extends towards the bottom right. Other light blue shapes are positioned in the upper and middle sections, creating a layered, geometric effect.

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Attachment 7:
Global Ethics Code of Practice



Ethics : code of practice

Purpose

Arup must show irreproachable integrity in all its activities. The purpose of this code of practice is to make all of its members aware of the firm's ethical standards and to provide guidance for members on upholding these standards. This will contribute to maintaining the high reputation that the firm already has in this area.

CODE OF PRACTICE

Arup expects from its members, and anyone else who represents it, the highest standards of integrity and conduct in all matters concerning the firm. We must not only abide by the laws of the countries in which we do business but must also act professionally and honourably at all times.

Effective date

1 May 2001

Applicability

This code of practice applies to all employees working for Arup worldwide. In addition, contractors, consultants, contract or casual staff or anyone else perceived as representing the firm will be required to meet these standards, as detailed in their contracts.