

# Corporate Report 2010



ARUP

*Design is about taking better decisions,  
creating better solutions and better results*



Arup is a global firm of designers, planners, engineers, consultants and technical specialists offering a broad range of professional services. We operate in five regions, the Americas, Australasia, East Asia, Europe and the UK, Middle East and Africa (UK-MEA), with our corporate centre based in the UK.

Arup is owned in trust on behalf of its employees. With no shareholders or external investors, we are able to determine our own direction as a business and set our own priorities, independently. We are not obliged to report on our performance in the same way as listed companies. Instead, we have chosen to use our Corporate Report as an opportunity to reflect on the past year and report on our sustainability performance and goals. Our financial results are appended at the end of the report.

# Chairman's foreword

The last 12 months has been a period of much turbulence, with many 'western' economies still affected by the world financial crisis, but some developing economies very active and providing plenty of opportunities. Fortunately, Arup's geographic and sector diversity has helped us enormously, and our turnover and resource base will be roughly the same as the previous year, albeit that this conceals some regional variations.

In previous recessions we have always seen one thriving part of our firm helping another less-buoyant part. Today, we operate much more as a true global network, sharing resources and delivering the best skills to appropriate projects no matter where the individuals are based. We are still seeing strong growth in several parts of Asia, especially China, and a healthy economy in Australasia. In the Americas and Europe, including the UK, we have more of a mixed picture, where infrastructure opportunities generally predominate, with property markets beginning to improve in many prime locations.

In April, we set out a fresh Arup Group Strategy focussing on the four themes of Investment, Design, Talent and Operations.

We have a long and successful history of investing for the future, and have now set down our focus areas for the next few years, including geographic and sector priorities as well as extending our collaborative research plans through Memorandum of Understandings with a small number of the best Universities.

At the same time, we continue to see design – providing our clients with innovative joined-up solutions to their complex problems – as a strong differentiator for Arup. Our strength is 'total design', combining our best local, technical and sector knowledge. Our newly-formed Arup Design Council is chaired by Sir John Sorrell, who has joined Arup as Group Advisor, and is focussed on reinforcing a design culture across the firm and promoting Arup as being central to the creative world.

The sustainability of Arup depends upon our ongoing success in attracting new people, and caring for and retaining those who align with our core values. Learning and development has always been at the heart of the firm, and the launch of the Arup University will help us maintain our learning culture for current and new generations.

I am pleased to report that our financial position is stable, and with our Trust ownership we can take long-term decisions free from the need to satisfy shareholders through the usual annual cycle. We have taken advantage of the changing marketplace to move some of our best people, including some key leaders, who then not only bring fresh ideas and experience, but also set-up bonds that strengthen the cohesion of our firm for the years ahead.

I have visited many of our offices throughout the year, and met many of our clients. Their appreciation of the quality of our work, the way it also benefits the communities in which they operate, and the enthusiasm of our people, all give me strong optimism for the future.



Philip Dille, Chairman

Marina Bay in Singapore exemplifies Arup's 'total design' approach. It integrates Singapore's prestigious waterfront promenade with iconic retail, entertainment and hotel facilities, public spaces and breathtaking city views. Pedestrian access to the resort is via the landmark Helix footbridge inspired by the geometric arrangement of DNA. The Marina Bay Sands Hotel has the world's longest public cantilever, the SkyPark, which is an engineering marvel.



# Sustainability at Arup

During these difficult economic times, it would be easy to put sustainability to one side and focus on areas that are more obviously business critical. We feel that to take this approach would be short-sighted, and over the last 18 months have strengthened our understanding of sustainability and worked to articulate more clearly what it means for Arup and our clients.

Sustainability is fundamental to our thinking at Arup, helping us to deliver on our mission to shape a better world. Our founder, Sir Ove Arup, established the firm over 60 years ago with the principle of 'total design' very much at the fore – the integration of the design process and the interdependence of all the professions. He also championed the social value of innovation and the humanitarian purpose of good design. Today we understand this as a commitment to sustainability.

Sustainability relates not just to our environmental performance, emissions and resource use, but to our economic performance, our impact on society, the culture of our firm and every element of our operation. Only by being sustainable in the way we conduct our business can we be successful in our mission to shape a better world.

In 2007, the Group Board formalised our approach by introducing Arup's global Sustainability Policy. As we implement the Policy throughout our operations there are inevitable challenges in embedding and measuring sustainability across our global operations. To address this and support our journey, we launched a Sustainability Strategy in April 2010 to provide a framework for sustainability and provide us with measurable targets.

In this, our first Corporate Report since we introduced our Sustainability Strategy, we celebrate some of the achievements from the calendar year 2010 under the framework provided by our Sustainability Policy: Our Business, Our People, Our Facilities and Our External Relationships. Each section contains a chart reporting on our performance against the key performance indicators (KPIs) in our Strategy, collated from all our regions. Where we measured it, we have included historical data to demonstrate our trend in performance.

The ongoing economic downturn in much of Europe means that land owners are reconsidering their strategies for empty plots that are not required for buildings.

We suggested that our client, Zuidas Development, establish an urban farm on one of its empty plots in central Amsterdam. The farm has a strong community element with neighbourhood schools invited to celebrate the harvest, and is transforming the perception of the future development among local people.

The contents of this report have been selected from across our regions for their contribution to furthering the sustainability agenda for our clients, within Arup and for society. Although we could have included many more, we hope these examples provide insight into our 'total design' thinking.

# Our business

As a firm of consultants, the biggest impact we can have on sustainability is through our work with clients. **But we try to embed sustainability in everything that we do** – in the way we run our business, our projects, and our physical impacts on the external environment.

## Equipping ourselves to help our clients

We help our clients to face the challenges of sustainability by investing in our passion for turning ideas into tangible tools and methodologies. Every year we invest a percentage of our profits to fund this research. This ensures we are equipped to continue to provide our clients with the best possible solutions.

### Some of our awards

---

Our East Asia Region won the Sustainability Award at the British Business Awards

---

Arup Associates was named Sustainable Designer of the Year by the UK's Sustainability Awards

---

The New Acropolis Museum in Athens won the Sustainability Award at the International Lighting Design Awards

---

The Property Council of Australia Innovation and Excellence Awards gave the Sustainable Development Award to 2 Victoria Avenue, Perth

---

Stanford Graduate School of Business, California, was named Green Project of the Year by the Silicon Valley/San Jose Business Journal

---

Beijing Changxindian Low Carbon Community project won the International Society of City and Regional Planners Awards for Excellence

In the maritime industry, for example, sustainability is high on the agenda, with ports obliged to comply with strict regulations under tight financial constraints. To support clients through this complex process, our maritime engineers in Madrid have adapted Arup's established SPeAR® sustainability appraisal tool, to develop **SuPort**, a holistic evaluation and diagnostic tool for assessing sustainability performance in ports and harbours.

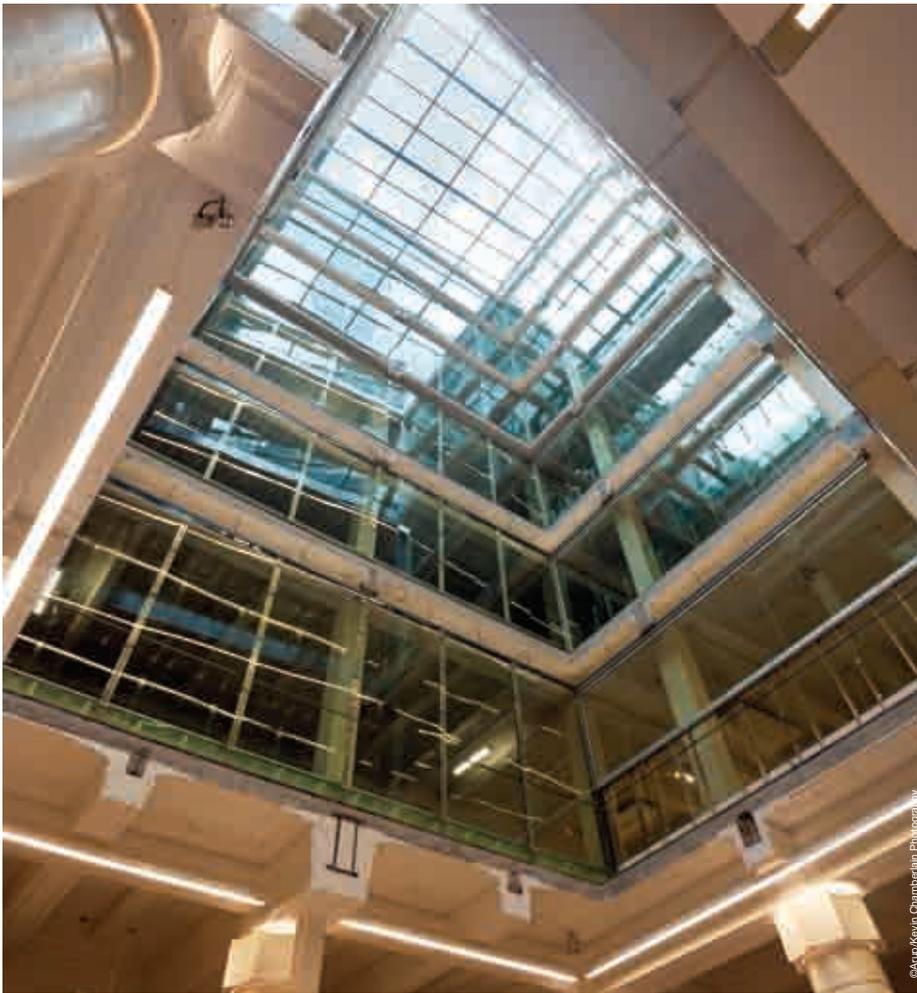
In the UK, we have formally incorporated **sustainable business outcomes** into our up-front discussions with clients. In this way, we engage with clients to explore how we might help them achieve their sustainability goals.

Our building retrofitting services are underpinned by our proprietary software tool, **AssetMap**, which brings together architectural, engineering, and financial and risk analysis in one place to enable us to quickly analyse the economic potential of a client's building or property portfolio. It helps us to advise clients on where they might focus any physical interventions, improve value for money and develop and deliver the strategy to take their portfolio forward.



1

2



©Acquity/Kevin Chamberlain Photography

3



4



5

- 1 SuPort
- 2 AssetMap
- 3 9 Hunter Street
- 4 Crossrail
- 5 Beijing

### A considered approach

Our work is informed by rigorous testing and analysis, and we are not afraid to challenge established methodologies, where we think there is a better way. And by approaching projects in a holistic way, we can deliver solutions that leave a positive legacy for our clients, the community and the environment.

In Crossrail, a major new railway connection beneath central London, our energy and infrastructure teams saw an opportunity to innovate by applying **geothermal borehole technology** to the tunnels. They approached Crossrail with the idea of embedding cold-water pipes into the tunnel linings which would be heated by the relatively-high ambient temperature of the air in the tunnel. This would then provide warm water to heat local buildings, potentially providing our client with a revenue stream and reducing the cost of operating ventilation fans to cool the tunnels. Crossrail has commissioned us to investigate the feasibility and potential market for this solution.

Hong Kong recently announced its long-awaited plan for tackling climate change which consists of a series of individual strategies for each of its different sectors. We think there is a need for the city to adopt a framework that considers the interactions between these strategies, rather than approaching them in isolation. To stimulate public debate – with the aim of achieving a better end result for Hong Kong – our local office developed a **Carbon Calculator** that considers these interactions. For example, the emission reduction attributed to adopting electric cars will depend on the efficiency of the electricity grid.

While many buildings lend themselves naturally to the principles of sustainable design, challenges often arise when trying to resolve these design options within the constraints of fire engineering. We are addressing this in Australia with a paper which highlights the need for the **earlier adoption of fire engineering** in projects, particularly those with sustainability objectives. Our refurbishment of 9 Hunter Street achieved a 6 star Green Star rating and illustrates how a balance can be achieved.

In Beijing we have partnered with the Beijing Institute for Urban Planning to **assess the city's carbon emissions** arising from its City Plan, and developing strategies for reducing Beijing's carbon footprint.



© ChargeMaster



© 2010 Wind Power Limited and Grimshaw

## Collaborative working

Our open approach encourages collaboration between our staff, clients and partners, as well as community stakeholders. We bring together teams of people from diverse disciplines and with unique skills on a global scale. This helps us collectively to tackle tough issues and find imaginative solutions to real problems.

One such example is a joint venture with Yorkshire Water to investigate the energy consumption associated with **advanced wastewater treatment**. By implementing the results of our research, Yorkshire Water is reducing its site operational costs by 15%, which equates to a potential reduction of over 16,000 tonnes of CO<sub>2</sub> each year and a £1.2m cost saving.

Measuring and **reporting of sustainability-related performance** is relatively new. A white paper we authored with Harvard University puts forward a new methodology that could transform the way companies report on green issues. It provides a simple and cost-effective way of reporting, and allows US companies to focus on what matters most.

The emerging technology of **carbon capture and storage** takes CO<sub>2</sub> emissions from sources such as coal-fired power stations and stores them underground. We have undertaken a joint

study for the European Commission with Scottish Carbon Capture and Storage, showing for the first time on a Europe-wide scale, the network of pipes that will be required to transport CO<sub>2</sub> across the continent to make carbon capture and storage a reality.

Our International Development team has agreed a three-year grant with the **Rockefeller Foundation**, building on the role we have played over the past two years working with them on the US\$40m Asian Cities Climate Change Resilience Network. ACCCRN is a network of ten cities across India, Vietnam, Thailand and Indonesia working together to generate practical examples of how cities in fast-urbanising, low- and middle-income countries, can build urban resilience to the various impacts of climate change.

We are collaborating with Wind Power Limited to develop an innovative new **10MW offshore wind turbine**. The transformational design of the AerogeneratorX is half the height of



© Yorkshire Water

an equivalent horizontal-axis turbine with the weight concentrated at the base, reducing fatigue in the blades and making wind energy more cost-effective.

**Electric vehicles (EVs)** are evolving rapidly, and Arup is leading the way through a number of partnerships and advisory roles. In South Africa, we are working with Optimal Energy to develop a new manufacturing facility for South Africa's own EV, the Joule. In the UK we are providing strategic advice to central government as the delivery partner for the Office for Low Emission Vehicles' infrastructure programme, Plugged-In Places, and adviser to the Technology Strategy Board (CABLED) and Energy Technologies Institute. On a local level, we are advising Milton Keynes on the procurement and installation of EV infrastructure. In order to stay at the forefront of technology development, we have co-founded HaloIPT, a company which provides wireless charging for EVs and which may be the future of charging technology.

	09-10	08-09	07-08	06-07	05-06	04-05	<b>Our indicators</b> <b>Trend in performance</b>
<b>Projects setting sustainability objectives (%)</b>	<b>23</b>	23	12	not measured			Aggregated from regional estimates based on Project Plans, Project Quality Plans and various databases. <i>Application of sustainability objectives to projects has been maintained.</i>
<b>Profit (% on turnover)</b>	<b>2.6</b>	8.6	11.2	8.5	7.2	2.9	Profit on turnover (before tax, exceptional items and staff profit share). <i>Level of profitability reflects global economic circumstances.</i>
<b>Investments (% of income)</b>	<b>1.5</b>	2.4	2.7	2.6	1.9	1.7	Investment in the business and its people, necessary for the continued success of the business. <i>Commitment to investment maintained despite global economic circumstances.</i>
<b>Cash at bank (weeks of costs, before profit share)</b>	<b>7.7</b>	7.9	8.1	6.6	6.9	5.3	Cash reserves necessary to meet our working capital demands. <i>Cash reserves have been maintained.</i>
<b>Repeat clients (%)<sup>1</sup></b>	<b>76</b>	58	70	50	50	52	Aggregated from regional client satisfaction surveys and various databases. <i>Level of repeat clients has increased despite challenging economic times.</i>

<sup>1</sup> Results recalculated pre 2009-10 using revised methodology

## Better solutions

One of our aims is to do quality work that brings real benefits to our clients and which create a positive legacy for the lives of people and for the environment.

GREEN TOMORROW is a **zero-carbon house** designed for Samsung as a showcase of sustainable design for South Korea. It is the first zero-carbon building in East Asia to achieve a LEED Platinum level. By incorporating the green concepts, Samsung aims to halve energy use in its new apartment developments by 2013. In Mauritius, we are delivering the first project to be rated using an international environmental standard. The BREEAM-rated Mauritius Commercial Bank incorporates a photovoltaic farm, rainwater harvesting and is orientated to eliminate solar gain.



© Samsung G&T

9

In Melbourne, commercial buildings are responsible for 48% of greenhouse gas emissions. As part of the City's 1200 Buildings programme to stimulate **retrofit of existing commercial buildings**, we have been commissioned to study Melbourne's building stock and to segment it into those with higher, medium and lower potential for mitigating CO<sub>2</sub> emissions. Our recommendations and database enabled the City Council to break down the large volume of information so it could effectively target building owners and operators.

San Francisco's Laguna Honda Hospital specialises in the long-term care of the city's homeless, elderly and poor, many of whom rely on the hospital for their wellbeing. We incorporated these unique issues into a design to increase patient wellbeing and to ultimately lower the overall cost of care. Features include organic walking trails to help treat Alzheimer's patients, a farm, greenhouse, and communal eating and recreation areas to increase patient interaction. The hospital achieved LEED certification, making Laguna one of the first **'green hospitals'** in the US.



© Mario David Wakely/Anastasia Allen

10

- 6 Electric vehicle charging station
- 7 AerogeneratorX
- 8 Yorkshire Water wastewater treatment
- 9 Green Tomorrow
- 10 Laguna Honda Hospital

# Our people

Our people are essential to us creating a sustainable business. By making our work environments stimulating, and by running our business in an equitable and rewarding way, **we create the space for staff to innovate and lead in new areas** – for the benefit of us and our clients.



## A learning organisation

Learning is at the heart of our organisation, and one of our ongoing aims is to improve standards and provide better coordination for our learning, knowledge sharing and research. To further these aims, we have established the **Arup University**, which acts as an umbrella for much of our learning activities. It will raise standards, ensuring that what we learn meets the firm's needs and is accessible to all staff. Active collaborations with external universities will help to ensure the Arup University's academic independence.

One of the courses on offer is a Masters-level module in Sustainability Leadership, which aims to develop a cadre of people working together to address the broadest and most challenging questions relevant to our business. The module has been designed in partnership with the University of Cambridge, and 23 staff from across our regions enrolled on the course this year.

## Shaping the sustainability agenda

All around the world, Arup people are actively involved in external organisations that promote and progress sustainability. This is a two-way activity, as they are also able to bring knowledge back into the firm, ensuring we are at the forefront of the latest thinking on sustainability.

- **Desiree Carolus**, on the Board of Enerkey in South Africa, which improves sustainability through urban energy projects
- **Andrew Chan**, Chairman of the Hong Kong Green Building Council
- **Fiona Cousins**, on the Board of Directors of the New York chapter of the US Green Building Council
- **Bora Kovacevic**, on the Management Board of the Russian Green Building Council
- **Ramón Rodríguez**, Vice-President of the Green Building Council Spain
- **Sara Turnbull**, Council Member and Trustee of the UK Women's Engineering Society
- **Frank Vromans**, on the Board of the Australian Green Infrastructure Council
- **Jeremy Watson**, Chief Scientific Adviser to the UK's Department for Communities and Local Government
- **Jaap Wiedenhoff**, member of the Rotterdam Climate Initiative in the Netherlands

### Some of our awards

---

Winners of the Olympic Delivery Authority Diversity Award for Most Improved Organisation

---

Our Hong Kong office won the Manpower Developer Award for outstanding accomplishments in training and development

---

Australian National Association for Women in Construction Award for Innovation in Design given to Kathy Franklin

---

Highest ranked consulting engineers in the Hong Kong Top 100 Graduate Employer List

---

Engineers Australia Young Inspiring Engineer Award given to Steven Lindsay

---

UK Women in Construction Awards Professional/Consultant of the Year Award given to Kate Hall

# 37%

The proportion of our graduate recruits in the UK-MEA who are women

	09-10	08-09	07-08	06-07	05-06	04-05	<b>Our indicators</b> <b>Trend in performance</b>
<b>Women in the firm (all Grades) (%)</b>	30	29	29	30	29	29	Based on staff at all grades. <i>Proportion of women in the firm has been maintained.</i>
<b>Women in management positions (Grades 7-9) (%) <sup>1</sup></b>	13	13	12	not measured			Based on staff at Grades 7-9. <i>Proportion of women in management has been maintained.</i>
<b>Staff who have received relevant sustainability training (%)</b>	41	17	16	not measured			Based on training records and external accreditation for staff at all Grades. <i>Significant improvement has occurred.</i>

<sup>1</sup> Introduced as a KPI this year



2



4



3

- 1 Arup University
- 2 OvaGreen Swap Shop
- 3 OvaGreen showcase
- 4 Priscilla Huong

### Grassroots sustainability

This November, we celebrated the **tenth anniversary of OvaGreen**, our global network of environmental volunteers in Arup offices. The work of this grassroots network predates the creation of Arup’s formal sustainability policy, and was started by a group of passionate staff in 2000. A lot of OvaGreen’s early initiatives are now managed by Arup’s central systems, such as purchasing departments, IT, facilities management, and through strategies such as the firm’s Group Sustainability Strategy. OvaGreen’s work is not over, however. Today, OvaGreen is dedicated to making our operational practices more sustainable, and promotes staff awareness of and involvement in sustainability issues, both in the workplace and in the community.

### Challenging superstition

In China, superstition holds that it is unlucky for women to enter a tunnel before it is completed. We worked closely with our client and with contractors on the Hong Kong West Drainage Tunnel to break this tradition by placing Priscilla Huong as the resident geologist on the project. She has been accepted in her role and says: “I am honoured to work as one of the **female pioneers** in the tunnelling industry. I will work hard to demonstrate that female engineers can play an equivalent role in this industry, just as male engineers do.”

# Our facilities

Sustainability is a key consideration for the way we manage our offices, in the resources that we use and the goods and services that we buy.



## Some of our awards

---

Best Large Corporation in the Mayor of London's Green Procurement Code Awards

---

Bronze award for the Green Office Management Award from the Hong Kong Green Council

---

Winner of the Hong Kong and Asian Most Admired Knowledge Enterprise Award

---

Gold Award from the Intranet Innovation Awards for our Discussion Forums and a Commendation for Arup Projects, our knowledge base of project information

## Greening the Arup estate

Our offices are the second biggest contributor to Arup's carbon footprint, after travel. We are committed to taking a resource efficient, sustainable approach to the way we run all our offices, and we aim to achieve the International Organisation for Standardisation's Environmental Management System Certification (**ISO14001**) across 95% of our estate by the end of 2012.

Our offices in Germany, the US and the Gulf have now achieved ISO14001 certification, as have Bristol, Singapore, Istanbul, Bangkok, Beijing, Hong Kong, Shanghai, Shenzhen, Tokyo and Moscow. This brings the proportion of Arup staff working in offices that are ISO14001 certified to 70%.

In the Americas, our Boston and Los Angeles offices received the additional accolade of being awarded Leadership in Energy & Environmental Design (**LEED**) **Silver ratings**. The certificate recognises design features and strategies to improve performance, such as dual

flush toilets, maximum use of daylight and diverting waste materials from the refurbishments from landfill.

Our **new central London office** opened at 8 Fitzroy Street, allowing us to consolidate 1400 staff from eight other sites into one world-class building. Environmental features include a chilled-beam heating and cooling system, solar heated hot-water supply, rainwater collection, daylight sensors and significant sub-metering allowing us to monitor and control energy use. The energy consumption for the building is displayed in the reception area as part of our intention to monitor and reduce our environmental impact.

Our San Francisco office also launched an energy metering and visualisation system. This '**energy dashboard**' shows real-time and historical data feeds of the electricity used by the lighting, server and plug loads of the office. Data can be accessed through various interfaces to increase understanding of energy use.

	09-10	08-09	07-08	06-07	05-06	04-05	<b>Our indicators</b> <b>Trend in performance</b>
<b>Staff working in offices with an EMS certified to ISO14001 (%)</b>	70	70	68	34	43	40	Based on the number of staff working in EMS (ISO14001) certified offices in all regions. <i>Certification of offices to ISO14001 has been maintained.</i>
<b>Carbon emissions per full-time employee per year (tonnes CO<sub>2</sub>)</b>	3.4	3.4 <sup>1</sup>	3.1 <sup>1</sup>	not measured			Based on regional estimates of direct and indirect emissions including business travel <sup>2</sup> . <i>No trend identified.</i>
<b>Total wastes generated per full-time employee per year (kg)</b>	115	122		not measured			Based on monitoring of waste generation in Australasia, East Asia, Europe and UK-MEA Regions. <i>No trend identified.</i>
<b>Lost time accidents per 100,000 employees <sup>3</sup></b>	99	219	141	107	94	118	Based on regional records of lost time accidents (previously reportable accidents 2003-07). <i>Reduction in the number of lost time accidents.</i>

<sup>1</sup> Recalculated using revised 2009 emission factors and resolving calculation errors

<sup>2</sup> Using the 'WRI Greenhouse Gas Protocol Corporate Accounting and Reporting' definition of Scopes 1, 2 and 3

<sup>3</sup> Recalculated in 2010 following a global review of accident statistics

## Sustainability investments begin to pay

In the UK, Arup's photocopiers have been installed with Uniflow **print management software**. Instead of directly printing a document, it is sent to a print queue and staff then retrieve their prints by swiping their ID badge. This has helped reduce wasted prints by automatically deleting those not collected within 24 hours. By April 2010, 30% of prints had not been collected, which translates to a saving of around £60k in printing and paper costs.

We also improved the call quality and user experience of our **video conference** facilities by moving from a single hub located in the UK, which served all our regions, to four hubs across the Americas, Australasia, East Asia and UK-MEA. This has driven the volume of video calls from an average of 300 per month in 2008 to 900 per month in 2010. The value of the investment was clear in April 2010 when the widespread cancellation of flights due to the volcanic ash cloud from Iceland's Eyjafjallajokull volcano resulted in a peak of 1100 calls, the first time that call volume had exceeded 1000.



3



4

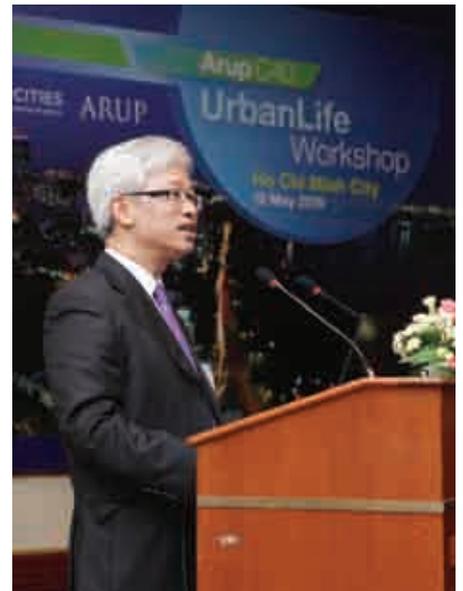
- 1 The Los Angeles office
- 2 8 Fitzroy Street
- 3 Video conferencing
- 4 Eyjafjallajokull volcano

# Our relationships

We work hard to develop partnerships that bring about a **genuine exchange of knowledge and ideas**, helping to drive further improvements in sustainability both within and outside Arup. This means **promoting the benefits of sustainability to clients and partners**, providing leadership in our local communities and helping to minimise our environmental impacts on society.



1



2

## Helping cities tackle climate change

As the sole strategic advisor to the C40, a group of 40 of the world's largest cities committed to tackling climate change, we are working with six member cities to deliver action-oriented **UrbanLife workshops**. By taking a multidisciplinary approach and fusing the practical with the political, we are helping deliver robust, realistic solutions to a specific challenge facing each city. Our workshops also consider the bureaucratic challenges of delivering far-reaching programmes that cut across the traditional departmental boundaries of city government.

In Toronto, we focused on the challenges of translating the Mayor's energy targets into action at a neighbourhood level. With Melbourne, we explored how the city could use information technology to encourage people to change their behaviour and enable city managers to better understand the impact of their climate policies. São Paulo's workshop explored how a new approach to waste management could create a renewable energy resource, and in Ho Chi Minh City we focussed on how to marry the city's rapid growth with greater resilience to flooding and water shortages. In 2011, we will lead workshops with Addis Ababa and Warsaw.

	09-10	08-09	07-08	06-07	05-06	04-05	<b>Our indicators</b> <b>Trend in performance</b>
<b>Charitable donations</b> <b>(£, to nearest £000) <sup>1</sup></b>	<b>742</b>	761	410		not measured		Direct charitable donations in all regions, including those from the Ove Arup Charitable Trust. <i>Donations are in line with the target of 1% of management account profit.</i>
<b>Pro bono engagement</b> <b>(£ equivalent staff cost, to nearest £000)</b>	<b>582</b>	715	109		not measured		Based on equivalent cost of pro bono staff engagement in all regions. <i>In the context of ongoing improvements to the consistency of reporting, level of pro bono engagement acceptable given the challenging economic condition.</i>

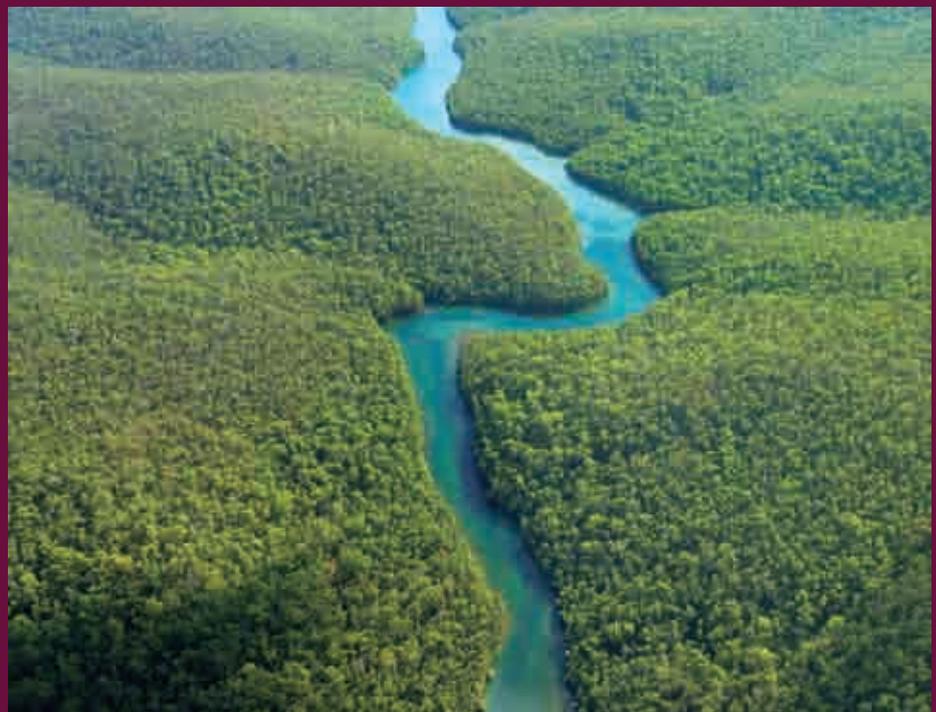
<sup>1</sup> Includes charitable donations through UK charitable trusts

## Sustainable insight

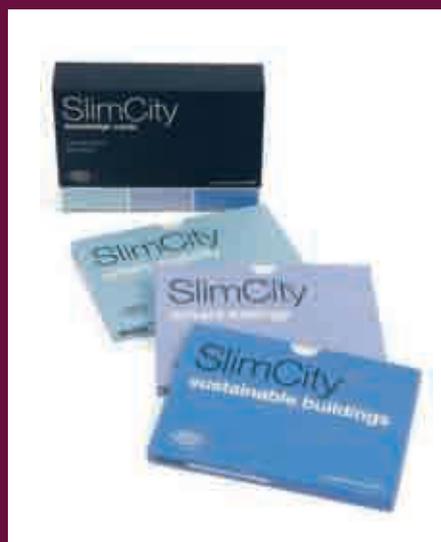
Our founding partnership with **Cambridge University's Programme for Sustainability Leadership** continues. We are lead partner in a new programme that aims to encourage companies and governments to recognise that natural capital is a fundamental basis for business value.

We have established a **sustainability hub** within our Brisbane office, bringing together four separate not-for-profit organisations working in the environment and sustainability sector. The hub's central mission is to integrate sustainability more broadly through our major infrastructure projects, buildings and communities. The hub organisations include Brisbane City Council's CitySmart, Green Cross, Australian Green Infrastructure Council, and the Green Building Council of Australia.

Our Relationship with the **World Economic Forum** continued. Following the publication in 2009 of the SlimCity Knowledge Cards which we researched and produced in collaboration with the Forum, this year we produced a SlimCity e-platform. The online tool furthers the aim of the SlimCity programme, to inspire Mayors and the private sector to take committed action towards achieving resource efficiency at a city level. Users can now browse the cards online and leave comments for discussion. An innovative radial diagram maps the connections between the SlimCity topics. To date the cards have been used in workshop events in Tokyo, Toronto, Melbourne, San Francisco and London.



3



4

- 1 UrbanLife workshop in Toronto
- 2 Wilfred Lau in Ho Chi Minh City
- 3 Natural capital
- 4 SlimCity cards

# Humanitarian causes

One of the many things that sets Arup apart is its commitment to humanitarian causes. Our founder, Ove Arup, established the firm as ‘an organisation which is human and friendly’ and with ‘a wish to do socially useful work and to join hands with others fighting for the same values.’

We fulfil this commitment through giving, doing and developing, including through our global initiative that seeks to encourage and leverage staff abilities to reduce suffering and improve people’s lives, the **Arup Cause**. We give money and allow our people to give their time; we fund staff to provide technical assistance to humanitarian and development organisations around the world; and we encourage our staff at a grassroots level to undertake networking and education activities on charitable and community issues, under the umbrella of Arup’s **Poverty Action Network**.

## Giving

Each year, we aim to donate 1% of our profits to charitable causes, and we also contribute staff time. Wherever possible, we try to combine money and time to bring about the greatest impact. We partner with organisations and charities with which Arup can have an ongoing relationship, and community engagement groups in each of our regions allocate donations across a broad range of areas: education, social care, health and welfare, disaster relief and poverty alleviation, local community development, sustainability and the environment, and technology.

Our largest donation is to **The Ove Arup Foundation**, a charitable organisation that aims to promote new thinking in engineering and architectural education. In particular, it aims to build a greater understanding between these different disciplines, and promote a more holistic approach to design. Over 50% of The Foundation’s donations made in 2009-10 were to universities.

### Top ten monetary donations in 2009-10

The Ove Arup Foundation	£139,271
Engineers Without Borders	£46,436
RedR	£40,626
The Climate Group	£25,000
Red Cross	£23,126
The Smith Family	£23,087
Habitat for Humanity	£22,394
Sports Aid	£20,500
The Royal Academy of Engineering	£18,800
Unicef	£15,790
Other (less than £10,000)	£366,970
<b>Total donations</b>	<b>£742,000</b>

*Thanks to Arup’s support, the Smith Family has been able to expand initiatives such as an innovative family and child centre in Townsville, and our online mentoring programs were assisted by Arup staff. A generous donation of \$25,000 provided further support to our programs.*

Damian Foley, General Manager  
Queensland, The Smith Family



- 1 SportsAid competition
- 2 Wu Zhi Qiao
- 3 Haiti earthquake

## Doing

Each of our five regions has established a small number of **strategic partnerships** with charities that enable us to provide an ongoing programme of support. We want to maximise the impact of these partnerships by aligning our skills, knowledge and interests with each charity's mission, and with their immediate and longer-term needs. As these partnerships develop we believe the enthusiasm of our staff will make a real difference, will improve the personal development of our staff, and help our business to become more closely engaged with the communities in which we work.

The **Smith Family** is an independent children's charity in Australia committed to helping disadvantaged children by providing them with education and learning opportunities. We work together to enable children and their families to access the support they need to have better futures.

In East Asia, we work with the **Wu Zhi Qiao** (Bridge to China) organisation, providing engineering support to teams of university student volunteers on bridge rebuilding projects in remote

areas of China. In June, we launched a global bridge design competition to gather the best ideas from around Arup for a footbridge that provides safe access to schools and the local market for the remote community of Mixia Village in Yunnan Province. Each project is informed by a fusion of modern construction knowledge, and local wisdom and materials.

In partnership with SportsAid, the Construction Youth Trust and the Royal Academy of Engineering, we invited students aged 12-14 from across London to design and submit plans for a **new sports venue**. Over 200 children took part, supported by 60 Arup staff, with 30 entries from 11 schools. Ten finalists competed for the prestigious accolade at a public forum hosted at our offices. Talks are underway with our partners to expand the competition nationwide next year.

The **Haiti earthquake** on 12 January 2010 caused extensive damage and made hundreds of thousands homeless. Through our International Development team, which provides assistance to development and humanitarian agencies

on a not-for-profit basis, we provided technical assistance to a number of non-governmental agencies that are contributing to relief and recovery efforts.

We have been advising Habitat for Humanity on its **transitional shelter programme** in Haiti and in developing its strategic plan to assist communities in re-building their homes. We assessed a pre-earthquake housing programme as a potential benchmark for reconstruction and prepared technical guidance notes on a variety of topics including wind loading, damage assessment and building typologies which have been shared with the UK Shelter Forum and UN Shelter Cluster.

# \$65,000

Amount raised for Haiti earthquake relief by staff in the Americas

## Developing

In the Ashanti region of Ghana, we continued our relationship with NGO **Ashanti Development** to provide safe and accessible water and better waste management to local communities. We provided two specialists on a 50% voluntary basis, 50% funded as Arup Cause activities. Our work is undertaken alongside villagers and is sustainable in that no village is allowed to become dependent on us.

Eighteen staff members from Cardiff took part in a project to design and build an **orphanage in Uganda**. As well as providing architecture, structure, infrastructure, landscaping and environmental assessment services, they gained planning permission and hired a local workforce to build the Orphanage. Arup Cause funding supported the engineers' travel to Uganda to oversee construction for two week stints.

Arup's **Poverty Action Network** (PAN) originated as a global grassroots community of staff focused on international development and disaster relief work. PAN has since grown into a vehicle for action for our staff – enabling those that have an interest in humanitarian issues, social injustice and sustainable development to take action in the local and wider community. Regular events include monthly talks, 'wear red for RedR' fundraising events in all our regions for the international charity, and volunteering to provide free home repairs to low-income homeowners in Los Angeles through the organisation, Rebuilding Together.



4

# 3279

Hours of unpaid voluntary time donated by staff to oversee construction of the orphanage in Uganda



5

- 4 Ashanti Development
- 5 Wear red for RedR

# 531

Global subscribers to Arup's Poverty Action Network Forum

# Our indicators

Sustainability Policy Objectives	Key Performance Indicators	2009-10 Final	2011-12 Target
<b>Our business</b>			
<ul style="list-style-type: none"> <li>provide value to clients by building upon its reputation for integrated design and a holistic approach to projects</li> <li>deliver projects recognised for their sustainability credentials, in line with client expectations</li> <li>evaluate projects with respect to their sustainability risks and opportunities and, where appropriate, discuss these with the client</li> <li>achieve performance that ensures the firm's economic, environmental and financial viability</li> </ul>	Projects setting sustainability objectives (%)	23	50
	Profit (% on turnover)	2.6	- <sup>1</sup>
	Investments (% of income)	1.5	- <sup>1</sup>
	Cash at bank (weeks of costs, before profit share)	7.7	- <sup>1</sup>
	Repeat clients (%)	76	- <sup>1</sup>
<b>Our people</b>			
<ul style="list-style-type: none"> <li>employ and retain staff who have a high degree of awareness and expertise in sustainability for all disciplines practised</li> <li>provide continual education and training for all staff on sustainability issues relevant to the firm's businesses</li> <li>support innovative approaches to implementation of sustainability strategies on projects</li> </ul>	Women in the firm (all Grades) (%)	30	35
	Women in management positions (Grades 7-9) (%)	13	15
	Staff sustainability training (%)	41	35
<b>Our facilities</b>			
<ul style="list-style-type: none"> <li>maintain management systems to assist with implementation of sustainability objectives</li> <li>aim to use resources efficiently and to minimise waste, usage of water, energy and other consumables in the office environment</li> <li>develop a strategy to move towards minimising carbon emissions in its operations</li> <li>endeavour to prevent pollution within the scope of its activities</li> <li>develop a strategy for the firm to move towards sustainable procurement of the goods and services used in its operations</li> </ul>	Staff in offices with EMS to ISO14001 (%)	70	95
	Carbon emissions per full-time employee per year (tonnes CO <sub>2</sub> )	3.4	2.9 <sup>2</sup>
	Total wastes generated per full-time employee per year (kg)	115 <sup>3</sup>	110 <sup>4</sup>
	Lost time accidents per 100,000 employees	99	186 <sup>2</sup>
<b>Our external relationships</b>			
<ul style="list-style-type: none"> <li>partner with organisations that practise sustainability and that enable the exchange of ideas and the promotion of sustainability leadership across its businesses</li> <li>fund and work on community projects that achieve sustainability goals</li> </ul>	Charitable donations (£, to nearest £000) <sup>5</sup>	742k (1.1%)	1% of management account profit
	Pro bono engagement (£ equivalent staff cost, to nearest £000)	582k	- <sup>1</sup>

<sup>1</sup> No target set   <sup>2</sup> 15% reduction on 08-09 outcome   <sup>3</sup> Excludes Americas Region

<sup>4</sup> 10% reduction on 08-09 outcome   <sup>5</sup> Includes charitable donations through UK charitable trusts

After several years of data collection we are in a position to understand trends in our performance. Our Group Board articulated a set of global targets in 2009 to measure delivery of our Sustainability Strategy. These targets identify performance to be achieved by the end of the 2011-12 financial year. At that time, the Strategy will be reviewed and

opportunities for further improvement will be identified and implemented.

The table above shows a summary of our 2009-10 performance against our sustainability targets. In this first year of implementing our Group Sustainability Strategy, it is too early to draw conclusions from our progress. However,

it is apparent that in some areas planned improvement will take significant effort to attain, that other activity areas should achieve their target by 2012, and some we already comfortably achieve.

We will be guided by this review of our performance in setting and modifying our sustainability delivery plans for 2011.



# Financial Statements 2010

Arup Group Ltd (Consolidated)



ARUP



## Contents

Directors' report	1-2
Independent auditors' report	3
Profit and loss account	4
Statement of total recognised gains and losses	4
Group balance sheet	5
Company balance sheet	6
Cashflow statement	7
Notes to the financial statements	8-22

## Directors' report

The directors present their report together with the financial statements for the year ended 31 March 2010 which were approved by the Board of Directors on 22 October 2010.

The capital of the Company is divided into equity shares, which are held in trust for the benefit of the employees (past and present) of the Group, and voting shares that are held by the Ove Arup Partnership Charitable Trust.

### Principal activity

The Company and its subsidiaries practice in the field of consulting engineering services, in architecture and in other related professional skills.

### European Union branches

The Group has significant branches operating in the European Union countries of Poland and Romania.

### Review of the business and future developments

The Group turnover for the year remained unchanged (2009: increased by 22.5%) and the Group made a total profit before tax, dividends and staff profit share of £104.1m (2009: £76.6m).

The performance and development of the Group is in line with the expectations of the directors.

The directors draw attention to the following matters that have had an impact on the reported performance in the current year:

- The results include the defined benefit pension scheme liabilities and assets as calculated under FRS 17. This shows as a net liability on the balance sheet of £83.4m (2009: £98.9m).
- The closure of the pension scheme and the move from RPI to CPI valuation resulted in two exceptional credits to the profit and loss account of £42.3m and £38.5m.

The principal risks and uncertainties facing the business include foreign exchange risk and risk resulting from the diverse geographical spread of the business and its ability to continue to secure new projects and deliver the performance of existing projects in line with management's objectives. To monitor these, the directors use the following financial key performance indicators (KPIs):

- Turnover and profit per person is a financial KPI used to monitor the continued contribution to the Group. In calculating this measure profit is stated before tax, dividends and profit share. For the year ended 31 March 2010, turnover per person was £90k (2009: £85k) and profit per person was £11k (2009: £8k).
- Staff turnover is a key non-financial measure of business performance. For the year ended 31 March 2010, staff turnover was 12.7% (2009: 10.0%).

### Directors and their interests

The directors of Arup Group Ltd during the year were as follows:

J Baster (Appointed 01/11/09)

M D Bear (Appointed 01/10/09)

A J Belfield

R F Care

T G A Carfrae

A K C Chan

P G Dilley

G S Hodgkinson

L M Lui

J C Miles

M Raman

D J Singleton

D A Whittleton

No director has an interest in the shares of the Company (or any other member of the Group) other than through their interest as an employee of the Group in the employee trusts which own the equity shares of the ultimate parent Company.

### Auditors

At an extraordinary general meeting of Arup Group Limited held on 7 October 2010, a resolution was passed to appoint PricewaterhouseCoopers LLP for the year ending 31 March 2011 as the Company and Group auditors. A thorough audit tender process was undertaken, considering industry knowledge, audit quality and cost efficiency.

## Directors' report (continued)

### Charitable donations

During the year the Group made donations to charities and for charitable purposes of £730k (2009: £761k), of which £372k (2009: £551k) was to beneficiaries in the UK.

### Employees

The maintenance of a highly skilled workforce is key to the future of the Group. Health and Safety matters are regularly reviewed by the directors and it is their policy to ensure that:

- full and fair consideration is given to all applications for employment made by disabled persons, having regard to their capabilities;
- when existing employees become disabled (whether from illness or accident) every reasonable effort is made to continue to provide suitable employment either in the same, or by training, in an alternative job; and
- disabled persons are given equal consideration for training, career development and opportunities for promotion within the Group.

The Group is active in the field of employee communications and employees are encouraged to express their views on major policy issues. Each year employees are provided with a Chairman's report and financial information. Employees receive the balance of Group profits each year after transfer to reserves.

### Statement of directors' responsibilities

The directors are responsible for preparing the Directors' Report and the financial statements for each financial year in accordance with applicable laws and regulations.

The directors have elected to prepare financial statements in accordance with United Kingdom Generally Accepted Accounting Practice (United Kingdom Accounting Standards and applicable law). Under company law the directors must not approve the financial statements unless they are satisfied that they give a true and fair view of the state of affairs of the Group and of the profit or loss of the Group for that period. In preparing these financial statements, the directors are required to:

- make judgements and estimates that are reasonable and prudent;

- select suitable accounting policies and then apply them consistently;
- state whether applicable accounting standards have been followed, subject to any material departures disclosed and explained in the financial statements; and
- prepare the financial statements on the going concern basis unless it is inappropriate to assume that the Group will continue in business.

The directors are responsible for keeping adequate accounting records that are sufficient to show and explain the Group's transactions and disclose with reasonable accuracy at any time the financial position of the Group and enable them to ensure that the financial statements comply with the Companies Act 2006. They are also responsible for safeguarding the assets of the Group and hence for taking reasonable steps for the prevention and detection of fraud and other irregularities.

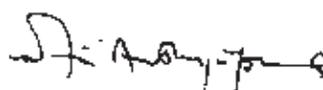
Legislation in the United Kingdom governing the preparation and dissemination of the accounts and the other information included in Annual Reports may differ from legislation in other jurisdictions.

The maintenance and integrity of the Group website is the responsibility of the directors; the work carried out by the auditors does not involve consideration of these matters, and accordingly the auditors accept no responsibility for any changes that may have occurred in the financial statements since they were initially presented on the website.

### Audit

So far as the directors are aware, there is no relevant audit information of which the Group's auditors are unaware, and the directors have taken all steps that ought to have been taken as directors in order to make themselves aware of any relevant audit information, and to establish that the Group's auditors are aware of that information.

By Order of the Board



M J Ansley-Young  
Company Secretary

22 October 2010  
Registered Office: 13 Fitzroy Street, London W1T 4BQ

## Independent auditors' report

We have audited the financial statements of Arup Group Limited for the year ended 31 March 2010 which comprise the group profit and loss account, the group and parent company balance sheet, the group cash flow statement, the group statement of total recognised gains and losses and the related notes numbered 1 to 25.

The financial reporting framework that has been applied in their preparation is applicable law and United Kingdom Accounting Standards (United Kingdom Generally Accepted Accounting Practice).

This report is made solely to the Company's shareholders, as a body, in accordance with Sections 495 to 496 of the Companies Act 2006. Our audit work has been undertaken so that we might state to the Company's shareholders those matters we are required to state to them in an auditor's report and for no other purpose. To the fullest extent permitted by law, we do not accept or assume responsibility to anyone other than the Company and the Company's shareholders as a body, for our audit work, for this report, or for the opinions we have formed.

### Respective responsibilities of directors and auditors

As explained more fully in the Statement of directors' responsibilities, the directors are responsible for the preparation of the financial statements and for being satisfied that they give a true and fair view. Our responsibility is to audit the financial statements in accordance with applicable law and International Standards on Auditing (UK and Ireland). Those standards require us to comply with the Auditing Practices Board's Ethical Standards for Auditors.

### Scope of the audit of the financial statements

A description of the scope of an audit of financial statements is provided on the Auditing Practices Board's website at [www.frc.org.uk/apb/scope/UKNP](http://www.frc.org.uk/apb/scope/UKNP).

### Opinion on financial statements

In our opinion the financial statements:

- give a true and fair view of the state of the Group's and the parent company's affairs as at 31 March 2010 and of the Group's profit for the year then ended;
- have been properly prepared in accordance with United Kingdom Generally Accepted Accounting Practice; and
- have been prepared in accordance with the requirements of the Companies Act 2006.

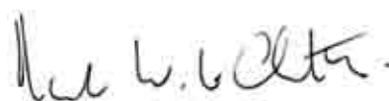
### Opinion on other matters prescribed by the Companies Act 2006

In our opinion the information given in the Directors' Report for the financial year for which the financial statements are prepared is consistent with the financial statements.

### Matters on which we are required to report by exception

We have nothing to report in respect of the following matters where the Companies Act 2006 requires us to report to you if, in our opinion:

- adequate accounting records have not been kept by the parent company, or returns adequate for our audit have not been received from branches not visited by us; or
- the financial statements are not in agreement with the accounting records and returns; or
- certain disclosures of directors' remuneration specified by law are not made; or
- we have not received all the information and explanations we require for our audit.



**David Chitty (Senior Statutory Auditor)**  
for and on behalf of Crowe Clark Whitehill LLP,  
Statutory Auditor  
Chartered Accountants

London  
9 November 2010

## Profit and loss account

		2010 £'000	2009 £'000
<b>Turnover</b>	Notes 1c & 2	<u>889,212</u>	<u>888,794</u>
Staff costs	3	(487,537)	(502,235)
Exceptional staff costs	3	80,800	-
<b>Other operating charges</b>			
Charges from sub-consultants and other direct project costs		(228,162)	(203,091)
Accommodation		(54,077)	(50,968)
Depreciation	8	(21,450)	(16,778)
Communications and other overheads		(87,441)	(69,798)
		<u>(391,130)</u>	<u>(340,635)</u>
Operating costs		<u>(797,867)</u>	<u>(842,870)</u>
<b>Operating profit</b>	5	91,345	45,924
Dividends received		-	11
Other finance (charges)/income		(7,088)	26
Interest receivable		1,088	2,107
Interest payable	6	(645)	(36)
<b>Profit on ordinary activities before taxation</b>	2	84,700	48,032
Taxation on ordinary activities	1e & 7	(24,705)	(13,531)
<b>Profit for the financial year</b>	17 & 18	<u>59,995</u>	<u>34,501</u>

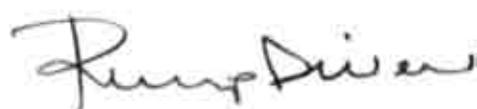
## Statement of total recognised gains and losses

		2010 £'000	2009 £'000
<b>Profit for the financial year</b>	17 & 18	59,995	34,501
Exchange translation gain/(loss)	17 & 18	3,582	(2,455)
Actuarial losses recognised in the pension schemes	25	(65,287)	(92,323)
Deferred tax asset movements related to the actuarial losses		18,300	24,886
<b>Total gains/(losses) recognised since last annual report</b>		<u>16,590</u>	<u>(35,391)</u>

The notes on pages 8 to 22 form part of these financial statements.

<b>Balance sheet – Arup Group Ltd and its subsidiary undertakings</b>		<b>2010</b>	<b>2009</b>
		<b>£'000</b>	<b>£'000</b>
	<b>Notes</b>		
<b>Fixed assets</b>			
Tangible assets	8	135,786	71,212
Unlisted investments at cost	10	<u>4</u>	<u>38</u>
		<b>135,790</b>	<b>71,250</b>
<b>Current assets</b>			
Debtors	11	267,090	281,020
Investments	12	422	282
Cash at bank and in hand		<u>102,256</u>	<u>125,673</u>
		<b>369,768</b>	<b>406,975</b>
<b>Creditors:</b>			
Amounts falling due within one year	13	<u>(323,973)</u>	<u>(341,035)</u>
		<b>45,795</b>	<b>65,940</b>
<b>Net current assets</b>		<b>45,795</b>	<b>65,940</b>
<b>Total assets less current liabilities</b>		<b>181,585</b>	<b>137,190</b>
<b>Creditors:</b>			
<b>Amounts falling due after more than one year</b>			
Mortgage		(43,281)	-
Lease incentives		(996)	(729)
Finance leases		<u>(93)</u>	<u>(127)</u>
		<b>(44,370)</b>	<b>(856)</b>
<b>Provision for liabilities and charges</b>			
Deferred taxation	1e	<u>-</u>	<u>(199)</u>
		<b>137,215</b>	<b>136,135</b>
<b>Net assets excluding pension liabilities</b>		<b>137,215</b>	<b>136,135</b>
Pension liabilities	25	<u>(83,359)</u>	<u>(98,869)</u>
		<b>53,856</b>	<b>37,266</b>
<b>Net assets after pension liabilities</b>		<b>53,856</b>	<b>37,266</b>
<b>Capital and reserves</b>			
Share capital	16	120	120
Capital reserve	17	3	3
Profit and loss account	17	52,909	36,319
Revaluation reserve	17	<u>824</u>	<u>824</u>
		<b>53,856</b>	<b>37,266</b>
<b>Shareholders' funds</b>		<b>53,856</b>	<b>37,266</b>

Approved and authorised for issue by the Board of Directors on 22 October 2010 and signed on its behalf:



P G Dilley  
Chairman

The notes on pages 8 to 22 form part of these financial statements.

**Balance sheet – Arup Group Ltd excluding its subsidiary undertakings**

		2010 £'000	2009 £'000
	<b>Notes</b>		
<b>Fixed assets</b>			
Tangible assets	8	2,494	2,557
Investment in subsidiary undertakings	9	131,434	53,626
Unlisted investments at cost	10	<u>4</u>	<u>4</u>
		<b>133,932</b>	<b>56,187</b>
<b>Current assets</b>			
Debtors	11	10,209	36,444
<b>Creditors:</b>			
<b>Amounts falling due within one year</b>	13	<u>(62,042)</u>	<u>(60,187)</u>
<b>Net current liabilities</b>		<u>(51,833)</u>	<u>(23,743)</u>
<b>Total assets less current liabilities</b>		<u><b>82,099</b></u>	<u><b>32,444</b></u>
<b>Creditors:</b>			
<b>Amounts falling due after more than one year</b>			
Mortgage		<u>(43,281)</u>	<u>-</u>
<b>Net assets</b>		<u><b>38,818</b></u>	<u><b>32,444</b></u>
<b>Capital and reserves</b>			
Share capital	16	120	120
Profit and loss account	17	<u>38,698</u>	<u>32,324</u>
<b>Shareholders' funds</b>		<u><b>38,818</b></u>	<u><b>32,444</b></u>

Approved and authorised for issue by the Board of Directors on 22 October 2010 and signed on its behalf:



P G Dilley  
Chairman

The notes on pages 8 to 22 form part of these financial statements.

**Cashflow statement**

	2010 £'000	2009 £'000
	<b>Notes</b>	
<b>Net cash inflows from operating activities</b>	<b><u>29,241</u></b>	<b><u>64,540</u></b>
<b>Returns on investment and servicing of finance</b>		
Interest received	1,088	2,107
Interest paid	(645)	(11)
Interest element of finance lease rental payments	-	(25)
Dividends received	<u>-</u>	<u>11</u>
<b>Net cash inflow on investment and servicing of finance</b>	<b><u>443</u></b>	<b><u>2,082</u></b>
<b>Taxation</b>		
Corporation tax paid	<u>(10,862)</u>	<u>(16,904)</u>
<b>Capital expenditure and financial investment</b>		
Payments to acquire fixed assets	(85,682)	(28,750)
Receipts from sales of fixed assets	434	671
Payments to acquire investments	(95)	-
Receipts from sales of investments	<u>-</u>	<u>-</u>
<b>Net cash outflow on capital expenditure and financial investment</b>	<b><u>(85,343)</u></b>	<b><u>(28,079)</u></b>
<b>Financing</b>		
Receipts from long term loan	45,000	-
Repayments of long term loan	<u>(1,719)</u>	<u>-</u>
<b>Net cash inflow from financing</b>	<b><u>43,281</u></b>	<b><u>-</u></b>
<b>(Decrease)/increase in cash</b>	<b><u>(23,240)</u></b>	<b><u>21,639</u></b>
<b>Reconciliation of net cashflow to movement in net funds</b>	<b>15</b>	
Net funds at 1 April	125,291	103,652
(Decrease)/increase in cash	(23,240)	21,639
Cash inflow from increase in debt financing	<u>(43,281)</u>	<u>-</u>
Movement in net funds in the period	<u>(66,521)</u>	<u>21,639</u>
<b>Net funds at 31 March</b>	<b><u>58,770</u></b>	<b><u>125,291</u></b>
<b>Notes to the cashflow statement</b>		
<b>Reconciliation of operating profit to net cashflow from operating activities</b>		
Operating profit	91,345	45,924
Depreciation charges	21,450	16,778
Loss/(gain) on foreign exchange	2,378	(8,890)
Loss on disposal of fixed assets	395	111
Difference between pension charge and cash contributions	(93,266)	(8,589)
Decrease/(increase) in debtors	21,559	(37,268)
(Decrease)/increase in creditors	<u>(14,620)</u>	<u>56,474</u>
<b>Net cash inflow from operating activities</b>	<b><u>29,241</u></b>	<b><u>64,540</u></b>

## 1 Accounting policies

### a) Basis of accounting

The financial statements have been prepared in accordance with all applicable accounting standards under the historical cost convention modified to include the revaluation of freehold properties.

Having considered past year end trading and forecasts and the cash resources available to the Group, the directors are satisfied that it is appropriate to continue to use the going concern assumption.

### b) Basis of consolidation

The consolidated financial statements include the Company and all its subsidiary undertakings. Intragroup trading is eliminated within charges from sub-consultants and other direct project costs and communications and other overheads.

### c) Turnover

Turnover represents the value of work performed on contracts in the year.

### d) Depreciation

Fixed assets are written off over their estimated useful lives on a straight line basis. Provision for depreciation is made on all assets excluding buildings at a rate of 25% per annum on a straight line basis. Freehold buildings are depreciated on a straight line basis at 1% per annum. Expenditure on leasehold properties is written off over the period of the lease.

### e) Deferred taxation

In accordance with FRS 19, full provision is made for timing differences at the tax rates that are expected to apply in the periods in which the timing differences are expected to reverse, based on tax rates and laws that have been enacted or substantially enacted at the balance sheet date, in respect of timing differences which have arisen but not reversed at the balance sheet date. Timing differences are differences between the Company's taxable profits and its results as stated in the accounts, which are not permanent. Deferred tax is measured on a non-discounted basis.

In accordance with FRS 19, no deferred tax has been provided for on revalued amounts, where no binding agreement to sell any property has been entered into prior to the balance sheet date or where the gain on any property contracted to be sold will be rolled over into replacement assets.

Deferred tax assets are only recognised where they arise from timing differences where the recoverability is foreseen with reasonable certainty.

### f) Exchange rates

Assets and liabilities in foreign currency have been translated into sterling at year end exchange rates. The trading results of overseas operations have been translated using an average rate for the year.

Exchange differences on the translation of the results of overseas operations together with those on assets and liabilities in foreign currency are taken directly to reserves. All other exchange differences are included in the profit and loss account.

### g) Long term contracts

The value of long term contracts is based on recoverable costs plus attributable profit. Cost is defined as technical staff costs and related overheads plus project expenses.

As projects reach stages where it is considered that their outcome can be reasonably foreseen, proportions of the expected total profit are brought into the financial statements. Provision is made for all known and anticipated losses.

For contracts on which turnover exceeds fees rendered, the excess is included as amounts recoverable on contracts (lump sum projects), and as accrued income, (time basis projects), within debtors. For contracts on which fees rendered exceeds turnover, the excess is included as fees in advance, within creditors.

### h) Other contracts

Other contracts are mostly time basis contracts which are valued at external charging rates. Profits are taken as services are performed.

### i) Pension costs

Contributions to the Group's defined contribution schemes are charged to the profit and loss account when they fall due.

The Group also operated two defined benefit schemes during the year as described in note 25. Under FRS 17, the assets of the defined benefit pension schemes are measured at their fair (market) value at the balance sheet date and compared to the liabilities of the schemes, at the same date, measured on an actuarial basis using the projected unit method. The discount rate used is the rate of return at the balance sheet date on a high quality corporate bond of equivalent currency and term to the scheme liabilities. The extent to which the schemes' assets exceed/fall short of their liabilities is shown as a surplus/deficit in the balance sheet. The surplus/deficit is shown net of deferred taxation.

The increase in the present value of the pension schemes' liabilities arising as a result of employee service in the current period is charged to operating profit. Any increase in the present value of pension schemes' liabilities arising in the current period but as a result of employee service in prior periods is charged to operating profit on a straight line basis over the period in which the increases in benefit vest.

The amount of expected return on the schemes' assets and the increase during the period in the present value of the scheme liabilities arising from scheme liabilities being one year closer to payment are included as other finance income in the profit and loss account.

Management assessed the expected return on plan assets based on a review of past returns and professional advice of the level of future returns.

Actuarial gains and losses are reported in the statement of total recognised gains and losses.

### j) Leased assets

Where the Group has entered into finance leases, the obligations to the lessor are shown as part of the borrowings, and the rights to the corresponding assets are treated in the same way as fixed assets. Leases are regarded as finance leases where their terms transfer to the lessee substantially all the benefits and burdens of ownership, other than the legal right to title.

Rentals payable under operating leases are charged to the profit and loss account as incurred.

### k) Company profit and loss account

In accordance with the concession quoted under Section 408(3) of the Companies Act 2006, the Company profit and loss account has not been separately presented in these financial statements.

**2 Segmental report**

	2010 £'000	2010 £'000	2009 £'000
<b>Turnover</b>			
United Kingdom		298,736	372,550
Asia		157,750	125,765
Australasia		149,903	113,410
Europe		112,880	104,023
Middle East & Africa		102,920	94,055
Americas		67,023	78,991
		<u>889,212</u>	<u>888,794</u>
<b>Profit before taxation</b>			
United Kingdom		30,687	19,250
Asia		16,205	6,498
Australasia		15,399	5,860
Europe		11,596	5,375
Middle East & Africa		10,573	4,860
Americas		6,885	4,081
		<u>91,345</u>	<u>45,924</u>
Net interest and other financing income		(6,645)	2,108
Group profit before taxation		<u>84,700</u>	<u>48,032</u>
<b>Net assets</b>	<b>Excluding pension liabilities</b>		
United Kingdom	108,356	26,526	(5,708)
Asia	5,809	4,280	9,309
Australasia	3,944	3,944	4,240
Europe	4,430	4,430	2,998
Middle East & Africa	4,161	4,161	6,953
Americas	10,515	10,515	19,474
	<u>137,215</u>	<u>53,856</u>	<u>37,266</u>

The method for allocating the consolidation adjustment is now based on the subsidiaries net asset value not turnover by project location as this is considered to be a more appropriate method of allocation. The comparison data for net assets has been restated so that it is on the same basis as the 2010 data.

**3 Staff costs**

	2010 £'000	2009 £'000
<b>Ordinary staff costs</b>		
Salaries	389,969	392,011
Staff profit sharing	19,434	28,581
Social security	31,473	32,788
Pension contributions	19,008	20,039
Redundancy costs	3,651	-
Other staff costs	24,002	28,816
	<u>487,537</u>	<u>502,235</u>
<b>Exceptional staff costs</b>		
Curtailement of the pension scheme	(42,300)	-
Past service costs	(38,500)	-
	<u>(80,800)</u>	<u>-</u>
<b>Total staff costs</b>	<u>406,737</u>	<u>502,235</u>

The closure of the pension scheme, to which the Group was irrevocably committed at 31 March 2010, and the move from using the Retail Price Index to the Consumer Price Index for calculating deferred pension increases has resulted in two exceptional staff cost gains of £42.3m and £38.5m respectively.

**3 Staff costs (continued)****2010****2009****Average number of persons employed by the Group**

	<b>Number</b>	Number
Engineering and technical staff	<b>7,805</b>	8,277
Administrative staff	<b>1,606</b>	1,643
Government site staff	<b>441</b>	426
	<b><u>9,852</u></b>	<u>10,346</u>

**4 Directors' remuneration****2010****2009****£'000****£'000****Aggregate remuneration:**

Aggregate emoluments paid	<b>4,254</b>	4,086
Aggregate contributions paid to money purchase schemes	<b>93</b>	94

**Number of Directors accruing pension benefits under:**

	<b>Number</b>	Number
Defined benefit schemes	<b>9</b>	9

**Highest paid Director:**

	<b>£'000</b>	£'000
Total emoluments excluding contributions paid to pension schemes	<b>427</b>	421
Accrued annual pension from defined benefit scheme as at 31 March	<b>-</b>	59

**5 Group operating profit****2010****2009****£'000****£'000****This is stated after charging/(crediting):**

During the year, the Group obtained the following services from the Company's auditor:

Audit of parent company and consolidated accounts	<b>99</b>	99
Fees payable for other services:		
- Audit of the Company's subsidiaries, pursuant to legislation	<b>294</b>	308
- Tax services	<b>216</b>	486
Loss on disposal of fixed assets	<b>395</b>	111
Loss/(profit) on foreign exchange from trading activities	<b>4,322</b>	(15,366)
Research and development costs	<b>14,023</b>	12,599
Operating leases - land & buildings	<b>39,367</b>	28,341
- plant & machinery	<b>957</b>	998

**6 Interest payable****2010****2009****£'000****£'000**

Bank interest	<b>578</b>	1
Finance lease interest	<b>-</b>	25
Other interest	<b>67</b>	10
	<b><u>645</u></b>	<u>36</u>

**7 Taxation**

	<b>2010</b>	<b>2009</b>
	<b>£'000</b>	<b>£'000</b>

**a) Analysis of tax charge**

The charge for taxation comprises:

UK corporation tax for the year at 28%	3,231	12,137
Less: double tax relief	<u>(6,789)</u>	<u>(6,520)</u>
	<b>(3,558)</b>	<b>5,617</b>
Over provision of UK corporation tax in respect of prior years	<u>(2,992)</u>	<u>(253)</u>
	<b>(6,550)</b>	<b>5,364</b>
Non-UK tax for the current year	9,923	5,712
Under/(over) provision of non-UK tax in respect of prior years	<u>902</u>	<u>(479)</u>
	<b>4,275</b>	<b>10,597</b>
Current tax charge	<b>4,275</b>	<b>10,597</b>
Deferred taxation for the current year	20,745	3,140
Over provision in respect of prior years	<u>(315)</u>	<u>(206)</u>
	<b>24,705</b>	<b>13,531</b>

**b) Factors affecting the tax charge for the year**

The tax assessed for the year is lower than the standard rate of corporation tax of 28%.  
The differences are explained below:

Profit on ordinary activities before taxation	<u>84,700</u>	<u>48,032</u>
Profit on ordinary activities at the standard rate of corporation tax of 28%	23,716	13,449
Effects of:		
Permanent differences	801	(606)
Timing adjustments	(22,175)	(893)
Adjustments to tax charge in respect of prior years including non-UK tax charge	(2,090)	(732)
Unrelieved losses carried forward	941	7
Non-UK tax in excess of UK tax/(UK tax in excess of non-UK tax)	<u>3,082</u>	<u>(628)</u>
	<b>4,275</b>	<b>10,597</b>
<b>Current tax charge</b>	<b>4,275</b>	<b>10,597</b>

**8 Tangible assets - Group**

						£'000
	Freehold land & property	Leasehold property	Furniture, fittings & IT	Motor vehicles	Leased motor vehicles	Total
<b>Cost or valuation</b>						
Balance at 1 April 2009	900	41,635	113,657	1,334	298	157,824
Additions during the year	62,891	11,097	11,611	51	32	85,682
Disposals during the year	-	(8,235)	(20,687)	(110)	(36)	(29,068)
Adjustment for exchange differences	-	(450)	2,749	98	29	2,426
<b>Balance at 31 March 2010</b>	<b>63,791</b>	<b>44,047</b>	<b>107,330</b>	<b>1,373</b>	<b>323</b>	<b>216,864</b>
<b>Depreciation</b>						
Balance at 1 April 2009	-	15,739	69,935	797	141	86,612
Charge for the year	693	4,945	15,575	181	56	21,450
Eliminated in respect of disposals	-	(7,747)	(20,365)	(90)	(36)	(28,238)
Adjustment for exchange differences	-	(19)	1,233	45	(5)	1,254
<b>Balance at 31 March 2010</b>	<b>693</b>	<b>12,918</b>	<b>66,378</b>	<b>933</b>	<b>156</b>	<b>81,078</b>
<b>Net book value at 31 March 2010</b>	<b>63,098</b>	<b>31,129</b>	<b>40,952</b>	<b>440</b>	<b>167</b>	<b>135,786</b>
Net book value at 31 March 2009	900	25,896	43,722	537	157	71,212

During the year the Group acquired the freehold of our head office at 13 Fitzroy Street in London.

**Revalued assets**

As at 31 January 2006 the freehold property then held by the Group was externally valued at £1.25m by Strutt & Parker, International Property Consultants, based on market value, as defined by the RICS Appraisal and Valuations Standards (Red Book) 5th Edition. The freehold property was valued, on an interim basis, on 10 March 2009 at £0.9m by an independent chartered surveyor. Had the freehold property not been revalued the net book value based on original cost would have been £76k.

**8 Tangible assets - Company**

	£'000
	<b>Leasehold property</b>
<b>Cost or valuation</b>	
Balance at 1 April 2009	3,790
<b>Balance at 31 March 2010</b>	<b>3,790</b>
<b>Depreciation</b>	
Balance at 1 April 2009	1,233
Charge for the year	63
<b>Balance at 31 March 2010</b>	<b>1,296</b>
<b>Net book value at 31 March 2010</b>	<b>2,494</b>
Net book value at 31 March 2009	2,557

**Leasehold property**

Included in the leasehold property of the Group and Company is long leasehold property at a cost of £3.6m (2009: £3.6m) and accumulated amortisation of £1.1m (2009: £1.1m).

## 9 Subsidiary undertakings

The companies noted below were all wholly owned by Arup Group Limited at 31 March 2010, unless stated otherwise. The operating companies were all engaged in the same principal activities as the parent company, except for Arup (Luxembourg) Sarl and Arup Property Guernsey Ltd whose principle activity is property holdings.

<b>Direct holdings:</b>	<b>Country of incorporation</b>	<b>Indirect holdings:</b>	<b>Country of incorporation</b>
Arup Americas Inc	USA	Arup Associates Ltd	England & Wales
Arup Botswana Ltd	England & Wales	Arup Canada Inc	Canada
Arup BV	Netherlands	Arup doo	Serbia
Arup China Ltd	Hong Kong	Arup Engineering Design and Consulting Services India Pvt Ltd	India
Arup Consulting Engineers EPE	Greece	Arup Environmental Consultants Pty Ltd	Australia
Arup Corporate Finance Ltd	England & Wales	Arup Gulf Ltd	England & Wales
Arup GmbH	Germany	Arup International Ltd	England & Wales
Arup International Consultants (Shanghai) Co Ltd	China	Arup Ltd	England & Wales
Arup Italia Srl	Italy	Arup New Zealand Ltd	New Zealand
Arup (Luxembourg) Sarl	Luxembourg	Arup North America Ltd	England & Wales
Arup Muhendislik ve Musavirlik LS	Turkey	Arup Pacific Pty Ltd	Australia
Arup Partner Pty Ltd	Australia	Arup Pensions Administration Ltd	England & Wales
Arup Pty Ltd	Australia	Arup Property Guernsey Ltd	Guernsey
Arup Services BV	Netherlands	Arup Services New York Ltd	England & Wales
Arup SIGMA Ltd	Mauritius	Arup Texas Inc	USA
Arup Singapore International Ltd	England & Wales	Arup USA Inc	USA
Arup Singapore Pte Ltd	Singapore	Arup Vietnam Ltd	Vietnam
Fitzroy Insurance Services Ltd	Guernsey	Broomco (1469) Ltd	England & Wales
Ove Arup & Partners Danmark A/S	Denmark	Heathrow Hub Ltd (83% holding)	England & Wales
Ove Arup & Partners Hong Kong Ltd	England & Wales	Heathrow Hub Property Ltd	Guernsey
Ove Arup & Partners International Ltd	England & Wales	OASYS Ltd	England & Wales
Ove Arup & Partners Isle of Man Ltd	Isle of Man	Ove Arup & Partners Detroit Ltd	England & Wales
Ove Arup & Partners Japan Ltd	England & Wales	Ove Arup & Partners Ltd	England & Wales
Ove Arup & Partners Korea Ltd	Republic of Korea	Ove Arup & Partners PC	USA
Ove Arup & Partners Poland Sp z o o	Poland	Ove Arup & Partners Scotland Ltd	Scotland
Ove Arup & Partners SAU	Spain	Rossmore Dempsey & Company Ltd	England & Wales
Ove Arup & Partners Thailand Ltd	England & Wales	Rossmore MCA Ltd	England & Wales
Ove Arup (Thailand) Ltd	Thailand	Rossmore Turner Lombard Ltd	England & Wales
Ove Arup Incorporated	England & Wales		
Ove Arup Partnership Ltd	England & Wales		
Rossmore Group Ltd	England & Wales		

**9 Subsidiary undertakings (continued)**

£'000

**Movement of investment**

Cost at 1 April 2009	53,626
Additions	<u>77,808</u>
<b>Cost at 31 March 2010</b>	<b><u>131,434</u></b>

**10 Unlisted investments at cost**

	<b>Country of incorporation</b>
1 Ordinary Share of £1 in Ovarpart Nominee Ltd	England & Wales
100 Ordinary Shares of €1.27 each in Arup Ireland Partner Ltd	Ireland
2 shares of £1 each in The Arup Partnerships Trustees Ltd	England & Wales
4 Ordinary Shares of US\$1 each in Arup Africa Inc	Mauritius
50 Ordinary Shares of 10,000 Riyals each in Arup Iran SSK	Iran
1,250 Ordinary Shares of £1 each in Architecture Today Plc	England & Wales
30,000 Ordinary Shares of 1p each in St Helena Leisure Corporation Ltd	England & Wales

**11 Debtors**

£'000

	2010		2009	
	Group	Company	Group	Company
Amounts recoverable on contracts	50,882	3,920	44,742	4,518
Trade debtors	145,944	-	171,782	6,419
Amounts owed by Group undertakings	-	5,789	-	25,407
Foreign tax recoverable	6,794	-	6,880	-
Deferred taxation	5,306	-	2,892	-
Corporation tax recoverable	8,743	-	3,447	-
Other debtors	10,094	450	9,628	-
Prepayments and accrued income	<u>39,327</u>	<u>50</u>	<u>41,649</u>	<u>100</u>
	<b><u>267,090</u></b>	<b><u>10,209</u></b>	<b><u>281,020</u></b>	<b><u>36,444</u></b>

**12 Current asset investments**

£'000

	2010		2009	
	Group	Company	Group	Company
Unlisted investment	<u>422</u>	<u>-</u>	<u>282</u>	<u>-</u>



**15 Analysis of changes in net funds**

£'000

	At 1 April 2009	Cashflow	At 31 March 2010
Cash at bank and in hand	125,673	(23,417)	102,256
Overdrafts	(190)	139	(51)
Mortgage	-	(43,281)	(43,281)
	<u>125,483</u>	<u>(66,559)</u>	<u>58,924</u>
Finance leases	(192)	38	(154)
	<u>125,291</u>	<u>(66,521)</u>	<u>58,770</u>

**16 Share capital**

2010	2009
£'000	£'000

**Group and Company****Issued, called up and fully paid:**

65 voting shares of £1 each	-	-
120,000 equity shares of £1 each	<u>120</u>	<u>120</u>
	<u>120</u>	<u>120</u>

**17 Reserves**

£'000

	Group			Company
	Capital reserve	Property revaluation	Profit and loss account	Profit and loss account
Balance at 1 April 2009	3	824	36,319	32,324
Retained profit for the financial year	-	-	59,995	6,374
Actuarial losses recognised in the pension schemes	-	-	(65,287)	-
Deferred tax asset movements related to the actuarial losses	-	-	18,300	-
Exchange translation differences	-	-	3,582	-
	<u>3</u>	<u>824</u>	<u>52,909</u>	<u>38,698</u>
<b>Balance at 31 March 2010</b>	<b>3</b>	<b>824</b>	<b>52,909</b>	<b>38,698</b>
Profit and loss reserve excluding pension liabilities			136,268	
Pension liabilities			<u>(83,359)</u>	
Profit and loss reserve			<u>52,909</u>	

**18 Reconciliation of movements in shareholders' funds - Group**

	<b>2010</b> <b>£'000</b>	2009 £'000
Balance at 1 April	37,266	73,007
Revaluation reserve	-	(350)
Retained profit for the financial year	59,995	34,501
Exchange translation difference	3,582	(2,455)
Actuarial loss recognised in the pension scheme	(65,287)	(92,323)
Deferred tax asset movement related to the actuarial gain	<u>18,300</u>	<u>24,886</u>
Closing shareholders' funds	<u>53,856</u>	<u>37,266</u>
Shareholders' funds excluding pension scheme liabilities	137,215	136,135
Pension scheme liabilities	<u>(83,359)</u>	<u>(98,869)</u>
<b>Closing shareholders' funds</b>	<u><b>53,856</b></u>	<u><b>37,266</b></u>

**19 Trust monies**

The Group operates a number of bank accounts which are maintained in the name of Group companies in Australia on behalf of third party clients. These accounts are not available to meet any liabilities of the Group and are therefore excluded from the consolidated balance sheet. The total of such accounts at 31 March 2010 was £6.4m (2009: £8.9m).

**20 Contingent liabilities**

The Company has guaranteed bond support facilities granted to other companies in the Group. The guarantee is supported by a secured debenture dated 28 September 2009. No borrowings were outstanding as at 31 March 2010.

**21 Capital commitments**

£'000

	2010		2009	
	Group	Company	Group	Company
Contracted for	<u>540</u>	<u>-</u>	<u>229</u>	<u>-</u>

**22 Other financial commitments**

£'000

The Group and Company have the following annual property leasing commitments, at the year end, in respect of leases expiring as follows:

	2010		2009	
	Group	Company	Group	Company
Within one year	2,804	-	4,679	-
In two to five years	13,847	-	12,145	-
After five years	<u>22,275</u>	<u>-</u>	<u>18,457</u>	<u>-</u>

## 23 Ultimate controlling party

Arup Group Ltd is owned by the Ove Arup Partnership Employee Trust, the Ove Arup Partnership Charitable Trust and the Arup Service Trust.

## 24 Related party transactions

The Company and its wholly owned subsidiaries transact with each other in the normal course of business. These transactions are not disclosed, in accordance with FRS 8 paragraph 3, as the transactions and balances between Group entities have been eliminated on consolidation.

## 25 Pension commitments

During the year, the Group operated two defined benefit retirement schemes for employees, one UK registered and one Hong Kong registered.

### UK Registered Scheme

During the year, the Group operated a UK registered, contributory, defined benefit retirement scheme for employees. Contributions to the scheme have been made in accordance with the advice of independent qualified actuaries on the basis of triennial valuations.

The most recent valuation was at 31 March 2007 using the projected unit method. The actuarial valuation of the scheme's assets at 31 March 2007 on an ongoing basis represented 92% of the actuarially calculated liabilities for benefits that had accrued to members and the scheme's assets had a market value of £463.5m at that date. The most significant assumptions made by the actuary in carrying out this valuation were the discount rate of 5.8% and the consumer price inflation of 2.9% pa.

There was an employer's contribution for the year to 31 March 2010 of £16.5m (2009: £17.3m). No special employer's contribution was made during the year to 31 March 2010 (2009: £Nil).

The next actuarial valuation is being carried out as at 31 March 2010 but the results will not be available until December 2010 at the earliest. The valuation position of this scheme was reassessed at 31 March 2010 by a qualified independent actuary for the purposes of the financial reporting standard FRS 17.

On 31 March 2010, the scheme was closed to new members. With effect from 30 June 2010 the future accrual of benefits for existing members ceased. A new pension arrangement on a defined contribution basis was opened on 1 July 2010.

### Hong Kong Registered Scheme

The Group operates a defined benefit scheme in Hong Kong. Contributions to the scheme are made in accordance with the advice of independent qualified actuaries on the basis of regular actuarial valuations.

The most recent valuation was at 1 April 2008 using the attained age method. The actuarial valuation of the scheme's assets at 1 April 2008 on an ongoing basis represented 120% of the liabilities that had accrued to members and had a market value of approximately £22 million at that date. The most significant assumption made by the actuary in carrying out this valuation was that the investment return would be 6% per year.

There was an employer's contribution for the year to 31 March 2010 of £2,261k (2009: £1,905k).

The next actuarial valuation will be carried out as at 1 April 2011.

**25 Pension commitments (continued)****Assets in the scheme and the expected rates of return at 31 March:**

	2010	Long term rate of return expected		
		UK	Hong Kong	
		2009	2010	2009
Equities and property	8.50%	8.00%	8.80%	8.00%
Bonds and cash including net current assets	4.60%	5.00%	3.30%	5.00%

	Value of assets in the schemes			
	UK	Hong Kong		
	2010	2009	2010	2009
	£'m	£'m	£'m	£'m
Equities and property	303.9	303.4	23.2	15.0
Bonds and cash including net current assets	190.9	56.5	5.6	5.5
Total market value of assets	494.8	359.9	28.8	20.5
Present value of defined benefit obligation	(608.5)	(492.0)	(31.0)	(24.0)
Deficit in the scheme	(113.7)	(132.1)	(2.2)	(3.5)
Less: Related deferred tax asset/(liability) at 28%	31.8	37.0	0.6	(0.2)
<b>Net scheme liability</b>	<b>(81.9)</b>	<b>(95.1)</b>	<b>(1.6)</b>	<b>(3.7)</b>

**Major categories of scheme assets as a percentage of total scheme assets:**

	UK		Hong Kong	
	2010	2009	2010	2009
Equities and property	61%	84%	81%	73%
Bonds and cash including net current assets	39%	16%	19%	27%
	100%	100%	100%	100%

**Amounts recognised in the profit and loss account:**

	UK		Hong Kong	
	2010	2009	2010	2009
	£'m	£'m	£'m	£'m
Current service cost	(5.8)	(8.8)	(1.8)	(1.6)
Interest on obligation	(34.3)	(34.9)	(1.6)	(1.4)
Expected return on plan assets	27.3	34.3	1.5	2.0
Past service costs	38.5	-	-	-
Gain on curtailments and settlements	42.3	-	-	-
<b>Net charge</b>	<b>68.0</b>	<b>(9.4)</b>	<b>(1.9)</b>	<b>(1.0)</b>

**25 Pension commitments (continued)****Movement of deficit during the year**

	UK		Hong Kong	
	2010 £'m	2009 £'m	2010 £'m	2009 £'m
(Deficit)/surplus in scheme at 1 April	(132.1)	(58.1)	(3.5)	5.7
Movement in the year:				
Current service cost	(5.8)	(8.8)	(1.8)	(1.6)
Employer's contributions	16.5	17.3	2.3	1.9
Past service costs	38.5	-	-	-
Interest cost	(34.3)	(34.9)	(1.6)	(1.4)
Expected return on scheme assets	27.3	34.3	1.5	2.0
Actuarial (loss)/gain	(66.0)	(81.9)	0.7	(10.4)
Curtailments and settlements	42.3	-	-	-
Adjustment for exchange difference	-	-	0.2	0.3
Deficit in scheme at 31 March	<u>(113.7)</u>	<u>(132.1)</u>	<u>(2.2)</u>	<u>(3.5)</u>

The closure of the pension scheme and the move from RPI to CPI valuation were the main factors contributing to the decrease in the UK scheme deficit in the year.

	UK		Hong Kong	
	2010 £'m	2009 £'m	2010 £'m	2009 £'m
<b>Reconciliation of the present value of the defined benefit obligation:</b>				
Present value of defined benefit obligation at 1 April	492.0	511.8	24.0	16.4
Current service cost	5.8	8.8	1.8	1.6
Interest cost	34.3	34.9	1.6	1.4
Members' contributions	8.3	8.8	-	-
Actuarial loss/(gain) on scheme liabilities	167.8	(56.3)	5.5	(0.4)
Benefits paid	(18.9)	(16.0)	(1.3)	(1.7)
Past service costs	(38.5)	-	-	-
Curtailments and settlements	(42.3)	-	-	-
Adjustment for exchange difference	-	-	(0.6)	6.7
Present value of defined benefit obligation at 31 March	<u>608.5</u>	<u>492.0</u>	<u>31.0</u>	<u>24.0</u>
<b>Reconciliation of fair value of scheme assets:</b>				
Fair value of scheme assets at 1 April	359.9	453.7	20.5	22.1
Expected return on scheme assets	27.3	34.3	1.5	2.0
Actuarial loss on scheme assets	101.8	(138.2)	6.2	(10.8)
Adjustment for exchange difference	-	-	(0.4)	7.0
<b>Actual return on scheme assets</b>	<u>129.1</u>	<u>(103.9)</u>	<u>7.3</u>	<u>(1.8)</u>
Employer contributions	16.5	17.3	2.3	1.9
Members' contributions	8.3	8.8	-	-
Benefits paid	(18.9)	(16.0)	(1.3)	(1.7)
<b>Fair value of scheme assets at 31 March</b>	<u>494.8</u>	<u>359.9</u>	<u>28.8</u>	<u>20.5</u>

## 25 Pension commitments (continued)

### Principal actuarial assumptions at the balance sheet date (expressed as weighted averages):

	UK		Hong Kong	
	2010	2009	2010	2009
<b>At 31 March</b>				
Future average rate of increase in salaries	N/A	3.8%	4.5%	4.5%
Future average rate of increase for pensions in payment and deferred pensions	2.9%	2.8%	N/A	N/A
Future average rate used to discount liabilities	5.8%	7.0%	4.9%	7.0%
Retail price inflation	3.6%	2.8%	3.0%	3.0%
Consumer price inflation	2.9%	N/A	N/A	N/A
Pension increases:				
- Pre 88 Guaranteed Minimum Pension	0.0%	0.0%	N/A	N/A
- Post 88 Guaranteed Minimum Pension	2.4%	2.3%	N/A	N/A
- NGMP accrued before 01/10/2006 (5%LPI)	3.4%	2.8%	N/A	N/A
- Pension accrued after 31/09/2006 (2.5%LPI)	2.3%	2.0%	N/A	N/A

NGMP – Non Guaranteed Minimum Pension

LPI – Limited Price Indexation

Mortality 2010 & 2009	UK	Hong Kong		
	PNA00 birth year mortality tables using the 92 series medium cohort projections, allowing for minimum improvements in mortality of 1% pa.	Age	Mortality (%) Hong Kong Life Table 2001	
			Male %	Female %
		25	0.062	0.024
		30	0.070	0.030
		35	0.083	0.042
		40	0.127	0.070
		45	0.205	0.112
		50	0.332	0.172
		55	0.557	0.270
		60	0.907	0.409

Cash commutation 2010 & 2009	UK	Hong Kong
	30% of members' pensions assumed to be taken as cash.	N/A

### Assumed life expectations on retirement at age 65 for the UK and age 60 for Hong Kong:

		UK		Hong Kong	
		2010	2009	2010	2009
		Number of Years		Number of Years	
Retiring today	Males	22.4	22.3	21.4	21.4
	Females	24.8	24.7	25.9	25.9
Retiring in 20 years	Males	24.3	24.2	21.4	21.4
	Females	26.7	26.6	25.9	25.9

The assumptions used by the actuary are the best estimates chosen from a range of possible actuarial assumptions.

**25 Pension commitments (continued)****UK Registered Scheme****History of experience gains and losses**

	2010	2009	2008	2007	2006
	£'m	£'m	£'m	£'m	£'m
Defined benefit obligation	(608.5)	(492.0)	(511.8)	(538.5)	(504.4)
Scheme assets	494.8	359.9	453.7	463.6	405.2
Scheme deficit	<u>(113.7)</u>	<u>(132.1)</u>	<u>(58.1)</u>	<u>(74.9)</u>	<u>(99.2)</u>
Experience adjustments on plan liabilities	12.4	11.9	(5.0)	(20.6)	(11.2)
Experience adjustments on plan assets	101.8	(138.2)	(54.3)	5.4	54.5

**Hong Kong Registered Scheme****History of experience gains and losses**

	2010	2009	2008	2007	2006
	£'m	£'m	£'m	£'m	£'m
Defined benefit obligation	(31.0)	(24.0)	(16.4)	(17.1)	(18.0)
Scheme assets	28.8	20.5	22.1	20.9	19.7
Scheme (deficit)/surplus	<u>(2.2)</u>	<u>(3.5)</u>	<u>5.7</u>	<u>3.8</u>	<u>1.7</u>
Experience adjustments on plan liabilities	-	-	-	-	-
Experience adjustments on plan assets	6.2	(10.8)	(0.5)	1.5	1.3

**Estimated contributions**

The employer's best estimate of contributions to be paid to the defined benefit schemes next year are:

	UK	Hong Kong
	£'m	£'m
Employer	9.0	2.2
Employees	<u>2.0</u>	<u>-</u>
	<u>11.0</u>	<u>2.2</u>

**Defined contribution schemes**

The Company has also made payments to defined contribution schemes of £11.8m (2009: £9.9m).

**Arup Group**

13 Fitzroy Street  
London W1T 4BQ  
United Kingdom

**David Singleton**

Group Sustainability Director  
t: +61 3 9668 5404  
e: david.singleton@arup.com

**Martin Ansley-Young**

Company Secretary  
t: +44 20 7755 3580  
e: martin.ansley-young@arup.com

[www.arup.com](http://www.arup.com)