

Sustainable Hotel *Siting, Design and Construction*



The industry guide to good practice

1 INCEPTION

1.1 Finance

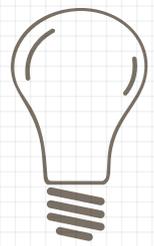
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This report was published in 2014 when Sustainable Hospitality Alliance was known as International Tourism Partnership (ITP), part of Business in the Community (BITC).



1.1 Finance

Finance is important throughout the life of a hotel and is particularly important during the design and initial development phase. Various financing services are available for different requirements and stages, including development, leasing, working capital needs, refurbishment and insurance. These services are made available through providers such as investment funds, banks, mortgage and leasing companies.

Financiers are increasingly incorporating environmental and social performance into their investment decision making in order to minimise their risk and exposure to liabilities.⁸ This is likely to have a number of implications for hotel siting, design, construction and operation.

Machu Picchu Sanctuary Lodge, Peru. In the refurbishment of the Lodge, Orient Express Hotels looked to blend the property visually with the surrounding UNESCO World Heritage Site with the support of the IFC, who helped to finance the project. The new roof matches the colour of the surrounding vegetation (previously it was red) and the gardens have been planted with indigenous rather than exotic species.



1.1.1 Risk management

The financial sector now actively considers environmental and social risk in its investment decision making.⁹ This move has been driven by several factors but, in the tourism sector, it relates particularly to:

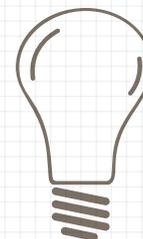
- Minimising **reputational risk** to banks by exercising caution over investing in projects that may create adverse environmental and social impacts.

⁸ As evidenced by publications such as 'Clear Advantage: Building Shareholder Value' and 'Financing the Future: The London Principles—The Role of UK Financial Services for Sustainable Development'

⁹ See the Equator Principles (www.equator-principles.com), the Association of British Insurers (ABI) publication 'Risk Returns and Responsibility' and Swiss Re's publication 'Environmental Management Systems and Environmental Impairment Liability Insurance'



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- The recognition that environmental and social issues such as climate change and community unrest can have a direct and significant impact on **investment performance and returns**.

Evidence of capacity and commitment to manage environmental risk, environmental impact assessments (EIAs) and audits are increasingly required as part of loan and investment decisions. Over 25 leading commercial banks have adopted the Equator Principles, which provide a common framework for commercial lenders to ensure that the projects they finance 'are developed in a manner that is socially responsible and reflects sound environmental management practices.' The principles apply to projects with a capital cost of US\$50 million or more and are intended to become an important element of lender due diligence and borrower compliance and part of the project management process, extending over the life cycle of a development.

Developers and hoteliers that can demonstrate that they understand and can manage their environmental and social impacts will be at an advantage. Access to capital will become increasingly difficult for hotel companies and developers who cannot demonstrate good environmental practices or whose facilities are sited in areas likely to experience environmental or social risks.

1.1.2 Opportunities

The financial sector will increasingly look to invest in projects and operations that can demonstrate higher levels of environmental and social performance. This trend began with the introduction of Socially Responsible Investment (SRI)¹⁰, but other forms of finance are following suit. The insurance sector in particular is paying considerable attention to environmental liabilities and risks associated with the poor siting of facilities, largely as a result of increasingly stringent legislation and planning policy.

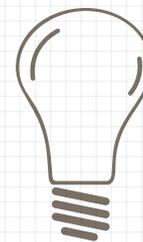
As the requirement for more comprehensive and informed reporting of environmental and social performance becomes more commonplace, leading-edge companies will be able to capitalise on the commercial advantages of sound environmental performance. In the case of **developers** this means providing evidence that siting and development planning has addressed local environmental and social needs such as the protection of natural habitats and appropriate consultation with local communities as part of the EIA or planning process. **Hotel companies** can benefit by demonstrating energy and water efficiencies and other environmental initiatives. Sophisticated approaches to environmental management have direct financial benefits to hoteliers (for example, reduction in energy and water consumption by even 20% can have a significant impact on bottom line profits over the lifetime of the building), but they may also create new markets for financial products and services. For example, in the UK the introduction of 'green' mortgages¹¹ enables businesses that contribute positively to the environment (by addressing issues such as climate change, resource pressures and pollution) to benefit

¹⁰ For example the Dow Jones Sustainability Index and the FTSE4Good Index Series which measure the performance of businesses that meet globally-recognised corporate responsibility standards with the specific purpose of facilitating investment in those companies.

¹¹ Following the launch of a green mortgage for home buyers in 1998 and the Carbon Neutral® mortgage in 2000, the Norwich and Peterborough Building Society introduced the first green commercial mortgage for businesses in 2004, developed with the UK Centre for Economic and Environmental Development.



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from a discount on the interest rate. A recent report by Building Operating Management¹² suggests that pooling green mortgages into securities and showcasing their value in the financial market is likely to create a step change in investor interest in such buildings.¹³

1.1.3 Public policy and incentives

Incentives for more appropriate siting and the development of more sustainable buildings are becoming more common as planning and regulatory agencies begin to address national commitments made at the World Summit on Sustainable Development (WSSD), the Kyoto Protocol and other international commitments.

National responses will vary, but tax breaks, expedited planning approvals and other public incentives that encourage more sustainable hotel siting, design and construction seem set to increase. As these are implemented, the financial sector will begin to refine its products and services.

- **Legislation** to avoid or buydown risk, such as the EU Environmental Liabilities Directive,¹⁴ will make companies whose activities have caused environmental damage financially liable for remediation. Banks will begin screening to avoid the likelihood of investing in companies with latent or active liabilities.
- **New financing opportunities** such as tax breaks or capital allowance schemes will encourage developers and owners to incorporate resource-efficient technologies into buildings. For example, the UK's Enhanced Capital Allowance Scheme¹⁵ enables businesses to claim 100% of first-year capital allowances on qualifying plant and machinery such as cogeneration or combined heat and power (CHP) systems, heat exchangers, energy-efficient lighting and water conservation equipment. Businesses can write off the whole of the capital cost of their investment against their taxable profits of the period during which they make the investment.
- Assistance in the form of **technical support** or **construction materials** may be available to developers. For example, in the US, the New York State Energy Research and Development Authority (NYSERDA) offers technical and financial incentives to accelerate the incorporation of energy-efficient and renewable energy sources into the design, construction and operation of commercial buildings.¹⁶ Other forms of technical assistance are likely to become available and the Internet is a good source of information.

¹² Green CMBS; A report prepared on behalf of the Institute for Market Transformation to Sustainability by Building Operating Management, October 2004 issue, www.facilitiesnet.com/bom

¹³ In Europe and the USA the growing market for commercial mortgages provides both liquidity and diversification for large commercial real estate investors, including insurance companies and large pension funds. This has led to the creation of commercial mortgage-backed securities (MBS) for green buildings, because such buildings represent higher value and lower risk to investors. The popularity of commercial MBS is expected to increase as investment bankers become more aware of the higher value of green buildings from lower operating costs, greater occupant satisfaction, increased tenant retention and greater access to capital.

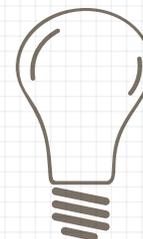
¹⁴ EU Environmental Liabilities Directive (Directive 2004/35), www.europa.eu.int

¹⁵ See www.eca.gov.uk

¹⁶ NYSERDA New Construction Financial Incentives – PON 815, www.nyserda.org



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1.1.4 Implications for hotel companies and developers

- **Accessing capital** will get harder unless developers and hoteliers can demonstrate high levels of environmental and social risk management.
- **Partnerships** within the industry will increasingly address the challenge of improving environmental performance, which will open up new financing opportunities and services.
- **Reporting and demonstrating higher levels of environmental and social performance** will become more important to investors. With this expectation will come a growing need to develop reporting¹⁷ and benchmarking tools that demonstrate company commitments, capacities and track records.
- **Engaging and communicating with other stakeholders** including investors, local communities and civil society will be the norm for most large developers and hotel operators.
- The **wider environmental and social impacts** of the sector 'beyond the footprint' will start to be tracked by investors through, for example, supply chains and the cumulative impacts of individual operations (since risk will be recognised and attributed to financial service clients). This will increase and deepen the need for more sophisticated environmental and social management within the sector.

More information

Clear Advantage: Building Shareholder Value

A tool to enable businesses to measure, manage and communicate EHS value to the financial community.

Global Environmental Management Initiative, 2004

www.gemi.org

Environmental Management Systems and Environmental Impairment Liability Insurance

Swiss Re, 1998

www.swissre.com

Financing the Future: The London Principles: The Role of UK Financial Services in Sustainable Development

Forum for the Future for the UK Department for Environment, Food and Rural Affairs (DEFRA), 2002

www.cityoflondon.gov.uk/services/environment-and-planning/sustainability/sustainability-and-the-environment/Documents/SUS_financingfuture.pdf

Funding Green Buildings Toolkit (formerly the EnergyWi\$e Construction Funding Directory)

A guide to grants, technical assistance, creative financing and private-public partnerships for commercial green buildings.

The McAdams Group, 2004

www.fundinggreenbuildings.com

Global Reporting Initiative (GRI) Sustainability Reporting Guidelines: Tour Operators Sector Supplement

GRI and Tour Operators Initiative, 2002

www.globalreporting.org

Green CMBS

A report prepared on behalf of the Institute for Market Transformation to Sustainability by Building Operating Management.

October 2004 issue

www.facilitiesnet.com/bom

Is Biodiversity a Material Risk for Companies?: An Assessment of the Exposure of FTSE Sectors to Biodiversity Risk

F&C Asset Management (formerly ISIS Asset Management), 2004

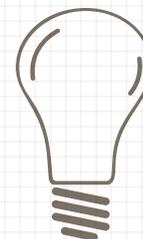
www.businessandbiodiversity.org/publications.html

Risk Returns and Responsibility

Association of British Insurers (ABI), 2004

www.abi.org.uk

¹⁷ 'Global Reporting Initiative (GRI) Sustainability Reporting Guidelines: Tour Operators Sector Supplement', GRI and Tour Operators Initiative, 2002,



1.2 Project team formation and objective setting

Success in achieving a more sustainable hotel building can only happen if all parties are aware of the importance that will be placed on sustainability from the outset and what is expected from them in helping to achieve it. This should be reinforced throughout the course of the project. The client needs to demonstrate a clear vision of the outcome, take a strong leadership role over the supply chain and remain committed to adhering to sustainable principles throughout the development process, even when presented with obstacles. Capacity building and awareness-raising programmes, using induction tools such as The Natural Step,¹⁸ may be valuable in creating a cultural shift, both within the client organisation (from board level downwards) and to help bind the supply chain together.

Though some compromises may be inevitable, time and effort spent defining and communicating the 'mission' at inception will repay itself as the project progresses. It will also help to keep the building project on track and facilitate assessment of its success on completion.

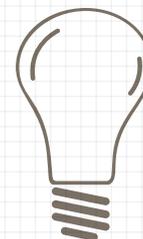
- A** The first step is to **define the mission**. In setting objectives, consider the economic, environmental and social aspects of the project (in all its phases) and define the acceptable limits of change for the area and community where the development will be situated.
- B** **Assemble a multidisciplinary project team**. It may be sensible to enlist the services of a specialist consultancy to help with this if sustainability concepts are new to the client or developer. In selecting architects, engineers, designers, contractors and suppliers, it is important to ask about their previous experience on environmental development projects and examine the credentials of potential team members carefully. Do they operate an environmental management system (EMS) such as ISO14001 or EMAS?¹⁹ Do they have their own sustainability policy? It should be explained to all of them that sustainability will be a key part of the project.
- C** Ensure that '**sustainability clauses**' are incorporated into all contracts and legal agreements and that you are aware of the legal and regulatory framework of the country in which the project is to be located. It is advisable to consult someone with expertise in environmental and sustainability matters to ensure these issues are properly covered.

¹⁸ The Natural Step framework sets out ways to achieve a sustainable society and states that nature should not be subject to systematically increasing: 1) concentrations of substances extracted from the earth's crust, 2) concentrations of substances produced by society, 3) degradation by physical means and that 4) human needs are met worldwide. www.naturalstep.org

¹⁹ ISO 14001—the standard issued by the International Organisation for Standardisation, www.iso.org, EMAS—Eco-Management and Audit Scheme, www.emas.org.uk



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- D** The **procurement process** and effective **supply chain management** will play a deciding role in whether the project retains its sustainable objectives. Develop a policy for procurement that defines the sustainability criteria to be met by suppliers and products (for example, using life cycle analysis and identifying resource efficiency targets). Decide what the tolerances will be and how much extra you may be prepared to pay for goods and services that will help you meet the project objectives. There are many tools and sources of guidance on how to arrive at the most sustainable solution, especially where it comes to the selection of materials.²⁰
- E** Develop **reliable forms of measurement**, such as Whole Life Costing (WLC),²¹ with which to measure capital and operating costs and benefits and deliver a 'value for money' and a sustainable project. WLC considers not only the initial capital costs of construction (including the costs of planning, design and acquisition), but also the operational costs of the building over its lifetime (running costs, maintenance and disposal less any residual value). The cost and business benefits should be quantified for each component and each phase of the building's life cycle and minimised wherever possible without sacrificing quality. The aim is to deliver 'the optimum combination of whole life cost and quality (or fitness for purpose) to meet the customer's requirement'. See also **Section 3** *Creating the Design Brief*.
- F** Ensure that **linguistic and cultural differences** are taken into account in dealings with the community, contractors and the general public.



More information

Achieving Excellence in Construction Procurement Guide 07: Whole Life Costing

UK Office of Government Commerce, 2003
www.ogc.gov.uk/sdtoolkit/reference/achieving/ae7.pdf

BRE WLC Comparator

Tool to calculate the whole life costs of building components.

Building Research Establishment
www.bre.co.uk/page.jsp?id=48

Invest 2

Software tool designed to simplify the process of designing buildings with low environmental impact and whole life costs.

Building Research Establishment
<http://investv2.bre.co.uk>

EQUER

A life cycle simulation tool for buildings.
Centre for Energy Studies, Ecole des Mines de Paris
www.cenerg.ensmp.fr

Green Guide to Specification: Third Edition

A quick and easy way to access the environmental performance of over 250 construction specifications.
Building Research Establishment, 2002
www.brebookshop.com

Norwich and Peterborough Building Society

www.npbs.co.uk

The Costs and Financial Benefits of Green Buildings: A Report to California's Sustainable Building Task Force

California Integrated Waste Management Board, 2003
www.ciwmb.ca.gov/GreenBuilding

The Natural Step (TNS)

www.naturalstep.org

Whole Life Cost Forum

The UK National Initiative on Construction Whole Life Costing
www.wlcf.org.uk

²⁰ For example the 'Green Guide to Specification' and 'Invest 2' published by the Building Research Establishment, www.brebookshop.com

²¹ More information from the Whole Life Cost Forum (the UK National Initiative on Construction Whole Life Costing), www.wlcf.org.uk