

South Ayrshire Sustainability Conference 4 May 2006-06-08
Just Do It! – Lori McElroy – Sust.
Introduction

According to the popular definition, sustainable development is underpinned by a desire to ensure that those currently living on this planet do not adversely affect the quality of life of its future inhabitants. But perceived needs are constantly changing and this, combined with advances in technology, has to be taken into account when predicting future requirement. And notwithstanding the global warming aspect, there is an obvious need for conservation of fossil fuel-based energy resources, but this will only become a critical issue if alternatives do not emerge within the necessary timescale - whatever that may be.

The South Ayrshire Sustainability Conference covered many areas relating to sustainable development - and what impact legislation might have in terms of driving or forcing us to become more sustainable. And perhaps most significantly - one of the biggest developers in the country indicated that sustainable design and construction is compatible with commercial development. But the question remains - what is stopping us? Why can't we just get out there and do it?

Further, the workshops allowed us to examine the role of renewables in a stand alone and an integrated manner; and although not exactly abundant, there is some money available to help support this - however, there is still a need for improved dialogue between agencies such as Communities Scotland the EST and the Housing Associations to make the best of the funding sources available. The workshops also explored getting sustainability into the brief and the role of sustainability checklists in facilitating design and construction.

The Scottish Executive is fully committed to sustainable development and although not supporting this with as much legislation as we might like to see, there are fairly significant changes coming through, from site waste management to improved Building Standards - as well as the EPBD, and the new SD Strategy (Choosing our future) which provides excellent guidance on joined-up thinking relating to social, economic and environmental aspects of SD.

So there we have it - or do we? Because, despite the fact that most of the information that has been presented here today is fairly accessible and available, we seem to have a problem piecing it all together and turning theory into practice. We all know that in building terms, sustainable development requires a re-thinking of the way in which we design and deliver buildings, to the extent of examining all of our actions and replacing all unsustainable practices with sustainable alternatives. But herein lies the problem - this is easy to say, but what does it actually mean, and how do we deliver it in practice?

Why so few sustainable buildings?

From clients to design teams and from project managers to building contractors & component manufacturers, those involved in the design, delivery and management of buildings face ever-increasing pressures and are often

reluctant to tackle the numerous barriers associated with adopting new methods into an already complex and time constrained process – in spite of the fact that new and impending environmental legislation requires that sustainability issues are addressed.

So, despite the fact that the majority of public buildings and housing association projects are currently being delivered against design briefs that call for sustainability, the number of fully sustainable buildings being constructed is relatively low - despite clients' and design teams' best intentions. Research shows that in practice, perhaps due to lack of control or poor communication, there persists a tendency not to see things through. The reasons for this are many fold and some of these are listed here:

- lack of understanding of what sustainability means;
- over simplification of the issues;
- mis-information regarding sustainability;
- failure to ensure that the sustainable design intent is carried through and revisited at each stage of the process.

Many of those commissioning and designing 'green' buildings still think of sustainability as an add-on, such as the addition of anything from insulation to heat pumps, wind-turbine or photovoltaics, to a 'traditional' design. Rather, sustainable development is a process that requires constant vigilance and re-evaluation at every stage in order to avoid 'dropping the ball'. This may include new technologies, but in order for these technologies to make the maximum beneficial contribution, best practice in energy conservation and environmental impact should be applied first – otherwise we run the risk of taking inappropriate actions and misapplying technologies such as small scale renewables which can lead to poor uptake in the long term.

Case Studies

Although few in number, we do have some good, sustainable building case studies in Scotland and we also have a number of support agencies available to assist those who need assistance with the first steps. Not all of the projects cover all aspects of sustainability – for example some deal more with healthy materials and others concentrate on renewable energy or fuel poverty, while some focus on 'placemaking' and design issues. But the following examples summarise where we are at the moment and provide a good starting point:

Case Studies – expanded in Powerpoint presentation

McLaren – Gaia architects

Fairfield Housing – Tollhouse - Gaia Architects

Recycling Centre – Bute – Chris Stewart Architects

Bunessan Primary – Mull – Crerar & Partners

St Aloysius Junior School – Elder & Cannon

Leitch Street – Greenock – John Gilbert Architects

Shettleston – Glasgow – John Gilbert Architects

Support - SUST. (THE LIGHTHOUSE ON SUSTAINABILITY)

Sust. is a Scottish Executive funded project, devised by The Lighthouse – Scotland's Centre for Architecture and Design, to bring together the parties

required to build sustainable communities and to help them realise this through their own project ideas.

The Sust. project is aimed at people with an interest in the design and delivery of well-designed sustainable environments that meet the aspirations of the funders, users, communities, design and construction teams, developers and financial professionals.

The ultimate aim of the Sust. programme is to facilitate the mainstreaming of sustainable design in architecture, in other words to help make sustainable design the norm rather than the exception. This commenced almost two years ago with an awareness raising campaign and we are now building on this in terms of assisting the delivery of sustainable buildings.

During the first two years of the project, the Sust campaign engaged with key players, including clients, community groups, designers and contractors responsible for building projects to develop unique training, guidance and information to allow decision-makers to make informed choices about sustainable development. These were aimed primarily at the three main audience groups listed on this slide, and more information on all of these projects is available on the Sust. web site. Around 30 projects have been developed with more than 30 partner organisations.

Working with these groups and recognised experts in the sustainability field, the Sust. campaign aims to enable its clients to take a more integrated approach to the design and management of the built environment with a view to promoting a fundamental shift in thinking about Sustainable design. Projects put in place should assist all building stakeholders to make the necessary changes to their approaches and work practices - in effect to mainstream sustainable development.

Sust Case Studies

Client Audience Examples

Business to Business - Cala - East Dunbartonshire Schools

Scottish Executive

Community Audience Projects

New Slide - Housing Association Grants/ Sust Back Courts

Construction Audience

RIAS Accreditation

By linking clients with expert in the field, Sust helps organisations to:

- ensure the development of a sustainable brief; but also to help see things through by:
- supporting the establishment of a web-based knowledge base to keep the team on the right track;
- help define mechanisms that will support delivery; and thus to
- help keep the project on track.

We are currently seeking to support projects in the areas listed here:

- a. ***Client Training and Guidance*** will continue but with a shift from *the theoretical to the practical/ delivery side including:*

- 'live' building case studies of sustainable projects;
- design guidance and assistance for sustainable development;
- support for in-house training/ CPD.

b. Green Business Strategies

- support for changing work practices;
- design support for the delivery of live projects;
- design team/ Client/ Contractor/ User support.

c. Grant Aid: A limited number of small grants (up to £7,000) are available to assist putting sustainable design into action, for example:

- funding support for design innovation;
- funding support for design analysis ;
- support for feasibility studies/ assistance in application for grant support (e.g. for renewables).

Sust. support is open to all organisations – including Local Authorities, and if you would like to find out more, please visit the Sust website www.sust.org.

Sust is not the only game in town and we also work closely with other support agencies including the local energy advice centres all over Scotland, as well as the EST and the Carbon Trust, BRE and the Local Authorities.

Conclusion

In conclusion, sustainable development is a process to which all involved in the creation of a development or settlement must be fully committed. It requires a desire to produce buildings and places that not only meet the aspirations of the creators and the expectations of current users but which are also adaptable to meet the needs of potential future users. In addition, these wonderful spaces should be created with due consideration to the fact that whether or not we believe that humans are the prime cause of global warming and climate change, we are dealing with a world where resources are limited, and therefore we should use them sparingly and with due consideration for the needs of those that come after us – not to mention the aspirations of those who went before us.

So it's not just about the environment, materials or energy, or about costs and jobs or creating places that people will love – it's about balancing all of these things so that when we create these spaces people will love them and cherish them and they will last – and we won't have to waste energy in taking them apart and putting them in landfill sites and starting again in 20 years.

Bad design is expensive - it is not like bad television, you cannot switch it off. It continues to infect our lives. A good architect can design a good building, but 'good' is like 'nice', lacking in inspiration. The combination of a good design team and contractor and an informed client can result in an excellent outcome. Sustainability should be inherent in design excellence.