Sustainability in Architecture and Construction
Bratislava
26th May 2011

Impact of EU Legislation and Policy on Architecture
Focus on Sustainability and the Future

A Presentation by
Adrian M Joyce
Director
Sustainability in Architecture and Construction

The ACE - What is it?

- The Representative Body of the Architectural Profession
- Member Organisations from All EU Countries plus Norway, Switzerland and Candidate Countries
- 46 Member Organisations, Each one Representative at National Level
- Regulatory Bodies and Professional Associations
- Represents About 520,000 Architects in Europe
Current Priorities of the ACE

- Raising EU Standards for Training of Architects and of Professional Practice
- Seeking to Improve Public Procurement Procedures
- Promoting Integrated Approaches to the Creation of the Built Environment
- Understanding the Business and Regulatory Environment (Sector Study)
- Engaging with Sister Organisations and the General Public
Sustainability in Architecture and Construction

The Context

- Global Challenges:
  - Climate Change
  - Economic and Financial Crisis
  - Demographic Change
  - Political Evolutions
  - Environmental Degradation
  - Globalisation
Sustainability in Architecture and Construction

The Context

- European Challenges:
- Leadership Role
- Diversity
- High Standards of Living
- Skills Gap
Sustainability in Architecture and Construction

The Context

- City Level:
- 80% of Population
- Potential for real Impact
Sustainability in Architecture and Construction

The Context

- Cities and Regions have Real Potential to act on:
  - Buildings Level - Implementation of EPBD
  - City Level - Covenant of Mayors
  - Social Level - Quality Housing for All
Sustainability in Architecture and Construction

The Context

Expo Site, Lisbon - After the Show, a Truly Sustainable Quarter is Born
Sustainability in Architecture and Construction

The Context

Main Square - Poznan - Urban Regeneration Project Showing Good Practice Approach
Sustainability in Architecture and Construction

EU and Other Initiatives

- Energy Services Directive
- Energy Efficiency Plan 2011
- Lead Market Initiative on Sustainable Construction

Other:

- Labelling such as BREEAM, LEED, etc...
- Research Funding such as FP7, E2BA, IEE, etc...

Nurse Education Building - Ireland
A&D Wejchert, Architects
RIAI Sustainable Building Award 2007

Bratislava – 26th May 2011
Commitment to:
- Changing individual Professional Practices
- Promoting Sustainable Design
- Fostering Environmental Literacy and Competence
- Practicing Institutional Leadership
- Collaborating for Interdisciplinary Approaches
- Broadening Service and

Outaniemi Technical University, Helsinki, Finland
Alvar Aalto, Architect
Sustainability in Architecture and Construction

Sustainable Architecture

“Sustainable Design Integrates Consideration of Resource and Energy Efficiency, Healthy Buildings and Materials, Ecologically and Socially Sensitive Land Use and an Aesthetic That Inspires, Affirms and Enables”

Union Internationale des Architectes Declaration of Interdependence for a Sustainable Future, Chicago, 1993

Architecture and Children Programme, Finland
The Sustainability Agenda

- An Integrated and Holistic Approach
- The Building and its Environments
- The Environment and its Buildings
- A New Baukultur

- Sustainable Architecture
- Energy Efficiency & Climate Change
- Answering the Needs of Society
- Urban Design & Research Needs

- ACE Actions

Terraced Housing - Norway
ROJO Architects
High Insulation Levels; Ground Sourced Heat Pumps; Heat Recovery Ventilation.
Photo: Elisabeth Lund
Overall Integration and Holistic Approaches

- Environmental Implications of Design, Construction and Operation
- Local Materials, Embodied Energy
- Indoor Environmental Quality
- Water Conservation
- Waste Minimisation and Recycling
- Whole Life Cycle, ‘Cradle to Cradle’
- Design and Construction Process
- Performance in Use
- Conservation and Reuse of old Buildings
- Urban Design and Spatial Planning
- Accessibility
Sustainable Design:

- Embodies principles of sustainability combined with an architecture more responsive to climate and human needs.
- Building and site design that responds to location and takes optimal advantage of ambient energy sources.
- Use of building fabric - walls, roofs, floors, etc., to collect, store and distribute solar thermal energy and to distribute daylight.
- Capable of providing over 50% of building energy needs.