

# **REHVA Supporters Seminar**

**12th February 2009**

## **Environmental Policy of the ACE**

**A sustainable, quality built environment**

**Adrian M Joyce**

Senior Adviser

---

# Environmental Policy of the ACE

## *About the ACE*

- 45 Member Organisations from all EU Member States plus Norway, Switzerland and Candidate Countries
- Regulatory and professional bodies, representing about 480,000 practising architects

### **Sustainability related actions:**

- EU projects
- European Construction Technology Platform (ECTP)
- DG Environment Thematic Strategy on the Urban Environment



# Environmental Policy of the ACE

## *The Challenge*

*"The scientific evidence is now overwhelming: climate change is a **serious global threat**. Climate change is the greatest market failure the world has ever seen. Tackling climate change is the pro-growth strategy for the longer term."*

**Stern Review (UK) 2007**

*"Sustainable development is development that meets the needs of the present without compromising the ability of future generations to meet their own needs"*

**Brundtland Commission 1987**



# Environmental Policy of the ACE

## *The Impact of Construction*

- About 50% of all material taken from Earth's crust
- About 35% of all greenhouse gases
- About 40% of all waste produced (by weight)
- Effects on health and productivity of all
- The well-being of the largest industrial workforce



Hong Kong Nights



# Environmental Policy of the ACE

## *Sustainable Design - 1*

*“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



1998 Expo Site, Lisbon

# Environmental Policy of the ACE

## *Sustainable Design - 2*

- Engineering systems to heat, cool and light for satisfactory indoor conditions

*Versus*

- Integrating users and the environment in an architecture which uses ambient energy sources and seasonal and diurnal outdoor changes to reduce reliance on mechanical and electrical systems



Sustainable Energy Ireland  
Architect: UCD Energy Research Group

# Environmental Policy of the ACE

## *Sustainable Design - 3*

- An architecture more **responsive** to climate and human needs, seasonal and diurnal change
- Building and site design that responds to **location** and takes optimal advantage of ambient energy sources
- Use of **building fabric** to shade and ventilate, to collect, store and distribute solar thermal energy and to distribute daylight appropriately
- **Healthy indoor environments** with high standards of thermal and visual comfort
- Smart energy design, and use of materials and energy from **sustainable sources**



Community Centre, Voralberg, Austria

# Environmental Policy of the ACE

## *Actions of the ACE*

- EU Projects
  - PISA - Photovoltaics in Buildings
  - 'A Green Vitruvius'
  - Towards Class "A"
- European Construction Tech Platform
  - Chair of Urban Issues
  - E2B: Energy Efficient Buildings
- Thematic Strategy on Urban Environment
  - Urban Design
  - Sustainable Construction Methods and Techniques
- Promotion of involvement of architects in EPBD Certification



Fingal County Offices, Dublin  
Architect: Bucholz McEvoy

---

# Environmental Policy of the ACE

## *The Policy of the ACE*

### **The ACE has Committed Itself to:**

- The Active Promotion of the Principles of Sustainable Development
- The Formulation of Proposals for Concrete Action
- Contribute to the Implementation of Agreed EU Proposals that Concern it Directly, as well as in Conjunction with Other Interested Organisations

### **Specific early measures will include:**

- The Inclusion of Energy and Environmental Performance Information as an Assessment Criterion in all Architectural Competitions and Competitive Selection Processes
- The Encouragement of Similar Performance Information to Accompany all Published Architectural Reviews
- A Recommendation that such Information Becomes an Additional Criterion in Selection Processes for Public Architectural Awards.

# Environmental Policy of the ACE

## *The ACE Declaration on Sustainable Architecture*

### **The ACE has Committed Itself to:**

- Change Individual Professional Practice
- Promote Sustainable design
- Foster Environmental Literacy and Competence
- Practice Institutional Leadership
- Collaborate for Interdisciplinary Approaches
- Broaden Service and Outreach Nationally and Internationally



Aged Finnish Farm Building



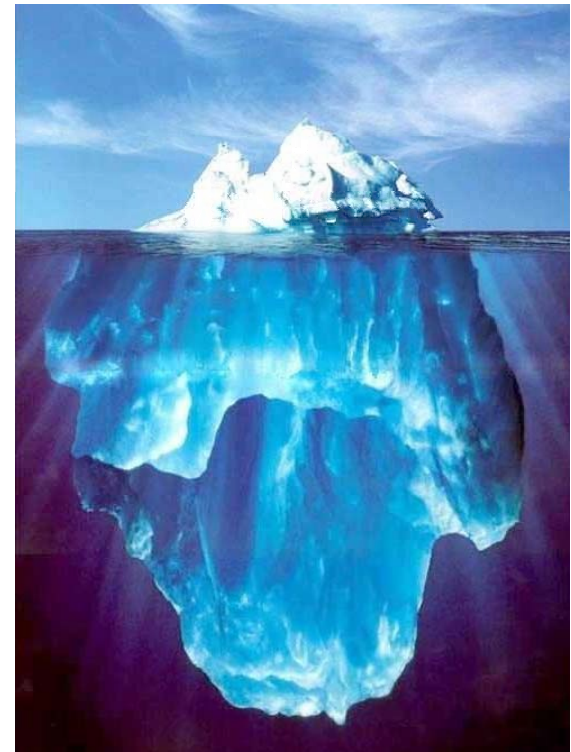
# Environmental Policy of the ACE

## *TSUE - Sustainable Methods and Techniques*

### **The ACE Chaired this Work in 2003**

#### Recommendations Included:

- Development of an Adequate Common EU Assessment Method
- Integration of Principles of Sustainability into the Practice of Design, Construction, Maintenance, Management and Dismantling of Buildings
- Certification Should be Performance Based
- Education and Continuous Training



# Environmental Policy of the ACE

## *Issues for Architects*

- Site micro-climate
  - Optimise building envelope
  - Maximise daylight
  - Minimise energy demand through serious Energy Conservation
  - Responsible sourcing of materials
  - Use of passive techniques
  - Supply energy with maximum efficiency and use of renewable sources
- 
- Integrated project teams



Green Building, Temple Bar, Dublin  
Architect: Murray O'Laoire

# Environmental Policy of the ACE

## *Best Practice Approaches*

- Labeling - Need to Display
- Radical Energy Saving
- Local Sourcing : Sense of Place
- Project Team Partnering





# Environmental Policy of the ACE

## *Necessary Actions - Desirable Outcomes*

- **Know-how and skills**
  - Design team practice
  - Design, specification, procurement, construction, commissioning, testing, operation, maintenance
- **Replacing Energy with Ingenuity**
  - New materials, unconventional combinations
  - Innovative technologies, appropriate systems
  - Smart monitoring and control
  - Building Science
- **Target setting**
- **Design for longevity, flexibility and change**
- **Pervasive quality**



Green Building, Dublin  
Architect: Murray O'Laoire

# Environmental Policy of the ACE

## *The Future*

### **Role of the Architect**

- Champion of Sustainable Buildings
- Knowledgeable Partner in Team
- Closely Involved in Assessments
- Evidence-based Design

### **Continuous Supports**

- Post-occupancy Evaluation
- Value Engineering
- Ongoing Commissioning
- Integrated project teams

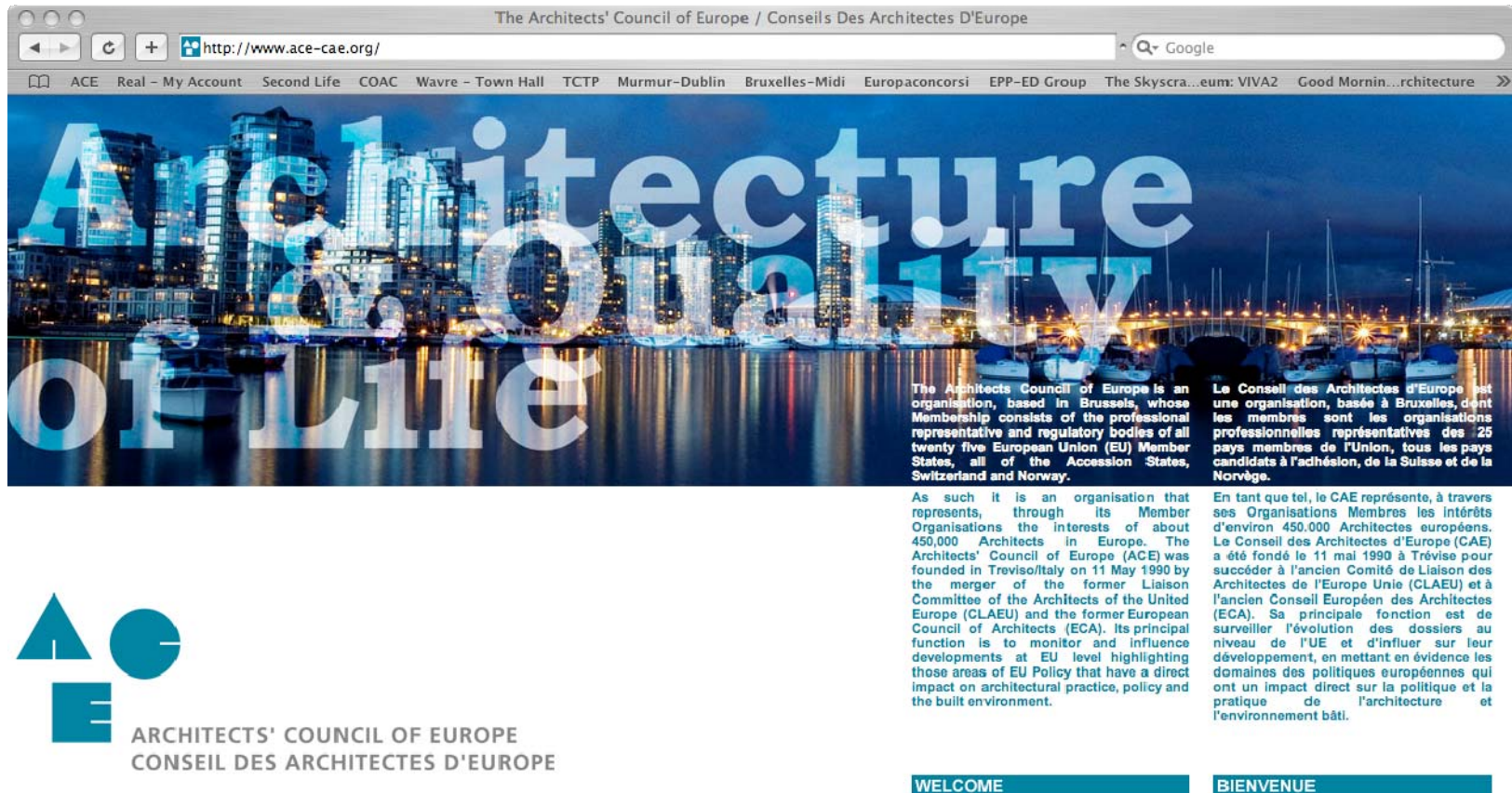


Reichstag, Berlin

Norman Foster & Partners

# Environmental Policy of the ACE

## Thank you for your Attention



The screenshot shows the homepage of the Architects' Council of Europe (ACE). The browser address bar displays <http://www.ace-cae.org/>. The navigation menu includes links to ACE, Real - My Account, Second Life, COAC, Wavre - Town Hall, TCTP, Murmur-Dublin, Bruxelles-Midi, Europaconcorsi, EPP-ED Group, The Skyscraper Museum: VIVA2, and Good Morning Architecture. The main banner features the text "Architecture of Quality of Life" over a cityscape at night. Below the banner, there are two columns of text in English and French, and a logo for the Architects' Council of Europe (ACE) on the left. The logo consists of a stylized 'A' and 'C' forming a triangle, with the text "ARCHITECTS' COUNCIL OF EUROPE" and "CONSEIL DES ARCHITECTES D'EUROPE" below it. At the bottom right, there are two buttons: "WELCOME" and "BIENVENUE".

The Architects' Council of Europe is an organisation, based in Brussels, whose Membership consists of the professional representative and regulatory bodies of all twenty five European Union (EU) Member States, all of the Accession States, Switzerland and Norway.

Le Conseil des Architectes d'Europe est une organisation, basée à Bruxelles, dont les membres sont les organisations professionnelles représentatives des 25 pays membres de l'Union, tous les pays candidats à l'adhésion, de la Suisse et de la Norvège.

As such it is an organisation that represents, through its Member Organisations the interests of about 450,000 Architects in Europe. The Architects' Council of Europe (ACE) was founded in Treviso/Italy on 11 May 1990 by the merger of the former Liaison Committee of the Architects of the United Europe (CLAEU) and the former European Council of Architects (ECA). Its principal function is to monitor and influence developments at EU level highlighting those areas of EU Policy that have a direct impact on architectural practice, policy and the built environment.

En tant que tel, le CAE représente, à travers ses Organisations Membres les intérêts d'environ 450.000 Architectes européens. Le Conseil des Architectes d'Europe (CAE) a été fondé le 11 mai 1990 à Trévise pour succéder à l'ancien Comité de Liaison des Architectes de l'Europe Unie (CLAEU) et à l'ancien Conseil Européen des Architectes (ECA). Sa principale fonction est de surveiller l'évolution des dossiers au niveau de l'UE et d'influer sur leur développement, en mettant en évidence les domaines des politiques européennes qui ont un impact direct sur la politique et la pratique de l'architecture et l'environnement bâti.

ARCHITECTS' COUNCIL OF EUROPE  
CONSEIL DES ARCHITECTES D'EUROPE

WELCOME BIENVENUE