



The Special Relationship goes Green

Presented by Michael Norton



PRESENTATION OUTLINE

- **WHO ARE CIBSE AND ASHRAE? WHY SHOULD THEY WORK TOGETHER?**
- **WHERE IS THE COLLABORATION?**
- **IS THERE A COMMON AGENDA?**
- **HAS SUSTAINABILITY BROUGHT A CLOSER TRANSATLANTIC RELATIONSHIP?**
- **WHAT NEXT?**



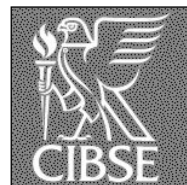


A special relationship

- **400 YEARS OF TRANSATLANTIC RELATIONS**
- **HISTORY OF COLLABORATION**
- **'WE SPEAK THE SAME LANGUAGE'**



COLLABORATION IN MEETING THE CHALLENGE



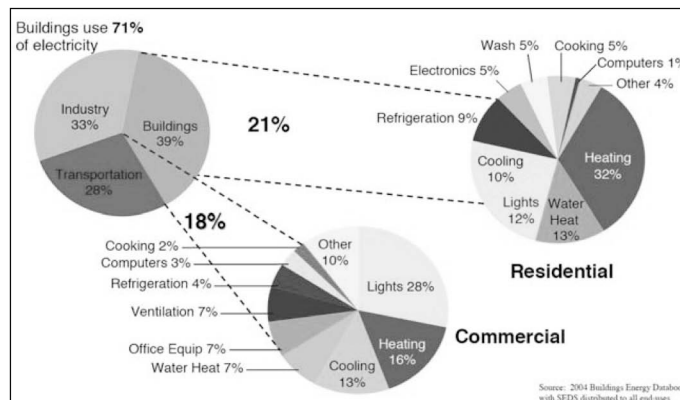


A BAD IMAGE!

- LOTS OF CARS
- TALL BUILDINGS
- WASTEFUL ENERGY USE
- LOTS OF ENERGY
- CHEAP ENERGY
- MASS CONSUMER SOCIETY

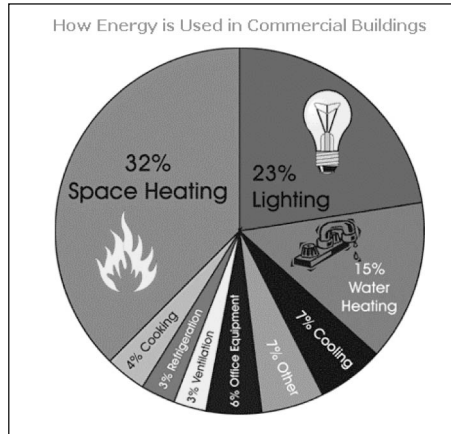


ENERGY USE IN THE USA





Potential FOR CHANGE



TERRY TOWNSEND 2007 ASHRAE PRESIDENT



"It is now our time to carry the fire of the ASHRAE Promise of a sustainable future"



'Working together'

- **COMBINED EFFORT IN ENGINEERING THE SOLUTIONS OF THE FUTURE**
- **CIBSE/ASHRAE GROUP & ASHRAE REGION AT LARGE**
- **CROSS COMMUNICATION ON IDEAS AND EXPERIENCES**
- **YOUNG ENGINEERS IN ASHRAE (YEA) & CIBSE YOUNG ENGINEERS' NETWORK (YEN)**

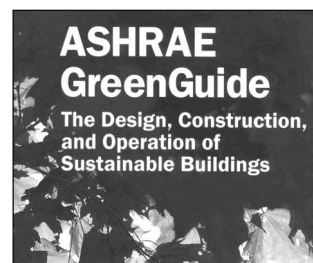


CIBSE Guide L: Sustainability meets ASHRAE Green Guide



Similarities:

- Increase role of engineers
- Early involvement (load reduction etc.)
- Similar definition of sustainability
- Advocate / champion for sustainability
- Set targets at the start of the project





KEY ASHRAE DOCUMENTS

- **ASHRAE Research Plan**
- **Sustainability Roadmap**
- **The Strategic Plan**
- **Energy Design Guide**
- **Advanced Energy Design Guide Series**



ASHRAE RESEARCH PLAN

"Research and technology are the foundation of ASHRAE on which everything else is built"

- 1. Energy and Resources**
- 2. Indoor Environmental Quality**
- 3. Tools and Applications**
- 4. Equipment, Components and Materials**
- 5. Education and Outreach**





KEY CIBSE DOCUMENTS

CIBSE Guide L: Sustainability forms part of a 'Sustainability Toolkit', which consists of three elements:

- **1. Guide L: Sustainability**
- **2. The Introduction to Sustainability**
- **3. Online Sustainability Engineering Tool**



LEADING BY EXAMPLE

- **ASHRAE HAVE PROMISED TO 'WALK THE TALK'**
- **CIBSE CARBON CLEAN UP**





ASHRAE LEADING BY EXAMPLE

- **ASHRAE propose to lead by example**
- **Redevelopment of ASHRAE headquarters**
- **The ASHRAE head quarters – a living lab**
- **Compliance with ASHRAE standards**



CIBSE SCHEMES

- **CIBSE Low Carbon Consultants and Energy Assessors**





Carbon 60 before 2020

The Government's timescale for reducing carbon emissions by 60% is 2050

CIBSE could be delivering the 60% reduction by 2020, or even earlier

Emphasis on 10 year payback



JOINT STATEMENT ISSUED IN JANUARY 2006 WITH JOINT MEASURES TO BE IMPLEMENTED

- Coordinated approach
- Low environmental impact designs
- Encourage energy efficiency
- Encourage renewable energy
- Educate building owners, users and engineers
- Provide information and advice





A VISION FOR CHANGE

- **Utilise communication opportunities**
- **Embrace new technologies**
- **Collaboration between construction industry disciplines**
- **Total building solution**



OUR RESPONSIBILITY

- Revolution in thinking
- Encourage use of renewable energy
- Promote low or zero carbon buildings
- Work with HVAC&R industry
- Social awareness – improving our profile





YOUNG ENGINEERS

- CIBSE Young Engineers' Network
- Support and education for young engineers
- Knowledge exchange regarding new technologies
- Guiding the next generation towards awareness
- G4C Umbrella group – young professionals
- ASHRAE Young Engineers – (YEA)



WHAT NEXT?

- CONTINUED KNOWLEDGE EXCHANGE
- YOUNG ENGINEERS TO CARRY THE COLLABORATION INTO THE NEXT GENERATION
- JOINT EVENTS AND LEARNING PROGRAMMES





**CIBSE/ASHRAE Conference
Sustainability - Niche to Norm
29-30 April 2008, Newcastle, UK**

- **MAKING SUSTAINABILITY THE NORM**
- **GUIDANCE ON SUSTAINABILITY AND LEGISLATION**
- **NEWCASTLE UPON TYNE IS A PRIME EXAMPLE OF SUSTAINABLE REGENERATION**



SUMMARY

- **THE US IS SERIOUS ABOUT ENERGY BUT FOR DIFFERENT REASONS WITH SECURITY OF ENERGY A PRIORITY**
- **ASHRAE HAS BEEN TALKING ABOUT ENERGY FOR OVER 30 YEARS BUT NOW IS PLAYING CATCH UP**
- **THE US CLIMATE CHANGE TECHNOLOGY PROGRAM SHOWS A COMMITMENT AT FEDERAL LEVEL**





SUMMARY

- **ASHRAE AND CIBSE HAVE MADE A JOINT COMMITMENT TO DESIGNING A SUSTAINABLE FUTURE**
- **BOTH ASHRAE AND CIBSE BELIEVE IN LEADING BY EXAMPLE AND MAKING PROACTIVE MOVES IN CHANGING THE WAY WE AS AN INDUSTRY OPERATE**
- **YOUNG ENGINEERS IN BOTH ORGANISATIONS ARE SEEN AS THE FUTURE AND ARE BEING ENCOURAGED TO WORK IN COLLABORATION AS THE NEXT GENERATION TO TAKE UP THE CHALLENGES**
- **THE JOINT CONFERENCE IN NEWCASTLE HIGHLIGHTS THE DESIRE TO WORK CLOSELY AND IN PARTNERSHIP FOR THE FUTURE**



CONCLUSION

WHO ARE CIBSE AND ASHRAE? WHY SHOULD THEY WORK TOGETHER?

- **LEADING PROFESSIONAL INSTITUTIONS IN THE DESIGN OF SERVICES FOR BUILDINGS**
- **A COMMON RESPONSIBILITY AND SIMILAR DIRECTION**





CONCLUSION

WHERE IS THE COLLABORATION?

- **WORKING TOGETHER TO PROVIDE DESIGN GUIDANCE**
- **GOOD COMMUNICATION WITH LESSONS AND IDEAS EXCHANGED**
- **JOINT STATEMENTS OF INTENT**
- **JOINT CONFERENCE**



CONCLUSION

IS THERE A COMMON AGENDA?

- **BOTH RECOGNISE THE PROBLEMS**
- **SIMILAR GOALS FOR CHANGE AND IMPROVEMENT**
- **DIFFERENCES IN APPROACH AND APPLICATION**





CONCLUSION

HAS SUSTAINABILITY BROUGHT A CLOSER TRANSATLANTIC RELATIONSHIP?

- BOTH ON THE SAME SIDE
- ASHRAE LOOK TO US FOR A LEAD
- GLOBAL ISSUE NEEDING A GLOBAL RESPONSE



CONCLUSION

WHAT NEXT?

- CONTINUED COLLABORATION AND COMMUNICATION
- YOUNG ENGINEERS HAVING A GREATER ROLE
- MORE EMPHASIS ON A JOINT APPROACH WITH SIMILAR GUIDANCE FOR DESIGNERS





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QUESTIONS?