Sustainable Innovation and Design Academic Perspective

Andrew Miller University of Brighton

21st November 2005



Outline

o Introduction

- Significance of the Built Environment
- Current Activity
- Opportunities

Introduction

Centre for Sustainability of the Built
 Environment

energy

landscape

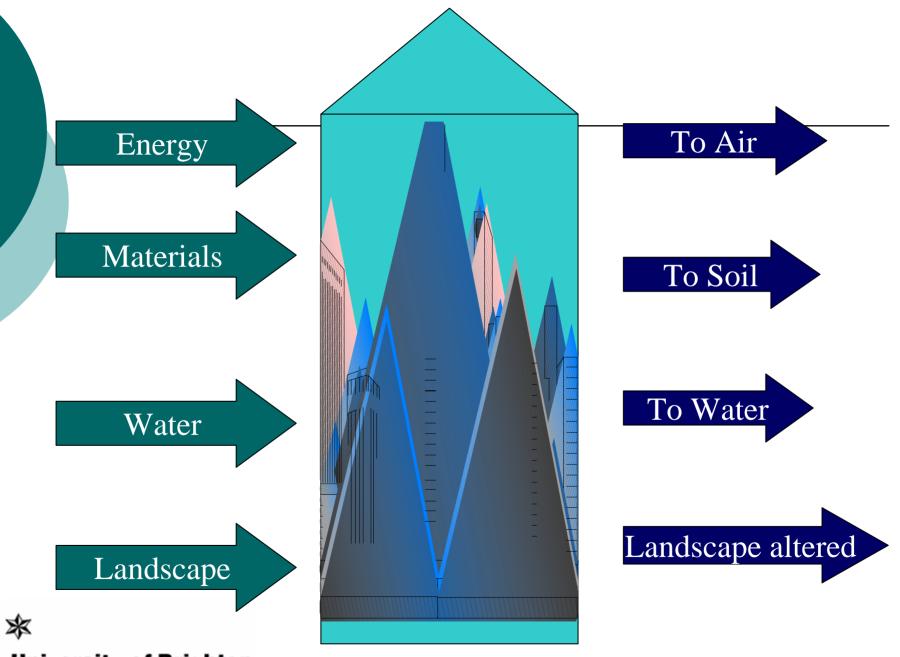
School of the Environment



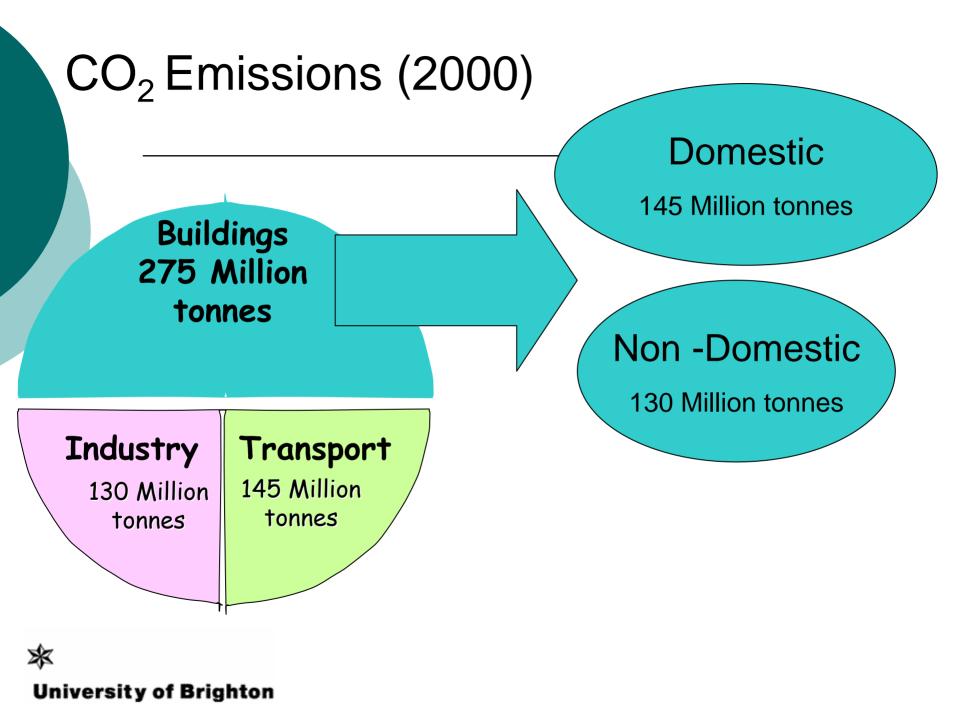
Significance of Built Environment

- Major user of material resources
- o Major user of fossil fuels
- Responsible for green house gas emissions
- High construction waste
- o High demolition waste

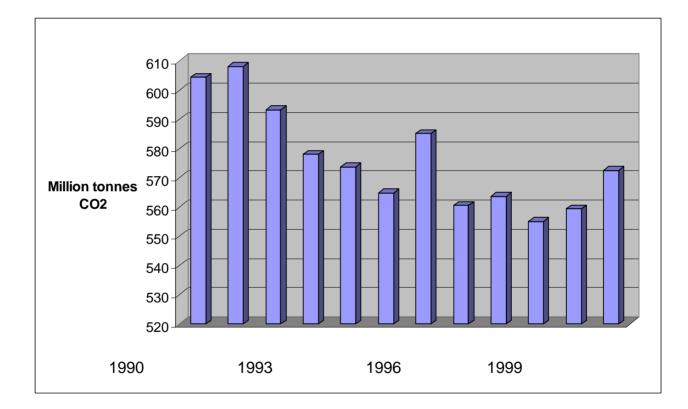




University of Brighton



Carbon Dioxide Emissions 1990-2001



✤ University of Brighton

Construction Waste

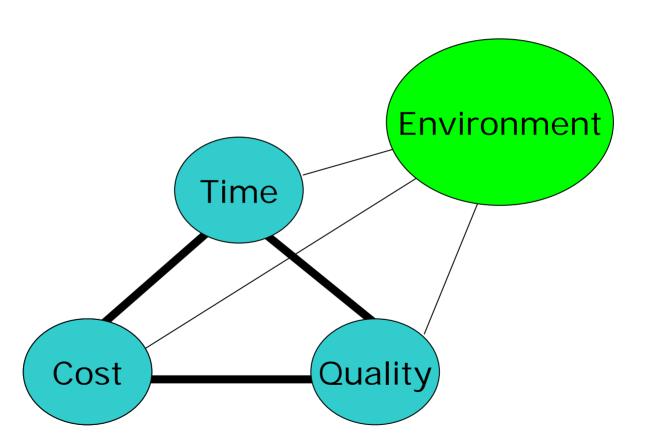
o 70 million tonnes per annum







Research Direction



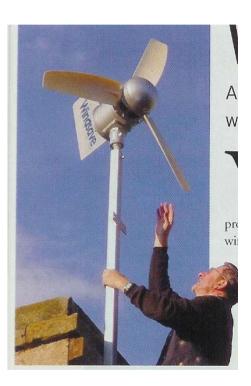


Current Activity

- Centre for Sustainability of the Built Environment
- Flavour of undergraduate courses
- Active student union
- o Modules
- Research collaboration
- Universities carbon club

LCA – Sustainable Technologies

- What do they cost?
- What do they save?
- What is the real cost?
 - Carbon Dioxide
 - Cleaning the environment



• Carbonomics!!!!

✗ University of Brighton

Opportunities

Monitoring and Modelling
Phase change materials
Sustainable Timber

Research Collaboration
Masters Courses
CPD
KTP

水 University of Brighton

Centre for Sustainability of the Built Environment



