LANCASTER UNIVERSITY

Eco-Friendly Student Accommodation

Thursday 14th May 2009

Presented by David Peeks, Commercial Director

University's Mission & Sustainability

- A Commitment to Environmental Issues
- Sustainable Energy Infrastructure Study
- Environmental Policy
- Corporate Objectives

Design Process

- UPP and Lancaster University
  - Identified Sustainability Issues

- Accent Housing Group, Dr Avi Friedman and Goddard Wybor Practice Architects
  - Accent worked with Dr Freedman and Wybor Architects (GWP)on producing low cost sustainable solutions for Social Housing

- Lancaster Consultation Group
  - University Council, UPP, Students, Colleges, Estates Department

Dr Avi Friedman is Professor of Architecture & Director of Affordable Housing Programme, McGill University, Montreal, Canada

Key Principles

- UUK/SCOP Code of Practice for Student Housing
- Move away from “volumetric pre-cast concrete solutions”
- Enhanced living space and social provision
- Style & Quality – product and development level
- Improve accommodation choice and price point

Key Principles

- Low delivery and running costs
- Product Performance – Sustainability and Environment
- Target BREEAM / Eco-homes Excellent

The solution

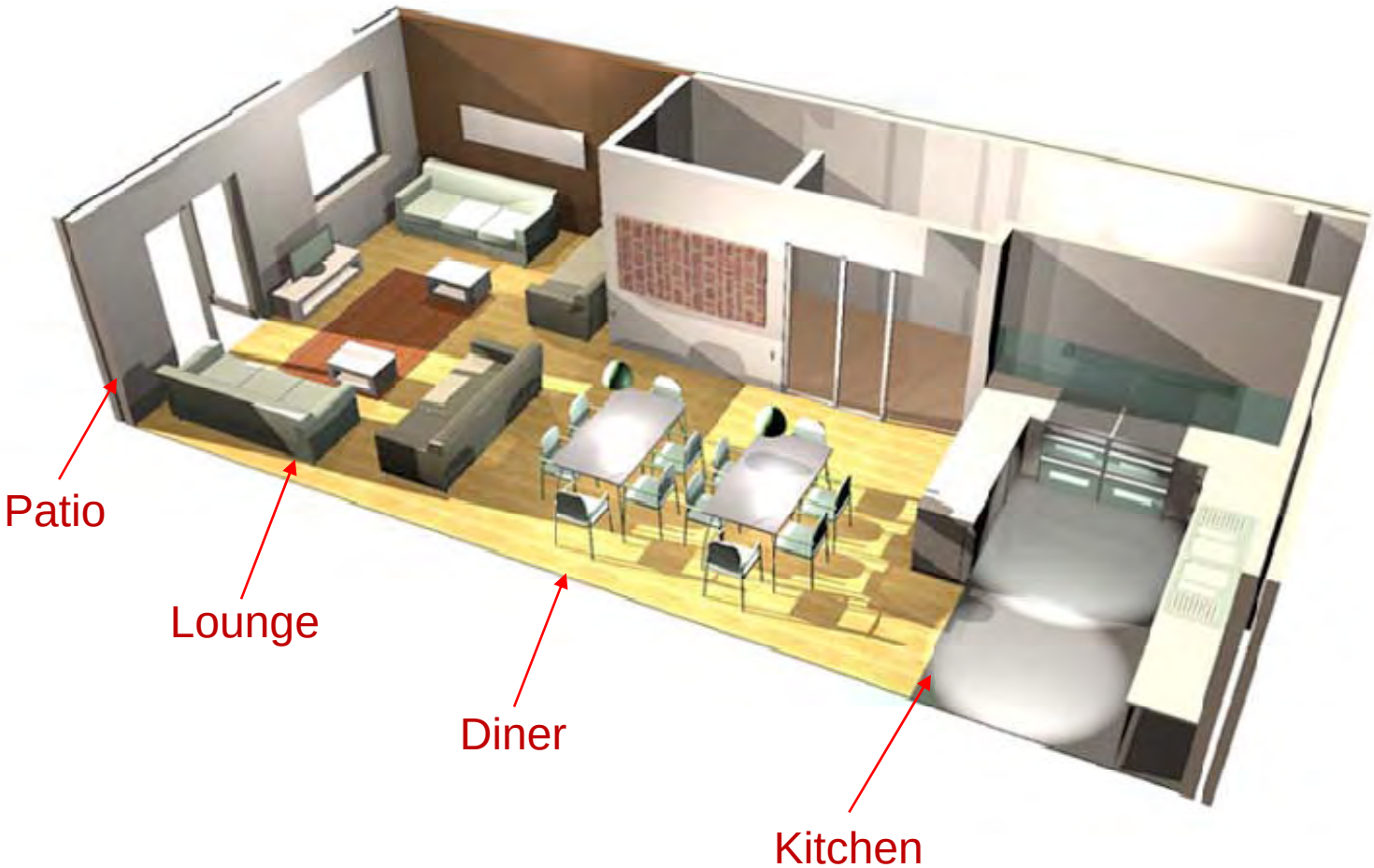
- Flexible student accommodation
- Low waste – lower cost
- Highly sustainable by design
- Healthy home by design
- Highly energy efficient by design
- Attractive “lifestyle” product offer
- Educational experience opportunity

The Construction Process

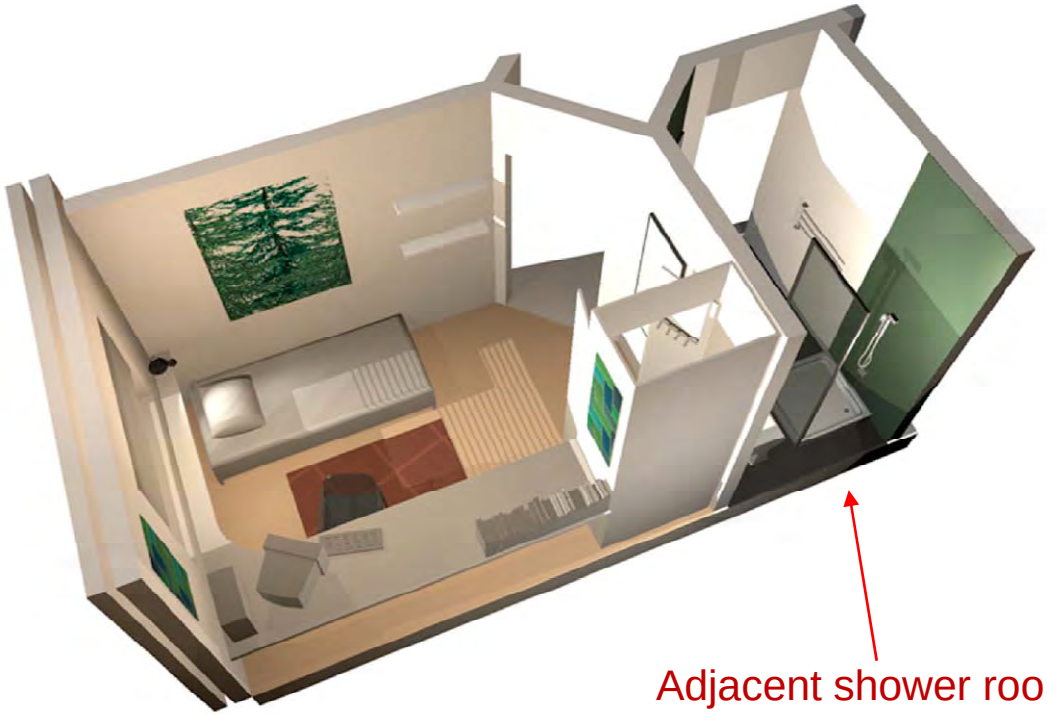
- Timber framed solution
- Lighter weight foundations [less concrete]
- Off site manufacture/less site generated waste
- Speedier construction
- Watertight quicker allowing internal fit out to progress in parallel
- FSC certified timber
- Low or no emission paints & fabrics & low energy fittings
- Internal ventilation & heat recovery system

UPP adaptation for modern student accommodation

Full ground floor social space

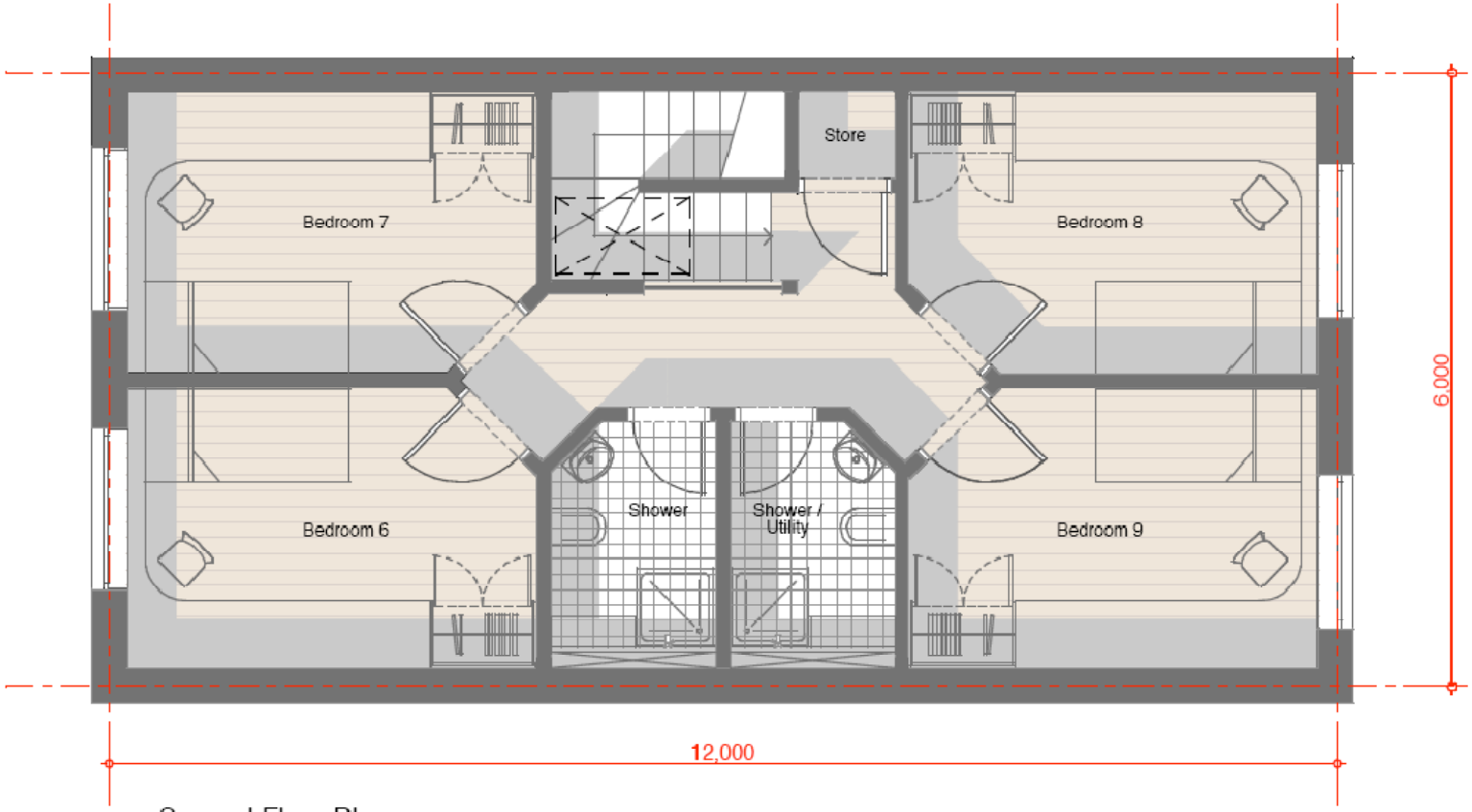


Student bedrooms



Adjacent shower room

Bedroom Floor - shared shower rooms



Second Floor Plan

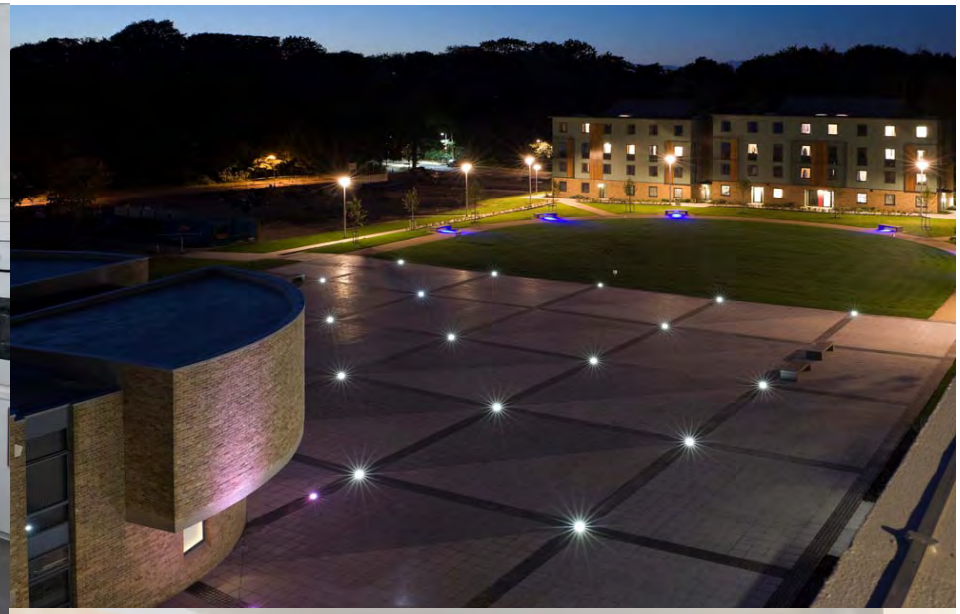
Gross Internal Area 65.52 m²

Bedroom Area 10.64 m²

Aspirations…

- Carbon Footprint : 25% less per student
- Insulation : up to 50% better
- Utilities : up to 20% less in use
- Living room included within the cost plan
- Circa 15% cheaper in construction cost than previous phases
- More competitive output tariffs

Completed Development



Successes so far….

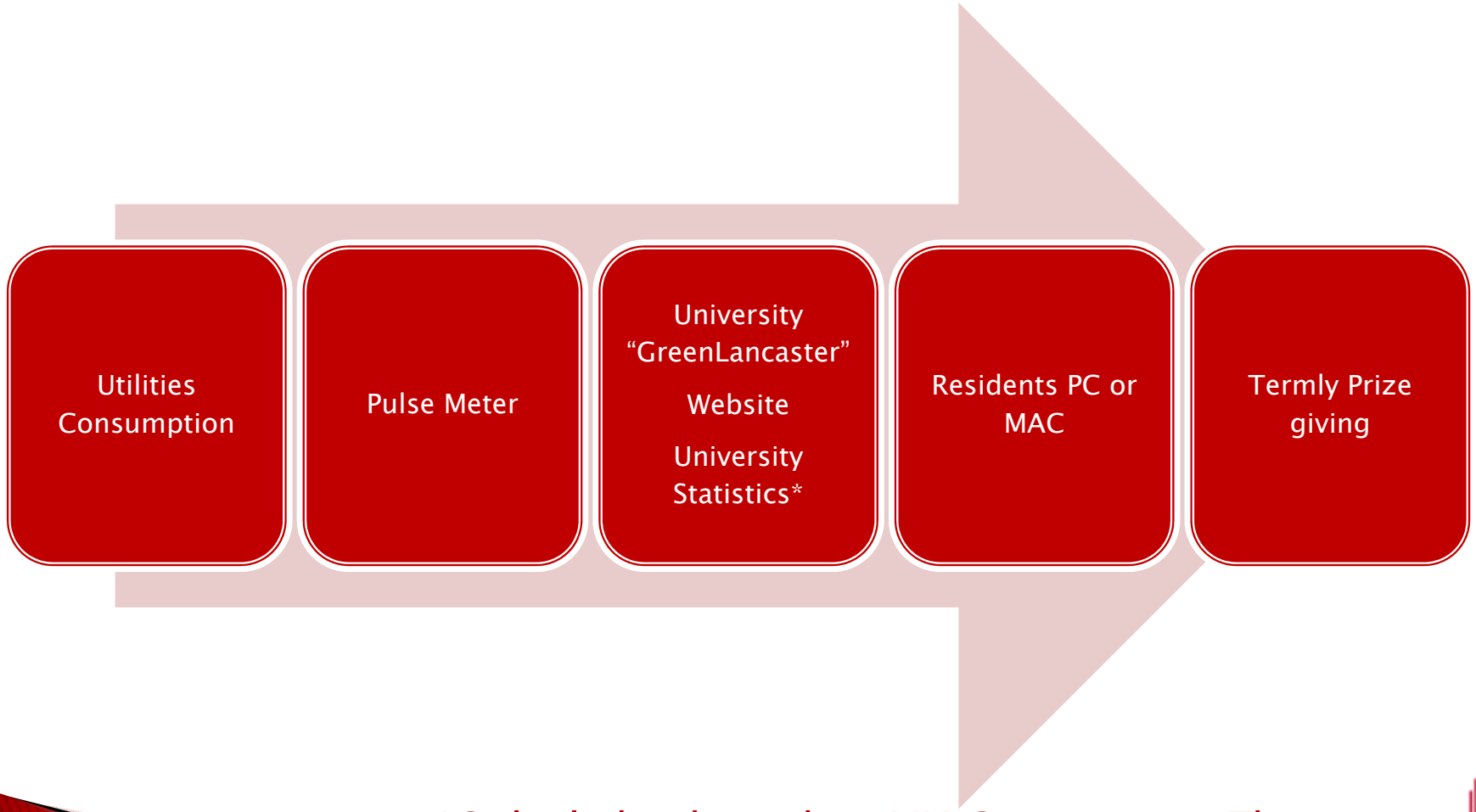
- BREEAM: Excellent Rating
  National Award in Multi-Residential Category
- CIBSE : Regional Award
- Secure By Design: Police Service Award
- NW Regional Construction Award : Shortlisted

BREEAM: Building Research Establishment – Environmental Assessment Method

Student Benefits

- Monitor utilities usage in real time via the internet
- Keeps sustainability at the forefront
- Carbon competition to win back their utility costs
- Students are incentivised by “Green” concerns
- More efficient utility usage

Carbon Competition



*Calculation based on UK Government Figures

Student Benefits

- Recycling facilities are designed into the accommodation
- Secure Bicycle stores
- Outdoor spaces and facilities enhance and extend the live and learn spaces on campus
- Student satisfaction with eco-friendly accommodation

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