New opportunities in R&D

Alastair Stupart, Assistant Director
Forest Products Research Institute
What is FPRI?

- One of nine research institutes at Edinburgh Napier University
- Each institute matches a specific area of government economic policy
- Forestry recognised as a key sector
- FPRI has four research centres (including CTE)
FPRI: four specialist research centres

- Two centres deal with wood science & chemistry
  - Plant science and biopolymer research
  - Wood science and technology

- Two centres focused on design & construction
  - Centre for Timber Engineering
  - Wood Studio
Plant science & biopolymers

- Led by Professor Philip Turner (Director of FPRI)
- Nanotechnology
- Focused on new uses for cellulose
- Developing very high strength lightweight materials
- The “rocket science” end of timber research
- Funding from international companies
Wood science & technology

- Led by Professor Callum Hill
- Embraces strategic integrated research in timber (“SIRT”) programme
- Chemistry focus - working with companies such as AkzoNobel and UPM Kymmene
- Specialist areas include wood modification
Centre for Timber Engineering

- Led by Professor Abdy Kermani
- Now re-focused exclusively on timber engineering
- Education
  - BSc Civil & Timber Engineering
  - MSc Timber Engineering
  - MSc Timber Industry Management
CTE (continued)

- Works extensively with timber manufacturing and construction sector on applied research & product development
  - Timber bridge design
  - Timber lamination technology
  - Platform timber frame technology
  - Eurocode 5
The Wood Studio

- Led by Peter Wilson (architect)
- Applied research & innovation in timber architecture, design & construction (e.g. cladding, CLT, modified timber, green timber)
- Advanced education in timber for specific professional groups (architects & designers)
- MRes programme for design research (to come)
Half-time

- A new larger institute has grown out of CTE (35 staff & students)
- Education and R&D
- Continued commitment to work with UK timber industry
- How? – commercial, KTP, public sector grants, student projects, research grants.......
- New opportunities (1) Expanded CPD & (2) “WPIG”
Continuing Professional Development

- Strong existing track record
- Now commissioned to deliver Wood for Good’s CPD programme in Scotland
- Year-round programme: conferences, seminars, lectures, workshops, presentations
- Events aimed at specific target groups with a view to generating new consultancy & research leading to the development of new value added timber products, processes & services
CPD: new house designs & products
CPD: smaller timber structures
Wood Products Innovation Gateway (WPIG)

- European Regional Development Fund Priority 1
- £1.5m three year programme
- Funding Partners: Scottish Enterprise, Forestry Commission Scotland, ConFor, Wood for Good and Edinburgh Napier University
- Built around existing strategies for forestry and timber industries (*added value products, home grown resource, low carbon agenda* etc)
- Pro-active engagement with SMEs – especially construction industry professionals
WPIG - Aims

- To engage with 600+ SMEs
- To develop and commercialise 20+ new products, process and/or construction systems (derived from Scottish grown timber)
- To develop 20+ new research collaborations and networks
- To increase turnover in supported enterprises by £10 million+
- To create 10+ new jobs
Project Resources

Andy Leitch, Project Manager
Margaret Watson, Business Development Advisor

Prof Barry Gardiner, wood properties of HG species.
WPIG: SME engagement

- CPD Events Programme
- Provision of technical information on range of topics
- Identification of ideas
- Feasibility and technical support
- Identification of further funding support
- From first idea to full commercialisation
WPIG : Technical Information & Support

- Andy Leitch (FCS) - Project Manager
- Margaret Watson (SE) - business development
- Prof Barry Gardiner (FR) - technical expertise
- Peter Wilson - leads WPIG for the University

www.napier.ac.uk/fpri
WPIG major projects: Cross Laminated Timber
Cross laminated timber
Potential support for SME’s in construction sector

- Wood products innovation gateway
- Low carbon building technologies gateway
- Low carbon built environment innovation den
- BRE Innovation Park @ Ravenscraig
Thanks

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