

Tropical Timber European/UK Buyer Perspectives

Dr Andy Pitman
TRADA Technology

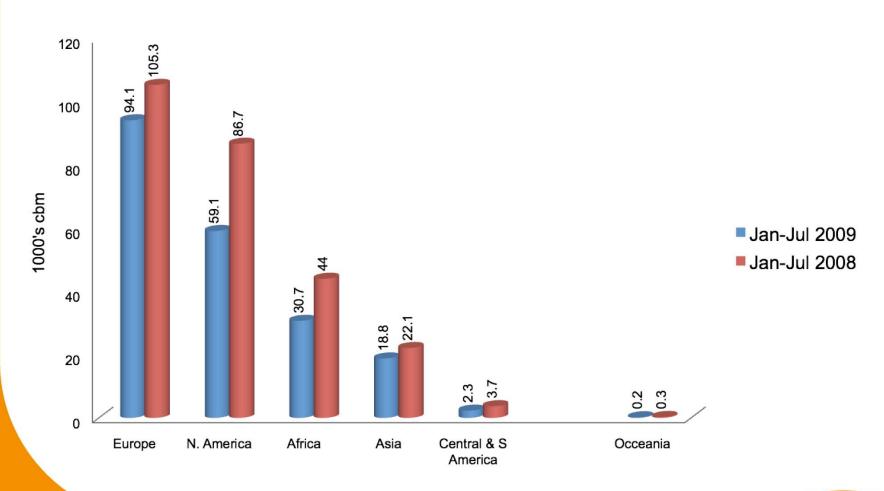


European (EU) demand for tropical hardwoods 2008 (a re-cap)

- Hardwood logs ↓ 27%
- Sawn ↓23%
- Veneer ↓11%
- Plywood ↓14%



Current demand for hardwoods (temperate & tropical) in the UK





Future UK timber imports (TTF Oct 2009)

- 2008 ↓31% reduction in all wood imports
- 2009 ↓14%
- 2010 ↑ 14%



Drivers influencing tropical timber imports by Europe with focus on the UK

- 1. Current conditions in the construction sector
- 2. Requirements for responsibly sourced timber
- 3. Sustainability credentials of timber & its competitors
- 4. Construction Products Directive



Current condition of UK construction market

- UK Construction comprises
 - New build
 - Refurbishment
 - Repair & Maintenance
- Between 2003-2007 annual growth across these categories was between 5-12% annually
- 2008 valued at £116.5 billion with a modest growth of 2% growth over 2007
- 2009 will see an estimated fall of 4% to £111 billion
- Growth predicted to return by 2011 though predicted to be modest at 2%



Which construction sectors have been most affected in the UK?

- Privately financed new build projects have been most affected including:
 - Commercial
 - Residential (UK new starts ↓30% in 2008)
- Refurbishment works also affected
- Repair and Maintenance less affected









The role of the UK Government in supporting the construction industry

2009 - Fast tracked building programmes

- Schools (BSF)
- Hospitals
- Social Housing
- Olympics

Why is this important?

Need to play to UK Government rules with materials procurement!





Market requirements for responsibly sourced timber

- UK Government (national & local authority)
- European Governments



UK Government timber procurement policy

Central Government Departments, Government agencies and Public bodies must procure timber that is Legal and sustainable (certified: type A) or from FLEGT licensed source (type B).

UK Government consumes 20% of the countries timber & sets building codes = important influencer.

Some parts of local Government only recognise certified wood as suitable





EU Forest Law Enforcement, Governance & Trade Action Plan

- Voluntary Partnership Agreements between EU & Producer countries to support better governance and legal licensing
 - Cameroon, Republic of Congo & Cameroon signed (Malaysia, Indonesia, Vietnam, Liberia all in discussions)
- Proposed legislation to address illegal imports Oct 08
- Funding private sector initiatives e.g. TTAP
- European Governments introducing Timber Procurement Policies with UK, Netherlands, Denmark most advanced





EU Proposed Legislation

- All first placers of timber in the EU (including domestic) to undertake a "due diligence" system to assess the risk of illegal timber.
- Wide support for the regulation but clarity is still needed and some unrest with domestic producers
- Currently legislation is under discussion by both the Parliament and Council to consider what the final regulation will be
 - Negotiation point is the introduction of an underlying prohibition making it an offence to place illegal timber on the EU market



UK and its Commitment: TTF New Code of Conduct



- Code of Conduct committed TTF members to implement a system of "due diligence" ahead of new EU legislation option
- Introduced in June 2008 for TTF members
- Members can develop their own system but must meet the agreed criteria





Due Diligence Tool

- A voluntary tool introduced in 2004 provides
 - An "off the shelf" due diligence tool to assess the risk of timber products
 - Supports business in promoting good practice to customers and/or meeting policy requirements
 - Focus on uncertified products certified or verified legal simply recorded
 - A stepwise approach to source legal & sustainable timber products
 - Preparing members to meet proposed future legislation





Other EU Developments influencing timber purchasing

- Green Public Procurement on products including construction products & furniture;
 - Requiring Certified or FLEGT licensed products
- Introduction of schemes to measure & rate the environmental impact of buildings or developments e.g. BREEAM (UK), CSH (UK) and CEN 350 (EU proposed under new Construction Products Regulation)
 - Credit responsible sourcing & lower environmental impacts
- CE Marking passport to supply certain structural products to market



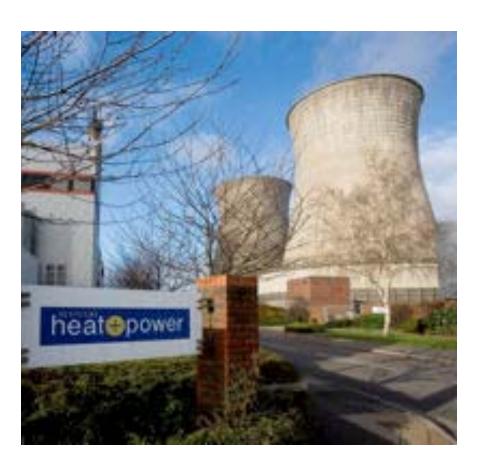
UK's Experience to date

- Certification & legally verified products are "de facto" becoming market requirements to prove legality & sustainability
- In the UK this only results in a 2-7% price premium on certified hardwood products
- Recent research demonstrates a 20% rise in demand for certified products
- Over 80% of the timber consumed in the UK is certified
- Climate change has generated significant interest in sustainable construction in UK using timber



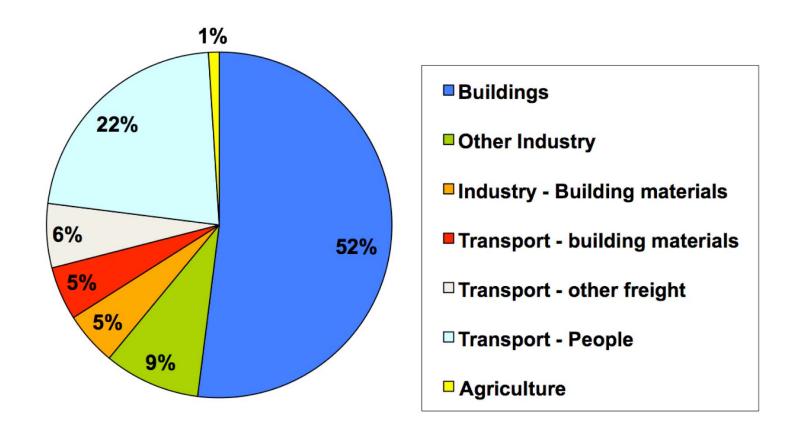
Sustainability credentials of timber

Carbon agenda



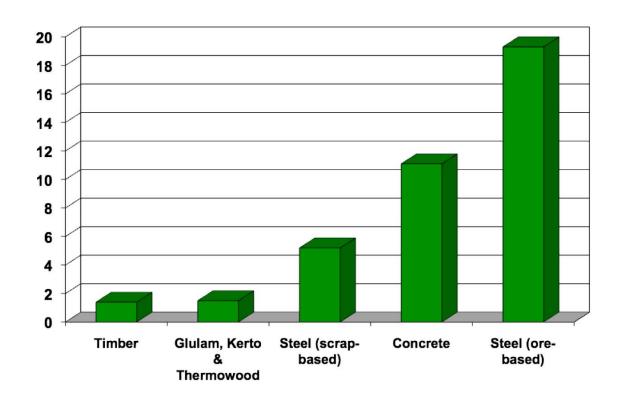


Construction's contribution to UK CO₂ emissions





CO₂ emissions from the manufacture of different materials

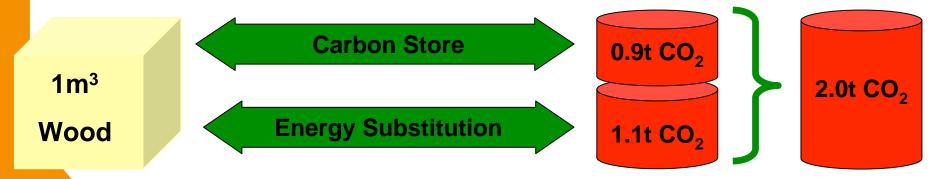


■ Kgs of CO2 per square metre building area



Carbon saved through substitution

- 0.9 tonnes of CO₂ stored in 1m³ of wood
 - 1.1 tonnes less CO₂ emissions than the production of an equivalent amount of fossil fuel intensive materials, such as steel, concrete or plastics
 - This amount, coupled to the 0.9 tonnes of CO₂ stored in the wood, means that every metre cube of wood substituting for fossil fuelintensive materials saves a total of roughly 2 tonnes of CO₂





Wood & the Code for Sustainable Homes CSH (UK)

- Launched Dec 2006 = Environmental Impact rating for housing, new standards for energy efficiency and <u>sustainability</u>.
- Six levels, with level 6 = zero carbon
- Score points against nine categories
- April 2008 all Government funded homes (social) had to meet Code level 3
- May 2008 all new private homeshad to publish their rating



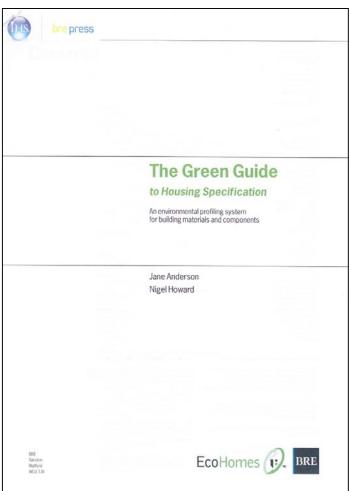
CSH & Responsible sourcing

- By using responsibly sourced timber you gain max. points: needs to be FSC, PEFC, SFI, MTTC or CSA
- Next Code for Sustainable Buildings
 To apply to all commercial buildings where higher volumes of timber may be used



Helping specifiers & designers make environmental choices

- Discussed at length in the Green Guide
- Timber systems score very well - often A+





Timber can score well provided

- It can be shown to be sustainably sourced
- It provides a good service life
- It is recycled at end of life



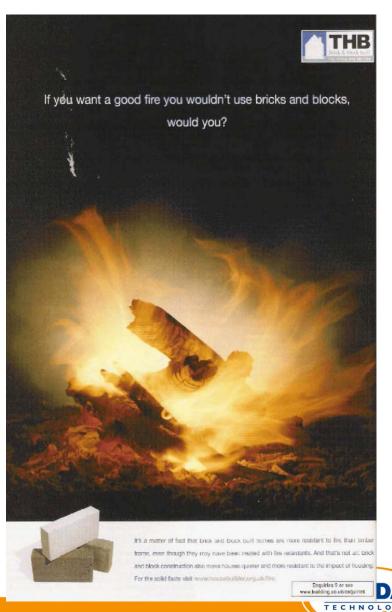






Pressure on wood products

- Market <u>demanding proof</u>
 of lower environmental
 impact through methods
 such as LCA & Carbon
 foot printing
- Other sectors starting to badge their products as "responsibly sourced"
- Other materials use "illegality" against us!!!



Materials competing with tropical woods in the UK market

- Other materials
- Temperate woods for some applications



AggRegain

Your complete online guide to sustainable aggregates ...



Sustainable steel Constructional steelwork Association (BCSA), and the British Constructional steelwork Association (BCSA), and the British Constructional steelwork Association (BCSA), and the British Constructional steelwork Association (BCSA), and the Constructional steel work Association (BCSA), and the Steel Construction (BCSA), and the Constructional steel work Association (BCSA), and the Constructional steelwork Association (BCSA), and the Steel Constructional steelwork Association (BCSA), and the Construction (BCS The steel sector—comprising (SCI)—is delighted to be leading the way in developing a more steel Construction Institute (SCI)—for the UK.

Steel Construction Institute industry for the UK. Sustainable steel construction Steel Construction Institute (SCI)—Is delighted the UK.

Sustainable construction industry for the UK.

Housing group fits first recycled PVC windows -**Northwood Housing Association 2009**



What is Wood Modification?

Changing wood properties without preservatives



Why modify wood?

- 1. Improve durability achieve a 60 year service life
- 2. Improve stability reduce cupping, checking, opening of joints & premature failure of coatings
- Improve mechanical properties strength & hardness
- 4. Improve aesthetics

Competes with tropical hardwoods



Commercialisation of wood modification

1. Thermal

ThermoWood® Plato®wood Retitech™

Bois Perdure[©] FLO.TERMO[®] Celloc[®]

MENZ HOLZ

2. Chemical

Accoya[®] Kebony[®] Belmadur [®]

3. Impregnation technologies

Osmose Indurite*

Vecowood®



Modified softwoods - Accoya®





Kebony – teak substitute





Modified softwood - Vecowood®

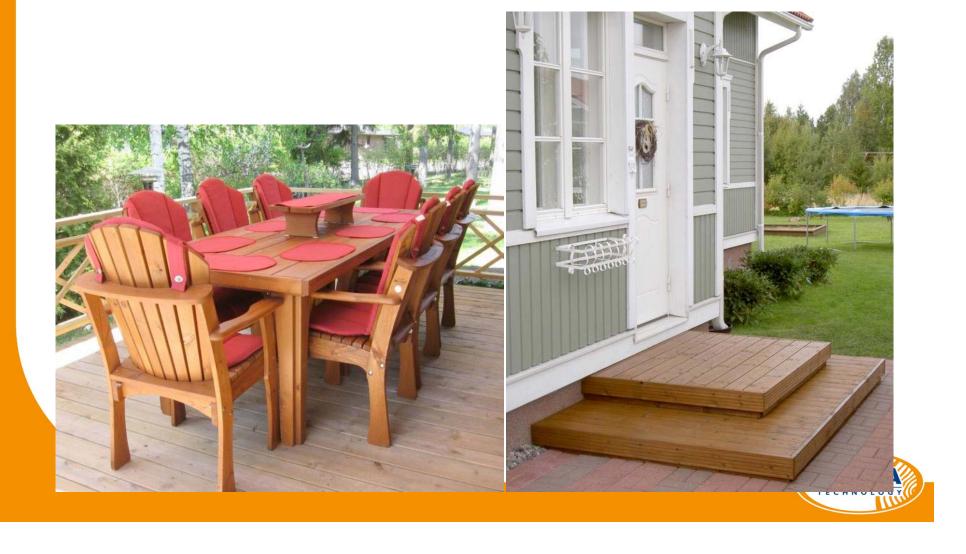




Vecowood®



Upgrading low durability softwoods: ThermoWood® for exterior use



Upgrading low durability softwoods - Plato®Wood





Joining them: Upgrading low durability hardwoods i.e. Frake



Softwood Competition ThermoWood[®]: Villiers Hall, Leicester.







Changes to construction regulations

- EU Construction Products Directive (CPD)
 harmonises building regulations across EU
 products will be given a CE mark
- Already introduced for panels once CE marked access across all EU markets
- Stability (strength) & fire performance important
- It will be a requirement of all wood products used in permanent structures



TRADA's role in helping tropical timber suppliers

- Independently assign strength classes to LUS graded to EU visual standards
- All LUS species tested are available as certified
- Allows LUS to be used by UK Government Agency





Questions?

Dr Andy Pitman
apitman@trada.co.uk
www.trada.co.uk

