See-through supply chains

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Provenance and transparency

• The place of origin or earliest known history, esp. of a work of art, manuscript etc.
• Origin.

• French, from provenir, from Latin provenire (venire come)

• The condition of being transparent.
• …easily seen through
• …easily understood
• …frank, open

• Middle English from Old French, via Medieval Latin transparens from Latin transparere (‘shine through’)

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Ask yourself this question…

“Do you know where your materials come from?”
The landscape in construction

Responsible sourcing

APRES
Action Programme for Responsible Sourcing – research and knowledge exchange

Product standards

Legislation (Timber & Modern Slavery)

Supply chain systems?
Ethical sourcing?
More, not less?

What’s next?

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Action Programme for Responsible and Ethical Sourcing (APRES)

- SME training
- APRES network
- Survey & Case studies
- 1st Little Book
- Ethical manifesto
- BES6001 analysis
- EngD on SMEs
- CPD sessions
- Designers’ guide
- PhD on traceability
- APRES conferences
- New CIRIA guide (2016)
Action Programme for Responsible Sourcing

- Originally a public-funded network grant, now fully commercially self-sustaining
- Based at BRE, chaired by Loughborough University
- 350+ members on database
- 6th annual conference in November
- Cross supply-chain engagement and frank open debate
- Convening practice, research and comment

>700k impressions
#APRES2015
Do you own one of these?
About Coltan
It isn’t a new concept...

1976

1988

1993

1878
High profile exposès

- Nike
  - Child labour in Pakistan and Cambodia
- Primark
  - Child labour in India
  - Working practices in India and Bangladesh
Timeline and drivers
Using the BES 6001 sourcing standard

- Promote responsible sourcing
- Clear guidance on sustainability aspects
- Provide confidence
- Provide a route to obtaining credits in assessment schemes
BES 6001: Principles

- Ethics
- Legal Compliance
- Management Systems
- Supply chain management
- Stakeholder engagement
- Complaints and prosecutions
- Fundamental rights at work
- Health and safety
- Climate change and energy
- Resource use
- Site stewardship
- Water
- Waste management
- Transport impacts
- Employment and skills
- Local communities
- Contribution to the built environment
Our research (1)

BES6001: number of certified products (2008-2013) (n=126)

- Aggregates: 36%
- Asphalt: 5%
- Brick: 6%
- Cement: 7%
- Concrete: 25%
- Roof Tile: 6%
- Steel: 2%
- Sand: 1%
- Building Materials: 1%
- Natural Stone: 1%
- Mortar: 1%
- PFA: 1%
- Plasterboard: 1%
- Quarry products: 2%

Upstill-Goddard et al, 2015, ICE Engineering Sustainability journal.
Mind the gap?
Listed on www.greenbooklive.com
New CIRIA handbook

• Authoritative guidance underway

• **Responsible sourcing: a handbook for the construction industry**


• Two major parts:
  – Introduction and context
  – Product sheets

• Launch early 2017
Example product sheet

INSULATION

Scope:
The product sheet focuses on the most widely used products in the UK insulation sector: Glass Wool, Mineral Wool, and non-fibre insulation boards. Natural wool is excluded as Glass Wool and Mineral Wool make up the greatest proportion of the UK fibrous insulation market. The non-fibre insulation boards covered include those made from EPS (Expanded Poly styrene), XPS (Extruded Poly styrene), PUR (Polyurethane) and PIR (Polyisocyanurate).

Typical Supply Chain:

- **Material Input**
  - Plastics, e.g., polyethylene and polyvinyl chloride
  - Chemical blowing agent
  - Facing Materials
  - Recycled Foaming Materials

- **Manufacturing Process**
  - Foam/expansions plastics formed with blowing agent
  - Insulation laminate into boards with facings

- **Product**
  - Insulation board

Typical Insulation Types:

- **Fibreglass Insulation**
  - Sand, limestone, and soda ash
  - Glass from recycled sources
  - Volcanic rock
  - Water from recycled sources

Typical Considerations:

- **Physical and environmental impacts**
  - Material inputs: Extraction of materials can lead to environmental impacts such as deforestation.
  - Manufacturing process: The production of insulation materials can lead to air pollution.
  - Distribution and use: The transportation of insulation materials can lead to carbon emissions.

- **Health and safety impacts**
  - Chemicals used in the manufacturing process can pose health risks to workers.

Key Procurement Questions:

- Please describe your procedure for ensuring that all raw materials are traceable, and that your company is certified to do so.
- Please provide your action plan for assurance when you may not be able to trace the supply chain.
- Please provide evidence of an effective environmental management system and details of any actions you have taken to reduce energy use.
- Please provide evidence that you control the use of hazardous substances during manufacture, complying with requirements.

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Now, ask yourself…

“Do you know where your people come from?”
Modern Slavery

An estimated **35.8 million** people worldwide live in modern day slavery...

Over **70%** live in just ten countries

- Russia: 1,049,700
- Uzbekistan: 1,201,400
- Pakistan: 2,058,200
- Nigeria: 834,200
- DRC: 762,900
- India: 14,283,700
- Bangladesh: 680,900
- Indonesia: 714,100
- Thailand: 475,300

Source: Global Slavery Index 2014
Everyone’s talking about it


• Watch a short film: http://www.unchosen.org.uk/portfolio-item/what-do-you-see/

• E-learning from Loughborough University/ Responsible Solutions now available at: www.ethicalsourcing.co.uk
New film on modern slavery

• http://www.unchosen.org.uk/portfolio-item/your-construction-project/
Our research (2)

• An ethical sourcing portfolio for construction
• Aims to extend engagement
• Goes beyond responsible sourcing and into specification
• Manifesto: 10 pledges to embed ethical sourcing: http://apres.bre.co.uk/docs/Manifesto-Ethical-Sourcing.pdf
Ethical sourcing: a designer’s guide

- Developed with Responsible Solutions.
- Sourcing starts with specification
- Awareness-raising; focused on design
  - But valuable for all parties in the project team
- Available from:
  - http://apres.bre.co.uk/
E-learning

- Supplements the Designers’ Guide
- 5 x 15min modules
  - Modern Slavery
  - Modern Slavery Act
  - Conflict Minerals
  - Traceability
  - Influencing change
- www.ethicalsourcing.co.uk
New labour standard

- Ethical labour sourcing standard (ELS)
- A verification standard
- BRE convened a group of stakeholders in January; grown from 30 to nearly 80.
- Initial document piloted; launch on 10 Nov in London (www.msa4construction.com).
- Anyone interested is welcome to contribute; please contact Dr Shamir Ghumra: shamir.ghumra@bre.co.uk
Developing a profile of the organisation; not Y/N; what is working, developing and an area for improvement
New: Traceability in the construction supply chain (PhD, Asselya Katenbayeva)

**Aim 1:** Develop a **theoretical framework** for traceability within the construction supply chain

1) Understand the conceptual meaning of the term traceability in supply chain

2) Analyse how the concept of traceability is addressed in the construction sector

3) Assess construction companies’ attitude and awareness towards traceability programmes

4) Identify potential benefits and challenges associated with implementing traceability programmes within the construction industry

**Aim 2:** Develop a **process model** for implementing traceability within the construction supply chain

5) Develop a strategy to implement traceability in the construction supply chain

6) Test and validate effectiveness of the strategy

7) Identify implications and recommendations for changes in standards and practices
6th APRES Conference

• Tuesday 29 November 2016

• 11 Cavendish Square, London

• Speakers include: AECOM, AkzoNobel, BRE, CE, CIOB (President), CILT, Crossrail, Highways England, IRMA, HTA.

• Join APRES and get a £70 discount

• Some places still available.

• http://www.bre.co.uk/eventdetails.jsp?id=14806
Thank you for listening

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