



EPD in the UK

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BRE Centre for Sustainable Products

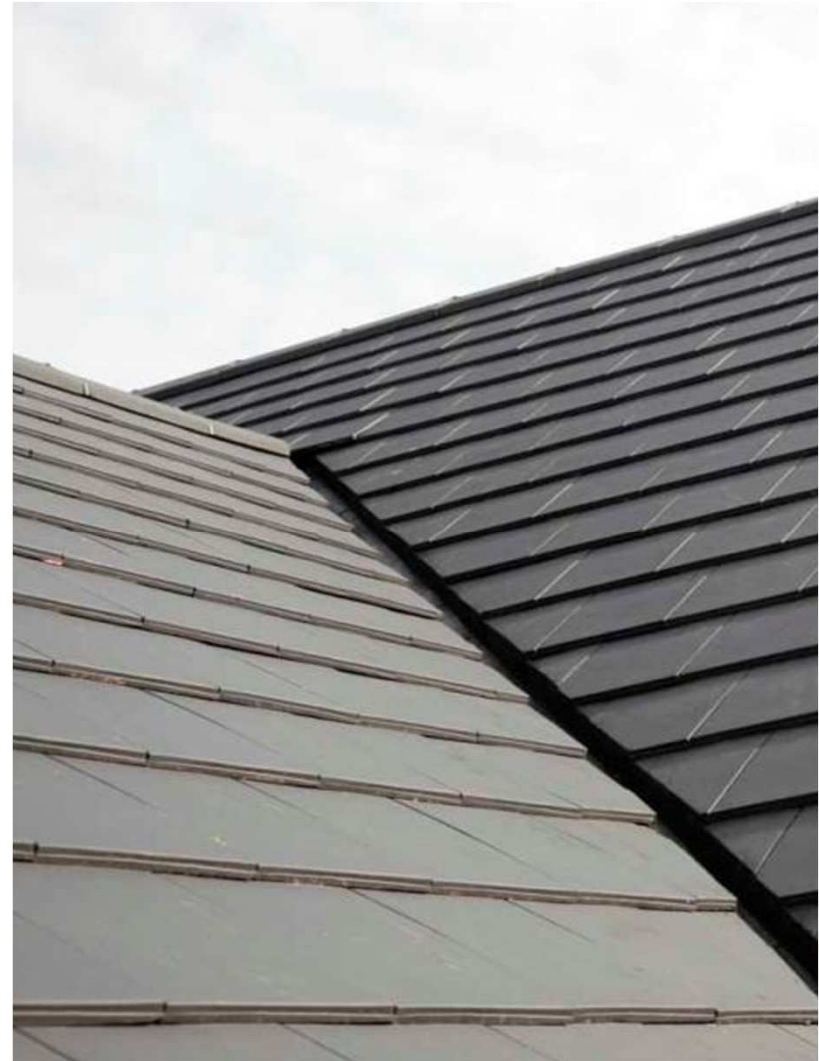
17th March 2014

Part of the BRE Trust



Outline

- Background on UK Market
- Embodied impacts in BREEAM
- The future for EPD in the UK



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UK Market
Background

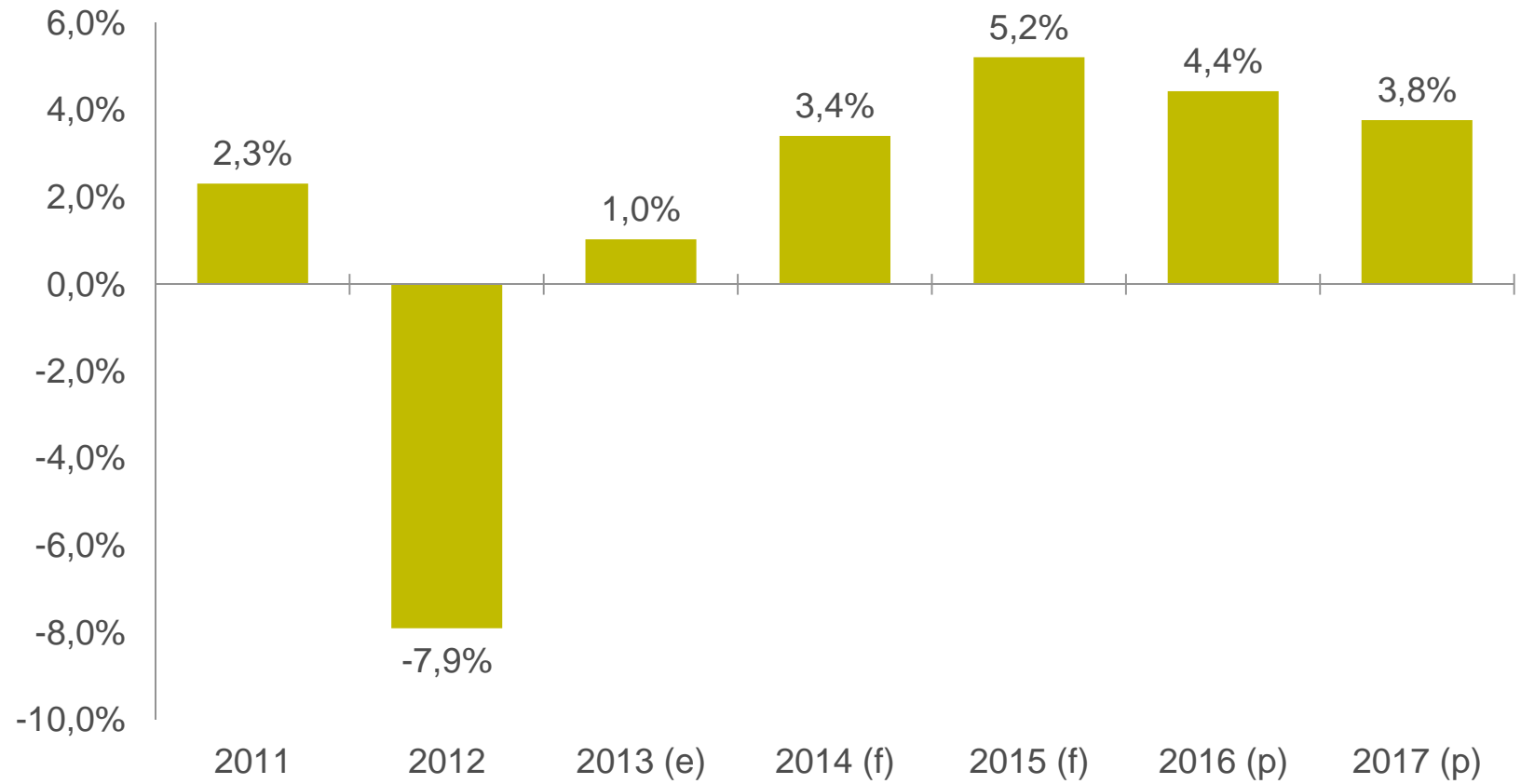


UK Construction – Economic Outlook

- Public housing, education & health affected by austerity measures
- Commercial property affected by uncertainty in private investment
- Difficult market for UK construction products sector – but improving
- Government stimulus focused on infrastructure and private housing



UK Construction Output (% growth)



Source: ONS, Construction Products Association

UK Government & Sustainable Construction

- UK Climate Change Act 2008
- Building Regulation
 - operational energy
 - ‘zero carbon’ 2016 (domestic) 2019 (non-domestic)
- De-regulation, liberal free market economy
 - Code for Sustainable Homes recently scrapped
 - embodied impact assessment removed from planning framework
- No regulatory drivers
- UK Government against EU setting centralised resource efficiency targets

UK Industry & Sustainable Construction

- Industry sees competitive advantage in energy efficiency
- Business case for material efficiency less clear
- Support for use of CEN/TC 350 standards
- Focus on embodied carbon
- **Supply side** - voluntary agreements within material sectors (Resource Efficiency Action Plans) focus on practical action
- **Demand side** - main contractors have sustainable procurement policy through UKCG (combined spend £3 billion/year)

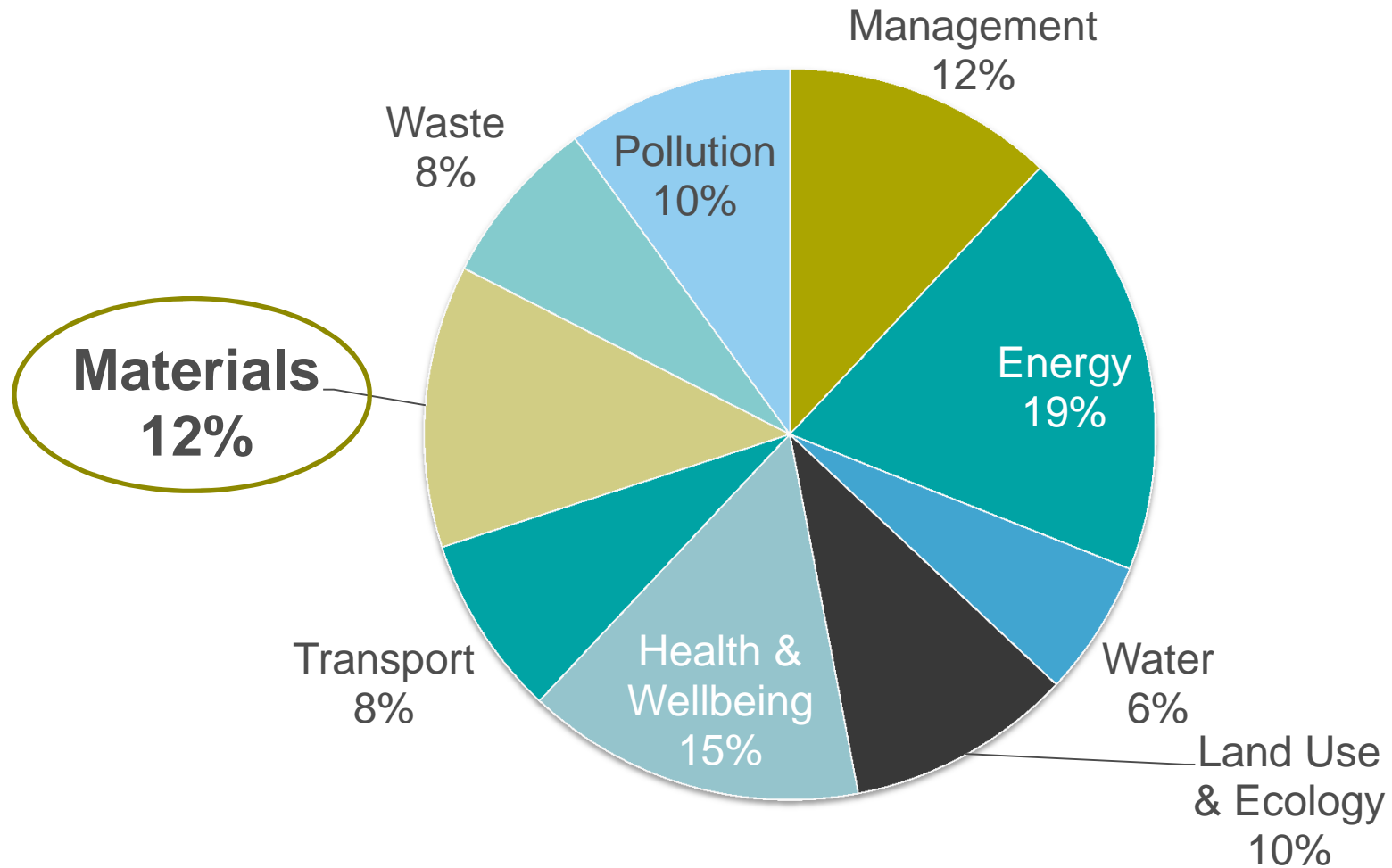
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Embodied Impacts

BREEAM



BREEAM Categories & Weightings



www.greenbooklive.com

Materials/products



Environmental Profiles
EPD

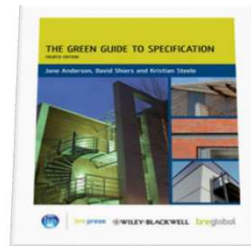


www.thegreenguide.org.uk

Building elements



Green Guide



www.impactwba.com

Whole Buildings



BREEAM®

&



BREEAM®

ModelIT - C:\VE-Projects\DemoProject_3_LCA\DemoProject_3_LCA.mit - Axonometric : Model

File View Tools ModelIT Draw Settings Help

Applications: Navigators Colour 26 Layer 08

delBuilder

ModelIT

Components

ar

SunCast

rgy

Apache

ApacheHVAC

MacroFlo

Vista

VistaPro

Compliance and Ratings

Floors

Model

- Ground Floor (8)
- 1st Floor (8)
- 2nd Floor (8)
- 3rd Floor (8)
- 4th Floor (8)
- Roof (2)

Room Name	Room ID	Total Volume (m ³)	Total Floor Area (m ²)	Ext. Wall Area (m ²)	Ext. Opening Area (m ²)	Colour	Layer
-	-	1848.7500	474.0000	360.0000	55.0000	-	-

Location: London/Heathrow, ASHRAE Climate Zone des

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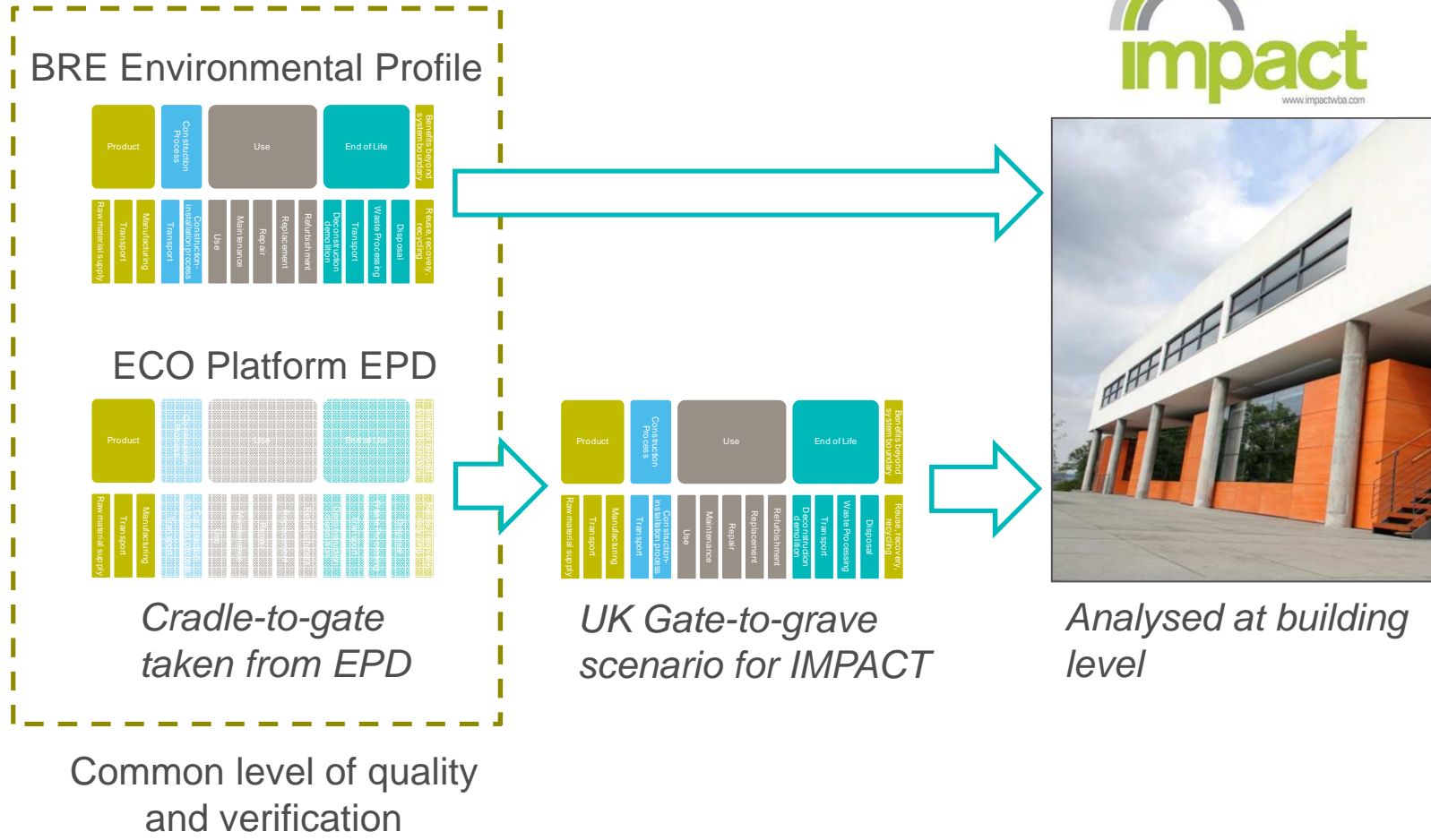
Adoption of CEN Standards



Current status

- BRE PCR compliant with EN15804
- Starting to transition existing EPD to EN15804
- BREEAM UK using BRE 2008 methodology until:
 - Large generic dataset converted
 - Performance benchmarks established
 - Existing BREEAM & CSH registrations complete (5 years)
- BREEAM UK awards credit for using ISO14025 compliant EPD
- BREEAM International gives highest credits for EN15804 EPD

Towards mutual acceptance of EPD data



Future for EPD and materials efficiency

- Opportunities
 - Timescales – climate change imperative
 - Transparency drives change
 - BIM integration
- Challenges
 - Uncertain European / UK policy environment
 - Managing transition to CEN standards
 - Interpretation & communication
 - Embedding in design & procurement practice

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Thank you

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