Value chain collaboration for sustainable construction and resource efficiency

UNEP Symposium “Sustainable Buildings and Cities”
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WBCSD – Business Solutions for a Sustainable World

200 members, 24 sectors, 19m employees and $9tn aggregate revenue
Vision 2050

9+ billion people    All living well    Within the boundaries of the planet
Action 2020: 6 Strategic Clusters

- Basic Needs & Rights
- Sustainable Lifestyles
- Climate Change
- Water
- Ecosystems & Landscape Management
- Exposure to Harmful Substances

- Social Impact
- Sustainable Lifestyles
- Climate & Energy
- Water
- Ecosystems
- Safe & Sustainable Materials

Buildings and cities
WBCSD Global Network

67 partners around the world
Global urban challenges…

• 50% of the world’s population now live in urban areas. Projected to be 70% by 2050.
• Cities consume a major proportion of the world’s resources and are responsible for 75% of GHG emissions.
• 3 billion more city dwellers and over 1 billion live in slums with little access to economic opportunity or essential services.
...and opportunities

- Huge investment to be spent in infrastructure in the world’s urban infrastructure
- Cities are fundamental to the process of resource-efficient, low-carbon, resilient innovation necessary to deliver sustainable development.
- Well designed and managed cities can support access to livelihood opportunities (health, jobs) and essential services.
Current projects

SMP 2.0: Sustainable, safe and affordable mobility

In scoping: Natural infrastructure Water reuse

EEB 2.0: Unlock investments
Sustainable and resource efficient buildings
Multiple benefits of sustainable buildings

Identify Co-benefits

Source: Capturing the Multiple Benefits of Energy Efficiency, IEA 2014
9 action plans... to overcome market barriers for energy-efficient buildings (EEB 2.0)

- Houston/US
- Warsaw/Poland
- Rio de Janeiro/Brazil
- Bangalore & Jaipur/India
- Belgium/The Netherlands
- Singapore
- Jakarta/Indonesia
- Kuala Lumpur/Malaysia
- China
WBCSD – Mainstreaming LCA for buildings and materials

The Challenge

• Sector-by-sector or product-by-product methodologies to define life cycle metrics across the buildings value chain
  • EPDs, PCRs, regional methods, etc.
• Perceived complexity and resource intensity of conducting LCA hinder uptake on a wider scale
  • Lack of data transparency and data availability;
  • Complexity and associated cost
• Increasing need for life cycle information along the value chain to make informed decisions on sustainability throughout the buildings value chain
WBCSD – Mainstreaming LCA for buildings and materials

- **Objective:** Harmonize and simplify life-cycle assessment (LCA) for buildings and materials, enhance the business case for the use of a set of consistent indicators by key decision-makers in the building value chain and provide guidance on implementation in order to reduce complexity and mainstream the implementation by business worldwide.

- **Companies:** Skanska (chair), AGC, AkzoNobel, ArcelorMittal (tbc), DuPont, Eastman Chemical, Holcim, Metsä Group, Saint Gobain (tbc)
WBCSD – Mainstreaming LCA for buildings and materials

**Timeline:** 3-year project (started March 2015), currently undertaking full landscape review of how decision-makers use LCA today

**Success factors:** Global view, involve key stakeholder groups (investors, developers, valuers, design/architects, regulators, rating schemes)

- Based on existing methods/standards (ISO, CEN, EU PEF, etc.)
- Simplify where possible (core indicators), data sets...
- Guidance on implementation
- Encourage move from generic to actual data
LCTPi

Low Carbon Technology Partnership initiative

Catalyze action to accelerate low-carbon technology development
Thank you

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