



United Nations Environment Programme

برنامج الأمم المتحدة للبيئة · 联合国环境规划署
PROGRAMME DES NATIONS UNIES POUR L'ENVIRONNEMENT · PROGRAMA DE LAS NACIONES UNIDAS PARA EL MEDIO AMBIENTE
ПРОГРАММА ОРГАНИЗАЦИИ ОБЪЕДИНЕННЫХ НАЦИЙ ПО ОКРУЖАЮЩЕЙ СРЕДЕ



UNEP SBCI
Sustainable Buildings
& Climate Initiative

UNEP – Sustainable Buildings & Climate Initiative (SBCI)

SUSTAINABLE BUILDINGS & CLIMATE INDEX (SBCIndex)

Global Guide for Building Performance

September 10th – 11th, 2009

Aims: Provide a global guideline for assessing and reporting the influence of buildings on key global issues with consensus on common metrics for building performance to support national policy development and the Conference of the Parties (COP) 15.

DAY 1 - AGENDA

10th September 2009

9:00 – 18:00

8:30 – 9:00 *Breakfast*

9:00 – 9:10 **Welcome:**
Master of Ceremony: Niclas Svenningsen, UNEP Head, Sustainable United Nations (SUN)
Sylvie Lemmet, UNEP Division of Technology, Industry and Economics (DTIE)

9:15 – 9:30 **Keynote Address: Energy efficiency in buildings: how far can it take us in mitigating climate change?**
Diana Urge-Vorsatz, Intergovernmental Panel on Climate Change (IPCC)/Central European University
Annex A: Energy Efficiency – how far does it get us in controlling climate change?

09:30- 09:45 **Keynote Address: Energy in buildings: a wake-up call**
Constant van Aershot, World Business Council for Sustainable Development (WBCSD)
Annex B: Energy Efficiency in Buildings – Transforming the Market

9:45 – 10:00 **Keynote Address: Importance of a Sustainable Building & Climate Index on the Road to COP15**
Stéphane Pouffary, SBCI Think Tank, French Environment & Energy Management Agency (ADEME)
Peter Graham, UNEP-SBCI
Annex C: UNEP-SBCI Think Tank – Summary & PowerPoint presentation

10:00 – 10:15 *Coffee Break*

10:15 – 11:45 **Session 1: Keys to Common Metrics and the Carbon Footprint of Building Operations:**

*Format: Key Stakeholder Plenary Panel - presentations (10-min/each) introduced by Co-Moderators.
Expected outcomes: Identify common ground & barriers to a common carbon metric.
Annex 1: Listing of contributions and concerns regarding common metrics.*

Co-Moderators	Organisation	Additional contribution
Alfonso Ponce	Sustainable Building (SB) Alliance	
Darren Wachtler	World Economic Forum	<i>Annex 1b: SlimCity Knowledge Cards - Sustainable Buildings</i>
Panelists	Organisation	Additional contribution
Martin Townsend	Building Research Establishment (BRE-Global)	
Scot Horst	U.S. Green Building Council (USGBC)	
Andrew Aitken	The Green Building Council of Australia (Green Star)	<i>Annex 1e: Common Carbon Metric - The story so far</i>
Priyanka Kochhar	The Energy & Resources Institute (TERI)	
Johan van Dessel	Belgian Building Research Institute (BBRI)	<i>Annex 1g: Label for Environmental, Social & Economic Buildings (LEnSE)</i>

11:45-12:15 Q&A – Open Panel Discussion - led by co-moderators of Session 1

12:15 -12:30 Summary & Next Steps – Chia-Chin Cheng, UNEP Risoe Centre

12:30 – 13:30 *Lunch*

13:30– 14:45 SESSION 2: Pathways to Setting the Bar – Building Energy Performance:

*Format: **Key Stakeholder Plenary Panel*** - presentations (10-min/each) introduced by Moderator.
Expected outcomes: Summarize issues to be resolved in order to reach consensus on the SBCIndex.
Annex 2: Papers & reports submitted by presenters as noted in the table below.

Moderator	Organisation	Additional contribution
Jean Carassus	Mandated by Centre Scientifique et Technique du Bâtiment (CSTB) for CIB	<i>Annex 2a:</i> UNEP-SBCI Knowledge Base Report and Coordinator of CIB Task Group TG 66 Energy & the Built Environment
Panelists	Organisation	Additional contribution
Volker Hartkopf	Carnegie Mellon University	<i>Annex 2b:</i> UNEP-SBCI High-performance by Building Type: Outcomes of UNEP-SBCI Case-studies Report (The State of Play Report)
Tarja Hakkinen	International Standards Organization	<i>Annex 2c:</i> The ISO framework for defining sustainable buildings (ISO – TC59)
In Hee Chung	United Nations Environment Programme (UNEP)	<i>Annex 2d:</i> UN Carbon Calculator & Manual
Tadashi Matsumoto	Organization for Economic Cooperation and Development (OECD)	<i>Annex 2e:</i> Environmentally Sustainable Buildings (2003)
Zhang Yue	Broad Air-conditioning	<i>Annex 2f:</i> From one community to one planet

14:45-15:15 Q&A – Plenary Panel Discussion facilitated by Moderator of Session 2

15:15 – 15:30 *Coffee Break*

15:30 – 16:30 SESSION 3: SBCIndex Concept & Methodology– Consensus Issues:

*Format: **Plenary Discussion*** – introduced and led by Co-Moderators.

- Summarize conclusions from the Sessions 1 & 2 discussions;
- Comment further to come to consensus on areas of agreement; and
- Note sticking points and what might be needed to reach consensus.

Expected outcomes: Identification of common metrics for building energy performance, such as:

- 1) Defined by climate zone;
- 2) Defined by building type;
- 3) Differentiated between new vs. existing buildings then graduated by age;
- 4) Measured in kWh/m²/yr;
- 5) Reported in eCO₂/m²/yr;
- 6) Bounded by Scope 1 emissions to start and work toward Scope 2 & 3;
- 7) Guided through building life-cycle;
- 8) Optimized through technology transfer;
- 9) Enabled through capacity building; and
- 10) Encouraged through policy guidelines.

Annex 3: Documents listed below are provided to tee-up the discussion for Session 3 and be modified to set the stage for Session 4.

Co-Moderators	Organisation	Additional contribution
Nils Larsson	International Initiative for a Sustainable Built Environment (iiSBE)	<i>Annex 3a</i> : EEB Matrix and SBCI-Metrics - iiSBE
Greg Foliente	Commonwealth Science & Industry Research Organization (CSIRO)	<i>Annex 3b</i> : UNEP-SBCI Delphi - Top-10 Performance Criteria, embodied & operational carbon

16:30 – 17:30 SESSION 4: Structure, Scope, and Methodology for the SBCIndex:

*Format: **Plenary Panel*** – introduced by Workgroup Leaders (10 min/each) and sign-up lists for each Workgroup;

Expected Outcomes: Agree on the following Workgroups to define building energy performance metrics.

Annex 4: Submissions by Workgroup Leaders as listed in the table below.

Workgroup Leaders	Organisation	Additional contribution
Workgroup #1. Index Structure: Building Types, Baselines & Targets, & Climate Zones		
Jens Laustsen	International Energy Agency (IEA)	<i>Annex 4a</i> : Energy Efficiency Requirements in Building Codes, Energy Efficiency Policies for New Buildings
Workgroup #2. Boundary of Measurement & Reporting: Scope 1 and 2 Emissions		
Janet Kidner	Lend Lease Retail & Communities	<i>Annex 4b</i> : Efficient Buildings Scheme
Workgroup #3. Building Lifecycle: Scope 3 Emissions = Design, Build, Own/Invest/Occupy, Maintain, Refurbish, and		
Kaarin Taipale	Finnish Ministry of Environment	<i>Annex 4c</i> : Marrakech Task Force on Sustainable Buildings & Construction
Workgroup #4. Technology Transfer and Capacity Building		
Rodney Milford	Construction Industry & Development Board (CIDB)	<i>Annex 4d</i> : UNEP-SBCI - Buildings & Climate Change Report - South Africa
Workgroup #5. Policy Guidelines: Regulation, Labeling, and Financial Incentives		
Darren Meyers	International Code Council	<i>Annex 4e</i> : Draft - International Green Construction Code (IgCC)

17:30-18:00 Q&A - Plenary Panel Discussion – Workgroup Leaders as panelists, facilitated by Co-Moderators of Session 3.

18:00 *Adjourn*

19:00-21:30 *Seated Dinner @ Montparnasse Restaurant (56th floor with spectacular view of the city and Eiffel Tower) – Reservation under: UNEP-SBCI*

DAY 2 - AGENDA

11th September 2009

9:00 – 15:00

8:30 – 9:00 *Breakfast*

9:00 – 9:15 Findings from DAY 1 - Current Progress & Consensus on Common Issues & Indicators:
Niclas Svenningsen, UNEP

9:15 – 10:30 SESSION 4 Continued: Breakout Workgroup Sessions: Led by Session 4 Panelists

*Format: **Breakout Workgroups*** facilitated by Workgroup Leaders;

Expected outcomes: deliver a well defined framework for the common carbon metric to be used to guide and be circulated to populate with consistent data for reporting.

Annex 4: See table above for Session 4 Workgroups.

WORKGROUP #1: Leader - Jens Laustsen, International Energy Agency (IEA)		
1) Climate Zones; <i>write short description of how building owners can determine their climate zone.</i>		
a. Tropical;		
b. Dry;		
c. Temperate;		
d. Cold; and		
e. Polar.		
2) Building Types; <i>write short description of why these building types are the most critical.</i>		
a. Detached Housing;		
b. Multi-unit Low-rise Housing;		
c. Multi-unit High-rise Housing;		
d. Retail;		
e. Commercial Office; and		
f. Public Uses.		
3) New & Existing Building categories; <i>write short description of why these divisions are important.</i>		
a. New;		
b. Current to 1990;		
c. 1990-1960;		
d. 1960 and older.		
WORKGROUP #2: Leader - Janet Kidner, Lend Lease Retail & Communities		
4) Measured by kWh/m²/yr using conversions for alternate fuels; – provide conversion factors here;		
5) Reported in eCO₂/m²/yr; – provide conversion factors here;		
6) Scope 1 & 2 Emissions;		
a. Demand-side use – write short description of Scopes 1 & 2 here ;		
WORKGROUP #3: Leader - Kaarin Taipale, Marrakech Task Force, Ministry of Environment, Finland		
7) Life-cycle periods; <i>write key issues and guidance on each stage.</i>		
a. Design;		
b. Build;		
c. Own/Occupy/Invest;		
d. Maintain;		
e. Refurbish; and		
f. Deconstruct.		
WORKGROUP #4: Leader - Rodney Milford, Construction Industry & Development Board (CIDB)		
8) Technology Transfer; <i>identify the best practices and technologies.</i>		
a. Conservation;		
b. Passive;		
c. Active;		
d. Renewables/Closed-loops.		
9) Capacity Building; <i>identify the opportunities and methods.</i>		
a. Training; and		
b. Twinning;		
WORKGROUP #5: Leader - Darren Meyers, International Code Council.		
10) Policy & Guidelines; <i>identify opportunities, resources, and examples.</i>		
a. Regulation;		
b. Labeling;		
c. Financial incentives; and		
d. Reporting.		

- 10:30 – 10:45 *Coffee Break*
- 10:45 – 12:30** **Session 4 Continued: Workgroup Reports: Plenary Panel of Workgroup Leaders of Session 4**
- 12:30 – 13:30 *Lunch – Workgroup Leaders dine with Niclas Svenningsen @ reserved table*
- 13:30 – 15:00** **SESSION 5: The Sustainable Buildings & Climate Index – Next Steps: Plenary Discussion**
Niclas Svenningsen, Head, Sustainable United Nations (SUN)
- 15:00 *Adjourn - (Please join us in Singapore, October 26-30, 2009)*
-

****Thank you to our generous meeting sponsor, Broad Air-conditioning****