GlobalABC New Report Launching Webinar

Adopting Decarbonization Policies for the Buildings and Construction Sector to Support Economic Stimulus
Agenda

09:00  The Challenges for the Building Sector  
Martina Otto, Head of Cities Unit/ GlobalABC Secretariat, UNEP

09:10  Policy Drivers for Decarbonisation of the buildings sector – the evidence for costs, benefits and economic stimulus  
Peter Graham – Executive Director, GBPN

09:30  Building Codes  
Ludwig Labunzinski, Expert, Energy-Efficient Buildings, German Energy Agency (dena)

09:40  Rating & Disclosure  
Carlos Flores, Director, National Australian Built Environment Rating System (NABERS)

09:50  Municipal Government Actions  
Muhammad Nur Fajri Alfata, Researcher, Laboratory of Building Sciences, Ministry of Public Works and Housing of Indonesia

10:00  The Importance of Policy Signals to Spur Market Transformation  
Roland Hunziker, Director, Sustainable Buildings and Cities, WBCSD

10:10  Q&A

10:25  Closing Remarks  
Martina Otto, Head of Cities Unit/ GlobalABC Secretariat, UNEP

Housekeeping

- To ensure a smooth flow of presentations during the webinar, we will mute all the microphones

- Please send your questions through the chatbox in GoToWebinar
Martina Otto
Head, Cities Unit | GlobalABC Secretariat, UN Environment Programme
Global Alliance for Buildings and Construction (GlobalABC)

- Founded at COP21 and hosted by UNEP, the GlobalABC is a voluntary partnership of national and local governments, inter-governmental organisations, businesses, associations, networks and think tanks committed to a common vision: A zero-emission, efficient and resilient buildings and construction sector.

- Objectives:
  - Raising ambitions to meet the Paris climate goals
  - Mobilizing all actors along the value chain

- By means of:
  - Giving a voice to the buildings sector regarding its impact and potential
  - Collaborating for partnerships, technology and know-how sharing
  - Finding solutions and pathways that put the building sector on a below 2°C path
With over **140 members, including 30 countries**, the GlobalABC is the leading global platform for, among others:

- Governments
- Private sector
- Civil society
- Intergovernmental and international organizations

*Geographical disclaimer: The designations employed and the presentation of the material in this website do not imply the expression of any opinion whatsoever on the part of GlobalABC or the UNEP concerning the name or legal status of any country, territory, city or area, nor of its authorities, nor concerning the delimitation of its frontiers or boundaries.*
Key Activities

FORGING PATHWAYS

towards zero-emission, efficient and resilient buildings and construction

FACILITATING REGIONAL KNOWLEDGE

sharing and bridging fragmented value-chains

KEEPING UNDER REVIEW

the buildings and construction sector through its Global Status Report

SHAPING THE GLOBAL AGENDA

giving a voice to the sector in high-level fora
Why buildings?

Facts and figures of the buildings and construction sector:

• Almost 40% of energy and process-related CO2 emissions in 2018.

• 11-13% of global GDP (2015) and 220 million jobs (7% of global employment).

• Energy efficiency investments in buildings slows – and this despite the green buildings sector representing a $24.7 trillion investment opportunity by 2030 across all emerging markets cities with a population of more than half a million people (IFC, 2019).

• 136 parties have referenced actions related to the buildings and/or construction sector in their NDCs - very few describe targets to move to carbon neutral or net-zero energy building performance. Even if present NDCs and existing building policies were applied, only some 60% of buildings were covered.

• Two thirds of countries still do not have mandatory building energy codes in place. Most construction will occur in these countries.
Regional Roadmaps for Buildings and Construction

• Global, Africa, Asia and Latin America
• Built on inputs from over 700 regional stakeholders and global experts
• Outline a comprehensive framework of **aspirational targets, timelines, and key actions** by:
  • Informing policy and technology timelines across all levels of government and business community that create **common goals and language** for a high impact sector with a fragmented value chain
  • Addressing the **whole built environment and its lifecycle** by proposing ambitious targets for Urban Planning, New Buildings, Building Retrofits, Building Operations, Systems, Materials, Resilience and Clean Energy; as well as for three cross-cutting enablers: Capacity-building, Finance and Multi-stakeholder Engagement
  • Serving as a stepping-stone for **regional cooperation, ambitious policymaking, and market development & transformation** in decarbonizing the buildings and construction sector.
Peter Graham
Executive Director, Global Buildings Performance Network
Buildings Decarbonization Policies for Stimulus: What is working

Dr. Peter Graham
Executive Director – GBPN
Report Author
We have just seen change is possible!

Through the Covid crisis, we have seen how fast we can act, and how resilient our environment is, and how dire the consequences of inaction can be ...
The evidence shows that our policies are working
The cost of inaction is far greater than the cost of action
Review Methodology

Which are the cost-effective public policies for reducing building energy consumption & related emissions, with societal & economic benefits?

- **Reliable evidence** vs noise
- 4000 publications -> **120** are selected
- Limitations:
  - Too few on developing & emerging economies.
  - Lack of consistent methodologies
Key Insights

**Most effective when**: Tailored to local non-energy priorities, climate and socio-economics, tackle up-front costs, are monitored, reported and verified.

**Most value is created by**: Policy packages including mandatory, incentive, and voluntary awareness-raising and capacity building programs.

**Most impact created by**: Implementing and enforcing policy best-practices with clear and ambitious absolute performance targets.

**Most Cost Effective**: Mandatory building energy codes, rating & disclosure and energy efficiency obligations.
Most Effective
Align with non-energy priorities

Priorities in National Adaptation Plans

Innovation

Health

Resilience

Affordability

Flooding

Thermal Comfort

Equity

Integrated Planning

Regulations & Standards

Thermal Comfort

R&D

Energy Efficiency

Retrofitting

Green Building

Materials

Renewables

Pilot Projects

Insurance Risk

Financing

Mod...

IEQ

F

Ta
Policy ambition leads to +ve ROI to Public Finances over time...

e.g. direct and co-benefits of energy efficiency measures potentially add 1% - 2.7% to EU GDP.

Costs associated with stringent code requirements reduce rapidly when there is uptake in the market....

normalising within the range of cost and price fluctuations associated with standard construction.
Higher performance leads to lower home operating costs.

e.g. EE measures to eliminate fuel poverty in 2.5 million homes in the UK offer a net economic benefit of £1.2Bn in 2008
Jobs

Each US$1M invested in EEBs creates about 14 job-years of net employment.

- 14 jobs net employment per US$1 million in EEBs
- 10-19 jobs per €1 million invested
- 19 jobs per US$1 million invested

Productivity of the construction value chain also improves.
Direct health benefits are between 8%-22% of value of energy savings ...

e.g. up to €2.86Bn health savings by 2020

Indirect benefits include better physical & mental health

e.g. people who lived in more thermally comfortable homes take less days off work and days off school.

... Improving thermal comfort in homes has also been shown to benefit cardiovascular and respiratory health.
Resilience

**Nature based solutions** & urban ecological restoration are more profitable and create higher-yield investments than traditional approaches.

**Adaptation Plans** emphasize integrated planning policy, improving building regulations & standards, and improving the thermal performance of existing buildings.

**Clean energy access** and affordability of on-grid and off-grid energy supply is improved by EEBs.

e.g. Uganda planning buildings energy policies to bring electricity to **8 million customers** without adding new generation capacity...
**Key Insights**

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Most impact created by: Implementing and enforcing policy best practices with clear and ambitious absolute performance targets.

Most Cost Effective: Mandatory building energy codes, rating & disclosure and energy efficiency obligations.
Most Value
Delivered by policy packages
Renovation Policies are Key
Renovation Policies are Key

Set targets & obligations

20% improvement: +€33.8bn GDP by 2020; Deep renovation: > €1300bn +1.1M jobs by 2050.
## Renovation Policies are Key

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<th>Action</th>
<th>Example</th>
</tr>
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<td>NABERS: saved 35% energy &amp; 42% in emissions since 2000.</td>
</tr>
<tr>
<td>Price carbon emissions</td>
<td>Tokyo Cap &amp; Trade reduced emissions by 14MtCO₂ (2010-2014)</td>
</tr>
</tbody>
</table>

(KfW = German Development Bank)

(NABERS = National Assessment Building Energy Rating System)
Key Insights

**Most effective when:** Tailored to local non-energy priorities, climate and socio-economics, tackle up-front costs, are monitored, reported and verified.

**Most value is created by:** Policy packages including mandatory, incentive, and voluntary awareness-raising and capacity building programs.

**Most impact created by:** Implementing and enforcing policy best-practices with clear and ambitious absolute performance targets.

**Most Cost Effective:** Mandatory building energy codes, rating & disclosure and energy efficiency obligations.
Most Impact
Implementing and enforcing policy best-practices with clear and ambitious absolute performance targets

e.g. How many power station equivalents can be reduced per year?

Saved 35 – 45MtCO₂
2010-2011

Saved 106 Million toe
1992-2012

Beijing Saved 1585Mtce
2011-2015
Key Insights

**Most effective when:** Tailored to local non-energy priorities, climate and socio-economics, tackle up-front costs, are monitored, reported and verified.

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**Most Cost Effective:** Mandatory building energy codes, rating & disclosure and energy efficiency obligations.
Most Cost Effective:
The most cost-effective policies deliver high-impact with the least monetary costs over a given period.

### Cost-effective building energy policy measures

<table>
<thead>
<tr>
<th>Regulatory measures</th>
<th>Market Intervention Measures</th>
</tr>
</thead>
<tbody>
<tr>
<td>• Building energy codes.</td>
<td>• Public procurement.</td>
</tr>
<tr>
<td>• Renovation obligations.</td>
<td>• Emissions trading, carbon taxes &amp; grants</td>
</tr>
<tr>
<td></td>
<td>• Voluntary agreements.</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Information measures</th>
<th>Advice &amp; leadership Measures</th>
</tr>
</thead>
<tbody>
<tr>
<td>• Building energy certificates and labelling.</td>
<td>• Information campaigns.</td>
</tr>
<tr>
<td></td>
<td>• Knowledge services.</td>
</tr>
<tr>
<td></td>
<td>• Public leadership &amp; capacity building.</td>
</tr>
</tbody>
</table>
Challenges & Opportunities

Challenges

• Economic barriers
  ▪ First Costs
  ▪ Split Incentives

• Social Barriers
  ▪ Behavior & Social Practices
  ▪ Awareness & Demand

• Knowledge & Information
  ▪ Decision-based evidencing
  ▪ Access to education

Opportunities

• Compliance & Enforcement

• Integrated urban planning & design

• Life-cycle building design & construction value-chain innovation

• Carbon Pricing & Trading

• Evidence & Education

"Never let a good crisis go to waste"

Winston Churchill
Thank you!
Let’s stay in touch ...

Consult our web sites: www.gbpn.org & www.buildingpolicy.net

Follow us on Twitter: @GBPN_org
Send us an email: info@gbpn.org
Ludwig Labunzinski
Expert, Energy-Efficient Buildings, German Energy Agency (dena)
SPACE HEATING ACCOUNTS FOR THE HIGHEST SHARE OF ENERGY CONSUMPTION IN GERMANY’S BUILDINGS

Source: dena Concise 2018 Building Report; BMWi, 2017c
LOW-ENERGY REFURBISHMENT OF EXISTING BUILDING STOCK IS CRUCIAL FOR THE SUCCESS OF THE ENERGY TRANSITION

Fig. 6: The building stock in Germany

- 18.8 million residential buildings
- 3.2 million apartment buildings
- 40.3 million residential units
- 21.5 million residential units
- 15.6 million detached and semi-detached houses
- 18.8 million residential units
- 3.7 billion m² of living space
- 1.5 billion m² of living space
- 2.2 billion m² of living space

Source: dena Concise 2018 Building Report; Destatis, 2017c; own calculations
BUILDING EFFICIENCY REGULATION FOLLOWS THE TECHNICAL LEARNING CURVE

Kilowatt hours per cubic meter per year (kWh/m²a)

Solar houses
Low-energy buildings
Building practice
Three-litre houses
Passive houses
Zero-heating energy buildings
Plus-energy houses

Source: Fraunhofer IBP 2020

Current building practice:

WSVO 1977
WSVO 1984
WSVO 1995
EnEV 2002 / 2007
EnEV 2009
EnEV 2014
GEG 2020
nZEB

Three-litre houses
Zero-energy houses
nZEB
Current building practice:

Source: Fraunhofer IBP 2020
NATIONAL REQUIREMENTS (IN PROGRESS)

Energy Saving Act (EnEG)
Energy Saving Ordinance (EnEV)
Renewable Energy Heat Act (EEWärmeG)

Building Energy Law (GEG)

Federal Ministry for Economic Affairs and Energy
Federal Ministry of the Interior, Building and Community
CURRENT DEVELOPMENTS AND PERSPECTIVES OF THE GERMAN BUILDING SECTOR IN TIMES OF COVID-19

Economic activity, continuity, climate protection

- protection (short-term)
- stimulating demand (medium-term)
- transformation (longer-term)
DENA’S BUILDING SECTOR ENGAGEMENT

EXAMPLES

Individual refurbishment roadmap

Tongli New Energy Town

Alliance for Building Energy Efficiency

Energiesprong

dena energy transition congress

Building report

Statistics and analyses zur Energieeffizienz Gebäudebestand
THANK YOU VERY MUCH

Ludwig Labuzinski

labuzinski@dena.de
www.dena.de
NABERS ratings and energy efficiency disclosure in Australia

Carlos Flores | Director, NABERS
NABERS is Australia’s language for building sustainability

1 STAR
POOR

2 STARS
BELOW
AVERAGE

3 STARS
AVERAGE

4 STARS
GOOD

5 STARS
EXCELLENT

6 STARS
MARKET
LEADING
NABERS-rated buildings reduce energy use at one of the fastest rates in the world

1st NABERS rating

<table>
<thead>
<tr>
<th>Year</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
<th>6</th>
<th>7</th>
<th>8</th>
<th>9</th>
<th>10</th>
<th>11</th>
<th>12</th>
<th>13</th>
</tr>
</thead>
<tbody>
<tr>
<td>Change</td>
<td>-3%</td>
<td>-4%</td>
<td>-11%</td>
<td>-12%</td>
<td>-16%</td>
<td>-21%</td>
<td>-25%</td>
<td>-28%</td>
<td>-32%</td>
<td>-34%</td>
<td>-35%</td>
<td>-38%</td>
</tr>
</tbody>
</table>
Policy has been key in building energy efficiency demand

Office buildings certified under NABERS

- Federal mandatory disclosure
- State Government leasing
State Government leasing: driving sustainability at scale

Buildings leased by governments must have a NABERS rating

Meet minimum energy efficiency (e.g. 5 stars)
Government leasing: energy savings

Energy use in office buildings (MJ/m²)
Mandatory disclosure in Australia

Selling or leasing spaces larger than 1,000m²

Must promote in all advertisement (physical and digital)
Bringing all buildings into the energy efficiency picture

Federal mandatory disclosure
Government leasing: energy savings

Energy use in office buildings (MJ/m²)

- Before CBD
- Government leasing

FY06 FY07 FY08 FY09 FY10 FY11 FY12 FY13 FY14 FY15 FY16 FY17 FY18
Bringing all buildings into the energy efficiency picture

Energy use in office buildings (MJ/m²)

- Government leasing
- Mandatory disclosure
# NABERS Sustainable Portfolios Index 2020

<table>
<thead>
<tr>
<th>Rank</th>
<th>Portfolio Name</th>
<th>Company Name</th>
<th>NABERS Energy rating</th>
<th>Portfolio rated %</th>
<th>Assets rated</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Cbus Property</td>
<td>CBUS Property</td>
<td>5.5</td>
<td>100%</td>
<td>8</td>
</tr>
<tr>
<td>2</td>
<td>Local Government Property Fund</td>
<td>Local Government Super</td>
<td>5.2</td>
<td>100%</td>
<td>4</td>
</tr>
<tr>
<td>3</td>
<td>Charter Hall (CLW)</td>
<td>Charter Hall</td>
<td>5.1</td>
<td>100%</td>
<td>8</td>
</tr>
<tr>
<td>4</td>
<td>Brookfield Premier Real Estate Partners Australia</td>
<td>Brookfield</td>
<td>5.0</td>
<td>100%</td>
<td>4</td>
</tr>
<tr>
<td>4</td>
<td>Lendlease Barangaroo International Towers</td>
<td>Lendlease</td>
<td>5.0</td>
<td>100%</td>
<td>4</td>
</tr>
<tr>
<td>5</td>
<td>GPT Group Office</td>
<td>GPT</td>
<td>4.9</td>
<td>100%</td>
<td>26</td>
</tr>
<tr>
<td>5</td>
<td>GPT Office</td>
<td>GPT</td>
<td>4.9</td>
<td>100%</td>
<td>14</td>
</tr>
<tr>
<td>5</td>
<td>GPT Wholesale Office Fund (GWOF)</td>
<td>GPT</td>
<td>4.9</td>
<td>100%</td>
<td>17</td>
</tr>
<tr>
<td>6</td>
<td>Australian Prime Property Fund (APPF) Commercial</td>
<td>Lendlease</td>
<td>4.8</td>
<td>100%</td>
<td>15</td>
</tr>
<tr>
<td>6</td>
<td>Investa Commercial Property Fund (ICPF)</td>
<td>Investa</td>
<td>4.8</td>
<td>100%</td>
<td>12</td>
</tr>
<tr>
<td>7</td>
<td>Brookfield Property Partners</td>
<td>Brookfield</td>
<td>4.7</td>
<td>100%</td>
<td>6</td>
</tr>
<tr>
<td>7</td>
<td>Charter Hall (CHOT)</td>
<td>Charter Hall</td>
<td>4.7</td>
<td>100%</td>
<td>10</td>
</tr>
<tr>
<td>7</td>
<td>Charter Hall (CPOF)</td>
<td>Charter Hall</td>
<td>4.7</td>
<td>100%</td>
<td>19</td>
</tr>
<tr>
<td>8</td>
<td>Charter Hall (DOF)</td>
<td>Charter Hall</td>
<td>4.6</td>
<td>100%</td>
<td>8</td>
</tr>
<tr>
<td>8</td>
<td>Growthpoint Properties Australia Limited</td>
<td>Growthpoint Properties Australia Limited</td>
<td>4.8</td>
<td>97%</td>
<td>20</td>
</tr>
<tr>
<td>8</td>
<td>Stockland Office</td>
<td>Stockland</td>
<td>4.6</td>
<td>100%</td>
<td>12</td>
</tr>
<tr>
<td>9</td>
<td>Dexus Group Office</td>
<td>Dexus</td>
<td>4.8</td>
<td>94%</td>
<td>52</td>
</tr>
<tr>
<td>10</td>
<td>Charter Hall (BSFW)</td>
<td>Charter Hall</td>
<td>4.4</td>
<td>100%</td>
<td>2</td>
</tr>
<tr>
<td>10</td>
<td>Charter Hall (CCT)</td>
<td>Charter Hall</td>
<td>4.4</td>
<td>100%</td>
<td>2</td>
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Thank you

Carlos Flores
Carlos.Flores@environment.nsw.gov.au

nabers.gov.au
Dr. Eng. Muhammad Nur Fajri Alfata
Researcher at the Division of Building Sciences, Ministry of Public Works and Housing of Indonesia
The importance of local (municipal) energy-saving building regulations

Dr. Eng. Muhammad Nur Fajri Alfata
Ministry of Public Works and Housing, The Republic of Indonesia
Energy in building sector

Source: Ministry of Energy, 2019
Urban Development Policy in Indonesia

**2015-2045**

1. Interconnection between city and urban-rural area in the National Urban System
2. Compliance to urban services
3. 100% for urban planning achieved in all cities
4. 100% of Green City’s indicators achieved in all cities
5. Compliance of minimum standard of urban services toward Livable City
6. 100% of Smart City’s indicators achieved in all cities

**2015**
- Compliance to urban services
- 100% for urban planning achieved in all cities

**2020**:
- Zero slum area

**2025**
- Compliance of minimum standard of urban services toward Livable City

**2035**
- 100% of Green City’s indicators achieved in all cities

**2045**
- 100% of Smart City’s indicators achieved in all cities
- 100% of Sustainable City’s indicators achieved in all cities

Source: Indonesia National Urban Development Policy and Strategies 2015-2045
Building Codes

• Indonesia does not have comprehensive national energy-saving building codes;

• Standards for energy-saving building mostly focus on the air-conditioned and complex buildings. *How about residential buildings?*

• Standards for energy-saving building mostly focus on HVAC system and artificial lighting. *How about the utilization of natural resources for passively cooling the building?*

• Some of standards are obsolete.

• Lack of updated data (thermal comfort standard, thermal properties of materials, SHGC, etc.)

• Energy-saving building codes should consider different climatic zones in Indonesia.
Cities and Climate: Potential for energy-saving building codes

Opportunity
- Act No. 23/2014: Local government is the key
- Energy-saving building codes for different climate zones

Challenges
- Legal uncertainty
- Awareness of stakeholders
- Human resources capacity
- Gap between regions: Financial support
Implementation of low-carbon affordable apartments in the hot-humid climate of Indonesia towards Paris Agreement 2030

Overall goal (2025-2030)

- To develop standard for low-carbon affordable apartments and implement them across Indonesia towards the greenhouse gas (GHG) reduction target of Paris Agreement for 2030
- Support and assist local authorities and related organizations to propose and/or to revise the local building regulations from a technical perspective.

The proposed low-carbon techniques are implemented in all the newly constructed affordable public apartments with a total floor area of more than 2,000 sqm.

Project objectives (2020-2025)

- To develop comprehensive low-carbon cooling techniques for affordable apartments in Indonesia and proposed to be incorporated in building codes and guidelines, etc.
- Develop prototype of low-carbon affordable apartment.
Prototype of Low-Carbon Apartment
Roland Hunziker
Director for Sustainable Buildings and Cities, World Business Council for Sustainable Development (WBCSD)
The importance of policy signals to spur market transformation

Roland Hunziker, WBCSD
The Building & Construction sector has a high carbon footprint

The building sector represents approx. 40% global energy-related GHG emissions = 13 GtCO₂

Every 5 days a surface of the size of Paris is built

GOAL

ACHIEVE NET-ZERO EMISSIONS ACROSS THE BUILT ENVIRONMENT LIFECYCLE BY 2050.

Operation - Net Zero:
- 2030: all new buildings
- 2050: all buildings

Embodied carbon:
- 2030: -40% CO2 emissions
- 2050: Net Zero

Source: Global Status Report 2018, Global Alliance for Building and Construction
The fundamental issue

Building industry has operated in silos for centuries. Insufficient attempts have been made to bridge the gaps resulting in loss of productivity and sustainability.
The Building System – a fragmented value chain
We need a common language and metric \((\text{CO}_2/\text{m}^2)\)

**WBCSD Building System Carbon Framework (upcoming):**

- Enables to coherently address all emissions in the building system
- Focalizes attention on getting to “net zero” across the life-cycle
- Enables performance-based and technology-neutral regulation that allows for innovation across building stages

### BUILDING STAGES

<table>
<thead>
<tr>
<th>BUILDING STAGES</th>
<th>A1-A3</th>
<th>A4-A5</th>
<th>B1-B5</th>
<th>B6</th>
<th>C</th>
<th>kg\text{CO}_2\text{-eq/}m^2</th>
<th>D</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Product</strong></td>
<td></td>
<td></td>
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**BUILDING LAYERS**

- **Structure**: Foundation, Load-bearing
- **Skin**: Windows, Roof, Insulations
- **Space Plan**: Interior fit out
- **Services**: Mechanical, Electrical, Plumbing
- **Stuff (optional)**: Furniture & Appliances

**Building Carbon Emissions**

- **Carbon compensation**: removals and offset

**kg\text{CO}_2\text{-eq/}m^2**
In summary

1. **Performance-based regulation & transparency**
   - Send strong signal and allow industry to adapt

2. **Adopt life-cycle based targets (net zero)**
   - Common metric (CO₂/m²)
   - e.g. “Level(s)” framework, Bilan Carbone France, WorldGBC Advancing Net Zero

3. **Involve all actors in policy development**
   - To create a roadmap supported by all (e.g. Roadmap for fossil-free Swedish construction sector)

4. **Progressive carbon pricing on demand side**
   - In combination with performance-based building standards to drive low-carbon solutions
Join the WBCSD webinar on 29 June

Virtual event series:
Business as unusual, reshaping the present and future.

Monday, 29 June 2020
10:00-11:30 CEST and 16:00-17:30 CEST (repeated)

“Going beyond individual company action for system decarbonization”

To decarbonize a whole system, companies need to look beyond their own direct and indirect impact and target setting and collaborate with their clients, suppliers and investors and leverage their influencing position to trigger systemic change and overcome external barriers to accelerating efforts towards net-zero emissions.

Register directly on WBCSD website
Q&A

• Send your questions through the chatbox
• Please inform your name, organization and who your question is addressed to (speaker or all)
Martina Otto
Head, Cities Unit | GlobalABC Secretariat, UN Environment Programme
Thank You!

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