The C40 Cities

Addis Ababa
Amsterdam
Athens
Austin
Bangkok
Barcelona
Basel
Beijing
Bogota
Buenos Aires
Cairo
Caracas
Changwon
Chicago
Copenhagen
Curitiba
Delhi
Dhaka
Hanoi
Heidelberg
Ho Chi Minh City
Hong Kong
Houston
Istanbul
Jakarta
Johannesburg
Karachi
Lagos
Lima
London
Los Angeles
Madrid
Melbourne
Mexico City
Milan
Moscow
Mumbai
New Orleans
New York
Oslo
Paris
Philadelphia
Portland
Rio de Janeiro
Rome
San Francisco
Santiago
Sao Paulo
Seattle
Seoul
Shanghai
Singapore
Stockholm
Sydney
Tokyo
Toronto
Vancouver
Venice
Warsaw
Washington, DC
Yokohama
98% of Cities Face Climate Risks - Now
# Cities have the Power to Take Action

<table>
<thead>
<tr>
<th>Assets/Functions</th>
<th>Africa</th>
<th>East Asia</th>
<th>Europe</th>
<th>Latin America</th>
<th>North America</th>
<th>South &amp; West Asia</th>
<th>Southeast Asia &amp; Oceania</th>
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<tbody>
<tr>
<td>Existing municipal offices</td>
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<td>New non-residential buildings (private)</td>
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<td>Existing Commercial/ industrial buildings (private)</td>
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<td>Streetlights</td>
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<td>Traffic lights and signals</td>
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<tr>
<th>Buildings</th>
<th>Outdoor Lighting</th>
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<td>Strong power</td>
<td>Partial power</td>
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C40 Transfers Ideas that Work
Cities Tailor Solutions to Local Circumstance

Percentage actions by lever

- Incentive / Disincentive
- Policy / Regulation
- Procurement
- Project / Program

Africa
East Asia
Europe
Latin America
North America
South & West Asia
Southeast Asia & Oceania
Cities are Taking Buildings Actions to Scale

C40 Global

- Transformative (city wide): 41%
- Significant (across most of the city): 16%
- Proposed (awaiting final authorization): 23%
- Pilot (being tested): 20%

Regional Breakdown

- Africa
- East Asia
- Europe
- Latin America
- North America
- South & West Asia
- Southeast Asia & Oceania

Percentage of actions by scale

- Transformative (city wide)
- Significant (across most of the city)
- Proposed (awaiting final authorization)
- Pilot (being tested)
London’s RE:FIT

Details:
- Open to all public sector organisations in London
- Pre-approved panel of ESCOs
- Guaranteed savings contracts
- Includes a EU-funded “programme delivery unit”

Results:
- 235 buildings retrofitted
- £31.7m invested
- 24,000 t CO₂e annually saved
- £3.5 million annual fuel bill savings

In 2007, President Clinton challenged C40 cities to commit to retrofitting public sector buildings. London led - and developed RE:FIT.
“Energy Savings Partnership”

Program of the Berlin Energy Agency available to public and private buildings

Pools buildings (average 20) to a minimum energy bill of €200,000 to ensure scale

1,400 buildings

64,000 t CO₂e annually saved

Average energy savings of 26% per building pool
NYC: Greener, Greater Buildings

- 75% of Citywide GHGs
- “Greener, Greater Buildings Plan”
- 4 local laws:
  - Mandatory benchmarking (>50,000 sq ft)
  - Energy code compliance
  - Mandatory auditing and retro-commissioning every 10 years
  - Mandatory lighting upgrade and sub-metering
- Mayor’s Carbon Challenge – 30% GHG reduction over 10 years
  - 17 universities, 11 hospitals
  - Expanding to commercial offices, multi-family residences, theatres
Tokyo: Cap and Trade

- Not aiming to restrain urban business activities and development; instead promote the shift toward greener, low carbon buildings
- Target 1,300 Buildings

- Two compliance periods 1) 2010-2014: 6% reduction 2) 2015-2019: 17%
- Targeted facilities submit annual report
- More than 60% of targeted facilities have successfully reduced more than target
- More than 20% of targeted facilities have already succeeded in meeting 17% reduction target
- Mandatory reporting, including for SMEs, preceded introduction of cap and trade programme
Melbourne: 1200 Buildings

- Innovative financing effort for commercial building retrofits – supported from its inception by expertise across C40's network of staff, cities and partners.
- 70% of commercial building stock; improve EE by 38% and reduce GHG emissions by 383,000 tonnes annually
- Environmental upgrade finance gives commercial building owners better access to competitively priced capital; paves way for owners to share the cost of retrofits with tenants
- Financiers have a strong incentive to advance funds for retrofit works as they can recover funds as a statutory charge which provides certainty.
Climate Positive Development Framework

ON-SITE
Maximize efficiency.

- ENERGY
- WASTE
- TRANSPORTATION

OFF-SITE
Earn credits by reducing emissions in the surrounding community.

- Solar panel
- Cyclist
- LED lightbulb
- Wind turbines
- Car
- Trees
- Street light
- Pedestrians
- Recycle symbol
Verified Projects will reduce ~1m t CO$_2$e

Projects listed are currently in the programme; 5 proposals have been currently vetted by a technical review committee.
Beijing is Learning from Global Projects

--- Beijing is Learning from Global Projects ---

--- 北京市绿色建筑半年“新增”四倍的背后 ---

--- 绿色示范区树立行业典范 ---

--- 相关链接 ---

C40可持续社区组
及“正气”开发计划

C40合作是C40城市气候领袖
及“正气”开发计划

C40合作是C40城市气候领袖
及“正气”开发计划
Finance is Still a Hurdle

Has the city established a fund to invest in energy efficiency, renewable energy or carbon reduction projects?
MegaCities can help Bridge the Gap