EARTH HOUR CITY CHALLENGE

Digest

COMMITMENTS AND ACTIONS OF 328 CITIES TOWARDS A CLIMATE SMART FUTURE
CITIES ARE THE KEY TO A CLIMATE RESILIENT AND SUSTAINABLE ONE PLANET FUTURE

“THROUGH THE EARTH HOUR CITY CHALLENGE WWF WANTS TO HELP CITIES ACT AS GLOBAL SOLUTIONS HOTSPOTS TO SPEED UP OUR TRANSITION TOWARDS A RENEWABLE ENERGY BASED AND SUSTAINABLE FUTURE AND PROMOTE THE REAL CHANGES THAT ARE BEING CREATED EVERY DAY FROM SOLAR STREETLAMPS TO CLEAN TRANSIT SYSTEMS OF THE WORLD’S CITIES.”

Yolanda Kakabadse, President of WWF
WWF’s mission is to stop the degradation of our planet’s natural environment, and build a future in which humans live in harmony with nature. To achieve this, two targets are set in our flagship Living Planet Report: to preserve Earth’s biodiversity and reduce mankind’s ecological footprint. In the last 40 years, the biodiversity index has fallen by 52% and the ecological footprint has doubled. Today we use the equivalent capacity of 1.6 planets and this has damaged ecosystems and increased the risk of runaway climate change and ecosystem collapse.

We believe cities are key to reversing these trends and achieving our mission.

- There is a historical correlation between urbanization, economic development and increasing footprints.

- 54% of the world’s population now live in cities, and continued urbanization will increase that figure to 70% by 2050, according to UN projections.

- City residents are responsible for well over 70% of global CO2 emissions.

- Many cities have jurisdiction over key infrastructure areas, and the technological capacity and resources to start a sustainable transformation on their own.

- Many cities already started on the path towards a fossil fuel free future decades ago despite the lack of national plans or an international agreement, and a sizable part of progress so far has been achieved by cities.

- Even now with an international agreement in place, and national governments starting new climate mitigation programs, cities will remain the key places where action will be taken.
The Paris Climate Agreement was a big step forward, but it is not enough. Cities are the best hope for bridging the gap between the commitments so far, and what needs to be done to avoid runaway climate change.

In December 2015 a new global climate agreement was reached at the 21st Conference of the Parties, or COP21 in Paris. The breakthrough deal was signed by over 190 countries, committing to keeping the global temperature rise well below 2°C by reducing greenhouse gas emissions with 1.5°C as the desirable target.

But the agreement is not enough. It will not come into effect until 2020, and science tells us that in order to meet the global goal of limiting warming to 1.5°C or well below 2°C, emissions must peak before 2020 and sharply decline thereafter. Moreover, current pledges will provide only about half of what is needed, leaving a 12 to 16 gigatonne emissions gap.

Cities are crucial to bridging this gap. They have a long history as innovators and pioneers of climate action, and networks of cities have been setting more ambitious targets than their national governments. Some cities have become role models for climate action, cities like the global and national winners of the Earth Hour City Challenge, such as Vancouver, Cape Town, Seoul, Copenhagen and Paris.

The world’s cities are expected to grow by 65 million inhabitants per year between 2010 and 2025. This rapid urbanization is a threat to the environment, but it is also an opportunity. It is in particular an opportunity for those small, fast growing cities in Africa and Asia which have the chance to leapfrog business-as-usual fossil-fuel based infrastructure development and instead embrace green technology that can keep their climate footprints low while still dramatically improving infrastructure and quality of life for their inhabitants. The choice between a low emission, climate resilient infrastructure, or locking the world into the carbon intensive technology of the past will be absolutely critical to meeting the climate challenge.
However, there is an immense financing challenge; only 4 percent of the largest 500 cities in emerging economies are even deemed creditworthy in international markets, according to the World Bank. In recent years, key actors working with urban sustainability have started to come together to tackle this challenge. At the United Nations Climate Summit in New York in 2014 the Cities Climate Finance Leadership Alliance (CCFLA) launched. The CCFLA is an alliance of more than 40 global organizations, including WWF, ICLEI, UN-Habitat, the World Bank, and a number of other finance actors, with the mission to mobilize finance for investment in low-carbon and climate-resilient infrastructure.

According to its first report, The State of City Climate Finance, $4.1 trillion to $4.3 trillion per year will need to be spent on urban infrastructure just to keep up with projected growth in a business-as-usual scenario over the next 15 years. To make this infrastructure low-emission and climate-resilient, only an additional 9 to 27 percent ($0.4 trillion to $1.1 trillion) will be necessary.
The Earth Hour City Challenge (EHCC) is the longest running comprehensive global sustainability contest for cities. It is unique in its combination of features: city participation through reporting emissions, plans and actions; professional consultation and feedback; and third party evaluation and selection by a high level independent international jury.

FACTS AND HISTORY

THE EHCC CONCEPT WAS TESTED IN SWEDEN 2010-2011 WITH Malmö AS WINNER.

IN 2012-13, INTERNATIONAL PILOT CONDUCTED IN PARTNERSHIP WITH ICLEI, INCLUDING CITIES FROM 6 COUNTRIES. VANCOUVER CHOSEN AS GLOBAL EARTH HOUR CAPITAL
EHCC is the centerpiece of WWF’s work with cities. It aims to identify and reward cities that are leading the transition toward a climate-friendly, one-planet future. The Challenge invites cities to report ambitious commitments and big win climate actions, in terms of GHG reductions as well as the co-benefits they provide in relation to food, water and energy security challenges. To date, 55 cities have been rewarded with the title National Earth Hour Capital and 4 Global Earth Hour Capitals have been selected.

IN 2013-14, EHCC EXPANDED TO 14 COUNTRIES WITH CAPE TOWN AS WINNER.
IN 2014-15 CITIES FROM 17 COUNTRIES TOOK PART WITH SEOUL AS WINNER.
AND IN 2015-16, EHCC WAS EXPANDED TO 21 COUNTRIES WITH PARIS AS WINNER.

SINCE ITS START A CUMULATIVE NUMBER OF 328 CITIES HAVE PARTICIPATED IN THE CITY CHALLENGE AT LEAST ONCE.

Geographical spread of reporting cities

- Asia, 42%
- Europe, 14%
- North America, 25%
- South America, 15%
- Oceania, 1%
- Africa, 3%
Local governments are invited to report climate targets, performance and actions in the carbonn® Climate Registry (cCR), the world’s leading reporting platform to enhance transparency, accountability and credibility of subnational climate action, managed by ICLEI – Local Governments for Sustainability.

Outreach and support to cities is provided in collaboration with ICLEI and the final plans and data are reviewed by a high level international jury of experts. A group of finalists are filtered out, from which national winners are selected, and finally a global winner.

**THE EHCC PROCESS**

**Evaluation process**

**THE EARTH HOUR CITY CHALLENGE CYCLE**

1. **International awards ceremony for National and Global winners**

2. **JURY MEETINGS**
   - **Meeting 1**: An international expert jury discusses city actions and selects the most ambitious finalist cities as national winners
   - **Meeting 2**: The jury makes deeper level scrutiny of national winner strategies and selects the global winner

3. **PUBLIC ENGAGEMENT**
   - Top 1-3 cities in each country are promoted in media campaigns, and people are invited to express their support for city climate actions through social media (welovecities.org). The social media campaign has no influence on the selection of Earth Hour capitals which is completely based on city reporting on cCR.

4. **SUBMIT CITY DATA**

5. **WE LOVE CITIES**
The international jury reviews development plans for building, transport, energy, waste and food systems — solutions that will make a city greener and cleaner and improve living standards for residents. Awarded cities will show a commitment to innovative, ambitious and inclusive initiatives that bring the city closer to a 100% renewable and sustainable future. How cities are advancing the sustainability agenda at pace, and demonstrating a clear, strategic connection between actions and targets are also critical factors in the evaluation process.

In order to level the playing field between cities with varying starting points, the panel takes into account differences in resources related to level of ambition. The Earth Hour City Challenge is not about rewarding cities for the most impressive, hi-tech plans, but about commitment and innovative thinking that promotes attractive, one-planet lifestyles, and provides solutions to the challenges of food, water and energy security.

Key criteria for winner selection in Earth Hour City Challenge 2016:

- Ambitious actions that are credible and inspiring examples of how cities can work to “bridge the gap” in helping to keep global warming well below 2°C.
- Moving towards a renewable energy based, energy efficient, and sustainable economy through strategic and ambitious commitments and actions with a matching budget.
- Taking actions for a climate resilient future where human needs are met in sustainable ways, particularly with respect to energy, water and food.
- Integrating actions into coherent strategies that also address other key sustainability challenges such as adaptation, equitable access issues and public engagement.
- Innovation and thinking outside the box, for example promoting low footprint lifestyles and leveraging the city’s networking power to support solutions beyond its boundaries.
- Significant leadership and credibility with respect to local context.

“...The Earth Hour City Challenge is a commendable initiative and the most valuable platform for promoting the leadership of cities as they accelerate climate action, increase resilience, and implement innovative and scalable low-carbon solutions.”

Dr. Aisa Kacyira, EHCC jury member and Deputy Executive Director of UN Habitat
The EHCC has contributed significantly to the growing number of local governments going public with their climate data on the cCR.

It has given incentives and capacity building for these cities to develop and report climate action plans transparently and has contributed to raising the overall ambition level among the reporting cities on this platform. As of 2016, 328 of the 618 reporting cities on the cCR were cities that had participated at least once in the EHCC. And they have contributed with 68% of all commitments, 80% of all actions in total, and as much as 88% of all actions on renewable energy reported on the platform.

RESULTS SO FAR

Committed GHG reduction by EHCC cities*

<table>
<thead>
<tr>
<th>Year</th>
<th>2020</th>
<th>2030</th>
<th>2050</th>
</tr>
</thead>
<tbody>
<tr>
<td>GHG</td>
<td>358 Mt</td>
<td>450 Mt</td>
<td>537 Mt</td>
</tr>
</tbody>
</table>

Commitments of 100% RE in government operations

- Calgary
- Siena
- Säffle
- Grand Rapids
- Helsingborg
- Kristianstad
- Lund
- Malmö
- San Francisco
- Söderlåge
- Täby
- Upplands Väsby
- Moshi

Commitments of 100% RE in community

- Evanston
- Siena
- Oslo
- Piteå
- Malmö
- Säffle
- Växjö
- Santa Cruz
- Vancouver
- Gävle
- Moshi

* Please note that the total emission reduction estimate assumes maximum possible emission reduction from energy efficiency commitments.
### Commitments for the Whole Community by Percentage

<table>
<thead>
<tr>
<th>Commitments</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>EE commitments</td>
<td>20%</td>
</tr>
<tr>
<td>RE commitments</td>
<td>30%</td>
</tr>
</tbody>
</table>

### Number of Commitments by Type

- **Renewable Energy**
  - EHCC: 204
  - cCR total: 232
- **GHG Emissions Reduction**
  - EHCC: 523
  - cCR total: 906
- **Energy Efficiency**
  - EHCC: 104
  - cCR total: 205

### Number of Actions by Focus

- **Adaptation**
  - EHCC: 930
  - cCR total: 1326
- **Mitigation**
  - EHCC: 3747
  - cCR total: 4560

### Total Mitigation Commitments

<table>
<thead>
<tr>
<th>Year</th>
<th>EHCC</th>
<th>cCR</th>
</tr>
</thead>
<tbody>
<tr>
<td>2010</td>
<td>100</td>
<td>200</td>
</tr>
<tr>
<td>2020</td>
<td>300</td>
<td>400</td>
</tr>
<tr>
<td>2030</td>
<td>500</td>
<td>600</td>
</tr>
</tbody>
</table>

### Actions by Type

- **Policy/Strategies/Action Plans**
  - 1476
- **Regulatory**
  - 226
- **Technical/Infrastructure Investment**
  - 1667
- **Fiscal/Financial Mechanism**
  - 159
- **Organizational/Governance**
  - 133
- **Education/Awareness Raising**
  - 634
- **Assessment/Research**
  - 258
- **Public Participation/Stakeholder Engagement**
  - 350
- **Not Specified**
  - 87

The bulk of cities in the EHCC are small or medium sized cities.
The Earth Hour City Challenge provides national and international recognition, resources, and support to all participating local governments. It is a unique opportunity to draw on the assets and expertise of WWF, the world’s largest conservation organization, and its partners, to help achieve the city’s sustainability goals.

**WHAT IS THE EARTH HOUR CITY CHALLENGE?**

The Earth Hour City Challenge (EHCC) provides a platform for cities to report their climate actions and progress, as well as to compare and track their local climate commitments, performance and actions on the carbon® Climate Registry (cCR), including help to align with the standardized GHG emissions inventory framework, the Global Protocol for Community-Scale Greenhouse Gas Emission Inventories (GPC) – a requirement for participation in the global Compact of Mayors.

**WHY PARTICIPATE?**

**Strengthen reporting on a globally recognized climate reporting platform**
Participants receive capacity building and technical support, throughout the process of reporting to the carbon® Climate Registry (cCR), including help to align with the standardized GHG emissions inventory framework, the Global Protocol for Community-Scale Greenhouse Gas Emission Inventories (GPC) – a requirement for participation in the global Compact of Mayors.

**Increase local awareness and support for your sustainability efforts**
EHCC gives participating cities good opportunities to improve collaboration with relevant stakeholders, and in particular to build public support for and participation in their sustainability efforts, eg through the web media campaign We Love Cities.

**Increase media interest in your city’s sustainability work**
Participation in the EHCC increases media attention to the city’s sustainability work, and offers the city a great collaborative partner in WWF with its expertise and resources.

**Receive feedback on your strategies**
Through participating in EHCC, cities get an opportunity to consolidate, internally evaluate, and get external professional feedback on their climate work.

**Share expertise with your peers**
Compare and track your local climate commitments, performance and actions on the cCR with data from over 600 fellow subnational governments worldwide, and benefit from additional opportunities through EHCC conferences and other events to share experiences and expertise.

**Contribute to building collaborative pressure for additional action**
By joining the EHCC your city adds to a critical mass of cities demonstrating leadership and accountability and increasing the pressure on national governments and finance actors to bolster support to local-level climate action.

**Benefit from recognition by WWF**
Benefit from the opportunity to be recognized for your ambitious actions through WWF outreach in social media as well as in conventional media channels.

**Put your city on the world map**
Participation in the EHCC increases a city’s visibility for working towards sustainability, a visibility that goes global if your city qualifies as a finalist or even national or global winner.

“We are overjoyed that Cape Town has been selected from among so many great cities striving to create attractive, smart cities while tackling a multitude of urgent environmental and social challenges. We know we have a lot more work to do and the Earth Hour City Challenge is a great way for our city and our community to be inspired to continue moving forward”

Patricia de Lille, Executive Mayor of Cape Town
Among the 328 cities that have participated at least once in the EHCC, many have progressively prioritized the environmental agenda as a core, unifying principal for their transformational development, with the following cities as leading examples.

**Belo Horizonte**, National Earth Hour Capital of Brazil 2014 and 2015, already a worldwide model city for food security as “the city that ended hunger”, is well on its way to becoming the next Latin American urban sustainability success story. The city has launched an ambitious Greenhouse Gas Reduction Plan for 2030 with a number of innovative actions, including MOVE, a new high quality Bus Rapid Transit (BRT) system already capable of transporting 700,000 passengers on a daily basis.

**Cape Town**, South Africa, was crowned the Global Earth Hour Capital 2014 for “its ambition and pioneering actions to combat climate change in its effort to bolster quality of life for its citizens.” With a showcase of green programs and actions, Cape Town is a role model for other cities to replicate – it has intensified its solar water heating program with the aim of 500,000 installations by 2040, and has launched several energy-efficiency programs.

**Paris**, Global Earth Hour Capital 2016, has shown strong climate leadership, notably hosting the historic 2015 Global Climate Summit. The city is an inspiring model for climate action with an effective centralized Climate Agency. It invests in clean vehicles, public transportation expansion and waste-to-fuel conversion. Paris also incorporates a regular review process of its climate targets to ensure that it is on track to meet its sustainability goals.

**Seoul**, National Earth Hour Capital of South Korea 2014 and Global Earth Hour Capital 2015, impressed the jury with its massive Sunlight City solar program and its innovative financing schemes and outreach campaigns, including the Eco-Mileage program. In less than 3 years, through its One Less Nuclear Power Plant program, Seoul managed to reduce its energy consumption from external sources by the equivalent of the production a nuclear plant with 2-3 reactors.

**Vancouver**, Global Earth Hour Capital 2013, winner of People’s Choice Award 2013 and National Earth Hour Capital of Canada 2015, is a green visionary with the ambition to become the greenest city in the world by 2020. If it succeeds, by 2020 Vancouver will be a carbon neutral city with an ecological footprint reduced by one-third, where walking, cycling and public transit has become the preferred mode of transport, and where everybody lives within a five-minute walk of a green space.
The Earth Hour City Challenge was invented by WWF and is run in close collaboration with ICLEI, which provides the global reporting platform, the cCR, for the EHCC, along with technical webinars, capacity building, and local government outreach.

Quality control of the initiative and support during the evaluation phase is provided by the international consultancy Accenture. For the selection of winning cities, WWF is indebted to the valuable contributions from an international expert jury with representatives from academia, civil society, as well as a number of organizations playing an important role for the future of urban development, such as the city networks ICLEI and C40, UN Habitat, the Mexico City Pact, the World Economic Forum, the World Bank, the Inter-American Development Bank (IDB) and the Asian Development Bank (ADB). This jury selects the national and global winners of the year based on criteria developed by WWF, but independent from WWF which does not participate in the jury deliberations.

In 2014 the world’s major city networks joined forces in the Compact of Mayors, an initiative committing its signatories to reduce local greenhouse gas emissions, enhance resilience to climate change and track their progress publicly in cCR, the key repository for the Compact of Mayors. To contribute to building a critical mass of cities joining this initiative to fight climate change in a consistent and complimentary manner to national efforts, WWF also encourages EHCC participants to become signatories of the Compact of Mayors.

### Jury members 2016

- **Simon Giles** (London), Senior Principal Intelligent Cities Accenture Global
- **Gino Van Begin** (Bonn), Secretary General ICLEI
- **David Simon** (Gothenburg), Director, Mistra Urban Futures
- **Wee Kean Fong** (Beijing), Senior Associate, World Resources Institute
- **Gii-Hong Kim** (Manila), Division Director Sustainable Infrastructure, ADB
- **Aroma Ravi** (Bangalore), Director, Indian Institute of Human Settlements
- **Aida Kacyira** (Nairobi), Deputy Executive Director Assistant Secretary-General UN-Habitat
- **Gino Van Begin** (Bonn), Secretary General ICLEI
- **Aroma Ravi** (Bangalore), Director, Indian Institute of Human Settlements
- **Aida Kacyira** (Nairobi), Deputy Executive Director Assistant Secretary-General UN-Habitat
- **Marion Verles** (Geneva), CEO, Gold Standard
- **Alice Charles** (Geneva), Head of Urban Development & Services, World Economic Forum
- **Xolisa Ngwadla** (Pretoria), Research leader Global Change at CSIR
WWF’s ambition is to bridge the gap between different stakeholders – development banks, academia, city networks – and the public, connecting partners locally and internationally, to increase access to finance and remove obstacles to city level enhanced action.

That is why WWF is an endorsing partner to the Compact of Mayors, which has helped to enable the establishment of cCR as an official repository of city data and the use of a global standard for reporting (the GPC). That is also why WWF, as a member of the Cities Climate Finance Leadership Alliance (CCFLA), will continue working to mobilize investments into low-emissions and climate-resilient urban infrastructure and remove obstacles for city level finance access. One example is the “Closing the Gap for Transformative Local Action” project, in which WWF together with ICLEI, The Gold Standard Foundation and South Pole Group addressed fundamental barriers to the required channeling of finance to low-carbon city projects.

Finally, in order to increase interaction between urban decision makers and their public, WWF has developed a public engagement leg of the Earth Hour City Challenge – the We Love Cities campaign – to raise awareness of the good work that the best candidates in the City Challenge are doing. The We Love Cities campaign invites people all over the world to show their support for the impressive efforts that selected cities of the City Challenge are making towards sustainability. Through this campaign, citizens are invited to: learn about urban sustainability action within the areas of buildings, transport, waste, energy and food; vote for their favorite cities; share what they love about them via photos and videos; and submit suggestions for how their cities can become more sustainable. By combining people’s love of place and concerns about global climate issues with learning about the potential of concrete urban sustainability action right where they live, WWF, through the We Love Cities campaign, intends to build long-term support and active participation by urban dwellers all over the world.

www.welovecities.org
Earth Hour City Challenge

CITIES

Cities are the epicentre of sustainable development. Working with cities is critical for achieving a sustainable global footprint and conservation of biodiversity.

ECOSYSTEM SERVICES

In the sustainable city, ecosystem services – both in the city and in relation to the world around it – stand for a wide range of benefits.

ECOLOGICAL FOOTPRINTS

Smart, efficient cities can reduce their footprints while raising quality of life.

INVESTMENTS AND INNOVATIONS

Sustainable cities require new ways of thinking about and organizing the city’s needs, functions and infrastructure.

LEADERSHIP

A strong focus on urban solutions is needed in order to secure a globally sustainable development in the coming decades.

BRIDGING THE GAP

Cities and their residents will play a critical role in closing the gap between nations’ commitments so far and the additional emission reduction needed to keep global warming well below 2 degrees.

Why we are here

To stop the degradation of the planet’s natural environment and to build a future in which humans live in harmony with nature.

www.panda.org

Front cover photos: TOP LEFT: © iStock / csfotimages, TOP RIGHT: © iStock / gy99038, MID RIGHT AND BOTTOM: © iStockphoto.com / WWF-Canada

Text: Martin Jacobson and WWF

Information graphics and layout: Björnekull Design


WWF International, Avenue du Mont-Blanc, 1196 Gland, Switzerland
For contact or further information, please call +46 (0)8 624 74 00