Kyoto City’s climate action

“2019 Towards the Sustainable and Energy Transformation Forum”
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Characteristics of Kyoto City

- Capital of Japan from 8th - 19th centuries
- Coexistence and harmony with rich nature
- Inland metropolis home to 1.47 million people
- Engaged citizens and communities backed by traditional self-governing bodies
- University town with 150,000 students studying at 38 universities and junior colleges
- Flourishing high technologies based on superior traditional industries—A manufacturing city
- Birthplace of the “Kyoto Protocol” Environmental Model City
- No. 1 ranking in world tourism “Travel and Leisure” magazine 2014, 2015 “Wanderlust” magazine 2017
- 17 World Cultural Heritage sites*
  *Kyoto City and surrounding areas
<table>
<thead>
<tr>
<th>Year</th>
<th>Events</th>
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<tbody>
<tr>
<td>1997</td>
<td>Adoption of Kyoto Protocol on Global Warming Prevention (first in Japan)</td>
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<td>2009</td>
<td>Formulation of Global Warming Countermeasures Plan</td>
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<td>2010</td>
<td>Target: 10% reduction by 2010, compared to FY1990; Ordinance on Global Warming Prevention (first in Japan)</td>
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<td>2011</td>
<td>Full revision of ordinance; Goal achieved! 15% reduction in GHGs compared to FY1990!</td>
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<td>2015</td>
<td>Revision of plan (strengthened measures in household/business sectors, “Path to Project ’0’” • addition of adaptation measures, etc.)</td>
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<td>2017</td>
<td>Release of “Kyoto Declaration for Cultivating a Culture of Sustainable Cities”</td>
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<td>2019</td>
<td>Commemorative Symposium on the IPCC Session in Kyoto, Kyoto Appeal to jointly achieve 1.5 °C, Mayor pledges net-zero CO₂ by 2050</td>
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SDGs of Kyoto City

No one Left Behind

Sustainability/SDGs Ranking Of 815 Municipalities in Japan (Nikki Newspaper)

Kyoto City as No 1

Kyoto City as No 1

SDGs (エスディージーズ) とは

全ての人が参加した、誰一人取り残さない社会を実現するための取組。レジリエント・シティ（しなやかに強く、持続可能な魅力あふれる京都）の取組とともに、ひとごとではなく、「自分ごと」「みんなごと」として取り組んでまいります。
Waste cut in half based on citizen involvement!

15.4 billion yen reduction in waste treatment costs
36.7 billion yen (2002 peak) → 21.3 billion yen (2017)
Reduced number of waste treatment facilities (clean centers) from 5 facilities → 3 facilities

【Per capita domestic waste volume of citizens】
Kyoto City: 399 grams (FY2018)
Average for Japanese cities: 555 grams (FY2017)
Dependence on thermal power generation increased after the Great East Japan Earthquake, changing the composition of power sources. Thus, energy consumption trends are not linked to trends in CO₂ emissions.
Renewable energy output increased by 4.3 times

Solar photovoltaic increased by 10.4 times

Solar thermal, biomass, etc. increased by 1.7 times
“Pedestrian-friendly Kyoto,” prioritizing people and public transportation

**Ratio of visitors to Kyoto by car**

1994: 41.7% (80% drop)  
2009: 30.0%  
2017: 8.7%

**Allocation of means of transportation**

Automobile:

1994: 28.3%  
2000: 22.3%  
2018: 21.8%  
(20% drop, 30% rise)

Train, bus:

2000: 28.8%  
2018: 28.8%
94 Projects for "Pedestrian-friendly Kyoto," prioritizing people and public transportation

**Enhanced convenience of buses and subways**

- **Passengers per day** 120,000 person increase in 10 years
  
  (630,000 ⇒ 750,000)

- Continued independent management of city buses, further enhancements to convenience
  - Passengers per day
    - bus 311,000 (2009) → 368,000 (2017)
    - subway 327,000 (2009) → 387,000 (2017)

- Annual income of in-station businesses

**Enhanced convenience of public transportation: Pedestrian-friendly town**

- "Arukumachi Kyoto" route-planning app "Bus and Train Veteran" route-planning system

**Measures to relieve congestion**

- Price revision for subway and bus passes and PR on easy ways to sightsee using the subway
  - One-day subway/bus pass (1200→900yen).
  - Two-day pass (2000→1700 yen)

- "Board in front, Alight in back" system for city buses from March 2019

**Widening of sidewalks on Shijo Street**

- Widening of sidewalks: Doubled in places. Lanes for cars reduced from 4→2
- Creation of roadside parking spaces: 15 parking spaces set up along the street
- Consolidation of bus stops and creation of terraced bus stops: consolidated from 16→4 locations

**Recognition after improvements**

International Association of Traffic Safety and Sciences Award, City Planning Institute of Japan Award, Japan Society of Civil Engineers Award, national-level award for street design

Promoting innovations through concentration of the knowledge of industry, academia and the public sector

- Striking energy-saving effects of SiC (Silicon carbide)
  Aiming for mass production and societal implementation

- Plant-derived new material CNF (Cellulose Nanofiber)
  5 times the strength of steel, 1/5 the weight

Involving communities in volunteer environmental activities

- Eco school districts
  All 222 school districts in Kyoto City

Fostering tomorrow’s leaders

- Kyoto City Environmental Education Standard
  Environmental education in all curriculums at the primary and jr. high levels

- Children’s Eco-life Challenge
  More than 110,000 primary school students have taken classes, and supported by Volunteers, have involved families in energy-saving

Partnership-based Initiatives

- Nationwide expansion after trial at “Miyako Agenda 21 Forum”
  Energy-saving labels on household appliances

Small and medium-size enterprises edition
KES Environmental Management System
Turning point of Kyoto City’s Climate Action

**DO YOU KYOTO?** Are you doing good for the environment?

- Global temperature rise under 2 °C, under 1.5 °C if possible
- Substantially zero greenhouse gas emissions by the latter half of this century

**Kyoto Protocol**

- 1997

**Paris Agreement**

- 2015

**Kyoto Declaration for Cultivating a Culture of Sustainable Cities**

- 2017

**IPCC Kyoto Guidelines**

- 2019

**Kyoto Appeal to jointly achieve 1.5 °C**

- 2019
In this session, "2019 Refinement to the 2006 IPCC Guidelines for National Greenhouse Gas Inventories" was adopted.

Our city suggested to call for this guidelines to be know as the "IPCC KYOTO Guidelines".

Mr. Hoesung Lee, Chair of IPCC also said our suggestion "It is good suggestion."

Japanese government officially uses this name.

Please use "IPCC KYOTO Guidelines" in the same way as the "Kyoto Protocol"!
December 2015  Paris Agreement
October 2018  IPCC Special Report on 1.5°C

11 May 2019  Commemorative Symposium on the IPCC Session
At the symposium Mayor of Kyoto City declared
the city’s “Resolution to aim for net-zero carbon dioxide emissions
by 2050”.

Our Mayor announced
the “Kyoto Appeal to jointly achieve 1.5°C”
with
Minister of the Environment of Japan, President of Kyoto University,
Researcher of National Institute and other officials.

- Necessity of taking concrete actions towards “net-zero” carbon
dioxide emissions by around 2050, in order to limit global average
temperature rise to under 1.5°C.
- Importance of uniting efforts by citizens, businesses, communities,
universities, research institutes, NPOs, and administrations for
combining
  wisdom to promote innovation, nurturing future generations who will
build a sustainable society.

→For more information on Kyoto Appeal
Keep global temperature rise under 1.5°C

Let’s get to 2050

Net-zero CO₂ emissions

From Kyoto, we will advance concrete actions towards net-zero CO₂ emissions around 2050 in order to limit the global temperature increase to 1.5°C.
Thank you for your attention. Please visit KYOTO.