Kashiwa-no-ha Smart City
A New Vision for the Cities of Tomorrow

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Mayor of Kashiwa City
1. The Environs

2. Urban Development Framework
   (Partnership between public and private sectors and resident participation)

3. Urban Development Concept (A model for resolving city issues)

4. State-of-the-Art Gate Square (Demonstration to Implementation)

5. Collaboration between Portland and Kashiwa-no-ha
   (A New Vision for the Cities of Tomorrow)
1. The Environs
25 km from central Tokyo

27 minutes by Tsukuba Express from Akihabara

Tokyo Access
Tokyo: 30 min
Akihabara: 27 min
Roppongi: 50 min

Airport Access
Haneda: 58 min
Narita: 62 min
Haneda (54km): 60 min
Narita (48km): 60 min*

Note: Excluding transfer and waiting times
Kashiwa-no-ha Area in Kashiwa

- **Kashiwa-no-ha (new development)**: Developing northern part of Kashiwa, which would become a second hub after JR Kashiwa Station for central Kashiwa and its population of 411,000.

- **Kashiwa Station**: Base station for JR Joban line, which serves more than 2 million people.

- **Kashiwa city center**: JR Joban Line Base station for JR Joban line, which serves more than 2 million people.

- **Kashiwa-no-ha Campus Station**: Tsukuba Express (opened in 2005)

- **Route No. 16**:

*Kashiwa*

- Area: 115 km²
- Population: 411,000
Area under Development

Kashiwa-no-ha Campus

A land readjustment project area covering roughly 273 hectares and with a planned population of 26,000

Developed from scratch
- Leveraging advanced knowledge and technologies
- A social experiment in which residents are participating

Kashiwa Interchange of Joban Expressway
Kashiwa-no-ha Park
To Akihabara
Kashiwa-no-ha Campus Station
To Tsukuba
Tsukuba Express
The Leading-Edge Kashiwa-no-ha Campus Station Area
2. Urban Development Framework

(Partnership between public and private sectors and resident participation)
Some of Japan's leading universities, research institutions, and industrial support facilities are here.
Leverage universities as the area's greatest resource and create an entirely new city that is a model for resolving social issues.

Formulate a new urban development paradigm that eschews the traditional centralized administration approach.
Kashiwa-no-ha International Campus Town Initiative

In 2008, Chiba Prefecture, Kashiwa City, the University of Tokyo, and Chiba University formulated this initiative, with Mitsui Fudosan and the Urban Renaissance Agency also taking part.

They presented the eight objectives shown below and 27 policies as priority measures.

Goal 1: Develop a garden city coexisting in harmony with the environment
Goal 2: Deploy creative industrial and cultural spaces
Goal 3: Create international academic, educational, and cultural spaces
Goal 4: Maintain a sustainable transportation system
Goal 5: Undertake a Kashiwa-no-ha approach that fosters health
Goal 6: Manage the area through a partnership between the public, private, and academic sectors
Goal 7: Design high-quality urban spaces
Goal 8: Develop a city that supports innovative fields
Committee established to follow up with Initiative, with UDCK functioning as secretariat to continuously monitor progress.

Chiba Prefecture, Kashiwa City, University of Tokyo, Urban Renaissance Agency, and Mitsui Fudosan.

Kashiwa-no-ha International Campus Town Initiative Committee

Follow-up secretariat: UDCK

Basic research conducted in fiscal 2006

Initiative formulated in fiscal 2007

Follow-up research in fiscal 2008 through 2012

Explored bolstering Initiative in fiscal 2012

Follow-up research in fiscal 2013

Bolstered Initiative in fiscal 2013

1. Spatial Design Subcommittee
2. Area Management Subcommittee
3. Mobility Subcommittee
4. Location Subcommittee
5. Agriculture and Food Subcommittee
6. Community Education Subcommittee
7. Area Promotion Subcommittee
8. UDC Deployment Subcommittee
UDCK's Vital and Open Facilities

### UDCK Usage

<table>
<thead>
<tr>
<th>Purpose</th>
<th>Fiscal 2013 gatherings (Previous year numbers in parentheses)</th>
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<tbody>
<tr>
<td>Town planning meetings</td>
<td>371 (449)</td>
</tr>
<tr>
<td>University lectures, seminars, and research meetings</td>
<td>54 (43)</td>
</tr>
<tr>
<td>Forums and events</td>
<td>57 (76)</td>
</tr>
<tr>
<td>Tours from Japan and abroad</td>
<td>184 (308)</td>
</tr>
<tr>
<td>Public lectures and workshops</td>
<td>51 (89)</td>
</tr>
<tr>
<td>Civic activities, preparations and work</td>
<td>36 (29)</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>753 (994)</strong></td>
</tr>
</tbody>
</table>

- Functioning as multipurpose facility for everything from university lectures to town planning meetings and civic activities
- Number of event bookings in fiscal 2013: Around 750

- In fiscal 2013, UDCK limited usage during around one month owing to relocation preparations
Diverse Community Activities

- Number of club activities: Around 26
- Number of registered people: Around 1,100 at end-March 2014
- Creating a local communities that brings residents together through their interests

Citizens draw on tips from instructors of the Faculty of Horticulture, Chiba University to plant and care for flowers, vegetables, and herbs in front of Kashiwanoha Campus Station.
Local stores and producers set up booths around the station with assistance from students. There are also events featuring artists and presentations about town development.

People can use community points they accumulate by participating in the town’s activities or in field tests for local programs or activities. The points link Kashiwanoha residents and cultivate their awareness of the environment and health, creativity, and interaction.
Diverse Community Activities Involving Academia and Citizenry

Chiba University created this lifelong learning program, which positions the entire community as an educational vehicle. As well as offering systemic, the program it aims to create an interactive teaching and learning approach that shares the experiences and expertise of people from diverse backgrounds.

A group from the University of Tokyo aims to revitalize the community by communicating through science. The group shares noteworthy achievements through the Science Café and runs traveling science classes for children and adults.
3. Urban Development Concept

(A model for resolving city issues)
A new vision for the cities of tomorrow

Formulated three urban development concepts to help Japan fulfill its commitment to tackling challenges for the future of the world

Environmental-Symbiosis
A city that is people- and environment-friendly and fully disaster-prepared

Health and Longevity
A city in which people of all ages can enjoy healthy and secure living

New Industry Creation
Fostering growth fields that become sources of new vitality for Japan
Designated as Comprehensive Special Zone and Future City

Two systems to materialize Japan's growth strategy

**Comprehensive Special Zone** for regional revitalization

Japanese government offering **deregulation and tax incentives for advanced regional vitalization initiatives**

**Future City**

Japanese government providing financial assistance for advanced initiatives to tackle **environmental and social aging issues in creation of cities as models for the world**

**December 2011**

Kashiwa City received both designations, centering on the Kashiwa-no-ha Campus

Japanese government is providing comprehensive support to swiftly materialize the world-class Kashiwa-no-ha Smart City Model
4. State-of-the-Art Gate Square  
(Demonstration to Implementation)
State-of-the-Art Gate Square

July 2014 saw the grand opening of Gate Square, which integrates the environmental, healthcare, and new industry creation components of a smart city.

- Energy Building
- Multi Vehicle Sharing Port
- Shops and Offices Building
- West Exit Street
- The University of Tokyo Kashiwa-no-ha Campus Station Satellite
- Hotel and Residences

Facilities:
- Rental housing: 145 units
- Hotel: 166 rooms
- Shops: 7,260 square meters
- Offices: 7,755 square meters
Key Facilities

Health and Longevity

④ Town Health Station

New Industry Creation

⑤ Kashiwa-no-ha International Village
⑥ Mitsui Garden Hotel Kashiwa-no-ha
⑦ Kashiwa-no-ha Open Innovation Lab (KOIL)

Environmental-Symbiosis

① Kashiwa-no-ha Smart Center
② Kashiwa-no-ha HEMS (Park Axis Kashiwa-no-ha)
③ Kashiwa-no-Harappa/Multi Mobility
Kashiwa-no-ha Smart Center

Leveraging the Kashiwa-no-ha Area Energy Management System to operate a smart grid that was Japan's first facility to interchange power between districts

**Key points**

- Managing and controlling energy for entire region
- Power interchange setup for emergencies

Cutting regular peak power demand by 26% Eliminating outages during emergencies
Residences Employing Kashiwa-no-ha HEMS

Kashiwa-no-ha HEMS (Park Axis Kashiwa-no-ha)

Residences equipped as standard with the Kashiwa-no-ha Home Energy Management System (HEMS), drawing on energy conservation advice to control air-conditioning and lighting.

Key point

Conserves energy while supporting disaster prevention and community involvement.

Energy savings helping to cut electricity consumption by 35%.
Floor Offering Preventing Healthcare Services

Town Health Station

12 medical facilities and health services shops that emphasize preventive care

- Health measurement services drawing on fruits of advantage research
- Framework in which citizens collaborate in facilities operations
- Each store offering unique health methods and services

A-shi-ta Health Support Lab

Shops that are fun and provide healthy lifestyle experiences

Free health support facility that University of Tokyo oversees
Office Environment to Encourage Innovation

**KOIL** (Kashiwa-no-ha Open Innovation Lab)

Encourages innovation through interactions between diverse people, helping to create new industries through startup assistance from experts and networking events.

**Key points**

- Diverse facilities create a one-stop innovation site
- Encouraging reactions through events and startup support programs
5. Collaboration between Portland and Kashiwa-no-ha

(A New Vision for the Cities of Tomorrow)
Overall Kashiwa-no-ha Smart City Concept (Future Areas)
Collaborative Structure between Portland and Kashiwa-no-ha

We Build Green Cities Team (WBGC)

- Portland Development Commission (PDC)
  - Team Leader
  - Landscape Design
  - Mechanical Engineering
  - Urban and Architectural Design
  - Facilitation of Community Meetings

- ZGF Architects LLP

Kashiwa-no-ha Team

- Urban Design Center Kashiwa-no-ha (UDCK)
  - Chiba Prefecture
  - Chiba University

- The University of Tokyo

- Kashiwa City

- Mitsui Fudosan Co., Ltd.

- Nikken Sekkei Ltd

Provide Community-based Urban Design, Know-How, Experiences, and Sustainable Development

Provide Opportunities to Participate in Innovative Community Organization in Kashiwa-no-ha
Vision proposed for Kashiwa-no-ha Smart City Innovation Campus
Kashiwa-no-ha 2030

Artist’s impression of Kashiwa-no-ha Smart City in 2030