

# Osaka's High-tech Clusters and Market Potentials

**September 2016**

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**Osaka Prefectural Government**



# Location of Osaka

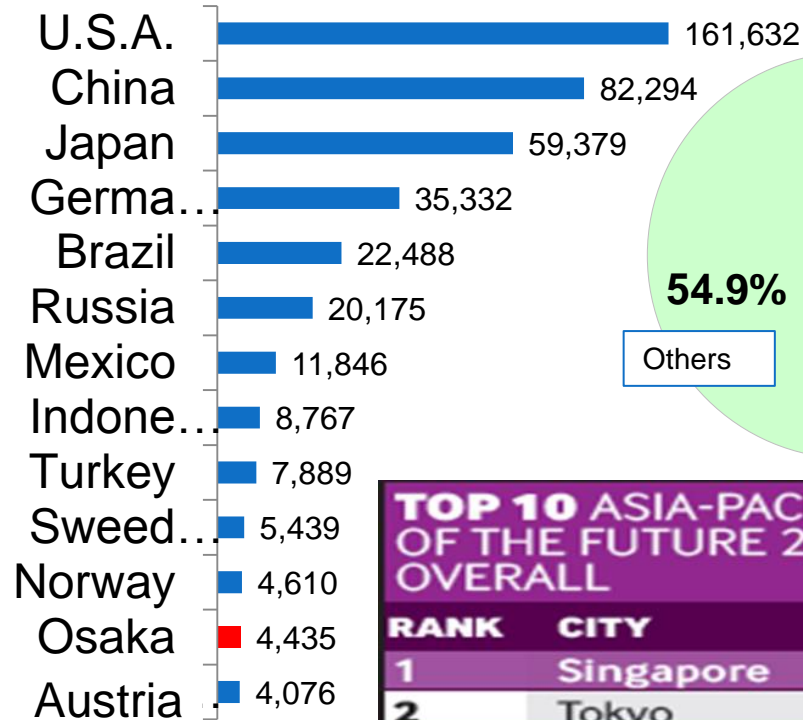
## KANSAI

Osaka locates at the center of western Japan.

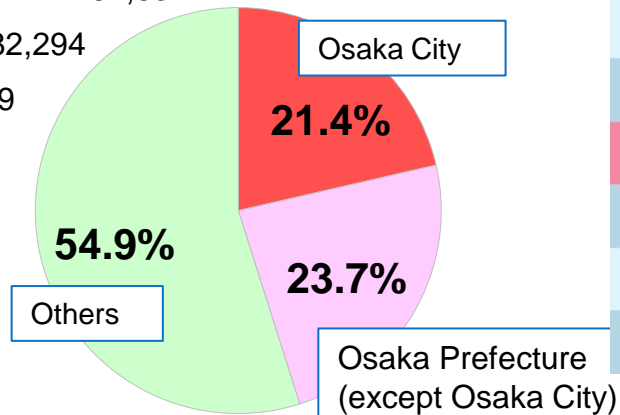


# GDP & Population BUSINESS FRIENDNESS

**GDP of Osaka :**  
**7.5% of Japan, equal to Norway**



**The Number Of  
Establishments  
in Kansai**



**Population of Osaka :**  
**8.85 million**

City	
Seoul (South Korea)	10,008
Jakarta (Indonesia)	9,608
Osaka Pref.	8,850
Guangzhou (China)	8,525
New York (U.S.A.)	8,337
Bangkok (Thailand)	8,305

## TOP 10 ASIA-PACIFIC CITIES OF THE FUTURE 2015/16 – OVERALL

RANK	CITY	COUNTRY
1	Singapore	Singapore
2	Tokyo	Japan
3	Taipei	Taiwan
4	Seoul	South Korea
5	Hong Kong	Hong Kong
6	Kuala Lumpur	Malaysia
7	Beijing	China
8	Shanghai	China
9	Osaka	Japan
10	Sydney	Australia

## ASIA-PACIFIC CITIES OF THE FUTURE

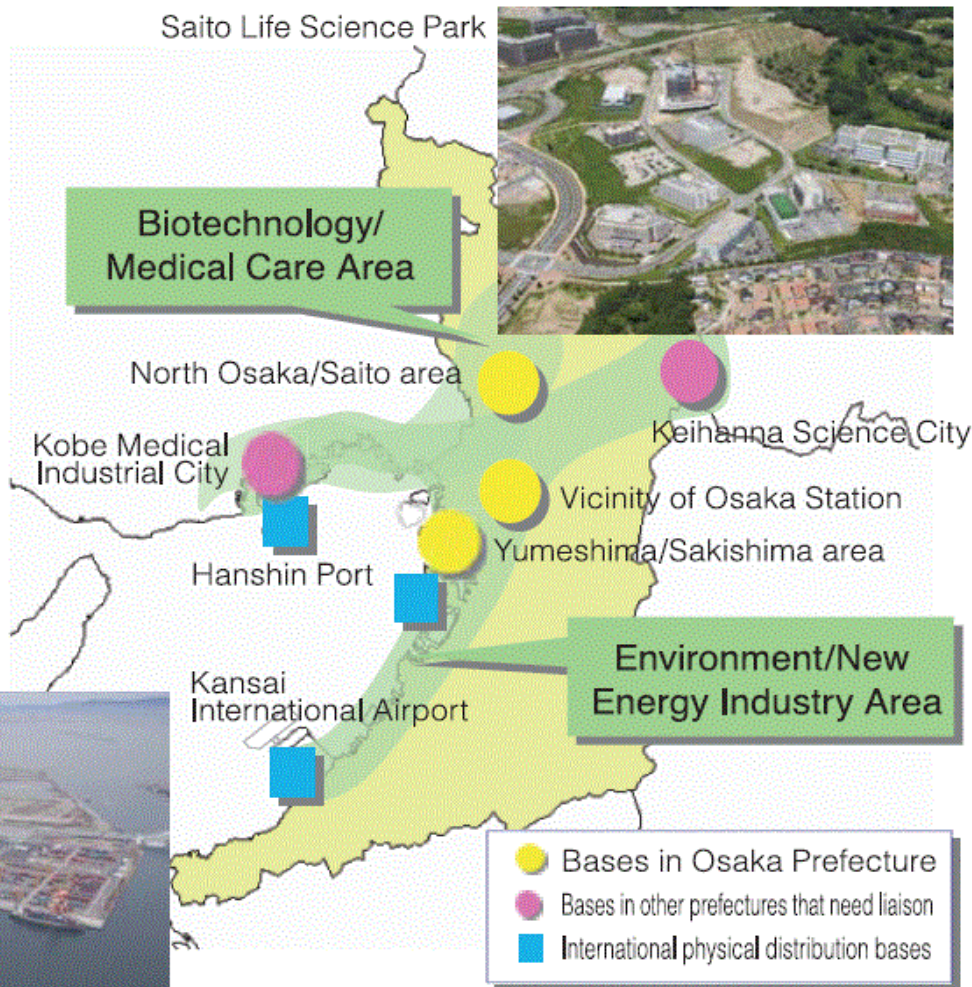
**BUSINESS FRIENDNESS  
of Osaka**

**Osaka is ranked among  
the world's top 10.**



# Special Zone

## The Kansai Innovation Comprehensive Global Strategic Special Zone



6 important targets create the innovation

Pharmaceutical  
Drugs

Medical Device

Preemptive Medicine

Advanced Medical  
Technology  
(regenerative  
medicine)

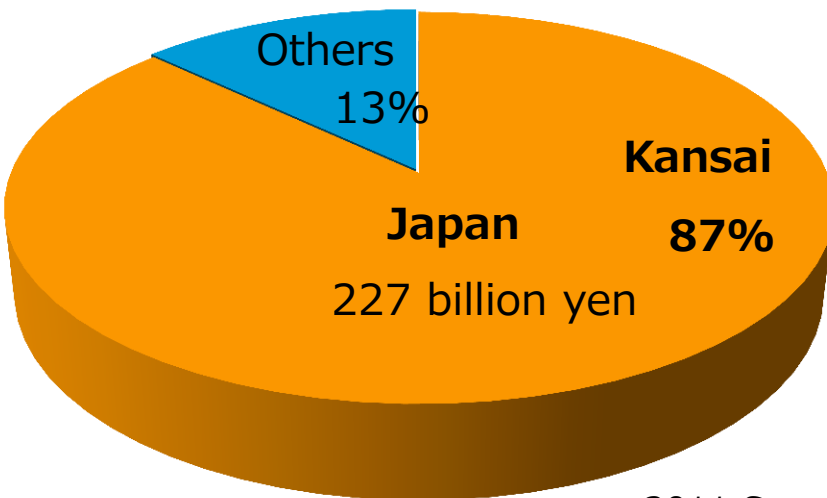
Battery

Smart Community

# Potential of Osaka [Energy] (1)

## New Energy Potential

No.1 in Lithium-ion battery  
production value



## World-class companies in Osaka

- Panasonic Corporation
- Sumitomo Electric Industries

**Panasonic**  
ideas for life

 **SUMITOMO ELECTRIC**

2011 Survey of Production (METI)  
2011 Primary Product Production Statistics  
(Kansai Bureau of Economy, Trade and Industry)

## Feature

In Osaka, there are a lot of enterprises that have important key technologies and gain a high market share in new energy industrial fields, Rechargeable Battery, Hydrogen and Fuel Cell. (See the following page)

# Potential of Osaka [Energy] (2)

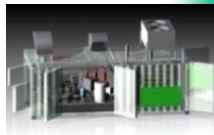
In Osaka, a lot of companies which have typical key technologies in hydrogen and fuel cell fields.

## Leading company

Iwatani



Hydrogen lorry



Package For hydrogen station



Hydrogen generator

OSAKA GAS



Residential fuel cell

Panasonic



Liquid hydrogen

Kajitech



Compressor

Samtech



Accumulator



Hydrogen generator

Hitachi Zosen

Fujikin



Hydrogen sensor

TECHNO TAKATSUKI



Hydrogen recycle blowers

Takaishi Industry



Packing

NEW COSMOS ELECTRIC



Hydrogen sensor

NIPPON SHOKUBAI



Fuel-cell materials

## Supporting industry

# Potential of Osaka [Energy] (3)

## One of the World's Largest – “Testing and Evaluation Center for Large Storage Batteries” Completed in bay area of Osaka

- **NITE\*** has built the world's largest testing and evaluation facility.

\*The **N**ational **I**nstitute of **T**echnology and **E**valuation

- **Establish eco-system that provides necessary services for battery business**



Source: provided by NITE



# Potential of Osaka [Energy] (4)

## KIX Hydrogen Grid Project @ Kansai International Airport



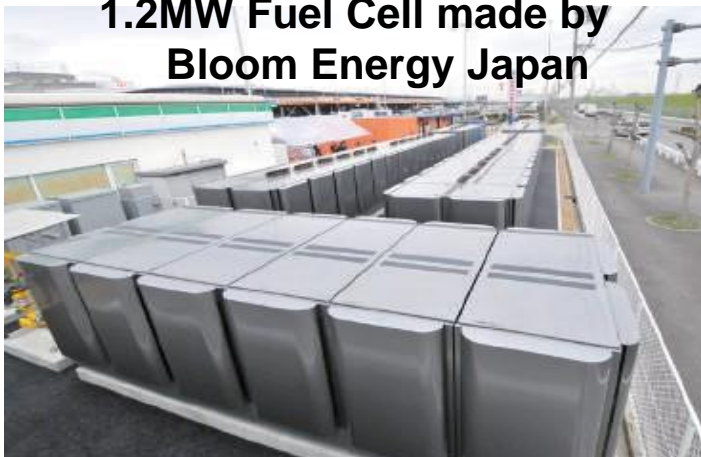
- Experimental project of fuel cell forklift



- Hydrogen station at Kansai int'l airport

## Nation's First Largest Fuel Cell @ Osaka Central Wholesale Market

1.2MW Fuel Cell made by Bloom Energy Japan



- Disaster-Resistant
- provides 50% of electricity needs
- 30% CO2 reduction compare to the previous year



# Potential of Osaka [Energy] (5)

## Open Innovation Event (September 5, 2016)

- Invite leading companies from Canada and UK.

Osaka chamber of commerce



## International Conference (September 6-8, 2016)

- Future perspective of Osaka as a New Energy Society.
- Cutting-edge lectures
- Great opportunity of Networking

Osaka Prefectural Government



## Delegation Event (November 13-20, 2016)

- Business delegation to Canada and US.

Osaka chamber of commerce



**Ask Osaka about business on Battery, Hydrogen / Fuel cell in Japan.**

# Potential of Osaka [Energy] (6)

## Osaka Business Delegation of Hydrogen and Fuel Cells to North America

### OSAKA GAS



- ENE-FARM  
(home use  
fuel cell)
- Hydrogen  
Station  
(commercial  
use)

### Hitachi Zosen Corporation



- Hydrogen  
Generation  
System

### Iwatani Corporation



- Total  
solution for  
hydrogen  
station

### Fujikin Incorporated



- High-  
Pressure  
Flow Control  
Valve for H2  
for hydrogen  
station

# Potential of Osaka [Energy] (7)

## Osaka Business Delegation of Hydrogen and Fuel Cells to North America

**FIS Inc.**



- Hydrogen leak Sensor for Fuel Cell Vehicle(Toyota MIRAI)
- Hydrogen leak Sensor for Hydrogen Station

**KAJI TECHNOLOGY CORPORATION**



- Hydrogen Compressor for Fuel Cell Refueling Station

**Takaishi Industry Co., Ltd**



- O-rings for hydrogen station



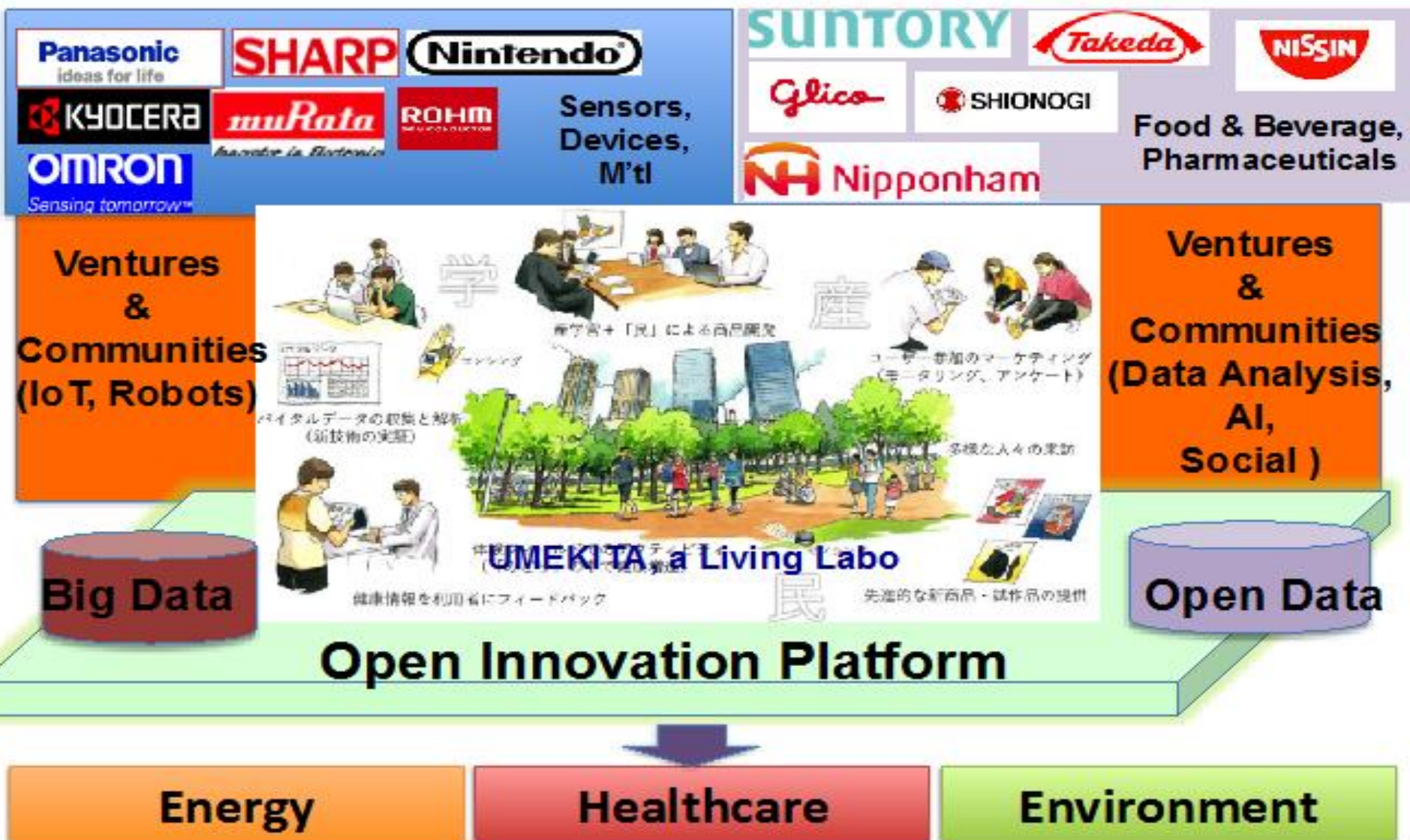
# Potential of Osaka [Innovation](1)

## Umekita 2<sup>nd</sup> Phase





# Potential of Osaka [Innovation](2)



# Potential of Osaka [Innovation](3)

**G-ONE INC.** Nishi-tenma, Kita-ku, Osaka-shi

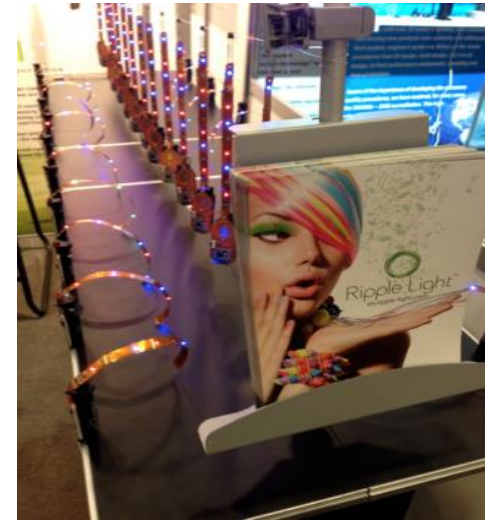
**Ripple Light:**

a color-customizable LED wristband  
controlled by radio waves.

feature: making it easy to find the right color  
for any event.

ex)concert :

its LED colors can be pre-programmed  
to change and shift with music



**G-ONE INC.**  
Ground IT Communication Tech.

**SMART VALUE**



**Services:**

web design, software, data centers,  
mobile applications

**CiEMS:**

- an IT service designed for automobiles
- a car navigation system for safe driving

Utsubo-honmachi,  
Nishi-ku, Osaka-shi



# Potential of Osaka [Innovation](4)

**WESTUNITIS**



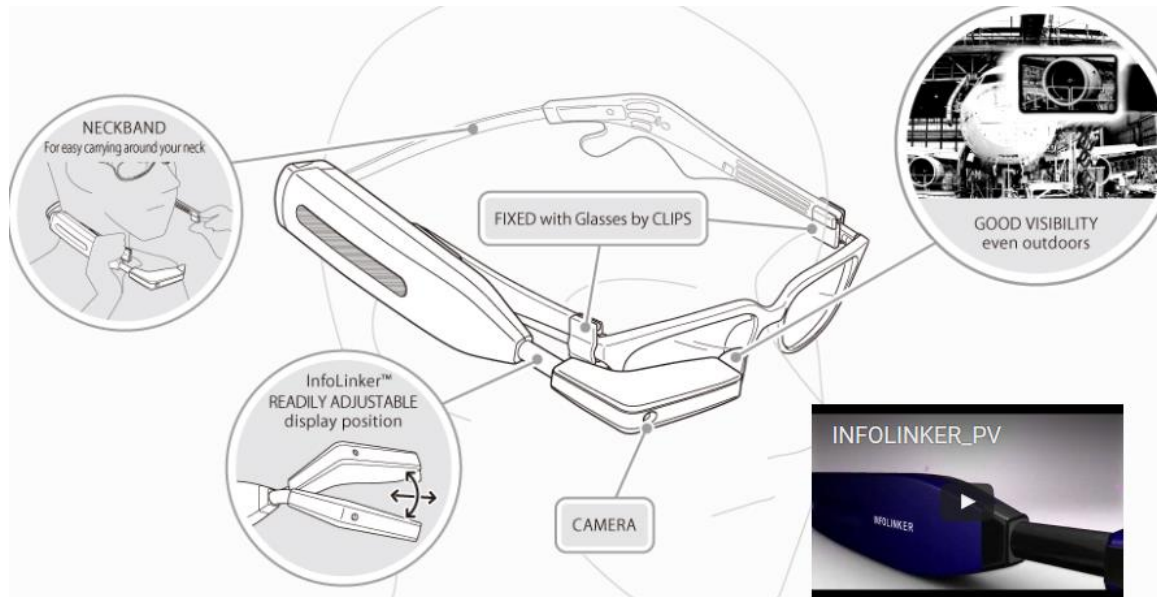
**Ofuka-cho, Kita-ku,  
Osaka-shi**

**Services:**

**consumer electronics and hardware production**

**Wearable computers:**

**allowing users to access training and educational  
manuals/videos and enterprise solutions  
that offer product-integrating software systems**



# Support by Osaka

## Osaka Prefectural Government

### ▶ Subsidy for Investment Promotion

Subsidies of up to ¥50 million for companies constructing or renovating factories or R&D facilities in designated zones within Osaka

### ▶ Real Estate Acquisition Tax Breaks

Real estate tax breaks for the acquisition of land and buildings in designated zones within Osaka

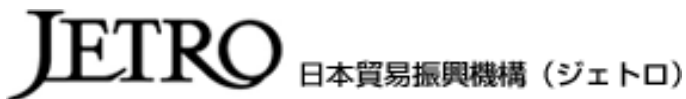


provides comprehensive support for foreign companies that wish to set up new business in Osaka

- Introduction of agencies handling application for status of residence and other registration
- Introduction of experts on social welfare, salary and tax
- Offering information on marketing and office space

### Temporary Office Space

Office space which foreign companies considering doing business in Osaka



3 offices up to 50 business days

### IBPC Osaka

Investment Promotion Project

7 offices up to 6 months (in principle)



# Attraction of Osaka

## Kansai International Airport

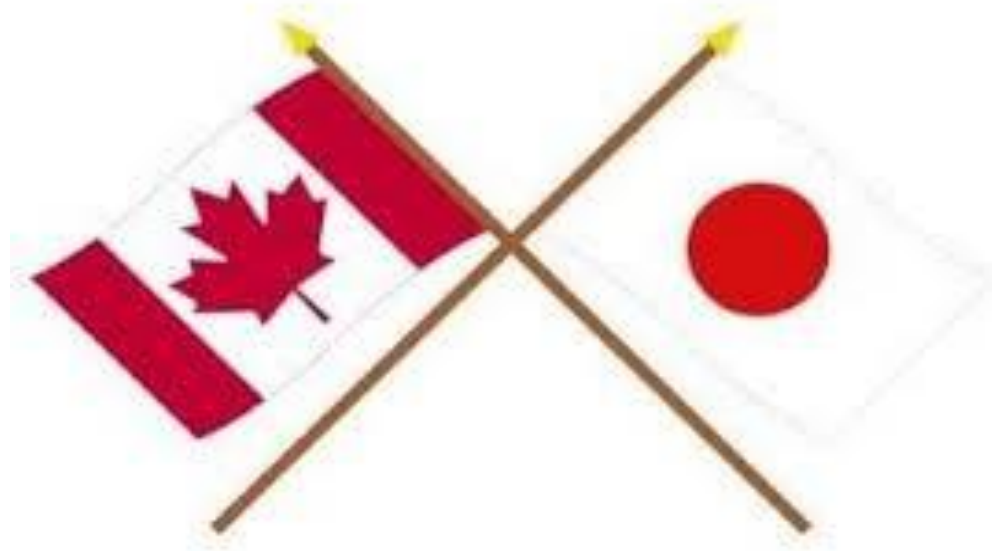


There are many  
Japanese-style restaurants  
ex) Nadaman Osaka

and historic buildings  
ex) Osaka castle  
Shitenno-ji temple



# Thank you for your attention



**Osaka Prefectural Government**

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