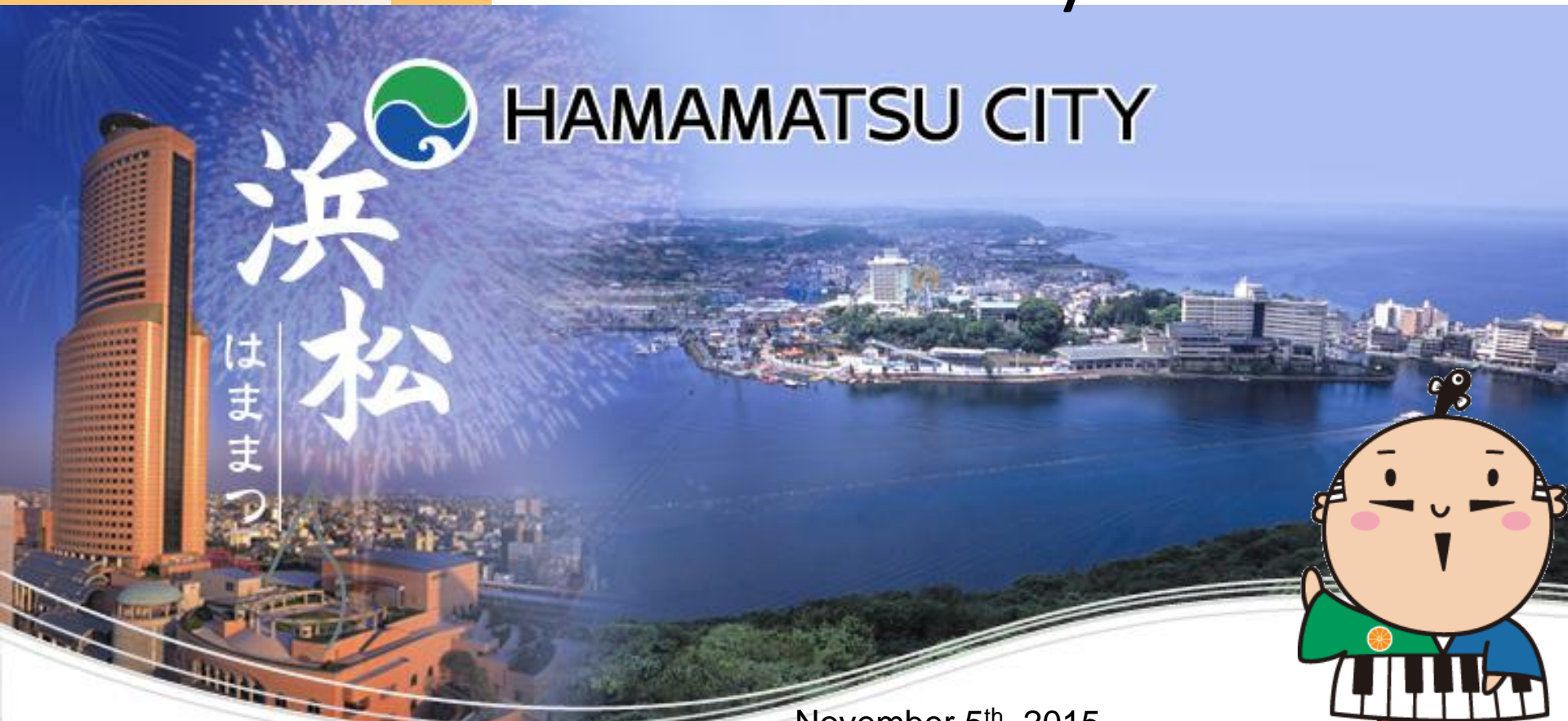


3R and Intercity Cooperation in Hamamatsu City



= Outline =

1. Introduction of Hamamatsu City
2. Intercity Cooperation
3. Waste Management and 3R Initiatives
4. Previous Projects and Future Direction

November 5th, 2015

Hamamatsu City Environmental Department
Waste Disposal Division,
Deputy Chief Engineer,

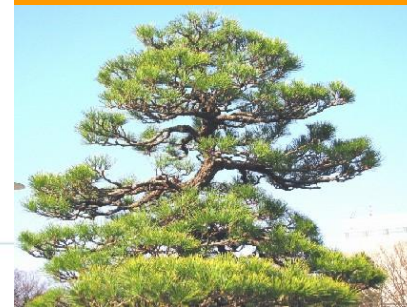
Atsushi ISHIHARA



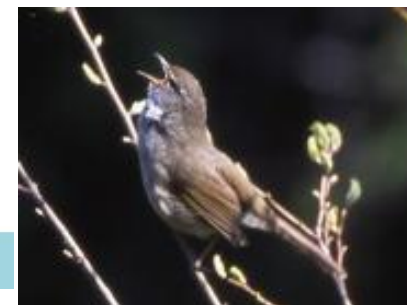
© 浜松市



City Flower: Mikan (Mandarin Orange)



City Tree:
Matsu
(Japanese Pine)



City Bird:
Uguisu
(Japanese bush warbler)

Outline of Hamamatsu

【Basic Information】(October 1, 2015)

- Population : 809,065 / Number of households : 324,467
- Total Land Area : 1,558.04km² /

east to west approx.52km・South to north approx.73km

※The second largest city in area in Japan



HAMAMATSU

HONDA



【Characteristics】



KAWAI

Roland

- Hamamatsu has been famous as an advanced industrial city especially for global companies such as SUZUKI, HONDA, YAMAHA.
- It also has been known for musical instruments industry with a rich musical culture and holding of international events like “Hamamatsu International Piano Competition”
- Surrounded on four sides by sea, lake, rivers, mountain range and richly endowed with nature.

Intercity Cooperation with Various Overseas Cities

Cooperation with Cities

Sister Cities

Rochester (USA, 2006)
 Camas (USA, 1981)
 Chehalis (USA, 1990)
 Porterville (USA, 1981)

Friendship Exchange Cities

<Music Culture Exchange>
 Warsaw (Poland, 1990)
 <Tourism Exchange>
 Shenyang (PRC, 2010)
 Hangzhou (PRC, 2012)
 Taipei (Taiwan 2013)

Cities with which a MoU signed

<Music Culture Exchange>
 Bologna (Italy, 2014)
 <Cultural and Environmental Exchange>
 Bandung (Indonesia, 2014)

Cooperation with National Governments etc.

National Governments etc. with which a MoU signed

<Economic Exchange>
 Vietnam Ministry of Planning and Investment (2014)
 Indonesia Investment Coordinating Board (2014)

Affiliation with International Network / Organization

United Cities and Local Governments (UCLG)

The biggest International local government organization. Members consist of over 1,000 cities and 112 local governments organizations from 136 countries and areas around the world.

※Hamamatsu affiliated with IULA, one of the original constituents of UCLG in 2003.

Alliance for Healthy Cities (AFHC) ※Affiliated in 2012

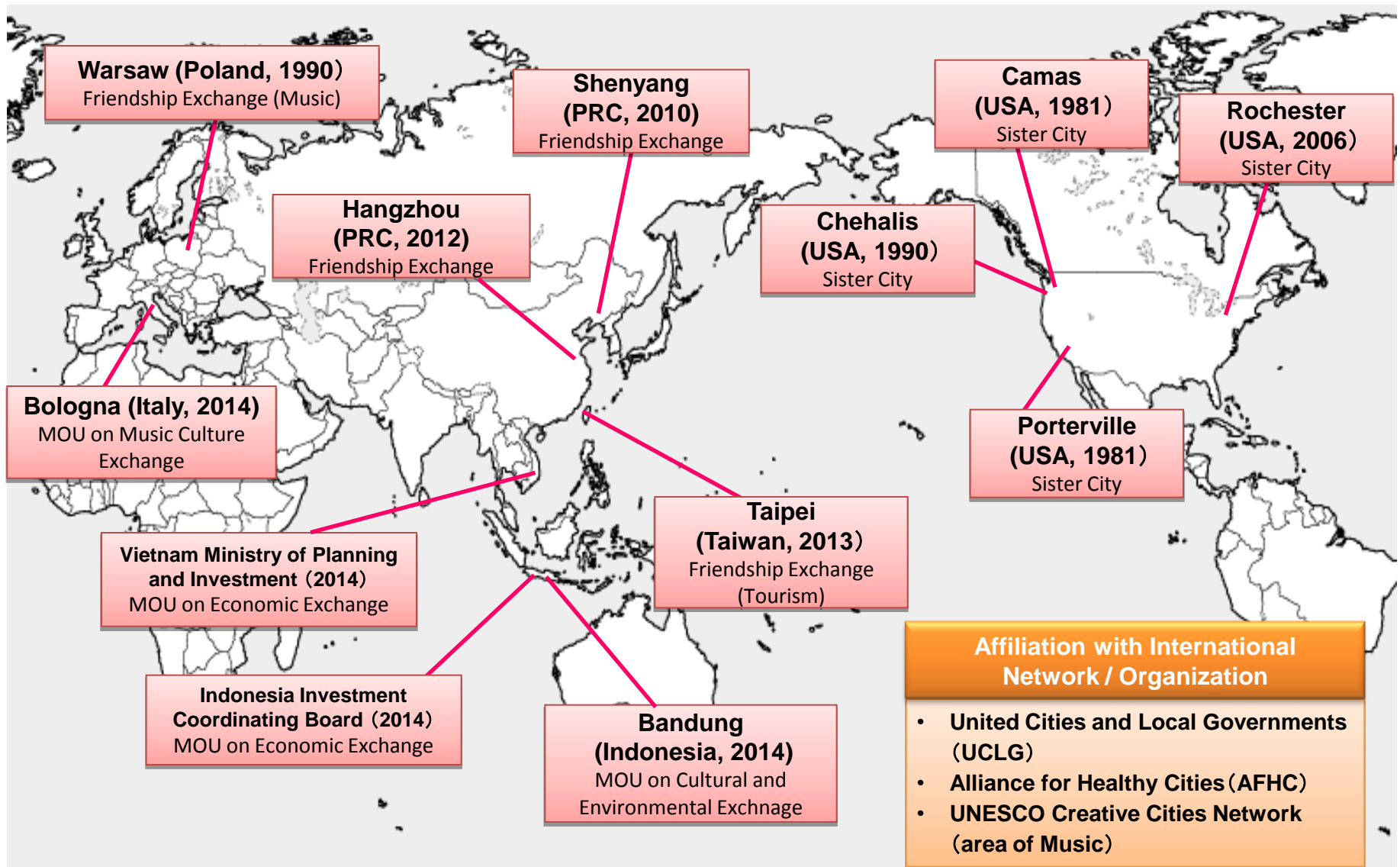
An international network aiming at protecting and enhancing the health of city dwellers. 173 cities and organizations, mainly from Asia-Pacific region, are affiliated with the network.

UNESCO Creative Cities Network (area of Music)

※Affiliated in 2014

Launched in 2004, the network recognize distinctive cities in seven creative fields: Crafts & Folk Arts, Design Firm, Gastronomy, Literature, Media Arts, and Music. Hamamatsu became the 7th city, as well as the 1st city in Asia, to be designated in the area of music.

Intercity Cooperation with Various Overseas Cities



(Example: Affiliation with UCLG)

- United Cities and Local Governments (UCLG)
 - the biggest international local government organization in the world
 - Mission: to be the united voice and world advocate of democratic local self-government, promoting its values, objectives and interests, through cooperation between local governments, and within the wider international community.
 - Members consist of over 1,000 cities and 112 local governments organizations from 136 countries and areas around the world.
 - World Secretariat : Barcelona, Spain
 - Asia-Pacific Regional Section (UCLG ASPAC) Secretariat : Jakarta, Indonesia
 - Japanese member cities : Hamamatsu City and Shizuoka City

 - UCLG ASPAC Executive Bureau Meeting 2014 Hamamatsu
 - Main theme: “Local governments’ international strategies in the age of globalization”
 - Participants: 244 participants from 11 countries and areas
 - Speakers from overseas
 - Mayor of Bandung City (Indonesia), Vice Governor of Jakarta City (Indonesia), President of Australian Local Government Association (ALGA), President of All India Institute of Local Self-Government (AILLSG), President of League of Cities of Philippines (LCP), Spokesperson of Association of District Development Committees of Nepal (ADDCN)
 - Officials from Federation of Sri Lankan Local Government Authorities, Dalian City (China), Jeollabuk-do Province (Korea)
- >Through these activities, Hamamatsu has met face-to-face and built close relationships with both leaders and staff members from member cities, as well as with the UCLG ASPAC secretariat.



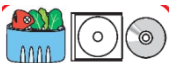




Hamamatsu City's Waste

■ Types of Waste

- Industrial waste ⇒ Disposal implemented by authorized industrial waste treatment operators
- General business waste ⇒ Transportation implemented by authorized operators,
treatment implemented by Hamamatsu City
- General household waste ⇒ Transportation and treatment implemented by Hamamatsu City (Includes operators entrusted by Hamamatsu City)



■ Household Waste Categories

- Burnable Rubbish 
- Non-burnable Rubbish 
- Plastic Containers and Packaging 
- Bottles/Cans/PET (plastic) bottles 
- Special Items (Fluorescent tube, Batteries, Mercury thermometer, etc.)
- Rubbish Which Requires Contact 



ごみは、清掃・環境事業や
民間の会社のごみ収集車が集めます。

Rubbish Collections

Rubbish Disposal Method

- Citizens put out their rubbish at the designated collection site for their local area (approx. 13,300 sites across the city).
- Rubbish which requires contact are put out in front of individual households.

Collection Frequency *Please see reference

- Burnable rubbish: Twice a week
- Non-burnable rubbish: Once a week
- Plastic containers & packaging: Once a week
- Bottles, cans, PET bottles: Once every two weeks
- Special items: Once a month (some exceptions apply)

Collection Method

- Rubbish which requires contact: collected by city employees
- Other rubbish: collected by entrusted operators (some exceptions apply)

- 溶融(再資源化)する施設
- 焼却する施設
- 埋め立てする施設
- その他の施設

Heiwa Landfill, Heiwa Crushing Treatment Center,

Western Garbage Incineration Plant

Southern Garbage Incineration Plant

みんなの地域のごみはどこに
運ばれるのかわいてみるのじゃ!



0 2 4 6km

Flow of Rubbish Treatment

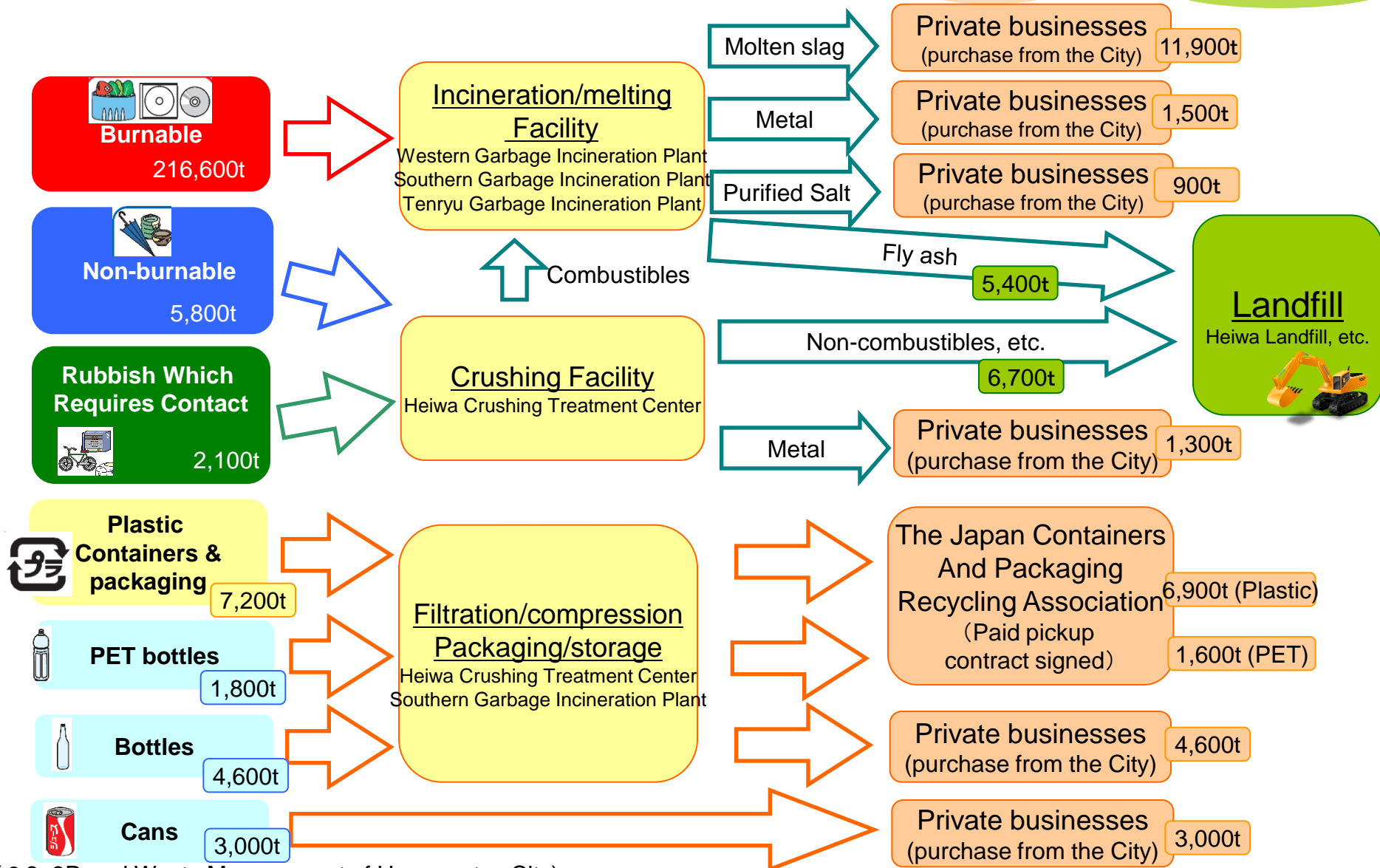
*This is just a brief conceptual diagram, there are some variations in the actual process.
 *Figures are from actual data in 2014 (Includes approximate figures and figures from Kosai City. Some types of waste and figures are omitted.)

<Types of Waste>

<Intermediate treatment>

<Reuse>

<Final disposal>



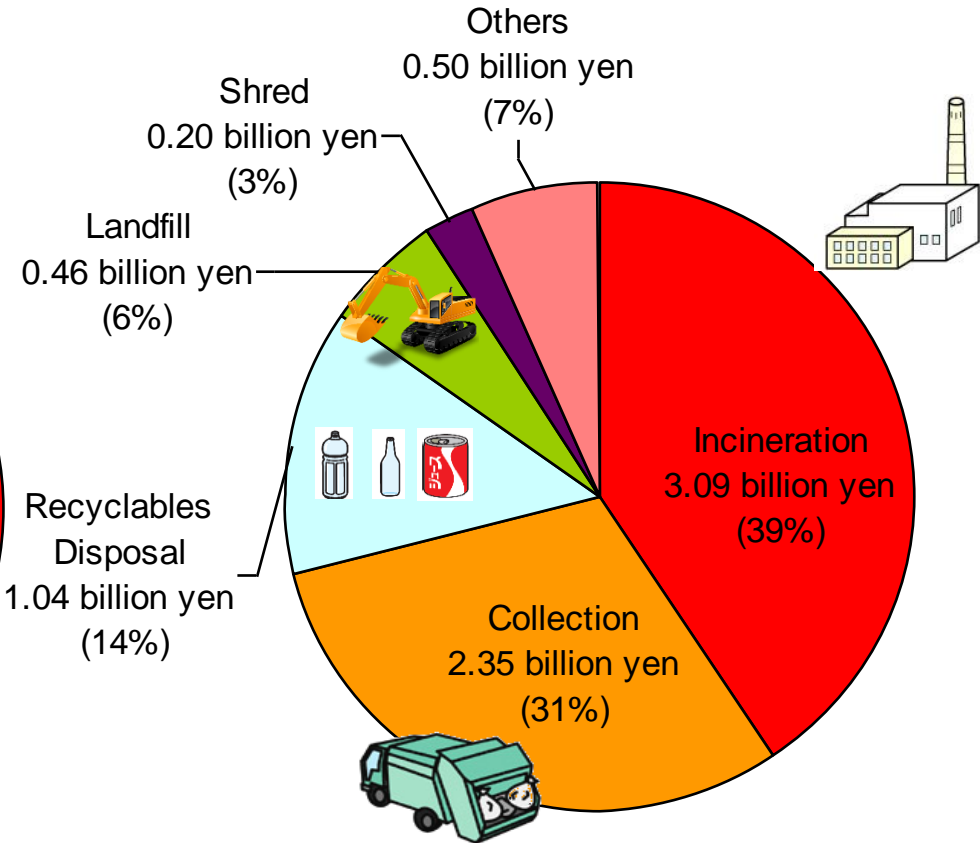
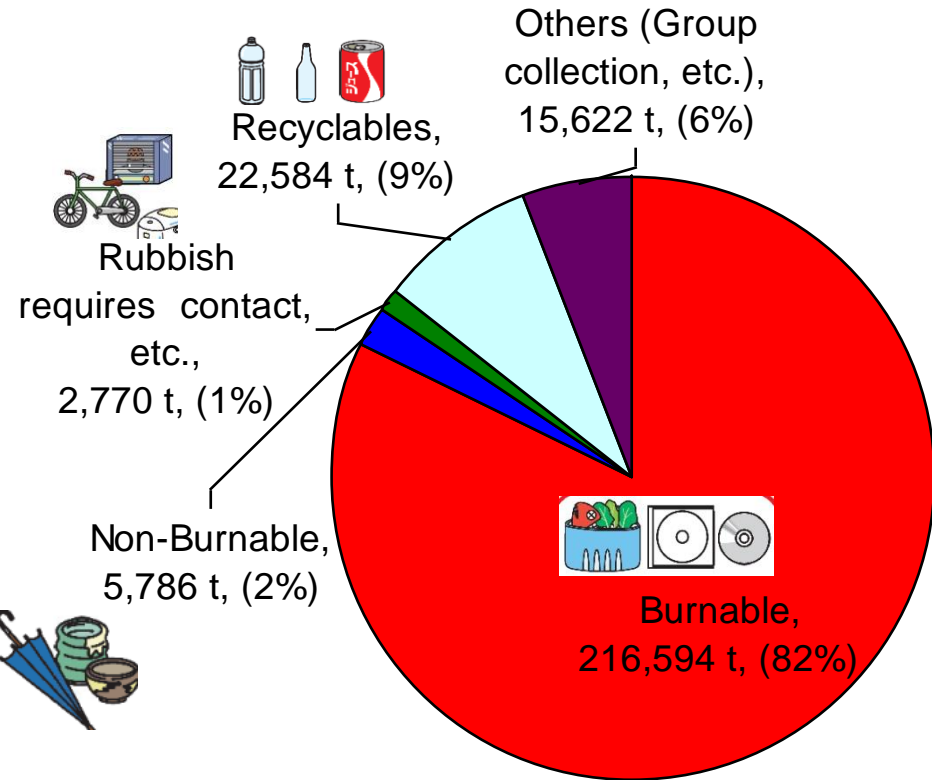
Waste Treatment/Disposal Cost

<Emission of Waste・Recyclable Waste :

263,357t. (FY2014) >

<Waste Treatment/Disposal Cost :

7.65 billion JPY (FY2014) >



■ amount of emission per resident / day : 912g

■ Unit cost of Disposal/t. : 31,871 JPY

■ Unit cost of Disposal per resident : 9,431 JPY

Waste Reduction Policy - 1

- Approximately 87% of all waste and recyclable materials is burnable waste. Within that, 40% is raw waste and 38% is paper ⇒ Reduction of raw waste and paper is necessary in reducing waste.

⇒ Raw waste reduction

- Promotion of composting (Free distribution of composting containers, subsidy for the purchase of raw waste treatment machines.)
- Drainage of water in waste



⇒ Paper recycling

- Group collection of recyclables by residents in the community
- Collection hubs through placement of recycling stations



⇒ Reduction of other wastes

- Collection of used small electrical appliances, used clothing, waste cooking oil, used ink cartridges and recycling of greenery (branches, grass, etc.), etc.



Waste Reduction Policy - 2

- Education on Correct Rubbish Disposal Methods and Waste Reduction
 - Pamphlet for elementary students, *Waste and Us* (9,200 copies distributed to Elementary grade 4 students)
 - Creation of waste reduction educational picture books (For elem. grade 1 students)
 - Implementation of visiting presentations by city staff, holding of educational events at shopping malls in the city, etc.

The pamphlet is divided into several sections with illustrations of a character named 'Iku-kun'.

- ステップ 2 やってみよう!** (Step 2 Let's try it!) - Encourages trying to do things on their own.
- 家の人はごみをどのように出しているの?** (How do family members dispose of trash?) - Explains that trash should be sorted by material.
- ごみ、資源物をちゃんと分別して出すんだね!** (You're sorting trash and resources properly, aren't you!) - Emphasizes sorting.
- ごみの分別を見えよう** (Let's see trash sorting) - Lists items that can be recycled (paper, plastic, metal, glass) and those that cannot (food, organic waste).
- びん・かん・ペットボトル** (Bottles, Cans, PET Bottles) - Shows how to sort these items.
- 特定品目** (Special Items) - Lists items like pens, calculators, and lighters that go in a special bin.
- 連絡ごみ** (Special Waste) - Explains how to dispose of large items like bicycles and furniture.

Pamphlet for elementary school students

The picture book features two children, a girl and a boy, standing next to a large blue trash bin with yellow stars. The girl is holding a piece of paper and the boy is holding a red toy car. A speech bubble from the girl says 'すてたらごみになっちゃうよ〜!'.

At the bottom right, it says '浜松市 ごみ減量啓発絵本②' (Hamamatsu City Waste Reduction Education Picture Book 2).

Educational picture book

Hamamatsu City Seibu (Western) Incineration Plant

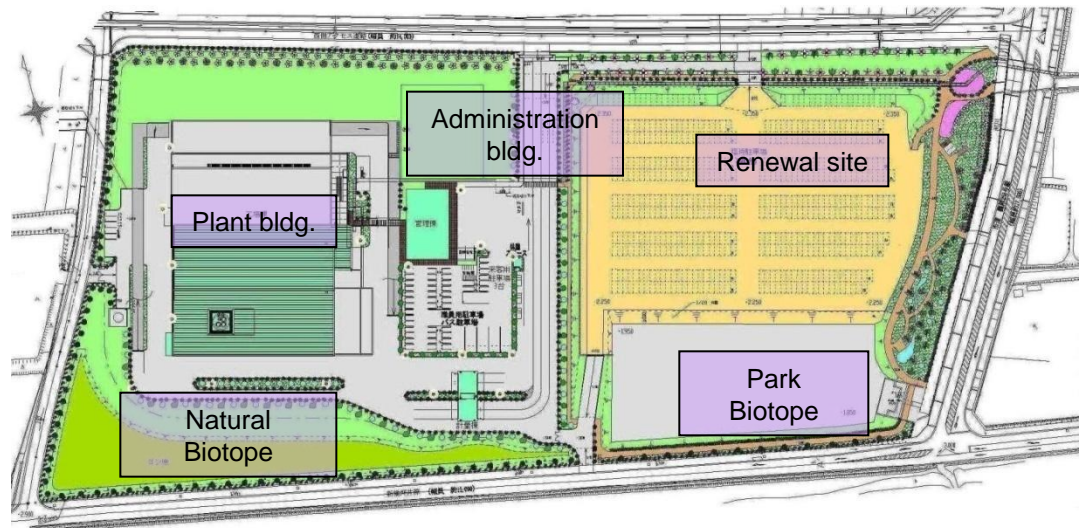
Outline of the Facility

Scale :

- Incineration Plant : Processing capacity 450t. /day
- Swimming Pool : International certified 50m main and sub swimming pool, etc.

Cost for Construction : ※actual, tax-included

- Incineration Plant 13,595,400,000 JPY
- Swimming Pool 6,982,500,000 JPY

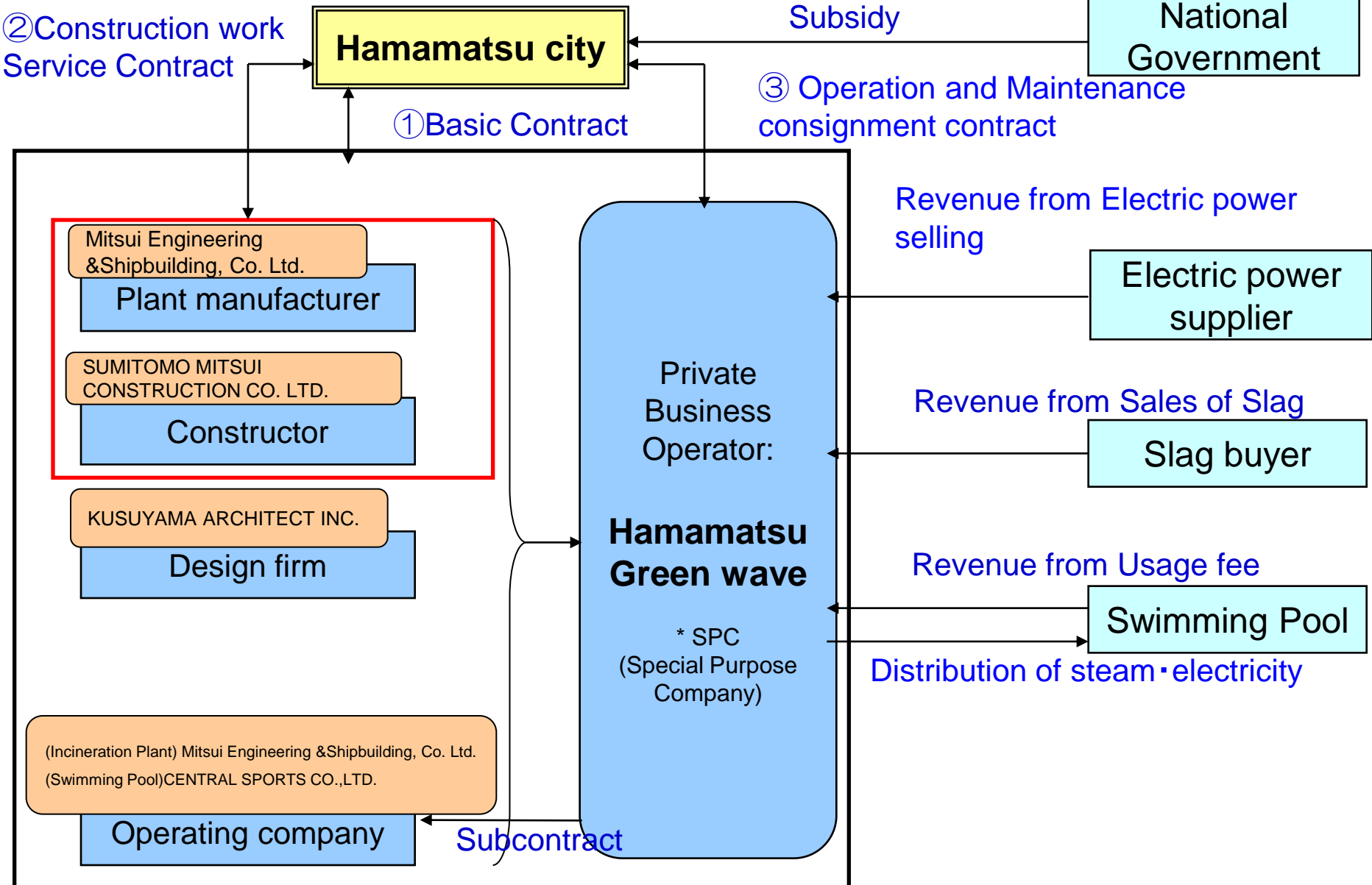


Construction Process of Seibu Incineration Plant

- The features of the facility
 - Combined constructions for Incineration Plant and Swimming Pool
 - Application of PPP Method (DBO scheme)
- Project schemes using the power of the private enterprises

Project schemes	Features	Comparison			
		Facility Owner	Procurement	Design/ Construction	Operation
BOO scheme (Build-Own-Operate)	After the term of operation, a private enterprise removes the facility or owns it in principle.	Private	Private	Private	Private
BOT scheme (Build-Operate-Transfer)	After the term of operation, a private enterprise transfers (for compensation) the facility to a public authority.	Private	Private	Private	Private
BTO scheme (Build-Transfer-Operate)	A private enterprise transfers the facility right after the completion of construction. The payment for the facility will be made by installment or non-installment. The facility is run by a private enterprise.	Public	Private	Private	Private
DBO scheme (Design-Build-Operate)	A private enterprise designs, constructs, operates the facility. A public authority procures fund and is concerned in the design & construction, owns it.	Public	Public	Public Private	Private
LDO scheme (Lease-Develop-Operate)	A private enterprise develops and runs an existing public facility by lease contract.	Public	Public	Public	Private
BLT scheme (Build-Lease-Transfer)	A private enterprise procures fund, designs, constructs, leases out the facility to a public authority for the certain period and hands over the ownership to a public authority after the term of contract.	Private	Private	Private	Public

Structure of the PPP project (DBO scheme)



(§ 3. Waste Management and 3R Initiatives)

Evaluation of PPP project

【Evaluation of VFM (Value for Money)】

- at the Appointment of Specified business (March, 2003) . . . 9.9%
- at the Appointment of Private Business Operator (January, 2005) . . . 22.6%

【Evaluation after 5 years of the start of the project】

- The project is basically operated based on the proposals of private enterprises and is taking advantage of overall maintenance and operation of the incineration plant and the Swimming Pool, it is considered as efficient and effective outcome as a result.
- Examples of merits of DBO scheme
 - Realization of operational management by utilizing private sector know-how
 - Improvement of the level of service such as extending service hours
 - Reduction in workforce operated by the city
 - Clarification of the apportionment of responsibilities among public and private regarding operational management
 - Prompt response in case of trouble

Citizen's participation in facility operation "eco-hama"

- Environment enlightenment facility 「eco-hama」operation is in cooperation with local ecology-related NPO.
- Achieved the enlightenment program implementation effectively from people's perspective with NPO's unique creativity.

(Operation contents)

- Mottainai market
(Swap shop)
- Reuse workshop
(Reuse furnitures)
- Toy Hospital
- Permanent Reuse Corner
- Various ecology seminars and events

リユース 工房
家具のリユース 工房で、お部屋の模様替えし、再び使えるようにします。
家具のリユース 工房で、お部屋の模様替えし、再び使えるようにします。

おもちゃ 病院
壊れた「おもちゃ」を治しましょう！
壊れたおもちゃを修理します。

エコ講座
エコロジーや環境に関する講座や講習会を随時開催しています。
※写真は布ぞうりづくり

もったいない市(不用品交換市)
まだまだ使えてもったいない家庭内の不用の衣類や書籍・おもちゃ・日用品など、フリーマーケットに参加するほどの量はないけど誰かに使ってもらえたら・・・そんな市民のための譲り合いの場所を開催します。

もったいないコーナー
家庭内で不用となった「図書」「おもちゃ」「子ども服」(寄付)を、清掃後に展示し、希望者が持ち帰りができるコーナーです。(個数制限があります。)

Examples of Previous Intercity Cooperation Projects

- Assistance with the Development of Waste Management Policy in Bandung (JICA Partnership Program: FY2007 – FY2009)
 - FY2007: Hamamatsu city officials' visit to Bandung, Discussion about the content of the program of skills cooperation
 - FY2008: Training program for Bandung city officials in Hamamatsu
 - Lecture on Hamamatsu's waste management system and 3R initiatives
 - OJT on Hamamatsu's waste management policy making
 - Study tour on waste separation activities by citizens
 - FY2009: Dispatch of specialists from Hamamatsu to Bandung
 - Complementary tutorship for Bandung city officials
 - Seminar on the 3Rs for Bandung city citizens

- FY2014: Hamamatsu city officials' visit to Bandung



Future Direction

■ Conclusion of an LOI with Bandung City

- In December 2014, a LOI (letter of intent) on exchange in areas such as culture and the environment was concluded between Hamamatsu and Bandung



Mayor of Bandung Mayor of Hamamatsu

■ Future Development

- Project Team for Overseas Development through Intercity Cooperation established in FY 2014 in the Environmental Department of the City Hall
- Build mutually beneficial cooperative relationships with overseas cities, through analysis of preceding international cooperation programs, and of the needs of the partner cities and the solutions that the knowledge and skills of the administration and businesses in Hamamatsu can offer.
- Gather the latest information and build relationships with overseas cities, using various kinds of opportunities such as the 3R Conference for Asian Local Governments.

Thank you for your kind attention !

ゆるキャラグランプリ
2015

スマホ・携帯・パソコンから
毎日投票
今こそ浜松力ノみんなで悲願のグランプリ獲得じゃ!



投票期間2015年
8/17~11/16
家康くん 検索

詳しくは出世大名家康くんオフィシャルサイトへ

I'm the mascot character of Hamamatsu
City:

Ieyasu-Kun,

The Daimyo of Success!

I'm a contestant in the national
Yuru-Chara Grand-Prix 2015.

PLEASE, GIVE ME YOUR VOTE!

ゆるキャラグランプリ
2015 in 出世の番 浜松
オフィシャルウェブサイト



全国200体以上の
ゆるキャラ®が
大集合するのじゃ!

開

Yuru-Chara Grand-Prix 2015 in Hamamatsu, City of Success:

Date: November 21st – 23rd

Venue: Nagisaen Park, Hamamatsu City