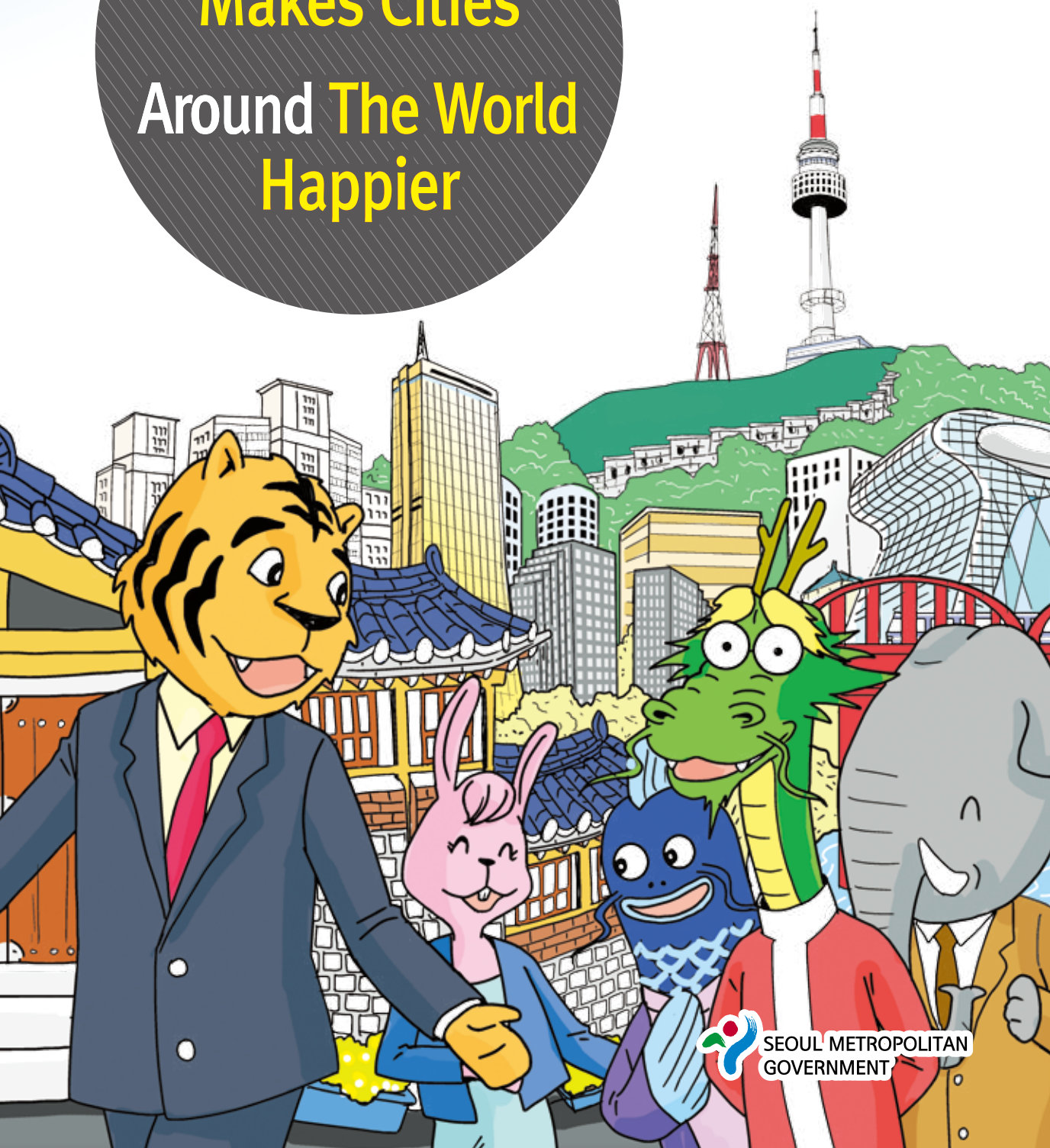
간행물발간등록번호
51-6110000-000879-01

Seoul, ready to share with the world

# Policy Sharing Makes Cities Around The World Happier



SEOUL METROPOLITAN GOVERNMENT

# Policy Sharing Makes Cities Around The World Happier

SEOUL METROPOLITAN GOVERNMENT

# **HISTORY** OF SEOUL

1950's

1960's

1970's

1980's

2000's

President of international organization OZ

A global expert on international development cooperation

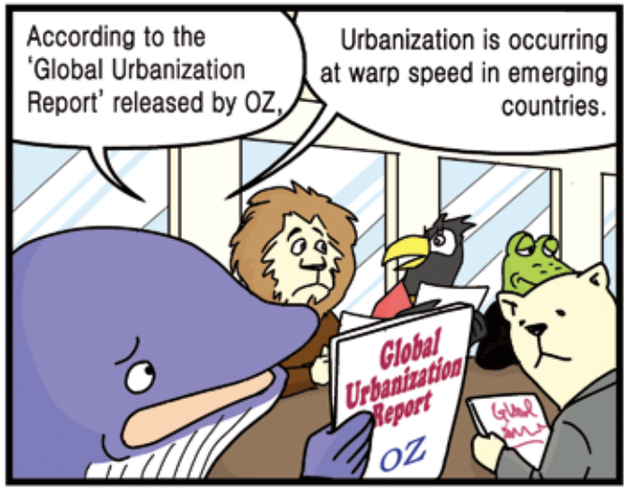
Mayor of Shangrila

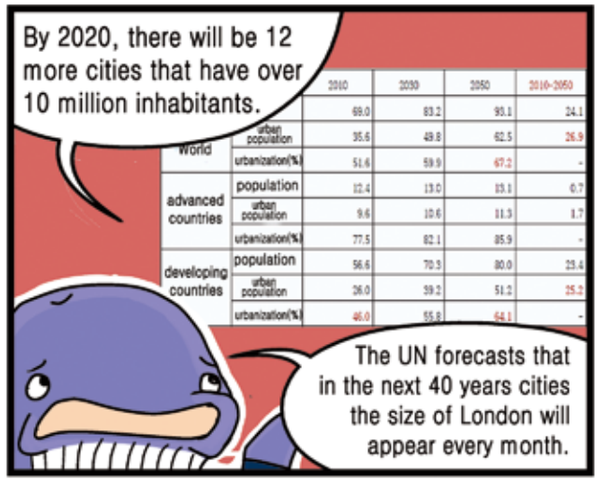
Head of Transportation at Shangrila

Director of Global Urban Partnership at Seoul

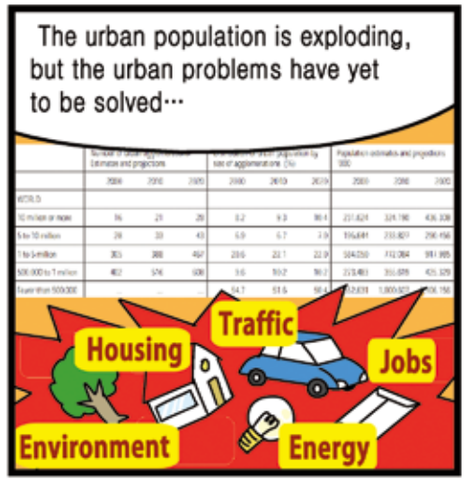
Head of Water-works at Shangrila

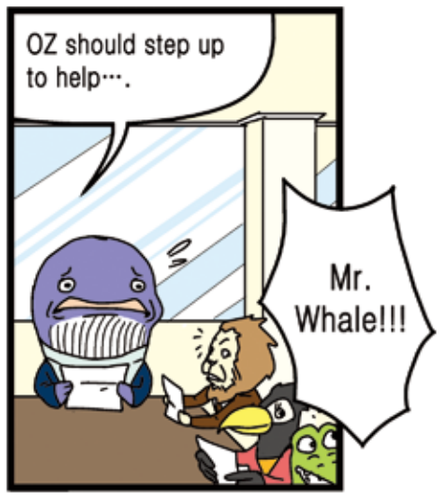
Manager of Global Urban Partnership at Seoul

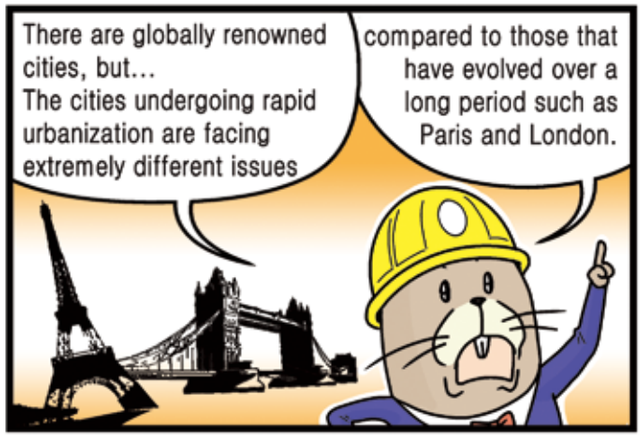



| | | 2010 | 2030 | 2050 | 2010-2050 |
|---|---|---|---|---|---|
| World | population | 69.0 | 83.2 | 93.1 | 24.1 |
| | urban population | 35.6 | 49.8 | 62.5 | 26.9 |
| | urbanization(%) | 51.6 | 59.9 | 67.2 | - |
| advanced countries | population | 12.4 | 13.0 | 13.1 | 0.7 |
| | urban population | 9.6 | 10.6 | 11.3 | 1.7 |
| | urbanization(%) | 77.5 | 82.1 | 85.9 | - |
| developing countries | population | 56.6 | 70.3 | 80.0 | 23.4 |
| | urban population | 26.0 | 39.2 | 51.2 | 25.2 |
| | urbanization(%) | 46.0 | 55.8 | 64.1 | - |





I would take Seoul as an example.

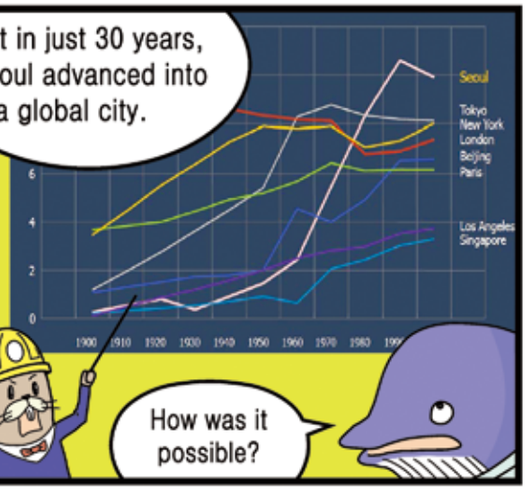
Seoul was facing the worst situation in the 1960s, right after the Korean War.

Poor infrastructure such as roads, water and sewerage system, and breakouts of epidemics···

At the time GNP per its capital was only around $82, with high unemployment.

So it was even worse than the present day emerging countries!

But in just 30 years, Seoul advanced into a global city.




How was it possible?

First, Seoul had its own unique urban planning.

Seoul Urban Planning

Seoul Master Plan

They developed the area south of the river and systematically expanded the city.

How did they come up with the funds?

Through grants from other countries, and also by introducing credit.



Apart from that, Seoul was also very proactive in addressing its issues internally, such as private sector investment and bond floatation.

Seoul's urbanization process was led by a strong partnership between the public and private sector.

Oh~! So that's how they were fast and efficient!

But! We have to consider 'sustainable development' in the 21st century.

Up until the 1990s, Seoul focused on building infrastructure and city expansion,

But now the focus has shifted towards sustainability and the citizens' quality of life.

So what you're saying is that Seoul has the knowhow on not only building infrastructure but also on making a sustainable city?

It would be great if the success story was shared with emerging country cities...

Share? Oh yes! Don't you remember Seoul city has a special division just for that!

I gave you some related documents on that!

···Hmm..where is that···

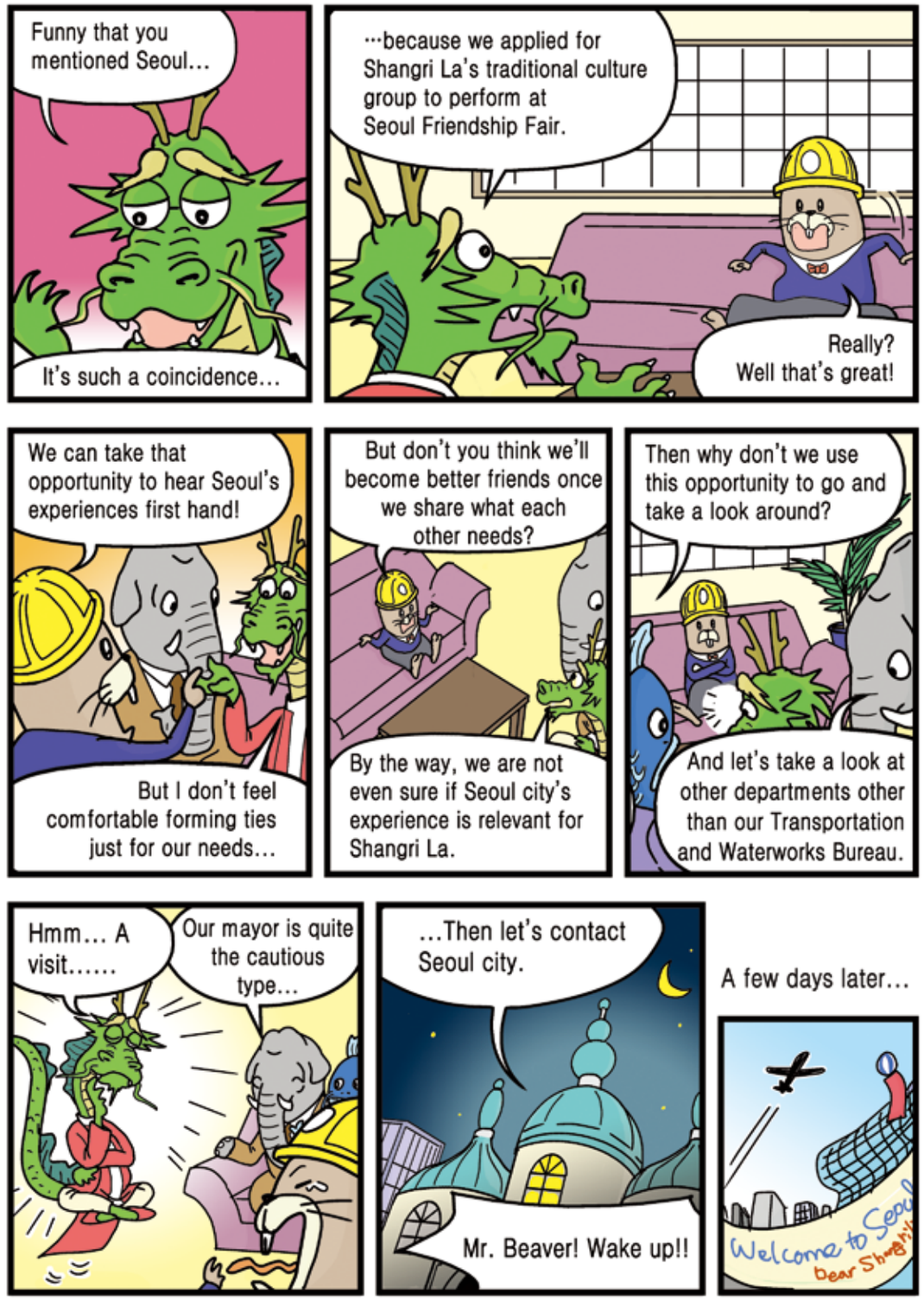
This is why we need a plan..

WHALE

Oh~! Here it is!!

Shangri La City
Welcome to
Shangri La
ancient
mystery
Shangri La City Hall
So!! What I wanted to say is!!!!!
Let's share Seoul's case!
SEOUL?
Head of Transportation at Shangrila
Mayor of Shangrila
Head of Waterworks at Shangrila
Yes, I did a research on Shangri La and I could see many similarities with Seoul's past.
It's true that you uphold tradition and are very cautious about development. But,
you also need to respond to your rapid urbanization.
Sharing other cities' experience, and then customizing the solutions to Shangri La...
.....
...will help you save time and resources, and minimize trial and error.



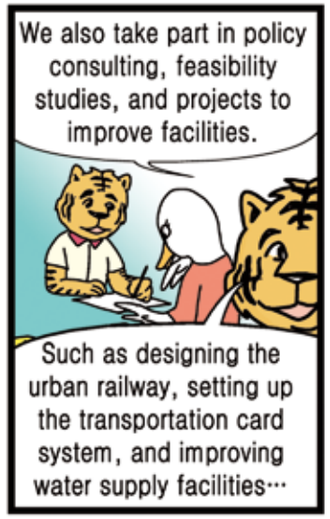

Funny that you mentioned Seoul...
It's such a coincidence...
...because we applied for Shangri La's traditional culture group to perform at Seoul Friendship Fair.
Really? Well that's great!
We can take that opportunity to hear Seoul's experiences first hand!
But I don't feel comfortable forming ties just for our needs...
But don't you think we'll become better friends once we share what each other needs?
By the way, we are not even sure if Seoul city's experience is relevant for Shangri La.
Then why don't we use this opportunity to go and take a look around?
And let's take a look at other departments other than our Transportation and Waterworks Bureau.
Hmm... A visit.....
Our mayor is quite the cautious type...
...Then let's contact Seoul city.
Mr. Beaver! Wake up!!
A few days later...
Welcome to Seoul
Bear Shangri-La

Welcome to Seoul!
To Seoul
Dear Shangrila
We are from the Global Urban Partnership Division, in charge of policy sharing!

Thank you for participating at the Seoul Friendship Fair.
Well, we think that it's also a good opportunity for us to share our traditional culture.

Thanks to your team, it was very convenient for us to request an official visit to Seoul city.
But what kind of work do you do at your division?

First of all we identify successful policies of Seoul, make a booklet on the policies, then introduce our policies to international cities that need them.

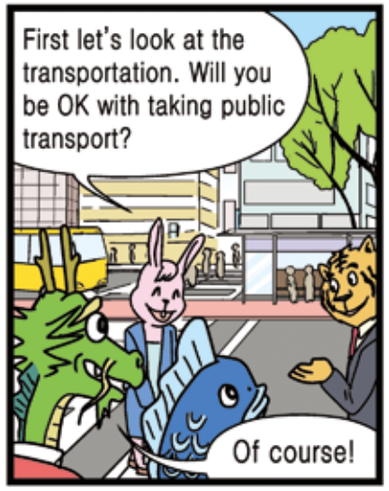

We also take part in policy consulting, feasibility studies, and projects to improve facilities.
Such as designing the urban railway, setting up the transportation card system, and improving water supply facilities…

On top of the cities we share policies with, we also have partnerships with related agencies and international organizations.

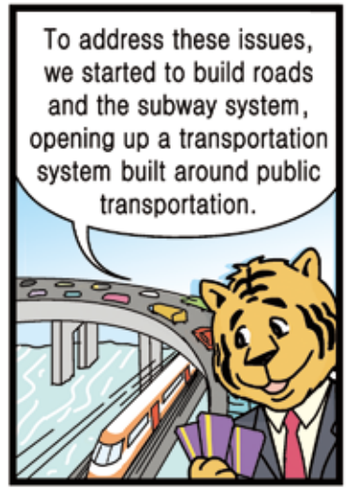
Through the Seoul policy archive portal site, we share valuable information
and address the urban issues together.

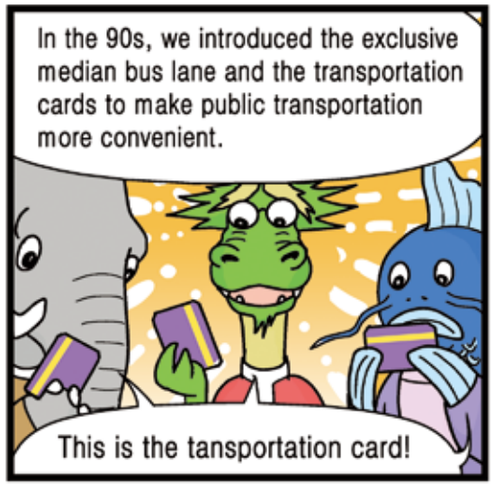
Then shall we start with a site visit to explore Seoul's outstanding policies?

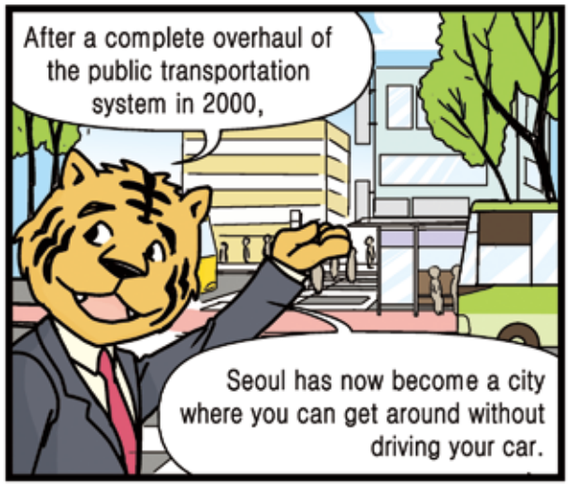


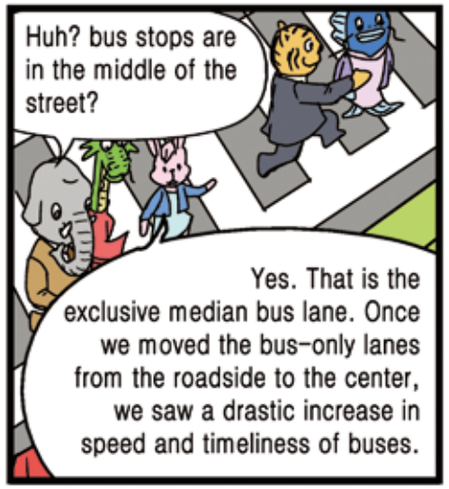

First let's look at the transportation. Will you be OK with taking public transport?
Of course!

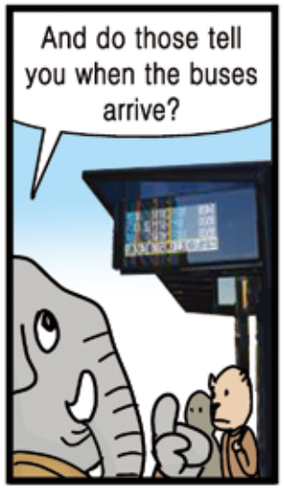
In the 70s to 80s along with economic development and an increase in automobiles, Seoul started to suffer from extreme traffic and air pollution.
Oh~ that's the situation in Shangri La!


To address these issues, we started to build roads and the subway system, opening up a transportation system built around public transportation.


In the 90s, we introduced the exclusive median bus lane and the transportation cards to make public transportation more convenient.
This is the tansportation card!


After a complete overhaul of the public transportation system in 2000,
Seoul has now become a city where you can get around without driving your car.


Huh? bus stops are in the middle of the street?
Yes. That is the exclusive median bus lane. Once we moved the bus-only lanes from the roadside to the center, we saw a drastic increase in speed and timeliness of buses.


And do those tell you when the buses arrive?

Yes, thanks to the Bus Management System, the operation information is gathered with GPS and wireless communication…
Bus Management System
- BMS BIS

…and is provided through ARS, the internet, smart-phones, and other devices on bus stations or on the buses.

So, shall we take this bus?

Peep!

The biggest benefit of the T-money card that Seoul city created is that it facilitates transfers.

The card would remember the location where the passenger gets on and off.

So when the passenger transfers to another bus or even onto the subway,

Distance-based integrated fare system

passengers get discounts based on the total travel distance.

Wow.. There are a lot of stations gathered together!

Yes, these are major transfer stations that facilitate transfers and connections between major stations or key points.

You can very easily transfer onto 4 types of buses – Green, Blue, Yellow, and Red – to get to your desired destination.

Trunk
Feeder
Inter-regional
Circular

The information acquired from the BMS and transportation cards is analyzed

by the Transport Information Analysis System (TIAS).



Making it possible for more efficient operation and management, such as increasing or adjusting bus lines.

Such information related to the operation of buses and road traffic is all managed here at the TOPIS.

TOPIS is the control tower for Seoul city's transportation system, responsible for communicating with related agencies and providing traffic information.

Mr. Mayor, I think Shangri La really needs something like TOPIS!

Hmm… I think we need to think carefully about that.

Our mayor is indeed the super cautious type, isn't he?

But we do have to consider the realistic situation of Shangri La.

Mr. Mayor, if you are willing to have a policy sharing partnership with Seoul city, we will provide you with the knowhow on the complete process beginning from forming a policy to operations…

…and we will be happy to assist you address Shangri La's transportation problems.

I feel relieved that you would say so.

But we cannot disregard the subway network

if we were to prepare for the transportation needs of the rapidly increasing urban population

At the moment in Shangri La, we have trams which may look romantic.

But they fall short in terms of traffic volume and speed.

Seoul also had streetcars that started the operation in 1899, but were discontinued for the same reasons.

Whoa.. You have up to 9 lines?

Yes, we started from the 70s to 2000, consecutively opening the lines in a 30year span.

Today, we have one of the world's largest metro networks, transporting approximately 7 million people daily, and 2.5 billion annually.

Hmm.. So urbanization is a threat and an opportunity.

Now if you touch in your transportation card that you received at the ticket gate, you can transfer within 30 min.

It's a pity that we couldn't get the transfer discount! We took too much time observing the TOPIS center!

There is a similar all-source intelligence center for the subway. Would you care to take a look?



I love that it has a screen door!

It looks clean and safe.

This Korean-type safety door (PSD: platform screen door) uses patent technology developed by the Seoul Metropolitan Rapid Transit Corporation, and it is installed in all stations.

Not only has it reduced dust, noise, and the recurrence of accidents, but it is also very effective in lowering energy loss for heating and cooling.

It's definitely something that you would need in a subway station.

The continuous monitoring and efficient control system of the intelligence center

also adds to making a fast and safe Seoul metro.

Whew...but I can't imagine how long it would take to build such a subway network...

It definitely wasn't easy for Seoul either because there are so many geographical obstacles such as hills and rivers.

But that has rather served as an opportunity for us to increase knowhow on building subway systems.

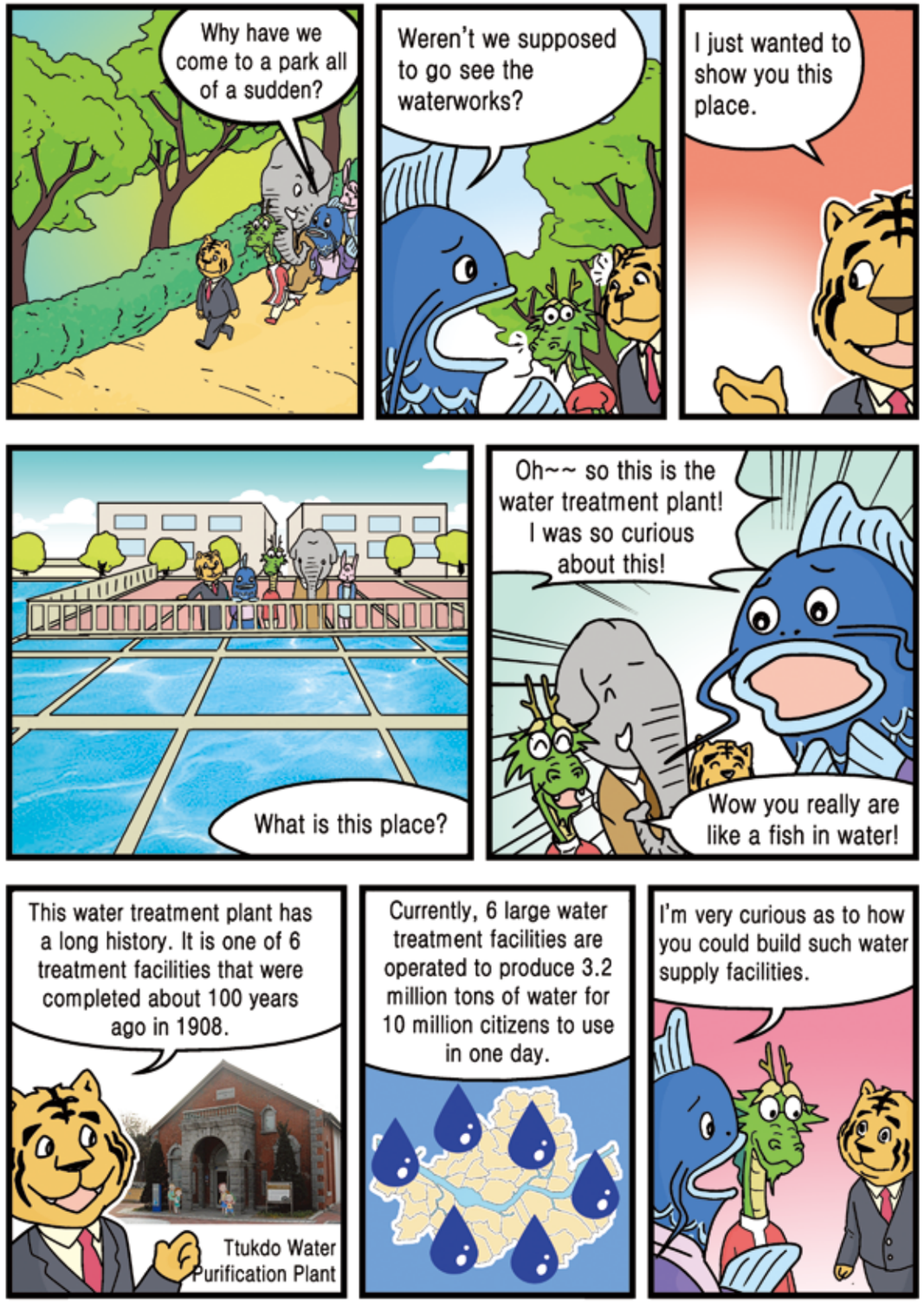
Various digging methods according to the conditions at the construction site

The B2S method that is fast and safe

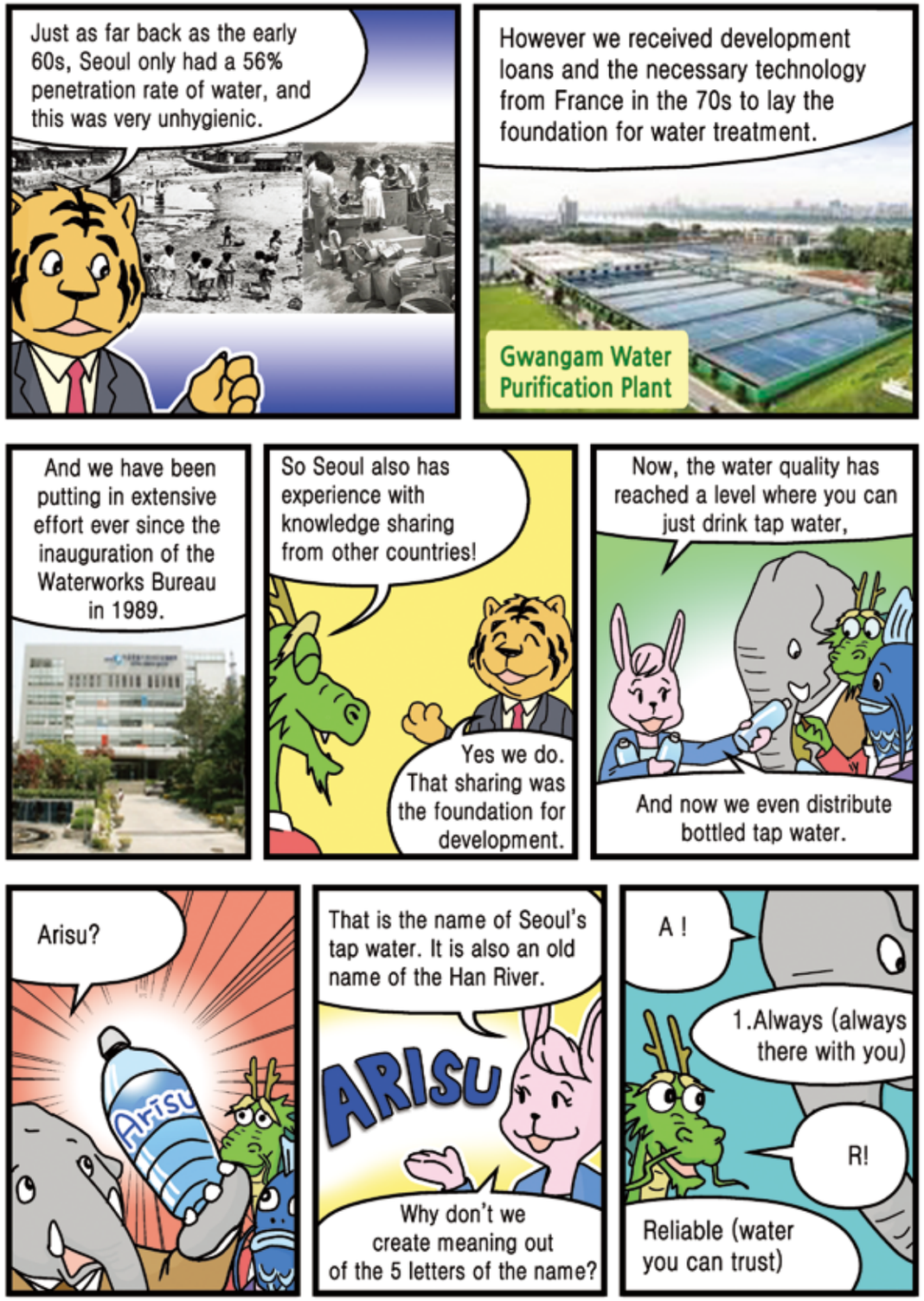
eco-friendly shield TBM method

aseismic designs

If we tackle the challenges together, I think that it will not be difficult to introduce subway systems in Shangri La.


Why have we come to a park all of a sudden?
Weren't we supposed to go see the waterworks?
I just wanted to show you this place.
What is this place?
Oh~~ so this is the water treatment plant! I was so curious about this!
Wow you really are like a fish in water!
This water treatment plant has a long history. It is one of 6 treatment facilities that were completed about 100 years ago in 1908.
Ttukdo Water Purification Plant
Currently, 6 large water treatment facilities are operated to produce 3.2 million tons of water for 10 million citizens to use in one day.
I'm very curious as to how you could build such water supply facilities.




Just as far back as the early 60s, Seoul only had a 56% penetration rate of water, and this was very unhygienic.
However we received development loans and the necessary technology from France in the 70s to lay the foundation for water treatment.
Gwangam Water Purification Plant
And we have been putting in extensive effort ever since the inauguration of the Waterworks Bureau in 1989.
So Seoul also has experience with knowledge sharing from other countries!
Yes we do. That sharing was the foundation for development.
Now, the water quality has reached a level where you can just drink tap water,
And now we even distribute bottled tap water.
Arisu?
Arisu
That is the name of Seoul's tap water. It is also an old name of the Han River.
ARISU
Why don't we create meaning out of the 5 letters of the name?
A !
1.Always (always there with you)
R!
Reliable (water you can trust)

I !

Innovative (continously innovating)

S !

Smart (uses smart technology)

U!

User-friendly (customer centered) ARISU!

I'm most curious about your efforts on making reliable water.

First of all, ARISU operates a 'Han River Environment Monitor Group' to control and manage the raw water.

We also researched and developed many innovative methods in the water treatment process.

Advanced treatment

Membrane filtration treatment

Chlorine re-dispersion/ injection system

However clean the water may be, it would be no use with decrepit water pipes, and cracked pipes...

So the water pipe network was refurbished and taps were widely installed to ensure that citizens always had access to clean water.

IT technology was introduced in the management of water supply to easily forecast demand, manage risk, and communicate with the public.

Waterworks GIS DB

ARISU all-source intelligence system

Seoul Water Now system,

Mobile ARISU

So this is the smart and user-friendly aspect of ARISU!



Do you think we could apply such technology and knowhow in Shangri La city?

Shangri La first needs to build its water supply system, but there are difficulties due to the high altitude.

Seoul city already has experience participating in a project to improve the water system in such a city.

By applying all our knowhow from past projects,

we will be eager to assist you from consulting, feasibility testing, to introducing equipment.

Once we successfully build the water infrastructure, I hope we can get assistance on management based on smart technology.

TAXI

It is apparent that Seoul city has effectively applied IT in many areas of its administration.

As expected, Seoul truly is a leading city in the e-government area.

In the long term, Shangri La must also prepare to transition into an information-based society.

So it seems that you have a lot of interest on the e-government system?

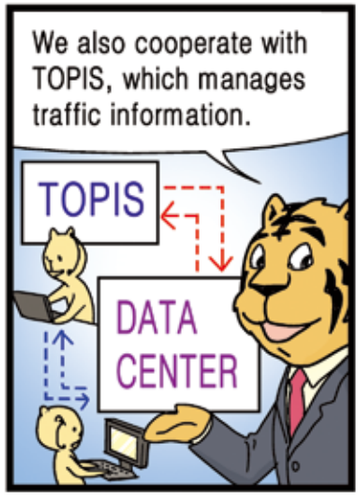
Yes.

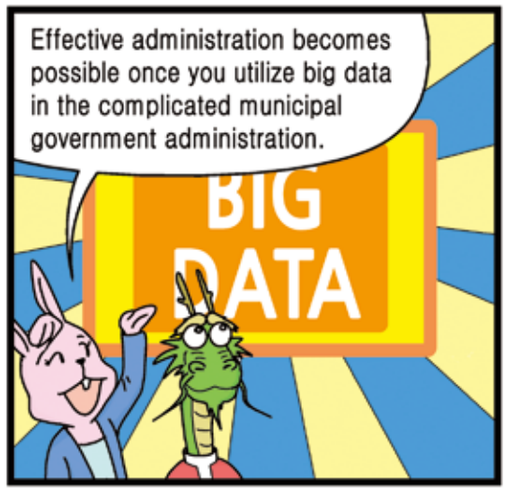
I wasn't able to prepare for urbanization in advance, but I want to be prepared for the information age.

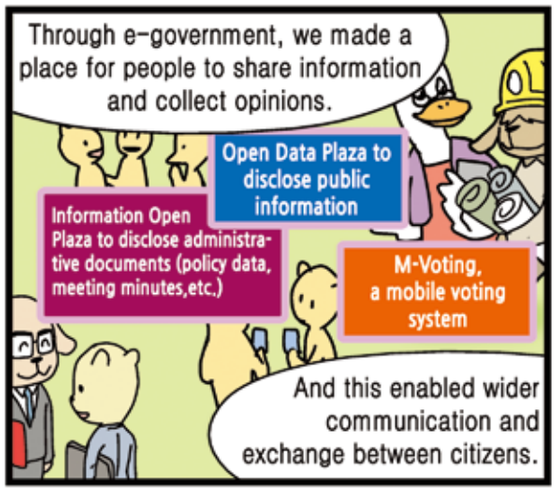
Then let's visit the Seoul Data Center.

SEOUL DATA CENTER

This is the heart of Seoul's e-government system, the Seoul Data Center.
This is where we operate and manage all information systems related to Seoul city. Here we have a number of equipment and facilities.


We also cooperate with TOPIS, which manages traffic information.
TOPIS
DATA CENTER


Effective administration becomes possible once you utilize big data in the complicated municipal government administration.
BIG DATA

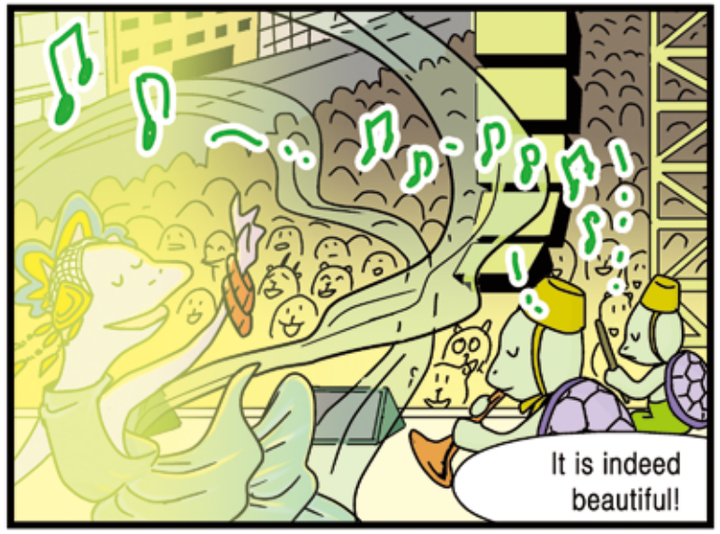

Through e-government, we made a place for people to share information and collect opinions.
Open Data Plaza to disclose public information
Information Open Plaza to disclose administrative documents (policy data, meeting minutes,etc.)
M-Voting, a mobile voting system
And this enabled wider communication and exchange between citizens.

If this e-government technology were to be shared with other countries, how would that come about?
We are sharing the information and technology through WeGO

Because you can really get a lot of help through this international network from consulting and professional education, to getting a self-diagnosis toolkit for the urban e-government.
WeGO
World e-Governments Organization of Cities and Local Governments
WeGO is an international intra-city e-government consultative group formed by Seoul city.

Other international organizations in Seoul, such as CITYNET, can connect your city with transportation, water, infrastructure and other resources!
CITYNET
CITYNET is an International Network that connects cities, organizations, and the private sector to build sustainable and resilient cities.

We've completely talked through the ride to the festival! Here we are!
The Shangri La traditional culture performance will start any minute now~


It is indeed beautiful!

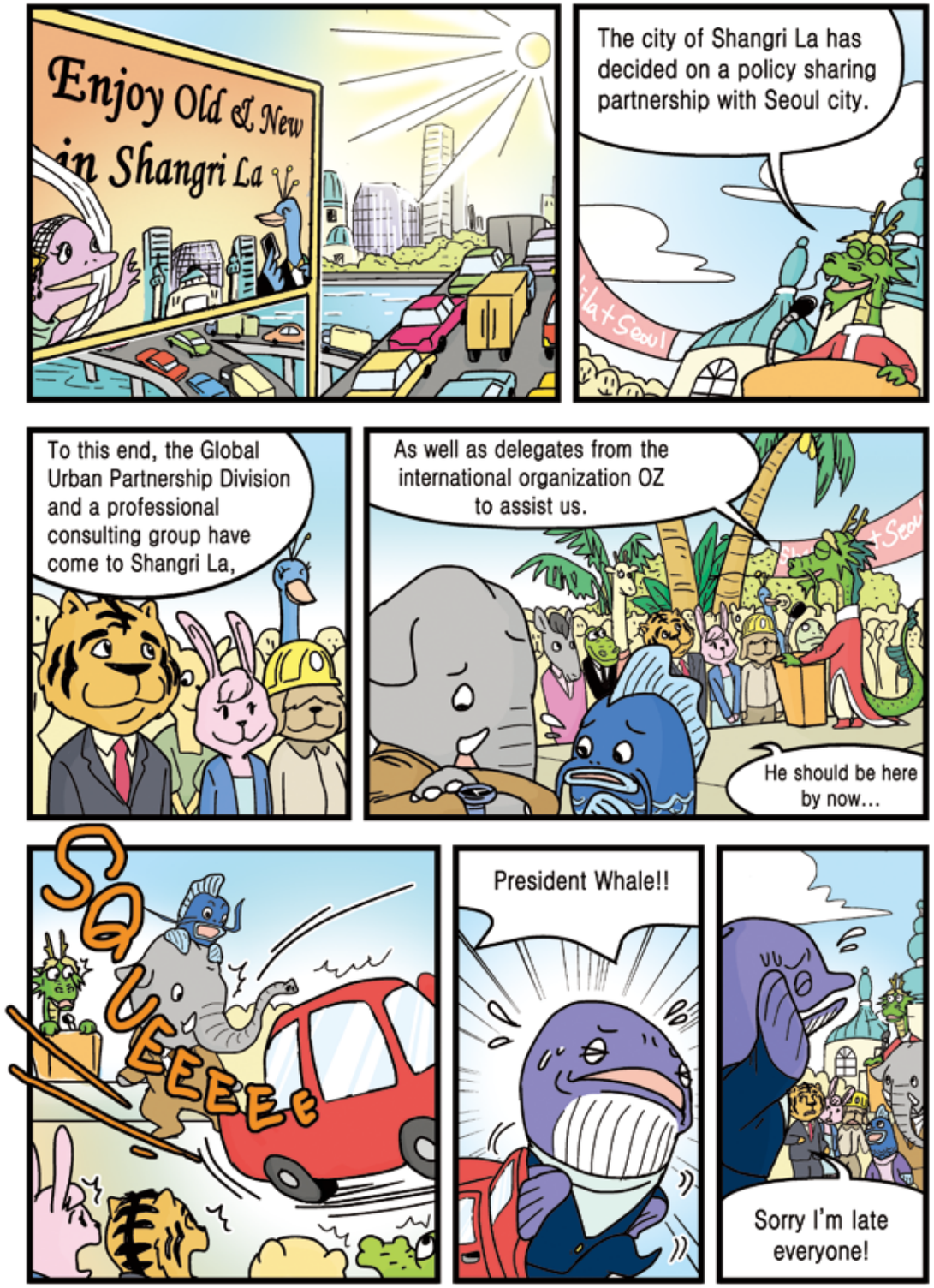
Shangri La's traditional culture is outstanding in itself, but we should really learn how they preserve and advance the culture.

Seoul city has designated each month of the year as the month of foreign cities to promote exchange between countries,
Day
what do you say to expanding cultural exchange between our two cities by designating June as the 'Month of Shangri La'?

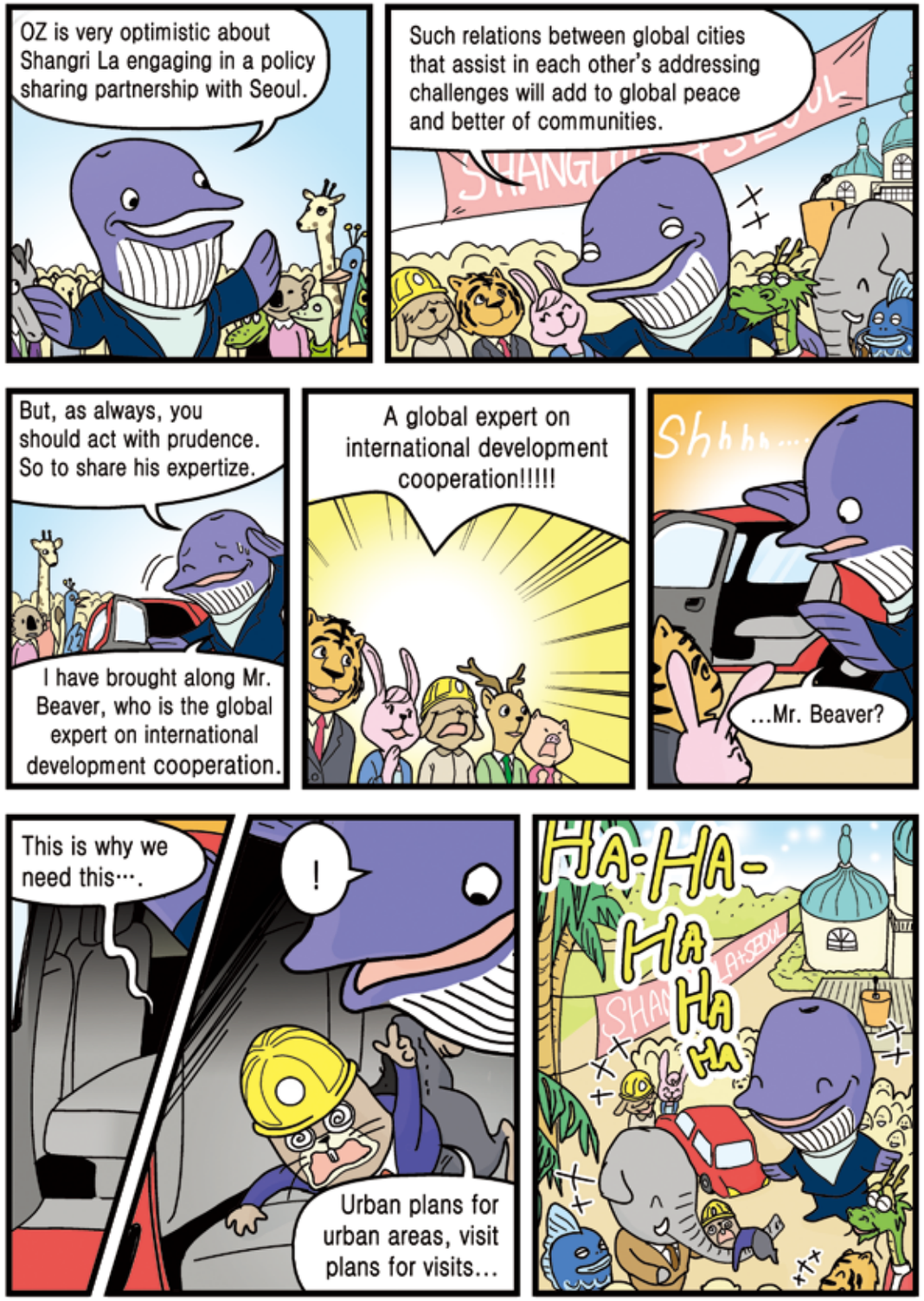
That sound like a great idea!
Wow!
This has got to be a record! Our mayor making such a quick decision!

I had my share of doubts, but I can see now that it was a good decision to come visit Seoul.

I hope Seoul and Shangri La can maintain strong relations for mutual happiness and development.


Enjoy Old & New in Shangri La
The city of Shangri La has decided on a policy sharing partnership with Seoul city.
To this end, the Global Urban Partnership Division and a professional consulting group have come to Shangri La,
As well as delegates from the international organization OZ to assist us.
He should be here by now…
SQUEEEEe
President Whale!!
Sorry I'm late everyone!




OZ is very optimistic about Shangri La engaging in a policy sharing partnership with Seoul.
Such relations between global cities that assist in each other's addressing challenges will add to global peace and better of communities.
But, as always, you should act with prudence. So to share his expertize.
I have brought along Mr. Beaver, who is the global expert on international development cooperation.
A global expert on international development cooperation!!!!!
Shhhh….
…Mr. Beaver?
This is why we need this….
!
Urban plans for urban areas, visit plans for visits…
HA-HA-HA HA HA

# Why Seoul Solution?
## (Seoul Solution Archive)

Seoul city has a remarkable experience of developing into one of the most sustainable cities in the world from being one of the poorest in just a matter of 50 years. Urbanization planning, as a means to improve sustainability, contributed greatly to such development.

The world is experiencing urbanization at an extremely rapid pace. The global urban population is projected to grow from 3.6 billion in 2010 to 6.3 billion in 2050, and it is expected that the emerging countries will be responsible for most of this urban population growth(UN , 2012). This translates into an urban population increase of 5 million every month.

Amid such urbanization on a global scale, Seoul's experience of handling rapid urbanization has more implications compared to the experiences and urban planning strategies of the more advanced cities in the western countries.

*First,* if cities in emerging countries emulate the development model of the western countries focused on low-density, automobile-based urban development, the world would not be sustainable due to environment problems and lack of resources. So emerging cities must become eco-friendly and sustainable, unlike the already advanced western cities. Seoul city is an efficient and eco-friendly city in terms of carbon emission and energy consumption.

*Second,* in retrospect, western societies went through urbanization through industrialization, as the cities developed into manufacturing based cities. However, in the case of Seoul as well as many emerging country cities, people first moved to the city without industrialization setting in. As the city expands rapidly, it is faced with a complex set of issues such as securing a strong economic foundation for the urban dwellers as well as sound living environment amidst unstable socio-economic conditions. Seoul is the only city that achieved sustainable growth in the economic, social, and environmental field despite the lack of resources and funding.

*Third,* in terms of methodology, western cities seek to understand the interested parties and analyze their needs to build a city together. However, with the rapid expansion of urban population in which hundreds of thousands of people each year flock to cities each year, it is difficult to categorize the interested parties, and in many cases it is close to impossible to fully determine those working in the informal sector. Instead of spending years on research for planning, it is important to take prompt action to prevent the deterioration of quality of life of the urban dwellers. In contrast, Seoul has realized its urban vision through future-oriented, preemptive urban planning thanks to the devotion of leaders, experts, and public officials.

The 'urbanization' planning strategy to respond to the rapid urbanization needs of today must be different from the 'urban' planning of the western societies. It is important to devise a forward-thinking and preemptive urbanization strategy and promptly implement the plan. An urbanization planning strategy distinct from urban planning will be instrumental for the cities in emerging countries in tackling various issues that arise from rapid urbanization. Also, in the coming years, such strategy will have much implications for other cities around the world seeking to build more sustainable cities.

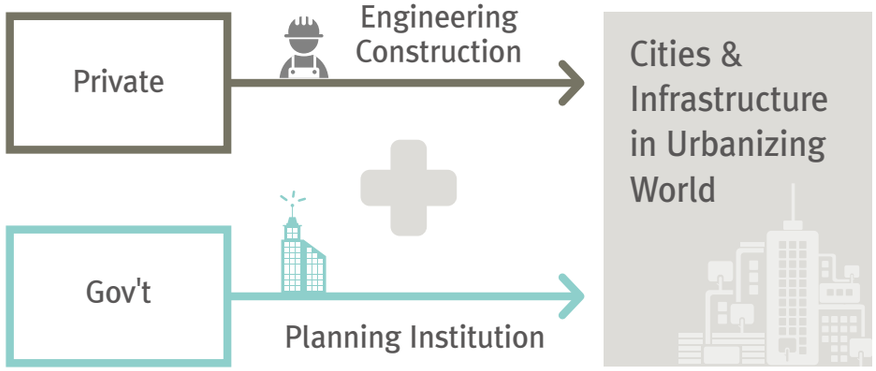
> "Seoul stands ready to cooperate with global cities to enhance the quality of life for all the citizens and build an economically prosperous and environmentally sustainable city. Going forward, Seoul city government will give higher priority to projects in partnership with emerging cities undergoing rapid urbanization in order to share Seoul's experiences and know-how."

## Q&A

# What is special about Seoul's policies that draw attention from cities in the developing countries?

- Seoul is the only city which has recently overcome the extreme poverty and learned hands-on experiences in Sustainable Growth through transforming from one of poor cities to one of the high quality cities.

- Seoul is ready to share its experiences with all the cities who want growth and sustainability.




**Envisioning – Will – Action**

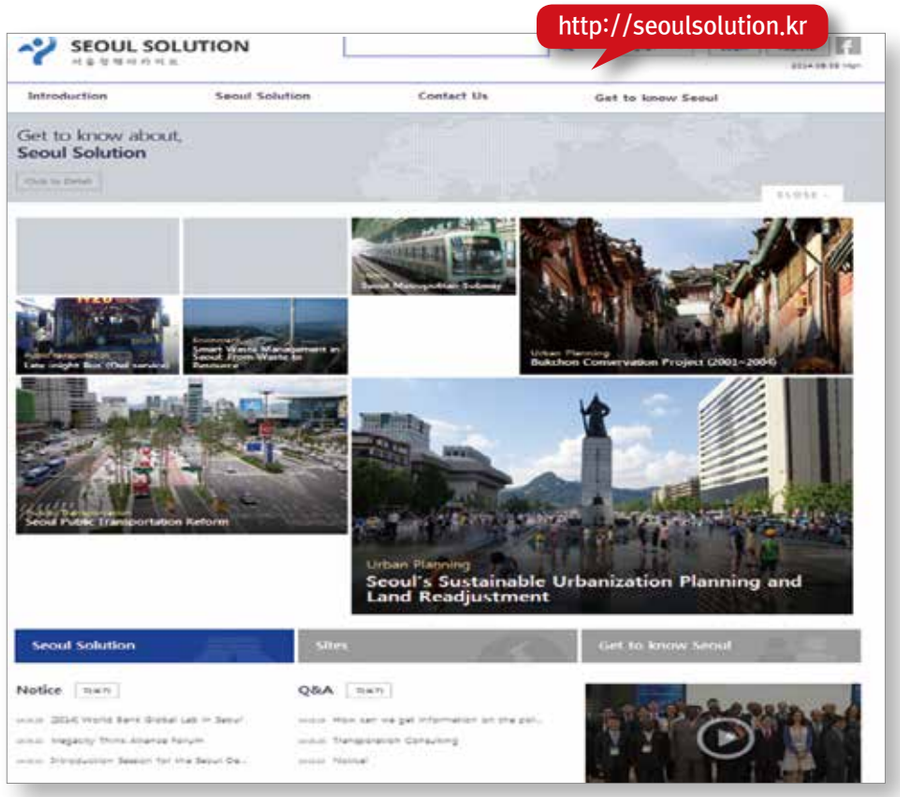
Seoul is ready to collaborate with your cities.



## Q&A

# How can other cities get information on the policy sharing projects?

- Introduction on the policy sharing project and global cities, Seoul city's outstanding policies, support on site visits applied with such policies, and overall information on the public-private cooperation projects will be provided through the [Seoul City Outstanding Policies Public-Private Cooperation for Overseas Expansion] website.

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Policy Sharing
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