## Appendix 1
### Participants of Each Thematic Meeting

**No.1 “Showcase of best practice of smart city management”**

Moderator: Ms. Mary Jane Crisanto Ortega (Special Advisor for Y-PORT Center)

<table>
<thead>
<tr>
<th>City/Organization</th>
<th>Title</th>
<th>Name</th>
</tr>
</thead>
<tbody>
<tr>
<td>Da Nang People’s Committee</td>
<td>Vice Chairman</td>
<td>Mr. Dung Viet Dang</td>
</tr>
<tr>
<td>Hue City People’s Committee</td>
<td>Deputy Director, Hue City Water Environment Improvement Project Management Unit</td>
<td>Mr. Quang Minh Do</td>
</tr>
<tr>
<td>Cabinet Office, Japan</td>
<td>Counsellor, Office for Promotion of Overcoming Population Decline and Vitalizing Local Economy in Japan</td>
<td>Mr. Masaaki Takabatake</td>
</tr>
<tr>
<td>Ministry of Economy, Trade and Industry, Japan</td>
<td>Deputy Director, Recycling Promotion Division</td>
<td>Mr. Hideyuki Umeda</td>
</tr>
<tr>
<td>UN-HABITAT</td>
<td>Regional Office for Asia and the Pacific</td>
<td>Mr. Laxman Perera</td>
</tr>
<tr>
<td>FINETECH CO., LTD.</td>
<td>President &amp; CEO</td>
<td>Mr. Motoyuki Okada</td>
</tr>
<tr>
<td>Kathmandu Metropolitan City Office</td>
<td>Chief and Executive Officer, Chief and Executive Officer's Office,</td>
<td>Mr. Rudra Singh Tamang</td>
</tr>
<tr>
<td>Province of Cebu</td>
<td>Vice-Chair, MCDCB Prod Executive Committee</td>
<td>Ms. Dominica Bardinhas Chua</td>
</tr>
<tr>
<td>Consolacion</td>
<td>Mayor</td>
<td>Ms. Teresa Pepito Alegado</td>
</tr>
<tr>
<td>No</td>
<td>City</td>
<td>Position</td>
</tr>
<tr>
<td>----</td>
<td>--------------</td>
<td>--------------------------------------------------------------------------</td>
</tr>
<tr>
<td>10</td>
<td>Andhra Pradesh Government</td>
<td>Principal Secretary, Municipal Administration and Urban Development</td>
</tr>
<tr>
<td>11</td>
<td>Phnom Penh</td>
<td>Deputy Director, Administration</td>
</tr>
<tr>
<td>12</td>
<td>Bhopal</td>
<td>Deputy Director, UADD, Urban Administration &amp; Development Department GoMP</td>
</tr>
<tr>
<td>13</td>
<td>Tunis</td>
<td>Director General, Ministry of Local Affairs and the Environment</td>
</tr>
</tbody>
</table>
City to city collaboration for sustainable urban development

Da Nang People’s Committee
City of Yokohama
### Overview of Da Nang city

<table>
<thead>
<tr>
<th>INDICATORS (2015)</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Area (km²)</td>
<td>1,285</td>
</tr>
<tr>
<td>Population</td>
<td>1,028,838</td>
</tr>
<tr>
<td>Labor Force</td>
<td>53%</td>
</tr>
<tr>
<td>GDP (billion US$)</td>
<td>2.9</td>
</tr>
<tr>
<td>GDP per capita (US$)</td>
<td>2,825</td>
</tr>
<tr>
<td>FDI (Up to 2015)</td>
<td>383 projects, 3.674 billion USD</td>
</tr>
<tr>
<td>Number of Visitors/Year</td>
<td>652,000 (International Arrivals) 3,012,000 (Domestic Arrivals)</td>
</tr>
<tr>
<td>Provincial Competitiveness Index PCI (2015)</td>
<td>1</td>
</tr>
</tbody>
</table>
Framework of City to City Collaboration

- Government of Vietnam
- Da Nang People’s Committee
- Local businesses
- Cooperative agreement between the cities
- Relationship between the National Government
- Private sector and academic sector
- City of Yokohama
- Relationship between businesses and academic organizations
- Government of Japan

Promote sustainable urban development
Achieved results

- MOU Signing Ceremony on Technical Cooperation between Da Nang PC (2016)
- Applying JCM model to installation of high efficiency pumps at DAWACO (2016)
- Study for Lien Chieu Port Development (2016)
Tentative Cooperation in the Future
Welcome to my presentation

Presentator: DO MINH QUANG
Nationality: Vietnam
Theme: Best practice of smart city management

A smart city:
* Sustainable development
* Innovated development
* Competitiveness
* Environment protection
Holding conferences relating to environment every year

* Share experiences
* Exchange information
* Learned to neighbouring cities in a similar situation
Good practices of city to city collaboration

Hue urban water environment improvement project funded by JICA

Have learned so many experiences from other Project:
* Avoid problems
* Apply advanced technology
* Efficiency
* Quality
* Resonable cost
Thanks for your attention!
City to city cooperation by the "FutureCity" Initiative

Masaaki Takabatake
Counselor, Office for promotion of Overcoming Population Decline and Vitalizing Local Economy in Japan, Cabinet Office
Basic Concept of “FutureCity” Initiative

Intensive investment

Goods
Human resource
Capital
Regulatory reforms

“FutureCity”

Best practices (domestic and overseas)

Technology
Socioeconomic system
Service
City planning
Business models

Improve Quality of Life

Disseminate and propagate successful cases
“FutureCity” and Eco-model City

Low-carbon society
(Renewable energy, organization of forest land, deployment of local resources)

Environmental value
Social value
Economic value

FutureCities
11 municipalities and communities at present

Selection through evaluation

Eco-model Cities
23 municipalities at present

Support each city’s autonomous initiative

Create pioneering cases and promote them internationally

Activities autonomously pursued by the municipalities aiming to adopt the FutureCity, Eco-model City

Promotion Council for the FutureCity Initiative
Develop a platform for international intelligence

Platforms for Exchanges

Collaboration with domestic and global networks
The 6th International Forum on “FutureCity” Initiative (@ Yokohama)

8 countries, participated in about 800 people
Japan’s Activities toward Sound Material Cycle Society and Expectation for the Roll of Cities

Ministry of Economy, Trade and Industry
Recycling Promotion Division
Examples of Industrial Promotion Measures: Eco-town Project

- Stimulating environmental industry and promoting cooperation among industries with utilizing industry accumulation in each region
  → Promoting innovation

Starting year of the measure: FY 1997
No. of region: 26 regions

Examples of cooperation among industries (in Tokyo)

Amount accepted: 450,000~680,000t (of which amount generated in Metropolitan Tokyo: 290,000~520,000t)

Super Eco Town

- Recycling of food residue into animal feed
  - Aflol Ltd.

- Recycling of food residue into biogas
  - Bioenergy

- Recycling facility for construction and demolition waste
  - Recycle Pear Co., Ltd.

- Recycling facility for electrical, electronic, and IT devices
  - Re-Tom Corporation

- Recycling facility for construction and demolition waste
  - Takatori Co., Ltd.

- Recycling facility for electrical, electronic, and IT devices
  - Future Ecology

Minerals: Subbase coarse material for roads, soil additives
Fibers: Fiber raw materials, felt
Wood chips: Fuel chips, compact
RFF raw materials
Rubble: Recycled crushed stone and sand
Plastics: Plastic, wood chips, etc.
Raw materials for papermaking
Glass: Raw material for public-works projects, glass fibers, artificial sand
Food residue: Synthetic animal feed
Sludge: Improved soils
Consumer electronics
Metals: Valuable metals such as gold, silver, copper, steel, aluminum and stainless steel
Examples of Inappropriate Treatments in Overseas

- Environmental pollution, health damage and loss of resources have happened by inappropriate treatment including open incineration.

- The system is needed in which wastes are appropriately treated and resources are effectively collected.

Waste treatment led by informal sector

\[
\text{Income by selling collected material/Cost of collecting} > 1 \\
\text{Cost of security and environmental conservation/Cost of intermediate process} = \text{small}
\]

There are scavenger and informal sector differing from developed countries.
Building a Material-Cycle System with Utilizing the Cooperation between Local Governments

Proposing programs of waste management and recycling, depending on the needs by municipalities in Asian countries. Those programs will be provided by combining know-how of Japanese local government with high-technologies of private companies.

- Insufficient waste management and recycling system
- Shortages of operational know-how and human resources

Expected results

- Improving quality of recycling and fostering business environment through building a material-cycle system

[Hyogo-prefecture=Cantong-province] 2007～2009
[Kitakyushu-city=Tianjin-city] 2008～2009
[Kawasaki-city=Shanghai-city] 2008～2009
[Kitakyushu-city=Rayong-Proinice, Thailand] 2009～2010
[Kitakyushu-city=Surat-city, India] 2009～2010
[Kitakyushu-city=Hai Phong-city etc., Vietnam] 2014～
Demonstration Project for Introducing an Energy-Saving Resource Circulation System in Asia
2016 budget: 150 Million yen (New)

Object and summary of the project
- We will implement a demonstration project aiming for an Energy-Saving Resource Circulation System in Asia to promote a stable supply of resources and energies and to reduce the greenhouse gas emissions in the resource recycling.
- Specifically, we will provide know-how to reduce environmental loads and carry out efforts with demonstration effects and visualize their effectiveness together with the recipient countries, for example, by introducing policy tools or technical system which were implemented before by Japanese local governments, so that an appropriate system would be constructed by recipient countries and their local governments. Therefore, we will implement a demonstration project where institution, technology and system are integrated, based on policy dialogues or feasibility studies.
- Simultaneously, in Japan, we promote a smooth expansion of our recycling system in Asia, by supporting demonstration projects or dealing with international standards which seek to streamline or sophisticate resource recycling by arteriovenous cooperation.

Outcome objectives
- 5 years project from 2016 to 2020 which seeks to introduce 3 systems in Asian countries within 5 years after the end of the project.

Conditions (target, subject acts, subsidy rate, etc.)

<table>
<thead>
<tr>
<th>Country</th>
<th>Grants</th>
<th>NEDO</th>
<th>Private companie s, etc.</th>
</tr>
</thead>
</table>

Project image

Establishment of a proper energy-saving grand resource recycling system in Asia
Back-flow of useful materials to Japan
Promotion of energy-saving and low-carbonization
(Assuming to expand in Asia)
System building
Support from the system construction phase in each country
Promotion of energy-saving and low-carbonization
(international efficient use of recyclable resources)

Policy dialogue
FS investigation (narrowing down)
Overseas demonstration (Soft-hard unified demonstration)

System Construction and introduction (Outcome)
- Resource saving
- Energy saving
- Proper and stable resource recycling
- Support for entry into Asian market

Feed back or results
interior demonstration (Construction of arteriovenous integrated network) (Accumulation and sharing of achieved results)
Aid for construction of Resource Recycling society in future Asian countries

- Promote the visibility in system building support for the administrative sector.
- Providing solutions which fit to the situation of each cities.

Developing the Sustainability Index Tool

- Providing methodologies to understand the current situation and to resolve the problems

(appeal for other countries)

Recipient countries should perceive the current situation and appeal to attract investment by disclosing index values, etc.

Development and Introduction of Systems

- Formalization of informal sectors
- Establishment of appropriate waste collecting route
- Improvement of technologies for treatment and recycle of waste
- Low carbon by promotion of recycle
- Resource saving and low carbon by providing recyclable resources

Becoming the APEC Self Fund Project

Endorsed by the SOM held on August 2016. Discussed in the SOM Friends of the Chair on Urbanization.

Construction of Proper and stable resource recycling system in Asia

Resource saving and energy saving in Asia
Global commitment to sustainable urbanization

New Urban Agenda - a collective vision and a political commitment to promote and realize sustainable urban development

leverage the key role of cities and human settlements as drivers
THE TRANSFORMATIVE COMMITMENTS FOR SUSTAINABLE URBAN DEVELOPMENT

• Social Inclusion and ending poverty
• Sustainable and inclusive urban prosperity and opportunities for all
• Environmentally sustainable and resilient
• Building the urban governance structure: establishing supportive framework
• Planning and managing urban spatial development
commit to adopt a **smart city approach**, which makes use of opportunities from

- digitalization,
- clean energy and technologies,
- innovative transport technologies,

thus **providing options for** inhabitants to make more **environmentally friendly choices** and boost **sustainable economic growth** and enabling cities to improve their service delivery.
decentralized, and city-to-city cooperation, as appropriate, to contribute to sustainable urban development, developing capacities and fostering exchanges of urban solutions and mutual learning.
5th Asia Smart City Conference

SUSTAINABLE DEVELOPMENT GOAL 11
Make cities and human settlements inclusive, safe, resilient and sustainable

11.1 Housing, Slums, Services
- e-government solutions

11.2 Transport (incl Public T)
- Smart urban transportation

11.3 Urban Planning
- ICT transforms society

11.4 Cultural & Natural Heritage
- open communication on heritage preservation

11.5 Disaster Risk Reduction
- ICT-enabled resilient systems

11.6 Impact on Environment
- ICT-enabled monitoring and products

11.7 Safe Public Space
- Smart security and monitoring systems

Laxman Perera
“Smart Green City Project” (Low-carbon Technology for Sustainable Growth)

The 5th Asia Smart City Conference

Going for Green

www.finetech.co.jp

November 18, 2016
Yokohama Urban Smart Solution Alliance

Over 10 leading private SMEs in Yokohama, including FINETECH, form up an alliance under the roof of Y-PORT CENTER to:

- Provide best available smart solutions
- Establish a showcase of smart urban solutions
- Serve and promote as one-stop shop with SME’s knowledge and technologies to cities in Asia and the world.
### Key Member Companies of Y-PORT CENTER

- **10 Leading Private SMEs and 4 Major Firms**
- **The International City-to-City Cooperation Activities**

<table>
<thead>
<tr>
<th>Company name</th>
<th>Logo</th>
<th>Company name</th>
<th>Logo</th>
<th>Company name</th>
<th>Logo</th>
</tr>
</thead>
<tbody>
<tr>
<td>Finetech Co., Ltd</td>
<td><img src="image1.png" alt="Finetech Logo" /></td>
<td>Interaction Corp (Listed Company)</td>
<td><img src="image2.png" alt="Interaction Logo" /></td>
<td>Ueno Green Solutions Co., Ltd</td>
<td><img src="image3.png" alt="Ueno Green Solutions Logo" /></td>
</tr>
<tr>
<td>CARBON FREE CONSULTING</td>
<td><img src="image4.png" alt="Carbon Free Logo" /></td>
<td>CTC Co., Ltd</td>
<td><img src="image5.png" alt="CTC Logo" /></td>
<td>Suidou Technical Service Co., Ltd</td>
<td><img src="image6.png" alt="Suidou Technical Service Logo" /></td>
</tr>
<tr>
<td>Mansei Recycle Systems Co., Ltd</td>
<td><img src="image7.png" alt="Mansei Logo" /></td>
<td>Unimation System INC</td>
<td><img src="image8.png" alt="Unimation Logo" /></td>
<td>Major Firms</td>
<td><img src="image9.png" alt="JGC Logo" /></td>
</tr>
<tr>
<td>Osumi Co., Ltd</td>
<td><img src="image10.png" alt="Osumi Logo" /></td>
<td>Major Firms</td>
<td><img src="image11.png" alt="HITACHI / JCC Logo" /></td>
<td>AMCON INC</td>
<td><img src="image12.png" alt="AMCON Logo" /></td>
</tr>
<tr>
<td>HITACHI / JCC</td>
<td><img src="image13.png" alt="HITACHI Logo" /></td>
<td>CHIYODA / JFE ENG</td>
<td><img src="image14.png" alt="CHIYODA Logo" /></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
Inter-city Collaboration by Yokohama City

Cities collaborated with Yokohama City

- **Philippine:** Cebu City
- **Vietnam:** Danang City
- **Thailand:** Bangkok Metropolitan Administration (BMA)
- **Indonesia:** Batam City

**Business Matching in Bangkok**
- JCM and NEDO FS in Thai
  - Approved FY2015

**Business Meeting in Batam city**
- JCM FS in Batam
  - Approved FY2015

**JCM Financial Support Scheme in Thai**
- Approved FY2016

**JCM FS Scheme in Batam**
- Approved FY2016
Basic Concept of the Joint Credit Mechanism (JCM) cont’d

**Leading Country**

JAPAN (Government)

- Contributed credits are utilized to achieve Japan’s GHG emission reduction target
- ✓ Low-carbon Project Proposal
- ✓ Project Deployment with MRV
- ✓ Technology Implementation
- ✓ Technology Handover

**HOST Countries**

Thailand (Government)

- JCM Projects
- GHG reduction & avoidance through MRV methodology

**Credits**

- Partnersing company in Thailand (Designated by FINETECH)

**JCM Supporting Platform**

- OECC Low-carbon Mission
- Y-Port Joint Initiative
- JCM Supporting Platform
- Finetech

**Contributed credits** are utilized to achieve Japan’s GHG emission reduction target.
JCM Project in Thailand  2MW (rooftop solar) with AEMS

- FINETECH’s Key Featuring Technology for Smart City Creation

>>>>> Advance Energy Management System (AEMS)

- Utilize Renewable Energy in Factory Site
- Utilize Renewable Energy in Regional Community
  In collaboration with the Grid Electricity

Paint Factory Site
Smart Green Park (Trademark of FINETECH)

- Micro-Hydro Power
- Wind Power
- Biofuel Plant (Planned Site)
- Biomass Power
- Solar Power

FINETECH Co., Ltd. All Rights Reserved, Copyright ©
“Smart Green Island Strategy and Future City Concept” in Batam

- Smart Renewable Energy
- Smart Traffic & Transportation
- Smart Working Place
- Smart Urban Grid
- Smart Industrial Park
Smart City Practices in Kathmandu

Presented by:
Rudra Singh Tamang
Chief Executive Officer
Kathmandu Metropolitan City Office
Yokohama Japan, 16-18th Nov 2016
Outline of the Presentation

• Introduction of Kathmandu Metropolitan City Office (KMC)
• Smart City Policy in KMC
• Smart City Practices in KMC
• Key Issues and Challenges
• Way Forward
Introduction of (KMC)

• Historic and cultural city with 2000 years
• Largest Local Authority in Nepal
• Capital city
• 1.1 million Population
• 50.0 sq.km
• 35 wards offices
• 11 Departments
• 2085 employee
Smart City Policy in KMC

• The government of Nepal has been lunched new ICT policy 2015.
• KMC has adopted the policy, highly emphasis for the development of ICT sector.
• ICT as a tool developing economic growth and improving the quality of life of the citizens.
• The policy intends to promote platform neutral services in e-governance
Smart City Practices in KMC

• MARS (Municipal Administration & Revenue System)
• EBPS (Electronic Building Permit System)
• VERS (Vital Registration System)
Key Issues and Challenges

- Less competent human resource
- Lack of awareness and Knowledge of People
- Insufficient Infrastructure in ICT
- Adopting new technology Institutional arrangements
- Lack of a coherent policy framework
- Internet facility and affordability
- Privacy and security
Way Forward : KMC as a Smart City

- Smart City and Smart Citizen: *Two peas in a pod!*
- ICT innovation and co-creation
- Urban participation, Involvement and social cohesion
- Invest on social capital and innovative communication for sustainable development
- Optimal relationships between available resources, technology, communities and services
- Reconnection of people: citizens become partly responsible
- Citizens fully inclusive and innovative
Thank You !
MCDCB
Platform for City to City Collaboration

5th Asia Smart City Conference
Yokohama, Japan

November 18, 2016
Best Practices in Smart City Management
Platform for City to City Collaboration

MEGA CEBU

Making Waves

Wholesome, Advanced, Vibrant, Equitable, Sustainable
Platform for City to City Collaboration

Find

Build

Strengthen

Assets & Challenges

Interests & Directions

Aspirations & Vision

Information, Knowledge & Understanding

Development Strategies & Plans

Connections

Metro Cebu Development & Coordinating Board (MCDCB)
Platform for City to City Collaboration

Challenges & Thrusts

- Integrated Development & Spatial Planning
- Traffic & Transport Management
- Solid Waste Management
- Water Supply, Septage & Sewerage Management
- Disaster Risk Reduction & Management

Five Focal Themes
Platform for City to City Collaboration

Challenges & Thrusts

Integrated Development & Spatial Planning
Traffic & Transport Management
Solid Waste Management
Water Supply, Septage & Sewerage Management
Disaster Risk Reduction & Management

Five Focal Themes
Waze's 2016 Driver Satisfaction Index
SATISFYING (10) TO MISERABLE (1)

WORST URBAN AREAS IN THE WORLD TO BE A DRIVER
1. Cebu, Philippines (1.15)
2. Bogor, Indonesia (2.15)
3. San Salvador, El Salvador (2.85)
4. Denpasar, Indonesia (2.89)
5. Bandung, Indonesia (3.00)

Traffic Management Issues & Framework
Mega Cebu Traffic Enforcers Academy (MCTEA)

- Enforce Traffic Laws
- Direct and Control Traffic
- Responding to Traffic Accidents

5-Day Traffic Education Training and Traffic Code Consultation Meetings with Metro Cebu LGUs

- 2 Day Training Regulation and Performance Criteria Formulation Workshop
- Curriculum Development Meeting 1
- Core Competency Refinement and Finalization
- Results validation with different sectors.
Vision 2050 & 3+1 Development Strategy

Roadmap for Sustainable Urban Development

Projects: Solid Waste, Septage, Stormwater, Water Supply

Studies & Conferences: Flood Control, Urban Green Growth, Low Carbon, IWRM, Suitability

Traffic Enforcers Academy and Synchronization of Traffic Policies

Constituency, Coalition, and Partnership Building
CONSOLACION COMMUNITY COLLEGE

CONSOLACION, CEBU, PHILIPPINES
AN EDUCATIONAL INSTITUTION THAT WILL SERVE AS STEPPING STONE IN THE REALIZATION OF THE YOUTH’S QUEST FOR A BETTER LIFE.
OBJECTIVE

✔ To provide college education to poor and deserving students;

✔ To develop the intellect of the youth of Consolacion who are financially deprived;

✔ To bring college education closer to the populace.
COURSES OFFERED

✓ BACHELOR OF SECONDARY EDUCATION
✓ BACHELOR OF ELEMENTARY EDUCATION
✓ BACHELOR OF SCIENCE IN INFORMATION TECHNOLOGY
✓ BACHELOR OF ARTS IN POLITICAL SCIENCE
✓ B.S BUSINESS ADMINISTRATION
✓ B.S HOTEL & RESTAURANT MANAGEMENT
✓ ASSOCIATE IN COMPUTER TECHNOLOGY

TOTAL NUMBER OF STUDENTS : 1,030
FUNDING

✓ Subsidized by the Local Government Unit.

FACULTY

✓ FULL TIME : 19
✓ PART TIME : 10
ADDITIONAL CLASSROOMS
MAYOR TERESA P. ALEGADO
5th Asia Smart City Conference

Smart City Development

Principal Secretary
Municipal Administration & Urban Development Department
Government of Andhra Pradesh, India

16-18th November 2016
Yokohama, Japan
<table>
<thead>
<tr>
<th></th>
<th>Presentation Structure</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Smart Cities Development Context</td>
</tr>
<tr>
<td>2</td>
<td>Smart Cities Road Map</td>
</tr>
<tr>
<td>3</td>
<td>Economic Master Plan</td>
</tr>
<tr>
<td>4</td>
<td>City Branding</td>
</tr>
<tr>
<td>5</td>
<td>Smart Cities Development in Andhra Pradesh</td>
</tr>
<tr>
<td>6</td>
<td>Institutional Innovation</td>
</tr>
<tr>
<td>7</td>
<td>Leveraging City Competitiveness</td>
</tr>
</tbody>
</table>
### Smart Cities Development Context

#### Smart Cities Mission

- **Pan-India initiative** by Government of India; Covers 100 cities in the Country
- **To drive socio-economic growth** by enabling sustainable development and harnessing technology

#### Comprehensive Development in Smart City includes

<table>
<thead>
<tr>
<th>Activity</th>
<th>Details</th>
</tr>
</thead>
<tbody>
<tr>
<td>Promoting mixed land use in area-based developments</td>
<td>The contribution by State and Centre for each Smart City development is USD 150 mn</td>
</tr>
<tr>
<td>Applying Smart Solutions to infrastructure and services</td>
<td>Private Sector Investment opportunities</td>
</tr>
<tr>
<td>Making governance citizen-friendly and cost effective</td>
<td>The implementation of the Mission at the City level will be done by a Special Purpose Vehicle (SPV) created for the purpose. The SPV will plan, appraise, approve, release funds, implement, manage, operate, monitor and evaluate the Smart City development projects</td>
</tr>
<tr>
<td>Housing and inclusiveness</td>
<td></td>
</tr>
<tr>
<td>Preserving and developing open spaces</td>
<td></td>
</tr>
<tr>
<td>Promoting a variety of transport options</td>
<td></td>
</tr>
</tbody>
</table>
Smart Cities Development

1. Infrastructure Creation
   - Physical, Social, Economic, Institutional Infrastructure creation
   - Sustainable lifestyle in urban environments; efficient use of resources

2. Quality of Life Enhancement
   - Giving an identity to the city
   - Inclusive Growth

3. Attracting Investment
   - Financial Sustainability

4. Employment Generation
   - Global Competitiveness

Enhancing Productivity and building competitiveness
Economic Master Plan – “Employment Generation”

Investment into urban development (Greenfield and Brownfield Development) to be strategic, focused and with high priority to economy generation and employment creation.

City Growth is characterised by their Economic Functions and hence need to evolve an “Economic Master Plan”.

National / International Partnering is key to bring in investments, exposure and expertise.

Economic Master Plan provides a clear economic direction to enable partners to focus on delivering the city’s key priorities in its envisioned context.

Goals

- Supports Local Economic and Employment Potential
- Diversified business attraction
- Promotes Entrepreneurship and encourages small business development
- Sustainable physical and economic vitality
- Community development
- Delivers intended Quality of Life

Thematic Considerations for Economic Cities

- Industrial
- Education
- Sports
- Tourism
- Health
City Branding – “A Valuable Asset”

In the era of globalisation, Cities compete for **attracting investments, talent, lifestyles**

**Branding of Cities** to leverage their economic positions - based on the **inherent strength** of the city, its unique proposition and **strategic positioning** to be achieved

City brand can strengthen a place and **engage its stakeholders around a common vision**

Andhra Pradesh envisions its cities to be **Productive, Inclusive, Smart, Sustainable and Well-Governed** thereby bringing social, environmental and economic benefits to the residents and businesses of AP cities

**City branding** would build up its positioning in the **global marketplace**, attract various types of investment, people and markets, sustainable competitive advantage thereby bringing in **socio-economic transformation**

Kakinada – *Port City*  
Tirupati – *Temple City*
City Management Approach – “Citizen Centric”

- Citizen interaction and active participation in city functioning
- Modeling citizen behaviors
  - Lifestyle processes
  - Citizen sentiments
  - Response and feedback
- Monitoring and Management of City Processes
- City needs to provide multiple ways to deliver information and choices to the citizen
- Leverage on Information Communication Technology

E-Governance

PuraSeva APP
An integrated portal based citizen help desk and grievance redressal mechanism, wherein citizens can send their complaints/suggestions/grievances to the Municipalities through post or phone or Fax/E-mail

Features
- Grievances
- Property Tax
- Vacant Land Tax
- Water Charges
- Building Plan Approval
- Building Penalization Scheme
- Citizen Charter
- SOS
- Birth / Death Certificates
The people of Andhra Pradesh envision transforming their State into a happy, inclusive, responsible, globally competitive and innovation-driven society through structural transformation and by sustaining inclusive double-digit economic growth, to become one amongst the three best states in India by 2022, the best state by 2029, and a leading global investment destination by 2050.

Urbanisation from 30% to 50% to achieve double digit economic growth requires structured urban growth and development

Investment opportunity of about USD 30 bn in Urban Development

Vision:
Cities and towns of Andhra Pradesh to be transformed into growth engines

Mission:
Best-in-class urban governance to make the cities smarter with delivery of efficient urban services for sustainable development
Kakinada - Smart City

**Municipal Area**  
31.4 sq.km

**Population**  
(2011 Census): 3.3 lakh

**Growth Drivers**  
- Deep Water Port Industries  
- Fisheries  
- Petrochemical  
- Special Economic Zone  
- Tourism

**Vision and Goals**  
Transform Kakinada from Pensioners’ Paradise to Economic Destination  
- Economically Vibrant, Inclusive, Liveable & Sustainable based on the strengths of Ports, Marine & Tourism

**Citizen Engagement**

**Projects**

1. Smart Transport Facilities
2. Water Management
3. Storm Water Mgmt
4. ICT based Mun. Solid Waste Mgmt.
5. Housing
6. Solar Roof Top and LED
7. Underground Wiring
8. Waterfront Development
9. Smart Health and Education
10. ICT Solutions
11. Greenery
Institutional Innovation in Andhra Pradesh

An Innovative Institutional Framework created to bridge the financing requirements for urban development in the State and End-to-End Project Delivery along with Capacity Building

ANDhra PraDeSh URBan DeVelopment Fund
Under SEBI guidelines
Blending and Leveraging of Public Capital with Private Capital through Urban Reforms
“Fund of Fund across Urban Sectors through innovative instruments”

ANDhra PraDeSh URBan infraStrucTurE asSET manAgeMent LimiTED
A Joint Venture of Government of Andhra Pradesh and IL&FS, acting as an AMC for Fund
Approaching Multilateral and Bilateral Agencies for partnering in APUIAMl

Infrastructure Projects worth about USD 0.5 bn being taken up through Project Specific SPV’s

Sectors for Development
Water Supply | Sewerage
Urban Transport | Solid Waste Management | Smart City
Tourism | Waterfront
Smart City attributes leveraging City Competitiveness

- Smart Cities approach enable leveraging City Competitiveness

- **Physical Infrastructure**
  - Inter-operability between City Systems
  - Service delivery and performance benchmarks

- **Creative Economy**
  - Strategic Tie-ups, Partnering
  - Entrepreneurship, Innovation, Knowledge

- **Human Capital**
  - Participatory and Complementing
  - Awareness and Responsible
Thank You
Phnom Penh Capital Hall

The 5th Asia Smart City Conference

16-19 November 2016
Yokohama, Japan

by

LIM Vichet

Deputy Director of Administration,
Phnom Penh Capital Hall, Cambodia
The Best Practice of Smart City Management in Phnom Penh

Content:

1. Road Construction, 50% + 50% Formula
2. Using Palm Leaves to Wrap Palm Sugar
1. Road Construction, 50% + 50% Formula

Previously, Phnom Penh used a model of partnership for development between government and people to jointly construct infrastructure, road, in the community by means of 50%+50% formula.

How it works:

- Phnom Penh Capital Hall with authorization from the Royal Government of Cambodia organized a committee to construct many roads in Phnom Penh by using this 50% + 50% formula;
- This formula means the government contributes 50% and residents contribute 50% to build roads in the community.

- In the construction process, the Department of Public Work and Transport will do the study, evaluation and monitoring the project;
- This model of development has been every successful and gained much support from people, all levels of authorities and private sectors.
- Many roads in 7 districts out of 12 had been used this formula successfully.
2. Using Palm Leaves to Wrap Palm Sugar

It is a model of using city budget to develop the city with private sector’s participation:

Previously, Phnom Penh City uses budget from private sectors to develop the city such as the construction of:

- revetment
- bridges
- flyover bridges and other infrastructure...

The budget comes from state land leasing, under the management of Phnom Penh Administration, such as 100 hectares of Diamond Island (Koh Pich Land) rented by OCIC Company, around 14 hectares of Western Chroy Changva Land rented by Sokha Hotel Company and 387 hectares of Northern Chroy Changva Land rented by OCIC Company.
2. Using Palm Leaves to Wrap Palm Sugar (cont)

1. Leasing of Koh Pich (Diamond Island) Land: Budget was used for infrastructure development such as revetment improvement, the construction of new Monivong bridge, 2 bridges to the Island, Kbal Thnal flyover bridge, and Techno flyover bridge

2. Leasing of Sokha Hotel’s Chroy Changva Land: budget was used to build Eastern revetment, improvement of road, sewage system, traffic sign and traffic light around the area etc.

3. Leasing of Chroy Changva Land of OCIC Company: budget was used to construct Steung Meancheay flyover bridge and 7 Makara flyover bridge.

4. Advertising on City Bus: budget from advertising on public bus has been used to support the operation of public bus authority.

Thank you!
Showcase of Best Practice of Smart City Management

Bhopal, Madhya Pradesh

18 November, 2016
• Within 1 year of Smart Cities Mission, Bhopal has initialized several smart cities projects
  • Smart poles and intelligent street lights on PPP mode
  • Smart bikes and smart cycle tracks
  • Smart mapping and Smart app for citizen services
  • Smart solid waste management through convergence

State level scheme for mini-smart cities launched with allocation of Rs. 300 crores under Chief Minister Infrastructure Development Scheme

**Key Success Factors**
- Fast-track Projects
- PPP Amenable Project Structure
- Convergence
- High Impact on Urban Form and Citizens
World Bank funded Global Environment Facility (GEF) Project for Bus Operations

- Transport Fleet Management Software
- Modern Management Information Systems (MIS)
- Modernization and automation of Depot Infrastructure
- Capacity Building & Training for BCLL staff
- Project Management TA support
- Modern marketing and Branding Programme for bus operations

![Automatic Bus Washing Plant](image1.png)
![Bus Paint Booth](image2.png)

![Water Hydrant System](image3.png)
![Forklift Truck](image4.png)
# Smart Poles and Street Lighting

<table>
<thead>
<tr>
<th>Feature</th>
<th>Quantity</th>
</tr>
</thead>
<tbody>
<tr>
<td>Smart Poles</td>
<td>400</td>
</tr>
<tr>
<td>Intelligent LED lights</td>
<td>20000</td>
</tr>
<tr>
<td>Surveillance camera</td>
<td>400</td>
</tr>
<tr>
<td>Wi-Fi Hotspot</td>
<td>100</td>
</tr>
<tr>
<td>Digital Signage</td>
<td>400</td>
</tr>
<tr>
<td>EV Charging</td>
<td>100</td>
</tr>
<tr>
<td>Optical fibre Cable</td>
<td>200 km</td>
</tr>
<tr>
<td>Environmental sensors</td>
<td>100</td>
</tr>
<tr>
<td>O &amp; M Period</td>
<td>15 years</td>
</tr>
<tr>
<td>Capex</td>
<td>390 Cr</td>
</tr>
<tr>
<td>Opex</td>
<td>300 Cr</td>
</tr>
</tbody>
</table>

## PPP Project
- Investment of **Rs 690 Cr**
- Capital Cost – **Rs 390 Cr**
- Operation Cost – **Rs 300 Cr**
- No cost to city
- Revenue share of 5.4% of project cost (**Rs 47 Cr**) to BSCDCL

## Revenue Sources
- Mobile service providers
- Advertisements through digital signages
- WiFi Premium Services
- Data from Sensors

Consortium of industry giants like- Bharti - Infratel, Ericsson, SmartX and HPL
Bhopal Smart Bike and Bicycle Track

**PPP Project**
- 50 Stations
- 500 Smart Bicycles
- Onboard Computer
- GPS

**Features of Smart Bike**
- Promotion of Non-motorized transport.
- Can be taken from Docking station through Smart Card.
- Constant monitoring through GPS
- Payment through app,
- Low fares to promote cycling in the city.

**Launch** – **25th December, 2016**
**Project Cost** – **Rs 2.95 Cr**
**Next Bike** has been awarded the projects.

**Rental with Smart Cards**
**Rental via NFC or App**
**PIN code entry**

**Bicycle Track Features**
- **5m** wide track
- **12 km** long
- Integrated with BRTS
- **Project Cost** – **Rs 5 Cr**
- Implementation Started, completion by Dec 2016
Bhopal Smart Map & Smart App

**Bhopal Smart Map**

- 56 layered GIS cutting across departments
- Citizen portal
- Map visualization
- Query & Location based Info
- Education & health services
- Public feedback
- Property & Other taxes

Launched on 15 Nov 2016

**Bhopal Smart App**

An integrated platform enabling and promoting
Collaborative, Participatory and Unified Governance

- Citizen Collaboration
- Citizen Services
- Grievances
- City Dashboard

Launched on 7 Nov, 2016
Cluster Based Integrated Solid Waste Management

- All 378 Towns grouped into 26 Cluster projects to be implemented on PPP mode
- Waste-to-Energy Projects in 5 clusters: Rs. 1,534 Cr–Jabalpur operational, Bhopal awarded, Indore, Gwalior and Rewa tenders invited
- Waste-to-compost projects in 21 clusters: Rs. 1,625 Cr–Katni & Sagar operational, rest to be tendered by Dec 2017

Jabalpur – Waste to Energy Plant

- Power Generation – 11 MW
- No Cost to the City
- Functional since 25th June 2015
- Project Cost – Rs 178 Cr

Funding Structure

- 20% Grant from Centre
- 20% from State under Swachha Bharat Mission
- 60% by the Concessionaire
Thank You
SMART CITIES: NEW INITIATIVE FOR IMPROVING MANAGEMENT OF TUNSIAN CITIES

Technical Deep Dive (TDD) on Smart Cities
Tokyo & Yokohama, Japan, Nov 14-18, 2016
## ANNUAL PERFORMANCE EVALUATION OF LOCAL GOVTS

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>I Approche Participative</td>
<td>12</td>
<td>IV Gestion des Ressources Humaines</td>
<td>10</td>
</tr>
<tr>
<td>1.1 Quatre réunions ordinaires du conseil municipal par année au minimum</td>
<td>4</td>
<td>4.1 Un plan d’action municipal pour renforcer des capacités (incluant dans le PARC)</td>
<td>6</td>
</tr>
<tr>
<td>1.2 Réunions préparatoires aux réunions du conseil municipal avec la participation des citoyens</td>
<td>4</td>
<td>4.2 Les arrêts d’affectation sont disponibles et revalidés périodiquement</td>
<td>4</td>
</tr>
<tr>
<td>1.3 Actions pour promouvoir la consultation, la codécision et l’engagement avec la société civile</td>
<td>4</td>
<td>V Gestion des Ressources Financières</td>
<td>10</td>
</tr>
<tr>
<td>II Transparence et Accès à l’information</td>
<td>8</td>
<td>5.1 Taux d’exécution financière des dépenses du budget annuel sous Titre I</td>
<td>4</td>
</tr>
<tr>
<td>2.1 Les documents clés de la commune sont accessibles aux citoyens par site internet</td>
<td>4</td>
<td>5.2 Taux d’exécution financière (des dépenses) du PAI</td>
<td>6</td>
</tr>
<tr>
<td>2.2 La commune utilise des moyens divers pour informer ces citoyens</td>
<td>4</td>
<td>VI Commandes publiques</td>
<td>10</td>
</tr>
<tr>
<td>III Mécanisme de Gestion des Plaintes</td>
<td>10</td>
<td>6.1 Un tableau de bord pour le progrès des commandes publiques est en place</td>
<td>2</td>
</tr>
<tr>
<td>3.1 Point focal pour la gestion des plaintes nommé (comme “M/Mme performance”)</td>
<td>2</td>
<td>6.2 Le calendrier des commandes publiques tel que publié sur site est respecté</td>
<td>3</td>
</tr>
<tr>
<td>3.2 Registre des plaintes et des réponses est en place et à jour</td>
<td>3</td>
<td>6.3 Les paiements des biens et des services sont faits dans un délai de moins de 45 jours</td>
<td>3</td>
</tr>
<tr>
<td>3.3 Pourcentage des plaintes traitées dans un délai de moins de 21 jours calendaires</td>
<td>5</td>
<td>6.4 Les délais de clôture définitifs des contrats des marchés publics sont respectées</td>
<td>2</td>
</tr>
<tr>
<td>IV Entretien des Biens</td>
<td>15</td>
<td></td>
<td></td>
</tr>
<tr>
<td>7.1 Inventaire du patrimoine: Les deux registres en place et à jour avec indication de l’état de ces biens</td>
<td>3</td>
<td></td>
<td></td>
</tr>
<tr>
<td>7.2 Budget pour l’entretien des biens (sous Titre I et II) par rapport au budget total pour Titre II</td>
<td>6</td>
<td></td>
<td></td>
</tr>
<tr>
<td>7.3 Dépenses réalisées pour l’entretien des biens (sous Titre I et II) par rapport aux dépenses totales du Titre II</td>
<td>6</td>
<td></td>
<td></td>
</tr>
<tr>
<td>VIII Assainissement des dettes</td>
<td>10</td>
<td></td>
<td></td>
</tr>
<tr>
<td>8.1 Un plan pluriannuel et exhaustif (en termes de montant et créanciers) d’assainissement des dettes est en place</td>
<td>3</td>
<td></td>
<td></td>
</tr>
<tr>
<td>8.2 L’inscription au budget des montants annuels prévus dans le plan d’assainissement des dettes</td>
<td>3</td>
<td></td>
<td></td>
</tr>
<tr>
<td>8.3 Paiement de la totalité des dettes engagée dans le budget</td>
<td>4</td>
<td></td>
<td></td>
</tr>
<tr>
<td>IX Ressources propres</td>
<td>7</td>
<td></td>
<td></td>
</tr>
<tr>
<td>9.1 Mise à jour annuel du rôle de recouvrement des taxes sur les immeubles bâtis et les terrains non-bâtis</td>
<td>2</td>
<td></td>
<td></td>
</tr>
<tr>
<td>9.2 Taux de recouvrement des ressources propres</td>
<td>3</td>
<td></td>
<td></td>
</tr>
<tr>
<td>9.3 Taux de croissance des ressources propres</td>
<td>2</td>
<td></td>
<td></td>
</tr>
<tr>
<td>X Sauvegardes sociales et environnementales</td>
<td>8</td>
<td></td>
<td></td>
</tr>
<tr>
<td>10.1 Examen social et environnemental des projets</td>
<td>8</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Score maximum : 30 | Score maximum : 30 | Score maximum : 40
The Portal is one of the many tools developed within the framework of the Urban Development and Local Governance Program (UDLGP) which aims to strengthen the competences of municipalities, to promote a culture of good governance which takes precedence through transparency, participation and accountability.

The Portal provides users with information on the finances, the performance of municipalities, investment plans, the legal and regulatory framework of local authorities.

Top Tunisian City Performers on 1st Performance Evaluation as Listed on E-Portal

<table>
<thead>
<tr>
<th>Rank</th>
<th>Municipality</th>
<th>Governance</th>
<th>Management</th>
<th>Sustainability</th>
<th>Score</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Krib</td>
<td>28</td>
<td>26</td>
<td>38</td>
<td>92</td>
</tr>
<tr>
<td>2</td>
<td>Megrine</td>
<td>26</td>
<td>25</td>
<td>39</td>
<td>90</td>
</tr>
<tr>
<td>3</td>
<td>Zaghouan</td>
<td>26</td>
<td>19</td>
<td>39</td>
<td>84</td>
</tr>
<tr>
<td>4</td>
<td>El Ain</td>
<td>26</td>
<td>19</td>
<td>38</td>
<td>83</td>
</tr>
<tr>
<td>5</td>
<td>Zarat</td>
<td>26</td>
<td>23</td>
<td>34</td>
<td>83</td>
</tr>
<tr>
<td>6</td>
<td>Aguereb</td>
<td>26</td>
<td>26</td>
<td>30</td>
<td>82</td>
</tr>
</tbody>
</table>