

- ✓ Industrial development
- ✓ Population growth & urban concentration
- ✓ Changes in life style



- ✓ Mass production, consumption & waste
- ✓ Industrial & medical waste

- ✓ Wastewater from households & industries

- ✓ Exhaust gas, etc.

Solid Waste & its Inappropriate Disposal

Water Pollution

Air Pollution

【Challenges】 Environmental Burden associated with Economic Development/Urbanization

- Odor & deteriorated landscape
- Vector-borne, water-borne & respiratory/cardiovascular diseases
- Discharge and accumulation of waste (including plastics) in rivers/ocean
- Pollution of public water, groundwater & soil
- Generation of greenhouse gas (e.g. methane) from waste facilities, etc.



- (For the Residents)**
- Deteriorating public sanitation & living environment
 - Increasing health damage and risks

- (For the Country)**
- Urban & environment issues
 - Negative impact on tourism, fishery & economy

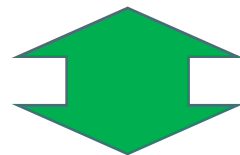
- (For the Earth)**
- Marine plastic litter
 - Global warming
 - Damage to ecosystem



Lack of Institutional/Administrative Capacity and Physical Infrastructure
Low Policy Priority and Public Awareness on Environmental Protection

Utilizing Japan's Own Experience & Knowledge/Technology

- Management of **waste and pollution problems**
- Practical know-how in **local gov'ts (municipalities)**
- Qualified technologies/products of **private sector**



Considering Needs of Each Developing Country

- **Prescriptions optimized** to socio-economic situation & issues of individual countries
- **Innovative measures** (e.g. DX) including "Leap Frog" technology

【JICA's Approach to Address the Challenges】

To Work on Key Issues ...

1. Institutional / administrative capacities for **waste management**
2. Facilities and O&M capacities for **wastewater treatment**
3. **Environmental regulations** & strategic plans to prevent /mitigate water & air pollution
4. Promotion of 3R & reduction of plastic waste toward **circular economy**

... Through Comprehensive & Integrated Solutions

- ◆ Development of human resources & organizations / systems
- ◆ Construction & management of facilities, with technology transfer
- ◆ Policy & financial support
- ◆ Civic education & behavioral modification

【Strengthening & Integrating JICA’s activities】

- **Accelerate, expand and evolve JICA’s cooperation** in the field of **environmental management**, making good use of its experience in past projects (e.g. waste management)
- Mobilize **all the types of cooperation**:
 - **Technical Cooperation**: Master Plans, Capacity development projects, Trainings
 - **Grant**: Equipment, Small-mid scale facilities
 - **Loan**: Sewerage facilities & pipelines, Waste-to-Energy facilities, Development policy loan
 - **Others**: Public-Private Partnership, Private financing, Grassroots projects, Japan Overseas Cooperation Volunteers (JOCVs), Development Studies Program(JICA-DSP), etc.
- Work together with **various partners in Japan: private sector, local governments, academics, NGOs, youth**, etc.
- Associate with **relevant fields: health, climate change, urban development, education**, etc.



【Scaling-up through Partnership】

- Cooperate with **governments** (e.g. Japan’s Ministry of Environment(MOE)), **UN agencies, MDBs and other donors / stakeholders** (including NPOs and private sector), to share **information**, utilize each **expertise & resources**, cover **wider areas**, etc.
- Also promote the partnership **via existing frameworks**:
 - **Worldwide**: JPRSI (Japan Platform for Redesign Sustainable Infrastructure, lead by MOE), Waste Wise Cities Campaign (by UN-Habitat), AEPW (Alliance to End Plastic Waste, by global companies), C40 (by megacities), etc.
 - **Asia**: 3RForum in Asia and the Pacific (by MOE & UN Centre for Regional Development), WEPA (Water Environment Partnership in Asia, by MOE), AWaP (Asia Wastewater Management Partnership, by MOE & Ministry of Land, Infrastructure and Transport)
 - **Pacific**: J-PRISM (by JICA), SPREP (by Pacific gov’ts)
 - **Africa**: ACCP (Africa Clean City Platform, by JICA)



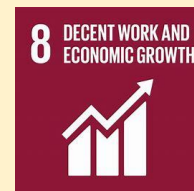
To benefit 500 million citizens in 50 countries by 2030 !

To benefit further more citizens and countries !

【Contribution of JICA Clean City Initiative】

(To Developing Countries)

- ◆ **Human Security**: Ensure **safe and healthy living environment** for general citizens and vulnerable groups, against the threats caused by environmental pollutions
- ◆ **Quality growth**: Realize economic growth which is inclusive, sustainable and resilient
- ◆ **With/Post COVID-19**: Reduce infection risk through maintenance & improvement of sanitary urban environment



(To SDGs)



(To Global Environment)

- ◆ **Marine Plastic Pollution**: Prevent the discharge of plastic waste into rivers / oceans, toward realization of “**Osaka Blue Ocean Vision**” (a common global vision agreed by G20 Leaders in 2019 and shared by many other countries, which aims to reduce additional pollution by marine plastic litter to zero by 2050)
- ◆ **Climate Change**: Prevent the generation of greenhouse gas (e.g. methane) through proper waste treatment
- ◆ **Biodiversity**: Prevent further environmental pollution thereby conserving ecosystems