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RECIPRO:CITY

CIRCULAR CITIES FOSTERING GREEN URBANIZATION



The Urban SDG Knowledge Platform initiative is a follow-up of the 2016 International forum on Urban Policy or Sustainable Development Goals (SDGs) held in Seoul, Republic of Korea; and a response to the 2015 Sixth Asia Pacific Urban Forum (APUF-6) Jakarta Call for Action held in Jakarta, Indonesia. Both forums were held in order to deliberate and contribute action-oriented recommendations to the region's leaders, focused strongly on an implementation agenda, including scaling up existing successful practices by fostering knowledge sharing.



CITYNET
THE REGIONAL NETWORK OF LOCAL AUTHORITIES
FOR THE MANAGEMENT OF HUMAN SETTLEMENTS

 **SEOUL METROPOLITAN
GOVERNMENT**

 **UNITED NATIONS
ESCAP**
Economic and Social Commission for Asia and the Pacific

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THE REGIONAL NETWORK OF LOCAL AUTHORITIES
FOR THE MANAGEMENT OF HUMAN SETTLEMENTS

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CIRCULAR CITIES FOSTERING GREEN URBANIZATION

RECIPRO:CITY

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ABOUT THE URBAN SDG KNOWLEDGE PLATFORM

The Urban SDG Knowledge Platform was established in collaboration with the United Nations Economic and Social Commission for Asia and the Pacific (ESCAP), the Seoul Metropolitan Government (SMG) and CityNet to promote and support knowledge sharing and city-to-city cooperation for sustainable urban development.

The Urban SDG Knowledge Platform supports local action for the implementation of the 2030 Agenda for Sustainable Development by:

- Providing a repository of policies, initiatives and best practices at the city level by municipal governments and other stakeholders;
- Facilitating north-south, south-south, and triangular cooperation by linking cities that have developed specific policies and strategies with other cities interested in learning from and replicating them;
- Enabling regional follow-up and review of the 2030 Agenda for Sustainable Development's implementation by providing a platform for local governments to share progress and lessons learned.

RECIPRO:CITY is the annual publication of the Urban SDG Knowledge Platform created to support the sharing of best practices on urban policies and introduce ongoing activities to all of its readers.

ORGANIZERS

CITYNET SECRETARIAT

CityNet is the largest association of urban stakeholders committed to sustainable development in the Asia Pacific region. Established in 1987 with the support of UNESCAP, UNDP and UN-Habitat, the network of cities has grown to include 173 municipalities, NGOs, private sector entities and research centres. CityNet connects actors to exchange knowledge and build commitment to more sustainable and resilient cities. Through capacity building, city-to-city cooperation and tangible projects, we help our members respond to Climate Change, Disaster, Sustainable Development Goals (SDGs) and rising Infrastructure demands.

SEOUL METROPOLITAN GOVERNMENT

Seoul Metropolitan Government (SMG) is the administrative organization of the city of Seoul. Seoul is the capital city of the Republic of Korea and has been the centre of the country throughout its long history from the prehistoric era to the present day. In addition, in just five decades, Seoul has seen its population increase by 43.3 percent and GDP soar by 1,389 percent. Along with this fast and tremendous development of Seoul, the city made strenuous efforts to tackle urban challenges. Due to those efforts, Seoul is now one of the most prosperous cities in the world.

UN ESCAP

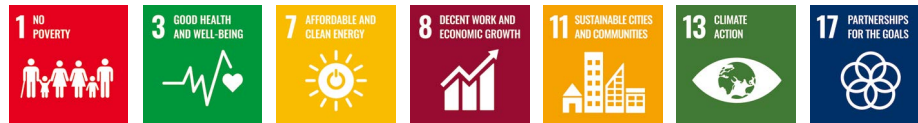
Headquartered in Bangkok, the Economic and Social Commission for Asia and the Pacific (ESCAP) serves as the United Nations' regional hub promoting cooperation among countries to achieve inclusive and sustainable development. As the largest regional intergovernmental platform with 53 Member States and 9 associate members, ESCAP has emerged as a strong regional think-tank offering countries sound analytical products that shed insight into the evolving economic, social and environmental dynamics of the region. The Commission's strategic focus is to deliver on the 2030 Agenda for Sustainable Development.





SUSTAINABLE CITY DEVELOPMENT THROUGH IMPROVEMENT OF ISWM

KATTANKUDY | SRI LANKA



Kattankudy City is aiming to develop into a green city by improving its Integrated Solid Waste Management (ISWM) and implementing a waste-to-energy concept in the city, which will help promote climate action and a transition to affordable, clean energy.

+ Population
53,383

+ Area(KM²)
6.5

+ GDP Per Capita
USD 3,682

+ Budget
LKR 25,000,000

+ Implementation Period
2019 - Ongoing

+ PROBLEM DEFINITION

The problem relating to energy in Kattankudy is threefold.

1. People in poverty do not have access to a reliable, sustainable, and affordable source of energy.
2. The amount of solid waste is very high, and the potential of this waste as an energy source is being underutilized.
3. Residents feel uncertain about using methane gas and compost as a source of energy.



Organization of the Solid Waste Management Technical Working Group

+ OBJECTIVES

Specifically designed to address SDG 13, this project aimed to combat climate change by utilizing biogas, which would help reduce CO₂ and CH₄ (methane) emissions. This project also contributes to SDGs 1, 3, 7, 8, 11, and 17.

Key objectives for the project include:

1. Improve integrated solid waste management (ISWM) to sustainably manage waste.
2. Contribute to the reduction of CO₂ and CH₄ emissions by using biogas.
3. Give access to reliable, sustainable energy for the impoverished.
4. Create a sustainable city by composting and utilizing biogas as a form of renewable energy, reducing greenhouse gas emissions.
5. Establish a municipal waste management baseline of information to mitigate the effects of past and present bad practices while developing a master plan.

+ OUTCOMES AND IMPACTS

The usage of methane gas and compost contributes to the development of agriculture and a small-scale, energy industry run out of domestic households, which helps improve household income.

The improvement of villagers' income and welfare increases their quality of life.

By using methane gas and compost for energy, it contributes to the reduction of greenhouse gas emissions and promotes sustainable energy, boosting environmental sustainability.

Users' initial perception of methane gas and compost as inconvenient and potentially dangerous was transformed. These energy sources are now viewed more favourably and seen as comfortable to use.

As villagers came to understand the importance and benefits of biogas, the number of public complaints against the presence of the biogas plant has decreased.

+ ACTIONS AND IMPLEMENTATIONS

The collection and distribution of methane gas and compost to the villagers of Kattankudy living in the vicinity of the biogas plant was conducted in a number of stages.

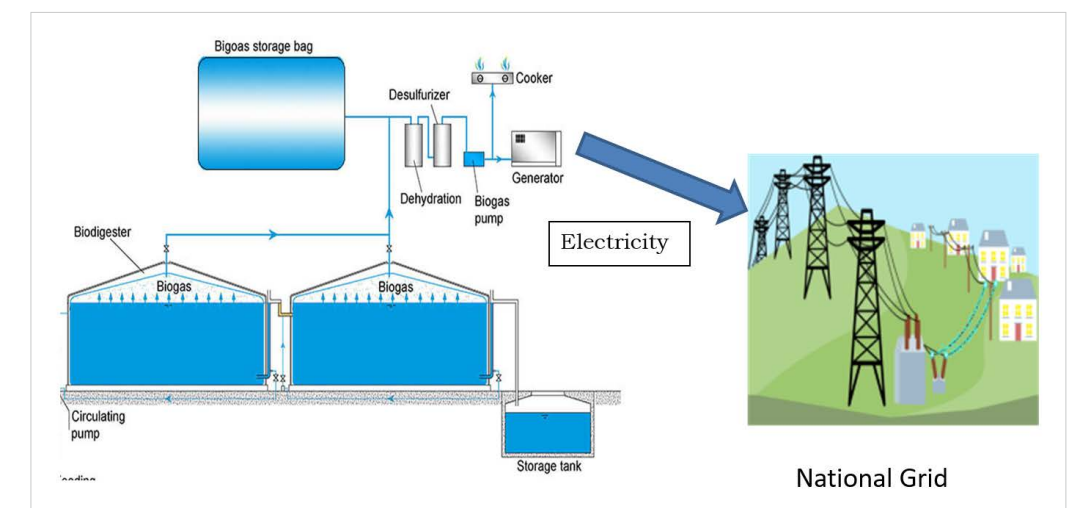
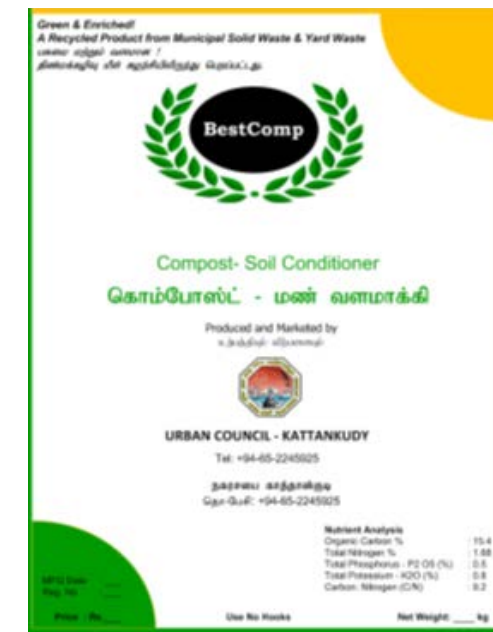
Stage 1	Planning and preparing detailed engineering design
Stage 2	Technical work on the installation of methane gas collection system and capture equipment
Stage 3	Socialization programme for village leaders and villagers
Stage 4	Identification of the beneficiaries
Stage 5	Construction of distribution piping and distribution of methane and compost to beneficiaries (Phase I)
Stage 6	Construction of distribution piping and distribution of methane and compost to beneficiaries (Phase II)
Stage 7	Construction of distribution piping and distribution of methane and compost to beneficiaries (Phase III)
Stage 8	Construction of distribution piping and distribution of methane and compost to beneficiaries (Phase IV)
Stage 9	Construction of distribution piping and distribution of methane and compost to beneficiaries (Phase V)
Stage 10	Maintenance of methane gas collection, regular production and distribution of compost
Stage 11	Daily monitoring



+ REPLICABILITY AND SCALABILITY

This innovation is one that can be easily replicated by other cities or local governments, especially in Asia. Most regions in Asia possess biogas plants, and each plant has the potential for methane gas production. Since most of the plants are located close to settlement areas, the gas would be easy to distribute to the villagers. In addition, the initial budget required for the installation of a methane capture and distribution facility is relatively low, and the technology relatively uncomplicated. Special training is unnecessary — a brief comparative study would be sufficient to replicate this innovation.

The scale of change was primarily implemented at the local level for the villagers of Kattankudy City. So far, 210 households have benefitted from free methane gas delivered to their homes from the plant and compost. The number of beneficiaries will increase each year.





SUSTAINABLE SOLID WASTE MANAGEMENT IN BATTAMBANG

BATTAMBANG | CAMBODIA



This project aimed to refrain from destructive 'take-make-dispose' linear economy to more circular approaches that mobilize resources more equitably. It engaged with multiple stakeholders to integrate analysis holistically, making evidence-based decisions and improving waste management.

+ Population
165,350

+ Area(KM²)
293

+ GDP Per Capita
USD 1,512

+ Budget
USD 58,772

+ Implementation Period
2018 – 2021

+ PROBLEM DEFINITION

Battambang's waste management challenges included the following.

1. Unauthorized waste disposal amounted to 20% of entire waste generated and the remainder went to landfills without liners or leachate treatment systems.
2. The landfill (8 hectares) was reaching its maximum capacity and could not contain further waste.
3. There was a shortfall of budget in waste management, contributing to the lack of waste collection bins.
4. Weak discretionary power to enforce waste management condoned littering and open burning, especially in informal settlement areas where waste collection services were absent or unreliable.
5. There was limited capacity to practice separation at source and lack of awareness about its importance.



+ OBJECTIVES

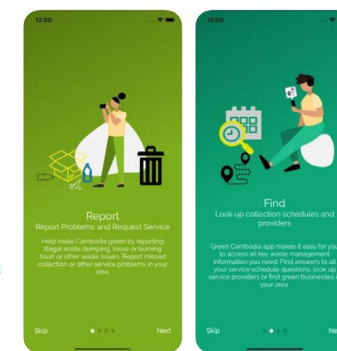
The project's baseline research to identify and address the challenges was conducted in Battambang. The key recommendations were the following.

1. Develop a municipal solid waste management plan to coordinate and systematically reform solid waste management in Battambang.
2. Improve institutional and communal capacity to manage waste and recycling.
3. Consider the establishment of a community waste bank to empower local communities and boost their capacity to manage waste.
4. Create a multi-stakeholder platform that includes local government representatives, community members, academia, the private sector (particularly waste collection companies), and others to steer decision making in waste management.

Pilot project activities were developed in line with Battambang's 2030 vision "to become environmentally friendly, socially responsible and economically successful and maintain its particularities."



GreenCambodia 4.4
Institute for Development Impact
Designed for iPhone
★★★★★ 5.0 + 4 Ratings
Free



+ OUTCOMES AND IMPACTS

This project improved livelihood opportunities for women in Battambang by providing entrepreneurship training to learn how to operate waste banks for recyclable materials. Business funds were provided to help women initiate related start-ups in their communities.

→ It enhanced Solid Waste Management (SWM) system through institutional capacity building and effective implementation of environmental and SWM policies, including the development of a Municipal SWM Master Plan to coordinate and systematically reform practices in Battambang. Habitat Cambodia worked with COMPED (local waste collection company), University of Battambang, and U.S. Agency for International Development (USAID) to train Sangkat councillors on SWM concepts including the use of financial, legal, and practical tools that can be integrated into municipal SWM plans.

+ DID YOU KNOW?

A waste bank is a waste management facility using a bank-like system where citizens can use their sorted garbage as a type of deposit.

+ DID YOU KNOW?

In Phnom Penh the districts are called Khan, and their subdivisions Sangkat which are smaller in the other provinces.

→ It aligned project activities with the national government's endorsement to integrate sanitation and SWM into the national policy, "Local Policy for Village and Commune Well-being and Safety."

→ It improved community awareness on effective SWM approaches through outreach programmes on recycling, enhancing the quality of waste collection services, and incorporating technological innovation into Battambang's SWM (including mobile applications and the use of social media). Sangkats in Battambang Municipality received training on a mobile application, GREENCAMBODIA, developed through a USAID funded project I4DI/T4GC. The application provides a digital platform to map waste collection routes, a marketplace for trading recyclable materials, and a way to flag problems with waste collection service delivery.

The project completed several virtual clean-up day campaigns engaging a wide range of stakeholders including youth and informal settlement communities and conducted advocacy and education sessions on SWM and clean cities that involved discussing Battambang Vision for 2030 alignment with the 2030 Agenda and Sustainable Urban Resource Management (SURM).

→ It institutionalized multi-stakeholder group, the Provincial Working Group, connecting SWM and SDGs.

→ It established SDG Corner Knowledge Hub within the main library of the National University of Battambang.



→ It purchased and strategically placed 130 recycling bins in informal settlement communities in Battambang and helped 25 waste collectors to negotiate contracts with plastic recycling facilities to supply collected, reused-plastic bags.

→ It translated ESCAP's "Localizing the 2030 Agenda through SURM" e-learning course into Khmer to reach stakeholders throughout Cambodia.



+ ACTIONS AND IMPLEMENTATIONS

Battambang localized the SDGs through SURM, which involved the following overlapping, reiterative steps, or phases.

ORIENTATION & SCOPING PHASE

Battambang began work on the project by participating in an Inception Workshop with the other selected Pilot Project Cities. The participating cities identified and framed issues with the SDGs at the centre of the process. Discussions on how to engage stakeholders, raise awareness, and build knowledge on SURM linked to the 2030 Agenda were held. Participants also examined existing research and data to help identify an urban resource sector to focus on for the duration of the Project.

ENGAGING STAKEHOLDER PHASE

Given the importance of collaboration in localizing SDGs, the local implementing partner, Habitat Cambodia led the establishment of a Core Team involving a few key stakeholders and a broader Multi-Stakeholder Network comprised of representatives from Battambang Municipality, Battambang Provincial Administration, University of Battambang, non-governmental organizations, and the private sector (mainly waste collection companies). Sangkat leaders and community members were also involved in building meaningful engagement to co-create change through all stages of the project.



BASELINE & STRATEGIC PLANNING PHASE

Working with researchers from the University of Battambang, a baseline study to assess the status of solid waste management in Battambang was prepared and shared at a Strategic Planning Workshop. The Multi-Stakeholder Network and community members reviewed findings and discussed ways to improve waste collection and management as well as strengthen existing regulations and policy. The participants established a project vision and goals and started to strategize the outcomes of localizing SDGs through SURM as well as identify research gaps to further investigate.

EVIDENCE-BASED DECISION-MAKING

Throughout the Project, Battambang gathered information, analyzed data, and disseminated knowledge with a focus on sustainably managing its solid waste. Details on waste generation, composition of recyclable material, service coverage and quality, disposal and treatment practices, and the policy landscape contributed to developing comprehensive, integrated project activities and policies. At their Systems Thinking Visioning Workshop, Battambang stakeholders used tools including SDG Cluster Analysis; Root Cause Analysis; Pilot Project Prioritization Matrices; and Strengths, Weaknesses, Opportunities and Threats (SWOT) Analysis to identify links between SDGs and waste management, develop a shared understanding of the underlying causes of the waste problem, map actors and potential solutions, and score proposed projects based on factors including feasibility of implementation.

IMPLEMENTATION & FOLLOW-UP PHASE

From 2020 through 2021, Battambang implemented pilot project activities aimed to improve livelihood opportunities, especially for women, through entrepreneurship training. The municipality collaborated with stakeholders to develop a solid waste management master plan. Various awareness raising activities on waste management improvements were also held. Details of Project achievements and follow up are in the next section. The multi-stakeholder network formed under this project was officially approved by the Battambang Provincial Administration and named the "Provincial Working Group." This group consists of staff from provincial departments, the municipality, NGOs, private sector, academia, and the community and will contribute to monitoring and evaluating Project outcomes and continuing work initiated under this Project. The PWG worked with Habitat Cambodia before the Project closed to develop a strategy paper, policy action plan, and sustainability plan. Details can be found on the Project website. See Strategy Paper with policy and sustainability plans annexes: www.unescap.org/projects/da11/pilotcities/battambang

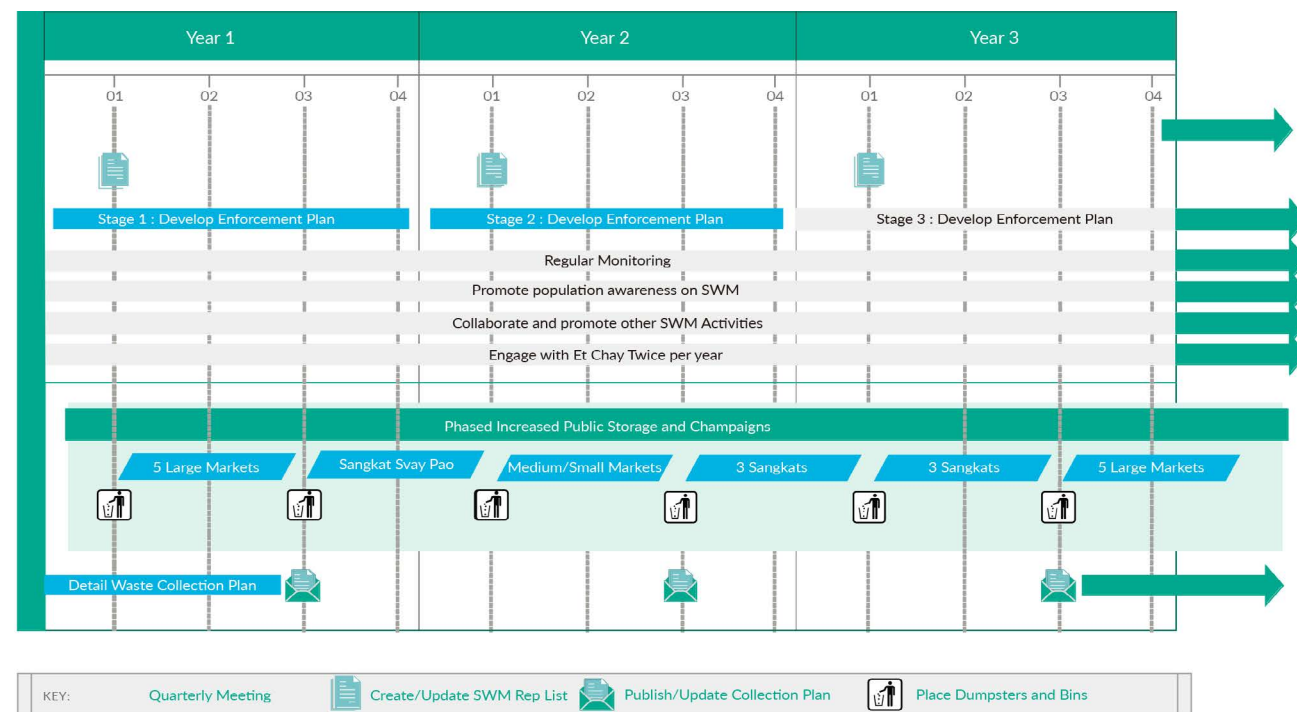
+ REPLICABILITY AND SCALABILITY

As many cities in the region face solid waste management challenges, many aspects of Battambang's sustainable waste management project are replicable and scalable from providing entrepreneurship training to women to managing waste banks to developing a solid waste management master plan. The raising of awareness, advocacy, and training may be tailored and delivered to other Sangkats and municipalities in Cambodia. Further, the "Localizing the 2030 Agenda through SURM" e-learning course in Khmer serves as an important resource to help other cities in Cambodia benefit from Battambang's (and the other Pilot Project cities) experience.



Some of the images were sourced from Global Green Growth Institute (GGGI) Cambodia and Group for Research and Technology Exchanges (GRET).

PROPOSED SOLID WASTE MANAGEMENT ACTIVITIES IN BATTAMBANG



SDGs Cluster Analysis



Project Prioritization Matrix



Project Feasibility SWOT Analysis



ENERGY EFFICIENCY PROGRAMME

SANTA ROSA, LAGUNA | PHILIPPINES



The Energy Efficiency Programme of the City of Santa Rosa is a brief but comprehensive list of the initiatives towards energy efficiency. It is composed of projects that have been implemented in the community and city government premises, in collaboration with agencies and organizations.

+ Population
414,812

+ Area(KM²)
54.84

+ GDP Per Capita
USD 3,298

+ Implementation Period
2019 - Ongoing

+ PROBLEM DEFINITION

As the city of Santa Rosa hosts industries and other commercial establishments, its demand for energy is quite high, especially compared to other cities and municipalities. After reviewing community-based greenhouse gas emission data, the city recognized the need to reduce emissions, chiefly from the energy sector.



+ BACKGROUND

The City of Santa Rosa is a first class component city in the Province of Laguna located about 40 kilometers south of Manila, the capital of the Philippines. It is a highly industrialized city, hosting major, multinational manufacturing companies, economic zones, and master-planned communities. The city is known as “The Lion City of South Luzon,” as its economy is vibrant and booming. It is also regarded as the “Motor City of the Philippines,” hosting almost all car manufacturing companies in the country. The city has also been tagged as one of the Next Wave Cities in ICT, with the presence of IT-BPO companies. This is why the city serves as a primary growth centre in the Laguna Provincial Development Physical Framework Plan.



+ OBJECTIVES

The Energy Efficiency Program is guided by national policies, such as Republic Act No. 11285, “Energy Efficiency and Conservation Act.” In line with the Energy Efficiency and Conservation Act, the main objective of this programme is to reduce emissions as well as to provide sustainable and affordable energy to citizens.

+ OUTCOMES AND IMPACTS

The electricity consumption cost of the city has been reduced thus far. As the projects are still ongoing, the impacts of the Energy Efficiency Program will be measured when the projects are complete.

+ ACTIONS AND IMPLEMENTATIONS

The Energy Efficiency Program is composed of various projects and strategies. The programme includes capacity building, pilot city participation in energy efficiency related projects in collaboration with international organizations, improvement of existing projects, benchmarking other local government units, stakeholder meetings, and workshops.

Since most of the projects are still ongoing at the present time, the progress of the programme is being monitored by city government departments.



The data in this chart shows the community-level greenhouse gas (GHG) emissions, where almost 54% accounts for the operation of industries in the city, and almost 39% accounts for the use of electricity, power, and fuel. This indicates that addressing GHG emissions caused by the use of energy could contribute to lowering the city's total GHG emissions.

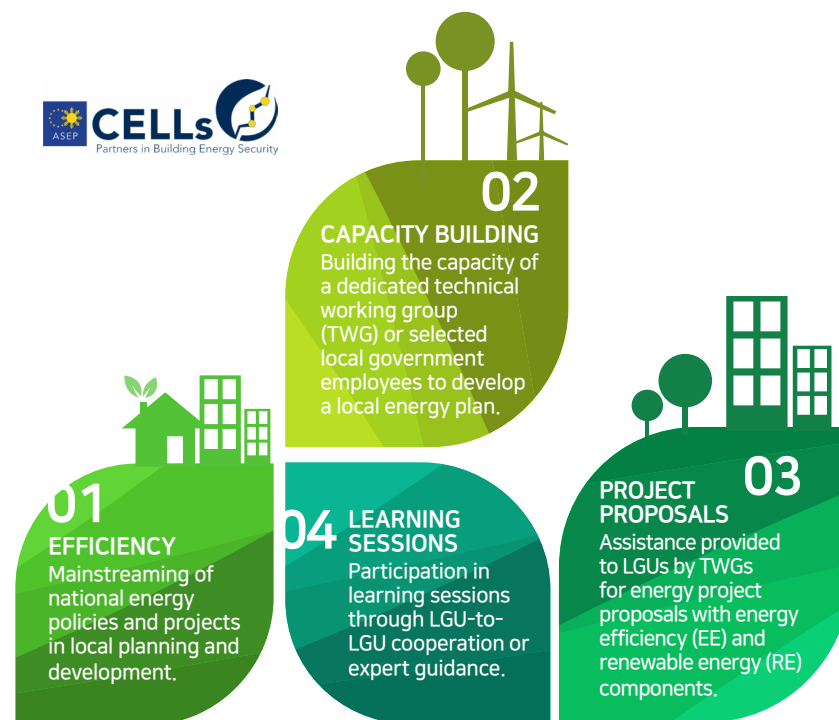
GREENHOUSE GAS EMISSIONS DATA

GHG Source	Emissions, tCO ₂ e	% to Total
Industrial Processes	1,080,119.35	53.84
Electricity Consumption	646,130.00	32.21
Road Transportation	121,908.50	6.08
Solid Waste	103,677.68	5.17
Wastewater	34,769.02	1.73
Stationary Energy	14,052.71	0.70
Agriculture	5,494.54	0.27
TOTAL	2,006,151.80	100.00
<i>Source: Powerpoint presentation of Ms. Maria Amor Salandanan during the CityNet Climate Leadership Program 3 in 2019</i>		● IPPU = 53.84% ● Energy = 38.99% ● Waste = 6.90%

ASEP-CELLS DEMONSTRATION PROJECT SITE

Access to Sustainable Energy Programme — Clean Energy Living Laboratories (ASEP-CELLs) is a joint undertaking of the European Union and the Philippine Department of Energy (DOE). The project provides funding to assist the Government of the Philippines to meet its rural electrification targets by means of renewable energy, and to promote energy efficiency. It aims to empower stakeholders such as policymakers and government officials to effectively respond to energy challenges and seize opportunities for sustainable production and consumption through knowledge management, education and capacity building, and awareness.

ICLEI – Local Government for Sustainability Southeast Asia Secretariat (ICLEI SEAS) serves as the lead coordinator for demonstration LGUs.



PROJECT MILESTONES

2019	The City Government of Santa Rosa submitted an Expression of Interest to become an ASEP-CELLs Demonstration Site in 2019.	The Expression of Interest contained information about the local government unit and its administrative set-up, past and ongoing policies, initiatives, projects, and commitments, project implementation and city commitments, and project contact person (project coordinator).
2020	First stakeholder meeting with the City of Santa Rosa as the ASEP-CELLs Luzon Demonstration Site held on 4 March 2020.	Mayor Arlene B. Arcillas and related departments in the City Government of Santa Rosa, along with ICLEI-SEAS, participated in this first stakeholder meeting. The main objectives of the meeting were to discuss the ASEP-CELLs project and corresponding activities, to verify energy-related targets and concerns of the city government, and to gather feedback from the city government to further shape ASEP-CELLs activities in Santa Rosa.
	Follow-up meeting held on 17 November 2020.	This meeting discussed the Memorandum of Understanding (MOU) between ASEP-CELLs and the City Government of Santa Rosa, as well as the upcoming activities of the project.
2021	Signing of the Memorandum of Understanding (MOU) between the City Government of Santa Rosa and ICLEI SEAS in January 2021.	The MOU highlighted the collaboration between the parties. ICLEI SEAS will conduct capacity building enhancement training, seminars, and will also assist the City Government of Santa Rosa in mainstreaming national energy policies and plans at the local level, among others. The City Government of Santa Rosa will designate a contact person and create a TWG who will be tasked to work closely on the initiatives and activities related to the ASEP-CELLs project.
	Focus Group Discussion (FGD) on the Government Energy Management Program (GEMP) on February 26, 2021.	The FGD is in line with ICLEI SEAS's assistance to local governments on mainstreaming energy policies with focus on Republic Act 11285 or the Philippine Energy Efficiency and Conservation Act of 2019 and on Government Energy Management Program (GEMP).

PROMOTION OF LOW CARBON URBAN TRANSPORT SYSTEMS

The City of Santa Rosa is one of the pilot cities in the Promotion of Low Carbon Urban Transport Systems in the Philippines (LCT) Project, an initiative the United Nations Development Programme (UNDP) implemented in partnership with the Department of Transportation (DOTr) of the Government of the Philippines (GOP). This project aims to promote a sustainable transportation system in the country through the creation of an enabling environment for both motorized and non-motorized low carbon alternatives.



PROJECT MILESTONES

2019	Project briefing between UNDP, DOTr and key departments of the City Government of Santa Rosa on 23 October 2019.	
2020	The LGU of Santa Rosa was invited for a Benchmarking Activity with General Santos City, organized by the LCT Project, on 26 to 27 February 2020.	A delegation from the City of Santa Rosa, Laguna conducted work planning and benchmarking activities in General Santos City, Philippines. The activities included presentations among local transport cooperatives in General Santos City on their establishment and operation, including their finances. Participants were able to see the actual operation in their office/transport terminal and charging station through observation and interviews.
	Signing of Memorandum of Agreement (MOU) between the City of Santa Rosa and the DOTr on 14 August 2020.	As a pilot city, Santa Rosa will receive capacity development in transport study/planning, private sector participation and installation of support facilities, social and environmental benefits, and more. The City of Santa Rosa will be responsible for the coordination and providing necessary data and support to DOTr to implement the objectives under the collaboration.
	Participation of the City of Santa Rosa in the DOTr Low Carbon Transport Project.	A Virtual Business Development Workshop (BDW) was held on 20 to 22 October 2020 to support public transport cooperatives and associations, electric vehicle (EV) manufacturers/operators and key actors in the LCT sector with the theme: "Achieving Resilience in the PUV Sector in a Post-Pandemic World."
2021	Provision of data by the City of Santa Rosa to DOTr (Needs Assessment Survey for Local Governments).	
	Participation of the City of Santa Rosa in the 3-day Workshop titled "The E-Mobility Future for the City of Santa Rosa's Public Transportation."	



INSTALLATION OF NEW LED STREETLIGHTS

The City of Santa Rosa recognizes the importance of having streetlights in all major and minor streets. The city allocated an annual budget for the installation and maintenance of these streetlights using LED lights, which are more energy efficient than high-pressure sodium (HPS) lights. The streetlights in the city were installed throughout the city not just to illuminate streets, but also to address some problems like peace and security where women, elderly and children are more vulnerable (Gender and Development). Streetlights also help in improving the crime solution efficiency and complement other projects like the installation of closed-circuit television (CCTV). In addition, replacement of existing HPS lights with new LED lights was carried out.



ENERGY EFFICIENCY INITIATIVES WITHIN THE CITY GOVERNMENT PREMISES

In compliance with Republic Act No. 11285, the "Energy Efficiency and Conservation Act", the City of Santa Rosa designated an Energy Efficiency and Conservation Officer. There are several initiatives have been implemented and are continuously being implemented within the city government premises, such as:

1. Installation of solar panels in City Hall Building A and in 24/7 DRRM Command Centre.
2. Switching/Converting air conditioning units into more energy efficient power inverter units.
3. Replacement of old lights within the offices with LED lights.
4. Contracting water concessionaires to supply water instead of using the old city pump, which also addresses water quality problems.

OTHER ENERGY EFFICIENCY INITIATIVES



BUILDING EFFICIENCY ACCELERATOR AND FORMULATION OF A GREEN BUILDING CODE

In coordination with the BEA through a Leadership Grant, the city of Santa Rosa and ICLEI Southeast Asia developed a local green building ordinance to support implementation of the Philippine National Green Building Code.



CLEAN ENERGY INVESTMENT ACCELERATOR

The CEIA encourages private companies to use renewable / alternative sources of energy by helping unlock clean energy investment across commercial and industrial sectors.



EARTH HOUR CITY CHALLENGE / ONE PLANET CITY CHALLENGE, NATIONAL EARTH HOUR CAPITAL IN 2016

Other initiatives include projects on food-water-energy" (nexus) in low-cost housing development for informal and vulnerable families, the modernization of "jeepneys," and the increased use of electric vehicles.

+ REPLICABILITY AND SCALABILITY

Some of the projects or initiatives within the program can easily be replicated since they are guided by national policies. They can also be scaled up to a larger area and more beneficiaries. These practices can be best replicated in any

city, especially those with a high demand for energy. As of now, as the project is still being implemented, lessons are being gathered and they will be used towards developing strategies for energy conservation.





GREEN PROJECT YOUR TRASH OUR TREASURE

SUBANG JAYA | MALAYSIA



"Your Trash Our Treasure" aims to collect recyclable items from residential areas to reduce the amount of waste disposed in landfills. Door-to-door collection was conducted for single housing units. Cabin & kiosk collection was conducted for multiple housing unit complexes.

+ Population
396,594

+ Area(KM²)
17

+ GDP Per Capita
USD 10,401

+ Budget
USD 232,000

+ Implementation Period
2017 – Ongoing

+ PROBLEM DEFINITION

60% of Majlis Bandaraya Subang Jaya (MBSJ) area is residential. In 2021, MBSJ boasted 324,462 households compared to 318,462 in 2020. This increased number of households resulted in an increased amount of waste generation.

There was limited commitment from residents to separate the recyclable waste from solid waste due to lack of awareness of recycling. Contractors managing waste collections were not committed to abide by Corporate Social Responsibility (CSR). Lastly, there was no law to enforce recycling or to prohibit or restrict inadequate waste disposal practices from residential areas.

+ OBJECTIVES

The primary objectives of this project are to reduce the amount of waste sent to landfills and to establish recycling as a widespread practice in households.

+ OUTCOMES AND IMPACTS

35,800 tonnes of waste was recycled instead of disposed of in landfills. Starting from 2020, separating waste into recyclable items and solid waste became a routine practice in 8 locations. In addition, a local resident association Majlis Perwakilan Pelajar (Student Representative Council) shared positive feedback regarding the project.

This project also eased the financial burden of marginalized groups from the kiosk by providing them a space to sell recyclable items.



+ ACTIONS AND IMPLEMENTATIONS

Kumpulan Darul Ehsan Berhad (KDEB) Waste Management Sdn. Bhd. (private limited company, Sendirian Berhad) was in charge of managing the door-to-door collection and running the transit station.

It adapted the circular economy approach involving an economic system of closed loops in which raw materials, components and products lose their value as little as possible, renewable energy sources are used and systems thinking is at the core.

It also achieved industrial symbiosis by establishing a network of diverse organizations fostering eco-innovation and long-term culture change, creating and sharing mutually profitable transactions—and improving business and technical processes.

By redesigning products, products were transformed into a service and the product line was extended as well.

According to the data recorded in 2020, a total of 3,449 houses from 8 residential areas were involved. Collectively, 20,653.6kg of waste was recycled and redesigned.



+ DID YOU KNOW?

Separation at Source refers to the practice of setting aside post-consumer and household waste materials at the point of generation at the household level to prevent them from entering the waste stream that is destined for landfilling.



Tetra Pal & KPT Recycle managed the waste collection from the cabin. According to the data recorded in 2020, a total of 28,950kg of waste was collected from 5 locations.

MBSJ City Council managed the mobile kiosk waste collection. According to the data recorded in 2020, a total of 1,780kg of waste was collected via 11 programmes.

Some of the positive impacts included extra cash for the citizens, gift redemptions, encouragement of separation at source, and adopting recycling as a lifestyle.

Community engagement and participation was achieved by putting up banners and posters along with regular reminders to the community encouraging recycling. Additionally, collectively setting the day of the kiosk collection also contributed to community engagement.

The cabin facility was monitored once a week along with monthly reports regarding KDEBWM's transit station maintenance, Tetra Pak & KPT Recycle's cabin maintenance and MBSJ City Council's kiosk maintenance.

Strategies for mid and long term include: achieving a 22% recycling rate by 2020, passing bills to enforce separation at source, and allocation of special budget for the recycling project.

+ REPLICABILITY AND SCALABILITY

The prospect for scaling up this project lies in rules and regulations being in place to enforce separation at source.

This initiative is highly replicable in residential areas with dense populations and multi-housing unit complexes where the community is prepared to cooperate with practicing separation at source.

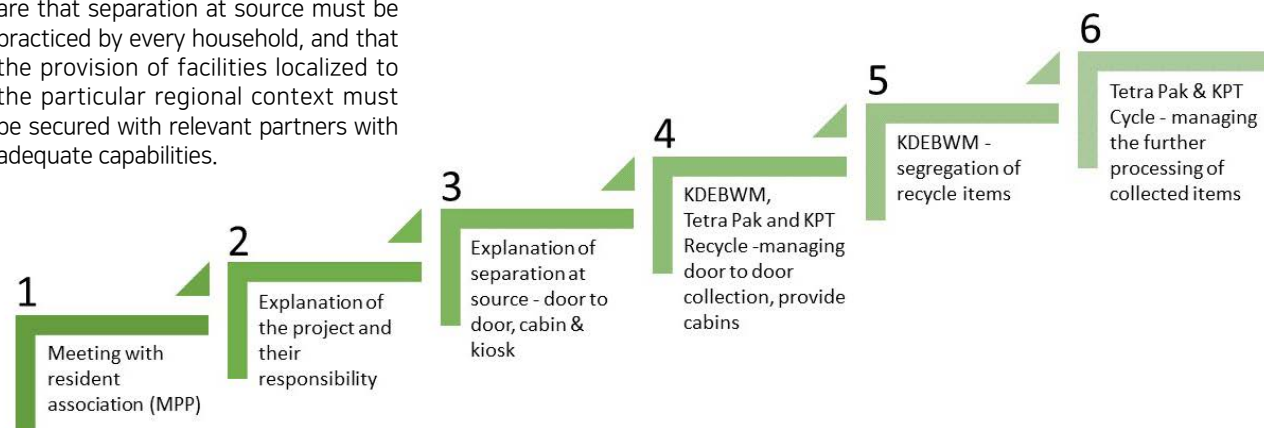
Important points to note for parties interested in replicating this project are that separation at source must be practiced by every household, and that the provision of facilities localized to the particular regional context must be secured with relevant partners with adequate capabilities.

CIRCULAR ECONOMY

- Circular resources and energy supply
- Resource recovery from waste
- Industrial symbiosis
- Product as a service
- Product line extension
- Redesigning products

Data recorded in 2020

- A total of 3,449 houses involved from 8 residential areas
- Total collection - 20,653.6 kg



COLLECTION FROM MOBILE KIOSK





FROM CRITICAL LAND TO A DREAM URBAN FOREST

BANDA ACEH | INDONESIA



In Banda Aceh, the conversion of critical land to a green urban forest was imperative in order to halt and reverse land degradation and biodiversity loss.

+ Population
252,899

+ Area(KM²)
61.36

+ GDP Per Capita
USD 3,869

+ Budget
USD 1,200,000

+ Implementation Period
2010 - 2015

+ PROBLEM DEFINITION

When the tsunami hit Banda Aceh in December 2004, Tibang was one of the most severely affected villages. Numerous productive farms were damaged and lands that used to flourish with plants became degraded, arid, and barren. Vegetation in the neighbourhood disappeared, swept away by the tsunami. Trees that survived were irregular and scattered. The remainder was an empty, infertile, swampy land. In short, the condition and quality of the environment at that time was completely devastating.

+ DID YOU KNOW?

Critical land is a land which experienced the functional decline (degradation) due to environmental damage.



As the area is surrounded by swamps, shallow wells utilized by the villagers were contaminated by seawater and no longer potable. Due to the infertility of the land, only marsh plants could be cultivated. The situation worsened with the tsunami's further penetration into the mainland. Tibang villagers simply could not sustain their livelihoods on this land in the aftermath of the tsunami.

During the wetter seasons, the area is inundated by water as a result of the coastal shores shifting inland due to the tsunami. The land being abandoned for years caused ecological succession, leaving it crawling with weeds and vines.

The public had limited use of the land because the green areas were used for grazing cattle, with the rest being used as an access route to the surrounding fishponds.

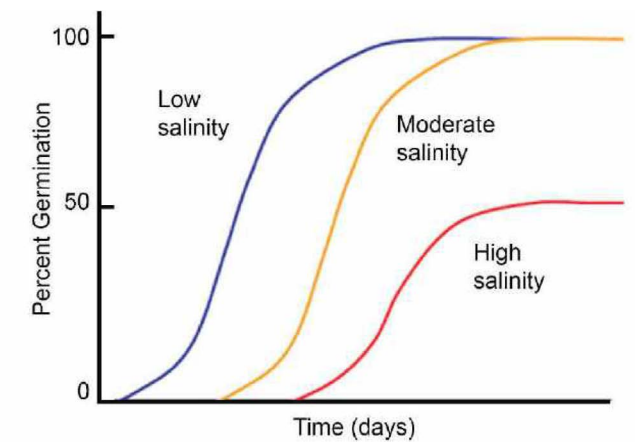
The initial condition of this land was unpromising. Proper utilization of this land as an urban forest needed to proceed with discreet consideration. Unlike regular urban forests, BNI Tibang Urban Forest was technically built from scratch. During the implementation phases, afforestation was the first and last activity and its maintenance tasks continued to be a priority among other construction developments.

+ OBJECTIVES

Despite the challenges stemming from the land's dismal conditions, the Government of Banda Aceh and BNI Bank refused to cease its initiatives in building an urban forest, which had been in high demand from the people of Banda Aceh.

Apart from a recreational purpose, it was expected to serve as the "lungs of the city" to supply better oxygen to Banda Aceh residents.

The legitimacy of the project was further consolidated by the fact that Banda Aceh was lacking in urban forests at the time. Citizens expressed a desire for outdoor spaces for recreation, socializing, and outdoor physical activities, free of air pollution.



+ OUTCOMES AND IMPACTS

Impacts and benefits gained included marked improvement in environmental quality and preservation. Citizens directly benefitted from the project outcomes, listed below:

CITY'S ENVIRONMENTAL QUALITY

Improving the atmospheric conditions

→ With the number of trees planted reaching more than 4,000 stalks of 150 species, BNI Tibang Urban Forest is able to produce 37 tons of oxygen per day.

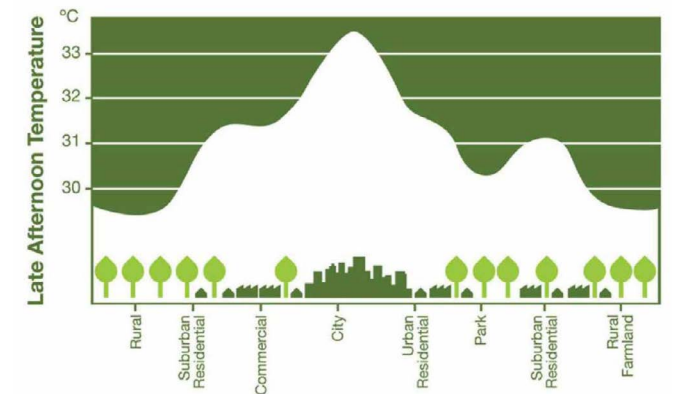
Air ventilation and reducing carbon emissions

→ With the increased supply of oxygen in the atmosphere, the air quality immensely improved. Severe air pollution caused by carbon emissions released from vehicle exhaust fumes can be absorbed by trees planted in urban forests. Thus, BNI Tibang Urban Forest guarantees the availability of oxygen for city residents.

Tackling Urban Heat Islands (UHI)

→ Definition: "Urban heat islands" occur when cities replace natural land cover with dense concentrations of pavement, buildings, and other surfaces that absorb and retain heat. This effect increases energy costs (e.g., for air conditioning), air pollution levels, and heat-related illness and mortality.

The trees provide shade and pleasant comfort to the residents by cooling the atmosphere and mitigating urban heat. The cooling effect of the urban forest transforms the heated air into cooled air.



ENVIRONMENTAL SUSTAINABILITY

Supporting land-use and water conservation

→ The BNI Tibang Urban Forest is able to provide a beneficial impact by reducing the intrusion of seawater to reduce the salinity of the villagers' shallow wells so that they may be reutilized.

Enlarging land usage and enhancing soil conservation

→ The soil quality was notably improved, enabling a larger area to be utilized productively, with improved fertility sufficient to cultivate various species of plantation.

Facilitating pollination and biodiversity preservation

→ BNI Tibang Urban Forest provided a haven for pollination which contributed to advanced biodiversity preservation.

COMMUNITY BUILDING

Local community (villagers):

→ People profit from the forest by vegetable cultivation.

→ The land owned by Tibang residents saw increased fertility and lowered groundwater salinity.

→ Jobs were provided for 56 women from Tibang village during the construction phase. 7 of them are still currently working at the urban forest.



CITIZENS

→ Provided means of nature-immersive learning, recreational activities, and social gatherings.

→ A daily average of more than 150 visitors to the urban forest is maintained, and the number is doubled on weekends.

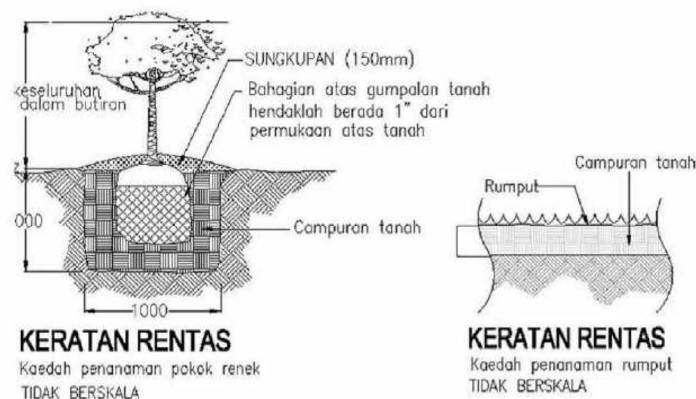
→ Facilitating study and research, with a few examples of remarkable research being the analysis of oxygen production and the exploration of various species of birds and butterflies inhabiting the area.



+ ACTIONS AND IMPLEMENTATIONS

The initiative was implemented by the Sanitation and Beautification Department (DK3) as the organization responsible for Green Open Space management in Banda Aceh municipality together with Bustanussalatin Foundation, an environmentalist foundation. DK3 and Bustanussalatin Foundation approached BNI Bank to gain its Corporate Social Responsibility (CSR) fund through the BNI Go Green programme. Since the complete transfer of the urban forest to the Banda Aceh government, its operation and maintenance responsibility has been delegated to DK3.

There are about 500 inhabitants directly affected by this initiative, namely the villagers of Tibang. Moreover, the initiative is also a response to demands for an urban forest by 250,000 citizens of Banda Aceh.



+ DID YOU KNOW?

Corporate Social Responsibility (CSR) can be simply defined as the grants and funding process under which various Non-profit Organizations (NGOs) can get financial and other assistance from the corporate sector.



The development of BNI Tibang Urban Forest consisted of 4 stages during a 2 year period. The stages are described as follows:

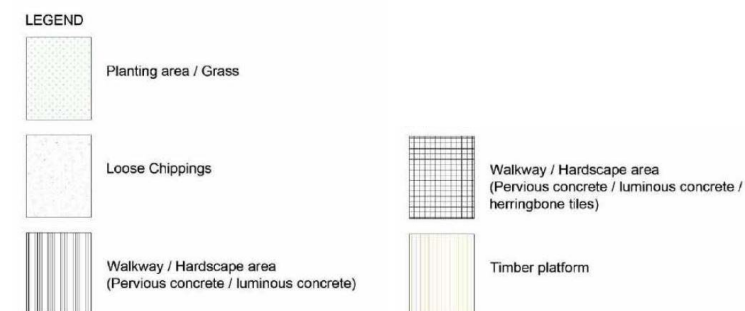
STAGE 1: LAND AND BASIC INFRASTRUCTURE PREPARATION AND TREE PLANTING

The first stage of the BNI Tibang Urban Forest was the most critical, as it initiated the transformation of degraded land into an urban forest. The initiatives were visually manifested through the planting of trees. In order to deliver various elements of the project, coordination between the public, administrative, and organizational sectors was imperative to deliver various project elements.

Timeline	Activities
	Preparation of BNI Tibang Urban Forest Master Plan
January–May 2010	Planting of trees
	Provision of basic infrastructure
	Development of community participation



The success of the four listed activities were considered crucial and required delicate execution. A setback in the first stage would have resulted in disrupted implementation of future stages.



STAGE 2: DEVELOPMENT OF CIRCULATION STRIP, MAIN PLAZAS AND TREE MAINTENANCE

Stage 2 took place from June to December 2010, targeted to breed and manage the trees planted in the first phase through close observation. Various infrastructure such as circulation paths, bridges, pedestrian paths, and ramp canopy trails were built.



STAGE 3: DEVELOPMENT OF THEMATIC PARK, PROVISION OF PUBLIC AND SOCIAL FACILITIES

Stage 3 was implemented through January to June 2011, targeted to broaden the diversity of tree species and promote particular themes, adding facilities for the users' convenience and supplementing informative accommodations.



STAGE 4: INSTALLATION OF ELECTRICAL AND INFORMATION BOARD

Stage 4 was the final stage, conducted over July to December 2011, wherein rare species of trees were added to the forest.

Following the completion of the development stage, BNI continued to support funding for urban forest maintenance tasks through the end of 2013. Beginning from 2014, BNI Tibang Urban Forest was fully transferred to the Government of Banda Aceh through the Sanitation and Beautification Department (DK3) of Banda Aceh Municipality.

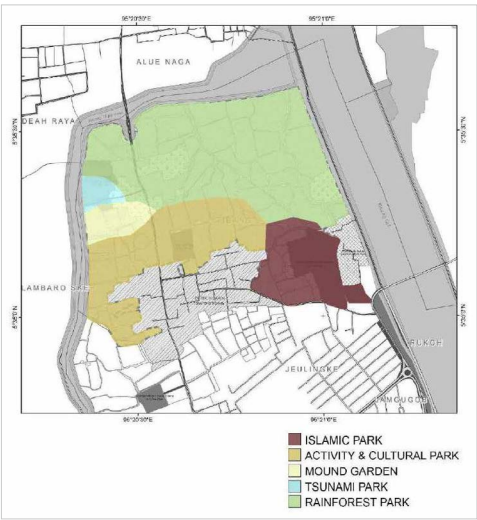
PLANTING SCHEDULE

ITEM	SYMBOL	SCIENTIFIC NAME	COMMON NAME	SPECIFICATIONS	OVERALL HEIGHT	TRUNK CALIPER	PLANTING DISTANCE	QTY nos
TREES								
1.		<i>Plumeria rubra</i>	Kemboja (pink)	Good branching, instant tree, polybagged	5m	50-75	as shown	7
2.		<i>Eucalyptus degupta</i>	Gum Tree	Good branching, instant tree, polybagged	6m	50-75	as shown	68
3.		<i>Fagraea fragrans</i>	Tembusu	Good branching, sapling, polybagged	3m	50	3m	71
4.		<i>Eugenia spp</i>	Eugenia Orange Bark	Polybagged, instant tree	4m	50	as shown	35
5.		<i>Pentaspadon motleyi</i>	Peleng	Polybagged, instant tree	4m	50	as shown	24
SHRUBS								
1.		<i>Gardenia jasminoides</i>	Jasmine	Polybagged, bushy, flowering	0.5m	0.3m		350
2.		<i>Ervatamia dwarf</i>	Ervatamia spp	Polybagged, bushy, flowering, Instant trimmed in round shape	0.8m	as shown		600



+ REPLICABILITY AND SCALABILITY

Collaborative approaches demonstrated by BNI Tibang Urban Forest's development have been adopted in the development of Terambesi City Park in Peulanggahan village, Banda Aceh. This project became a source of inspiration for many visiting city officials from various regions in Indonesia to study the development concept of BNI Tibang Urban Forest.



Some of the images were sourced from the Development Proposal [Hutan Kota Tibang & Krueng Aceh] prepared by Universiti Sains Malaysia.



TRANSFORMING CHEONWANG NEIGHBOURHOOD PARK INTO A CULTURAL SPACE

GURO-GU | REPUBLIC OF KOREA



The Cheonwang Neighbourhood Park was reborn as a multiplex cultural space for family camping, rock climbing, urban farming, and more.

- + Population
460,091
- + Area(KM²)
20.12
- + GDP Per Capita
USD 31,489
- + Budget
USD 25,090,000
- + Implementation Period
2020 -2021

+ PROBLEM DEFINITION

Due to its location in the greenbelt zone, expansion of businesses in the Hang-gol district were restricted. Additionally, livestock barns and factories were aging poorly.

After the completion of a large-scale housing development, about 20,000 people moved into the area, which increased the demand for neighbourhood parks.



+ OBJECTIVES

The project was designed to create a multiplex cultural space where people can enjoy their leisure time and various outdoor activities.

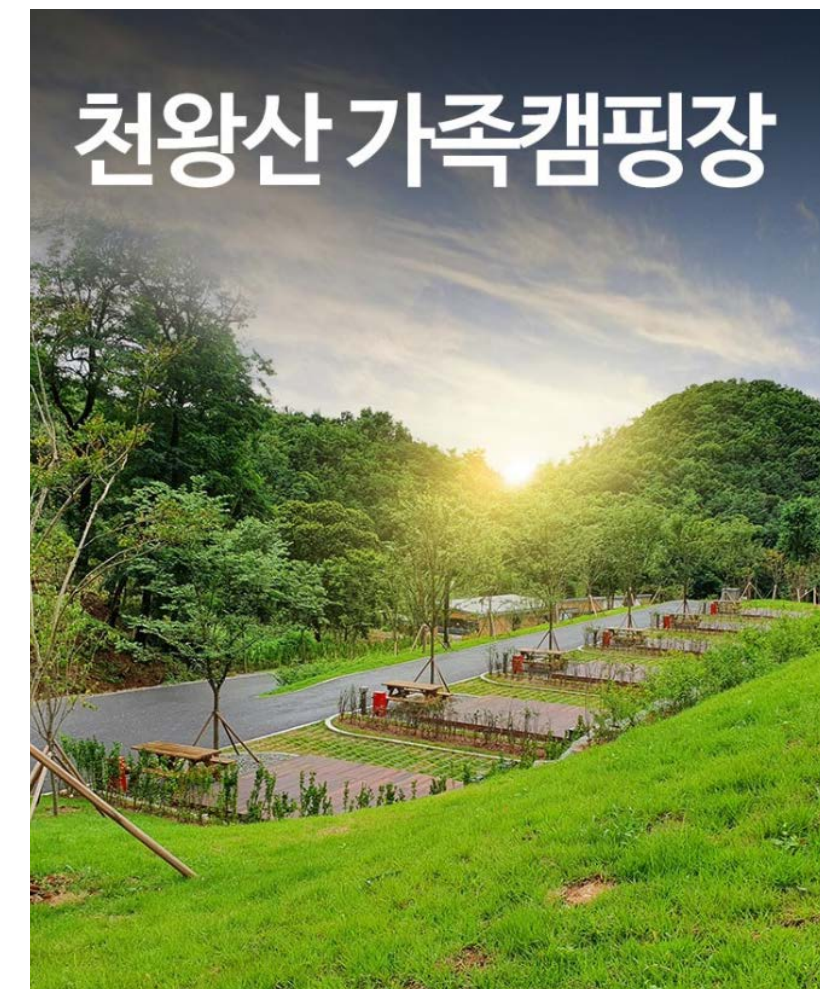
To meet those needs, the city has actively pushed ahead to expropriate land for parks and procured budgets from government-sponsored public projects through bidding proposals. The details are listed below.

- Agricultural Park**
Neighbourhood Park project proposal
- Ecological Park**
Ministry of Environment project proposal
- Family Camping Site**
Neighbourhood Park project proposal

+ OUTCOMES AND IMPACTS

With the completion of the project, the city has successfully transformed the underdeveloped park site into a multiplex cultural space while preventing reckless development and environmental damage.

In addition, it has contributed to satisfying the various needs of citizens for enjoying outdoor activities and revitalizing the local economy.



+ ACTIONS AND IMPLEMENTATIONS

PROJECT OVERVIEW

Period	January 2019 – December 2021	
Size	42,688 m ²	
Budget (USD)	Compensation payment for land expropriation	\$21 million
	Enlargement of camping site	\$840,000
	Book shelter	\$1.6 million
	Artificial rock wall	\$13 million
Master Plan	Ecological park	9,100 m ²
	Family camping site	33,052 m ²
	Book shelter	2,569 m ²
	Urban agricultural park	9,977 m ²



+ DID YOU KNOW?

To systematically conserve the natural environment and to manage and utilize natural resources, the Ministry of Environment levies and collects the Accountability Charge for the Ecosystem Conservation from an operator of development projects which have a substantial impact on the natural environment or ecosystem or cause a decrease in biological diversity.



+ DID YOU KNOW?

Vertical farming is the practice of growing crops in vertically stacked layers. It often incorporates controlled-environment agriculture, which aims to optimize plant growth, and soilless farming techniques such as hydroponics, aquaponics, and aeroponics.



REFUND OF ECOSYSTEM CONSERVATION ACCOUNTABILITY CHARGE

The charge was deducted by the Ministry of Environment due to reducing the area of environmental destruction.

Period	January – December 2020
Budget	USD \$417,000

This project aimed to revitalize the formerly aged cropland into an ecological park.

URBAN AGRICULTURAL EXPERIENCE CENTRE

This project was selected by the Ministry of Land, Infrastructure, and Transport in 2021. It aimed to create an urban agricultural experience centre, operate activity programmes, establish a vertical farm (containing a smart greenhouse and cafe) and cultivate crops using Information and Communications Technology (ICT).

Period	September 2020 – October 2021
Budget	USD \$2.1 million

EXPANSION OF CHEONWANGSAN FAMILY CAMPING GROUND

This project was selected by the Ministry of Land, Infrastructure, and Transport for 2022. The original project built a car camping site and initiated afforestation on the surrounding hills. The project for 2022 is intended to enhance the experience of the camping site through the introduction of other projects, such as the book shelter.

Period	January – October 2022
Budget	USD \$840,000

BOOK SHELTER (LIBRARY)

This project aimed to build a “book shelter” and a book cafe.

Period	September 2020 – October 2021
Budget	USD \$1.6 million

ARTIFICIAL ROCK WALL

This project aimed to build an artificial rock wall and initiate afforestation.

Period	October 2020 – October 2021
Budget	USD \$1.3 million

A huge amount of budget was required for land compensation and facility expenses. A public interest project proposal was submitted to the government to procure the necessary budget.

Providing compensatory payment for land expropriation was anticipated to be delayed due to the annual budget limit. Various sources of funding were obtained to meet the required deadlines.

The government was reluctant to grant permission for discretionary use of state-owned land. The Guro District office actively engaged in negotiations to overcome the predicament.

+ REPLICABILITY AND SCALABILITY

The project has provided opportunities for the citizens to enjoy outdoor activities while keeping a safe distance during COVID-19. It can be adopted by member cities desiring to make their cities more environmentally resilient.





NATURE-BASED SOLUTIONS, ROAD TO SUSTAINABLE GREEN CITY DEVELOPMENT

CALAPAN CITY | PHILIPPINES



Calapan City aimed to address and combat the challenges of rapid urbanization, climate change, and natural disasters through the implementation of nature-based solutions to promote urban reforestation, marine life conservation, urban greening, and water resource management to achieve sustainable development.

+ Population
145,786

+ Area(KM²)
250.1

+ GDP Per Capita
USD 3,298

+ Budget
USD 2,500,000

+ Implementation Period
2013 - Ongoing

+ PROBLEM DEFINITION

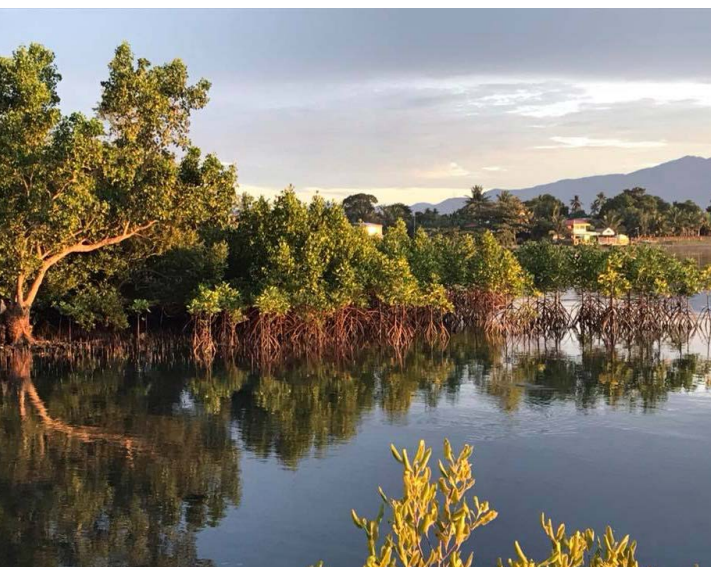
Like many other cities in the world, Calapan City experienced the adverse effects of rapid urbanization and climate change. This growing city is challenged by unintended consequences of urbanization, such as excessive concentration of commercial goods, light pollution, urban congestion, and exponential urban migration resulting in an increase in informal settlement areas and scarcity of resources.

The city is located in the typhoon belt and is frequently hit by strong typhoons, whose intensities have tripled over the past few years. Floods caused by exceptionally heavy monsoon rains occasionally occur. Irregular climate patterns like El Niño have detrimental effects on the agricultural sector.



+ DID YOU KNOW?

A typhoon belt is a large region in the Pacific Ocean where a lot of Earth's earthquakes and volcanic eruptions happen.



+ OBJECTIVES

Calapan City is striving to balance urban growth and sustainable development through Nature-Based Solutions.

In this light, Calapan City Green Initiatives promote sustainable development involving the significant role of ecosystem infrastructure in the provision of natural resources to the community while protecting the environment.



+ DID YOU KNOW?

Urban cores are defined as areas that have high population densities (7,500 or per square mile or 2,900 per square kilometer or more) and high transit, walking and cycling work trip market shares (20 percent or more).

+ DID YOU KNOW?

Carbon sequestration is the long-term removal, capture, or sequestration of carbon dioxide from the atmosphere to slow or reverse atmospheric CO₂ pollution and to mitigate or reverse climate change.

+ OUTCOMES AND IMPACTS

Mangrove Forest Park was developed at the urban core of the city in partnership with an academic institution, the Oriental Mindoro National High School. The two-hectare sized eco-park is located inside the premises of the school. The mangrove forest aims to reduce carbon emissions and provide a habitat for various freshwater marine species and birds, increasing biodiversity. The forest is also serving as a learning hub for students and visitors. The Youth for Environment-Organization (YES-O) is mostly students from the Science, Technology, Engineering and Mathematics (STEM) department. They gave the orientation lecture to visitors, sharing knowledge on the significance of mangrove forest about its contribution to climate action and its role in carbon sequestration. Additionally, the park is sought after as a local tourist attraction.

+ BACKGROUND

As the so-called 'Acropolis of the South', Calapan City incorporates the agricultural system as a vital component of urban and regional development. Calapan City's economy centres on agriculture, fishing and affiliated agro-industrial activities, including food processing.

Aside from being known as the 'Rice Basket' of Southern Luzon, it is also part of the Verde Island Passage, a strait located between the provinces of Batangas and Mindoro.

This strait is known to be the Centre of Marine Shorefish Biodiversity encompassing high concentration of marine species per unit area based on the result of a study conducted by Dr. Kent Carpenter, International Union for Conservation of Nature (IUCN) Global Marine Species Assessment Coordinator, and Dr. Victor Springer from the Smithsonian Institute in 2005.



Calapan City prioritizes urban greening to enhance the aesthetic elements of the city, mitigate the impacts of UHI and prevent citizens from experiencing heat stress. The Calapan City Government implements indigenous and native tree propagation and afforestation in partnership with the private sector at the City Nursery. This action also contributes to carbon sequestration and alleviates the damaging impacts of urbanization.

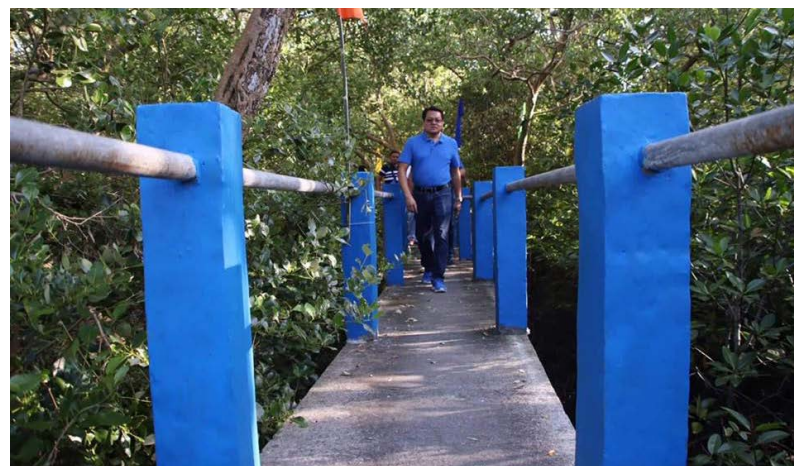


The pilot project on Calapan River, ABC Calapan River Management, was initiated in 2013. It includes a flood mitigation plan, relocation of informal settlers residing along the riverbanks, and the construction and maintenance of a river linear park.

The city government fosters these nature-based interventions to sustainably manage and restore natural resources, ensuring a healthy ecosystem towards a resilient city.



The establishment of the Marine Protected Areas in Calapan City has been managed in partnership with fisherfolk associations, the local communities (barangays), and the local fishing industry. The city government has designated 5 Marine Protected Areas in its coastal waters which includes Harka Piloto Marine Sanctuary, Silonay Mangrove Eco-Park, Maidlang Mangrove Forest, Mahal na Pangalan Mangrove Park and the Calero-San Rafael Seagrass.



+ ACTIONS AND IMPLEMENTATIONS

Calapan City has instituted public partnerships for the establishment of Mangrove Forest Park and to meet the following objectives. It aimed to initiate local eco-tourism development, improve carbon sequestration, establish a learning hub for ecological management, and mobilize the local residents to engage with the local government SDG implementation agency.



+ REPLICABILITY AND SCALABILITY

The project, "Nature Based Solutions" from Calapan City, is highly replicable for cities that are exposed to similar disaster risks.

Given that Calapan City's keen cooperation with various stakeholders was one of the critical factors in successfully delivering the implementation of the project, the feasibility for other cities is contingent on their capability to mobilize stakeholders' participation.





SDG NAVIGATOR

ABOUT

The SDG Navigator, a tool of the Urban SDG Knowledge Platform, is designed to facilitate local assessments of ongoing efforts to achieve the United Nations (UN) Sustainable Development Goals (SDGs) at the city level.

It is a self-assessment tool created to help cities evaluate their current performance on the implementation of the SDGs, based on official UN SDG targets. Although the UN SDGs were designed to be evaluated at a national level, the SDG Navigator aims to help bring this assessment to a level that is relevant for cities.



In the SDG Navigator, the 17 Sustainable Development Goals are re-categorized into the following 10 themes:



Since many of the indicators chosen to measure progress on SDGs tend to be at the national level, there has been a growing effort to provide comparable indicators at the city level. The indicators are to be interpreted in accordance with the context of the specific goal and target. The target specifics are displayed as in the examples to the right.

Additionally, based on the responses to the questionnaire, the SDG Navigator will suggest best practices from the Urban SDG Knowledge Platform that will help cities address their challenges in SDG implementation.



Target 11.7 Target Score: 1/10

By 2030, provide universal access to safe, inclusive and accessible, green and public spaces, in particular for women and children, older persons and persons with disabilities.

Target

Q24. What is the city's green area (forests, parks, gardens, etc.) per 100,000 residents?

Result

POOR

Q25. What percentage of local residents live within 400 meters of a public green area?

POOR



Target 11.7 Target Score: 1/10

By 2030, provide universal access to safe, inclusive and accessible, green and public spaces, in particular for women and children, older persons and persons with disabilities.

Here is a list of best practices to help your city improve target



Calapan City, Philippines | Philippines

Nature-Based Solutions, Road to Sustainable Green City Development

Calapan City is one of the fastest-growing cities in the Philippines. It has a total land area of 250.06 square kilometr...



Banda Aceh | Indonesia

Waste to Energy for the Poor: Banda Aceh Landfill Gas Utilization to Support the Living of the Poor Who Live around the Landfill

Potential methane gas produced from Banda Aceh landfill untapped for years and became one of the contributors of CO...



Bangkok | Thailand

Bumrungrawian School

The School was selected to be part of the Her Royal Highness Princess Maha Chakri Sirindhorn Royal's Initiative since 2007

DETAILED RESULTS

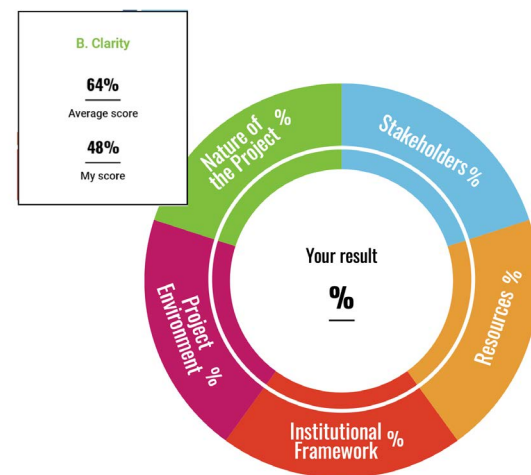
TOOLKIT ON LOCALIZATION OF URBAN PRACTICES



ABOUT

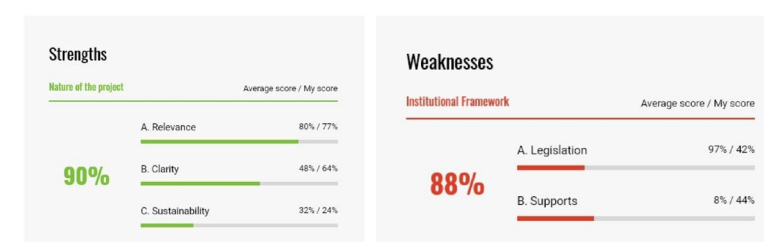
The biggest challenge for cities pursuing sustainable development is the implementation of best practices into their cities. The Toolkit on Localization of Urban Practices is a pre-feasibility study screening tool that aims to assess if best practices and projects from one city can be localized and implemented into another city. Based on a self-assessment of five key dimensions, the Toolkit is a diagnostic tool to identify and assess the challenges in delivering best practices of members and clusters to the local setting, enhancing the possibility of policy and project implementation.

As a city government official, you are often exposed to a variety of best practices of other cities during workshops, trainings, seminars, etc. However, not all best practices you are exposed to will be suitable for your city. This Toolkit will be used to identify the potential development challenges and to develop solutions on how to address those delivery challenges.



EXAMPLES OF DELIVERY AND IMPLEMENTATION CHALLENGES

- Overly complex or unclear projects and objectives
- Disengaged or resistant stakeholders
- Lack of resources
- Inefficient or non-existent institutional framework
- Weak support or poor project environment



Nature of the project

- A. Relevance
- B. Clarity
- C. Sustainability

Stakeholders

- A. Project officers of implementation agency
- B. Leadership
- C. Affected groups/target population

Resources

- A. Human resources
- B. Financial resources
- C. Technology
- D. Information

Institutional Framework

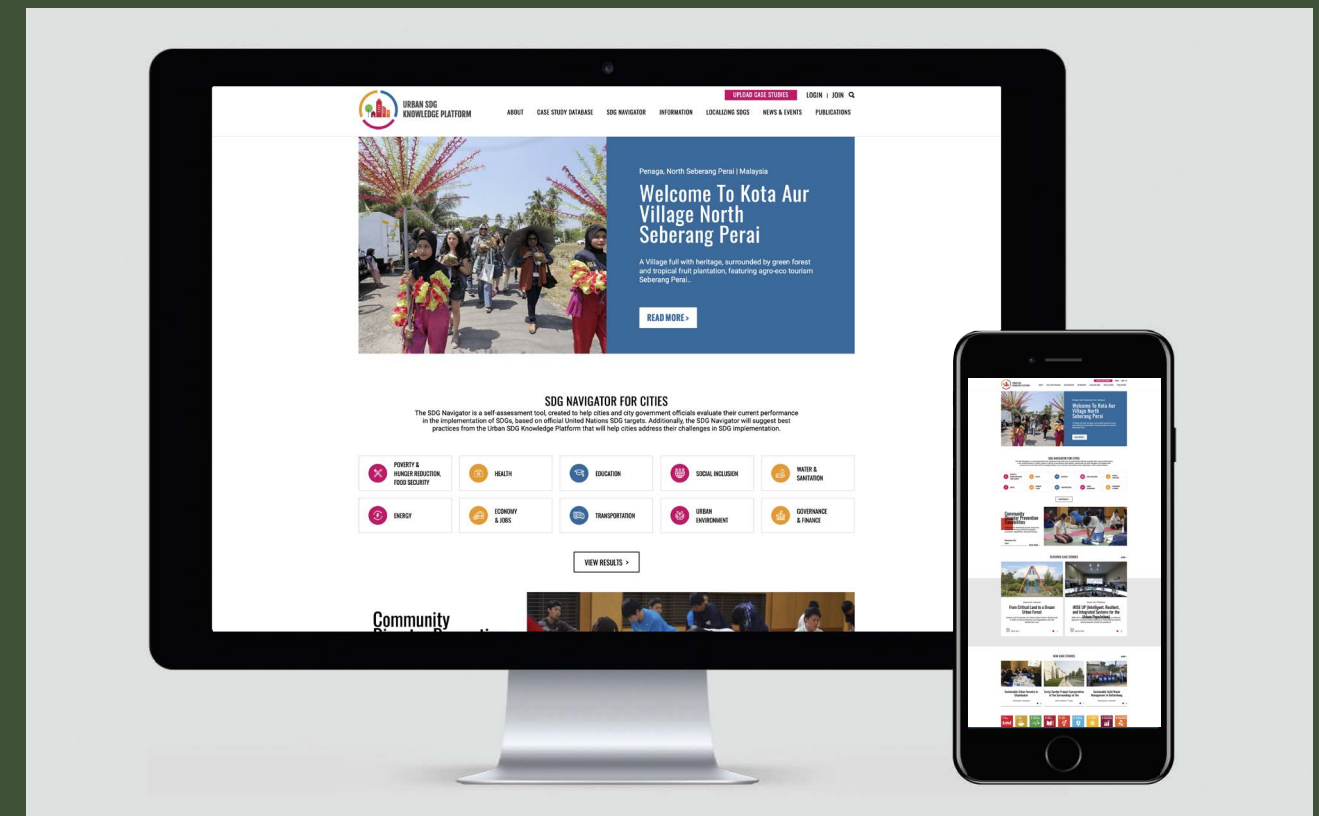
- A. Legislation
- B. Supports

Project Environment

- A. Infrastructure
- B. Social Environment
- C. Political Environment

INTRODUCTION TO THE URBAN SDG KNOWLEDGE PLATFORM

The Urban SDG Knowledge Platform
www.urbansdgplatform.org



CityNet, the Seoul Metropolitan Government, and the United Nations Economic and Social Commission for Asia and the Pacific (ESCAP) have established the Urban SDG Knowledge Platform to promote and support knowledge sharing and city-to-city cooperation for sustainable urban development.

The Urban SDG Knowledge Platform is intended to support local action for the implementation of the 2030 Agenda for Sustainable Development. A repository of best practices from all over the world, through up-take and replication of successful initiatives and good practices, conduction of capacity building workshops and technical assistance, and partnership with urban think tanks, the Urban SDG Knowledge Platform seeks to analyse best practices implementation at the local level.

To better further this aim, CityNet developed two tools from 2020-2021 to facilitate the understanding of local implementation of the SDGs and the localization of best practices. The SDG Navigator, based on official UN SDG targets, helps cities by localizing these targets for analysis at the local

level. By filling in a self-assessment questionnaire, officials are able to gain insight into their city's implementation of the SDGs. The Toolkit for Localization of Urban Practices is a pre-feasibility screening tool that helps cities evaluate if a best practice is suitable to be replicated in their own cities. Based on a self-assessment of five key dimensions, cities will be able to gain a better understanding of how suited a best practice is to their local context.

Through the Urban SDG Knowledge Platform project, CityNet, the Seoul Metropolitan Government, and UN ESCAP will continuously scale up its efforts to foster sustainable urban development in the Asia-Pacific region. By working together among various stakeholders and partners, the Urban SDG Knowledge Platform will keep connecting resources to further contribute to the city-to-city and city-to-multilateral cooperation. Through connecting urban stakeholders together, the Urban SDG Knowledge Platform will ensure that no cities are left behind from the implementation of the 2030 Agenda for Sustainable Development.