

LEDs Implementation

Linking national and sub-national LEDs
implementation frameworks

Scott A. Muller

Nicholas Harrison, Ecofys

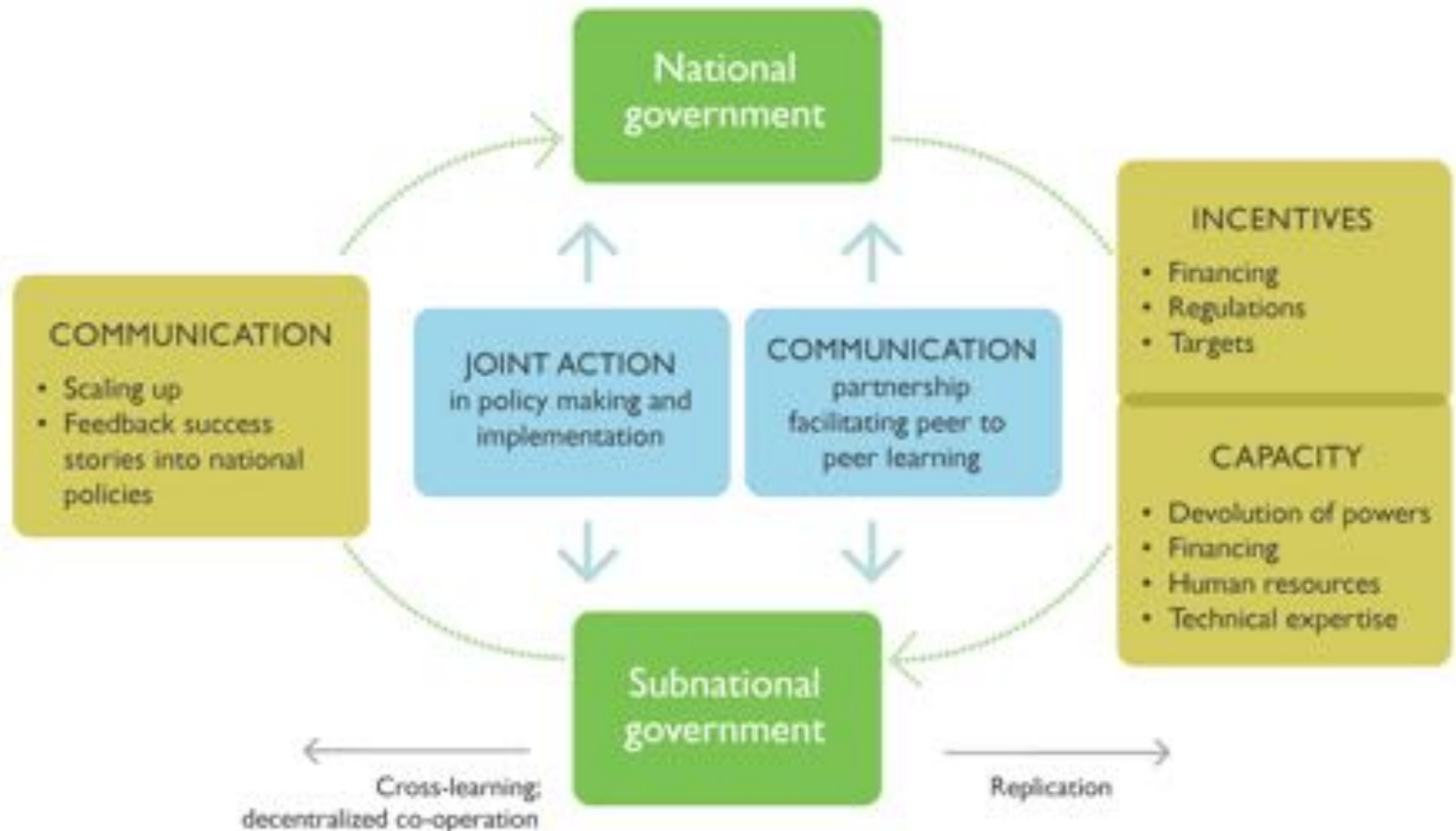
Mariani Yanti, Indonesia

Jackie Klopp, Columbia University

Addis Ababa, 2014



National & Sub-national LEDS Implementation Frameworks



Format of the session

- Concept Overview
- GGBP - SNI examples— Nicholas Harrison (10 mins)
- “Vertical Integration and Financing; the Case of Waste Management in Jambi City, Indonesia” — Ms. Mariani Yanti, Jambi City (15 mins)
- “Linking National and Sub-national Transportation Strategies”; How to collect, manage and link data for integrated transportation management; the case of Nairobi’s Digital Matatus — Dr. Jackie Klopp, Colombia University (15 mins)
- Small group work – addressing your own SNI challenges (30 mins)
- Report outs (10 minutes)

LEDS GLOBAL PARTNERSHIP

SUBNATIONAL INTEGRATION WORKING GROUP

MISSION:

To enhance capacity, capture synergies and improve and support coordination among national and subnational governments that are implementing low emission development strategies and climate change action plans.

ACTIVITIES:

- Mapping issues, activities and resources
- Capacity building training
- Ongoing dialogue

Launched in 2013, the SNI Working Group of the LEDS GP has 100+ members including governments, IGOs and NGOs



LEARNING: LEDS-GP Working Group Resources

What national governments can do to accelerate subnational action on climate

Key Findings:

- Huge opportunities
- Various barriers
- Many solutions

Case studies and further guidance tools and resources coming soon...



Download: http://unfccc.int/files/bodies/awg/application/pdf/ledsgp_sni_paper_bonn_2014.pdf

ECOFYS



MANY SOLUTIONS EXIST TO REMOVE BARRIERS AND ACCELERATE ACTION

FINANCIAL

- Direct subsidy or funding for SNG mitigation action (e.g. *Germany Climate Fund*)
- Establishing dedicated funding entities (e.g. *Rwanda, FONERWA; UK, GIB*)
- Working through existing finance entities (e.g. *Peru, COFIDES; Thailand EE fund*)

POLITICAL AND INSTITUTIONAL

- Providing mandate and ownership (e.g. *Vietnam GG Strategy; UK City Deals*)
- Improve integration and coordination (e.g. *US Climate Task Force*)

KNOWLEDGE AND INFORMATION

- Improving access to data (e.g. *UK HEED Database or mini-stern reviews*)

CAPACITY AND SKILLS

- Provide skills and knowledge support (e.g. *Brazil national development bank*)
- Building skills and knowledge (e.g. *Bangladesh, Waste management training*)

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Thai Revolving Energy Efficiency Fund (2003-12)

- Public funding mechanisms financed 294 projects with \$450MM
- Led to 15.7 TWh energy savings
- Collaboration with local commercial banks to develop and streamline procedures for appraising and financing EE projects.
- Loans to local commercial banks with 0% interest rate. Banks then lent to EE projects and ESCOs at max interest of 4%.
- Government dedicated credit line lowered bank risk, making EE savings and financial paybacks tangible.



Credit: Frankfurt School UNEP Collaboration Centre for Climate and Energy Finance

ECOFYS

sustainable energy for everyone
LEDS
Low Emission Development Strategy

Viet Nam Green Growth Strategy (VGGS) 2012

- Commitment by the Vietnamese government to transform the economy to a greener development path.
- All 63 provinces have mandate to formulate Provincial Green Growth Action Plans
- Provinces will integrate their plans into their local 5-year and annual Socio-Economic Development Plans.
- To provide basis for allocating budgets under State Budget Law.



UK City Region “Mini Stern Reviews”

- Data produced for national use to support implementation of National Climate Change Law
- Collaboration between local authorities, universities, and National Climate Change Committee
- Generated analysis which enabled locally tailored low carbon investment decisions
- Cost efficient, comparable and easily replicated in other city-regions



ECOFYS



Subnational GHG accounting protocol

- *Global Protocol on Community-scale GHG Emissions (GPC)*
- Moving towards a global standard for all local governments. Relevant to sub-national governments to support vertical integration.
- Core partners: WRI (leads process, hosts Secretariat), C40 and ICLEI.
- Currently in review – public commenting phase concluded.
- GPC 2.0 to be launched at COP 20 in Lima.



WORLD
RESOURCES
INSTITUTE



Estruturadora Brasileira de Projetos (EBP) (2009...)

- Joint venture between the Brazilian Development Bank (BNDES) and 8 financial groups.
- Supports the public sector to meet infrastructure and public policy goals by acting as an advisor for concessions or PPPs
- Assists municipal and state governments in all stages of the bidding and procurement process.
- In 4 years EBP has helped structure over US \$1.4 billion in municipal infrastructure projects.



Credit: EPB Bus Terminal — Belo Horizonte

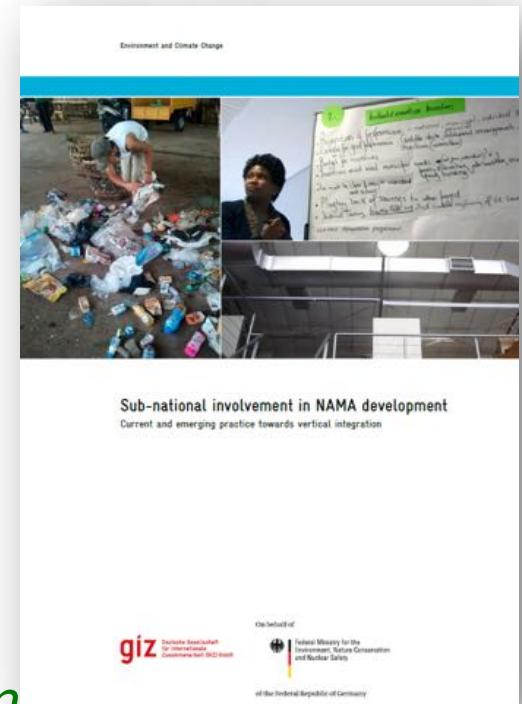
LEARNING: Vertical NAMA (V-NAMA) pilots

Sub-national involvement in NAMA development (+ checklist)

Key findings:

- Provide incentives
- Enable Integration
- Building capacity

Vertical integration policy and implementation guidance coming soon...



Source: <http://www.mitigationpartnership.net/giz-2013-sub-national-involvement-nama-development>

ECOFYS



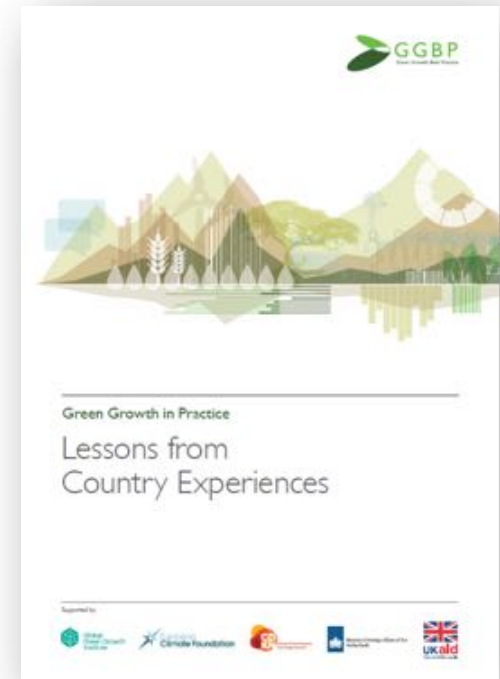
LEARNING: Green Growth Best Practice (GGBP)

Chapter 8: Integrating Subnational Action

Key findings:

- Incentives
- Capacity Building
- Joint action
- Communication

Case studies: www.ggbp.org

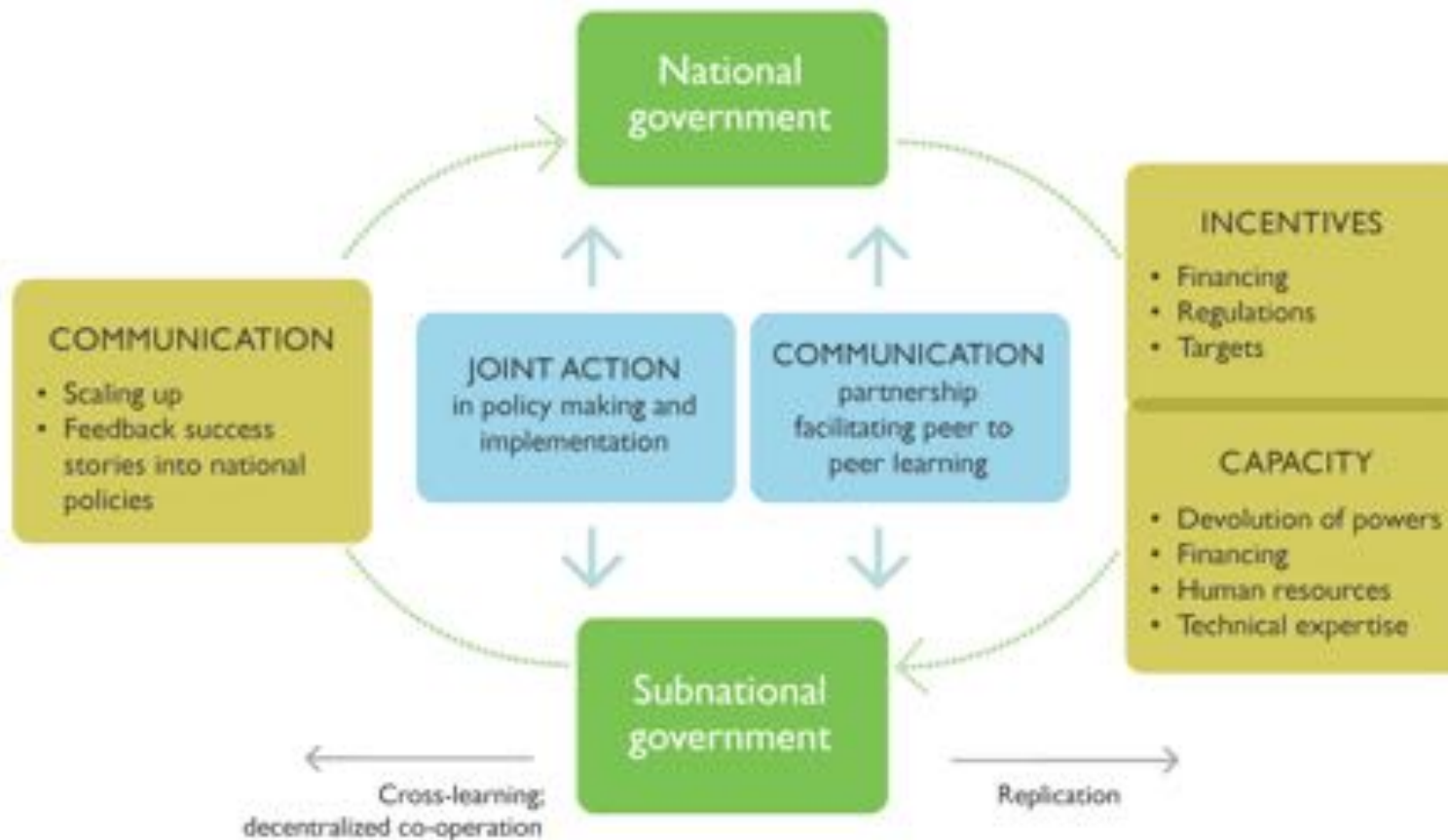


Source: <http://www.ggbp.org/report/best-practice-report/integrating-subnational-action>

ECOFYS



LEARNING: Green Growth Best Practice (GGBP)



LEARNING: Green Growth Best Practice (GGBP)

INCENTIVES

Establish financial incentives, regulations, and targets to motivate and support subnational government in promoting green growth

India: the Jawaharlal Nehru National Urban Renewal Mission (JnNURM) program linked funding incentives to implementing reforms.

China: Renewable Energy Law has had significant impact requiring provinces, autonomous regions, and municipalities to set up medium-to-long term objectives and plans for renewable energy development.

CAPACITY BUILDING

Enable subnational governments to implement green growth by providing new powers, budgets, human and technical resources, and peer learning

United States: US Environment Protection Agency (EPA) provides technical assistance to States and local government to assist in implementation of subnational climate and energy plans.

LEARNING: Green Growth Best Practice (GGBP)

JOINT ACTION

Develop interlinked green growth and subnational strategies and measures where national government enable and motivate subnational replication

France: Regional Climate-Air-Energy Plans guiding climate and energy policy in 26 French regions through to 2050. A hybrid approach of top-down, bottom-up and horizontal collaboration to facilitate regional ownership of GHG inventories and contributing to national energy plans.

COMMUNICATION

Facilitate dialogue between subnational and national governments for effective partnerships, optimizing resource use and learning.

Belo Horizonte, Brazil: Innovative approach to waste management by integrating local associations and cooperatives of waste pickers into the formal recycling strategies, which provided background for the National Policy on Waste Management adopted 2010.

FURTHER INFORMATION

LEDS-GP Subnational Integration Working Group:
<http://ledsgp.org/planning/NationalSubnationalLEDS>

Request support with subnational integration:
<http://ledsgp.org/assistance>

Contact the co-chairs:

- Nick Harrison n.harrison@ecofys.com
- Scott Muller s.muller@mac.com
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EXPERIENCES WITH LEDS – PROGRESS AND PROSPECTS IN JAMBI CITY, INDONESIA



H. SY. Fasha, ME
Mariani Yanti, Ph.D

Addis Ababa, August 28th , 2014

OUTLINE

- I. Jambi City Facts and Figures
- II. Vertically Integrated Approach for Developing Mitigation Actions on Waste Sector (V-NAMA)
- III. GIZ V-NAMA Program and Waste Management Efforts in Jambi City
- IV. Benefits of Mitigation Action in Waste Management Sector of Jambi

I. Jambi City Facts and Figures

Jambi City Location



- Total area **205,38 KM²**
- Population over 681, 862 **with** growth rate of **3.08%**

-

Development policies and Actions

- Improve the Open Green Space by 30%



City Forest



Pine Forest

City Parks



Rimbo Parks



Orchid Parks



Green Median Parks

Development policies and Actions with local initiatives



Gotong Royong



Million Bio Pori



31 Waste Bank



Million Trees

Kampung Bantar

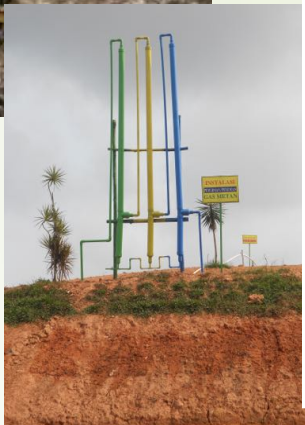


Million Loves Garden

Waste Management



Open Dumping Before 1997



Semi Controlled Landfill



Methane extraction and composting



Sanitary Landfill 2017

Development policies and Actions

Waste Management



Adipura Award 2014
Highest recognition for managing the environment

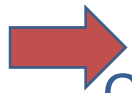


II. Vertically Integrated Approach for Developing Mitigation Actions on Waste Sector (V-NAMA)

Challenges and Options for Sub-national Involvement

CHALLENGE I: Lack of Incentives

(financial, political and co-benefits incentives)

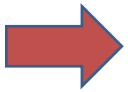


OPTIONS:

- Generating business models
- Find creative ways to channel national and international finance (private and public loans, grants, contracting agreements)
- Build in co-benefits and financial incentives which attract and secure all main sub-national stakeholders
- Use reputational incentives for public praise and recognition (e.g. competition)

Challenges and Options to Sub-national Involvement

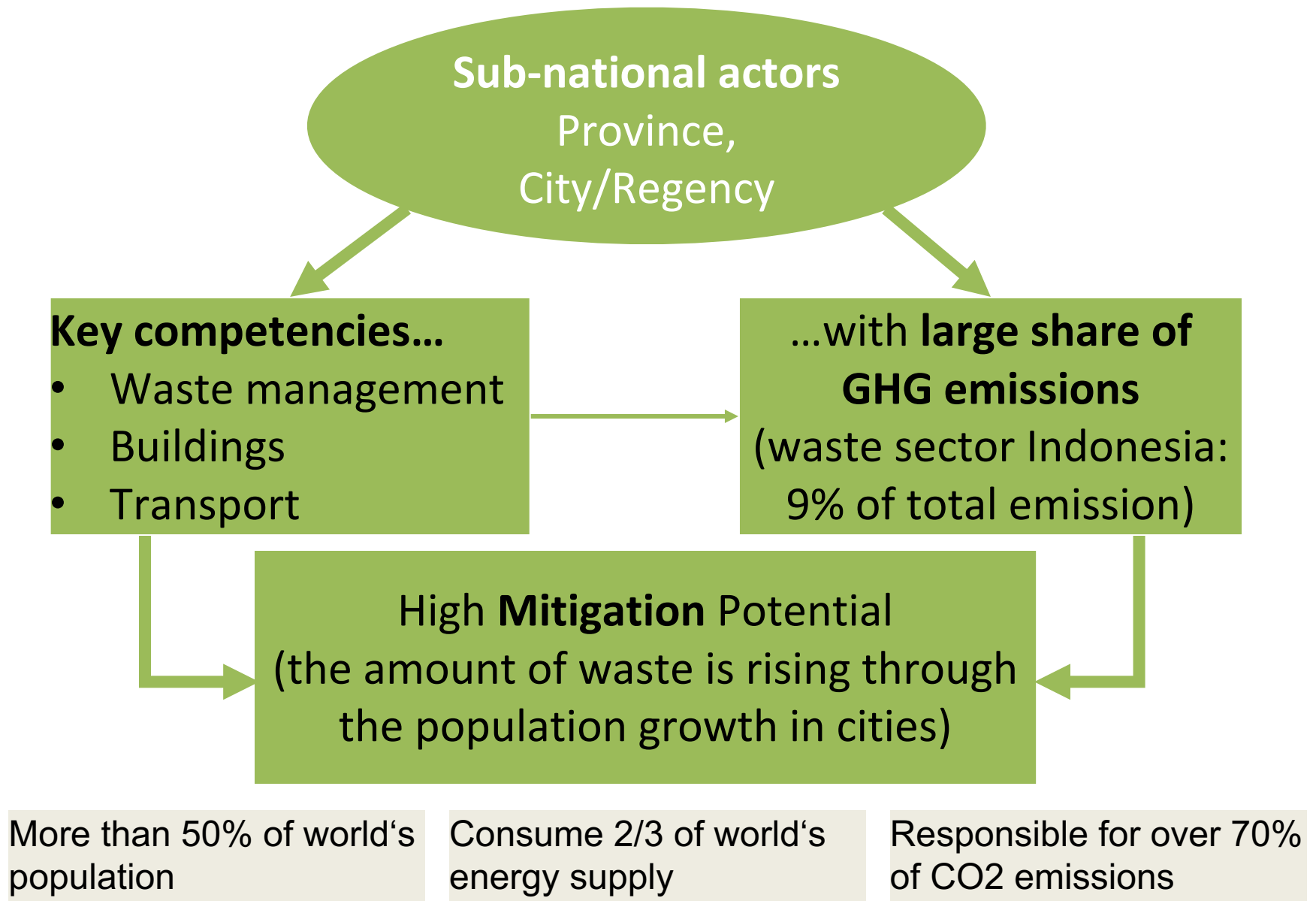
CHALLENGE II: Lack of Integration and Capacity



OPTIONS:

- Integration of policies and programs vertically, with political backing
- Strengthen horizontal coordination (e.g. authority distribution) & organizational capacity
- Facilitate stakeholders' dialogue and involvement
- Upgrading access to and exchange of data and information
- Strengthened leadership at sub-national level
- Build in opportunity for informal approaches

Why Involvement of Sub-nationals?



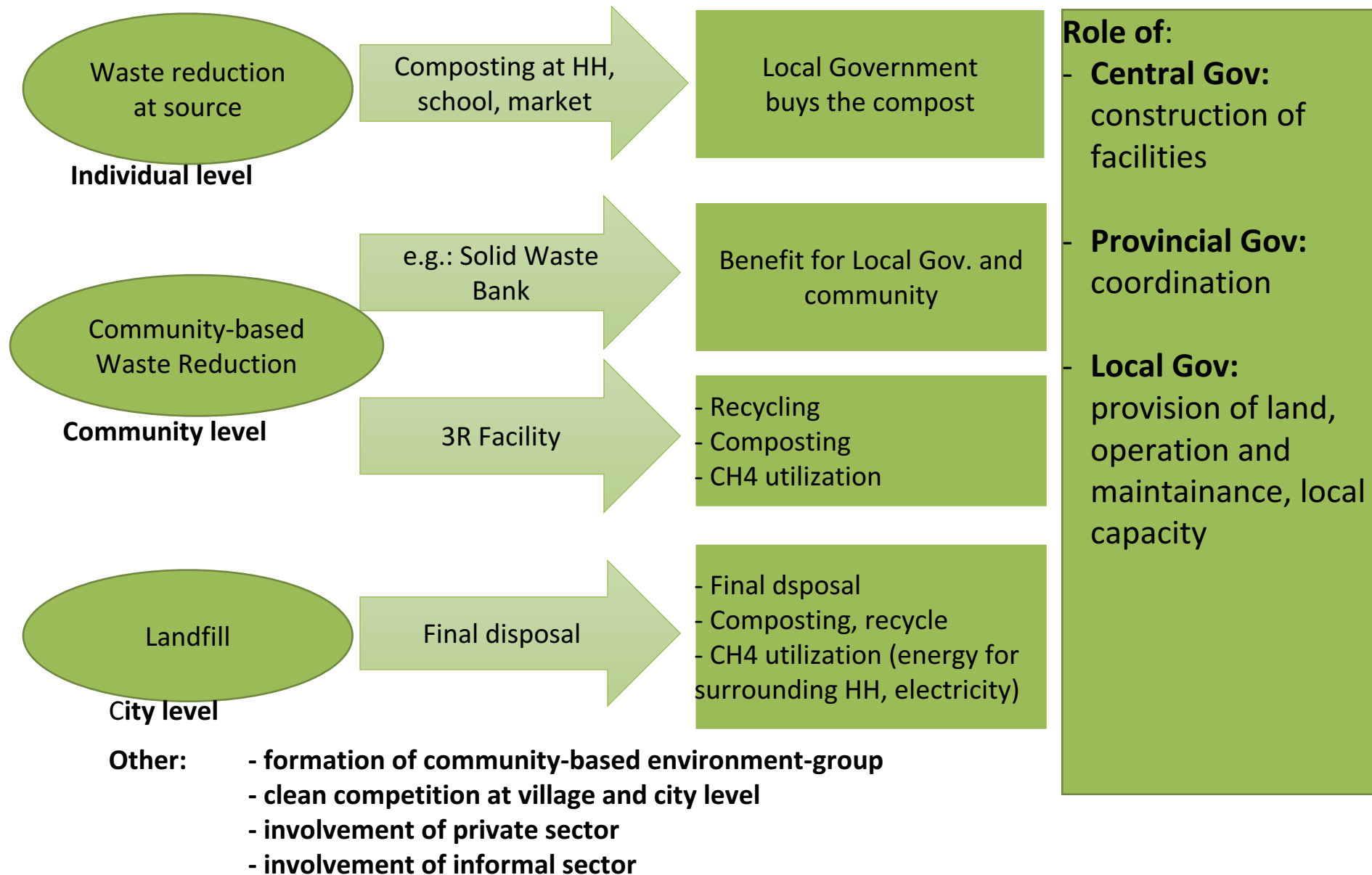
V-NAMA PROJECT in INDONESIA

| | |
|---------------------------------|---|
| <i>Purpose</i> | <i>Develop vertically integrated approach in the climate change mitigation action in Indonesia</i> |
| <i>Focus</i> | <i>municipal solid waste</i> |
| <i>Project Duration</i> | <i>September 2012 - April 2015</i> |
| <i>Pilot Location</i> | <i>Jambi City, Kendari City, Malang City, Pekalongan City and Regency, Sidoarjo Regency</i> |
| <i>Executing Agency</i> | <i>Lead executing agency is Ministry of National Development Planning) Lead Technical Agency is Ministry of Public Works</i> |
| <i>Partners</i> | <i>Ministry of Environment, Ministry of Home Affairs, Provincial Government and Local Government (Regency/City) and other related stakeholders in waste sector</i> |
| <i>Technical Support</i> | <i>GLZ, on behalf of the BMUB (German Federal Ministry for the Environment, Nature Conservation, Building and Nuclear Safety)</i> |
| <i>Outputs</i> | <i>1. Bankable NAMA-proposal that meets MRV requirements elaborated for the waste sector 2. Practical guidelines, support for the elaboration of other vertically integrated NAMAs</i> |

V-NAMA: Planning Solid Waste Emission Mitigation Activities and Stakeholder Consultations



Examples of Activities at a Pilot Location



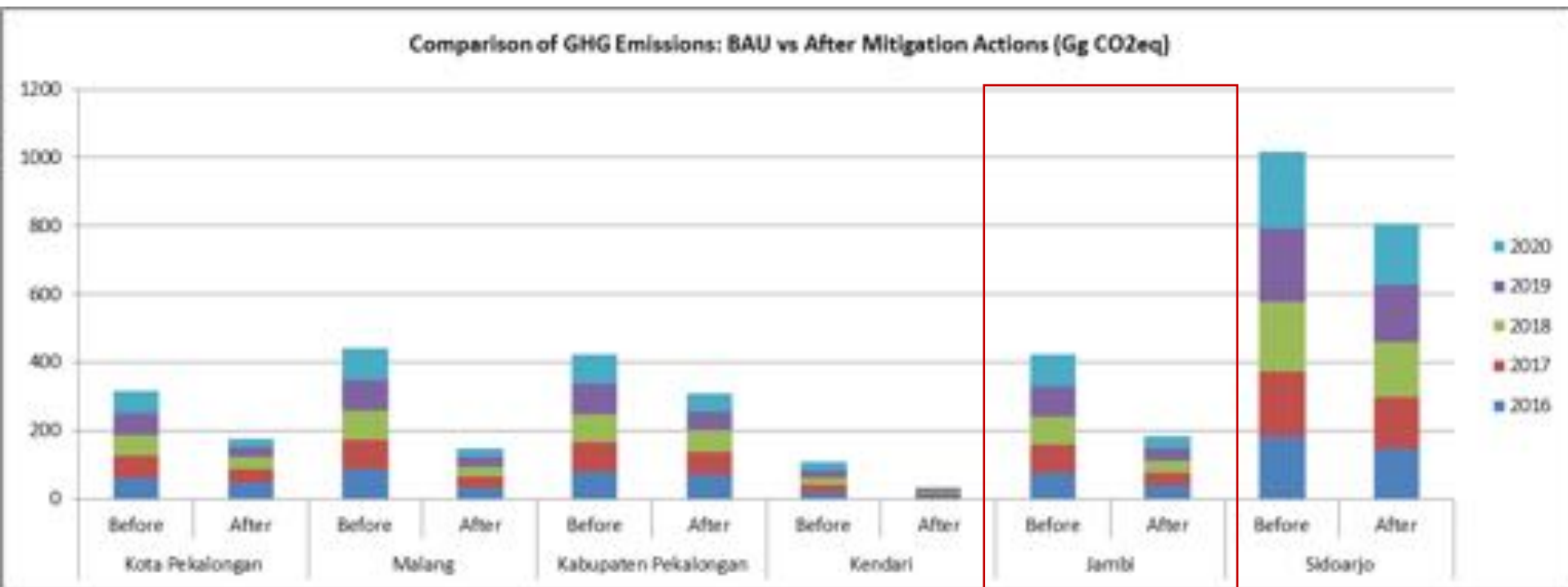
Jambi City efforts to support Reduction of Emissions from Solid Waste

- ❑ Sanitary landfill with a sorting and composting installation in planning by Public Works Department through KfW loan,
- ❑ Waste management program development:
 - Formulation of waste management policy
 - Provision of infrastructure and facilities for waste management (3R facilities: 9 in each Jambi sub-district)
 - Improvement of infrastructure operation and maintenance
 - 3R and Waste Management socialization campaign and increasing public participation (31 Waste Banks)

• IV. Benefits of Mitigation Action in Waste Management Sector of Jambi

Expected Impacts

- ❖ GHG Reduction
- ❖ Waste Minimization
- ❖ Economic Benefits & Landfill life prolongation
- ❖ Initiating Private Sector Participation
- ❖ Capacity Improvements (Public service & Community)



“We must, indeed, all hang together, or most assuredly we shall all hang separately” (1776, Benjamin Franklin).

- Jambi is one of the pilot locations for the V-NAMA program (expected to emit 80.000 tons CO₂eq)
- Replicate the success story to other districts and cities in Indonesia (4th largest population in the world) and other developing countries

Jambi City with the lessons learned would reduce its emissions and contribute to world total emission reduction efforts

High commitment VS.
Lack of government budget for emission reduction programs

Need Donors: Green Technology Investment,
Incentives for green technology applications

Thank you for your attention!



Sampling at the Landfill

Contact: **Mariani Yanti**
Head of Economic Division,
Regional Development Planning Agency,
City of Jambi, Indonesia

➤ Jambi City Planning Office

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- Email: yanti_yan@yahoo.com



Stakeholder Dialogue



Open Transit Data for Nairobi...

Supporting cities with improved public transit/lower emissions

Jacqueline Klopp

Center for Sustainable Urban Development

Columbia University

based on work with the other members of the [Digital Matatu team](https://digitalmatatus.com) (Dan Orwa, Peter Waiganjo, Jackson Mutua, Peterson Kamiri (University of Nairobi) Sarah Williams, Wenfei Xu, Emily Eros (Civic Data Design Lab MIT) and Adam White (Groupshot) See digitalmatatus.com

Many cities rely on “informal” transit: subnational problem requires cooperation



Matatu - Nairobi



Jeepney - Manila



Dhaka



Bush Taxi - West Africa



Colectivo - Mexico City



Manical - Panama City



Lima



Marshrutkas - Russia



Tap, Tap - Haiti



Daladala - Dar Salaam



Dolmuş in Bodrum, Turkey

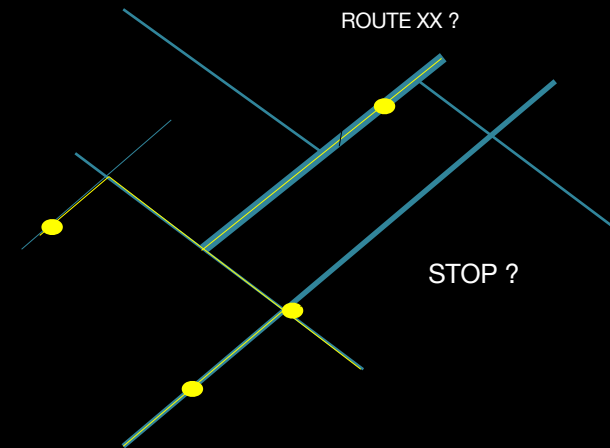
NAIROBI: OVER 130 MATATU ROUTES THAT SERVE 3.5-4 MILLION PEOPLE



We lack data on these systems!!

This means

- No Maps/Passenger Information/Apps
- Few planning tools
- No modelling and understanding of dynamics
- Many transportation projects in the world simply ignore this major form of public transit making the projects to more likely to be private car oriented-hence higher emissions



CHALLENGES IN DATA CREATION

1 | Matatus don't use fixed routes which means data need to be collected multiple times and merged to create a final route form.

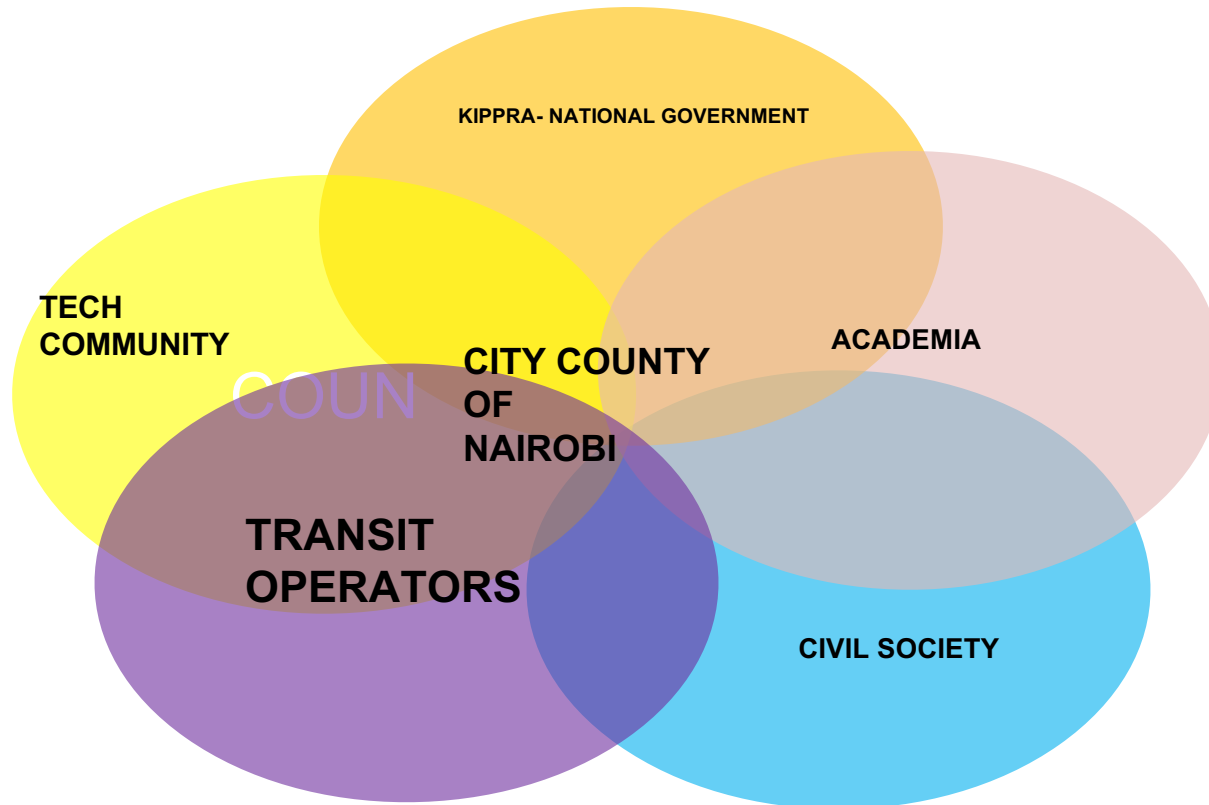
2| Working in matatus can be dangerous

3| Hard to get a lock on the data (need better tools)

4| Postprocessing data was time consuming.

5| *Poor recognition of how important this data is and why it needs to be open*

ENGAGEMENT STRATEGY: POLICY NETWORK





MATATU DRIVERS



BUT CELLPHONE USE IS HIGH IN MANY CITIES AND/OR GROWING

DIY DATA COLLECTION

+ DEVELOP OPEN DATA =

CHANGE



USER/PLANNING APPS AND INFO

TRANSPORT
MODELS

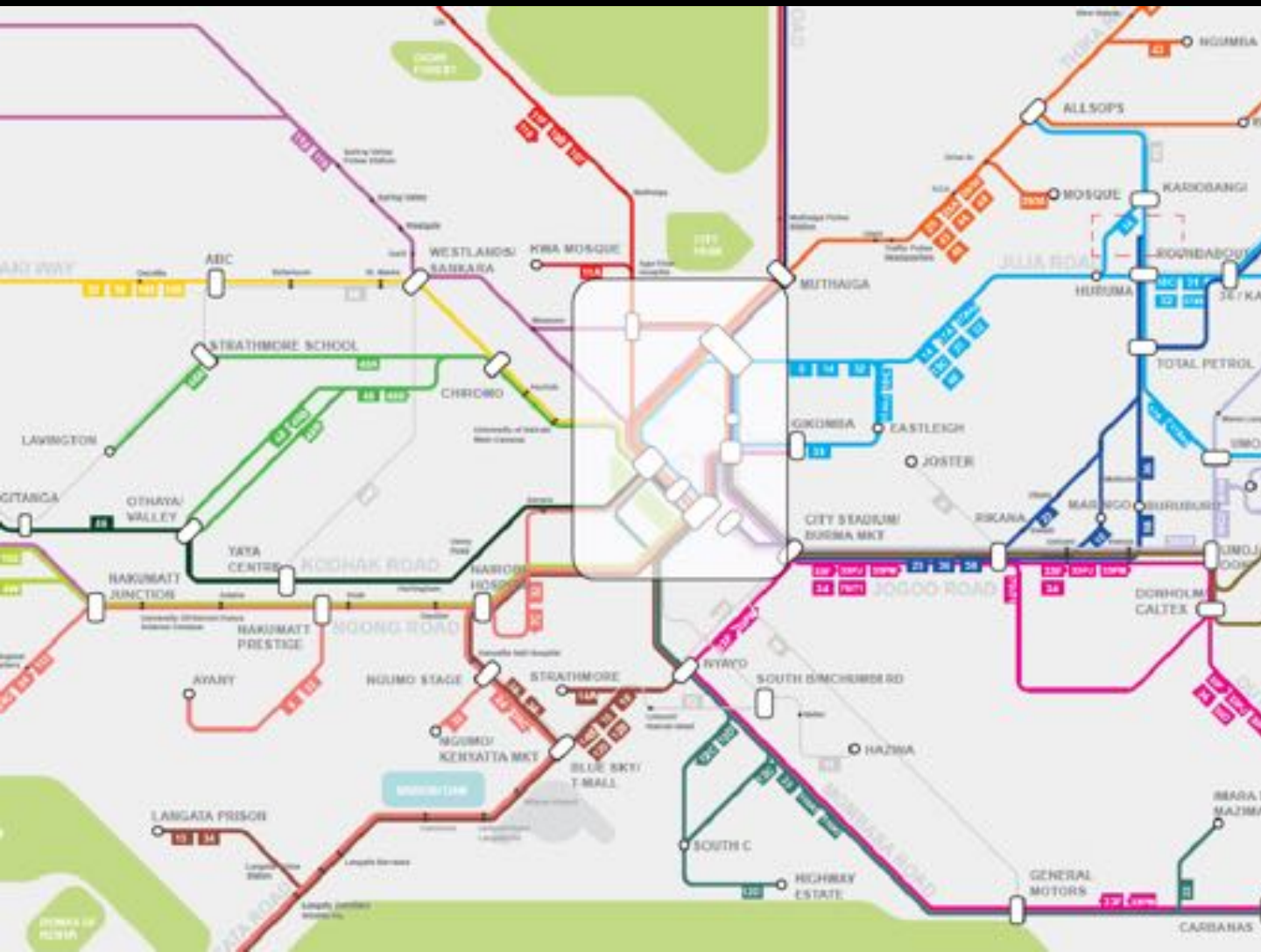
PUBLIC TRANSIT VISIBLE

IN GTFS STANDARD FORMAT

+ ONLINE AND PAPER

—

INNOVATION, EMPOWERED USERS AND PLANNERS



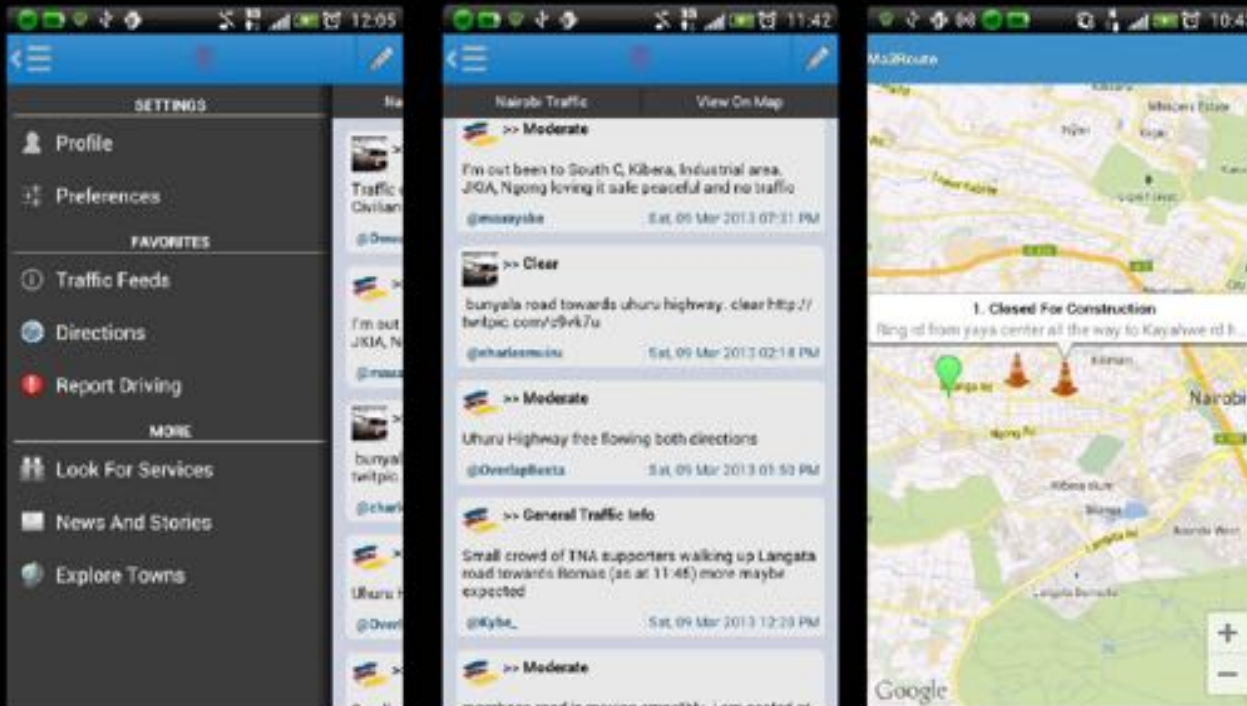
Digital Matatus

collected all 134 bus routes, most stops and 6 rail routes for Nairobi and used this to make

one of the first open GTFS data sets for public transit in an African city

a comprehensive public transit map for the city

digital matatu OPEN DATA has made possible:



APP DEVELOPMENT
(MA3ROUTE
FLASHCAST)

BETTER SHARING OF
TRANSPORT DATA AND
MODELLING

PUBLIC POLICY
DISCUSSION ON OPEN
TRANSPORT DATA FOR
NAIROBI AND BEYOND

NEXT STEPS/Challenges...

- Create an open transport data portal (KIPPRA, UON, MINISTRY OF TRANSPORT, ICT AUTHORITY and CITY OF NAIROBI-link to their new portal)
- Explore which forms of passenger information most effective for different groups
- Analyze data generated by apps that crowd-source data (Ma3route) and support use of data in planning for transit in a more inclusive way
- Convince those that finance transport across the globe to support **OPEN DATA** and to fill the data and technology gap for public transit
- Scaling up: Spread knowledge and support for other cities

LESSONS

1. Starting with a loose network around a concrete low emissions project that creates valuable data and outcomes for the public can build trust and create locally specific institutional pathways for change
1. Universities and technology sector can be allies if incorporated creatively -can help visualize issues for a broader public
1. Much transport planning and lending is car-oriented-higher emissions and not very transparent or inclusionary; generate private data through consultants and not yet supportive of the need for open institutionalized data and its implications -work to be done with donors and data

Addressing your own LEDS challenges

Small Group Outputs

- Share a success or a challenge you currently have related to integrating Sub-national and National LEDS efforts.
- Share ideas on effective SNI practices and solutions
- Identify opportunities for further collaboration and learning. Recommendations for additional support needed.
- Capture ideas on the output template sheets

▪ Main insights

▪ New ideas

▪ Commitments and Actions

Some questions to ask yourselves:

1. What is the SNI challenge *really* about?
2. What types of SNI approaches has your country/organization used?
3. Which stakeholders are involved? What do you build engagement?
4. What tools/ resources are available or could be created to help build solutions?
5. What assistance would be helpful?

Capturing discussion points and outputs

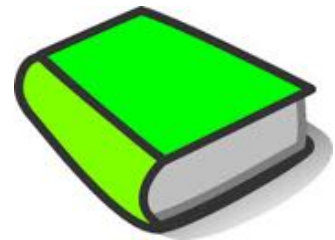
In your learning group:
before you
finish your
session please
be sure to
complete your
output sheet!

| | |
|--|--|
| Session Title: | Other - Actions / Requests / Needs: |
| Group members: | |
| Selected country challenge discussed: | How LEDS-Global Partnership could assist in applying solutions |
| Good practices and lessons for overcoming these challenges | |
| Initial ideas on how to apply what's learned | |



Hearing back from you

- Main insights
- New ideas
- Commitments and actions



FURTHER INFORMATION

LEDs-GP Subnational Integration Working Group:
<http://ledsgp.org/planning/NationalSubnationalLEDs>

Request support with subnational integration:
<http://ledsgp.org/assistance>

Contact the co-chairs:

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