

UNDP Lao PDR contribution to circular economy and sustainable waste management

Strengthening resilience in SDGs era



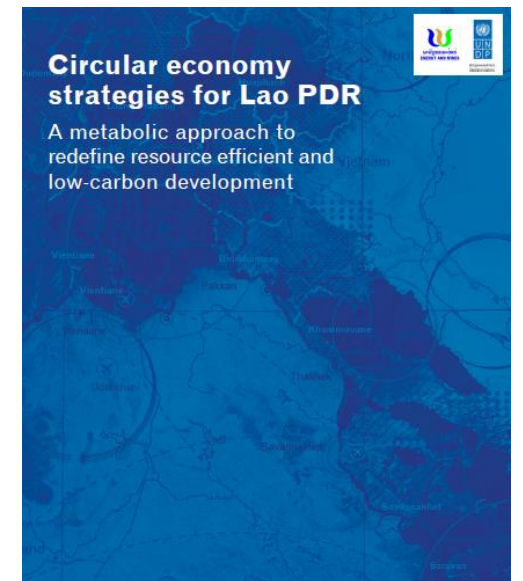
Circular Economy in Lao PDR

Circular Economy Strategies for Lao PDR (2017)

- IREP (MEM) collaborated with UNDP to identify Circular Economy Strategies for Lao PDR (2017)
- 3 core CE strategic priorities
 - Circular manufacturing, textiles and waste management
 - Circular construction materials from forests
 - Circular agriculture and hydropower

National Green Growth Strategy (2018)

- MPI collaborated with the World Bank and GGGI on a National Green Growth Strategy in 2018
 - Prepared on basis of Green Growth Potential Assessment (GGPA) during 2016-2017
 - Recommended financial and economic incentives including payment for ecosystem services, environmental tax and fuel tax mechanisms
 - **Promotes the use of agricultural sector waste as a raw material for organic fertilizers, soil enhancer or biofuel**



Lao People's Democratic Republic
Peace Independence Democracy Unity Prosperity

National Green Growth Strategy of the Lao PDR till 2030

(Secretariat for Formulation of National Green Growth Strategy
of the Lao PDR)

Vientiane Capital, December 2018

9th National Socioeconomic Development Plan (2021–2025)



Outcome 4/ Output 2 - Environmental protection and sustainable natural resources management.

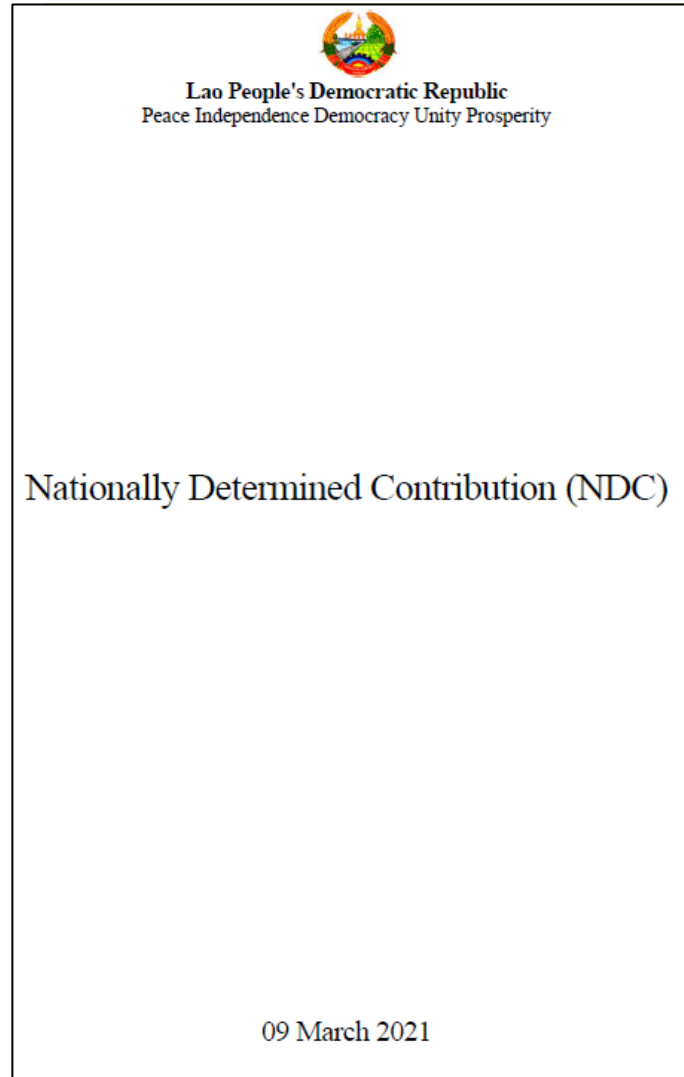
2.2. Priority Activities: Circular Economy



Vientiane Capital
March 2021

Nationally Determined Contributions (2021)

Mitigation ‘Lao PDR will also aim to further explore the mitigation potential of a *circular economy* including through material and product recirculation, circular business models, product resource efficiency, and prioritizing the use of regenerative material resources’.



Adaptation ‘means to prioritise domestic circular use of regenerative resources, closing nutrient cycles and enabling communities to become less reliant on vulnerable international value chains’.

Circular
Economy
Opportunities
in Lao PDR



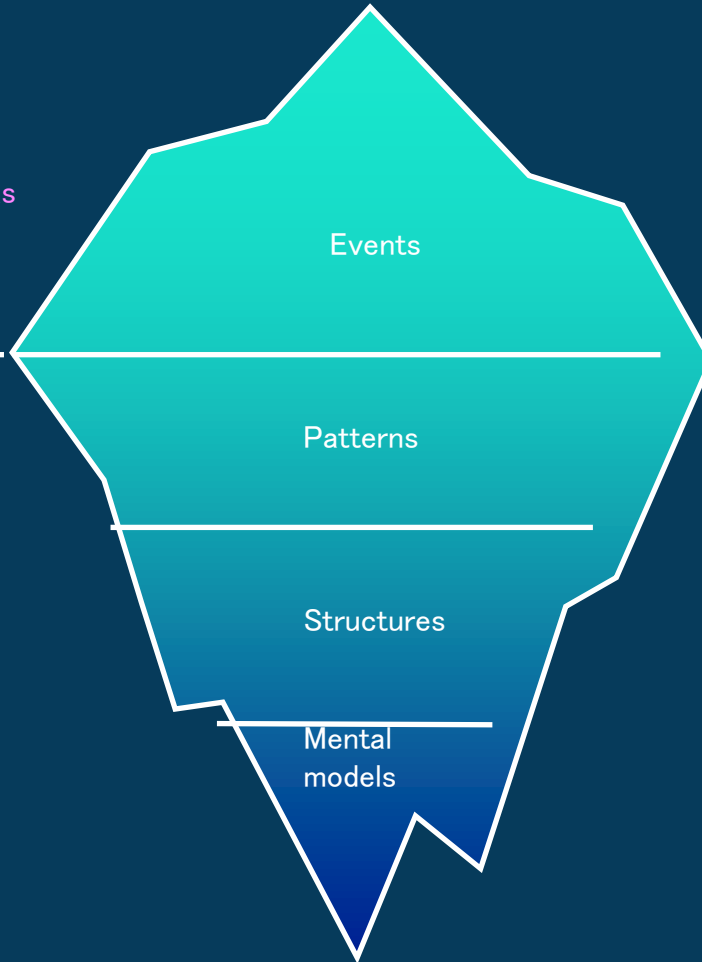
Why we approach systems thinking

Sensing
Design
Testing



- Focus on the symptoms (fixing stuff)
- Only have a part of the system
- Lead to the single-point interventions such as an App, a campaign or a facility
- Miss the informality

- Deep dive into the root causes
- Navigate the whole system
- Act on multiple leverage points
- Shift the paradigm (circularity)



Examples from Vientiane, Lao PDR's experience

- Landfills burning
- Illegal dumping
- Cheap Plastic packaging
- Low recycling rate
- Failure of the pilot projects
- Lack of incentive mechanism for waste recycling in private sector
- Lack of strict policy enforcement & monitoring
- Informal sector is marginalized
- Technology will save us
- It is not my job
- Waste is dirty, less interaction the better
- Lack of hope in collective action



Circular GHG mitigation opportunities **Lao PDR**

A metabolic approach

Climate Promise

United Nations Development Programme (UNDP)

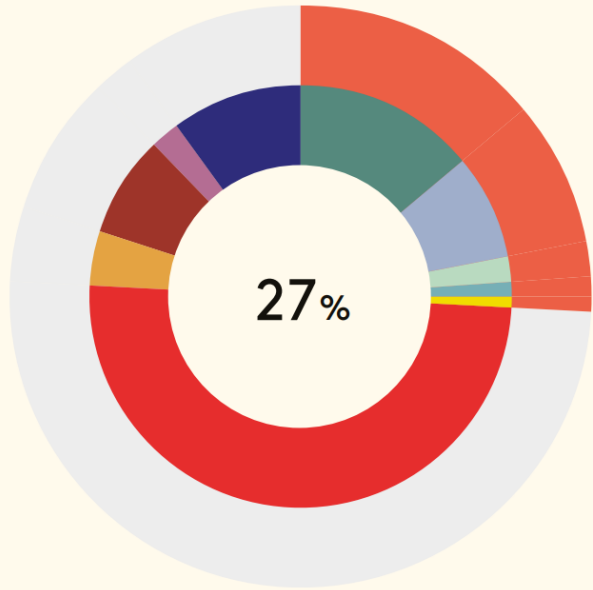
www.undp.org

@UNDPClimate



Lao PDR has a strong but degrading circularity base

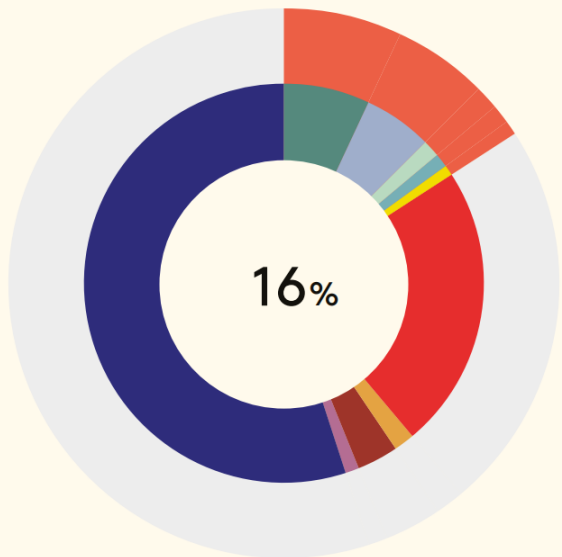
Circularity of consumption



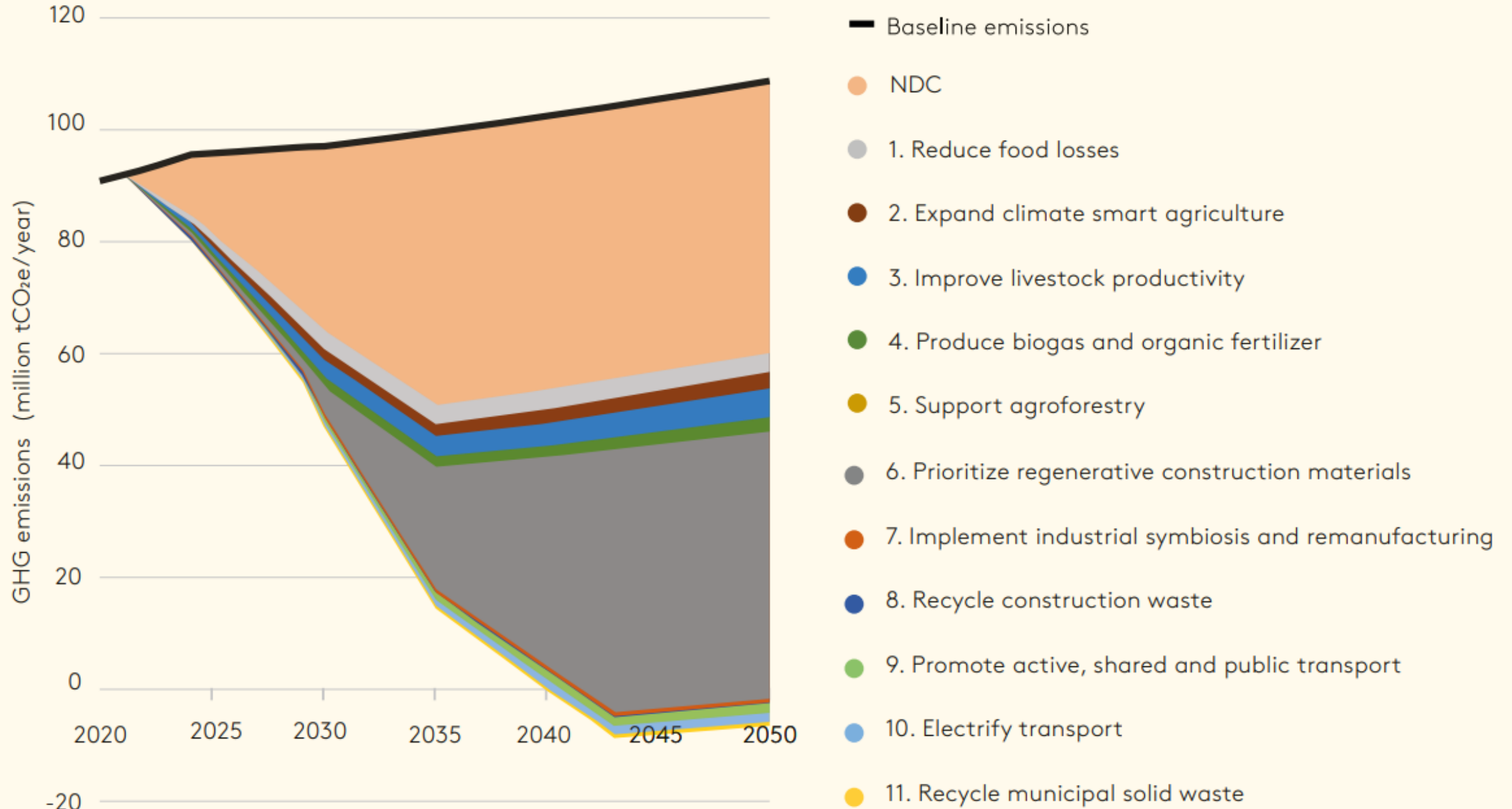
- Organic residues from regenerative origin applied on land
- Regenerative firewood
- Regenerative food with nutrient recovery after consumption
- Recycling (< 1%)
- Regenerative materials
- Circular imports
- GHG emissions
- Fossil fuel use
- Resources landfilled or untreated discharge
- Unsustainable food production and/or food without nutrient recovery
- Linear imports

■ circular
■ linear

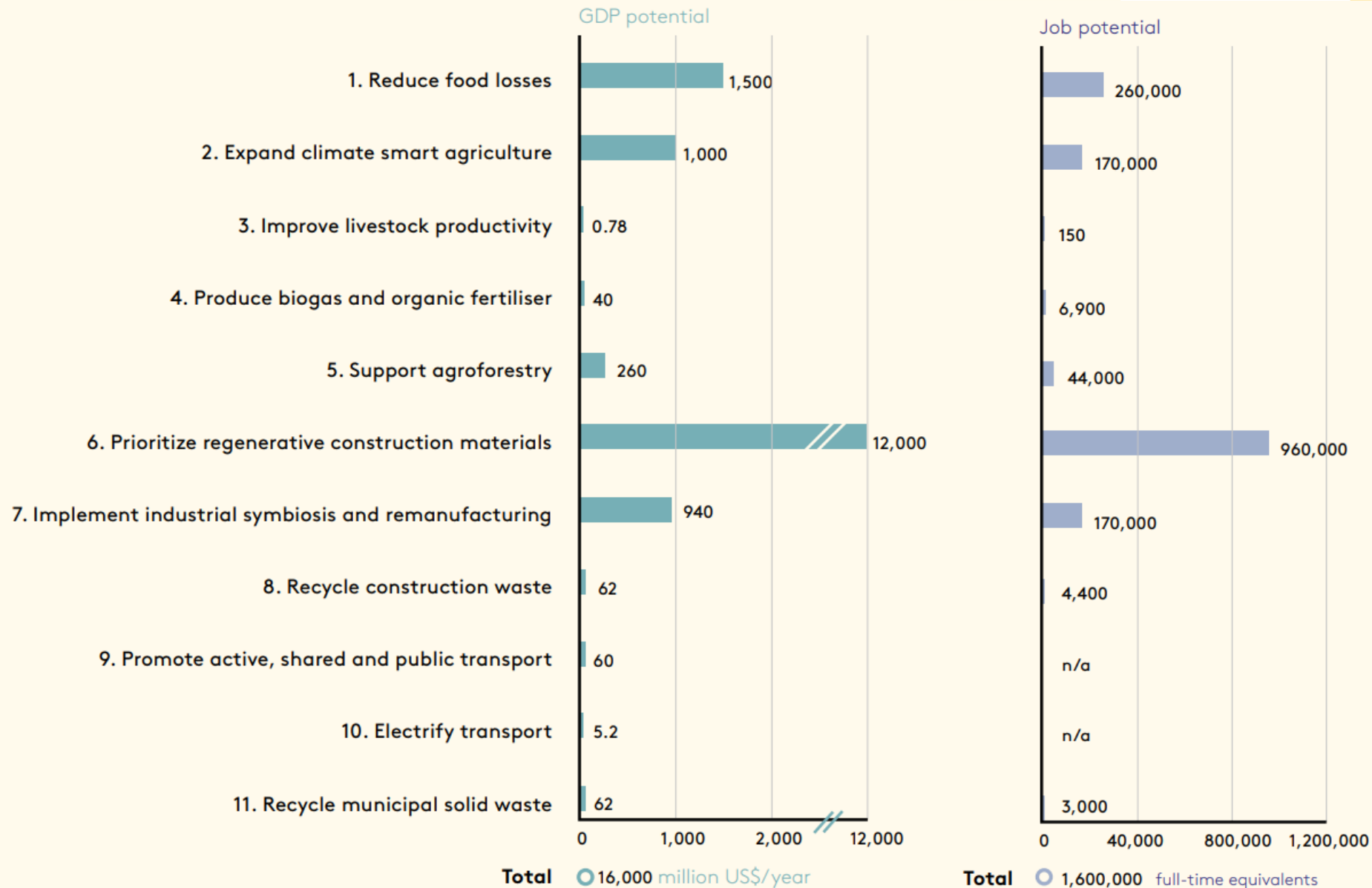
Circularity of production



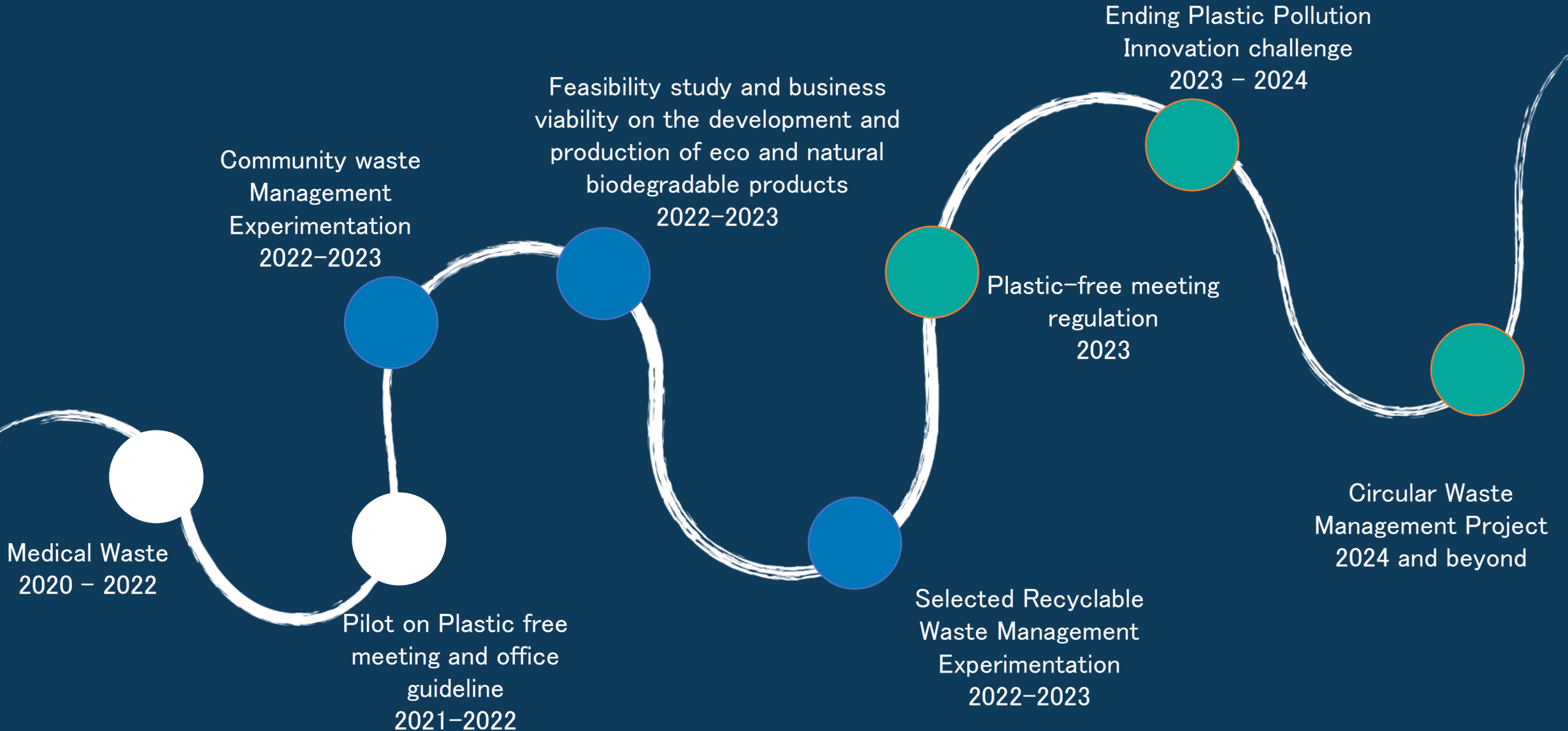
With NDC and Circular Economy mitigation opportunities, Lao PDR can reach net carbon neutrality by 2040



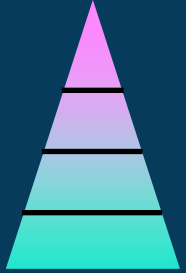
The circular economy has a GDP potential of \$16 billion and can create 1.6 million jobs



Waste-related projects in Lao PDR



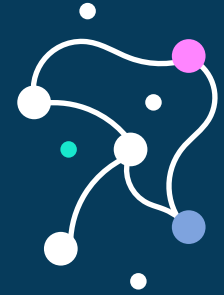
Waste is a complex development challenge



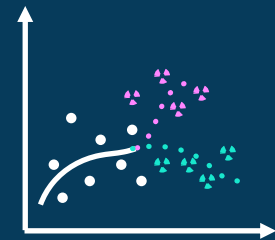
Driven by multiple factors



Interlinkage across the process and sectors of waste management



Entangling relationship & power dynamics in the ecosystem



Uncertainty in the development trend

Medical Waste



Pilot Plastic-free Meeting and Office Guideline



Guideline for Plastic-free meeting



This guideline comprises a list of single-use plastic items in meeting, their alternatives and recommended actions to reduce the use of single-use plastics in offices' meeting.

Implementation's steps:

Use this guideline to know how to reduce single-use plastic items

Prepare meeting based on recommendations on this guideline

Use checklist to audit the meeting

Principles to reduce single-use plastics:



Community Waste Management Experimentation

Sensing

Design

Testing



Feasibility study on alternative to plastic products



1 Raw Material



2 Pulping



3 Forming



6 Needle Detecting and Sterilizing



5 Inspecting



4 Cutting



7 Packing



8 Storehouse



9 Cabinet



Bagasse
Recycled Paper
Banana fiber

PRIZES

TOP
15

ALL SEMIFINALISTS GET:

- 3-month **incubation programme** delivered by UNDP
- **Field trips** to Kaysone Phomvihane and Sihanoukville
- **Mentoring and webinars** by sectoral experts



TOP
4

FINALISTS ALSO GET:

- Additional 9-month **incubation programme** by UNDP
- **USD\$18,000** in seed funding
- Communication and media **support**
- **Networking** and Demo Days with investors

Visit the EPPIC website at
<http://www.plasticchallenge.undp.org.vn/>



Selected Recyclable Waste Management Experiment



ທ່ານລູກຄ້າທີ່ເຄົາລົບ,ເພື່ອສິ່ງແວດລ້ອມທີ່ດີກວ່າ ກະລຸນານຳຕຸກຢາງປລາສຕິກ, ກະປ່ອງອາລູມິນຽມ, ແລະ ແບັດເຕີມາໃຫ້ພວກເຮົາຈັດມ້ຽນໃຫ້ຖືກວິທີ.



Dear clients, for better environment please bring your plastic, aluminium can and used battery here.



The future WE choose

Circular



Inclusive



Green & Clean



Building coalition
and partnership



Private sector
contribution and finance



Innovation, research &
technology transfer