

Sri Lanka's Organizing Framework for Scoping of PMR activities

Ministry of Mahaweli Development & Environment

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Outline

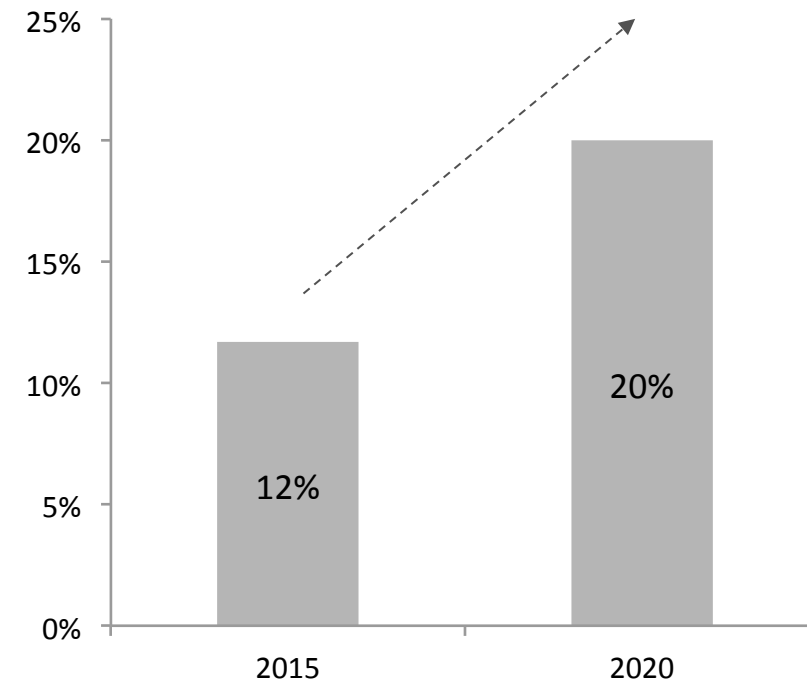
1. Policy context: Domestic mitigation policies and emission profile
 2. Technical building blocks of market readiness: relevant sectors & target areas (INDCs, NAMAs), and core readiness components (MRV & registry tracking, capacity building, SLCCS)
 3. Organization and consultations: PMR focal point, technical partner, consultation process, and other partners
 4. Organization of work and estimated timeline
 5. Conclusions – Summary of market readiness priority areas for PMR support
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1. Policy context: Domestic mitigation objectives and emissions profile (1/7)

1.1 Policy context and objectives – National Policy on mitigation

- ❑ Becoming energy self-sufficient by 2035
- ❑ Increasing forest cover
- ❑ Implementing a Green Transport System
- ❑ Implementing a Fuel Quality Road Map
- ❑ Multi-resource watershed management to improve water availability and retention

Share of NCRE in Electricity Mix

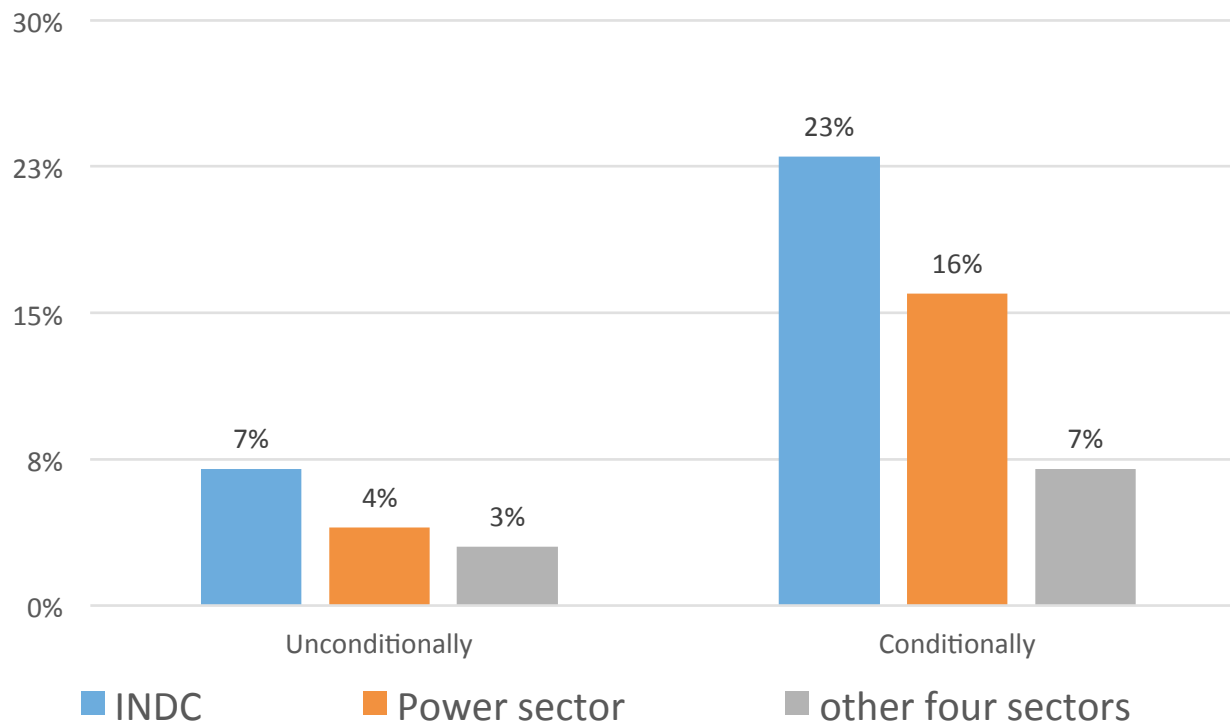


Source: Long Term Generation Expansion Plan (LTGEP) 2015-2034
Ceylon Electricity Board; Government of Sri Lanka

1. Policy context: Domestic mitigation objectives and emissions profile (2/7)

1.1 Policy context and objectives – Intended Nationally Determined Contributions (INDCs)

- ◆ Submitted to UNFCCC in October 2015
- ◆ Identified five major sectors: energy, transport, forests, industry and waste.
- ◆ Intends to reduce the GHG emissions against Business- As-Usual (BAU) scenario by



1. Policy context: Domestic mitigation objectives and emissions profile (3/7)

1.1 Policy context and objectives – Existing strategies for achieving targets

Renewable Energy Targets

- ◆ Sri Lanka has vast untapped wind, solar, biomass, biogas, and wave energy resources
- ◆ Sri Lanka has set ambitious targets:
 - ❑ Become energy self-sufficient by 2035
 - ❑ Achieve 20% energy generation from Non-Conventional Renewable Energy (NCRE) sources by 2020
 - ❑ Reduce carbon footprint of energy sector by 5% by 2025

Sri Lanka Next Program

- ◆ A blue-green development strategy for sustainable growth
- ◆ Blue Development (Ocean economy) includes:
 - ❑ Identify potential for offshore wind and Oceanic Thermal Energy Conversion
 - ❑ Sustainably utilize oceanic fish and other marine biological resources
 - ❑ Explore oceanic mineral resources
- ◆ Green Development includes:
 - ❑ Green energy generation
 - ❑ Sustainable agriculture
 - ❑ Green buildings and transport
 - ❑ Eco-friendly industrial production

1. Policy context: Domestic mitigation objectives and emissions profile (4/7)

1.1 Policy context and objectives – Interest in Market Mechanisms (1/2)

Clean Development Mechanism (CDM):

- ◆ As Designated National Authority, the Climate Change Secretariat has awarded several letters of approval to CDM projects that meet the criteria for sustainable development.
- ◆ Sri Lanka also aims to develop a mechanism for trading Certified Emissions Reductions (CERs).

CDM	Number	MW/year	tCO ₂ eq
Registered projects	22	178	605,236 per year
CERs issued	8	60	882,536 total

1. Policy context: Domestic mitigation objectives and emissions profile (5/7)

1.1 Policy context and objectives – Interest in Market Mechanisms (1/2)

Sri Lanka Carbon Crediting Scheme (SLCCS):

- ◆ Sri Lanka has instituted domestic carbon standards through its Carbon Crediting Scheme (SLCCS) for regulation and registry of projects that provide carbon offsets.
- ◆ Projects that meet SLCCS eligibility criteria are registered and are eligible to receive SCERs (Sri Lankan Certified Emission Reductions)

1. Policy context: Domestic mitigation objectives and emissions profile (6/7)

1.1 Policy context and objectives – Interest in Market Mechanisms (2/2)

Carbon Partnership Facility:

- ◆ Sri Lanka is currently exploring the possibility of market instruments in the energy sector through scaled-up carbon crediting activities (SCA) with the support from the World Bank
- ◆ The objective is to facilitate the achievement of Sri Lanka's NCRE expansion goal of 20% NCRE by 2020.

Voluntary emissions reductions:

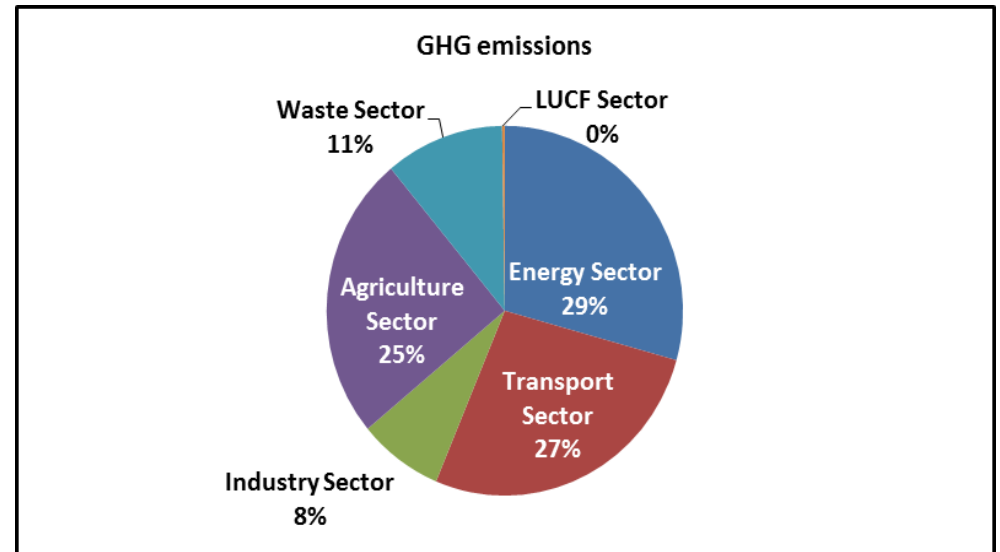
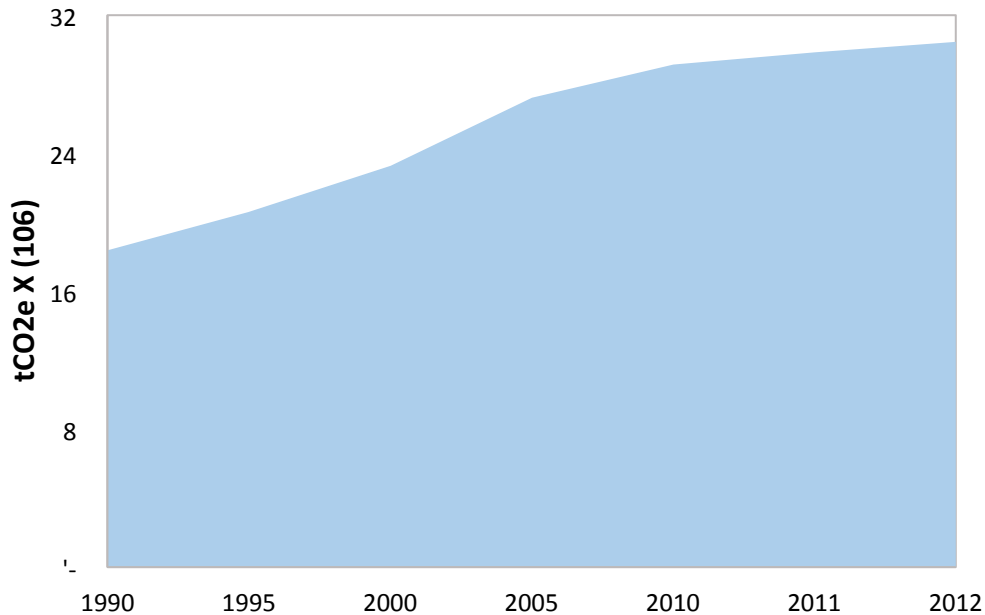
- ◆ Under Article 6 of the Paris agreement, Parties can also engage on a voluntary basis in cooperative approaches with internationally transferred mitigation outcomes towards nationally determined contributions, provided there is no double counting.
- ◆ Sri Lanka has shown interest in several voluntary emission reduction programmes, eg- feasibility study to implement Joint Crediting Mechanism in transport sector

1. Policy context: Domestic mitigation objectives and emissions profile (7/7)

1.2 Overview of country's GHG emissions

Sri Lanka's GHG emission was approximately 0.78 tons of CO₂ per capita in 2012, far below the world average value of 4.44, and lower than most of its neighboring countries.

Historical GHG Emission

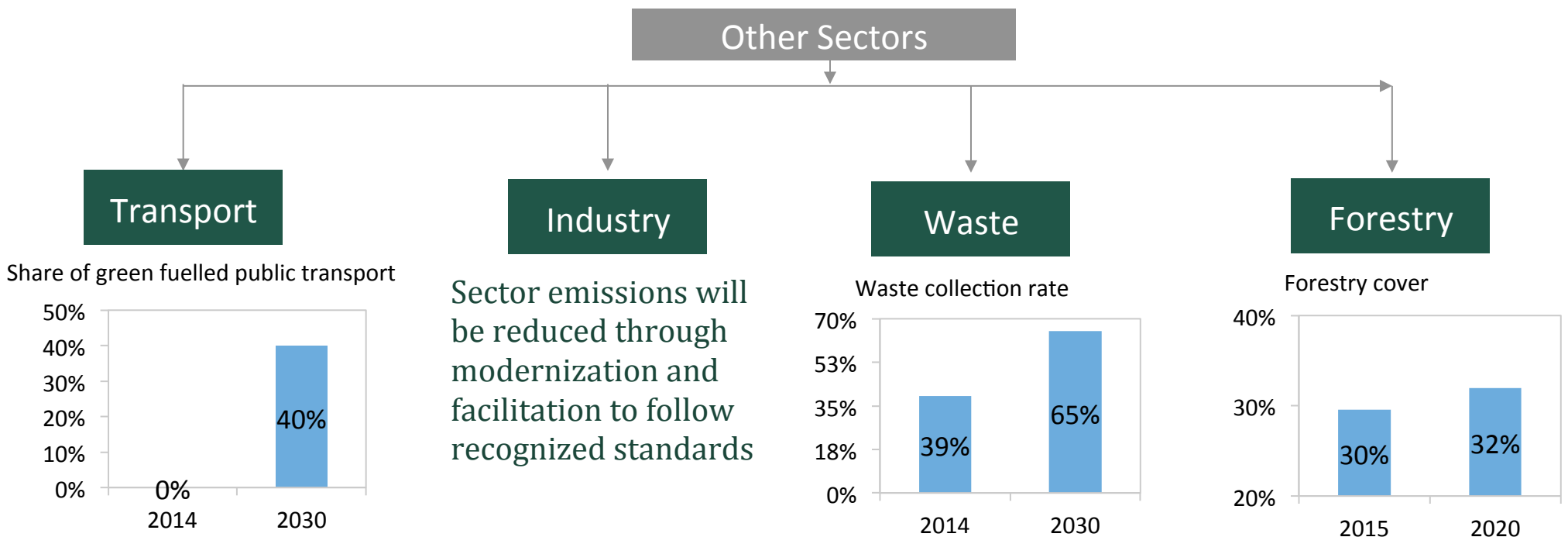


Source: UNFCCC country brief, Emission Database for Global Atmospheric Research (EDGAR)

2. Technical building blocks of market-readiness (1/8)

2.1 Taking stock of relevant sectors and target areas (1/2) – Intended Nationally Determined Contributions (INDCs)

- ◆ **Energy sector targets under Sri Lanka's INDCs submitted to UNFCCC**
 - ❑ **Unconditional Target:** Annual emission reduction from existing hydro, Non-Conventional Renewable Energy (NCRE) and future hydro developments of 4% reduction in 2030 against the 2010 baseline
 - ❑ **Conditional Target:** Emission reduction through future NCRE developments of 16% in 2030 compared to the likely demand in 2030

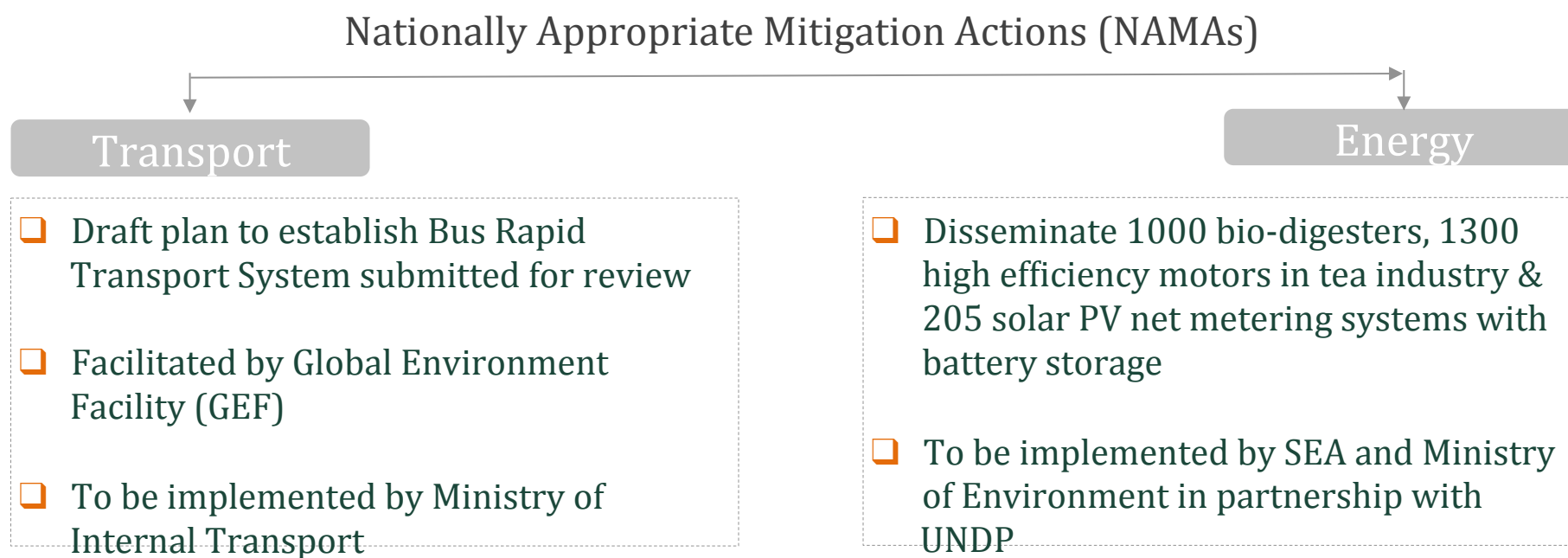


Source: Sri Lanka's INDC submitted to UNFCCC, 2015

2. Technical building blocks of market-readiness (2/8)

2.1 Taking stock of relevant sectors and target areas (2/2) – Nationally Appropriate Mitigation Actions (NAMAs)

- ◆ Two NAMAs are being developed for the two priority sectors: energy & transport

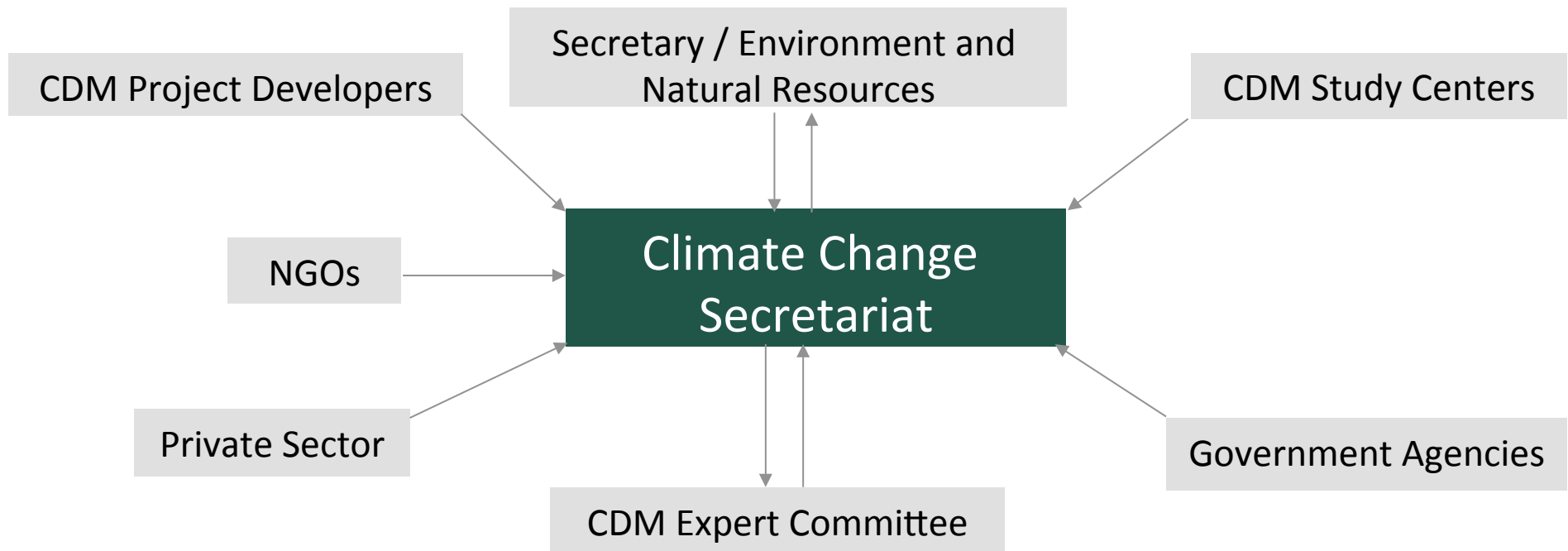


- ◆ Given the emphasis of the INDCs, the industrial and waste sectors may also be considered for development of market mechanisms

2. Technical building blocks of market-readiness (3/8)

2.2 Core Readiness Components (1) – MRV Systems & registry tracking (1/2)

- ◆ An excel based carbon registry has been implemented under SLCCS by SLCF
- ◆ Participation in CPF & NAMAs help to strengthen MRV in energy sector
- ◆ Development of an effective national MRV system helps to streamline monitoring, reporting, and verification of the mitigation activities in the sectors



Source: Global Affairs Division, Ministry of Environment and Natural Resources, Government of Sri Lanka, 2000

2. Technical building blocks of market-readiness (4/8)

2.2 Core Readiness Components (1) – MRV Systems & registry tracking (2/2)

- ◆ PMR support can help strengthen Sri Lanka's MRV systems, thereby encouraging investments in climate-friendly development activities, by:
 - ❑ Improving data management and validation processes
 - ❑ Building institutional capacity to develop domestic carbon markets and effectively engage in international markets (e.g. through bilateral offset schemes)
 - ❑ Building awareness and confidence in SLCCS process, as well as develop procedures, standards, guidelines in SLCCS comparable with international best practices
 - ❑ Identify sectors that show the greatest potential for development of domestic carbon offsets market (e.g. energy efficiency in industry and manufacturing, waste heat recovery, renewable energy)

2. Technical building blocks of market-readiness (5/8)

2.2 Core Readiness Components (2) – Institutional/regulatory Capacity Building (1/2)

- ◆ Institutional capacity building would be required across stakeholders for creating effective domestic carbon markets

Institution	Function
Climate Change Secretariat (CCS), focal point	Established under the Ministry of Environment and Renewable Energy (MoERE), to adopt a comprehensive national approach to address climate change challenges.
Ceylon Electricity Board (CEB)	An integrated state owned utility that owns and operates 65% of the electricity generation system and the entire transmission network.
Public Utilities Commission of Sri Lanka (PUCSL)	Established in 2002 to regulate energy and water sectors.
Sustainable Energy Authority (SEA)	Established in 2007 to develop and implement policy for renewable energy development, energy efficiency, and energy conservation.
Sri Lanka Climate Fund (SLCF), technical partner (to develop & implement MRP)	Established in 2008 under the purview MoERE, to undertake climate finance assignments that align with national priorities; and to develop national MRV system.
Other	Relevant government institutions and other stakeholders

2. Technical building blocks of market-readiness (6/8)

2.2 Core Readiness Components (2) – Institutional/regulatory Capacity Building (2/2)

- ◆ Capacity to develop necessary regulations and policies that support development, implement and enforcement of market instruments is needed.
 - ◆ Ministry of Power & Renewable Energy
 - ◆ Ministry of Mahaweli Development & Environment
 - ◆ Ministry of Industries
 - ◆ Ministry of Finance
 - ◆ Other relevant government institutions and stakeholders

2. Technical building blocks of market-readiness (7/8)

2.2 Core Readiness Components (3) – Sri Lanka Carbon Crediting Scheme (1/2)

- ◆ The scheme could support generating SCERs for achieving Sri Lanka's carbon neutrality goals
- ◆ It also incentivizes projects for blue-green development under Sri Lanka Next
- ◆ Expansion of carbon footprint registry can accelerate green growth and facilitate the achievement of INDCs
- ◆ The scheme also could generate internationally tradable SCERs.

SLCCS EB

- 1) Dr. Senaweera
- 2) Mr. Maliyadda
- 3) Prof. Attalage
- 4) Mr. Keerthi Wickramaratne
- 5) Prof. Sumathipala

Validation/Verification

[SLCF Validation & Verification division]

Carbon Management Assessment/Monitoring Report

[Client/Consultant]

Source: Sri Lanka Climate Fund, 2015

2. Technical building blocks of market-readiness (8/8)

2.2 Core Readiness Components (2) – Sri Lanka Carbon crediting Scheme (2/2)

- ◆ SLCCS requires further strengthening through:
 - ❑ Research on mitigation potential in Sri Lanka to target sectors with the greatest potential
 - ❑ Development & design of appropriate market-based instruments that supports the scheme
 - ❑ Improve its standards, procedures, and guidelines comparable with practices
 - ❑ Improving data management to build a national registry
 - ❑ Help identify measures to improve tradability of carbon offsets to improve uptake of the scheme

3. Organization and consultations (1/3)

3.1 PMR contact point

- ◆ The Climate Change Secretariat under the Ministry of Mahaweli Development & Environment is responsible for coordination of Sri Lanka's climate change activities and will lead PMR efforts
- ◆ Focal point: Dr Dissabandara Sunimal Jayathunga, Director, Climate Change & Sustainable Development
- ◆ Technical partner: H.M.Buddika Hemashantha, CEO, Sri Lanka Climate Fund

3. Organization and consultations (2/3)

3.2 Consultation process

- ◆ Consultations with relevant public and private stakeholders will be conducted throughout the MRP preparation phase
- ◆ The timeline for stakeholder consultations will be determined by Climate Change Secretariat, Ministry of Mahaweli Development & Environment

3. Organization and consultations (3/3)

3.3 Partners in the formulation and implementation of the country's Market Readiness Proposal (MRP)

Constitution of Inter-Ministerial Working Group (IMWG)
coordinated by Climate Change Secretariat

Proposed composition of IMWG

- Ministry of Mahaweli Development and Environment
- Ministry of Power and Energy
- Ministry of Finance
- Ministry of Industries



Activities to be undertaken by IMWG

- Determine the role of market-based instruments on climate change policy
- Sectoral analysis of the viability of market-based instruments
- National/sectoral MRV
- Selection of market-based instruments according to sectoral needs/preferences
- Support development of appropriate policies and regulatory environment for introduction of market based instruments
- Support development of Sri Lanka Crediting Scheme

4. Organization of work and estimated timeline

4.1 Overview of tasks and estimated timeline for formulation of Market Readiness Proposal

The proposed timeline for preparation of the Market Readiness Proposal (MRP) is 6 months. The timeline for activities to be carried out are presented below

Activities	May	Jun	Jul	Aug	Sep	Oct
Preparation and development of draft MRP	■	■				
Stakeholder consultation			■			
Review of MRP based on feedback				■	■	
Finalizing MRP					■	■

Sri Lanka's vision to introduce market instruments

Step 1	Research green policy instruments to support government in achieving low carbon development path (e.g. green tax, levy)	Assess Sri Lanka's mitigation potential by sector
Step 2	Develop potential policy mechanisms for government	Identify potential sectors and match with market instruments
Step 3	Test green policy instruments (e.g. green bonds, SLCCS)	Implement/ pilot market instruments in identified sector (e.g. scaled up crediting mechanism for transport, building)

Through continuous capacity building with domestic institutions

5. Conclusions – Summary of market readiness priority areas for PMR support

1. National MRV Systems
 - ❑ Improve data management and validation processes
 - ❑ Build institutional capacity to develop domestic carbon markets and effectively engage in international markets
 - ❑ Build awareness and capacity building of stakeholders to enhance the confidence on market instruments
 - ❑ Identify sectors that show the greatest potential for carbon offsets (e.g. energy efficiency in industry and manufacturing, waste heat recovery, renewable energy)

2. Institutional and regulatory Capacity Building for:
 - ❑ Facilitating private investment in green growth
 - ❑ Creating an enabling environment and institutional framework
 - ❑ Developing domestic carbon markets

3. Sri Lanka Carbon Crediting Scheme (SLCCS)
 - ❑ Research on mitigation potential in Sri Lanka to target sectors with the greatest potential
 - ❑ Development & design of market-based instruments that supports the scheme
 - ❑ Improving data management to build a national registry
 - ❑ Help identify measures to improve tradability of carbon offsets to improve uptake of the scheme

Thank you!

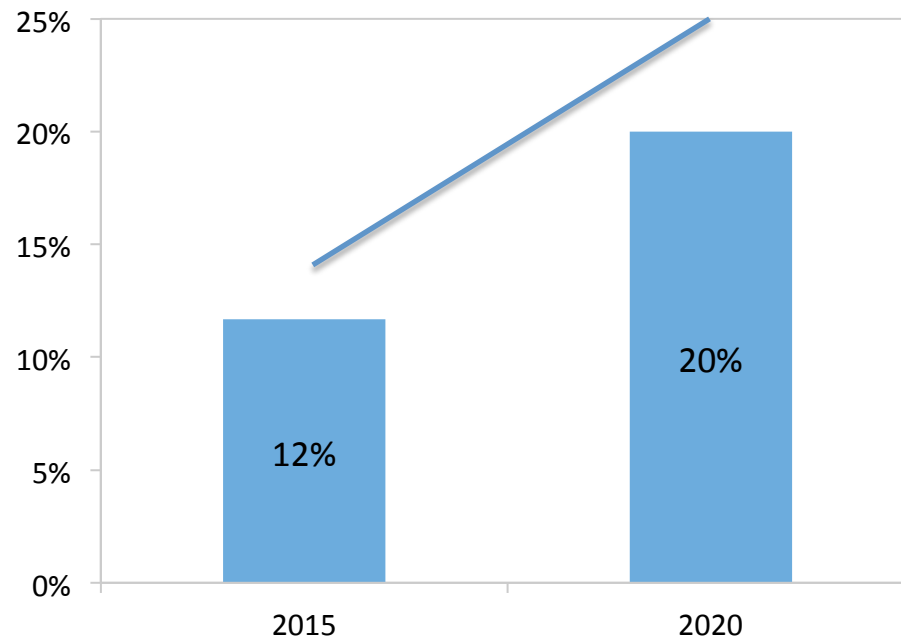
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2. Technical building blocks of market-readiness (1/8)

2.1 Taking stock of relevant sectors and target areas (1/2) – Intended Nationally Determined Contributions (INDCs)

Energy sector target

Share of NCRE in Electricity Mix



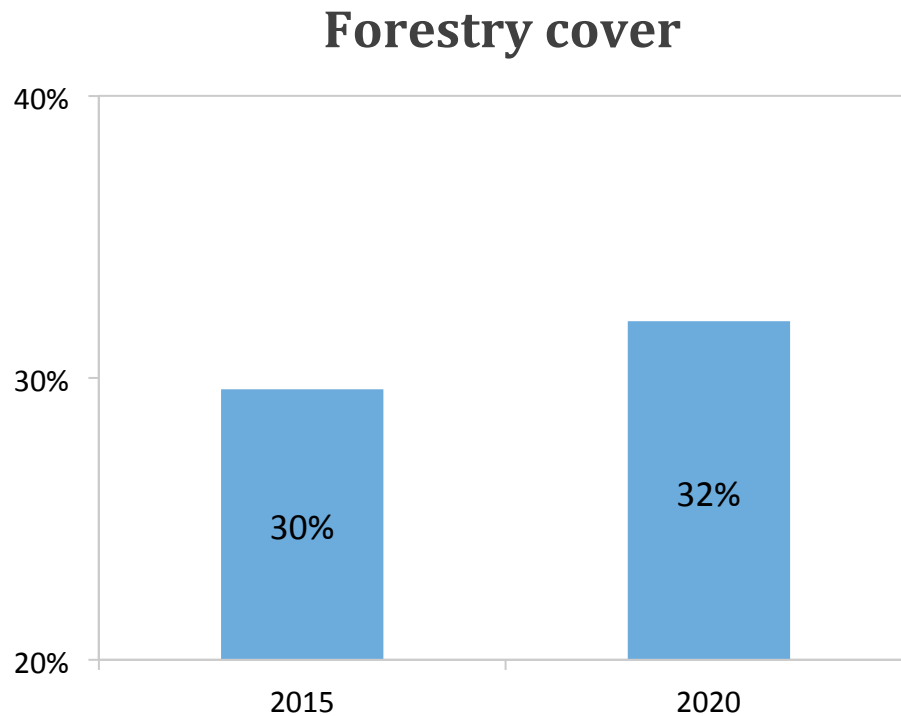
Increase share of non-conventional renewable energy (NCRE) electricity generation to 20% by 2020

Source: Sri Lanka Energy Sector Development Plan for a Knowledge-based Economy 2015 - 2025
Source: long term generation expansion plan 2015-2034

2. Technical building blocks of market-readiness (1/8)

2.1 Taking stock of relevant sectors and target areas (1/2) – Intended Nationally Determined Contributions (INDCs)

Forest sector target



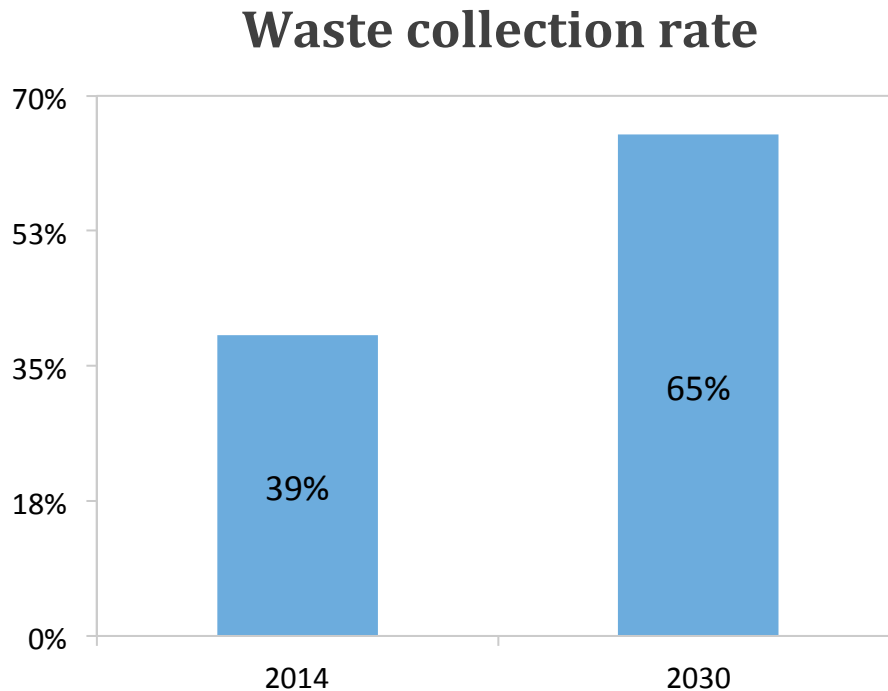
Increase forestry cover from
29.6% to 32%

Source: long term generation expansion plan 2015-2034

2. Technical building blocks of market-readiness (1/8)

2.1 Taking stock of relevant sectors and target areas (1/2) – Intended Nationally Determined Contributions (INDCs)

Waste sector target



Increase waste collection rate to 50-65% by 2030

Promote recycling, composting, and waste to energy actions

long-term goal of disposing 50% of MSW by composting

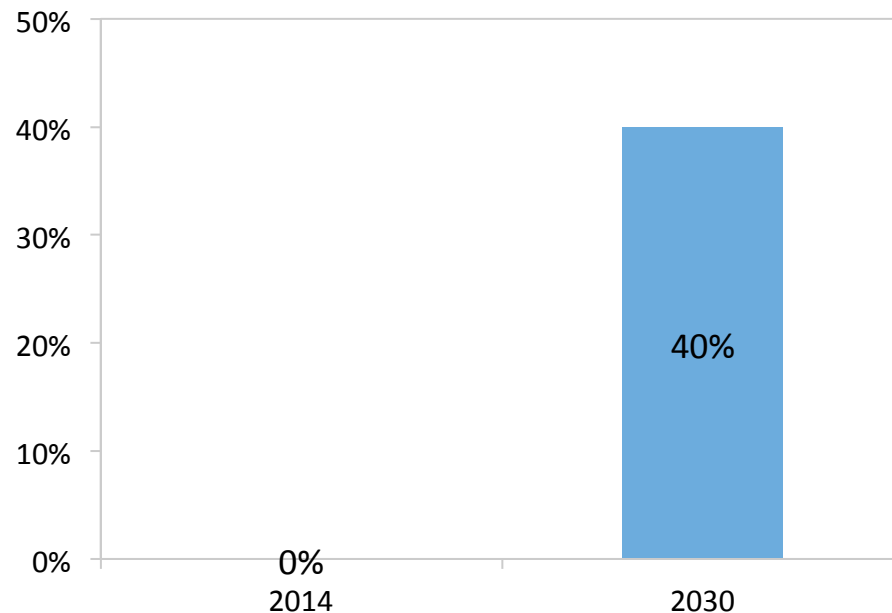
Source: long term generation expansion plan 2015-2034

2. Technical building blocks of market-readiness (1/8)

2.1 Taking stock of relevant sectors and target areas (1/2) – Intended Nationally Determined Contributions (INDCs)

Transport sector target

Share of green fuelled public transport



Establish energy efficient and environmentally sustainable transport systems by 2030 with 25%-40% green fuelled public transport

Source: long term generation expansion plan 2015-2034

2. Technical building blocks of market-readiness (1/8)

2.1 Taking stock of relevant sectors and target areas (1/2) – Intended Nationally Determined Contributions (INDCs)

Industrial sector target

Sector emissions will be reduced through modernization and facilitation to follow recognized standards, breaks into sub sectors

Source: long term generation expansion plan 2015-2034

2. Technical building blocks of market-readiness (4/8)

2.2 Core Readiness Components (1) – MRV Systems & registry tracking (2/3)

- ◆ At present, Sri Lanka's MRV systems not well developed:
 - ❑ Underdeveloped carbon markets (also demand issue)
 - ❑ Limited institutional capacity
 - ❑ Low awareness of SLCCS processes