



Sri Lanka's Organizing Framework for Scoping of PMR activities

**Ministry of Mahaweli Development & Environment
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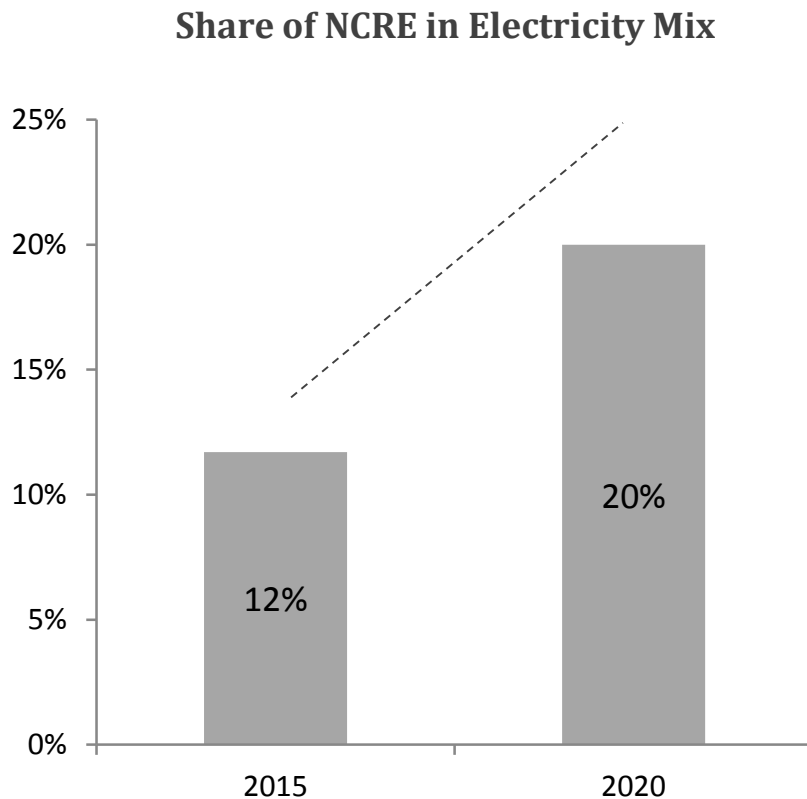
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1. Policy context: Domestic mitigation objectives and emissions profile (1/6)

1.1 Policy context and objectives – National Policy on Climate Change



- ◆ In order to address climate change, Sri Lanka has developed a national policy agenda that includes strategies such as:
 - Achieving 20% energy generation from Non-Conventional Renewable Energy (NCRE) sources by 2020
 - Rehabilitating and restoring estuaries, lagoons, mangroves, salt marshes, sand dunes, beaches and grass-beds to safeguard the coastline
 - 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

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 (2/6)

1.1 Policy context and objectives – Intended Nationally Determined Contributions

- ◆ Sri Lanka has submitted its INDC to UNFCCC in October 2015
- ◆ Five major sectors have been identified for the Sri Lanka INDCs such as energy, transport, forests, industry and waste.
- ◆ Sri Lanka intends to reduce the GHG emissions against Business- As-Usual (BAU) scenario by
 - ◆ 20% in energy sector (4% unconditionally and 16% conditionally) by 2030;
 - ◆ 10% in other sectors (transport, industry, forests and waste) by 3% unconditionally and 7% conditionally by 2030.

1. Policy context: Domestic mitigation objectives and emissions profile (3/6)

1.1 Policy context and objectives – Existing strategies for achieving targets

Renewable Energy Targets

- ◆ Over 40% of Sri Lanka's primary energy is dependent on imported fossil fuels
- ◆ Sri Lanka spends US\$ 5 billion per year to import fossil fuels
- ◆ Sri Lanka has vast untapped wind, solar, biomass, biogas, and wave energy resources
- ◆ To meet twin objectives of energy security and climate change mitigation, 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

- ◆ The government has also adopted the 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 (4/6)

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

- ◆ **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 (5/6)

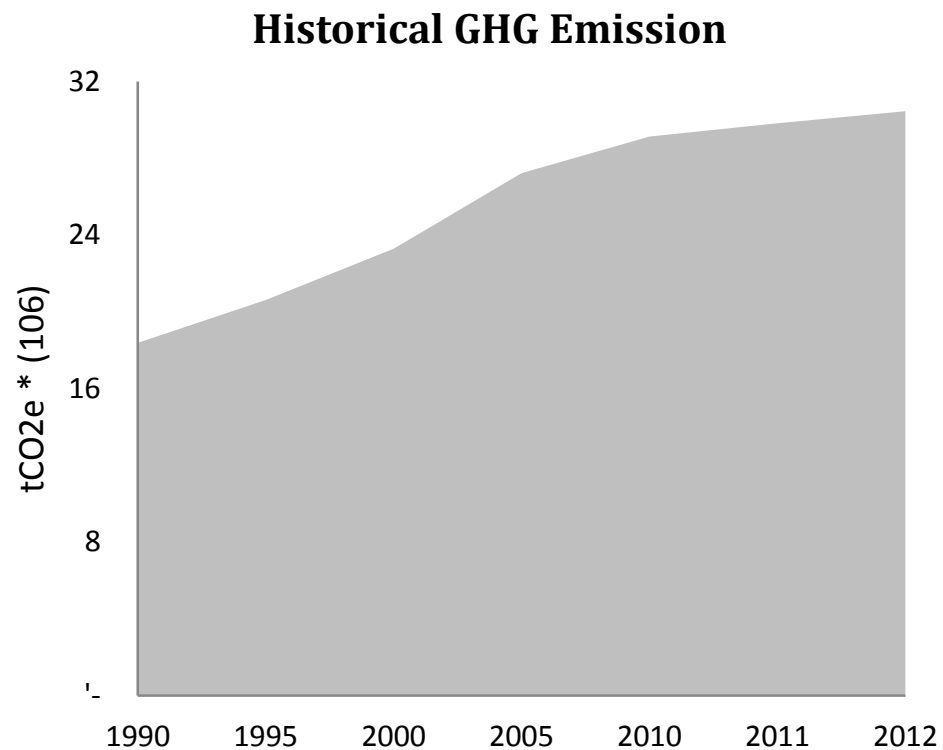
1.1 Policy context and objectives – Interest in Market Mechanisms (2/2)

- ◆ **Carbon Partnership Facility:** With World Bank support, Sri Lanka is currently exploring the possibility of market instruments in the energy sector through scaled-up carbon crediting activities (SCA). 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 participating in voluntary emissions reductions through several schemes and programs

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

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.

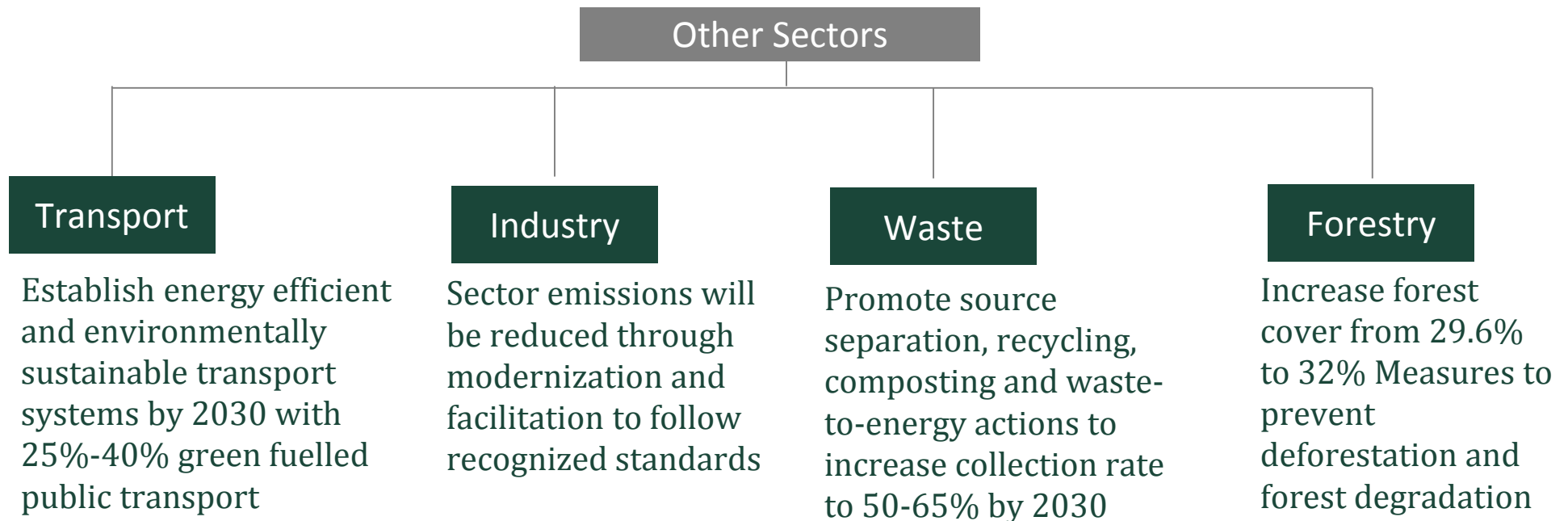


Source: UNFCCC country brief, Emission Database for Global Atmospheric Research (EDGAR)

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



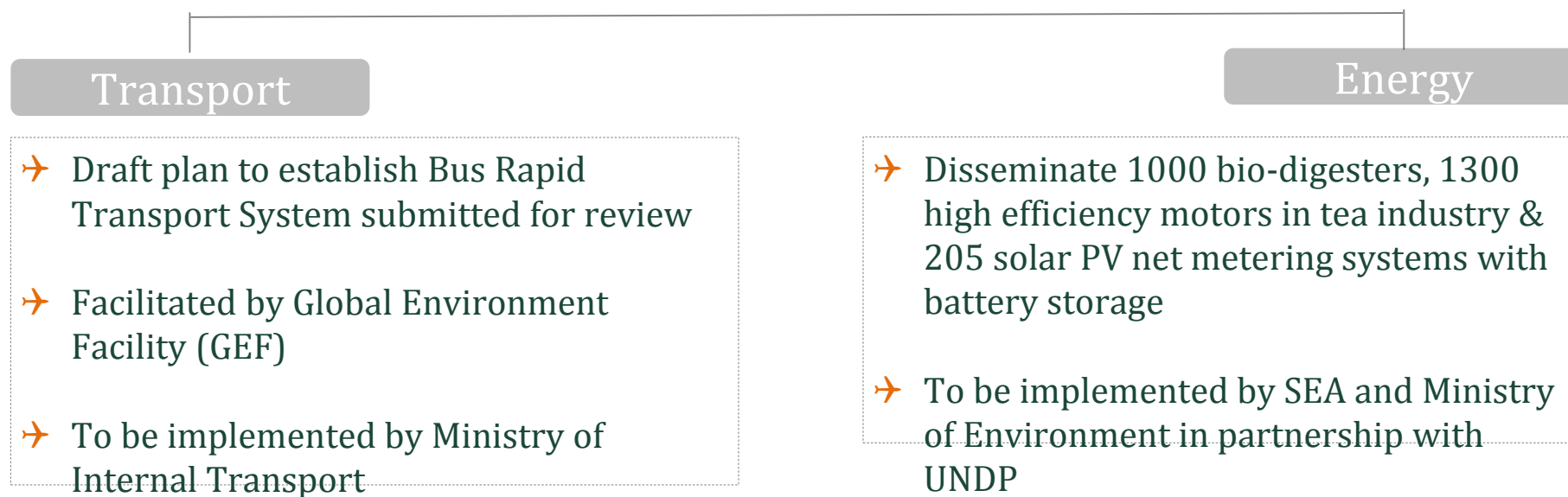
Source: Sri Lanka's INDC submitted to UNFCCC, 2015

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)

- ◆ In addition to energy, the transport sector has been identified as a priority sector for GHG emission reduction through market instruments. Ministry of Power and Energy and SEA have prepared draft sub-sector NAMAs together with UNDP

Nationally Appropriate Mitigation Actions (NAMAs)

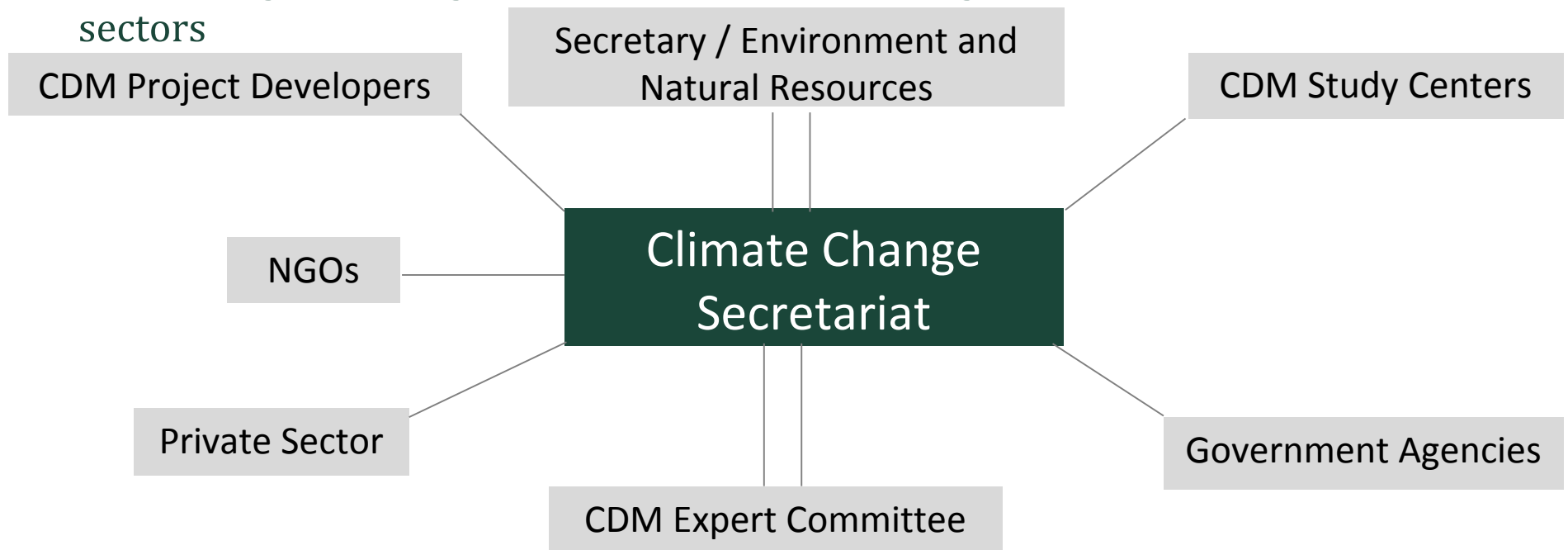


- ◆ Given the emphasis of the INDCs, the industrial and waste sectors may also be considered for development of market mechanisms

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

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

- ◆ Sri Lanka has implemented an excel based carbon registry and tracking under Sri Lanka Carbon Crediting Scheme
- ◆ Sri Lanka participation in World Bank's CPF & NAMAs help to strengthen support for MRV in energy sector
- ◆ Development of an effective national MRV system helps to streamline monitoring, reporting, and verification of the mitigation activities in different 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)

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

- ◆ 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 the-SLCCS process, especially with banks and financial institutions
 - ➔ 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)	Established under the Ministry of Environment and Renewable Energy to adopt a comprehensive national approach to address climate change challenges, which will act as the nodal agency for implementing PMR activities
Ceylon Electricity Board (CEB)	An integrated state owned utility that owns and operates 65% of the electricity generation system and the entire transmission network. Since CEB also performs most of the power purchase and distribution functions, its participation in PMR activities can be vital in encouraging investment in renewable energy
Public Utilities Commission of Sri Lanka (PUCSL)	Established the Public Utilities Commission of Sri Lanka (PUCSL) in 2002 as a regulator for the energy and water sectors. Institutional capacity building can facilitate the creation of an enabling environment for green investment
Sustainable Energy Authority (SEA)	Established in 2007 to develop and implement policy for renewable energy development, energy efficiency, and energy conservation. Capacity building can facilitate the provision of an institutional framework for private investment
Sri Lanka Climate Fund (SLCF)	Established in 2008 under the purview of the Ministry of Environment and Renewable Energy (MoERE), to undertake climate finance assignments that align with national priorities. SLCF can play a vital role in demonstrating the viability of carbon neutral projects and implementing MRV systems
Other	Relevant government institutions and other stakeholders

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

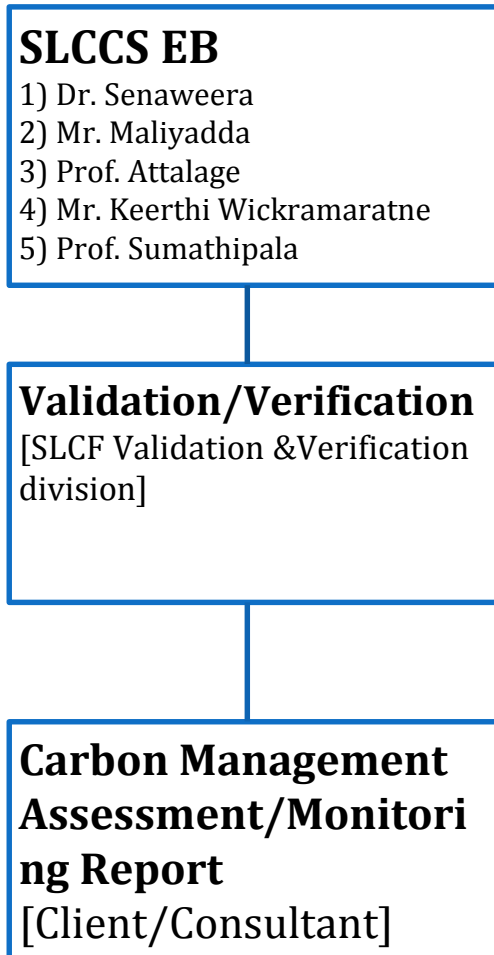
2.2 Core Readiness Components (2) – Institutional/regulatory Capacity Building (2/2)

- ◆ 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
 - ◆ 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** voluntary offsets 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



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)

- ◆ The Sri Lanka climate Fund provides carbon footprinting certification services ranging from organization to product footprints in line with GHG Protocol, ISO 14064 -1 & 2 and PAS 2050 carbon footprinting standards

Carbon Credit Prices

Carbon offset scheme	Project type	Country	Amount of total credits available	Unit price (USD/unit)
Sri Lanka Carbon Offset Scheme	Hydro	Sri Lanka	26,000 SCERs	2
Clean Development Mechanism - International	Hydro	Sri Lanka	More than 10000 CERs	3
Clean Development Mechanism - International	Hydro, Wind, etc technologies listed in VC	Countries listed in VC	More than 10000 CERs	1-4

- ◆ The Sri Lanka Carbon crediting Scheme 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
 - ➔ 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 Offset Scheme
- Pilot activities

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	Active	Active	Active	Active	Active	Active
Stakeholder consultation	Active	Active	Active	Active	Active	Active
Review of MRP based on feedback	Active	Active	Active	Active	Active	Active
Finalizing MRP	Active	Active	Active	Active	Active	Active

Sri Lanka requires additional support to make climate mitigation efforts a success.



Capacity Building

Strengthen domestic institutions to design and implement programs that will enable achievement of Sri Lanka's low carbon growth goals



Develop Market Mechanisms

Develop new financial instruments or improve the design of existing instruments to catalyze private investment in climate change mitigation projects



Incorporate International Standards

Improve design and enhance effectiveness of domestic GHG mitigation programs by incorporating international standards and practices

PMR can help achieve Sri Lanka's climate change objectives...

Block 2: Identify target sectors

- Research on mitigation potential and suitable policy instruments

Block 3: Core components (data & regulatory framework)

- Planning and identification

Block 6: Schedule and budget

- Steps for Implementation

...using a sequenced approach.

Step 1	Research green policy instruments to support government in achieving low carbon development path (e.g. green tax, levy) (Block 1)	Assess Sri Lanka's mitigation potential by sector (Block 2)
Step 2	Develop potential policy mechanisms for government (Block 3)	Identify potential sectors and match with market instruments (Block 4)
Step 3	Test green policy instruments (e.g. green bonds, SLCOS)	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