



# Draft Market Readiness Proposal of Costa Rica

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Country: **Costa Rica**

Responsible agency: **MINAET**

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# AGENDA

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# Overview

Key themes:

- MRP objectives and Focus
- MRP Development process
- Approach to progressing the MRP

## MRP Objectives and Focus

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- Costa Rica seeks to align its sustainable development and competitiveness strategies: mitigation component seeks to achieve a carbon neutral economy by 2021.
- Specific objectives include:
  1. Completion and initial **implementation of a domestic market design**, including legal, institutional and regulatory aspects (registry)
  2. **Strengthening of demand**
  3. **Consolidation of supply sectors**

# MRP Development Process

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- High level political support.
- Carbon neutrality requires that all sectors be engaged.
- PMR worked with individual sectors in a **highly participatory process** that involved all stakeholders: Government, private sector, technical experts and cooperation agencies.
- Sectors determined their own priorities.
- Ministry of Energy and Environment (MINAE) coordinated process.

# Approach to progressing the MRP

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- Costa Rica is implementing a **progressive approach** that focuses on the voluntary market and is compatible with international markets.
- The approach has compulsory elements like emissions-reporting, and could include **benchmarks or sectoral caps** in the future.
- One important challenge is the definition of C-Neutrality at the national level and the **integration of REDD+** into one framework, registry, etc. No PMR support asked for this.

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# Policy context and the big picture

Key themes:

- Costa Rica's low emissions development goal
- International context: Costa Rica's voluntary mitigation pledge and underlying considerations
- Experience with market instruments

## Costa Rica's low emission development goal

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- In 2007 Costa Rica announced its pledge to attempt to become **carbon neutral by 2021**.
- This commitment incorporated in 2011-2014 Development Plan.
- Government proposes eco-competitiveness strategy, clean production, corporate social responsibility.
- National Climate Change Strategy (NCCS) defines six areas of action: mitigation, vulnerability and adaptation, metrics, capacity building, education and awareness and financing.



## International context: Costa Rica's pledge on voluntary mitigation action and underlying considerations

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- In January 2010, in the aftermath of the Copenhagen Climate Summit, Costa Rica submitted its pledge to promote *a long-term economy-wide transformational effort to enable carbon neutrality*.
- Estimates of the cost of the investment package around 1% of GDP above regular projected investments.
- Costa Rica acknowledged that required international support through a variety of mechanisms, including markets, ODA, loans, etc

# Costa Rica's history of reaching for ambitious goals

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- Free and compulsory education for children of both sexes (1869 Constitution)
- Abolished Army (1948)
- Develops tropical conservation and ecotourism
- First tropical country to reverse deforestation trend (1987-2012)
- Bans strip mining (2010) and all hunting (2012) as a result of popular write-up campaign
- Happiest country in the world (2012)

## Experience with market instruments

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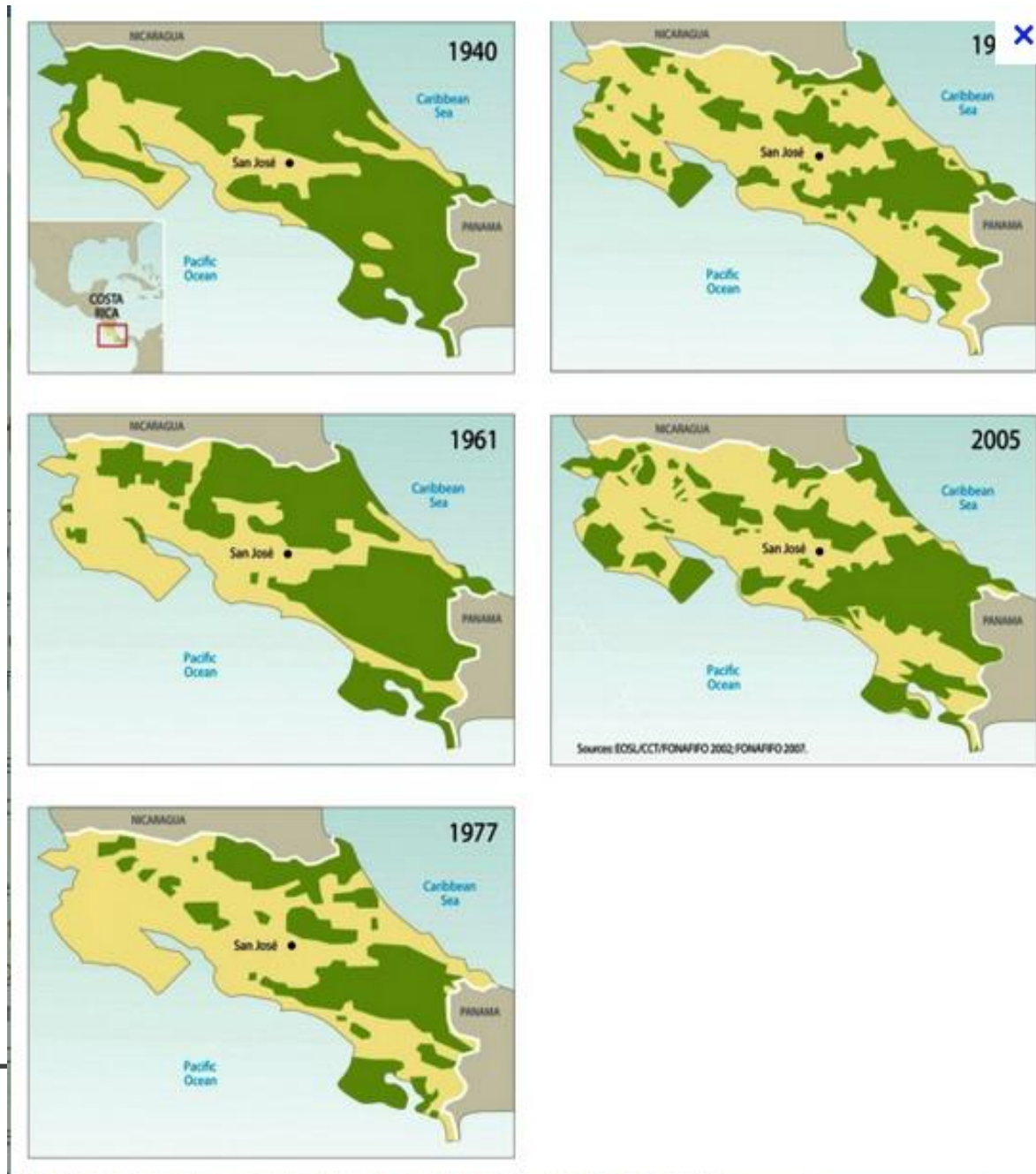
- Costa Rica pioneered a financial instrument for placing GHG offsets in the international market: the **CTO** (Certified Tradable Offset).
- In 1996, Costa Rica sold its first 200,000 CTO's to Norway for \$2 million.
- Two cooperation projects with the Netherlands dealing with anaerobic treatment of organic coffee waste and the Netherlands received CTO's equivalent to reduction of 500 tons of methane.

# Experience with market instruments: REDD+ and Payment for Environmental Services (PES)

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- Costa Rica has been a leader in REDD+.
- Since 1997 the country implemented a program designed to promote the maintenance and recovery of the country's forest cover.
- This program has been financed by a 3.5% carbon tax, two World Bank loans and two GEF grants. Overall investment in 15 years close to \$400 million.
- Program has covered 9,000 private landowners, geo-referenced and certified yearly.

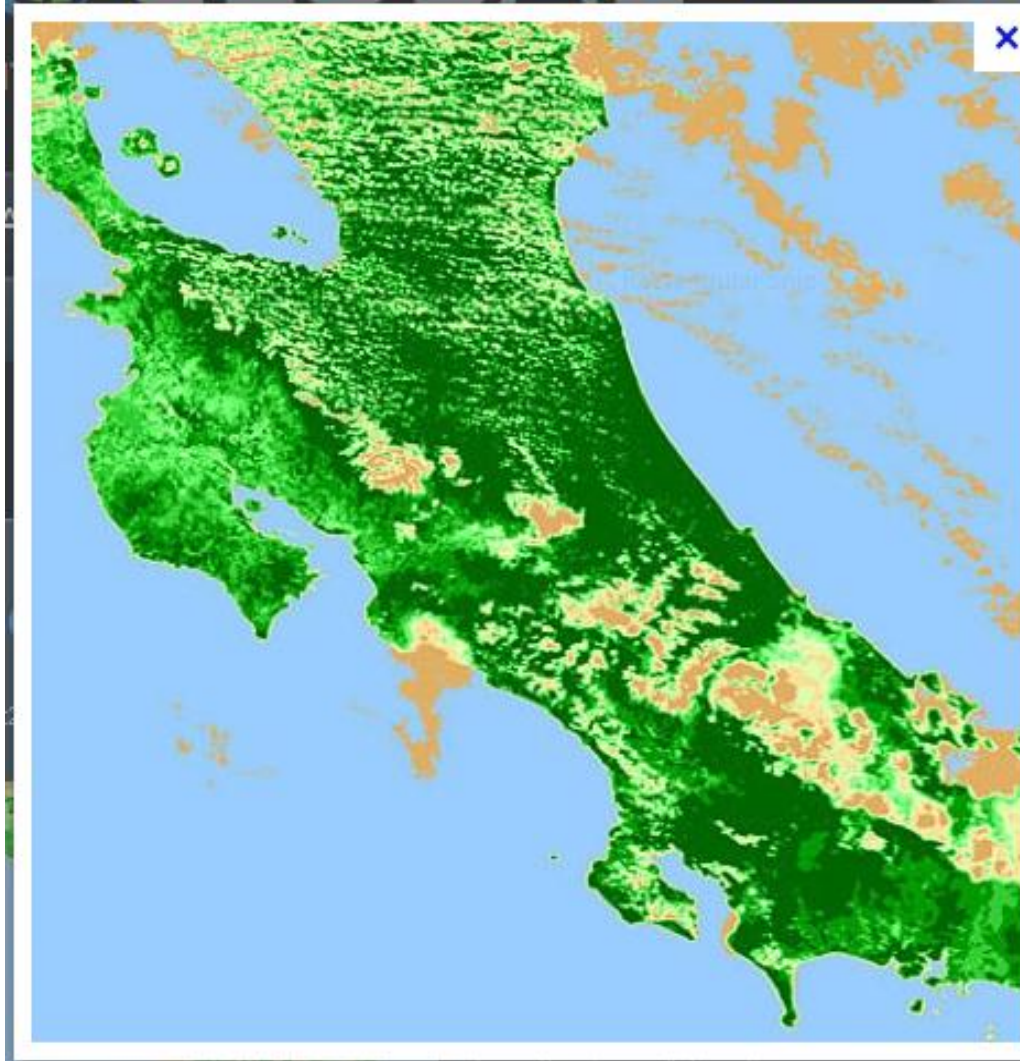
# Experience with market instruments: REDD+ and Payment for Environmental Services (PES) - Costa Rica's Striptease



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Costa Rica in 2005





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# MRP Target Area – the Costa Rican Domestic Voluntary Carbon Market

Key themes:

- Overall mechanics
- Supply/demand infrastructure
- Institutional infrastructure and participants
- Creation of a market instrument
- Registry and tracking system
- International alignment – international third party audit process

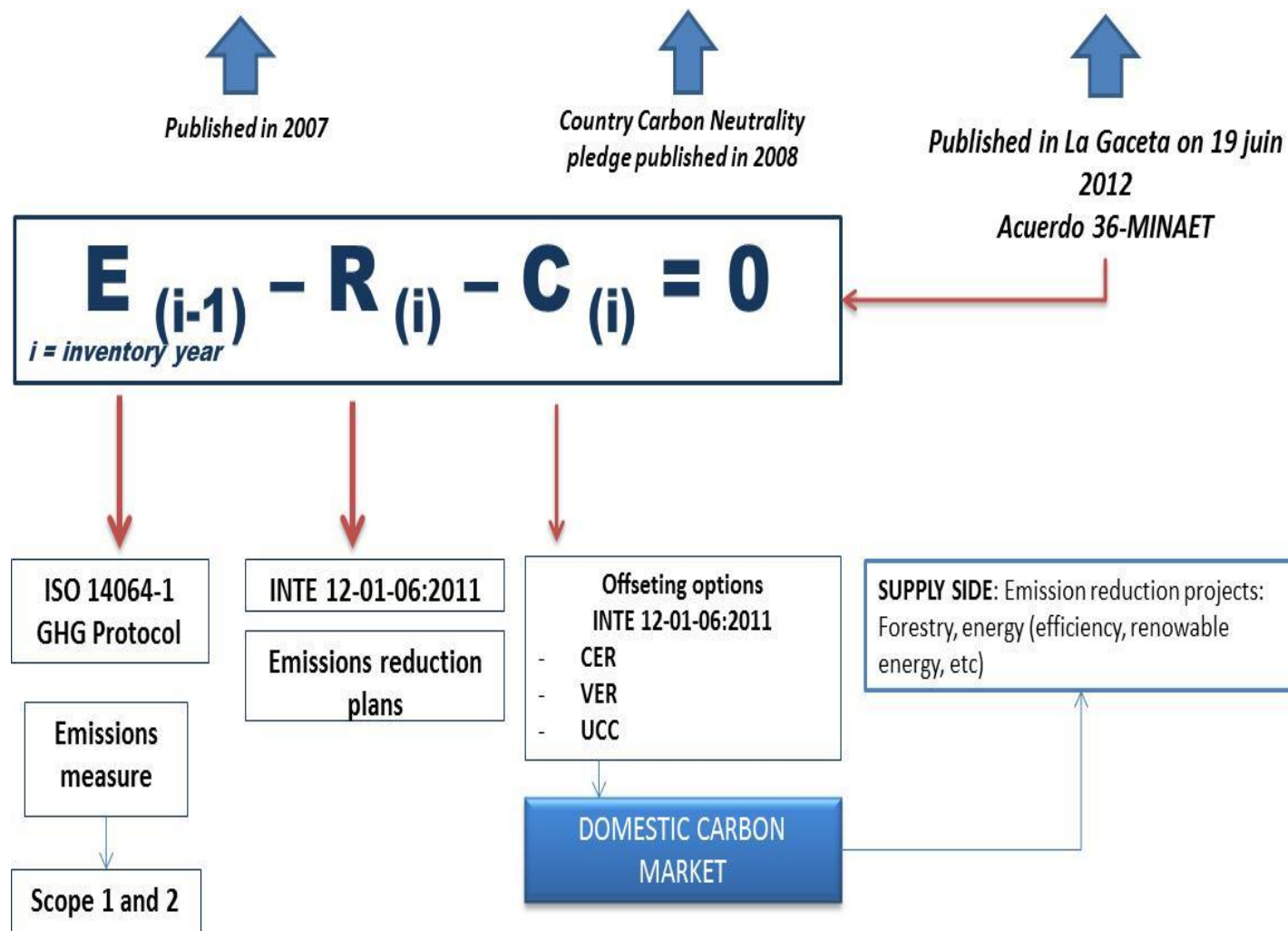
## Overall mechanics

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- Given the present situation of international carbon markets, Costa Rica proposes to focus on its internal **voluntary carbon market**.
- Voluntary does not mean without standards, on the contrary we seek **international best practice** and **high standards**.
- The Carbon neutrality Country Program establishes a voluntary procedure by which a productive process becomes carbon neutral



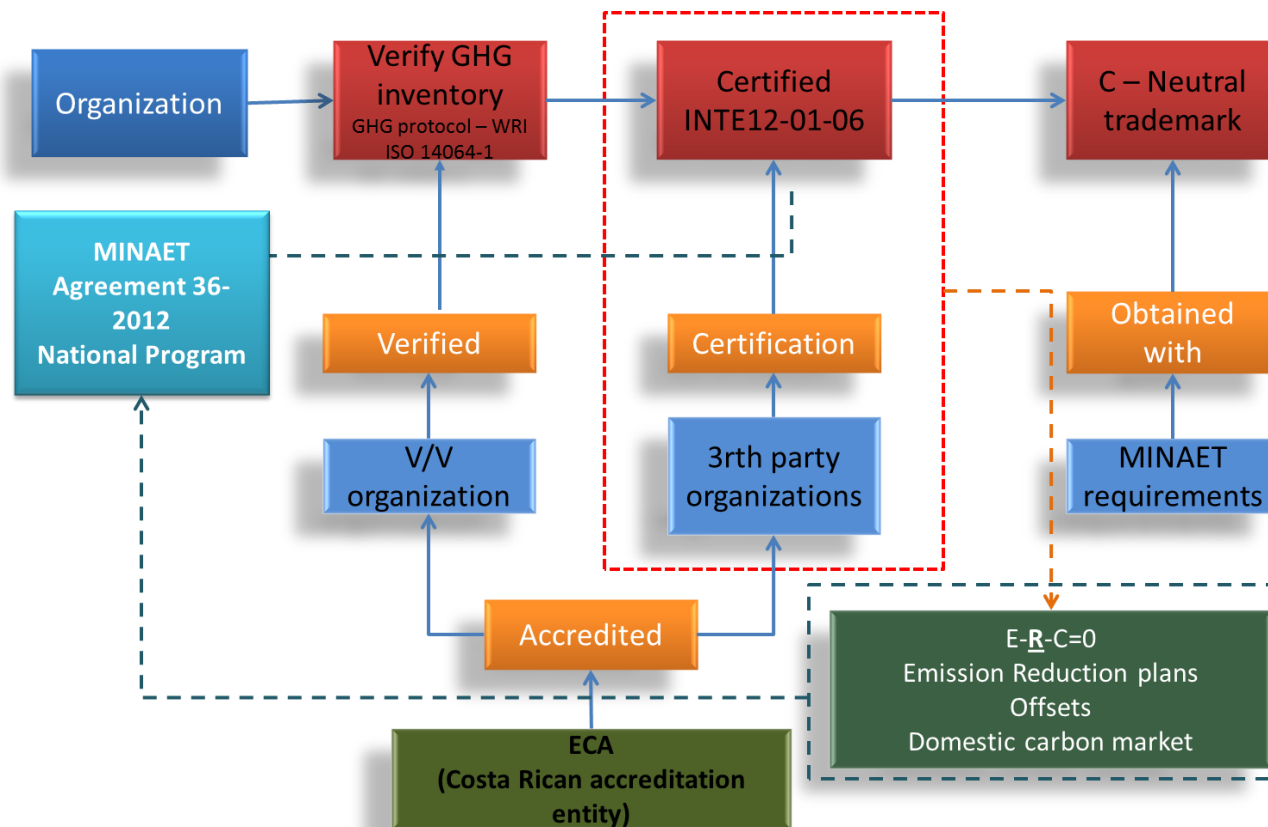
# Overall mechanics – the carbon neutrality equation



## Overall mechanics – the carbon neutrality equation ‘E’

$$\mathbf{E}_{(i-1)} - \mathbf{R}_{(i)} - \mathbf{C}_{(i)} = 0$$

*i = inventory year*



## Overall mechanics – the carbon neutrality equation ‘R’

$$\boxed{E_{(i-1)} - R_{(i)} - C_{(i)} = 0}$$

*i = inventory year*

‘R’ represents the requirements to reduce emissions and/or increase removals. It indicates that a management plan should be implemented to achieve these goals and should include as a minimum:

- Statement by upper management about the commitment to carbon neutrality.
- Reduction objectives.
- Expected resources.
- Compensation strategy.

The plan is to be updated at least every 12 months.

## Overall mechanics – the carbon neutrality equation ‘C’

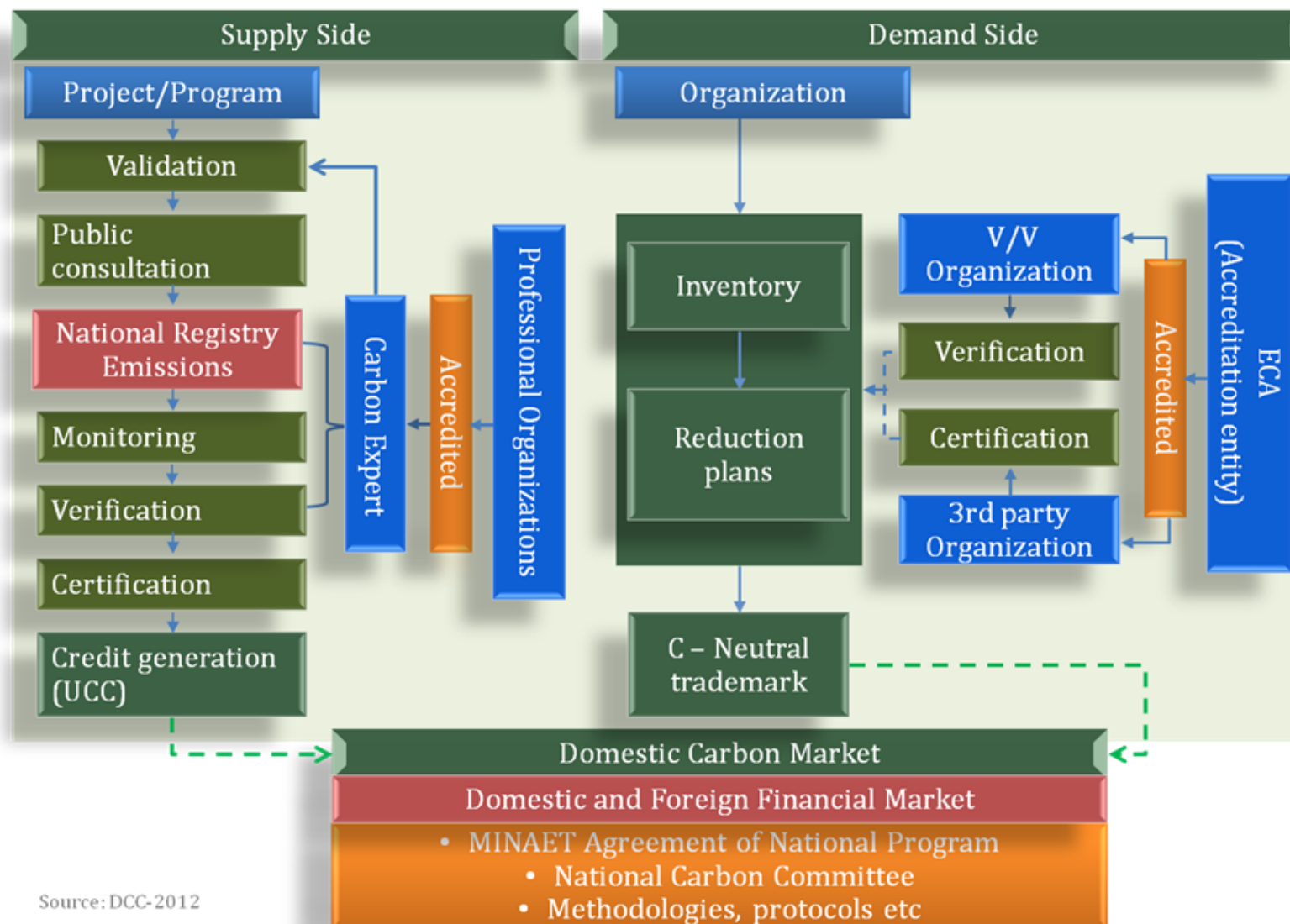
$$\boxed{E_{(i-1)} - R_{(i)} - C_{(i)} = 0}$$

*i = inventory year*

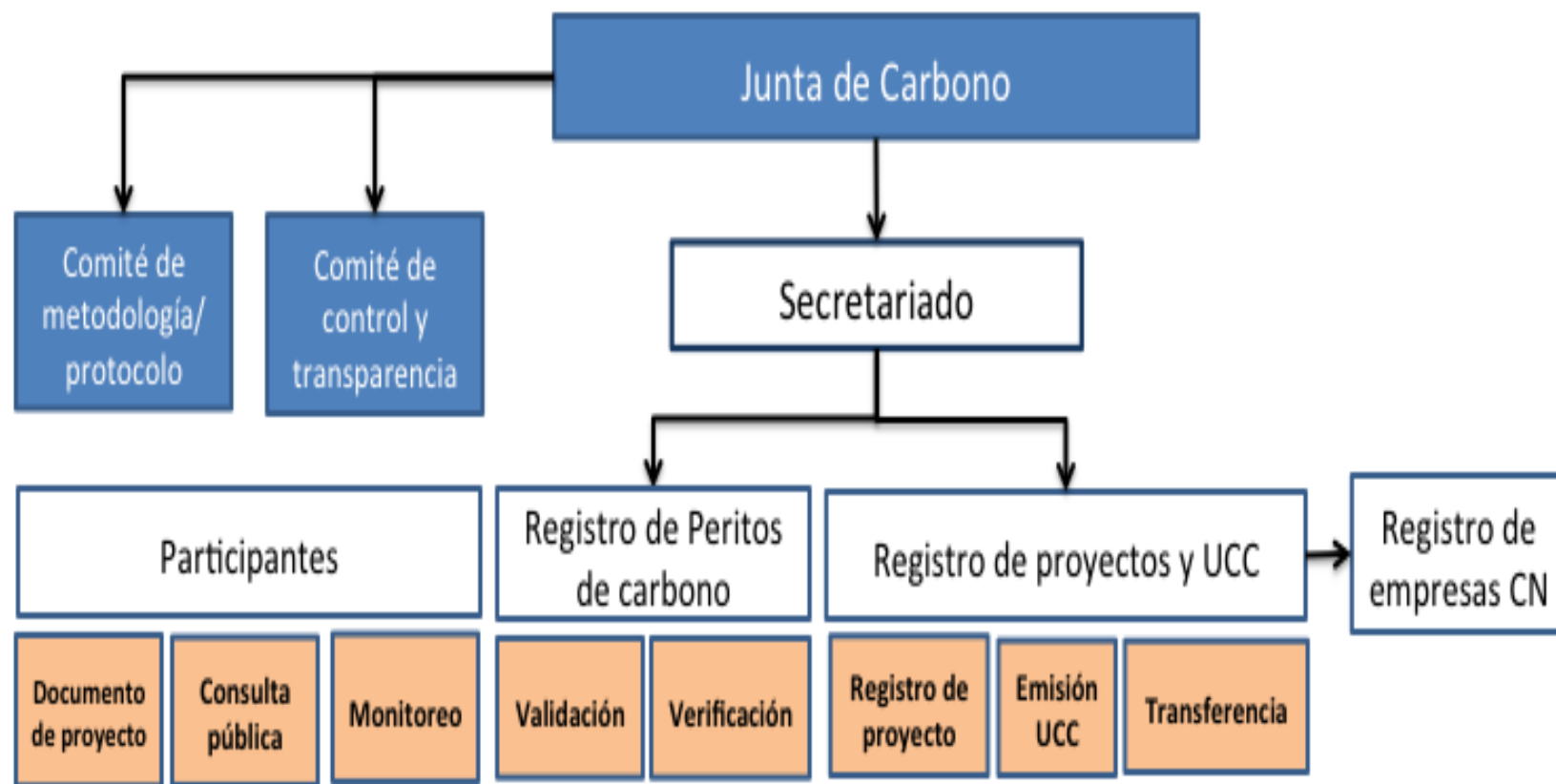
‘C’ represents the offsetting component of the standard states. It allows for organizations to offset GHG emissions that have not been reduced internally by acquiring the following asset classes:

- Certified Emissions Reductions (CERs).
- Verified Emissions Reductions (VERs).
- Unidades Costarricenses de Compensación (UCC/Costa Rican Compensation Units).

# Supply and demand Infrastructure



# Institutional infrastructure and participants

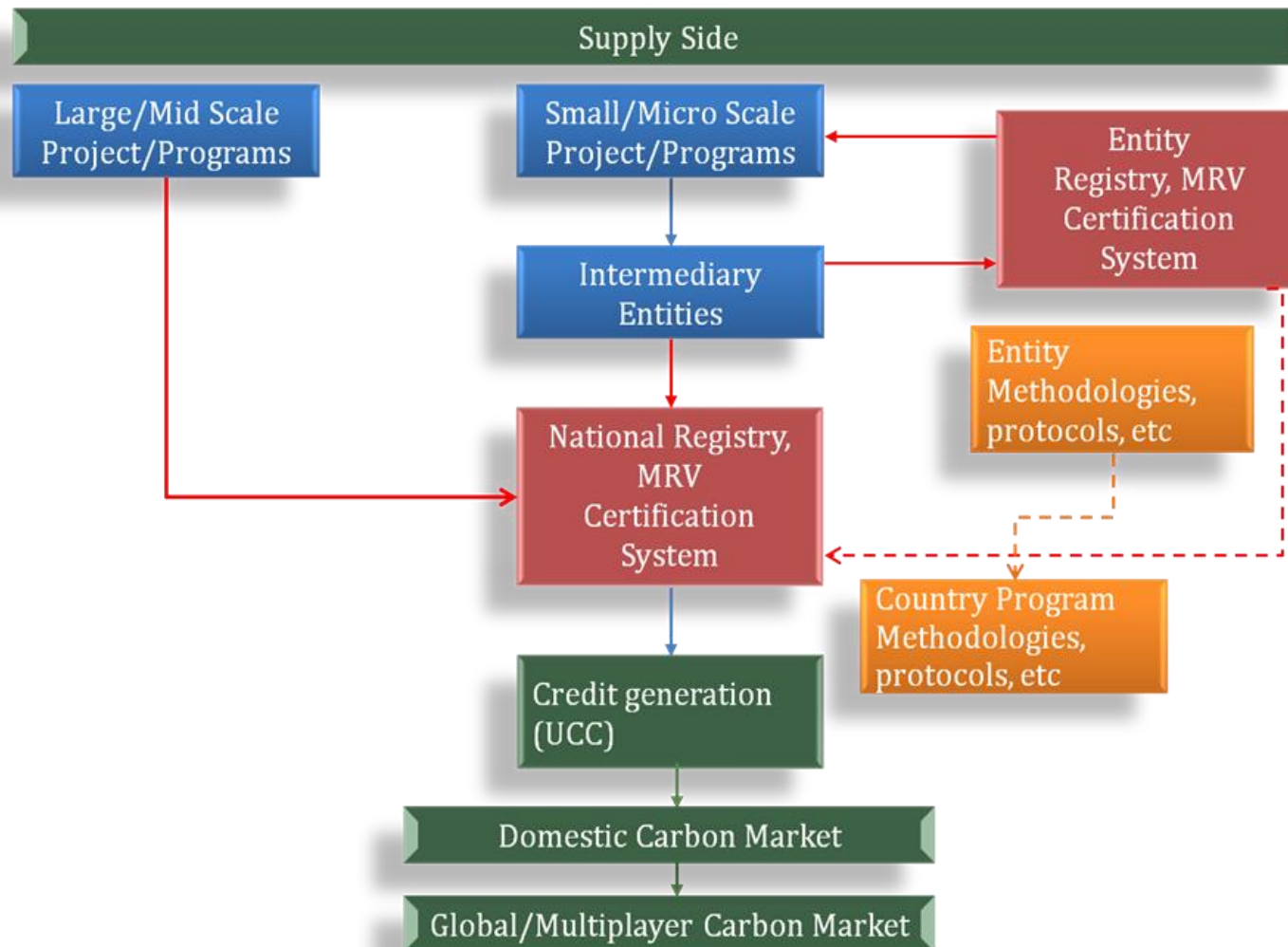


# Creation of a market instrument - the UCC, Costa Rican offset units

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- Represents emissions that were avoided, reduced, removed, and stored and have also been monitored, reported and verified.
- Equivalent to one ton of carbon dioxide.
- Tradable initially in the domestic market, but design expected to be sufficiently robust to meet international standards and markets.
- Must be registered with official entity.
- Standard against which UCCs are issued was developed by Technical Standards Institute of Costa Rica

# Creation of a market instrument - process for generating UCCs

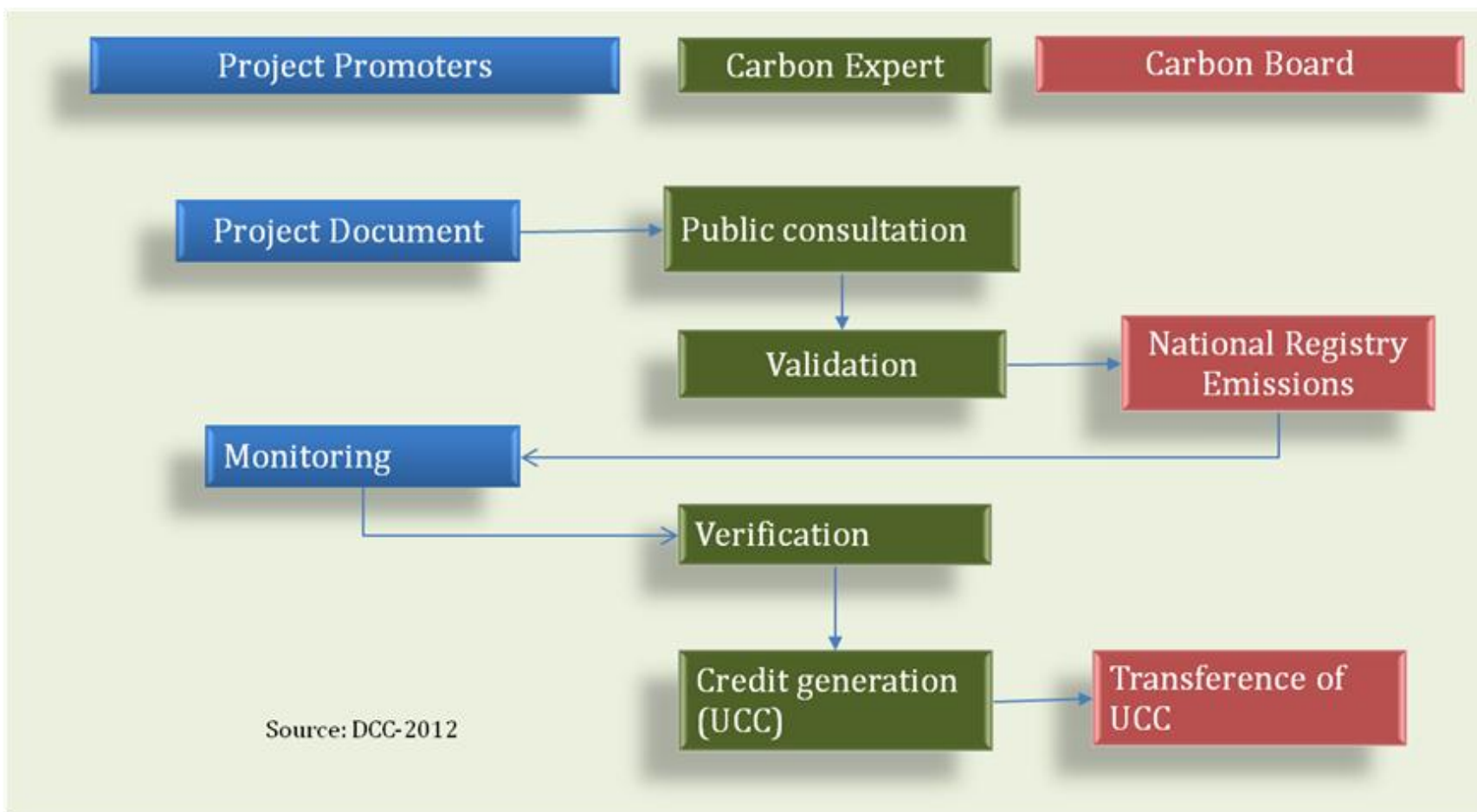


Source: DCC-2012

MRP TARGET AREA – DOMESTIC VOLUNTARY MARKET



# Creation of a market instrument - UCC project cycle



## Registry and tracking systems

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- Essential to ensure proper accounting of emissions, reductions and UCCs.
- Provides security and transparency, legal proof of credits and transactions.
- Provides source of centralized information in real time with solid protocols.
- Register includes projects, credits issued, processes carried out, participants and other stakeholders involved.
- Also a roster of qualified carbon experts.

## International alignment – international third party audit process

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Costa Rica intends to achieve international alignment through an international third party audit process. The process is intended to consider the following aspects of Costa Rica's domestic voluntary carbon market:

- The effectiveness and efficiency of the Scheme as a whole.
- The effectiveness of emissions reporting and coverage.
- The effect of, and potential for, international linking
- Governance arrangements.
- Any other aspect of the scheme and its operation that MINAE asks to be reviewed.

# Next steps requiring PMR support

## Domestic market infrastructure

1. Design and implementation of the legal, institutional and economic framework
2. Design and implementation of the registry and tracking system
3. Generation of protocols and methodologies for offset programs and MRV
4. Capacity building and social awareness
5. Pilot Project of the basic structure of market transactions and preliminary exercise with 5 companies (CHAMPIONS)

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# Demand

Key themes:

- Existing private sector interest
- Policy options to stimulate demand
- Sectoral approach

## Existing private sector interest

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- Demand has only been partially assessed at this stage, but a number of very significant actors have made pledges.
  - Nine "champion" carbon neutral companies representing 770,000t/CO<sub>2</sub>e (~ 8% of national GHG emissions), were announced in June 2012. Among them:
    - Holcim Group (cement)
    - Florida Beverages (brewery, water, beverages)
    - Cooperativa Dos Pinos (milk and derivatives)
    - Intel Costa Rica (electronics)
    - Bridgestone (tires)
  - Verifying GHG inventories for these 9 industrial companies reflects their commitment to carbon neutrality, as they must comply with the official rules that regulate verification and subsequent definition of carbon neutrality goals.
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## Existing private sector interest

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There are other clear indications that the Costa Rican private sector is interested in pursuing carbon-neutrality:

- Several banks, including Banco Nacional de Costa Rica, Banco Popular and BAC Credomatic have made C-Neutrality commitments
- Banco Nacional de Costa Rica is negotiating a contract with the Ministry of Agriculture and Livestock to purchase agriculture-based offsets.
- In addition to Intel and Hewlett Packard, there are 45 other high technology and 41 medical technology companies that have made specific commitments or shown interest.

## Policy options to further stimulate demand

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The DCC is committed to further exploring policy options to stimulate demand, that include:

- Capitalizing on the demonstration-effect created by large Costa Rican firms integrating voluntarily to the market.
- Exploring the feasibility of establishing benchmarks or sector emission caps.

The policy mix eventually chosen by MINAE will depend of scientific, educational and cultural factors that come to play when designing successful public policy instruments.



## Sectoral approach to demand

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The DCC will target demand sectorally based on level of interest and potential. Key sectors are likely to be:

- Financial sector.
- Tourism sector.
- High technology sector – including technology and medical companies.

# Next steps requiring PMR support

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## Strengthening of demand

1. Design and implementation of strategy of policy options to promote the goal of C Neutrality
2. Implementation of Activities for demand creation
3. Outreach of activities on private sector for C Neutrality adoption
4. Sector base discussions on policy and instrument for C Neutral objective
5. Pilot Project of scaling up of offset program from experience with 5 champion companies

DEMAND

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# Supply

Key themes:

- General criteria to guide coverage considerations
- Covered sectors:
  - Power generation
  - Agriculture and livestock
  - Solid waste management
  - Transport
  - Sustainable building

# General criteria to guide coverage decisions

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- C-Neutrality requires work in all sectors, starting with those with high **mitigation potential**. A second important consideration is **market potential or suitability**.
- The sectors considered are power generation, agriculture, solid waste, transport and sustainable construction.
- Some sectors, like agriculture and cattle, can be sources of both supply and demand. Other sectors, like transport, are more difficult to tackle with market instruments alone.

# Power generation sector

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- Long standing trend of renewable development by national utility ICE, up to 95% of generation.
- Recently, thermal generation has risen to 10% and the plan is to reduce over one-third of thermal generation with **small-scale renewable like geothermal, wind and biomass**. The second year about 75% of thermal generation would be displaced.
- Average potential emission reductions over 200,000 tons per year.

# Agriculture and livestock sector

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- Emissions from agriculture and livestock are **over half of total emissions**, important reductions opportunities in **livestock, coffee and sugar cane**.
- Sector is well organized, all private producers but Ministry of Agriculture has important role in MRV.
- Livestock very important, divided in dairy and beef. Largest processor of milk (80%) committed to C-Neutrality. Coffee sector also very active

# Solid waste management

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- Responsible for close to 20% of emissions.
- Main actions include **capture and destruction of all methane gas in landfills**, if possible to be used for power generation.
- **Recycling** of materials like paper, plastics, metal and glass.
- **Composting** and bio-digestion of organic waste
- Long-term mitigation potential of over 900,000 tons.
- GLZ is a key partner in this sector.

# Transport sector

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- Emissions from transport close to 4 M tons/yr.
- Highly fragmented sector with many private players and weak governmental capacity.
- Market incentives alone insufficient, a strong planning framework required.
- Sectorization of **bus transport** an important alternative: transfer points and larger buses.
- Revival of **trains** in the metropolitan area.
- Restrictions to private cars: one day stop.
- Mitigation potential small but payoff in congestion reduction.,



# Sustainable building sector

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- Important share of emissions, considerable waste large reduction potential and pay-offs.
- Main actions include:
- **Waste reduction** and standardization
- **Increase wood** and other natural products in construction. Same as REDD+ objective.
- Foster **environmentally friendly materials**
- **Reduce energy** consumption.

## **Generation of Supply**

- 1) Studies supporting the market participation of the sector**
- 2) Improving GHG data generation and management in the sector**
- 3) Institutional and capacity building for the implementation**
- 4) Stakeholder consultation processes**
- 5) Formulation of Sector Offset Program**

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## Building Blocks 5 and 6

Key themes:

- Organization, communication, consultation and engagements
- Schedule and budget
- Roadmap
- Other considerations

# Organization, Communication, Consultation and Engagement

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The team organized an intense process of multi-stakeholder awareness raising and consultation among government agencies, public and private entities, independent experts and other stakeholders. The process included:

- Research - Identification and analysis of existing research and documentation
- Sectorial meetings - interviews with experts and authorities, and half-day workshops
- National workshops - held with the DCC, the National Technical Team, consultants, and the PMR Core Team.
- External cooperation – including meetings with donors and scientific and policy based networks.

## Schedule and budget

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Costa Rica's schedule and budget is divided into three areas of market readiness:

- The domestic market infrastructure.
- Demand strengthening .
- Supply generation.

Most of the budgetary requirements relate to design and implementation of the infrastructure for market operation. While this process has started, it is still in a pre-design stage in several areas.

# Roadmap

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- Costa Rica is implementing a **progressive approach** that focuses on the voluntary market and is compatible with international markets.
- The approach has compulsory elements like emissions-reporting, and could include **benchmarks or sectoral caps** in the future.
- One important challenge is the definition of C-Neutrality at the national level and the **integration of REDD+** into one framework, registry, etc. No PMR support asked for this.

# Other considerations

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- Costa Rica acknowledges the support of important partners like GIZ, US-LEDS, the European Union, and the UN system.
- Important support was provided by the World bank team and external reviewers.
- Given the unique characteristics of the Costa Rican proposal, the tool did not fit our situation directly and had to be adapted, but it provided useful guidance.



# **Draft Market Readiness Proposal of Costa Rica**

**Presentation by Dr. Alvaro Umaña**