



Sustainable
Solutions
for the
Environment

Global Carbon Markets & NAMAs

Where from now on?



A faint, light-colored world map is visible in the background, showing the outlines of continents and a grid of latitude and longitude lines. The map is centered on the Atlantic Ocean, with North and South America on the left and Europe and Africa on the right.

GLOBAL CARBON MARKET – Post DOHA

Reality Check

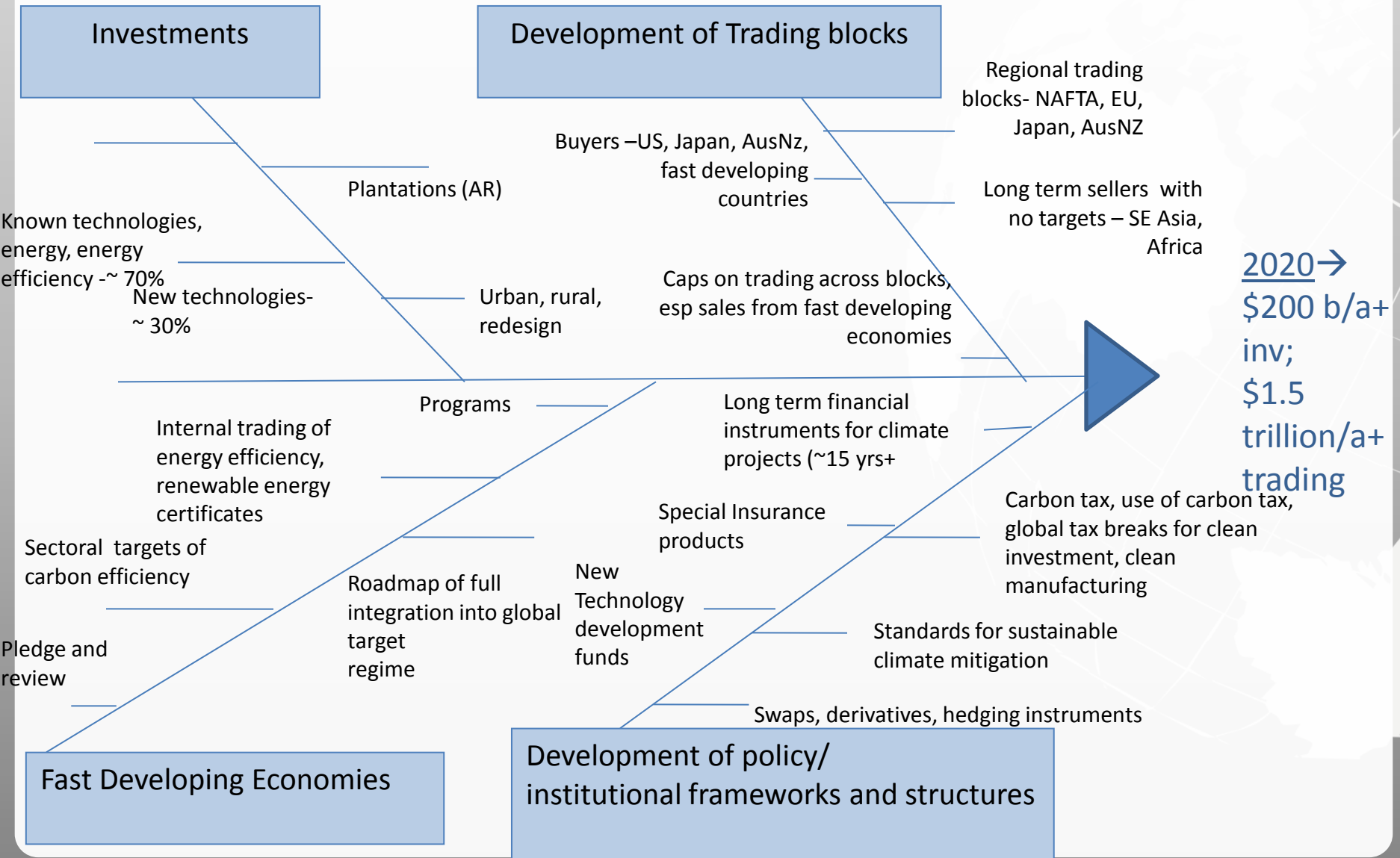
Commodity Prices for ICE ECX CER

Delayed Futures - 04:32 - Monday, January 21st

[[Go to Daily](#)] [[Options](#)] [[Spread Prices](#)] [[Profile](#)] (Click on Contract for Chart)

Contract	Last	Change	Open	High	Low	Volume	Prev. Stl.	Time	Links
Jan '13 (CQF13)	0.13s	-0.03	0.00	0.13	0.13	0	0.16	01/18/13	Quote Opinions Options
Feb '13 (CQG13)	0.13s	-0.03	0.00	0.13	0.13	0	0.16	01/18/13	Quote Opinions Options
Mar '13 (CQH13)	0.12	-0.01	0.12	0.12	0.12	6	0.13	03:34	Quote Opinions Options
Jun '13 (CQM13)	0.31s	-0.03	0.00	0.31	0.31	0	0.34	01/18/13	Quote Opinions Options
Sep '13 (CQU13)	0.31s	-0.04	0.00	0.31	0.31	0	0.35	01/18/13	Quote Opinions Options
Dec '13 (CQZ13)	0.33	+0.01	0.34	0.34	0.28	977	0.32	04:28	Quote Opinions Options
Mar '14 (CQH14)	0.33s	-0.04	0.00	0.33	0.33	0	0.37	01/18/13	Quote Opinions Options
Jun '14 (CQM14)	0.34s	-0.04	0.00	0.34	0.34	0	0.38	01/18/13	Quote Opinions Options
Sep '14 (CQU14)	0.35s	-0.04	0.00	0.35	0.35	0	0.39	01/18/13	Quote Opinions Options
Dec '14 (CQZ14)	0.36s	-0.05	0.38	0.38	0.34	586	0.41	01/18/13	Quote Opinions Options
Mar '15 (CQH15)	0.37s	-0.06	0.00	0.37	0.37	0	0.43	01/18/13	Quote Opinions Options
Dec '15 (CQZ15)	0.42s	-0.07	0.38	0.42	0.37	390	0.49	01/18/13	Quote Opinions Options
Dec '16 (CQZ16)	0.50s	-0.07	0.50	0.50	0.48	125	0.57	01/18/13	Quote Opinions Options
Dec '17 (CQZ17)	0.59s	-0.07	0.00	0.59	0.59	0	0.66	01/18/13	Quote Opinions Options
Dec '18 (CQZ18)	0.63s	-0.07	0.00	0.63	0.63	0	0.70	01/18/13	Quote Opinions Options
Dec '19 (CQZ19)	0.83s	-0.07	0.00	0.83	0.83	0	0.90	01/18/13	Quote Opinions Options
Dec '20 (CQZ20)	0.95s	-0.07	0.00	0.95	0.95	0	1.02	01/18/13	Quote Opinions Options

What may underlie future carbon markets



Kyoto Protocol

Only Annex I parties (mainly Australia, EU) with targets under KP II allowed to use CERs, AAUs, ERUs after 31 December 2012

Australia, EU, Japan, Liechtenstein, Monaco, Norway & Switzerland will not use Phase I AAUs to meet Phase II emission reduction targets

- Annex I countries to maintain surplus reserve for unused Phase I AAUs in their national registries
- Phase I AAUs can only be used in case the Phase II emissions exceed the assigned amount of Phase II
- Parties can trade maximum of 2% of unused Phase I AAUs amongst themselves
- Positive difference between assigned amount and average annual emissions of first three years of Phase II shall be transferred into cancellation account of the Party
- Parties to submit views by 15 April 2015 on how their assigned amounts be calculated

- About 13 billion surplus AAUs from Phase I may remain unused, which could potentially drive demand for other Kyoto instruments
- EU, Australia, Norway & Switzerland pledge to reduce at least 785 million tonnes between 2013 and 2020
- Can raise emission reduction targets to pledge reduction of up to 1,422 million tonnes by 2020

Enhancing Targets Under Kyoto Phase II

- Annex I countries to review emission reduction targets up to 2020 in 2014
- Revision of targets with an aim to reducing Annex I countries' emissions by 25-40% by 2020 from 1990 levels
- Annex I countries to report any increase in target by 30 April 2014

Clean Development Mechanism

- ✓ In longer term a correlation between emerging markets like China, South Korea, Chile and CDM possible
- ✓ Review of validation procedure could impact small-scale projects including several renewable energy projects
- ✓ About 480 million CERs from industrial gas projects may remain unused as they have been banned by EU, Australia, New Zealand
- ✓ About 7 million non-banned CERs likely to be carried over into Phase II

- ✓ CDM projects recognized under Kyoto Protocol Phase II
- ✓ Annex I countries can continue to invest in CDM projects

EB asked to explore possibility of reviewing validation of CDM projects automatically deemed additional

- ✓ Parties with no Kyoto Phase II target will not be allowed to use CERs from 01 January 2013
- ✓ Only 2.5% of Phase I CERs allowed to be carried over into Phase II of Kyoto Protocol

Post 2012 Climate deal

- ✓ A new climate change deal to come into force in or after 2020 to be adopted by COP21 in Dec-15
- ✓ Various options to increase emissions reduction targets till 2020 to be discussed in 2013
- ✓ United Nations to convene a conference of world leaders in 2014 to discuss post-2020 climate change deal
- ✓ Various elements of the negotiating text to be discussed at COP20 in 2014
- ✓ Negotiating text to be ready no later than May 2015

New Market Mechanisms

- ✓ New work program to be implemented in 2013 to set up a framework for various domestic schemes (market-based and non-market-based)
- ✓ Draft decision on this framework addressing issues like environmental integrity and avoiding double-counting, and is expected at COP19
- ✓ Draft decision on this framework expected at COP19
- ✓ Parties to submit views by 25 March 2013

Finance

Intermediate Finance	Long Term Finance
<ul style="list-style-type: none">• Developed countries encouraged to provide at least \$10 billion per year between 2013 and 2015• Germany, UK, France, Denmark, Sweden, and the EU Commission pledge to provide \$6 billion up to 2015	<ul style="list-style-type: none">• Work program on long-term finance extended by one year, will identify pathways to mobilize \$100 billion per year by 2020.• Developed countries to submit plans at COP19 to raise \$100 billion per year by 2020• Substantial share of public funds from developed countries to go to adaptation activities
Adaptation Fund	Green Climate Fund
<ul style="list-style-type: none">• Cumulative approval for funding adaptation projects reached \$166.5 million• Total cumulative funding received \$301.1 million	<ul style="list-style-type: none">• GCF to develop policies, eligibility criteria, and programs• GCF to prepare procedures by COP19, to provide country-driven finance through public, private-sector finance• Initial guidance to GCF to be given in COP19

What is in it for Project Owners

Registered/ RFR

- Find the right buyer
- Hedge your risk for rest of crediting period

Initial or Mid Stage – validation or before

- Switch to Voluntary Carbon Market

Identify Cost abatement strategies

- Renewable technologies
- Energy Efficiency

A faint, light-colored world map is visible in the background of the slide, showing the outlines of continents and a grid of latitude and longitude lines.

NAMA (Nationally Appropriate Mitigation Actions)

What is NAMA?

- ✓ National Policies and Strategies for a sector to reduce its GHG (Green House Gas) emissions from a Business As Usual scenario
- ✓ Voluntary pledges taken by developing countries at a sectoral level, unlike the CDM's project specific approach
- ✓ Submitted to the UNFCCC independently or as a part of a National Low Carbon Strategy

“ nationally appropriate mitigation actions in the context of sustainable development, supported and enabled by technology, financing and capacity-building, aimed at achieving a deviation in emissions from ‘business as usual’ emissions in 2020 (UNFCCC, COP 16, Car

”

Evolution of NAMAs

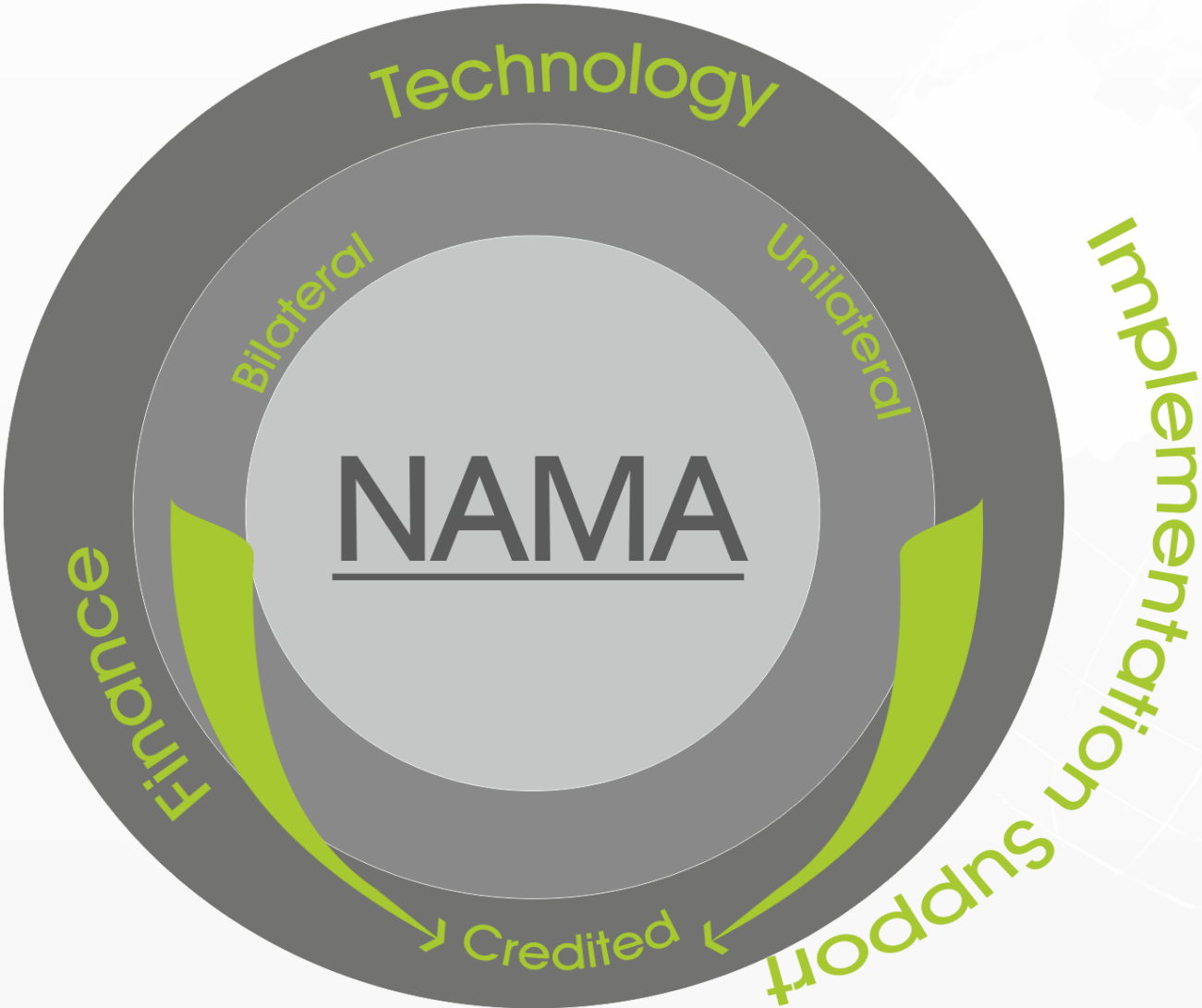
Concept was first introduced during COP 13 in Bali in 2007 through the Bali Action Plan (BAP)

Concept was finally accepted and elaborated during COP 16 in Cancun in 2010

Till date 35 NAMAs have been reported in either Concept, Proposal or Implementation stage in 27 countries

In addition, around 28 more feasibility studies have been reported in these countries

Types of NAMAs



Benefits of NAMAs

(1 of 2)

NAMA is a VOLUNTARY PLEDGE by a Developing Country

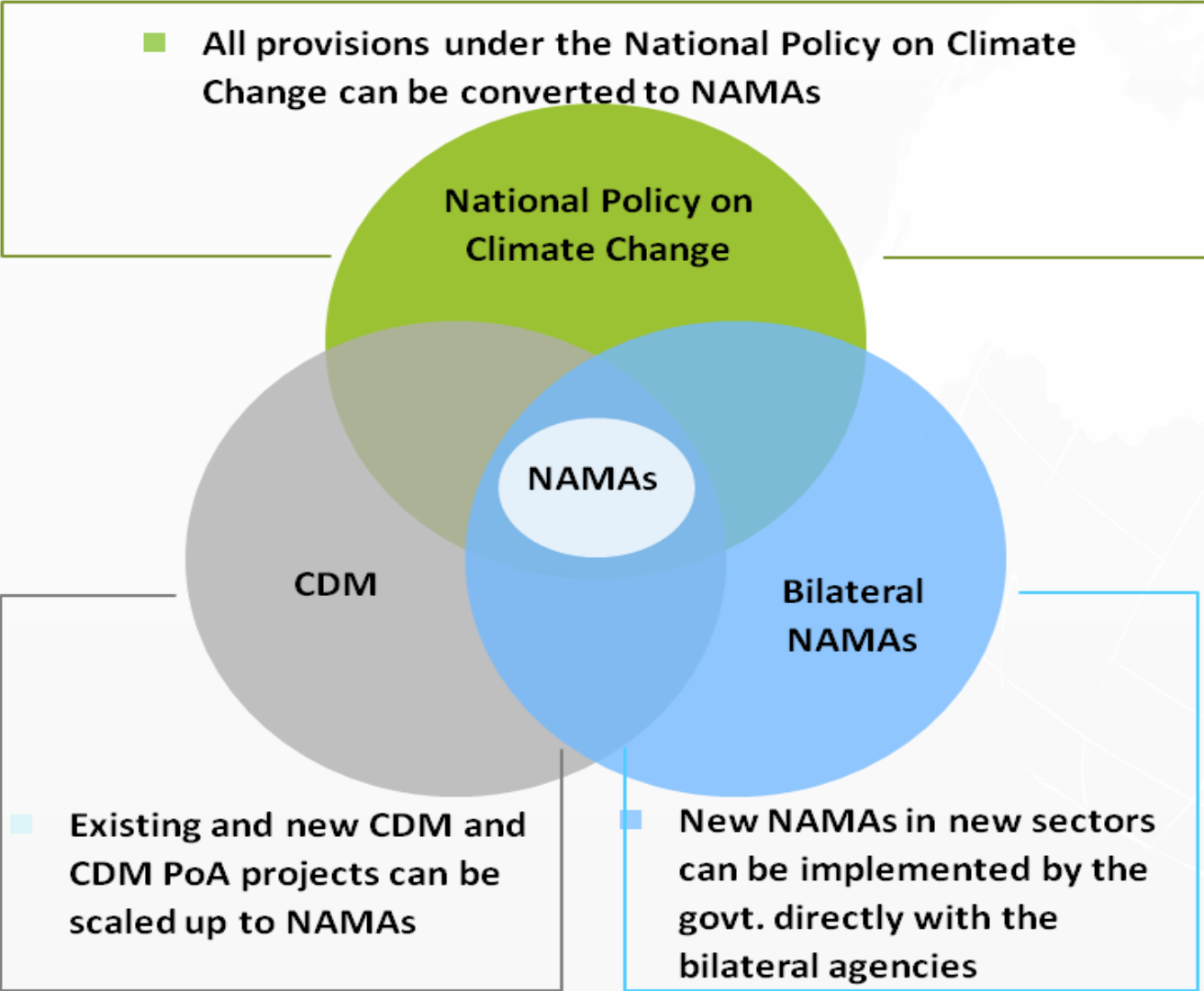
Well designed NAMAs can avail

Technical and
Financial support
from various forums
like Global Climate
Fund

Carbon Credits

In Copenhagen Accord
in COP 15, developed
countries have
committed to 100
billion USD by 2020 for
the same.

Benefits of NAMAs



How to Approach a NAMA

Project Preparation

- ✓ Inventory of all emissions from the selected sectors
- ✓ Project emissions under BAU (Business as Usual) and under current Emission Reduction Mandates

Technology & Capacity Building

- ✓ Selection of available and suitable of Low Emission Technologies, or Development of the same
- ✓ Local and National Capacity Building for adoption of new technologies and implementation of new low carbon policies

Institutional Structure

- ✓ Establishment of an Institutional Structure to monitor and implement the projects across all sectors and bringing together all concerned government, private, bilateral and multilateral agencies

Project Implementation

- ✓ Conversion/Modification of old processes to new low emission systems
- ✓ Development of new low carbon policies and regulations as well as market based mechanisms to promote low carbon technologies

Difference between NAMA & CDM

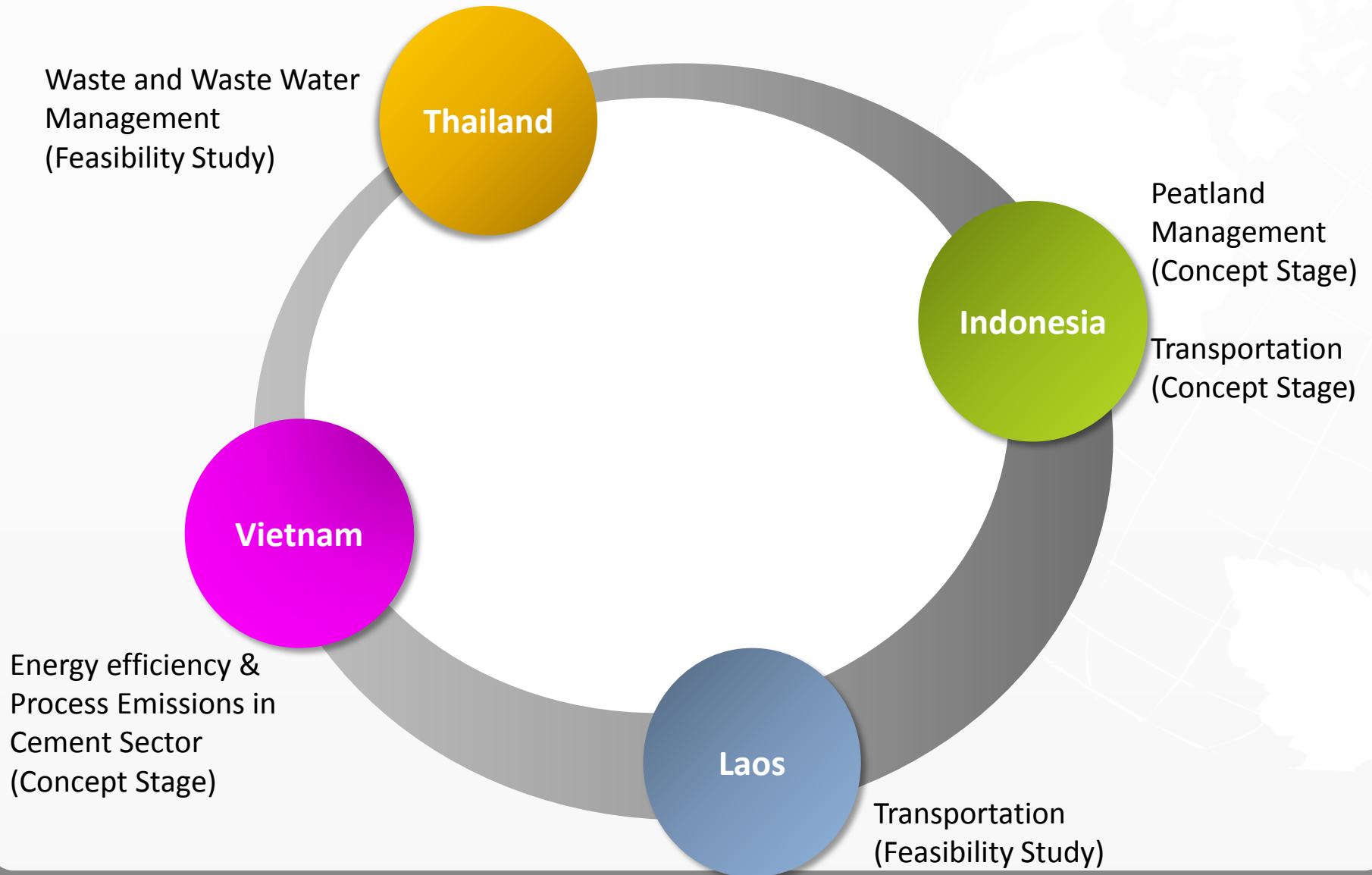
ACTIONS	CDM	NAMA
SCALE OF MITIGATION	Project Level	National Sectoral Level
TYPE OF ACTIONS	Offset mechanisms like Individual Projects and PoA (Program of Activities).	National level Policies, Programs and Projects.
PROJECT DEVELOPER	Private Sector	National Government
FUNDING TYPE	Multilateral or Private Sectoral	Unilateral, Bilateral or Multilateral
FINANCIAL MECHANISM	If Additionality is proven, CERs are issued which can be sold in the carbon markets. Initial funding for project development from private sector.	Funding and Technology can be availed from governments of Developed countries, or developing countries can fund their own projects.
MARKET INDICATORS	CER prices are largely driven by targets taken by the Developed Countries.	Funding as per the voluntary targets taken by the Developing Countries. No penalties at all.
GHG REDUCTION POTENTIAL	2005-11: 500 Mt CO ₂ -eq	2012-20: 40,000 Mt CO ₂ -eq

Map showing the countries preparing NAMAs



The green portions show the developing countries which are preparing NAMAs. Source: NAMA Database http://www.nama-database.org/index.php/Main_Page

Success stories in South East Asia



EVI's role in NAMA development

PREPARATION OF NAMA ROADMAPS:

Prioritisation and Selection of Sectors for a country

Emission Inventorisation

BAU Baselineing:
Calculation of 20 years GHG emissions till 2012

BAU Extrapolation:
Estimation of GHG emissions till 2030

National Emission Reduction Policy

Reviewing current national policies and regulations

Recommendations to modify the policies for NAMA

Preparation of MRV Framework

Preparation of Measurement Metrics, Reporting Systems and Verifications

Local and National Implementation

NAMA Proposals

Preparation of NAMA proposals for submission

Conversion of existing NAMAs to Credited NAMAs



BRIEF INTRODUCTION TO EVI

About Us

Founded in 1999, EVI started its climate business in 2004 and since then EVI is providing consulting and implementation services to clients in carbon, sustainability and renewables domain.

Consulting & Implementation

Carbon

- EVI has registered **85 + CDM** projects to date with 170 + in the pipeline;
- Fastest time to registration;
- Experience spanning a range of technologies and processes

Sustainability

- As sustainability experts, EVI works with international govt. agencies to frame relevant and actionable policies
- EVI also assists corporate to create sustainability strategy

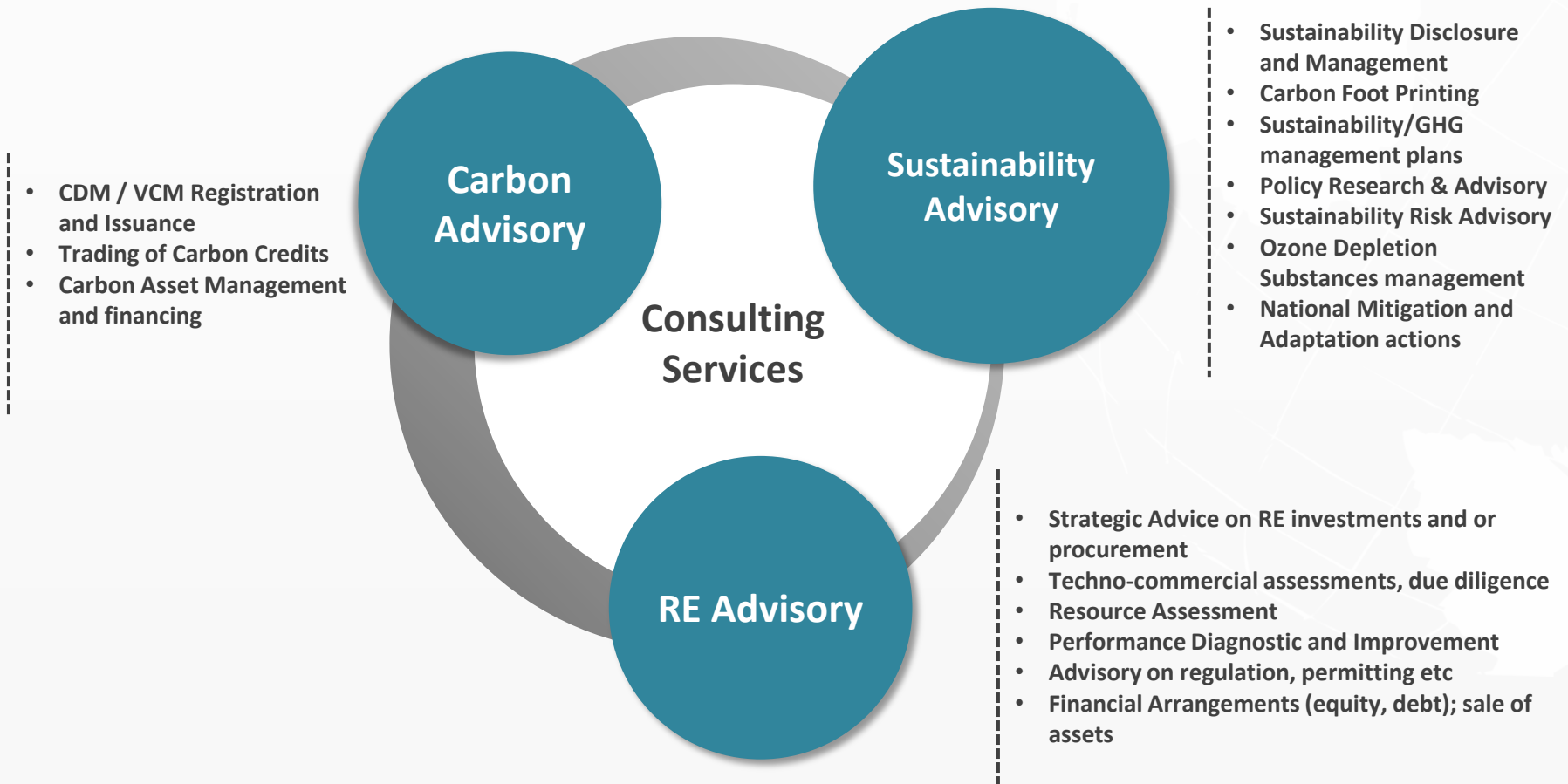
Renewables

- EVI is providing services to more than **500 MW** of RE projects including solar, wind and biomass energy

- IDFC Private Equity is an investor in EVI. IDFC PE is India's largest private equity firm focused on infrastructure managing a corpus of over \$1.3B
- 120+ employees with a presence in India, Sri Lanka, Singapore, Thailand, Indonesia, Malaysia, Spain, U.K and United States
- Our marquee clientele includes fortune 500 companies, Government bodies, UN bodies, and renowned NGOs

Consulting Services

Our consulting services focus on most critical issues and opportunities in carbon, sustainability and renewables. We have strong functional expertise and are known to deliver high value solutions to our clients. We are a proven partner to deal with complexities in these emerging areas.





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