United Nations Framework Convention on Climate Change

Línea Base Estandarizada para el Sector Cemento

Plataforma de Dialogo: Co-Procesamiento y Gestión Integral de Residuos Sólidos dentro de un Marco Jurídico para la República Dominicana. Foro ZACK 2015

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En esta presentación

1. **Líneas de base estandarizadas**
2. **Aplicación y desarrollo de las LBEs**
3. **Diferencia entre metodologías y LBE**
4. **PSB0002 – Standardized baseline for clinker production in Ethiopia**
5. **UNFCCC – RCC St. George's**

¿ Que es una LBE ?

- ✓ Es una línea de base establecida para una región, país o un grupo de países para facilitar el calculo de emisiones de gases de efecto invernadero de un sector

¿ Por que usar una LBE?

- ✓ Mejora la predictibilidad;
- ✓ **Mayor transparencia:** Las LBEs están disponibles públicamente para recibir comentarios de todos los actores involucrados;
- ✓ Asegura la integridad ambiental;
- ✓ La complejidad se traslada al ente regulador;
- ✓ Amplia la accesibilidad para países menos desarrollados
- ✓ Uso de la *institutional architecture*
- ✓ *Participatory approach* (local/global stakeholders)

¿Cómo puedo presentar una Línea de Base estandarizada?

Los países, desarrolladores de proyectos, organizaciones industriales con representación a nivel internacionales así como organizaciones observadoras aprobadas pueden enviar una línea de base estandarizada **a través de la autoridad nacional designada (AND)**.

República Dominicana

El Consejo Nacional para el Cambio Climático y Mecanismo de Desarrollo Limpio (CNCCMDL)

Las solicitudes son **examinadas por las entidades operacionales designadas (EOD) o el secretariado** y posteriormente son enviadas a la Junta Ejecutiva del MDL para su evaluación.

Resultados del trabajo de desarrollo de LBE

Facilitar desarrollo de proyectos de mitigación (e.g. MDL, NAMA, NMM)

a) Simplificar la preparación de proyectos;
b) Facilitar la validación de proyectos
c) Proyectos individuales no necesitaran demostrar la adicionalidad ni calcular la línea de base

Herramientas para desarrollar la LBE

a) Información en: producción, combustible, tecnología, costos, etc.

b) Información del IPCC

Diferencia entre una metodología y una LBE?

Metodologías

- Estándares internacionales
- Calculo de emisiones especifica por proyecto
- Limites del proyecto específicos
- La línea de base se determina proyecto por proyecto
- Las líneas de base con 48 (a) (histórica o actual), 48 (b) (más atractivo curso de acción), o 48 (c) (Promedio de 20% superior)
- Las emisiones del proyecto
- Los datos no monitoreados
- Los datos monitoreados

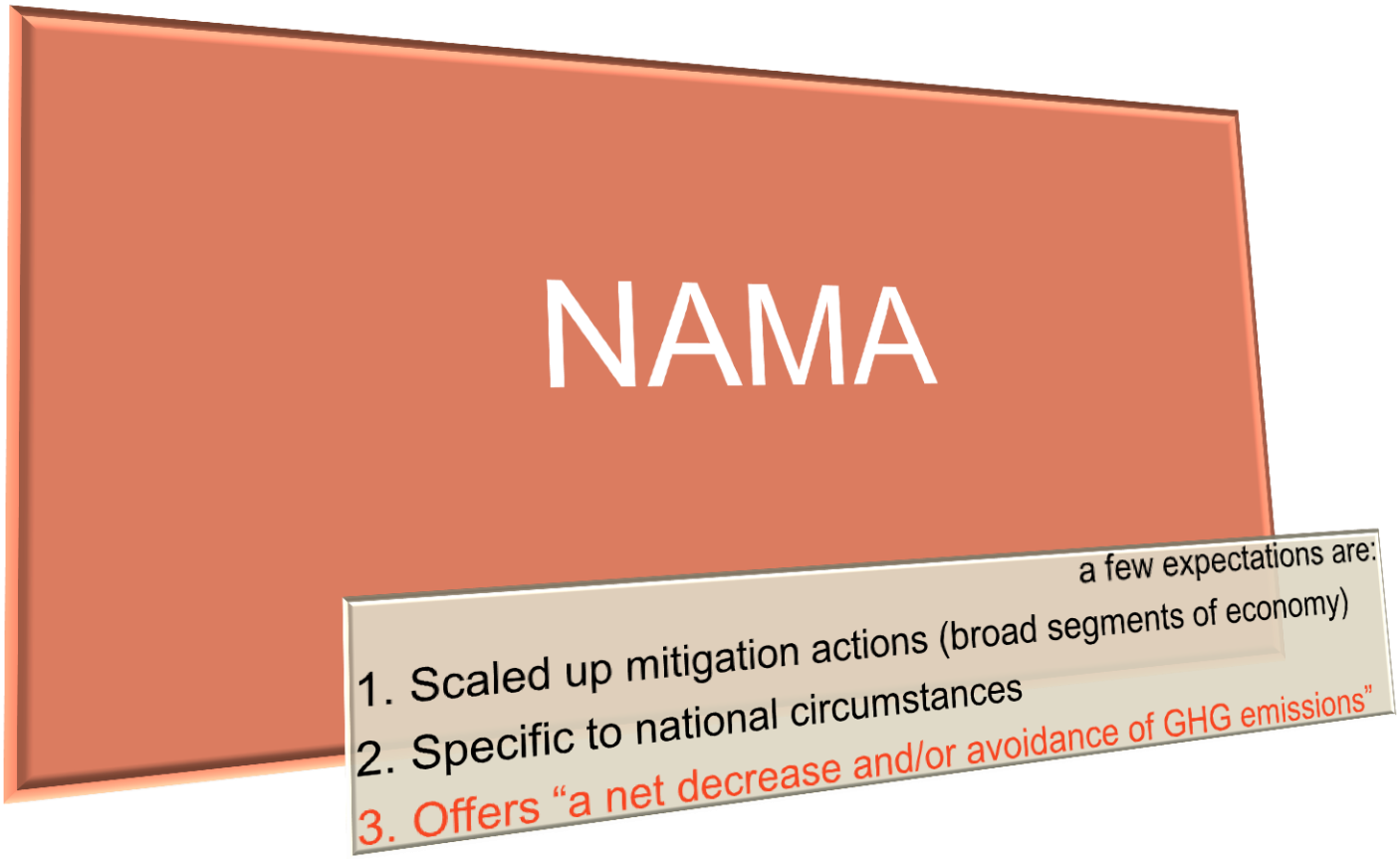
LBEs

- Toma en cuenta las características específicas de los sectores;
- La línea de base puede ser utilizada por diferentes proyectos
- Los valores calculados pueden ser utilizados para la línea de base y demostrar adicionalidad;
- Se puede calcular el factor de emisión de línea de base para la amplia clase de actividades de mitigación (medidas) realizadas por sectores, o factor de emisión de referencia para el sector entero;

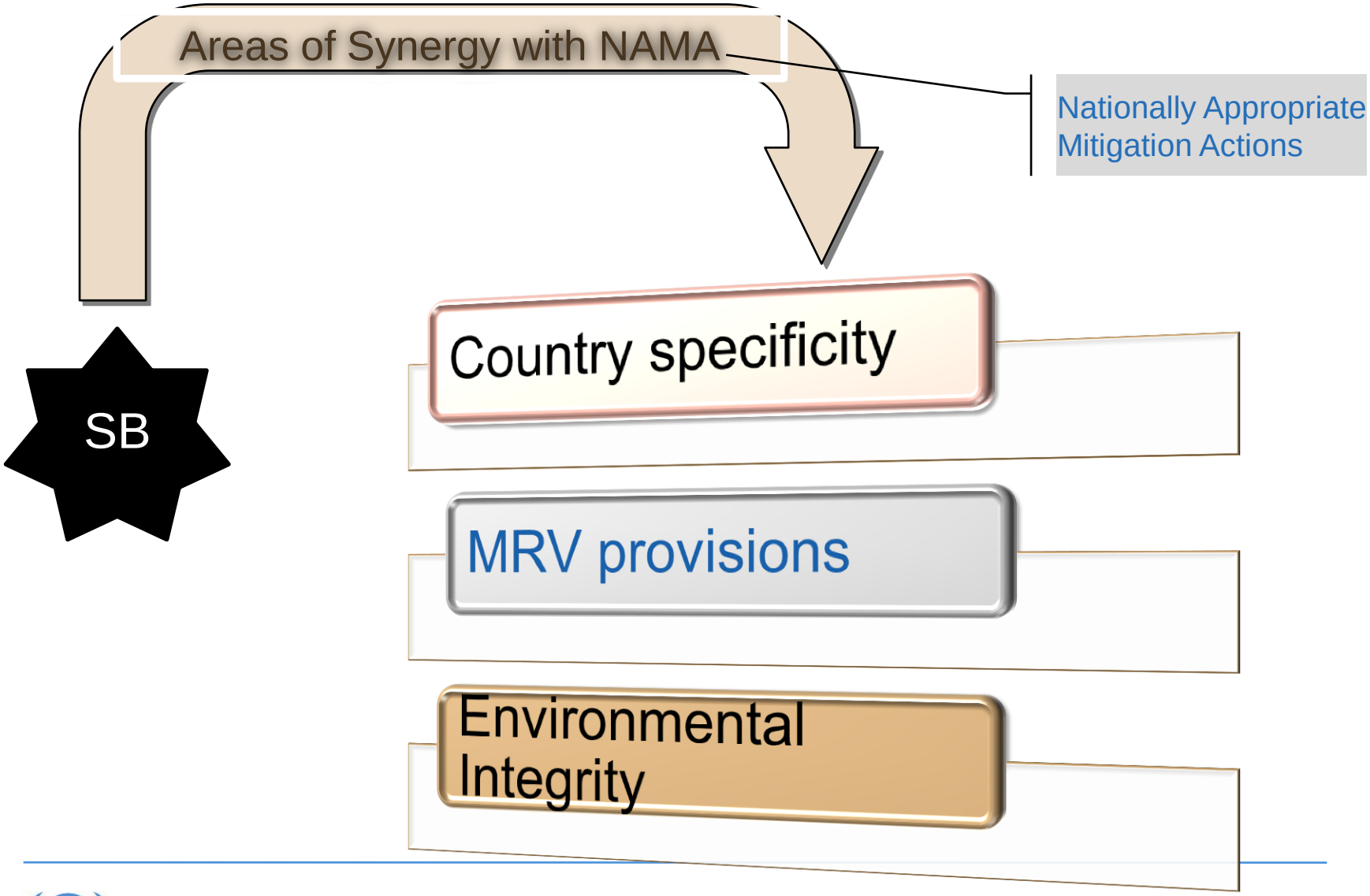
Algunas de las características esperadas para los NMMs ya están contempladas en las LBEs:

- ✓ **Escalabilidad**
- ✓ **Las especificidades de los países**
- ✓ **Créditos sectoriales**
- ✓ **La integridad ambiental (diferentes umbrales para los esfuerzos de compensación nacional)**
- ✓ **Las reducciones netas de emisiones**
- ✓ **Cuestiones sobre doble conteo**

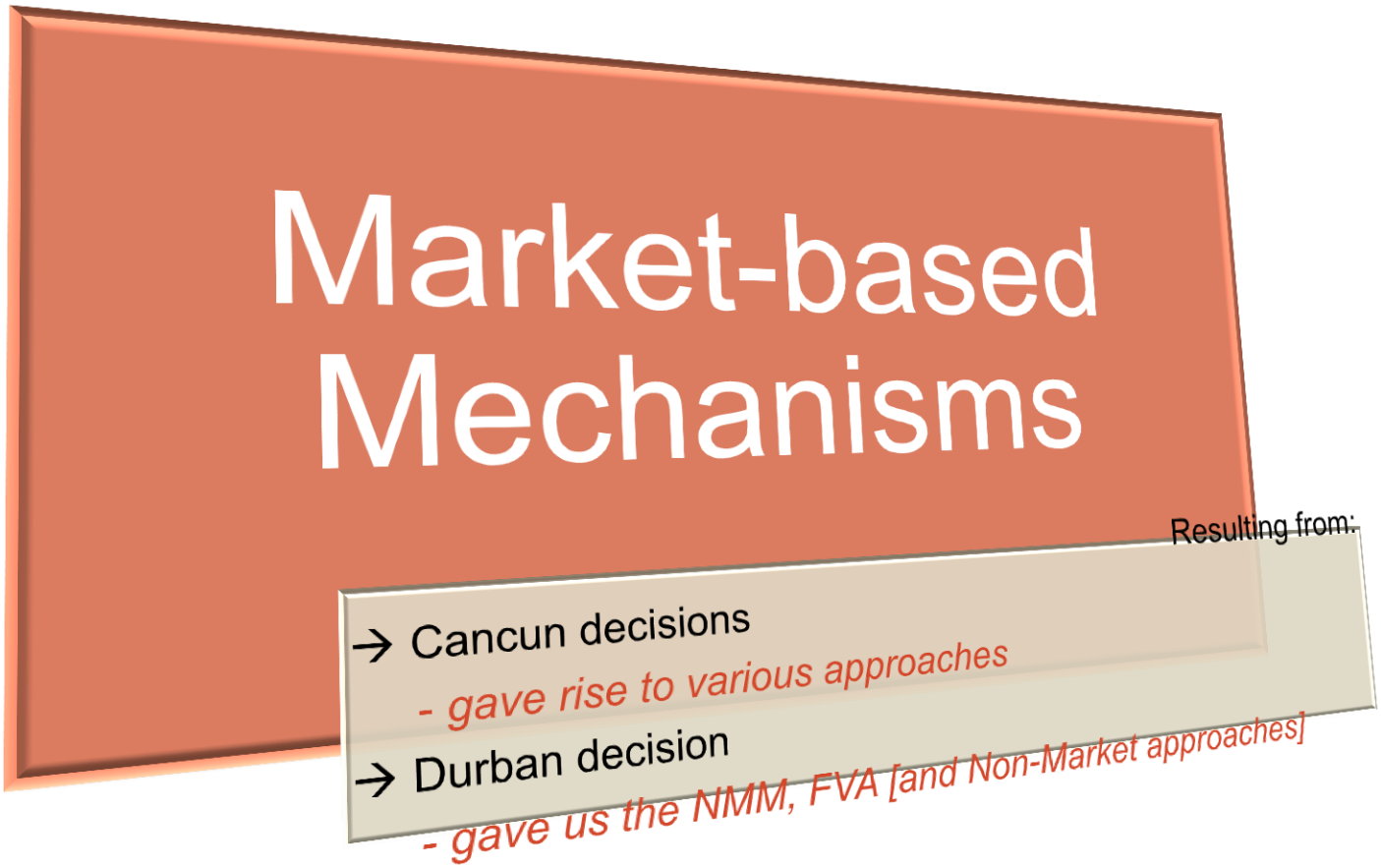
Potential SB linkages to future mechanisms...



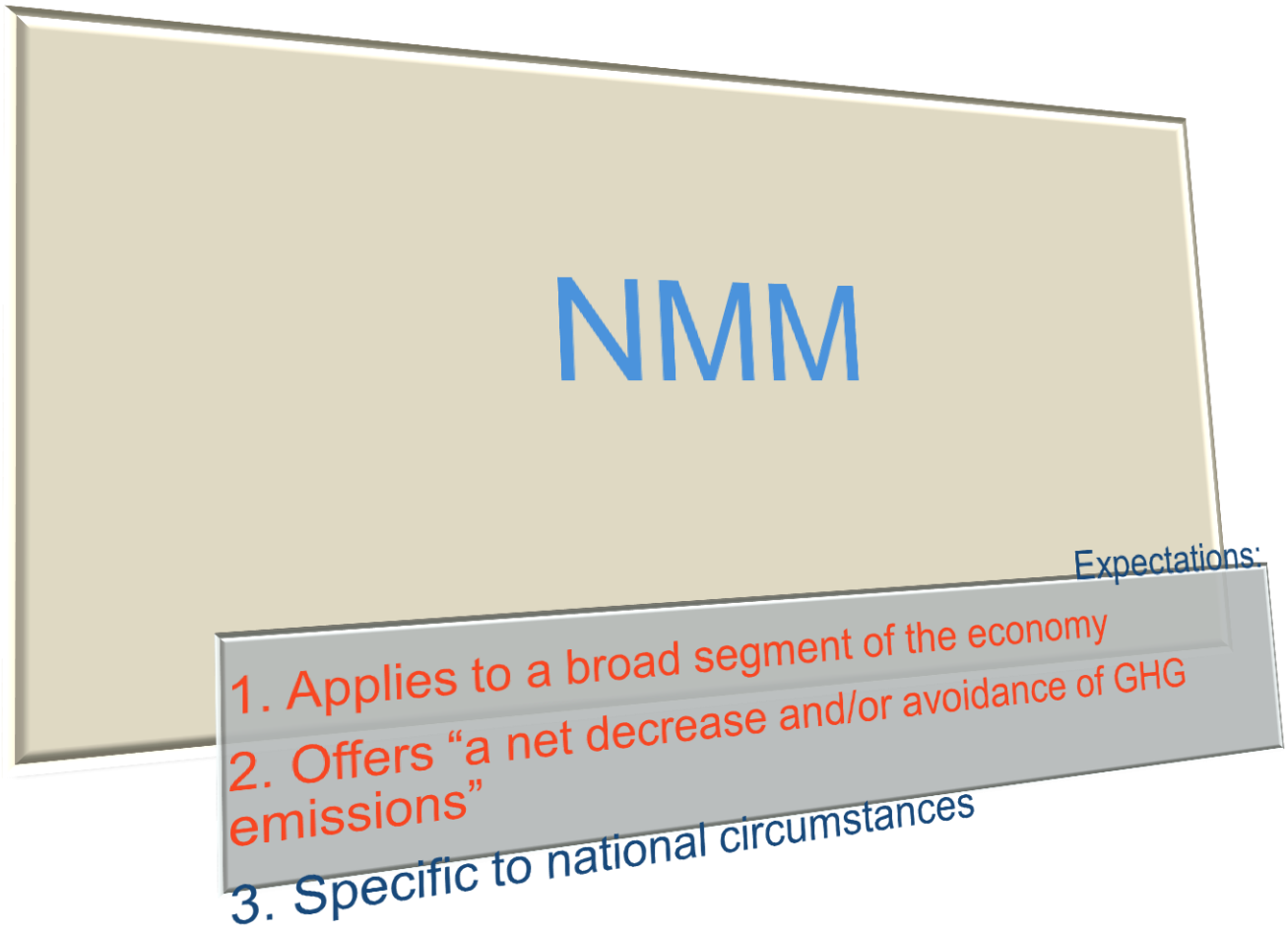
Where SB can be hooked to future mechanisms



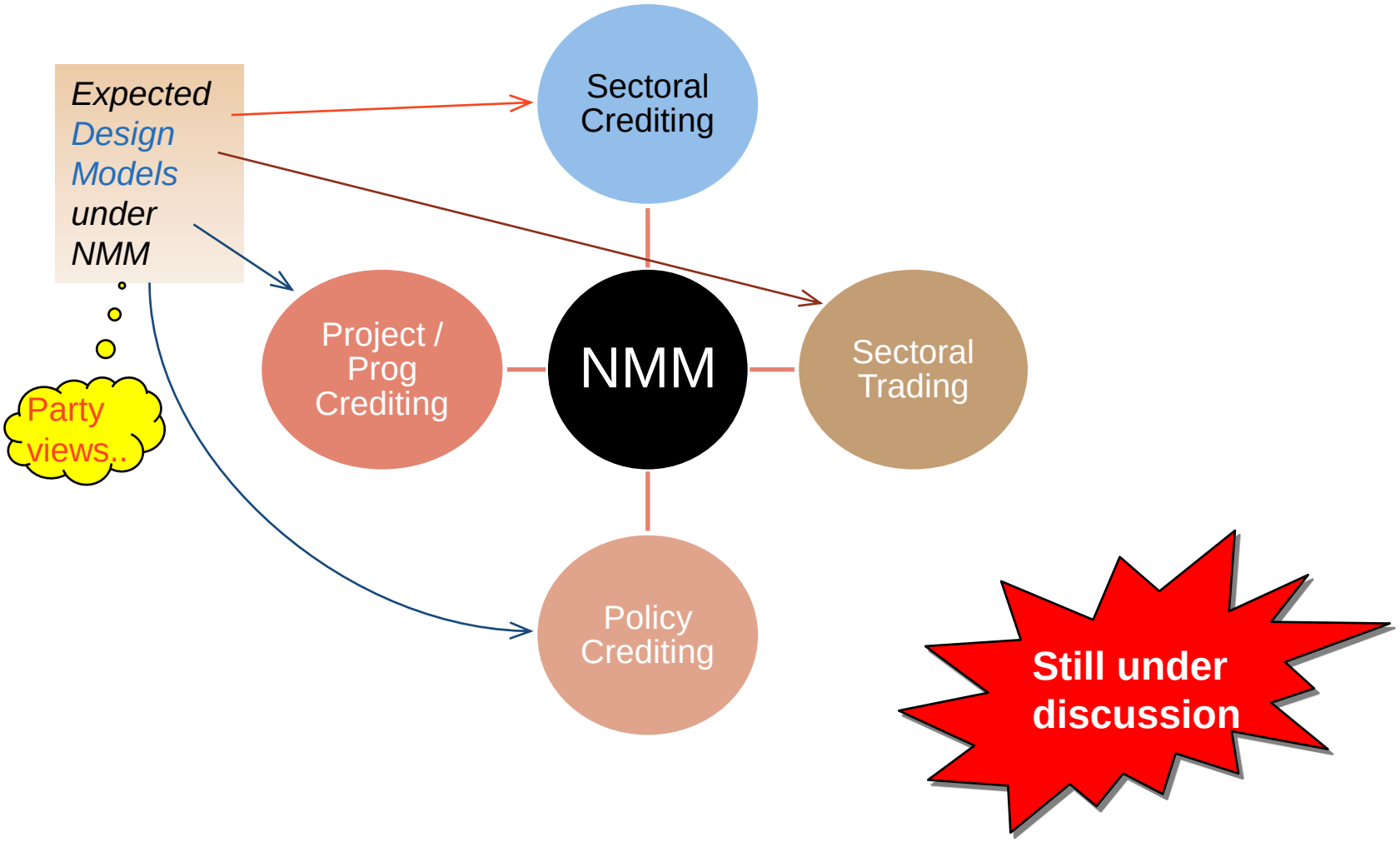
Potential SB linkages to future mechanisms...



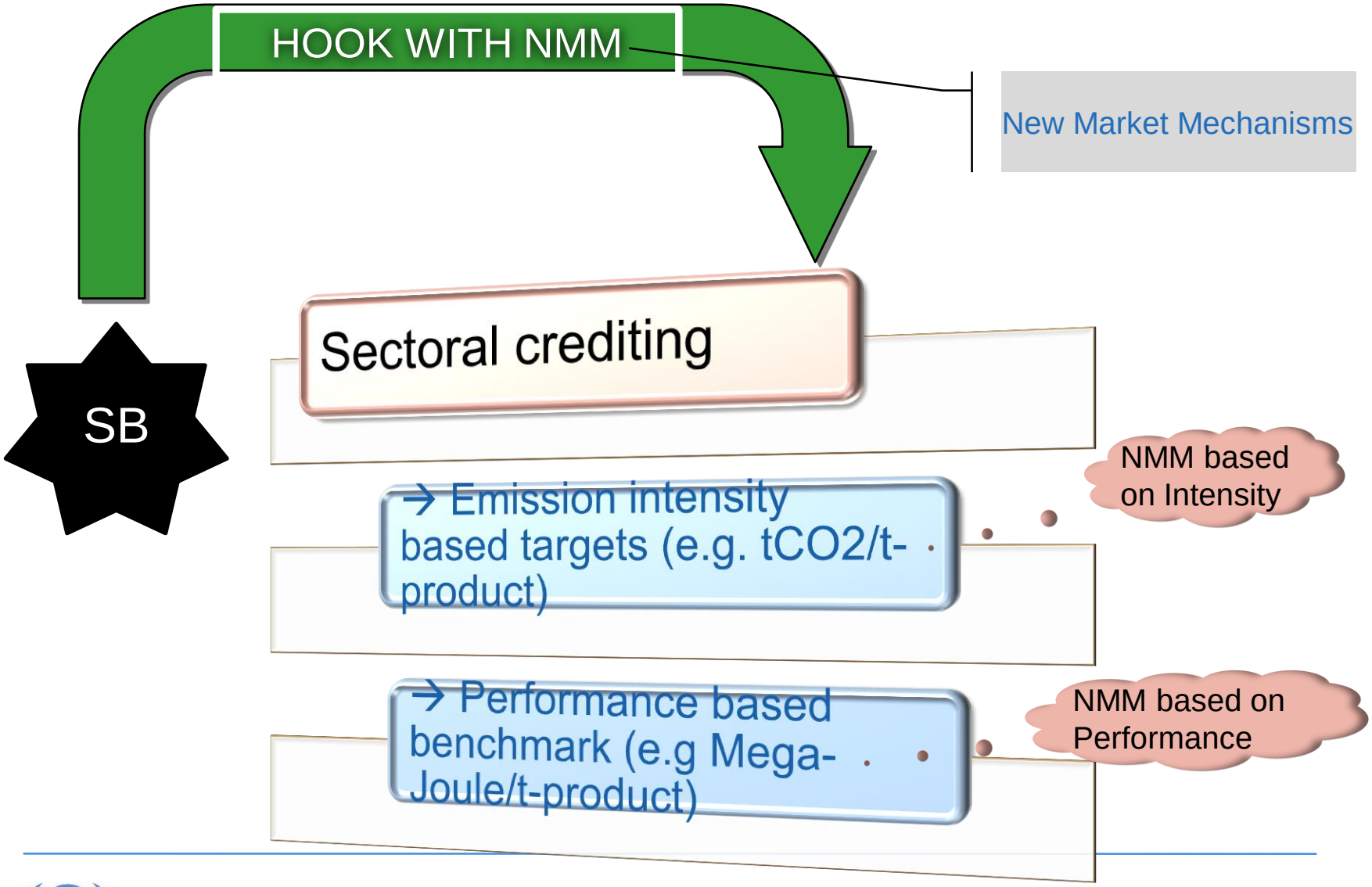
Potential SB linkages to future mechanisms...



Potential SB linkages with future mechanisms

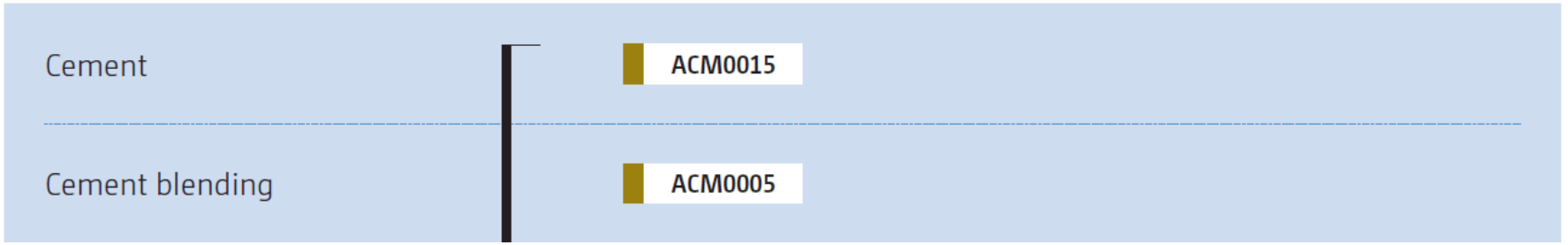


Where SB can be hooked to future mechanisms



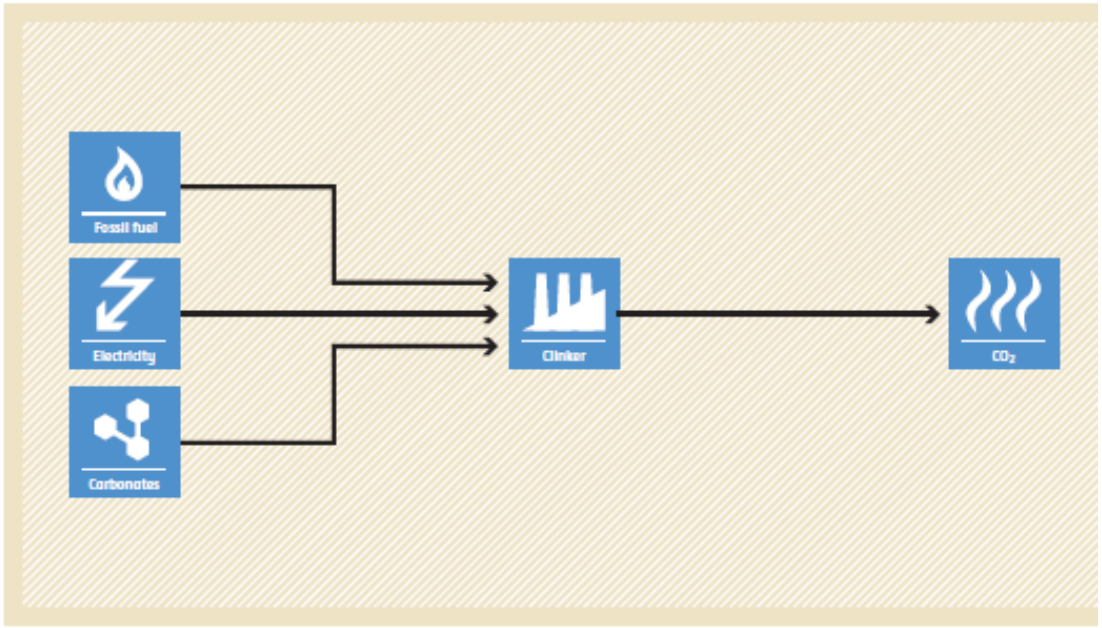
Methodologies – Cement Sector

Figure VII-9. **Methodologies for feedstock switch**

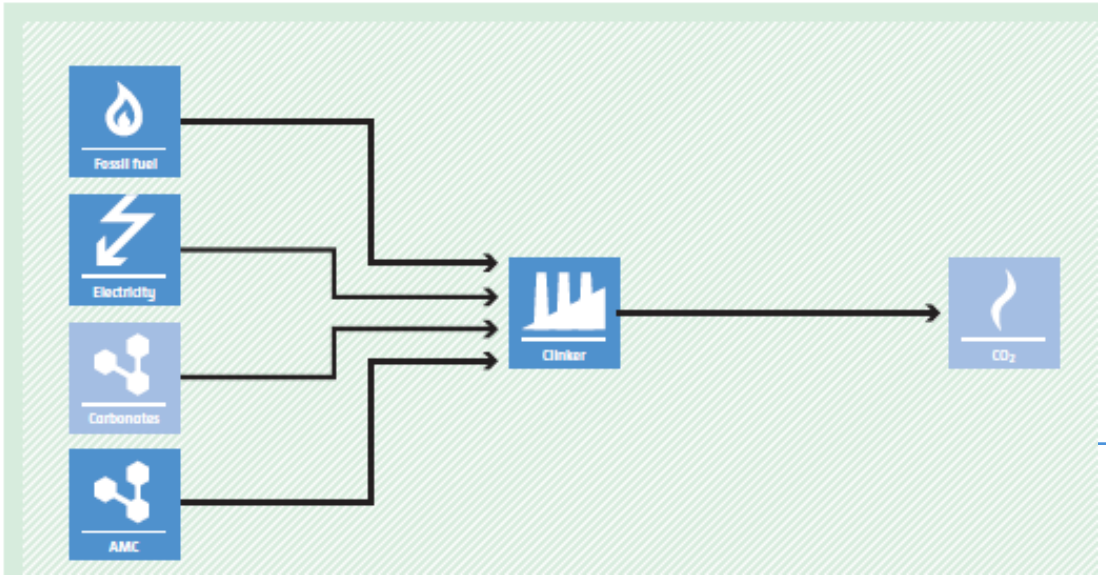


ACM0015 Emission reductions from raw material switch in clinker production

BASELINE SCENARIO
Raw materials that contain calcium and/or magnesium carbonates (e.g. limestone) are used to produce clinker.

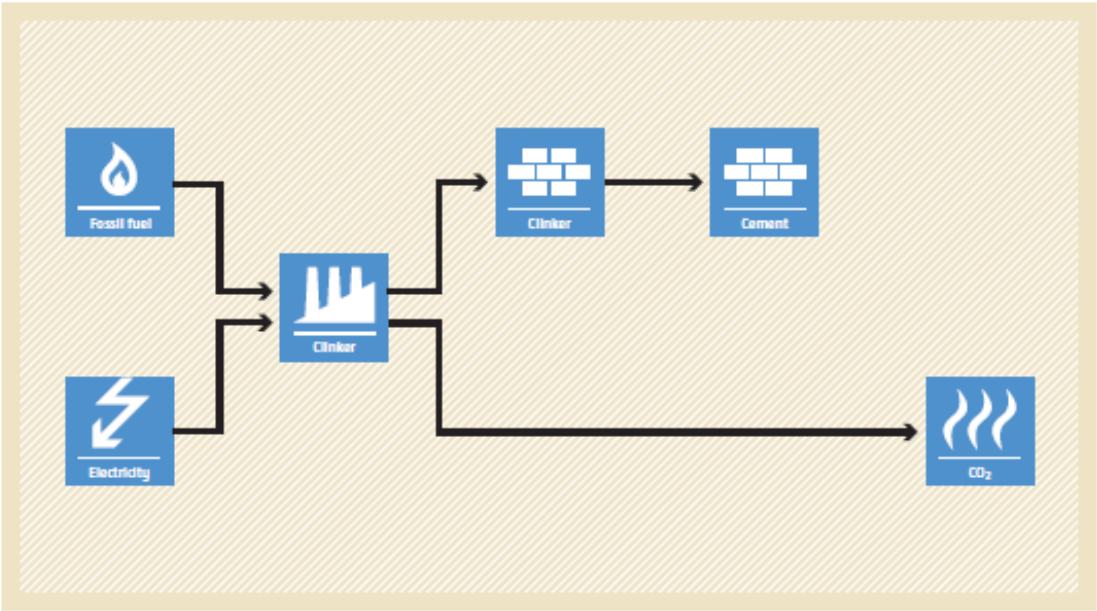


PROJECT SCENARIO
Alternative raw materials that do not contain carbonates (AMC) are used to produce clinker.

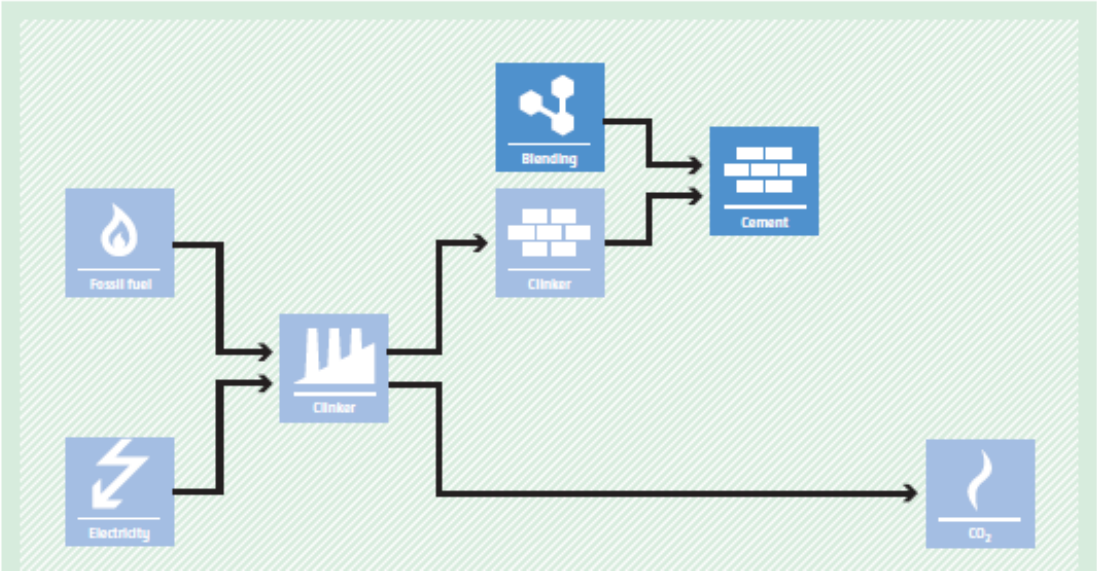


ACM0005 Increasing the blend in cement production

BASELINE SCENARIO
Available blending material is not used. Cement is produced with high clinker content, leading to high CO_2 emissions.



PROJECT SCENARIO
Available blending material is used in cement to partially replace clinker. Thereby CO_2 emissions from clinker production are avoided.



PSB0002 - Standardized baseline for clinker production in Ethiopia

Emission factor for a sector:

"When multiple measures are simultaneously applied in a sector or in a section of the sector it is necessary to **derive a baseline emission factor** that integrates the combined effect of all the measures applied…" (*para 46, Guidelines for the establishment of sector specific standardized baselines, version 02.0)*

Proposed standardized baseline for clinker production submitted by Ethiopia has applied multiple measures (Measure 1 and Measure 2, and combination thereof)

The standardized baselines will replace the Additionality, Baseline Identification and Baseline Emission sections of ACM0015

- Feedstock types that result in carbon intensity (calcinations emission factor) less than that of Limestone and Clay

Development of the (sectoral) baseline emission factor – The baseline emission factor for this sector is determined in terms of the combined (integrated) EF of the baseline facility.

- The *ex-ante* determination of the baseline emission factor is based on the data presented or calculated for each clinker facility as below:

  - average clinker production (actual data) – (tons/year)
  - fuels (actual data) and feedstock (actual/estimated data) used – (tons/year)
  - specific technology efficiency (calculated) – (tCO2/t-clinker)

Positive list of Feedstock

- Similar procedure as applied for fuels to arrive at the positive list of feedstock
  - For PSB Ethiopia: Feedstock or combination of feedstock whose emission factor is less than **0.376** tCO2/Ton of feedstock and cost is more than **XX** USD/T feedstock

Positive list of Technology(ies)

- Similar procedure as applied for fuels to arrive at the positive list of technologies - requires estimation of the cost of technology per facility, calculated based on capital cost of technology divided by the production capacity and design life
  - For PSB Ethiopia: The positive list will be technology(ies) having efficiency less than **5.54** GJ/ton of clinker and cost more than **0.016** USD/t-clinker

Scope and application

- PSB applies to entire country of Ethiopia
- The sector to which this PSB applies to is the Cement sector and the output is Clinker
- Data to establish the standardized baseline is either primary data obtained by DNA from facilities and also data collected by other Government authorities.
- Only plants built in the last five calendar years before the submission year of the standardized baseline are included
- No public plants built in the last ten years, and they will not be included in the aggregation even in case they penetrate in future
- Only private sector plants considered
- Any project that employs measures of fuel switch, feedstock switch or technology switch or their combinations can use the SB

Promoting clean technologies and opportunities under the carbon market

Renewable energy

Support development of sectoral baselines for countries, e.g. grid emission factors (GEFs)

Support the development of CDM proposal at programme level, PoA (programme of activities)

CDM support

To project participants in the CDM cycle

To CDM process, providing inputs to improve the CDM

Exploring synergies between the CDM and other mitigation actions

To link buyers-sellers of carbon credits

Stakeholder engagement

Government level – ministries of environment and energy

Private – developers, investors/entrepreneurs

International level – donors, technology providers

Capacity building: designing and delivering trainings, promoting success stories, sharing information, and responding technical queries

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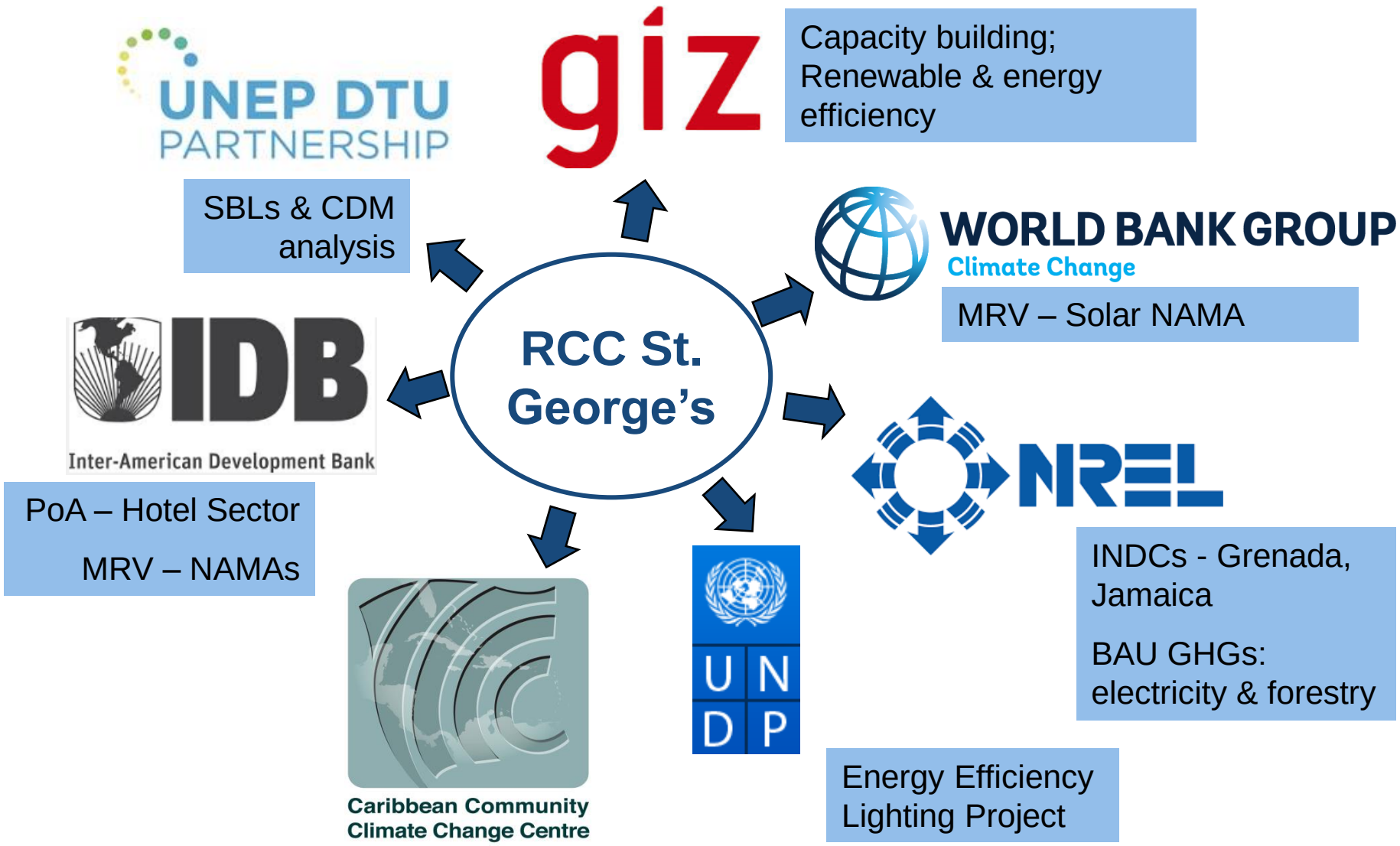

Gracias!