



MRV and Accounting approaches Colombia

Partnership on Transparency in the Paris
Agreement

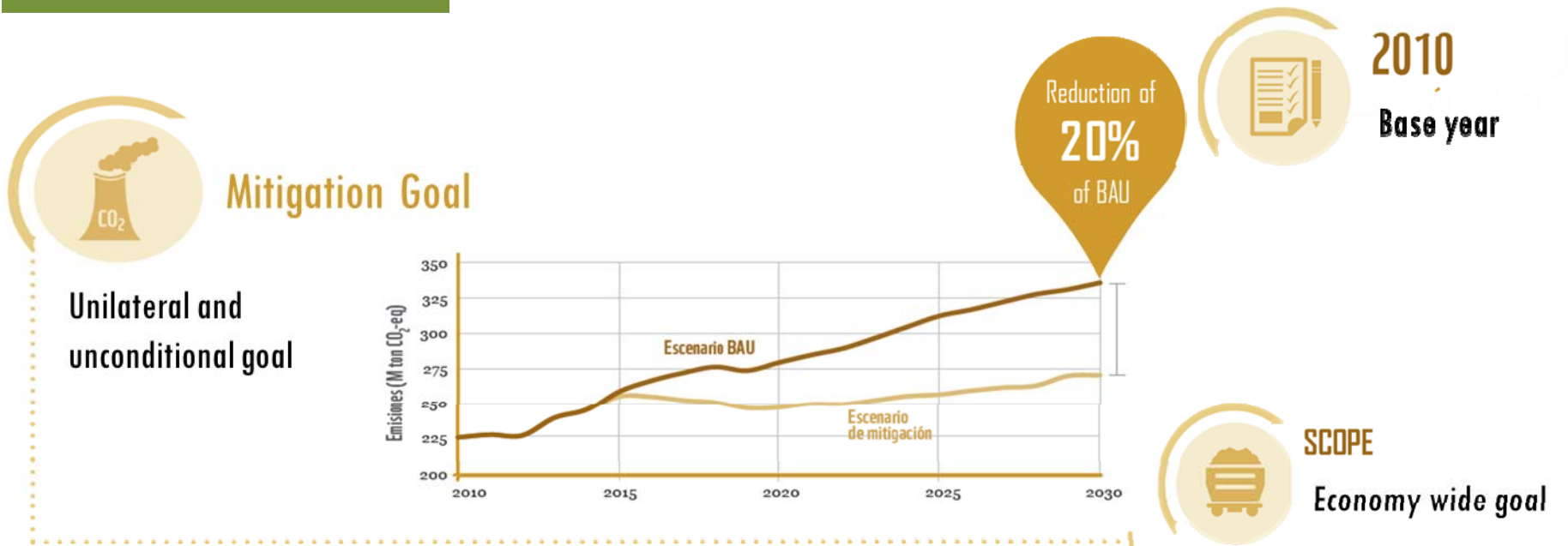
6th Annual Retreat
September 6th, 2017



Agenda

- The NDC mitigation target of Colombia
- National MRV approach
- Five steps accounting methodology in Colombia
- Institutional Arrangements - SISCLIMA
- Information systems
- Next steps

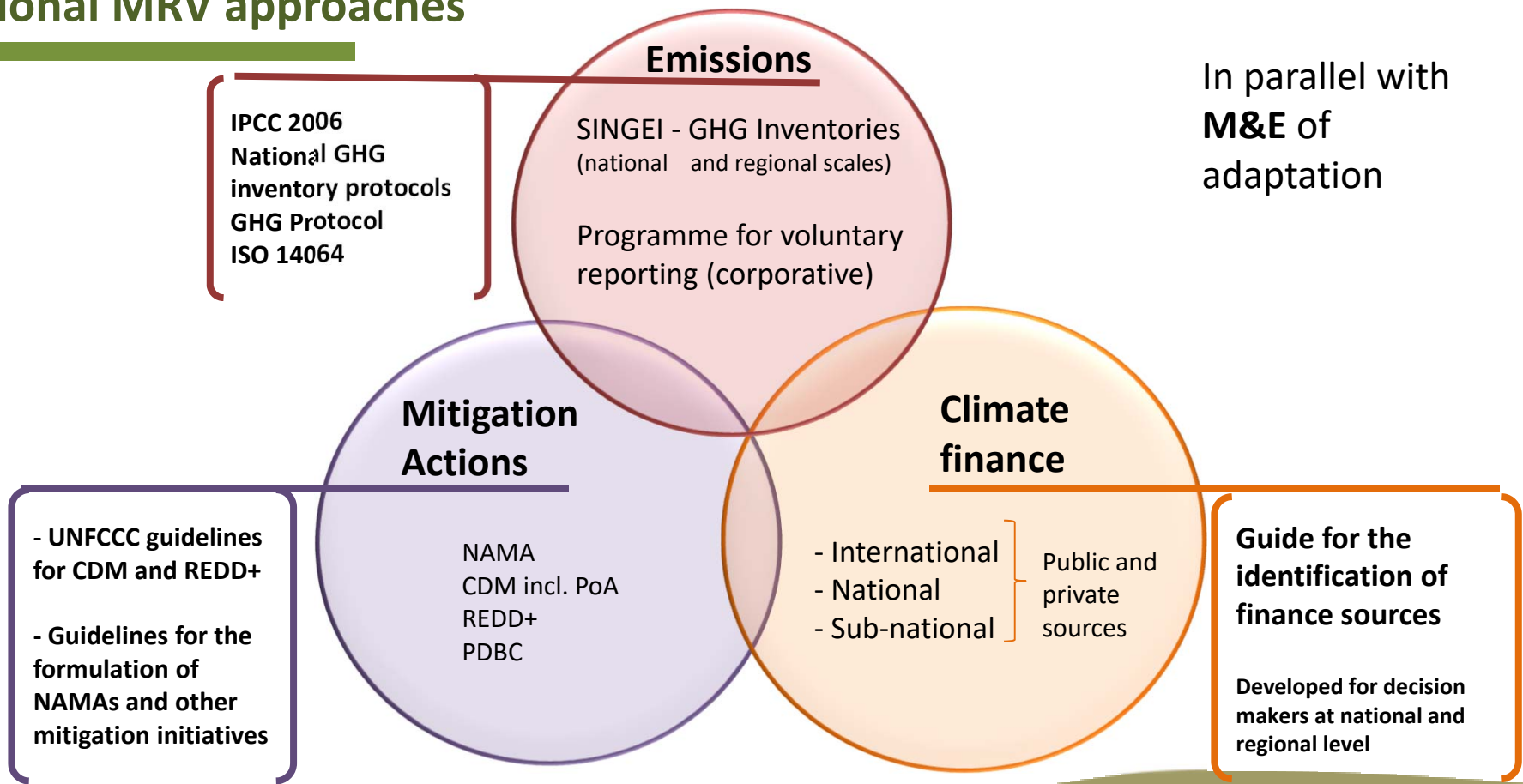
Colombia mitigation goal in the COP 21



The NDC mitigation target of Colombia for 2030, is a reduction of APPROXIMATELY 670 million tons of CO₂-e in the period 2015-2030.

National MRV approaches

In parallel with
M&E of
adaptation



National MRV Approach



GHG Emissions

- Design of SINGEI
- Synergies with other national information systems
- Voluntary corporate reporting program
- 3 NCs – 2 BURs



Mitigation actions

- National Registry of mitigation actions
- Accounting rules
- Carbon tax law
- Guidelines for the formulation of NAMAs and other mitigation initiatives



Climate finance

- Climate investment from different sources
- Guide for the identification of finance sources

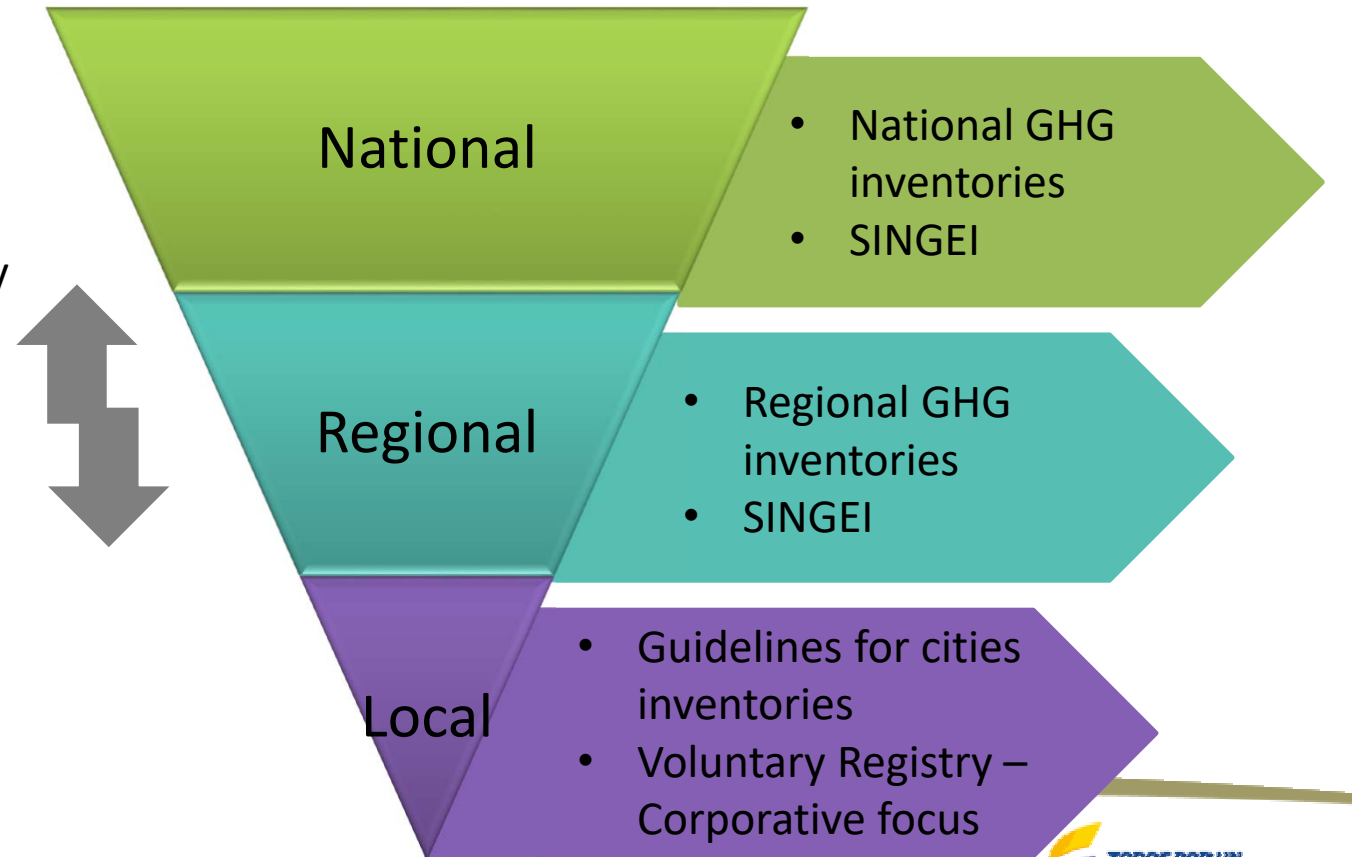
- Conceptualization. 2015-2016
- Protocols and guidelines. 2015-2016
- First technologic developments. 2016
- Registry for data collection and analysis platforms. 2016
- Articulation with Carbon tax (Decree 926 of 2017)

Scales of information



National Registry of Mitigation Actions - **RENARE**

Finance MRV Plataform



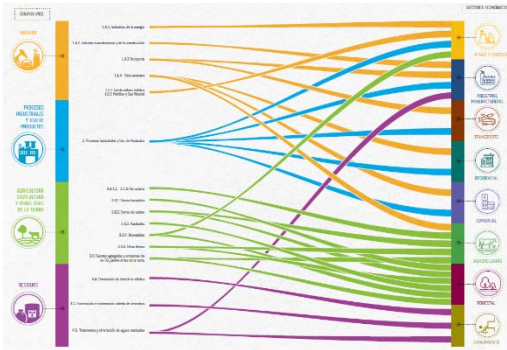
5 STEPS Methodology - NDC Accounting

- **STEP 1.** To detail the NDC target
- **STEP 2.** To choose a calculation method for NDC tracking
- **STEP 3.** To define data needs for the NDC tracking
- **STEP 4.** To define the institutional structure/arrangements
- **STEP 5.** Implementation and tracking

STEP 1. Detail the NDC target (1)

- Calls between GIZ experts and technical groups of Colombia
- Technical work
- Data mining
- Workshop with sectorial experts and GHG inventory team

STEP 1. Detail the NDC target (2)



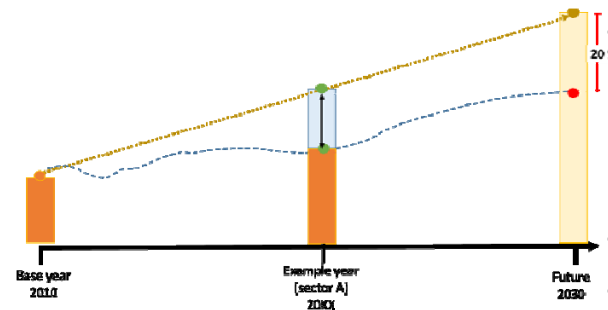
GHG national and sectorial emissions - baseline

- To understand national GHG inventory data (Clarify data sources, base year, categories, emission factors, activity factors, etc.)
- Methodological changes between GHG emission inventories (2010 – BUR and 2012- Third National Communication)

Projections and assumptions

- Drivers (population growth, GDP and fuel prices)
- Methodology
- Key stakeholders

Policies and actions – mitigation escenario



- Identify the mitigation actions included in the baseline, assumptions for their quantification, categories, etc.
- Sectorial data sources
- Inventariability

STEP 2. Choose a calculation method for tracking the NDC

Baseline deviation on the year (t)

$$\text{Progress (t)} = \frac{BAU - GHG \text{ Inventory}}{BAU}$$

Baseline deviation on the year (t) alternative methods using impacts of mitigation actions and policies

$$\text{Progress (t)} = \frac{\text{Impacts}_{\text{mitigation act\&pol}}}{BAU}$$

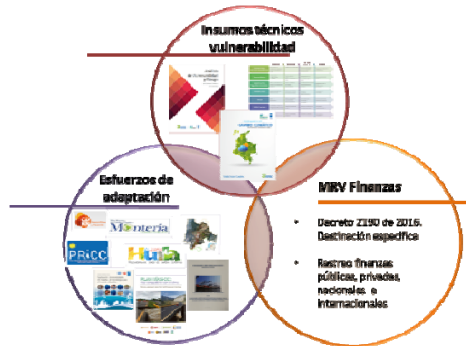
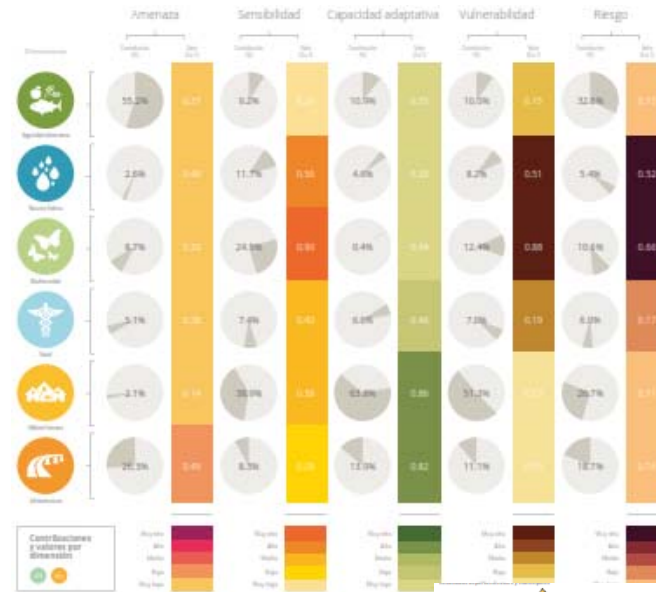
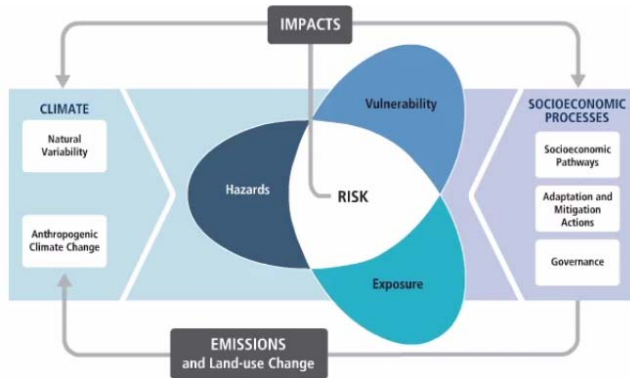
$$\text{Progress (t)} = \frac{\text{Impacts}_{\text{mitigation act\&pol}}}{GHG \text{ Inventory} + \text{Impacts}_{\text{mitigation act\&pol}}}$$



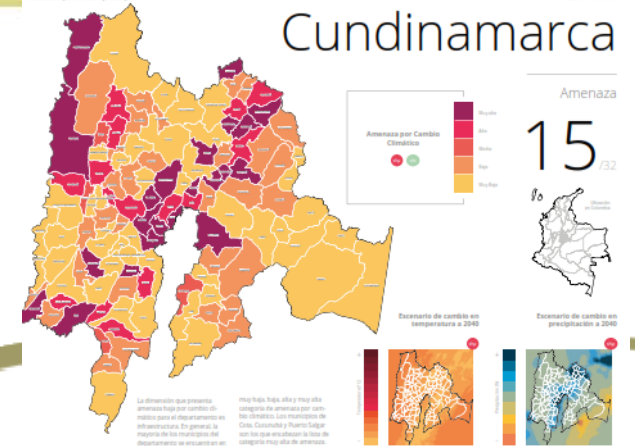
Linea base (BAs)	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030
Miliones de t de CO ₂ e	224.0	229.2	231.4																		
Nacional	224.0	229.2	231.4																		
Sectores carbona																					
1. MAE	29.4	30.3																			
2. MACT	22.0	22.8																			
3. MACH	34.9	34.8																			
4. MPCT	34.8	33.0																			
5. MACTransporte	22.7	23.5																			
6. MAOS	1.4	1.4																			
7. Emisiones Comercial Institucional	1.4	1.4																			
8. Emisiones por deforestación	76.3	76.3																			
9. Total	224.0	229.2																			
10. Suma sectores carbona	224.0	229.2																			
11. Total	224.0	229.2																			
12. Sectores IPCC																					
13. Energia	71.2	71.3																			
14. IPPU	8.7	8.5																			
15. AFOLU	100.3	100.7																			
16. Industria	15.7	15.8																			
17. Suma sectores	224.0	229.2																			
18. Total	224.0	229.2																			
19. Contribucion																					
20. %																					
21. Nacional	20%																				
22. Distribucion entre años unicamente para el seguimiento																					
23. Miliones de t de CO ₂ e	2010	2011																			
24. Nacional	224.0																				
25. Distribucion entre sectores a entre años unicamente por sectores																					
26. Sectores carbona																					
27. MAE	20%																				
28. MACT	20%																				
29. MACH	20%																				
30. MPCT	20%																				
31. MACTransporte	20%																				
32. MAOS	20%																				
33. Emisiones Comercial Institucional	20%																				
34. Emisiones por deforestación	20%																				
35. Total	20%																				



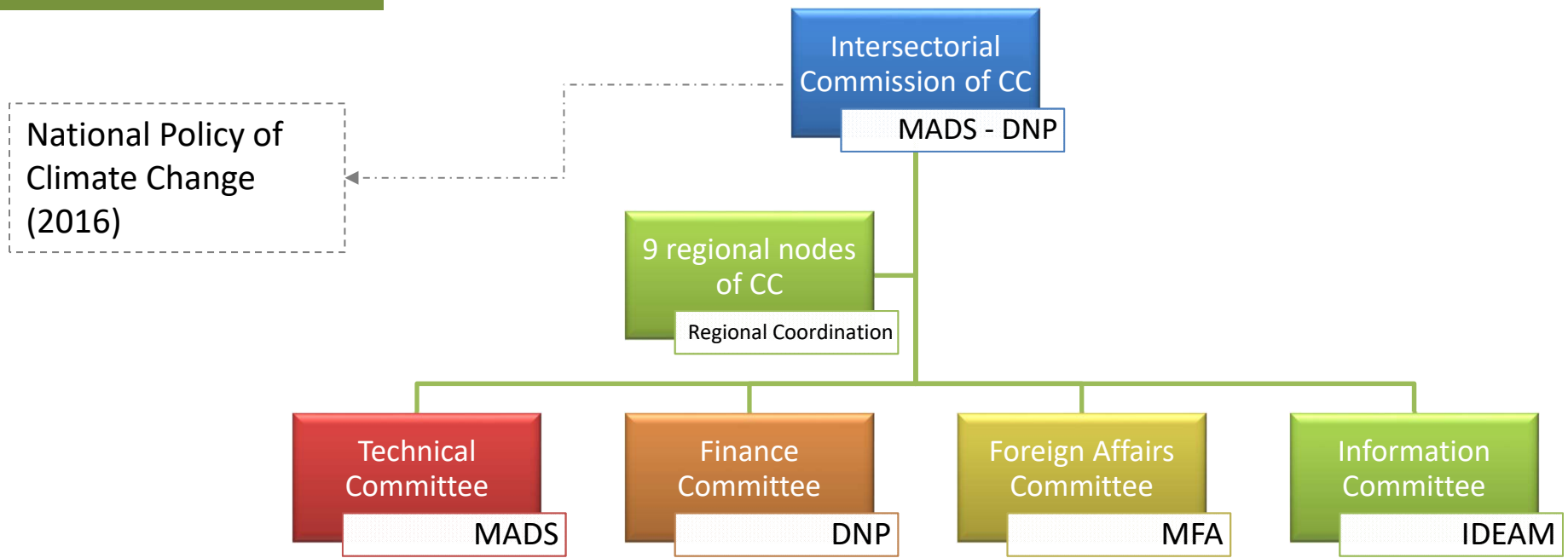
Adaptation approaches in parallel



	Exposición	Sensibilidad	Capacidad Adaptativa	Riesgo
Biodiversidad y Servicios Ecosistémicos	Probabilidad de cambio del ecosistema a partir de cambios T y P	Conflicto uso del suelo	Representatividad Áreas protegidas Restauración	Riesgo por colapso de ecosistemas
Recurso Hídrico	Economía Amenaz. Actual y Futura	Presión sobre el recurso Agua no retornada a la cuenca	Reparación de cuencas Uso eficiente del agua	Desabastecimiento hídrico
Agropecuaria y Seguridad Alimentaria	Áreas cultivables en zonas con pérdida de aptitud	Aptitud climática del cultivo Monocultivos	Facilidades financieras Diversificación de cultivos	Desabastecimiento Pérdidas para agricultores
Infraestructura	Diferentes tipos de infraestructura	Diseño no resiliente (materiales, trazado) Mal mantenimiento	Diseño resiliente Mantenimiento	Abandono y pérdidas
Energía	kwh producido	Matriz energética Capacidad de almacenamiento	Diversificación Intensidad energética	Desabastecimiento Aumento costos kwh
Habitat Humano	Individuos, casas en zonas de riesgo (resiste a diferentes amenazas)	Calidad/condiciones de vida	Mejorar condiciones de vida, educación	Mortalidad Desplazamiento
Salud	Población susceptible al riesgo	Acceso a servicios de salud	Educación, Prevención Acciones emergencias cobertura de atención	Mortalidad y morbilidad



National Climate Change System - SISCLIMA



MADS: Ministry of Environment and Sustainable Development

DNP: National Planning Department

MFA: Ministry of Foreign Affairs

IDEAM: National Institute of Hydrology, Meteorology and Environmental Studies

NEXT STEPS

- To apply steps 2, 3, 4 and 5 of the methodology
- To involve key stakeholders at technical and high level (leadership)
- To keep looking for synergies with sub-national, sectorial and national systems
- To establish institutional arrangements
- To improve sectorial and regional data
- To ensure interoperability among systems



Thanks!

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