



**La movilidad
es de todos**

Mintransporte

Colombia investment roadshow

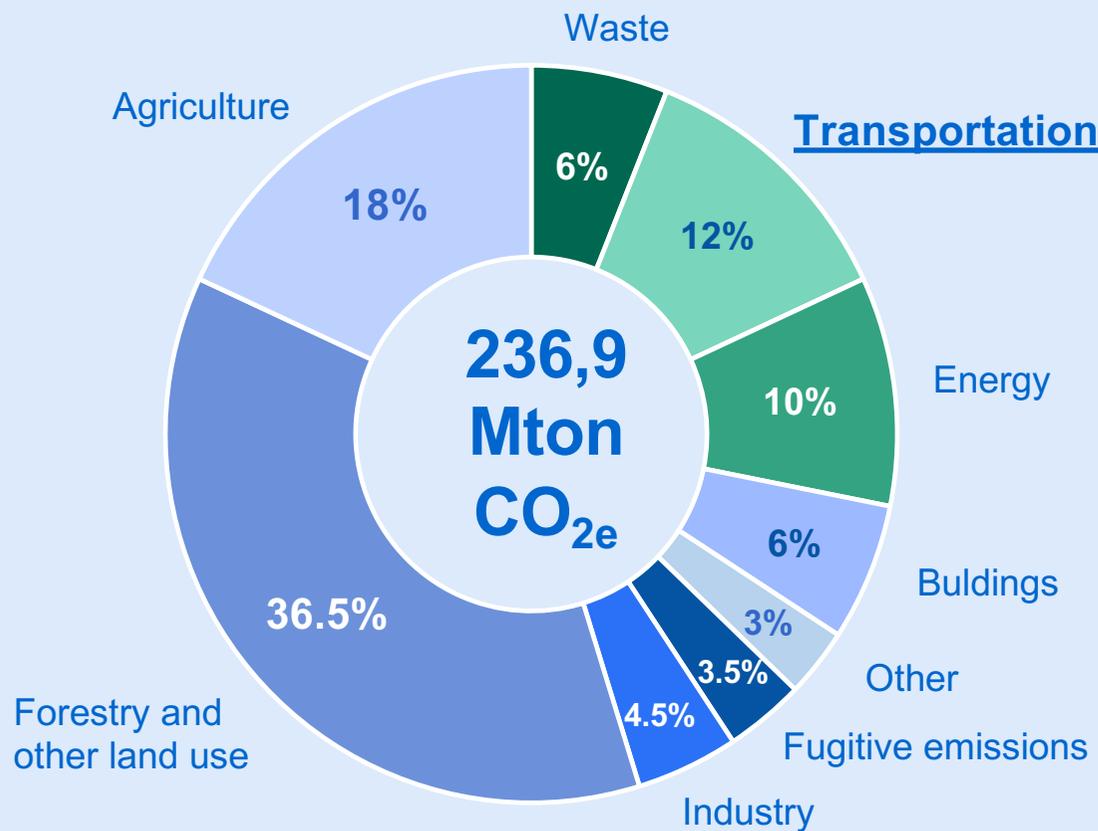
The role of infrastructure and energy in a
post COVID era in Colombia

Ángela María Orozco Gómez
Ministry of Transport
8 July 2020

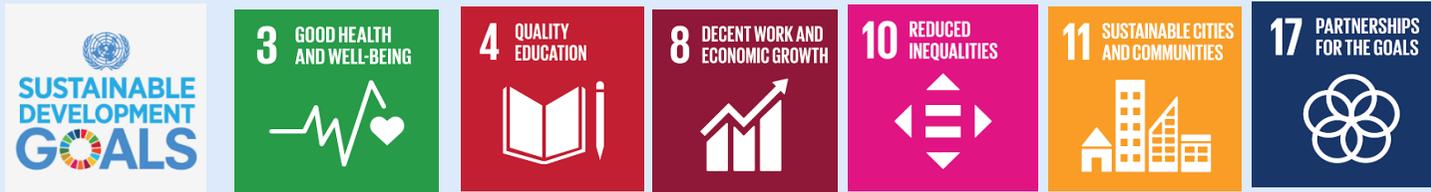
Environmental commitment

National Emissions

Green House Gases – 2014



- According to 2014 data, the transportation sector emitted 29 million tons of CO₂e, corresponding to 12% of the country's GHG emissions.
- According to national projections, the sector will emit more than 40 million tons of CO₂e in 2030, which indicates the urgent need for strategies that allow us to make a transition towards more sustainable mobility.hb



Setting the Agenda National Development Plan, 2018 - 2022 Transport & Logistics Pact for Competitiveness and Regional Integration

CHAPTERS	1	Modern governance and institutions for efficient, and safe transport and logistics.
	2	Sustainable urban/regional mobility for equality, competitiveness and wellbeing.
	3	Intermodal strategic corridors: national transport network, logistic nodes and modal efficiency.
	4	Financial innovation and mobilization of new payment sources

Colombia's ambition

A sustainable transport framework

The framework:

- National Electric Mobility Strategy – 2019
- Electric Mobility Law – 2019
- Green Growth - CONPES 3934
- Sustainable mobility strategy
- National urban and regional mobility policy
- Sustainable Road Infrastructure

The NDC's Update

The actions:

- Multimodal freight operations
- ✓ Train investments: La Dorada – Chiriguana
- ✓ Fluvial investments: PPP Rio Magdalena
- Sustainable Public Transport Renovation
- 600.000 Electric vehicles in 2030
- National Active Transportation Strategy
- Freight Transport Modernization Program

Public Transport

Since 2000 – Policy Design and Implementation:

National Urban Transport Policy (PNTU in spanish)

Moving from conventional bus service operations towards integrated public transport systems



7 BRT* Systems – 5.4 million pax/day
8 Strategic Transport Systems
Metro Areas and Intermediate cities
USD \$5.5 billion (2000-2027) 88% progress

Bogotá Metro - First Elevated Line (2027)
USD \$6.8 billion (2018-2049)
(+ \$1.4 billion for 2 BRT Feeder Trunk Lines)

First Regional Tram-Train for the Capital Regional (2024)
USD \$600 million (2018-2027)

70% National; 30% Local Investment

***BRT - Bus Rapid Transit**

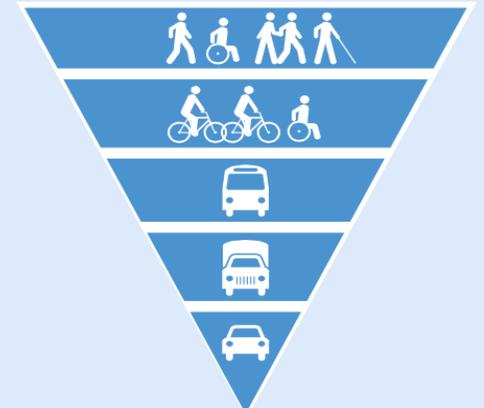
Moving towards a shared global vision – 2030 Agenda

TOD* Principles Planning for Urban Sustainability



Taken from: <https://www.itdp.org/what-we-do/eight-principles/>

Urban Mobility Pyramid
Invest and give priority to sustainable transport modes
Active Mobility and Public Transport



Taken from: <http://www.plataformaurbana.cl/archive/2015/04/28/peaton-primer-pro-bicicleta-y-zonas-calmas-las-iniciativas-del-plan-integral-de-movilidad-de-santiago/>

EV Progress – 2020

Public Transport with Electric Vehicles (EV component)

Cali BRT-MIO
26 E-Buses in operation
Sept/2019
Approx. 100 by Dec/2020

Medellín:
BRT-Metroplús
64 E- Buses in operation
Nov/2019

Bogotá:
Integrated Public Transport System -
Approx. 380 by Dec/2020

All BRT and Strategic Public Transport Systems Studying EV introduction phases

2022 National projection: at least 1.000 E-Buses in public transport

*TOD – Transit Oriented Development (Urban Planning and Mobility)

Towards Clean and Sustainable Public Transport

- Financing zero and low emission bus fleets for Mass Public Transport (7 Integrated BRT Systems in metropolitan areas) and Strategic Public Transport Systems (8 intermediate cities) - NDP, Law 1955/2019

E-BUS National Program 2019-2022 - Feasibility studies and pilot tests:

- Evaluating CAPEX incremental costs of E Buses and the financial instruments to tackle it.
- 2030 BRT and Strategic Public Transport Systems:
 - ✓ At least 8.000 E Buses (E-Mobility Law 1964, July 2019).
- 2030 National Potential - 30 cities with an E-Bus component in public transport:
 - ✓ Approximately 30.000 E Buses

National E Mobility Strategy (August 2019)

NAMA MovE - Support Project (Design phase 2019-2020)

Includes electrification actions for other transportation segments



MIO - BRT Cali
26 E-Buses – Sept / 2019



Metroplús - BRT Medellín
64 E Buses – Nov / 2019

New Public Transport Infrastructure and Public-Private Partnerships (PPPs) opportunities

New Strategic Transport Systems (SETP): Improving public transport in intermediate cities

Approx. USD \$500 million

- Second Phase of SETP projects - financing infrastructure and new buses for Public Transport
- 5 or 6 New Projects.

Integrated Public Transport Systems: Financing planned infrastructure for expansion and consolidation phases.

Approx. USD \$800 Million

- Cities and Metropolitan Areas with operating BRT Systems Bogotá, Barranquilla, Cali, Medellín, Pereira, Bucaramanga and Cartagena.
- Cities implementing SETPs: Pasto, Sincelejo, Santa Marta, Valledupar, Montería, Armenia, Popayán and Neiva.

New Urban / Commuter Rail projects in feasibility studies phase (local structuring):

- RegioTram del Norte (Bogota), Valle del Cauca Commuter Train (Cali), Barranquilla Metro Area Light Rail, Tren del Rio (Med).

Public roadworks

Sustainability policy Invias

Sustainable Projects

Incorporate sustainability criteria into the life cycle of transport infrastructure projects

Sustainable Communities

Integrate the needs, knowledge and skills of local communities in the entity's projects

Sustainable Institutional

Implement sustainability strategies at the institutional and inter-institutional level

Sustainable Innovation

Promote the development of science, technology and innovation applied to transport infrastructure projects

THROUGH

Technical guidelines documents

Planning documents

- Research documents
- Information services implemented

- Informal Education Service
- Methodological documents
- Geographic Information Services

New Bridge Honda – Tolima



3 kilometers north of the urban area of Puerto Bogotá and Honda, downstream from the current bridge that connects the Mesuno sidewalks in the Honda municipality and Bodegas in the Guaduas municipality, Route 50 Section 07.



Connecting the departments of Cundinamarca and Tolima



Cable-stayed structure with a total length of 406.77 m.



The solar powered photovoltaic panel system:

- Environmentally friendly solution.
- Reduces maintenance costs by improving required visibility and security conditions at night

La Cernidera - Circunvalar Volcán Galeras



Located in the department of Nariño.

Corresponds to the 6-kilometer paving on the Consacá - Sandoná section, 6-kilometer rehabilitation between Cebadal - Yacuanquer and attention to the critical site of La Cernidera.



- Protection of water outcrops on the upper slope
- Construction of a section of special combined structure of "cantilevered road", and walls for the protection of water resources.

Construction of the arboric fauna pass, via Aguachica - Ocaña, in the municipality of Rio de Oro Cesar



- A tree fauna crossing was built to identify the balance of this ecosystem in a sensitive area of high anthropic intervention with future deforestation that frequents an identified population of howler monkeys.

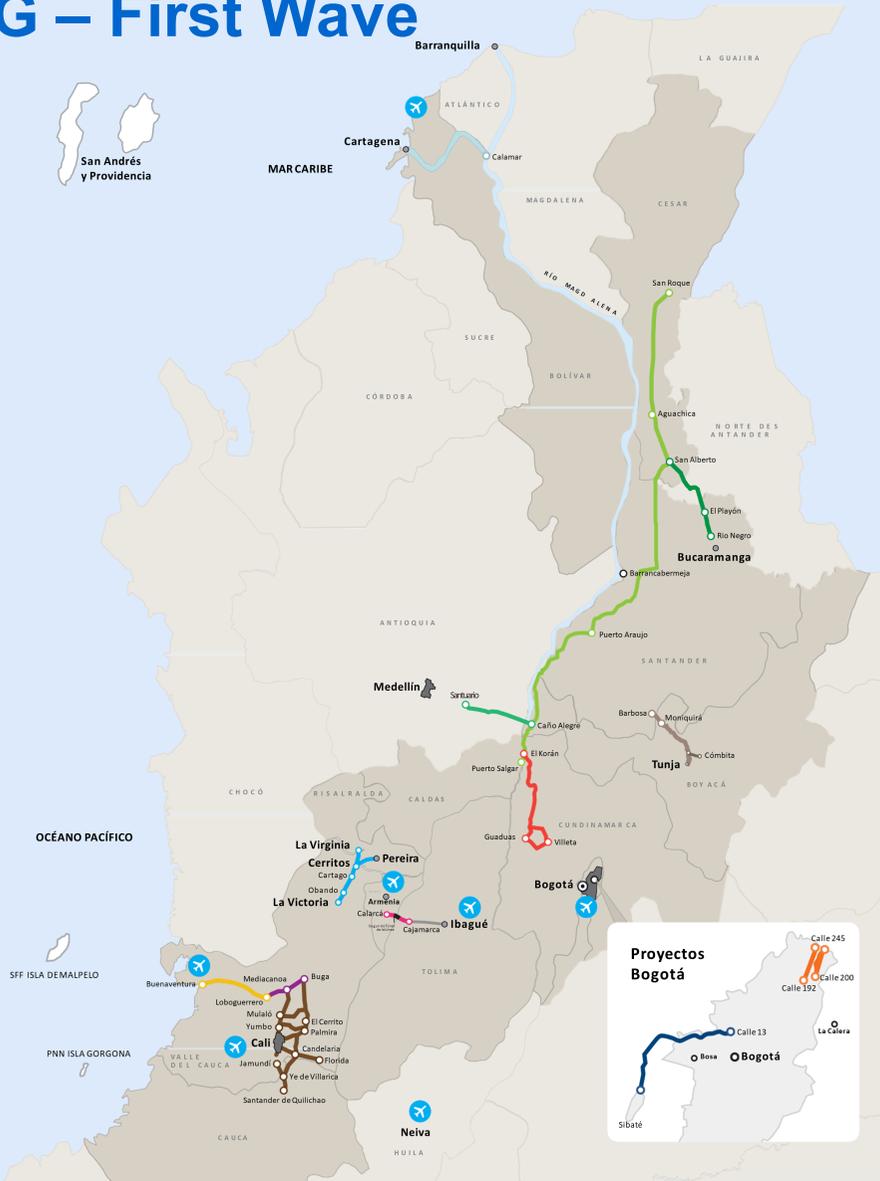
Other projects where wildlife steps have been implemented as a biodiversity conservation strategy



- San Gil Variant, in Santander has four fauna passes established, but they have not been installed. Construction stage.
- Relief Variant in Santander. Wildlife steps will be included. Elaboration stage.
- Buga-Buenaventura Double Causeway, has signage for wildlife crossings, and two overpasses that are for wildlife crossing

New infrastructure projects in Colombia: fifth concessions generation

5G – First Wave



Road Projects	CAPEX	CAPEX (EUR)*
IP ALO Sur	\$ 0,66 Bn	156.489.328
Accesos Norte II	\$ 1,27 Bn	301.123.404
Accesos Cali - Palmira	\$ 1,16 Bn	275.041.840
Buga – Loboguerrero - Buenaventura	\$ 2,45 Bn	580.907.353
Puerto Salgar - Barrancabermeja	\$ 1,96 Bn	464.725.883
Barrancabermeja – San Roque	\$ 1,63 Bn	386.481.219

Airport Projects	CAPEX	CAPEX (EUR)*
IP Aeropuertos de Suroccidente	\$ 1,18 Bn	279.783.950
IP Aeropuerto de Cartagena	\$ 0,47 Bn	111.439.370
IP Nuevo Aeropuerto de Cartagena	\$ 2,92 Bn	692.346.723

Others	CAPEX	CAPEX (EUR)*
Rio Magdalena	\$ 0,58 Bn	137.520.925
Canal del Dique	\$ 1,95 Bn	462.354.832
Dorada – Chiriguana	\$ 1,80 Bn	426.789.076

Total investment - CAPEX 5G First Wave	\$ 18,03 Bn	4.275.003.903
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*1 EUR = \$4.217,54

5G – Second wave

Road projects:

	CAPEX (estimated investment)	CAPEX (estimated investment in euro)
Santuario Caño Alegre	\$ 3,1 Bn	735.025.631
Pasto Popayán	\$ 4,5 Bn	1.066.972.690
Terminación Ruta del Sol 1	\$ 1,30 Bn	308.236.554
Pereira – La Virginia	\$ 0,26 Bn	61.647.311
Zipaquirá - Barbosa	\$ 3,2 Bn	758.736.135
Barbosa – Bucaramanga	\$ 2,9 Bn	687.604.623
Ocaña – Cúcuta	\$ 1,7 Bn	403.078.572
Duitama - Pamplona	\$ 1,1 Bn	260.815.547
Sogamoso – Aguazul	\$ 1,7 Bn	403.078.572
San Roque – Cuestecitas	\$0,4 Bn	94.842.017
Sistema Aeroportuario de Bogotá - SAB 2050	\$ 9,4 Bn	2.228.787.397
	\$ 29,56 Bn	7.008.825.049

**Total Investment CAPEX
5G: First and Second Wave**

\$ 47,59 Bn

**EUR
11.283.828.952**

The fifth
concessions
generation will
change our
country...

Esta presentación es propiedad intelectual controlada y producida por la Presidencia de l

Proyectos de Infraestructura de transporte concesionada



Thank You