

## Colombia

# Designing a vertically-integrated, transit orientated development NAMA

Activity	Designing a NAMA that integrates national policies on transport and housing, and local projects based on urban development around transportation systems, including vertical integration of policies between national and subnational government
Country	Colombia
Sector(s) involved	Transport, Housing, Urban Planning
Time frame	2011–2014
Case summary	<p>In Colombia, the transport sector is the fastest-growing source of greenhouse gas emissions and urban areas increasingly suffer from traffic congestion and road safety concerns. The Colombian Transit Oriented Development (TOD) NAMA aims to address these issues by demonstrating how integrating urban planning and transport development in a city can reduce traffic growth by 25–36%, while improving air quality and living conditions.</p> <p>Through this NAMA, the Colombian government aims to promote a more holistic approach to transport planning, with better coordination of land-use and transport systems, and their integration with social housing policy. This integration between different government agendas aims to promote public and private investment that will be channelled into pilot projects across a range of locations and interventions. Thus the project aims to promote better-designed, walkable, transit-oriented neighbourhoods and contribute to reducing household transportation costs, improving access to jobs and services, and enhancing social inclusion in the area.</p> <p>A key part of the design of this NAMA includes the vertical integration between national and subnational policies and it is estimated that if fully implemented, it has the potential to reduce annual greenhouse gas emissions by between 3.6 and 5.5 MtCO<sub>2</sub>e by 2040.</p>



Bogotá BRT System (Transmilenio)

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## Background

Colombia is globally recognised for having implemented successful massive public transport systems based on bus rapid transit (BRT). Building on the city of Bogota's effective approaches to transport planning, the Government of Colombia adopted many of its successes into National Public Transport Policy in 2002. This policy addressed many of the core issues of public transport in Colombia including: pollution; accessibility; lack of regulation for the operators; security; and lack of public space and infrastructure for non-motorized transportation. Through this national policy, eight large cities and seven midsize cities received financial and institutional capacity building incentives to implement Integrated Mass Transit Systems<sup>1</sup> (SITMs) and Strategic Public Transport Systems<sup>2</sup> (SETPs). By 2013, the Government had invested USD 3.8 billion in SITMs and USD 0.7 billion in SETPs nationally. With local government co-financing, total public investment on these systems amounted to USD 7.3 billion (Colombia, 2013).

After ten years of implementation, the National Public Transport Policy and Colombian BRT systems are facing new challenges. The growing economy has encouraged a rapid growth in motorisation rates. This, in conjunction with transit planning that has failed to consider urban development sufficiently, has had repercussions on traffic and air pollution in Colombia's major cities in the form of increased traffic congestion and greenhouse gas emissions.

At the same time, the Government of Colombia (led by the Ministry of Housing) has promoted National Affordable Housing Macro-Projects and invested USD 2.3 billion in order to provide 100,000 free houses for people living in extreme poverty (Colombia, 2013). These projects are expected to eventually provide almost 300,000 household units and represent a big opportunity for coordinated efforts between ministries in order to ensure more successful outcomes.

In 2011, under direction from the Ministry of Environment and Sustainable Development, the National Government launched the Colombian Low Carbon Development Strategy (CLCDS). This strategy states that Colombia should take advantage of international financial incentives to promote low-carbon growth and sustainable practices and prepare the economy for a "future carbon-conscious global economy". (Colombia, 2013).

The Center for Clean Air Policy (CCAP), a non-profit organization supporting many NAMA initiatives around the world, helped the National Government of Colombia to identify the conjunction between transport and urban planning as an opportunity to implement the CLCDS and obtain financial support to develop new smart infrastructure projects for Colombian sustainable cities through a process of Transport Oriented Development (TOD) planning. (Colombia, 2013). Some important details needed to be considered in order to develop this initiative: for example, urban planning is the responsibility of local governments and it is not possible for the National Government to impose specific criteria for city design, so to be successful, TOD requires effective collaboration between national and local government, and the commitment of private project developers investing in a TOD approach.

Connecting these key actors within the existing policy framework, supported with international sponsorship and technical guidance, provided the basis for the design of a TOD NAMA, which in 2013, was selected for financial support by the newly formed UK-German funded NAMA Facility.

## Activities

- » **Facilitating inter-institutional dialogue:** Effective TOD requires horizontal integration of efforts between institutions responsible for housing, public-spaces and transport. Achieving this requires effective inter-institutional dialogue, which the Ministry of Environment and Sustainable Development, the Center for Clean Air Policy and Findeter worked to facilitate (see "Cooperation with" and "Finance"

<sup>1</sup> Transportation Systems based on BRTs. Some of this BRTs were MDL projects and received financial support through CERs

<sup>2</sup> Transportation Systems based on the development of better transport planning on intermediate cities.

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sections for further information about Findeter). Activities included: taking the first steps to build an inter-disciplinary technical and high-level team to support the process, identifying key actors in ministries (Transport, Housing, and Environment) and institutions (National Planning Department, Findeter and CCAP); providing training in low emission development to specialised professionals from the ministries; hosting a study tour to a TOD project in Washington for high-level Colombian officers; and showing the ministries how a well-articulated development of their policies could have important benefits in the sustainability of the projects and receive financial aid from a NAMA (Figure 1). Through these initiatives, the team achieved the commitment of relevant ministries to pursue a more coordinated approach under the existing policy framework.

- » **Vertical integration efforts:** Local mayors are responsible for final investment decisions in their cities. To identify projects that were interesting and relevant for these cities, local authorities were involved in the design of TOD projects through two main activities: (1) visiting local authorities in their cities, and (2) participating in a study tour to Washington D.C. to view relevant examples of TOD projects in the US. The tour promoted dialogue between participants (who included: planners, bankers, national and local government representatives) while identifying relevant options for proposal in the TOD NAMA. As a result of the tour, the group also worked together to bring other national and sub-national counterparts on-board with their proposals.
- » **Public-Private Partnership:** In 2012, the National Planning Department (DNP) promoted new legislation supporting Public-Private Partnership (PPP) that established a framework for private investment in public infrastructure and related services (Departamento Nacional de Planeación, 2014). The TOD NAMA aimed to build on this new legislation by providing additional incentives to develop vibrant transit-orientated neighbourhoods that increase returns for real estate investors (CCAP, 2013).

Benefits of TOD NAMA Implementation (CCAP, 2013) (Figure 1)



Source: CCAP (2013) <http://ccap.org/colombia-transit-oriented-development-nama-selected-for-funding>

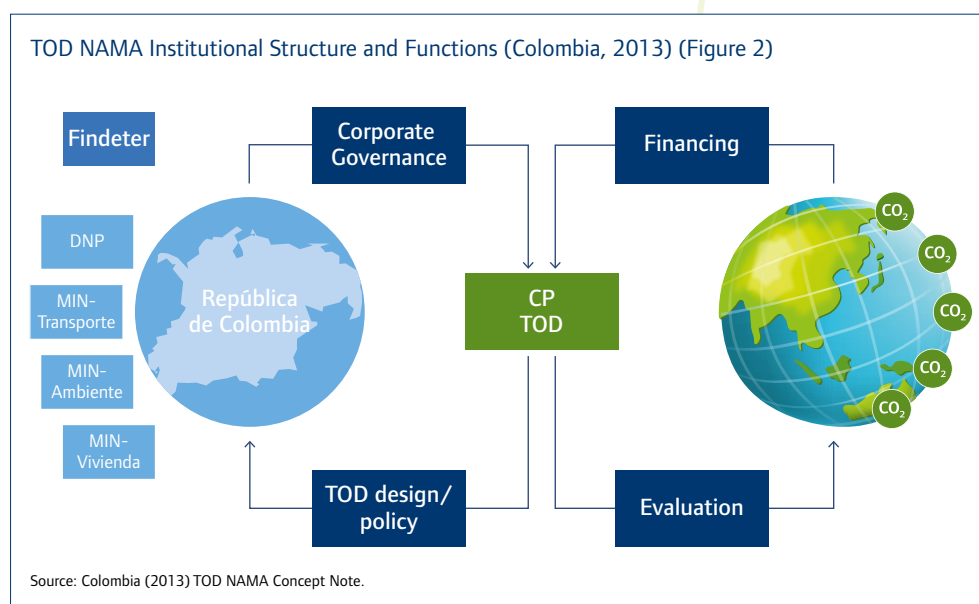
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- » Creation of the Center for the Promotion of Transit-Oriented Development (CIUDAT): At the core of the NAMA design is an independent Center for the Promotion of Transit-Oriented Development (CIUDAT), financed by the NAMA Facility and managed by Findeter, which is expected to provide technical and financial assistance on TOD implementation based on locally articulated needs. The Center is also expected to serve as a policy advisor, integrating national policies to promote TOD and advance national policy goals on urban transportation, housing, environment, economic development and social equity (Colombia, 2013). Experts in TOD design, evaluation, finance and public-private agreements will staff the CIUDAT, supported by technical consultants and guided by an independent technical secretariat.

## Institutions involved

Ministry of Environment and Sustainable Development; Ministry of Transport; Ministry of Housing, Cities and Territory; National Planning Department; Local Authorities. (See Figure 2 for full description).



TOD NAMA Institutional Structure and Functions (Colombia, 2013)

## Cooperation with

Findeter, a public, industrial and commercial enterprise of the State that acts as a second-tier bank to finance infrastructure projects, aimed at promoting regional and urban development for the common good, by granting loans to both public and private entities. The NAMA was developed in cooperation with the Center for Clean Air Policy (CCAP) with support from BMUB's International Climate Initiative (IKI).

## Finance

The NAMA Facility, jointly established by the German Federal Ministry for the Environment, Nature Conservation, Building and Nuclear Safety (BMUB) and the Department of Energy and Climate Change (DECC) of the United Kingdom, has approved support of USD 20 million for technical and financial aid through the development of CIUDAT under the management of Findeter. CIUDAT is also projected to develop and execute a financial and sustainability plan to identify funding sources beyond this NAMA support. Nevertheless, the Colombia TOD NAMA is supported by a solid policy framework that has its own resources, including:

- » National Public Transport Policy: Since 2002, USD 7.3 billion has been invested in this policy. Funds originate from the national budget and multilateral bank (IADB, CAF and the World Bank).

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## Impact of activities

- » National Affordable Housing macro-projects and free houses programs: Led by the Ministry of Housing, national government has invested USD 2.3 billion with an additional USD 2–3 billion projected for social housing (Colombia, 2013).
- » Sustainable and Competitive Cities Program: Led by Findeter it has USD 500 million for investment in a pipeline of ready to-go projects (Colombia, 2013).
- » Other financial sources include USD 500 million for the Cali Green Corridor (TOD project), an anticipated USD 40 million from CTF for pedestrian and cycling infrastructure and more than USD 2.5 billion for the Bogotá Metro (Colombia, 2013).

- » **Improved understanding of TOD and its potential as a LEDS:** Developed by key actors from ministries of Transport and Housing through specialised knowledge that was promoted by CCAP in the form of training, conferences and site visits.
- » **Identification of local projects with TOD potential in major cities:** Through visiting local authorities and listening to them suggest catalytic projects that could be supported by the NAMA and which already have the commitment of local authorities. This was important in order to ensure the participation of local authorities.
- » **Involvement of key actors from private planners, local and national authorities:** By showing the benefits of TOD and identifying potential TOD projects, these actors were encouraged to participate in the design of a TOD NAMA.
- » **Inspiring further action:** As a pioneer NAMA in Colombia it serves as a successful case of low emission development that is expected to motivate other sectors and signal that LEDS and NAMA have real possibilities for implementation, for international support and to contribute to the country's development. It also offers lessons on associated institutional, legal and financial challenges.

## Why is it good practice

- » Aims to achieve **significant GHG impact:** Reducing annual GHG emissions by 3.6–5.5 MtCO<sub>2</sub> by 2040 through reducing the use of private vehicles and promoting the use of public transportation systems.
- » **Contributes to sustainable development** through TOD neighbourhoods which will be better-designed, walkable and will contribute to reduced household transportation costs, improved access to jobs and services, and enhanced social inclusion in the area.
- » The NAMA has a **broad scope** and was developed based on local experiences that could be replicated throughout the national territory in accordance with National Policies. It also includes a **diverse set of interventions** on transportation, housing and public space which have emission reduction potential that represent environmental and economic benefits. Thus, this TOD NAMA fits into the Colombian Low Carbon Development Strategy (CLCDS) which acts as a National Policy Framework for NAMAs.
- » It has a **high level of political ownership:** represented in a well-defined budget for each of the individual policies that support the TOD NAMA (National Public Transport Policy, National Affordable Housing Macro-Projects and Sustainable and Competitive Cities Program).
- » The Concept Note of the TOD NAMA proposal includes a simple sketch for an MRV framework, and a well-defined **strategy for MRV** is being developed at the current appraisal stage.
- » Investment in urban development requires joined effort from public and private actors and the NAMA aims to **stimulate private investment** through Public Private Partnerships (PPP).

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- » This NAMA resulted from a **participatory process** involving key stakeholders, including Ministries, local authorities and private investors. These key actors were included during the formulation of the NAMA and it is expected that they will participate in the implementation stages. The NAMA has been designed over existent national public policies on transport and housing, aiming to ensure **sustainability of the actions over time**.

## Success factors

- » **Urban development has strong political support:** Colombia has a well-defined policy framework for urban development together with projects (and national budget to support them) covering transportation and housing in both large (over one million inhabitants) and medium sized (300,000–600,000 inhabitants) cities. Political support has built capacity in national and local government for effective urban development which was a key foundation for TOD (Kooshian, 2012).
- » **TOD is well understood in Colombia:** Colombia is globally recognized for implementing successful massive public transport approaches based on bus rapid transport (BRT). The TOD NAMA takes advantage of this experience, focusing urban development around transit stations to provide a solution to the new challenges faced by Colombian cities (growing air pollution and lack of demand for public transport) and creating an urban development model that encourages the use of more efficient transportation systems well-integrated with housing planning (Colombia, 2013).
- » **Existing projects had the potential for TOD:** Part of the success of the vertical integration depends on the commitment from local authorities with support from national policies. For this NAMA, extensive work with local authorities was undertaken to identify which locally designed projects could have potential for TOD. As a result, projects from Cali, Medellín, Manizales and Barranquilla were identified.
- » **Existing vertical institutional framework for transit projects:** Colombia's experience with BRT systems implementation has created a framework for vertical integration where national institutions establish national policies and local authorities follow-up and monitor compliance of those policies (Kooshian, 2012). These local authorities define, deliver and manage their transport and transit agendas in observance of national policies and sign a co-financing agreement. This model serves as an effective foundation for vertical institutional to implement the TOD NAMA (Kooshian, 2012).
- » **Enabling effective communication and facilitating bottom-up approaches:** The design process allowed a confidence and equality between local and national institutions which helped overcome typical challenges to effective local and national government collaboration. By offering technical support and showing financial benefits, local authorities understood the importance of including TOD concepts into their projects, not as a result of a National Government directive, but because it could improve their results (GIZ, 2013).
- » **Engagement of the private sector:** Private real estate developers have used land around main transit stations to develop commercial and residential projects and it was consequently easier to involve them in the TOD NAMA (Kooshian, 2012).
- » **Development of a national framework:** The development of the national framework for low emission development (CLCDS) and Colombia's active role internationally and in UNFCCC negotiations are significant factors for the NAMA to have been formulated and successfully received by the NAMA Finance Facility.

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Overcoming barriers/  
challenges

## Information

What were the main barriers/challenges to delivery?  
How were these barriers/challenges overcome?

There was a lack of information about what TOD is and how it could be useful for urban development in Colombia.

CCAP made important efforts to help Colombia's local and national technical staff to better understand TOD. They circulated key information about TOD, spoke to technical experts in Colombia, visited local authorities, invited ministerial staff to international meetings and coordinated a study tour for high level officials in Washington. All these activities helped develop skills and knowledge relevant for TOD.

**Lack of information for MRV.**

A simple, sketch-level GHG emissions reduction estimate was developed as part of the initial scoping for the NAMA (Kooshian, 2012). Based on a literature review, it was estimated that GHG emissions could potentially be reduced by 20–40% through diminishing the use of private vehicles (Colombia, 2013). Implementation of detailed analysis and monitoring is planned for the implementation stages of the NAMA (Kooshian, 2012).

**Lack of integrated relationships between ministries required for delivering TOD NAMA.**

In order to encourage a better integrated relationship between ministries involved in the TOD NAMA (Transportation and Housing), the Ministry of Environment and Sustainable Development undertook many conversations with key parties in both ministries and helped to identify how working together would solve many of the common challenges they face and add value to their projects.

**Lack of integration between local and national government.**

By a closer conversation with local authorities that included technical visits to the cities, a study tour to Washington and promoting effective communication between local and national authorities, the potential of TOD was recognised by both local and national authorities. This allowed the identification of some local projects where national policies related to TOD could be applied.

## Institutional

## Lessons learned

- » **Build a common understanding between local and national authorities:** Both are looking for the best way to develop, so it is necessary to identify what is important for both parts through effective communication in an environment of confidence and equality, which promotes bottom-up approaches.
- » **Empower local authorities to ensure their commitment to implementing national policies:** Many local authorities perceive national policies to be largely imposed on them, which impacts the effectiveness of policy implementation. However, when local authorities are able to see how their own projects would be supported through implementing national policies, it is easier for them to commit.
- » **Involving the right people and institutions:** Institutions are made up of people, so in order to ensure the involvement of institutions it is necessary to invest time "finding the champions" and then invest even more time securing their participation. According to CCAP (Kooshian and Winkelman, 2014), they invested a lot of time finding key people for the TOD NAMA in local and national authorities (technical experts and decision makers) and finding time to successfully proceed with the project.
- » **Effectively engage national ministries:** By identifying which of their own projects could be boosted by including low emission strategies and receiving financial support and visibility through engaging in NAMAs.

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- » **Integrate NAMA into a well-structured existing policy:** The TOD NAMA is based on Colombia's National Transport Policy which provided an effective foundation for the TOD approach.
- » **Ensure a well-defined institutional framework for NAMA implementation:** Defining a work schedule, responsibilities and a coordination mechanism.
- » **Secure technical and financial support:** Despite the capacity and interest from National Government for the development of a Transport NAMA, Technical and Financial International Support was decisive for the initiative's success.

## How to replicate this practice

- » **Identify what kinds of projects are important to both, national and local governments:** To ensure broad engagement and avoid the imposition of policies from a single ministry (e.g. the Ministry of Environment).
- » **Facilitate close dialogue with key ministries:** In order to identify their priorities and then procure an understanding of how their projects/policies could be boosted by including low emission criteria.
- » **Engage local authorities:** To identify how their work can align with national priorities.
- » **Develop technical understanding:** By providing information about the benefits of involvement in NAMA implementation to current work.
- » **Continuously review relevant policies:** Such as transport and housing policies and regulatory aspects which may impact on NAMA development and implementation.

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## Website(s)

- » Colombian Low Carbon Development Strategy: [www.minambiente.gov.co/contenido/contenido.aspx?catID=1366&conID=8884](http://www.minambiente.gov.co/contenido/contenido.aspx?catID=1366&conID=8884)
- » Center for Clean Air Policy (CCAP) Colombia TOD NAMA: [ccap.org/programs/transit-oriented-development-nama-in-colombia](http://ccap.org/programs/transit-oriented-development-nama-in-colombia)

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