

Incorporating Just Transition strategies in developing country NDCs and post COVID responses: Colombia

Eduardo Uribe
(Fedesarrollo)

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Introduction

Project approach and methodology

Stakeholder Engagement and Country Profile.

Country Situation

Colombia has a population of 48 million people. GDP composition is agriculture 7.2%; Industry 30.8% and Services 62.1%. Employment is 17%, 21% and 62% respectively. Informal employment is above 47% and poverty is at 28% of the population [1].

During the last decades, the improvement of the socioeconomic conditions of the Colombian population have been remarkable. Between 1973 and 2018 the percentage of people with Unfulfilled Basic Needs (*Necesidades Básicas Insatisfechas*) dropped from 70,5% to 14,1 % [2]; between 2005 and 2019, the GDP *per capita* went from nearly \$ 12 to 17,5 million Colombian pesos [3]. The access to education¹ has grown significantly [4]. Likewise, the coverage of the National Health System [5] has grown to the point that today most of the population is covered². In relation to food security [6] there have also been important improvements³. However, there is evidence that Covid-19 may have harmed some of these indicators.

Discussion

Preliminary findings

Government has adopted a series of policies, laws, and regulations aimed at the construction of a robust legal framework and the provision of economic incentives for the implementation of climate change mitigation and adaptation measures and activities.

Key Data

The government's identified climate change priorities

The main sources of GHG emissions in the country are associated with land-use practices, mainly deforestation and forest degradation, and with the consumption of fossil fuels by the electric and transport sectors. The AFOLU⁴ category represents 50 % of the national emissions. Energy use correspond to 36% of the national emissions. Thus, most of the activities for the reduction of emissions are inherent in those sectors.

¹ Between 2002 and 2017 gross coverage went from 23,7% to 52,8%;

² The coverage of the System of Social Security in Health went from 29,2% in 1995 to 94,6% in 2018.

³ Between 2010 and 2015 the percentage of families with food *in*security went from 57,7 % to 54,2%.

⁴ agriculture, forestry and other land use

Colombia's NDC has prioritized six sectors of the economy: transport, energy, agriculture, housing, health, and trade, tourism & industry.

Progress toward achievement of the NDC commitments

In October 2020 the Government of Colombia presented for public consultation a proposal for the actualization of the National NDC. The proposal incorporated the three components that guide the work at the national and regional levels, and for different sectors: i) mitigation of Green House Gases (GHG), ii) adaptation to climate change, and iii) means of implementation of the policies and actions for a resilient low carbon development. The consultation process sought to promote the active involvement of a range of stakeholders in the design and implementation of appropriate measures at the local and national levels and in different sectors and areas: research, knowledge sharing, technology development, financing. etc.

This government-led consultation process was coordinated by Inter-Sectorial Commission on Climate Change with the participation of public and private agents, academia and representatives of the civil society, including representatives of ethnic groups, youth and women's organizations.

As a result of his processes the government published in December of 2020 the actualized version of the NDC. This updated version of the NDC has nine integrating elements: *i.)* food security and poverty eradication, *ii.)* Just Transition of the labor force, *iii.)* human rights, *iv.)* intergenerational equality, and regional inclusion, *v.)* differential approach with ethnic and vulnerable communities, *vi.)* gender equality and women's empowerment, *vii.)* water, ecosystem and biodiversity protection, *viii.)* circular economy, *ix.)* implementation on the context of COVID-19.

The objectives and ambitions of this updated NDC are aligned with the strategic objectives of the National Plan for the Adaptation of Climate Change⁵ which guides the planning processes and the coordination of adaptation policies and actions. The NDC has 30 objectives. Twenty-three of them are aligned to the knowledge and planning-related components of that National Plan, and 16 to its transformation-related areas which objectives are related to the strengthening the resilience to climate change.

The adaptation objectives of the NDC include the design and implementation climate adaptation strategies and objectives in six sectors of the economy: transport, energy, agriculture, housing, health, commerce, tourism and manufacture.

The updated long term mitigation ambition of Colombia's NDC is to reach carbon neutrality by year 2050. By year 2030 the NDC ambitions to reduce the country's net emissions by 51 %, in relation to the business as usual (reference) scenario. These, by means of the country's Low Carbon Development Strategy⁶ and its Strategy for Forest's Management and Deforestation Control⁷. Most of the mitigation measures included in the NDC will be achieved through the Sectorial Mitigation Action Plans. In addition, twenty-two regional climate change plans have

⁵ <https://www.dnp.gov.co/programas/ambiente/CambioClimatico/Paginas/Plan-Nacional-de-Adaptacion.aspx#:~:text=Plan%20Nacional%20de%20Adaptaci%C3%B3n-Contenido%20de%20la&text=El%20Plan%20Nacional%20de%20Adaptaci%C3%B3n,la%20transformaci%C3%B3n%20gradual%20del%20clima.&text=El%20DNP%20es%20coordinador%20del,de%20Ambiente%20y%20Desarrollo%20Sostenible>

⁶ <https://www.minambiente.gov.co/index.php/estrategia-colombiana-de-desarrollo-bajo-en-carbono>

⁷ <https://colaboracion.dnp.gov.co/CDT/Conpes/Econ%C3%B3micos/4021.pdf>

been structured and, by June of 2020, 70 climate sensitive watershed plans had been adopted.

The government has followed the development of those regional and sectorial plans, has identified the bottlenecks that have hindered progress and has made adjustments. However, the strengthening of the training and education strategies has been modest. Progress in the inclusion of climate considerations on the planning process of key infrastructure and other projects of national interests has also been scant. Five of the ten main associations of the agricultural sector are participating in the implementation of adaptation strategies. And, although 10 out of 15 regions have formed agro-climatic tables, farmers are not yet receiving relevant climatic information to plan their activities.

Notably, significant progress has been made in the delimitation of 36 climate sensitive *páramo* ecosystems and in the increase of the areas protected by the national park's system. In 2019, the government granted rights for the installation of an additional capacity of 1.398 MW of renewable energy sources to the national electric grid.

Relevant legislative and regulatory instruments

- **National Plan for the Adaptation to Climate Change 2012.** This plan has the main objective of reducing the social, ecological, and economic risks and impacts of climate change. Among its purposes is the incorporation of climate considerations in the planning of sectorial and regional development strategies.
- **Low Carbon Development Strategy.** This strategy seeks the decoupling of economic growth and carbon emissions, and the identification of low carbon development strategies for different sectors of the economy. It also seeks to establish priority actions by sector through a set of Sectorial Mitigation Action Plans. More than 15 Nationally Appropriate Mitigation Actions (NAMA's) for different sectors have been developed⁸.
- **National Climate Change Policy 2017.** This policy incorporates climate change mitigation and adaptation objectives and strategies in the agendas and priorities of policies at the national, regional, and municipal levels. This policy proposes economic and financial instruments to achieve low-carbon and climate change resilience development and to meet the mitigation objectives. It promotes public participation in the design process of climate policies; including the participation vulnerable communities (Pg. 83 and 282).
- **National Development Plan**, adopted by Law 1955 of 2019. This plan sets the target to reduce 36 million tons of CO_{2eq} between 2019 and 2022. In 2015, the Ministry of Environment and Sustainable Development (MADS) jointly with the National Planning Department (DNP), began to work in the design of two economic instruments to reduce GHG emissions: (i) a carbon tax for the energy, manufacture, transport and waste sectors; and (ii) a National Cap-and-Trade System (ETS) for a range of economic activities with high emissions levels. Although the carbon tax is in place, the ETS is still being structured.
- **Tax Reform** (Law 1819 of 2016). This legal reform created the Colombian Carbon Tax.

⁸ Colombian Coffee, Sustainable cattle production, Technological and productive reconversion of the Raw Sugar Cane industry, Freight transportation, Not-motorized transport, Not-interconnected zones, Energy Efficiency in Hotels, Public illumination, Energization with renewable energy in not interconnected areas, Domestic refrigeration, Forestry, Waste management, Sustainable Habitats, Manufacturing industries, Gas appliances, Metal-mechanic industry, Steel industries.

- **Carbon Neutrality Mechanism** (Decree 926 of 2017). This mechanism, sets the legal basis for Colombia's ETS: The National Program of GHG Tradable Emission Quotas (*Programa Nacional de Cupos Transables de Emisión de Gases con Efecto Invernadero -PNCTE*). This mechanism also orders the development of Sectorial Plans for the Management of Climate Change. To date, seven have been formulated⁹, and there are four in progress (sanitation, housing, manufacturing, agriculture, and health).
- **Monitoring, Reporting, and Verification System** (MRV) that was regulated in 2018 (Resolution 1447 of 2018). This system is administered by the National Institute of Hydrology and Meteorology (IDEAM). Nearly 70 institutions contribute to the construction of these reports.
- **Law 1931 of 2018 ("the Climate Change Law")** established the National Climate Change Information System (SISCLIMA).
- **Decree 298 of 2016**: The Inter-Sectoral Commission on Climate Change defined and assigned a series of responsibilities to these ministries concerning their contribution to the country's NDC.
- **National Strategy for Forest's Management and Deforestation Control**. CONPES Policy Document 4021. December 2020.

Government departmental responsibilities and cross-portfolio engagement

- Ministry of the Environment and Sustainable Development (MADS)
- Department of National Planning (DNP)
- National Institute of Hydrology and Meteorology (IDEAM)
- Inter-Sectoral Commission of Climate Change has responsibility for SISCLIMA which defines the set of stakeholders, institutions, policies, regulations, processes, resources, strategies, and information related to climate change. SISCLIMA seeks to facilitate the concurrence of national and local governmental agencies around the implementation of adaptation and mitigation actions.
- The ministries of transport, energy, agriculture, housing, health, and trade, tourism & industry are responsible for the development of sectoral mitigation and adaptation strategies.
- Regional environmental agencies, in coordination with municipal authorities have responsibility for control of deforestation. Local governments seek the intervention of the police or where necessary the military to control deforestation and the clearing of lands when are conducted to establish illicit crops. Municipal mayors have command over the local police and the intervention of the military depends on the central government.

⁹ Agriculture, Oil & Gas, Mining, Electricity, Transport, Solid Wastes, and Housing.

Key sector labour-market focus for transition

The government has adopted policies to diversify the economy and to favour the creation of new jobs in the non-extractive sectors. Although those policies were not designed to prevent the potential externalities and impacts of climate mitigation and adaptation policies on labour markets, they may indirectly, and to a certain degree, contribute to that purpose.

Thermal energy –mainly supplied by coal- represents nearly 30% of the electricity installed capacity of the country. The recent and severe decline international thermal coal prices and the imminent increased participation of renewable sources of energy in the electricity and other sectors¹⁰ are already affecting labour markets, the jobs of coal miners and of workers along the coal commercialization and transportation chains. Massive layoffs are underway in some of the thermal coal mines of the Caribbean region of Colombia as some of the largest coal mines are closing or downsizing operations. During the first semester of 2021 hundreds of direct workers have lost or are in the process of losing their jobs. Thousands more could lose their jobs during year 2021. This situation has triggered legal disputes and alarmed regional governments and communities. To date, the national government has not taken action.

The Oil & Gas industry is essential to the economies of several rural and often remote regions of the country. It demands goods and services from local businesses and activities. Besides, the industry provides formal and fairly remunerated jobs to qualified and not qualified workers, pay local taxes, and generate royalties for local governments. Its social investments¹¹ contribute to local welfare. To date, the labour markets of the Oil & Gas industry have not directly felt the impact of the energy transition. The unions and the producer's associations, trust that this economic activity will continue playing a significant role in the Colombian economy and in the provision of energy for the electricity, transportation and other sectors. Thus, they have not actively proposed actions to mitigate potential impacts on jobs and labour markets.

The main challenges to reach Colombia's NDCs are in the AFOLU and the energy sectors. Concerning AFOLU emissions, Colombia's priorities are the control of deforestation and forest degradation, the conservation of strategic ecosystems, and the development of sustainable low-carbon agricultural technologies. Pertaining to energy, the country's strategy focuses on energy efficiency and the shift of the electricity and transportation sectors to cleaner sources of energy¹². Although the government has adopted policies for the control of carbon emission by these two sectors (AFOLU and energy), it has not put in place strategies to mitigate the potential externalities on labour markets or employment.

Informal workforce strategies

47.87% of Colombian workers are informal. However, there is a wide variation between the sectors relevant to the country's NDC. Most of the workers involved in AFOLU related activities, particularly deforestation, are informal. These include independent workers involved

¹⁰ cement, brick, paper, and food industries.

¹¹ In the areas of health, education, recreation, technical support to agricultural activities, etc.

¹² According to the National Development Plan, between 2018 and 2022 the national generation capacity with renewable sources will go from 22.4 MW 1.500 MW; and there should be 6,600 electric vehicles. According to Law 1964 of 2019, by the year 2025, 30% of the vehicles of public agencies should be electric or zero-emissions; and by the year 2030, 100% of the vehicles of the massive transportation systems in cities of more than 600.000 inhabitants should be electric or zero emissions.

in, both, legal and illegal activities. Deforestation and forest degradation are driven by a variety of forces. However, rural poverty and informality are often subjacent to most of them. The clearing of forests for the establishment of precarious farming systems or illegal crops¹³, the exploitation and overexploitation of forests for timber, and illegal and informal mining, are economic options for informal rural workers lacking formal and sustainable alternatives. Often, those activities are promoted, controlled, and protected by criminal organizations. There are no official records of the number of people dedicated to deforestation.

All of those hired by the Oil & Gas industry are formal. In the case of coal mining, while all the workers hired by large mining operations are formal, informality is frequent in small and artisanal mining operations; particularly in those mines that do not hold formal mining rights. According to the Ministry of Mines, 17% of the medium-scale coal mines and 50 % of small mines do not have legal mine rights [17]. Most are located in the *Departamento* of Boyacá (Andean Region) which concentrates 18% of the country's coal mines and only 3,21% of national production [18]. There is no data concerning the number of informal workers in small and medium coal mines.

As of June of 2020, 45.3% of the urban workers in Colombia were informal [19]. They did not have a formal job contract. Their work relations were not protected by the state. They did not receive the protection and the social benefits regulated by the labour legislation and were not under the radar of tax authorities.

Government monitoring and evaluation measures

The Monitoring, Reporting, and Verification System (MRV) is administered by the National Institute of Hydrology and Meteorology (IDEAM). This system monitors the progress towards the NDC commitments.

The government has adopted the basic regulations and defined the procedures necessary for the coordinated implementation of its NDC commitments concerning the mitigation and adaptation to climate change. It is in the process of strengthening the relevant institutional framework. To date, however, Colombia does not have a robust instrument to monitor the implementation of the NDCs, nor a system of indicators to monitor adaptation measures. No provisions have been made to monitor the progress of a Just Transition Strategy which, according to the NDC, will be in place by year 2023.

Relevant stakeholders

For the preparation of Colombia's 2nd NDC, the Ministry of the Environment and SISCLIMA conducted consultations at the national, regional and local levels with sector ministries, regional and local governments, NGO's social and private organizations, and academic institutions.

The social groups to be most likely impacted by the transition to a low-carbon economy would mainly be the following:

- rural, informal, and self-employed workers whose income largely depends on the expansion of the agriculture and cattle frontiers, informal mining, and the exploitation of natural forests.

¹³ According to the National Development Plan, between 2018 and 2022 280 mil hectares of illicit crops will be destroyed.

- rural workers, often belonging to ethnic groups that have traditionally inhabited the country's "páramos", forests and the more than 2.5 million hectares to be included on the National System of Protected Areas.
- Direct workers of the coal mines and of the Oil & Gas industries, and other workers along the coal chain.
- workers from rural local communities directly hired by companies of the oil and gas industry, and workers hired by local companies to provide goods and services to the coal and to the oil & gas industries.

There are several national and regional organizations relevant to for the implementation climate strategies:

Producer's organizations:

- National Federation of Coal Producers (FENALCARBON)
- [Colombian Petroleum Association \(ACP\)](#)
- National Industrialists Association (ANDI)
- Colombian Mining Association (ACM)
- National Association of Public Services (ANDESCO)
- Natural Gas Association (NATURGAS)
- Farmers Association of Colombia (SAC)
- National Federation of Oil Palm Producers (FEDEPALMA)

Unions:

- [Central Union of Workers \(CUT\)](#)
- Union of Coal Workers (SINTRACARBON)
- Union of Workers of the Oil Industry (USO)
- National Union of agro-industrial workers (SINTRAINAGRO)

Agricultural sector organizations, and indigenous communities:

- National Indigenous Peoples' Association (ONIC)
- National Process of Black Communities (RENACIENTES)
- National *Campesino* Association (ANUC)

Related social issues and policy responses

Some of the mitigation and adaptation policies and activities could have short-term negative effects on *campesino* (peasant farmer) and indigenous peoples and on thermal coal miners. In the medium to long terms, workers of the Oil & gas industries and communities in oil-producing regions would also be impacted.

The conservation strategies of forests and other ecosystems such as *páramos* and the control of colonization activities, may impose additional restrictions on the economic use of natural resources by the rural communities that have traditionally inhabited those areas.

In the case of the energy sector, the main short term impacts would arise from the elimination of direct and indirect jobs from coal mines, and the decrease of public revenue (taxes and royalties) for municipal and regional governments.

Although the impact of the energy transition began to be felt during the first semester of 2021 on the labour markets of the coal sector and in the coal producing regions, the government has not yet proposed specific policy responses.

The responses to the impact of COVID-19 on social welfare and jobs have concentrated all the attention of the government: direct cash transfers and subsidies have been given to the poorest social groups, and to companies in order to retain workers.

Government consideration of workplace impacts and proposed responses

The potential impacts of the implementation of GHG mitigation and adaption policies on job markets have not yet received any significant attention by the government, and only scant attention by social organizations. The issue has not been placed on the public agenda for open debate.

While the activism and the social and legal public debates have focused on the potential environmental impacts of the extractive industry (mainly fracking), the potential impacts and externalities of the de-carbonization of the economy on labour markets have been generally overlooked.

Although the Government has designed a series of general strategies and policies to diversify the country's economy and to create new jobs, they were not designed to mitigate the potential impacts of climate policies on labor markets, they may indirectly contribute to soothing them. Among the most relevant and recent initiatives to diversify the country's economy and to create new jobs are included in the National Development Plan for the 2028-2022 (Law 1955 of 2019) which proposes the creation of 1,6 million jobs and the reduction of unemployment from 9,4% to 7,9%.

Any financial issues such as such as donor influence**

The government has adopted a Nacional Strategy for the Financing for Climate Mitigation and Adaptation¹⁴. It includes an action plan that focuses of the development of the country's NDC. This action plan does not allude the need of a Just Transition.

Multilateral¹⁵ and bilateral¹⁶ international cooperation is contributing to Colombia's NDC. The multilateral agencies have placed most of their efforts in the building of institutional capacities for the design and implementation of climate change, forest conservation, sustainable transport, and renewable energy strategies and policies. Bilateral cooperation has mainly focused on the financing of regional projects aimed at the control of deforestation, and sustainable rural development and ecosystem conservation with local communities.

Although the Ministry of the Environment and the UNDP are working on the identification of sectors potentially affected by the transition to a low carbon economy, to date international

¹⁴ <https://finanzasdelclima.dnp.gov.co/Que%20hacemos/Paginas/Estrategia-Nacional-Financiamiento-Climatico.aspx#>

¹⁵ World Bank, the Inter American Developed Bank, the *Corporación Andina de Fomento* –CAF, the Global Environmental Facility –GEF, the United Nations Environmental Program –UNEP

¹⁶ Mainly: The United States, Germany, Norway, the European Union, the United Kingdom

cooperation agencies are not involved in the implementation of on-the-ground actions in the affected regions.

Barriers to progress

The adoption of measures to mitigate the impacts on labour markets and on other socio-economic variables will probably encounter the following challenges and barriers:

- The limited awareness and recognition of those impacts. Neither the government nor the communities or social organizations have given a high priority to this issue and have not placed those concerns in the public debate. While the government has made significant efforts to advance climate change policies, it has not yet undertaken on-the-ground measures to mitigate their potential externalities and impacts on job markets. Communities and social organizations are aware of those impacts, but have not participated in the design of relevant policies and have taken active action.
- Once the potential impacts and eventual externalities of climate change policies on job markets and other socio-economic variables are brought to public debate, those policies might be questioned by those directly affected, by some political leaders and public officials. They will most likely condition their advancement and full implementation to the adoption of appropriate compensation measures and to the adoption of a Just Transition strategy.
- Although the updated NDC indicates that by year 2023, the Ministry of Labor will have adopted a strategy to secure a Just Transition, the MRV system does not have the capacity to inform on the impact of climate change policies on social welfare or in the job markets. This system would have to be strengthened to monitor and report on the efficacy of the Just Transition strategy.
- The growth of the National System of Protected Areas could affect the livelihoods of informal rural workers (Campesinos, indigenous afro-descendants) that have traditionally inhabited those territories: their economic activities would be severely restricted, or become illegal as new restrictions may be imposed to the use of the natural resources of the forested ecosystems of the traditional territories of ethnic communities. The control of deforestation, set as a goal of the National Development Plan, would also leave some marginalized rural workers without economic alternatives.
- The costs and difficulties of re-training the workers of the coal industry and of the workers associated to the coal chain could limit the efficacy of the Governments' Just Transition strategy.
- The costs and the technological risks associated to the development of sustainable and competitive economic alternatives for communities in forested and colonization areas could become a barrier for the full fledge implementation of the Governments' Just Transition strategy.
- The lack of capacity of the current Monitoring, Reporting and Verification system (MRV) to inform on the impacts of climate policies on social welfare and jobs.

Findings

The findings presented on this section are the result of the evaluation of the country's NDCs, its related policies, the labor conditions of key sectors and the conversations with a diverse range of stakeholders¹⁷.

General Findings

- The main sources of GHG emissions in Colombia are deforestation and the degradation of natural ecosystems, followed by the use of fossil fuels by the transpiration and energy sectors. The main challenges and opportunities to attain the targeted ambition (51% reduction in GHG emissions) are in the Agriculture, Forestry and Other Land Use (AFOLU) sector and in the energy sector, including transportation. Other sectors where the government seeks to reduce emissions are housing, health, commerce and manufacture.
- The government of Colombia committed to a reduction of 51% of its GHG emissions by year 2030 in relation to the Business as Usual scenario.
- The government of Colombia has been prolific in the production of laws, regulations, policies, etc. directed to the mitigation and adaptation to climate change. It has been active in international fora, and prone to commit to ambitious objectives. However, the effectiveness of the instruments in place and the advancement toward those climate-related objectives has been limited and scarcely monitored.
- The climate laws, regulations, policies have not taken full heed of the potential impacts of the transition to a low carbon economy on jobs, regional development, social equality and labor markets. Thus, they do not include specific provisions to secure a Just Transition.
- The participation of key stakeholders potentially affected by the climate policies and regulations has been very limited or absent. Thus, their views are not reflected in those policies and regulations and appropriate measures to control potential impacts have not

¹⁷ Union of Workers of the Oil Industry (USO); in Spanish: *Unión Sindical Obrera de la Industrial del Petróleo*. Colombian Petroleum Association (ACP); in Spanish: *Asociación Colombiana del Petróleo*. Foundation for Higher Education and Development (FEDESARROLLO); in Spanish: *Fundación para la Educación Superior y el Desarrollo*. National Federation of Oil Palm Producers (FEDEPALMA); in Spanish: *Federación Nacional de Cultivadores de Palma de Aceite*. National Association of Public Services and Communication Companies (ANDESCO); in Spanish: *Asociación Nacional de Empresas de Servicios Públicos y Comunicaciones*. Association for Tomorrow's Future (ASOFUTURO); in Spanish: *Asociación para el Futuro de Mañana*. National Federation of Coal and Coking Coal Producers (FENALCARBON); in Spanish: *Federación Nacional de Productores de Carbón*. Center of Socioeconomic and Regional Studies (CESORE); in Spanish: *Centro de Estudios Socioeconómicos y Regionales*. Fund for the Development of Indigenous Peoples of Latin America and the Caribbean (FILAC); in Spanish: *Fondo para el Desarrollo de los Pueblos Indígenas de América Latina y el Caribe*.

been adopted. According to the interviews conducted, the communities and social groups potentially affected by the transition have not been consulted nor informed of the risks that hover around them.

- Besides the robust body of climate legislation and regulations, the Sectorial Action Plans are the main instruments in place to secure the actual implementation of adaptation and mitigation measures. They propose specific actions to lower emissions, to fix carbon, and to increase the adaptation to climate change and the resilience to extreme climatic events and situations. However, none of them allude to the risks of the transition to a low carbon economy for jobs, labor markets, regional economies and the welfare of communities.
- The actualized DNC, evidences that the government of Colombia is aware that of the fact that climate policies could have negative impacts on some labor markets. It indicates that, under the coordination of the Ministry of Labor, a Just Transition Strategy to mitigate those impacts will be in place by year 2023. However, those impacts are already being felt by a large numbers of workers of the large coal mines o the northern regions of the country, and by the communities and local governments.
- The government has not engaged in dialogs with the private sector in order to design strategies to mitigate the impact of declining coal and oil production and of de-carbonization on job markets and on local economies.
- The actualized version of the Colombian DNC was drafted with the participation of governmental, private and social organizations at the national and regional level. The draft was public for comments to the general public. However, because of the pandemic, direct participation and the participation of rural and poor communities (with no access or with limited access to the internet) was limited.
- Some of the stakeholders interviewed indicated that they realize the potential impacts of the decarbonization of the economy on jobs, livelihoods and labor markets. However, they indicated that they are not aware of any action taken by government to control those impacts, and that they have not been convoked to discuss possible alternatives.
- Thus far, there are not strategies un place to support workers, communities and citizens vulnerable to the effects of the low-carbon transition. Policies that support economic diversification, labor market plans, re-training and social security have not been designed.

Findings in relation to AFOLU

- While coal and the oil and gas industries are crucial for the national and regional economies, for the government finances and for the wellbeing of the communities in the producing regions, most the emissions associated with the AFOLU sector are caused by illegal deforestation which generates environmental deterioration and social conflict.
- Most of the labor force dedicated to the AFOLU sector is informal; and some of that labor is in colonization areas are related to illicit activities (illicit crops, illegal wood harvesting, deforestation, illegal mining).
- For the AFOLU sector, the objective of the national policy is a gradual decrease in deforestation to reach cero deforestation by year 2030, the conservation and creation of

new protected areas, and the development and adoption of low emission agricultural technologies.

- The creation of new protected areas and other governmental conservation strategies could limit the economic and territorial rights of ethnic communities as they could impose additional restrictions to the sustainable use of the natural resources of their traditional territories. The government has not discussed this issue with communities.

Findings in relation to Coal and Oil & Gas: labor Issues

- All of the direct jobs of the oil and gas sector and of the large coal mines are formal. Informality is frequent on small and medium coal mines, mainly in those that do not hold formal mining rights.
- There are about 130.000 jobs associated to the coal mining industrial chain. About 20.000 of them correspond to direct unionized workers, mainly on the large multinational operations of the northern Caribbean region. Some of the large operations have already initiated massive layoffs of workers.
- Declining international process and demand of thermal coal have driven international prices to historically low levels. In consequence, the largest coal mining operations (mostly oriented to international markets) are lowering production, and some are closing. Thousands of formal unionized jobs are being lost. The national government has not discussed with communities and local governments possible alternatives to address this issue.
- According to the Ministry of Mines, 17% of the medium-scale coal mines and 50 % of small mines do not have legal mine rights. There is no data concerning the number of direct informal workers in small and medium coal mines; nor about the impact of the lower coal prices and demand are having in those labor markets. prices and demand are having in those labor markets.
- The government has adopted wide reaching policies to diversify the economy and to create jobs in non- extractive industries. Although those policies are not specifically directed to the mitigation of the impact of climate policies on the job markets of the coal and oil industries, they could contribute to that purpose¹⁸.
- The labor markets of the Oil & Gas industry which are largely integrated by unionized workers, and the workers associated to its commercial chain, have not yet felt the impact of climate policies.

Findings in relation to Coal and Oil & Gas: trade and economics

¹⁸ The National Development Plan (Law 1955 of 2019) proposes the creation of 1,6 million new jobs, and the reduction of unemployment to 7,9%.

- Coal production in Colombia declined from 90.5 million tons in 2017 to 65 million in 2020. This mainly as a result of lower international demand and prices¹⁹. This decline would have a significant impact on the government finances as the value of the exports during 2020 was USD 1.300 million lower than in 2019 when the industry transferred to the government nearly USD 600 million in royalties. Coal royalties represents about 80% of the royalties transferred by the entire mining sector to the national government.
- While it is expected that the dramatic decline in the large thermal coal mining operations will have a severe impact on the government finances and labor, the impacts of the sustained and gradual decline in the prices of coking and metallurgical coal from small and medium mines have been less dramatic.
- National oil and reserves²⁰, national production²¹ and international oil prices have declined during the last decade. However, in general, global demand and consumption continues to grow, and the government expects that the royalties from the oil industry will continue to be a significant source of public revenue²². Exploration efforts are intense.
- The migration from fossil fuels to renewable sources of energy has not yet impacted the labor markets and jobs associated to the oil and gas sectors. Although the national union of oil workers (USO) sees this as a potential threat and has proposed alternatives (transform oil companies to renewable energy companies and re-training of workers), neither the government nor the oil companies have taken firm steps in that direction.
- While the potential impacts and externalities of the de-carbonization of the economy on the labor markets have received little attention, the activism, the social controversies and the legal disputes have concentrated on the potential environmental impacts of the extractive industries (mainly fracking).

Energy findings

- The Colombian NDC focusses on the increase of energy efficiency and on the gradual migration (including the use of natural gas) to cleaner and renewable sources of energy in the electricity and transportation sectors.
- Nearly 30% of the electricity of the country is generated with coal. The migration to renewable sources of energy is having an impact on labor markets, and on the jobs associated to the thermal coal mining sector.
- The potential impacts of the energy transition on job markets and employment have received very limited attention by the government, and only scarce attention by social organizations. This issue has been brought up only in limited academic milieu, is not yet of general public interest, and is not part of the public debate.

¹⁹ Currently the price of coal is USD 34/ton. This is nearly 30% of the Price two years ago (USD 116/ton)

²⁰ National oil reserves in year 2020 are equivalent to 56% of the reserve of 1996. The country's current reserves would last 6.3 years.

²¹ By July 2020 the production of oil declined by 9,81% with respect to the same period of year 2019; and that of natural gas declined by 10,5%.

²² About USD 4 billion/year

- The government has yet not designed strategies directly focused to the mitigation of the potential impacts of the energy transition on labor markets and jobs.

Impacted stakeholders

- The social agents that in the short term could be affected by a transition to a low carbon economy are:
 - Direct workers of large, medium and small thermal coal mines, and those associated with the coal chain.
 - Municipalities and communities in the thermal coal producing regions that would see increases in unemployment, and a decreases in royalties, taxes and public investments.
 - Social organizations and local private companies that provide goods and services to the thermal coal companies.
 - Rural informal workers whose income depend on the expansion of agriculture and cattle ranching over natural forests and ecosystems.
 - Workers and communities that have traditionally inhabited the high mountain *paramo* ecosystems, and those that inhabit the 2.5 million hectares that the government seeks to include in the National System of Protected Areas.
- The social agents that the medium to long term could be affected in by a transition to a low carbon economy are:
 - Direct workers of the oil and gas sectors, and those associated with the oil and gas chain.
 - Municipalities and communities in the oil and gas producing regions that would see increases in unemployment, and a decreases in royalties, taxes and public investments.
 - Social organizations and local private companies that provide goods and services to the oil and gas companies.

Barriers

The following barriers would have to be fallen in order to secure a Just Transition:

- **Information and participation:**
 - The limited governmental and social awareness in relation to the potential social impacts of the decarbonization of the economy.
 - The lack of information and awareness of the rural communities and social groups to be directly impacted the implementation of Colombia's NDC and by the de-carbonization of the economy. Their active and effective participation on the

design of a Just Transition strategy would be a necessary condition for its viability.

- The lack of active participation of the private sector on the design process of a Just Transition strategy.
- **Financial and economic:**
 - The cost associated to the implementation of the Just Transition strategy to be devised and implemented by the Ministry of Labor by year 2023, which may include the retraining of the workers of the coal mines, the diversification of regional economics etc.
 - The cost, technological risks, and logistic challenges of developing sustainable and competitive economic alternatives in forested areas and colonization areas.
 - The insufficiency of economic incentives to invest in alternative economic projects in those regions directly affected by the implementation of the climate strategies and policies.
- **Market:**
 - The lack in the short term of sufficient new openings for the displaced labor force of coal mines.
 - The lack of local demand in regions for the goods and services traditionally provided by local communities and enterprises to coal mines.
 - Poor market integration of local enterprises in remote rural areas and colonization fronts with regional, national and international markets.
- **Political/ideological:**
 - Opposition to the use of public resources to finance a Just Transition strategy and its compensation alternatives.
 - Opposition to the promotion of sustainable economic activities by local communities in protected areas.
 - Opposition to finance the costs of a Just Transition for rural communities that have been involved in illicit activities (deforestation, illegal mining and timber harvesting, etc.).

International cooperation

There are multilateral²³ and bilateral²⁴ cooperation projects directed to support the Colombian efforts to attain the ambitions of its Nationally Determined Contribution. Multilateral agencies

²³ World Bank, Inter-American Development Bank, *Corporación Andina de Fomento*, Global Environmental Facility, United Nations Environmental Program.

²⁴ Mainly the United States, Germany, Norway, the European Union; The United Kingdom.

have placed more emphasis on the strengthening of the national capacities to design and implement mitigation and adaptation strategies. The bilateral cooperation has been more oriented to the development of projects at the regional level with local communities.

Recommendations

The following recommendations are the result of the author's analysis of the policy documents and the comments and recommendations of the interviewed stakeholders²⁵.

General recommendations

- A Just Transition in the context of Colombia should take into account the following main facts: i.) most of the national emissions come from the AFOLU sector, mainly from deforestation and ecosystem degradation. ii.) most of the workers involved in deforestation and forest degradation are informal workers, members of poor and marginalized communities, and, in some cases, related to illegal activities (illegal mining, illicit drugs, and illicit timber extraction); iii.) the restrictions imposed to the use of the natural resources in the areas to be declared as national parks and *páramos* will disproportionately affect the economic rights of poor communities –often ethnic groups and campesino. iv.) the thermal coal mining regions where massive layoffs are taking place are poor and highly dependent on the taxes and royalties generated by the coal mining industry, and on the direct formal and indirect jobs that the industry generates.
- Just Transition actions in Colombia should mainly focus on those communities whose traditional territories would be declared natural reserves and on the coal mining regions where massive layoffs are taking place.
- Alternative sources of income in colonization regions, the diversification of the economies of coal producing regions, and the training of laid off workers in the coal producing regions should be of high priority.
- The government should promote investigations to quantify the potential fiscal impact of a transition to a low carbon economy, and its consequences for labor markets, jobs, the economies of the coal and oil producing regions, and the prices of public transportation for low and medium income urban families.
- The governmental strategies to create jobs and to diversify the Colombian economy should explicitly deal with the need to secure a Just Transition.

²⁵ Union of Workers of the Oil Industry (USO); in Spanish: Unión Sindical Obrera de la Industrial del Petróleo. Colombian Petroleum Association (ACP); in Spanish: Asociación Colombiana del Petróleo. Foundation for Higher Education and Development (FEDESARROLLO); in Spanish: Fundación para la Educación Superior y el Desarrollo. National Federation of Oil Palm Producers (FEDEPALMA); in Spanish: Federación Nacional de Cultivadores de Palma de Aceite. National Association of Public Services and Communication Companies (ANDESCO); in Spanish: Asociación Nacional de Empresas de Servicios Públicos y Comunicaciones. Association for Tomorrow's Future (ASOFUTURO); in Spanish: Asociación para el Futuro de Mañana. National Federation of Coal and Coking Coal Producers (FENALCARBON); in Spanish: Federación Nacional de Productores de Carbón. Center of Socioeconomic and Regional Studies (CESORE); in Spanish: Centro de Estudios Socioeconómicos y Regionales. Fund for the Development of Indigenous Peoples of Latin America and the Caribbean (FILAC); in Spanish: Fondo para el Desarrollo de los Pueblos Indígenas de América Latina y el Caribe.

- The climate Monitoring, Reporting and Verification system (MRV) in place should be strengthened to inform on the impacts of climate policies on social welfare and jobs. Technical assistance may be required for the standardization of methodologies for the collection of data and indicators.
- The engagement of the communities, workers companies, local governments and other stakeholders potentially affected by the implementation the climate policies and by the attainment of international climate commitments (NDC) is a necessary condition to secure the viability of the Just Transitions strategies that the government eventually adopts. To secure the that engagement, the government should:
- Investigate the potential impacts of the climate policies and international commitments on labor markets, social welfare and regional economies
- Disseminate and publicly present information related to the potential impacts of the climate policies and international commitments on labor markets, social welfare and regional economies.
- Identify, by region, the private, social and public stakeholders to be directly affected by the implementation of the climate policies and international commitments.
- Create formal instances of consultation at the regional and at the national levels to propose and discuss the identification, design and monitoring of the options and actions to be included in the Just Transition Strategy to be adopted by the government.
- Strengthen the MRV system (develop information management systems and indicators), to monitor the development and performance of the Just Transition Strategy adopted by the government.
- Publicly report the findings of the MRV in relation to the progress of the Just Transition Strategy and, through the instances for stakeholder consultation, disseminate the results and propose adjustments.

Recommendations by sector

Oil & Gas

- The government should promote investigations to quantify the potential socioeconomic impacts of declining Oil & Gas production for the different oil producing regions of the country. In particular, it should evaluate the potential impacts on unemployment rates, informality, family income, and migrations.
- Based on the results of the investigations indicated above, the government should design regionally differentiated strategies to secure Just Transition processes that recognize local economic and social conditions. In particular, those strategies should include the retraining of workers, the relocation of workers, the promotion of alternative competitive economic activities and local enterprises,
- The national government should facilitate regional dialogs with the oil companies and with the local governments and communities to discuss the strategies and options that in the medium to long term could maintain regional economic prosperity and lead to a Just

Transition to post-oil regional economies. To this end, regional formal and periodic consultation mechanisms and processes should be established.

- Given the declining oil reserves and prices, and the foreseeable lesser contribution of royalties and taxes to local public finances and jobs, the government must make a significant effort to diversify the economies of oil producing regions. To this end, it should create favorable conditions to promote investments –national and international- in new sectors. In particular, it should identify and remove the legal and other barriers that limit the flow of private investments to those regions in alternative sectors (agriculture, manufacture, tourism etc.), and create positive economic incentives.

Coal

- The government should promptly promote investigations to quantify the current and potential impact of the lower coal production and prices on regional and municipal public finances, unemployment rates, informality, family income, social welfare (health, education, nutrition etc.) security and migrations. It should also evaluate the potential impact on the capacity of regional and municipal governments to provide public services and goods: education, health, infrastructure, recreation, technical assistance to farmers, security, etc.
- Based on the results of the investigations indicated above, the government should design regionally differentiated strategies to secure Just Transition processes that recognize local economic and social conditions. Those strategies may include the re-training of workers, the relocation of workers, the promotion of alternative competitive economic activities and of local enterprises.
- The national government should facilitate regional dialogs with the coal companies, with workers and with the local governments and communities to discuss the strategies and options that in the short term could alleviate and control ongoing impacts on labor markets and social wellbeing. To this end, regional formal and periodic consultation mechanisms and processes should be established.
- Given the ongoing and rapidly declining coal production and prices, and the already diminished contribution of coal royalties and taxes to public finances, the government must undertake steadfast actions to diversify the economy and to create favorable conditions to promote investments –national and international- in new sectors in the already affected regions, and in those soon to be affected. To this end, it should create favorable conditions to promote investments –national and international- in new sectors. In particular, it should identify and remove those legal barriers that limit the flow of private investments to those regions in alternative sectors (agriculture, manufacture, tourism etc.) and create positive economic incentives.

AFOLU

- Governmental conservation strategies should simultaneously seek the protection of the integrity of strategic ecosystems and the protection of the territorial and economic rights of the communities. To this end, long term research programs directed to the development of appropriate agricultural and other technologies and practices for the sustainable use of natural resources should be conducted.

- Governmental conservation strategies that impose restrictions on the use of natural resources over the traditional territories of local communities, must take into consideration the potential consequences for their welfare, economies and territorial rights. They should include appropriate measures to control risks and to compensate social impacts. In particular, those measures should assure that the restrictions imposed are fully justifiable, and that the communities affected are fairly compensated. Especial attention should be given to secure the territorial rights of ethnic groups.
- The government should develop strategies directly focused to the alleviation of poverty in colonization areas and in the territories of indigenous communities whose livelihoods critically depend on the use of the resources of natural ecosystems. Those strategies should focus on education, training, health, food security and connectivity; and on the promotion of sustainable and culturally appropriate economic alternatives on their traditional territories.

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ANNEX

This annex presets the opinions and reactions of a selected group of stakeholders to the Stage 1 report. These opinions were taken into account for the completion of this Stage 2 report, mainly to draft the findings and recommendations sections.

Union of Workers of the Oil Industry (USO). Mr. Gregorio Mejia, President of the Union's chapter of Bogotá

The Union is aware of the challenges posed by the energy transition in Colombia as it could threaten the job stability of the industry's workers. In consequence, it has proposed the migration of the national oil company (ECOPETROL), towards the business of renewable energies. In line with this objective, the Union has insisted in the need to re-train the company's workers and employees for the energy transition. The Union considers that the government of Colombia and ECOPETROL have not taken steps to meet the challenges and risks posed by the energy transition, and that have not devised policies to secure a just labor transition. Although ECOPETROL has developed some small scale solar generation facilities, the Union considers that the company does not regard a rapid migration to renewable sources of energy as a priority, and that is not truly committed to this objective. The Union attributes the lack of action by the government and by ECOPETROL to their perception that the demand for oil will decline slowly and over an extended period of time, and that in the short and

medium term the industry and its workers will not face mayor challenges. The Union is of the opinion that the left leaning political parties have been more aware and proactive in relation to the need to secure a Just Transition.

Colombia Petroleum Association (ACP). Mr. Francisco Lloreda, President

The Association is aware of the labor related challenges posed by the energy transition. Although the oil industry is not labor intensive, an accelerated and poorly planned transition could have significant impacts on jobs and on the welfare of local communities in the oil producing regions. This would be more evident in those regions where the industry has a significant participation on the demand for local services and goods, and in the generation of local public revenue (taxes and royalties). The Association has not devised and proposed concrete actions to face the threats of the energy transition to labor markets and jobs. However, it considers that the diversification of the local economies would be key. It also considers that the government has not rigorously delved into the potential economic and social implications and consequences of the energy transition, and that is not taking steps to secure a Just Transition. A rigorous and realistic analysis by the government of the upcoming energy transition is due.

The Association notices that the consequences of the transition will be different for the production of coal, gas, and oil; and that gas, being a less polluting source of energy, could play an important role in the transition.

Foundation for Higher Education and Development (FEDESARROLLO), Dr. Jairo Núñez, Senior Researcher on social policies and labor markets.

The negative impact of the demise of the coal industry in the producing regions on labor markets, jobs and social welfare would be “gargantuan”. A Just Transition would be of the outmost importance. The case of oil would be less severe as it is expected that the transition in markets and the decline of prices would be less accelerated.

The national Government is largely unaware of the challenges posed by the energy transition in the coal producing regions, and has not adopted relevant, specific and comprehensive policies to mitigate its impacts on labor markets, jobs and local finances. This, in spite of the fact that there is already evidence that some coal mining operations are decreasing production, or closing. Amongst the reasons for the lack of opportune action by the government may be the unforeseen and abrupt drop in the international coal prices and demand during 2020.

Although re-training of the displaced workers is a traditional option that should be included in the portfolio of alternatives, it may not be sufficient given the large scale of the challenge: the economy of entire coal-dependent regions may have to be transformed. New economic options may have to be identified, and current options may have to be strengthened. To meet those challenges, the government would have to create conditions to favor and increase in private investments: public infrastructure, human capacities, security, rule of law, etc.

National Federation of Oil Palm Producers (FEDEPALMA), Mr. Andrés Felipe García, Director of Planning and Sustainable Development.

The production and the expansion of the palm oil agroindustry is certainly an option to increase the supply of a key renewable source of energy for the transport sector: biodiesel. The growth of this industry would certainly create new jobs in rural areas, including in some oil and coal producing regions that could be affected by the energy transition. Thus, its expansion could play a role in a Just Transition as it would create new jobs in a cleaner industry in those regions. However, the government is not including the palm oil sector in their plans for an energy transition, let alone in plans for a Just Transition.

The expansion of this sector largely depends on two main conditions: the growth of international demand, mainly the European market, and on the national regulations related to the mixtures (concentration) of biodiesel with the conventional Diesel fuel. Neither the growth of the European market, nor the regulated increase in the concentration of biodiesel in conventional fuels seem plausible in the short term. Regulations of the European Union do not allow the emission reductions originated from the use of palm oil-based biodiesel to be accounted, and its participation in that market has decreased in relation to that of other oils (soy, sunflower, canola). In addition, the national government has not taken firm steps to increase the mix of biodiesel with conventional Diesel fuel. This may be a consequence of the opposition of some car manufactures who argue that the increase in the concentration of biodiesel would affect the performance of their vehicles.

National Association of Public Service and Communication Companies (ANDESCO); Mr. Mauricio López, Technical Vice-president.

This association includes companies that generate electricity with renewable (hydro, solar and wind) and with fossil sources (coal, gas and liquid fossil fuels) of energy. Nearly 70% of the energy generated in Colombia is based on renewable sources -mainly hydro. This association and its members are fully aware of the imminent changes of the electricity markets driven by national and international demands. In consequence, most of them are already leaving behind their traditional operations based on coal and liquid fuels, and migrating to natural gas and renewable sources of energy. This migration is facilitated by the fact that most of those are multinational companies with experience in renewable energies, mainly solar and wind, in Europe.

Although the energy transition in the electricity sector is currently quite dynamic, the association has not perceived an impact on labor markets. The transition is not generating labor related concerns to the government and to the workers and unions of the energy sector²⁶.

The association and its members consider that the switch from coal and liquid fuels to natural gas is a key part of the energy transition, that it would not have a major impact on the labor markets of the electricity sector, and that the jobs eventually lost would be replaced in the new facilities. However, they do realize that the labor markets of the coal sector could be severely impacted and that the government (local and national) have to re-train and facilitate the relocation of the labor force of the coal industry. The Association does not see the government working on this front.

Association for tomorrow's future (ASOFUTURO); Eder Ledesma, President

²⁶ Union of Energy Workers (SINTRAENERCOL) and the Union of Professional Workers of Public Utilities' Companies.

This organization is formed by 200 families headed by fisherwomen of afro-Colombian descent on the Pacific region. According to Mr. Ledesma, its President, the communities of this organization are highly aware of the problem of Climate Change and of its implications. They have perceived its consequences for their wellbeing and livelihoods. The deterioration of forest mangroves, the growing climatic unpredictability and variability, and the increasing frequency of extreme climatic events have resulted in lower fish captures and family income. The organization is aware that the conservation of mangroves would be part of a low carbon economy, and that would also be of key importance to secure the long term productivity of their fisheries. However, the forest mangroves are the main source of firewood and construction materials for the local communities. The governmental enforcement of conservation actions would leave natural gas as the only energy option for cooking, and would limit their access to locally available construction materials. These would be costly for these generally poor or extremely poor communities. According to Mr. Ledesma, the conservation intentions of the government have not been effective mainly because they do not recognize the needs of local communities, and the potential impact on their wellbeing. Thus, current patterns of mangrove overexploitation prevail.

National Federation of Coal and Coking Coal Producers (FENALCARBON); Carlos Cante, President

Colombia is an important coal exporter of thermal and metallurgic coal, and has reserves that could last for centuries. There are in the country two main types of coal mines and producers: thermal coal mines located in the northern Caribbean coastal plain²⁷, and metallurgic and thermal coal mines located in the Andean region²⁸. While the mines in the Caribbean region are large operations mainly own by multinational companies, the mines in the Andean region are small and medium operations mainly owned by local companies. The presence of small informal mines in the Andean region is significant. Most of the thermal coal of the Caribbean is exported while most of the thermal coal produced in the Andean region is consumed in Colombia by thermal power plants, and by cement, paper, and steel industries. Most of the metallurgic coal is exported. The royalties and taxes paid by those operations are often crucial for governmental finances –local, regional and national- and public social investment. The direct jobs that they generate and the goods and services they demand play a very significant role in local economies.

The climate crisis and the energy transition have created unprecedented challenges for coal mining operations of all sizes: decreased demand and lowering prices. Not all of those operations are being able to fully overcome those changes. Large operations in the Caribbean region have lower their production, lay off workers, or are planning closure. Besides, the commitments of the Country's NDCs related to the conservation of the highland *páramo* ecosystems and the consequent restrictions to develop coal mining operations in those areas is leading to their closing and the layoff of workers.

The national environmental and energy policies have not taken into account the impacts that the energy transition is already having on local economies and jobs, and the government has not consulted with local authorities and communities about possible alternatives to mitigate the ongoing and foreseeable impacts. According to this association, the climate problem is not a consequence of the production of coal, but the technologies used to combust it to generate electricity or heat.

²⁷ Departments of Guajira and Cesar.

²⁸ Departments of Boyacá, Santander, Norte de Santander, Antioquia and Córdoba.

Center of Socioeconomic and regional Studies (CESORE); Fernando Herrera, Director

This local think-tank of the coal-producing region in the Caribbean coast is conducting series of studies to explore the potential social and economic impacts of the current decline and eventual disappearance of coal mining in that region. Those investigations also seek to propose policy alternatives to prevent and mitigate the foreseen impacts. The closing of mining operations and the continuous decline of coal production in that region will have severe social and economic consequences at the local and regional levels as most public investments depend on the taxes and royalties generated by the de coal industry. The losses of formal and high-quality direct jobs and indirect jobs would exacerbate the situation.

Although the timing and the rhythm of the decline and the eventual disappearance of coal mining in the Caribbean region are difficult to predict, the worst scenario would be to be unprepared. Thus, this private organization is working on the design of policy options directed to the diversification and strengthening of alternative economic options and generation of public revenue.

Fund for the Development of Indigenous Peoples of Latin America and the Caribbean (FILAC); Gabriel Muyui Jacanamejoy²⁹, President.

The indigenous communities in Colombia are well aware of the climate crisis as they have suffered its consequences. They are also cognizant of the role of the conservation of the forested areas in their traditional territories for the mitigation and adaptation to climate change.

The ineffectiveness of the proposed measures to deal with the climate crises and with its consequences is rooted in the lack of coherence between the public declarations and regulations –national and multilateral- and the nature of the actual actions at the local level. While national and international agreements and policies declare the intention to mitigate emissions, the government promotes investments and highly polluting activities at the local level. In the end, conservation and environmental objectives are overwhelmed by financial interests

To secure balanced and equitable decisions, wide and inclusive social, political, and cultural dialogs must be opened and maintained at the national and the local levels. This could contribute to secure the coherence and complementarity between different policies: energy, conservation, cultural, mining, etc. Otherwise, the groups or sectors with more influence would continue to impose their agendas. Also, ethnic communities, often living in remote areas, must be informed and timely consulted on matters of their concern.

Indigenous communities are well aware of the importance of the conservation of their forests and ecosystems for climate change mitigation, and place great cultural value on biodiversity conservation. However, they feel that governmental conservation initiatives over their territories (national parks, etc.) promoted to mitigate climate change and to conserve biodiversity, could limit their autonomy and governance over their territories. The right to the sustainable use of the resources of their traditional forested territories which is needed to improve their living conditions could be limited by those governmental conservation initiatives.

²⁹ Former Senator in the Colombian Congress in representation of the indigenous communities, former vice-president of the National Indigenous Organization of Colombia (ONIC), and advisor the former Colombian President (Mr. Juan Manuel Santos). He is FILAC's new President.

A sustained dialog between government, private agents, and indigenous communities would help a Just Transition.