



# Solutions for Hope Assessment: CAPAZ Tantalum Project in Colombia

SUMMARY REPORT

August 2017

## Table of Contents

Acronyms.....	3
Background.....	4
Analysis and Conclusions .....	4
Annexes .....	5
1. Coltan in Colombia: Overview.....	6
2. Timeline .....	7
3. Potential for coltan exploitation in Colombia .....	9
4. Relevant legal framework .....	11
5. Relevant actors and institutions. ....	13
References.....	15



## Acronyms

ACMV	Autodefensas Campesinas de Meta y Vichada / Self-Defense Forces of Meta and Vichada
ANM	National Mining Agency
ANLA	National Authority of Environmental Licenses
ARM	Alliance for Responsible Mining
ASOCSIAM	Asociación de Cabildos Indígenas Sikuanis Amoruas / Sikuanis Amoruas Indigenous Reserves Association
AUC	Armed Self-Defense Forces of Colombia
AVX	AVX Corporation
BACRIM	Criminal Gangs
COP	Colombian Peso
ELN	Ejército de Liberación Nacional / National Liberation Army
ERPAC	Ejército Revolucionario Popular Antisubversivo de Colombia / Anti-Subversive Popular Revolutionary Army of Colombia
FARC	Fuerzas Armadas Revolucionarias de Colombia / Colombian Armed Revolutionary Forces
GEGEMA	Group of Study on Economic Geology and Applied Mineralogy
NGO	Non Governmental Organization
ORPIBO	Organización Regional de los Pueblos Indígenas del Bajo Orinoco / Regional Organization of the Indigenous Peoples of the Orinoco
SIMCO	Sistema de Información Minero Colombiano / Colombian Mining Information System
UNODC	United Nations Office on Drugs and Crime
UPME	Unidad de Planeación Minero Energética / Mining and Energy Planning Unit
USD	United States Dollar

## Background

RESOLVE and the Alliance for Responsible Mining (ARM) conducted a Solutions for Hope feasibility study for a proposed “closed pipe” system for sourcing conflict-free material from an artisanal tantalum mine site in Colombia<sup>1</sup>. A first evaluation took place in early 2015 with a team represented by Resolve, AVX, and ARM who met with various Colombian governmental officials. Based on the initial findings, an in-depth effort was made in late 2016/early 2017 to better understand the current challenges and opportunities to legally source tantalum from Colombia.

This report includes the results of a desk review of the political, normative and social context of Colombia, Vichada department, and Puerto Carreño municipality in relation to tantalum and niobium extraction, as well as the results of the meetings held with relevant national authorities and other stakeholders that took place between October 4<sup>th</sup> and 7<sup>th</sup>, 2016.

## Analysis and Conclusions

### *History*

'Coltan' is an abbreviation of columbite-tantalite, a mixture of two mineral ores, and is the common name for these ores in eastern Congo (Nest, 2011). These minerals, despite having a low profile and being relatively unknown to the public, are at the heart of many modern technologies, allowing tablets, smartphones and computers to be increasingly smaller and more efficient. Worldwide, according to 2014 data of the US Geological Survey, Brazil and Canada were the leading producers of niobium mineral concentrates, while Democratic Republic of Congo and Rwanda were the leading producers of tantalum mineral concentrates (Papp, 2014).

Around 2009, the existence of coltan reserves in eastern Colombia, in the departments of Guainía and Vichada, became publicly known. In the following three years, approximately 30 titles were granted for exploration and development of concessions containing coltan. However, between 2012 and 2016, amid concerns about exploitation of Indigenous peoples for labor, and possible links to armed groups and illegal networks, the government suspended the issuance of any further titles until further geological studies are completed.

### *Legal Status and Conclusion*

Given questions around legal status and the suspension of mining titles for artisanal tantalum in Strategic Mining Areas and the Forest Protection Reserve, current conditions are not favorable for companies to pursue coltan sourcing from Colombia.

The absence of a clear legal framework that regulates the extraction and trade of Colombian coltan is one of the main problems hindering the development of this economic activity.

The unclear or lacking framework has also created an opening for trade of material of ambiguous legality. Research indicates that extraction and trade of Colombian coltan (especially under the label of “black sands”) that does not strictly meet legal requirements – including from the sites under review – has been

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<sup>1</sup> Colombia’s political geography comprises thirty-two departments; departments are the main administrative jurisdiction in the country. Each department has a Governor and a Department Assembly or Council; Departments are formed by a grouping of municipalities. Municipal government is headed by a mayor and administered by a Municipal Council.

possible due to confusion about the laws and how they should be enforced. Export records from those concessions granted by the government also indicate significant confusion about the legal procedures under which coltan can be exported.

### *Going Forward*

There is a clear need to design enabling regulatory frameworks, in a formal and supervised manner, to prevent connections between the exploitation of this natural resource and armed conflict (Cruz, 2012).

Although the Colombian government is aware of informal activity around coltan extraction and trade, coltan is not a priority for regulatory reform. The main reason for this inconsistency seems to be the lack of quality geological data that would allow for informed decisions. Given the complexity of the areas in which coltan is found – distance from the capital city, difficult logistics, minimal state presence, and an important environmental protection value (Orinoco/Amazon basin) – the government prefers to abstain from decision making until more is known. It appears that this data is being gathered by the geological survey, but it is unlikely to be available for at least one year, if not more.

This dialogue with several key government entities helps to bring their attention to coltan mining, by showing that there is an important demand. It is important to note that the complex and uncertain current situation could change in the next couple of years, and in mid- to long-term, a coltan supply-chain from community-run mines may be possible. It is important to monitor the situation, and to reconsider the involvement once the context clears up. The characterization of Guainía department that is being performed by the Ministry of Mines to define potential for formalization should be available late 2017, and should give interesting insights on the viability of small-scale coltan mining in Colombia. AVX Corporation, as one of the many possible stakeholders in responsibly sourcing minerals from Colombia has said that it “remains engaged and actively seeking opportunities to work with relevant authorities to overcome the challenges presented in this report.”

## **Annexes**

The following annexes provide more detail to support the analyses and conclusions. They include an overview of the Colombian situation regarding coltan extraction and an analysis of the local context, followed by a chronological review of facts in the recent evolution of coltan as a potential source of wealth in Colombia, and the attempts that the government has made to regulate its extraction and export since 2009. Other resources include the legal framework that regulate this industry and the actors and institutions whose actions can affect the sector.

## 1. Coltan in Colombia: Overview

'Coltan' is an abbreviation of columbite-tantalite, a mixture of two mineral ores, and is the common name for these ores in eastern Congo (Nest, 2011). These minerals, despite having a low profile and being relatively unknown to the public, are at the heart of many modern technologies, allowing tablets, smartphones and computers to be increasingly smaller and more efficient. Worldwide, according to 2014 data of the US Geological Survey, Brazil and Canada were the leading producers of niobium mineral concentrates, while Democratic Republic of Congo and Rwanda were the leading producers of tantalum mineral concentrates (Papp, 2014).

Around 2009, the existence of coltan reserves in Colombia became publicly known. The mineral was found in the east of the country, in the departments of Guainía and Vichada, near the Venezuelan-Brazilian border. However, according to media reports, strong illegal networks were already trading these minerals and using the Indigenous population to extract the so-called “black sands” which contain unprocessed coltan (El Espectador 2010). The Indigenous people use a simple “barequeo”<sup>2</sup> (panning) technique, a form of extraction that involves manual movement of the sediments and the use of a pan to separate heavy particles through gravity. This business has allegedly become part of the financial structure of armed illegal groups like the *Fuerzas Armadas Revolucionarias de Colombia* (FARC) and *Ejército de Liberación Nacional* (ELN), which transport coltan designated as black sands – apparently also extracted in Venezuela (Ramírez, 2016) – out of the country across the Brazilian border (Revista Semana, 2009).

According to media reports, illegal groups have heavily exploited Indigenous labor through low wages while receiving large cash infusions from the sales. In 2012, those extracting coltan in clandestine mining sites, mainly in river basins through barequeo, received only 0.06% of the international market price for the coltan produced (Indigenous miners received COP \$9,000 or around USD \$3 at current exchange rates per kilo of unprocessed sand that was sold in the international market at an average price of COP \$162,000 or about USD \$56) (Quintero, 2012).



“Barrequero” (panner). Photo credits: [eluniversal.com.co](http://eluniversal.com.co)

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<sup>2</sup> Coltan is a highly resistant mineral that, when found in water streams mixed with other elements weaker to erosion such as quartz or mica, remains intact concentrating in river basins in a process that facilitates its extraction through “barequeo” or panning due to its density.

Between 2009 and 2012, according to a report by national newspaper *El Tiempo* (Quintero, 2012), the country's authorities seized 26 tons of coltan lacking proper documentation. Even as recently as March 23 2016, seizures of this mineral continue to be reported in amounts exceeding 3 tons, believed to be owned by the FARC (AFP, 2016).

The situation in the coltan-rich zones is even more complex because the mineral reserves often coincide with Indigenous and/or forest reservations, in which unregulated mining activities are threatening fragile environments and cultures.

Finally, it is important to consider the peace agreement signed by the national government with the FARC, the largest and oldest leftist guerrilla group in the country. The agreement, although rejected in the referendum that took place on October 2, 2016, was reviewed and has been approved by the Congress to be implemented. The demobilization of the FARC and the eventual post-conflict scenario, despite the remaining armed illegal actors, can contribute to new opportunities for responsible sourcing of conflict-free minerals or deepen the conflict associated to the sector as emerging criminal groups fill in governance vacuums in these isolated regions.

## 2. Timeline

### 2009 – The potential of Colombia as a country with coltan reserves becomes publicly known.

The Mining and Energy Planning Unit<sup>3</sup> National Development Plan 2010-2018 dismissed the enthusiasm that the mineral created, stating that “the results of the exploration activities performed in the eighties in Vichada indicated low presence of mineral, and only in secondary deposits” (UPME, 2013, p. 48); this indicated that coltan was not a priority.

### 2012 – Following directives of the National Development Plan 2014, coltan was defined as a Strategic Mineral and the zones where it is found were also declared Strategic Mining Areas<sup>4</sup>.

The measure was intended to facilitate the fight against the illegal exploitation that was starting to emerge in the sector, and to give the government the opportunity to measure the real potential production and value of the minerals through geological studies. While this led to the suspension of new mining titles, it did maintain the validity of 30 titles that had been previously granted.

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<sup>3</sup> (UPME by its Spanish acronym)

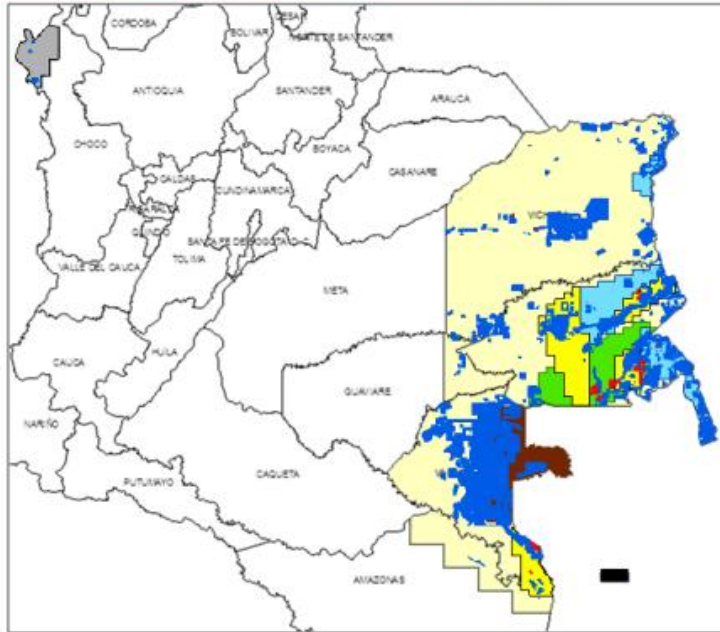
<sup>4</sup> Resolution 045 of 2012 of the Ministry of Mines and Energy.

**CHOCÓ AND EASTERN ZONES  
STRATEGIC MINING AREAS  
Resolution 0045/2012**

**Total Area:  
22,3 million hectares  
(15,4% of the national territory)**

**MINING POTENTIAL**

- Uranium
- Coltan
- Gold
- Iron
- Platinum



Mining Cadastre updated to June 2012

Adapted from National Mining Agency (2012)

2014 – All pending applications for coltan mining titles are denied.

At the time of the decision, there were 750 pending concession applications for niobium, tantalum, vanadium and zirconium, most of them issued by individuals, and around 80 by companies. The then-Minister of Mines, Amylkar Acosta, declared that there were no legal coltan concessions in Colombian territory, and that records of the mineral being exported through legal channels were non-existent. He further announced that tons of these minerals were being taken out of the country annually, all of them product of illegal mining (Celedon, 2014). These affirmations were far from reality, since actually around 30 titles of coltan were valid in the country by the time and only in that year; 54 tons were exported from the country, according to the UPME records (2016). However, this declaration forced the government to suspend all pending applications in order to control the situation.

2015 – Strategic Mining Areas are temporarily suspended by the Colombian State Council.

The State Council, one of Colombia's high courts<sup>5</sup> temporarily suspended the resolutions of the National Government in which 20 million hectares of the national territory were declared Strategic Mining Areas.<sup>6</sup> The decision was made in response to the lawsuit filed by several community councils led by the Colombian NGO

<sup>5</sup> Along with the Constitutional Court and the Supreme Court of Justice

<sup>6</sup> Rthrough Sentence T-677/2015.



*Tierra Digna*<sup>7</sup>, who accused the resolutions of failing to comply with the prior consultation process that should have been applied. The State Council considered it a valid claim, observing that, although the defined areas were free of mining rights, these areas were occupied by ethnic communities whose right of being consulted in a prior and informed manner could not be ignored (López, 2014)<sup>8</sup>.

### 2016 – Strategic Mining Areas are definitely suspended.

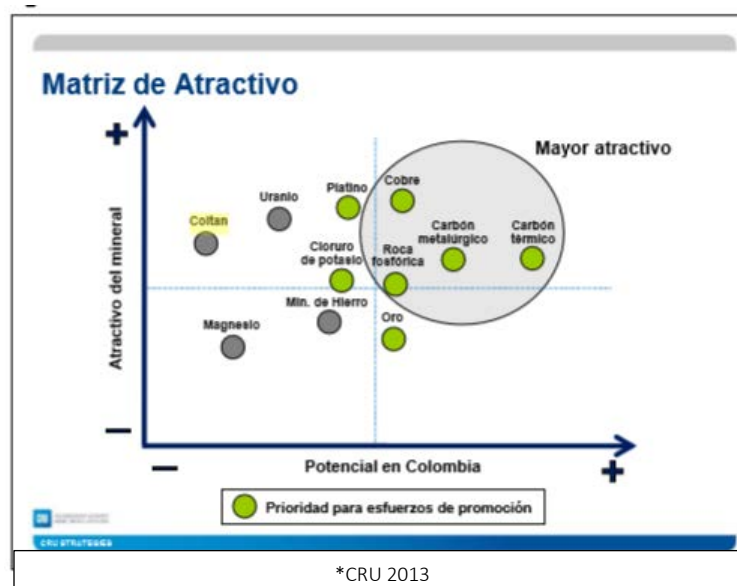
The National Mining Agency (ANM) appealed the State Council’s decision in a request to the Constitutional Court. The Constitutional Court upheld the earlier decision and the resolutions that defined the Strategic Mining Areas were declared permanently suspended.

Although it seemed that the Sentence of the Court opened the door to reinstate regular application for title acquisition in the former Strategic Areas, during a meeting on October 7, 2016 the representative of the National Mining Agency clarified that in fact the areas are now frozen. They are still inscribed as Strategic Areas but without the possibility of issuing new mining titles without first having the geological studies and consultation with the Indigenous people.

### 3. Potential for coltan exploitation in Colombia

There is limited information regarding coltan resources in Colombia. From a brief description of a bulletin issued by the Colombian Geological Survey in February 2012, the deposits of coltan that have been identified near the Venezuelan border.

In 2013, the Colombian state contracted CRU Consulting to do a market analysis of strategic metals. CRU classified strategic minerals of Colombia in four quadrants based on potential in Colombia and the



<sup>7</sup> [www.tierradigna.org](http://www.tierradigna.org)

attractiveness of the mineral. Coltan was grouped as “Interesting intrinsic appeal of mineral and medium-low potential in Colombia” quadrant.<sup>9</sup>

The global coltan industry is the smallest of all minerals analyzed in terms of value and that factor alone will make the development of the industry less attractive. Given the scarcity of geological information and the lack of experience of Colombia in relation to coltan, CRU evaluated it as having low potential (CRU-2013.P.XVIII). In 2014, CRU concluded that a more thorough assessment of the resources should be made in order to conduct a proper analysis of the potential supply of coltan from Colombia (CRU.2013.P.XV).

There is confusion about the correct procedure to legally extract and export unrefined coltan from Colombia. In the national cadaster, there are currently 30 registered mining titles for “minerals of niobium, tantalum, vanadium, zirconium or its concentrates” (25 valid and 5 terminated), most having been granted between 2008 and 2009<sup>10</sup> –before mining titles for these minerals were suspended in 2012– (SIMCO, 2016), and the Mining and Energy Planning Unit holds export records of these minerals since 2010 (UPME, 2016).

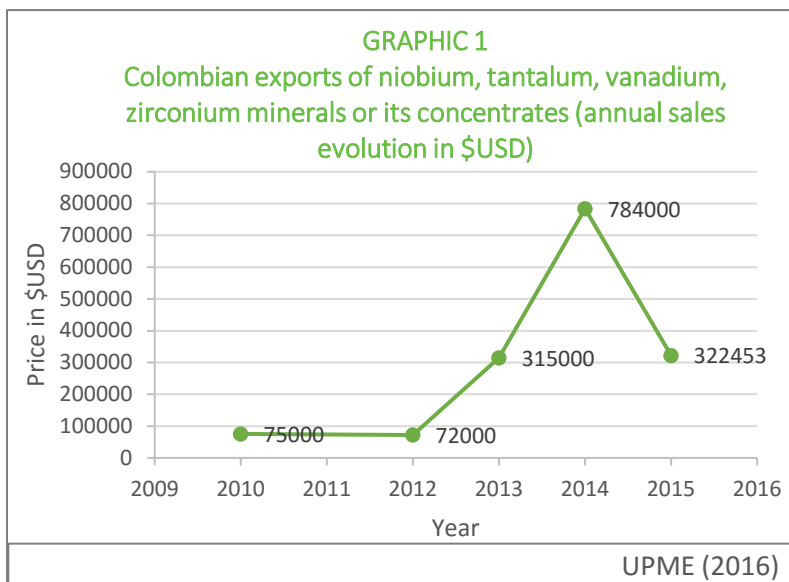
Export records indicate that extraction and trade of Colombian tantalum and niobium has been occurring. However, since according to the Mining Code, coltan is not part of the minerals that can be legally extracted through “barequeo” (panning), only minerals extracted with other techniques in one of the currently valid titles would be considered legal to trade, and only if they comply with all legal obligations, including payment of royalties.

Currently, the issuance of mining titles for coltan is suspended, while the exclusion of coltan from the list of permitted minerals for artisanal extraction methods (panning) pushes it into a grey area regarding legality.

The absence of a clear legal framework that regulates the extraction and trade of Colombian coltan is one of the main problems hindering the development of this industry. Therefore, as recommended by experts, there is a need to design enabling regulatory frameworks that facilitate the development of this industry, in a

**CHART 1**  
Colombian exports of niobium, tantalum, vanadium, zirconium minerals or its concentrates (UPME, 2016)

Year	Price in \$USD	Volume (Kg)
2010	75000	1200
2011	N.D.	N.D.
2012	72000	1463
2013	315000	29777
2014	784000	54320
2015	322453	22591



<sup>9</sup> Along with uranium, platinum, and potassium chloride

<sup>10</sup> All of these titles are located in Guainía department and are owned by the following companies: IBUT NITI S.A.S.; Maple Minerals Exploration And Development INC; MICOLDEX LTDA; and, Colombian Strategical Minerals S.A.

regulated and supervised manner, in order to prevent connections between the exploitation of this natural resource and armed conflict (Cruz, 2012).

## 4. Relevant legal framework

### Mining Code (Law 685/2001)

Article 155 defines “*barequeo*” as the washing of sands by manual means with the aim of separating and extracting precious metals and / or precious and semiprecious stones, banning the method as a legal technique for extracting coltan.

Articles 122 to 133 define Indigenous Mining Zones (Zonas Mineras Indigenas) as territories owned regularly and permanently for an indigenous community, in which any proposal to explore and exploit minerals will be resolved with the participation of representatives of the community that will have priority for the mining authorities to grant them concessions on mineral deposits located in such areas.

According to the 2007-2012 Mining Statistical Yearbook (this is the most recent yearbook available in the Ministry of Mines website), there are 17 Indigenous Mining Zones currently delimited in the country (located in Antioquia, Guainía, Cauca, Chocó, Guajira and Vaupés departments), as well as 19 Black Communities Mining Areas <sup>11</sup> (Ministerio de Minas y Energía, 2014).

According to resolution 18 of June 17, 2014 of the National Mining Agency, one of Indigenous Mining Zones were granted in favor of the *Cachicamo* Indigenous Reserve, southern Puerto Carreño; the resolution states that, tantalum and niobium deposits can be found in the area. Apparently, no Indigenous Mining Zone has been granted in favor of the *Guacamayas-Maipore* Reservation, however, this information remains unconfirmed due to the fact that updated, systematized data is unavailable.

### Resolution 223 of 2010 of the Energy and Mines Planning Unit (UPME)

Established for the first time the base price of COP\$93.218 (around USD\$32) for the payment of royalties for tantalum ore and other minerals contained in the “black sand”. Currently this price is set at COP\$464.765 (around USD\$162) and applies to minerals of niobium, tantalum, vanadium, zirconium or its concentrates (Resolution 390/2016 by the UPME).

To calculate the royalty to be paid, the base price should be multiplied according to the production volume and, finally, this sum must be multiplied again by the percentage established in the Law 756 of 2002 for metallic minerals (5%).

EXAMPLE:1 KG	IN 2010	IN 2016
Base Price for 1 Kg	COP\$ 93.218 (≈USD\$ 32)	COP\$ 464.765 (≈USD\$ 162)
Royalty %	5%	5%
Royalty to pay	COP\$ 4.660,9 (≈USD\$ 1,6)	COP\$ 23.238,25 (≈USD\$ 8)

<sup>11</sup> With the constitution of 1991 Black Communities acquired a prerogative of establishing collective territories in areas traditionally settled by the Afro-Colombian population. Black Communities Mining Areas (Zonas Mineras de Comunidades Negras) may be created in these collective areas, and allow adjudicating mining concessions to the community (rather than to individuals).

## National Development Plan 2010-2014 (Law 1450/2011)

Instructed the mining authority to determine the strategic minerals of the country, define Strategic Mining Areas where these minerals were located, and suspend title acquisition processes in these areas in order to design and implement a procedure to select companies that would carry out the exploitation of these strategic minerals.

## Resolution 18 0102 of 2012 of the Ministry of Mines and Energy

Defined the strategic minerals of the country, among which, in addition to niobium and tantalum, included gold, platinum, copper, thermal and metallurgical coal, uranium and iron.

## Resolution 045 of 2012 of the National Mining Agency

Defined the Strategic Mining Areas of the country including territories in Vichada, Guainía, Vaupés, Amazonas and Chocó departments and established that, within ten years, a special procedure to assign mining rights in these areas must be designed and implemented. The resolution included, as a paragraph, the possibility of medium and small-scale mining operations to be undertaken in the areas, with previous authorization of the mining authority.

## Sentence T-766/2015 of the State Council

The decision left without effect and validity the resolution 045 of the ANM that defined as Strategic Mining Areas the zones with coltan potential in eastern departments of Vichada, Guainía and Vaupés, and ordered the mining authority to undertake previous consultation processes with the ethnic communities present in these zones if they wanted to define them as Strategic.

## Second Law of 1953

Declares 7 forest reserves in the national territory, and forbids extractive activities to be performed in their 65.280 hectares.

## Resolution 1526 of 2012 of the Ministry of Environment

Establishes the terms of reference according to which subtractions of areas from forest reserves can be solicited.

## 5. Relevant actors and institutions.

### Ministry of Mines and Energy



**MinMinas**  
Ministerio de Minas y Energía

The Ministry defines the mining policy of the country and supervises the compliance of the normative regarding exploration, exploitation, transport, refining, distribution, processing, trade and export of nonrenewable natural resources in the national territory.

Vice minister of Mines:  
Carlos Cante

### National Mining Agency – ANM



Manages the mineral resources of the country, grants exploration and exploitation mining rights, oversees and monitors mining operations, supervises the national mining cadaster and mining registry, and collects and transfers the royalties generated by the mining industry.

President:  
Silvana Habib  
  
Vice president of mining rights:  
Eduardo Amaya

### Ministry of the Interior



**MinInterior**  
Ministerio del Interior

Is in charge of determining the need to carry on previous consultation processes with Indigenous or other ethnic communities present in the area of influence of extractive projects. Also supervises the application of these consultation processes.

Director of Prior Consultation:  
Álvaro Echeverry Londoño  
  
Secretary / Assistant to the Director:  
Sandra Triviño

### Ministry of Defense



**MinDefensa**  
Ministerio de Defensa Nacional

Takes action regarding crimes against the environment and natural resources that might be related to illegal mining activity; in this area, the Ministry is also in charge of supervising the legal trade of minerals and intervening at illegal mining sites, confiscating and destroying machinery used in this activity.

Mr. Álvaro Chávez.  
Public Security Director.  
Public security and Infrastructure directorate.

### Ministry of Environment



**MinAmbiente**  
Ministerio de Ambiente y Desarrollo Sostenible

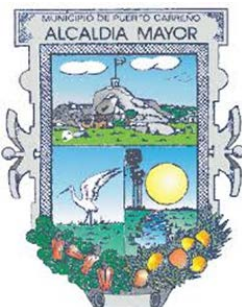
Is in charge of declaring forest reserves in the national territory, which includes supervising that no extractive activity takes place in these areas. Also in charge of granting subtractions of area that allow mining activities in forest areas, proven their social and public utility and foreseen the prevention and mitigation of environmental impacts.

### Constitutional Court



The Court safeguards the integrity and supremacy of the National Constitution, examining and deciding on claims of unconstitutionality filed by citizens. The court has demonstrated, through its sentences and decisions, a critical position against the mining policy of Juan Manuel Santos' government, for example, by granting autonomy to local authorities to decide whether or not they want extractive operations in their territories or by banning all mining activities in high mountain areas or moorlands, threatening previously acquired mining rights owned by several foreign and national companies.

### Puerto Carreño Mayoralty



In charge of keeping the official database of registered, authorized panners or “barequeros”.

Mayor:  
Marcos Pérez Jiménez

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## Corporinoquía



In charge of studying and granting environmental licenses for small and medium scale extractive projects in the area.

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## ANLA

National Authority of  
Environmental Licenses



In charge of studying and granting environmental licenses for large scale or strategic extractive projects in the area.

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## Study Centre for Social Justice “Tierra Digna”



Their website describes them as “an organization dedicated to the defense of the territory, life and culture of communities affected by the implementation of economic development measures of extractive character, driven by the national government and / or private companies” (<http://tierradigna.org>). They led several ethnic community councils in the filing of a lawsuit against the Strategic Mining Areas declared by the National Mining Agency in 2012. The community councils’ rights were finally granted by the State Council Sentence that suspended the Strategic Areas in 2016.

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## Etnollano



Since 1984 this not-for-profit organization accompanies Indigenous communities in Colombia’s *Orinoquía* and Amazon regions in their organizational processes and governance issues related to health, gender, intercultural education and community economy. In 2013, they prepared an economic diagnosis of Vichada department in relation to mining, oil, infrastructure and agriculture in which they analyzed the situation from the indigenous perspective and identified relevant stakeholders and procedures.

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## Group of Study on Economic Geology and Applied Mineralogy (Grupo de Estudios en Geología Económica y Mineralogía Aplicada – GEGEMA).



This research group, associated to the National University of Colombia, has performed studies in Vichada, Vaupés and Guainía with the purpose of determining the real existence of coltan reserves in the country. In November 2015, the group claimed to have found a small deposit with economic potential in Guainía (Unimedios, 2015).

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