



# Colombia Energy Investment Report

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# **Colombia Energy Investment Report**

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#### **Foreword**

The energy sector in Colombia has been one of the main pillars of development in the country for its contribution to economic growth, to the increase of private investment and to employment generation. The energy sector also contributes to fund a significant portion of the national budget which is devoted to social development, via the collection of royalties, taxes and dividends.

Indeed, the importance of the mining and energy sector as one of the engines of development in the country is evident considering its share in the GDP soared from 9.7% in the period 2006-2009 to 11.2% in the period 2010-2013. Likewise, the growth of the energy sector in the last four years follows an increase of Foreign Direct Investment in the sector of mines and energy from USD\$4,961 million in 2010 to USD\$8,281 million in 2013, with a 46% annual average growth rate, according to the Basis of the National Development Plan 2014-2018.

Looking ahead, the most important goal for the progress of the Colombian energy policy should be aimed at promoting maximum sustainable use of natural resources, both renewable and non-renewable; to increase electric coverage and to improve the quality of electricity and natural gas public services; to make efficient use of energy as an input for the generation of competitiveness in all sectors of the economy, aiming to attract new economic development opportunities and improve the living conditions of Colombians, especially those who live in isolated areas.

Bearing this in mind, Colombia has acceded to the International Energy Charter as a supporting instrument of international cooperation to contribute to the development of global energy markets under the principles of energy security, economic viability and sustainable environmental viability. We identify with these objectives even more after the country has compromised to reduce emissions of greenhouse gases at the last Paris convention.

Accordingly, the Colombian legal framework has strengthened to pave the way for new investment in non-conventional energy resources and efficient energy management, on the basis of a policy approach that embraces sustainable development.

Therefore, the International Energy Charter inspires and guides Colombia in key concepts and drives us to develop universal principles valuable for strengthening the energy sector of our country, with clear respect for the sovereignty of each State over its energy resources and their right to regulate the trilemma of energy security in light of the international architecture for good governance in the energy sector.

This report aims to provide useful information and a common understanding ground in the process of integrating Colombia in the platform of the International Energy Charter.

It is a pleasure to present this report which will certainly contribute to greater involvement of Colombia and other countries in the construction of global energy markets.

Amylkar Acosta Medina National Departments Federation

# **Table of Contents**

E	xecutive Summary	7
Ir	ntroduction	11
1	. General Information	12
	1.1. Country Information	12
	1.2. Political System	13
	1.3. Economic situation and performance	15
2	2. Investment flows and Policy	20
	2.1. Foreign Direct Investment	20
	2.2. Investment Institutions and Strategy	22
	2.3. International Investment Policy	24
	2.4. Investment Dispute Settlement	24
3	3. Significance of the energy sector in the economy of the country	25
	3.1. Energy supply and consumption	26
	3.2. Institutional structure of the energy sector	28
	3.3. Energy strategy of the country	30
4	l. International Dimension of Energy Policy and Regional Cooperation	34
	4.1. International organisations, international agreements and investor state disputes	34
	4.1.1. Participation in international organisations and in international treaties relat to energy trade and transit	
	4.1.2. Experience in Investor-State Disputes	38
	4.2. Regional Cooperation Projects	39
5	S. Market Structure of the Energy Sector	41
	5.1. Oil and gas	41
	5.2. Oil products	45
	5.3. Coal	47
	5.4. Electricity	49
	5.4.1. Electricity market	50
	5.4.2. Network electricity infrastructure	53
	5.5. Nuclear Power	54
	5.6. Renewable energy sources	54

5.7. Energy efficiency	55
6. Domestic Energy Legislation	57
6.1. Hydrocarbons law	57
6.2. Electricity law	58
6.3. Energy efficiency legislation	60
6.4. Environmental and social protection in the energy sector	61
7. Domestic investment legislation	62
7.1. Rules for the establishment of an investment	62
7.1.1. Establishment of legal entities	62
7.1.2. Land and real estate	64
7.1.3. Discriminatory measures	65
7.2. Domestic investment legislation	66
7.2.1. Competition	66
7.2.2. Transfer of technology	67
7.2.3. Transfer of payments	67
7.2.4. Intellectual property rights	68
7.2.5. Employment of key personnel	69
7.2.6. Expropriation and compensation of losses	69
7.2.7. Tax incentives	70
7.2.8. Measures in regard to privatisation	72
Conclusion	74
Annexes	76
Bibliography	93

# **List of Figures**

Figure 1. Map of Colombia	12
Figure 2. GDP Annual Percentage Variation 2001-2014	15
Figure 3. Compared GDP Argentina, Brazil, Chile, Colombia and Mexico	16
Figure 4. Revenue, expenditure and fiscal situation of the National Government	17
Figure 5. Global Competitiveness Index: Colombia	20
Figure 6. Flows of FDI to Colombia 1996-2015 (USD Millions)	21
Figure 7. Distribution of FDI per sectors 2015.	22
Figure 8. Share of the energy sector in FDI 1996-2015 (USD Millions)	26
Figure 9. Share of oil and coal in Colombian total exports 1992-2015 (USD Millions)	26
Figure 10. Production of primary energy resources in 2012	27
Figure 11. Domestic demand of primary energy sources in 2012 1.580 PJ	27
Figure 12. Domestic consumption by sector in 2012 1.070 PJ	27
Figure 13. Oil proved reserves 2000 – 2014	41
Figure 14. Colombian Petroleum and other liquids production and consumption	42
Figure 15. FDI in the Colombian oil and gas sector 2003-2015 (millions of USD)	43
Figure 16. Proved natural gas reserves of Colombia 2006-2015 (Trillion cubic feet)	44
Figure 17. Imports of fuels and oil products 1992-2015	47
Figure 18. Coal production in Colombia 1985-2015	48
Figure 19. Coal production and consumption 2004-2013	48
Figure 20. Share of Colombian coal exports in EU imports of coal 2012-2015	49
Figure 21. Total installed electricity capacity by technology 2015	50
Figure 22. Electric demand 1991-2014	51
Figure 23. Electricity exports of Colombia 2010-2015	
Figure 24. Electricity transmission system	53
Figure 25. Colombia's greenhouse emissions 2010	56
List of Tables	
Table 1. Basic Facts	
Table 2. Contribution per sector to GDP growth	
Table 3. Projections and fiscal targets of the National Government (% of GDP)	
Table 4. Unemployment rate and informal sector	
Table 5. Doing Business 2016: Colombia.	
Table 6. Contracts allocated by auctions 2007-2014	
Table 7. Production of gasolines bpd 2010 to 2015	
Table 8. Domestic consumption of gasolines in bpd 2010 - 2015	46

# **List of Annexes**

Annex 1. Membership of Colombia in International Organisations	75
Annex 2. List of FTAs, BITs, IIAs and DTAs	77
Annex 3. List of laws and regulations relevant to the energy sector	81
Annex 4 List of IIAs in force and references to energy investments	83

#### **Executive Summary**

For more than 25 years the Energy Charter Process has set rules for good governance in the energy sector, starting with the European Energy Charter (1991), then the Energy Charter Treaty (1994) and recently with the International Energy Charter (2015). As global energy markets evolve, the Energy Charter seeks to expand to other regions such as Latin America, the Middle East and Africa. This expansion project is part of the mandate of modernisation of the Energy Charter.

Colombia and Chile are the first Latin American countries to sign the International Energy Charter, a declaration of political intention towards a new age of global energy cooperation. Since then, Colombia and the Energy Charter Secretariat have been in valuable collaboration, particularly with the Colombian Embassy in Brussels, the National Hydrocarbons Agency and the Congress of Colombia. This report, prepared by a Colombian civil servant appointed by the Colombian energy authorities with the technical assistance of the Energy Charter Secretariat, is one of the outcomes of these relations.

Following the economic reforms introduced in the 1990s towards a free market economy, and the continuous adoption of International Investment Agreements (IIAs) and Free Trade Agreements (FTAs), Colombia has sharply grown its rates of foreign direct investment (FDI) and exports. The energy sector has performed a leading role in the sustained growth of the Colombian economy. In 2015 the energy sector received almost one third of total FDI, and represented slightly more than half of total exports, regardless of the low prices of energy commodities.

Fossil fuels have prevailed in primary energy production, mainly coal and oil. Concerning the electricity matrix, renewable resources, mainly represented by hydropower, have the greatest share in installed capacity and effective generation. Colombia is an interesting case to reflect on how climate change may affect energy security in countries with a high dependence on hydrologic resources. Indeed, the warm ocean currents called 'El Niño' have an effect on Colombian energy policies, particularly in fostering investments in unconventional renewable energies, thermal plants and energy efficiency aiming to enhance reliability in the electricity mix. In the long term, the country expects to secure reliable and efficient electricity supply, by enlarging the share of unconventional renewables resources, as well as increasing thermal plant efficiency.

On the other hand, taking into account that oil and gas reserves need to increase, policy makers have identified offshore and unconventional hydrocarbons as important targets to develop in the country. In the short term, imports of natural gas are also a feasible alternative. All these initiatives require a boost of foreign capital, knowledge, technology and infrastructure in a context of low prices of energy commodities and slow global growth. To face these energy sector challenges, it is critical to make further steps towards global cooperation and the adoption of international rules over energy investments, trade, transit, dispute resolution and energy efficiency. This is an important path to build confidence with investors.

With this in mind, this report addresses the foremost topics impacting the Colombian energy industry under the perspective of the Energy Charter. This report explores the linkages of Colombia

with the international standards developed for the energy industry, aiming to foster cooperation between Colombia and the global architecture of the Energy Charter, based on a level playing field and the rule of law.

#### Introduction

In May 2015 at a Ministerial Conference in The Hague, Colombia signed the International Energy Charter, a declaration of political intention providing common principles and a benchmark for good governance for a global energy sector. The International Energy Charter aims to strengthen energy cooperation among more than 70 signatory states, from all continents, and international organisations including the European Union and the Economic Community of West African States. Colombia and Chile are so far the Latin American signatories of this political declaration, entitled therefore with the status of observers at the Energy Charter Conference. Colombia and the Energy Charter have started valuable cooperation efforts, including two official visits from the Charter to national authorities in Bogotá, five Colombian young professionals accomplishing traineeships in the Energy Charter Secretariat, and a secondment programme which allowed a civil servant appointed by the Colombian energy authorities to join the Secretariat in Brussels for three months.

This report has three main objectives. First, to promote investments in the Colombian Energy sector; second, to increase knowledge in Colombia regarding the Energy Charter Treaty and, third, to foster cooperation between Colombia and the Energy Charter Secretariat. The first chapter starts with a general review of the country, including its political and economic situation, followed by a second section containing information on investment flows and policy. After covering this general information, the third part addresses the significance of the energy sector in the economy of the country, and the fourth chapter approaches the international dimension of Colombian energy policy. The market structure of the energy sector is then described in the fifth section and domestic energy legislation is explained in the sixth and seventh sections.

This Colombian Investment Report was prepared in the first semester of 2016, by a Colombian civil servant during her secondment in Brussels with the technical assistance of the Energy Charter Secretariat, based on public data from Colombian and International official sources. This data is analysed under the perspective of the Energy Charter, which seeks to promote the rule of law for energy governance and to create an international level playing field, based on the principles of national energy sovereignty, investment protection, non-discrimination, market-oriented price formation, and taking into account environmental concerns and the promotion of energy efficiency.

The outcomes of this report were disseminated in two meetings in Brussels, the "Energy Charter Forum for the Energy Dialogue: Latin America" and during the Investment Group Meeting of the Energy Charter, in February and May 2016, respectively. In Colombia, it will be officially presented in August 2016 in the Forum "From Bogotá to Tokyo", jointly organised by the Energy Charter Secretariat, the National Departments Federation, the Senate of the Republic of Colombia and the Externado of Colombia University.

Cooperation with the Colombian authorities is expected to continue for further engagement with the Energy Charter Process, in order to ease the integration of the Colombian economy into the global energy market.

#### 1. General Information

#### **1.1.** Country Information

The Republic of Colombia is located in the north-western corner of South America, bordered by the Caribbean Sea to the north, Venezuela to the east, Ecuador, Peru, and Brazil to the south, the Pacific Ocean to the west, and Panama to the northwest. Colombia has coastlines on the Pacific and Atlantic Oceans and extensive maritime territory in both of them. The land territory comprises high peaks in the Andes Mountains, plains in the East and jungles in the Amazonia, making it one of the 12 megadiverse countries of the world and ranking second overall in total biodiversity (Conservation International, 2011). The climate varies according to the region, covering equatorial, tropical, desert and ice cap climates. Its location, close to the equator, gives the country a fairly stable temperature over the year. Colombia has abundant non-renewable resources including coal, nickel, and gold, and hydrologic resources as a result of the five river basins that nurture vital rivers like Magdalena, Cauca, Putumayo, Guaviare, and Amazonas, among many others.



Figure 1. Map of Colombia

Source: Agustín Codazzi Geography Institute, 2016.

Colombia is the fifth country by size in Latin America and the Caribbean, and the third by population. The multicultural population is the result of a melting pot among indigenous pre-Columbian inhabitants, Hispanic immigrants and former slaves brought from Africa by the Hispanic colonisers.

The Colombian free market economy is the fourth in size in Latin America and the Caribbean and also ranks fourth as destination of Foreign Direct Investment (FDI) in the region since 2011. The

country occupied the 20<sup>th</sup> place in the world rank of FDI inward flows in 2014 (UNCTAD, 2016). The Organisation for Economic Cooperation and Development (OECD) announced in October 2013 the launch of the accession process of Colombia to the organisation.

**Table 1. Basic Facts** 

Official Name	Republic of Colombia
Capital City	Bogotá
Major Cities	Medellin, Cali, Barranquilla, Cartagena
Population	48.600.000 approximately
Language	Spanish
Independence	1810 from Spain
Government	Presidential Constitutional Unitary Republic
Natural Regions	Andean Mountains, Caribbean Coast, Pacific Coast, Plains, Amazon and Insular Region
GDP	USD 377,7 billion (2014, World Bank)
Area	2.129.748 sq. km
Land	1.141.748 sq. km
Water	988.000 sq. km

#### 1.2. Political System

The adoption of a new Constitution in 1991 was a breakthrough in Colombian history. The prior Constitution dated back to 1886 and lacked foundations for a fast developing and complex country. The National Constituent Assembly was summoned as a consequence of a social movement that encouraged the introduction of an informal seventh ballot during Congress elections as a supporting gesture for the delivery of a new constitution. Among the ground-breaking changes introduced in 1991, highlights include a fortified framework of human rights; the improved setting for economic development and investment; a course of action towards privatisation and liberalisation; administrative and financial independence of the judiciary from the executive branch; an upgraded electoral system, for wider political participation; the protection of the environment; the autonomy of the Central Bank; the popular election of governors; and the decentralisation of political power.

As stated in the 1991 Constitution, Colombia is a state governed by the rule of law, organised in the form of a unitary republic with policy centralisation and administrative decentralisation. The country is internally organised in 32 divisions called *departamentos*. The branches of government are the

executive, the legislative, and the judiciary. The President of the Republic, who is elected by direct and secret popular vote for a term of 4 years without option of re-election, is the Chief of State, head of government, and supreme administrative authority. The option of re-election was temporarily instituted between 2004 and 2015 and two Presidents, Álvaro Uribe Vélez and Juan Manuel Santos, benefited from it. The President freely appoints and dismisses cabinet ministers, with 16 ministries including the Ministry of Mines and Energy, the Ministry of Trade, Industry and Tourism and the Ministry of Foreign Affairs. Additionally, there are two control organs, the Office of the Comptroller General and the Public Ministry, in charge of overseeing fiscal management and defending and promoting human rights, respectively.

The legislative branch consists of a bicameral Congress composed of the Senate and the Chamber of Representatives. The popularly elected members of both chambers (102 for the Senate and 166 for the Chamber of Representatives) have a 4 year term, with the option of indefinite re-election. While the members of the Senate are elected from national electoral districts, the members of the Chamber of Representatives are elected from 33 regional electoral districts, one per *departamento* plus one for Bogotá, the capital city. The Congress amends the Constitution, makes the law and exercises political control over the national government. The laws may originate in either of the chambers at the proposal of their respective members, the national government, or through popular initiative.

The three judiciary jurisdictions have tribunals and courtrooms in cities and towns. There are three courts that act on behalf of the judiciary branch, the Supreme Court of Justice, the Council of State and the Constitutional Court. The Supreme Court of Justice is the highest court of the ordinary jurisdiction, which covers criminal, civil and commercial law cases. The Office of the Attorney General of the Nation conducts investigations of alleged offenses if there is sufficient reason to assume the commission of an offense, and brings criminal charges before the criminal jurisdiction.

The Council of State is the highest tribunal of the contentious-administrative jurisdiction, which hears cases regarding the behaviour of public authorities in their relations with citizens. The contentious administrative jurisdiction overrules decrees of the national and local governments when they are found to be overbearing for the recipients, and orders the compensation of extralegal damages for the fraudulent or criminal behaviour of its agents. The Council of State also acts as the supreme consultative body of the national government.

The Constitutional Court is responsible for safeguarding the integrity and supremacy of the Constitution by deciding on Actions of Unconstitutionality brought by citizens or the government against laws enacted by the Congress. Citizens can also petition the constitutional Court regarding the unconstitutionality of Constitutional amendments, exclusively for errors of procedure in their formation. The Constitutional Court decides definitively on the feasibility of international treaties and the laws approving them. The constitutional jurisdiction is entrusted with the protection of the constitutional rights of individuals through the *tutela* summary proceeding, when those rights may be jeopardised or threatened. The *tutela* is pertinent only when the affected party does not have

access to other means of judicial defence or when it is used as a temporary device to avoid irreversible harm. Exceptionally, it is possible to file the tutela against private parties.

Colombia has a long history of democratic and republican institutions since its independence from the Spanish monarchy in 1810. The main reforms to public institutions were introduced through the constitutions of 1863, 1886 and 1991. The democratic tradition of the country was briefly interrupted only once, during the dictatorship of General Gustavo Rojas Pinilla (1953-1957), who stroke a coup d'état to ease the conflict between liberal and conservative factions known as La Violencia. The political instability and social confrontations in the middle of the 20th century fostered the creation of guerrillas that are in the core of national security concerns in Colombia. The current Colombian government and the FARC guerrillas, the most important insurgent group, have been engaging in peace negotiations since 2012.

#### 1.3. Economic situation and performance

The growth of GDP is constant. Colombia has seen its GDP grow from less than USD \$100 billion in 2003 to USD \$377.7 billion in 2014 according to the indicators of the World Bank. Although GDP growth was disturbed to some extent during the 2008 global financial crisis due to the decay of imports and exports, recovery from the crisis was quick thanks to positive flows of FDI (OECD, 2015, p. 10). The economy is the fourth in size in Latin America, behind Brazil, Mexico, and Argentina.

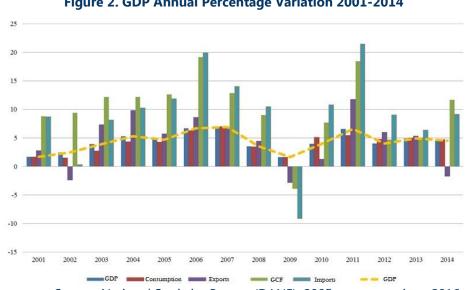


Figure 2. GDP Annual Percentage Variation 2001-2014

Source: National Statistics Bureau (DANE). 2005 constant prices, 2016.

Measures implemented in the area of macroeconomic policy like inflation targets, flexible exchange rates, budget surplus rule, and solid finance regulations, have helped to reduce macroeconomic volatility. The credit ratings of the country were increased to 'Investment Grade' level by Standard and Poor's, Moody's, and Fitch Ratings owing to the sound fiscal policy. Inflation has been kept in the range of 2-4% since 2009 and the real exchange rate adheres to the patterns of the IMF (IMF, 2014). The progressive opening to international free trade and investment has boosted exports and investments in the oil and mining sectors (OECD, 2015, p. 7). The growth of the economy is a result of the improvements in economic policy.

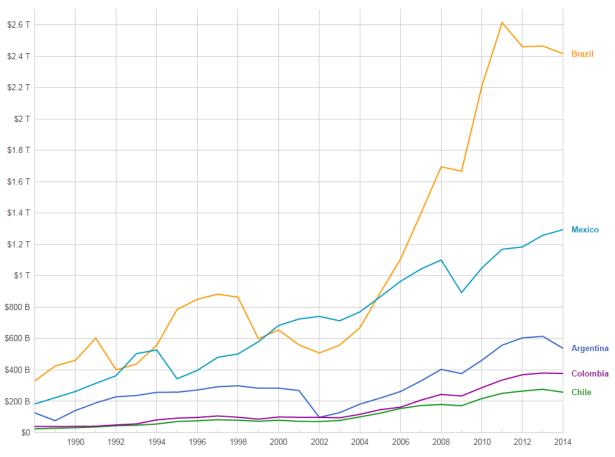


Figure 3. Compared GDP Argentina, Brazil, Chile, Colombia and Mexico

Source: World Development Indicators. World Bank, 2016.

The oil and mining sectors enjoyed a bonanza until 2014, when low international prices reduced the income of the national government to some extent. The agricultural and manufacturing sectors have been affected by the economic crisis in Venezuela, the high real exchange rate, smuggling and bottlenecks in transportation of goods (OECD, 2015, p.12). The solvency and liquidity indicators of Colombian banks, however, remain solid; default indicators and overdue loans are at historic lows. The growing connections with the global economy expose the Colombian economy to external risks, but the financial system is sound and can face challenges (IMF, 2014). The Colombian economy can benefit from the recovery of the economy of the United States and the increase of exports of raw materials. Nonetheless, the economy is diversified and does not heavily depend on oil and mining. The national government is striving to lift the construction and manufacturing sectors. Moreover, the growth of the economy is mainly driven by the services sector.

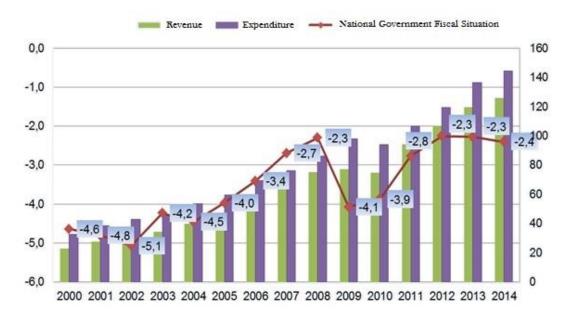
Table 2. Contribution per sector to GDP growth

	Agriculture	Oil and Mining	Manufacturing	Construction	Services	Indirect taxes	GDP
2009	-0,1	0,8	-0,7	0,4	1,4	-0,2	1,7
2010	0	0,7	0,2	0	2,5	0,6	4
2011	0,1	1	0,6	0,5	3,3	1	6,6
2012	0,2	0,4	-0,1	0,4	2,7	0,5	4
2013	0,3	0,4	-0,1	0,8	2,8	0,5	4,7
Percentage 2013	6,4%	8,5%	2,1%	17%	59,6%	10,6%	100%

Source: National Statistics Bureau (DANE), 2016.

The tightening of the monetary policy of the United States caused depreciation of the local currency, but the risk of currency mismatch is fairly controlled. Access to the Flexible Credit Line of the IMF and reserve accumulation mitigates the risks of exchange rate volatility. Public debt remains around 25% of GDP and is sustainable for the national government (IMF, 2014). In October 2014 the government submitted a tax reform to meet fiscal targets, which increased the tax burden on business. On the other hand, the government launched an ambitious infrastructure program executed under a public-private partnership scheme. The robust macroeconomic policy and financial system make it possible for Colombia to tackle these risks and other economic tensions (OECD, 2015, p. 14).

Figure 4. Revenue, expenditure and fiscal situation of the National Government



Source: Ministry of Treasury and Public Debt, 2015.

Colombia needs to increase public spending to lift economic development. There is growing need for the intensification of public spending as a result of the planned expansion of social policies in the areas of health, education, early childhood and retirement pensions. Additionally, the potential peace agreement with the FARC guerrillas would demand supplementary spending in the agricultural sector. The tax revenue system may need to be enhanced, since, despite tax reforms, collection is low in comparison to OECD and other Latin American countries due to tax evasion and informal economy (OECD, 2015, p. 21). Tax revenues in Colombia are between 2 and 4 percentage points of GDP lower than what could be expected from the country's fundamentals (IDB, 2013).

Table 3. Projections and fiscal targets of the National Government (% of GDP)

		Official projections according to fiscal rule				
	2013	2014	2015	2016	2020	2025
Total revenues	16,9	17	17	16,9	16,4	16
Tax revenues	14,3	14,8	15,1	15,2	14,8	14,5
Other revenues	2,6	2,2	1,9	1,7	1,6	1,5
Total expenditure	19,3	19,5	19,3	19,2	17,8	17
Interests payment	2,3	2,3	2,3	2,4	2,1	1,7
Current expenditure	13,7	14,3	14,6	14,5	13,6	12,6
Investment	3,3	2,9	2,4	2,3	2	2,7
<b>Budget balance</b>	-2,4	-2,4	-2,4	-2,2	-1,4	-1

Source: OECD. Ministry of Finance and Public Credit, 2015.

Although the employment rate has diminished, there is a high percentage of informal employment. An official survey indicates that informal unemployment is 48,4% in the 23 largest cities, with 43,1% employed in commerce, restaurants, and hotels. Also, 60,6% of informal employed population is self-employed (DANE, 2016). 25.371 workers were introduced into formal employment in the last four years, according to the Ministry of Labour.

**Table 4. Unemployment rate and informal sector** 

Uner	Percentage of employ not affiliated to he system	Percentage of employed people
------	--	-------------------------------

2015	8,9	59,2	62,2
2013	9,6	61	64,4
2011	10,8	62,5	68,4
2009	12	63,4	68,7
2007	11,2	NA	NA
2005	11,8	NA	NA
2003	14,1	NA	NA

Source: Ministry of Labour, 2015.

The *Doing Business 2016* report of the World Bank ranked Colombia number 54 out of 189 national economies. The report points out that Colombia made the biggest improvement in Latin America and the Caribbean in the score of distance to frontier over the past 12 years. The enhancements in the area of paying taxes and getting credit like electronic filing, the adoption of secured transactions, the broadening of the range of assets that can be used as collateral, and the adoption of a centralised collateral registry, are regarded as 'milestone reforms'. "Thanks to these changes, Colombia is now one of only three economies with a perfect score on the strength of legal rights index" (World Bank, 2016).

Table 5. Doing Business 2016: Colombia.

		✓ Reform	making it eas	sier to do business 🛮 🗶 Change making it more difficu	It to do busines
COLOMBIA		Latin America & Caribbean		GNI per capita (US\$)	7,780
Ease of doing business rank (1–189)	54	Overall distance to frontier (DTF) score (0–100)	70.43	Population (m)	48.9
Starting a business (rank)	84	Getting credit (rank)	2	Trading across borders (rank)	110
DTF score for starting a business (0-100)	86.13	DTF score for getting credit (0–100)	95.00	DTF score for trading across borders (0-100)	62.83
Procedures (number)	8	Strength of legal rights index (0-12)	12	Time to export	
Time (days)	11	Depth of credit information index (0-8)	7	Documentary compliance (hours)	60
Cost (% of income per capita)	7.5	Credit bureau coverage (% of adults)	88.7	Border compliance (hours)	112
Minimum capital (% of income per capita)	0.0	Credit registry coverage (% of adults)	0.0	Domestic transport (hours)	44
		3 , 3		Cost to export	
Dealing with construction permits (rank)	38	Protecting minority investors (rank)	14	Documentary compliance (US\$)	90
DTF score for dealing with construction permits (0–100)	75.99	DTF score for protecting minority investors (0–100)	71.67	Border compliance (US\$)	545
Procedures (number)	10	Extent of conflict of interest regulation index (0-10)	8.0	Domestic transport (US\$)	1,525
Time (days)	73	Extent of shareholder governance index (0–10)	6.3	Time to import	.,
Cost (% of warehouse value)	7.2	Strength of minority investor protection index (0-10)	7.2	Documentary compliance (hours)	64
Building quality control index (0-15)	11	g,,,		Border compliance (hours)	112
31 , , , ,		✓ Paying taxes (rank)	136	Domestic transport (hours)	44
Getting electricity (rank)	69	DTF score for paying taxes (0–100)	63.32	Cost to import	
DTF score for getting electricity (0-100)	74.82	Payments (number per year)	11	Documentary compliance (US\$)	50
Procedures (number)	5	Time (hours per year)	239	Border compliance (US\$)	545
Time (days)	102	Total tax rate (% of profit)	69.7	Domestic transport (US\$)	1,900
Cost (% of income per capita)	475.4			1	
Reliability of supply and transparency of tariffs index (0-8)	6	Enforcing contracts (rank)	180	Resolving insolvency (rank)	30
,,,,,,,,		DTF score for enforcing contracts (0-100)	29.66	DTF score for resolving insolvency (0–100)	72.06
Registering property (rank)	54	Time (days)	1,288	Time (years)	1.7
DTF score for registering property (0-100)	72.85	Cost (% of claim)	45.8	Cost (% of estate)	9
Procedures (number)	6	Quality of judicial processes index (0–18)	6.5	Recovery rate (cents on the dollar)	70.0
Time (days)	16	. , , ,		Strength of insolvency framework index (0-16)	11
Cost (% of property value)	2.0				
Quality of land administration index (0=30)	16				

Source: World Bank. Doing Business 2016.

The Colombian economy is highlighted in the Global Competitiveness Report 2015-2016 of the World Economic Forum for rising in the ranking for the second consecutive year, and is positioned

in 61<sup>st</sup> place among 140 assessed national economies "thanks largely to an impressive amelioration in financial market development (up 45 places to 25<sup>th</sup>)" (World Economic Forum, 2015, p. 31). The country is relatively well ranked in market size (36<sup>th</sup>) and macroeconomic results (32<sup>nd</sup>) for regional standards. Other dimensions like business sophistication (59<sup>th</sup>), and health and education (97<sup>th</sup>) have improved, although remaining low in the rank. Areas for improvement are the quality of transport (98<sup>th</sup>), the institutional framework of public institutions (125<sup>th</sup>), corruption (126<sup>th</sup>), security (134<sup>th</sup>), and structural reform to foster competition (127<sup>th</sup>).



Figure 5. Global Competitiveness Index: Colombia

Source: Global Competitiveness Report 2015-2016

## 2. Investment flows and Policy

#### 2.1. Foreign Direct Investment

Colombia received close to 8% of the total amount of FDI in Latin America in 2014 and, since 2013, ranks as the fourth destination of FDI in the region following Brazil, Mexico, and Chile. Colombia is one of the four home countries to major Latin American transnational companies. The other three are Brazil, Mexico and Chile – 90% of investment within the region in the last decade came from these four countries (ECLAC, 2015).

The historical increase of FDI in Colombia is linked to the economic reforms introduced in the decade of the 1990s and the continuous adoption of International Investment Agreements (IIAs) and Free Trade Agreements (FTAs). FDI was bolstered in 2011, soaring from USD 6,4 billion in 2010 to USD 14,6 billion, and reaching a peak of USD 16.8 billion in 2013, before suffering a decrease in

2015. The decrease of FDI in the hydrocarbon and mining sectors in 2015 was compensated by the rises in finance (54%), transport and communications (39%), and manufacturing (13%) (UNCTAD, 2015). Some of the major sources of FDI in 2015 were the United States (19,9%), Panama (15,2%), Switzerland (10,2%), Bermuda (10,1%), Spain (9,3%), England (5,9%) and Chile (5,5%) (Procolombia, 2015).

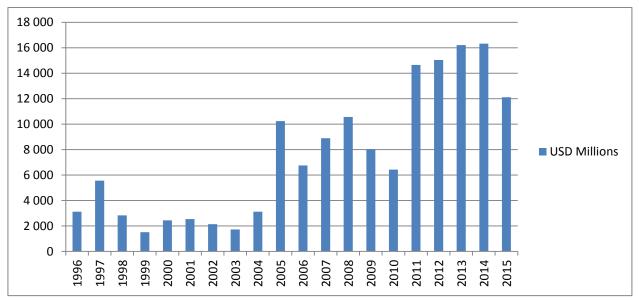


Figure 6. Flows of FDI to Colombia 1996-2015 (USD Millions)

Source: Author's elaboration. Data: Central Bank, 2016

Foreign investment receives the same treatment as investments made by Colombian nationals according to the Constitution and investment regulations. FDI is allowed in all sectors, excluding activities associated to national security and toxic waste.<sup>1</sup> In general, foreign investors may participate in the calls for privatisation of state-owned enterprises without restrictions (U.S. Department of State, 2015).

In the hydrocarbon and mining sectors there are special regimes for FDI, such as registration in the Superintendence of Corporations and the local chamber of commerce, and concession with the national government for upstream operations, but the amount of FDI is not restricted. Colombia has a comprehensive legal framework for business and FDI. According to US Department of State "Colombia's legal and regulatory systems are for the most part transparent and consistent with international norms" (U.S. Department of State, 2015, p. 3).

The mining and hydrocarbon sectors in Colombia receive the majority of FDI flows, but the percentage is decreasing since 2014 due to low prices of hydrocarbons and coal. The decrease of FDI in the mining and hydrocarbon sectors is a trend in most Latin American countries; the total

<sup>&</sup>lt;sup>1</sup> For more information regarding general restrictions, see Free Trade Agreement Colombia – USA, Annex I Non conforming Measures for Services and Investment Colombia Annex I.

benefits in the region for transnational companies in 2014 were USD \$103,9 billion, a reduction of 16% in comparison to 2013 (ECLAC, 2015, p. 11).

In January 2016, the president of the World Bank acknowledged that Colombia is better prepared than most South American countries to deal with a period of global economic slowdown and lower oil and commodity prices, 'in large part because of its very strong track record of enlightened macroeconomic management' (World Bank, 2016). The country has undertaken measures to face this period of low commodity prices in each sector of the economy.

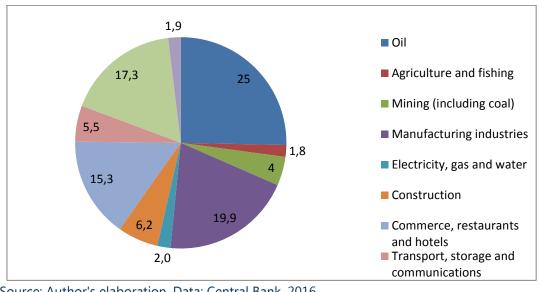


Figure 7. Distribution of FDI per sectors 2015.

Source: Author's elaboration. Data: Central Bank, 2016

#### 2.2. Investment Institutions and Strategy

The basic institutional framework for foreign investment is provided by the Law 7 of 1991 and related rules. The principles described in Law 7 include freedom of international trade, internationalisation of the economy, promotion of economic integration and FDI, and coordination with international rules concerning fiscal and financial policies.

The Ministry of Commerce, Industry and Tourism is responsible, among others, for directing, coordinating and implementing foreign trade policy. The Ministry creates the policy on incentives for domestic and foreign investment in coordination with the Ministry of Finance and Public Credit, and coordinates the strategies to increase the competitiveness of the country. The Ministry leads international negotiations on foreign investment and is responsible for defending the Colombian state in investor-state dispute settlement, with the support of the National Agency of Legal Defence of the State (Decree 1939 of 2013). Another function of the Minister is to coordinate the improvement of the investment climate for both domestic and foreign trade.

The High Council of Foreign Trade is composed of the President of the Republic and six Ministers, including the Minister of Commerce, the Minister of Foreign Affairs, and the Minister of Mines and Energy. The Head of the National Planning Department and the General Manager of the Central Bank are also full members. The primary functions of the Council include proposing foreign trade policy to the national government; setting policy guidelines and the tariff rate; to counsel the decisions of the national government in international foreign trade organisations; to issue opinions regarding international trade agreements; and to set the legal framework for the import of commodities.

The National Council on Economic and Social Policy (CONPES, the acronym in Spanish) is the highest national planning authority and serves as an advisory body to the government on all aspects related to economic and social development. The members are the President, all the Ministers and the Head of the National Planning Department. The CONPES evaluates and coordinates national discussion of the National Development Plan<sup>2</sup>, and conducts studies for the draft of strategic public policy documents. The overall foreign investment policy is formulated based on the decisions of the CONPES.

The Foreign Trade Bank (Bancoldex, the acronym in Spanish) is a financing institution attached to the Ministry of Commerce, Industry and Tourism, in charge of the promotion of trade. The Directive Board is constituted of Ministers and representatives from the private sector. Among other functions, Bancoldex provides financing to the purchasers of Colombian exports, as a way to boost global flows of FDI with countries that have entered into FTAs with Colombia. Bancoldex has a network of international banks overseas and also promotes itself through commercial *attachés* in Colombian embassies (Bancoldex, 2014).

Procolombia is the agency in charge of promoting international trade in Colombia other than financing activities. The agency facilitates contact among entrepreneurs and assists foreign entrepreneurs intending to invest in Colombia through specialised services. Also, the agency sponsors partnerships with national and international private and public entities to support various business initiatives. The promotion activities of this agency do not cover goods or services in the mining and energy sectors.

The Overseas Private Investment Corporation (OPIC) is one of the international partners of Colombia for international trade. OPIC is the development finance institution of the U.S. government and helps to address development challenges and changes in U.S. national security and foreign policy. OPIC provides financing and insurance to the U.S. private sector to invest and gain footholds in emerging markets. The Multilateral Investment Guarantee Agency (MIGA) is another international partner of Colombia. MIGA is the political risk insurance and credit enhancement arm of the World Bank Group (National Planning Department, 2016).

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<sup>&</sup>lt;sup>2</sup> The overall Colombian policy is fixed every four years in the National Development Plan.

#### 2.3. International Investment Policy

Seeking to attract FDI to the Colombian economy, the national government introduced three policy measures in the beginning of the 1990s. The first of these was the establishment of a comprehensive legal and attractive framework in line with international benchmarks. Second was the negotiation and signing of agreements to promote and protect FDI. Third was the signing of agreements with international insurers and international mechanisms for resolution of disputes (National Planning Department, 2016).

The reform to article 58 of the Colombian Constitution in 1999, to guarantee compensation in expropriation cases, was a milestone to improve the investment climate of the country. Decree 2080 of 2000, amended by Decree 4800 of 2010, motivated by the same principle, set the 'General Investment Regime for foreign capital in Colombia and Colombian capital abroad', and incorporated essential ground rules such as national treatment and most favoured nation principles in article 2. The National Development Plans from 2002, 2006, and 2010 explicitly supported and gave continuity to the promotion of FDI.

Following those pioneering measures in the beginning of the century, CONPES document number 3135 from 2001<sup>3</sup> set the policy outline for the negotiation of international agreements to promote and protect FDI and Colombian investment abroad. This document launched the strategy for the negotiation of the FTAs Colombia has signed, by giving specific instructions to establish an agenda and build up a team of expert negotiators.

In 2013, CONPES document number 3771 gave a new perspective to foreign trade policy, drawing attention to the lack of a national strategy to promote and protect Colombian investments abroad. Thus, this document assigned Procolombia to lead the promotion of Colombian investment abroad. Furthermore, it ordered the development of a consistent legal framework and establishment of networks to assist, inform and connect investors. The objective of the strategy is to increase the flow of Colombian investment abroad by an average of 1.6% of GDP between 2014 and 2018. Additionally, the strategy aims to expand Colombian investment to a broader spectrum of economic sectors abroad.

#### 2.4. Investment Dispute Settlement

Two important legal instruments regarding international arbitration were Law 315 of 1996 and Decree 1818 of 1998. Those rules contained the legal framework for arbitration in Colombia until 2012, when Law 1563 repealed the specific sections about international arbitration and introduced the 'Statute for National and International Arbitration', intending to harmonise the domestic legal framework with international standards. Moreover, the new Law aims to present Colombia as a setting for international arbitration and entice parties to international contracts on the lookout for a venue to initiate arbitration.

<sup>3</sup> The CONPES regularly releases documents to set public policy strategy in economic and social matters.

The Arbitration Statute was formulated taking the UNCITRAL Model Law on International Commercial Arbitration as a blueprint, but does not match it in detail. According to the Statute, an arbitration is considered to be international when the parties to an arbitration agreement have, at the time of the conclusion of that agreement, their places of business in different States; when the place of performance of a substantial part of the obligations or the place with which the subject matter of the dispute is most closely connected is located outside the states where the parties have their places of business; and when the dispute affects the interests of international trade. The Statute does not integrate article 1.3 (b) (i) of the UNCITRAL Model Law, according to which an arbitration is considered to be international when the place of arbitration determined in the arbitration agreement is situated outside the State in which the parties have their places of business. Neither does it integrate article 1.3 (c), according to which an arbitration is international when the parties have expressly agreed that the subject matter of the arbitration agreement relates to more than one country.

Likewise, Colombia signed the New York Convention on Investment Disputes, which entered into force on the 24<sup>th</sup> of December 1979; the Convention on the Settlement of Investment Disputes between States and Nationals of other States (ICSID Convention), entered into force on the 14<sup>th</sup> of August 1997; the Inter-American Convention on International Commercial Arbitration (Panama Convention), entered into force on the 28<sup>th</sup> of January 1987; and finally the Montevideo Convention, entered into force on the 14<sup>th</sup> of August 1997.

Finally, Colombia is also party to treaties and international conventions that promote FDI and provide investor-state dispute resolution procedures with several countries and organisations including the United States, Canada, El Salvador, Guatemala, Honduras, Chile, Japan, the United Kingdom, India, China, Peru, Switzerland, Spain and Mexico<sup>4</sup>.

## 3. Significance of the energy sector in the economy of the country

The energy sector has a leading role in the sustained growth of the Colombian economy. In 2014 the mining and energy industries accounted for 10% of overall GDP, received most of the FDI (43%), and represented 70% of total exports (Ministry of Mines and Energy, 2015). 65% of these exports were coal, petroleum and oil products (Figure 9). In 2013, taxes, royalties and dividends from the energy sector contributed 31% of regular revenues. The share of mining and energy activities in GDP (10%) also shows a diversified economy. Pursuant to the low prices of oil since 2014 and coal since 2011, along with a decline of global demand and social issues, these indicators decreased but the government has carried out measures to promote new investments and maintain current investors. In 2015 coal, petroleum and oil products accounted for 53% of total exports and attracted more than 25% of FDI inflows (Figure 7).

<sup>&</sup>lt;sup>4</sup> Refer to annexes 2 and 4 to see detailed information.

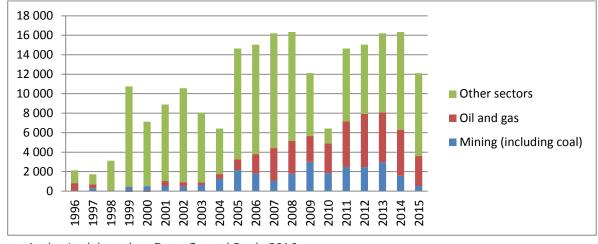


Figure 8. Share of the energy sector in FDI 1996-2015 (USD Millions)

Source: Author's elaboration. Data: Central Bank, 2016

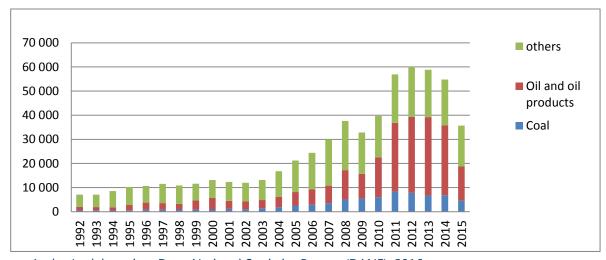


Figure 9. Share of oil and coal in Colombian total exports 1992-2015 (USD Millions)

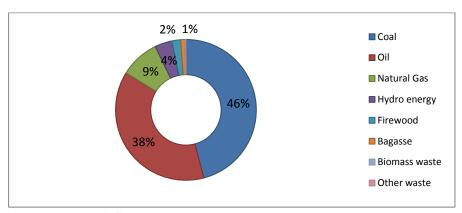
Source: Author's elaboration. Data: National Statistics Bureau (DANE), 2016

### 3.1. Energy supply and consumption

The basic structure of the energy industry and energy policy depends on three main factors. First, the availability of energy resources in the territory and the feasibility of import and export. Second, the consumption of those energy resources in national and international markets. Third, the economic, social, technological, environmental and geopolitical issues in the country. Regarding the availability of primary energy, Colombia is a country gifted with natural resources, reflected in an energy matrix rich in fossil fuels and renewable resources. 93% of primary energy production is made up of fossil fuels (coal, oil and natural gas). 4% is from hydro-resources, and 3% from biomass and residues (figure 10). 69% of primary energy resources are exported - mainly coal and oil - and domestic consumption is about 31%. 78% of primary energy resources consumed are

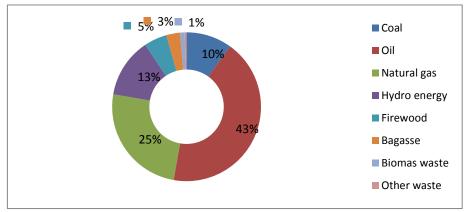
fossil fuels and 22% are renewable resources. Oil and natural gas are used in the transport and industry sectors, as well as natural gas for electricity generation (UPME, 2015, p. 25).

Figure 10. Production of primary energy resources in 2012



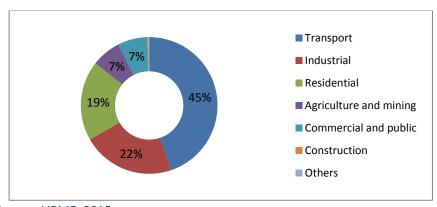
Source: UPME, 2015.

Figure 11. Domestic demand of primary energy sources in 2012 1.580 PJ



Source: UPME, 2015.

Figure 12. Domestic consumption by sector in 2012 1.070 PJ



Source: UPME, 2015.

The transport (45%), industrial (22%) and residential sectors (19%) consume most of the primary energy resources. The country imports electricity from Ecuador, particularly during dry seasons, as well as fuels and oil products, and is expected to import natural gas from 2017 (UPME, 2015, p. 85).

#### 3.2. Institutional structure of the energy sector

The State is the owner of the subsoil and natural non-renewable resources, and is responsible for the general management of the economy. By mandate of the law, the State will intervene in the exploitation of natural resources, land use, production, distribution, use, and consumption of goods and services, while promoting private initiative in the economy and free economic competition. To accomplish this constitutional mandate, the State has structured its energy sector under the principle of complementarity between public and private initiative, maintaining its role as a planner, regulator, promoter, and supervisor without relinquishing the right of exploiting and providing directly primary and secondary energy sources.

The Colombian energy sector is made up of a series of specialised institutions in charge of promoting and developing its energy resources. The Ministry of Mines and Energy (MME) is the maximum authority in the central government and reports directly to the President of the Republic. The MME is the responsible body for the formulation of national energy policy and strategic planning, and it represents the government in international bodies devoted to energy integration and cooperation. The MME is also a regulatory and supervisory authority with the mandate to establish technical regulations regarding all non-renewable natural resources and biofuels: to approve generation and transmission plans; to control the exploration and exploitation of mineral and oil deposits; and to regulate fuel prices and establish rules to allocate energy subsidies for consumers.

There are six major agencies and institutions under the authority of the MME:

- The Mining and Energy Planning Unit UPME
- The Energy and Gas Regulatory Commission CREG
- The Planning and Promotion Institute for Energy Solutions to non-interconnected zones –
   IPSE
- The National Hydrocarbons Agency ANH
- The National Mining Agency ANM
- The Colombian Geological Service SGC

According to the institutional design, each body has specialized functions: planning, regulation, promotion of investments, management of energy resources and geological information.

The UPME was founded in 1992 as the planning authority responsible for determining energy needs and ways to satisfy domestic demand, considering available energy resources as well as economic, social, technologic and environmental aspects. The UPME prepares and updates the

National Energy Plan, the Electricity Expansion Plan, and allocates projects to expand the electricity transmission and distribution network.

The CREG was established in 1994 through Law 143 of 1994 to replace the Commission of Energy Regulation. The mission of the CREG is to ensure an efficient and timely supply of electricity and gas services in terms of quality and cost, as well as to promote competition in the electric and gas market and regulate monopolies in the provision of utilities when competition is not possible. It approves the methodology used to establish rates for access to the electricity grid and to calculate prices for electricity sales to final regulated consumers, among other functions.

The IPSE was founded in 1999 aiming to promote and implement energy projects in non-interconnected zones<sup>5</sup>, which provide electricity to approximately 52% of the national territory. The IPSE develops programs to provide electricity and the use of unconventional renewable resources in remote areas.

The ANH was created in 2003 by Decree 1760 as the administrator of hydrocarbons reserves and resources. The ANH designs the strategy to promote investments in the oil and gas sectors; adopts the contracts for exploration and production of hydrocarbons; allocates hydrocarbons exploration and production blocks; and monitors the compliance of commitments acquired by the companies in terms of seismic activity, wells drilled, acquisition of geological information, production, and the collection of royalties and other economic rights. Its duties regarding the management of hydrocarbons resources concern upstream activities specifically.

The ANM was established in 2011 through Decree 4134, to replace Ingeominas as the administrator of mining resources, including coal. The ANM allocates concessions to explore and produce minerals; designs and undertakes strategies to promote them; follows up mining concessions; collects royalties; and supports the MME in the formulation of mining policy.

The Colombian Geological Service was established in 2011 to replace some functions developed by Ingeominas. It researches the potential of subsoil resources including minerals, hydrocarbons, groundwater and geothermal energy; and manages subsoil information and ensures the safe use of nuclear and radioactive materials in the country, providing the UPME with the required information to plan the use of the subsoil resources.

Furthermore, there are energy companies with state participation linked to the MME, undertaking industrial and commercial operations. Ecopetrol S.A. is the state company operating in the hydrocarbons sector. In the electricity sector there are companies with partial ownership of the national government, local governments, and private parties. The companies with partial ownership of the national government are:

- Interconexión Eléctrica S.A. ISA
- Electrohuila S.A. E.S.P.
- Electrocaqueta S.A. E.S.P.

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<sup>&</sup>lt;sup>5</sup> Mostly rural areas where the national grid does not provide energy and the electricity is generated locally.

- EMSA S.A. E.S.P.
- Cedelca S.A. E.S.P.
- Cedenar S.A. E.S.P.
- Dispac S.A. E.S.P.
- Urra S.A. E.S.P.
- Eedas S.A. E.S.P.
- Gecelca S.A. E.S.P.
- Gensa S.A. E.S.P
- Eeasa S.A. E.S.P.
- Corelca S.A. E.S.P.

The liberalisation of the electricity market continues. In 2016 the state sold its stakes in Isagen, the third main electricity generator, to private investors. Regarding coal exploitation, which is also open to private companies, there is no state-owned company operating.

#### 3.3. Energy strategy of the country

Sound government action is crucial to transform natural resources into secure energy supply systems, which increase access to affordable and modern energy services and stimulate sustainable economic development. Since the 1990s, Colombia sought to implement a liberalisation policy across the broad economy in order to promote private investment. These measures have included constitutional and legal provisions to carry out:

- A clear legal framework,
- Easy access to markets,
- Fair competition conditions,
- Stability for investors, and
- Improvement of security conditions.

The energy sector is the best example of these changes. The electricity sector was reformed in 1994, followed by the oil and gas industry in 2003. These reforms have contributed to a remarkable increase in FDI (Figure 6), with the oil and gas industry being the main receptor of FDI (a share of 25% in 2015).

Inspired by the British model, the electric sector was reformed with ways seeking to foster private investment and to introduce market competition (Laws 142 and 143). These reforms improved the efficiency and reliability of the sector, with a very clean energy mix which relies 70% on hydrogeneration, and 10% on natural gas (installed capacity). The reforms attracted more companies and competition to the market, improving the electricity access from 76% in 1994 to 98% in 2015. Successful policies helped to generate electricity surplus to export to neighbouring countries Ecuador and Venezuela. International energy trade fosters the upgrading of the electric transmission infrastructure and the energy security standards of the Colombian energy system.

When 'El Niño' disturbs the electricity production of hydropower plants, due to dry seasons, Colombia needs to increase electricity imports from Ecuador.

Nowadays, the main objectives of the Colombian electricity sector strategy are:

- a) To attract greater investment in the electricity sector.
- b) To promote unconventional renewable resources such as solar, wind, biomass, small-hydropower, and geothermal energy, aiming to achieve universal energy access and more security in the system.
- c) To advance in regional electric integration, developing projects such as the Interconnection Colombia–Panama (operational by 2018) and the Andean Electrical Interconnection System among Ecuador, Peru and Chile (operational by 2022).

In the late nineties and at the beginning of the 21<sup>st</sup> century, the Colombian oil sector was in decline, with production peaking at 830,000 Mbbl/d in 1999 (EIA, 2015) and reserves at 1,5 Bbo in 2003. To encourage private investments, inspired by the Norwegian and Brazilian models, in 2003 the government implemented a legal reform with three main measures:

- a) Fair competition among the National Oil Company –Ecopetrol– and other domestic and international oil companies, allowing private companies to explore and exploit hydrocarbons without partnering with Ecopetrol;
- b) Creation of the ANH as the regulatory authority; and
- c) Introduction of a new fiscal regime, shifting from a production sharing contract to a modern concession. In 2007 these amendments comprised the partial privatisation of Ecopetrol.

These measures, along with high oil prices and improvement of security conditions, allowed an increase in daily production from half a million bpd (barrels per day) in 2004 to 1 million bpd since 2011. Colombia became one of the twenty major oil producers in the world. These amendments also included, in 2007, the partial privatisation and internationalisation of Ecopetrol. The Colombian government controls over 88% of the shares of the company.

A relevant issue for the government is to maintain current investments in the oil and gas sectors. With oil prices dropping around 70% in comparison to the second half of 2014, the Colombian government, through the ANH, has put in place regulatory measures to maintain and support investments. These measures include extensions of terms of investment and a release of cash flows through flexible guarantees.

On the other hand, if the government achieves a peace agreement with the FARC guerrillas, it would positively impact the environment for energy investments in the country by reducing political risks, taking into account that energy infrastructure has been a focus of guerrilla attacks (National Planning Department, 2014-2018, p. 40).

One of the targets for the Colombian energy policy in the oil and gas industry is to increase oil and gas reserves, and one of the strategies for this goal is the development of the offshore potential of Colombia. By these means, oil reserves could be multiplied by 6, and the gas reserves by 3. These possibilities have attracted important companies, which are assessing the deep water potential of the country in the Caribbean Sea. To ease the process, the government has introduced fiscal incentives such as, for instance, off-shore free trade zones.

This performance has been recognised by the World Economic Forum in the Global Energy Architecture Performance Index 2016, where Colombia ranks as one of the top 10 performers, among 126 countries studied, taking into account three aspects: economic growth and development, environmental sustainability, and energy access and security.

Currently, there is not a unique document containing the Colombian energy policy and strategy. Under the Constitution of 1991, each incoming President must present a National Development Plan to the Congress, setting up the key policies for the next four years of government. The National Development Plan 2014-2018 "Everyone for a New Country" was enacted by the Congress through Law 1753 of 2015, embracing among its objectives the fostering of economic competitiveness through several strategies, including the strengthening and development of the energy industry. The strategies used to achieve this goal are:

- a) Use of hydrocarbon resources in a responsible way, contributing to sustainable development;
- b) Spreading and strengthening the market of natural gas fuel;
- c) Ensure fuels and biofuels supply; and
- d) Increase electricity access and quality.

Regarding the energy sector, the National Development Plan NDP Law establishes the following policy measures:

#### **Hydrocarbons sector**

- Increase oil and gas proved reserves and production by: a) developing offshore potential; b) promoting unconventional hydrocarbons; and c) implementing enhanced oil recovery technologies to exploit existing fields (National Planning Department, 2014-2018, p. 226).
- Fiscal incentives for offshore activities and enhanced oil recovery.
- Maintain investments, reserves and production, adapting oil and gas contracts to low oil prices.
- Promote investments in hydrocarbons exploration and production.
- Strengthen articulation among the MME, the ANH and the environmental authorities in charge of environmental license procedures.
- Improve security conditions.

• Connect small fields to transport infrastructure.

#### Natural gas fuel

- Spread the use of LPG.
- Build regasification plants to import natural gas.
- Exploit coal bed methane.
- Explore the feasibility of importing gas from Venezuela.
- Promote competition in the natural gas market and strengthen the role of the 'Manager of the Natural Gas Market'.

#### **Fuel and biofuels**

- Increase the capacity of refining plants in order to enhance the use of heavy oil and produce more fuels.
- Improve energy infrastructure used to import fuels when domestic production does not meet demand.
- Discourage diesel and gasoline consumption (National Planning Department, 2014-2018, p. 231).
- Increase the use of biofuels.

#### **Electricity sector**

- Increase electricity access and quality.
- Encourage electricity generation based on unconventional renewables energies.
- Foster energy efficiency.
- Boost new international power interconnections, specially the interconnection Colombia –
   Panama.
- Expand energy trade with Ecuador and Venezuela.
- Use energy experience to gain leadership in international organisations and as a tool to improve bilateral cooperation, seeking to advance the Andean Interconnection System.

#### Coal

- Increase annual coal production from 85,50 million tonnes in 2013 to 102,50 million tonnes in 2018.
- Delimitation of strategic areas to develop mining and energy projects, through the allocation of contracts to investors.

#### **Renewable energies**

- Increase unconventional renewable energies installed capacity from 9.893 MW in 2013 to 11.113 MW in 2018.
- Raise unconventional renewable energies installed capacity in non-interconnected zones from 2,8 MW in 2013 to 9 MW in 2018.
- Set up a strategy of low carbon development, including goals to reduce greenhouse gas emissions.

Furthermore, the UPME elaborated the 'Energy National Plan Colombia: Ideario Energético 2050', setting out the basis to create and undertake a long-term energy policy (UPME, 2015, p. 6).

#### 4. International Dimension of Energy Policy and Regional Cooperation

# 4.1. International organisations, international agreements and investor state disputes

Colombia is member of international organisations with diverse areas of commitment such as multilateral cooperation, regional integration, competitiveness, investments, trade and technological exchange. They include the United Nations, the World Bank, the World Trade Organisation, the Andean Community, the Pacific Alliance and UNASUR. A list of Colombian membership in international organisations is provided in Annex 1.

The country has recently begun the accession process to other international bodies such as the Organisation for Economic Cooperation and Development (OECD)<sup>6</sup> and the Extractive Industries Transparency Initiative (EITI)<sup>7</sup>.

With these key steps Colombia reaffirms its commitment to the principles of non-discrimination, transparency, stability and an open and transparent regime for FDI, removing any barriers or restrictions to investments. These principles are also promoted by the Energy Charter Treaty (ECT) in the specific fields of energy trade, transit, investment, dispute resolution and energy efficiency.

Regarding investment protection, in 2014 Colombia was one of the most active countries in concluding International Investment Agreements (UNCTAD, 2015). Through its International Investment Agreements (IIAs) and Free Trade Agreements (FTAs) Colombia has access to 47 countries and more than 1,5 billion consumers (Procolombia, 2016, p. 20).

Some of the agreements and treaties in force contain Investor-State Dispute Settlement (ISDS) procedures. However, Colombia has not adopted any multilateral treaty to specifically promote and protect investments in the energy sector.

# a) List of International Investment Agreements and Bilateral Treaties on the Protection and Promotion of Foreign Investments

<sup>7</sup> Colombia was accepted as an EITI Candidate at the International EITI Board meeting on 15 October 2014.

<sup>&</sup>lt;sup>6</sup> On 29 May 2013, the OECD decided to open accession discussions with Colombia.

The Government of Colombia has signed several IIAs and BITs, particularly on the protection and promotion of investments, with Mexico, Spain, Chile, Switzerland, El Salvador, Guatemala, Honduras, Peru, EFTA, Canada, the United States, China, India, the European Union, the United Kingdom, Japan and the Pacific Alliance. A list of all concluded IIAs and BITs is presented in Annex 2. Colombia has also negotiated IIAs with South Korea, Singapore, France and Turkey; these agreements are currently completing constitutional and legal procedures before they enter into force (Ministry of Trade, Industry and Tourism of Colombia, 2015).

# b) Free Trade Agreements

Colombia has concluded FTAs with the Andean Community, the Caribbean Community, Mexico, MERCOSUR, Chile, El Salvador, Guatemala, Honduras, the EFTA, Canada, the United States, the European Union, the Pacific Alliance, and Costa Rica. A list of these agreements is presented in Annex 2. The country also concluded FTAs with South Korea, Israel, and Panama, which are at present in constitutional and legal procedures for their commencement (Ministry of Trade, Industry and Tourism of Colombia, 2015).

# c) List of Bilateral Treaties (Agreements) on Avoidance of Double Taxation

The Republic of Colombia has ratified bilateral treaties on the Avoidance of Double Taxation with the Czech Republic, Portugal, India, South Korea, Mexico, Canada, Switzerland, Chile, Spain and the Andean Community. A list of BTAs on Avoidance of Double Taxation is presented in Annex 2.

# 4.1.1. Participation in international organisations and in international treaties related to energy trade and transit

In the global economy, energy resources are commodities traded around the world. Colombia is a developing economy that can further integrate into the world energy market, where there is global competition, projects are highly strategic and capital-intensive and the risks have to be assessed over the long-term.

Colombia is member of the International Atomic Energy Agency (IAEA), the Latin American Energy Organisation (OLADE, for the Spanish acronym), the International Renewable Energy Agency (IRENA), and an observer of the Energy Charter Conference.

Regarding the sub-regional level, Colombia is part of organisations such as the Andean Community, which is not devoted solely to energy issues, but it has developed guidelines towards Andean countries' integration, including in the energy sector.

Colombia is also a member of international non–governmental organisations such as the World Petroleum Council (WPC) and the Regional Energy Integration Commission (REIC).

Concerning international treaties related to energy trade and transit, Colombia has not adopted any multilateral treaty to specifically promote and protect energy investments and transit. Colombia is signatory to the Barcelona Convention and Statute on Freedom of Transit (April 20<sup>th</sup>, 1921) which

deals only with water and railway transit. Colombia has been a member of WTO since the 30<sup>th</sup> of April of 1995, and, since the 3<sup>rd</sup> of October of 1981, acceded to the General Agreement on Tariffs and Trade (GATT), which addresses general transit rights in global goods trade.

The Country did not ratify the 1982 United Nations Convention on the Law of the Sea (UNCLOS), which refers to offshore or submarine transit issues.

## a) The Latin American Energy Organisation (OLADE)

OLADE focuses specifically on energy issues. The member states of the organisation work with political and technical agendas to achieve regional and sub-regional energy integration and cooperation. OLADE was born in the early seventies as an initiative of Latin American and Caribbean countries. Energy sector authorities went through a process of political mobilisation and signed the Lima Agreement on the 2<sup>nd</sup> of November 1973, the constituent instrument of the Organisation (OLADE, 2015).

One of the functions of OLADE is to foster ways to ensure that the landlocked countries of the region, in situations not governed by treaties or conventions, have free energy transit and can use different means for transporting energy resources, as well as related facilities, through the territories of the Member States.

Twenty-seven countries in Latin America and the Caribbean have ratified the Lima Agreement, and Colombia acceded to the organisation on the 2<sup>nd</sup> of February 1976 (OLADE, 2015).

# b) International Renewable Energy Agency (IRENA)

As an important step towards energy transition, Colombia approved the Statute of IRENA through Law 1665 of 2013. This Statute promotes widespread, increased adoption and sustainable use of all forms of renewable energy, including bioenergy, geothermal, hydropower, ocean, solar and wind. This law was declared constitutional by the Colombian Constitutional Court through decision C-332 in 2014, and the country is a full pledge member since March 2015. 146 countries from all continents have ratified the Statute of IRENA, which entered into force on the 8<sup>th</sup> of July of 2010.

## c) Cartagena Agreement – Andean Community (CAN)

The Cartagena Agreement, also known as the "Andean Pact" was signed in 1969 by Bolivia, Colombia, Chile, Ecuador and Peru. The Community of Andean Nations (CAN) was then founded. Venezuela joined in 1972. Currently, the country members of the CAN are Bolivia, Colombia, Ecuador and Peru. Chile withdrew in 1976 and Venezuela in 2006.

Chapter XIII of the Cartagena Agreement encourages 'physical integration'. Article 104 states country members will develop joint actions to advance sub-regional economic integration, mainly in the fields of energy, transport and communications, and these actions will include measures to facilitate border traffic among members. Under the rules of CAN Decision 536, Colombia and Ecuador developed their electricity interconnection in 2003. The Cartagena Agreement embraces the basis of energy integration among the South American signatory countries, since the point of view is one of "physical integration".

To achieve energy integration, the Andean Community enacted CAN Decision 536 in December 2002, labelled the "General Framework for the Sub-regional Interconnection of the Electric Systems and the Intra-Community Exchange of Electricity". This decision sets the principles of non-discriminatory prices among national and external markets, equal treatment for internal and external players in each country, free access to international interconnection lines, and promotes private investments in the development of electricity transport infrastructure (Article 1). The decision also endorses transparent access to information (Article 8) and establishes an arbitral procedure to solve disputes with companies that are part of international electricity trade contracts (Article 21).

CAN Decision 536 was suspended for two years by CAN Decision 720 in November 2009, aiming to set up a new legal framework for electricity interchanges and introduce a provisional regime to maintain the electric interconnection between Colombia and Panama, under the principles of CAN Decision 536. This short-term suspension was extended until August 31<sup>st</sup> 2016 by CAN Decisions 757 (August, 2011) and 789 (June, 2013).

## d) Union of South American Nations (UNASUR)

The Union of South American Nations (UNASUR, for the Spanish acronym) was constituted on the 23<sup>rd</sup> of May 2008 as an international organisation to build integration and union in the cultural, social, economic and political fields, prioritizing political dialogue, social policies, education, energy, infrastructure, financing and the environment, among others.

Although UNASUR has a broad scope, one of its objectives is "energy integration for the integral and sustainable use of the resources of the region, in a spirit of solidarity" (UNASUR, 2008). The Energy Council of South America was created by the Declaration of Margarita of 2007, and is currently part of UNASUR.

UNASUR enacted the Additional Protocol to the Constitutive Treaty of UNASUR, which entered into force on the 19<sup>th</sup> of March of 2014 and established measures in the event of a breach or threat of breach against the democratic order, a violation of the constitutional order, or any situation that jeopardises the legitimate exercising of power and the application of the values and principles of democracy. Article 4 assigns to the Council of Heads of State and Government the faculty to partially or completely close land borders, including the suspension and/or limitation of trade, air and maritime traffic, communications and provision of energy, services and supplies.

The members of UNASUR are all twelve South American countries: Argentina, Bolivia, Brazil, Colombia, Chile, Ecuador, Guyana, Paraguay, Peru, Suriname, Uruguay and Venezuela (UNASUR, 2015).

# e) Energy Charter Conference

Colombia is an Observer to the Energy Charter Conference since 20<sup>th</sup> of May of 2015, when the International Energy Charter (IEC) was signed. The IEC is a declaration of political intention to strengthen energy cooperation between the signatory states. To date, the IEC has been adopted by

more than 75 parties from all continents. Colombia is one of two countries in Latin America, the other being Chile, which has aligned itself with international trends in energy relations.

The Energy Charter Conference is the organisation's governing and decision-making body, and meets on a regular basis to discuss issues affecting energy cooperation among the Energy Charter Treaty (ECT) members, to review the implementation of the Treaty and the provisions of the Protocol on Energy Efficiency and Related Environmental Aspects (PEEREA), and to consider possible new instruments and joint activities within the Energy Charter framework.

The ECT provides a multilateral framework for long-term cooperation in the energy field that is unique under international law. It is designed to promote energy security through the operation of more open and competitive energy markets, while respecting the principles of sustainable development and sovereignty over energy resources.

The Treaty was signed in December 1994 and entered into legal force in April 1998. To date the Treaty has been signed or acceded to by fifty-two states, the European Union and the European Atomic Energy Community (EURATOM).

The ECT incorporates the main rules of the World Trade Organisation (WTO) with respect to trade in goods in the energy sector, as a particular sector of the economy. The provisions of the Treaty cover energy trade, competition, transit, transfer of technology, environment, access to capital, investment promotion and protection, and focus on four broad areas:

- The protection of foreign investments, based on the extension of national treatment, or most-favoured nation treatment (whichever is more favourable) and protection against key non-commercial risks;
- Non-discriminatory conditions for trade in energy materials, products and energy-related equipment based on WTO rules, and provisions to ensure reliable cross-border energy transit flows through pipelines, grids and other means of transportation;
- The resolution of disputes between participating states, and, in the case of investments, between investors and host states;
- The promotion of energy efficiency, and attempts to minimise the environmental impact of energy production and use.

#### 4.1.2. Experience in Investor-State Disputes

In respect to ISDS, Colombia signed the New York Convention on Investment Disputes which entered into force on the 24<sup>th</sup> of December 1979; the Convention on the Settlement of Investment Disputes between States and Nationals of other States (ICSID Convention) entered into force on the 14<sup>th</sup> of August 1997; the Inter-American Convention on International Commercial Arbitration (Panama Convention) entered into force on the 28<sup>th</sup> of January 1987, and finally the Montevideo Convention entered into force on the 14<sup>th</sup> of August 1997.

Until 2016, no international arbitral claims had been brought against Colombia under an international investment protection treaty. On the 16<sup>th</sup> of March 2016, Colombia was sued before the International Centre for Settlement of Investment Disputes by the companies Glencore International A.G. (Switzerland) and C.I. Prodeco S.A. (a Glencore subsidiary), owners of coal mine concessions in the departments of La Guajira and Cesar. This claim–ICSID Case No. ARB/16/6–(ICSID, 2016) was brought under the 2006 Switzerland–Colombia BIT.

Additionally, on the 19<sup>th</sup> of February of 2016 Cosigo Resources Ltd., from Canada, and Tobie Mining and Energy Inc., from the United States, issued a notice of UNCITRAL arbitration against the Republic of Colombia, under the rules of the US–Colombia FTA (Italaw, 2016). This claim relates to the creation of the Yaigoji Apaporis National Park, which encompasses the area of the gold mining concession IGH-15001X in the Taraira region near the boundary with Brazil.

# 4.2. Regional Cooperation Projects

Colombia has two main electricity regional cooperation projects: the interconnection with Panama and the Andean Electrical Interconnection System among Colombia, Chile, Ecuador and Peru. The country also signed a bilateral agreement to develop geothermal resources with Ecuador.

## a) Interconnection Colombia - Panama

On the 1<sup>st</sup> of August, 2008, the Presidents of Colombia and Panama signed an agreement to set a regulatory framework which allows trade of electricity between both countries. For this purpose, both countries signed Ministerial Agreements in 2009 and 2010. In 2009 a specific settlement was subscribed by the Energy and Gas Regulation Commission of Colombia (CREG, the acronym in Spanish) and the National Authority for Public Services of Panama (ASEP, the acronym in Spanish). Panama and Colombia have not signed a specific treaty on this subject.

This interconnection will link the 'Cerromatoso' substation in the department of Cordoba, Colombia, with the Panama II substation located in Pedregal, in Panama Province, Panama, contributing to supply the demand of electricity in Panama and Colombia and paving a path to connect the electricity markets of the Andean Community and the Central America region. The transmission line, including overhead line and submarine cable, will be about 600 km. The submarine line will comprise about 130 kilometres. In its first stage, the interconnection will have a 300 MW transmission capacity, with a possibility of reaching up to 600 MW in the second stage. 'Interconexión Eléctrica S.A. E.S.P.' (ISA) from Colombia, and 'Empresa de Transmisión Eléctrica S.A.' (ETESA), from Panama are the responsible companies to carry out this project, which is expected to be concluded in 2019.

# b) Andean Electrical Interconnection System (SINEA)

The Andean Electrical Interconnection System (SINEA, the acronym in Spanish) entails the construction of 1.900 km of electrical lines and an investment of USD \$1.500 million, which will

allow electricity exchanges and transactions across the Andean region and progressive market integration.

This initiative emerged during the adoption of the Galapagos Declaration by the Ministers of Energy of Bolivia<sup>8</sup>, Colombia, Chile, Ecuador, and Peru in April 2011. The Galapagos Declaration created the Council of Ministers of the SINEA, as well. The Lima Declaration (2014), on the other hand, stated that the legal framework for international exchanges of electricity will be based on bilateral agreements and rules of the Andean Community.

After several Ministerial meetings, a road map with three stages for Andean Electrical Integration was endorsed in 2014. The Inter-American Bank concluded studies for regulatory harmonisation the same year.

The Colombia-Ecuador interconnection is one of the foundations of the SINEA. The success of the SINEA depends on the construction of two more lines: Ecuador-Peru and Chile-Peru.

According to the road map, the second stage of the project will be concluded in 2021 with the operation of the grid between Chile and Peru. The third stage will conclude in 2024 when the regional electric market is expected to be fully operational.

Through the Santiago Declaration (2015), the Council of Ministers reaffirmed the willingness of the five countries to grant continuity to and promote the SINEA. Colombia was elected the meeting coordinator for 2016.

# c) Electrical Interconnection Project between Colombia and Venezuela

On the 14<sup>th</sup> of April, 2009, the Ministry of the Popular Power for Energy and Petroleum of Venezuela and the Ministry of Mines and Energy of Colombia signed a memorandum of understanding for two years to supply electricity from Puerto Inirida, Colombia, to San Fernando de Atabapo, Venezuela (Ministry of Popular Power for Foreign Affairs of Venezuela, 2011).

This project includes the construction of a 62 kilometre power line (South American Council of Infrastructure and Planning COSIPLAN, 2015) which will be financed by funds from the Colombian general budget. The second stage of the project is currently suspended until both governments conclude a new agreement, given that the memorandum of understanding between Colombia and Venezuela finished in 2011 (IPSE, 2013).

# d) Geothermic Project Colombia – Ecuador

In July 2010 the Ministry of Mines and Energy of Colombia and the Ministry of Electricity and Renewable Energy of Ecuador signed a bilateral agreement to develop the project 'Tufiño-Chiles-Cerro Negro'. The objective of this project is to generate electricity from geothermal resources in the border between the two countries (Ministry of Foreign Affairs of Colombia, 2011). Its potential is roughly 114 MW, and entails the investment of approximately USD \$150 million (Ministry Coordinator of Strategic Sectors of Ecuador, 2013).

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<sup>&</sup>lt;sup>8</sup> Bolivia is an observer country.

# 5. Market Structure of the Energy Sector

# 5.1. Oil and gas

Colombia is the third-largest oil producer in South America (BP, 2015, p. 8) and the fifth-largest crude exporter to the United States (EIA, 2016). At the end of 2015 the country had more than 2.002 million barrels of proved crude oil reserves, with a reserves-to-production ratio of 5,5 years (ANH, 2016). The policy of the government in the petroleum sector is aimed at developing exploration, in order to increase oil reserves. The territory is divided into 23 sedimentary basins. The producing basins are Eastern Llanos, Middle Magdalena Valley, Upper Magdalena Valley, Caguan–Putumayo, Catatumbo, and Eastern Cordillera. The emerging basins are Guajira and the Guajira offshore, Cesar–Ranchería, Sinú-San Jacinto, and the Lower Magdalena Valley. The frontier basins are Los Cayos, Urabá, Chocó, Chocó offshore, Tumaco, Tumaco Offshore, and Cauca-Patía.

Regarding unconventional hydrocarbons, Colombia is the third most important country in South America, in terms of the amount of technically recoverable resources of shale oil (6.8 billion bbl) (EIA, 2013).

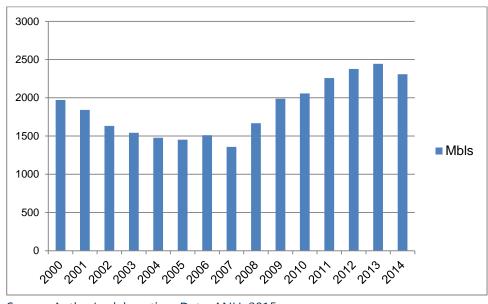
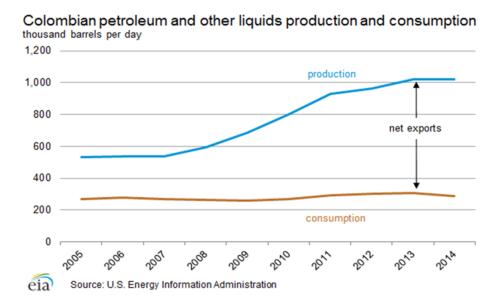


Figure 13. Oil proved reserves 2000 – 2014

Source: Author's elaboration. Data: ANH, 2015

Oil production exceeds domestic consumption, and over 70% is exported to countries such as the United States, the Netherlands, China, India and Panama.

Figure 14. Colombian Petroleum and other liquids production and consumption



Under the new institutional legal framework the ANH has adopted diverse mechanisms to allocate oil and gas contracts, the foremost being direct negotiations and public bidding or Open Rounds which are promoted worldwide. During the period 2007 - 2014 the government awarded 236 contracts through Open Rounds.

Table 6. Contracts allocated by auctions 2007-2014

Bidding	Oil and gas blocks offered	Contracts awarded	% Allocation		
Caribbean Round 2007	13	9	69%		
Mini Round 2007	38	12	32%		
Heavy Oil	8	100%			
Open Round Colombia 2008	43	22	51%		
Mini Round 2008	102	41	40%		
Open Round Colombia 2010	229	68	30%		
Open Round Colombia 2012	115	50	43%		
Open Round Colombia 2014	95	26	28%		
Total	643	236	36%		

Source: ANH, 2015

From 2006 to 2014, the ANH allocated 23 contracts for offshore areas. Also, between 2012 and 2014, 7 contracts to explore and produce unconventional hydrocarbons were granted (ANH, 2016).

The market structure of the Colombian oil and gas sector is outlined by the participation of the national oil company Ecopetrol, and domestic and international oil companies. An average of 626.500 bpd, out of the 1 million in average produced in 2015, came from operations of Ecopetrol, its partners and affiliated companies, which represent more than 60% of total production (Ecopetrol, 2016). There are 301 exploration and production contracts in force<sup>9</sup> (ANH, 2016) and 75 of them belong to Ecopetrol. Shell, Exxonmobil, Total, Petrobras, Statoil and Conocophillips are some of the top multinational oil and gas companies operating in Colombia, mainly focused on offshore and unconventional hydrocarbons resources. There are also medium and small size companies from countries as the United States and Canada. From 2000 to 2015, a total of 261.073 km of 2D and 3D seismic work and 978 exploratory wells were concluded.

The oil sector received USD \$5.39 billion of FDI in 2012, accounting for 34% of total FDI in Colombia for that year. This successful performance brought additional benefits like increased infrastructure expansion and made of Colombia "one of Latin America's foremost destinations for investment into the oil and gas sector" (World Economic Forum, 2015).

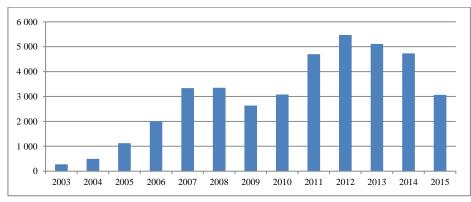


Figure 15. FDI in the Colombian oil and gas sector 2003-2015 (millions of USD)

Source: Central Bank of Colombia, 2016.

Regarding the midstream stage, which is open to private investments, Ecopetrol is the owner of five refineries operating with a capacity of 430.000 bpd. The main facilities are Barrancabermeja (250.000 bpd) and Cartagena (165.000 bpd). Hidrocasanare (10.000 bpd), Apiay (2.500 bpd) and Orito (2.800 bpd) have smaller crude distillation capacity. The Cartagena refinery expanded in 2015 and is considered the most modern refinery in Latin America (Ecopetrol, 2016, p. 149) with a conversion capacity of 95%. As a result of its upgrade, the Cartagena refinery can produce gasoline and diesel oil meeting international standards, as well as petroleum coke.

<sup>&</sup>lt;sup>9</sup> Including Exploration and Production Contracts (E&P) and Technical Evaluation Agreements (TEA).

In terms of transport infrastructure, the network of oil pipelines is made up of seven main lines, named Ocensa, Caño Limon Coveñas, Bicentenario, Oleoducto de Colombia, Llanos Orientales, Transandino (OTA) and Alto Magdalena. OTA is the sole pipeline in the south of Colombia, and Ecopetrol owns almost all of the infrastructure to transport oil. These facilities connect production fields to refineries and oil export terminals in Coveñas, Cartagena, Barranquilla, Santa Marta, Buenaventura and Tumaco, four of them on the Caribbean coast and two on the Pacific coast. The downstream market is made up of 17 suppliers and 5.169 retail service stations (UPME, 2016). The main suppliers are Terpel (37,7%), Exxon Mobil (17,9%), Biomax (15,4%) and Chevron Petroleum Company (8,2%).

According to the Superintendence of Industry and Commerce (SIC), Ecopetrol has ownership of 80% of the pipelines in Colombia, which makes it the dominant company in the industry. The SIC explains that although there is transparency in the definition of prices and procedures for pipeline access, the actual limitations of the transportation infrastructure could lead to competition problems (SIC, 2012). It is important to note that Ecopetrol is partner of national and foreign companies for exploration and production of hydrocarbons, and its success is the result of their joint effort. At the end of December 2015, Ecopetrol had 30 partners for exploration and 66 for production of hydrocarbons in Colombia and other countries (Ecopetrol, 2015).

At the end of 2015 Colombia had estimated proved natural gas reserves of 4,3 trillion cubic feet and a reserves-to-production ratio of 10,4 years (ANH, 2016). Daily average production in 2015 was 1.031 million cubic feet per day (ANH, 2016). The main natural gas reserves are located in the basins Llanos Orientales (50% of total production) and La Guajira (31%), and the remaining 19% is placed in the basins Catatumbo, Lower, Middle and Upper Magdalena Valley (UPME, 2015). The main fields are Cusiana, Cupiagua (Llanos Orientales) and the offshore field Chuchupa (La Guajira). The majority of production comes from the operation of the companies Ecopetrol, Equion Energía and Chevron. The chart below shows natural gas reserves from 2006 to 2015.

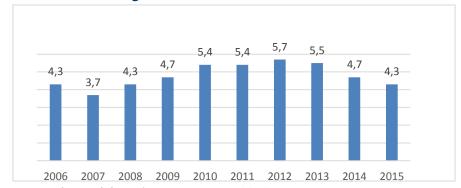


Figure 16. Proved natural gas reserves of Colombia 2006-2015 (Trillion cubic feet)

Source: Author's elaboration. Data: (ANH, 2016)

Colombia has been self-sufficient in natural gas and exporting to Venezuela from 2007 to 2015. The consumption of natural gas in the energy matrix over the last fifteen years increased from 7%

in 1995 to about 22% in 2014 (UPME, 2015, p. 9), providing fuel to key sectors such as industrial, electric power, residential, oil industry, transportation (NGV), commerce and petrochemical. There are 7.744.589 residential users and about 526.000 vehicle consumers (UPME, 2016), ranking Colombia in the top ten countries worldwide according to the number of natural gas vehicle users.

In July 2006 Colombia and Venezuela signed an agreement to build the gas pipeline "Ballenas – Maracaibo", at the expense of Venezuela, initially to supply gas to the western region of Venezuela from the Ballenas field in La Guajira, but beginning to reverse the flow to Colombia in 2016. This gas pipeline, with a length of 225 kilometres, is operational since 2007. In May 2007 Ecopetrol and Chevron Corp.—which jointly operate the Ballenas field—signed a sales contract with PDVSA to provide natural gas to Venezuela. During the second phase, which was scheduled to start in January 2016, Venezuela should supply 39 million cubic feet per day of natural gas to Colombia. However, this stage is suspended while Venezuela deals with the negatives effects of El Niño on its electrical system (PDVSA, 2016).

As a result of rising demand for natural gas, the diminishing existing proved reserves of gas, as well as the effects of climate change El Niño, the first LNG regasification terminal has been under construction on the Caribbean coast since 2015, financed by private investments. It will operate beginning in 2017, with estimated capacities of 155.000 m<sup>3</sup> of storage and 400 million cubic feet per day of regasification. Imports of natural gas are expected to start in 2017 (UPME, 2015, p. 128).

# 5.2. Oil products

The main oil products produced in Colombia are gasoline, diesel oil, kerosene, fuel oil, jet fuel, propane, oil asphalt and liquefied gas, with oil products being the foremost source of supply for transport. As shown in tables 7 and 8, the consumption of gasoline rose from 79.288 bpd in 2010 to 100.397 bpd in 2015. The consumption of JP - A (jet fuel) increased from 20.116 bpd in 2010 to 27.946 bpd in 2015, and domestic production decreased from 23.097 bpd to 19.516 bpd in the same period. Fuel oil is the main exported product (Ecopetrol, 2016, p. 158). In 2015 63.113 bpd were manufactured, slightly higher than the 62.794 bpd produced in 2010, and enough to satisfy domestic demand and generate surplus. Although diesel fuel is the main product manufactured (77.624 bpd), it can only satisfy approximately 50% of domestic consumption, therefore the country imports diesel (Figure 17). The production of low sulphur diesel fuel is a key objective, passing from 5.000 ppm in 1990 to 50 ppm in 2013 (Ecopetrol, 2016, p. 308).

Table 7. Production of gasolines bpd 2010 to 2015

	Blancos													
Año		Gasol	inas											
	Gasolina Motor Regular	Gasolina Extra	Bencina & Cocinol	Total	Diesel (ACPM)	Queroseno	JP-A	Total	Avigas	Propano	Total	Fuel-Oíl **		
2010	69.214	3.257	0	72.471	69.346	725	23.097	93.168	256	17.842	246.531	62.794		
2011	68.155	3.474	0	71.629	96.622	594	24.182	121.398	240	17.777	283.668	72.624		
2012	69.692	3.369	0	73.061	95.152	1.041	24.155	120.348	243	18.750	282.758	70.356		
2013*	70.093	3.433	0	73.526	93.567	1.296	25.646	120.509	278	17.538	312.976	101.124		
2014	74.872	3.364	0	78.236	101.045	365	24.236	125.646	289	17.022	286.108	64.915		
2015	71.531	3.075	0	74.606	77.624	458	19.516	97.598	253	17.939	253.509	63.113		

Source: UPME, 2015

Table 8. Domestic consumption of gasolines in bpd 2010 - 2015

						20	110 a	Agos	to 20	15						
						Barril	es p	or Día	Cale	ndar	oio					
						Blanc	Negros									
	Gasolinas					Des	tilado	s Medios	3					e =		
۸ña	Gasolina Motor					Diesel								cast ***		Total
Año	Regular	Extra	Subtotal	Bencina & Cocinol	Subtotal	(ACPM)	Queroseno	JP-A	Subtotal	Avigas	Propano	Subtotal	Fuel-Oil **	Crudo de Castilla y Rubiales***	Subtotal	TOTAL
2010	75.887	3.402	79.288	0	79.288	103.899	243	20.116	124.258	273	19.400	223.220	1.014	10.532	11.546	234.7
2011	78.999	3.492	82.491	0	82.491	124.162	186	21.497	145.845	302	19.619	248.257	552	3.790	4.342	252.5
2012	80.878	4.546	85.423	0	85.423	131.596	156	23.560	155.313	286	17.168	258.190	1.968	13.000	14.968	273.1
2013	84.551	3.652	88.202	0	88.202	131.348	596	25.526	157.470	294	14.724	260.691	1.887	11.500	13.387	274.0
2014	91.548	3.805	95.353	0	95.353	134.045	320	26.576	160.941	346	17.021	273.661	5.790	12.300	18.090	291.7
2015	96.614	3.783	100.397	0	100.397	140.496	442	27.946	168.884	296	16.860	286.437	7.350		7.350	293.7

Source: UPME, 2015

The government implemented blending levels of ethanol in gasoline since 2005 and biodiesel in diesel fuels since 2008, as a measure to reduce greenhouse emissions and stimulate the biofuels market. The current level for biodiesel blending in diesel fuel is 8% (B8) or 10% (B10) depending on the region of the country. For gasoline an 8% ethanol blend is mandatory (E8).

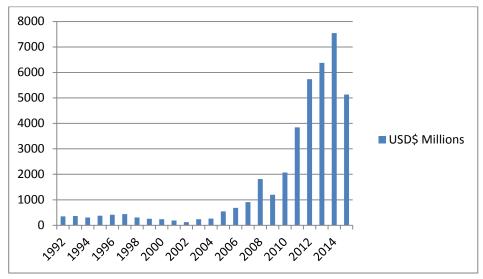


Figure 17. Imports of fuels and oil products 1992-2015

Source: Author's elaboration. Data: Central Bank, 2016

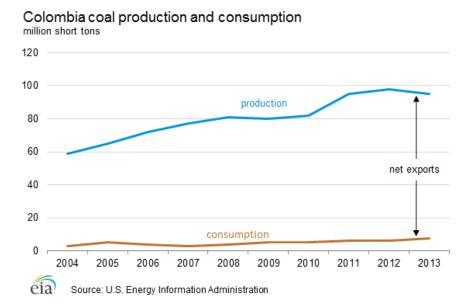
# 5.3. Coal

The National Mining Agency (ANM, the acronym in Spanish) entitles private companies to operate individual mines. The coal mining sector, the most relevant mining activity in Colombia, became fully privatised in 2004 after the liquidation of Minercol Ltda., the state mining company. Colombia has 6.746 million tonnes of coal, being the 8<sup>th</sup> largest producer worldwide, the first in Latin America (BP, 2015) and the fifth exporter on the globe. Its primary proved reserves are located in the departments of La Guajira (55%) and Cesar (26%) (UPME, 2016). More than 92% of operations are open pit mining, about 94% of production is thermal coal, and about 92% of thermal coal is exported to countries such as the Netherlands, Turkey, Spain, the United States, and others (SIMCO, 2016). Colombia is the third largest coal exporter to the European Union (Figure 20). Despite this significant coal production, only about 8% of installed electric power capacity corresponds to coal thermal power plants (UPME, 2016). The chart below shows the sharp growth of coal production in Colombia during the last twenty years, from 8,9 million tonnes in 1985 to 85,5 in 2015.

Figure 18. Coal production in Colombia 1985-2015

Source: Author's elaboration. Data: Colombian Mining Information System (SIMCO, 2016)

Figure 19. Coal production and consumption 2004-2013



20,000 Mt 18,000 Mt 16,000 Mt 14,000 Mt 12.000 Mt 10,000 Mt 8,000 Mt 6,000 Mt 4 000 Mt 2.000 Mt 2012 Ukraine Indonesia ■ South Africa ■ Australia ■ Colombia United States Russia Canada

Figure 20. Share of Colombian coal exports in EU imports of coal 2012-2015

The largest mines are 'Cerrejon Zona Norte', operated by the joint venture BHP Billiton plc (UK)-Anglo American plc (UK)-Glencore plc (UK-Switzerland Anglo–Swiss), and 'La Loma'', exploited by Drummond Ltda, a subsidiary of Drummond Inc. (USA). These two mines provided around 47% of overall production in 2014 (UPME, 2016). Coal is transported mainly by truck, barge, conveyor and train to the embarking ports, to be exported.

# **5.4. Electricity**

After a severe rationing, and inspired by the British model, the electricity sector was reformed in 1994 to foster private investment and introduce market competition (Laws 142 and 143). Until 1995 electricity services were provided by the state through the company Interconexión Eléctrica S.A. (ISA) and other government-owned utilities, with slight participation of the private sector. The power sector was reformed to introduce market economy principles, assigning the state the role of regulator for equal private participation in the market. ISA was split in two companies: ISA the transmission company with system and market operating functions, and Isagen S.A., a new company for electricity generation.

Utilities such as "Central Hidroeléctrica de Betania", "Chivor", "Termocartagena" and "Termotasajero" were privatised in 1996, and other enterprises—e.g. Emgesa and Codensa in the capital city and Electricaribe and Electrocosta on the Caribbean coast—were partially privatised in 1998. These reforms attracted more private investment and players to the market, improving the efficiency and reliability of the electricity sector, with a clean energy mix which relies on about 70% hydro-generation (installed capacity). With these changes the electric access index increased from 76% in 1994 to 98% in 2015, and electricity production rose to create surplus that is exported to

neighbouring countries such as Ecuador and Venezuela. New international electric interconnections have also enhanced the reliability of the Colombian electric system during shortages, allowing the national market to purchase electricity from neighbouring countries. As an outcome of these reforms, ISA has emerged as a Latin American Multinational Company, carrying out infrastructure and interconnection projects in Colombia, Brazil, Peru, Chile, Bolivia, Ecuador, Argentina, Panama and Central America.

# **5.4.1. Electricity market**

At the end of 2015 the installed capacity in the National Interconnected System was 16.436 MW (UPME, 2016). 98% of the population has access to electricity. As shown in figure 21, hydroelectric power generation represents 70% of the electricity matrix, followed by thermal energy with 29% and unconventional renewable energy at 0,68% (biomass 0.57% and wind 0.11%). There is still the potential for 56 GW of hydroelectric resources to be developed in Colombia.

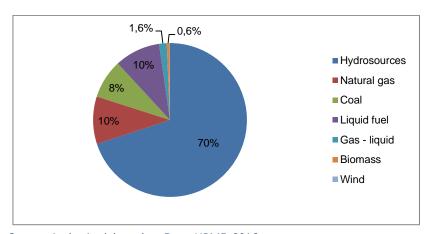


Figure 21. Total installed electricity capacity by technology 2015

Source: Author's elaboration. Data: UPME, 2016

The high share of hydroelectric resources in the energy matrix makes electricity generation dependent on climatic variables. Specifically, the El Niño weather phenomenon causes periods of droughts that force the generation system to temporarily increase thermal generation. For instance, in December 2015 El Niño caused a drought during which thermal generation accounted for 44,6% of total electricity production, in comparison to December 2014 when thermal energy accounted only for 26,6% of overall electricity generation. In 2015 energy demand accounted for around 65.816 GWh, an increase of 4,1% over 2014. Two sectors of the economy consumed about 66% of generated electricity: the manufacturing industry consumed 43,6%, and the mining sector consumed 22,6% (XM, 2016).

70,000 8.0% 6.0% 60,000 50,000 4.0% Variación anual **GWh año** 40,000 2.0% 30,000 0.0% 20,000 -2.0% 10,000 -4.0% -6.0% 1996 1997 1998 2000 2001 2002 2003 2004 2005 2005 DEE Anual Variación anual

Figure 22. Electric demand 1991-2014

Source: UPME, 2016

At the end of 2015, nine main power generation projects—five hydroelectric and four thermal—were under construction. The generation capacity of these projects will be up to 2.442 MW: Ituango (1200 MW), El Quimbo (400 MW), Gecelca 3.2 (250 MW), Gecelca (164 MW), Tasajero 2 (160 MW), Termonorte (88 MW), Carlos Lleras Restrepo (78.2 MW), Cucuana (60 MW) and San Miguel (42 MW). The 'Expansion of Power Generation and Transmission Plan 2015-2029' states that from 2020 electric demand will surpass supply and the additional installed capacity of the system will require between 4.208,3 MW and 6.675,5 MW, in order to enhance the reliability of the electric system. In the most diversified scenario it is necessary to incorporate conventional and unconventional sources to generate electricity, mainly wind and coal thermal plants (UPME, 2016).

In regard to international exchanges, in 2015 Colombia exported 457,3 GWh to Ecuador, 27 GWh to Venezuela, and imported 45,19 GWh from Ecuador.

■ Exporta Venezuela Exportaciones de electricidad ■ Exporta Ecuador 500 450 400 350 300 250 150 100 50 jun/13 sep/13 dic/12 nar/12 jun/12 sep/12 mar/14 nar/13 dic/13 jun/11 sep/11 dic/11

Figure 23. Electricity exports of Colombia 2010-2015

Source: XM, 2016

The parties involved in the electricity market are generators, transmission operators, distributors, traders and consumers. In 2015 there were a total of 56 generators, 12 transmission operators, 31 distributors and 93 energy traders (XM, 2016). Generation capacity is mostly driven by six large companies which own about 82% of the electricity capacity in the country: EPM (22%), Emgesa (19,22%), Isagen (19,08%), Gecelca (8,65%), Epsa (6,82%) and AES Chivor (6,36%) (UPME, 2016). Energy is traded in the Wholesale Energy Market—Mercado de Energía Mayorista—through two competitive mechanisms, the short-term energy market or pool, where energy is traded on an hourly basis for the next day based on the lowest price offers, and the long-term energy market where energy is traded for longer periods through bilateral contracts specifying prices and quantities of energy. The long-term market allows generators, traders, and non-regulated customers to manage the risk of short-term price volatility. Generators are free to trade their production among themselves, with distributors, traders and non-regulated customers. Codensa, Electricaribe, EPM and Emcali are the companies involved in commercialisation and distribution activities.

Since 2005, XM (Compañía de Expertos en Mercados S.A. E.S.P.), which is a subsidiary of ISA, operates the National Interconnected System—the Sistema Interconectado Nacional—runs the Wholesale Energy Market and administers short-term International Electricity Transactions—Transacciones Internacionales de Electricidad—with Ecuador.

There are regulated and non-regulated consumers in the Colombian electricity system. Non-regulated users can sign bilateral contracts with dealers where prices and quantities are agreed freely between the two parties. Regulated users are subject to the general prices regulation of the CREG. Subsidies are allocated to low income customers and covered, to some extent, by high income customers and the industrial and commercial sectors.

## **5.4.2.** Network electricity infrastructure

The electric power system consists of an interconnected grid—the National Interconnected System—which supplies about 98% of the overall demand. The remaining demand—Non Interconnected Zones—is supplied by local small electricity generation plants running mainly on liquid fuels such as diesel. The National Interconnected System comprises six lines of 110kV, 115kV, 138kV, 220kV, 230kV and 500kV, with a total length of 24.981,73 kilometres (XM, 2016). It is divided into the National Transmission System (voltages equal or higher than 220kV), the Regional Transmission System and the Local Distribution System (both with voltages lower than 220kV). The National Transmission System is a multi-owner network, with ISA holding the largest share (approximately 75%), which transports electricity through its affiliated companies Intercolombia and Transelca. The State owns about 62% of ISA's shares and private investors own 31% of it. Transmission is an activity separated from generation, distribution and retailing. The transmission operators must provide open access to customers on a non-discriminatory basis, while receiving regulated revenues through the use of transmission system charges. These charges are regulated by CREG, paid by electricity consumers and collected by retailers.



Figure 24. Electricity transmission system

Source: (UPME, 2016)

Sufficient interconnection is one of the most important prerequisites for optimal functioning of the electricity market in order to meet the growing demand. Each year, the UPME put projects out to tender to expand the electric grid pursuant to the expansion plan for the transmission network. At the end of 2015 there were 21 projects under construction, in different stages.

Colombia currently has electric interconnection with Venezuela and Ecuador. The electric interconnection with Venezuela comprises four lines: 'Cuestecitas – Cuatricentenario' (230kV), 'San Mateo - Corozo' (230kV), 'Tibu – La Fria' (115 kV) and 'Puerto Carreño - Puerto Paez' (34.5 kVv). The rules which govern the electric interconnection with Venezuela are Ministerial Agreements signed in 1989, and short term bilateral contracts between Isagen and EDELCA. The electric interconnection with Ecuador began in 2003 under the rules of CAN Decision 536. Colombia is reinforcing its current electric interconnections with this country.

#### 5.5. Nuclear Power

In Colombia nuclear power is considered to be an unconventional source of energy, without any share in electric generation to date. It is not promoted in the Colombian energy strategy. There is one nuclear reactor, IAN – R1, received from the United States in 1965 for researching proposals, currently under supervision of the Colombian Geological Survey. It has an operating power of 30kW(t) and uses 20% of enriched U235 for fuel. Colombia ratified the Comprehensive Nuclear-Test-Ban Treaty (CTBT) on the 29<sup>th</sup> of January 2008 and is a member of the International Atomic Energy Agency.

# 5.6. Renewable energy sources

Hydropower is the largest renewable energy source in the world, with a 16% overall share of electricity production in 2013 (IEA, 2015). As it was previously noticed, hydroelectric resources represent 70% of Colombian electricity installed capacity and 56 GW of untapped hydroelectric capacity is still to be developed (UPME, 2016), being the second country in South America after Brazil in potential hydro resources. Unconventional renewable energies are emerging in the country. The 'Indicative Plan 2010-2015 PROURE' established targets for unconventional renewable energies in the National Interconnected System. The target for 2015 was an increase of renewable energies participation in the energy matrix by 3.5%, and 6.5% for 2020.

In Colombia small hydroelectric (<10 MW), wind, solar, biomass, geothermal and wave energy are considered to be unconventional renewable resources. There is a solar irradiation average of 194  $W/m^2$  over the territory, local winds with average speed of 9 m/s (up to 80 metres in the Department of La Guajira) and energy potential around 450.000 TJ per year in biomass residues (UPME, 2015). The potential of wind power is estimated to be around 49.5 GW and geothermal about 1 - 2 GW.

Regarding the power sector, the current installed capacity in unconventional renewable energy has been developed on the small scale. In 2004 the operation of the wind farm 'Jepirachi' began on the Caribbean coast, in the department of La Guajira, with a nominal capacity of 19.5 MW. 'Jepirachi' is owned by the Medellin Public Utilities Company (EPM). In 2010 there was around 9 Megawatts peak (MWp) of solar photovoltaic capacity, belonging to private systems and some of them

operating in non-interconnected zones (UPME, 2015). To foster unconventional renewable energies it is essential to link more private investment and remove market and technological barriers. The development of unconventional renewable energies also needs to be carefully considered in light of comparative cost, grid access and dispatch.

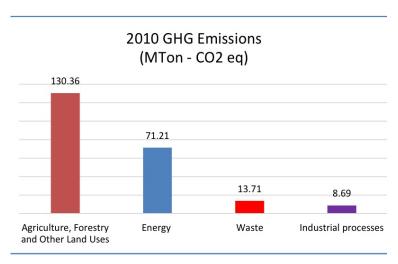
The National Development Plan 2014-2018 officially established targets for unconventional renewable energies aiming to multiply (by three) the installed capacity in non-interconnected zones to 11.113 MW in 2018. Both legislation and government have identified that the most feasible way to incorporate renewable energies is in non-interconnected zones, in order to provide electricity by replacing diesel electricity generation. The National Development Plan also states that the FENOGE and public-private partnership initiatives will attract private investment for energy efficiency. In 2014 the Colombian Congress enacted Law 1715 to promote unconventional renewable energies.

For the transport sector, policy focuses on biofuels with blending mandates (implemented in 2005) which have been progressively set since 2001 through Law 693 and fiscal incentives introduced by Law 939 of 2004. These measures have positioned Colombia as one of the top 10 countries for biofuel production, and the third in Latin America after Brazil and Argentina (World Economic Forum, 2015).

# 5.7. Energy efficiency

Colombia is a developing country where energy consumption has grown rapidly due to its increasing population and production. In 2010 the country produced estimated greenhouse gas emissions of 224 Mton of CO<sub>2</sub>eq, which accounts for 0.46% of total global emissions (United Nations Framework Convention on Climate Change, 2015). Nevertheless, Colombia suffers the effects of climate change, with a high incidence of extreme weather events. The changes in hydrological conditions and rainfall reduction deeply affect the energy supply.

Figure 25. Colombia's greenhouse emissions 2010



Source: Colombian Biennial updated report, IDEAM 2015

In 2010 agriculture, forestry and other land uses accounted for 58% of total greenhouse gas emissions. At that time, the energy sector was the second source of emissions at 32%. In 2012 the energy sector rose in its share in national greenhouse gas emissions, becoming the primary source with a stake of 44%. Transportation is included in this index as part of the energy sector, and accounted for 38% of emissions in this category (IDEAM, 2015).

Greenhouse gas emissions could increase by 50% by 2020 compared to 2000, without taking into account deforestation, which remains a large source of emissions (OECD, 2014). Under the agreement achieved in COP-21, the country is committed to reduce its greenhouse gas emissions by 20% for 2030, pursuant to its Intended Nationally Determined Contribution. Taking into account that in 2012 the energy sector (including transportation) was the main source of greenhouse effects, the policies, regulations and programmes to foster energy efficiency have a critical role.

There is energy saving potential of USD \$5.200 million per year, considering that in 2012 the proportion of useful energy and wasted energy was 40% and 60%, respectively (UPME, 2015). The Indicative Plan 2010-2015 PROURE found that the country could save around 20,2% of electricity (13.515 GWh) and established targets to reduce electrical consumption by 14,8% and in other energy resources by 0.81% in 2015. Transport is the largest consumer of energy and the largest source of CO<sup>2</sup> emissions from fuel combustion (OECD, 2014). The residential sector consumes about 20% of the total energy supply, with electricity (31%) and firewood (28%) being the main sources. Energy Efficiency in the household sector in Colombia is influenced by three factors: 1) high use of electricity for cooling and lack of maintenance and replacement of old/inefficient equipment; 2) use of incandescent light bulbs in some regions; and 3) excessive consumption of thermal energy to cook and heat water (UPME, 2015). The household sector has the potential to save 10.6% of total energy. Therefore, five targets were set in the PROURE Indicative Plan 2010-

2015 to overcome energy inefficiency; they include substituting 48 million light lamps for a USD \$144 million cost, and replacing refrigerators which would represent savings of USD \$770 million.

At the end of 2013 the industrial sector accounted for 23.7% of final energy consumption, with a high use of thermal energy: coal is the largest primary energy source (35%), followed by natural gas (28%). Most inefficiencies are related to technologic obsolescence and lack of good operating practices. In 2012 the government undertook strategies to boost investment in upgraded technology, like fiscal incentives such as VAT exemptions and tax deductions. Approximately 40 energy audits were completed on small and medium size enterprises (UPME, 2015).

# **6. Domestic Energy Legislation**

Colombia has gradually set up a legal framework to attract investments in the energy sector. Regarding domestic legislation three cornerstone reforms were implemented to boost investments: a) 1994 in the electricity industry; b) 2003 in the oil and gas sector; and c) 2004 in the coal mining industry. There is not a unique law regulating the energy industry. The legislation applicable to the energy industry is given by the Congress and the national Government in the Constitution and laws, decrees and regulations. The main laws specific to the energy sector are the Petroleum Code, the Mines Code, the Public Utilities Law, the Electricity Law, the Energy Efficiency Law and the Unconventional Renewable Energy Sources Law. Environmental and social legislation have a key role in the energy sector, in order to achieve sustainable development.

This chapter describes the main legislation in the hydrocarbons and electricity sectors as well as in terms of energy efficiency and environmental and social protection. Regarding the coal industry, it is relevant to mention that it is regulated as part of the mining sector. It became fully privatised in 2004 after the liquidation of the state-owned company Minercol Ltda. and the creation of the mining authority INGEOMINAS. The relevant legislation regarding coal is the Mines Code, which regulates concession contracts. The institutional framework has been reformed several times, and, after the promulgation of Decree 4134 of 2011, the ANM is the national mining authority.

# 6.1. Hydrocarbons law

Decree Law 1056 of 1953 is the Petroleum Code, which declared the exploration, exploitation, refining, transport and distribution of oil and gas as activities of public interest. The Code regulates upstream and downstream operations in the oil and gas industry, and it must be analysed together with Decree 2310 of 1974 and its reform, implemented in 2003, which introduced substantial changes to the hydrocarbons sector.

Decree Law 1760 of 2003 removed regulatory functions from Ecopetrol and created the ANH as the authority in charge of managing hydrocarbons reserves and the allocation of oil and gas contracts. Since then, Ecopetrol is in charge of industrial and commercial operations only. Decree Law 1760 of

2003 was modified by Decree Law 4137 of 2011 and Law Decree 714 of 2012 to introduce changes to the structure of the ANH. In general terms, the ANH designs, promotes and agrees on oil and gas contracts for the exploitation of those resources in the Colombian subsoil. The model contract adopted by the ANH is a modern concession, which allows domestic and international companies to explore and exploit hydrocarbons reserves without entering into partnership with the national oil company Ecopetrol, and to obtain oil and gas production by paying royalties, rights and taxes to the Colombian State.

The conditions of oil and gas contracts are defined by the regulation of the ANH, mainly in Agreement 4 of 2012 and 3 of 2014. There are two foremost types of contracts: a) Exploration and Production (E&P), and b) Technical Evaluation Agreement (TEA). The typical E&P contract has a duration of thirty years and is divided into three stages: exploration, evaluation and production. On the other hand, the objective of the TEA is to explore and assess the hydrocarbons potential in larger areas than E&P contracts, with less geological information available. The typical TEA contract has a duration between 18 to 36 months and allows the oil and gas company to convert a portion of the area covered by the TEA into area subject to an E&P contract. There are two main procedures to allocate oil and gas contracts: a) open rounds (competitive procedures), and b) direct assignment procedures, which entitle the ANH to allocate contracts under the principle of "First come, first served".

Agreement 3 of 2014 introduced new regulation in order to allocate contracts to explore and produce unconventional hydrocarbons. Since 2015, the ANH Agreements 2, 3 and 4 have implemented measures to alleviate the effects of low oil prices, aiming to maintain the current investments in E&P and TEA contracts. On the other hand, technical regulation to explore and produce hydrocarbons is contained in Resolution 181495 of 2009, issued by the Ministry of Mines and Energy. Future regulation seeks to implement changes to the procedures for allocating oil and gas contracts, and the draft of the new regulation was published in the website of the ANH.

Regarding downstream, the Petroleum Code sets the rules to transport oil by pipelines and promotes open access to transport infrastructure to third parties when there is remaining capacity. Resolution 72145 of 2014, issued by the Ministry of Mines and Energy, develops these rules. Decrees 4299 of 2005 and 1717 of 2008 contain the legal framework for refining, storage, management, import, transport and distribution of oil liquid fuels (except LPG) and establish the sanctioning regime. These activities are public services open to the participation of private enterprises under authorisation of the Ministry of Mines and Energy.

# 6.2. Electricity law

Laws 142 of 1994 ("Public Utilities Law") and 143 of 1994 ("Electricity Law") transformed the electricity sector from a state monopoly to a competitive market divided into four main activities: generation, transmission, distribution and retailing. Law 142 of 1994 regulates the provision of electricity and distribution of natural gas, among other utilities. It split the state-owned company

'Electric Interconnection S.A.' (ISA), in order to separate electricity generation and transmission operations and allow the privatisation of electricity utilities and attract more players in the market. ISA remained as the transmission company in charge of the operation of the grid, removing its participation in the activities of generation, trade and distribution. The law establishes open access to the grid to third parties, including electricity generators and other users, under agreement to pay for the respective fees. ISA is the Transmission System Operator and operates the National Dispatch Centre. Since 2005, ISA operates the National Interconnected System and manages the Wholesale Electricity Market through XM, an affiliated company.

Law 143 of 1994 sets the rules that govern the generation, transmission, interconnection, distribution and trade of electricity as well as the Wholesale Electricity Market, which came into operation on the 20<sup>th</sup> of July, 1995. State, private and public-private partnerships may generate, transmit, distribute and trade electricity without requiring a concession. Pursuant to Resolution 056 of 1994 of the CREG, these enterprises need to report the start of their activities to the CREG and according to Law 142 of 1994, they also must inform to the Superintendence of Public Services. The generators can sell electricity in the Wholesale Electricity Market (regulated prices) or through bilateral contracts (non-regulated prices). The Commercial Exchange System was created to register the operators, the commercial borders of the market, the long-term electricity contracts, as well as to settle the financial obligations and debts of the generators and traders in the Wholesale Electricity Market.

The electricity law and CREG regulation establish unbundling rules restricting horizontal and vertical integration of utility companies that provide electricity services. These rules are: a) the companies constituted before Laws 142 and 143 of 1994 can develop more than one activity under separated accounts for each business, and b) the companies constituted after this legislation can only carry out, at the same time, complementary activities such as generation-retailing or distribution-retailing and are forbidden to simultaneously perform activities of generation-transmission, generation-distribution, transmission-distribution and transmission-retailing. Regarding horizontal integration, according to Resolution 128 of 1996 of the CREG, a single company may not own more than 25% of the generation, retailing and distribution activities.

Non-regulated users are those which consume between 0.1 MW and 55 MWh per month. Large consumers do not participate directly in the Wholesale Electricity Market, and they are represented by traders. In 2006, Resolution 071 of the CREG introduced the 'Reliability Charge Scheme' ('Cargo por Confiabilidad' in Spanish) aiming to encourage investments in power plants and to guarantee the availability of electricity in periods of scarcity or droughts. Under this scheme, the CREG may open a call for bids for electricity generators and investors. The winning bidder receives a stable compensation over a specific time period for the produced electricity. In exchange, the generator must release a predetermined amount of electricity when the energy spot price surpasses a threshold fixed by the CREG. All the consumers of the National Interconnected System pay this compensation, through fees charged by the electricity commercialisation companies.

In 2014 the Colombian Congress enacted Law 1715 to promote unconventional renewable energies within the national energy system and encourage energy efficiency, seeking to support sustainable economic development, reduce greenhouse gas emissions and enhance the reliability of the energy supply. In the electric sector, fiscal incentives are the prevalent policy mechanism for promoting unconventional renewable energy. The main measures introduced by this law include: i) access of renewable self-generators to the transmission and distribution grid to deliver their surplus; ii) development and use of distributed energy resources; iii) the creation of the Unconventional Energy and Efficient Energy Management Fund (FENOGE) to finance renewable energy projects; and iv) fiscal incentives such as: a) reduction of up to 50% in income tax on investments in renewable power generation; b) accelerated depreciation of assets; c) value-added-tax exemption on pre-investments and investments in goods and services; and d) import tariffs exemption on pre-investments and investments in raw materials, machinery and equipment for the development of unconventional renewable projects. For the moment, the regulation has not implemented feed-in tariff mechanisms, nor auctions.

# 6.3. Energy efficiency legislation

By means of Law 629 of 2000 Colombia approved the Kyoto Protocol, which aims to reduce greenhouse gas emissions, fostering energy efficiency in each sector of the economy, among other policies. One year after the Congress issued two laws, the Energy Efficiency Law, and a law to promote energy efficiency in the transportation sector. Law 693 of 2001 established gasoline blending components with oxygenates, such as alcohol components, as mandatory for cities with more than 500.000 inhabitants.

In 2001 the Congress enacted Law 697 to promote energy efficiency as well as unconventional energy resources, seeking to guarantee energy supply and economic competitiveness, to guard rights of the consumers, and to achieve sustainable development. This law declared the rational and efficient use of energy to be of public interest and gave attributions to the Ministry of Mines and Energy to promote and monitor energy efficiency programmes like the Programme for the Rational Use of Energy and the Use of Renewable Sources of Energy (PROURE).

Decree 3683 of 2003 created the Intersectoral Commission for the Rational and Efficient Use of Energy and Non-Conventional Energy Sources (CIURE, its acronym in Spanish) to support the Ministry of Mines and Energy and to coordinate energy efficiency policies. It sets incentives for research on energy efficiency, obligations for enterprises and rights for consumers, and establishes financial mechanisms for energy efficiency. It creates the Merit Order of the Rational Use of Energy and commands the Ministry of Mines and Energy to issue technical regulation on energy efficiency, including labelling to protect the rights of consumers.

The Energy Efficiency Law and its secondary regulations provide the legal basis and measures to promote and support energy efficiency improvements, including: a) fiscal incentives for equipment and machinery in 2002; b) research and development funds for PROURE in 2005; c) development of

technical requirements for electrical equipment (labelling) in 2007; d) best practices included in technical installation standards in 2008; e) electrical installations standards in 2009; f) lighting standards in 2010; g) carbon emissions considered for electricity generation projects in 2010; and h) the indicative plan PROURE 2010-2015 with specific targets for the residential, industrial, transport and energy sectors adopted by the Ministry of Mines and Energy through Resolution 180919 of 2010. This plan was extended until June 2016. The Ministry of Mines and Energy is working on PROURE 2016-2020 as well as on the design and implementation of an integral policy which includes economic incentives for investments in energy efficiency.

Furthermore, the Ministry of Environment adopted Resolution 0186 of 2012 to set goals in the industrial and transportation sectors, as well as aims for the use of unconventional renewable energy sources in the National Interconnected System (6,5% for 2020) and the Non-Interconnected Zones (30% in 2020), according to PROURE 2010-2015. Resolution 0563 of 2012 of the UPME regulates the procedures to obtain tax exemptions and deductions on energy efficiency.

Future legislation seeks to modify the structure of CIURE and introduce rules to promote an energy efficiency market. Since April 2016 the Ministry of Energy and Mines released two drafts of a Decree for public comments.

# 6.4. Environmental and social protection in the energy sector

One of the principal laws regarding environmental protection in Colombia is Decree 2811 of 1974 or the "Natural Resources Code", which established the preservation and management of the environment as subjects of public interest and created a System of National Parks to protect lands of environmental relevance. 17 years after the expedition of this law, the Constitution of 1991 emphasised environmental concerns, including multiple provisions to safeguard the environment. The Constitution stipulates that the state will plan the management and use of natural resources in order to guarantee their sustainable development, conservation or recovery; it will prevent and control the factors of environmental deterioration; and it will charge legal sanctions and demand the reparation of any environmental damage caused. In the same way, the state will cooperate with other nations in the protection of ecosystems located in the border areas. Regarding social protection, the Constitution sets out that the exploitation of natural resources in indigenous lands will be done without spoiling the cultural, social and economic integrity of indigenous communities. In the decisions adopted with respect to the mentioned exploitation, the government will promote the participation of the representatives of the respective communities.

By constitutional mandate, Natural Parks and communal lands of ethnic groups are inalienable, imprescriptible, and unseizable. Additionally, Colombia has incorporated several international treaties and conventions into domestic legislation in order to reinforce environmental protection. With respect to protected areas, Law 165 of 1994 approved the Convention on Biological Diversity, which requires each contracting party to establish a system of protected areas. By means of Decree 2372 of 2010 Colombia adopted the National System of Protected Areas which include: a) national

parks; b) protective forest reserves; c) regional national parks; d) integrated management districts; e) land conservation districts; f) recreational areas; and g) natural reserves of civil society.

Law 99 of 1993 is another essential environmental rule in Colombia. This law created the Ministry of Environment and Sustainable Development and the National Environmental System as a decentralised management system; regulates environmental licenses; and establishes measures for public participation in environmental issues and sanctions for non-compliance. Environmental Impact Assessments and Environmental Licensing Procedures are required in the hydrocarbons, coal, electricity and nuclear energy sectors, according to the terms and conditions set by Law 99 of 1993 and Decree 2041 of 2014.

At the regional level, there are 33 Autonomous Regional Corporations responsible for implementing environmental policies. The institutional framework was strengthened in 2011 by Decree 3573, which created the National Environmental Licensing Authority as part of the Ministry of Environment and Sustainable Development. Along with the Autonomous Regional Corporations, the National Environmental Licensing Authority is the entity responsible for the environmental licensing and permitting processes for projects, works and activities that can damage natural resources or the environment.

Regarding social safeguards, in addition to Constitutional provisions, Law 21 of 1991 enacted ILO Convention 169 of 1989 on Indigenous and Tribal Peoples. This means that free, prior and informed consultation with ethnic groups is an obligation in Colombia. The government and companies must consult indigenous, tribal, afrocolombian and Romani populations that may be affected by energy projects located within the lands they own, occupy or use. Ethnic groups shall as long as possible participate in the benefits of such activities, and shall receive fair compensation for any damages caused.

# 7. Domestic investment legislation

## 7.1. Rules for the establishment of an investment

## 7.1.1. Establishment of legal entities

The procedure for the establishment of all legal entities for commercial purpose by foreign investors in Colombia is the same that nationals must follow. The Commerce Code covers the general procedures. The legal entities are constituted by public deed that must include the name and address of the founders, nationality and identification number in the case of natural persons, and legal document(s) of constitution in the case of legal entities. The corporate structure of the entity, the business name and its core activities ought to be declared as well. Other requirements are the address, the legal representative, the branches, the social capital, the duration and causes of dissolution of the entity, and the general rules for the administration of the business (bylaws).

The public deed must be registered in the commerce chamber of the city where the commercial entity has its principal commercial activities, including the branches. If there is real-estate as a contribution to the social capital, the public deed must be registered in a notary office according to the provisions of the Civil Code. Foreign corporations constituted in Colombia are under the supervision of the Superintendence of Corporations, just as national corporations are. Without the registration requirements the commercial entity cannot commence business activities.

There are five corporate structures, or company types, governed by the Commerce Code. The most common and suitable for commercial purposes are limited liability companies, corporations, and simplified stock companies. These kind of legal entities make a clear division between capital and liability, limiting the responsibility of each shareholder to the amount of participation. The shares are freely negotiable and the only exception is the right of first refusal.

Concerning corporations, there is a minimum requirement of five shareholders (individuals or entities) and no shareholder may hold 95% or more of the shares. Corporations are required to have a statutory auditor. For the limited liability company, the requirement of shareholders descends to two individuals or entities, and the maximum is 25 individuals. A highlight of the limited liability company is that it is possible to assign greater responsibility to some or all of the partners as provided by the bylaws. A statutory auditor is only mandatory if the assets or income of the company surpass the threshold prescribed in the law.

The most common company type are the simplified stock companies, commonly known as SAS (their acronym in Spanish). Law 1258, governing this structure, was introduced in 2008 in order to ease the establishment of companies. The incorporation and amendments of a simplified stock company may be done through a private document that needs to be registered in the Commercial Chamber. A public deed is only needed if there is real estate as an asset.

Establishing a branch is an option as well for foreign companies. For them to carry out commercial activities in Colombia it is mandatory to establish a branch, when creating a separate legal entity is not an option. It is possible to present bids for foreign companies without the constitution of a branch, but a written compromise to constitute such a branch is a prerequisite that must be presented with the bid in this case. The establishment of a branch is achieved through submission of the public deed of constitution of the company and its bylaws to a notary<sup>10</sup>. Additionally, the branch must be entitled to operate with a permit issued by the Superintendence of Corporations before commencing business activities. Pursuant to the Code of Mines, foreign mining companies that perform activities in Colombia for less than one year are not obliged to establish a branch.

There is a special regime for companies providing domestic public services as given by Law 142 of 1993. The transport, generation, commercialisation, transformation, interconnection and transmission of electricity on the one hand, and the distribution and commercialisation of natural gas on the other hand, are considered to be domestic public services by the mentioned Law. The

<sup>&</sup>lt;sup>10</sup> More detailed information: <a href="http://www.investincolombia.com.co/how-to-invest/steps-to-establish-your-">http://www.investincolombia.com.co/how-to-invest/steps-to-establish-your-</a> company/creating-a-foreign-company-branch.html

special regime requires the companies delivering these kind of services to be constituted as limited companies. They are supervised by the Superintendence of Public Services and the services they provide are regulated by the Energy and Gas Regulatory Commission.

Regarding companies dedicated to exploration and exploitation of oil and natural gas, it is not mandatory to establish a branch in Colombia in order to present a proposal in a bidding process. However, according to the regime provided by the Hydrocarbons National Agency in Directive 4 of 2012, the bidding company must agree to establish a branch and fulfil it if the company successfully wins the bidding. Otherwise, the company may also be constituted under the rule of the Commerce Code.

#### 7.1.2. Land and real estate

According to Article 332 of the Constitution, the Colombian State is the owner of the subsoil and non-renewable resources. The State entitles particulars to explore and exploit natural resources in the subsoil. The State also plans the use of natural resources in order to guarantee their sustainable development and conservation, and intervenes in the exploitation of natural resources and land use. Consequently, the Petroleum Code (Decree 1056 of 1953) and the Mines Code (Law 685 of 2001) declared the different activities related to the industries of hydrocarbons and mining, respectively, as public interest activities. Furthermore, Law 142 of 1994 declared the activities related to the delivery of electricity services to be of public interest. Consistent with Article 58 of the Constitution, property has a social dimension which implies obligations and, in consequence, the private interest shall yield to activities declared of public interest. Based on this legal framework, it is possible to initiate easements and expropriations for the exploration and exploitation of renewable and non-renewable natural resources.

Regarding the mining industry, once a company has a mining title issued by the National Mining Agency, the first step to impose an easement is negotiation with the owner of the land as to arrange the value of the compensation. If there is no agreement, the owner of the land can petition the mayor of the municipality to assign an expert for quantifying the compensation. The decision can be appealed to the governor and reviewed by judicial authority only to reconsider the amount of the compensation. The easement needs to be recorded in the register of deeds. The easements over lands allow the entitled companies to develop all activities related to exploration and exploitation of minerals. The owner of the land has the right to receive compensation and insurance in case of unexpected damages.

In the hydrocarbons industry the idea of easement has the same ground rules pursuant to Article 9 of the Petroleum Code. Law 1274 of 2009 covers the procedures to procure an easement and specifies that the municipal judicial authority has the competence to enforce it. Provided that the easement is imposed for reasons of public interest, this procedure aims only to appraise the value of compensation. In both the oil and mining industries, the company may decide to purchase the land as a result of the negotiation with the owner of the land. There is no distinction in the legal

framework regarding easements between foreign and national individuals or companies, nor public or private institutions.

Article 5 of Law 143 of 1994 declared the activities of electricity generation, transmission and distribution to be of public interest. The responsibility for the enforcement of an easement and the fixation of the amount of the compensation in these cases is the judicial authority, according to the procedure provided by Law 56 of 1981 and 143 of 1994.

There are certain kinds of lands that are subject to a special regime and need additional authorisation. In regard to the protection of indigenous peoples, Colombia has ratified the Indigenous and Tribal Peoples Convention of the International Labour Organisation (169 of 1989). Thereof, the indigenous, afro Colombian and Romani peoples need to be consulted in order to impose an easement over the lands they inhabit. Furthermore, lands protected by environmental rules, the territories under urban perimeters, and culturally protected areas require special permits from the responsible authorities.

In regard to public lands, the Lands National Agency may assign portions of those lands to public institutions to carry out projects related to public interest activities, namely, mining, hydrocarbons and electricity industries, pursuant to Law 160 of 1994. The public lands within a radius of 2500 meters around the areas of exploitation of non-renewable natural resources cannot be entitled by the Lands National Agency to third parties.

# **7.1.3. Discriminatory measures**

Article 252 of the Code of Mines orders that the mining companies must prefer goods and services of the domestic industry provided they offer similar delivery conditions. Also, pursuant to Article 251, mining companies must prefer national over foreign individuals for the execution of mining and environmental studies and works, as long as such persons have the required skills.

The obligation of preferential treatment of nationals is reproduced also in the oil industry. The contracts between the Hydrocarbons National Agency and oil and gas companies include a clause that compels the companies to prefer, under the same quality and price conditions, the bids of local, regional and national bidders, in that specific order.

Another example of preferential treatment of nationals is in Article 21 of Law 80 of 1993. The contracts for the supply of public services must be granted through public bidding. The goods and services of national bids are preferred over foreign bids when they offer the same conditions. For the acquisition of goods and services by public entities, among foreign bids, the one with most national employees, national content and better conditions for transfer of technology is preferred over the others.

# 7.2. Domestic investment legislation

#### 7.2.1. Competition

The antitrust legal framework is mainly provided by Law 155 of 1959, 256 of 1996 and 1340 of 2009. The Superintendence of Industry and Commerce (SIC) has jurisdiction to take over administrative investigations, adopt concrete measures, and impose fees for infringing on competition related rules. The SIC must be informed regarding the merger of companies when those companies have a market share of 20% or higher and exceed an amount of assets and income determined by the SIC. In the merger cases that require the SIC to be informed, the Superintendence may oppose the merge and even reverse it if an inquiry concludes there is a restriction of competition as a result of the merge. The Superintendence can also authorise the merge when there is a tendency to hamper competition under specific obligations, and conditions to maintain competition. The SIC supervises the companies in the entire energy sector, including hydrocarbons, mining and electricity.

The antitrust legal framework in the electricity and natural gas sectors is governed by Laws 142 and 143 of 1994. The regulatory authority is CREG. The general mandate of the CREG is to promote competition among companies through regulation, as well as to prevent companies from abusing a dominant market position. Charging fees that do not cover the operating expenses of a service, for example, is considered to be a restriction to competition. In the electricity and gas sectors, any company serving 25% or more of the users that make up a market has a dominant market position pursuant to a legal presumption of Law 142 of 1994. This law also provides 25 types of contractual clauses that are forbidden because they are regarded as restrictive to competition.

Monopolies are exceptionally permitted in delimited areas in order to deliver electricity and gas to households when a competitive system is not economically feasible for the companies providing these services. The CREG produces the regulatory framework to be followed by companies delivering gas and electricity under a regulated monopolistic market scheme.

The competitive scheme in the hydrocarbon industry was introduced in Colombia in 2003 with the establishment of the Hydrocarbons National Agency. The mandate of the Agency is to negotiate, subscribe and manage the concessions for exploration and exploitation of hydrocarbons, aiming to boost competitiveness in the industry and attract international investors. This scheme diminishes the share of Ecopetrol in the market but does not reverse the endurance of the national company in the industry, given its large investment in transport, storage, and refining infrastructure. The other oil companies pay fees to Ecopetrol for the right to use these facilities.

Additionally, Decrees 4299 of 2005 and 1717 of 2008 sets out that companies devoted to refine, store, manage, import, transport and distribute oil liquid fuels must refrain from restrictive practices and unfair competition.

# 7.2.2. Transfer of technology

With regard to the hydrocarbons sector, Directive 004 of 2012 of the Hydrocarbons National Agency defines the transfer of technology as a contribution of exploration and production contractors to support the development of the industry, the progress of the professional personnel, and to fund projects of institutional strengthening and transfer of knowledge. Exploration and production contracts have a clause requiring the contractors to endorse scientific and technology related activities. This obligation can be satisfied with the payment of a fee calculated with a formula which takes into account the area of the field of exploration or production. The amount of the fee can never exceeds USD \$100.000 (constant 2012 value) per year or phase. Contractors frequently choose to pay the fee, and the collected funds are allocated by the Agency for undertaking activities related to the transfer of technology.

In the mining sector, pursuant to the Code of Mines, a clause for permanent transfer of technology must be introduced in all contracts for exploration and production of minerals in the international seabed. Additionally, the experienced companies develop programmes for the transfer of technology and professional development. The 'Tecnocerrejón' programme in the coal industry is an example.

On the other hand, the Ministry of Mines and Energy and the National Hydrocarbons Agency are prone to sign memorandums of understanding with foreign governments. In January 2016 Australia and Colombia signed an agreement with the potential of implementing measures on technology transfer in fields such as the exploration and production of coal bed methane and offshore hydrocarbons. Colombia has also signed MoUs with the United Kingdom and Norway in order to transfer technology in offshore hydrocarbons operations.

## 7.2.3. Transfer of payments

Decree 1068 of 2015 prohibits discriminating measures between Colombians and foreigners regarding international investments. The purchase of shares, the participation in a trust, the acquisition of real estate, the contribution of capital to a company, and other similar international investments done by foreign companies are governed by Decree 1068 of 2015. Loans, mortgages and other similar transactions do not constitute foreign investment and are excluded from this regime.

There is no need of authorisation for foreign investments, but all these operations must be registered with the Central Bank. The omission of this obligation is a contravention to the foreign exchange rules. The investment of foreign capital held in compliance with the rules of the Decree entitles its holder to reinvest or retain profits, to capitalise sums produced with the investment, and to repatriate the net profits of an investment or the revenues obtained for selling an investment. The procedures for registering foreign investment are given by Directive DCIN 83 of the Central

Bank<sup>11</sup>. The terms of transfer of payments can not be changed by the Central Bank or the government in a way that affects international investors, except for transitory measures when international reserves amount to less than three months of imports.

The transfer of payments of foreign investments in the hydrocarbons and mining sectors has a special regime provided by Directive DCIN 83 of the Central Bank, that applies to the branches of foreign companies operating in Colombia. These branches can only access the foreign exchange market under three circumstances: a) to send currency abroad equal to the amount of foreign capital in the company in case of liquidation of the branch office; b) to send currency abroad equal to profits received for the sales of oil, natural gas or services; and c) to receive foreign currency in order to cover expenses in local currency. The branch offices can submit a claim to the Central Bank to be excluded from the special regime. The branch offices are only subject to the general exchange regime for 10 years from the presentation of the solicitude. Additionally, the national and foreign companies of the hydrocarbons sector can form a pact and disburse payments in foreign currency among them, as long as there is no contravention of the rules of the special regime.

## 7.2.4. Intellectual property rights

Domestic law protects trademarks registered with the Superintendence of Industry and Commerce (SIC). The trademark can not be registered if the signs or descriptive words can deceive the consumer, violate the rights of third parties, or consolidates an act of unfair competition. The registration of the trademark entitles its owner to exclusive rights for its use in the country for 10 renewable years each time.

Invention patents are granted for a 20 year period to inventions in any field of technology under the conditions that the invention is new, denotes an inventive step and has an industrial application. Utility model patents are granted for a 10 year period to new designs of devices and parts of devices that denote an improvement over previous designs. The solicitude to obtain invention patents and utility model patents must be submitted to the SIC. The granted patents must be used directly or through an authorised company or person before three years after the date of issue of the patent or four years after the filing date of the submission. Otherwise, third parties may obtain a compulsory license to use the patent. Infringement of copyrights is a criminal offense in Colombia and empowers the legal owner to claim for damages.

The SIC has provided a Patent Prosecution Highway with the Directive 54093 of 2012. The SIC typically takes two to six years to issue a patent, and this new procedure aims to shorten the terms and interchange of information with patent offices in foreign countries to avoid the duplication of inquiries. There are agreements with the patent offices of the United States (2012), Spain (2013), Japan (2014) and South Korea (2016).

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<sup>&</sup>lt;sup>11</sup> 'Circular Reglamentaria Externa – DCIN – 83' is the heading in Spanish.

Colombia is an active member of international organisations and signatory to international treaties for the protection of intellectual property rights. Some of these are the Paris Convention, the World Trade Organisation (TRIPS Agreement), the World Intellectual Property Organisation (Patent Cooperation Treaty) and the Andean Community (Decision 486 of 2000).

#### 7.2.5. Employment of key personnel

Employment contracts executed in Colombia, regardless of the nationality of the parties (employer or employee), are governed by Colombian law (PROCOLOMBIA, 2016). Article 3 of the Colombian Labour Code (Decree 2663 of 1950) regulates employment relationships, covering the areas of individual labour law, collective labour law and integral social security. However, employment relationships that involve public authorities have a special labour regime.

According to Article 32 of the Labour Code, key personnel in Colombia is defined as the employees which represent the employer and which normally hold direction, trust and handling positions. The nature of key personnel employment contracts is specified in their wording, or can be demonstrated by the functions that the employee executes. These employees have a different treatment, as they should remain in office on a long-term basis. They have decision-making and management powers and they are trusted with the development of the business. Also, they do not have maximum legal working hours. If the job requires it, employees holding said positions shall implement the required time to perform their duties without overtime pay (PROCOLOMBIA, 2016). In addition, they can be part of a labour union but they cannot be part of its board of directors and they are not able to apply for labour union immunity.

Article 8 of the Petroleum Code establishes that national individuals will be preferred to occupy high- level employment positions in petroleum companies. Also, nationals will have the same labour conditions and salary as foreign employees. In the same sense, the Mines Code, in its Article 253, establishes that mining companies have to pay national employees at least 70% of the total salary of their qualified or managerial employees. If mining companies do not find enough qualified nationals to hire, they could exceed the maximum percentage by seeking an authorisation from the Ministry of Labour. However, they will be obliged to contribute to the specialised training of Colombians.

Normally, oil and gas contracts include provisions to protect the labour rights of Colombians. As an example, E&P contracts with the National Hydrocarbons Agency will have to include a clause where the contractor will agree to provide proper training to national employees for the development of the contract.

# 7.2.6. Expropriation and compensation of losses

Legislative Act 1 of 1999 eliminated expropriation without compensation in order to promote FDI. Consequently, Decree 2080 of 2000 was issued and the promotion and protection of FDI became a

major issue for Colombia. The Decree established a general foreign capital investment regime in Colombia and for Colombian investments abroad. This Decree was amended by Decree 4800 of 2010.

In this sense, Colombia has signed numerous investment promotion and protection agreements including substantial guarantees such as: a) non-expropriation without compensation; b) clear rules to determine the compensation amount in case of expropriation; and c) compensation for indirect expropriation, when the host state does not affect the entitlement of the investment but issues regulatory measures which affect its economic viability (National Planning Department and others, 2013).

Article 4 of the Petroleum Code established that the petroleum industry and all the activities of its productive chain including exploration, exploitation, refining, transportation and distribution are of public interest. Consequently, the Ministry of Mines and Energy, by request of an interested party, can expropriate private property when necessary for the development of the industry. Additionally, Article 84 established the requirements for the mentioned expropriation request.

Furthermore, Article 13 of the Mines Code declared the mining industry and all its phases to be of public interest. In this sense, expropriation could be requested by the interested party. The requirements of the request are determined in Articles 189 and 286. Moreover, Article 186 established the assets that can be subject to expropriation and Article 187 established that those assets must be essential to the efficient operation of mining projects, installations, and the exploitation of minerals.

Article 56 of Law 142 of 1994 declared of public interest the execution of works to provide public services and the acquisition of sufficient spaces to ensure the protection of the respective facilities. For both cases, immovable property can be expropriated. According to Article 116, local authorities and the nation have the faculty to initiate the expropriation process.

Law 56 of 1981, Article 16, declared of public interest the projects for the generation, transmission and distribution of electricity, water supply, irrigation, river and flows regulation, and the areas where they are developed. Article 18 mentions that the national and local authorities, and the state-owned companies with related activities, are entitled to initiate the process and declare the expropriation of the necessary assets or rights.

#### 7.2.7. Tax incentives

Colombia has a competitive Free Trade Zone (FTZ) regime including permanent FTZs and single enterprise FTZs. In both of them, different benefits are granted for the production of goods or the provision of services including a single 15% income tax rate (rather than the normal 25% rate) if they were filed or approved by December 31<sup>st</sup>, 2012. Afterwards, they will be beneficiaries of the 9% Income Tax for Equity (CREE Tax) and of a 6% surcharge on CREE tax, which will be increased up to 9% in 2018.

Customs taxes (VAT and customs duties) are not generated when raw materials are introduced to the FTZ from abroad. Also, there is a VAT exemption for raw materials, inputs and finished goods sold from Colombia to the FTZ. Exports made from Free Trade Zones to foreign countries may apply the benefits of international trade agreements signed by Colombia. The investor also has the possibility of performing partial processing outside of the FTZ for up to 9 months. Additionally, within the national territory the investor can sell all services or goods with no fees or restrictions, prior to nationalisation and payment of the corresponding taxes (PROCOLOMBIA, 2015).

There are also Special Economic Zones for Exports (ZEEE) in five different cities of Colombia. They involve special incentives to encourage investment and strengthen national export of goods and services produced in national territory.

Offshore FTZs were created by Decree 2682 of 2014 to attract investment and enhance the competitiveness of the hydrocarbon sector of Colombia. This decree established the requirements and conditions to designate a permanent offshore FTZ in any non-continental area of the national territory. The companies operating in those zones must be dedicated exclusively to technical evaluation, production and exploration of hydrocarbons, logistics, compression, or the transformation and liquefaction of gas related to hydrocarbons offshore. Also, the government can designate continental or insular areas as FTZs. In these zones, companies have to encourage activities directly related to the offshore oil and gas sector.

Decree 2129 of 2015 clarifies the Decree mentioned before, as it established that the operator of a contract with the National Hydrocarbons Agency must seek authorisation for the designation of a FTZ. For this, the operator must agree to create and maintain at least 30 new jobs after 6 years and to make investments in the amounts provided by the Decree 2129 of 2015. The new decree also established that a territory will qualify as a FTZ if it is assigned to one operator by multiple contracts signed with the National Hydrocarbons Agency.

The hydrocarbon operators in FTZs may benefit from a number of incentives, including a reduced income tax rate of 15% and an exemption from the surcharge on the corporate income tax (CREE). Also, the operator will have the possibility to accede to the general FTZ VAT exemptions mentioned above (Brigard & Urrutia, 2015).

Colombia has been focusing on the investment, research and development of clean energy and energy efficiency. Law 1715 of 2014 determined the integration of unconventional renewable energy into the national energy system and created tax incentives for investments in these sources of energy. Since February 2016, Decree 2143 of 2015 regulates tax incentives as such: a) 50% of the investments will have a deduction in the payment of the income tax for a period of 5 years; b) there will be an exemption of VAT from the goods associated to the investments and from customs tariffs; and c) the assets associated to the investments will be subject to accelerated depreciation.

Additionally, the sale of electricity generated by wind resources has an exemption to income tax for 15 years from January 1<sup>st</sup>, 2003, as established in Article 18 of Law 788 of 2002 and Decree 2755 of 2003. The exemption operates when the generator obtains and sells certificates of emission of

carbon dioxide in accordance with the terms of the Kyoto Protocol, and invests at least 50% of the revenues in social benefits.

According to Article 428 of the Tax Statute, imports of machinery and equipment for the development of projects which contribute to reducing the emission of greenhouse gases, and therefore to sustainable development, do not cause VAT.

#### 7.2.8. Measures in regard to privatisation

Article 60 of the Constitution sets out that the state will promote access to property. When the state disposes of its holdings in a company, it will take measures to democratise the ownership of the shares and will offer them under special conditions for access to the workers and labour organisations. Law 226 of 1995 regulated the matter. The privatisation of state companies is supported under the principles of equality, transparency, protection of public property, publicity and free competition. The law encouraged the participation of private investors and diminished the state monopoly in the delivery of public services.

Article 2 of Law 226 determined that any natural or legal person can purchase the shares offered by the state to the public. Article 3 of the mentioned law created a preferential right of special access conditions to: a) the active and retired employees of the entity being privatised and entities where the latter has majority stake; b) former employees of the entity being privatised as long as they were not dismissed under a just cause by the employer; c) employees or former employees associations of the entity to be privatised; d) labour unions; e) federations and confederations of labour unions; f) employees funds and mutual investment funds; g) pension and severance funds; and h) the cooperative entities defined by the cooperative legislation. Nevertheless, Article 14 stated that employees in managerial positions may only own shares of the entity equal to a maximum of 5 times their annual remuneration.

As Articles 4 and 5 of Law 226 of 1995 state, public property will be protected and, when the privatised entity provides public services, the continuity of those services will be guaranteed. Also, 10% of the net profit from the sale of shares will be invested by the government in regional development projects in the same territory in which the main activity of the concerned company occurred.

Since the 1990s, different state companies of the Colombian energy sector have been privatised. The privatisation of electricity utilities "Central Hidroeléctrica de Betania" (CBH), "Chivor", "Termocartagena" and "Termotasajero" was in 1996. In 1997 the energy company of the capital city "Empresa de Energía de Bogotá S.A. ESP" (EEB) sold 48,5% of its shares in Emgesa and Codensa—generation and commercialisation affiliated companies—to private investors. In 1998 the distribution companies Electricaribe and Electrocosta were partially privatised. Regarding the coal sector, in 2000, the state-owned company 'Carbones de Colombia' (Carbocol) was sold to a multinational corporation. In the oil and gas industry, in 2006, EEB was the successful bidder for

many assets and rights from the company "Empresa Colombiana de Gas" (Ecogas). Ecogas changed its name in 2009 to "Transportadora de Gas Internacional S.A." (TGI). Law 1118 of 2006 authorised Ecopetrol to issue up to 20% of its shares in the market so they could be acquired by natural or legal persons. Currently, the Colombian government controls over 88% of the shares of Ecopetrol.

The privatisation of the electricity sector continues, one of the most recent events being the sale of Isagen. In January 2016, the 57,6% of the state-owned shares in Isagen were sold to Brookfield Asset Management. Finally, in March 2016 "Empresas Públicas de Medellín" (EPM), a company owned by the municipality of Medellín that provides electricity, gas, water, sanitation and telecommunications services, and EEB decided to sell their stakes in Isagen (13,1% and 2,5% respectively) to Brookfield Asset Management.

#### **Conclusion**

As has been expressed, this report seeks to boost investments in the Colombian energy sector, to spread the global architecture of the International Energy Charter and to foster cooperation between Colombia and the International Energy Charter. To accomplish these purposes, this document presents the Colombian energy market and legal framework under the universal principles and rules governing the Energy Charter Process: energy security, international energy cooperation, protection of foreign investments, open and competitive markets, protection of the environment and the promotion of energy efficiency.

Three cornerstone reforms were implemented in Colombia to boost investments in the energy sector: in the electricity industry in 1994, the oil and gas sector in 2003, and the coal mining sector in 2004. After these amendments the legislation and regulation aim to develop the electricity, fuel and natural gas markets, promote other energy sources such as unconventional and offshore hydrocarbons, unconventional renewable resources in the power system, biofuels, and implement energy efficiency policy measures.

Colombia is already one of the strongest economies in Latin America. Its GDP rate grew from less than USD \$100 billion in 2003 to USD \$377.7 billion in 2014, being one of the top 20 main destinations for FDI. The energy sector has a leading role in the sustained growth of the Colombian economy, and in 2015 attracted almost one third of FDI inflows and represented slightly more than a half of total exports. Since the government and rebels have been in peace negotiations since 2012, progress regarding the armed conflict may improve the conditions of public security and reduce the political risks for investments. The historical increase of FDI is linked to the economic reforms introduced in the decade of the 1990s towards a free market economy, and the continuous adoption of IIAs and FTAs.

Reforms implemented in the power sector attracted more energy companies, competition and investments, shaping a clean electricity matrix—70% relies on hydro-generation—increasing the access to electricity from 76% in 1994 to 98% in 2015, and producing an energy surplus to export. In the oil industry the reforms allowed an increase of daily oil production from half a million barrels per day in 2004 to 1 million barrels per day in 2013, making Colombia one of the twenty largest oil producers on the globe. Regarding natural gas, reserves increased by more than 50% from 2007 to 2013, satisfying domestic demand and even allowing export to Venezuela. In the same way, coal production multiplied by 10 times from 8,9 Mt in 1985 to 85 Mt in 2015. Colombia is currently the fifth largest coal exporter on the globe. During the last ten years, the country has intensified its FDI flows and international energy trade, being the third coal exporter to the European Union and the fifth-largest oil exporter to the United States.

However, Colombia still faces growing challenges to increase its oil and gas reserves, improve energy infrastructure, enhance the security of the electricity system, introduce more unconventional renewable energies and thermal plants, develop interconnection projects, and to reconcile environmental and social concerns. Aiming to provide more reliability in the natural gas

supply, the country will also need to invest in regasification plants. All these challenges demand a boost of energy investment in the current context of global economic slowdown and low oil and commodity prices.

Until 2016, no international arbitral claims had been brought against Colombia under an international investment protection treaty, but from a pragmatic point of view, Investor-State Disputes are part of the process of globalisation of energy markets and the country needs to be prepared to deal with them. This experience should motivate the country to adopt international rules for good governance in the global energy sector.

Colombia has access to 47 countries through its International Investment Agreements (IIAs) and Free Trade Agreements (FTAs). These agreements promote investment protection and encourage the participation of the country in international organisations. In May 2015 Colombia signed the International Energy Charter, becoming an observer of the Energy Charter Conference. The Energy Charter Process builds energy cooperation among developed and emerging economies, and energy producing, consuming and transit countries, in order to face common challenges at the regional and international levels. Colombia aligned itself with these principles and is expected to move forward in relations with the Energy Charter. To make further progress, the Energy Charter is willing to receive a Colombian civil servant to elaborate a report regarding energy efficiency in Colombia.

#### **Annexes**

#### **Annex 1. Membership of Colombia in International Organisations**

Agency for the Prohibition of Nuclear Weapons in Latin America and the Caribbean (OPANAL) **Andean Community** Association of Caribbean States (ACS) Bank for International Settlements (BIS) Caribbean Development Bank Central American Bank for Economic Integration (CABEI) Community of Latin American and Caribbean States (CELAC) Food and Agriculture Organisation (FAO) Group of Three (G-3) Group of 24 (G–24) Group of 77 (G-77) Ibero-American Conference Inter American Development Bank (IADB) International Atomic Energy Agency (IAEA) International Bank for Reconstruction and Development (IBRD) International Centre for Settlement of Investment Disputes (ICSID) International Civil Aviation Organisation (ICAO) International Criminal Police Organisation (INTERPOL) International Development Association (IDA) International Finance Corporation (IFC) International Fund for Agricultural Development (IFAD) International Hydrographic Organisation (IHO) International Institute for the Unification of Private Law (UNIDROIT) International Labour Organisation (ILO) International Maritime Organisation (IMO) International Monetary Fund (IMF) International Organisation for Standardisation (ISO)

International Organisation on Migration (IOM) International Red Cross and Red Crescent Movement (ICRM) International Renewable Energy Agency (IRENA) Inter-Parliamentary Union (IPU) International Telecommunication Union (ITU) Latin American and the Caribbean Economic System (SELA) Latin American Integration Association (ALADI) Mesoamerican Project Multilateral Investment Guarantee Agency (MIGA) Non-Aligned Movement (NAM) Organisation for the Prohibition of Chemical Weapons (OPCW) Organisation of American States (OAS) Pacific Alliance Permanent Commission for the South Pacific (CPPS) United Nations (UN) United Nations Commission on International Trade Law (UNCITRAL) United Nations Conference on Trade and Development (UNCTAD) United Nations Educational, Scientific and Cultural Organisation (UNESCO) United Nations Industrial Development Organisation (UNIDO) Union of South American Nations (UNASUR) World Bank World Customs Organisation (WCO) World Health Organisation (WHO) World Intellectual Property Organisation (WIPO) World Trade Organisation (WTO)

Source: Author's elaboration based on data from Ministry of Foreign Affairs of Colombia http://www.cancilleria.gov.co/international/regional/can

## Annex 2. List of FTAs, BITs, IIAs and DTAs

## **List of FTAs and Partial Scope Trade Agreements in force**

Title of agreement	Date of signature	Date of entry into force
Free Trade Agreement between the Republic of Colombia and the Republic of Costa Rica	22/05/2013	01/08/2016
Pacific Alliance Agreement Colombia, Chile, México and Peru – Additional Protocol-	10/02/2014	01/05/2016
Trade Agreement between the EU and its Member States, of the one Part, and Colombia and Peru, of the other Part	26/06/2012	01/08/2013
Partial Scope Trade Agreement between the Republic of Colombia and the Bolivarian Republic of Venezuela	28/11/2011	19/10/2012
Free Trade Agreement between the USA and Colombia	22/11/2006	15/05/2012
Free Trade Agreement between Canada and Colombia	21/11/2008	15/08/2011
Free Trade Agreement between the EFTA States and Colombia	25/11/2008	Switzerland and Liechtenstein 01/07/2011  Norway 01/09/2014  Iceland: 01/10/2014
Free Trade Agreement between the Republic of Colombia and the Republics of El Salvador, Guatemala and Honduras	09/08/2007	Honduras 27/03/2010 El Salvador 01/02/2010 Guatemala 12/11/2009
Free Trade Agreement between Chile and Colombia	27/11/2006	08/05/2009
Economic Complementation Agreement between Members of MERCOSUR and Colombia, Ecuador and Venezuela	18/10/2004	01/04/2005
Economic Complementation Agreement between the Republic of Colombia and the Republic of Cuba	15/09/2000	10/07/2001
Framework Agreement for the Creation of a Free Trade Area between the CAN and MERCOSUR	16/04/1998	16/04/1998

Free Trade Agreement between the United Mexican States and the Republic of Colombia	13/06/1994	01/01/1995
Title of agreement	Date of signature	Date of entry into force
Trade and Cooperation Agreement between the Republic of Colombia and the Caribbean Community – CARICOM	24/07/1994	30/12/1994
Economic Complementation Agreement N. 24 between the Republic of Chile and the Republic of Colombia	06/12/1993	01/01/1994
Partial Agreement between the Republic of Colombia and the Republic of Nicaragua	02/03/1984	02/09/1985
Montevideo Treaty	12/08/1980	18/03/1981
Agreement on Andean Sub-regional Integration (Cartagena Agreement)	26/05/1969	16/10/1969

Source: Author's elaboration based on data from Ministry of Trade, Industry and Tourism of Colombia and UNCTAD http://www.tlc.gov.co/publicaciones.php?id=5398 http://investmentpolicyhub.unctad.org/IIA/CountryOtherIias/45

## **List of International Investment Agreements in force**

Title of agreement	Date of signature	Date of entry into force
Pacific Alliance Agreement Colombia, Chile, México and Peru – Additional Protocol	10/02/2014	01/05/2016
Agreement between the Republic of Colombia and the Republic of Japan to liberalise, promote and protect investments	12/09/2011	12/09/2015
Bilateral Agreement between the Republic of Colombia and the United Kingdom to promote and protect investments	17/03/2010	10/10/2014
Trade Agreement between the EU and its Member States, of the one Part, and Colombia and Peru, of the other Part	26/06/2012	01/08/2013
Agreement between the Republic of Colombia and the Republic of India to promote and protect investments	10/11/2009	03/07/2012

Bilateral Agreement between the Republic of Colombia and the Popular Republic of China to promote and protect investments	22/11/2008	03/07/2012
Title of agreement	Date of signature	Date of entry into force
Free Trade Agreement between USA and Colombia	22/11/2006	15/05/2012
Free Trade Agreement between Canada and Colombia	21/11/2008	15/08/2011
Free Trade Agreement between the EFTA and	25/11/2008	Switzerland and Liechtenstein 01/07/2011
Colombia	, ,	Norway 01/09/2014 Iceland 01/10/2014
Agreement between the Republic of Colombia and the Republic of Peru for Mutual Investment Promotion and Agreement	11/12/2007	30/12/2010
Free Trade Agreement among the Republic of Colombia and the Republics of El Salvador, Guatemala and Honduras	09/08/2007	Honduras 27/03/2010 El Salvador 01/02/2010 Guatemala 12/11/2009
Agreement between the Republic of Colombia and the Switzerland Confederation for Mutual Investment Promotion and Agreement	17/05/2006	06/10/2009
Free Trade Agreement between Chile and Colombia	27/11/2006	08/05/2009
Agreement between the Republic of Colombia and the Kingdom of Spain for Mutual Investment Promotion and Protection	31/03/2005	22/09/2007
Free Trade Agreement between the United Mexican States and the Republic of Colombia	13/06/1994	01/01/1995

Source: Author's elaboration based on data from Ministry of Trade, Industry and Tourism of Colombia http://www.tlc.gov.co/publicaciones.php?id=6420 and PROCOLOMBIA http://inviertaencolombia.com.co/Guia Legal 2016.pdf

## List of Bilateral Treaties (Agreements) on Avoidance of Double Taxation in force

Title of agreement	Date of signature	Date of entry into force
Agreement between the Republic of Colombia and the Czech Republic to avoid double taxation and prevent fiscal evasion on income tax	22/03/2012	06/05/2015
Agreement between the Portuguese Republic and the Republic of Colombia to avoid double taxation and prevent fiscal evasion on income tax and its Protocol	30/08/2010	30/01/2015
Agreement between the Republic of Colombia and the Republic of India to avoid double taxation on income tax and prevent fiscal evasion and its Protocol	13/05/2011	07/07/2014
Agreement between the Republic of Korea and the Republic of Colombia to avoid double taxation on income tax and prevent fiscal fraud	27/07/2010	03/07/2014
Agreement between the Republic of Colombia and the United Mexican States to avoid double taxation and prevent fiscal evasion on income and equity taxes	13/08/2009	01/08/2013
Agreement between Canada and the Republic of Colombia to prevent fiscal evasion and avoid double taxation on income and equity taxes	21/11/2008	12/06/2012
Agreement between the Republic of Colombia and the Switzerland Confederation to avoid double taxation on income and equity taxes and prevent fiscal evasion	16/10/2007	01/01/2012
Agreement between the Republic of Chile and the Republic of Colombia to avoid double taxation and prevent fiscal evasion on income and equity taxes	19/04/2007	22/12/2009
Agreement between the Kingdom of Spain and the Republic of Colombia to avoid double taxation on income and equity taxes and prevent fiscal evasion and its Protocol	31/03/2005	23/10/2008
CAN Multilateral treaty. Decision 578	04/05/2004	01/01/2005

Source: Author's elaboration based on data from National Direction of Taxes and Customs, Ministry of Foreign Affairs of Colombia

 $http://www.dian.gov.co/dian/15servicios.nsf/d7f3eee255a0ca1e05256ef6008028eb/f06a01dc14b8e9810525798f004ea2ef?\\ OpenDocument - http://apw.cancilleria.gov.co/tratados/SitePages/BuscadorTratados.aspx?TemaId=41\&Tipo=B$ 

Annex 3. List of laws and regulations relevant to the energy sector

Main Legislation	
Name	Date of issue
onstitution	04.07.1991
etroleum Code Decree Law No. 1056	20.04.1953
ublic Utility Services Law No. 142	11.07.1994
lectricity Law No. 143	11.07.1994
1ines Code Law No. 685	15.08.2001
nergy Efficiency Law No. 697	03.10.2001
nconventional Renewable Energy Sources Law No. 1715	13.05.2014
il and gas sector	
ecree Law No. 1760 –Institutional structure-	26.06.2003
ecree No. 4299 –Downstream-	25.11.2005
ecree 2400 -Natural gas international interconnections-	18.07.2006
ecree No. 1717 –Downstream-	21.05.2008
aw No. 1274 -Oil easement-	05.01.2009
linistry of Mines and Energy Resolution No. 181495 -Technical regulation xplore and produce hydrocarbons-	to 02.09.2009
ecree 2100 –Measures to provide Natural gas-	15.06.2011
ecree Law No. 4137 -Institutional structure-	03.11.2011
ecree No. 714 –Structure of ANH-	10.04.2012
NH Agreement No. 04 –Rules to allocate oil and gas contracts-	04.05.2012
aw No. 3004 -Unconventional hydrocarbons-	26.12.2013
ecree No. 1616 -Onshore and offshore hydrocarbons-	28.08.2014
lectricity sector	,
REG Resolution No. 056 –General issues electricity-	28.12.1994
REG Resolution No. 024 -Wholesale Electricity Market-	13.07.1995
REG Resolution No. 025 – Code of Networks-	13.07.1995
REG Resolution No. 084 –Electricity self generation-	15.10.1996
REG Resolution No. 128 –Separation of activities-	17.12.1996
REG Resolution No. 071 –Reliability charge-	03.10. 2006

Name	Date of issue
CREG Resolution No. 005 –Cogeneration-	01.02.2010
CREG Resolution 156 – Rules to trade electricity-	17.11.2011
Decree No. 2143 -Tax incentives unconventional renewable energies-	04.11.2015
Energy Efficiency	
Law No. 629 –Approved Kyoto Protocol-	27.12.2000
Law No. 693 –biofuels-	19.09.2001
Decree 3683 -Creates the Intersectoral Commission for the Rational and Efficient Use of Energy and Non-Conventional Energy Sources-	19.12.2003
Ministry of Mines and Energy Resolution No. 180919 -Programme for the Rational Use of Energy and the Use of Renewable Sources of Energy (PROURE)-	01.06.2010
Environmental and social protection	
Decree Law No. 2811 – Natural Resources Code-	18.12.1974
Law No. 21 -Approved ILO Convention 169 of 1989-	04.03.1991
Law No. 99 –Institutional structure, environmental licences-	22.12.1993
Decree No. 2372 –Protected areas-	01.07.2010
Decree No. 3573 of 2011 – Created National Environmental Licensing Authority-	27.09.2011
Decree No. 2041 –Environmental licences-	15.10.2014

Annex 4 List of IIAs in force and references to energy investments

Title of agreement	References to energy investments	ISDS and/or arbitral clauses
Trade Agreement between the EU and its Member States, of the one Part, and Colombia and Peru, of the other Part	"Article 7 Trade and Economic Relations Covered by this Agreement 1. () apply to the bilateral trade and economic relations between, () each individual signatory Andean Country and () the EU Party; but not to the trade and economic relations between individual signatory Andean Countries."  "TITLE FOUR Trade In Services, Establishment and Electronic Commerce - Chapter 2 Establishment - Article 110 Definitions ()  "Investor of a Party" means any natural or juridical person of that Party that seeks, through concrete actions to perform, is performing or has performed an economic activity in another party through setting up an establishment."  -The energy sector is committed under the Chapter 2, article 114 "List of Commitments" and Annex VII which includes the extraction of crude petroleum, natural gas, mining of coal, production; transmission and distribution on own account of electricity, gas, (excluding nuclear based electricity generation).  -Chapter 2 does not cover provisions on investment protection, such as provisions specifically relating to expropriation and fair and equitable treatment, nor does it cover investor-State dispute settlement procedures.	"Article 302 Initiation of Arbitration Proceedings  1. The complaining Party may request the establishment of an arbitration panel if:  (a) the Party complained against does not reply to the request for consultations in accordance with Article 301, paragraph 3;  (b) consultations are not held within the period of time established in Article 301 paragraphs 5 or 6, as the case may be;  (c) the consulting Parties have failed to settle the dispute through consultations; or  (d) the parties to the dispute have agreed not to engage in consultations according to Article 301, paragraph 4."
Free Trade Agreement between the USA and Colombia	"CHAPTER TEN –Investment- Section A: Investment Article 10.1: Scope and Coverage 1. This Chapter applies to measures adopted or maintained by a Party relating to: (a) investors of another Party; (b) covered investments; and (c) with respect to Articles 10.9 and 10.11, all investments in the territory of the Party.	"CHAPTER TEN –Investment- () Section B: Investor-State Dispute Settlement Article 10.16: Submission of a Claim to Arbitration  1. In the event that a disputing party considers that an investment dispute cannot be settled by consultation and negotiation:  (a) the claimant, on its own behalf, may submit to

	2. A Party's obligations under this Section shall apply to a state	arbitration under this Section a claim
	enterprise or other person when it exercises any regulatory,	(i) that the respondent has breached
	administrative, or other governmental authority delegated to it	(A)an obligation under Section A, 10-11
	by that Party, such as the authority to expropriate, grant licenses,	(B) an investment authorization, or
	approve commercial transactions, or impose quotas, fees, or	(C) an investment agreement; and
	other charges	(ii) that the claimant has incurred loss or damage by reason
		of, or arising out of, that breach; and
	()	
		()
	Article 10.28: Definitions	
	For purposes of this Chapter:	Provided that six months have elapsed since the events
	()	giving rise to the claim, a claimant may submit a claim
		referred to in paragraph 1:
	investment agreement means a written agreement between a	
	national authority of a Party and a covered investment or an	(a)under the ICSID Convention and the ICSID Rules of
	investor of another Party, on which the covered investment or	Procedures for Arbitration Proceedings, provided that both
	the	the respondent and the Party of the claimant are parties to
	investor relies in establishing or acquiring a covered investment	the ICSID Convention; (b) under the ICSID Additional
	other than the written agreement itself, that grants rights to the	Facility Rules, provided that either the respondent or the
	covered investment or investor:	Party of the claimant is a party to the ICSID Convention;
	(a) with respect to natural resources that a national authority	(c) under the UNCITRAL Arbitration Rules; or
	controls, such as for their exploration, extraction, refining,	(d) if the claimant and respondent agree, to any other
	transportation, distribution, or sale;	arbitration institution or under any other arbitration rules."
	(b) to supply services to the public on behalf of the Party, such as	,
	power generation or distribution, water treatment or	
	distribution, or telecommunications; or	
	(c) to undertake infrastructure projects, such as the construction	
	of roads, bridges, canals, dams, or pipelines, that are not for the	
	exclusive or predominant use and benefit of the government;	
	()."	
Free Trade	Energy resources are not literally mentioned.	"Chapter Eight – Investment
Agreement		Section B - Settlement of Disputes between an Investor and
between	"Chapter Eight – Investment -Section A – Investment- Article	the Host Party
Canada and	801: Scope and Coverage	Article 822: Submission of a Claim to Arbitration
Cariada aria	Took ocope and coverage	7. G.C. O. C.

#### Colombia

- 1. This Chapter shall apply to measures adopted or maintained by a Party relating to:
- (a) investors of the other Party;
- (b) covered investments; and
- (c) with respect to Articles 807, 815 and 816, all investments in the territory of the Party.
- 2. For greater certainty, the provisions of this Chapter do not bind a Party in relation to any act or fact that took place or any situation that ceased to exist before the date of entry into force of this Agreement.

Article 838: Definitions. For purposes of this Chapter:(...)investment means:

- (a) an enterprise;
- (b) shares, stocks and other forms of equity participation in an enterprise;
- (c) bonds, debentures and other debt instruments of an enterprise, but does not include a debt instrument of a state enterprise;
- (d) a loan to an enterprise, but does not include a loan to a state enterprise;
- (e) an interest in an enterprise that entitles the owner to a share in income or profits of the enterprise;
- (f) an interest in an enterprise that entitles the owner to share in the assets of that enterprise on dissolution;
- (g) interests arising from the commitment of capital or other resources in the territory of a Party to economic activity in such territory, such as under

- 1. Except as provided in Annex 822, a disputing investor who meets the conditions precedent in Article 821 may submit the claim to arbitration under:
- (a) the ICSID Convention and the ICSID Rules of Procedures for Arbitration Proceedings, provided that both the disputing Party and the Party of the disputing investor are parties to the ICSID Convention;
- (b) the Additional Facility Rules of ICSID, provided that either the disputing Party or the Party of the disputing investor, but not both, is a party to the ICSID Convention; or
- (c) the UNCITRAL Arbitration Rules."

	(i) contracts involving the presence of an investor's property in the territory of the Party, including turnkey or construction contracts, or concessions, or (ii) contracts where remuneration depends substantially on the production, revenues or profits of an enterprise; (h) intellectual property rights; and (i) any other tangible or intangible property, moveable or immovable property, and related property rights acquired in the expectation or used for the purpose of economic benefit or other business purposes; ()"	
Free Trade Agreement between the EFTA States and Colombia	Energy resources are not literally mentioned.  "CHAPTER 5 INVESTMENT  ARTICLE 5.1 Coverage This Chapter shall apply to commercial presence in all sectors, with the exception of services sectors as set out in Article 4.1 (Scope and Coverage) in Chapter 4 (Trade in Services) of this Agreement.  ARTICLE 5.2 Definitions 1. For the purpose of this Chapter,  ()  (e) "commercial presence" means any type of business establishment, including through:	"Decision of The EFTA-Colombia Joint Committee No. 2 of 2014 (Adopted On 7 November 2014) Establishing The Rules Of Procedure For The Arbitration Panel  SECTION II PROCEEDINGS  ()  Article 5  Commencing the Arbitration  1. Unless the disputing Parties otherwise agree, they shall meet with the arbitration panel within 15 days following the establishment of the arbitration panel in order to discuss such matters pertaining to the panel proceedings as the disputing Parties or the arbitration panel deem appropriate, including the administration of and the timetable for the arbitration panel proceedings, procedures for the hearing ()
	(i) the constitution, acquisition or maintenance of a juridical person, or (ii) the creation or maintenance of a branch or a representative office, within the territory of another Party for the purpose of	2. The arbitration panel shall, as soon as practicable and whenever possible within five days after the meeting with the disputing Parties, determine the timetable for the

	performing an economic activity."	arbitration panel proceedings. ()"
	"CHAPTER 12	"CHAPTER 12
	INVESTMENT	INVESTMENT
	Section A Investment	Section B Settlement of Disputes Investor-State
Free Trade Agreement between the Republic of Colombia and the Republics of El Salvador, Guatemala and Honduras	Article 12.1 Definitions. () Investment means any kind of economic asset owned by an investor, or controlled by this directly or indirectly, which have the features indicated in paragraph 3, including, but not exclusively, the following:  (a) moveable or immovable property, () (b) shares, equity shares and other forms of equity participation in an enterprise; ()  (e) Concessions granted by law, administrative acts or contracts including concessions to explore, grow, extract or exploit natural resources.  ()".	Article 12.18 Submission of a Claim ()  5. Whether the dispute has not been settled in this way in a term of nine (9) months () the controversy may be submitted, by the choice of the investor to:  (a) an ad hoc-arbitral tribunal which, unless otherwise agreed upon by the parties to the dispute, shall be established under the arbitration rules of UNCITRAL. (b) the ICSID Convention and the ICSID Rules of Procedures for Arbitration Proceedings, provided that both the disputing Party and the Party of the disputing investor are parties to the ICSID Convention; (c) the Additional Facility Rules of ICSID, provided that either the disputing Party or the Party of the disputing investor, but not both, is a party to the ICSID Convention; or d) An arbitral tribunal under any other arbitration institution or any other arbitration rules, agreed by the Parties."
	Energy resources are not literally mentioned.  "CHAPTER 9	"CHAPTER 9 Investment
Free Trade	Investment	()
Agreement	Section A: Investment	\ <i>\</i>
between Chile	Article 9.1: Scope	Section B Settlement of Disputes Investor-State
and Colombia	1. This Chapter applies to measures adopted or maintained by a	- detailed a detailed of bispates investor state
	Party relating to:	()

	<ul><li>(a) investors of another Party;</li><li>(b) covered investments; and</li><li>(c) with respect to Articles 9.6 and 9.13, all investments in the territory of the Party."</li></ul>	Article 9.16 Submission of a Claim to Arbitration ()
	territory of the Party.	5. () the claimant may submit the dispute referred to paragraph 1 to:  (a) According to the ICSID Convention and all its applicable instruments, provided that both the Party of the disputing investor and the disputing Party are parties to the Convention; or  (b) According to the Additional Facility Rules of ICSID, provided that either the disputing Party or the Party of the disputing investor, but not both, is a party to the ICSID Convention; or  (c) According to the arbitration rules of UNCITRAL; or d) If the disputing Parties agree, an arbitral tribunal adhoc under any other arbitration institution or any other arbitration rules."
Agreement on Andean Sub-regional Integration (Cartagena Agreement)	Article 128 envisions the cooperation for joint energy development and conservation of the environment.	Arbitration is provided but not implemented. Chapter 20, clause 3.
Agreement between the Republic of Colombia and the Republic of Japan to liberalize, promote and	"Article 1. For the purposes of this Agreement () the term 'investments' means () rights conferred pursuant to laws and regulations or contracts such as concessions, licenses, authorizations and permits, including those for the exploration and exploitation of natural resources."	"Articles 26. In the event of an investment dispute, the disputing parties shall, as far as possible, settle the dispute amicably through consultations and negotiations which may include the use of non-binding and third-party procedures.  As one of the non-binding and third-party procedures referred to in paragraph 1, the disputing parties may agree to submit the investment dispute to conciliation

protect		procedure under the ICSID Convention or under the ICSID
investments	"Article 2 Investment ( ) investment means ( ) business	Additional Facility Rules."
Bilateral Agreement between the Republic of Colombia and the United Kingdom to promote and protect investments	"Article 2. Investment () investment means () business concessions granted by law, administrative acts or contracts including concessions to explore, grow, extract or exploit natural resources."	"Article 9. Any disputes arising between an investor of a Contracting Party and the other Contracting Party () shall be settled, as far as possible, amicably. The investor and the Contracting Party concerned in the dispute may agree to refer the dispute either to:  (a) the International Centre for the Settlement of Investment Disputes  (b) the Court of Arbitration of the International Chamber of Commerce;  (c) an international arbitrator or ad hoc arbitration tribunal to be appointed by a special agreement or established under the Arbitration Rules of the  United Nations Commission on International Trade Law; or  (d) a tribunal constituted in accordance with the Rules of Arbitration of the arbitral institution in the Contracting Party in whose territory the investment is made."
Agreement between the Republic of Colombia and the Republic of India to promote and protect investments	"Article 2. Investments shall mean () Concessions granted by law, administrative act or contract, including concessions to explore, extract or exploit natural resources."	"Articles 9. Any dispute () shall as far as possible be settled amicably between the parties of the dispute. In case the dispute cannot be resolved in this manner () it shall be submitted () to an arbitration tribunal. () The arbitration tribunal () shall determine its own procedural rules."
Bilateral	"Article 1. The term Investment means () concessions conferred	"Article 9. Any dispute () shall be settled, as far as possible,
Agreement	by law or administrative act, or under contract permitted by law,	amicably.
between the	including concessions to search for, cultivate, extract or exploit	If the dispute has not been settled () it may be submitted,
Republic of	natural resources."	by the choice of the investor to:
Colombia and		()
the Popular		b) The International Centre for Settlement of Investment

Republic of		Disputes.
China to		c) An arbitral tribunal under any other arbitration institution
promote and		or any other arbitration rules, agreed by the Contracting
protect		Parties."
investments		
	Energy resources are not literally mentioned.	
Agreement between the Republic of Colombia and the Republic of Peru for Mutual Investment Promotion and Agreement	"Article 1: Scope and Coverage  This Chapter Agreement applies to measures adopted or maintained by a Party relating to:  (a) investors of another Party; (b) covered investments; and (c) with respect to Articles 6 (Performance requirements) and 9 (Measures regarding Health, Security and Environment), all investments in the territory of the Party.	"Article 19. In case there is a controversy related to an investment the parties shall settled the dispute though consultations and negotiation.  Article 20. If one party considers that the dispute cannot be settled amicably, it may be submitted to:  a) The International Centre for Settlement of Investment Disputes, b) An arbitration tribunal according to the UNCITRAL rules, c) An ad hoc arbitration tribunal or any other arbitration institution or any other arbitration rules."
	()"	
Agreement	"Article 1. The term 'investment' means every kind of asset and	"Article 11. If an investor of a Party considers that a
between the	particularly () concessions under public law, including	measure applied by the other Party is inconsistent
Republic of	concessions to search for, extract or exploit natural resources	with an obligation of this Agreement, () he may request
Colombia and	as well as all other rights given by law, by contract or by	consultations with a view to resolving the matter amicably.
the	decision of the authority in accordance with the law; ()".	Any such matter which has not been settled () the
Switzerland		investor has the choice between either of the following:
Confederation		a) the International Centre for Settlement of Investment
for Mutual		Disputes,
Investment		b) an ad hoc-arbitral tribunal which, unless otherwise
Promotion		agreed upon by the parties to the dispute, shall be
and		established under the arbitration rules of UNCITRAL."
Agreement		established under the arbitration rules of UNCTIKAL.
Agreement	"Article 2. Investment shall mean () concessions granted by law,	"Article 10. As far as possible, the parties in controversy shall
between the	by an administrative act or under a contract, including	try to settle the dispute amicably. () If the controversy
Republic of	concessions to explore, cultivate, extract or exploit natural	cannot be amicably solved () it can be submitted to:

Colombia and	resources."	()
the Kingdom		b) an ad hoc arbitration tribunal established in accordance
of Spain for		with UNCITRAL rules,
Mutual		c) the International Centre for Settlement of Investment
Investment		Disputes."
Promotion		
and		
Protection		
Free Trade	Chapter XVII Investment	"Article 17-17. The investor of a Party may () submit to
Agreement		arbitration a claim on the grounds that other Party has
between the	Annex to article 3-03. National treatment does not apply to	violated an obligation under this chapter ()
United	imports and exports of energy commodities.	Article 17-18. A disputing investor may submit the claim to
Mexican	Annex to article 3-09. Hydrocarbons are excluded from the trade	arbitration under:
States and the	agreement.	a) The rules of the International Centre for Settlement of
Republic of		Investment Disputes,
Colombia		b) The UNCITRAL rules, alternatively."

Source: Author's elaboration based on data from Ministry Trade, Industry and Tourism of Colombia

 $\underline{http://www.tlc.gov.co/publicaciones.php?id=6420} \ and \ UNCTAD \ \underline{http://investmentpolicyhub.unctad.org/IIA/CountryOtherIias/45}$ 

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