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# International Cluster Collaboration: Preparatory Briefing on Colombia

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**Abstract:** The preparatory briefing on Colombia is the result of the collection of relevant cluster information in the country, including business and sector trends, cluster policies and programmes, as well as cluster mapping. This document is intended to provide a good overview of the country's opportunities for European cluster organisations and SMEs.

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## Objectives of the report

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The aim of this “preparatory briefing” is to provide up to date information on the cluster landscape in Colombia in order to support European cluster organizations and their small and medium enterprises (SME) to familiarise themselves with the country and explore its potential for collaboration and market opportunities. More specifically, this briefing paper provides an overview on the country’s economy and sectorial trends/strengths where clusters contribute. In addition, it aims at giving an idea of the existing cluster community, the cluster policies/local support to clusters and the cluster programs – including their historical development and internationalization activity when relevant.

The content of this report is provided through desk research and confirmed by relevant local contact points.

A complementary report, « discussion paper », is also available and provides an overview on the existing EU-Colombia cluster cooperation, presents related good practices/success stories and opportunities for future exchange.

The briefing papers are intended to provide information to the clusters themselves, as well as their SME’s, the ESCP-4i partnership, as well as policy-makers, etc.

# 1. Colombian Economy

## 1.1. Overview

Colombia presents an improving **political context**, due to its progress during the last decade through the peace process carried out between Colombian Governments and the FARC group, which [new agreement](#) was signed on 24 November 2016<sup>1</sup>.

The country is a member of different international organizations, such as [MERCOSUR](#) (as an associate State) and the UN Security Council (non-permanent member). Despite decades of drug related insecurity and domestic armed conflict, especially in rural areas, Colombia maintains relatively strong democratic institutions<sup>2</sup>. Colombia's Political Risk Index (PRI) scored 56.5% and ranked 31th in the Global PRS Risk Index of March 2017<sup>3</sup>.

Moreover, Colombia is a **dynamic and open economy**, of growing regional importance. According to the World Bank, in 2015, Colombia had a Gross Domestic Product (GDP) of EUR 259.35 billion and a GDP per capita of EUR 5,377<sup>4</sup>.

Colombia is a **strategic country for the EU in terms of political strategy of internationalization** in Latin America, since Colombia is the EU's fifth most important economic partner in the region. In this regard, a **Trade Agreement with Colombia** and Peru was signed in 2012. The agreement has been applied with Colombia since August 2013. However, **economic exchanges with Colombia are still limited**. Imports from Colombia rose to EUR 6,725 million in 2015 representing a 17.78% decrease compared to 2014. Similarly, exports achieved EUR 6,517 million in 2015, showing a 2.7% increase compared 2014<sup>5</sup>. These figures show the impact of the Trade Agreement applied in 2013. Additionally, the Trade Agreement brought new disciplines and mechanisms on non-tariff barriers and competition, contributing to the **openness of the economy**. Foreign Direct Investment (FDI) in 2016 achieved EUR 1,652 million, which was 15.9% higher than in 2015<sup>6</sup>.

With regards to the foreign trade between Colombia and the EU, in 2015, the imported products by the EU originating in Colombia were mainly **coal (36.25%), oiling (21.75%), bananas (13.05%), coffee (9.32%)**, flowers (2.31%), palm oil (1.98%) and ferronickel (1.11%). During the same year, European Union's main export products to Colombia were **machinery and mechanical appliances (17.36%)**,

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<sup>1</sup> It should be noted that the first agreement was signed in La Habana on 26 September 2016, however after the referendum in which Colombians voted no to the conditions raised in this agreement, the government was forced to modify it.

<sup>2</sup> CIA World Factbook, [www.cia.gov](http://www.cia.gov)

<sup>3</sup> Coface, [www.coface.com.co](http://www.coface.com.co).

<sup>4</sup> World Databank, [www.data.worldbank.org](http://www.data.worldbank.org).

<sup>5</sup> European Union publication: "La implementación del Acuerdo Comercial entre Colombia y La Unión Europea. Panorama general de las relaciones comerciales y de inversión 2013-2016" [Implementation of preferential trade agreement between the Colombia and the European Union]. Page 6.

<sup>6</sup> Procolombia, [www.procolombia.co](http://www.procolombia.co).

**pharmaceuticals (12.59%), aircraft and aircraft parts (8.34%),** vehicles and spare parts (7.86%) and Electrical machinery and equipment (6.78%)<sup>7</sup>.

In terms of foreign investment, [PROCOLOMBIA](#) (organization in charge of promoting non-traditional exports, international tourism and foreign investment in Colombia) fosters investment in agribusiness (biofuels, aquaculture, etc.), manufacturing (automotive, cosmetics, building, fashion, etc.) and services (software and IT, outsourcing, tourism, etc.). Therefore, Colombia has strong **sectors of interest for the EU**.

## 1.2. Opportunities for Europe – investment, trade and science, Technology & Innovation cooperation.

### 1.2.1. Trade and investment<sup>8</sup>

In the current post-conflict era in Colombia, the business sector has been playing a key role in boosting employment and investment. The current trade agreements with other countries are a way of opening up new opportunities for economic development and peace.

Trade and investment measures taken under the Government's National Development Plan are focused on opening up new markets and strengthening trade relations with strategic partners by diversifying the country's export base and by building a more competitive and productive economy to attract foreign investment.

With regard to domestic policy, the Ministry of Foreign Affairs sees trade and investment as fundamental for the country's economic growth and sustainable development. In this regard, the Ministry of Foreign Affairs, in conjunction with the Ministry of Trade, Industry and Tourism, is working on the negotiation and conclusion of various free trade agreements, agreements to protect and promote investment and double-taxation agreements.

Colombia also attaches great importance to progress and the overhaul of procedures at regional level to adapt to the Union of South American Nations (UNASUR), the Community of Andean Nations, the Meso-American Project and the consolidation of the Pacific Alliance. Similarly, efforts are currently ongoing to strengthen relationships with new trade partners in countries in the Asian Pacific, Eurasia and Middle East.

In the same vein, one of the Government's priorities is to diversify the agenda with traditional partners and allies, such as the United States of America, the European Union and Canada. One fundamental objective will be the accession of Colombia to the Organization for Economic Cooperation and

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<sup>7</sup> Op. Cit, p. 7.

<sup>8</sup> Colombian Ministry of Foreign Affairs (*Cancillería Colombia*), [www.cancilleria.gov.co](http://www.cancilleria.gov.co).

Development (OECD) following its commitment to good governance and sustainable development policies.

### **Direct foreign investment<sup>9</sup>**

The country has been a major recipient of direct foreign investment flows. These resources have been directed for a large part towards the hydrocarbons sector, but also towards other businesses. Over the past two years, direct foreign investment in the oil and mining sectors has declined drastically in the wake of the fall in the prices for crude and other commodities. It is important to note, however, that direct foreign investment has continued in manufacturing, trade, electricity, the financial sector and transport, among others.

Investment as a percentage of GDP has remained at around 30%, a figure that just a few years ago was only seen in respect of the so-called Asian economic miracle. At regional level, Colombia, together with Peru and Ecuador, is well above the average of 18.4% for Latin America as a whole. The fact that Colombia managed to retain a good investment indicator in 2016 is particularly relevant given that flows of foreign direct investment globally have levelled off.

Against this backdrop, it is clear that Colombia is a country of major opportunities, but also with massive challenges. It is consolidating a prestigious position at international level and has taken great strides along the path towards greater economic and social development, as well as continuing to create a competitive environment favourable to investment and growth.

### **1.2.2. Science, Technology & Innovation**

Science, technology and innovation (STI) are the linchpins for economic progress and competitiveness. Countries that have set their sights on economic progress have made major investments in science, technology and innovation to build capacities - that is to say, human capital, knowledge and technologies - to boost the production of more sophisticated goods and services.

Over the past ten years, Colombia has made scant progress in science, technology and innovation. With the amount invested in science, technology and innovation businesses increasing by 40% over the period from 2006 to 2015 and the creation of the Science, Technology and Innovation Fund under of the General Royalties Scheme, Colombia is half-way towards achieving the average investment of Latin America and is likely to duplicate this investment within the next two years in aspiring to achieve, in 2018, its objective of 1% of GDP, which ascends to EUR 259.35 billion as mentioned before. The goal is to move from 0.5% in 2015 to 1% in 2018. This means increasing the flow of resources to EUR 2.53 billion.

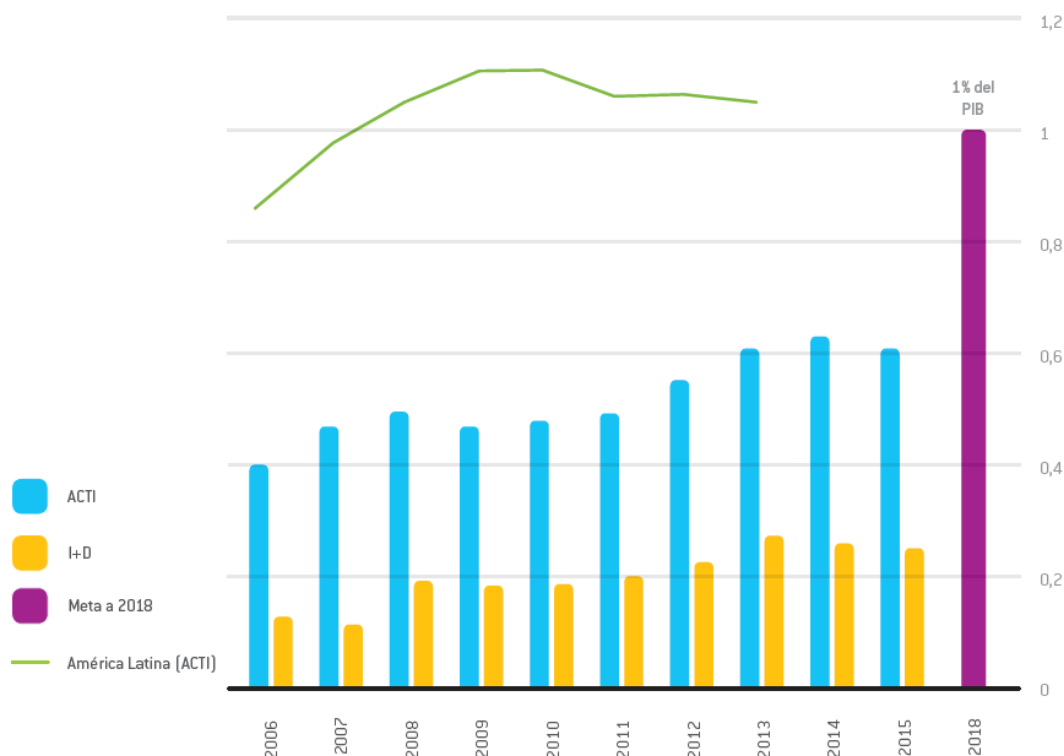
The principal source of resources for science, technology and innovation businesses in the country continues to be the public sector, which accounted for 50.2% of investment in 2015, while the private sector contributed 38.8% and higher education institutions 9.5%. The Colombian Institute for the Development of Science and Technology (Colciencias), the Ministry of Trade and the National Planning

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<sup>9</sup> Portafolio, [www.portafolio.co](http://www.portafolio.co).

Department are striving to strengthen initiatives targeting business investment with the aim of achieving investment of 1% of GDP in science, technology and innovation.

**Figure 1. Investment in science, technology and innovation (business, research and development) as a percentage of GDP in Colombia and Latin America, from 2006 to 2015 and estimated for 2018<sup>10</sup>.**



Investment in research and innovation (technological research and development) grew at a similar pace to investment in science, technology and innovation businesses to reach 0.23% of GDP in 2015, but has continued to fall in comparison with other countries in the region. In addition, this increase is not reflected in the results of this investment, as evidence by the reduction of 71% in the number of innovator companies since 2011<sup>11</sup>.

“In addition to being low, the increased investment in science, technology and innovation businesses comes primarily from the public sector and not the private sector at a point when the situation in developed and OECD countries is entirely the opposite. This is replicated in companies, most of which are not innovators”, says Julián Pontón Silva, Colciencias Director of Technological Development and Innovation<sup>12</sup>.

<sup>10</sup> Science and Technology Indicators Network (*Red de Indicadores de Ciencia y Tecnología - RICYT*)

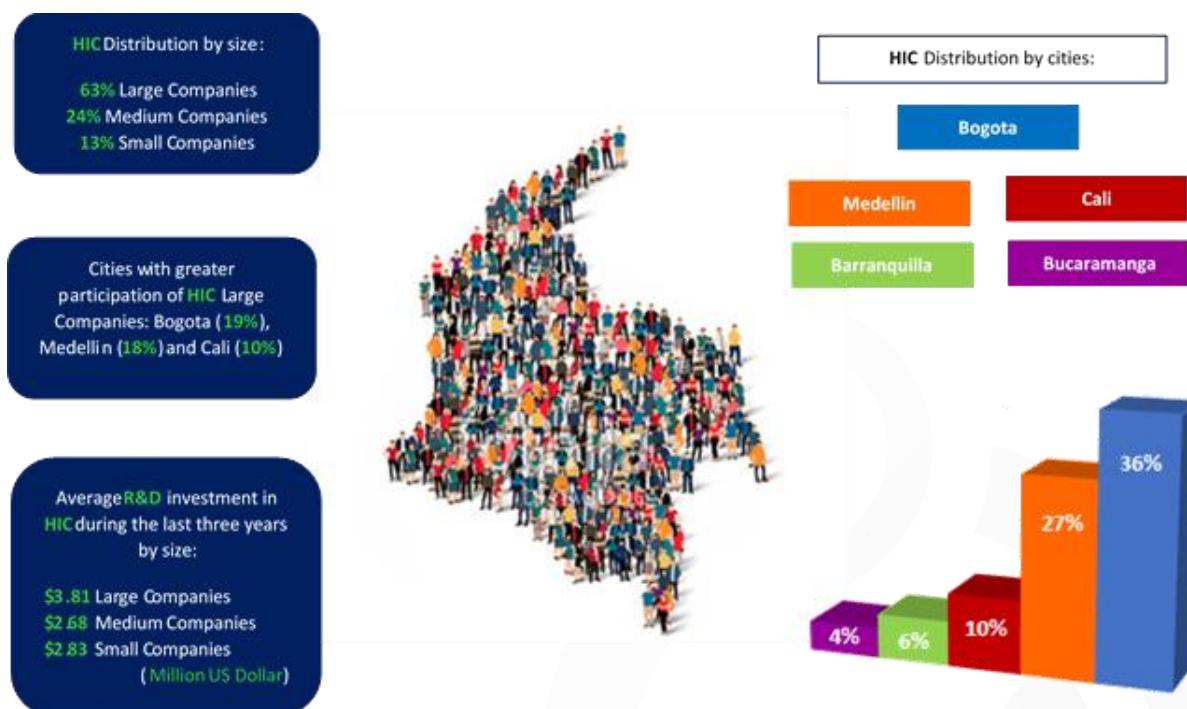
<sup>11</sup> Colombian Competitiveness Privy Council, [www.compitem.gov.co](http://www.compitem.gov.co).

<sup>12</sup> Dinero.com, 2017.



With the aim of encouraging investment by private companies in innovation, the Colombian Institute for the Development of Science and Technology ([Colciencias](http://colciencias.gov.co)), the Ministry of Trade, Industry and Tourism and the National Planning Department gave official recognition to the first group of 89 Highly Innovative Companies (HIC) in the country, which had a tax incentive with an income tax deduction up to 175 percent of the investment they make in innovation projects.

**Figure 2. Highly Innovative Companies (HIC) map distribution in Colombia<sup>13</sup>**



Of the 89 companies recognized, 24% are medium sized and 13% small undertakings, showing that innovation is not just the purview of large businesses. The pilot project also shows that in addition to Bogota, Medellin and Cali, where there are high concentrations of innovator companies, other towns are surging ahead in this area, such as Barranquilla, Pereira, Bucaramanga, Manizales and Cartagena, which generates a positive impact both on the economy of each one of these cities and that of the country, with a highest possibility of consolidating itself as one of the most attractive destinations to do business and invest in the region.

#### **Development Plan and Policy 3866 of the National Council for Social and Economic Policy (CONPES)**

The vision for science, technology and innovation adopted in the Development Plan is for Colombia to become one of the three most innovative countries in Latin America by 2025.

With a view to improving the outcome for science, technology and innovation businesses and achieving this objective, the Juan Manuel Santos Government set out the goals to be met in this area in the 2014-

<sup>13</sup> Translated from the original in Spanish. Source: Colciencias [www.colciencias.gov.co](http://www.colciencias.gov.co)



2018 National Development Plan, established for his second presidential period, which will end next year. This means that with a new president, new goals will be set in this regard. The challenges for science, technology and innovation outlined in this four years plan include: raising still further the percentage of innovator companies in the industry and services sectors, increasing the number of scientific publications, increasing the number of patent applications from Colombian residents and expanding grants for post-graduate training.

Initiatives for encouraging the private sector to make greater investment in science, technology and innovation businesses include the merger of the Competitiveness and Innovation System and the Science, Technology and Innovation System, the creation of an innovative public procurement program for SMEs, improving how the General Royalties Scheme Science, Technology and Innovation Fund operates and the conclusion of pacts for innovation<sup>14</sup>.

In addition, the Government approved the [Conpes policy 3866](#) (a document issued by the National Council for Social and Economic Policy (CONPES), the supreme body for the coordination of economic policy in Columbia) under which tax breaks will be provided to companies that invest in innovation with a view to incentivizing innovation by the private sector.

According to Daniel Arango, Deputy Minister for Business Development, “this document grants tax breaks of up to 175% to companies presenting projects in innovation. In addition, this encompasses the concept of highly innovative companies, that is to say those that make investments in this field, and we want to speed up the process for them”<sup>15</sup>.

An interview conducted with the former Minister for Trade, Industry and Tourism, Cecilia Álvarez-Correa, brought to light the fact that these tax benefits for companies that invest in science, technology and innovation are already producing results. “Between 2013 and 2015, there was a 47.2% increase in the use of the share of tax set aside for this purpose, rising by 31.8% to 79%, corresponding to USD 397 thousand million, which was allocated to 156 projects in this past year”<sup>16</sup>.

The Ministry has also developed a roadmap based on productive mapping of Colombia - which has 1,047 products that are being supported - and it is in contact with the regions to analyze the decisions that must be taken so that the focus is not across all these products but on those with a high degree of competitiveness, have high potential and a chain that can be established within or outside the region<sup>17</sup>.

In setting these goals, Colombia is seeking to boost progress and win ground in an international context in which it ranks 48th out of the 143 nations in the 2014-2015 Global Innovation Index.

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<sup>14</sup> EFE news agency. (28 May 2015)

<sup>15</sup> Dinero. (19 August 2015)

<sup>16</sup> Colombian Institute for the Development of Science and Technology (*Colciencias*), [www.colciencias.gov.co](http://www.colciencias.gov.co).

<sup>17</sup> María Claudia Lacouture, Minister of Industry and Trade (2016-2017), 2016.

### 1.3. Sectorial strengths

The following section presents the main economic sectors in Colombia, which help to boost economic development.

#### Transport infrastructure

The Colombian Government sees infrastructure projects as one of the key drivers for the country's sustainable development.

The planned investments in roads, ports, airports, inland waterway transport, the hotel sector and energy, is essential for the country to press ahead with economic growth. The Government is counting heavily on national investment plans: the [4<sup>th</sup> Generation Plan](#), which is aimed at developing and modernizing public transport infrastructures with the help of the private sector and which is estimated to be ready in 2021.

**Figure 3. Colombian 4<sup>th</sup> generation road projects<sup>18</sup>.**



This project will have a significant impact on the growth of the Colombian economy, the competitiveness of the country and the generation of employment. Additionally, it will enable the logistics and transportation sector to grow as well, thereby bringing great benefits to already existing logistics and transport clusters<sup>19</sup> and will surely lead to the creation of new clusters in this sector all around the Colombian territory. Roads in poor condition generate about 30 percent of overcharges for the freight transport sector, the Government idea is to consolidate transport infrastructure to make transportation efficient and consequently make transport and logistics companies and clusters grow.

<sup>18</sup> National Infrastructure Agency (ANI). [www.ani.gov.co](http://www.ani.gov.co)

<sup>19</sup> The Colombian Red Cluster defines a cluster as a geographic concentration of companies, specialized suppliers, service providers, companies in related industries and support institutions (such as universities, regulatory agencies and guilds) that are engaged in the same activities or in closely related activities.

## The construction sector

The construction sector is one of the country's most dynamic productive activities. In 2015, construction grew to become one of the largest sectors in the Colombian economy. This year, the profits generated by this sector, amounting to 4.6%, exceeded those for the entire economy. Building construction projects, and in particular public-sector housing projects, have bolstered the growth of this sector, thanks to the Government's free housing program for the most disadvantaged families.

Furthermore, construction clusters are considered one of the most important and consolidated in the country, being the [Medellin's Construction Cluster](#) the biggest and most important, which is committed to promoting the construction sector and to integrating technology to this industry. According to Mr. Carlos Bernal, Director of this cluster, technology is the challenge and opportunity for national companies to improve their performance and competitiveness.

It is a fact that the cluster is already working on turning this purpose into a reality. Many technology initiatives are being launched. The Technological Development Center of the Construction Industry from the Antioquia's Engineering School ([CIDICO](#), in its Spanish acronym), for example, is contributing to this goal. They developed a software for the management and control of construction materials and are promoting the idea that a Colombian resident abroad can invest in a home project, receive credits from the financial sector and carry out this operation as an export.

In the upcoming years, technology demand and offer should increase in this sector if this kind of initiatives remain constant. However, mutual collaboration between the government, clusters and other involved entities is essential to ensure that the sector continues its positive trend.

## The Health sector

The health sector is one of the productive bets of the country and one of the sectors with greater number of cluster established throughout the territory.

It has become evident in the health industry in Colombia that the technical and scientific capacity and the quality of the service offered by some clinical centres can constitute an offer for patients who are willing to travel in order to receive medical treatments and motivated by the unavailability of services or the high costs in their country of origin.

The Health Cluster Initiative was founded in Medellin and today is also established in Bogotá, Cali and Bucaramanga. Records show that patients travel for specialized assistance in the field of ophthalmology, invasive cardiology and specific centres related to assisted reproduction, the most requested service. Patients from Aruba, Bonaire, Curacao, Panama, Peru and Ecuador, often come to the country to take these kind of services.

The internationalization of Colombian Health companies is growing. This fact is one of the key conditions of productive development in small or medium countries such as Colombia, which explains the high importance of this cluster for the Colombian economy.

## **The electrical energy sector**

The national energy industry is viewed as one of the most promising in Latin America.

The sector is made up of various sub-sectors, entities and companies with clearly defined roles in the transmission, marketing, generation and distribution of energy, such as the Ministry of Mines and Energy, the Mines and Energy Planning Unit, the Energy and Gas Regulatory Commission, the Residential Public Services Supervisory Body, the National Hydrocarbons Agency, among others.

In November 2006, in order to boost the electrical sector, one of the fastest growing sectors, a cluster was created in Medellin, followed by two others established in Cali and Bogota. These clusters have been tasked to improve the competitiveness of the industry and to contribute to Colombia's position as an international reference in electrical energy through development and technological applications.

This is a sector linked to the economic activity that the country requires for its development. Additionally, energy electrical clusters serve as a tool to achieve the internationalization of the economy, making the country more competitive.

## **Information and communications technologies sector**

The information and communications technologies (TIC) sector is also one of the industries with the highest growth potential in Colombia, and of great importance for competitiveness. The characteristic features of this sector are constant growth, fostered by the high commitment of the Government, the existence of an infrastructure capable of supporting operations of a global scale and by the presence of an abundant and skilled work force.

The ITC clusters network in Colombia is key in all areas of the economy, even it represents an ally of the other cluster networks. Today, technological upgrading, the strong competition and the markets globalization are movements that make economies look for and create new competitive advantages that allow them to survive in the world market, and it is well known that technology is characterized by being an engine of development.

The country is currently drawing up a policy aimed at bolstering the development of the information technologies industry to create additional export channels for IT services. The Government has begun to set up infrastructure projects for the IT sector with major private-sector involvement as well as investment projects to create services based on value-added software technologies.

### Opportunities for the European companies in the field of technology and information<sup>20</sup>

Numerous opportunities exist with respect to the development of software for the various sectors.

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<sup>20</sup> Colombian National Business Association (ANDI), Software y Servicios TI, Oportunidades en la industria local [Software and IT Services, Opportunities in local industry], [www.andi.com.co](http://www.andi.com.co).

Financial sector: spurred by Government policy aimed at increasing access to banking services in the country, the financial sector has, in terms of demand for IT services, become one of the principal clients, generating major opportunities for the provision of back office services and call centers in the country.

Infrastructure: note should be taken of the [4th Generation road-building program](#), mentioned earlier in this document. This amounted to approximately USD 25 billion and was undertaken by the Santos Government with a view to enhancing the country's competitiveness by reducing the logistical costs of transporting goods from points of manufacture to the ports for export. Other programs are being implemented in relation to the port, rail and airport infrastructures in the country. All these programs require accounting, finance and logistical support services.

Health sector: with a population of 48 million inhabitants, healthcare needs have increased significantly, opening up major opportunities in telemedicine and data consolidation (data entry).

Energy sector: the gas and oil sectors require mobile telecommunications services for monitoring wells and drilling, oil extraction and transport processes for their day-to-day activities.

## 2. Cluster community in Colombia

With the support of different entities around the country, mentioned later in this document, each region has established a consolidated and strong network of clusters, which are presented below.

### **Bogota and the department of Cundinamarca**

Bogota - with a little over 8 million inhabitants - is a major regional market with a varied economy and a GNP accounting for nearly 25% of the total for the country as a whole. The City of Bogota has a diverse productive structure, but most businesses are linked to services.

According to the Bogota Chamber of Commerce figures, the City of Bogota has the largest business platform in the country with more than 400,000 companies, that is to say 29% of the figure for the country as a whole, and around 53,000 new companies are created each year<sup>21</sup>.

The 13 specialized business clusters in Bogota currently all pursue "a strategy of intelligent specialization as part of efforts by Colombia to increase its competitiveness that, like all the other clusters in the country, falls within the [2014-2018 National Development Plan](#), and more specifically the integrated [National System for Competitiveness, Science, Technology and Innovation](#). Executive committees and mixed technical committees work on issues such as Innovation, logistics, etc.

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<sup>21</sup> Cámara de Comercio de Bogotá. ([www.ccb.org.co](http://www.ccb.org.co))

throughout the year. There are 32 such committees, the same as the number of departments in Colombia.

The Bogota Committee has its secretariat in the Bogota Chamber of Commerce for logistical and practical reasons. According to Marco Llinas Vargas, Vice-President for Competitiveness and Added Value for the Bogota Chamber of Commerce, Bogota is ahead of the rest of the country as regards productive policy, because besides the Chamber, the city has a collective leadership of actors such as, Bogota Connect, Andi Bogota, Probogotá, Invest In Bogotá, the District, the Government and other public and private institutions, working together in order to build a strong cluster network.

The Bogota Regional Committee has five specialized areas:

1. The Bogota Creative Region that covers the so-called orange economy – cultural, cinema, television, advertising, fashion, graphic communications, music, etc.;
2. BioPole that covers life sciences, agro-industry, livestock farming, health, cosmetics, pharmaceuticals, etc.;
3. Business services, such as financial services, tourism, Business Process Outsourcing (BPO), Knowledge Process Outsourcing (KPO), etc.;
4. Knowledge hub with human capital, universities, positioning of Bogota as the Mecca for knowledge, etc.
5. Sustainable City and Region, with projects such as the reclaiming of the Bogota River, the circular economy, etc.

Since 2012, the Bogota Chamber of Commerce has been driving and supporting the initiatives of the business clusters in those sectors that are the most representative of the Bogota economy. There are currently more than 2,600 stakeholders taking an active part in the projects and actions of the 13 initiatives of the Bogota business clusters, i.e.:

Name of the Cluster	Sector of Activity	Date of creation	Website
<b>Clothing (Prendas de Vestir)</b>	Textiles, clothing sector and sector services	2012	<a href="http://www.ccb.org.co/Clusters/Cluster-de-Prendas-de-Vestir">www.ccb.org.co/Clusters/Cluster-de-Prendas-de-Vestir</a>
<b>Leather, Footwear and Leather Goods (Cuero, Calzado y Marroquinería)</b>	Tanneries, manufacture and marketing of footwear and leather goods	2012	<a href="http://www.ccb.org.co/Clusters/Cluster-de-Cuero-Calzado-y-Marroquineria">www.ccb.org.co/Clusters/Cluster-de-Cuero-Calzado-y-Marroquineria</a>
<b>Software and IT (Software y TI)</b>	Applications and customs software development	2012	<a href="http://www.ccb.org.co/Clusters/Cluster-de-Software-y-TI">www.ccb.org.co/Clusters/Cluster-de-Software-y-TI</a>





	companies, IT Services and related companies		
<b>Jewellery (Joyería y Bisutería)</b>	Jewellery designers, industrial manufacturers and craft shops, small retailers, specialty stores and jewellery chains.	2012	<a href="http://www.ccb.org.co/Clusters/Cluster-de-Joyeria-y-Bisuteria">www.ccb.org.co/Clusters/Cluster-de-Joyeria-y-Bisuteria</a>
<b>Creative and Content Industries (Industrias Creativas y deContenido)</b>	Cinema, advertising, media, video games and digital animation such as: advertising, media and marketing agencies, TV channels, filmmakers, audiovisual producers, post producers, digital animation studios and video game studios.	2012	<a href="http://www.ccb.org.co/Clusters/Cluster-de-Industrias-Creativas-y-Contenidos">www.ccb.org.co/Clusters/Cluster-de-Industrias-Creativas-y-Contenidos</a>
<b>Graphic Communications (Comunicación Gráfica)</b>	Economic activities related to public commercial printing, production of packaging and labels, editorial production, daily press printing and magazines and post press activities.	2013	<a href="http://www.ccb.org.co/Clusters/Cluster-de-Comunicacion-Grafica">www.ccb.org.co/Clusters/Cluster-de-Comunicacion-Grafica</a>
<b>Cosmetics (Cosméticos)</b>	Make-up, perfumery, toiletries, hand and foot care, body and facial treatments, hair products, shaving products and depilatories manufacturers.	2013	<a href="http://www.ccb.org.co/Clusters/Cluster-de-Cosmeticos">www.ccb.org.co/Clusters/Cluster-de-Cosmeticos</a>
<b>Electrical Energy (Energía Eléctrica)</b>	Goods and services companies related	2014	<a href="http://www.ccb.org.co/Clusters/Cluster-de-Energia-Elctrica">www.ccb.org.co/Clusters/Cluster-de-Energia-Elctrica</a>

	to the electrical energy sector		
<b>Healthcare (Salud)</b>	Health-care providers such as clinics and hospitals, prepaid medicines and insurance companies, suppliers of medical devices, technology, equipment and medicines, laboratories.	2014	<a href="http://www.ccb.org.co/Clusters/Cluster-de-Salud-de-Bogota">www.ccb.org.co/Clusters/Cluster-de-Salud-de-Bogota</a>
<b>Trade and Events Tourism (Turismo de Negocios y Eventos)</b>	Hotels, fairgrounds, travel agencies, restaurants, air and land transport, professional organizers of congresses and events.	2014	<a href="http://www.ccb.org.co/Clusters/Cluster-de-Turismo-de-Negocios-y-Eventos">www.ccb.org.co/Clusters/Cluster-de-Turismo-de-Negocios-y-Eventos</a>
<b>Gastronomy (Gastronomía)</b>	Hotels, restaurants, catering, suppliers, academia and entities of the national government	2014	<a href="http://www.ccb.org.co/Clusters/Cluster-de-Gastronomia">www.ccb.org.co/Clusters/Cluster-de-Gastronomia</a>
<b>Music (Música)</b>	Artists, managers, music producers, festivals, specialized media, government entities, collective management societies, event producers and academia	2014	<a href="http://www.ccb.org.co/Clusters/Cluster-de-Musica">www.ccb.org.co/Clusters/Cluster-de-Musica</a>
<b>Dairy Products (Lácteos)</b>	Dairy products producers. Suppliers of machinery and services for the dairy industry.	2014	<a href="http://www.ccb.org.co/Clusters/Cluster-Lacteo-de-Bogota-Region">www.ccb.org.co/Clusters/Cluster-Lacteo-de-Bogota-Region</a>

Bogota has been designated as the venue for the 20th global business clusters conference, which will be taking place from 7 to 9 November 2017 on the subject of: "The Future of Clusters through Cross-

[www.clustercollaboration.eu](http://www.clustercollaboration.eu)

Country and Cross- region Collaboration". This conference is organized by the ITC and Bogota Chamber of Commerce, in partnerships with [INNpalsa Colombia](#), the Ministry of Information and Communications Technology, the Bogota Conventions Bureau and [Invest in Bogota](#)<sup>22</sup>.

### Medellin & Antioquia

The **Medellin City Business Cluster** project is an initiative led by the Mayor Medellin and Antioquia Chamber of Commerce with the aim of contributing to business development in the region by favouring the development of the *Business Cluster* strategy focusing on "intelligent specialization".

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#### Benefits of the Project:

- Spaces for coaching, training and knowledge transfer.
- Participation in advertising and business networking events through business agendas.
- Promotion and leadership of the city's six strategic sectors.
- Development of intelligent specialization, in which the emphasis is placed on the impact of companies in the six strategic *Business Clusters*.

Name of the Cluster	Sector of Activity	Date of creation	Website
<b>Electrical Energy (Energía Eléctrica)</b>	Generation, transformation, transmission, distribution and commercialization companies of electrical energy	2006	<a href="http://www.camamedellin.com.co/site/Cluster-y-Competitividad/Comunidad-Cluster/Cluster-Energia-Electrica.aspx">www.camamedellin.com.co/site/Cluster-y-Competitividad/Comunidad-Cluster/Cluster-Energia-Electrica.aspx</a>
<b>Textiles/dressmaking, Design and Fashion (Textil/Confección, Diseño y Moda)</b>	Clothing, footwear, accessories, lingerie, sportswear, beachwear and underwear	2008	<a href="http://www.camamedellin.com.co/site/Cluster-y-Competitividad/Comunidad-Cluster/Cluster-Textil-Confeccion-Diseno-y-Moda.aspx">www.camamedellin.com.co/site/Cluster-y-Competitividad/Comunidad-Cluster/Cluster-Textil-Confeccion-Diseno-y-Moda.aspx</a>
<b>Construction (Construcción)</b>	Specialized and complementary companies in the construction of buildings,	2008	<a href="http://www.camamedellin.com.co/site/Cluster-y-Competitividad/Comunidad-Cluster/Cluster-Construccion.aspx">www.camamedellin.com.co/site/Cluster-y-Competitividad/Comunidad-Cluster/Cluster-Construccion.aspx</a>

<sup>22</sup> <http://www.tci2017.org/>

	infrastructure and consulting.		
<b>Business, Fairs and Conventions Tourism (Turismo de Negocios, Ferias y Convenciones)</b>	Hotels, fairgrounds, travel agencies, restaurants, air and land transport, professional organizers of congresses and events.	2008	<a href="http://www.camaramedellin.com.co/site/Cluster-y-Competitividad/Comunidad-Cluster/Cluster-Turismo-de-Negocios.aspx">www.camaramedellin.com.co/site/Cluster-y-Competitividad/Comunidad-Cluster/Cluster-Turismo-de-Negocios.aspx</a>
<b>Medical and Dental Services (Servicios de Medicina y Odontología)</b>	Hospital services, Outpatient services, Dental services, Universities, Services companies in the sector.	2009	<a href="http://www.camaramedellin.com.co/site/Cluster-y-Competitividad/Comunidad-Cluster/Cluster-Medicina-y-Odontologia.aspx">www.camaramedellin.com.co/site/Cluster-y-Competitividad/Comunidad-Cluster/Cluster-Medicina-y-Odontologia.aspx</a>
<b>Information, Technology and Communications (Tecnologías de la información y las Telecomunicaciones)</b>	Applications and customs software development companies, IT Services and related companies	2009	<a href="http://www.clustertic.co/site/Inicio.aspx">www.clustertic.co/site/Inicio.aspx</a>

#### Other three business clusters in Medellin:

Name of the Cluster	Sector of Activity	Date of creation	Website
<b>Colombian Aerospace (Aeroespacial Colombiano)</b>	Air and aerospace sector	2011	<a href="http://www.redclustercolombia.com/clusters-en-colombia/iniciativa/130">www.redclustercolombia.com/clusters-en-colombia/iniciativa/130</a>
<b>Antioquia coffee (cafe)</b>	Food and beverages	2013	<a href="http://www.redclustercolombia.com/clusters-en-colombia/iniciativa/103">www.redclustercolombia.com/clusters-en-colombia/iniciativa/103</a>
<b>Antioquia Cocoa (Cacao)</b>	Food and beverages, agricultural products and inputs	2014	<a href="http://www.redclustercolombia.com/clusters-en-colombia/iniciativa/142">www.redclustercolombia.com/clusters-en-colombia/iniciativa/142</a>

#### *Impact and progress of the Medellin Business Cluster strategy*

Shared responsibility, a sense of belonging, localization and local institutions are some of the guiding principles underlying the Medellin Business Cluster strategy, a public-private partnership initiative, led by the Mayor of Medellin and the Medellin Chamber of Trade for Antioquia, aimed at strengthening the business fabric of the Antioquia capital with efforts being focused on productivity, access to new markets, and the formalization and transfer of good practices.

### Cali & Valle del Cauca<sup>23</sup>

After analyzing the largest and most dynamic production chains in the Valle del Cauca the Chamber of Commerce of Cali identified six business clusters that will seek to promote from different fronts: Bioenergy, White Protein, Health, Macrosnacks, Fashion System and Beauty & Wellness.

Name of the Cluster	Sector of Activity	Date of creation	Website
<b>White Protein (Proteína Blanca)</b> (eggs, chicken and pork meat)	Food and Beverages, livestock sector, agricultural products	2014	<a href="http://www.ccc.org.co/programas-y-servicios-empresariales/plataforma-cluster/proteina-blanca/">www.ccc.org.co/programas-y-servicios-empresariales/plataforma-cluster/proteina-blanca/</a>
<b>Clinical Excellence (Excelencia Clínica)</b>	Pharmaceutical, Medical supplies and equipment, Health and other social services	2014	<a href="http://www.ccc.org.co/programas-y-servicios-empresariales/plataforma-cluster/excelencia-clinica/">www.ccc.org.co/programas-y-servicios-empresariales/plataforma-cluster/excelencia-clinica/</a>
<b>Beauty and Personal (Belleza y Cuidado Personal)</b>	Biotechnology, Cosmetics & Toiletries, Chemical	2014	<a href="http://www.ccc.org.co/programas-y-servicios-empresariales/plataforma-cluster/belleza-y-cuidado-personal-2/">www.ccc.org.co/programas-y-servicios-empresariales/plataforma-cluster/belleza-y-cuidado-personal-2/</a>
<b>Bioenergy (bioenergía)</b>	Energy, goods and related services	2014	<a href="http://www.ccc.org.co/programas-y-servicios-empresariales/plataforma-cluster/bioenergia-2-2/">www.ccc.org.co/programas-y-servicios-empresariales/plataforma-cluster/bioenergia-2-2/</a>
<b>Macrosnacks</b>	Food and Beverages, agricultural products	2014	<a href="http://www.ccc.org.co/programas-y-servicios-empresariales/plataforma-cluster/alimentos-procesados-macro-snacks/">www.ccc.org.co/programas-y-servicios-empresariales/plataforma-cluster/alimentos-procesados-macro-snacks/</a>
<b>Fashion system (Sistema moda)</b>	Footwear, Clothing and Fashion, Leather, Jewelry and Textiles	2016	<a href="http://www.ccc.org.co/programas-y-servicios-empresariales/plataforma-cluster/sistema-moda/">www.ccc.org.co/programas-y-servicios-empresariales/plataforma-cluster/sistema-moda/</a>

In addition, there are two more clusters created by the companies themselves. These are PacifiTIC and Valle del Cauca Fresh Fruit:

Name of the Cluster	Sector of Activity	Date of creation	Website
<b>PacifiTIC - Platform for accelerating competitiveness,</b>	Software and IT	2012	<a href="http://www.redclustercolombia.com/clusters-en-colombia/iniciativa/15">www.redclustercolombia.com/clusters-en-colombia/iniciativa/15</a>

<sup>23</sup> [www.ccc.org.co/programas-y-servicios-empresariales/plataforma-cluster/](http://www.ccc.org.co/programas-y-servicios-empresariales/plataforma-cluster/)

innovation, training and investment in the information and communication technologies (ICT) sector in the pacific region of Colombia			
Valle del Cauca Fresh Fruit (Fruta Fresca)	Food and Beverages	2013	<a href="http://www.redclustercolombia.com/clusters-en-colombia/iniciativa/98">www.redclustercolombia.com/clusters-en-colombia/iniciativa/98</a>

### The Caribbean Coast

The Colombian Caribbean coast alone has 12 business clusters spread across the four principal departments, primarily through the services of the chambers of commerce in the principal towns in these departments, as in the rest of the country.

#### Barranquilla and the Atlantico Department (6):

Name of the Cluster	Sector of Activity	Date of creation	Website
Atlantico Department Health and Pharmaceutical	Health and other social services.	2011	<a href="http://www.camarabaq.org.co/pentagono/cluster-salud-farma/">www.camarabaq.org.co/pentagono/cluster-salud-farma/</a>
Agro-industrial Supplies	Products and agricultural supplies	2012	<a href="http://www.camarabaq.org.co/pentagono/cluster-insumos-agro-industriales/">www.camarabaq.org.co/pentagono/cluster-insumos-agro-industriales/</a>
Caribbean ITC	Software and IT	2013	<a href="http://www.caribetic.org/">www.caribetic.org/</a>
Furniture	Furniture	2013	<a href="http://www.camarabaq.org.co/pentagono/cluster-amoblar-c/">www.camarabaq.org.co/pentagono/cluster-amoblar-c/</a>
Atlantico dairy products	Livestock sector	2014	<a href="http://www.redclustercolombia.com/clusters-en-colombia/iniciativa/112">www.redclustercolombia.com/clusters-en-colombia/iniciativa/112</a>
Tourism	Tourism and restaurants	2014	<a href="http://www.redclustercolombia.com/clusters-en-colombia/iniciativa/117">www.redclustercolombia.com/clusters-en-colombia/iniciativa/117</a>



**Cartagena & the Department of Bolivar (3) + Caribbean ITC:**

Name of the Cluster	Sector of Activity	Date of creation	Website
<b>Tourism for Meetings and Conventions</b>	Tourism and restaurants	2012	<a href="http://www.ccartagena.org.co/es/rutas-competitivas/mantenimiento-competitivo">www.ccartagena.org.co/es/rutas-competitivas/mantenimiento-competitivo</a>
<b>Cartagena Nautical - Nautical Industry</b>	Shipyard industry.	2013	<a href="http://www.cartagenanautica.com/">www.cartagenanautica.com/</a> <a href="http://www.redclustercolombia.com/clusters-en-colombia/iniciativa/49">www.redclustercolombia.com/clusters-en-colombia/iniciativa/49</a>
<b>Competitive Maintenance</b>	Oil, goods and services companies in this sector	2014	<a href="http://www.ccartagena.org.co/es/rutas-competitivas/mantenimiento-competitivo">www.ccartagena.org.co/es/rutas-competitivas/mantenimiento-competitivo</a>

**Santa Marta & the Department of Magdalena (2) + Caribbean ITC:**

Name of the Cluster	Sector of Activity	Date of creation	Website
<b>Banafuturo</b>	Food and Beverages	2012	<a href="http://www.redclustercolombia.com/clusters-en-colombia/iniciativa/70">www.redclustercolombia.com/clusters-en-colombia/iniciativa/70</a> and <a href="http://www.banafuturo.com">www.banafuturo.com</a>
<b>Natural Macondo</b>	Tourism and restaurants	2013	<a href="http://www.redclustercolombia.com/clusters-en-colombia/iniciativa/68">www.redclustercolombia.com/clusters-en-colombia/iniciativa/68</a>

**Department of Guajira (1) + Caribbean ITC:**

Name of the Cluster	Sector of Activity	Date of creation	Website
Media and Alta Guajira Tourism Business Cluster	Tourism and restaurants	2014	<a href="http://www.redclustercolombia.com/clusters-en-colombia/iniciativa/205">www.redclustercolombia.com/clusters-en-colombia/iniciativa/205</a>

## 2.1. Cluster mapping

The following map, created by the Red Cluster Colombia, shows the total number of cluster initiatives throughout the Colombian territory. The numbers in orange, refer to the number of existing clusters in that particular area or region. As you can see in the picture, most of the clusters are concentrated in the most populated regions of the country (from the center to the north), because the biggest and most important cities and economic centers of the country are located in these zones, mainly in the Andean and the Caribbean Region. It is worth highlighting that about 70 to 80 per cent of the Colombian population lives in urban areas, looking for better living conditions.

**Figure 4. Cluster Mapping. Total number of cluster in Colombia: 87<sup>24</sup>.**



<sup>24</sup> <http://www.redclustercolombia.com/clusters-en-colombia/mapa-de-clusters>

## 3. Cluster policies and programmes in Colombia<sup>25</sup>

### 3.1. Programme of support for the competitiveness of Business Clusters (from the 1990s to the first decade of 2000)

Since the 1990s ([Monitor study](#)), efforts have been focused in Colombia on fostering regional development through business clusters. This process emerged from the regions, as was the case with the Medellin and Antioquia Business Cluster Community, the Bogota Chamber of Commerce Business Cluster Program and the Barrancabermeja Oil and Gas Business Cluster initiative, among others. National government intervention began in 2004 with the Inter-American Development Bank, the University of the Andes and Ministry of Trade, Industry and Tourism (MINCIT) implementing the Business Cluster Competitiveness Support Program designed to support the development of the projects of 10 business clusters in the country. In addition, four pilot initiatives were undertaken to bolster competitiveness and these later gave rise to the Competitive Pathways Program.

### 3.2. Since 2012: Competitive Pathways Program

In performing its mission, [Innpulsa Colombia](#) launched the [Competitive Pathways Program](#) in 2012. This was a program designed for companies, encouraging them to redefine their strategy and to identify more attractive and sophisticated trade segments in which to compete. The Program developed business cluster intervention initiatives applying a methodology tried and tested at international level.

Through the Competitive Pathways Program and the calls for tender organised by [Innpulsa](#) aimed at strengthening the Regional Competitiveness Committees, initiatives were developed to foster business cluster intervention that had a positive impact in 22 of the country's departments by developing, implementing and transferring a methodology for regional capacity building to boost business clusters.

In total, the 51 pathways or initiatives to strengthen competitiveness were developed in 22 departments, more than 500 companies took part with a view to competing in more attractive trade (in various sectors, such as fishing, tourism, coffee, furniture, bananas, fruit, construction, healthcare, among others) and skills were transferred to over 50 regional experts in strategy and competitive development for Business Clusters. These Competitiveness Pathways resulted in action plans being drawn up to achieve the strategies established for each business cluster. They were aligned with the

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<sup>25</sup> Colombia Business Cluster Network, <http://www.redclustercolombia.com>.

Regional Competitiveness Plans and the Departmental Development Plans, and responded, in general, to the needs prioritized by the departments.

**Figure 5. Competitive Pathways in Colombia<sup>26</sup>**



The 18 departments in the country in which the program was undertaken fall into three groups. Group 1 consists of the Departments of North Santander, Santander, Magdalena, Atlántico, Bolívar and Cesar. Group 2 of Huila, Tolima, Nariño, Cauca, Risaralda and Quindío. Group 3 of the Departments of Boyaca, Casanare, Meta, Arauca, Valle del Cauca and Antioquia. Finally, there are the other departments newly introducing pathways (new CRCs): Sucre, San Andrés, Chocó and Guajira. In accordance with the time lines set, the departments for the first two groups are close to finishing their two pathways, while those in group 3 are nearing completion of their first pathway and launching the second<sup>27</sup>.

The results of the Competitive Pathway Program and other initiatives designed to strengthen the competitiveness of Business Clusters developed by principal governments, municipal authorities and chambers of commerce, among others, show not only that companies in the regions have strategic options for competing and growing but also that the models designed to strengthen competitiveness through business clusters are a key strategy for pursuing: i) competitive capacity building in the regions; ii) linking the various stakeholders in the territory; iii) establishing targeted strategies for economic development and achieving consensus on the productive objectives in the territory.

<sup>26</sup> <http://redclustercolombia.com/assets/multimedia/Infografia-Rutas-Competitivas.pdf>

<sup>27</sup> Colombia Business Cluster Network, <http://www.redclustercolombia.com>.

From 2012 to the first quarter of 2017, more than 35 hundred thousand pesos were invested in the planning of business cluster initiatives, with around 9 thousand million pesos being contributed by the regions and over 27 million pesos by the Ministry of Trade, Industry and Tourism through Innpulsa Colombia. Furthermore, more than 700 companies have benefited from these resources under the Pathways Program and the business cluster initiatives put in place have the potential to impact on more than 17,000 companies.

As part of the business cluster strategy rolled out by the Ministry of Trade, Industry and Tourism, Innpulsa Colombia pressed ahead with an agreement with the Colombian Competitiveness Privy Council to create the Colombia Business Cluster Network. Within this Network, more than 70 initiatives have been identified for business cluster intervention across the country. Likewise, the Network, in conjunction with the Ministry for Trade and Innpulsa, drew up a model for measuring and assessing business cluster initiatives that measures their level of maturity, and this has been provided to more than 50 business clusters around the country. The Assessment System provides business clusters across the country with a benchmark, the possibility of identifying best practices and the ability to assess their progress over time.

#### **INITIATIVES TO BOOST THE COMPETITIVENESS OF BUSINESS CLUSTERS<sup>28</sup>**

Since 2012, Innpulsa Colombia fostered the development of initiatives to strengthen competitiveness in business clusters in different parts of the country. This objective forms part of the theoretical framework developed by Michael E. Porter whereby geographical concentrations of various companies and organizations interact with each other based on a set strategy. This provides multiple benefits in each and every one of the productive component units of such groupings. These benefits include increased productivity, access to new markets, training and dissemination of knowledge. With regard to support for the competitiveness of business clusters, Innpulsa Colombia has established numerous programs and instruments over the past three years that have led to the development and implementation of business cluster initiatives in Colombia. The current call for tender therefore supports the implementation of measures established by applying the methodology developed under the Competitive Pathways Program or other initiatives that make it possible for business clusters to develop initiatives to strengthen their competitiveness.

In addition to the above, six new initiatives to strengthen business clusters have been identified by applying the same methodology used for the Competitive Pathways Program. These initiatives are being provided with specific resources to each region:

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<sup>28</sup> INNpulsa Colombia. <https://www.innpulsacolombia.com>.



Department	Initiative to strengthen the competitiveness of business clusters conducted with local resources
Santander	Health
Bolivar	Industrial Maintenance
Cauca	Pineapple and Quinoa
Risaralda	Knowledge Process Outsourcing
Risaralda	Aerospatiale

Other initiatives to strengthen business cluster competitiveness identified by the Colombia Business Cluster Network presented below:

Department	Business Cluster with an initiative to strengthen competitiveness
Antioquia	Technology, Information and Communication Medical and Dental Services Business and Fair Tourism Textiles and Dressmaking Fashion
Atlantico	Goods and Healthcare Services Technology, Information and Communication Agro-industrial supplies Health
Bogota	Print shops, agencies and publishing houses Footwear and Leather Business and Fair Tourism Textiles and Dressmaking Jewellery and precious metals Cosmetics Creative and content industries
Caldas	Metal-mechanic industry
Quindio	Tourism
Tolima	Coffee
Valle del Cauca	Personal care Clinical Excellence Technology, Information and Communication

As indicated, there are more than 80 projects throughout the country with initiatives aimed at strengthening business cluster competitiveness that are in the process of proceeding with the implementation of their strategies.

In the wake of the Colombia Business Cluster Network, considerable activity in relation to Productive Development is being seen in 2017. Firstly, the Ministry for Trade, Industry and Tourism, in



implementing its Productive Development Policy, has drawn up a roadmap for boosting 1,864 micro-enterprises, SMEs and productive units across the country in 2017. Secondly, between 7 and 9 November 2017, Bogota will be the venue for the 20th Global Conference for Business Clusters, #TCI2017, the key international event for the development of business clusters and competitiveness; this is expected to bring together more than 400 participants from 60 countries, most of whom are leading figures in regional development, innovation systems and cluster development agendas, as well as distinguished international conference speakers.

## 4. Conclusion

Colombia has seen a growth in initiatives designed to increase the competitiveness of business clusters at local level. The country has 87 business clusters that are registered with the Colombian business clusters network, representing more than 21,000 companies. The main sectors in terms of the number of existing clusters are agriculture and agroindustry, energy, manufacturing, health, ICT and business tourism, mostly based in the Andean, Pacific and Caribbean regions.

A major cause of this boom is due to the Competitive Routes Program implemented since 2012 by Innpulsa Colombia. This project has supported the development of 36 cluster initiatives in 18 departments of the country and has redefined growth strategies in order to make regions more competitive, which has brought positive results.

As all this shows, the measures implemented by each of the regions has indeed made it possible to strengthen competitive capacity and economic development given that each activity undertaken with the framework of the business clusters responds to the specializations and priorities of each department. This means that companies are competing for trade that is more attractive and has greater added value.

These results show that both local governments and companies are encouraging competitiveness across the country. However, to ensure the continuity of initiatives and strategies aimed at the consolidation of business clusters in the country greater support is needed from entities or programs, such as the Innpulsa Competitive Pathways Program, as well as the knowledge and experience that can be shared by international entities.

The goal set by the Government and companies is to move towards internationalization, with the aim of creating links with the outside world since it is there that countries, companies and European entities can find opportunities to work in partnership with Colombia.

## 5. Appendices

### 5.1. Detailed list of clusters in Colombia

Name of the initiative	Sector of activity	Departments of Colombia	Year of creation
<a href="#">Tourism Business Cluster (Clúster de Turismo - MTO)</a>	Tourism and restaurants	Casanare, Guania, Meta & Vichada	2013
<a href="#">Competitive Pathway for the Colombian Institute for Energy Research (IREC) (Ruta Competitiva IREC)</a>	Tourism and restaurants	Risaralda	2013
<a href="#">Folclor initiative (Iniciativa Folclor)</a>	Tourism and restaurants	Cesar	2013
<a href="#">Tourism pathway (Ruta de Turismo)</a>	Tourism and restaurants	Huila	2014
<a href="#">Meet in Cartagena - Tourism for meetings and conventions (Meet in Cartagena - Turismo de Reuniones y Convenciones)</a>	Tourism and restaurants	Bolivar	2012
<a href="#">Turiscauca</a>	Tourism and restaurants	Cauca	2014
<a href="#">Competitive destination - Tourism for South Santander (Destino Competitivo - Turismo para el Sur de Santander)</a>	Tourism and restaurants	Santander	2012
<a href="#">Tabebuia initiative - Nature tourism in Ibagué (Iniciativa Tabebuia- turismo de naturaleza en Ibagué)</a>	Tourism and restaurants	Tolima	2013
<a href="#">Tumbaga initiative (Iniciativa Tumbaga)</a>	Tourism and restaurants	Quindio	2011
<a href="#">Nature Tourism (Turismo de Naturaleza)</a>	Tourism and restaurants	Casanare	2014
<a href="#">Trade and Events Tourism Business Cluster (Iniciativa Clúster de Turismo de Negocios y Eventos)</a>	Tourism and restaurants	Bogota DC	2013
<a href="#">Trade, Trade Fair and Conventions Tourism Business Cluster (Clúster Turismo de Negocios, Ferias y Convenciones)</a>	Tourism and restaurants	Antioquia	2009



<a href="#"><u>Macondo Natural initiative (Iniciativa Macondo Natural)</u></a>	Tourism and restaurants	Magdalena	2013
<a href="#"><u>Tourism Business Cluster (Clúster de Turismo)</u></a>	Tourism and restaurants	Atlantico	2014
<a href="#"><u>Competitive Pathway for Tourism in Media and Alta Guajira (Ruta Competitiva del Turismo de la Media y Alta Guajira)</u></a>	Tourism and restaurants	La Guajira	2014
<a href="#"><u>Gastronomy Business Cluster initiative (Iniciativa Clúster de Gastronomía)</u></a>	Tourism and restaurants Food and Beverages	Bogota DC	2014
<a href="#"><u>Competitive clays (Arcillas Competitivas)</u></a>	Construction and real estate	North Santander	2012
<a href="#"><u>Construction Business Cluster initiative (Iniciativa Clúster Construcción)</u></a>	Construction and real estate	Antioquia	2007
<a href="#"><u>Competitive Pathway - Building construction Business Cluster in the metropolitan area of Bucaramanga (Ruta Competitiva - Clúster de la construcción de inmuebles del área metropolitana de Bucaramanga)</u></a>	Construction and real estate	Santander	2013
<a href="#"><u>Caribbean ITC (CaribeTic)</u></a>	Software and IT	Atlantico, Bolivar, Cesar, Cordoba, La Guajira, Magdalena, San Andres, Sucre	2013
<a href="#"><u>PacifiTIC - Platform for accelerating competitiveness, innovation, training and investment in the information and communication technologies (ICT) sector in the Pacific region of Colombia (PacifiTIC)</u></a>	Software and IT	Valle del Cauca	2012
<a href="#"><u>Technology, Information and Communications Business Cluster (Clúster Tecnología, Información y Comunicación)</u></a>	Software and IT Creative industries Telecommunication	Antioquia	2011
<a href="#"><u>CreaTIC Corporation Business Cluster (Corporación Clúster CreaTIC)</u></a>	Software and IT	Cauca	2013
<a href="#"><u>Santander ITC Companies Business Clusters (Clúster de empresas de tecnologías de información y comunicaciones de los Santanderes)</u></a>	Software and IT Telecommunication	North Santander	2009



<a href="#">IT Network - ITC Business Cluster for the Coffee Triangle (Caldas, Risaralda and Quindío) – [NetworkIT - Clúster TIC del Triángulo del Café (Caldas, Risaralda y Quindío)]</a>	Software and IT	Risalda, Quindio, Caldas	2012
<a href="#">Orinoco ITC Business Cluster (Orinoco Clúster TIC)</a>	Software and IT	Meta	2012
<a href="#">Software and IT Business Cluster initiative (Iniciativa Clúster de Software y TI)</a>	Software and IT	Bogota DC	2012
<a href="#">Quindio ITC Business Cluster (Clúster TIC del Quindío)</a>	Software and IT KPO	Quindio	2010
<a href="#">Medical and Dental Services Business Cluster (Clúster de Servicios de Medicina y Odontología)</a>	Health and other social services	Antioquia	2008
<a href="#">Healthcare Business Cluster - Competitive Healthcare (Clúster de Salud - Salud Competitiva)</a>	Health and other social services	Antlatico	2011
<a href="#">My health future (Mi Destino Salud)</a>	Health and other social services	North Santander	2013
<a href="#">Healthcare Business Cluster initiative (Iniciativa Clúster de Salud)</a>	Health and other social services	Bogota DC	2015
<a href="#">Clinical Excellence (Excelencia Clínica)</a>	Pharmaceutical Health Equipment and medical devices	Valle del Cauca	2014
<a href="#">Competitive Pathway for Medical Products and Services and Clinics in the metropolitan area of Bucaramanga (Ruta Competitiva Productos y Servicios Médicos y Clínicos del Área Metropolitana de Bucaramanga)</a>	Health	Santander	2014
<a href="#">Adu initiative (Iniciativa Adu)</a>	Food and Beverages	Risaralda	2013
<a href="#">Dairy Products Business Cluster initiative (Iniciativa Clúster de Lácteos)</a>	Food and Beverages	Bogota DC	2014
<a href="#">Competitive Dairy Products (Lácteos Competitivos)</a>	Food and Beverages Livestock industry	Cesar	2012



<a href="#"><u>CaféPlus initiative (Iniciativa CaféPlus)</u></a>	Food and Beverages Products and agricultural supplies	Nariño	2012
<a href="#"><u>Boyaca Dairy Products Business Cluster (Clúster de derivados lácteos de Boyacá)</u></a>	Food and Beverages	Boyaca	2013
<a href="#"><u>Cafénix initiative - Tolima highest quality coffees (Iniciativa Cafénix-café de calidad suprema del Tolima)</u></a>	Food and Beverages	Tolima	2010
<a href="#"><u>Banafuturo</u></a>	Food and Beverages	Magdalena	2012
<a href="#"><u>Kaldia initiative (Iniciativa Kaldia)</u></a>	Food and Beverages Agricultural products and supplies	Quindio	2012
<a href="#"><u>White Protein (Proteína Blanca)</u></a>	Food and Beverages Agricultural products and supplies Livestock industry	Valle del Cauca	2014
<a href="#"><u>Snacks Competitive Pathway (Ruta competitiva snacks)</u></a>	Food and Beverages	Meta	2013
<a href="#"><u>Antioquia Coffee Business Cluster (Clúster de café Antioquia)</u></a>	Food and Beverages	Antioquia	2013
<a href="#"><u>Valle del Cauca French Fruit Business Cluster (Clúster de Fruta Fresca del Valle del Cauca)</u></a>	Food and Beverages	Valle del Cauca	2013
<a href="#"><u>Macrosnacks</u></a>	Food and Beverages	Valle del Cauca	2014
<a href="#"><u>Antioquia Cocoa Business Cluster initiative (Iniciativa Clúster de Cacao de Antioquia)</u></a>	Food and Beverages Agricultural products and supplies	Antioquia	2014
<a href="#"><u>Arauca Cocoa Business Cluster (Clúster de cacao Arauca)</u></a>	Food and Beverages Agricultural products	Arauca	2014
<a href="#"><u>Agro-industrial Supplies Business Cluster (Clúster de Insumos Agroindustriales)</u></a>	Agricultural products and supplies	Atlántico	2012



<a href="#">Fruit-growing Business Cluster initiative (Iniciativa clúster frutícola)</a>	Agricultural products and supplies	Meta	2014
<a href="#">Lactic initiative (Iniciativa Láctis)</a>	Agricultural products and supplies Livestock industry	Nariño	2013
<a href="#">Arauca Meat Business Cluster (Clúster de carne de Arauca)</a>	Livestock industry	Arauca	2013
<a href="#">Atlantico Dairy Business Cluster (Clúster lácteo del Atlántico)</a>	Livestock industry	Atlantico	2014
<a href="#">Fisheries pathway (Ruta Piscícola)</a>	Fishing and aquaculture	Huila	2013
<a href="#">Nautical Cartagena - Nautical Industry (Cartagena Náutica - Industria Náutica)</a>	Shipyards industry	Bolivar	2013
<a href="#">Furniture Business Cluster - AmoblaR-C (Clúster de Muebles - AmoblaR-C)</a>	Furniture	Atlantico	2013
<a href="#">Confique</a>	Clothing and Fashion	Cauca	2013
<a href="#">Textile initiative - Dressmaking in Tolima (Iniciativa textil-confección del Tolima)</a>	Clothing and Fashion	Tolima	2013
<a href="#">The Fashion North (El Norte de la Moda)</a>	Clothing and Fashion	North Santander	2014
<a href="#">Eje Cafetero Textile and Dressmaking Business Cluster Federation (Federación Clúster Textil Confección Eje Cafetero)</a>	Clothing and Fashion	Caldas, Quindio, Risaralda	2015
<a href="#">Clothing Business Cluster initiative (Iniciativa Clúster de Prendas de Vestir)</a>	Clothing and Fashion	Bogota DC	2012
<a href="#">Fashion System (Sistema Moda)</a>	Clothing and Fashion	Valle del Cauca	2016
<a href="#">Textiles, Dressmaking, Design and Fashion Business Cluster (Clúster Textil Confección Diseño y Moda)</a>	Clothing and Fashion Leather Footwear	Antioquia	2008
<a href="#">Leather, Footwear and Leatherwork Business Cluster initiative (Iniciativa Clúster de Cuero, Calzado y Marroquinería)</a>	Footwear Leather	Bogota DC	2013
<a href="#">Artemis initiative (Iniciativa Ártemis)</a>	Footwear	Quindio	2013





<a href="#"><u>Jewellery and costume jewellery Business Cluster initiative (Iniciativa Clúster de Joyería y Bisutería)</u></a>	Jewellery	Bogota DC	2012
<a href="#"><u>Cosmetics Business Cluster initiative (Iniciativa Clúster de Cosméticos)</u></a>	Cosmetics	Bogota DC	2013
<a href="#"><u>Music Business Cluster initiative (Iniciativa Clúster de Música)</u></a>	Creative industry	Bogota DC	2014
<a href="#"><u>Cultural and Content Industries Business Cluster (Iniciativa Clúster de Industrias Culturales y de Contenido)</u></a>	Creative industry	Bogota DC	2012
<a href="#"><u>Eje Cafetero Creative Industries Business Cluster (Clúster de Industrias Creativas del Eje Cafetero)</u></a>	Creative industry	Caldas, Quindio, Risaralda	2011
<a href="#"><u>Electrical Energy Business Cluster (Clúster Energía Eléctrica)</u></a>	Energy	Antioquia	2006
<a href="#"><u>Bio energy (Bioenergía)</u></a>	Energy	Valle del Cauca	2014
<a href="#"><u>Colombian South West Electrical Energy Business Cluster (Clúster de Energía Eléctrica del Sur Occidente Colombiano)</u></a>	Energy	Risaralda, Valle del Cauca	2013
<a href="#"><u>Electrical Energy Business Cluster initiative (Iniciativa Clúster de Energía Eléctrica)</u></a>	Energy	Bogota DC	2014
<a href="#"><u>Barrancabermeja Oil Business Cluster (Clúster del Petróleo de Barrancabermeja)</u></a>	Oil	Santander	2008
<a href="#"><u>Competitive Maintenance (Mantenimiento Competitivo)</u></a>	Oil	Bolivar	2014
<a href="#"><u>Casanare Hydrocarbons Supply Industry (Industria Auxiliar de Hidrocarburos en Casanare)</u></a>	Oil	Casanare	2014
<a href="#"><u>Orinoquia Oil &amp; Gas Business Cluster (Clúster Oil&amp;Gas de la Orinoquia)</u></a>	Oil	Meta	2014
<a href="#"><u>CEASCOL - Colombian Aerospace Business Cluster (CEASCOL - Clúster Aeroespacial Colombiano)</u></a>	Air and aerospace industries	Antioquia, Risaralda, Valle del Cauca	2011
<a href="#"><u>Atlantico Logistical Competitive Pathway (Ruta Competitiva Logística del Atlántico)</u></a>	Logistics, transport and distribution	Atlantico	2013
<a href="#"><u>Boyaca Passenger Transport Service Business Cluster (Clúster de servicio de transporte de pasajeros de Boyacá)</u></a>	Logistics, transport and distribution	Boyaca	2015

<a href="#">Graphic Communications Business Cluster initiative (Iniciativa Clúster de Comunicación Gráfica)</a>	Medias	Bogota D.C.	2013
<a href="#">NORTIC</a>	BPO&O	North Santander	2016
Novitas initiative for the Business Processing Outsourcing/Information Technology Outsourcing/Knowledge Processing Outsourcing sector in Risaralda (Iniciativa novitas para el sector BPO/ITO/KPO en Risaralda)	BPO&O	Risaralda	2013