

PROJECT PORTFOLIO 2014





IIRSA Technical Forum
Technical Coordination Committee



V Ordinary Meeting of COSIPLAN
Montevideo, Uruguay - December 4, 2014


























NOTE

The information about the projects presented here is built on the data contained in the COSIPLAN Project Information System (PIS) (www.iirsa.org/proyectos) as of September 18, 2014. The information in such system is permanently updated by the UNASUR Member States.








The maps in this document have been prepared by IIRSA Technical Coordinating Committee (CCT) as a technical and general reference work tool. Borders, colors, denominations, or other information shown in them are used exclusively for illustration purposes, and are not to be understood as a judgment, opinion or other on the legal status of a territory or as recognition of borders by the institutions that make up the CCT.

MAP LEGEND


PROJECTS


	Road		Multimodal Transportation
	Rail		River Navigability
	Navigability		River
	Electric Transmission Line		Gas Project
	Telecommunications Line		Inland Port
	Oil/Gas Pipeline		Telecommunications Infrastructure
	Ring Road		Thermal Power Station
	Ring Railway		Tunnels
	Ports		Bridge
	Airport		Border Crossings
	Electricity Generation		Logistic Center
	Environmental Management Program		


GEOGRAPHIC LEGEND


	Country capital		Existing Rail Tracks
	City		Main Hydrography
	Country Borders		Area of Influence of the Integration and Development Hub
	Existing roads		

PROJECT LIFE CYCLE STAGES



Profiling



Pre-Execution



Execution



Completed


INTEGRATION AND DEVELOPMENT HUB



Amazon Hub



Andean Hub



Guianese Shield Hub



Paraguay-Paraná Waterway Hub


Capricorn Hub



MERCOSUR-Chile Hub

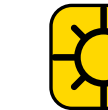

Central Interoceanic Hub

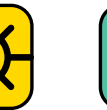

Peru-Brazil-Bolivia Hub


Southern Hub


SECTOR



Transport



Energy



Communications


SUBSECTOR



River



Sea



Rail



Air

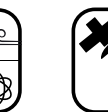

Road


Border Crossing



Multimodal



Energy Interconnection


Energy Generation


Communications Interconnections

SOURCE OF FINANCING


Public


Private



Public/Private

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This Fourth Report on the COSIPLAN Project Portfolio, provided for in the COSIPLAN-IIRSA Work Plan 2014, is intended for submission to the consideration of the UNASUR South American Infrastructure and Planning Council (COSIPLAN) and for citizens, and has a twofold objective. On the one hand, it reflects the results of the territorial planning work conducted by the countries this year, and on the other hand, it presents an overall assessment of the Portfolio, including details of the evolution of its projects.

Chapter A provides a brief account of the background to the physical integration process developed in the South American region. The COSIPLAN Strategic Action Plan is presented as the foundation of the work carried out by the Council, particularly of the actions taken to consolidate its Portfolio. It also includes a section offering an overview of the work performed this year in order to enhance the quality and standardization of the data on the Portfolio projects, and to better communicate their progress and outcomes.

Chapter B presents the territorial planning process undertaken in South America, stresses the importance of the territory as a space to achieve sustainable development, and explains the concept of the Integration and Development Hubs. Next, it describes the Indicative Territorial Planning Methodology and its application, which led to the creation of the Project Portfolio. Furthermore, the main objectives and concepts of the COSIPLAN territorial planning tools and methodologies are reviewed, with special emphasis on the achievements made in 2014.

Chapter C examines the progress of the Portfolio projects between 2013 and 2014. The perspectives selected for this purpose are: i) number of projects and estimated investment amount; ii) project progress by life cycle stage between 2013 and 2014; iii) sector- and subsector-based breakdown and type of works; iv) sources of financing; v) territorial scope of the projects; and vi) Anchor Projects. For each of these dimensions, an analysis is made of a series of variables from the following sources: (i) the information updated by the countries in the COSIPLAN Project Information System as of September 18, 2014; (ii) the COSIPLAN Project Portfolio Report 2013; and (iii) the outcomes of the meetings of the Executive Technical Groups on the nine Integration and Development Hubs to update the COSIPLAN Project Portfolio and the Integration Priority Project Agenda (API), held on April 22 and 24, 2014, in the city of Bogotá, Colombia.

From Chapter D onwards, the information on each of the nine Integration and Development Hubs is presented, including data on the Project Groups that make them up, their strategic functions, and details of the projects involved. At the end of each chapter, the consolidated information on the respective Hub is offered following the structure of the dimensions used for the analysis of the whole COSIPLAN Project Portfolio.

The Union of South American Nations (UNASUR) was created by the South American presidents in 2008 as a forum for high-level political dialogue and coordination among the twelve countries of the region. Within this institutional framework, a number of sectoral councils at ministerial level, one of which is the South American Infrastructure and Planning Council (COSIPLAN), were created. The COSIPLAN is the forum where political and strategic discussions are held with a view to implementing the UNASUR member countries' regional infrastructure integration.

Since 2000, the South American governments have been making a major effort of cooperation with the purpose of securing a greater and more sustainable physical integration in the region. The work undertaken by the Initiative for the Integration of Regional Infrastructure in South America (IIRSA) throughout its first ten years since its creation and by the UNASUR South American Infrastructure and Planning Council (COSIPLAN) since 2011 has focused from the start on infrastructure project planning as a key component of territorial development.

The distinctive feature of this process has been infrastructure planning in the transportation, energy and communications sectors with a regional perspective. With a focus on the territory, this process is intended to enhance the competitiveness of the economies of the region, contribute to reducing regional disparities and social inequality, and improve life expectancy and quality of life in every country and in the region as a whole.

A. THE COSIPLAN PROJECT PORTFOLIO IN THE SOUTH AMERICAN PHYSICAL INTEGRATION PROCESS

The origins of South American physical integration can be traced as far back as more than a decade ago. The landmark event was the First South American Presidential Summit, held in Brasilia in 2000.

Since this First Summit, another twelve presidential summits have been held, in the course of which UNASUR began to take shape. The meetings of presidents increasingly gained formalization, culminating with the approval of the Constitutive Treaty of the Union of South American Nations on May 23, 2008, in Brasilia.

Year after year, the UNASUR presidents have renewed their commitment to the physical integration of South America by incorporating this topic into the UNASUR agenda and emphasizing the importance of the work undertaken within the framework of COSIPLAN, which was encouraged to continue its efforts towards attaining an effective territorial connectivity.

Throughout 2011, COSIPLAN made headway towards devising the two instruments that would structure its work in the next ten years: the Strategic Action Plan (PAE) 2012-2022 and the Integration Priority Project Agenda (API).

The PAE 2012-2022 is the result of a discussion process and consensuses reached by COSIPLAN, designed on the basis of proposals submitted by officials from infrastructure and/or planning ministries or similar bodies.

The general and specific objectives of the Council are closely linked to the infrastructure-related goals laid down in the UNASUR Constitutive Treaty: energy integration for the integrated, sustainable use of the region's resources, in a spirit of solidarity; the development of infrastructure for the interconnection of the region and among our peoples, based on sustainable criteria of social and economic development; and industrial and productive integration, focusing especially on small- and medium-size enterprises, cooperatives, networks and other forms of productive organization.

Similarly, crucial aspects to support this work are established, namely to enhance the role of the Council in implementing projects and to revise and apply the territorial planning methodologies and tools. This document purports to summarize the efforts made and the results attained by the COSIPLAN in these matters during 2013.

B. TERRITORIAL PLANNING

The report stresses the importance of the territory as a space to achieve sustainable development and the hierarchy gained by this concept on the COSIPLAN work agenda. The concept of Integration and Development Hubs is the element that provides the backbone and organization of the territory, enabling the identification of and consensus on integration infrastructure projects under a vision shared by the twelve South American countries, as it conceives infrastructure as a physical integration component that catalyzes economic, social and environmental development in the geographical areas concerned.

To strengthen and enrich the South American infrastructure sustainable planning process, several instruments have been developed, namely: (i) methodologies aimed at incorporating environmental, social, production integration and logistics, and regulatory and legal aspects, among others; and (ii) tools that support and facilitate the analysis of the territory through the systematization of project information.

Such methodologies and tools are incorporated into the PAE; furthermore, the COSIPLAN annual work plans include activities to work on their enhancement and application.

C. THE COSIPLAN PROJECT PORTFOLIO FOR THE INTEGRATION OF REGIONAL INFRASTRUCTURE IN SOUTH AMERICA

Portfolio Evolution: One of the objectives of COSIPLAN, as laid down in its Strategic Action Plan (PAE) 2012-2022, consists in revising and updating the COSIPLAN Project Portfolio on the basis of the development and application of the Indicative Territorial Planning Methodology. The Project Portfolio was created in 2004 with 335 infrastructure projects organized into 40 project groups, with an investment amount estimated at US\$37,424.8 million. In 2013, the COSIPLAN Project Portfolio is made up of 583 integration infrastructure projects in the transportation, energy and communications sectors, organized into 48 project groups and nine Integration and Development Hubs, amounting to an estimated investment of US\$157,730.5 million.

Portfolio Sector-Based Breakdown: Transportation projects account for 88.2% of all the projects and for 67.7% of the total investment, whereas energy projects account for 10.1% and 32.3%, respectively. Road transport projects predominate in the Portfolio, representing almost half of the initiatives and more than 50% of the sectoral investment, followed in order of importance by rail, sea and river transport projects. More and more significance is being attached to border crossing projects, which are far more intensive in development and intra- and inter-institutional coordination issues than in infrastructure, while playing an important role in the facilitation of integration and regional trade. The Portfolio in the communications sector accounts for less than 2% of all the projects, with an investment amount estimated at US\$44.7 million.

The COSIPLAN Portfolio Territorial Scope: From the perspective of their territorial location, 481 COSIPLAN Portfolio projects are national in scope. However, most of these projects contribute directly to the completion, improvement or adaptation of infrastructure for integration purposes and therefore have a regional impact. Of the remaining projects, 96 are binational and 5, trinational. There are only two multinational projects, concerned with telecommunications among Bolivia, Colombia, Ecuador, Peru, and Venezuela in Project Group 10 of the Andean Hub.

Portfolio Financing by Source: The main financial source for projects is the public sector (74.5%). The private sector as well as public-private partnerships contribute with similar percentages: 12.5% and 13%, respectively.

Portfolio Schedule according to the Life Cycle Methodology and the Classification by Stage: Of the total 583 projects, 172 are at the execution stage, with an estimated investment of little less than half of the Portfolio (US\$75,267.3 million, accounting for 47.7%); 162 are at the profiling stage, with an estimated amount of US\$19,669.5 million (12.5% of the Portfolio); 164 are at the pre execution stage, with an estimated investment amount of US\$46,503.9 million (29.5%); while 85 projects have been completed, with an investment amount of US\$16,289.8 million (10.3% of the Portfolio).

The monitoring module is expected to be applied to the COSIPLAN Portfolio projects as part of Work Plan 2014. Thus, it will be possible to rely on updated information on the life cycle schedule of each project and estimate their date of completion more accurately.

D. PORTFOLIO PROJECTS BY INTEGRATION AND DEVELOPMENT HUB

The Second Part of this Report gathers and organizes all the information related to the COSIPLAN Project Portfolio 2013 in an executive format, by presenting the distribution of the projects and their estimated investment amounts by Hub; the sector- and subsector-based breakdown of the COSIPLAN Portfolio by Hub; and the type of project by sector and subsector, differentiating projects according to the type of works involved:

From the analysis of the Portfolio projects by Integration and Development Hub, the following observations can be derived:

The **Amazon Hub** is made up of 88 projects organized into eight project groups with an estimated investment of US\$28,948.9 million. Even though more than 50% of the projects involve road and river transportation, rail projects account for 43.3% of the estimated investment.

Based on the proposal made by Brazil to incorporate its northeastern and central-western territories into the Amazon Hub, an exercise was carried out in 2013 to apply the Indicative Territorial Planning Methodology to this Hub. As a result, the area of influence of Project Group 5, Connection between the Amazon Basin and Northern Northeastern Brazil, was enlarged by incorporating 14 projects, reaching a total number of 17. The estimated investment amount of this project group is US\$15,817 million. Furthermore, a new project group was created, Group 8: Porto Velho - Southern Northeastern Brazil Rail Connection, which includes 11 projects with an estimated investment of US\$6,510 million.

The **Andean Hub** is made up of 65 projects organized into 10 project groups, with an investment amount estimated at US\$9,183.5 million, in which road projects predominate, followed by border crossing facilities. Colombian projects Bogotá - Buenaventura Road Corridor and Bogotá - Cúcuta Road Corridor account for 36.5% of the estimated investment.

The **Capricorn Hub** is made up of 80 projects organized into five project groups, with an estimated amount of US\$13,974.6 million. More than 80% of the estimated investment amount is allocated to the road and rail sectors.

The **Guianese Shield Hub** is made up of 20 projects organized into four project groups, with an estimated investment of US\$4,560.4 million. Two thirds of this amount are for the Surinamese project known as "Integrated Masterplan of Coastal Protection Albina - Nickerie."

The **Paraguay-Paraná Waterway Hub** is made up of 94 projects organized into five project groups, with an investment amount estimated at US\$7,865.1 million. This Hub ranks second as to the number of projects, but its estimated investment accounts only for 5% of the total Portfolio, since more than half of the projects involve river transportation and do not require huge amounts to be executed.

The **Central Interoceanic Hub** is made up of 62 projects organized into five project groups, with an estimated investment of US\$8,830.5 million. More than 50% of the projects relate to road transport, and 80% of the estimated investment is allocated to road and rail projects.

The **MERCOSUR-Chile Hub** is made up of 122 projects organized into six project groups, with an investment estimated at US\$52,701.1 million. The projects known as "Railway Project between Los Andes, Chile, and Mendoza, Argentina (Central Trans-Andean Railway)" and "Construction of the Corpus Christi Hydroelectric Power Station" account for 17.6% of the estimated investment of the Hub.

The **Peru-Brazil-Bolivia Hub** is made up of 26 projects organized into three project groups, with an estimated investment of US\$29,089.8 million. Of this amount, 62.6% goes to the Brazilian project known as "Madeira River Hydroelectric Power Complex (Santo Antônio and Jirau Hydroelectric Power Stations)," which is being executed.

The **Southern Hub** is made up of 28 projects organized into two project groups, with an estimated investment amount of US\$2,762 million. The projects requiring the largest investment are Bahía Blanca - San Carlos de Bariloche Railway Branch Line and Construction of a 500-kV Comahue - Cuyo Region Electricity Interconnection, accounting for 27.1% of the total estimated amount.

1. BACKGROUND AND STRATEGIC FOCUS

The origins of South American physical integration can be traced as far back as more than a decade ago. The landmark event was the First South American Presidential Summit, held in Brasilia in 2000. At this meeting, a multi-layered process of integration and cooperation was launched involving the twelve independent South American countries: Argentina, Bolivia, Brazil, Chile, Colombia, Ecuador, Guyana, Paraguay, Peru, Suriname, Uruguay, and Venezuela. On that occasion, the presidents undertook to promote regional integration to address present challenges and make use of the advantages offered by globalization. A concrete outcome of this vision was the creation of the Initiative for the Integration of Regional Infrastructure in South America (IIRSA),¹ which “seeks to encourage the integration and modernization of physical infrastructure under a regional vision of the South American space” (Brasilia Communiqué, 2000).

Since the First Summit in Brasilia, another twelve presidential summits have been held, in the course of which UNASUR began to take shape. The meetings of presidents increasingly gained formalization, culminating with the approval of the Constitutive Treaty of the Union of South American Nations (UNASUR) on May 23, 2008, in Brasilia. According to Article 2 therein, the objective of UNASUR is to create, in a participatory and consensual manner, a forum for integration and union among its members in the cultural, social, economic and political fields, through political dialogue, social policies, education, energy, infrastructure, financing and the environment, among other priorities, with a view to eliminating socioeconomic inequality, achieving social inclusion and the participation of civil society, strengthening democracy, and reducing asymmetries within the framework of the strengthening of the sovereignty and independence of the States (Constitutive Treaty of UNASUR, 2008).

At the III Summit of UNASUR (Quito, August 2009), the South American presidents decided to create, in such institutional context, the South American Infrastructure and Planning Council (COSIPLAN).² Its Statutes and Regulations were approved by the COSIPLAN Ministers at their First Meeting (Buenos Aires, December 2009). According to the Statutes, COSIPLAN “... is a forum for political and strategic discussion [...] aimed at implementing the integration of regional infrastructure in the UNASUR Member States.” On the occasion of the IV Summit of the UNASUR Presidents (Georgetown, November 2010), the presidents envisaged “the prompt implementation of its Action Plan, which is especially significant for the future of regional integration,” and stressed “the importance of selecting a series of works that would impact powerfully on integration and regional socioeconomic development” (Declaration of the IV Summit of UNASUR, 2010).

At their VI Summit (Lima, November 2012), the UNASUR presidents approved the COSIPLAN Strategic Action Plan (PAE) 2012-2022 and the COSIPLAN Integration Priority Project Agenda (API). Furthermore, they stressed their “will to promote the intensive use of Information and Communication Technologies (ICTs) and the construction of the South American Fiber Optic Ring” (Declaration of the VI Summit of UNASUR, 2012).

The following year, on the occasion of their VII Ordinary Meeting (Paramaribo, August 2013), the heads of State and government expressed their belief that one of the pillars of a long-term strategic vision of UNASUR is the “strengthening of the physical infrastructure and connectivity among Member States to promote the integration of their citizens and encourage the establishment of the South American identity.” With regard to the financing of physical integration, they requested the Council to analyze the possibility of establishing mechanisms to finance infrastructure projects, with participation from regional development banks. Moreover, they urged COSIPLAN to move forward in the interconnection of fiber optic networks in order to make “telecommunications more secure, strengthen the development of regional technologies and promote digital inclusion” (Declaration of the VII Summit of UNASUR, 2013).

As can be seen from the foregoing, year after year the UNASUR presidents renew their commitment to the physical integration of South America by incorporating this topic into the UNASUR agenda and emphasizing the importance of the work undertaken within the framework of COSIPLAN, which is encouraged to continue its efforts towards attaining an effective territorial connectivity.

¹ For more information, visit <http://www.iirsa.org>

² For more information on COSIPLAN, visit <http://www.iirsa.org/cosiplan.asp>

2. THE COSIPLAN STRATEGIC ACTION PLAN

Throughout 2011, COSIPLAN made headway towards devising the two instruments that would structure its work in the next ten years: the Strategic Action Plan (PAE) 2012-2022³ and the Integration Priority Project Agenda (API).⁴

The PAE 2012-2022 is the result of a discussion process and consensuses reached by COSIPLAN, designed on the basis of proposals submitted by officials from infrastructure and/or planning ministries or similar bodies of the UNASUR Member States. The highlights of the PAE are the following:

- It recognizes the results in regional infrastructure integration attained by IIRSA, particularly: (i) the development and application of the Indicative Territorial Planning Methodology, which gave rise to a consensus-built portfolio of more than 500 transport, energy and communications infrastructure projects, organized in nine Integration and Development Hubs; (ii) the creation of the Implementation Agenda Based on Consensus (AIC) 2005-2010, consisting in a set of 31 priority projects having a high impact on the physical integration of the territory; (iii) the design of projects related to Sectoral Integration Processes (PSIs); and (iv) the development and application of new planning methodologies and tools.
- It is based on the UNASUR Constitutive Treaty and the COSIPLAN Statutes and Regulations. The general and specific objectives of COSIPLAN are closely linked with those related to infrastructure as established in the UNASUR Constitutive Treaty:
 - “d) Energy integration for the integrated, sustainable use of the region’s resources, in a spirit of solidarity;”
 - “e) The development of infrastructure for the interconnection of the region and among our peoples, based on sustainable criteria of social and economic development;”
 - “m) Industrial and productive integration, focusing especially on small- and medium-size enterprises, cooperatives, networks, and other forms of productive organization.”
- For every specific objective of COSIPLAN, it institutes a series of actions including their expected deliverables and estimated implementation time or frequency of implementation. Likewise, it identifies the major instruments required for the implementation of these actions and provides for the development of mechanisms designed to monitor and assess them, considering that the PAE will be subject to review five years after its launch.

The PAE includes the challenges posed by the South American presidents to COSIPLAN, one of the most important being securing political support and viable funding for the projects that make up the Portfolio of Projects for the Integration of Regional Infrastructure in South America (hereinafter, the COSIPLAN Project Portfolio),⁵ particularly for its Integration Priority Project Agenda (API).

Similarly, crucial aspects to support this work are established, namely to enhance the role of the Council in implementing projects and to revise and apply the territorial planning methodologies and tools. The purpose of all this is to select and implement projects that result in sustainable economic and social development in South America.

³ For more information on the PAE, visit <http://www.iirsa.org/pae.asp>

⁴ For more information on API, visit <http://www.iirsa.org/api.asp>

⁵ For more information on the COSIPLAN Project Portfolio, visit <http://www.iirsa.org/cartera.asp>

3. THE COSIPLAN PROJECT PORTFOLIO IN 2014: INFORMATION UPDATE AND QUALITY IMPROVEMENT

As part of the Work Plan 2014, the countries carried out specific actions intended to enhance the quality and standardization of the Portfolio and API project data, and to better communicate their progress and outcomes. These lines of work were agreed upon at the GTE Meeting to Update the COSIPLAN Project Portfolio and API held in Bogotá, Colombia,⁶ and are described below:

- Organization of the Fields in the Project Files: The information fields contained in the project files of the COSIPLAN Project Information System (SIP)⁷ were organized on the basis of internationally accepted project management dimensions: scope, cost and financing, and project status (deadlines). Furthermore, new information fields were included in each of these dimensions:
 - Scope: The “related projects” and “descriptors by sector, subsector, and type of works” were added.
 - Cost and financing: The “included in the national budget” and “year” fields were added to communicate the priority assigned to the project in the annual allocation exercise.
 - Project status: The field “estimated date of completion” of the works was added.
- Specific Descriptors by Sector, Subsector and Type of Works: These descriptors help clearly identify the objectives of each individual project, report important technical features in an aggregate manner, and produce project indicators by country, Project Group, or Integration and Development Hub. These new information fields are divided into “primary” and “secondary” and apply to projects at the pre-execution and execution stages. The schedule agreed by the countries to enter the information for the descriptors in the PIS project files is the following:
 - 2014: API and Anchor Projects at the pre-execution and execution stages
 - 2015: Portfolio projects at the execution stage
 - 2016: Portfolio projects at the pre-execution stage
- Results Indicators for Completed Projects: A new section including information fields that are specific to completed projects was incorporated. These new fields, which are also grouped into the scope, cost and financing, and deadlines dimensions, are: “completed projects results indicators by type of works” (descriptors), “final project investment in US\$,” “total cost of studies in US\$,” “start date of works,” and “delivery date of works”. The schedule agreed by the countries to enter the information for the fields specific to completed projects in the PIS project files is the following:
 - 2014: API Projects and Anchor Projects
 - 2015: The other Portfolio Projects
- Application of the Project Monitoring System (PMS) to the Project Portfolio: The PMS enables the recording of API project progress from a regional perspective and the generation of timely and reliable information for relevant government authorities to make decisions. Until 2013, this monitoring module was only available for the API projects. The countries agreed to gradually use the PMS for all the Portfolio projects according to the following schedule:
 - 2014: Anchor Projects
 - 2015: Projects at the execution stage
 - 2016: Project at the pre-execution stage

⁶GTE Meeting on the Nine Integration and Development Hubs to Update the COSIPLAN Project Portfolio and the Integration Priority Project Agenda (API), April 22 and 24, 2014, Bogotá, Colombia, <http://www.iirsa.org/Event/Detail?id=247>

⁷For more information on the PIS, visit <http://www.iirsa.org/sip.asp>

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- API Progress Indicators: Access to the information included in the PMS is limited, only available to National Coordinators and officials authorized by them. With the aim of informing the general public about the API progress and results, it was decided to make public, in the structured project files, the information about the progress of these projects as shown in the PMS.

To carry out the enhancement and update tasks already mentioned, a number of functional and design adjustments were made to the COSIPLAN Project Information System (PIS). The PIS is one of the main tools of COSIPLAN to fulfill its mission of implementing the integration of the UNASUR Member Countries' regional infrastructure. More in-depth information on the PIS and on the work done with this tool in 2014 is provided in Chapter B, Section 2.C.v, and in Annex 2.

Finally, the results of the analysis of the projects by Integration and Development Hub are described in detail in this document, which presents the COSIPLAN Project Portfolio status as of September 18, 2014, and the progress made since October 4, 2013.

B. Territorial Planning in South America

Since 2000, the South American governments have been making a major effort of cooperation and dialogue with the purpose of securing a greater and more sustainable physical integration in the region. The work undertaken by the Initiative for the Integration of Regional Infrastructure in South America (IIRSA) throughout the first ten years since its creation and by the UNASUR South American Infrastructure and Planning Council (COSIPLAN) since 2011 focuses on infrastructure project planning as a key component of territorial development.

The distinctive feature of this process has been infrastructure planning in the transportation, energy and communications sectors with a regional perspective. With a focus on the territory, this process is intended to enhance the competitiveness of the economies of the region, contribute to reducing regional disparities and social inequality, and improve life expectancy and quality of life in every country and in the region as a whole.

1. THE TERRITORY IN THE FOCUS OF ATTENTION: THE INTEGRATION AND DEVELOPMENT HUBS

This section explores the importance of the territory as a space to achieve sustainable development and the hierarchy gained by this concept on the COSIPLAN work agenda. It presents the concept of Integration and Development Hubs as the element that provides the backbone and organization of the territory and is linked with infrastructure conceived as a physical integration component that catalyzes economic, social and environmental development in the geographical areas concerned.

A) THE CONCEPT OF INTEGRATION AND DEVELOPMENT HUBS

The concept around which territorial planning was organized is that of Integration and Development Hubs.¹ An Integration and Development Hub is a multinational territorial space involving specific natural resources, human settlements, production areas and logistics services. Transportation, energy and communications infrastructure serves as its link, as it facilitates the flow of people, goods and services, and information within this territorial space and from/to the rest of the world.

The Hubs made it possible to identify and agree upon infrastructure projects for integration purposes under a common vision for the twelve South American countries within the framework of an indicative territorial planning process. On the basis of the economic, social and environmental characterization of the area of influence of the Hubs, a direct coordination of projects and their respective sites is sought.

The COSIPLAN Strategic Action Plan (PAE) 2012-2022 adds a broader dimension to this concept by emphasizing the need to give priority to sustainable development and to act on the reduction of asymmetries in the region. Thus, the design of the COSIPLAN projects should take into account their contribution to the endogenous development of the region and to the improvement of the living conditions of the population in the area of influence of the projects.

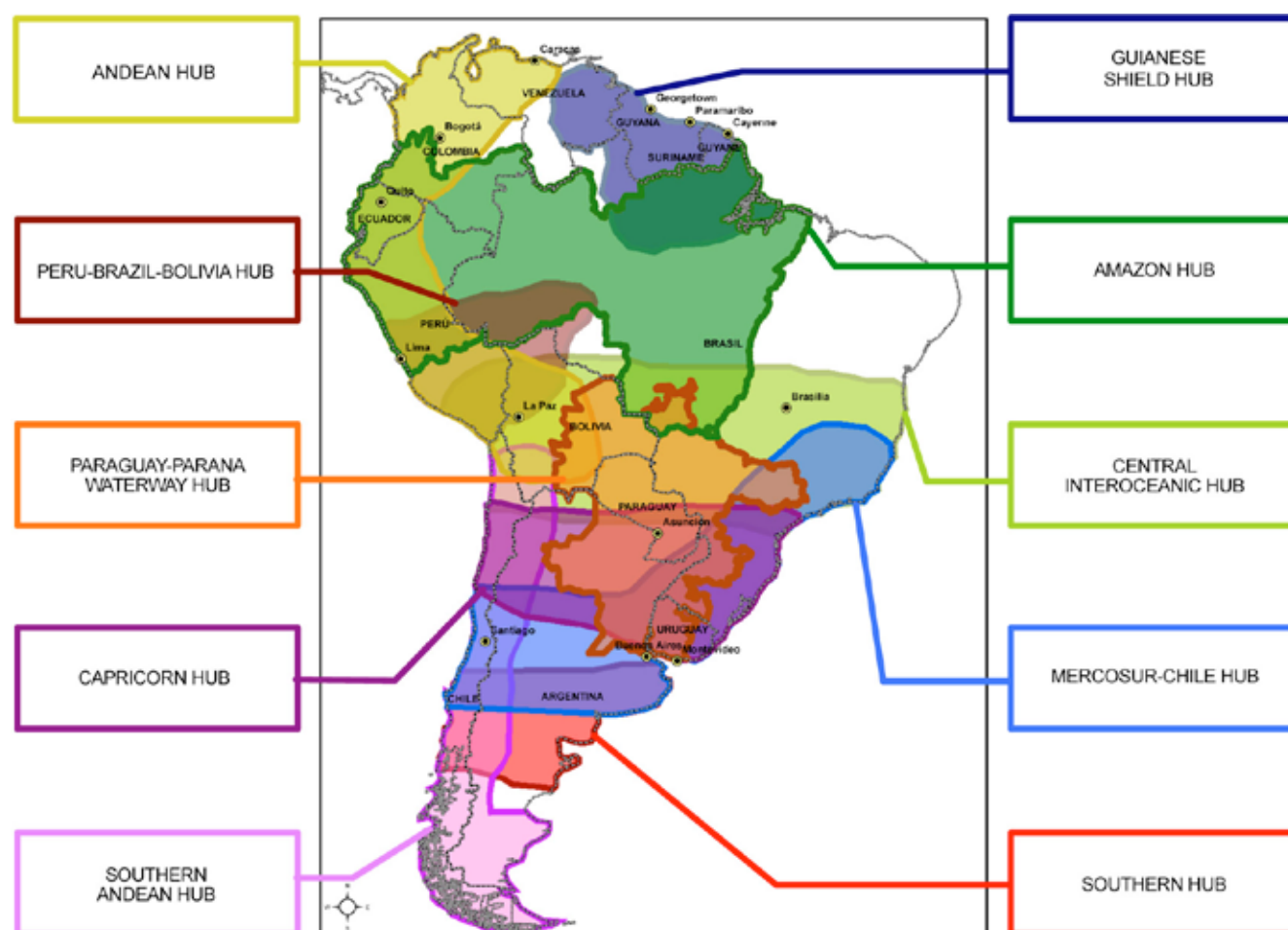
¹ For more information on the Hubs, visit <http://www.iirsa.org/eid.asp>

The Integration and Development Hubs and their areas of influence have been defined considering the following characteristics:

- Geographical coverage of countries and regions: The Hubs group territories that allow the presence and participation of all twelve South American countries in the physical integration process. Their area of influence covers regions with different population densities, including the main population concentrations.
- Identification of both existing and potential trade flows: The Hubs are areas that contain the main intraregional trade flows —following historical trade patterns—, enabled by the infrastructure in place, and also consider the production potential of the region.
- Investments in the areas of influence of the Hubs: Account has been taken of the volume of the investments recently made, of those in execution, and also of the funds planned to be invested in the short run within the area of influence of each Hub.
- Interest and participation of the local population and the production sectors in territorial development, logistics projects, and infrastructure.
- Social and environmental sustainability: In light of the diversity of ecosystems in each region, forest reserves, highly fragile ecological areas, as well as the rights and opportunities of local population have been identified.

The application of these criteria along with an analysis of the territory led to the identification of ten Integration and Development Hubs,² which were validated by the South American countries.

Map 1 • Integration and Development Hubs



² The Indicative Territorial Planning Methodology has not been applied to the Southern Andean Hub yet.

As a complement to the territorial aspects, the countries recognized the importance of identifying the regulatory and institutional obstacles hindering the development and operation of basic infrastructure in the region and, therefore, of proposing actions to overcome them. The PAE incorporates these issues in a series of specific actions known as “Sectoral Integration Processes.”³

B) THE INTEGRATION AND DEVELOPMENT HUBS AND INFRASTRUCTURE

Once the geographic area of the Hubs was established following the above-mentioned criteria, a key aspect was the link between them and infrastructure.

The development of the Indicative Territorial Planning Methodology was inspired by the conviction that investments and projects have a substantial impact on the economy and the environment of the region and contribute to increasing social development, while creating new economic opportunities for the local population.

In point of fact, such vision involves the interrelation of three great dimensions and physical infrastructure. Firstly, physical infrastructure serves as a platform for the growth and competitiveness of the immediate area of influence, the internal space, and the domestic markets and, consequently, broadens the competitive advantages for South American economies to become active players in the regional and global economy. Secondly, the primary goal associated with physical infrastructure enhancement has significant social implications, since it is a tool to create new opportunities for the inhabitants of the poorest, most isolated areas, and to facilitate their integration into the regional economy. Lastly, the approach places emphasis on environmental sustainability, as reflected in its structured project selection, execution, monitoring, and assessment process, and in its consideration of the combined effect of the whole Portfolio and its territorial repercussions for South America.

2. THE INDICATIVE TERRITORIAL PLANNING METHODOLOGY

This section offers a review of the Indicative Planning Methodology application process,⁴ which began with the launch of IIRSA. Within this framework, the concepts on which the methodology is based and the two major stages at which it was implemented are described.

Such process continued with the creation of COSIPLAN. Consequently, this section also addresses the decision of COSIPLAN to make this experience its own and presents the objectives and actions set out in the PAE that relate to the planning of infrastructure for South American integration purposes.

A) THE TERRITORIAL PLANNING PROCESS WITHIN THE FRAMEWORK OF IIRSA

Under the umbrella of IIRSA, South America acted for the first time as a single, integrated unit, one of its results being the creation of a Project Portfolio concerned with infrastructure in the transport, energy and communications sectors.

The structuring of this Portfolio was possible thanks to the development and application of the Indicative Territorial Planning Methodology. As mentioned in the preceding section, this methodology is based on the identification of Integration and Development Hubs, which organize the South American territory and structure the Project Portfolio. It was applied through Executive Technical Group (GTE) meetings in a participative working environment that involved the twelve countries.

³ For more information on the Sectoral Integration Processes, visit <http://www.iirsa.org/psi.asp>

⁴ For more information on the Indicative Territorial Planning Methodology, visit <http://www.iirsa.org/mpti.asp>

The **First Stage of Territorial Planning** took place between 2003 and 2004 and included two phases:

- First phase: Set-up of the Project Portfolio based on the identification of the Project Groups of each Hub.
- Second phase: Establishment of the analysis and assessment factors for the Project Groups.

In the first phase, the grouping of projects within each Hub was based on the concept of synergies, which led to define the Project Groups as well as their Anchor Projects and strategic functions.

MAIN CONCEPTS OF THE INDICATIVE TERRITORIAL PLANNING METHODOLOGY

Project Group

A Project Group is a set of interdependent projects in a given geoeconomic space having synergetic effects upon sustainable development. A Project Group enables the capitalization of the benefits of a set of investments, which are greater than the aggregate effects of its individual component projects. The process is territory-based and takes into account the location of projects, their relationships with the prevailing or potential economic activities, and related environmental and social aspects.

Strategic Function

The effects of a Project Group constitute its strategic function, i.e. its common objective and/or main benefits for both the integration and the regional development of the geoeconomic spaces involved. The strategic function has to do with the direct linkage of the Project Group to the specific territorial aspects of its area of influence and to the strategic vision of the pertinent Hub.

Anchor Project

Anchor Projects give meaning to the grouping process and make synergies viable. They are identified as the bottleneck or missing link in the infrastructure network hindering the optimum use of the combined effects of the group for the sake of economic and social development. They are not necessarily the largest-sized projects or those involving the greatest estimated investment.

Hinge Project

A hinge project articulates two or more Hubs, plays a role in more than one Hub, or articulates two or more Project Groups within one Hub.

The second phase of the methodology implementation started once the Project Portfolio was set up following the above-described process. This second phase consisted in defining a structure of factors to grasp the attributes of each Project Group. The two strategic dimensions of this analysis identified by the countries are:

- Impacts upon sustainable development, in terms of its economic, social, and environmental dimensions;
- Implementation feasibility, based on technical viability, capacity to obtain funding from different sources, and political convergence.

The assessment and prioritization of the Project Groups was conducted on the basis of these two dimensions. This exercise resulted in the need to (i) enhance the technical support of the Portfolio Project Groups by gaining greater knowledge about the economic, social and environmental situation of the territory and the likely impact of the infrastructure projects on sustainable development; (ii) improve the capacity for formulating, preparing and assessing integration projects in order to strengthen their inherent quality; and (iii) contribute to strengthening the technical skills of the national teams responsible for infrastructure planning.

To address these needs, the **Second Stage of Territorial Planning** was launched in 2005, framed under the concept of “improvement and a qualitative leap forward in the planning process.” In this context, training workshops on physical integration topics targeted for the national teams were held,⁵ and non-reimbursable funds for pre-investment studies were created.⁶ Likewise, new analytical tools and territorial planning methodologies were developed, particularly the following:

- Strategic Environmental and Social Evaluation (EASE) Methodology
- Production Integration and Logistics (IPrLg) Methodology
- Project Portfolio Database

B) THE TERRITORIAL PLANNING PROCESS WITHIN THE FRAMEWORK OF COSIPLAN

The Union of South American Nations (UNASUR) was created by the South American presidents in 2008 as a forum for high-level political dialogue and coordination among the twelve countries of the region. Within this institutional framework, a number of sectoral councils at ministerial level, one of which is the South American Infrastructure and Planning Council (COSIPLAN), were created. The COSIPLAN is the forum where political and strategic discussions are held with a view to implementing the UNASUR member countries’ regional infrastructure integration.

Throughout 2011, COSIPLAN, which includes IIRSA as its technical forum, made headway towards the design of the Strategic Action Plan (PAE) 2012-2022. The PAE, which structures the strategic lines of work of COSIPLAN for the following ten years, recognizes the results in regional infrastructure planning attained by IIRSA, and incorporates this experience by developing, since 2012, its annual work plans to ensure the continuity of the work undertaken by IIRSA and enhance it, thus complying with the six specific objectives of COSIPLAN:

1. Promote regional connectivity by building infrastructure networks for physical integration purposes, considering sustainable social and economic development criteria, and preserving the environment and the balance of ecosystems;
2. Enhance the capacity and potential of local and regional populations through the development of infrastructure, with the aim of improving their life quality and expectancy;
3. Design regional planning strategies for the development of infrastructure;
4. Consolidate the Project Portfolio for the Integration of Regional Infrastructure in South America;
5. Encourage the intensive use of information and communication technologies with a view to overcoming geographical and operational barriers in the region;
6. Stimulate the application of methodologies and the development of sectoral processes and complementary actions in order to facilitate the design, execution and operation of physical integration projects.

⁵ Training Workshops on Physical Integration: (i) Course on Integration and Development of Regional Infrastructure in South America, October 2008 (<http://www.iirsa.org/Event/Detail?Id=122>); and (ii) Training Workshop on Integration and Development of South American Regional Infrastructure, September 2009 (<http://www.iirsa.org/Event/Detail?Id=136>).

⁶ BID, CAF and FONPLATA earmarked specific line items for pre-investment studies for physical integration projects, with special emphasis on the Portfolio projects.

The presidents commissioned COSIPLAN, among other central tasks, to identify and select a set of high-impact works for the integration and development of South America. The Integration Priority Project Agenda (API), which is the result of the work undertaken during 2011 by the twelve countries within COSIPLAN, was set up in this context.

API is made up of a subset of Portfolio projects grouped into 31 strategic structured projects with a high impact on the physical integration and socioeconomic development of the region, involving an investment amount estimated at US\$21,172.6 million. Its purpose is to encourage connectivity in the region through the construction and efficient operation of infrastructure, while taking into account sustainable social and economic development criteria and preserving the environment and the balance of ecosystems.

C) THE COSIPLAN PLANNING METHODOLOGIES AND TOOLS

As mentioned, several instruments have been developed to strengthen and enrich the South American infrastructure sustainable planning process. These instruments fall into two categories: (i) methodologies aimed at incorporating environmental, social, production integration and logistics, disaster risk management, and regulatory and legal aspects, among others; and (ii) tools to support and facilitate the analysis of the territory through the systematization of project information.

The methodologies and tools described below are incorporated into the PAE; furthermore, the COSIPLAN annual work plans include activities to work on their enhancement and application.

i. Strategic Environmental and Social Evaluation (EASE) Methodology

One of the actions established in the PAE is to apply the Strategic Environmental and Social Evaluation (EASE) Methodology,⁷ the purpose of which is to identify any complementary action that might enhance —from a social, environmental and cultural point of view— the positive effects of projects and minimize their negative impact. The unit of analysis of this methodology is the area of influence of the Portfolio Project Groups and/or the API projects.

A very important aspect of the application of EASE is its contribution to the institutional strengthening of the countries through the participation and full commitment of national and subnational governments, appointed as counterparts to form part of the work team.

Given its strategic nature, the EASE Methodology can be applied at different scales and levels of analysis, basically using secondary information and experts' and key actors' opinions. This process creates a constructive dialogue between the governments of the countries involved as well as between the technical team responsible for applying it and the key local and regional actors in the area of influence of the projects. Throughout the implementation of the methodology, numerous meeting spaces for consultation and feedback are created, thus contributing to validating the results of the application exercise through the design of a participation plan.

Since its development, the EASE Methodology has been applied as follows:

- 2008: Project Group 6 of the Andean Hub: Colombia - Ecuador II (Bogotá - Mocoa - Tena - Zamora - Palanda - Loja) Connection (Colombia - Ecuador)
- 2009-2010: Project Group 2 of the Southern Hub: Binational Touristic Circuit of the Lakes Area (Argentina - Chile)
- 2013: API Project: Multimodal Transportation in the Laguna Merín and Lagoa dos Patos System (Brazil - Uruguay)
- 2013: National Project: Pehuenche Program (Argentina)

⁷ For more information on the EASE Methodology, visit <http://www.iirsa.org/ease.asp>

HIGHLIGHTS OF THE EASE METHODOLOGY

- The EASE Methodology is a valuable tool to incorporate environmental and social issues into the planning of infrastructure projects at both the national and regional levels.
- The Participation Plan proposed by the EASE Methodology is a suitable way to promote the involvement of civil society in project planning and the dissemination of the COSIPLAN actions.
- It is important to promote the EASE Methodology application to other API projects, Project Groups or national projects in order to create consistent knowledge about its use and advantages.
- It is important to coordinate the EASE Methodology with other planning tools included in the PAE, such as the Integration Territorial Programs (PTIs).

ii. Production Integration and Logistics (IPrLg) Methodology

Another PAE action related to the territorial planning methodologies is to revise and apply the Production Integration and Logistics Methodology.⁸ The objective of the methodology is to assess the potential for production integration and for the development of logistics in the area of influence of a Project Group or of an API project. Its final outcome helps articulate a set of actions within the framework of a logic of interdependent relations in order to leverage the impact of infrastructure on the development of these activities.

The methodology is based on three pillars: first, the collection of secondary information as a basis for the formulation of hypotheses about the potential of a Project Group or an API project for contributing to production integration and to the development of logistics services; second, the validation or adjustment of the hypotheses through consultations with the relevant actors at the central and local levels (for instance, public, private and public-private institutions, trade union associations and companies); and finally, the articulation of infrastructure projects with the removal of obstacles and the business opportunities identified based on the analysis of the information collected. The latter is reflected in an indicative action plan, which is the main outcome of the exercise.

Since its development, the IPrLg Methodology has been applied as follows:

- 2008-2009: Project Group 3 of the Capricorn Hub: Asunción - Paranaguá (Brazil - Paraguay)
- 2008-2009: Project Group 5 of the Central Interoceanic Hub: Connections of the Hub to the Pacific (Bolivia - Chile - Peru)
- 2009-2010: Project Group 5 of the Andean Hub: Colombia - Ecuador - Peru Connection
- 2010-2011: Project Group 4 of the MERCOSUR-Chile Hub: Coquimbo - Argentine Central Region - Paysandú (Argentina - Chile - Uruguay)

In November 2011, within the framework of the COSIPLAN Work Plan, a GTE meeting on IPrLg was held with the purpose of revising this methodology and proposing any adjustment necessary to facilitate its implementation and enhance its impact on regional infrastructure planning.⁹ This task was carried out during 2012, and the revised methodology was approved by the COSIPLAN Ministers at the III Ordinary Meeting of COSIPLAN.¹⁰

⁸For more information on IPrLg, visit <http://www.iirsa.org/iprlg.asp>

⁹GTE Meeting on IPrLg, October 11, 2011, Buenos Aires, Argentina, <http://www.iirsa.org/Event/Detail?Id=180>

¹⁰III Meeting of COSIPLAN, November 16, 2012, Lima, Peru, <http://www.iirsa.org/Event/Detail?Id=204>

LESSONS LEARNED FROM THE IPRLG METHODOLOGY APPLICATIONS

- The definition of the area of influence must take into account the production integration and logistics chains selected in the analysis, even if this entails exceeding the territory of the Project Group or API project concerned. The maximum limit set is the territory of the relevant Hub.
- Tourism is a sector of the economy influenced by the implementation of infrastructure, and accordingly must be included in the analysis of the production activities.
- Field interviews are essential to validate the hypotheses proposed during the exercise; therefore, a greater number of interviews is recommended, including the active participation of the private sector.
- The focus of analysis is broadened to include all the logistics aspects, not only the value-added logistics services.

iii. Integration Territorial Programs (PTIs)

Another objective of the PAE is to design “regional planning strategies for infrastructure development.” One of the concrete actions to fulfill this objective is to define a methodology for the creation of Integration Territorial Programs (PTIs)¹¹ associated with API as well as to design them.

The aim of the Integration Territorial Programs is to make headway with other aspects of the territorial planning process in order to enhance the environmental management of the territory, add production integration and logistics components, harmonize regulatory and legal aspects, and improve the local impact of infrastructure. The technical studies and methodological tools developed (IPRLg and EASE, among others) serve as inputs in designing these programs.

Throughout 2012 and 2013, work was conducted to define the general guidelines for the development of these programs. For this purpose, two API projects were selected as case studies to draft a proposal (Agua Negra Binational Tunnel, and Montevideo - Cacequi Railway Corridor). The technical teams of the countries involved contributed information on the specific projects and their views on what kind of actions might be considered when designing the PTIs, which were taken into account in drafting the guidelines.

The document entitled “Integration Territorial Programs – PTIs: Conceptual Guidelines for their Design” was analyzed at the GTE Meeting on PTIs held in Buenos Aires in 2013,¹² and was approved by the COSIPLAN Ministers at their IV Ordinary Meeting that same year.¹³ At this meeting, the proposal of applying these guidelines on a pilot basis to some API projects selected by the countries was included in the Work Plan 2014. In this regard, Argentina and Chile requested the support of IIRSA Technical Coordination Committee (CCT) to reach an agreement concerning the objective and work plan for the design of a PTI associated with API structured project Agua Negra Binational Tunnel.

In this context, the National Coordinators of Argentina and Chile as well as the CCT met on September 3 and 4 to agree upon the guidelines of the work plan to move forward in the program design. On November 13 and 14, an Argentina-Chile Bilateral Workshop was held with the participation of the national teams, made up by the COSIPLAN-IIRSA National

¹¹ For more information on the PTIs, visit <http://www.iirsa.org/pti.asp>

¹² GTE Meeting on PTIs, April 9, 2013, Buenos Aires, Argentina, <http://www.iirsa.org/Event/Detail?Id=216>

¹³ IV COSIPLAN Meeting, November 29, 2013, Santiago de Chile, <http://www.iirsa.org/Event/Detail?Id=222>

Coordinators and officials from central and regional/provincial government bodies concerned with the topics considered for the PTI. The objective of this Workshop was to present and discuss the work plan for the design of the PTI, agree upon the guidelines of the Participation Plan and identify the experts and key actors, and consolidate a shared vision of the work to be undertaken to design the Agua Negra Binational Tunnel PTI.

This first exercise, which is expected to take place in 2015, could serve to create a guide of the basic steps in the design of future PTIs. The main aspects that should be taken into account when designing a PTI are outlined in the box below.

MAIN ASPECTS IN THE DESIGN OF PTIS

- The definition of the objective guiding the PTI actions in a concerted manner by the countries involved in the API project is the main aspect in the design of a program.
- It is important to identify the area of influence of the API project and an area of action of the PTI that is restricted to the objectives identified and the actions proposed.
- The existing planning methodologies may contribute to the identification of problems, difficulties and opportunities to be addressed by the PTI.
- The multi-sectoral and territorial nature of PTIs calls for the participation of different government levels and the building of partnerships with the private sector and other key actors, for which purpose the drafting of a Participation Plan is suggested.
- A PTI is an action program requiring an implementation plan that should include allocation of resources and responsibilities, established implementation timeframes, and a management model.

iv. Methodology for the Incorporation of Disaster Risk Management (DRM) into the Regional Integration Infrastructure Projects

Another action established in the PAE is to design a Methodology for Risk and Disaster Prevention and Management¹⁴ that should define clear procedures to prevent or reduce the effects of natural disasters (earthquakes, tsunamis, floods, and volcanic eruptions) affecting South American infrastructure, and to devise plans for connectivity and public infrastructure recovery.

Losses associated with geological and climatic events have substantially increased over the last few decades, involving economic losses due to both the effects of natural phenomena and the structure and type of works constructed. The sectors primarily affected are transport (airports, roads, ports), energy and communications infrastructure, among others. These sectors are an essential part of the COSIPLAN work and of the process of integration of the South American countries.

The first version of the Methodology for the Incorporation of DRM into the COSIPLAN-IIRSA Regional Integration Infrastructure Projects was developed in 2013. This work was based on the exchange of experiences that took place

¹⁴ For more information on the Methodology for the Incorporation of DRM visit <http://www.iirsa.org/grd.asp>

among the countries in 2012,¹⁵ and took into account the importance of creating mechanisms of coordination and cooperation among the relevant bodies of the South American governments. This methodology was presented to the countries at the GTE meeting held on September 25, 2013, in Santiago de Chile.¹⁶

As provided for in the Work Plan 2014, a simplified version of the methodology and the preliminary version of the User's Manual were presented at a new GTE Meeting held in Buenos Aires.¹⁷

PHASES OF THE METHODOLOGY FOR THE INCORPORATION OF DRM INTO THE REGIONAL INTEGRATION INFRASTRUCTURE PROJECTS

- Phase 1, "Screening": This identifies the subject of study, i.e. the infrastructure or hazard whose risk wants to be determined for its subsequent management.
- Phase 2, "Risk Analysis": This includes four steps to identify the risk and its mitigation measures: (i) definition of performance indicators; (ii) identification of infrastructure and hazards; (iii) degree of depth of the study and Terms of Reference; and (iv) risk study and identification of mitigation actions.
- Phase 3, "Risk Management": This identifies the alternative actions once the risk involved in some infrastructure has been studied.

As a result of the meeting, the countries agreed to conduct a pilot application in 2015 of the User's Manual to Project Group 5 of the Central Interoceanic Hub, "Connections of the Hub to the Pacific: Ilo / Matarani - Desaguadero - La Paz + Arica - La Paz + Iquique - Oruro - Cochabamba - Santa Cruz," which is a seism silent area, using IDB technical cooperation funds. Furthermore, they decided to update the User's Manual on the basis of the pilot application. Lastly, they resolved to articulate and exchange information with other UNASUR councils and bodies currently working on disaster risks through the COSIPLAN Presidency Pro Tempore and the UNASUR General Secretariat.

v. COSIPLAN Project Information System

With the aim of consolidating the Project Portfolio, the PAE provides for the continuous update of the Project Database. The first version of the Project Database was built in 2004 on the basis of the creation of the Project Portfolio with the purpose of consolidating in a single instrument all the basic information related to each project. Between 2007 and 2010, important improvements were introduced into this IT tool, and the project files were regularly reviewed for information consistency. Each project file is kept updated by one responsible person per country or countries, depending on the geographical scope of the project.¹⁸

In 2011, the countries approved the Integration Priority Project Agenda (API), which is made up of a subset of COSIPLAN Portfolio projects. In order to record the progress made in the implementation of the API projects, it became necessary to add two new components associated with the Project Database: (i) a module to consolidate all the information on the API projects, and (ii) a Continuous Monitoring System (CMS) for these projects.

¹⁵ Workshop on South American Infrastructure Risk and Disaster Management, October 18-19, 2012, Santiago de Chile, <http://www.iirsa.org/Event/Detail?Id=209>

¹⁶ GTE Meeting on Risk and Disaster Prevention and Management, September 25, 2013, Santiago de Chile, <http://www.iirsa.org/Event/Detail?Id=230>

¹⁷ GTE Meeting on Risk and Disaster Prevention and Management, October 14, 2014, Buenos Aires, <http://www.iirsa.org/Event/Detail?Id=250>

¹⁸ National, binational or multinational projects.

To incorporate these new instruments, technical and programming adjustments had to be made to the Project Database platform in place. In this context, the COSIPLAN Project Information System, comprising three components, was developed in 2013.

COSIPLAN PROJECT INFORMATION SYSTEM

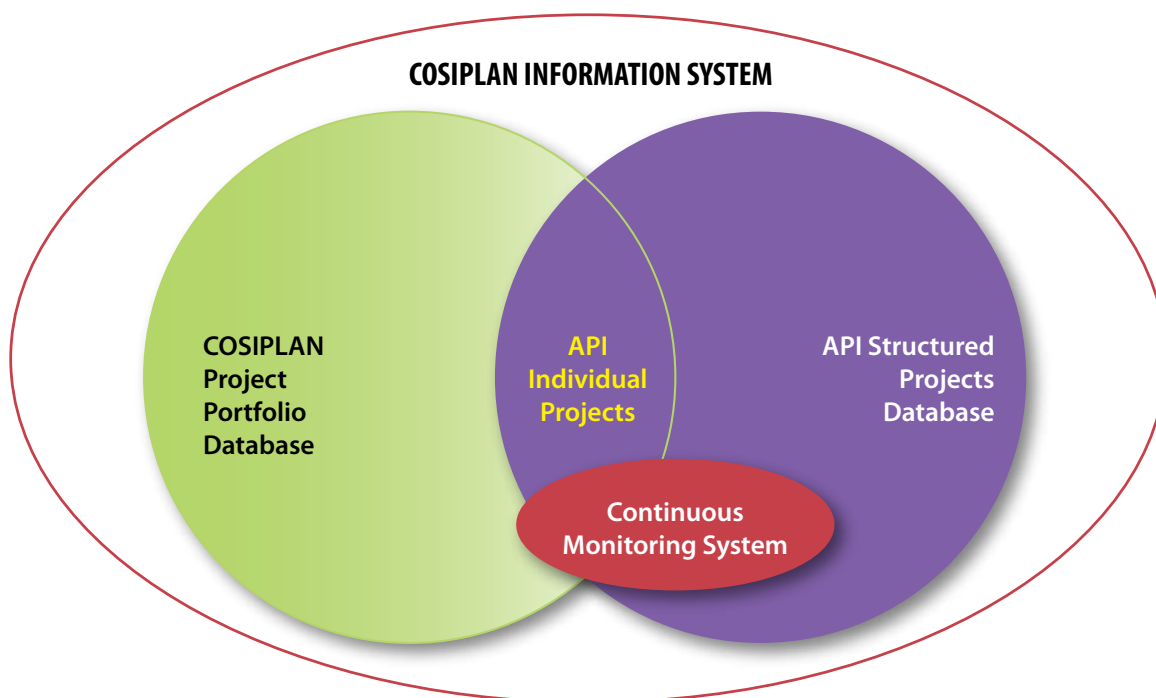
- **COSIPLAN Project Portfolio Database**
This contains the files of each Portfolio project (known as an “individual project” for the purposes of the System) with general information on it organized in modules. Searches and reports can be run on the database based on the query criteria selected by the user.
- **API Structured Projects Database**
This contains the files of the API structured projects. The information in these files is organized similarly to the data in the individual project files. Both the structured and individual project files are linked to one another. Furthermore, the API Structured Projects Database includes a series of reports on the Agenda.
- **API Continuous Monitoring System (CMS)**
The CMS module helps monitor the progress of a project throughout its life cycle (based on the Methodology for Scheduling the Life Cycle of Projects) as well as identify any deviation and its causes. The module controls the progress of structured projects by monitoring the individual projects that make them up.

The three components of the system are interconnected, even for data entering purposes, and can be accessed from the same IT platform using their respective sign-in buttons. The system is currently online,¹⁹ and was presented to the countries at the GTE Meeting on API and the CMS held in August 27 and 28, 2013, in Rio de Janeiro.²⁰

¹⁹ COSIPLAN Project Information System, www.iirsa.org/proyectos

²⁰ GTE Meeting on API and the CMS, August 27-28, 2013, Rio de Janeiro, Brazil, <http://www.iirsa.org/Event/Detail?Id=227>

Figure 1 • COSIPLAN Project Information System Relationship Diagram



As reported in Section 3 of Chapter A, in 2014 the countries carried out specific actions intended to enhance the quality and standardization of the project data, and to better communicate their progress and outcomes. This included the following: (i) the organization of the fields in the project files; (ii) specific descriptors by sector, subsector and type of works; (iii) results indicators for the projects already completed; (iv) the application of the Continuous Monitoring System (CMS) to the Project Portfolio; and (v) API progress indicators.

To carry out the enhancement and update tasks already mentioned, a number of functional and design adjustments were made to the PIS, as described in Annex 2.

COSIPLAN PORTFOLIO



PROJECTS



ESTIMATED INVESTMENT



BY STAGE



BY SECTOR



BY SOURCE OF FINANCING



C. Progress in the COSIPLAN Portfolio Projects during 2014

This section presents the evolution of the COSIPLAN Project Portfolio between 2004 and 2014, and the main indicators of the projects included in it. In addition, it provides a detailed analysis of the progress made by the Portfolio projects between 2013 and 2014¹ in six dimensions selected for this purpose: i) number of projects and estimated investment amount; ii) project progress by life cycle stages between 2013 and 2014; iii) project breakdown by sector, subsector, and type of works; iv) sources of financing; v) territorial scope; and vi) Anchor Projects.

1. BACKGROUND: EVOLUTION OF THE PROJECT PORTFOLIO BETWEEN 2004 AND 2014

The original structuring of IIRSA Project Portfolio took place in 2004 and was subject to successive updates as a result of improvements in the territorial planning process mentioned in the preceding chapter. In 2004, a portfolio made up of 335 infrastructure projects organized into 40 Project Groups and accounting for an investment estimated at US\$37,424.8 million was defined.²

In 2010, the last Portfolio update process under the framework of IIRSA was undertaken through meetings of the GTEs on every Integration and Development Hub. The resulting portfolio included 524 projects organized into 47 Project Groups, accounting for an investment estimated at US\$96,119.2.

Meetings of the GTEs on the nine Hubs have been annually organized since 2011 in order to update the Portfolio as part of the COSIPLAN-IIRSA Work Plan. The evolution of the Project Portfolio in the 2004-2014 period follows below.

Table C.1 • Number of Projects and Estimated Investment - 2004 - 2014

Year	Number of Projects	Estimated Investment (US\$ million)
2004	335	37,424.8
2007	349	60,522.6
2008	514	69,000.0
2009	510	74,542.3
2010	524	96,119.2
2011	531	116,120.6
2012	544	130,139.1
2013	583	157,730.5
2014	579	163,324.5

Table C.1 shows the importance gained by the COSIPLAN Project Portfolio, which, between 2004 and 2013, grew by more than 57% in number of projects and more than four times in terms of total estimated investment. As can be seen in the table, the countries proactively continue to identify strategic projects for integration purposes by using the territorial planning methodologies and tools and the information system developed within the framework of COSIPLAN to reach an agreement on infrastructure projects.

¹ The period of project evolution analysis is October 2013 to September 2014.

² The reports on the Project Portfolio updates for the 2004-2010 period are available at <http://www.iirsa.org/cartera.asp>

2. PROGRESS IN THE COSIPLAN PROJECT PORTFOLIO DURING 2014

A. NUMBER OF PROJECTS AND ESTIMATED INVESTMENT AMOUNT

At present, the COSIPLAN Project Portfolio is made up of 579 infrastructure projects for integration purposes in the transportation, energy and communications sectors, organized into 48 Project Groups and nine Integration and Development Hubs, amounting to an estimated investment of US\$163,324.5 million.

Table C.2 · Annual Change in the COSIPLAN Project Portfolio - 2013-2014
(number of projects and estimated investment)

HUB	No. of Projects			Estimated Investment (US\$ million)		
	2013	2014	Change	2013	2014	Change
Amazon Hub	88	82	-6	28,948.9	25,070.2	-3,878.7
Andean Hub	65	64	-1	9,183.5	9,962.1	778.6
Capricorn Hub	80	83	3	13,974.6	17,929.5	3,954.9
Guianese Shield Hub	20	20	0	4,560.4	4,581.3	20.9
Paraguay-Paraná Waterway Hub	94	95	1	7,865.1	7,574.4	-290.7
Central Interoceanic Hub	62	61	-1	8,830.5	8,907.6	77.1
MERCOSUR-Chile Hub	122	123	1	52,701.1	54,608.3	1,907.2
Peru-Brazil-Bolivia Hub	26	25	-1	29,089.8	32,131.9	3,042.1
Southern Hub	28	28	0	2,762.0	2,744.6	-17.4
TOTAL (*) (**)	583	579	-4	157,730.5	163,324.5	5,594.0

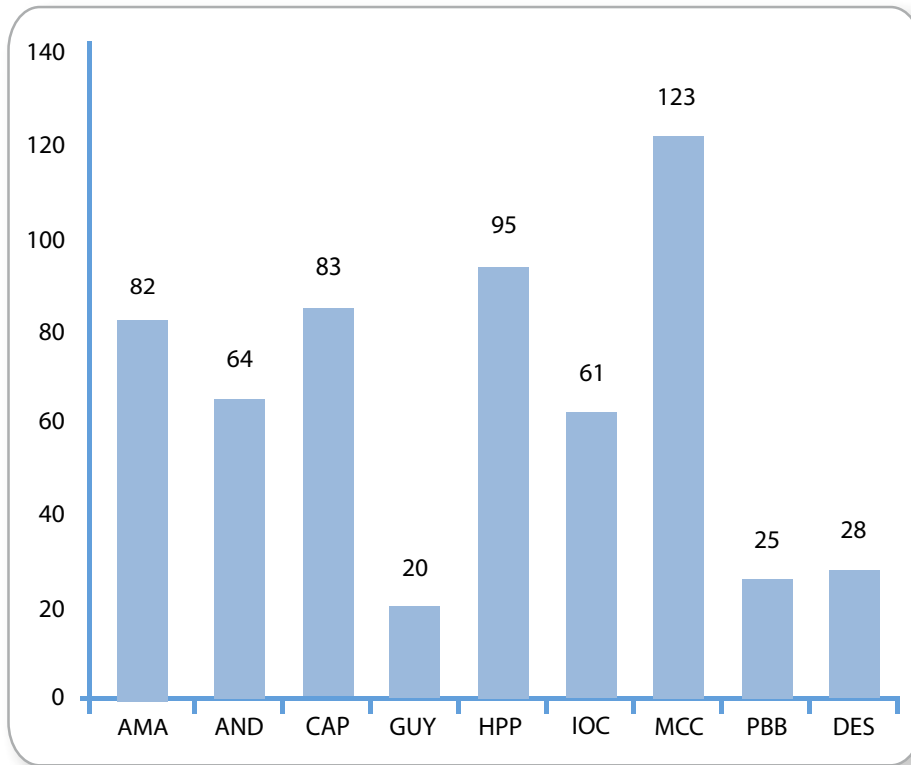
(*) Investments made in two existing projects before IIRSA was launched are not included. These projects are Road Corridor Connecting Santa Marta - Paraguachón - Maracaibo - Barquisimeto - Acarigua, in the Andean Hub, and Itaipu System, in the MERCOSUR-Chile Hub.

(**) Since, there are two so-called hinge projects falling within two Hubs, the totals in the No. of Projects and Estimated Investment columns do not match the arithmetic sum of the totals by Hub. These projects are: (i) Pircas Negras Border Crossing, belonging in the Capricorn and MERCOSUR - Chile Hubs, and (ii) Paving of the Potosí - Tupiza - Villazón Road, belonging in the Capricorn and Central Interoceanic Hubs. (A hinge project articulates two or more Integration and Development Hubs, plays a role in more than one Hub, or falls within two or more project groups in one Hub.)

Between 2013 and 2014, the total number of projects was reduced from 583 to 579. This was the result of a review undertaken by the countries in 2014, which focused on all the projects at the profiling stage. The analysis was mainly directed to all the projects incorporated into the Portfolio prior to 2008 that did not undergo any progress.

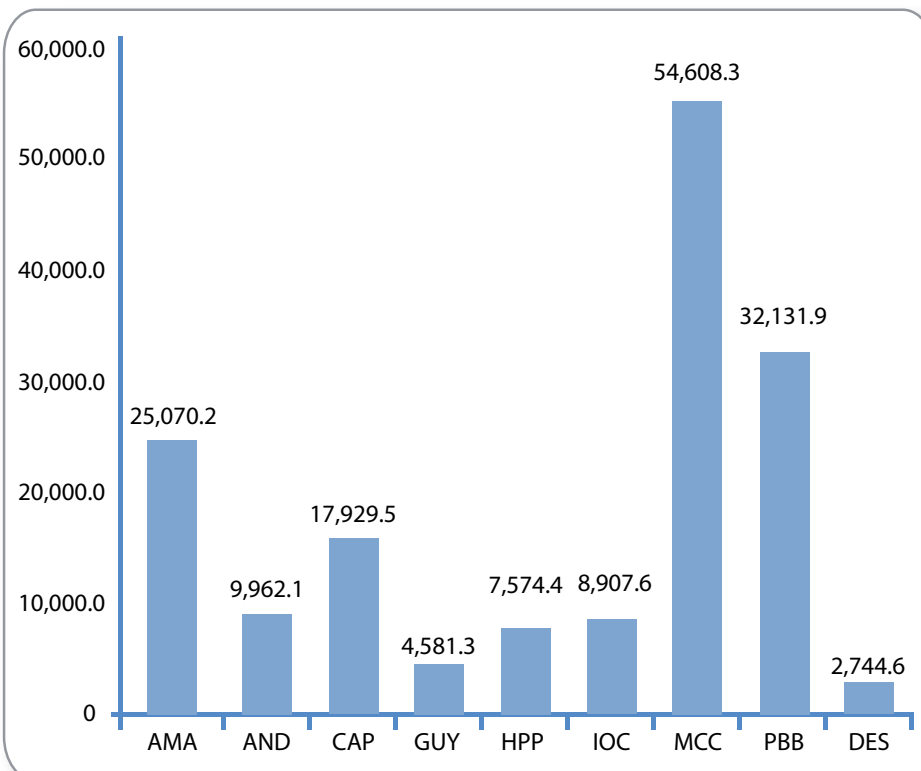
Figure C.1 shows that two thirds (383) of all the projects in the Portfolio are concentrated in the MERCOSUR-Chile, Paraguay-Paraná Waterway, Amazon, and Capricorn Hubs, which cover most of the territory of Argentina and Brazil, both countries having a considerable number of projects in the Portfolio (178 and 110, respectively).

Figure C.1 • General Indicators of the COSIPLAN Project Portfolio by Hub



Two thirds (383) of all the projects are located in the MERCOSUR-Chile, Paraguay - Paraná Waterway, Amazon, and Capricorn Hubs.

Figure C.2 • General Indicators of the COSIPLAN Project Portfolio by Hub (million US\$)

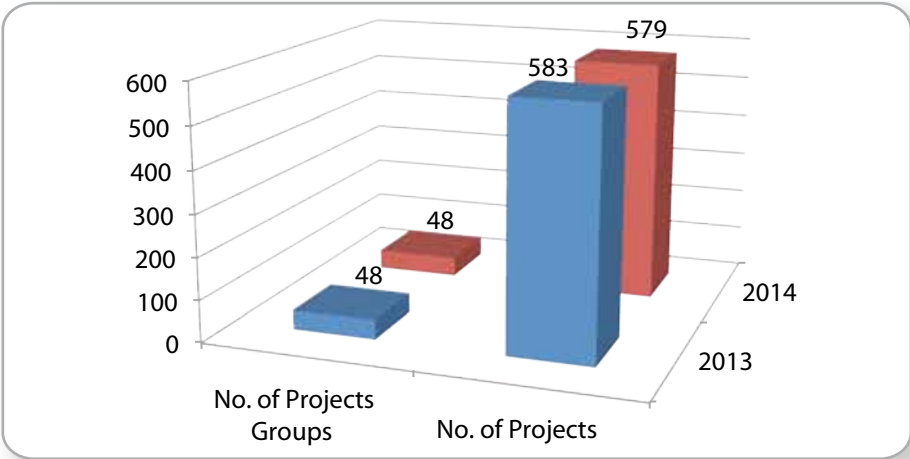


The MERCOSUR-Chile, Amazon, and Peru-Brazil-Bolivia Hubs host 68.4% of the estimated investment.

In the case of the MERCOSUR-Chile Hub, 17% of its estimated investment is explained by projects “Railway Project between Los Andes, Chile and Mendoza, Argentina (Central Trans-Andean Railway)” and “Construction of the Corpus Christi Hydroelectric Power Station.” In the Peru-Brazil-Bolivia Hub, 56.7% of the investment is explained by project “Madeira River Hydroelectric Power Complex (Santo Antônio and Jirau Hydroelectric Power Stations),” representing more than 11% of the total Portfolio estimated investment.

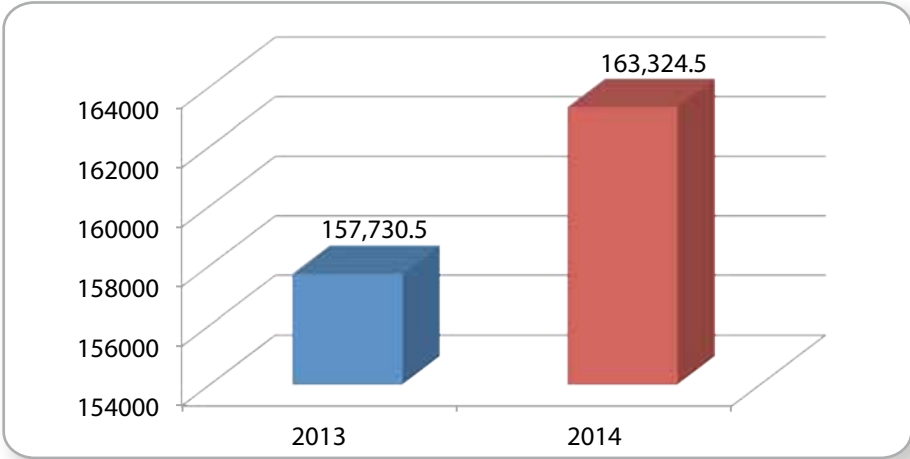
Figures C.3 and C.4 show the current data compared to last year’s results.

Figure C.3 • Evolution of the COSIPLAN Project Portfolio – 2013-2014
(number of project groups and number of projects)



The Portfolio update conducted during the GTE meetings resulted in four projects less. Eleven projects were excluded, while seven were incorporated, four of which are located in Paraguay.

Figure C.4 • Evolution of the COSIPLAN Project Portfolio - 2013-2014
(estimated investment in million US\$)



The increase in the estimated investment is explained by the review and update of the projects made by the countries as well as by the incorporation of seven new projects.

B. PROGRESS IN THE PORTFOLIO PROJECTS BY LIFE CYCLE STAGES

The progress attained by the COSIPLAN Portfolio projects is measured by the following stages and phases:

- **Profiling:** At this stage, background information is studied in order to assess the suitability and technical and economic feasibility of implementing the project idea.
- **Pre-Execution:** This stage includes projects in the following phases:
 - (i) Pre-feasibility: In this phase, the alternatives regarded as the most convenient at the profiling stage are thoroughly examined. This analysis includes, among other elements, the factors that impact on the feasibility and on the investment return of such alternatives.
 - (ii) Feasibility: The feasibility study must involve a detailed and accurate analysis of the alternative that was deemed feasible in the previous phase. This phase also includes the examination of all the aspects related to the physical works, the investment spending program, and project start-up and development.
 - (iii) Investment: This phase includes two aspects: i) Financing, which involves all the actions, formalities and other activities aimed at securing the funds necessary to finance the investment; and ii) Engineering study, consisting of a series of detailed studies for the construction, erection and commissioning of the works.
- **Execution:** It refers to the set of activities required for the physical construction of the project, such as contract conclusion, purchase and set up of machines and equipment, miscellaneous installations, etc.
- **Completed:** This stage involves the entire completion of the physical works (for instance, if the works include several sections and one or more of them have not been completed, the project will be considered in execution until the entire works are completed).

The following table shows the distribution of the COSIPLAN Project Portfolio 2014 by life cycle stage.

Table C.3 • Portfolio Projects by Life Cycle Stage
(number of projects, million US\$, and percentage)

Stage	No. of Projects	% of Projects	Estimated Investment (US\$ million)	% of Investment
Profiling	137	23.7	19,234.3	11.8
Pre-execution	157	27.1	50,744.7	31.1
Execution	179	30.9	72,990.7	44.7
Completed	106	18.3	20,354.8	12.4
TOTAL	579	100.0	163,324.5	100.0

The analysis of the Portfolio projects by their life cycle stage (Table C.3) shows that the Active Portfolio —i.e. the projects that are at the profiling, pre-execution and execution stages— accounts for 81.7% of the number of projects and 87.6% of the total estimated investment in the Portfolio. The remaining 18.3% are completed projects.

Table C.4 • The COSIPLAN Project Portfolio by Implementation Stage and by Hub

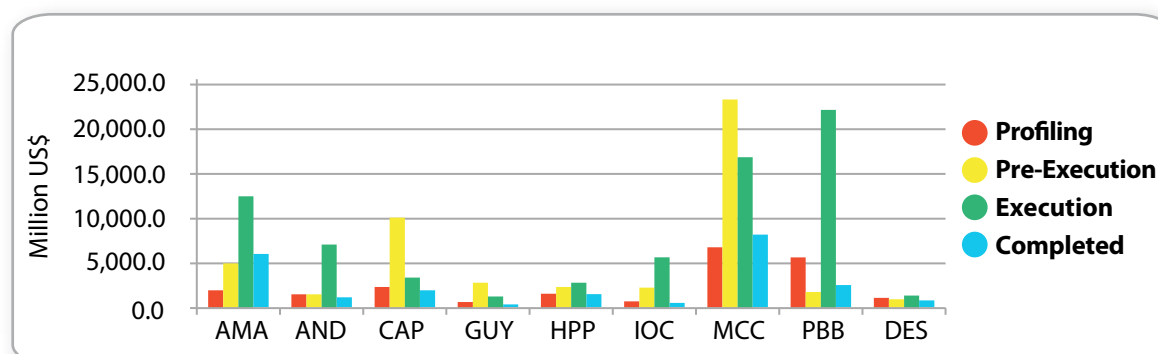
Hub	Profiling	Pre-Execution	Execution	Completed	Total
Amazon Hub	19	21	25	17	82
Andean Hub	16	9	22	17	64
Capricorn Hub	18	32	22	11	83
Guianese Shield Hub	7	2	5	6	20
Paraguay-Paraná Waterway Hub	31	30	22	12	95
Central Interoceanic Hub	10	12	27	12	61
MERCOSUR-Chile Hub	24	38	39	22	123
Peru-Brazil-Bolivia Hub	7	6	8	4	25
Southern Hub	6	7	10	5	28
TOTAL (*)	137	157	179	106	579
Percentage by Stage	23.7%	27.1%	30.9%	18.3%	

(*) The total in the last column does not match the arithmetic sum of the totals by Hub due to the existence of two hinge projects: (i) Pircas Negras Border Crossing, belonging in the Capricorn and MERCOSUR - Chile Hubs, and (ii) Paving of the Potosí - Tupiza - Villazón Road, belonging in the Capricorn and Central Interoceanic Hubs.

The table above shows that the Andean and Central Interoceanic Hubs have more than 60% of their projects at the execution and completed stages. As for the Active Portfolio of the Capricorn, Central Interoceanic, MERCOSUR-Chile, and Southern Hubs, more than 60% of their total projects are at the pre-execution and execution stages. Finally, the nine Hubs have approximately a fourth of their projects at the profiling stage.

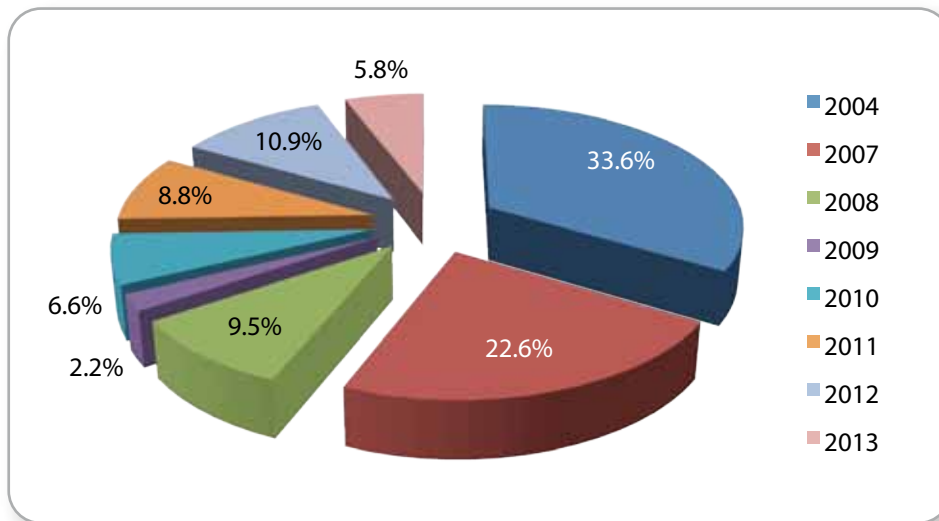
The Hubs with most of their estimated investment allocated to projects at the execution stage are the Amazon, Andean, and Peru-Brazil-Bolivia Hubs (Figure C.5).

Figure C.5 • The COSIPLAN Project Portfolio by Hub and Implementation Stage (million US\$)



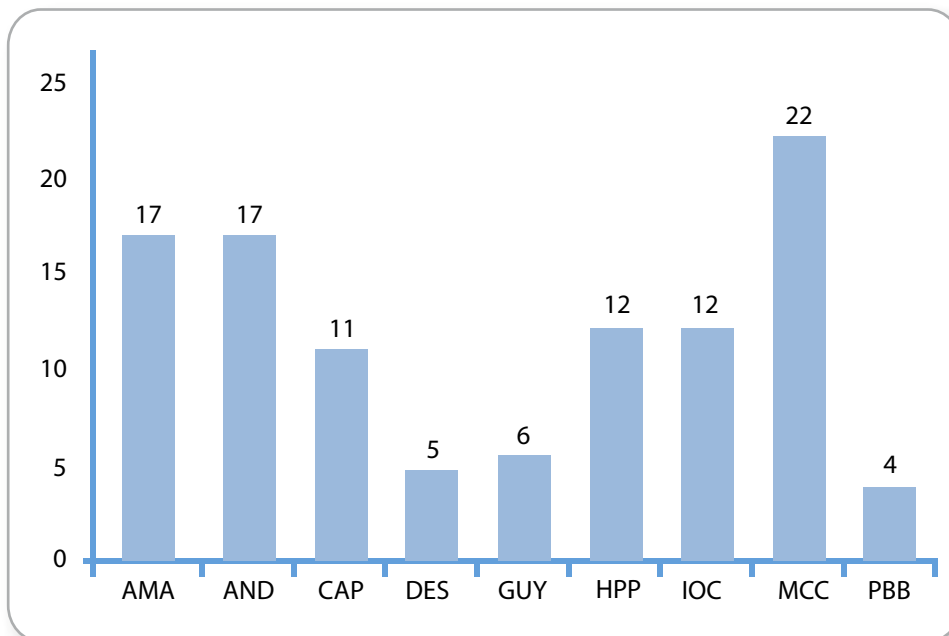
In terms of the year in which the projects at the profiling stage were included in the Portfolio, 83.3% of them became part of it before 2012. (Figure C.6).

Figure C.6 • Number of Projects at the Profiling Stage by Year of Inclusion in the Portfolio



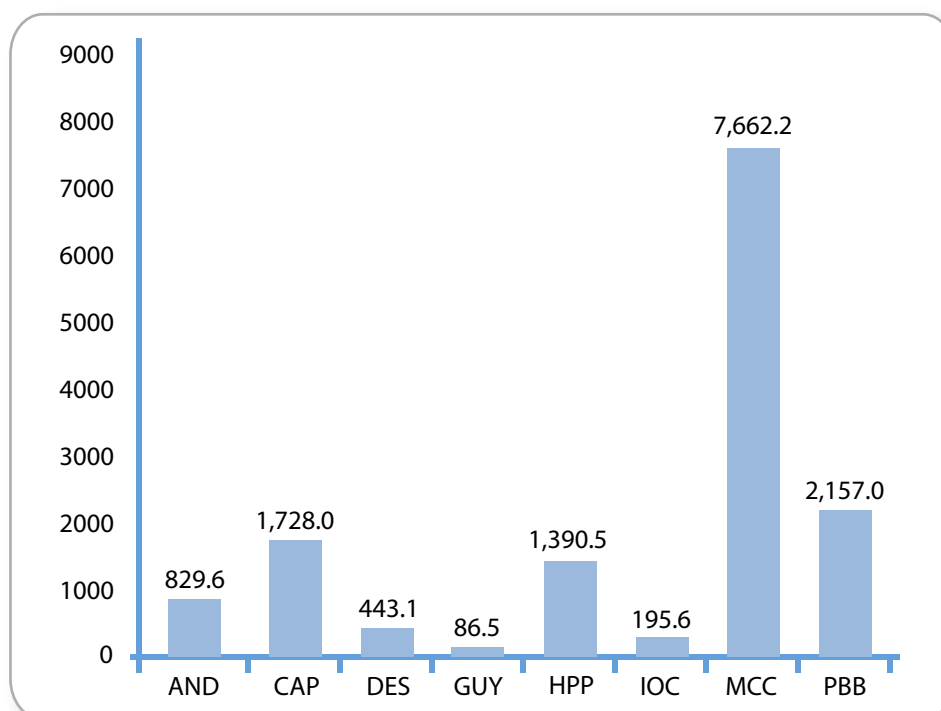
Of the 106 completed projects, 83 are transport sector projects, while 21 fall in the energy sector and two in the communications sector. More than half of the completed projects (52.8%) belong to the MERCOSUR-Chile, Amazon, and Andean Hubs (see Figure C.7).

Figure C.7 • Completed Projects by Hub
(number of projects)



In terms of investment, more than 66% of the investment in the completed projects is located in the MERCOSUR-Chile and Peru-Brazil-Bolivia Hubs (Figure C.8).

Figure C.8 • Completed Projects by Hub (million US\$)



As regards the change in stage of the projects from one year to the next, the following can be mentioned:

- 17 projects that were at the profiling stage moved on to the pre-execution stage, four to the execution stage, and one was completed.
- 25 projects that were at the pre-execution stage moved on to the execution stage, and six moved back to the profiling stage.
- 22 projects that were at the execution stage were completed, and three moved back to the pre-execution stage.
- The stage of two projects that appeared as completed was changed: one was moved to the execution stage and the other one to the pre-execution stage.

Table C.5 • Details of the Projects that Moved On in their Life Cycle in 2014

From Profiling to Pre-execution		
Amazon	Lima - Ricardo Palma Expressway	Peru
Amazon	Improvement of Navigation Conditions on the Morona River	Ecuador, Peru
Amazon	Implementation of the New Coca Airport	Ecuador
Amazon	IIRSA Center, Section 3: Turn Off to Cerro de Pasco - Tingo María	Peru
Andean	Mataje River Binational Border Service Center (CEBAF)	Colombia, Ecuador
Andean	Improvement of the Border Crossings in the Northern Department of Santander and the Táchira State	Colombia, Venezuela
Andean	Southern Panamerican Road, from Ica to the Chilean Border	Peru
Andean	Paving and Improvement of the San Vicente del Caguán - San José de Fragua - El Porvenir Road Section	Colombia
Capricorn	Integrated (One-Stop) Border Control Complex at San Francisco Border Crossing	Argentina, Chile
Capricorn	Construction of the El Dorado - Mayor Otaño Bridge, with Border Service Center	Argentina, Paraguay
MERCOSUR-Chile	Bahía Blanca - Pehuenche Border Crossing Road Corridor	Argentina
MERCOSUR-Chile	Construction of the New Airport of Region IV	Chile
MERCOSUR-Chile	Argentina - Brazil (Uruguay River) New Bridges	Argentina, Brazil
MERCOSUR-Chile	Border Crossing in the Montevideo - Chuy Road Corridor	Uruguay
MERCOSUR-Chile	San Nicolás / Zárate - Pehuenche Border Crossing Road Corridor	Argentina
MERCOSUR-Chile	Rehabilitation of the Montevideo - Río Branco Railway Branch Line	Uruguay
MERCOSUR-Chile	Improvement of Paysandú Border Crossing	Uruguay
From Profiling to Execution		
Amazon	Leticia Dock	Colombia
Andean	Construction of the Tienditas Bridge	Colombia, Venezuela
Central Inter-oceanic	Implementation of the Integrated Control System at Santa Rosa - Chacalluta Border Crossing	Chile, Peru
MERCOSUR-Chile	Improvement of the Itajaí (SC) Port Infrastructure (Rehabilitation of Northern Dock and Dredging)	Brazil
Profiling to Completed		
MERCOSUR-Chile	Optical Fiber Cable between Brazil and Uruguay	Brazil, Uruguay
From Pre-execution to Execution		
Amazon	Construction of New Yurimaguas Port	Peru
Amazon	Rehabilitation of Road BR-222 Açailândia (MA) - Porto de Itaqui (MA)	Brazil
Amazon	Paving of Road BR-230 Marabá (PA) - Itaituba (PA)	Brazil

From Pre-execution to Execution

Andean	Autopista del Sol: Improvement and Rehabilitation of the Sullana - Aguas Verdes Section (Including Tumbes Bypass)	Peru
Andean	Desaguadero Binational Border Service Center (CEBAF)	Bolivia, Peru
Capricorn	New Puerto Presidente Franco - Porto Meira Bridge, with a Paraguay - Brazil Integrated Control Area	Brazil, Paraguay
Capricorn	Improvement of the Encarnación - Posadas Bridge (San Roque González de la Santa Cruz Bridge)	Argentina, Paraguay
Capricorn	Concession of Loa Route	Chile
Capricorn	500-kV Transmission Line (Yacyretá - Villa Hayes)	Paraguay
Southern	Improvement of the Access to the Tremen - Mamuil Malal Border Crossing	Argentina, Chile
Paraguay-Parana Waterway	Paving of the Concepción - Vallemí Road (Routes A06 and PY14)	Paraguay
Paraguay-Parana Waterway	Improvement of Navigation Conditions on the Tietê River	Brazil
Paraguay-Parana Waterway	Rehabilitation and Improvement of the Piedra Sola - Salto Grande Railway Corridor	Uruguay
Paraguay-Parana Waterway	Binational Project for the Improvement of Navigation Conditions on the Uruguay River	Argentina, Uruguay
Central Inter-oceanic	Infante Rivarola - Cañada Oruro Border Crossing	Bolivia, Paraguay
Central Inter-oceanic	Construction of Route No. 5 Section between Bella Vista and the Connection with Apa River Bridge	Paraguay
Central Inter-oceanic	Construction of the Chungará Border Complex	Chile
MERCOSUR-Chile	Upgrade Works in the Navegantes - Rio do Sul Road Section (BR-470 / SC)	Brazil
MERCOSUR-Chile	Rehabilitation of the Montevideo - Rivera Railway	Uruguay
MERCOSUR-Chile	LNG Regasification Facilities in Uruguay	Uruguay
MERCOSUR-Chile	Punta del Tigre Combined Cycle Thermal Power Plant II 500 MW	Uruguay
MERCOSUR-Chile	Repowering of Embalse Nuclear Power Plant	Argentina
MERCOSUR-Chile	Enlargement of the Valparaíso Port	Chile
MERCOSUR-Chile	Dredging of the Tacuarí River	Brazil
MERCOSUR-Chile	La Charqueada Port Terminal and Dredging of the Cebollatí River	Uruguay

From Execution to Completed		
Amazon	Construction of a New Airport in Tena	Ecuador
Amazon	Paíta Port	Peru
Amazon	Improvement of the Guayaquil - El Triunfo - La Troncal - Zhud - El Tambo - Cañar - Azogues - Paute - Amaluza - Méndez Road and Enlargement and Improvement of the Méndez - Puerto Morona Road Section	Ecuador
Amazon	Improvement of the Puerto Bolívar - Santa Rosa - Balsas - Chaguarpamba - Loja - Zamora - Yantzaza - El Panguí - Gualaquiza - Gral. Leónidas Plaza - Méndez Road Section	Ecuador
Amazon	El Callao Mineral Shipping Terminal	Peru
Amazon	Porto Franco Multimodal Yard (North-South Railway)	Brazil
Amazon	500-kV Transmission Line (Tucuruí - Manaus)	Brazil
Amazon	Palmas Multimodal Yard (North-South Railway)	Brazil
Andean	Improvement and Rehabilitation of the Bella Unión - Gualaquiza Road Section	Ecuador
Andean	Construction of the New International Rumichaca Bridge and Improvement of the Existing Bridge	Colombia, Ecuador
Capricorn	500-kV Transmission Line (Itaipú - Villa Hayes)	Paraguay
Southern	Construction of the Hua Hum Border Complex	Chile
Paraguay-Parana Waterway	Paving of the San Estanislao - Puerto Rosario Road Section (Routes B11 and B09)	Paraguay
Paraguay-Parana Waterway	Paving of the Santa Rosa - Puerto Antequera Road Section (National Route No. 11)	Paraguay
Paraguay-Parana Waterway	Binational Project for the Improvement of Navigation Conditions on the Itaipú Lake	Brazil, Paraguay
Paraguay-Parana Waterway	High Voltage Transmission Line between Mercedes and Goya	Argentina
Central Interoceanic	San Matías - Cáceres (Porto Limão) Border Crossing	Bolivia, Brazil
MERCOSUR-Chile	Construction of Facilities and Implementation of Integrated Cargo Control in Paso de los Libres	Argentina
MERCOSUR-Chile	Upgrade Works of the Río Branco - Montevideo - Colonia - Nueva Palmira Road Corridor (Routes No. 1, 11, 8, 17, 18 and 26, Routes 23 and 12)	Uruguay
MERCOSUR-Chile	Rehabilitation of the Montevideo - Rivera Road Section	Uruguay
Peru-Brazil-Bolivia	San Gabán - Puerto Maldonado Electricity Transmission Line	Peru
Peru-Brazil-Bolivia	"IIRSA SUR" Southern Interoceanic Road, Section 1: San Juan de Marcona - Abancay - Cusco - Urcos	Peru

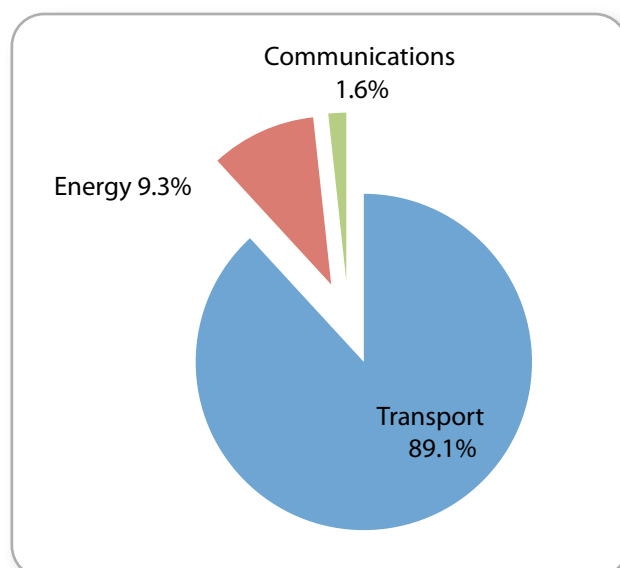
Table C.6 • Changes in the Distribution of the COSIPLAN Portfolio Projects by Stage – 2013-2014

	Profiling	Pre-Execution	Execution	Completed	Total
2013 Projects	162	164	172	85	583
Included Projects	-	4	3	-	7
Excluded Projects	-9	-1	-1	-	-11
Change in Stages	-16	-10	5	21	0
2014 Projects	137	157	179	106	579

C. SECTOR - AND SUBSECTOR - BASED BREAKDOWN OF THE COSIPLAN PORTFOLIO

Transport sector projects (89.1%) prevail in the COSIPLAN Project Portfolio, contributing to the improvement of regional physical connectivity and the reduction of transportation costs both at the domestic level and across the countries, which implies great benefits for the economies of the region. Of the other Portfolio projects, 9.3% fall in the energy sector and 1.6%, the smallest share, in the communications sector. An analysis of the estimated investment shows that even though projects in the energy sector have a small share in the Project Portfolio in terms of number, they account for 33.5% of its total estimated investment, as they require large investment amounts due to their size and technical characteristics.

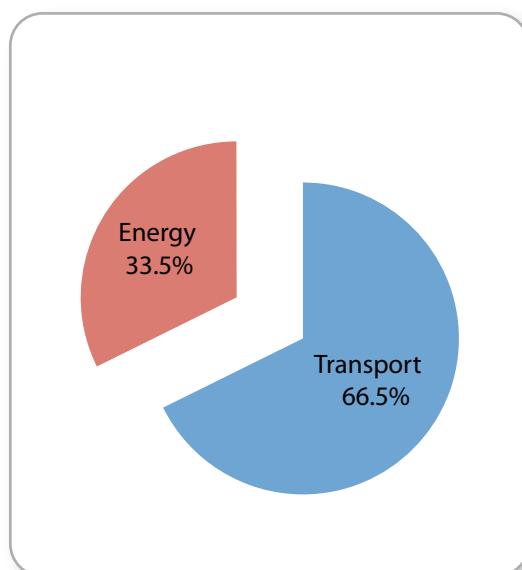
Figure C.9 • Sector-based Breakdown of the COSIPLAN Project Portfolio (percentage of the number of projects)



In terms of number, most of the COSIPLAN Portfolio projects (516) fall in the transportation sector, particularly in the road transport subsector (241 projects).

Most road projects belong to three Hubs: MERCOSUR-Chile, Capricorn, and Andean Hubs.

Figure C.10 • Sector-based Breakdown of the COSIPLAN Project Portfolio
((percentage of estimated amount))



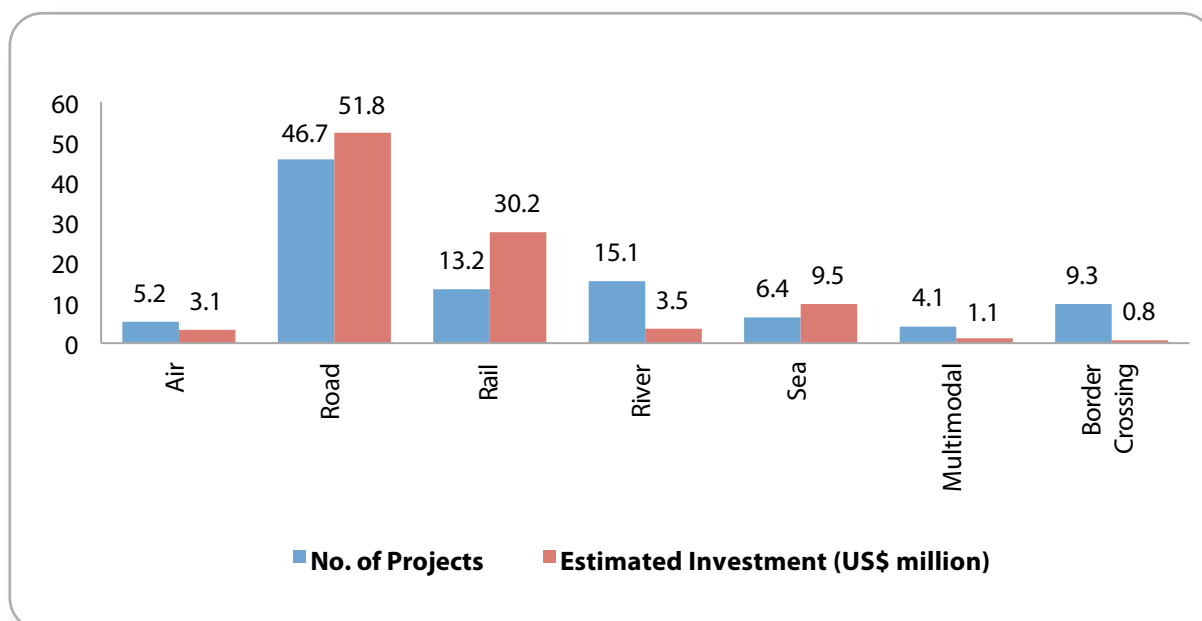
Rail and road projects account for more than 80% of the investment in the transport sector.

The projects in the energy sector account for a third of the total estimated investment in the Portfolio.

There are 9 projects in the communications sector, which involve an investment estimated at US\$41.6 million.

Transportation – Subsector-based Breakdown: Road projects account for 46.7% of the transport sector projects and more than half of their total estimated investment amount. Rail projects account for only 13.2% of all the projects in the transport sector, but they represent 30.2% of their total investment due to their size. In contrast to this, river projects account for 15.1% of the projects in this sector in terms of number, while their share in the total sectoral investment is estimated at only 3.5%. The same holds true for border crossing projects, which account for 9.3% of the total number, but require only 0.8% of the total investment in the sector for their implementation.

Figure C.11 • Subsector-based Breakdown of the COSIPLAN Project Portfolio as a Percentage of Total Projects in the Transport Sector (number of projects and estimated investment)



Road projects are mainly located in the MERCOSUR-Chile, Capricorn and Andean Hubs, and consist mainly of new paving works (30.7%), followed by roadways and structures rehabilitation works, accounting for 25.3%, and road capacity increase works (24.5%).

The Capricorn, Paraguay-Paraná Waterway, and Amazon Hubs host 64.7% of the **rail projects**, including 42.6% of railroad construction works, 48.5% of railroad rehabilitation works, and 8.8% of ring railway works.

Most **river transportation** projects fall within the Paraguay-Paraná Waterway (56.4%) and Amazon (23.1%) Hubs. They involve basic upgrade works at existing river ports as well as the improvement of navigation conditions, both of which account for 85.9% of the total, the remaining 14.1% being new river ports construction projects.

Sea transportation projects prevail in the MERCOSUR-Chile and Amazon Hubs. The Integrated Masterplan of Coastal Protection Albina - Nickerie project, in the Guianese Shield Hub, accounts for 29.3% of the estimated investment in this type of project. In this subsector, sea ports land infrastructure enlargement projects (78.8%) and new sea ports construction projects (21.2%) prevail.

Finally, most **border crossing** projects are located in the Andean, Capricorn, and MERCOSUR-Chile Hubs. The most important type of works is the development of infrastructure for new border control centers, which accounts for 72.9% of the total projects in this subsector.

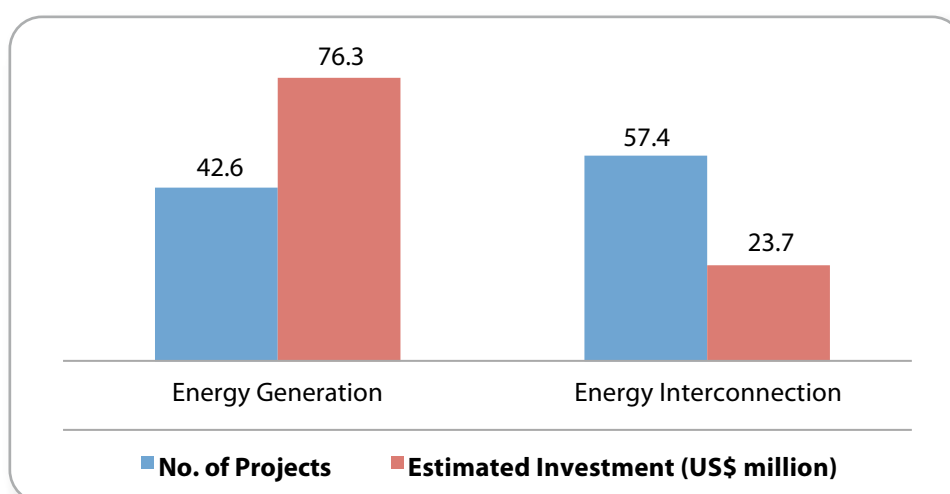
Table C.7 • Change in the Transport Sector Projects

Subsector	No. of Projects			Estimated Investment (US\$ million)		
	2013	2014	Change	2013	2014	Change
Air	27	27	0	3,473.1	3,427.2	-45.9
Road	235	241	6	58,523.6	56,305.7	-2,217.9
Rail	69	68	-1	29,412.4	32,770.4	3,358.0
River	79	78	-1	3,807.6	3,768.3	-39.3
Sea	33	33	0	10,340.7	10,306.7	-34.0
Multimodal	21	21	0	536.8	1,155.3	618.5
Border Crossing	50	48	-2	761.4	879.2	117.8
TOTAL	514	516	40	106,855.6	108,612.8	1,757.2

The change in the number of projects in the different transport subsectors is explained by the incorporation of six road projects and the exclusion of two border crossing projects, one rail project and one river project.

Energy – Subsector-based Breakdown: In terms of number, the energy projects in the Portfolio include 42.6% of **energy generation** projects, among which hydroelectric power projects prevail, and 57.4% of **energy interconnection** projects, whereas energy generation projects account for the greatest share of the investment in this sector (76.3%).

Figure C.12 • **Sub-sector Based Breakdown of the COSIPLAN Project Portfolio as a Percentage of Total Projects in the Energy Sector (number of projects and estimated investment)**



Changes in the Energy Project Portfolio: The number of energy projects in the Portfolio decreased in 2014 vis-à-vis 2013. Seven projects that were at the profiling stage prior to 2008 and did not undergo any progress were excluded, while projects “Construction of a 34.5-kV Interconnection Line between San Fernando de Atabapo (Venezuela) and Inírida Department of Guainia (Colombia)” and “Executive Project - 33 kV Medium-Voltage Line and Optical Fiber between Bardas Blancas and Pehuenche Border Crossing” were incorporated.

Table C.8 • **Change in the Energy Sector Projects**

Subsector	No. of Projects			Estimated Investment (US\$ million)		
	2013	2014	Change	2013	2014	Change
Energy Generation	27	23	-4	37,965.3	41,722.7	3,757.4
Energy Interconnection	32	31	-1	12,864.9	12,947.4	82.5
TOTAL	59	54	-5	50,830.2	54,670.1	3,839.9

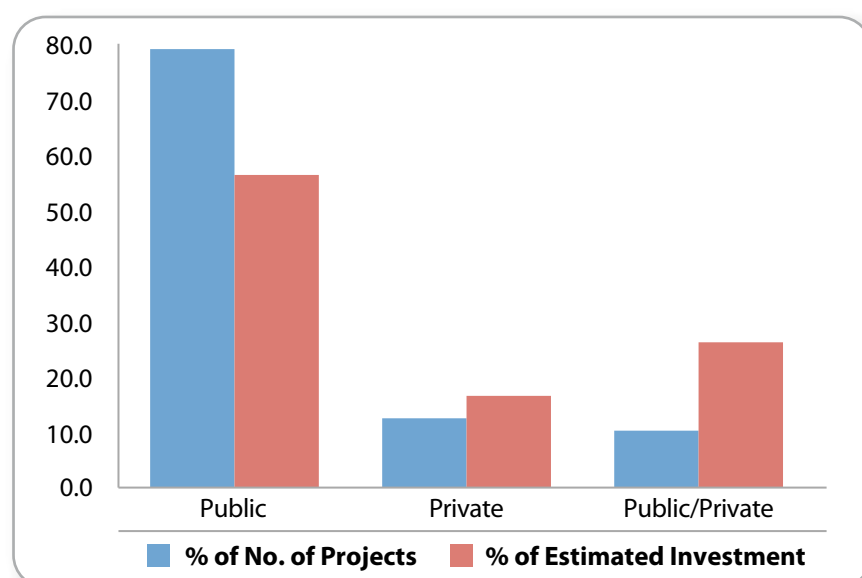
Concerning the communications sector, Project K4 “South Border” (Access to Telecommunications Services) was excluded.

D. THE PROJECTS AND THEIR SOURCES OF FINANCING

In terms of the financing of the Portfolio projects implementation, the public sector is the main source of estimated investment (79.1%), and the private sector and public-private partnerships account for a similar share of such investment: 12.8% and 8.1%, respectively.

Figure C.13 shows the number of Portfolio projects and their estimated investment by source of financing.

Figure C.13 • Sources of Financing of the Portfolio Projects
(% of the number of projects and % of the estimated investment)



The public sector is the main source of financing of the Portfolio projects, accounting for 79.1% of the total projects.

As regards the sources of financing by Hub, the Amazon and MERCOSUR-Chile Hubs are the ones with the greatest number of projects financed by the private sector, accounting for an investment estimated at about 13% of the total investment in the Portfolio. Brazilian projects “New Cross-Northeastern Railway Phase I (Suape - Salgueiro/Pecém - Eliseu Martins)” and “Center-West Integration Railway - Phase I (Campinorte - Lucas do Rio Verde)” account for 45% of the private investment in the Amazon Hub. As for the MERCOSUR-Chile Hub, binational project “Railway Project between Los Andes, Chile and Mendoza, Argentina (Central Trans-Andean Railway)” accounts for more than half of the private sector estimated investment.

Public-private partnerships stand out as the sources of financing of energy projects in the MERCOSUR-Chile and Peru-Brazil-Bolivia Hubs, accounting for approximately 18.3% of the total investment in the Portfolio. The Corpus Christi and Garabí hydroelectric power stations explain 53.1% of the public-private investments in the MERCOSUR-Chile Hub, while project Madeira River Hydroelectric Power Complex (Santo Antônio and Jirau Hydroelectric Power Stations) accounts for 82.6% of such investments in the Peru-Brazil-Bolivia Hub.

The following tables show the sources of financing by Hub.

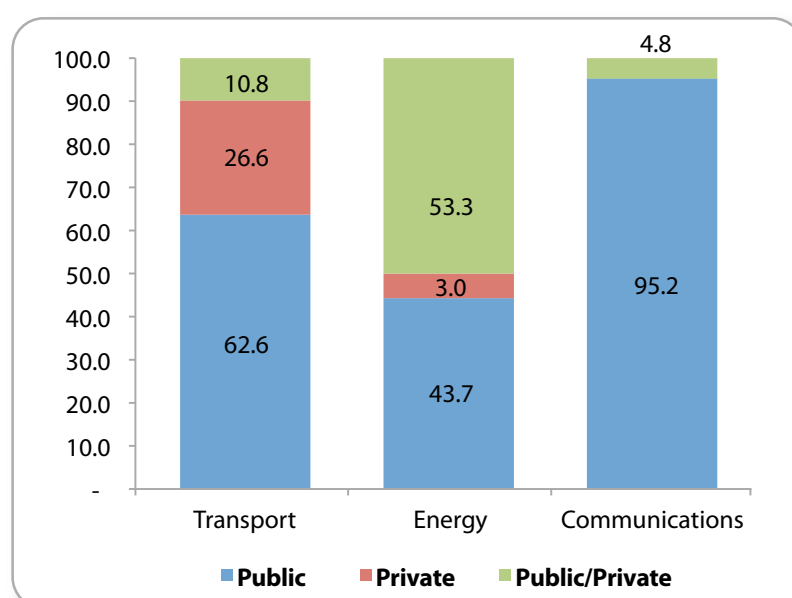
Table C.9 • Sources of Financing of the Portfolio Projects by Hub
(number of projects)

	AMA	AND	CAP	DES	GUY	HPP	IOC	MCC	PBB
Private	27	5	6	1	1	3	11	15	5
Public	45	48	72	27	15	91	45	99	18
Public/Private	10	11	5	0	4	1	5	9	2
TOTAL	82	64	83	28	20	95	61	123	25

Table C.10 • Sources of Financing of the Portfolio Projects by Hub
(US\$ million)

	AMA	AND	CAP	DES	GUY	HPP	IOC	MCC	PBB
Private	11,077.5	1,486.2	1,385.0	53.0	0	1,107.7	2,745.6	10,358.0	2,259.1
Public	11,362.0	6,573.8	14,181.6	2,691.6	860.4	6,402.7	5,840.5	36,335.3	7,840.8
Public/Private	2,630.7	1,902.1	2,362.9	0	3,720.9	64.0	321.5	7,915.0	22,032.0
TOTAL	25,070.2	9,962.1	17,929.5	2,744.6	4,581.3	7,754.4	8,907.6	54,608.3	32,131.9

Figure C.14 • Sources of Financing of the Portfolio Projects by Sector
(percentage of the investment amount)



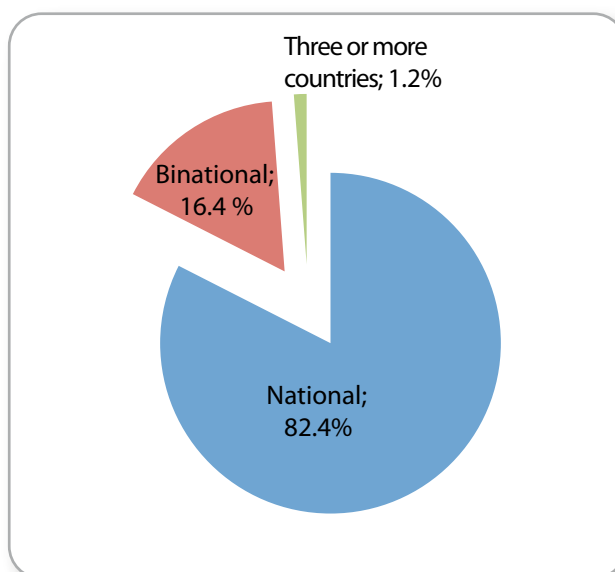
The public sector finances most projects in the transportation sector, while public - private financing prevails in the energy sector. The transport sector receives 94.6% of the investments made by the private sector.

An analysis of the sources of financing by sector (see Figure C.14) reveals that 62.6% of the estimated investment in the transportation sector is public, while public-private partnerships invest the most in the energy sector (53.3%).

E. TERRITORIAL SCOPE OF THE PROJECTS

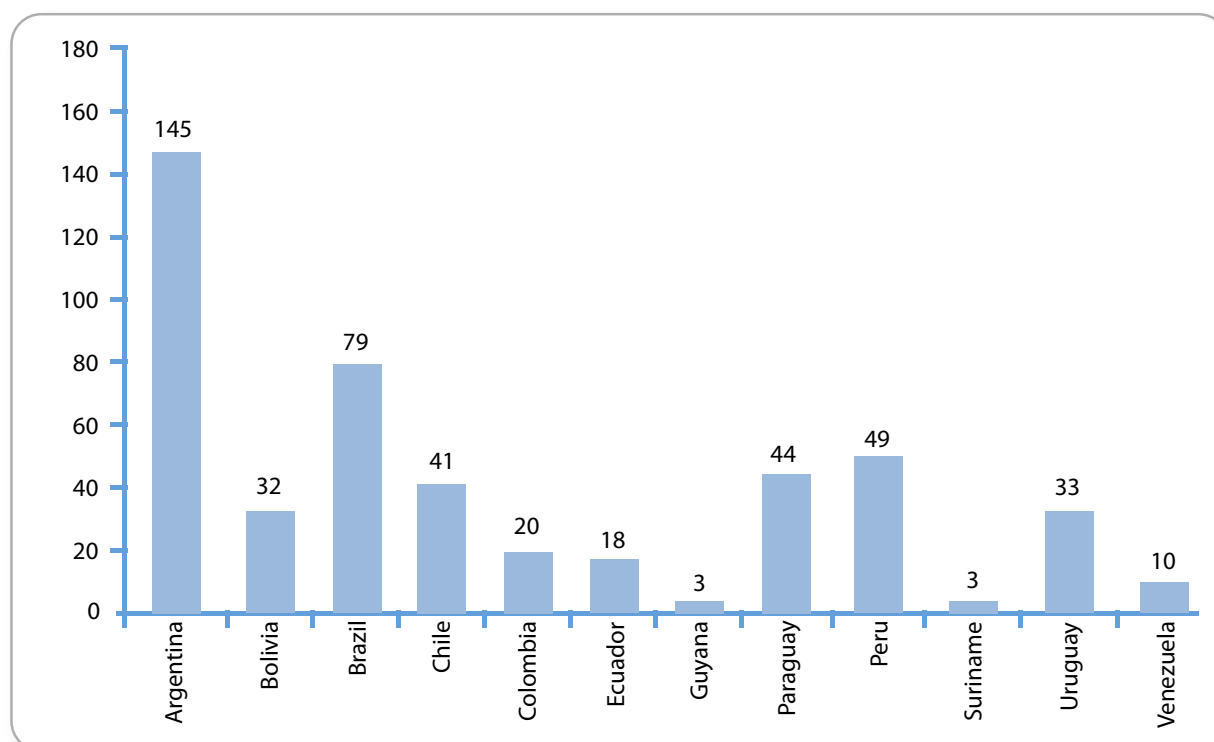
As shown in Figure C.15, 477 projects of the COSIPLAN Portfolio are exclusively national in scope on account of their territorial location. Most of them, however, contribute directly to the completion, improvement or rehabilitation of infrastructure for the integration of two or more countries and, thus, their impact is regional in scope. Of the other projects, 95 are binational and five are tri-national. There are only two multinational projects, both of which fall in the telecommunications sector, involve Bolivia, Colombia, Ecuador, Peru and Venezuela, and belong to Project Group 10 of the Andean Hub.

Figure C.15 • Territorial Scope of the COSIPLAN Portfolio Projects



The breakdown of national projects by country is presented in Figure C.16.

Figure C.16 • National Projects by Country
(number of projects)



F. ANCHOR PROJECTS

Anchor Projects give meaning to the grouping process and make synergies viable. They are identified as the bottleneck or missing link in the infrastructure network hindering the optimum use of the combined effects of the group for the sake of economic and social development. They are not necessarily the largest-sized projects or those involving the greatest estimated investment. As a result of the Portfolio structuring process, the twelve countries identified 53 Anchor Projects, most of which fall in the transport sector (96.2%) and involve an investment estimated at US\$20,785.9 million. Of these 53 projects, 11.3% are at the profiling stage, 35.8% are at the pre-execution stage, 34% are at the execution stage, and 18.9 are completed.

Figure C.17 • Anchor Projects by Execution Stage and by Hub
(% of the total Anchor Projects)

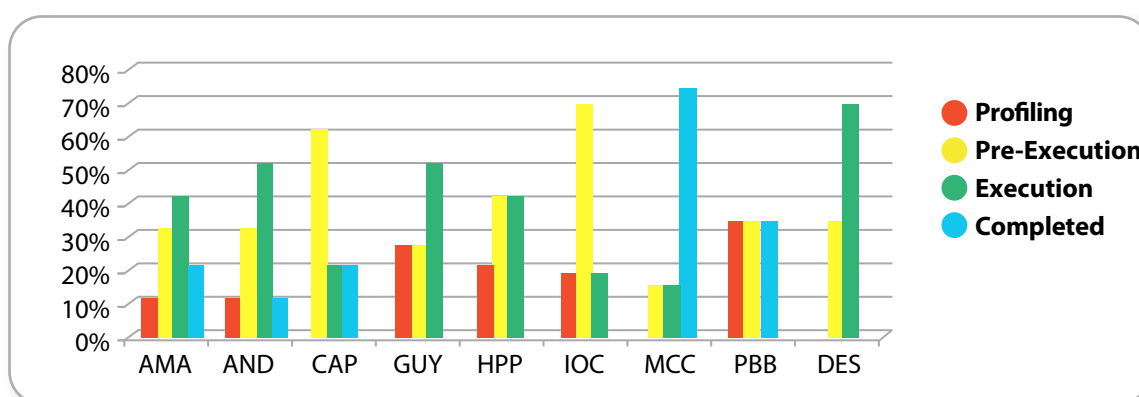
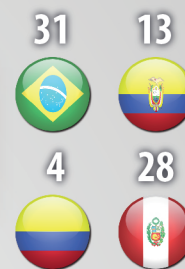
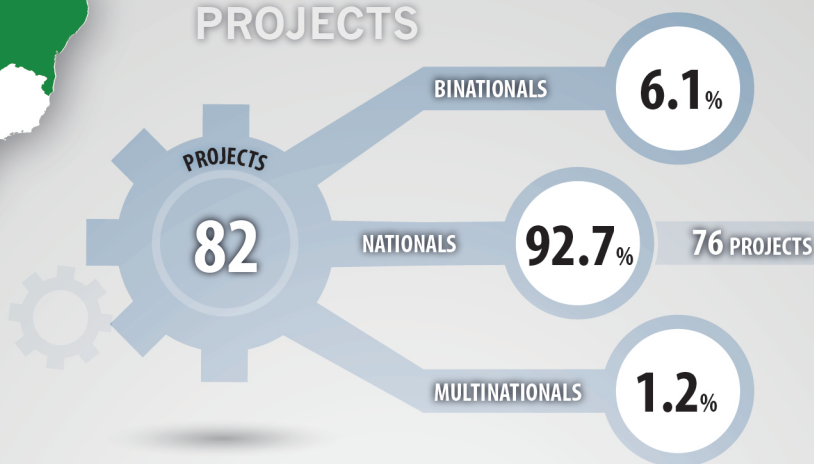


Figure C.17 shows that more than 70% of the Anchor Projects in the MERCOSUR-Chile Hub are completed. Half of the Anchor Projects in the Guianese Shield and Andean Hubs are at the execution stage, while the share of Anchor Projects at the execution stage in the Southern Hub is above 60%.

AMAZON HUB



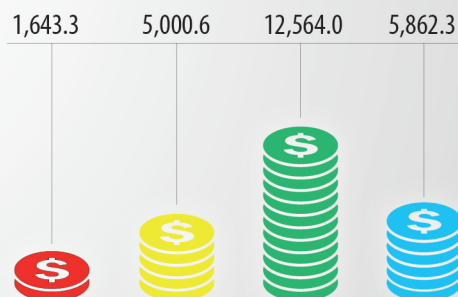
PROJECTS



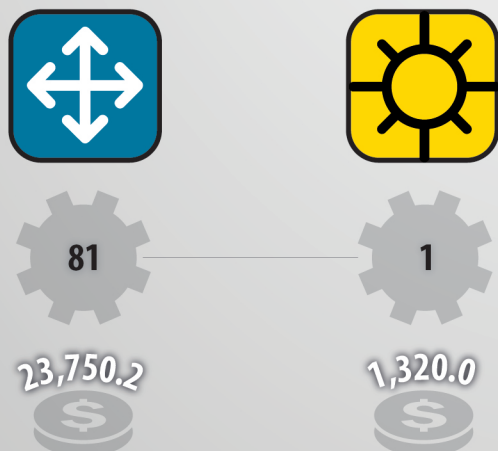
ESTIMATED INVESTMENT



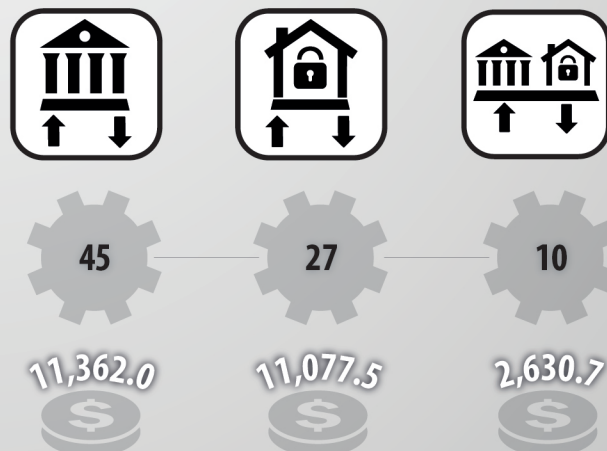
BY STAGE



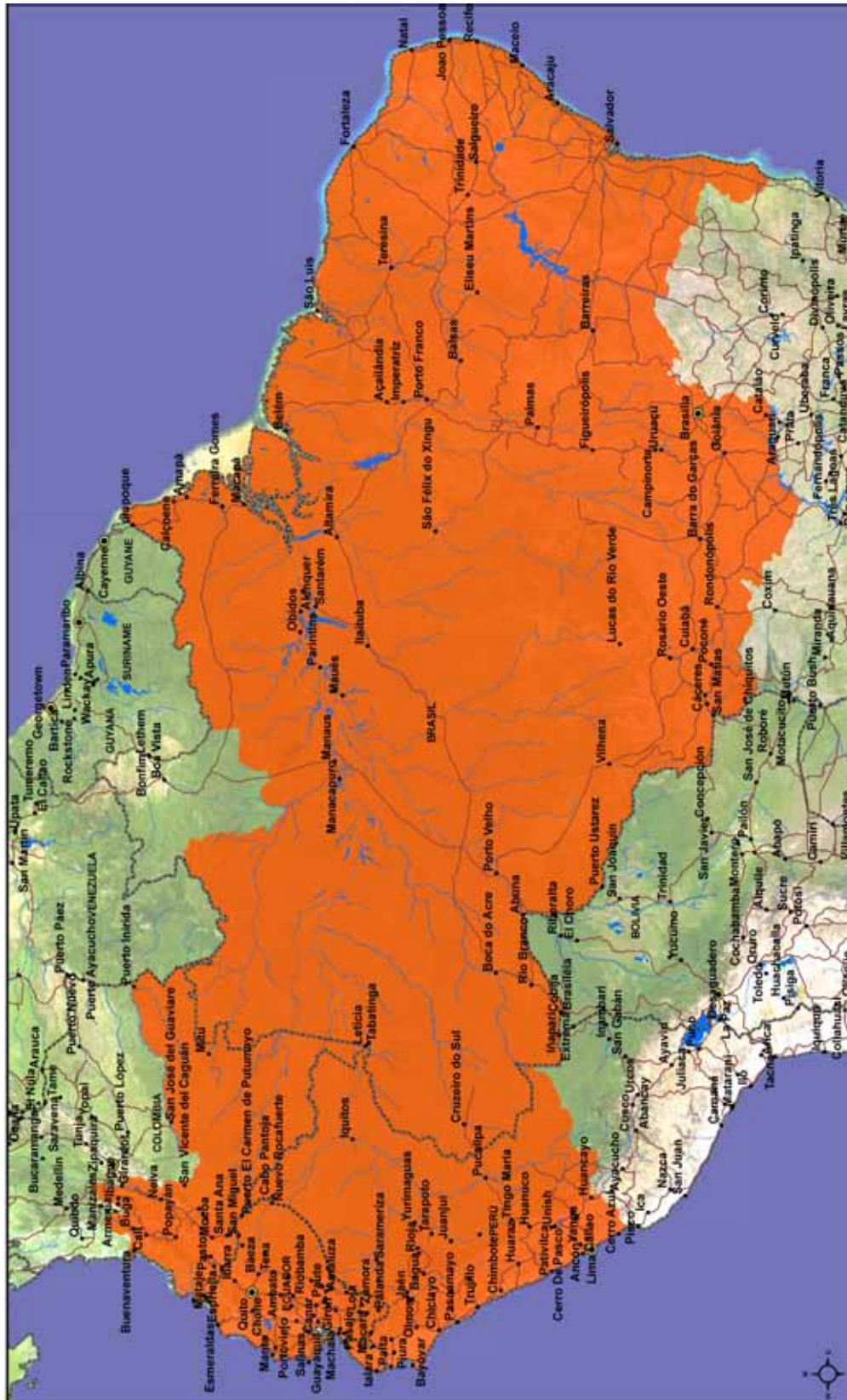
BY SECTOR

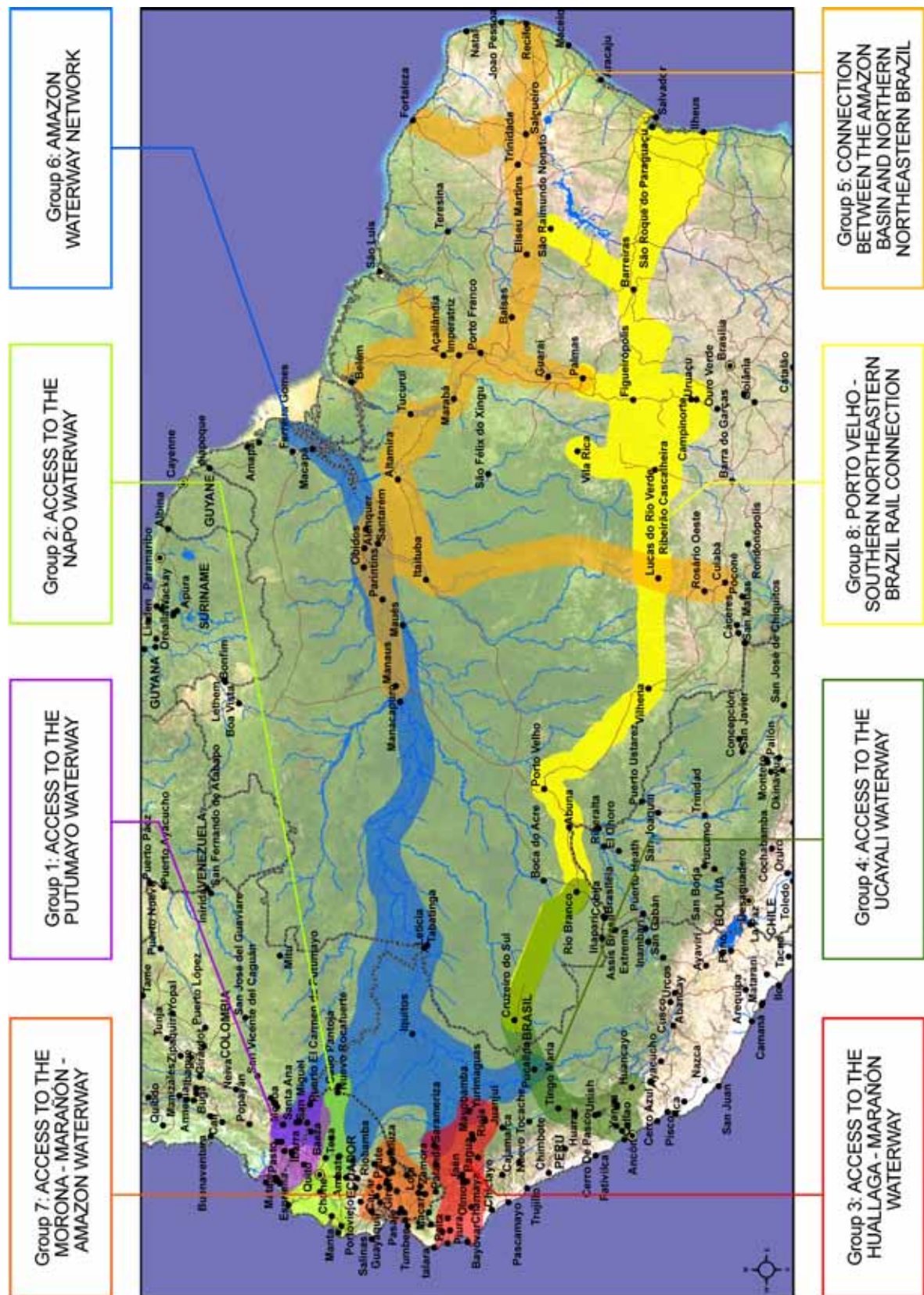


BY SOURCE OF FINANCING

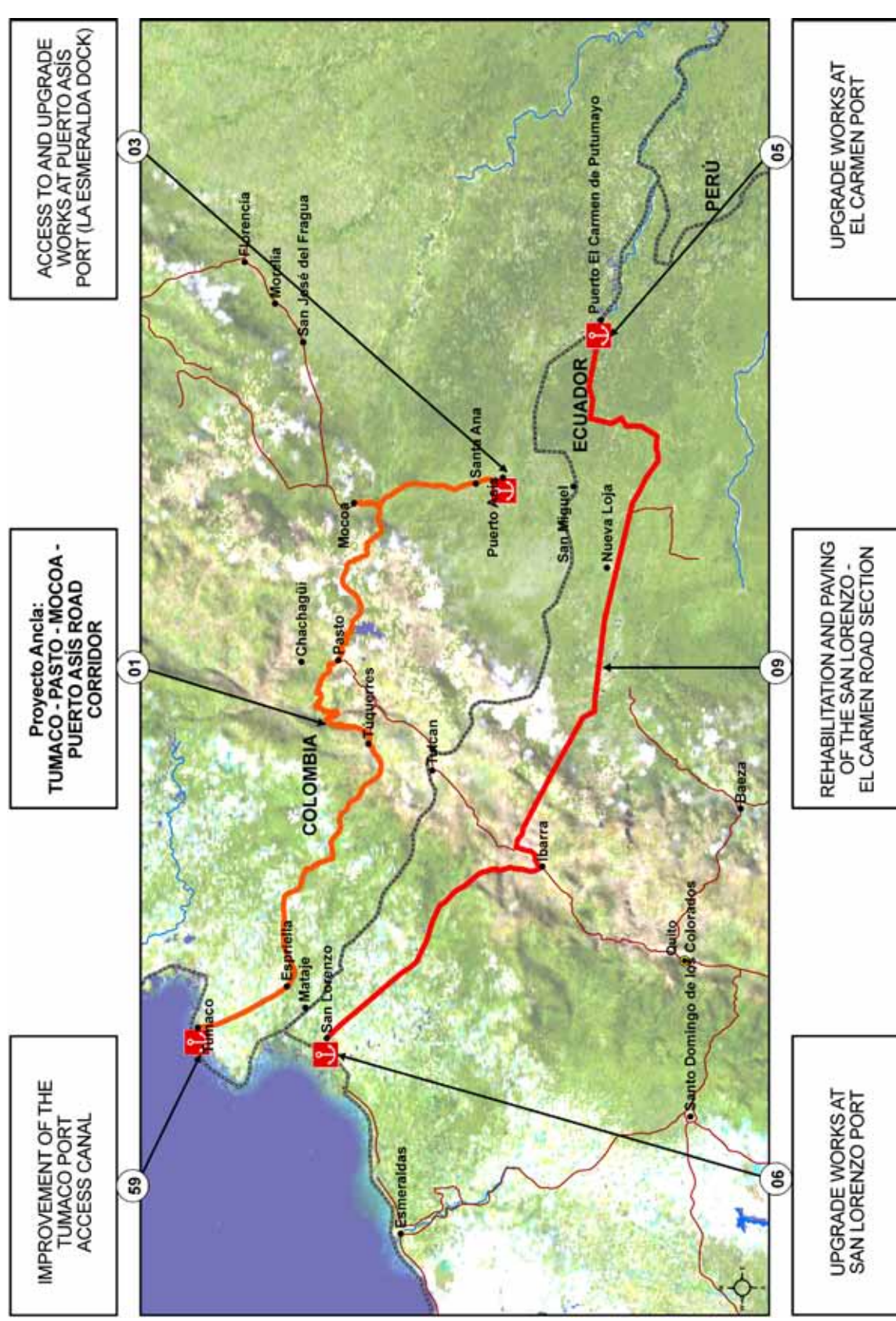


AMAZON HUB Area of Influence





AMAZON HUB - Group 1: Access to the Putumayo Waterway

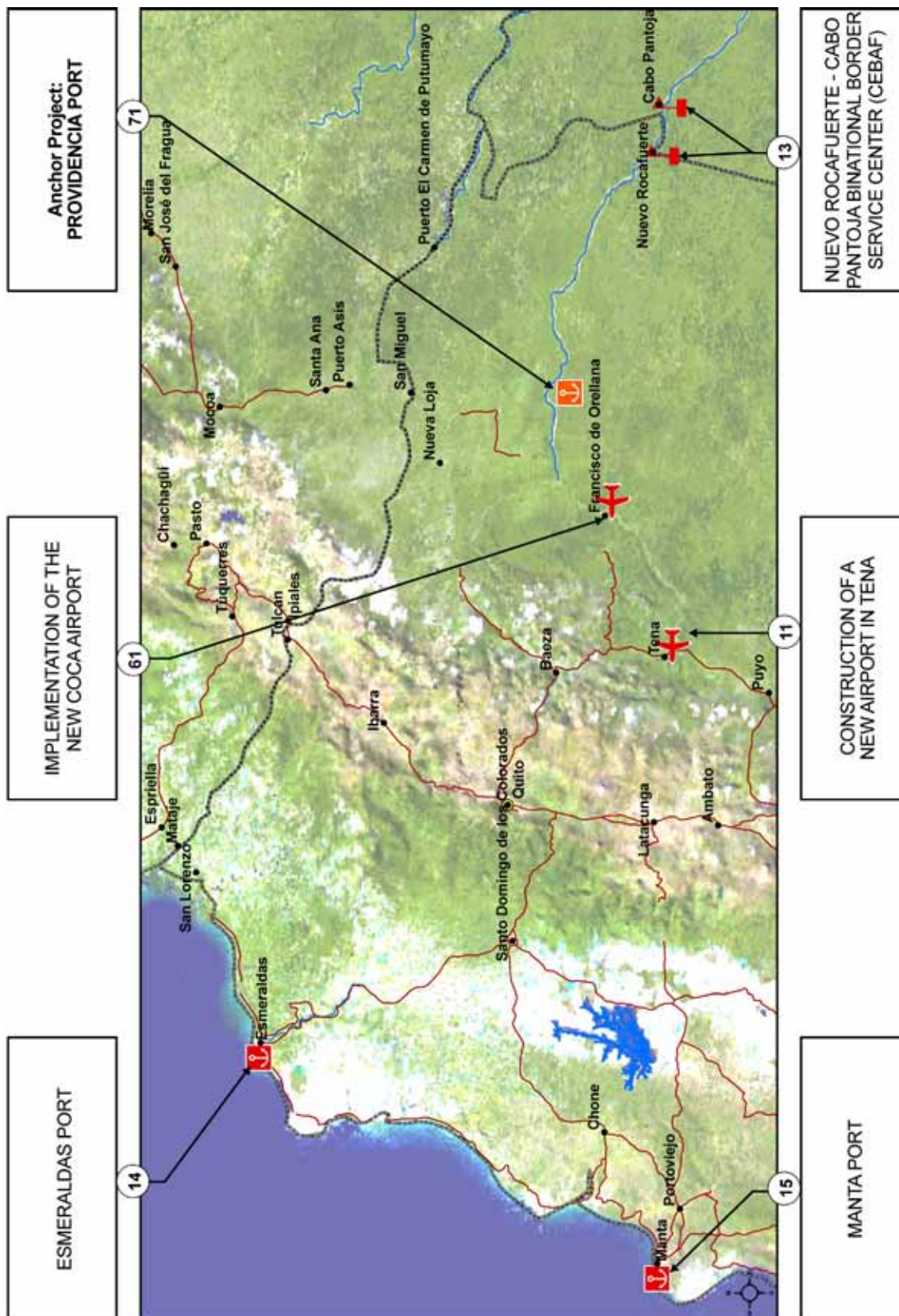


STRATEGIC FUNCTION

- Improve the logistics of national integration between production areas of the south of Colombia, department of Nariño, and the Amazon departments of Putumayo and Amazonas, and areas of northern Ecuador (especially the province of Sucumbíos).
- Improve the logistics of integration with Brazil and Peru.
- Reinforce the interconnection of the continent's hinterlands with the Pacific Basin

Code	Stage	Amazon Hub: Group 1	Estimated Investment (US\$ Million)
AMA01	●	TUMACO - PASTO - MOCOA - PUERTO ASÍS ROAD CORRIDOR (CO)	404.8
AMA03	●	ACCESS TO AND UPGRADE WORKS AT PUERTO ASÍS PORT (LA ESMERALDA DOCK) (CO)	3.0
AMA05	●	UPGRADE WORKS AT EL CARMEN PORT (EC)	3.0
AMA06	●	UPGRADE WORKS AT SAN LORENZO PORT (EC)	6.0
AMA09	●	REHABILITATION AND PAVING OF THE SAN LORENZO - EL CARMEN ROAD SECTION (EC)	76.0
AMA59	●	IMPROVEMENT OF THE TUMACO PORT ACCESS CANAL (CO)	5.0
TOTAL			497.8

AMAZON HUB - Group 2: Access to the Napo Waterway

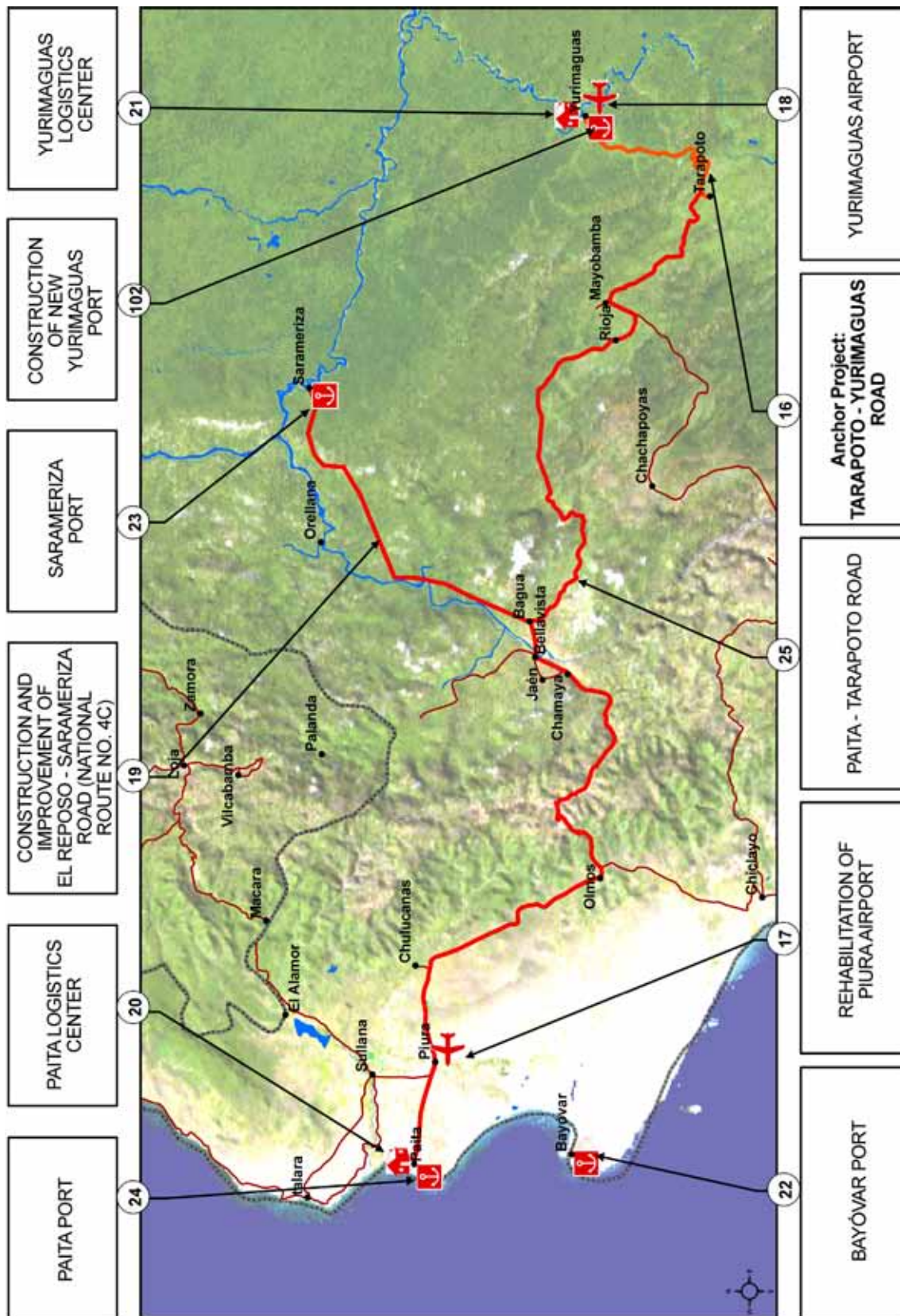


STRATEGIC FUNCTION

- Strengthen national Ecuadorian integration in the Amazon area, provinces of Napo and Orellana, with the sierras and coast in the central and northern part of the country, and consolidate the opportunity of having an Ecuadorian river for Amazon international integration towards Manaus.
- Reinforce the interconnection of the continent's hinterlands with the Pacific Basin.

Code	Stage	Amazon Hub: Group 2	Estimated Investment (US\$ Million)
AMA11	●	CONSTRUCTION OF A NEW AIRPORT IN TENA (EC)	46.0
AMA13	●	NUEVO ROCAFUERTE - CABO PANTOJA BINATIONAL BORDER SERVICE CENTER (CEBAF) (EC - PE)	10.0
AMA14	●	ESMERALDAS PORT (EC)	0.0
AMA15	●	MANTA PORT (EC)	0.0
AMA61	●	IMPLEMENTATION OF THE NEW COCA AIRPORT (EC)	17.1
AMA71	●	PROVIDENCIA PORT (EC)	25.0
TOTAL			98.1

AMAZON HUB - Group 3: Access to the Huallaga - Marañón Waterway

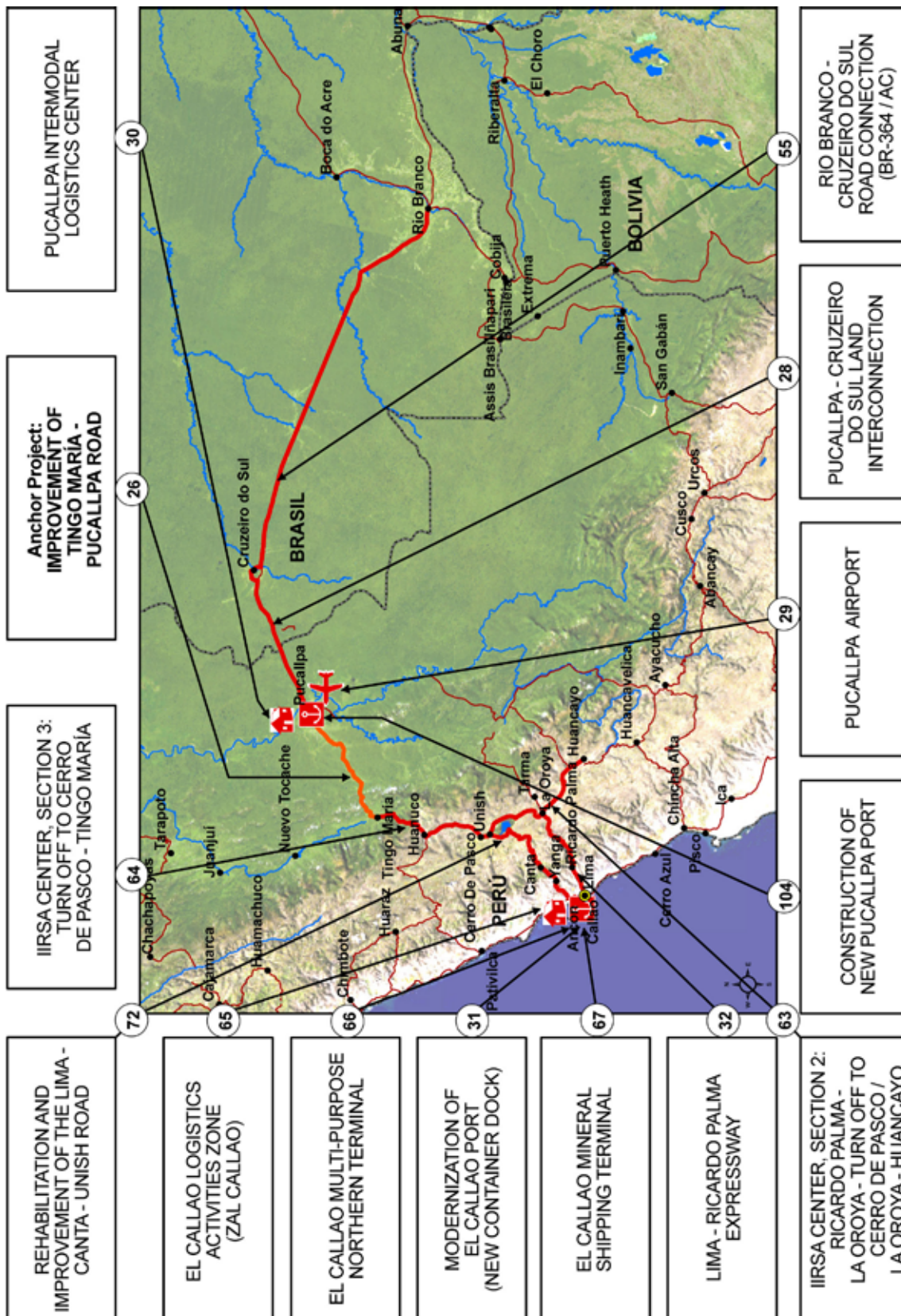


STRATEGIC FUNCTION

- Improve the navigation conditions and access logistics to the Huallaga and Marañón Waterways so as to consolidate the Corridor as a factor for integrating the Sierra and the Amazonia in Peru and its complementariness with the states of Amazonas and Pará, Brazil.
- Articulate the south and southeastern regions of Ecuador with the Peruvian Amazon to become the interconnection road with the Atlantic Basin.

Code	Stage	Amazon Hub: Group 3	Estimated Investment (US\$ Million)
AMA16	●	TARAPOTO - YURIMAGUAS ROAD (PE)	231.7
AMA17	●	REHABILITATION OF PIURA AIRPORT (PE)	7.2
AMA18	●	YURIMAGUAS AIRPORT (PE)	15.7
AMA19	●	CONSTRUCTION AND IMPROVEMENT OF EL REPOSO - SARAMERIZA ROAD (NATIONAL ROUTE NO. 4C) (PE)	371.5
AMA20	●	PAITA LOGISTICS CENTER (PE)	47.6
AMA21	●	YURIMAGUAS LOGISTICS CENTER (PE)	15.0
AMA22	●	BAYÓVAR PORT (PE)	70.0
AMA23	●	SARAMERIZA PORT (PE)	3.5
AMA24	●	PAITA PORT (PE)	266.9
AMA25	●	PAITA - TARAPOTO ROAD (PE)	273.7
AMA102	●	CONSTRUCTION OF NEW YURIMAGUAS PORT (PE)	43.7
TOTAL			1,346.5

AMAZON HUB - Group 4: Access to the Ucayali Waterway

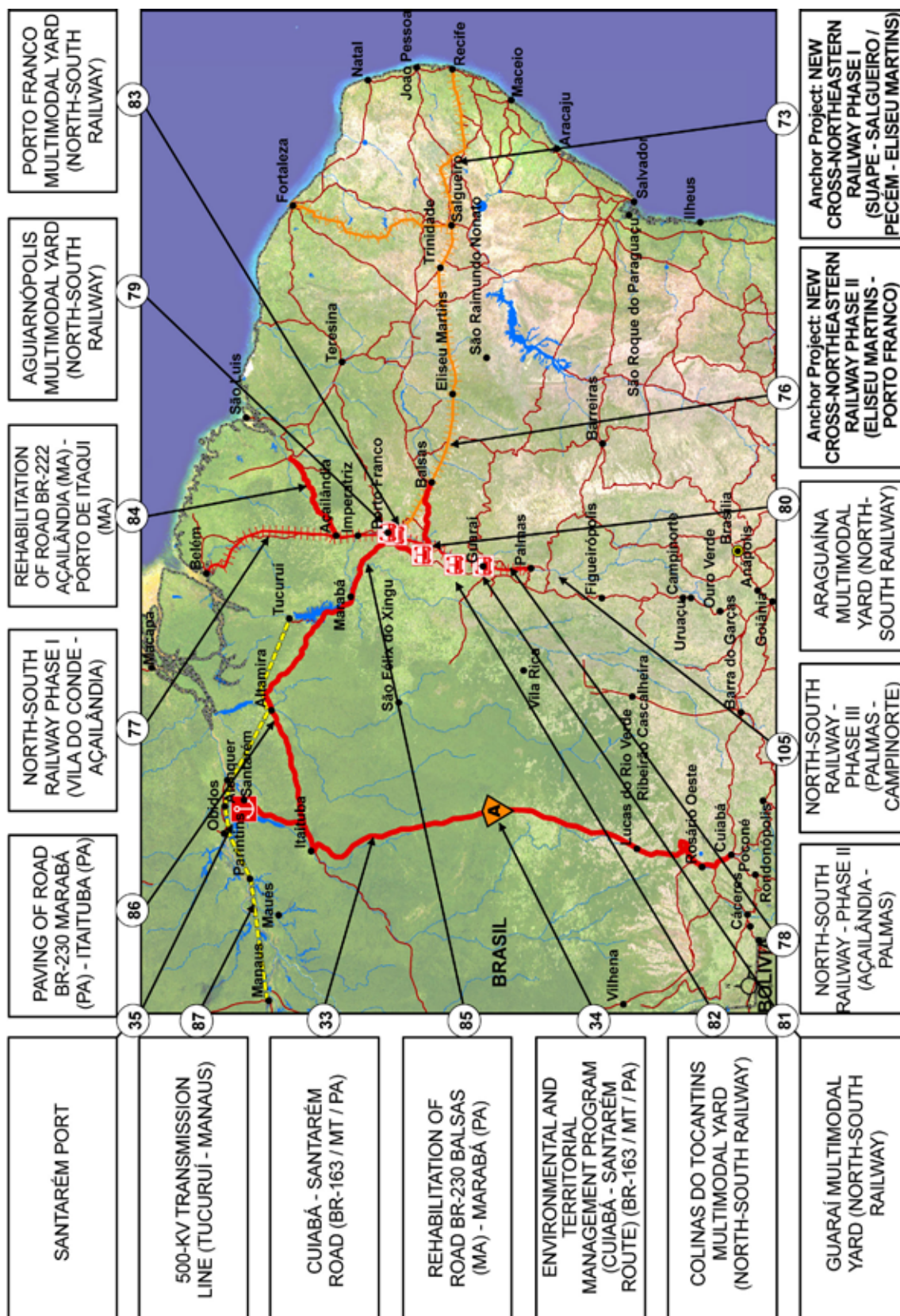


STRATEGIC FUNCTION

- Consolidate the Peruvian coast - sierra - rainforest association and integration and interconnect the main urban/ industrial center and the central area of the country with the states of Amazonas and Pará, Brazil.
- Reinforce the interconnection of the central eastern area of the continent with the Pacific and Atlantic basins.

Code	Stage	Amazon Hub: Group 4	Estimated Investment (US\$ Million)
AMA26	●	IMPROVEMENT OF TINGO MARÍA - PUCALLPA ROAD (PE)	438.4
AMA28	●	PUCALLPA - CRUZEIRO DO SUL LAND INTERCONNECTION (BR - PE)	0.0
AMA29	●	PUCALLPA AIRPORT (PE)	9.4
AMA30	●	PUCALLPA INTERMODAL LOGISTICS CENTER (PE)	15.0
AMA31	●	MODERNIZATION OF EL CALLAO PORT (NEW CONTAINER DOCK) (PE)	704.8
AMA32	●	LIMA - RICARDO PALMA EXPRESSWAY (PE)	242.0
AMA55	●	RIO BRANCO - CRUZEIRO DO SUL ROAD CONNECTION (BR-364 / AC) (BR)	573.0
AMA63	●	IIRSA CENTER, SECTION 2: RICARDO PALMA - LA OROYA - TURN OFF TO CERRO DE PASCO / LA OROYA - HUANCAYO (PE)	100.0
AMA64	●	IIRSA CENTER, SECTION 3: TURN OFF TO CERRO DE PASCO - TINGO MARÍA (PE)	115.6
AMA65	●	EL CALLAO LOGISTICS ACTIVITIES ZONE (ZAL CALLAO) (PE)	68.3
AMA66	●	EL CALLAO MULTI-PURPOSE NORTHERN TERMINAL (PE)	883.5
AMA67	●	EL CALLAO MINERAL SHIPPING TERMINAL (PE)	120.3
AMA72	●	REHABILITATION AND IMPROVEMENT OF THE LIMA - CANTA - UNISH ROAD (PE)	312.8
AMA104	●	CONSTRUCTION OF NEW PUCALLPA PORT (PE)	55.0
TOTAL			3,638.1

AMAZON HUB - Group 5:

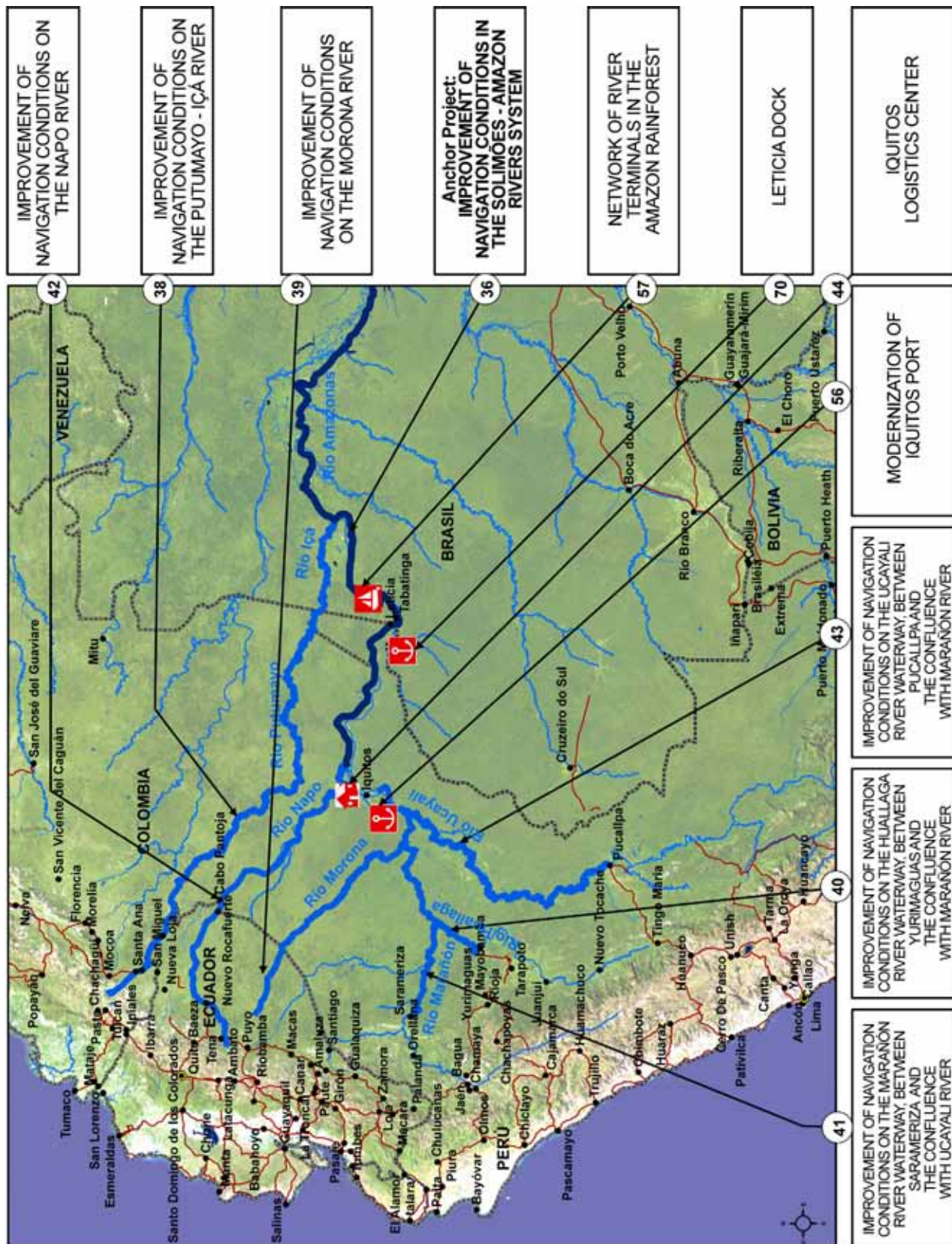


STRATEGIC FUNCTION

- Enlarge the connection and transportation alternatives between Central-Western and Northern Northeastern Brazil, and the access to new ports and markets in the region.
- Reduce the logistics costs associated with the supply of raw materials and the distribution of products to facilitate the integration between Northern Northeastern Brazil and the Amazon basin.
- Provide an efficient transportation infrastructure to attract productive activities to the region.
- Incorporate Manaus to the Brazilian interconnected electric system, with positive impacts on the economy and environment.

Code	Stage	Amazon Hub: Group 5	Estimated Investment (US\$ Million)
AMA33	●	CUIABÁ - SANTARÉM ROAD (BR-163 / MT / PA) (BR)	1,000.0
AMA34	●	ENVIRONMENTAL AND TERRITORIAL MANAGEMENT PROGRAM (CUIABÁ - SANTARÉM ROUTE) (BR-163 / MT / PA) (BR)	12.0
AMA35	●	SANTARÉM PORT (BR)	85.0
AMA73	●	NEW CROSS-NORTHEASTERN RAILWAY PHASE I (SUAPE - SALGUEIRO / PECÉM - ELISEU MARTINS) (BR)	3,000.0
AMA76	●	NEW CROSS-NORTHEASTERN RAILWAY PHASE II (ELISEU MARTINS - PORTO FRANCO) (BR)	0.0
AMA77	●	NORTH-SOUTH RAILWAY PHASE I (VILA DO CONDE - AÇAILÂNDIA) (BR)	1,300.0
AMA78	●	NORTH-SOUTH RAILWAY - PHASE II (AÇAILÂNDIA-PALMAS) (BR)	2,500.0
AMA79	●	AGUIARNÓPOLIS MULTIMODAL YARD (NORTH-SOUTH RAILWAY) (BR)	0.0
AMA80	●	ARAGUAÍNA MULTIMODAL YARD (NORTH-SOUTH RAILWAY) (BR)	35.0
AMA81	●	GUARAÍ MULTIMODAL YARD (NORTH-SOUTH RAILWAY) (BR)	447.0
AMA82	●	COLINAS DO TOCANTINS MULTIMODAL YARD (NORTH-SOUTH RAILWAY) (BR)	224.0
AMA83	●	PORTO FRANCO MULTIMODAL YARD (NORTH-SOUTH RAILWAY) (BR)	0.0
AMA84	●	REHABILITATION OF ROAD BR-222 AÇAILÂNDIA (MA) - PORTO DE ITAQUI (MA) (BR)	300.0
AMA85	●	REHABILITATION OF ROAD BR-230 BALSAS (MA) - MARABÁ (PA) (BR)	0.0
AMA86	●	PAVING OF ROAD BR-230 MARABÁ (PA) - ITAITUBA (PA) (BR)	1,000.0
AMA87	●	500-KV TRANSMISSION LINE (TUCURUÍ - MANAUS) (BR)	1,320.0
AMA105	●	NORTH-SOUTH RAILWAY - PHASE III (PALMAS-CAMPINORTE) (BR)	600.0
TOTAL			11,823.0

AMAZON HUB - Group 6: Amazon Waterway Network

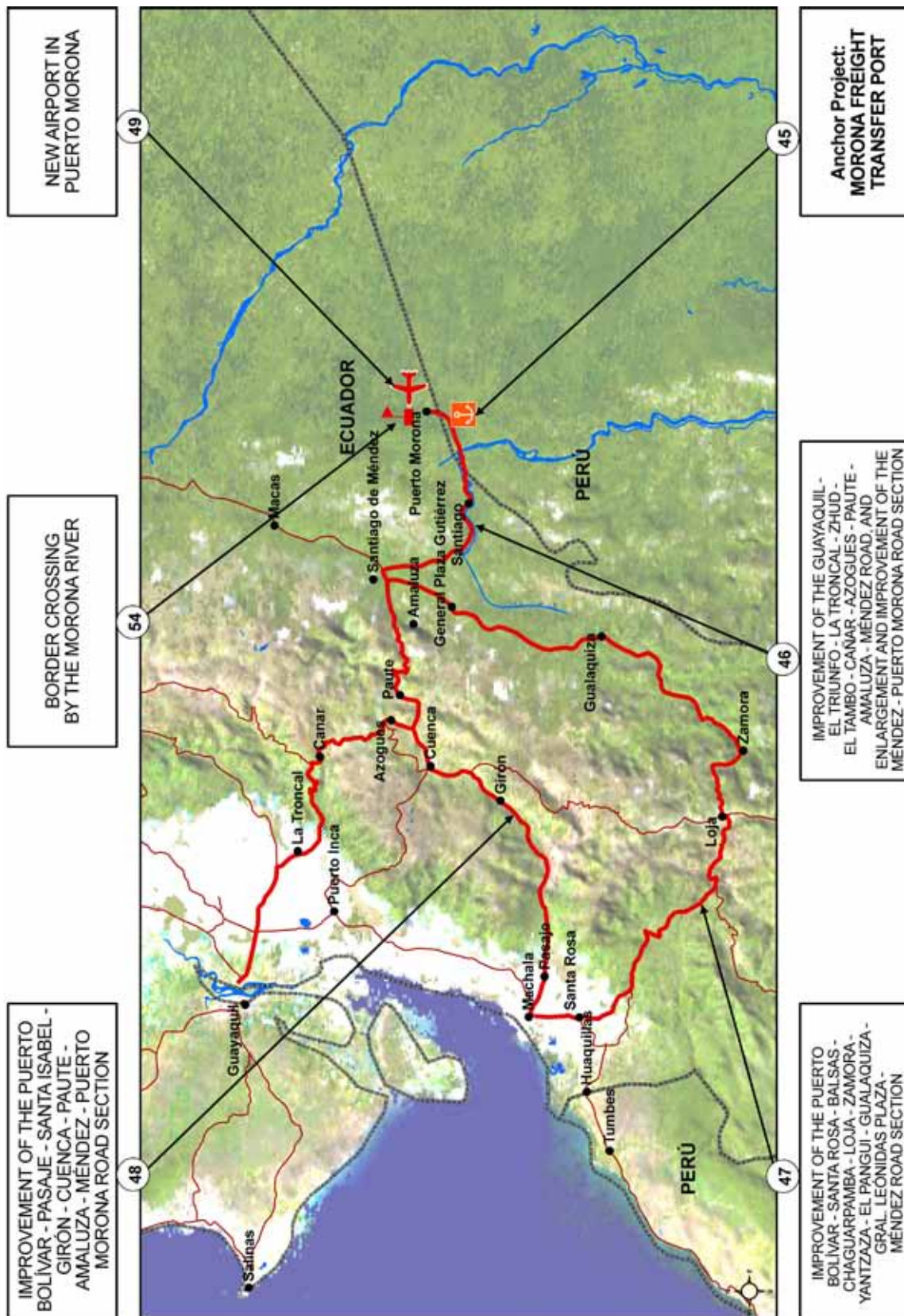


STRATEGIC FUNCTION

- Improve the navigation condition of the Amazon basin's rivers in order to promote the sustainable integration and development of the region in the economic, social and environmental dimensions and generate long distance transport flows.

Code	Stage	Amazon Hub: Group 6	Estimated Investment (US\$ Million)
AMA36	●	IMPROVEMENT OF NAVIGATION CONDITIONS IN THE SOLIMÕES - AMAZON RIVERS SYSTEM (BR)	8.0
AMA38	●	IMPROVEMENT OF NAVIGATION CONDITIONS ON THE PUTUMAYO - IÇÁ RIVER (CO - EC - PE)	15.0
AMA39	●	IMPROVEMENT OF NAVIGATION CONDITIONS ON THE MORONA RIVER (EC - PE)	2.0
AMA40	●	IMPROVEMENT OF NAVIGATION CONDITIONS ON THE HUALLAGA RIVER WATERWAY, BETWEEN YURIMAGUAS AND THE CONFLUENCE WITH MARAÑÓN RIVER (PE)	33.0
AMA41	●	IMPROVEMENT OF NAVIGATION CONDITIONS ON THE MARAÑÓN RIVER WATERWAY BETWEEN SARAMERIZA AND THE CONFLUENCE WITH UCAYALI RIVER (PE)	11.0
AMA42	●	IMPROVEMENT OF NAVIGATION CONDITIONS ON THE NAPO RIVER (EC - PE)	5.7
AMA43	●	IMPROVEMENT OF NAVIGATION CONDITIONS ON THE UCAYALI RIVER WATERWAY, BETWEEN PUCALLPA AND THE CONFLUENCE WITH MARAÑÓN RIVER (PE)	19.0
AMA44	●	IQUITOS LOGISTICS CENTER (PE)	15.0
AMA56	●	MODERNIZATION OF IQUITOS PORT (PE)	39.6
AMA57	●	NETWORK OF RIVER TERMINALS IN THE AMAZON RAINFOREST (BR)	185.0
AMA70	●	LETICIA DOCK (CO)	2.5
TOTAL			335.8

AMAZON HUB - Group 7: Access to the Morona - Marañón - Amazon Waterway

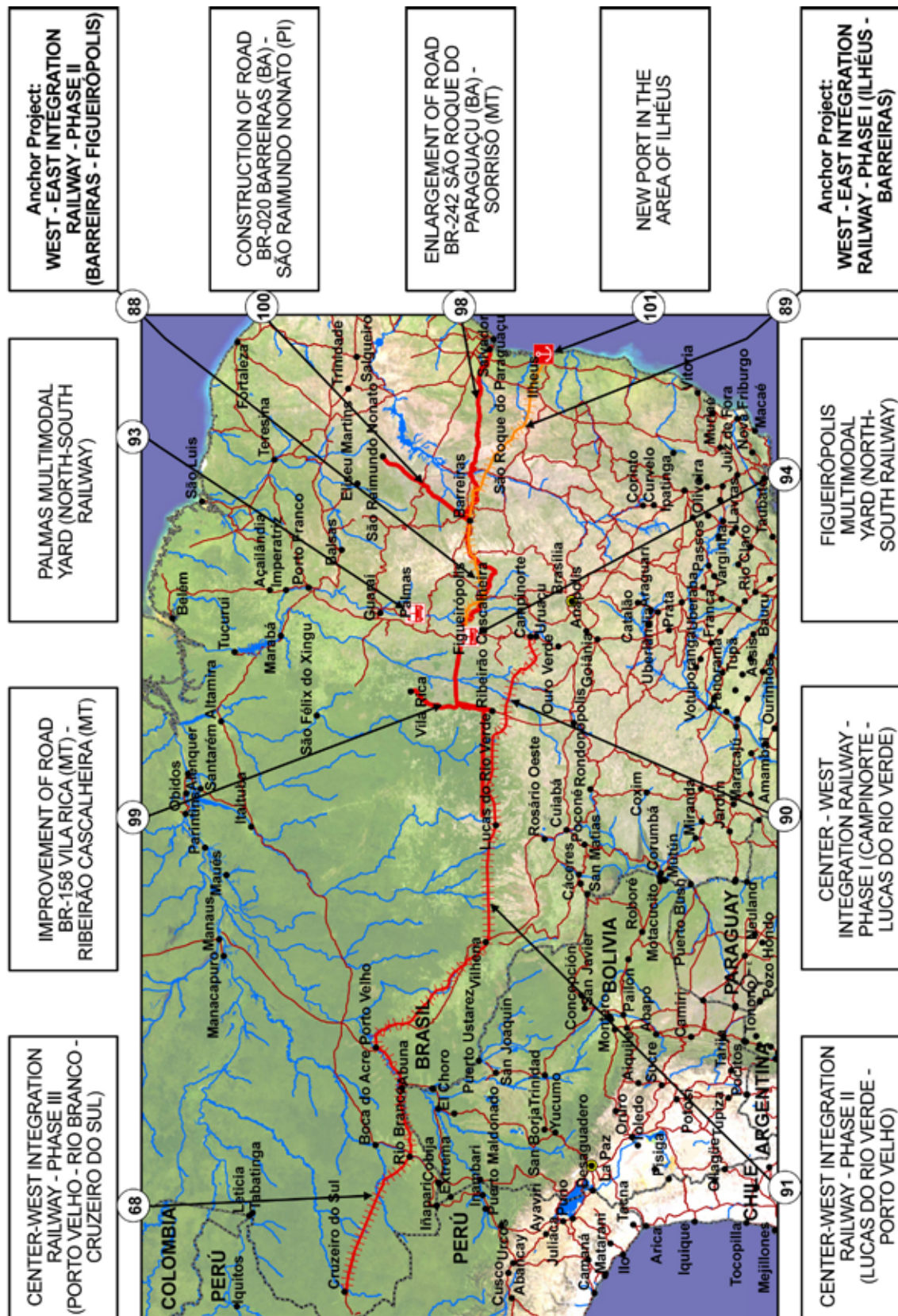


STRATEGIC FUNCTION

- Improve the logistics of integration among the southern provinces of Ecuador and the northeastern portion of Peru with the state of Amazonas in Brazil through a river route towards Manaus.

Code	Stage	Amazon Hub: Group 7	Estimated Investment (US\$ Million)
AMA45	●	MORONA FREIGHT TRANSFER PORT (EC)	5.0
AMA46	●	IMPROVEMENT OF THE GUAYAQUIL - EL TRIUNFO - LA TRONCAL - ZHUD - EL TAMBO - CAÑAR - AZOGUES - PAUTE - AMALUZA - MÉNDEZ ROAD, AND ENLARGEMENT AND IMPROVEMENT OF THE MÉNDEZ - PUERTO MORONA ROAD SECTION (EC)	140.0
AMA47	●	IMPROVEMENT OF THE PUERTO BOLÍVAR - SANTA ROSA - BALSAS - CHAGUARPAMBA - LOJA - ZAMORA - YANTZAZA - EL PANGUI - GUALAQUIZA - GRAL. LEÓNIDAS PLAZA - MÉNDEZ ROAD SECTION (EC)	167.7
AMA48	●	IMPROVEMENT OF THE PUERTO BOLÍVAR - PASAJE - SANTA ISABEL - GIRÓN - CUENCA - PAUTE - AMALUZA - MÉNDEZ - PUERTO MORONA ROAD SECTION (EC)	26.8
AMA49	●	NEW AIRPORT IN PUERTO MORONA (EC)	136.4
AMA54	●	BORDER CROSSING BY THE MORONA RIVER (EC - PE)	2.0
TOTAL			477.9

AMAZON HUB - Group 8: Porto Velho - Southern Northeastern Brazil rail connection



STRATEGIC FUNCTION

- Reduce the logistics costs associated with the supply of raw materials and the distribution of products, and facilitate access to the regional markets and the ports on the Atlantic and Pacific
- Encourage railway transportation to enhance environmental and energy efficiency benefits.
- Create better conditions for intra-regional trade.

Code	Stage	Amazon Hub: Group 8	Estimated Investment (US\$ Million)
AMA68	●	CENTER-WEST INTEGRATION RAILWAY - PHASE III (PORTO VELHO - RIO BRANCO - CRUZEIRO DO SUL) (BR)	0.0
AMA88	●	WEST - EAST INTEGRATION RAILWAY - PHASE II (BARREIRAS - FIGUEIRÓPOLIS)	550.0
AMA89	●	WEST - EAST INTEGRATION RAILWAY - PHASE I (ILHÉUS - BARREIRAS) (BR)	2,000.0
AMA90	●	CENTER - WEST INTEGRATION RAILWAY - PHASE I (CAMPINORTE - LUCAS DO RIO VERDE) (BR)	2,000.0
AMA91	●	CENTER-WEST INTEGRATION RAILWAY - PHASE II (LUCAS DO RIO VERDE - PORTO VELHO) (BR)	0.0
AMA93	●	PALMAS MULTIMODAL YARD (NORTH-SOUTH RAILWAY) (BR)	0.0
AMA94	●	FIGUEIRÓPOLIS MULTIMODAL YARD (NORTH-SOUTH RAILWAY) (BR)	0.0
AMA98	●	ENLARGEMENT OF ROAD BR-242 SÃO ROQUE DO PARAGUAÇU (BA) - SORRISO (MT) (BR)	200.0
AMA99	●	IMPROVEMENT OF ROAD BR-158 VILA RICA (MT) - RIBEIRÃO CASCALHEIRA (MT) (BR)	183.0
AMA100	●	CONSTRUCTION OF ROAD BR-020 BARREIRAS (BA) - SÃO RAIMUNDO NONATO (PI) (BR)	520.0
AMA101	●	NEW PORT IN THE AREA OF ILHÉUS (BR)	1,400.0
TOTAL			6,853.0

CARTERA DE PROYECTOS DEL EJE DEL AMAZONAS

I. GENERAL ASPECTS

Los países han acordado incluir en el Eje del Amazonas ochenta y dos proyectos con una inversión estimada de US\$ 25.070,2 millones tal como se resume a continuación:

Table D.1 • General Indicators of the Amazon Hub

Group	Name	Number of Projects	Estimated Investment (US\$ million)
Group 1	ACCESS TO THE PUTUMAYO WATERWAY	6	497.8
Group 2	ACCESS TO THE NAPO WATERWAY	6	98.1
Group 3	ACCESS TO THE HUALLAGA - MARAÑON WATERWAY	11	1,346.5
Group 4	ACCESS TO THE UCAYALI WATERWAY	14	3,638.1
Group 5	CONNECTION BETWEEN THE AMAZON BASIN AND NORTHERN NORTHEASTERN BRAZIL	17	11,823.0
Group 6	AMAZON WATERWAY NETWORK	11	335.8
Group 7	ACCESS TO THE MORONA - MARAÑON - AMAZON WATERWAY	6	477.9
Group 8	PORTO VELHO - SOUTHERN NORTHEASTERN BRAZIL RAIL CONNECTION	11	6,853.0
TOTAL		82	25,070.2

II. SOURCE OF FINANCING

Table D.2 • Source of financing of the Amazon Hub projects

Source of financing	Number of Projects	% Projects	Estimated Investment (US\$ million)	% Investment
Public	45	54.9	11,362.0	45.3
Private	27	32.9	11,077.5	44.2
Public/Private	10	12.2	2,630.7	10.5
TOTAL	82	100.0	25,070.2	100.0

III. API PROJECTS

Table D.3 • API Projects - Amazon Hub

Code	Project Name	Estimated Investment (US\$ million)
1	PAITA - TARAPOTO - YURIMAGUAS ROAD, PORTS, LOGISTICS CENTERS AND WATERWAYS (PE)	471.8
AMA16	TARAPOTO - YURIMAGUAS ROAD (PE) (*)	231.7
AMA20	PAITA LOGISTICS CENTER (PE)	47.6
AMA21	YURIMAGUAS LOGISTICS CENTER (PE)	15.0
AMA24	PAITA PORT (PE)	266.9
AMA25	PAITA - TARAPOTO ROAD (PE) (*)	273.7
AMA40	IMPROVEMENT OF NAVIGATION CONDITIONS ON THE HUALLAGA RIVER WATERWAY, BETWEEN YURIMAGUAS AND THE CONFLUENCE WITH MARAÑÓN RIVER (PE)	33.0
AMA41	IMPROVEMENT OF NAVIGATION CONDITIONS ON THE MARAÑÓN RIVER WATERWAY, BETWEEN SARAMERIZA AND THE CONFLUENCE WITH UCAYALI RIVER (PE)	11.0
AMA44	IQUITOS LOGISTICS CENTER (PE)	15.0
AMA56	MODERNIZATION OF IQUITOS PORT (PE)	39.6
AMA102	CONSTRUCTION OF NEW YURIMAGUAS PORT (PE)	43.7
2	CALLAO - LA OROYA - PUCALLPA ROAD, PORTS, LOGISTICS CENTERS AND WATERWAYS (PE)	2,761.9
AMA26	IMPROVEMENT OF TINGO MARÍA - PUCALLPA ROAD (PE)	438.4
AMA30	PUCALLPA INTERMODAL LOGISTICS CENTER (PE)	15.0
AMA31	MODERNIZATION OF EL CALLAO PORT (NEW CONTAINER DOCK) (PE)	704.8
AMA32	LIMA - RICARDO PALMA EXPRESSWAY (PE)	242.0
AMA43	IMPROVEMENT OF NAVIGATION CONDITIONS ON THE UCAYALI RIVER WATERWAY, BETWEEN PUCALLPA AND THE CONFLUENCE WITH MARAÑÓN RIVER (PE)	19.0
AMA63	IIRSA CENTER, SECTION 2: RICARDO PALMA - LA OROYA - TURN OFF TO CERRO DE PASCO / LA OROYA - HUANCAYO (PE)	100.0
AMA64	IIRSA CENTER, SECTION 3: TURN OFF TO CERRO DE PASCO - TINGO MARÍA (PE)	115.6
AMA65	EL CALLAO LOGISTICS ACTIVITIES ZONE (ZAL CALLAO) (PE)	68.3
AMA66	EL CALLAO MULTI-PURPOSE NORTHERN TERMINAL (PE)	883.5
AMA67	EL CALLAO MINERAL SHIPPING TERMINAL (PE)	120.3
AMA104	CONSTRUCTION OF NEW PUCALLPA PORT (PE)	55.0

Code	Project Name	Estimated Investment (US\$ million)
3	PAITA - TARAPOTO - YURIMAGUAS ROAD, PORTS, LOGISTICS CENTERS	52.8
AMA38	IMPROVEMENT OF NAVIGATION CONDITIONS ON THE PUTUMAYO - IÇÁ RIVER (BR)	15.0
AMA39	IMPROVEMENT OF NAVIGATION CONDITIONS ON THE MORONA RIVER (CO - EC - PE)	2.0
AMA42	IMPROVEMENT OF NAVIGATION CONDITIONS ON THE NAPO RIVER (EC - PE)	5.8
AMA45	MORONA FREIGHT TRANSFER PORT (EC)	5.0
AMA71	PROVIDENCIA PORT (EC)	25.0
TOTAL		3,286.5

Nota: (*): These two individual projects were completed before the creation of API and incorporated into the Agenda because they supplement the connectivity network of the structured project.

IV. SECTOR/SUBSECTORBASED BREAKDOWN AND TYPE OF WORKS INVOLVED

Table D.4 • Sector-based breakdown of the Amazon Hub

Subsector	Transport				Energy			
	N° Projects	% Projects	Estimated Investment (US\$ millions)	% Investment	N° Projects	% Projects	Estimated Investment (US\$ millions)	% Investment
Air	6	7.4	231.8	0.9				
Road	23	28.4	6,688.9	28.2				
Railway	10	12.3	11,950.0	50.3				
River	18	22.2	545.0	2.3				
Sea	9	11.1	3,450.5	14.5				
Multimodal	13	16.1	872.0	3.7				
Border Crossing	2	2.5	12.0	0.1				
Power Interconnection					1	100.0	1,320.0	100.0
TOTAL	81	100.0	23,750.2	100.0	1	100.0	1,320.0	100.0

Table D.5 • Air Transport

	Projects	Estimated Investment
Type of Work	N°	US\$ million
Refitting of airports	3	33.6
New airports	3	198.2
TOTAL	6	231.8

Table D.6 • Road Transport

	Projects	Estimated Investment
Type of Work	N°	US\$ million
Extension of the road capacity	5	1,352.2
Paving (new work)	12	2,231.7
Refitting of road and structures	6	3,105.0
TOTAL	23	6,688.9

Table D.7 • Railway Transport

	Projects	Estimated Investment
Type of Work	N°	US\$ million
Building of railways	10	11,950.0
TOTAL	10	11,950.0

Table D.8 • River Transport

	Projects	Estimated Investment
Type of Work	N°	US\$ million
Refitting of the existing river ports	6	161.5
Building of new river ports	5	289.7
Improvement of river navigability	7	93.8
TOTAL	18	545.0

Table D.9 • **Border Crossings**

	Projects	Estimated Investment
Type of Work	N°	US\$ million
Infrastructure for the setting up of border control centers	2	12.0
TOTAL	2	12.0

Table D.10 • **Maritime Transport**

	Projects	Estimated Investment
Type of Work	N°	US\$ million
Extension of the road infrastructure of the maritime ports	6	1,275.7
New sea ports	3	2,174.8
TOTAL	9	3,450.5

Table D.11 • **Multimodal Transport**

	Projects	Estimated Investment
Type of Work	N°	US\$ million
Transfer stations	13	872.0
TOTAL	13	872.0

Table D.12 • **Power Interconnection**

	Projects	Estimated Investment
Type of Work	N°	US\$ million
Building of new power interconnections	1	1,320.0
TOTAL	1	1,320.0

V. PROGRESS IN THE AMAZON HUB PROJECTS

Table D.13 • Projects by Progress Attained

Stage	Number of Projects	% Projects	Estimated Investment (US\$ million)	% Investment
Profiling	19	23.2	1,643.3	6.6
Pre-Execution	21	25.6	5,000.6	19.9
Execution	25	30.5	12,564.0	50.1
Concluded	17	20.7	5,862.3	23.4
TOTAL	82	100.0	25,070.2	100.0

Table D.14 • Concluded Projects

Code	Project Name	Estimated Investment (US\$ million)
AMA11	CONSTRUCTION OF A NEW AIRPORT IN TENA (EC)	46.0
AMA16	TARAPOTO - YURIMAGUAS ROAD (PE)	231.7
AMA22	BAYÓVAR PORT (PE)	70.0
AMA24	PAITA PORT (PE)	266.9
AMA25	PAITA - TARAPOTO ROAD (PE)	273.7
AMA34	ENVIRONMENTAL AND TERRITORIAL MANAGEMENT PROGRAM (CUIABÁ - SANTARÉM ROUTE) (BR-163 / MT / PA) (BR)	12.0
AMA36	IMPROVEMENT OF NAVIGATION CONDITIONS IN THE SOLIMÕES - AMAZON RIVERS SYSTEM (BR)	8.0
AMA46	IMPROVEMENT OF THE GUAYAQUIL - EL TRIUNFO - LA TRONCAL - ZHUD - EL TAMBO - CAÑAR - AZOGUES - PAUTE - AMALUZA - MÉNDEZ ROAD, AND ENLARGEMENT AND IMPROVEMENT OF THE MÉNDEZ - PUERTO MORONA ROAD	140.0
AMA47	IMPROVEMENT OF THE PUERTO BOLÍVAR - SANTA ROSA - BALSAS - CHAGUARPAMBA - LOJA - ZAMORA - YANTZAZA - EL PANGUI - GUALAQUIZA - GRAL. LEÓNIDAS PLAZA - MÉNDEZ ROAD SECTION (EC)	167.7
AMA67	EL CALLAO MINERAL SHIPPING TERMINAL (PE)	120.3
AMA78	NORTH-SOUTH RAILWAY - PHASE II (AÇAILÂNDIA-PALMAS) (BR)	2,500.0
AMA80	ARAGUAÍNA MULTIMODAL YARD (NORTH-SOUTH RAILWAY) (BR)	35.0
AMA81	GUARAÍ MULTIMODAL YARD (NORTH-SOUTH RAILWAY) (BR)	447.0
AMA82	COLINAS DO TOCANTINS MULTIMODAL YARD (NORTH-SOUTH RAILWAY) (BR)	224.0
AMA83	PORTO FRANCO MULTIMODAL YARD (NORTH-SOUTH RAILWAY) (BR)	0.0
AMA87	500-KV TRANSMISSION LINE (TUCURUÍ - MANAUS) (BR)	1,320.0
AMA93	PALMAS MULTIMODAL YARD (NORTH-SOUTH RAILWAY) (BR)	0.0
TOTAL		5,862.3

VI. ANCHOR PROJECTS

Los países identificaron en el Eje del Amazonas diez Proyectos Ancla que totalizan una inversión estimada de US\$ 6.663 millones de acuerdo con el siguiente detalle:

Table D.15 • Anchor Projects

Group	Code	Anchor Projects	Estimated Investment (US\$ million)	Financing Source	Scope	Project Stage
1	AMA01	TUMACO - PASTO - MOCOA - PUERTO ASÍS ROAD CORRIDOR (CO)	404.9	Public/Private	National	Execution
2	AMA71	PROVIDENCIA PORT (EC)	25.0	Public	National	Pre-Execution
3	AMA16	TARAPOTO - YURIMAGUAS ROAD (PE)	231.7	Public/Private	National	Concluded
4	AMA26	IMPROVEMENT OF TINGO MARÍA - PUCALLPA ROAD (PE)	438.4	Public	National	Execution
5	AMA73	NEW CROSS-NORTHEASTERN RAILWAY PHASE I (SUAPE - SALGUEIRO / PECÉM - ELISEU MARTINS) (BR)	3,000.0	Private	National	Execution
5	AMA76	NEW CROSS-NORTHEASTERN RAILWAY PHASE II (ELISEU MARTINS - PORTO FRANCO) (BR)	0.0	Public	National	Profiling
6	AMA36	IMPROVEMENT OF NAVIGATION CONDITIONS IN THE SOLIMÕES - AMAZON RIVERS SYSTEM (BR)	8.0	Public	National	Concluded
7	AMA45	MORONA FREIGHT TRANSFER PORT (EC)	5.0	Public	National	Pre-Execution
8	AMA89	WEST - EAST INTEGRATION RAILWAY - PHASE I (ILHÉUS - BARREIRAS) (BR)	2,000.0	Public	National	Execution
8	AMA88	WEST - EAST INTEGRATION RAILWAY - PHASE II (BARREIRAS - FIGUEIRÓPOLIS) (BR)	550.0	Public	National	Pre-Execution
TOTAL			6,663.0			

ANDEAN HUB

PROJECTS



ESTIMATED INVESTMENT



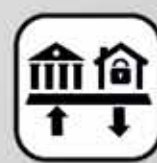
BY STAGE



BY SECTOR



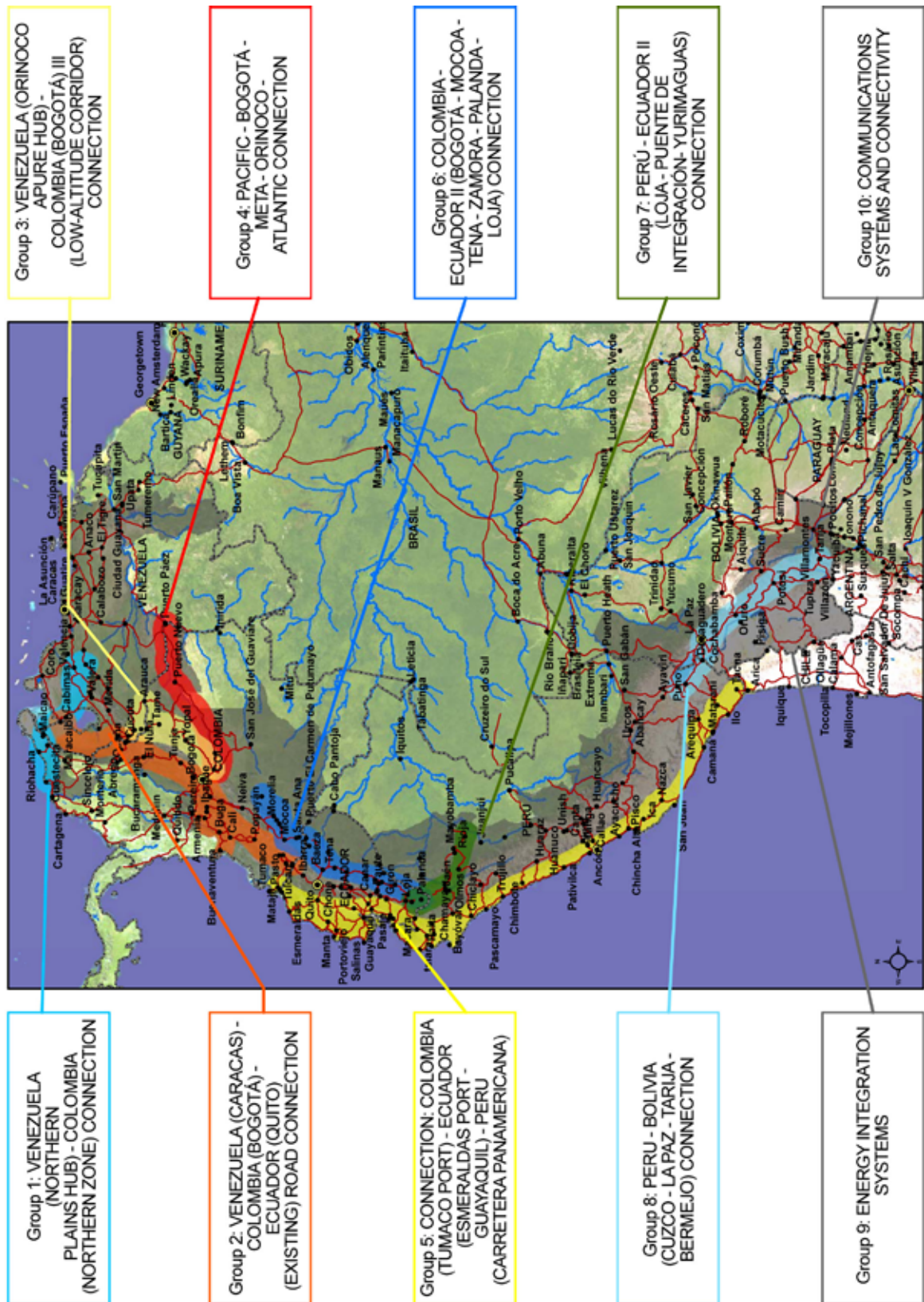
BY SOURCE OF FINANCING



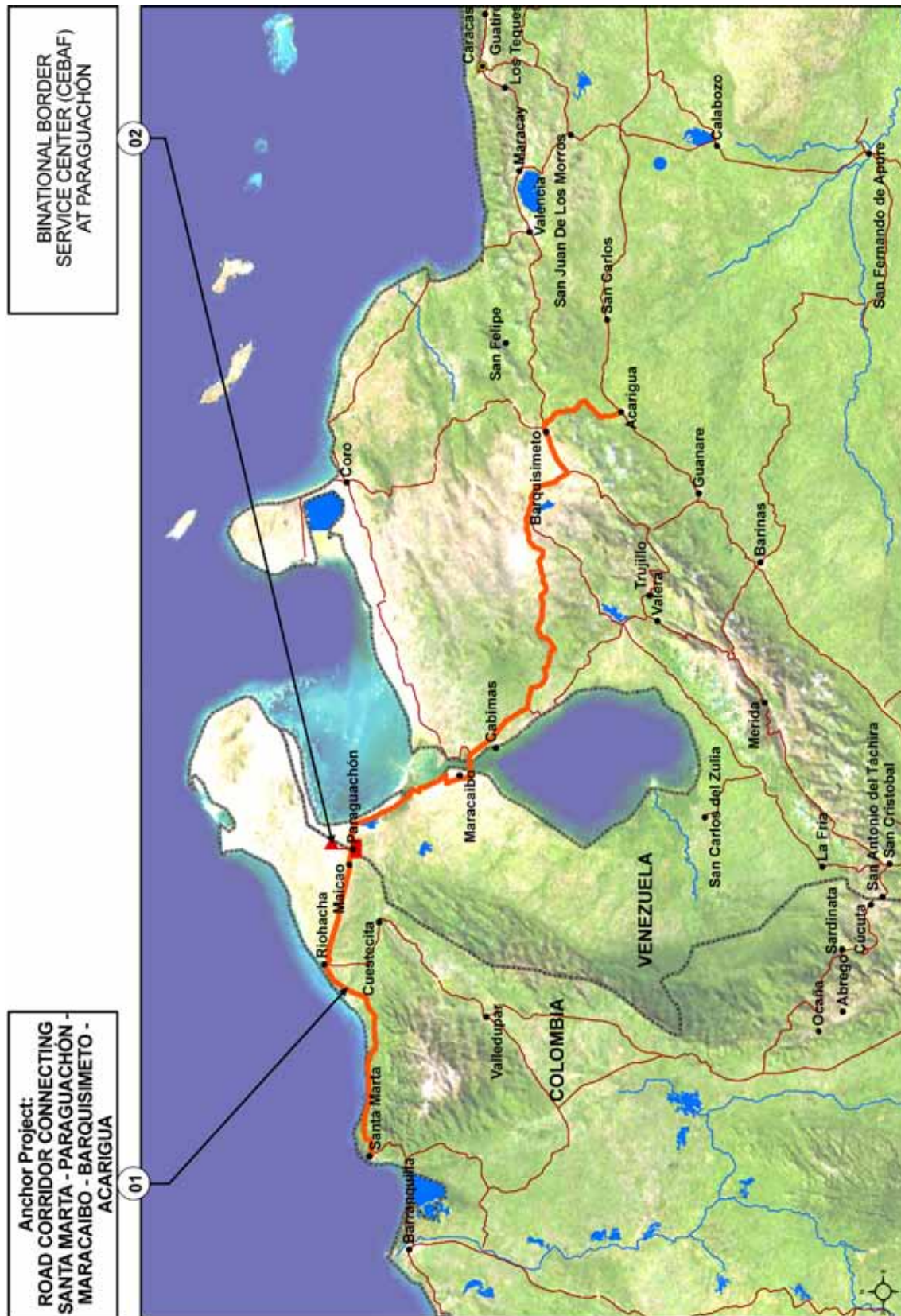
ANDEAN HUB

Area of influence





ANDEAN HUB - Group 1:
Venezuela (Northern plains hub) - Colombia (Northern zone) connection



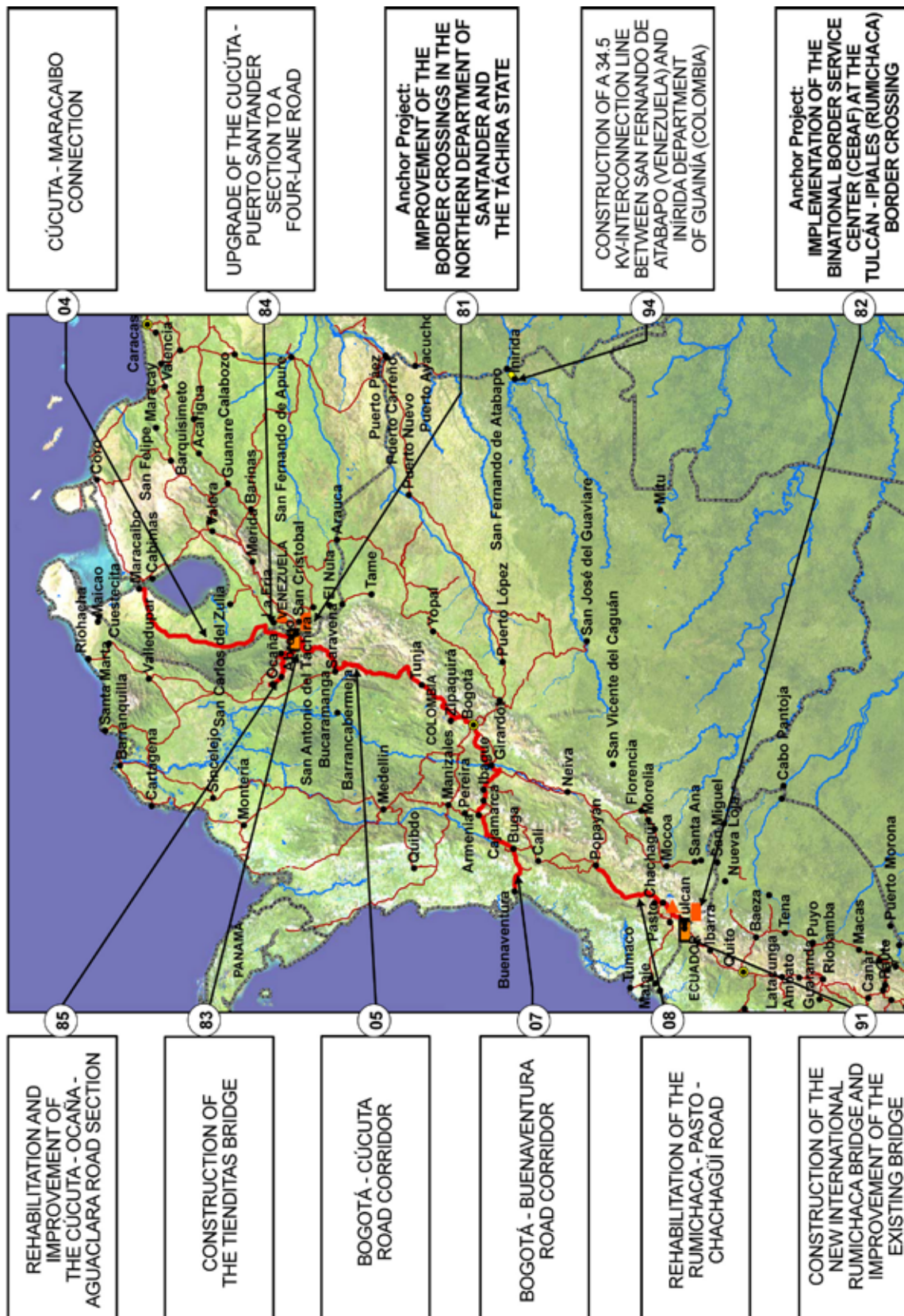
STRATEGIC FUNCTION

- Consolidate the economic integration between Colombia's northern Atlantic area and Venezuela's northern plains through an existing paved road.

Code	Stage	Andean Hub: Group 1	Estimated Investment (US\$ million)
AND01	●	ROAD CORRIDOR CONNECTING SANTA MARTA - PARAGUACHÓN - MARACAIBO - BARQUISIMETO - ACARIGUA (CO - VE)	411.2
AND02	●	BINATIONAL BORDER SERVICE CENTER (CEBAF) AT PARAGUACHÓN (VE)	2.0
TOTAL			2.0

ANDEAN HUB - Group 2:

Venezuela (Caracas) - Colombia (Bogotá) - Ecuador (Quito) (existing) Road connection



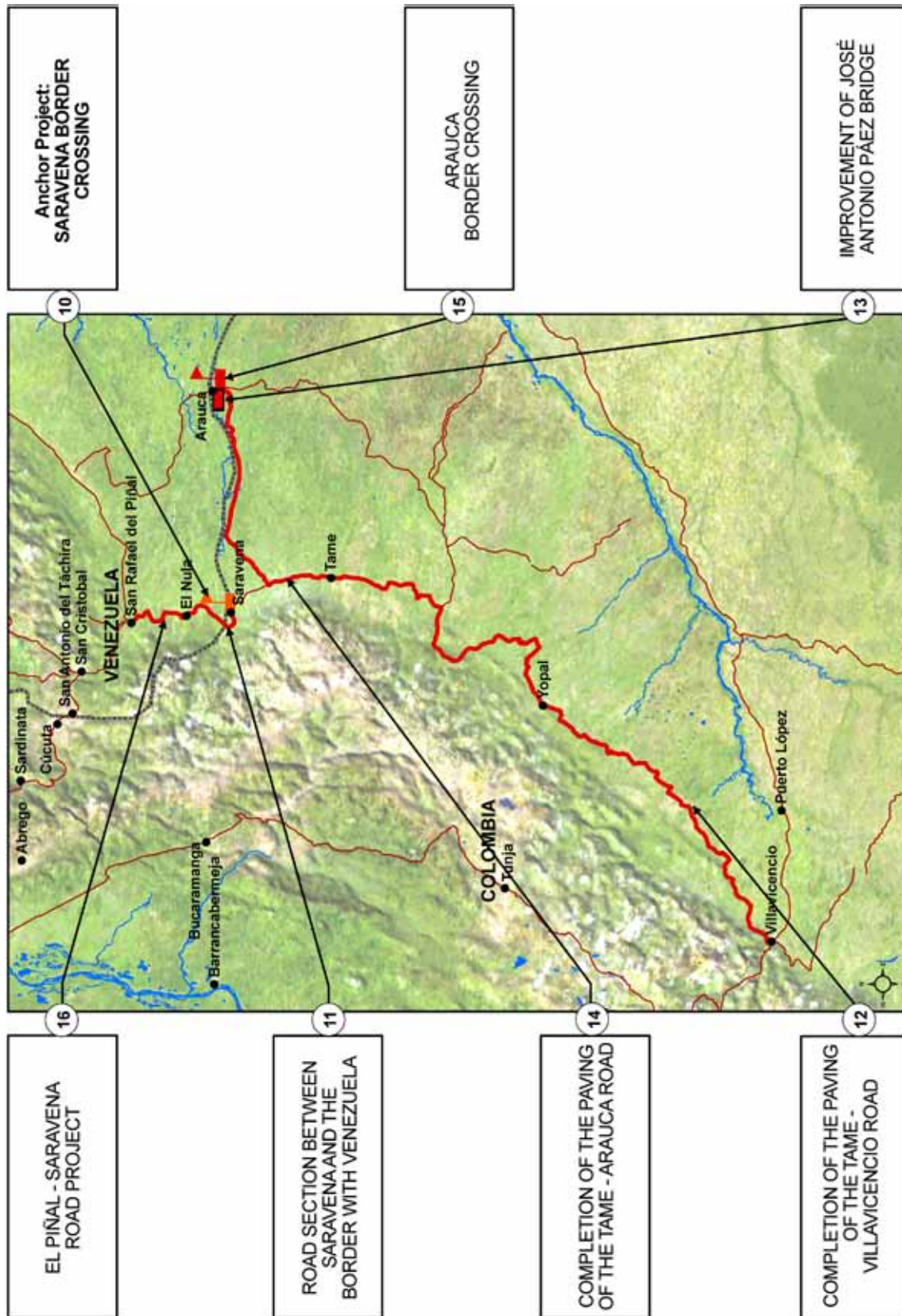
STRATEGIC FUNCTION

- Reinforce the economic relations of Ecuador, Colombia, and Venezuela through existing paved roads, which entails improving their border crossings and finding solutions to specific bottlenecks.

Code	Stage	Andean Hub: Group 2	Estimated Investment (US\$ million)
AND04	●	CÚCUTA - MARACAIBO CONNECTION (CO - VE)	0.3
AND05	●	BOGOTÁ - CÚCUTA ROAD CORRIDOR (CO)	1,559.0
AND07	●	BOGOTÁ - BUENAVENTURA ROAD CORRIDOR* (CO)	1,791.0
AND08	●	REHABILITATION OF THE RUMICHACA - PASTO - CHACHAGÜÍ ROAD (CO)	221.0
AND81	●	IMPROVEMENT OF THE BORDER CROSSINGS IN THE NORTHERN DEPARTMENT OF SANTANDER AND THE TÁCHIRA STATE (CO - VE)	2.0
AND82	●	IMPLEMENTATION OF THE BINATIONAL BORDER SERVICE CENTER (CEBAF) AT THE TULCÁN - IPIALES (RUMICHACA) BORDER CROSSING (CO - EC)	65.0
AND83	●	CONSTRUCTION OF THE TIENDITAS BRIDGE (CO - VE)	0.9
AND84	●	UPGRADE OF THE CUCÚTA - PUERTO SANTANDER SECTION TO A FOUR-LANE ROAD (CO)	1.8
AND85	●	REHABILITATION AND IMPROVEMENT OF THE CÚCUTA - OCAÑA - AGUACLARA ROAD SECTION (CO)	120.7
AND91	●	CONSTRUCTION OF THE NEW INTERNATIONAL RUMICHACA BRIDGE AND IMPROVEMENT OF THE EXISTING BRIDGE (CO - EC)	4.1
AND94	●	CONSTRUCTION OF A 34.5 KV-INTERCONNECTION LINE BETWEEN SAN FERNANDO DE ATABAPO (VENEZUELA) AND INÍRIDA DEPARTMENT OF GUAINIA (COLOMBIA) (CO - VE)	0.0
TOTAL			3,765.8

ANDEAN HUB - Group 3:

Venezuela (Orinoco Apure hub) - Colombia (Bogotá) III (Low-altitude corridor) connection

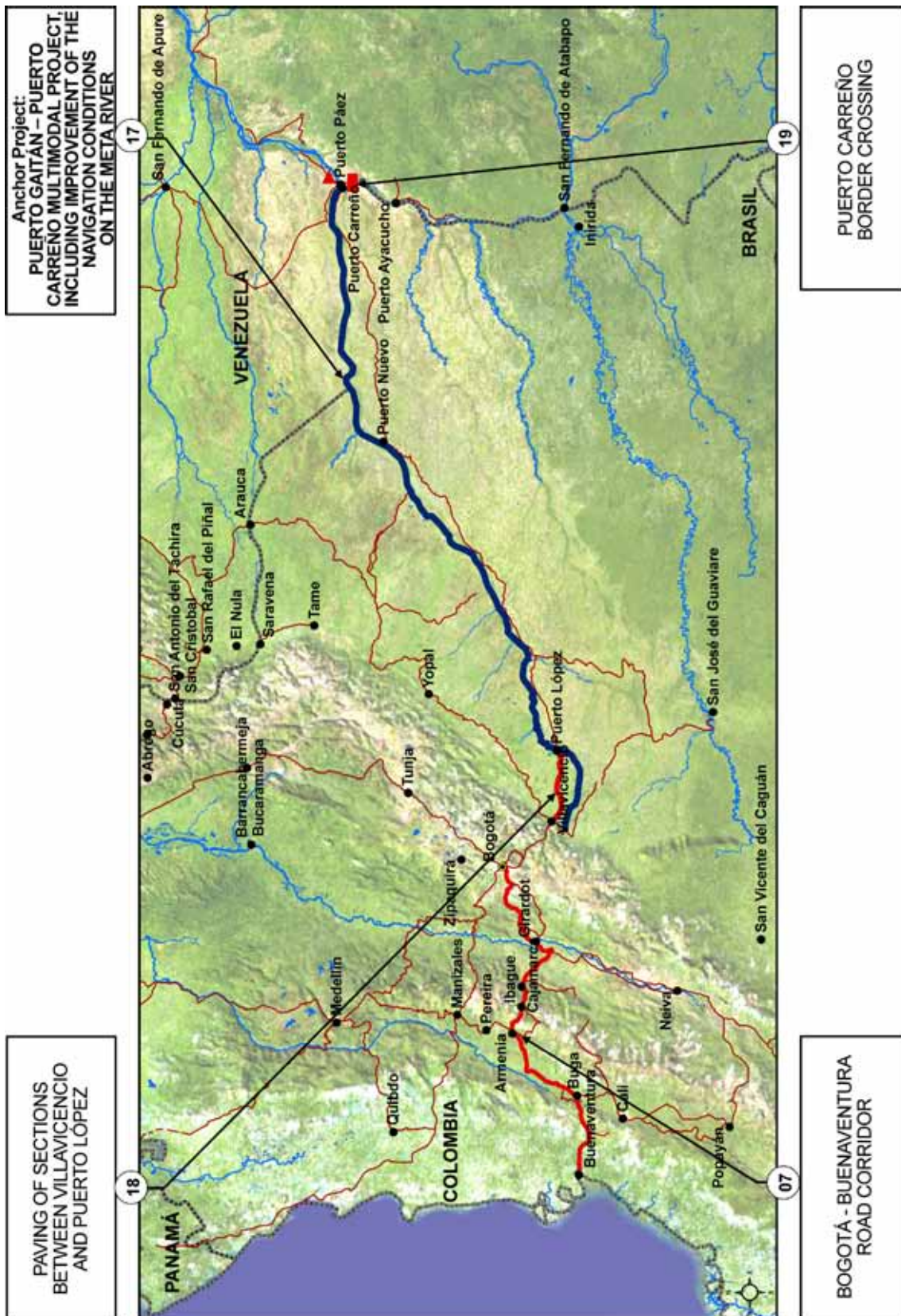


STRATEGIC FUNCTION

- Develop an international corridor for long-distance cargo transport with significantly lower operating costs and traveling times than the current Caracas - Bogotá corridor.
- This corridor will allow the participation in international trade of new regions in Colombia (Arauca) and Venezuela (Barinas).

Code	Stage	Andean Hub: Group 3	Estimated Investment (US\$ million)
AND10	●	SARAVENA BORDER CROSSING (CO)	3.3
AND11	●	ROAD SECTION BETWEEN SARAVENA AND THE BORDER WITH VENEZUELA (CO)	16.0
AND12	●	COMPLETION OF THE PAVING OF THE TAME - VILLAVICENCIO ROAD (CO)	3.6
AND13	●	IMPROVEMENT OF JOSÉ ANTONIO PÁEZ BRIDGE (CO)	1.3
AND14	●	COMPLETION OF THE PAVING OF THE TAME - ARAUCA ROAD (CO)	10.6
AND15	●	ARAUCA BORDER CROSSING (VE)	2.0
AND16	●	EL PIÑAL - SARAVENA ROAD PROJECT (VE)	6.8
TOTAL			43.6

ANDEAN HUB - Group 4: Pacif - Bogotá - Meta - Orinoco - Atlantic connection



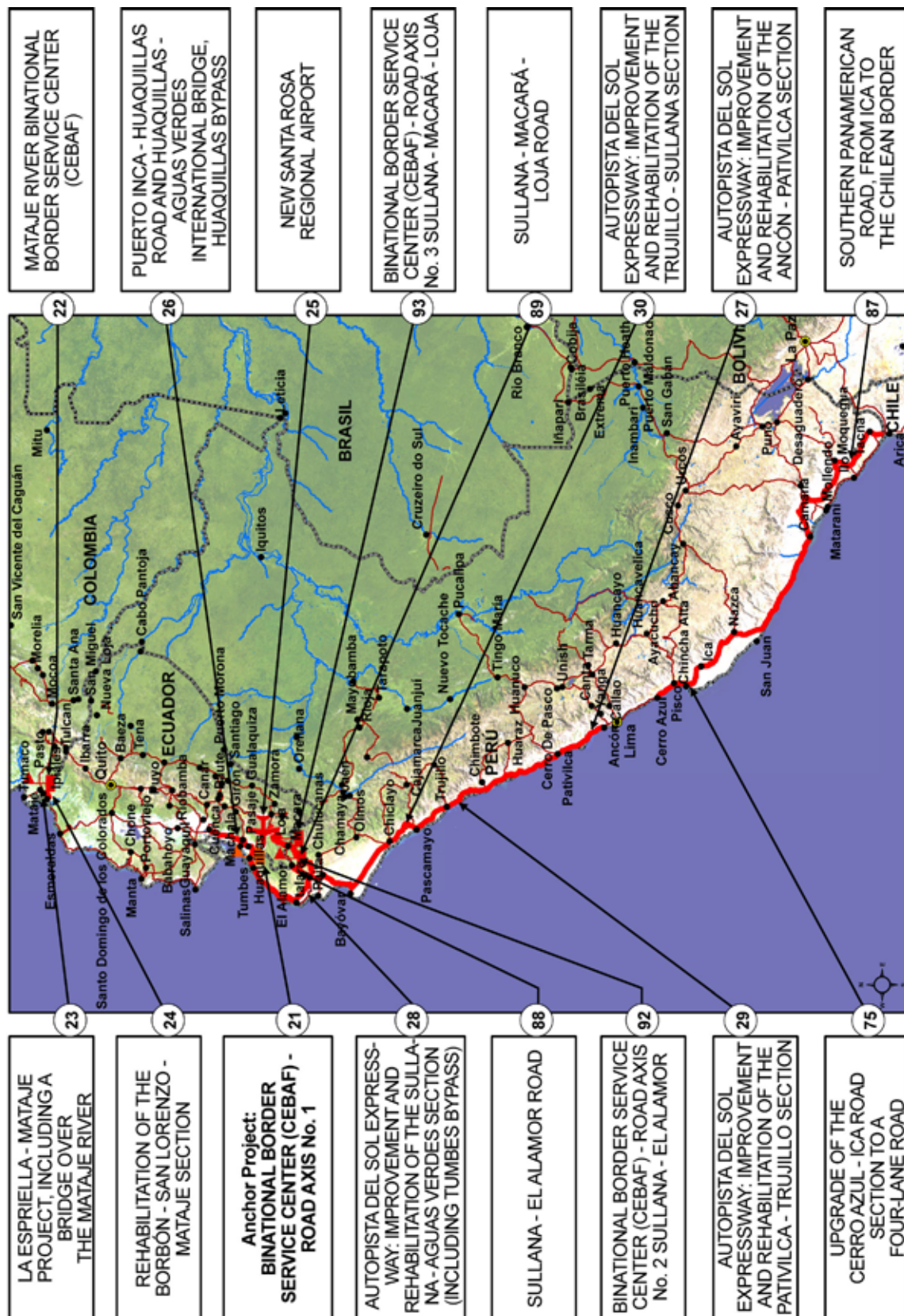
STRATEGIC FUNCTION

- Develop a Pacific - Bogotá - Meta - Orinoco - Atlantic bioceanic corridor for fostering trade among regions in Colombia (Orinoquía, Andina, and Pacífico) and Venezuela (the Plains, including the states of Anzoátegui and Monagas, Guayana, the Orinoco Delta) and for opening up these regions to international markets.

Code	Stage	Andean Hub: Group 4	Estimated Investment (US\$ million)
AND07	●	BOGOTÁ - BUENAVENTURA ROAD CORRIDOR* (CO)	1,791.0
AND17	●	RTO GAITÁN – PUERTO CARREÑO MULTIMODAL PROJECT, INCLUDING IMPROVEMENT OF THE NAVIGATION CONDITIONS ON THE META RIVER (CO)	108.0
AND18	●	PAVING OF SECTIONS BETWEEN VILLAVICENCIO AND PUERTO LÓPEZ (CO)	26.0
AND19	●	PUERTO CARREÑO BORDER CROSSING (VE)	1.0
TOTAL			1,926.0

(*) Hinge Project with Group 2 of the Andean Hub

Connection: Colombia (Tumaco Port) - Ecuador (Esmeraldas Port - Guayaquil) - Peru (Panamerican Road)



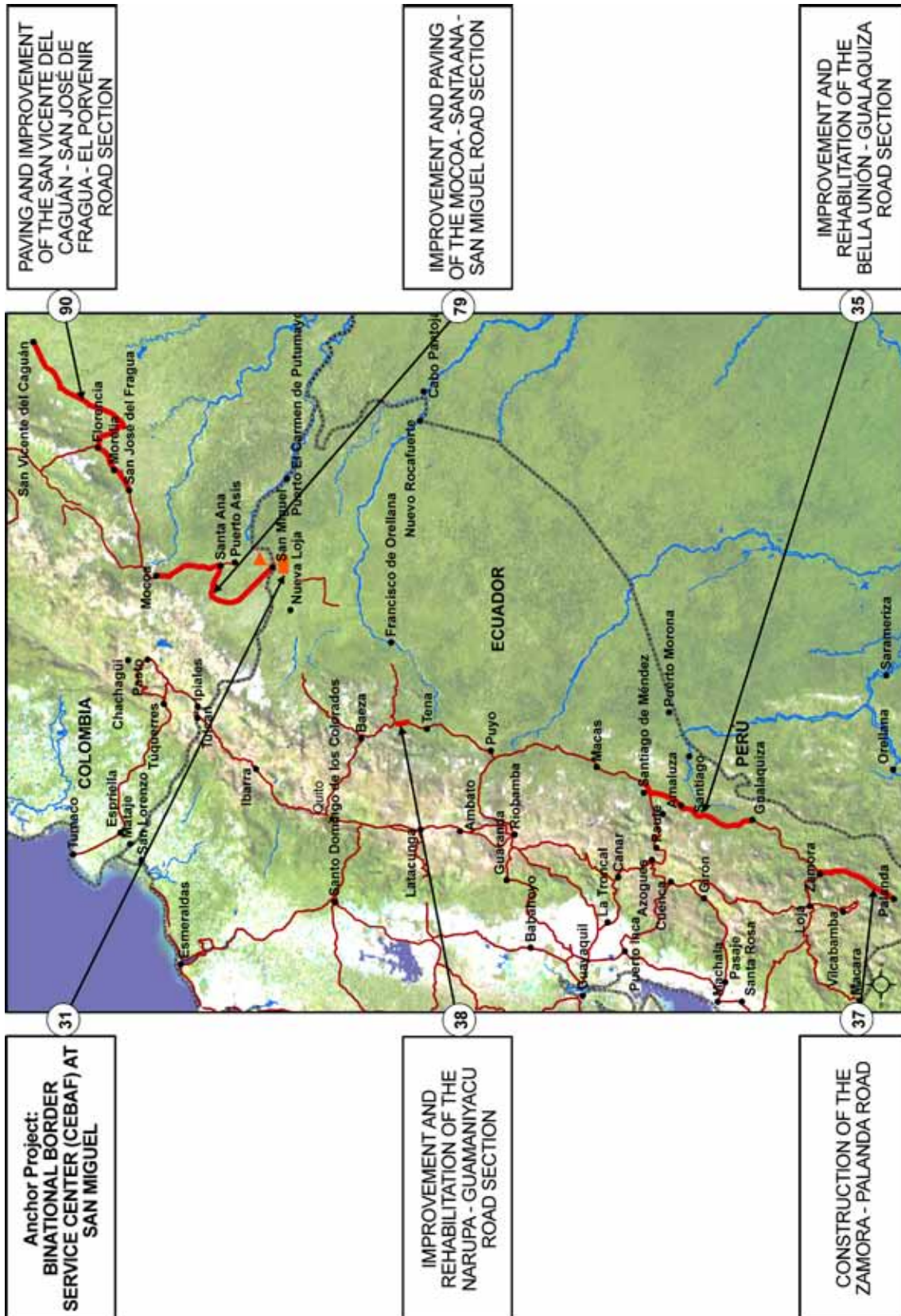
STRATEGIC FUNCTION

- Reinforce trade and tourism relations of major road corridor articulating the coastal areas of Peru and Ecuador, and the Southern Pacific Colombian areas.

Code	Stage	Andean Hub: Group 5	Estimated Investment (US\$ million)
AND21	●	BINATIONAL BORDER SERVICE CENTER (CEBAF) - ROAD AXIS No. 1 (EC - PE)	15.9
AND22	●	MATAJE RIVER BINATIONAL BORDER SERVICE CENTER (CEBAF) (CO - EC)	3.0
AND23	●	LA ESPRIELLA - MATAJE PROJECT, INCLUDING A BRIDGE OVER THE MATAJE RIVER (CO - EC)	25.0
AND24	●	REHABILITATION OF THE BORBÓN - SAN LORENZO - MATAJE SECTION (EC)	5.3
AND25	●	NEW SANTA ROSA REGIONAL AIRPORT (EC)	47.1
AND26	●	PUERTO INCA - HUAQUILLAS ROAD AND HUAQUILLAS - AGUAS VERDES INTERNATIONAL BRIDGE, HUAQUILLAS BYPASS (EC - PE)	85.8
AND27	●	AUTOPISTA DEL SOL EXPRESSWAY: IMPROVEMENT AND REHABILITATION OF THE ANCÓN - PATIVILCA SECTION (PE)	75.0
AND28	●	AUTOPISTA DEL SOL EXPRESSWAY: IMPROVEMENT AND REHABILITATION OF THE SULLANA - AGUAS VERDES SECTION (INCLUDING TUMBES BYPASS) (PE)	515.5
AND29	●	AUTOPISTA DEL SOL EXPRESSWAY: IMPROVEMENT AND REHABILITATION OF THE PATIVILCA - TRUJILLO SECTION (PE)	401.6
AND30	●	AUTOPISTA DEL SOL EXPRESSWAY: IMPROVEMENT AND REHABILITATION OF THE TRUJILLO - SULLANA SECTION (PE)	441.2
AND75	●	UPGRADE OF THE CERRO AZUL - ICA ROAD SECTION TO A FOUR-LANE ROAD (PE)	394.2
AND87	●	SOUTHERN PANAMERICAN ROAD, FROM ICA TO THE CHILEAN BORDER (PE)	460.0
AND88	●	SULLANA - EL ALAMOR ROAD (PE)	29.5
AND89	●	SULLANA - MACARÁ - LOJA ROAD (PE)	48.4
AND92	●	BINATIONAL BORDER SERVICE CENTER (CEBAF) - ROAD AXIS No. 2 SULLANA - EL ALAMOR (EC - PE)	20.0
AND93	●	BINATIONAL BORDER SERVICE CENTER (CEBAF) - ROAD AXIS No. 3 SULLANA - MACARÁ - LOJA (EC - PE)	0.0
TOTAL			2,567.5

ANDEAN HUB - Group 6:

Colombia - Ecuador II (Bogotá - Mocoa - Tena - Zamora - Palanda - Loja) Connection

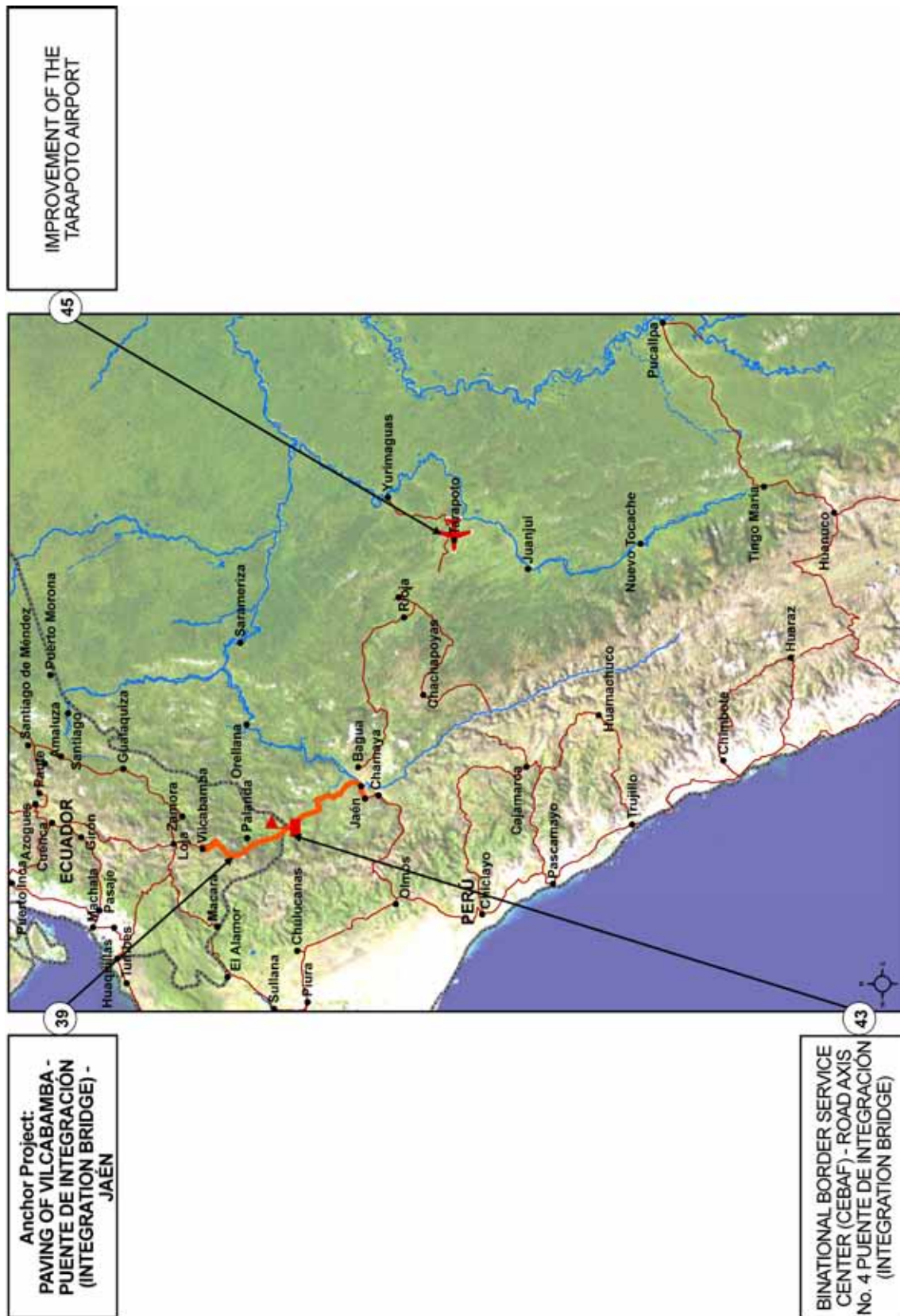


STRATEGIC FUNCTION

- Develop a corridor that would reinforce trade among areas in central and southern Colombia with Amazon provinces of northern and central Ecuador.

Code	Stage	Andean Hub: Group 6	Estimated Investment (US\$ million)
AND31	●	BINATIONAL BORDER SERVICE CENTER (CEBAF) AT SAN MIGUEL (CO - EC)	25.0
AND35	●	IMPROVEMENT AND REHABILITATION OF THE BELLA UNIÓN - GUALAQUIZA ROAD SECTION (EC)	23.2
AND37	●	CONSTRUCTION OF THE ZAMORA - PALANDA ROAD (EC)	1.3
AND38	●	IMPROVEMENT AND REHABILITATION OF THE NARUPA - GUAMANIYACU ROAD SECTION (EC)	23.6
AND79	●	IMPROVEMENT AND PAVING OF THE MOCOA - SANTA ANA - SAN MIGUEL ROAD SECTION (CO)	133.6
AND90	●	PAVING AND IMPROVEMENT OF THE SAN VICENTE DEL CAGUÁN - SAN JOSÉ DE FRAGUA - EL PORVENIR ROAD SECTION (CO)	239.3
TOTAL			446.0

ANDEAN HUB - Group 7: Peru - Ecuador II (Loja - Puente de Integración - Yurimaguas) Connection

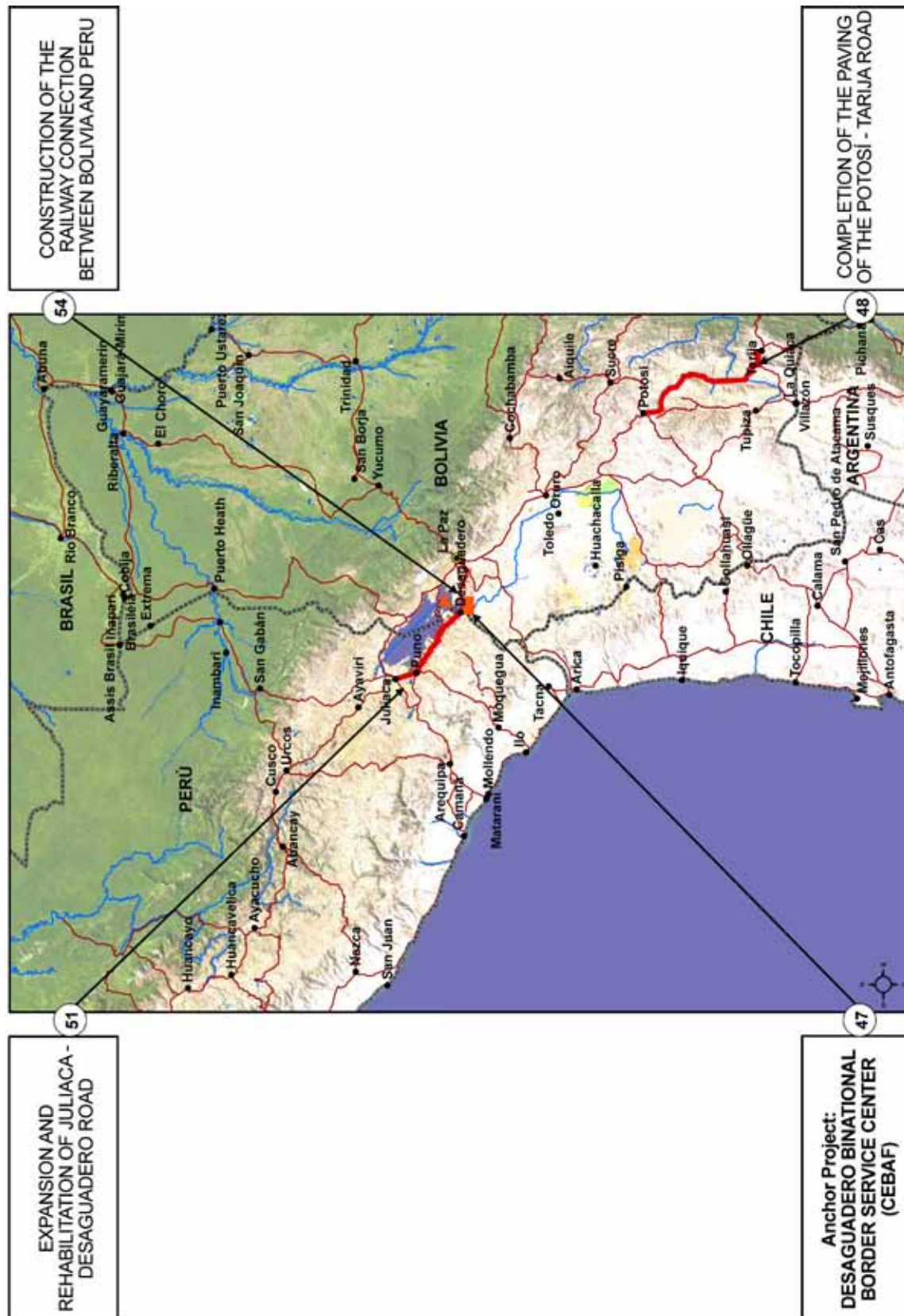


STRATEGIC FUNCTION

- Develop a new international trade corridor by improving the roads that connect the cities of Loja Vilcabamba, and Tarapoto, and Yurimaguas. This corridor will join the southern Andean region of Ecuador with the northern rainforest of Peru and its projection to the Amazon waterways.

Code	Stage	Andean Hub: Group 7	Estimated Investment (US\$ million)
AND39	●	PAVING OF VILCABAMBA - PUENTE DE INTEGRACIÓN (INTEGRATION BRIDGE) - JAÉN (EC - PE)	337.9
AND43	●	BINATIONAL BORDER SERVICE CENTER (CEBAF) - ROAD AXIS No. 4 PUENTE DE INTEGRACIÓN (INTEGRATION BRIDGE) (EC - PE)	20.0
AND45	●	IMPROVEMENT OF THE TARAPOTO AIRPORT (PE)	6.9
TOTAL			364.8

ANDEAN HUB - Group 8: Peru - Bolivia (Cusco - La Paz - Tarija - Bermejo) Connection

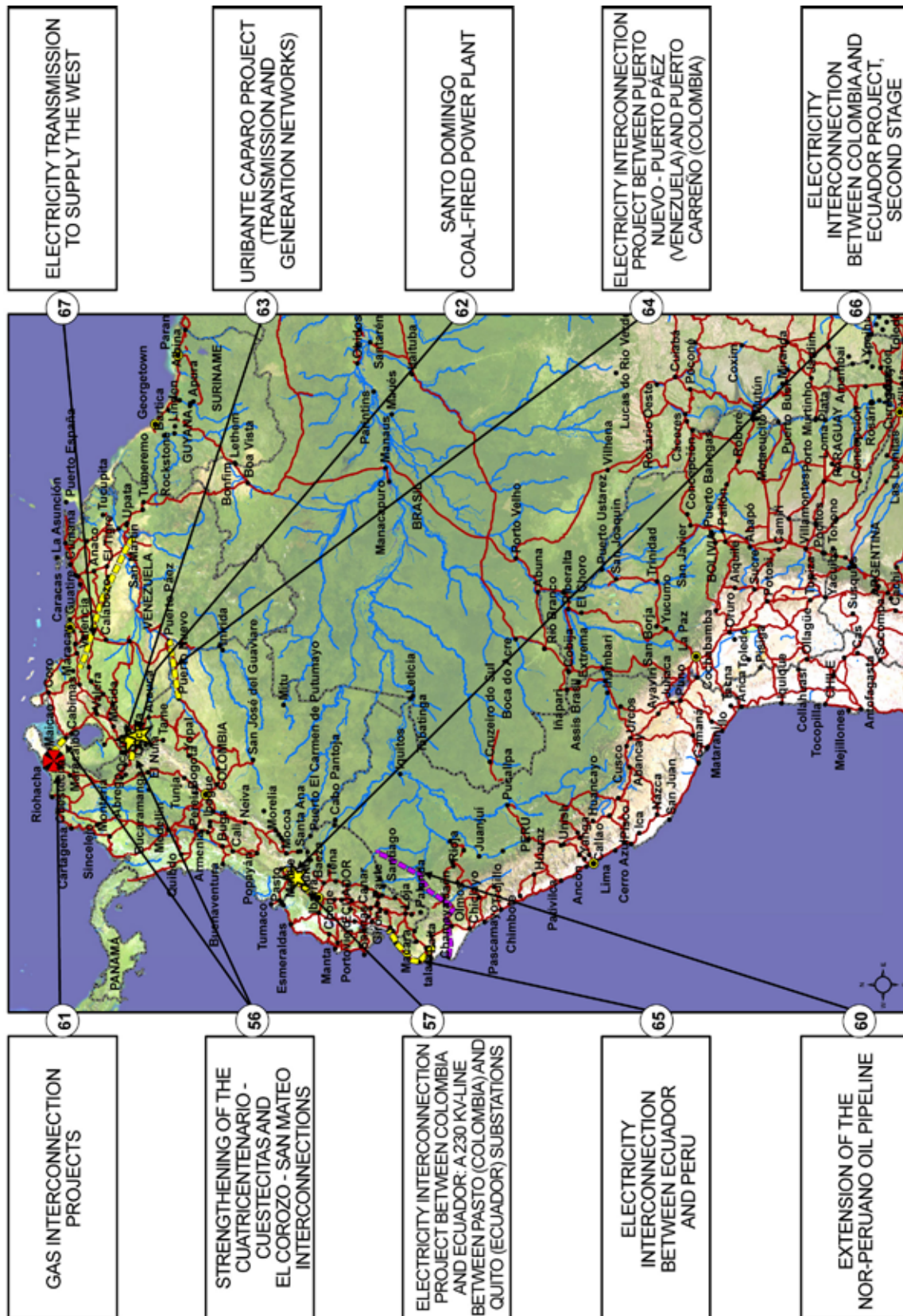


STRATEGIC FUNCTION

- Reinforce tourism and economic relations among the Andean cities of Peru (Cusco, Puno) and Bolivia (La Paz, Tarija) through existing paved routes, and extend these to the central Andean area of Peru and northwestern Argentina.

Code	Stage	Andean Hub: Group 8	Estimated Investment (US\$ million)
AND47	●	DESAGUADERO BINATIONAL BORDER SERVICE CENTER (CEBAF) (BO - PE)	40.3
AND48	●	COMPLETION OF THE PAVING OF THE POTOSÍ - TARIJA ROAD (BO)	238.2
AND51	●	EXPANSION AND REHABILITATION OF THE JULIACA - DESAGUADERO ROAD (PE)	243.2
AND54	●	CONSTRUCTION OF THE RAILWAY CONNECTION BETWEEN BOLIVIA AND PERU (BO - PE)	390.0
TOTAL			911.7

ANDEAN HUB - Group 9: Energy Integration Systems

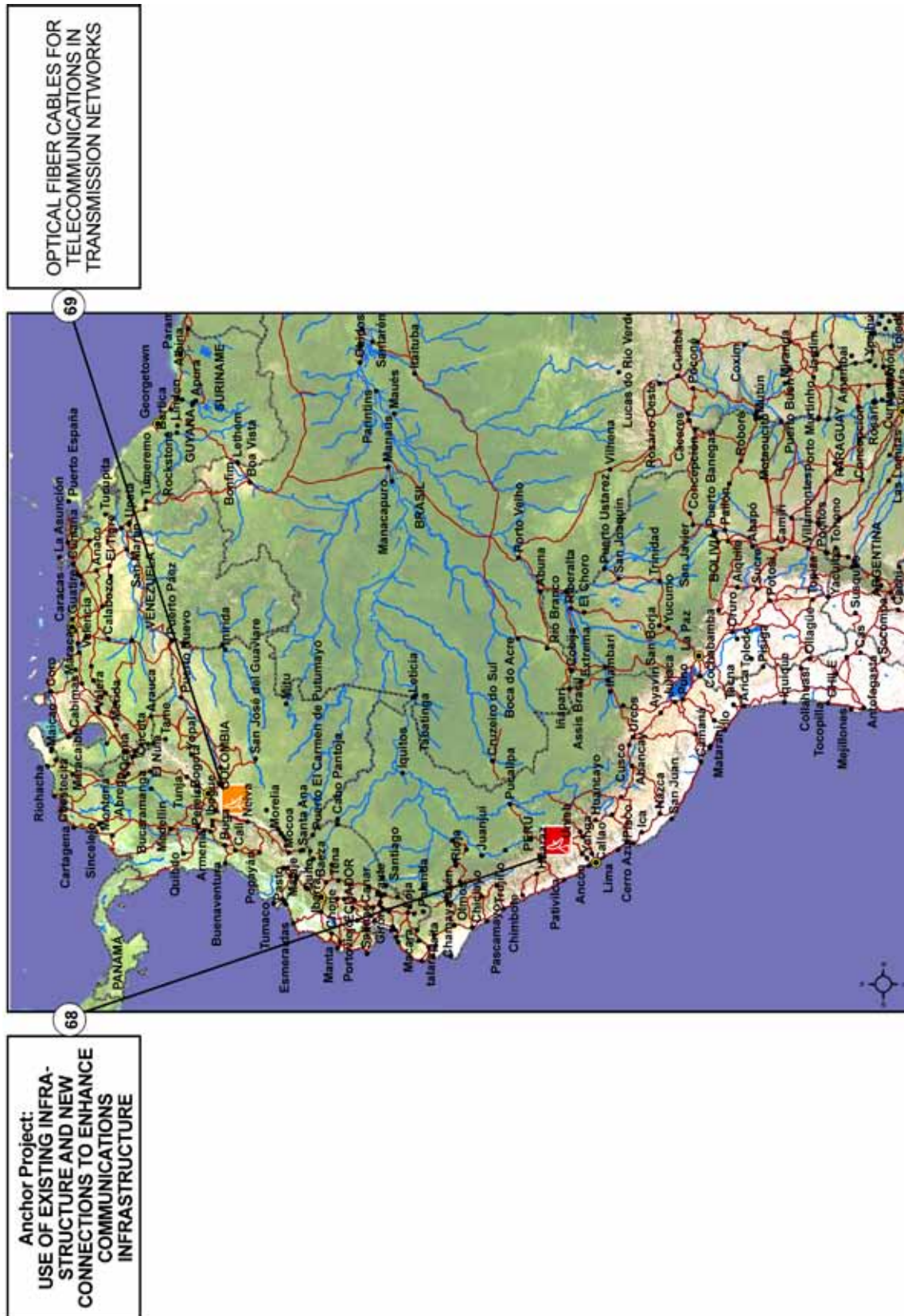


STRATEGIC FUNCTION

- Integrate energy systems to improve the efficiency and reliability of energy generation, transmission and distribution in order to promote the development of high value-added sectors.

Code	Stage	Andean Hub: Group 9	Estimated Investment (US\$ million)
AND56	●	STRENGTHENING OF THE CUATRICENTENARIO - CUESTECITAS AND EL COROZO - SAN MATEO INTERCONNECTIONS (CO - VE)	125.2
AND57	●	ELECTRICITY INTERCONNECTION PROJECT BETWEEN COLOMBIA AND ECUADOR: A 230 KV-LINE BETWEEN PASTO (COLOMBIA) AND QUITO (ECUADOR) SUBSTATIONS (CO - EC)	45.4
AND60	●	EXTENSION OF THE NOR-PERUANO OIL PIPELINE (EC - PE)	0.0
AND61	●	GAS INTERCONNECTION PROJECTS (CO)	335.0
AND62	●	SANTO DOMINGO COAL-FIRED POWER PLANT (VE)	625.0
AND63	●	URIBANTE CAPARO PROJECT (TRANSMISSION AND GENERATION NETWORKS) (VE)	0.0
AND64	●	ELECTRICITY INTERCONNECTION PROJECT BETWEEN PUERTO NUEVO - PUERTO PÁEZ (VENEZUELA) AND PUERTO CARREÑO (COLOMBIA) (CO)	5.0
AND65	●	ELECTRICITY INTERCONNECTION BETWEEN ECUADOR AND PERU (EC - PE)	0.0
AND66	●	ELECTRICITY INTERCONNECTION BETWEEN COLOMBIA AND ECUADOR PROJECT, SECOND STAGE (CO - EC)	0.0
AND67	●	ELECTRICITY TRANSMISSION TO SUPPLY THE WEST (VE)	590.0
TOTAL			1,725.6

ANDEAN HUB - Group 10: Communications Systems and Connectivity



STRATEGIC FUNCTION

- Incorporate urban and rural populated areas into the telecommunications system, eliminating the deficit in telephone coverage and allowing the expansion of value-added services (e-government, distance learning, remote health care, and so on) as a tool to develop isolated areas, and improve quality of life and cultural integration.
- Furthermore, expand the use of communication services to foster development, trade, and regional integration.

Code	Stage	Andean Hub: Group 10	Estimated Investment (US\$ million)
AND68	●	USE OF EXISTING INFRASTRUCTURE AND NEW CONNECTIONS TO ENHANCE COMMUNICATIONS INFRASTRUCTURE (BO - CO - EC - PE - VE)	0.1
AND69	●	OPTICAL FIBER CABLES FOR TELECOMMUNICATIONS IN TRANSMISSION NETWORKS (BO - CO - EC - PE - VE)	0.0
TOTAL			0.1

PROJECT PORTFOLIO OF THE ANDEAN HUB

I. GENERAL ASPECTS

The countries have agreed to include sixty-five projects in the Andean Hub, accounting for an estimated investment of US\$ 9,962.1 million, as summarized below:

Table E.1 • General Indicators of the Andean Hub

Group	Name	Number of Projects	Estimated Investment (US\$ million)
Group 1	VENEZUELA (NORTHERN PLAINS HUB) - COLOMBIA (NORTHERN ZONE) CONNECTION	2	2.0
Group 2	VENEZUELA (CARACAS) - COLOMBIA (BOGOTÁ) - ECUADOR (QUITO) (EXISTING) ROAD CONNECTION	11	3,765.8
Group 3	VENEZUELA (ORINOCO APURE HUB) - COLOMBIA (BOGOTÁ) III (LOW-ALTITUDE CORRIDOR) CONNECTION	7	43.6
Group 4	PACIFIC - BOGOTÁ - META - ORINOCO - ATLANTIC CONNECTION	4	1,926.0
Group 5	CONNECTION: COLOMBIA (TUMACO PORT) - ECUADOR (ESMERALDAS PORT - GUAYAQUIL) - PERU (PANAMERICAN ROAD)	16	2,567.5
Group 6	COLOMBIA - ECUADOR II (BOGOTÁ - MOCOA - TENA - ZAMORA - PALANDA - LOJA) CONNECTION	6	446.0
Group 7	PERU - ECUADOR II (LOJA - PUENTE DE INTEGRACIÓN - YURIMAGUAS) CONNECTION	3	364.8
Group 8	PERU - BOLIVIA (CUSCO - LA PAZ - TARIJA - BERMEJO)	4	911.7
Group 9	ENERGY INTEGRATION SYSTEMS	10	1,725.6
Group 10	COMMUNICATIONS SYSTEMS AND CONNECTIVITY	2	0.1
TOTAL		64	9,962.1

Note: (*) The total in the Number of Projects and Estimated Investment columns do not match the mathematical total amounts due to the existence of a Hinge Project: Bogotá - Buenaventura Road Corridor, belonging in Group 2 and Group 4 of this Hub.

II. SOURCE OF FINANCING

Table E.2 • Source of financing of the Andean Hub projects

Source of financing	Number of Projects	% Projects	Estimated Investment (US\$ million)	% Investment
Public	48	75.0	6,573.8	66.0
Private	5	7.8	1,486.2	14.9
Public/Private	11	17.2	1,902.1	19.1
TOTAL	64	100.0	9,962.1	100.0

III. API PROJECTS

Table E.3 - API Projects - Andean Hub

Code	Project Name	Estimated Investment (US\$ million)
4	CARACAS - BOGOTÁ - BUENAVENTURA / QUITO ROAD CORRIDOR (CO - EC - VE)	3,350.0
AND05	BOGOTÁ - CÚCUTA ROAD CORRIDOR (CO)	1,559.0
AND07	BOGOTÁ - BUENAVENTURA ROAD CORRIDOR (CO)	1,791.0
5	COLOMBIA - ECUADOR BORDER INTERCONNECTION (CO - EC)	227.7
AND31	BINATIONAL BORDER SERVICE CENTER (CEBAF) AT SAN MIGUEL (CO - EC)	25.0
AND79	IMPROVEMENT AND PAVING OF THE MOCOA - SANTA ANA - SAN MIGUEL ROAD SECTION (CO)	133.6
AND82	IMPLEMENTATION OF THE BINATIONAL BORDER SERVICE CENTER (CEBAF) AT THE TULCÁN - IPIALES (RUMICHACA) BORDER CROSSING (CO - EC)	65.0
AND91	CONSTRUCTION OF THE NEW INTERNATIONAL RUMICHACA BRIDGE AND IMPROVEMENT OF THE EXISTING BRIDGE (CO - EC)	4.1
6	COLOMBIA - VENEZUELA BORDER CROSSINGS CONNECTIVITY SYSTEM (CO - VE)	4.0
AND02	BINATIONAL BORDER SERVICE CENTER (CEBAF) AT PARAGUACHÓN (VE)	2.0
AND13	IMPROVEMENT OF JOSÉ ANTONIO PÁEZ BRIDGE (CO)	1.3
AND81	IMPROVEMENT OF THE BORDER CROSSINGS IN THE NORTHERN DEPARTMENT OF SANTANDER AND THE TÁCHIRA STATE (CO - VE)	2.0
7	DESAGUADERO BINATIONAL BORDER SERVICE CENTER (CEBAF) (BO - PE)	40.2
AND47	DESAGUADERO BINATIONAL BORDER SERVICE CENTER (CEBAF) (BO - PE)	40.2
8	AUTOPISTA DEL SOL EXPRESSWAY: IMPROVEMENT AND REHABILITATION OF THE SULLANA - AGUAS VERDES SECTION (INCLUDING TUMBES BYPASS) (PE)	515.5
AND28	AUTOPISTA DEL SOL EXPRESSWAY: IMPROVEMENT AND REHABILITATION OF THE SULLANA - AGUAS VERDES SECTION (INCLUDING TUMBES BYPASS) (PE)	515.5
TOTAL		4,137.4

Note: (*) This individual project was completed before the creation of API, and was incorporated into it because it complements the connectivity network of the structured project.

IV. SECTOR/SUBSECTORBASED BREAKDOWN AND TYPE OF WORKS INVOLVED

Table E.4 • Sector-based breakdown of the Andean Hub

	Transport				Energy				Communications			
Subsector	N° Projects	% Projects	Estimated Investment (US\$ millions)	% Investment	N° Projects	% Projects	Estimated Investment (US\$ millions)	% Investment	N° Projects	% Projects	Estimated Investment (US\$ millions)	% Investment
Air	2	3.9	54.0	0.7								
Road	34	66.6	7,485.0	90.9								
Railway	1	2.0	390.0	4.7								
River	1	2.0	108.0	1.3								
Border Crossing	13	25.5	199.4	2.4								
Power Generation					1	9.1	625.0	36.2				
Power Interconnection					10	90.9	1,100.6	63.8				
Communication Interconnection									2	100.0	0.1	100.0
TOTAL	51	100.0	8,236.4	100.0	11	100.0	1,725.6	100.0	2	100.0	0.1	100.0

Table E.5 • Air Transport

	Projects	Estimated Investment
Type of Work	N°	US\$ million
Refitting of airports	1	6.9
New airports	1	47.1
TOTAL	2	54.0

Table E.6 • Road Transport

	Projects	Estimated Investment
Type of Work	N°	US\$ million
Extension of the road capacity	12	5,890.2
Road maintenance	1	239.3
Paving (new work)	10	857.3
Bridges (new ones and refitting)	3	6.3
Refitting of road and structures	8	491.9
TOTAL	34	7,485.0

Table E.7 • Railway Transport

	Projects	Estimated Investment
Type of Work	N°	US\$ million
Building of railways	1	390.0
TOTAL	1	390.0

Table E.8 • River Transport

	Projects	Estimated Investment
Type of Work	N°	US\$ million
Improvement of river navigability	1	108.0
TOTAL	1	108.0

Table E.9 • Border Crossings

	Projects	Estimated Investment
Type of Work	N°	US\$ million
Infrastructure for the setting up of border control centers	13	199.4
TOTAL	13	199.4

Table E.10 • Power Generation

	Projects	Estimated Investment
Type of Work	N°	US\$ million
Carboelectric plants	1	625.0
TOTAL	1	625.0

Table E.11 • Power Interconnection

	Projects	Estimated Investment
Type of Work	N°	US\$ million
Refitting of power interconnections	9	975.4
Building of new power interconnections	1	125.2
TOTAL	10	1,100.6

Table E.12 • Communication Interconnection

	Projects	Estimated Investment
Type of Work	Nº	US\$ million
Optic fiber	2	0.1
TOTAL	2	0.1

V. PROGRESS IN THE ANDEAN HUB PROJECTS

Table E.13 • Projects by Progress Attained

Stage	Number of Projects	% Projects	Estimated Investment (US\$ million)	% Investment
Profiling	16	25.0	1,178.3	11.8
Pre-Execution	9	14.0	1,062.8	10.7
Execution	22	34.4	6,891.4	69.2
Concluded	17	26.6	829.6	8.3
TOTAL	64	100.0	9,962.1	100.0

Table E.14 • Concluded Projects

Code	Project Name	Estimated Investment (US\$ million)
AND12	COMPLETION OF THE PAVING OF THE TAME - VILLAVICENCIO ROAD (CO)	3.6
AND13	IMPROVEMENT OF JOSÉ ANTONIO PÁEZ BRIDGE (CO)	1.3
AND14	COMPLETION OF THE PAVING OF THE TAME - ARAUCA ROAD (CO)	10.5
AND18	PAVING OF SECTIONS BETWEEN VILLAVICENCIO AND PUERTO LÓPEZ (CO)	26.0
AND21	BINATIONAL BORDER SERVICE CENTER (CEBAF) - ROAD AXIS No. 1 (EC - PE)	15.9
AND25	NEW SANTA ROSA REGIONAL AIRPORT (EC)	47.1
AND26	PUERTO INCA - HUAQUILLAS ROAD AND HUAQUILLAS - AGUAS VERDES INTERNATIONAL BRIDGE, HUAQUILLAS BYPASS (EC - PE)	85.8
AND35	IMPROVEMENT AND REHABILITATION OF THE BELLA UNIÓN - GUALAQUIZA ROAD SECTION (EC)	23.2
AND38	IMPROVEMENT AND REHABILITATION OF THE NARUPA - GUAMANIYACU ROAD SECTION (EC)	23.5
AND56	STRENGTHENING OF THE CUATRICENTENARIO - CUESTECITAS AND EL COROZO - SAN MATEO INTERCONNECTIONS (CO - VE)	125.2
AND57	ELECTRICITY INTERCONNECTION PROJECT BETWEEN COLOMBIA AND ECUADOR: A 230 KV-LINE BETWEEN PASTO (COLOMBIA) AND QUITO (ECUADOR) SUBSTATIONS (CO - EC)	45.4
AND60	EXTENSION OF THE NOR-PERUANO OIL PIPELINE (EC - PE)	0.0
AND61	GAS INTERCONNECTION PROJECTS (CO)	335.0
AND64	ELECTRICITY INTERCONNECTION PROJECT BETWEEN PUERTO NUEVO - PUERTO PÁEZ (VENEZUELA) AND PUERTO CARREÑO (COLOMBIA) (CO)	5.0
AND88	SULLANA - EL ALAMOR ROAD (PE)	29.5
AND89	SULLANA - MACARÁ - LOJA ROAD (PE)	48.4
AND91	CONSTRUCTION OF THE NEW INTERNATIONAL RUMICHACA BRIDGE AND IMPROVEMENT OF THE EXISTING BRIDGE (CO - EC)	4.1
TOTAL		829.6

VI. ANCHOR PROJECTS

The countries identified ten anchor projects in the Andean Hub, totaling an estimated investment of US\$ 597.4 million, according to the following detail:

Table E.15 • Anchor Projects

Group	Code	Anchor Projects	Estimated Investment (US\$ million)	Financing Source	Scope	Project Stage
1	AND01	ROAD CORRIDOR CONNECTING SANTA MARTA - PARAGUACHÓN - MARACAIBO - BARQUISIMETO - ACARIGUA (CO - VE)	411.2	Public/Private	Binational	Execution
2	AND82	IMPLEMENTATION OF THE BINATIONAL BORDER SERVICE CENTER (CEBAF) AT THE TULCÁN – IPIALES (RUMICHACA) BORDER CROSSING (CO - EC)	65.0	Public	Binational	Pre-Execution
2	AND81	IMPROVEMENT OF THE BORDER CROSSINGS IN THE NORTHERN DEPARTMENT OF SANTANDER AND THE TÁCHIRA STATE (CO - VE)	2.0	Public	Binational	Pre-Execution
3	AND10	SARAVENA BORDER CROSSING (CO)	3.3	Public	National	Profiling
4	AND17	PUERTO GAITÁN – PUERTO CARREÑO MULTIMODAL PROJECT, INCLUDING IMPROVEMENT OF THE NAVIGATION CONDITIONS ON THE META RIVER (CO)	108.0	Public	National	Execution
5	AND21	BINATIONAL BORDER SERVICE CENTER (CEBAF) ROAD AXIS No. 1 (EC - PE)	15.9	Public	Binational	Concluded
6	AND31	BINATIONAL BORDER SERVICE CENTER (CEBAF) AT SAN MIGUEL (CO - EC)	25.0	Public	Binational	Pre-Execution
7	AND39	PAVING OF VILCABAMBA - PUENTE DE INTEGRACIÓN (INTEGRATION BRIDGE) - JAÉN (EC - PE)	337.9	Public	Binational	Execution
8	AND47	DESAGUADERO BINATIONAL BORDER SERVICE CENTER (CEBAF) (BO - PE)	40.2	Public	Binational	Pre-Execution
10	AND68	USE OF EXISTING INFRASTRUCTURE AND NEW CONNECTIONS TO ENHANCE COMMUNICATIONS INFRASTRUCTURE (BO - CO - EC - PE - VE)	0.1	Public	Multi-national	Execution
TOTAL			597.4			

Note: (*) Investments in this existing project have not been included in the estimated total amount as they were mostly made before IIRSA was launched.

CAPRICORN HUB



PROJECTS



ESTIMATED INVESTMENT



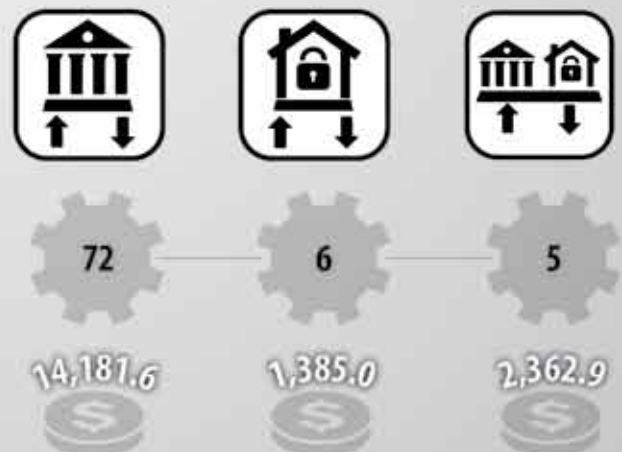
BY STAGE



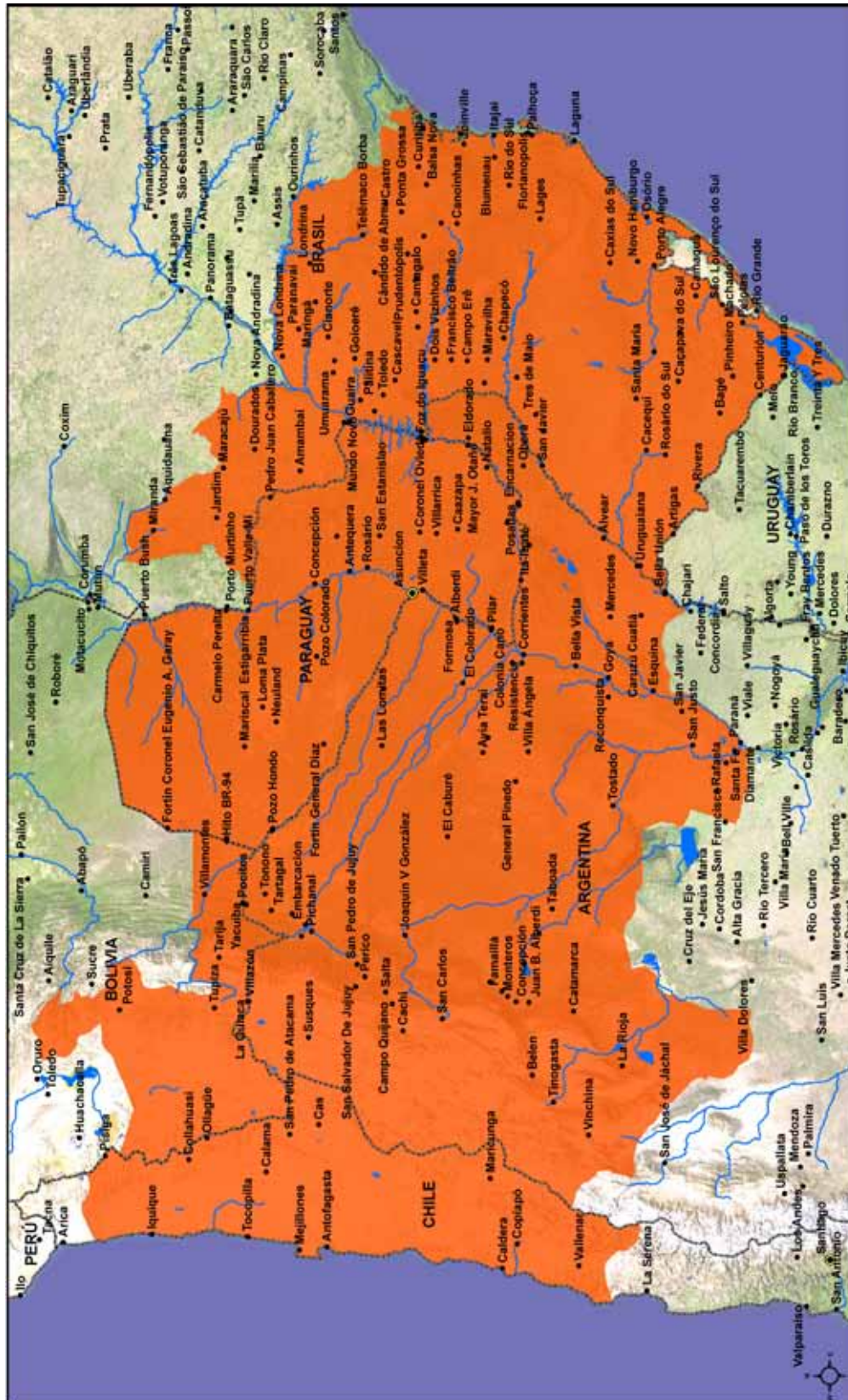
BY SECTOR



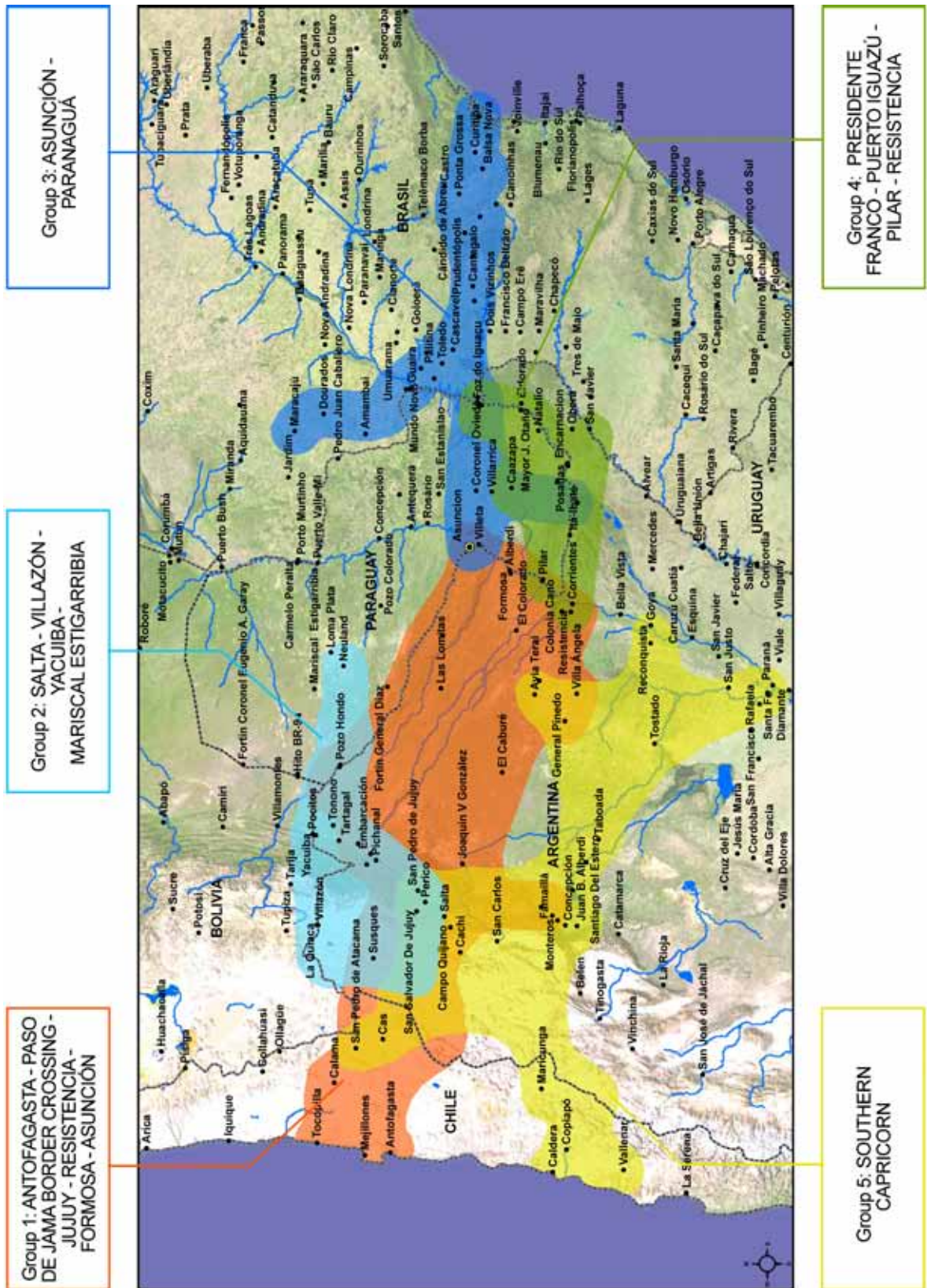
BY SOURCE OF FINANCING



CAPRICORN HUB Area of Influence

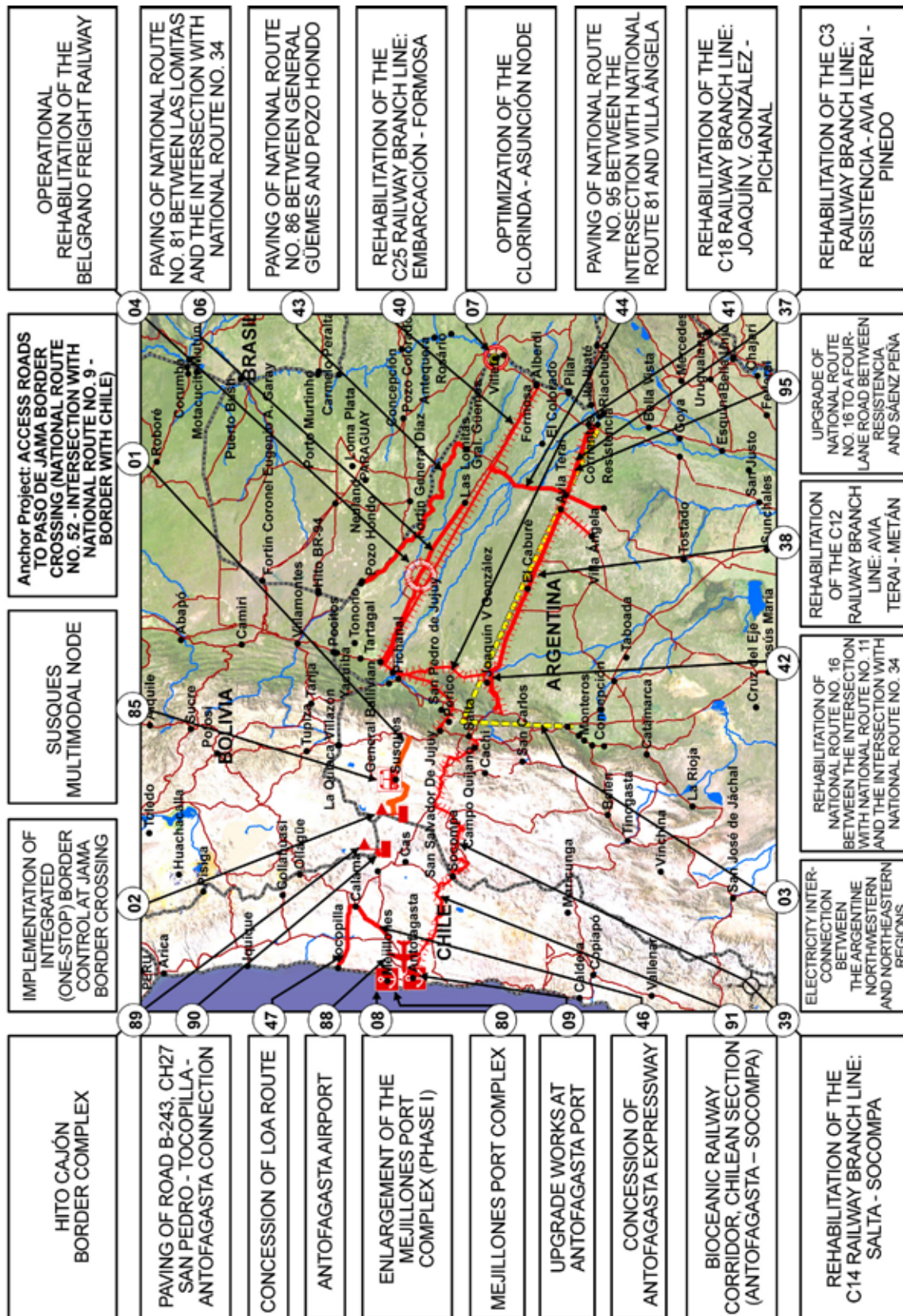


Project Groups



CAPRICORN HUB - Group 1:

Antofagasta - Paso de Jama border crossing - Jujuy - Resistencia - Formosa - Asunción



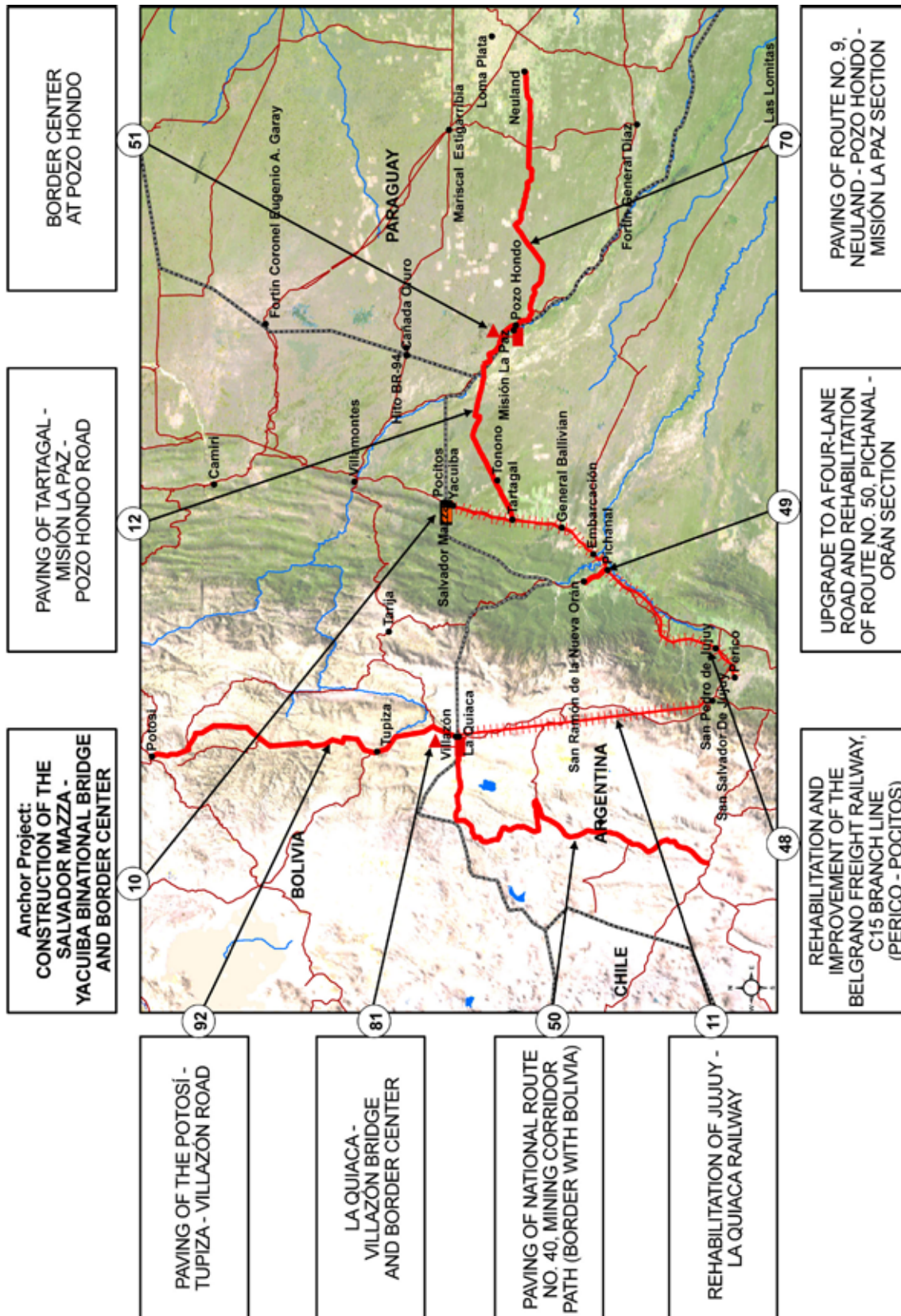
STRATEGIC FUNCTION

- Improve production integration and logistics conditions in the northwest region in Argentina, the south of Bolivia, Paraguay and Chile.
- Reinforce the connectivity of the territories involved toward the Pacific and the Paraguay-Paraná Waterway.
- Take profit from the complementary opportunities for the development of integrated tourism (northwestern Argentina, south of Bolivia and north of Chile).
- Facilitate the flow of people among the countries of the Group.

Code	Stage	Capricorn Hub: Group 1	Estimated Investment (US\$ million)
CAP01	●	ACCESS ROADS TO PASO DE JAMA BORDER CROSSING (NATIONAL ROUTE NO. 52 - INTERSECTION WITH NATIONAL ROUTE NO. 9 - BORDER WITH CHILE) (AR)	54.0
CAP02	●	IMPLEMENTATION OF INTEGRATED (ONE-STOP) BORDER CONTROL AT JAMA BORDER CROSSING (AR - CH)	4.0
CAP03	●	ELECTRICITY INTERCONNECTION BETWEEN THE ARGENTINE NORTHWESTERN AND NORTHEASTERN REGIONS (AR)	725.0
CAP04	●	OPERATIONAL REHABILITATION OF THE BELGRANO FREIGHT RAILWAY (AR)	350.0
CAP06	●	PAVING OF NATIONAL ROUTE NO. 81 BETWEEN LAS LOMITAS AND THE INTERSECTION WITH NATIONAL ROUTE NO. 34 (AR)	100.0
CAP07	●	OPTIMIZATION OF THE CLORINDA - ASUNCIÓN NODE (AR - PY)	101.2
CAP08	●	ENLARGEMENT OF THE MEJILLONES PORT COMPLEX (PHASE I) (CH)	120.0
CAP09	●	UPGRADE WORKS AT ANTOFAGASTA PORT (CH)	18.0
CAP37	●	REHABILITATION OF THE C3 RAILWAY BRANCH LINE: RESISTENCIA - AVIA TERAÍ - PINEDO (AR)	104.0
CAP38	●	REHABILITATION OF THE C12 RAILWAY BRANCH LINE: AVIA TERAÍ - METÁN (AR)	212.0
CAP39	●	REHABILITATION OF THE C14 RAILWAY BRANCH LINE: SALTA - SOCOMPA (AR)	60.0
CAP40	●	REHABILITATION OF THE C25 RAILWAY BRANCH LINE: EMBARCACIÓN - FORMOSA (AR)	64.0
CAP41	●	REHABILITATION OF THE C18 RAILWAY BRANCH LINE: JOAQUÍN V. GONZÁLEZ - PICHANAL (AR)	50.0
CAP42	●	REHABILITATION OF NATIONAL ROUTE NO. 16 BETWEEN THE INTERSECTION WITH NATIONAL ROUTE NO. 11 AND THE INTERSECTION WITH NATIONAL ROUTE NO. 34 (AR)	350.0
CAP43	●	PAVING OF NATIONAL ROUTE NO. 86 BETWEEN GENERAL GÜEMES AND POZO HONDO (AR)	200.0
CAP44	●	PAVING OF NATIONAL ROUTE NO. 95 BETWEEN THE INTERSECTION WITH NATIONAL ROUTE 81 AND VILLA ÁNGELA (AR)	90.0
CAP46	●	CONCESSION OF ANTOFAGASTA EXPRESSWAY (CH)	370.0
CAP47	●	CONCESSION OF LOA ROUTE (CH)	389.0
CAP80	●	MEJILLONES PORT COMPLEX (CH)	80.0
CAP85	●	SUSQUES MULTIMODAL NODE (AR)	0.0
CAP88	●	ANTOFAGASTA AIRPORT (CH)	28.0
CAP89	●	HITO CAJÓN BORDER COMPLEX (CH)	5.0
CAP90	●	PAVING OF ROAD B-243, CH27 SAN PEDRO - TOCOPILLA - ANTOFAGASTA CONNECTION (CH)	3.0
CAP91	●	BIOCEANIC RAILWAY CORRIDOR, CHILEAN SECTION (ANTOFAGASTA – SOCOMPA) (CH)	0.0
CAP95	●	UPGRADE OF NATIONAL ROUTE NO. 16 TO A FOUR-LANE ROAD BETWEEN RESISTENCIA AND SÁENZ PEÑA (AR)	300.0
TOTAL			3,777.2

Nota: (*) Obra preexistente. Eventualmente se definirán las acciones requeridas para que el tramo se incorpore al corredor ferroviario bioceánico.

CAPRICORN HUB - Group 2: Salta - Villazón - Yacuiba - Mariscal Estigarribia



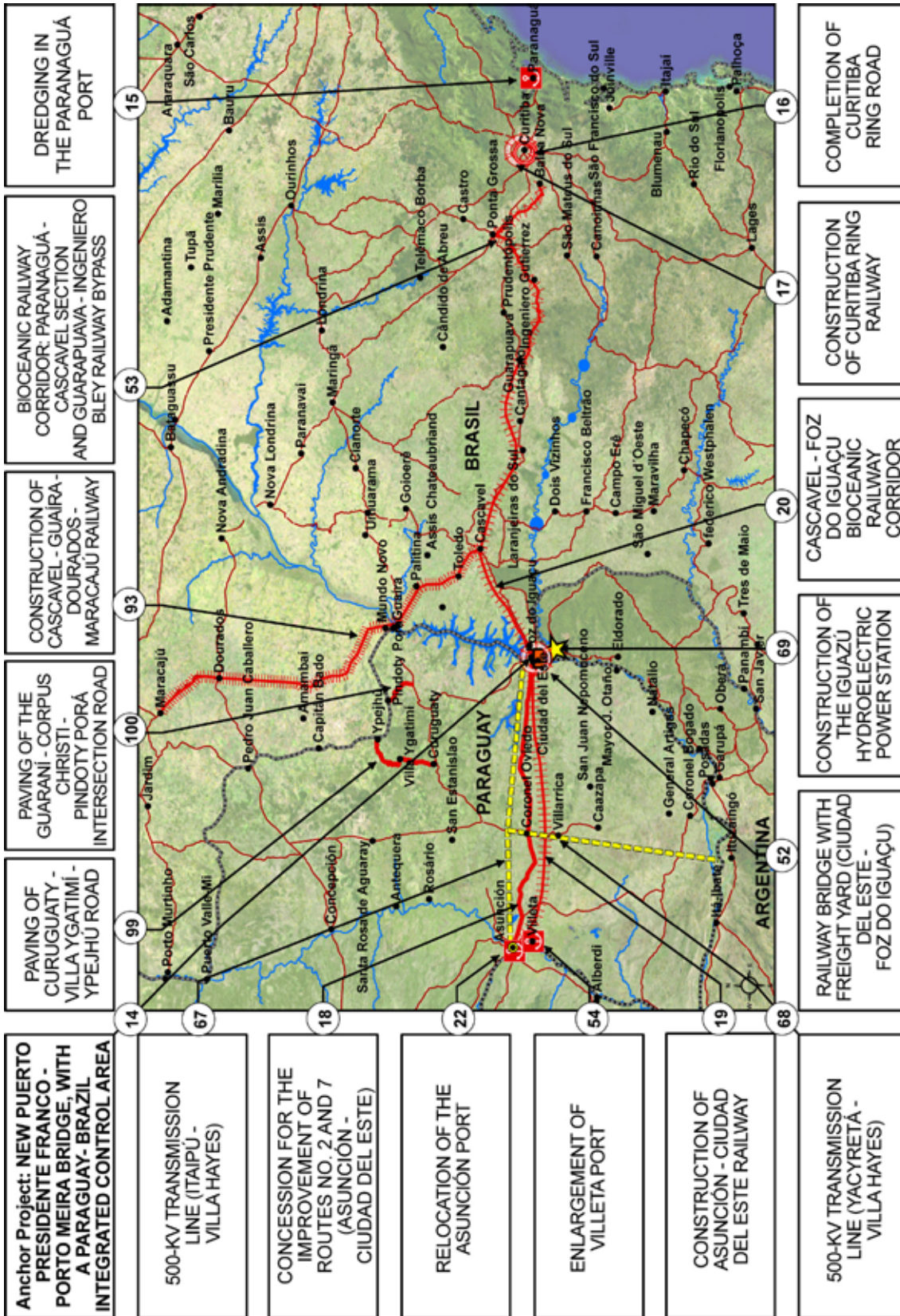
STRATEGIC FUNCTION

- Reduce costs and provide greater security to trade in goods and services among Argentina - Bolivia - Paraguay.
- Facilitate the flow of people among the countries of the Group.
- Articulate the Central Interoceanic and Capricorn Hubs.
- Organization of territorial dynamics and reduction of its environmental impact.

Code	Stage	Capricorn Hub: Group 2	Estimated Investment (US\$ million)
CAP10	●	CONSTRUCTION OF THE SALVADOR MAZZA - YACUIBA BINATIONAL BRIDGE AND BORDER CENTER (AR - BO)	45.0
CAP11	●	REHABILITATION OF JUJUY - LA QUIACA RAILWAY (AR)	62.0
CAP12	●	PAVING OF TARTAGAL - MISIÓN LA PAZ - POZO HONDO ROAD (AR)	150.0
CAP48	●	REHABILITATION AND IMPROVEMENT OF THE BELGRANO FREIGHT RAILWAY, C15 BRANCH LINE (PERICO - POCITOS) (AR)	60.0
CAP49	●	UPGRADE TO A FOUR-LANE ROAD AND REHABILITATION OF ROUTE NO. 50, PICHANAL - ORÁN SECTION (AR)	30.0
CAP50	●	PAVING OF NATIONAL ROUTE NO. 40, MINING CORRIDOR PATH (BORDER WITH BOLIVIA) (AR)	400.0
CAP51	●	BORDER CENTER AT POZO HONDO (PY)	1.5
CAP70	●	PAVING OF ROUTE NO. 9, NEULAND - POZO HONDO - MISIÓN LA PAZ SECTION (PY)	144.0
CAP81	●	LA QUIACA - VILLAZÓN BRIDGE AND BORDER CENTER (AR - BO)	15.0
CAP92	●	PAVING OF THE POTOSÍ - TUPIZA - VILLAZÓN ROAD (BO)	180.4
TOTAL			1,087.9

Note: (*) Hinge project with Group 1 of the Central Interoceanic Hub

Asunción - Paranaguá

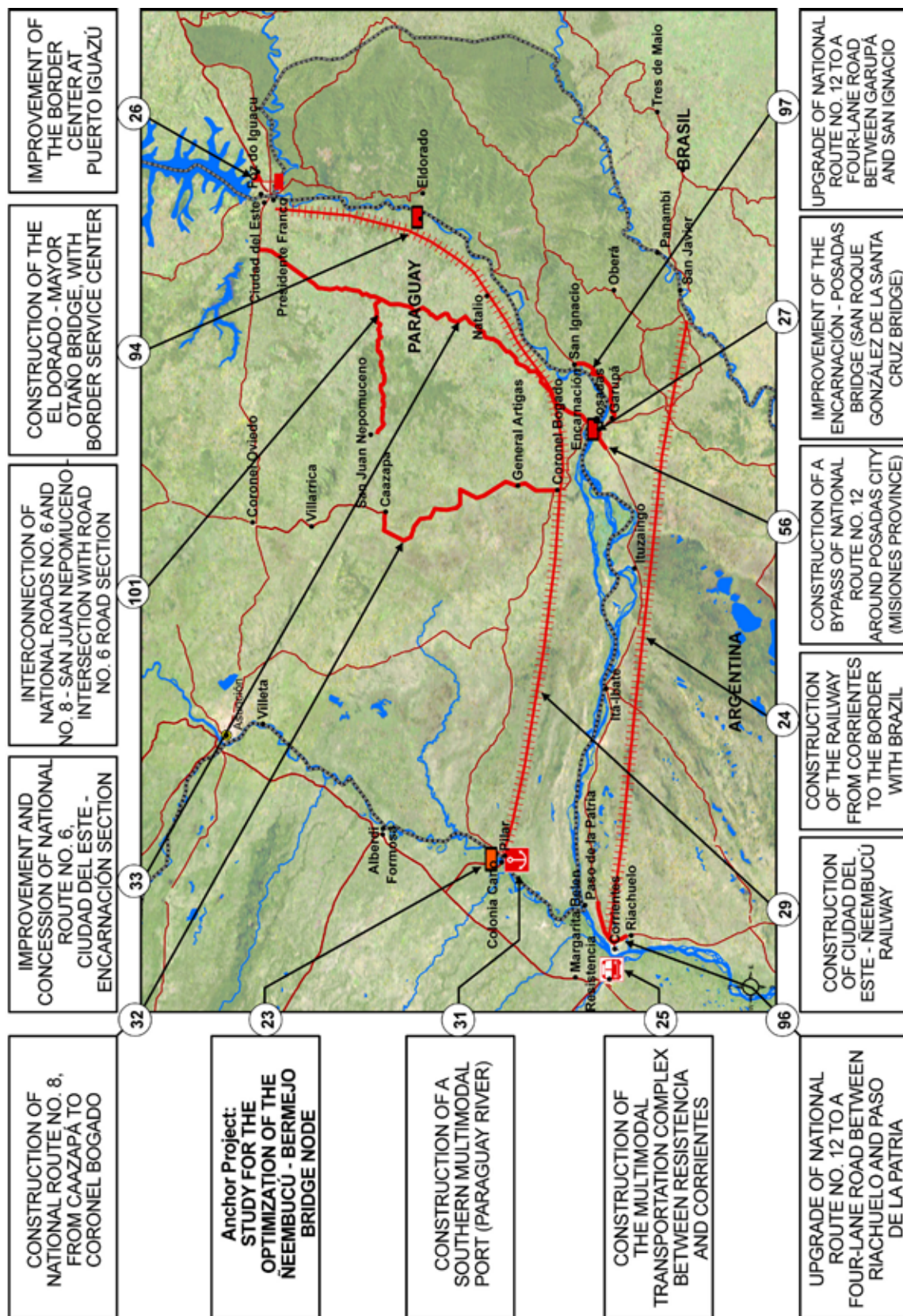


STRATEGIC FUNCTION

- Consolidate a high-capacity, low-cost system for moving bulk cargo from the region to international markets.
- Promote socio-economic regional development.

Code	Stage	Capricorn Hub: Group 3	Estimated Investment (US\$ million)
CAP14	●	NEW PUERTO PRESIDENTE FRANCO - PORTO MEIRA BRIDGE, WITH A PARAGUAY BRAZIL INTEGRATED CONTROL AREA (BR - PY)	173.0
CAP15	●	DREDGING IN THE PARANAGUÁ PORT (BR)	100.0
CAP16	●	COMPLETION OF CURITIBA RING ROAD (BR)	140.0
CAP17	●	CONSTRUCTION OF CURITIBA RING RAILWAY (BR)	0.0
CAP18	●	CONCESSION FOR THE IMPROVEMENT OF ROUTES NO. 2 AND 7 (ASUNCIÓN - CIUDAD DEL ESTE) (PY)	500.0
CAP19	●	CONSTRUCTION OF ASUNCIÓN - CIUDAD DEL ESTE RAILWAY (PY)	500.0
CAP20	●	CASCADE - FOZ DO IGUAÇU BIOCEANIC RAILWAY CORRIDOR (BR)	324.0
CAP22	●	RELOCATION OF THE ASUNCIÓN PORT (PY)	25.0
CAP52	●	RAILWAY BRIDGE WITH FREIGHT YARD (CIUDAD DEL ESTE - FOZ DO IGUAÇU) (BR - PY)	41.0
CAP53	●	BIOCEANIC RAILWAY CORRIDOR: PARANAGUÁ - CASCADE SECTION AND GUARAPUAVA - INGENIERO BLEY RAILWAY BYPASS (BR)	1,500.0
CAP54	●	ENLARGEMENT OF VILLETA PORT (PY)	30.0
CAP67	●	500-KV TRANSMISSION LINE (ITAIPU - VILLA HAYES) (PY)	555.0
CAP68	●	500-KV TRANSMISSION LINE (YACYRETÁ - VILLA HAYES) (PY)	297.0
CAP69	●	CONSTRUCTION OF THE IGUAZÚ HYDROELECTRIC POWER STATION (PY)	260.0
CAP93	●	CONSTRUCTION OF CASCADE - GUAÍRA - DOURADOS - MARACAJÚ RAILWAY (BR)	2,000.0
CAP99	●	PAVING OF CURUGUATY - VILLA YGATIMÍ - YPEJHÚ ROAD (PY)	77.0
CAP100	●	PAVING OF THE GUARANÍ - CORPUS CHRISTI - PINDOTY PORÁ INTERSECTION ROAD (PY)	43.0
TOTAL			6,565.0

CAPRICORN HUB - Group 4: Presidente Franco - Puerto Iguazú - Pilar - Resistencia

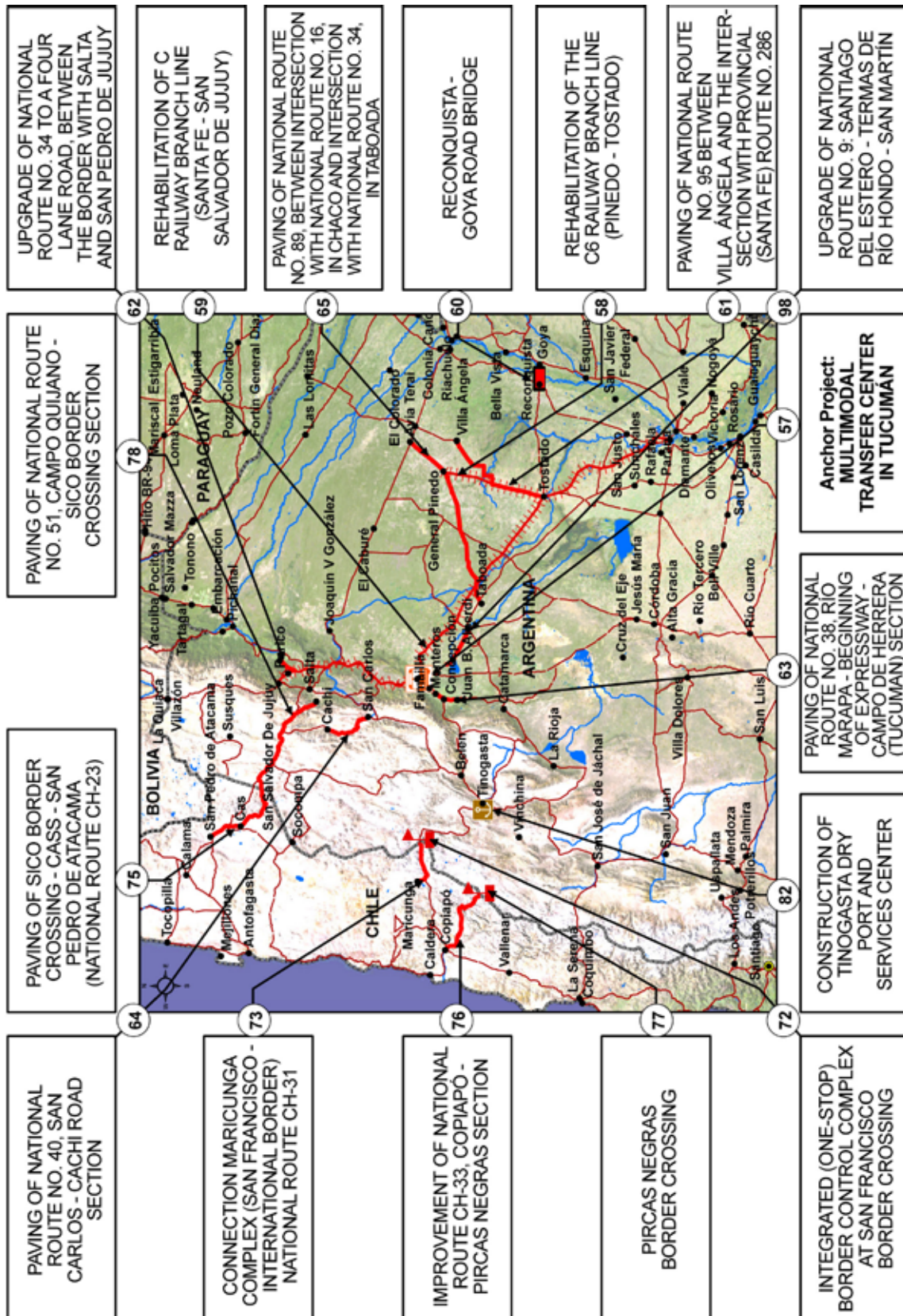


STRATEGIC FUNCTION

- Make intra-regional economic development more dynamic.
- Improve options so as to have outlets for the region's products towards the Paraguay-Paraná Waterway.
- Provide basic conditions for border facilitation.
- Facilitate the flow of people among the countries of the Group.

Code	Stage	Capricorn Hub: Group 4	Estimated Investment (US\$ million)
CAP23	●	STUDY FOR THE OPTIMIZATION OF THE ÑEEMBUCÚ -BERMEJO NODE (AR - PY)	61.2
CAP24	●	CONSTRUCTION OF THE RAILWAY FROM CORRIENTES TO THE BORDER WITH BRAZIL (AR)	0.0
CAP25	●	CONSTRUCTION OF THE MULTIMODAL TRANSPORTATION COMPLEX BETWEEN RESISTENCIA AND CORRIENTES (AR)	175.0
CAP26	●	IMPROVEMENT OF THE BORDER CENTER AT PUERTO IGUAZÚ (AR)	2.0
CAP27	●	IMPROVEMENT OF THE ENCARNACIÓN - POSADAS BRIDGE (SAN ROQUE GONZÁLEZ DE LA SANTA CRUZ BRIDGE) (AR - PY)	52.2
CAP29	●	CONSTRUCTION OF CIUDAD DEL ESTE - PILAR ÑEEMBUCÚ (PY)	2,800.0
CAP31	●	CONSTRUCTION OF A SOUTHERN MULTIMODAL PORT (PARAGUAY RIVER) (PY)	120.0
CAP32	●	CONSTRUCTION OF NATIONAL ROUTE NO. 8, FROM CAAZAPÁ TO CORONEL BOGADO (PY)	212.0
CAP33	●	IMPROVEMENT AND CONCESSION OF NATIONAL ROUTE NO. 6, CIUDAD DEL ESTE - ENCARNACIÓN SECTION (PY)	136.0
CAP56	●	CONSTRUCTION OF A BYPASS OF NATIONAL ROUTE NO. 12 AROUND POSADAS CITY (MISIONES PROVINCE)	35.0
CAP94	●	CONSTRUCTION OF THE EL DORADO - MAYOR OTAÑO BRIDGE, WITH BORDER SERVICE CENTER (AR - PY)	0.0
CAP96	●	UPGRADE OF NATIONAL ROUTE NO. 12 TO A FOUR-LANE ROAD BETWEEN RIACHUELO AND PASO DE LA PATRIA (AR)	80.0
CAP97	●	UPGRADE OF NATIONAL ROUTE NO. 12 TO A FOUR-LANE ROAD BETWEEN GARUPÁ AND SAN IGNACIO (AR)	92.0
CAP101	●	INTERCONNECTION OF NATIONAL ROADS NO. 6 AND NO. 8 - SAN JUAN NEPOMUCENO -INTERSECTION WITH ROAD NO. 6 ROAD SECTION (PY)	78.0
TOTAL			3,843.4

CAPRICORN HUB - Group 5: Southern Capricorn



STRATEGIC FUNCTION

- Implement intermodal articulation among the groups of the Capricorn Hub, the MERCOSUR-Chile Hub, the Central Interoceanic Hub, and the Paraguay-Paraná Waterway Hub.
- Improve sustainable economic and social development, connectivity, and intra-regional integration.
- Enable a new option for trade flows between the region and the Pacific markets.
- Facilitate the flow of people among the countries of the Group.

Code	Stage	Capricorn Hub: Group 5	Estimated Investment (US\$ million)
CAP57	●	MULTIMODAL TRANSFER CENTER IN TUCUMÁN (AR)	20.0
CAP58	●	REHABILITATION OF THE C6 RAILWAY BRANCH LINE (PINEDO - TOSTADO) (AR)	100.0
CAP59	●	REHABILITATION OF C RAILWAY BRANCH LINE (SANTA FE - SAN SALVADOR DE JUJUY) (AR)	270.0
CAP60	●	RECONQUISTA - GOYA ROAD BRIDGE (AR)	850.0
CAP61	●	PAVING OF NATIONAL ROUTE NO. 95 BETWEEN VILLA ÁNGELA AND THE INTERSECTION WITH PROVINCIAL (SANTA FE) ROUTE NO. 286 (AR)	37.0
CAP62	●	UPGRADE OF NATIONAL ROUTE NO. 34 TO A FOUR-LANE ROAD, BETWEEN THE BORDER WITH SALTA AND SAN PEDRO DE JUJUY (AR)	140.0
CAP63	●	PAVING OF NATIONAL ROUTE NO. 38, RÍO MARAPA - BEGINNING OF EXPRESSWAY - CAMPO DE HERRERA (TUCUMAN) SECTION (AR)	300.0
CAP64	●	PAVING OF NATIONAL ROUTE NO. 40, SAN CARLOS - CACHI ROAD SECTION (AR)	250.0
CAP65	●	PAVING OF NATIONAL ROUTE NO. 89, BETWEEN INTERSECTION WITH NATIONAL ROUTE NO. 16, IN CHACO AND INTERSECTION WITH NATIONAL ROUTE NO. 34, IN TABOADA (AR)	95.0
CAP72	●	INTEGRATED (ONE-STOP) BORDER CONTROL COMPLEX AT SAN FRANCISCO BORDER CROSSING (AR - CH)	4.0
CAP73	●	CONNECTION MARICUNGA COMPLEX (SAN FRANCISCO - INTERNATIONAL BORDER) NATIONAL ROUTE CH-31 (CH)	70.0
CAP75	●	PAVING OF SICO BORDER CROSSING - CASS- SAN PEDRO DE ATACAMA (NATIONAL ROUTE CH-23) (CH)	30.0
CAP76	●	IMPROVEMENT OF NATIONAL ROUTE CH-33, COPIAPÓ - PIRCAS NEGRAS SECTION (CH)	30.0
CAP77	●	PIRCAS NEGRAS BORDER CROSSING (*) (AR - CH)	5.0
CAP78	●	PAVING OF NATIONAL ROUTE NO. 51, CAMPO QUIJANO - SICO BORDER CROSSING SECTION (AR)	180.0
CAP82	●	CONSTRUCTION OF TINOGASTA DRY PORT AND SERVICES CENTER (AR)	0.0
CAP98	●	UPGRADE OF NATIONAL ROUTE NO. 9: SANTIAGO DEL ESTERO - TERMAS DE RÍO HONDO - SAN MARTÍN (AR)	275.0
TOTAL			2,656.0

Note: (*) Hinge project with Group 4 of the MERCOSUR-Chile Hub

PROJECT PORTFOLIO OF THE CAPRICORN HUB

I. GENERAL ASPECTS

Los países han acordado incluir en el Eje de Capricornio ochenta y tres proyectos con una inversión estimada de US\$ 17.929,5 millones tal como se resume a continuación:

Table F.1 • General Indicators of the Capricorn Hub

Group	Name	Number of Projects	Estimated Investment (US\$ million)
Group 1	ANTOFAGASTA - PASO DE JAMA BORDER CROSSING - JUJUY - RESISTENCIA - FORMOSA - ASUNCIÓN	25	3,777.2
Group 2	SALTA - VILLAZÓN - YACUIBA - MARISCAL ESTIGARRIBIA	10	1,087.9
Group 3	ASUNCIÓN - PARANAGUÁ	17	6,565.0
Group 4	PRESIDENTE FRANCO - PUERTO IGUAZÚ - PILAR - RESISTENCIA	14	3,843.4
Group 5	SOUTHERN CAPRICORN	17	2,656.0
TOTAL		83	17,929.5

II. SOURCE OF FINANCING

Table F.2 • Source of financing of the Capricorn Hub projects

Source of financing	Number of Projects	% Projects	Estimated Investment (US\$ million)	% Investment
Public	72	86.8	14,181.6	79.1
Private	6	7.2	1,385.0	7.7
Public/Private	5	6.0	2,362.9	13.2
TOTAL	83	100.0	17,929.5	100.0

III. API PROJECTS

Table F.3 • API Projects - Capricorn Hub

Code	Project Name	Estimated Investment (US\$ million)
9	CONSTRUCTION OF THE SALVADOR MAZZA - YACUIBA BINATIONAL BRIDGE AND BORDER CENTER (AR - BO)	45.0
CAP10	CONSTRUCTION OF THE SALVADOR MAZZA - YACUIBA BINATIONAL BRIDGE AND BORDER CENTER (AR - BO)	45.0
10	ARGENTINA - BOLIVIA WEST CONNECTION (AR - BO)	477.0
CAP11	REHABILITATION OF JUJUY - LA QUIACA RAILWAY (AR)	62.0
CAP50	PAVIN OF NATIONAL ROUTE NO. 40, MINE CORRIDOR PATH (BORDER WITH BOLIVIA) (AR)	400.0
CAP81	LA QUIACA - VILLAZÓN BRIDGE AND BORDER CENTER (AR - BO)	15.0
11	PARANAGUÁ - ANTOFAGASTA BIOCEANIC RAILWAY CORRIDOR (AR - BR - CH - PY)	5,102.2
CAP20	CASCAVEL - FOZ DO IGUAÇU BIOCEANIC RAILWAY CORRIDOR (BR)	324.0
CAP23	OPTIMIZATION OF THE ÑEEMBUCÚ - BERMEJO BRIDGE NODE (AR - PY)	61.2
CAP29	CONSTRUCTION OF CIUDAD DEL ESTE - ÑEEMBUCÚ RAILWAY (PY)	2,800.0
CAP37	REHABILITATION OF THE C3 RAILWAY BRANCH LINE: RESISTENCIA - AVIA TERAÍ - PINEDO (AR)	104.0
CAP38	REHABILITATION OF THE C12 RAILWAY BRANCH LINE: AVIA TERAÍ - METÁN (AR)	212.0
CAP39	REHABILITATION OF THE C14 RAILWAY BRANCH LINE: SALTA - SOCOMPA (AR)	60.0
CAP52	RAILWAY BRIDGE WITH FREIGHT YARD (CIUDAD DEL ESTE - FOZ DO IGUAÇU) (BR - PY)	41.0
CAP53	BIOCEANIC RAILWAY CORRIDOR: PARANAGUÁ - CASCAVEL SECTION AND GUARAPUAVA - INGENIERO BLEY RAILWAY BYPASS (BR)	1,500.0
CAP91	BIOCEANIC RAILWAY CORRIDOR, CHILEAN SECTION (ANTOFAGASTA - SOCOMPA) (CH)	0.0
12	FOZ - CIUDAD DEL ESTE - ASUNCIÓN - CLORINDA ROAD CONNECTION (AR - BR - PY)	774.2
CAP07	OPTIMIZATION OF THE CLORINDA - ASUNCIÓN NODE (AR - PY)	101.2
CAP14	NEW PUERTO PRESIDENTE FRANCO - PORTO MEIRA BRIDGE, WITH A PARAGUAY - BRASIL INTEGRATED CONTROL AREA (BR - PY)	173.0
CAP18	CONCESSION FOR THE IMPROVEMENT OF ROUTES NO. 2 Y 7 (ASUNCIÓN - CIUDAD DEL ESTE) (PY)	500.0
13	ITAIPÚ - ASUNCIÓN - YACYRETA 500 KV TRANSMISSION LINE (BR - PY)	852.0
CAP67	500 KV TRANSMISSION LINE (ITAIPÚ - VILLA HAYES) (PY)	555.0
CAP68	500 KV TRANSMISSION LINE (YACYRETÁ - VILLA HAYES) (PY)	297.0
TOTAL		7,250.4

Note: (*) This individual project has been completed and was incorporated into API because it complements the connectivity network of the structured project.

IV. SECTOR/SUBSECTORBASED BREAKDOWN AND TYPE OF WORKS INVOLVED

Table F.4 • Sector-based breakdown of the Capricorn Hub

	Transport				Energy			
Subsector	N° Projects	% Projects	Estimated Investment (US\$ millions)	% Investment	N° Projects	% Projects	Estimated Investment (US\$ millions)	% Investment
Air	1	1.2	28.0	0.2				
Road	40	50.6	6,871.8	42.7				
Railway	19	24.1	8,497.0	52.8				
River	3	3.8	175.0	1.1				
Sea	4	5.1	318.0	2.0				
Multimodal	3	3.8	20.0	0.1				
Border Crossing	9	11.4	182.7	1.1				
Power Generation					1	25.0	260.0	14.2
Power Interconnection					3	75.0	1,577.0	85.8
TOTAL	79	100.0	16,092.5	100.0	4	100.0	1,837.0	100.0

Table F.5 • Air Transport

	Projects	Estimated Investment
Type of Work	N°	US\$ million
New airports	1	28,0
TOTAL	1	28,0

Table F.6 • Road Transport

	Projects	Estimated Investment
Type of Work	N°	US\$ million
Extension of the road capacity	9	2,176.0
Road by-pass and access to cities	2	175.0
Road maintenance	1	90.0
Paving (new work)	17	2,266.4
Bridges (new ones and refitting)	6	1,311.4
Refitting of road and structures	5	853.0
TOTAL	40	6,871.8

Table F.7 • **Railway Transport**

	Projects	Estimated Investment
Type of Work	N°	US\$ million
Railway by-pass	1	0.0
Building of railways	8	7,165.0
Refitting of railways	10	1,332.0
TOTAL	19	8,497.0

Table F.8 • **River Transport**

	Projects	Estimated Investment
Type of Work	N°	US\$ million
Refitting of the existing river ports	2	55.0
Building of new river ports	1	120.0
TOTAL	3	175.0

Table F.9 • **Maritime Transport**

	Projects	Estimated Investment
Type of Work	N°	US\$ million
Extension of the road infrastructure of the maritime ports	4	318.0
TOTAL	4	318.0

Table F.10 • **Multimodal Transport**

	Projects	Estimated Investment
Type of Work	N°	US\$ million
Transfer stations	2	20.0
Multimodal transportation	1	0.0
TOTAL	3	20.0

Table F.11 • **Border Crossings**

	Projects	Estimated Investment
Type of Work	Nº	US\$ million
Refitting of existing infrastructure in border control centers	5	149.7
Infrastructure for the setting up of border control centers	4	33.0
TOTAL	9	182.7

Table F.12 • **Power Generation**

	Projects	Estimated Investment
Type of Work	Nº	US\$ million
Hidroelectric plants (new ones and refitting) - microcentrals	1	260.0
TOTAL	1	260.0

Table F.13 • **Power Interconnection**

	Projects	Estimated Investment
Type of Work	Nº	US\$ million
Building of new power interconnections	3	1,577.0
TOTAL	3	1,577.0

V. PROGRESS IN THE CAPRICORN HUB PROJECTS

Table F.14 • **Projects by Progress Attained**

Stage	Number of Projects	% Projects	Estimated Investment (US\$ million)	% Investment
Profiling	18	21.7	1,870.0	10.4
Pre-Execution	32	38.6	10,633.9	59.3
Execution	22	26.5	3,697.6	20.6
Concluded	11	13.2	1,728.0	9.7
TOTAL	83	100.0	17,929.5	100.0

Table F.15 • **Concluded Projects**

Code	Project Name	Estimated Investment (US\$ million)
CAP01	ACCESS ROADS TO PASO DE JAMA BORDER CROSSING (NATIONAL ROUTE NO. 52 - INTERSECTION WITH NATIONAL ROUTE NO. 9 - BORDER WITH CHILE) (AR)	54.0
CAP02	IMPLEMENTATION OF INTEGRATED (ONE-STOP) BORDER CONTROL AT JAMA BORDER CROSSING (AR - CH)	4.0
CAP03	ELECTRICITY INTERCONNECTION BETWEEN THE ARGENTINE NORTHWESTERN AND NORTHEASTERN REGIONS (AR)	725.0
CAP06	PAVING OF NATIONAL ROUTE NO. 81 BETWEEN LAS LOMITAS AND THE INTERSECTION WITH NATIONAL ROUTE NO. 34 (AR)	100.0
CAP08	ENLARGEMENT OF THE MEJILLONES PORT COMPLEX (PHASE I) (CH)	120.0
CAP09	UPGRADE WORKS AT ANTOFAGASTA PORT (CH)	18.0
CAP56	CONSTRUCTION OF A BYPASS OF NATIONAL ROUTE NO. 12 AROUND POSADAS CITY (MISIONES PROVINCE) (AR)	35.0
CAP61	PAVING OF NATIONAL ROUTE NO. 95 BETWEEN VILLA ÁNGELA AND THE INTERSECTION WITH PROVINCIAL (SANTA FE) ROUTE NO. 286 (AR)	37.0
CAP67	500-KV TRANSMISSION LINE (ITAIPU - VILLA HAYES) (PY)	555.0
CAP80	MEJILLONES PORT COMPLEX (CH)	80.0
CAP91	BIOCEANIC RAILWAY CORRIDOR, CHILEAN SECTION (ANTOFAGASTA – SOCOMPA) (CH)	0.0
TOTAL		1,728.0

VI. ANCHOR PROJECTS

The countries identified five anchor projects in the Capricorn Hub, totaling an estimated investment of US\$ 353.2 million, according to the following detail:

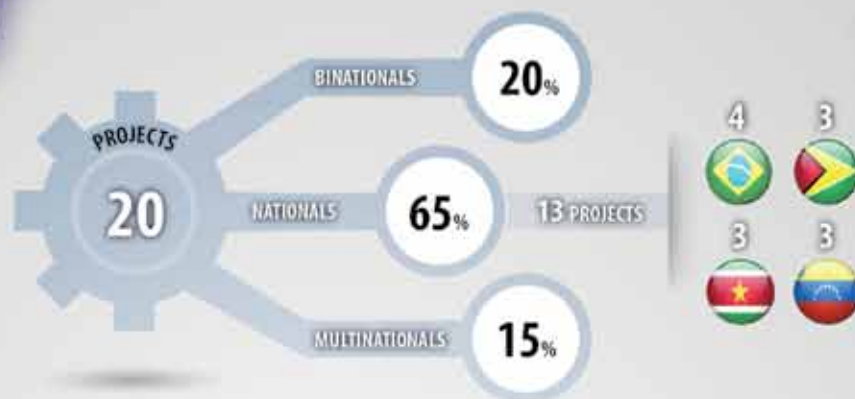
Table F.16 • **Anchor Projects**

Group	Code	Anchor Projects	Estimated Investment (US\$ million)	Financing Source	Scope	Project Stage
1	CAP01	ACCESS ROADS TO PASO DE JAMA BORDER CROSSING (NATIONAL ROUTE NO. 52 - INTERSECTION WITH NATIONAL ROUTE NO. 9 - BORDER WITH CHILE) (AR)	54.0	Public	National	Concluded
2	CAP10	CONSTRUCTION OF THE SALVADOR MAZZA - YACUIBA BINATIONAL BRIDGE AND BORDER CENTER (AR - BO)	45.0	Public	Binational	Pre-Execution
3	CAP14	NEW PUERTO PRESIDENTE FRANCO - PORTO MEIRA BRIDGE, WITH A PARAGUAY - BRAZIL INTEGRATED CONTROL AREA (BR - PY)	173.0	Public	Binational	Execution
4	CAP23	STUDY FOR THE OPTIMIZATION OF THE ÑEEMBUCÚ -BERMEJO NODE (AR - PY)	61.2	Public	Binational	Pre-Execution
5	CAP57	MULTIMODAL TRANSFER CENTER IN TUCUMÁN (AR)	20.0	Public	National	Pre-Execution
TOTAL			353.2			



GUIANESE SHIELD HUB

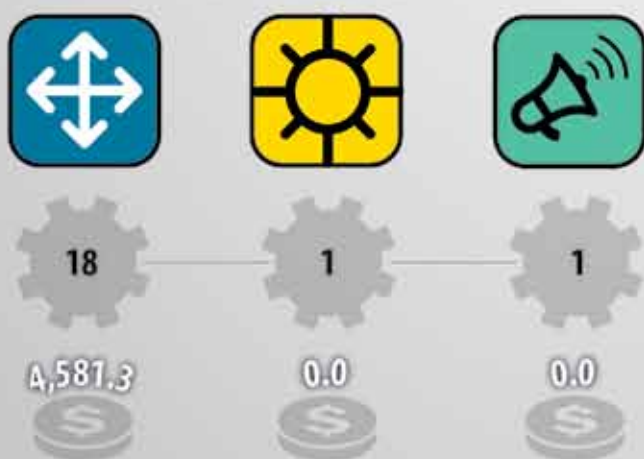
PROJECTS



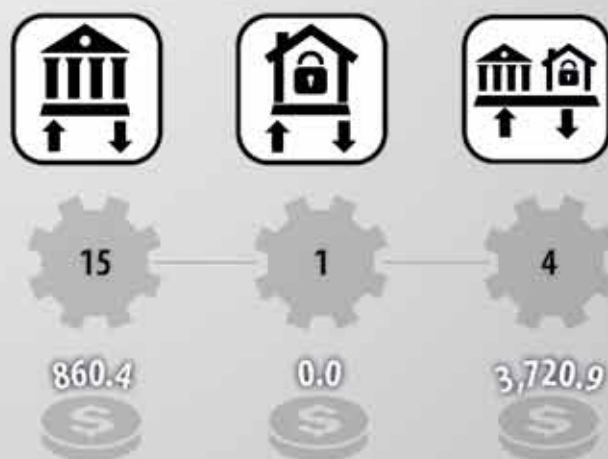
BY STAGE



BY SECTOR

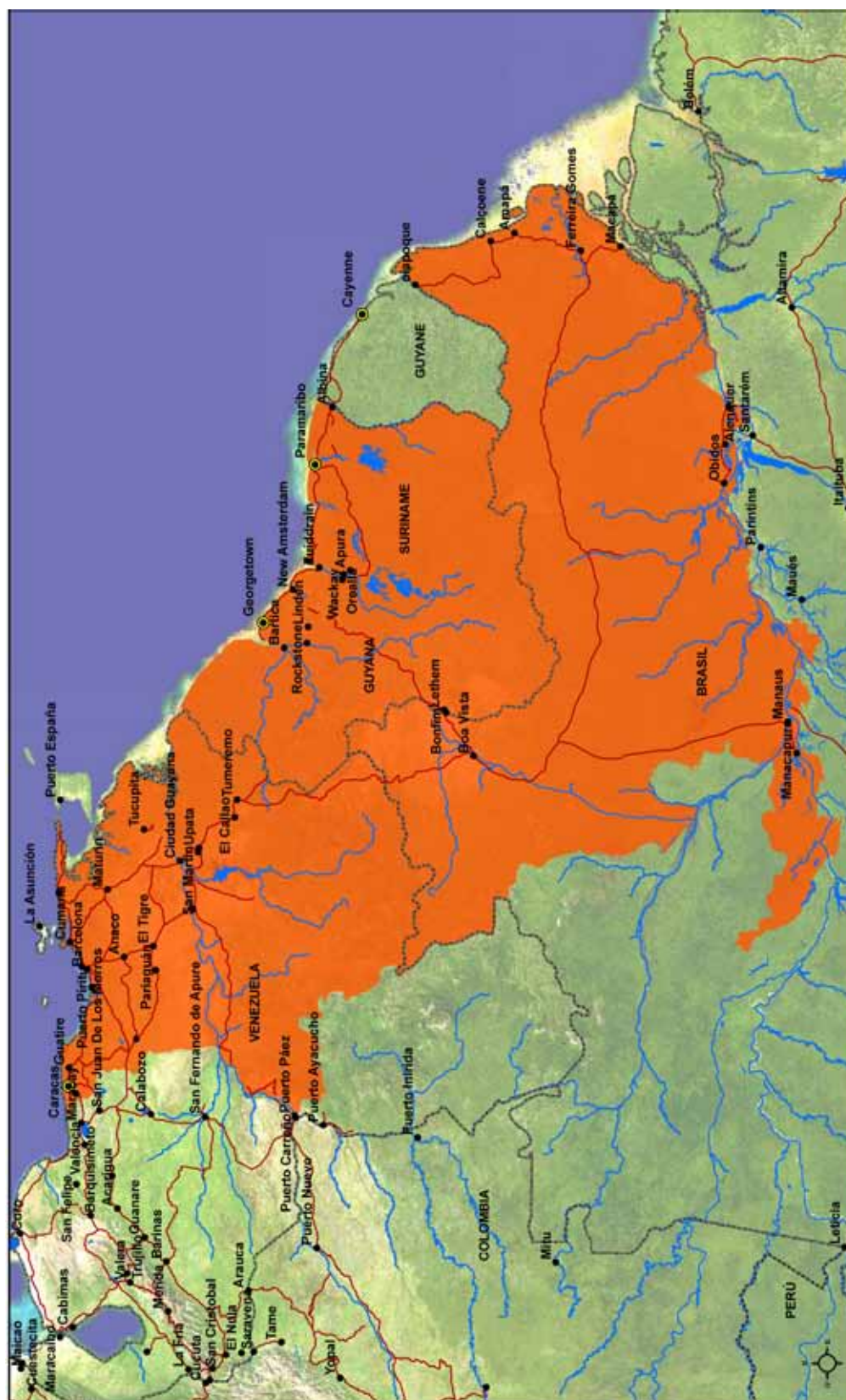


BY SOURCE OF FINANCING

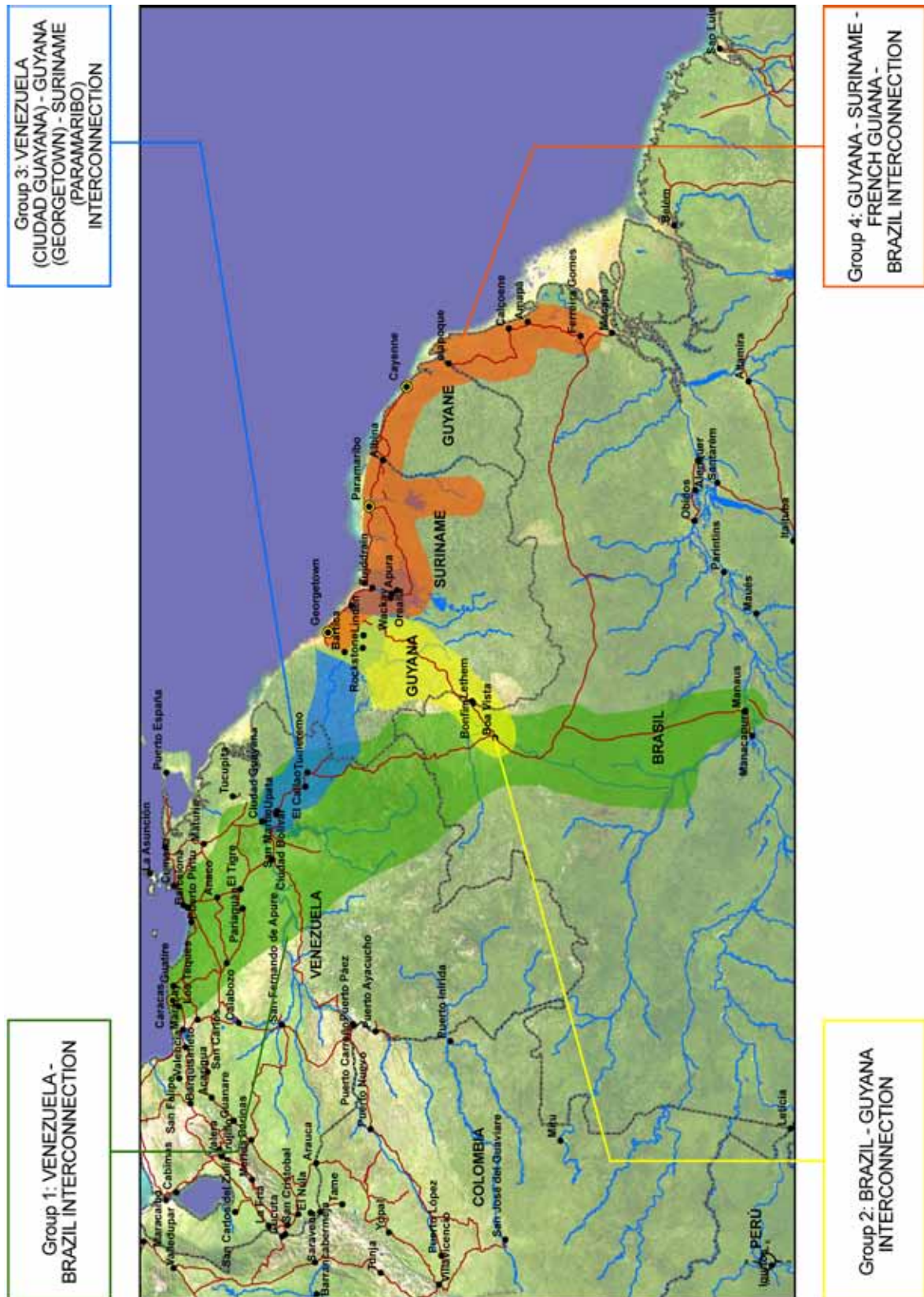


GUIANESE SHIELD HUB

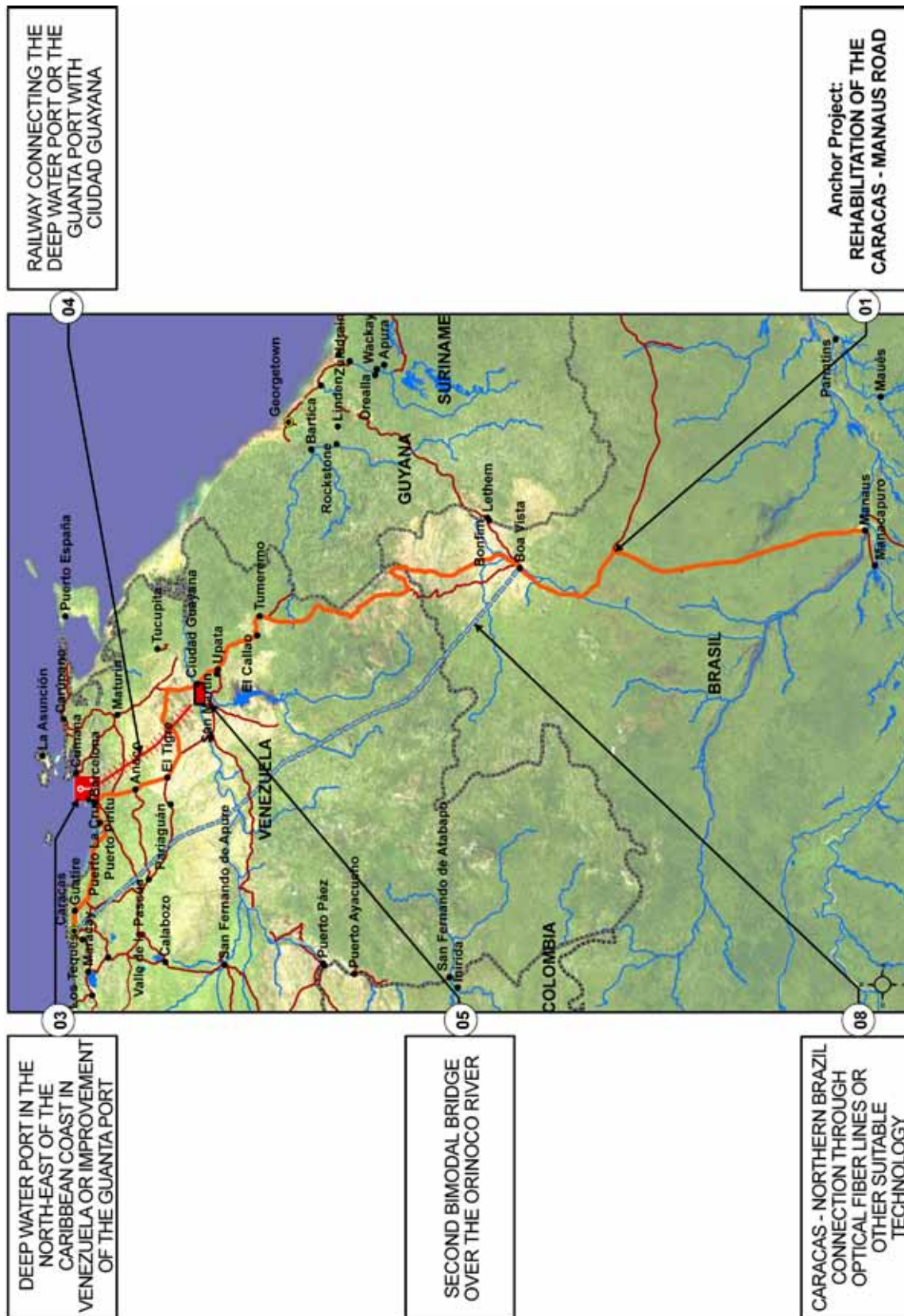
Area of Influence



Project Groups



GUIANESE SHIELD HUB - GROUP 1: Venezuela - Brazil Interconnection

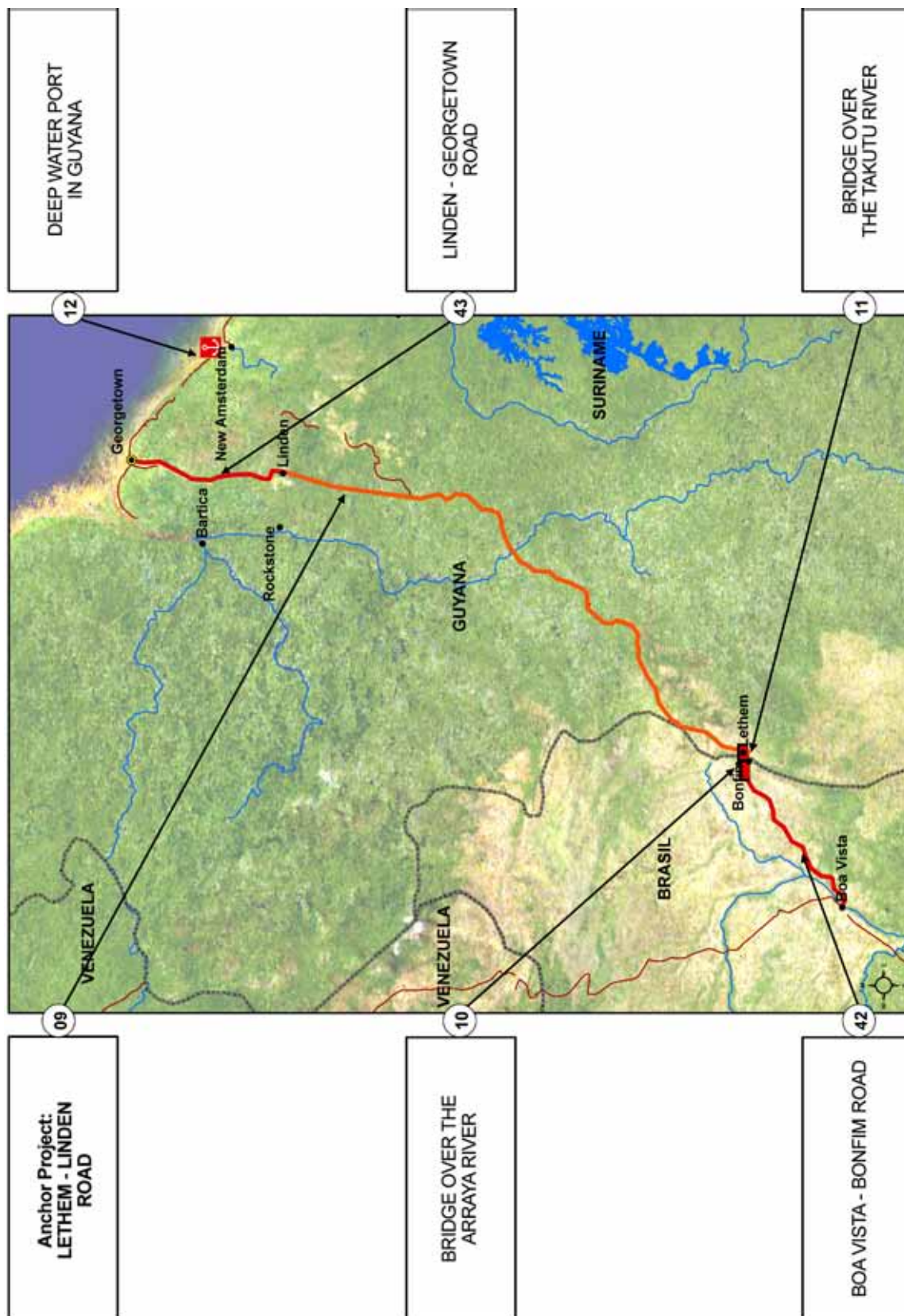


STRATEGIC FUNCTION

- Develop economic sectors having potential, such as heavy industry, durable goods, mining and jewelry, agribusiness and tourism (both ecotourism and Caribbean-style tourism), using the paved route between Caracas and Manaus and the transmission line between Guri and Boa Vista as the starting points.
- Connect Manaus with the south of Venezuela.

Code	Stage	Guianese Shield Hub: Group 1	Estimated Investment (US\$ million)
GUY01	●	REHABILITATION OF THE CARACAS - MANAUS ROAD (BR - VE)	407.0
GUY03	●	DEEP WATER PORT IN THE NORTH-EAST OF THE CARIBBEAN COAST IN VENEZUELA OR IMPROVEMENT OF THE GUANTA PORT (VE)	0.0
GUY04	●	RAILWAY CONNECTING THE DEEP WATER PORT OR THE GUANTA PORT WITH CIUDAD GUAYANA (VE)	0.0
GUY05	●	SECOND BIMODAL BRIDGE OVER THE ORINOCO RIVER (VE)	0.0
GUY08	●	CARACAS - NORTHERN BRAZIL CONNECTION THROUGH OPTICAL FIBER LINES OR OTHER SUITABLE TECHNOLOGY (BR - VE)	0.0
TOTAL			407.0

GUIANESE SHIELD HUB - GROUP 2: Brazil - Guyana Interconnection



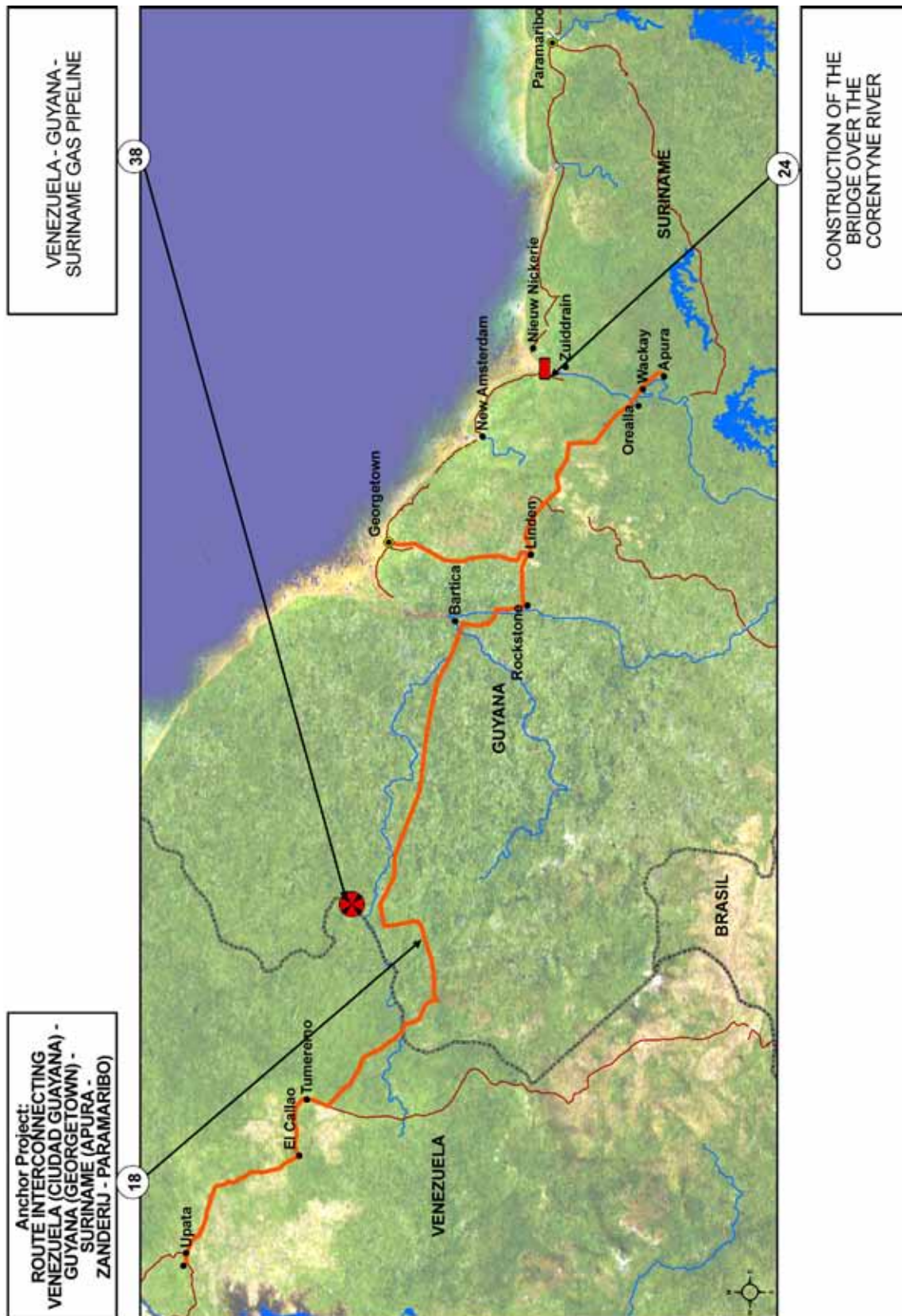
STRATEGIC FUNCTION

- Support the sustainable development and integration of the Brazilian states of Amazonas and Roraima with Guyana through the consolidation of the infrastructure that connects both countries.

Code	Stage	Guianese Shield Hub: Group 2	Estimated Investment (US\$ million)
GUY09	●	LETHEM - LINDEN ROAD (GU)	250.0
GUY10	●	BRIDGE OVER THE ARRAYA RIVER (BR)	1.5
GUY11	●	BRIDGE OVER THE TAKUTU RIVER (BR - GU)	10.0
GUY12	●	DEEP WATER PORT IN GUYANA (GU)	0.0
GUY42	●	BOA VISTA - BONFIM ROAD (BR)	15.0
GUY43	●	LINDEN - GEORGETOWN ROAD (GU)	0.0
TOTAL			276.5

GUIANESE SHIELD HUB - GROUP 3:

Venezuela (Ciudad Guayana) - Guyana (Georgetown) - Suriname (Paramaribo) Interconnection

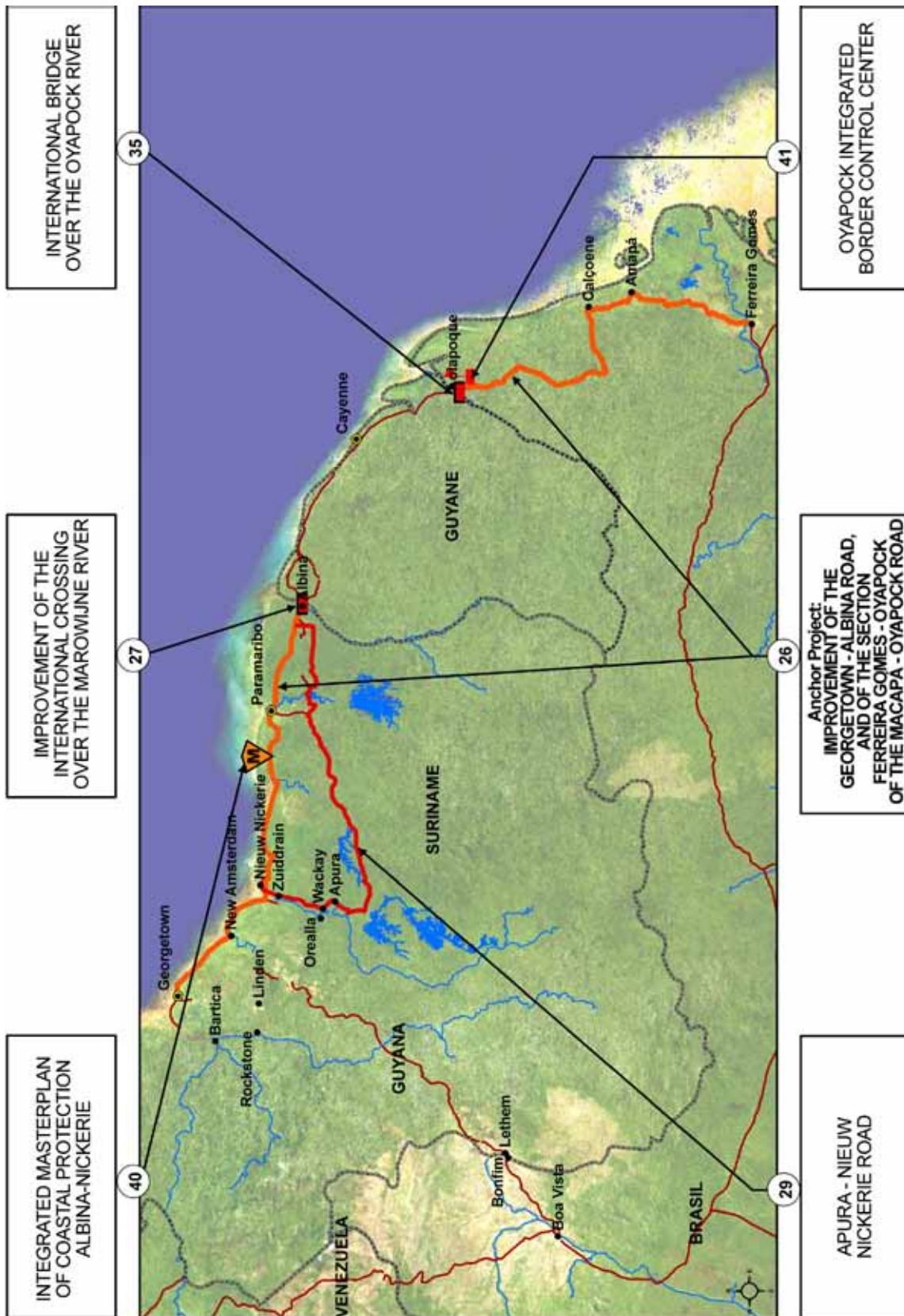


STRATEGIC FUNCTION

- Implement and develop an integration link in the north of South America that connects Venezuela, Guyana, and Suriname.

Code	Stage	Guianese Shield Hub: Group 3	Estimated Investment (US\$ million)
GUY18	●	ROUTES INTERCONNECTING VENEZUELA (CIUDAD GUAYANA) - GUYANA (GEORGETOWN) - SURINAME (APURA - ZANDERIJ - PARAMARIBO) (GU - SU - VE)	300.8
GUY24	●	CONSTRUCTION OF THE BRIDGE OVER THE CORENTYNE RIVER (GU - SU)	1.0
GUY38	●	VENEZUELA - GUYANA - SURINAME GAS PIPELINE (GU - SU - VE)	0.0
TOTAL			301.8

GUIANESE SHIELD HUB - GROUP 4: Guyana - Suriname - French Guiana - Brazil Interconnection



STRATEGIC FUNCTION

- Consolidate an international physical connection to promote the sustainable development and the integration of Guyana, Suriname, and the Brazilian states of Amapá and Pará.

Code	Stage	Guianese Shield Hub: Group 4	Estimated Investment (US\$ million)
GUY26	●	IMPROVEMENT OF THE GEORGETOWN - ALBINA ROAD, AND OF THE SECTION FERREIRA GOMES - OYAPOCK OF THE MACAPÁ - OYAPOCK ROAD (BR - GU - SU)	350.1
GUY27	●	IMPROVEMENT OF THE INTERNATIONAL CROSSING OVER THE MAROWIJNE RIVER (SU)	50.0
GUY29	●	APURA - NIEUW NICKERIE ROAD (SU)	110.0
GUY35	●	INTERNATIONAL BRIDGE OVER THE OYAPOCK RIVER (BR)	60.0
GUY40	●	INTEGRATED MASTERPLAN OF COASTAL PROTECTION ALBINA-NICKERIE (SU)	3,020.0
GUY41	●	OYAPOCK INTEGRATED BORDER CONTROL CENTER (BR)	5.9
TOTAL			3,596.0

PROJECT PORTFOLIO OF THE GUIANESE SHIELD HUB

I. GENERAL ASPECTS

Los países han acordado incluir en el Eje del Escudo Guayanés veinte proyectos con una inversión estimada de US\$ 4.581,3 millones tal como se resume a continuación:

Table G.1 • General Indicators of the Guianese Shield Hub

Group	Name	Number of Projects	Estimated Investment (US\$ million)
Group 1	VENEZUELA - BRAZIL INTERCONNECTION	5	407.0
Group 2	BRAZIL - GUYANA INTERCONNECTION	6	276.5
Group 3	VENEZUELA (CIUDAD GUAYANA) - GUYANA (GEORGETOWN) - SURINAME (PARAMARIBO) INTERCONNECTION	3	301.8
Group 4	GUYANA - SURINAME - FRENCH GUIANA - BRAZIL INTERCONNECTION	6	3,596.0
TOTAL		20	4,581.3

II. SOURCE OF FINANCING

Table G.2 • Source of financing of the Guianese Shield Hub

Source of financing	Number of Projects	% Projects	Estimated Investment (US\$ million)	% Investment
Public	15	75.0	860.4	18.8
Private	1	5.0	0.0	0.0
Public/Private	4	20.0	3,720.9	81.2
TOTAL	20	100.0	4,581.3	100.0

III. API PROJECTS

Table G.3 • API Projects - Guianese Shield Hub

Code	Project Name	Estimated Investment (millones de US\$)
14	REHABILITATION OF THE CARACAS - MANAUS ROAD (BR - VE)	407.0
GUY01	REHABILITATION OF THE CARACAS - MANAUS ROAD (BR - VE)	407.0
15	BOA VISTA - BONFIM - LETHEM - LINDEN - GEORGETOWN ROAD (BR - GU)	250.0
GUY09	LETHEM - LINDEN ROAD (GU)	250.0
GUY42	BOA VISTA - BONFIM ROAD (BR)	0.0
GUY43	LINDEN - GEORGETOWN ROAD(GU)	0.0
16	ROUTES INTERCONNECTING VENEZUELA (CIUDAD GUAYANA) - GUYANA (GEORGETOWN) - SURINAME (APURA - ZANDERIJ - PARAMARIBO), INCLUDING THE CONSTRUCTION OVER THE CORENTINE RIVER (GU - SU - VE)	301.8
GUY18	ROUTES INTERCONNECTING VENEZUELA (CIUDAD GUAYANA) - GUYANA (GEORGETOWN) - SURINAME (APURA - ZANDERIJ - PARAMARIBO) (GU - SU - VE)	300.8
GUY24	CONSTRUCTION OF THE BRIDGE OVER THE CORENTINE RIVER (GU - SU)	1.0
TOTAL		958.8

IV. SECTOR/SUBSECTORBASED BREAKDOWN AND TYPE OF WORKS INVOLVED

Table G.4 • Sector-based breakdown of the Guianese Shield Hub

	Transport				Energy				Communications			
Subsector	N° Projects	% Projects	Estimated Investment (US\$ millions)	% Investment	N° Projects	% Projects	Estimated Investment (US\$ millions)	% Investment	N° Projects	% Projects	Estimated Investment (US\$ millions)	% Investment
Road	13	72.2	1,555.4	34.0								
Railway	1	5.6	0.0	0.0								
Sea	3	16.6	3,020.0	66.0								
Border Crossing	1	5.6	5.9	0.1								
Power Generation					1	100.0	0.0	100.0				
Communication Interconnection									1	100.0	0.0	100.0
TOTAL	18	100.0	4,581.3	100.0	1	100.0	0.0	100.0	1	100.0	0.0	100.0

Table G.5 • Road Transport

	Projects	Estimated Investment
Type of Work	N°	US\$ million
Road maintenance	1	407.0
Paving (new work)	4	565.8
Bridges (new ones and refitting)	6	122.5
Refitting of road and structures	2	460.1
TOTAL	13	1,555.4

Table G.6 • Railway Transport

	Projects	Estimated Investment
Type of Work	N°	US\$ million
Building of railways	1	0.0
TOTAL	1	0.0

Table G.7 • Maritime Transport

	Projects	Estimated Investment
Type of Work	N°	US\$ million
Extension of the road infrastructure of the maritime ports	1	3,020.0
New sea ports	2	0.0
TOTAL	3	3,020.0

Table G.8 • Border Crossings

	Projects	Estimated Investment
Type of Work	N°	US\$ million
Infrastructure for the setting up of border control centers	1	5.9
TOTAL	1	5.9

Table G.9 • Power Generation

	Projects	Estimated Investment
Type of Work	N°	US\$ million
Other energy infrastructures	1	0.0
TOTAL	1	0.0

Table G.10 • Communication Interconnection

	Projects	Estimated Investment
Type of Work	N°	US\$ million
Optic fiber	1	0.0
TOTAL	1	0.0

PROGRESS IN THE GUIANESE SHIELD HUB PROJECTS

Table G.11 • Projects by Progress Attained

Stage	Number of Projects	% Projects	Estimated Investment (US\$ million)	% Investment
Profiling	7	35.0	351.8	7.7
Pre-Execution	2	10.0	3,270.0	71.3
Execution	5	25.0	873.0	19.1
Concluded	6	30.0	86.5	1.9
TOTAL	20	100.0	4,581.3	100.0

Table G.12 • **Concluded Projects**

Code	Project Name	Estimated Investment (US\$ millions)
GUY08	CARACAS - NORTHERN BRAZIL CONNECTION THROUGH OPTICAL FIBER LINES OR OTHER SUITABLE TECHNOLOGY (BR - VE)	0.0
GUY10	BRIDGE OVER THE ARRAYA RIVER (BR)	1.5
GUY11	BRIDGE OVER THE TAKUTU RIVER (BR- GU)	10.0
GUY35	INTERNATIONAL BRIDGE OVER THE OYAPOCK RIVER (BR)	60.0
GUY42	BOA VISTA - BONFIM ROAD (BR)	15.0
GUY43	LINDEN - GEORGETOWN ROAD (GU)	0.0
TOTAL		86.5

VI. ANCHOR PROJECTS

The countries identified four anchor projects in the Guianese Shield Hub, totaling an estimated investment of US\$ 1,307.9 million, according to the following detail:

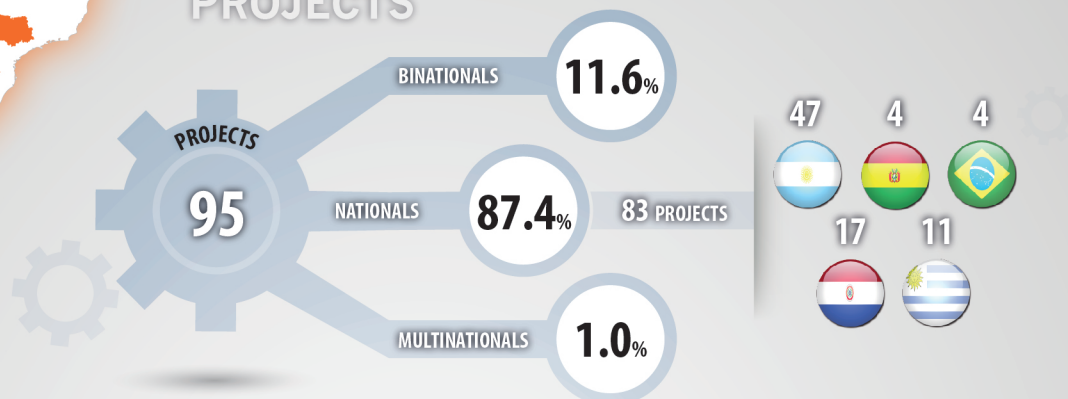
Table G.13 • **Anchor Projects**

Group	Code	Anchor Projects	Estimated Investment (US\$ million)	Financing Source	Scope	Project Stage
1	GUY01	REHABILITATION OF THE CARACAS - MANAUS ROAD (BR - VE)	407.0	Public	Binational	Execution
2	GUY09	LETHEM - LINDEN ROAD (GU)	250.0	Public	National	Pre-Execution
3	GUY18	ROUTES INTERCONNECTING VENEZUELA (CIUDAD GUAYANA) - GUYANA (GEORGETOWN) - SURINAME (APURA - ZANDERIJ - PARAMARIBO) (GU - SU - VE)	300.8	Public/Private	Trinational	Profiling
4	GUY26	IMPROVEMENT OF THE GEORGETOWN - ALBINA ROAD, AND OF THE SECTION FERREIRA GOMES - OYAPOCK OF THE MACAPÁ - OYAPOCK ROAD (BR - GU - SU)	350.1	Public/Private	Trinational	Execution
TOTAL			1,307.9			



PARAGUAY-PARANA WATERWAY HUB

PROJECTS



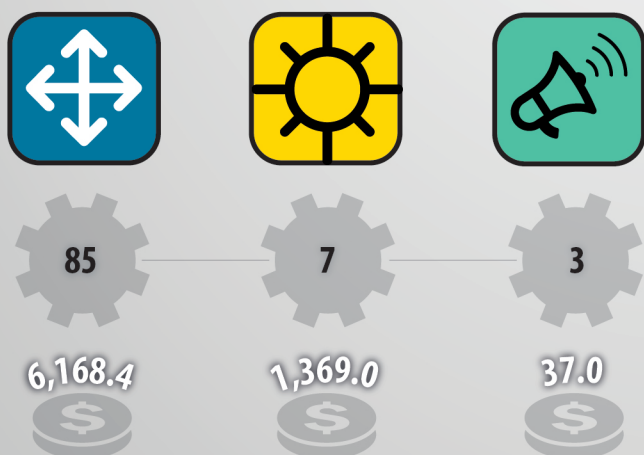
ESTIMATED INVESTMENT



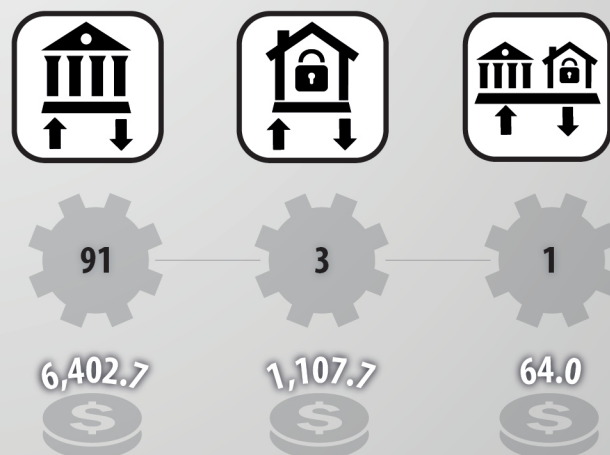
BY STAGE



BY SECTOR

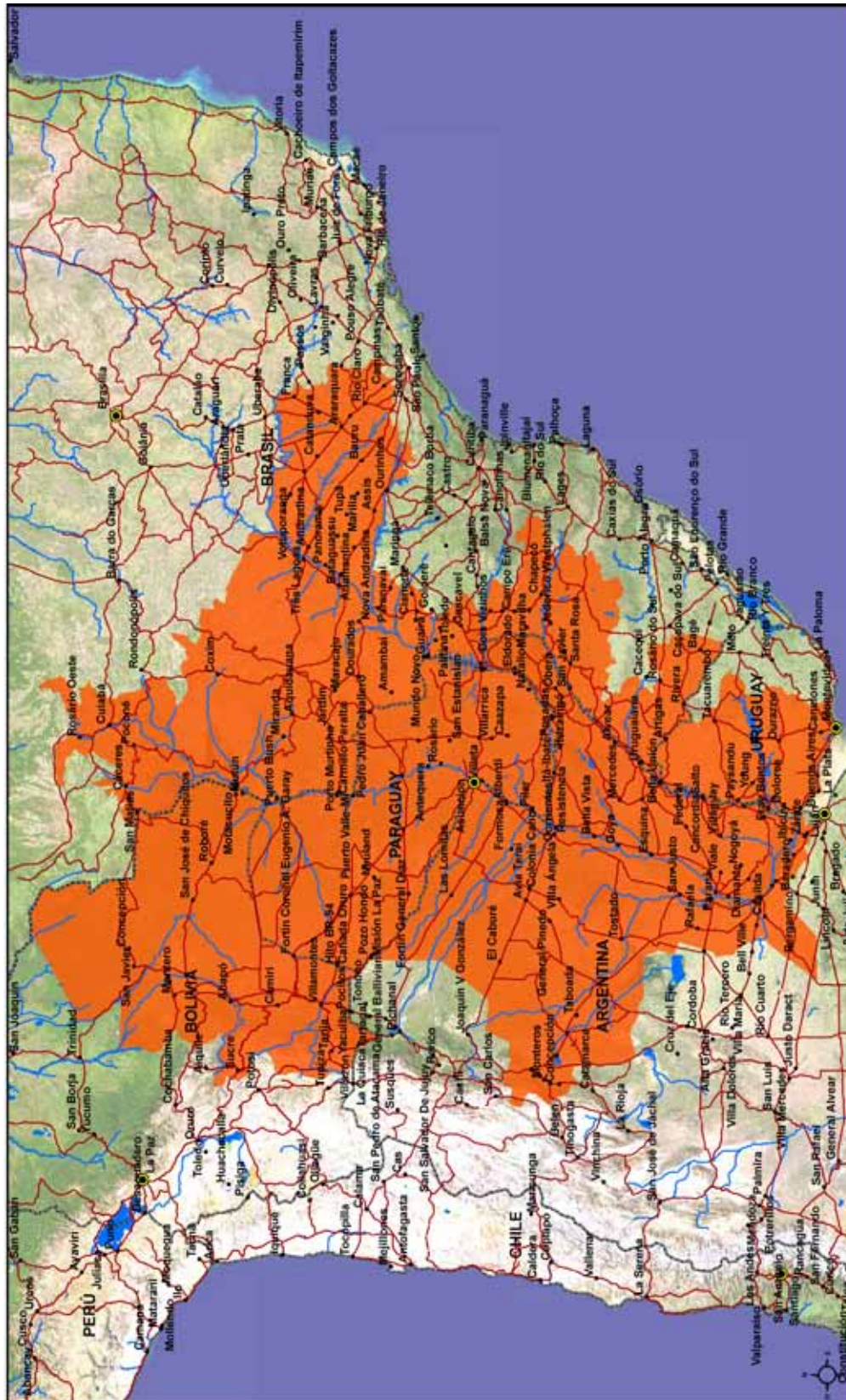


BY SOURCE OF FINANCING

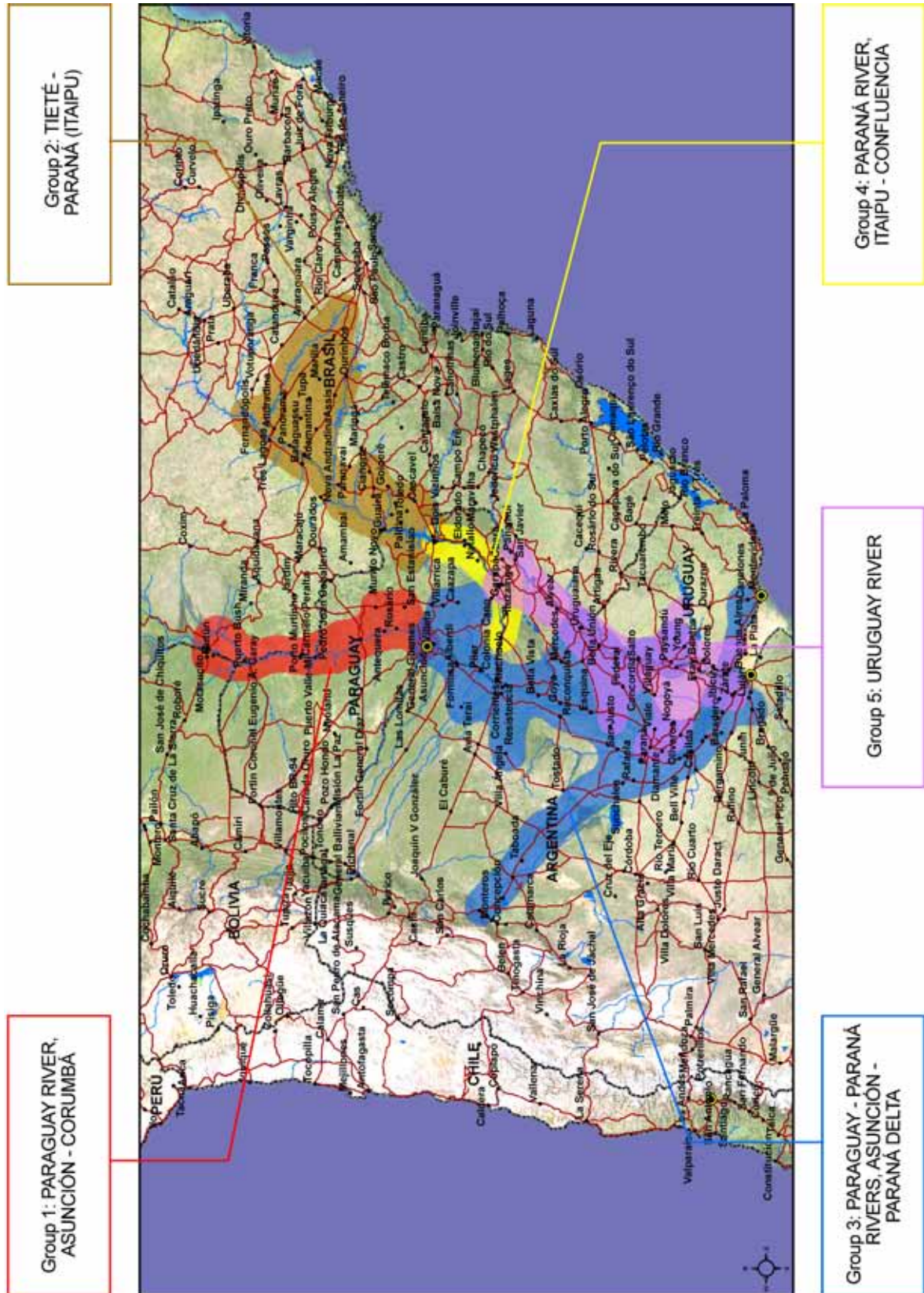


PARAGUAY-PARANÁ WATERWAY HUB

Area of Influence

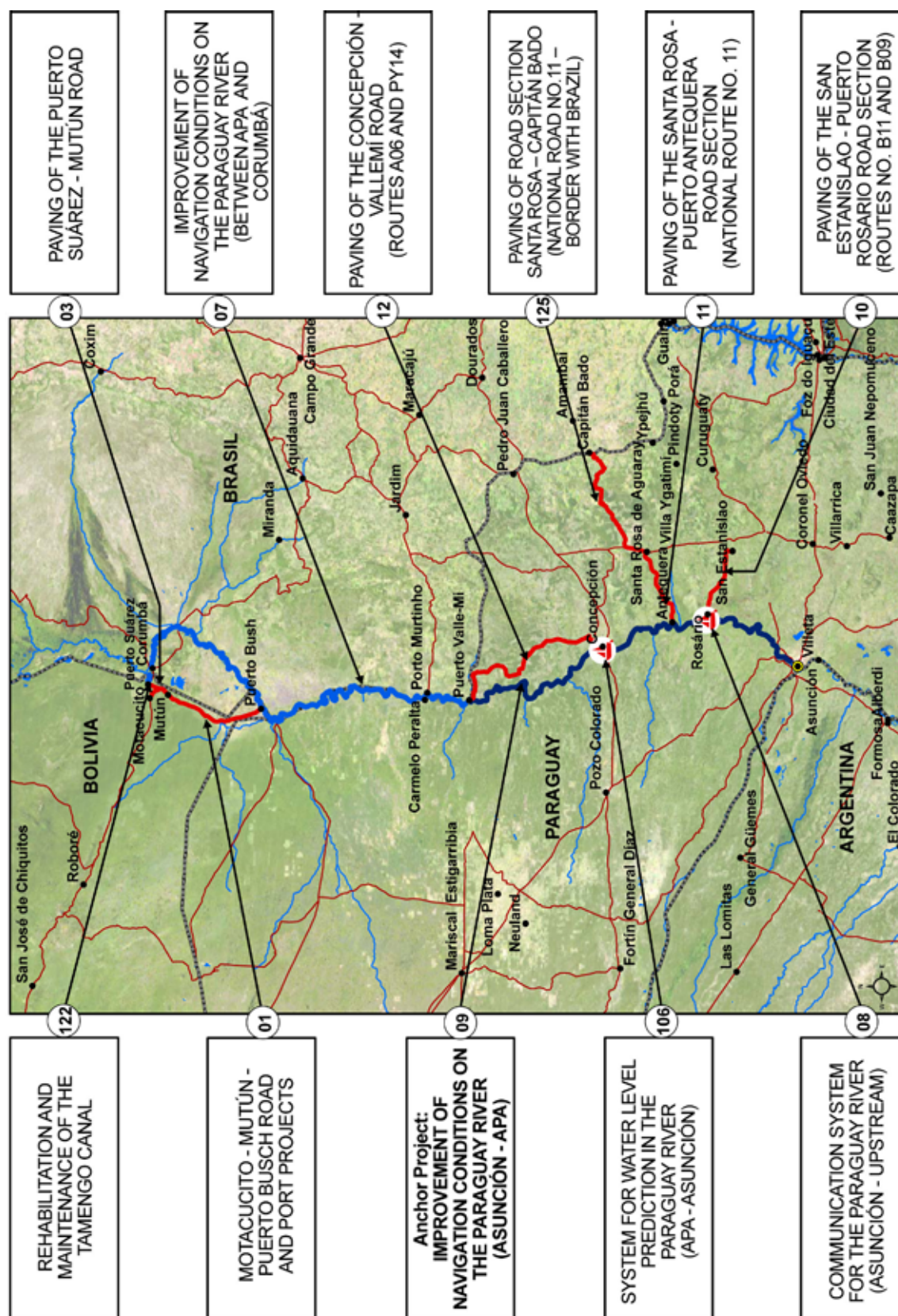


Project Groups



PARAGUAY-PARANÁ WATERWAY HUB - GROUP 1:

Paraguay River, Asunción - Corumbá



STRATEGIC FUNCTION

- Sustainably improve economic and social integration of the regions of Paraguay, Bolivia, and Brazil that share the basin.
- Facilitate the flow of people among the countries of the Group.
- Strengthen and boost the integration of the production chains along the Hub.
- Strengthen competitiveness in inland countries and regions by efficiently connecting them to the Atlantic ocean.

Code	Stage	Paraguay-Paraná Waterway Hub: Group 1	Estimated Investment (US\$ million)
HPP01	●	MOTACUCITO -MUTÚN - PUERTO BUSCH ROAD AND PORT PROJECTS (BO)	202.9
HPP03	●	PAVING OF THE PUERTO SUÁREZ - MUTÚN ROAD (BO)	18.8
HPP07	●	IMPROVEMENT OF NAVIGATION CONDITIONS ON THE PARAGUAY RIVER (BETWEEN APA AND CORUMBÁ) (BO - BR - PY)	39.0
HPP08	●	COMMUNICATIONS SYSTEM FOR THE PARAGUAY RIVER (ASUNCIÓN - UPSTREAM) (BO - PY)	4.0
HPP09	●	IMPROVEMENT OF NAVIGATION CONDITIONS ON THE PARAGUAY RIVER (ASUNCIÓN - APA) (PY)	110.0
HPP10	●	PAVING OF THE SAN ESTANISLAO - PUERTO ROSARIO ROAD SECTION (ROUTES NO. B11 AND B09) (PY)	66.5
HPP11	●	PAVING OF THE SANTA ROSA - PUERTO ANTEQUERA ROAD SECTION (NATIONAL ROUTE NO. 11) (PY)	0.0
HPP12	●	PAVING OF THE CONCEPCIÓN -VALLEMÍ ROAD (ROUTES A06 AND PY14) (PY)	113.0
HPP106	●	SYSTEM FOR WATER LEVEL PREDICTION IN THE PARAGUAY RIVER (APA - ASUNCIÓN) (BO - PY)	0.0
HPP122	●	REHABILITATION AND MAINTENANCE OF THE TAMENGO CANAL (BO)	10.5
HPP125	●	PAVING OF ROAD SECTION SANTA ROSA – CAPITÁN BADO (NATIONAL ROAD NO.11 – BORDER WITH BRAZIL) (PY)	122.5
TOTAL			687.2

Tietê - Paraná (Itaipú)

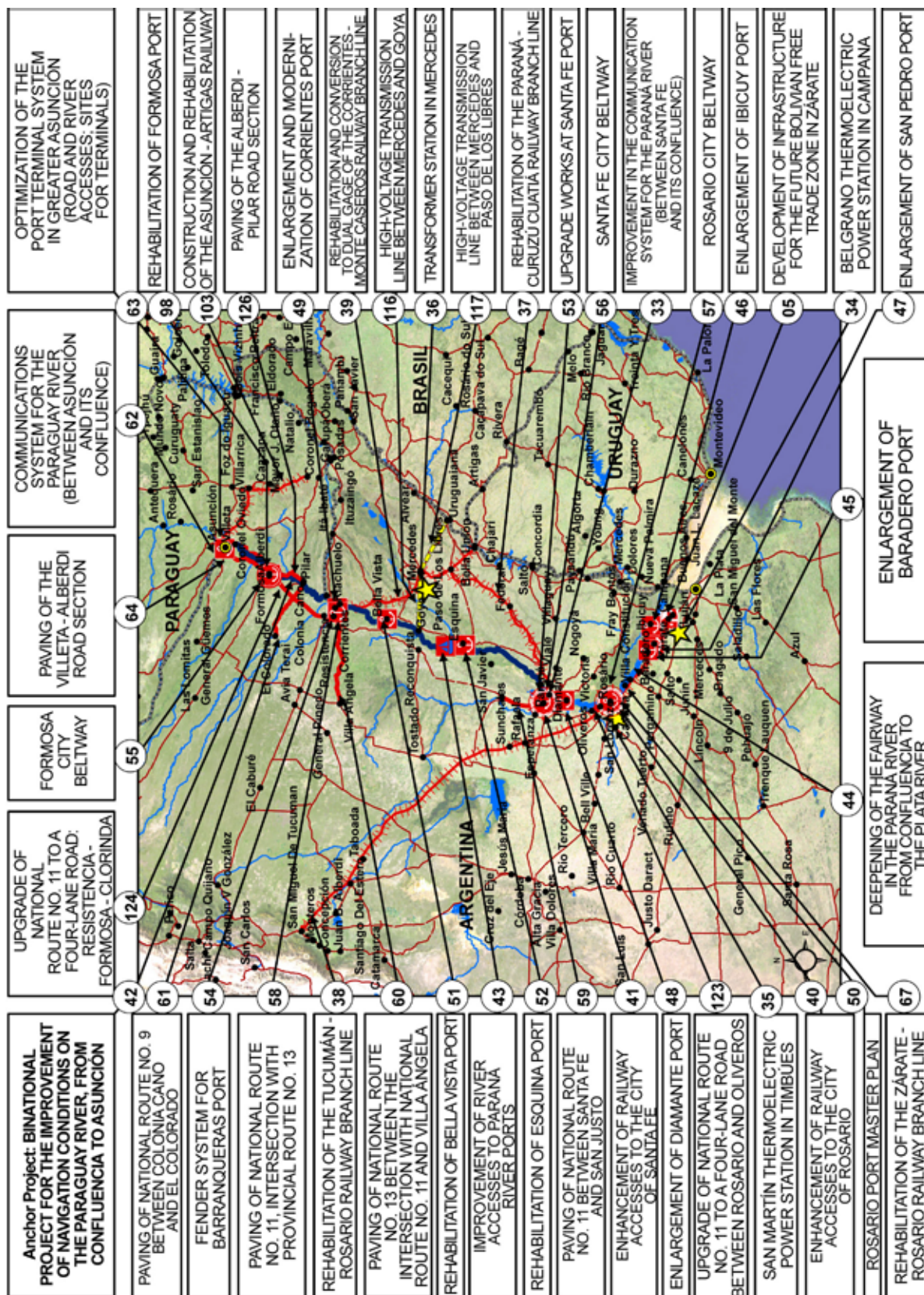


STRATEGIC FUNCTION

- Strengthen the socioeconomic dynamics in the area of influence of the group.
- Improve the integration of production and consumption areas in the Tietê and Paraná basins.
- Strengthen competitiveness in inland countries and regions by efficiently connecting them to the Atlantic ocean.

Code	Stage	Paraguay-Paraná Waterway Hub: Group 2	Estimated Investment (US\$ million)
HPP19	●	IMPROVEMENT OF NAVIGATION CONDITIONS ON THE TIETÊ RIVER (BR)	800.0
HPP25	●	SANTA TEREZINHA DE ITAIPU - CASCAVEL SECTION, ROUTE BR-277 (BR)	4.9
HPP27	●	OURINHOS - PRESIDENTE EPITÁCIO SECTION, ROUTE SP-270 (BR)	900.0
HPP28	●	ITAIPU DIVERSION BINATIONAL PROJECT (BR - PY)	0.0
HPP29	●	BINATIONAL PROJECT FOR THE IMPROVEMENT OF NAVIGATION CONDITIONS ON THE ITAIPU LAKE (BR - PY)	0.0
HPP30	●	ENLARGEMENT OF PUERTO INDIO (PY)	1.2
HPP31	●	REHABILITATION OF SALTO DEL GUAIRÁ PORT (PY)	0.8
HPP32	●	PAVING OF TRUNK ROAD II (PY)	25.6
HPP108	●	IMPROVEMENT OF NAVIGATION CONDITIONS ON THE ALTO PARANÁ RIVER (UPSTREAM OF SALTOS DEL GUAIRÁ) (BR)	15.0
TOTAL			1,747.5

PARAGUAY-PARANÁ WATERWAY HUB - GROUP 3: Paraguay - Paraná Rivers, Asunción - Paraná Delta



STRATEGIC FUNCTION

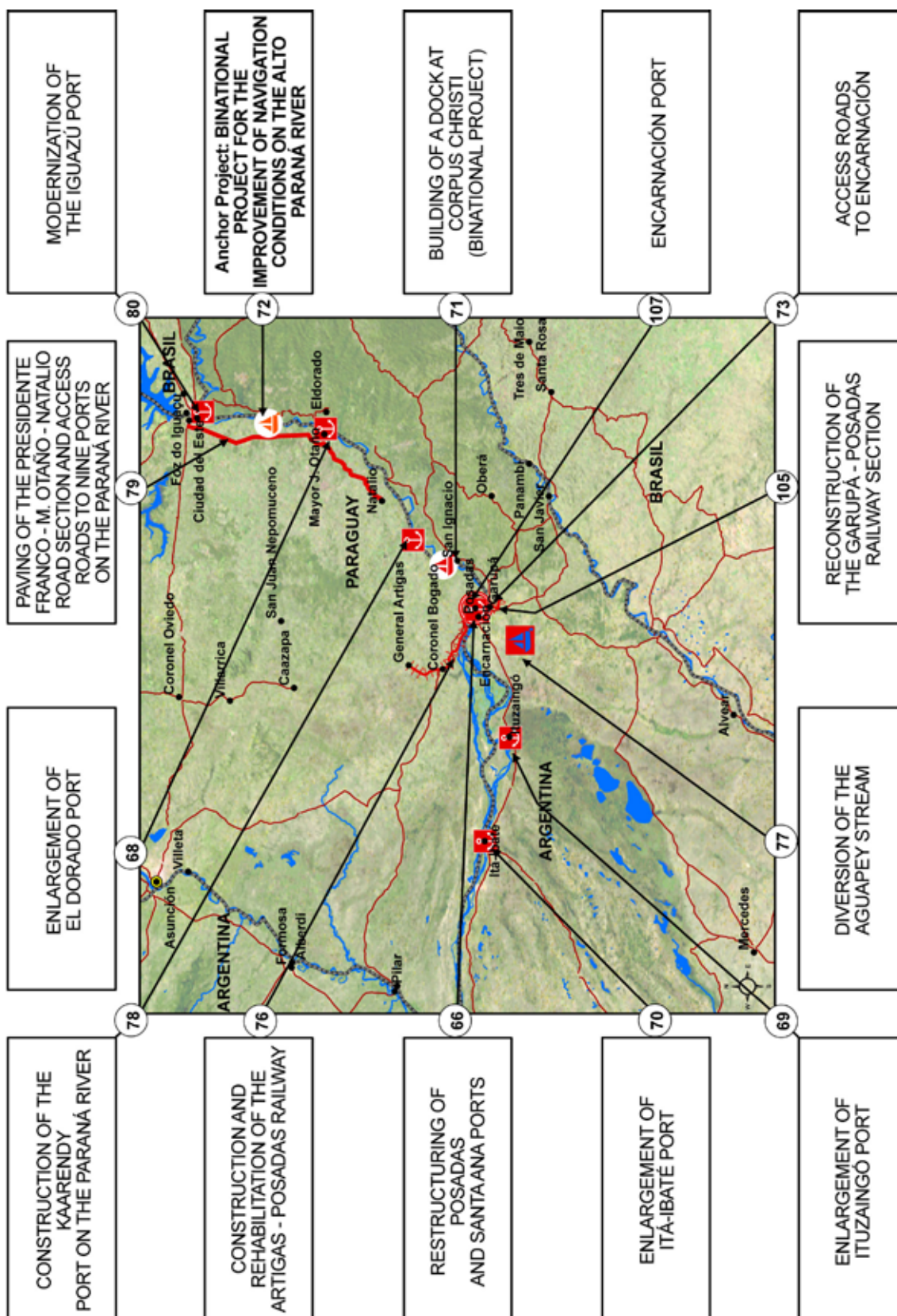
- Strengthen and boost the integration of the production chains along the Hub.
- Reinforce integration of inland countries and regions with global markets by efficiently connecting them to the Atlantic ocean.
- Improve the efficiency of the production system of the region and the quality of life of the populations living in the area of influence of the group.

Code	Stage	Paraguay-Paraná Waterway Hub: Group 3	Estimated Investment (US\$ million)
HPP05	●	DEVELOPMENT OF INFRASTRUCTURE FOR THE FUTURE BOLIVIAN FREE TRADE ZONE IN ZÁRATE (*) (BO)	0.0
HPP33	●	IMPROVEMENT IN THE COMMUNICATIONS SYSTEM FOR THE PARANÁ RIVER (BETWEEN SANTA FE AND ITS CONFLUENCE) (AR)	30.0
HPP34	●	BELGRANO THERMOELECTRIC POWER STATION IN CAMPANA (AR)	650.0
HPP35	●	SAN MARTÍN THERMOELECTRIC POWER STATION IN TIMBÚES (AR)	500.0
HPP36	●	TRANSFORMER STATION IN MERCEDES (AR)	25.0
HPP37	●	REHABILITATION OF THE PARANÁ - CURUZÚ CUATIÁ RAILWAY BRANCH LINE (AR)	0.0
HPP38	●	REHABILITATION OF THE TUCUMÁN - ROSARIO RAILWAY BRANCH LINE (AR)	200.0
HPP39	●	REHABILITATION AND CONVERSION TO DUAL GAGE OF THE CORRIENTES - MONTE CASEROS RAILWAY BRANCH LINE (AR)	0.0
HPP40	●	ENHANCEMENT OF RAILWAY ACCESSES TO THE CITY OF ROSARIO (AR)	92.0
HPP41	●	ENHANCEMENT OF RAILWAY ACCESSES TO THE CITY OF SANTA FE (AR)	0.0
HPP42	●	BINATIONAL PROJECT FOR THE IMPROVEMENT OF NAVIGATION CONDITIONS ON THE PARAGUAY RIVER, FROM CONFLUENCIA TO ASUNCIÓN (AR - PY)	45.5
HPP43	●	IMPROVEMENT OF RIVER ACCESSES TO PARANÁ RIVER PORTS (AR)	15.0
HPP44	●	DEEPENING OF THE FAIRWAY IN THE PARANÁ RIVER FROM CONFLUENCIA TO THE PLATA RIVER (AR)	110.0
HPP45	●	ENLARGEMENT OF BARADERO PORT (AR)	0.0
HPP46	●	ENLARGEMENT OF IBICUY PORT (AR)	3.0
HPP47	●	ENLARGEMENT OF SAN PEDRO PORT (AR)	36.0
HPP48	●	ENLARGEMENT OF DIAMANTE PORT (AR)	20.0
HPP49	●	ENLARGEMENT AND MODERNIZATION OF CORRIENTES PORT (AR)	12.0
HPP50	●	ROSARIO PORT MASTER PLAN (AR)	8.0
HPP51	●	REHABILITATION OF BELLA VISTA PORT (AR)	10.0
HPP52	●	REHABILITATION OF ESQUINA PORT (AR)	7.0
HPP53	●	UPGRADE WORKS AT SANTA FE PORT (AR)	110.0
HPP54	●	FENDER SYSTEM FOR BARRANQUERAS PORT (AR)	10.0
			Cont.

Code	Stage	Paraguay-Paraná Waterway Hub: Group 3	Estimated Investment (US\$ million)
HPP55	●	FORMOSA CITY BELTWAY (AR)	8.0
HPP56	●	SANTA FE CITY BELTWAY (AR)	200.0
HPP57	●	ROSARIO CITY BELTWAY (AR)	80.0
HPP58	●	PAVING OF NATIONAL ROUTE NO. 11, INTERSECTION WITH PROVINCIAL ROUTE NO. 13 (AR)	100.0
HPP59	●	PAVING OF NATIONAL ROUTE NO. 11 BETWEEN SANTA FE AND SAN JUSTO (AR)	40.0
HPP60	●	PAVING OF NATIONAL ROUTE NO. 13 BETWEEN THE INTERSECTION WITH NATIONAL ROUTE NO. 11 AND VILLA ÁNGELA (AR)	100.0
HPP61	●	PAVING OF NATIONAL ROUTE NO. 9 BETWEEN COLONIA CANO AND EL COLORADO (AR)	60.0
HPP62	●	COMMUNICATIONS SYSTEM FOR THE PARAGUAY RIVER (BETWEEN ASUNCIÓN AND ITS CONFLUENCE) (AR - PY)	3.0
HPP63	●	OPTIMIZATION OF THE PORT TERMINAL SYSTEM IN GREATER ASUNCIÓN (ROAD AND RIVER ACCESSES; SITES FOR TERMINALS) (PY)	0.0
HPP64	●	PAVING OF THE VILLET A - ALBERDI ROAD SECTION (PY)	51.0
HPP67	●	REHABILITATION OF THE ZÁRATE - ROSARIO RAILWAY BRANCH LINE (AR)	42.0
HPP98	●	REHABILITATION OF FORMOSA PORT (AR)	6.0
HPP103	●	CONSTRUCTION AND REHABILITATION OF THE ASUNCIÓN - ARTIGAS RAILWAY (PY)	300.0
HPP116	●	HIGH-VOLTAGE TRANSMISSION LINE BETWEEN MERCEDES AND GOYA (AR)	25.0
HPP117	●	HIGH-VOLTAGE TRANSMISSION LINE BETWEEN MERCEDES AND PASO DE LOS LIBRES (AR)	15.0
HPP123	●	UPGRADE OF NATIONAL ROUTE NO. 11 TO A FOUR-LANE ROAD BETWEEN ROSARIO AND OLIVEROS (AR)	45.0
HPP124	●	UPGRADE OF NATIONAL ROUTE NO. 11 TO A FOUR-LANE ROAD: RESISTENCIA - FORMOSA - CLORINDA (AR)	330.0
HPP126	●	PAVING OF THE ALBERDI - PILAR ROAD SECTION (PY)	100.0
TOTAL			3,388.5

PARAGUAY-PARANÁ WATERWAY HUB - GROUP 4:

Paraná River, Itaipu - Confluence



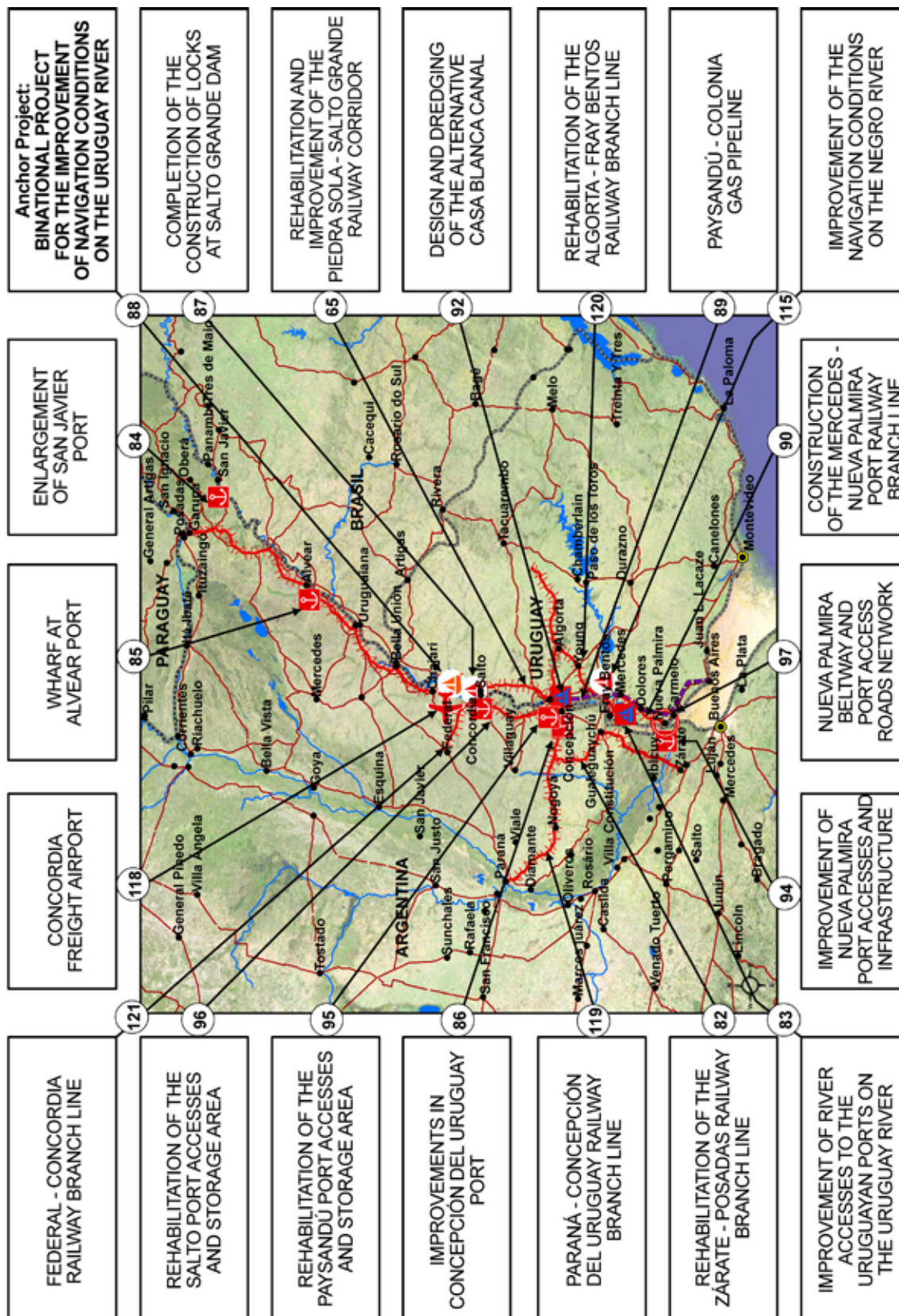
STRATEGIC FUNCTION

- Strengthen the socioeconomic dynamics in the area of influence of the group.
- Improve the integration of the production and consumption areas in the Tietê and Paraná basins.
- Strengthen competitiveness of inland countries and regions by efficiently connecting them to the Atlantic ocean.

Code	Stage	Paraguay-Paraná Waterway Hub: Group 4	Estimated Investment (US\$ million)
HPP66	●	RESTRUCTURING OF POSADAS AND SANTA ANA PORTS (AR)	10.0
HPP68	●	ENLARGEMENT OF EL DORADO PORT (AR)	0.0
HPP69	●	ENLARGEMENT OF ITUZAINGÓ PORT (AR)	27.0
HPP70	●	ENLARGEMENT OF ITÁ-IBATÉ PORT (AR)	10.0
HPP71	●	BUILDING OF A DOCK AT CORPUS CHRISTI (BINATIONAL PROJECT) (AR - PY)	0.0
HPP72	●	BINATIONAL PROJECT FOR THE IMPROVEMENT OF NAVIGATION CONDITIONS ON THE ALTO PARANÁ RIVER (AR - PY)	0.0
HPP73	●	ACCESS ROADS TO ENCARNACIÓN (PY)	26.0
HPP76	●	CONSTRUCTION AND REHABILITATION OF THE ARTIGAS - POSADAS RAILWAY (AR - PY)	150.0
HPP77	●	DIVERSION OF THE AGUAPEY STREAM (PY)	64.0
HPP78	●	CONSTRUCTION OF THE KAARENDY PORT ON THE PARANÁ RIVER (PY)	9.9
HPP79	●	PAVING OF THE PRESIDENTE FRANCO - M. OTAÑO - NATALIO ROAD SECTION AND ACCESS ROADS TO NINE PORTS ON THE PARANÁ RIVER (PY)	176.0
HPP80	●	MODERNIZATION OF THE IGUAZÚ PORT (AR)	0.0
HPP105	●	RECONSTRUCTION OF THE GARUPÁ - POSADAS RAILWAY SECTION (AR)	100.0
HPP107	●	ENCARNACIÓN PORT (PY)	18.0
TOTAL			590.9

PARAGUAY-PARANÁ WATERWAY HUB - GROUP 5:

Uruguay river



STRATEGIC FUNCTION

- Strengthen the socioeconomic dynamics in the area of influence of the group.
- Implement an efficient regional system of river and port activities with a view to improving access to the Atlantic.

Code	Stage	Paraguay-Paraná Waterway Hub: Group 5	Estimated Investment (US\$ million)
HPP65	●	REHABILITATION AND IMPROVEMENT OF THE PIEDRA SOLA - SALTO GRANDE RAILWAY CORRIDOR (UY)	127.3
HPP82	●	REHABILITATION OF THE ZÁRATE - POSADAS RAILWAY BRANCH LINE (AR)	0.0
HPP83	●	IMPROVEMENT OF RIVER ACCESSES TO THE URUGUAYAN PORTS ON THE URUGUAY RIVER (UY)	1.0
HPP84	●	ENLARGEMENT OF SAN JAVIER PORT (AR)	0.0
HPP85	●	WHARF AT ALVEAR PORT (AR)	0.0
HPP86	●	IMPROVEMENTS IN CONCEPCIÓN DEL URUGUAY PORT (AR)	8.0
HPP87	●	COMPLETION OF THE CONSTRUCTION OF LOCKS AT SALTO GRANDE DAM (AR - UY)	300.0
HPP88	●	BINATIONAL PROJECT FOR THE IMPROVEMENT OF NAVIGATION CONDITIONS ON THE URUGUAY RIVER (AR - UY)	40.0
HPP89	●	PAYSANDÚ - COLONIA GAS PIPELINE (UY)	90.0
HPP90	●	CONSTRUCTION OF THE MERCEDES - NUEVA PALMIRA PORT RAILWAY BRANCH LINE (UY)	90.0
HPP92	●	DESIGN AND DREDGING OF THE ALTERNATIVE CASA BLANCA CANAL (UY)	3.0
HPP94	●	IMPROVEMENT OF NUEVA PALMIRA PORT ACCESSES AND INFRASTRUCTURE (UY)	10.0
HPP95	●	REHABILITATION OF THE PAYSANDÚ PORT, ACCESSES AND STORAGE AREA (UY)	6.0
HPP96	●	REHABILITATION OF THE SALTO PORT, ACCESSES AND STORAGE AREA (UY)	4.0
HPP97	●	NUEVA PALMIRA BELTWAY AND PORT ACCESS ROADS NETWORK (UY)	15.0
HPP115	●	IMPROVEMENT OF THE NAVIGATION CONDITIONS ON THE NEGRO RIVER (UY)	350.0
HPP118	●	CONCORDIA FREIGHT AIRPORT (AR)	0.0
HPP119	●	PARANÁ - CONCEPCIÓN DEL URUGUAY RAILWAY BRANCH LINE (AR)	8.0
HPP120	●	REHABILITATION OF THE ALGORTA - FRAY BENTOS RAILWAY BRANCH LINE (UY)	100.0
HPP121	●	FEDERAL - CONCORDIA RAILWAY BRANCH LINE (AR)	8.0
TOTAL			1,160.3

PROJECT PORTFOLIO OF THE PARAGUAY-PARANÁ WATERWAY HUB

I. GENERAL ASPECTS

The countries have agreed to include ninety-five projects in the Paraguay-Paraná Waterway Hub, accounting for an estimated investment of US\$ 7,574.4 million, as summarized below:

Table H.1 • General Indicators of the Paraguay-Paraná Waterway Hub

Group	Name	Number of Projects	Estimated Investment (US\$ million)
Group 1	PARAGUAY RIVER , ASUNCIÓN - CORUMBÁ	11	687.2
Group 2	TIETÊ - PARANÁ (ITAIPÚ)	9	1,747.5
Group 3	PARAGUAY - PARANÁ RIVERS, ASUNCIÓN - PARANÁ DELTA	41	3,388.5
Group 4	PARANÁ RIVER, ITAIPÚ - CONFLUENCIA	14	590.9
Group 5	URUGUAY RIVER	20	1,160.3
TOTAL		95	7,574.4

II. SOURCE OF FINANCING

Table H.2 • Source of financing of the Paraguay-Paraná Waterway Hub projects

Source of financing	Number of Projects	% Projects	Estimated Investment (US\$ million)	% Investment
Public	91	95.8	6,402.7	84.5
Private	3	3.2	1,107.7	14.6
Public/Private	1	1.0	64.0	0.8
TOTAL	95	100.0	7,574.4	100.0

III. API PROJECTS

Table H.3 - API Projects - Paraguay-Paraná Waterway Hub

Code	Project Name	Estimated Investment (US\$ million)
17	IMPROVEMENT OF NAVIGATION CONDITIONS ON THE RIVERS OF THE PLATA BASIN (AR - BO - BE - PY - UY)	1,170.0
HPP07	IMPROVEMENT OF THE NAVIGATION CONDITIONS ON THE PARAGUAY RIVER (BETWEEN APA AND CORUMBÁ) (BO - BR - PY)	39.0
HPP09	IMPROVEMENT OF THE NAVIGATION CONDITIONS ON THE PARAGUAY RIVER (ASUNCIÓN - APA) (PY)	110.0
HPP19	IMPROVEMENT OF THE NAVIGATION CONDITIONS ON THE TIETE RIVER (BR)	800.0
HPP42	BINATIONAL PROJECT FOR THE IMPROVEMENT OF THE NAVIGATION CONDITIONS ON THE PARAGUAY RIVER, FROM CONFLUENCIA TO ASUNCION (AR - PY)	45.5
HPP44	DEEPENING OF THE FAIRWAY IN THE PARANA RIVER FROM CONFLUENCIA TO THE PLATA RIVER (AR)	110.0
HPP72	BINATIONAL PROJECT FOR THE IMPROVEMENT OF NAVIGATION CONDITIONS ON THE ALTO PARANA RIVER (AR - PY)	0.0
HPP88	BINATIONAL PROJECT FOR THE IMPROVEMENT OF NAVIGATION CONDITIONS ON THE URUGUAY RIVER (AR - UY)	40.0
HPP106	SYSTEM FOR WATER LEVEL PREDICTION IN THE PARAGUAY RIVER (APA - ASUNCIÓN) (BO - PY)	0.0
HPP108	IMPROVEMENT OF THE NAVIGATION CONDITIONS ON THE ALTO PARANA RIVER (UPSTREAM OF SALTOS DEL GUAIRÁ) (BR)	15.0
HPP122	REHABILITATION AND MAINTENANCE OF THE TAMENGO CANAL (BO)	10.5
18	PARAGUAY - ARGENTINA - URUGUAY RAILWAY INTERCONNECTION (AR - PY - UY)	577.3
HPP65	REHABILITATION AND IMPROVEMENT OF THE PIEDRA SOLA - SALTO GRANDE RAILWAY CORRIDOR (UY)	127.3
HPP76	CONSTRUCTION AND REHABILITATION OF THE ARTIGAS - POSADAS RAILWAY (AR - PY)	150.0
HPP82	REHABILITATION OF THE ZÁRATE - POSADAS RAILWAY BRANCH LINE (AR)	0.0
HPP103	CONSTRUCTION AND REHABILITATION OF THE ASUNCIÓN - ARTIGAS RAILWAY (PY)	300.0
19	REHABILITATION OF THE CHAMBERLAIN - FRAY BENTOS RAILWAY BRANCH LINE (UY)	100.0
HPP120	REHABILITATION OF THE ALGORTA - FRAY BENTOS RAILWAY BRANCH LINE (UY)	100.0
20	NUEVA PALMIRA BELTWAY AND PORT ACCESS ROADS NETWORK (UY)	15.0
HPP97	NUEVA PALMIRA BELTWAY AND PORT ACCESS ROADS NETWORK (UY)	15.0
TOTAL		1,862.3

IV. SECTOR/SUBSECTORBASED BREAKDOWN AND TYPE OF WORKS INVOLVED

Table H.4 • Sector-based breakdown of the Paraguay-Paraná Waterway Hub

	Transport				Energy				Communications			
Subsector	N° Projects	% Projects	Estimated Investment (US\$ millions)	% Investment	N° Projects	% Projects	Estimated Investment (US\$ millions)	% Investment	N° Projects	% Projects	Estimated Investment (US\$ millions)	% Investment
Air	1	1.2	0.0	0.0								
Road	23	27.0	2,582.3	41.9								
Railway	15	17.6	1,217.3	19.7								
River	44	51.8	2,165.9	35.1								
Multimodal	2	2.4	202.9	3.3								
Power Generation					3	42.9	1,214.0	88.7				
Power Interconnection					4	57.1	155.0	11.3				
Communication Interconnection									3	100.0	37.0	100.0
TOTAL	85	100.0	6,168.4	100.0	7	100.0	1,369.0	100.0	3	100.0	37.0	100.0

Table H.5 • Air Transport

	Projects	Estimated Investment
Type of Work	N°	US\$ million
New airports	1	0.0
TOTAL	1	0.0

Table H.6 • Road Transport

	Projects	Estimated Investment
Type of Work	N°	US\$ million
Extension of the road capacity	7	1,445.5
Road by-pass and access to cities	5	329.0
Paving (new work)	10	807.8
Refitting of road and structures	1	0.0
TOTAL	23	2,582.3

Table H.7 • **Railway Transport**

	Projects	Estimated Investment
Type of Work	N°	US\$ million
Railway by-pass	2	92.0
Building of railways	3	106.0
Refitting of railways	10	1,019.3
TOTAL	15	1,217.3

Table H.8 • **River Transport**

	Projects	Estimated Investment
Type of Work	N°	US\$ million
Refitting of existing river ports	24	299.0
Building of new river ports	2	27.9
Improvement of river navigability	18	1,839.0
TOTAL	44	2,165.9

Table H.9 • **Multimodal Transport**

	Projects	Estimated Investment
Type of Work	N°	US\$ million
Transfer stations	1	0.0
Multimodal transportation	1	202.9
TOTAL	2	202.9

Table H.10 • **Power Generation**

	Projects	Estimated Investment
Type of Work	N°	US\$ million
Hydroelectric plants (new ones and refitting) - microcentrals	1	64.0
Thermoelectric plants	2	1,150.0
TOTAL	3	1,214.0

Table H.11 • **Power Interconnection**

	Projects	Estimated Investment
Type of Work	N°	US\$ million
Building of new power interconnections	4	155.0
TOTAL	4	155.0

Table H.12 • **Communication Interconnection**

	Projects	Estimated Investment
Type of Work	N°	US\$ million
Optic fiber	3	37.0
TOTAL	3	37.0

V. PROGRESS IN THE PARAGUAY-PARANÁ WATERWAY HUB PROJECTS

Table H.13 • **Projects by Progress Attained**

Stage	Number of Projects	% Projects	Estimated Investment (US\$ million)	% Investment
Profiling	31	32.6	1,218.2	16.1
Pre-Execution	30	31.6	2,026.7	26.8
Execution	22	23.2	2,939.0	38.8
Concluded	12	12.6	1,390.5	18.3
TOTAL	95	100.0	7,574.4	100.0

Table H.14 • **Concluded Projects**

Code	Project Name	Estimated Investment (US\$ millions)
HPP10	PAVING OF THE SAN ESTANISLAO - PUERTO ROSARIO ROAD SECTION (ROUTES NO. B11 AND B09) (PY)	66.5
HPP11	PAVING OF THE SANTA ROSA - PUERTO ANTEQUERA ROAD SECTION (NATIONAL ROUTE NO. 11) (PY)	0.0
HPP29	BINATIONAL PROJECT FOR THE IMPROVEMENT OF NAVIGATION CONDITIONS ON THE ITAIPU LAKE (BR - PY)	0.0
HPP34	BELGRANO THERMOELECTRIC POWER STATION IN CAMPANA (AR)	650.0
HPP35	SAN MARTÍN THERMOELECTRIC POWER STATION IN TIMBÚES (AR)	500.0
HPP36	TRANSFORMER STATION IN MERCEDES (AR)	25.0
HPP73	ACCESS ROADS TO ENCARNACIÓN (PY)	26.0
HPP77	DIVERSION OF THE AGUAPEY STREAM (PY)	64.0
HPP94	IMPROVEMENT OF NUEVA PALMIRA PORT ACCESSES AND INFRASTRUCTURE (UY)	10.0
HPP95	REHABILITATION OF THE PAYSANDÚ PORT, ACCESSES AND STORAGE AREA (UY)	6.0
HPP107	ENCARNACIÓN PORT (PY)	18.0
HPP116	HIGH-VOLTAGE TRANSMISSION LINE BETWEEN MERCEDES AND GOYA (AR)	25.0
TOTAL		1,390.5

VI. ANCHOR PROJECTS

The countries identified five anchor projects in the Paraguay-Paraná Waterway Hub, totaling an estimated investment of US\$ 195,5 million, according to the following detail:

Table H.15 • **Anchor Projects**

Group	Code	Anchor Projects	Estimated Investment (US\$ million)	Financing Source	Scope	Project Stage
1	HPP09	IMPROVEMENT OF NAVIGATION CONDITIONS ON THE PARAGUAY RIVER (ASUNCIÓN - APA) (PY)	110.0	Public	National	Pre-Execution
2	HPP28	ITAIPU DIVERSION BINATIONAL PROJECT (BR - PY)	0.0	Public	Binational	Pre-Execution
3	HPP42	BINATIONAL PROJECT FOR THE IMPROVEMENT OF THE NAVIGATION CONDITIONS ON THE PARAGUAY RIVER, FROM CONFLUENCIA TO ASUNCIÓN (AR - PY)	45.5	Public	Binational	Execution
4	HPP72	BINATIONAL PROJECT FOR THE IMPROVEMENT OF NAVIGATION CONDITIONS ON THE ALTO PARANÁ RIVER (AR - PY)	0.0	Public	Binational	Profiling
5	HPP88	BINATIONAL PROJECT FOR THE IMPROVEMENT OF NAVIGATION CONDITIONS ON THE URUGUAY RIVER (AR - UY)	40.0	Public	Binational	Execution
TOTAL			195.5			

CENTRAL INTEROCEANIC HUB



PROJECTS



BY STAGE



BY SECTOR

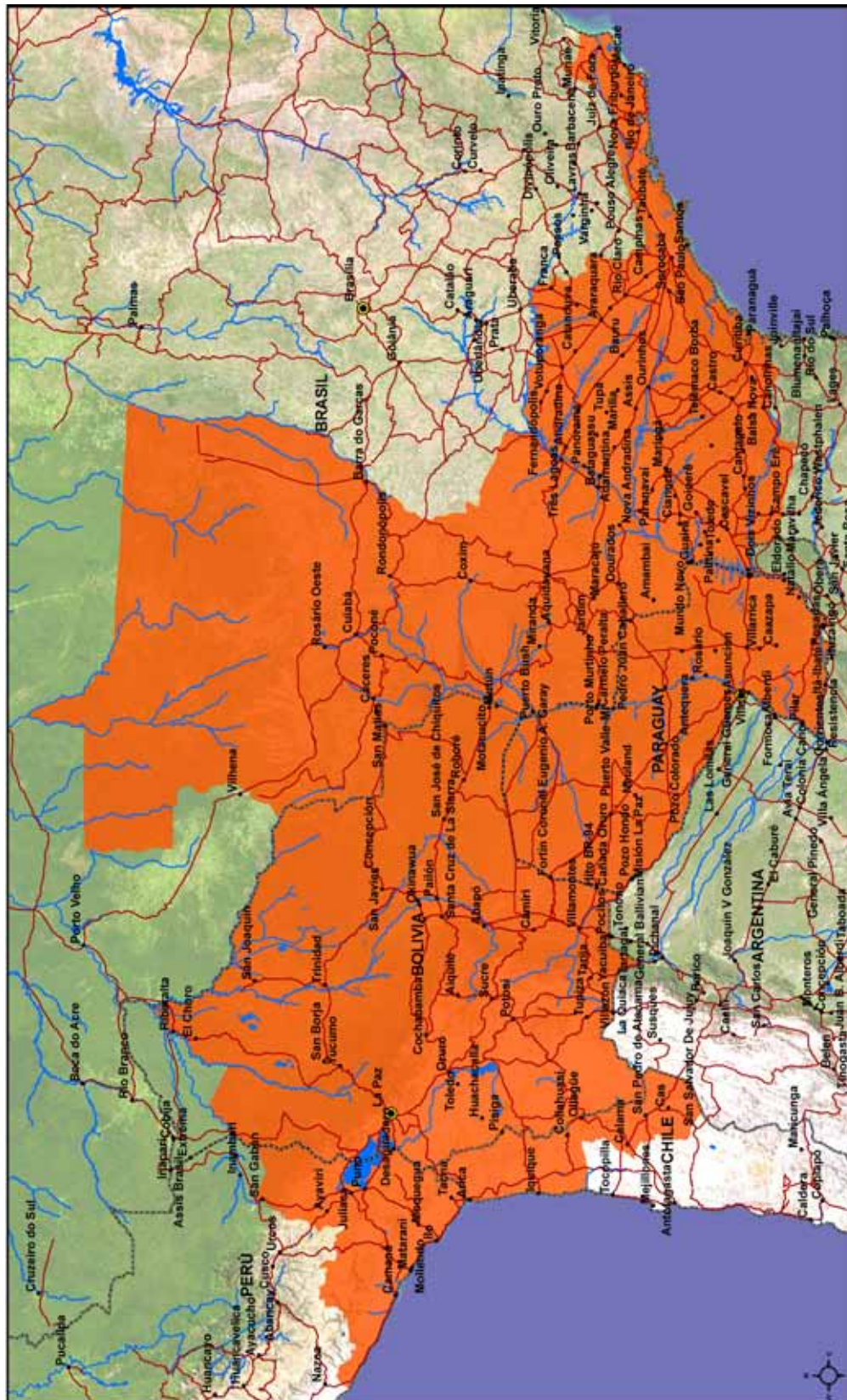


BY SOURCE OF FINANCING

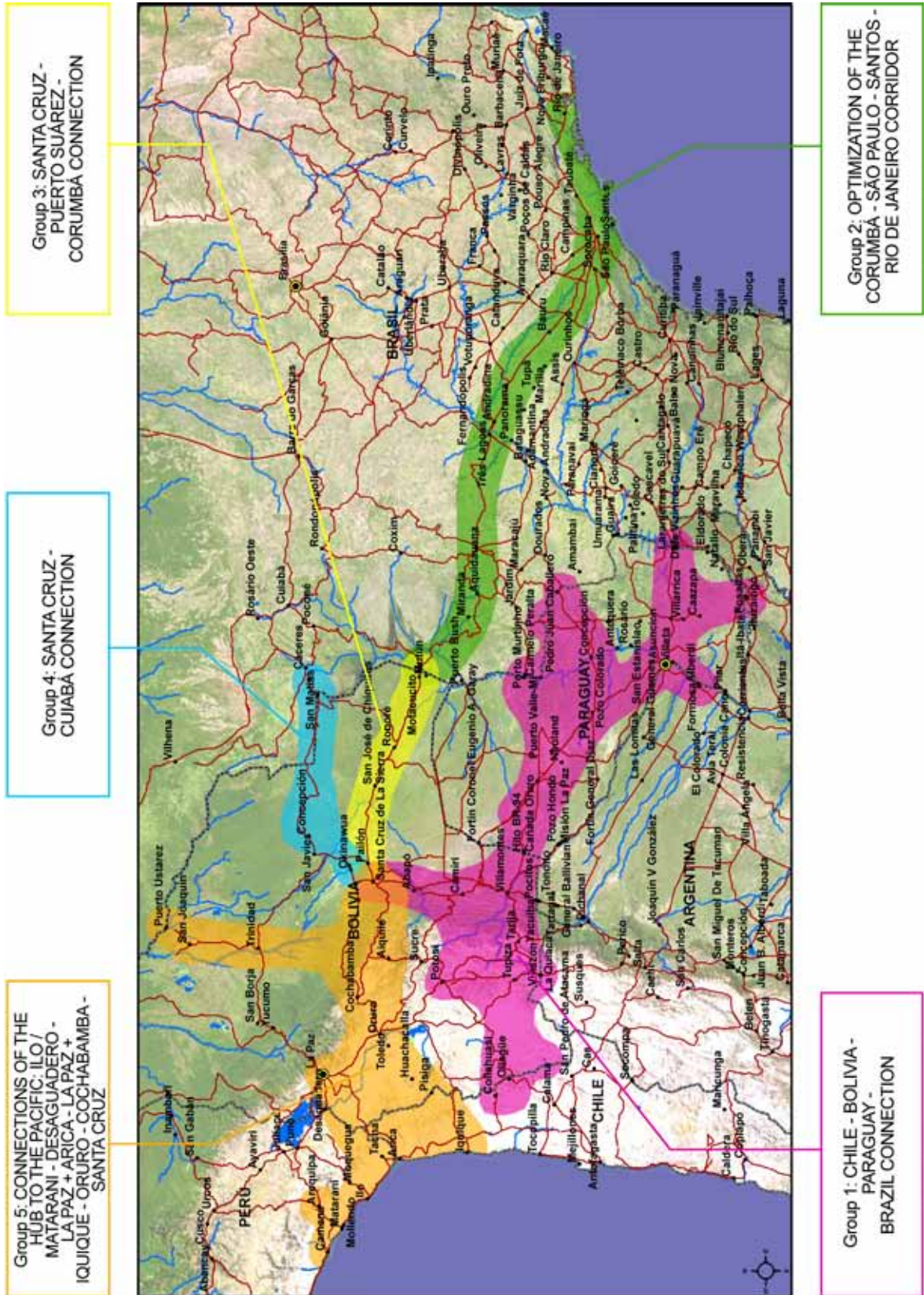


CENTRAL INTEROCEANIC HUB

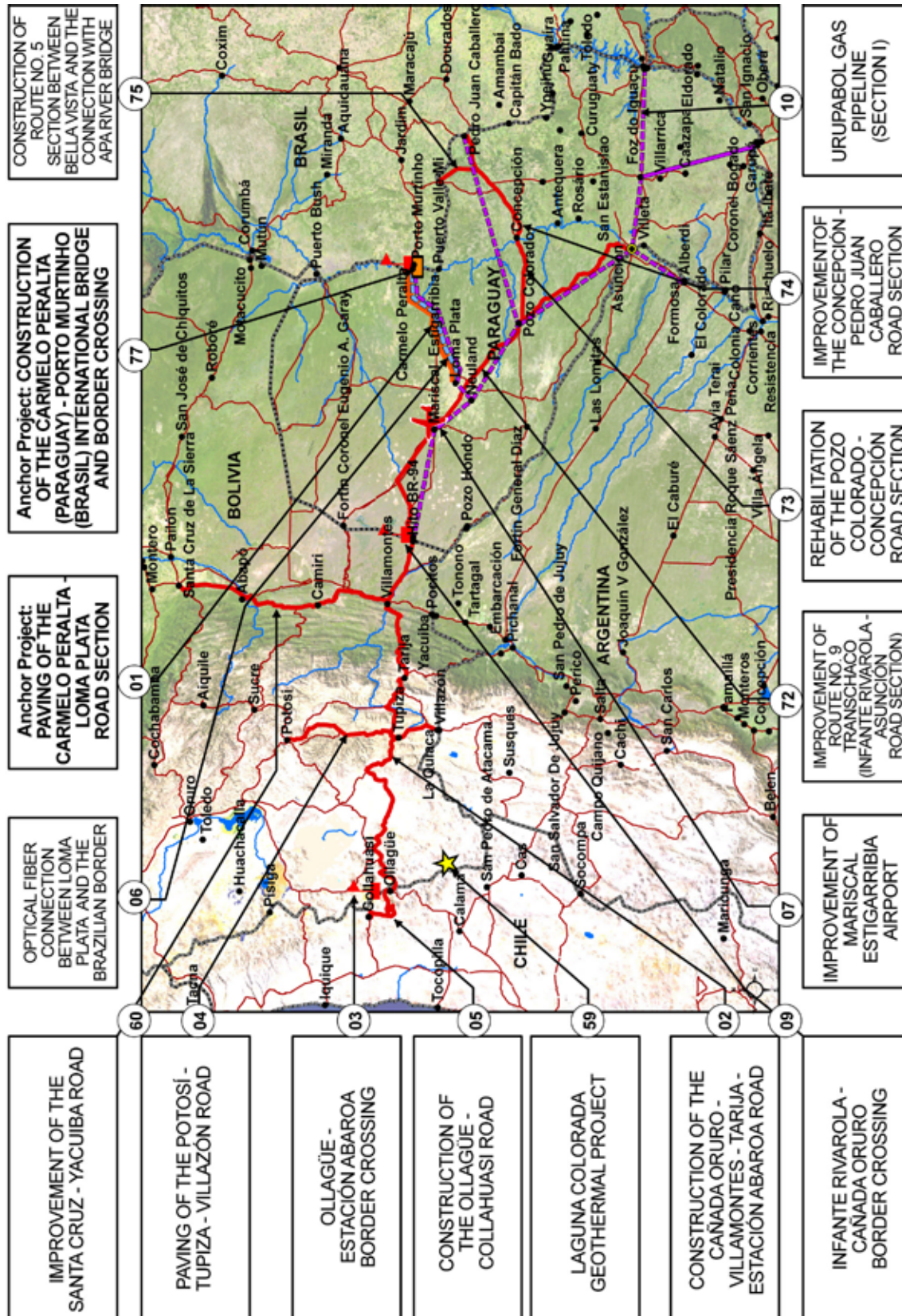
Area of Influence



Project Groups



CENTRAL INTEROCEANIC HUB - GROUP 1: Chile - Bolivia - Paraguay - Brazil Connection

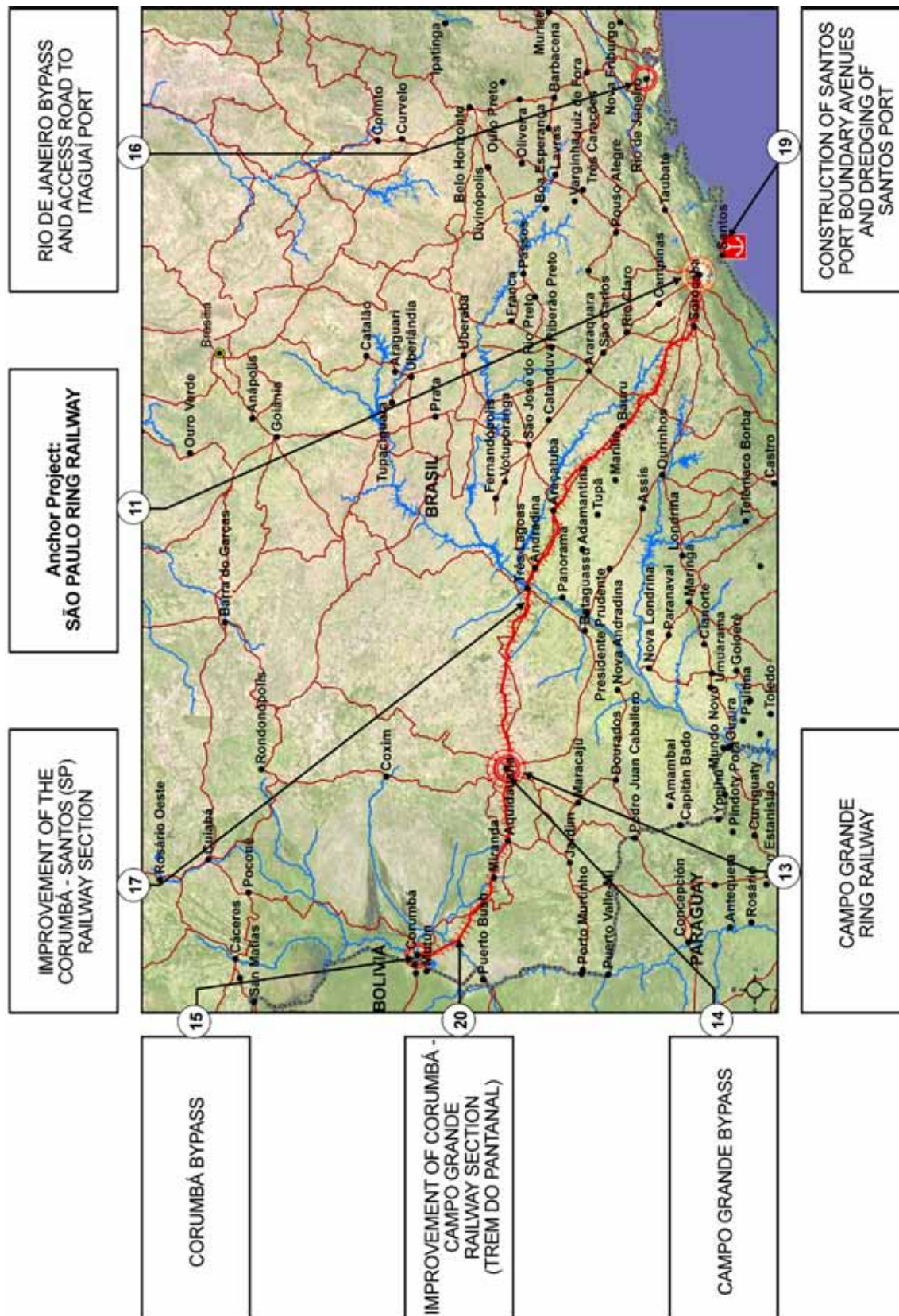


STRATEGIC FUNCTION

- Interconnect regional production areas (transportation, energy, and communications).
- Provide new access of the hinterlands to the Pacific ocean, articulating isolated territories.
- Increase economic complementariness among the countries.

Code	Stage	Central Interoceanic Hub: Group 1	Estimated Investment (US\$ million)
IOC01	●	PAVING OF THE CARMELO PERALTA - LOMA PLATA ROAD SECTION (PY)	127.5
IOC02	●	CONSTRUCTION OF THE CAÑADA ORURO - VILLAMONTES - TARIJA - ESTACIÓN ABAROA ROAD (BO)	210.0
IOC03	●	OLLAGÜE - ESTACIÓN ABAROA BORDER CROSSING (BO - CH)	5.0
IOC04	●	PAVING OF THE POTOSÍ - TUPIZA - VILLAZÓN ROAD (BO)	180.4
IOC05	●	CONSTRUCTION OF THE OLLAGÜE - COLLAHUASI ROAD (CH)	40.0
IOC06	●	OPTICAL FIBER CONNECTION BETWEEN LOMA PLATA AND THE BRAZILIAN BORDER (PY)	2.0
IOC07	●	IMPROVEMENT OF MARISCAL ESTIGARRIBIA AIRPORT (PY)	30.0
IOC09	●	INFANTE RIVAROLA - CAÑADA ORURO BORDER CROSSING (BO - PY)	1.9
IOC10	●	URUPABOL GAS PIPELINE (SECTION I) (*) (BO - PY)	0.0
IOC59	●	LAGUNA COLORADA GEOTHERMAL PROJECT (BO)	321.7
IOC60	●	IMPROVEMENT OF THE SANTA CRUZ - YACUIBA ROAD (BO)	104.0
IOC72	●	IMPROVEMENT OF ROUTE NO. 9 TRANSCHACO (INFANTE RIVAROLA - ASUNCIÓN ROAD SECTION) (PY)	170.0
IOC73	●	REHABILITATION OF THE POZO COLORADO - CONCEPCIÓN ROAD SECTION (PY)	47.0
IOC74	●	IMPROVEMENT OF THE CONCEPCIÓN - PEDRO JUAN CABALLERO ROAD SECTION (PY)	12.5
IOC75	●	CONSTRUCTION OF ROUTE NO. 5 SECTION BETWEEN BELLA VISTA AND THE CONNECTION WITH APA RIVER BRIDGE (PY)	48.0
IOC77	●	CONSTRUCTION OF THE CARMELO PERALTA (PARAGUAY) - PORTO MURTINHO (BRASIL) INTERNATIONAL BRIDGE AND BORDER CROSSING (BR - PY)	0.0
TOTAL			1,300.0

CENTRAL INTEROCEANIC HUB - GROUP 2: Optimization of the Corumbá - São Paulo - Santos - Rio de Janeiro Corridor

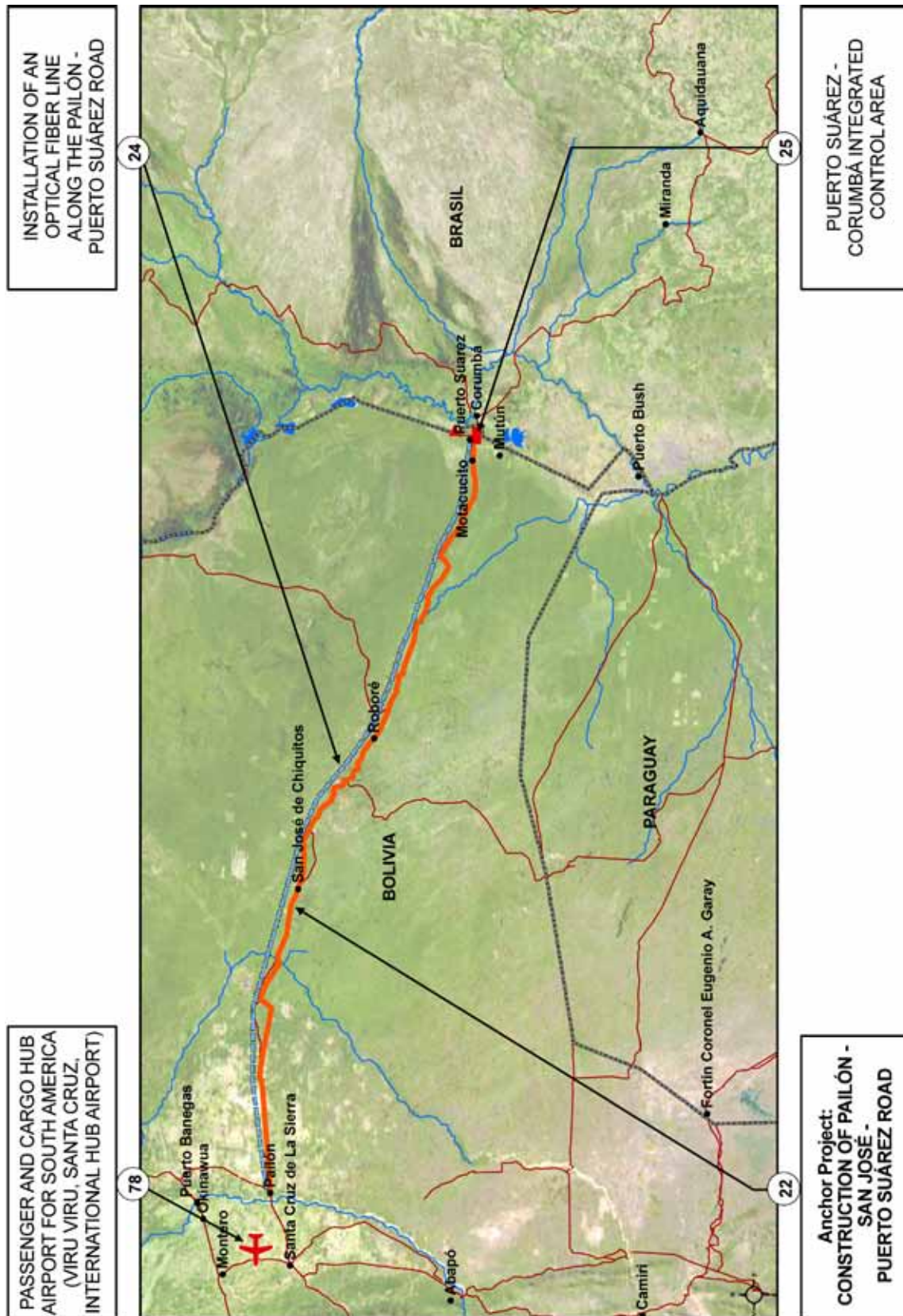


STRATEGIC FUNCTION

- Significantly reduce cargo transportation costs from Brazil, Bolivia, and Paraguay to the Atlantic ocean and among these countries as well.
- Increase the countries economic complementation.
- Increase the railway component in the regional transportation matrix.
- Support tourism in the region of Pantanal.

Code	Stage	Central Interoceanic Hub: Group 2	Estimated Investment (US\$ million)
IOC11	●	SÃO PAULO RING RAILWAY (BR)	1,500.0
IOC13	●	CAMPO GRANDE RING RAILWAY (BR)	31.0
IOC14	●	CAMPO GRANDE BYPASS (BR)	30.0
IOC15	●	CORUMBÁ BYPASS (BR)	8.0
IOC16	●	RIO DE JANEIRO BYPASS AND ACCESS ROAD TO ITAGUAÍ PORT (BR)	614.0
IOC17	●	IMPROVEMENT OF THE CORUMBÁ - SANTOS (SP) RAILWAY SECTION (BR)	2,250.0
IOC19	●	CONSTRUCTION OF SANTOS PORT BOUNDARY AVENUES AND DREDGING OF SANTOS PORT (BR)	334.4
IOC20	●	IMPROVEMENT OF CORUMBÁ - CAMPO GRANDE RAILWAY SECTION (TREM DO PANTANAL) (BR)	22.0
TOTAL			4,789.4

CENTRAL INTEROCEANIC HUB - GROUP 3: Santa Cruz - Puerto Suárez - Corumbá Connection

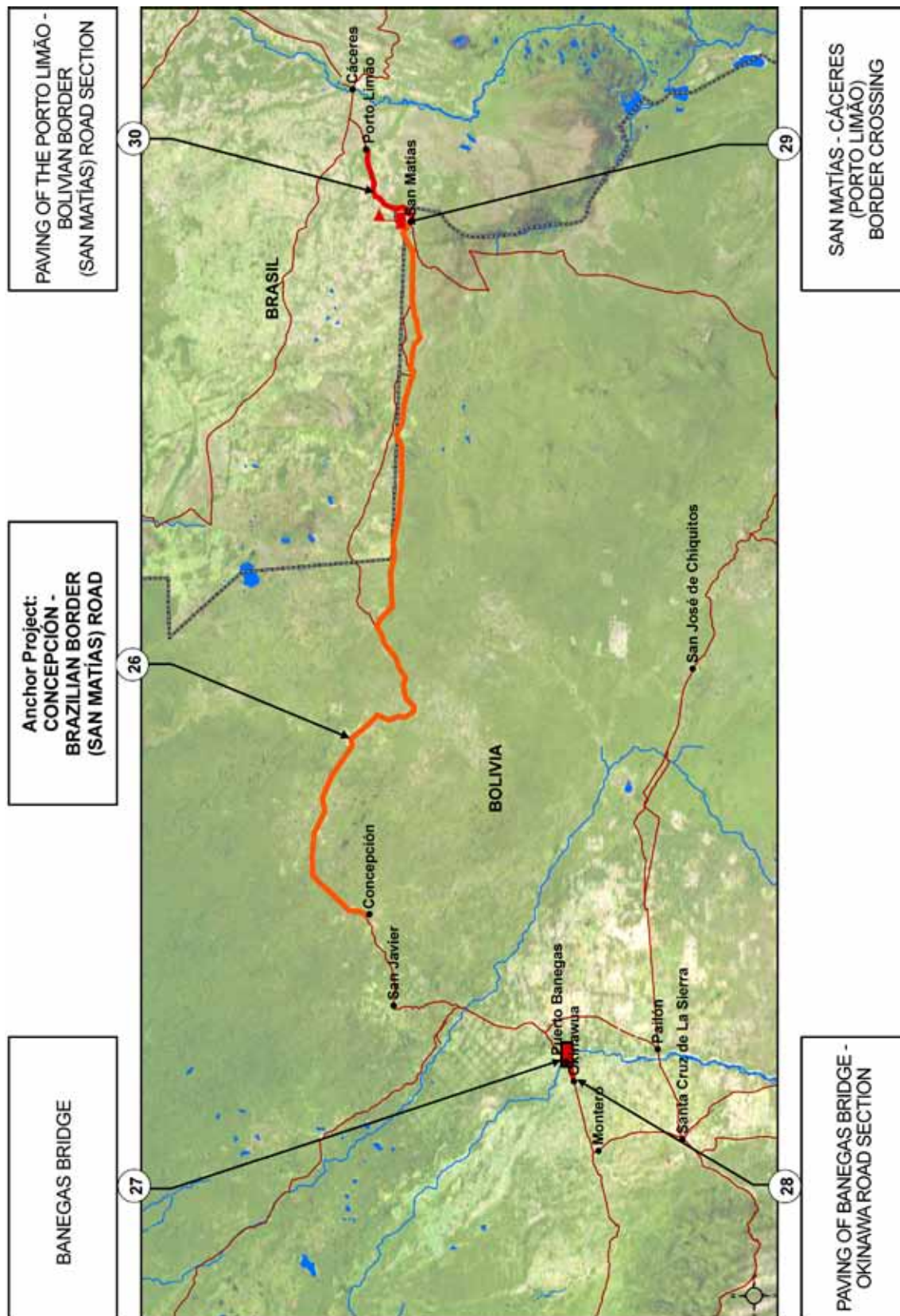


STRATEGIC FUNCTION

- Complete the railway and road connection in the Hub.
- Significantly reduce cargo transportation costs from Brazil, Bolivia, and Paraguay to the Atlantic ocean, the Pacific ocean, and among these countries as well.
- Increase the countries' economic complementation.
- Support tourism in the region of Pantanal.

Code	Stage	Central Interoceanic Hub: Group 3	Estimated Investment (US\$ million)
IOC22	●	CONSTRUCTION OF PAILÓN - SAN JOSÉ - PUERTO SUÁREZ ROAD (BO)	409.0
IOC24	●	INSTALLATION OF AN OPTICAL FIBER LINE ALONG THE PAILÓN - PUERTO SUÁREZ ROAD (BO)	2.5
IOC25	●	PUERTO SUÁREZ - CORUMBÁ INTEGRATED CONTROL AREA (BO - BR)	2.0
IOC78	●	PASSENGER AND CARGO HUB AIRPORT FOR SOUTH AMERICA (VIRU VIRU, SANTA CRUZ, INTERNATIONAL HUB AIRPORT) (BO)	20.0
TOTAL			433.5

CENTRAL INTEROCEANIC HUB - GROUP 4: Santa Cruz - Cuiabá Connection



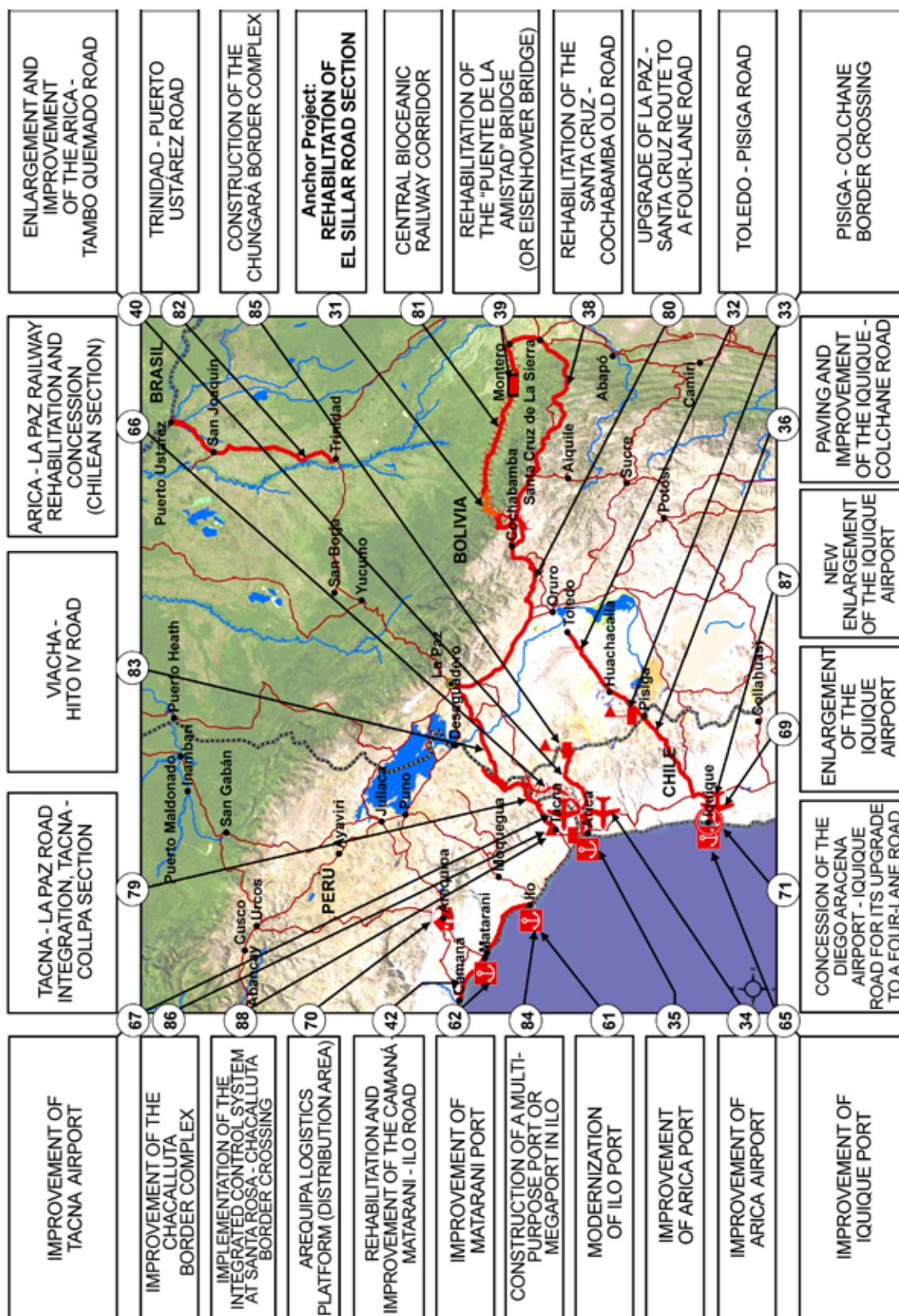
STRATEGIC FUNCTION

- Connect the eastern region in Bolivia with the Mato Grosso, facilitating the access of both regions to the ports on the Atlantic and Pacific oceans.
- Support the development of the agricultural potential in the central-eastern region of Bolivia.

Code	Stage	Central Interoceanic Hub: Group 4	Estimated Investment (US\$ million)
IOC26	●	CONCEPCIÓN - BRAZILIAN BORDER (SAN MATÍAS) ROAD (BO)	79.5
IOC27	●	BANEGAS BRIDGE (BO)	41.0
IOC28	●	PAVING OF BANEGAS BRIDGE - OKINAWA ROAD SECTION (BO)	0.0
IOC29	●	SAN MATÍAS - CÁCERES (PORTO LIMÃO) BORDER CROSSING (BO - BR)	2.0
IOC30	●	PAVING OF THE PORTO LIMÃO - BOLIVIAN BORDER (SAN MATÍAS) ROAD SECTION (BR)	13.0
TOTAL			135.5

CENTRAL INTEROCEANIC HUB - GROUP 5:

Connections of the Hub to the Pacic: Ilo/Matarani - Desaguadero -
La Paz + Arica - La Paz + Iquique - Oruro - Cochabamba - Santa Cruz



STRATEGIC FUNCTION

- Increase trade and tourism among the countries, promote production integration among the cities located within the area of influence of the Hub, provide a physical connection to the MERCOSUR and enhance their competitiveness by reducing foreign trade costs and technologically modernizing border crossings.

Code	Stage	Central Interoceanic Hub: Group 5	Estimated Investment (US\$ million)
IOC31	●	REHABILITATION OF EL SILLAR ROAD SECTION (BO)	122.5
IOC32	●	TOLEDO - PISIGA ROAD (BO)	130.5
IOC33	●	PISIGA - COLCHANE BORDER CROSSING (BO - CH)	10.0
IOC34	●	IMPROVEMENT OF ARICA AIRPORT (CH)	10.0
IOC35	●	IMPROVEMENT OF ARICA PORT (CH)	50.0
IOC36	●	PAVING AND IMPROVEMENT OF THE IQUIQUE - COLCHANE ROAD (CH)	42.0
IOC38	●	REHABILITATION OF THE SANTA CRUZ - COCHABAMBA OLD ROAD (BO)	35.0
IOC39	●	REHABILITATION OF THE "PUENTE DE LA AMISTAD" BRIDGE (OR EISENHOWER BRIDGE) (BO)	3.0
IOC40	●	ENLARGEMENT AND IMPROVEMENT OF THE ARICA - TAMBO QUEMADO ROAD (CH)	50.0
IOC42	●	REHABILITATION AND IMPROVEMENT OF THE CAMANÁ - MATARANI - ILO ROAD (PE)	482.3
IOC61	●	MODERNIZATION OF ILO PORT (PE)	100.0
IOC62	●	IMPROVEMENT OF MATARANI PORT (PE)	37.0
IOC65	●	IMPROVEMENT OF IQUIQUE PORT (CH)	33.0
IOC66	●	ARICA - LA PAZ RAILWAY REHABILITATION AND CONCESSION (CHILEAN SECTION) (CH)	50.0
IOC67	●	IMPROVEMENT OF TACNA AIRPORT (PE)	51.5
IOC69	●	ENLARGEMENT OF THE IQUIQUE AIRPORT (CH)	16.6
IOC70	●	AREQUIPA LOGISTICS PLATFORM (DISTRIBUTION AREA) (PE)	33.5
IOC71	●	CONCESSION OF THE DIEGO ARACENA AIRPORT - IQUIQUE ROAD FOR ITS UPGRADE TO A FOUR-LANE ROAD (CH)	232.0
IOC79	●	TACNA - LA PAZ ROAD INTEGRATION, TACNA - COLLPA SECTION (BO - PE)	183.1
IOC80	●	UPGRADE OF LA PAZ – SANTA CRUZ ROUTE TO A FOUR-LANE ROAD (BO)	269.0
IOC81	●	CENTRAL BIOCEANIC RAILWAY CORRIDOR (BO)	6.7
IOC82	●	TRINIDAD - PUERTO USTÁREZ ROAD (BO)	226.0
IOC83	●	VIACHA - HITO IV ROAD (BO)	16.0
IOC84	●	CONSTRUCTION OF A MULTI-PURPOSE PORT OR MEGAPORT IN ILO (BO)	10.0
IOC85	●	CONSTRUCTION OF THE CHUNGARÁ BORDER COMPLEX (CH)	37.0
IOC86	●	IMPROVEMENT OF THE CHACALLUTA BORDER COMPLEX (CH)	1.0
IOC87	●	NEW ENLARGEMENT OF THE IQUIQUE AIRPORT (CH)	10.0
IOC88	●	IMPLEMENTATION OF THE INTEGRATED CONTROL SYSTEM AT SANTA ROSA - CHACALLUTA BORDER CROSSING (CH - PE)	1.5
TOTAL			2,249.2

PROJECT PORTFOLIO OF THE CENTRAL INTEROCEANIC HUB

I. GENERAL ASPECTS

The countries have agreed to include sixty-two projects in the Central Interoceanic Hub, accounting for an estimated investment of US\$ 8,830.5 million, as summarized below:

Table I.1 • General Indicators of the Central Interoceanic Hub

Group	Name	Number of Projects	Estimated Investment (US\$ million)
Group 1	CHILE - BOLIVIA - PARAGUAY - BRAZIL CONNECTION	16	1,300.0
Group 2	OPTIMIZATION OF THE CORUMBÁ - SÃO PAULO - SANTOS - RIO DE JANEIRO CORRIDOR	8	4,789.4
Group 3	SANTA CRUZ - PUERTO SUÁREZ - CORUMBÁ CONNECTION	4	433.5
Group 4	SANTA CRUZ - CUIABÁ CONNECTION	5	135.5
Group 5	CONNECTIONS OF THE HUB TO THE PACIFIC: ILO / MATARANI - DESAGUADERO - LA PAZ + ARICA - LA PAZ + IQUIQUE - ORURO - COCHABAMBA - SANTA CRUZ	28	2,249.2
TOTAL		61	8,907.6

II. SOURCE OF FINANCING

Table I.2 • Source of financing of the Central Interoceanic Hub

Source of financing	Number of Projects	% Projects	Estimated Investment (US\$ million)	% Investment
Public	45	73.8	5,840.5	65.6
Private	11	18.0	2,745.6	30.8
Public/Private	5	8.2	321.5	3.6
TOTAL	61	100.0	8,907.6	100.0

III. API PROJECTS

Table I.3 • API Projects - Central Interoceanic Hub

Code	Project Name	Estimated Investment (US\$ million)
21	PASSENGER AD CARGO HUB AIRPORT FOR SOUTH AMERICA (VIRU VIRU, SANTA CRUZ, INTERNATIONAL HUB AIRPORT) (BO)	20.0
IOC78	PASSENGER AD CARGO HUB AIRPORT FOR SOUTH AMERICA (VIRU VIRU, SANTA CRUZ, INTERNATIONAL HUB AIRPORT) (BO)	20.0
22	IMPROVEMENT OF ROAD CONNECTIVITY IN THE CENTRAL INTEROCEANIC HUB (BO - BR)	431.5
IOC14	CAMPO GRANDE BYPASS (BR)	30.0
IOC25	PUERTO SUÁREZ - CORUMBÁ INTEGRATED CONTROL AREA (BO - BR)	2.0
IOC32	TOLEDO - PISIGA ROAD (BO)	130.5
IOC80	UPGRADE OF LA PAZ - SANTA CRUZ ROAD TO A FOUR-LANE ROAD (BO)	269.0
23	INFANTE RIVAROLA - CAÑADA ORURO BORDER CROSSING (BO - PY)	1.9
IOC09	INFANTE RIVAROLA - CAÑADA ORURO BORDER CROSSING (BO - PY)	1.9
24	CENTRAL BIOCEANIC RAILWAY CORRIDOR (BOLIVIAN SECTION) (BO)	6.7
IOC81	CENTRAL BIOCEANIC RAILWAY CORRIDOR (BOLIVIAN SECTION) (BO)	6.7
TOTAL		460.1

IV. SECTOR/SUBSECTORBASED BREAKDOWN AND TYPE OF WORKS INVOLVED

Table I.4 • Sector-based breakdown of the Central Interoceanic Hub

Subsector	Transport				Energy				Communications			
	N° Projects	% Projects	Estimated Investment (US\$ millions)	% Investment	N° Projects	% Projects	Estimated Investment (US\$ millions)	% Investment	N° Projects	% Projects	Estimated Investment (US\$ millions)	% Investment
Air	6	10.5	138.1	1.6								
Road	30	52.6	3,925.2	45.7								
Railway	6	10.5	3,859.7	45.0								
River	1	1.8	10.0	0.1								
Sea	5	8.8	554.4	6.5								
Multimodal	1	1.8	33.5	0.4								
Border Crossing	8	14.0	60.4	0.7								
Power Generation					1	50.0	321.8	100.0				
Power Interconnection					1	50.0	0.0	0.0				
Communication Interconnection									2	100.0	4.5	100.0
TOTAL	57	100.0	8,581.3	100.0	2	100.0	321.8	100.0	2	100.0	4.5	100.0

Table I.5 • Air Transport

	Projects	Estimated Investment
Type of Work	N°	US\$ million
Refitting of airports	6	138.1
TOTAL	6	138.1

Table I.6 • Road Transport

	Projects	Estimated Investment
Type of Work	N°	US\$ million
Extension of the road capacity	3	684.0
Road by-pass and access to cities	3	652.0
Paving (new work)	13	1,583.9
Bridges (new ones and refitting)	3	44.0
Refitting of road and structures	8	961.3
TOTAL	30	3,925.2

Table I.7 • Railway Transport

	Projects	Estimated Investment
Type of Work	N°	US\$ million
Railway by-pass	2	1,531.0
Building of railways	1	6,7
Refitting of railways	3	2,322.0
TOTAL	6	3,859.7

Table I.8 • River Transport

	Projects	Estimated Investment
Type of Work	N°	US\$ million
Building of new river ports	1	10.0
TOTAL	1	10.0

Table I.9 • Maritime Transport

	Projects	Estimated Investment
Type of Work	N°	US\$ million
Extension of the road infrastructure of the maritime ports	4	454.4
New sea ports	1	100.0
TOTAL	5	554.4

Table I.10 • Multimodal Transport

	Projects	Estimated Investment
Type of Work	N°	US\$ million
Transfer stations	1	33.5
TOTAL	1	33.5

Table I.11 • Border Crossings

	Projects	Estimated Investment
Type of Work	N°	US\$ million
Refitting of existing infrastructure in border control centers	4	6.5
Infrastructure for the setting up of border control centers	4	53.9
TOTAL	8	60.4

Table I.12 • Power Generation

	Projects	Estimated Investment
Type of Work	N°	US\$ million
Other energy infrastructures	1	321.8
TOTAL	1	321.8

Table I.13 • **Power Interconnection**

	Projects	Estimated Investment
Type of Work	N°	US\$ million
Building of new power interconnections	1	0.0
TOTAL	1	0.0

Table I.14 • **Communication Interconnection**

	Projects	Estimated Investment
Type of Work	N°	US\$ million
Optic fiber	2	4.5
TOTAL	2	4.5

V. PROGRESS IN THE CENTRAL INTEROCEANIC HUB PROJECTS

Table I.15 • **Projects by Progress Attained**

Stage	Number of Projects	% Projects	Estimated Investment (US\$ million)	% Investment
Profiling	10	16.3	444.0	5.0
Pre-Execution	12	19.7	2,417.0	27.1
Execution	27	44.3	5,851.0	65.7
Concluded	12	19.7	195.6	2.2
TOTAL	61	100.0	8,907.6	100.0

Table I.16 • **Concluded Projects**

Code	Project Name	Estimated Investment (US\$ million)
IOC13	CAMPO GRANDE RING RAILWAY (BR)	31.0
IOC15	CORUMBÁ BYPASS (BR)	8.0
IOC20	IMPROVEMENT OF CORUMBÁ - CAMPO GRANDE RAILWAY SECTION (TREM DO PANTANAL) (BR)	22.0
IOC29	PASO DE FRONTERA SAN MATÍAS - CÁCERES (PORTO LIMÃO) (BO - BR)	2.0
IOC30	PAVING OF THE PORTO LIMÃO - BOLIVIAN BORDER (SAN MATÍAS) ROAD SECTION (BR)	13.0
IOC33	PISIGA - COLCHANE BORDER CROSSING (BO - CH)	10.0
IOC34	IMPROVEMENT OF ARICA AIRPORT (CH)	10.0
IOC36	PAVING AND IMPROVEMENT OF THE IQUIQUE - COLCHANE ROAD (CH)	42.0
IOC39	REHABILITATION OF THE "PUENTE DE LA AMISTAD" BRIDGE (OR EISENHOWER BRIDGE) (BO)	3.0
IOC62	IMPROVEMENT OF MATARANI PORT (PE)	37.0
IOC69	ENLARGEMENT OF THE IQUIQUE AIRPORT (CH)	16.6
IOC86	IMPROVEMENT OF THE CHACALLUTA BORDER COMPLEX (CH)	1.0
TOTAL		195.6

VI. ANCHOR PROJECTS

The countries identified six anchor projects in the Central Interoceanic Hub, totaling an estimated investment of US\$ 2,238.5 million, according to the following detail:

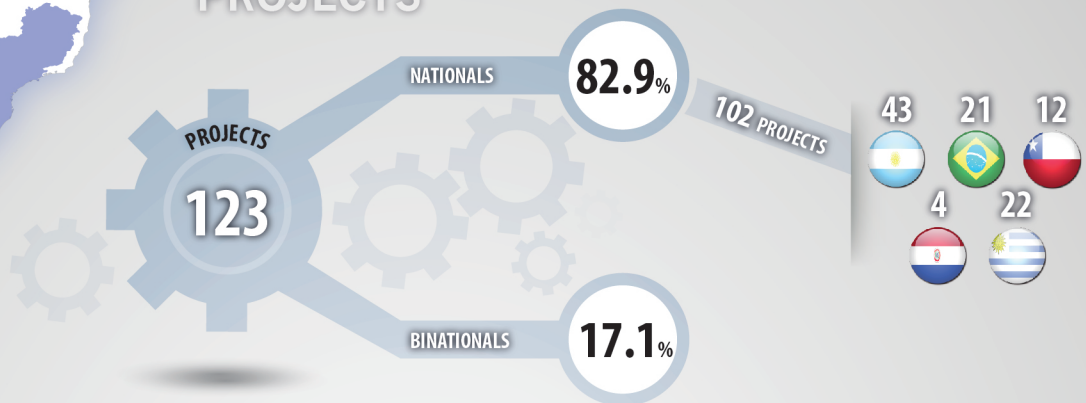
Table I.17 • **Anchor Projects**

Group	Code	Anchor Projects	Estimated Investment (US\$ million)	Financing Source	Scope	Project Stage
1	IOC77	CONSTRUCTION OF THE CARMELO PERALTA (PARAGUAY) - PORTO MURTINHO (BRASIL) INTERNATIONAL BRIDGE AND BORDER CROSSING (BR - PY)	0.0	Public	Binational	Profiling
1	IOC01	PAVING OF THE CARMELO PERALTA - LOMA PLATA ROAD SECTION (PY)	127.5	Public	National	Pre-Execution
2	IOC11	SÃO PAULO RING RAILWAY (BR)	1,500.0	Public	National	Pre-Execution
3	IOC22	CONSTRUCTION OF PAILÓN - SAN JOSÉ - PUERTO SUÁREZ ROAD (BO)	409.0	Public	National	Execution
4	IOC26	CONCEPCIÓN - BRAZILIAN BORDER (SAN MATÍAS) ROAD (BO)	79.5	Public/Private	National	Pre-Execution
5	IOC31	REHABILITATION OF EL SILLAR ROAD SECTION (BO)	122.5	Public	National	Pre-Execution
TOTAL			2,238.5			



MERCOSUR-CHILE HUB

PROJECTS



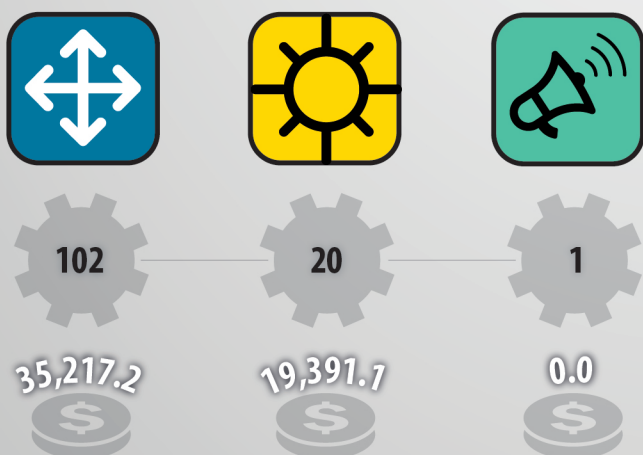
ESTIMATED INVESTMENT



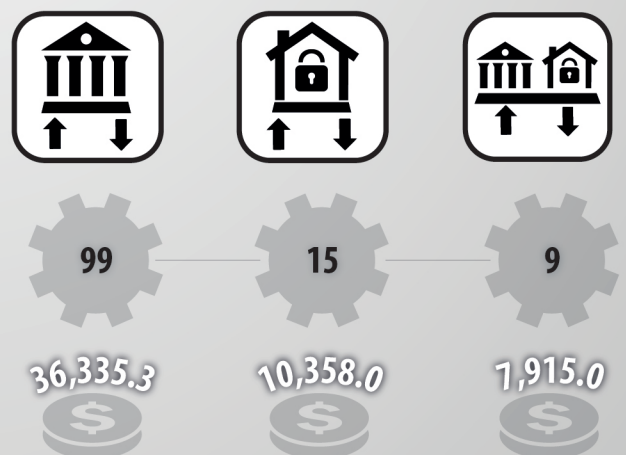
BY STAGE



BY SECTOR

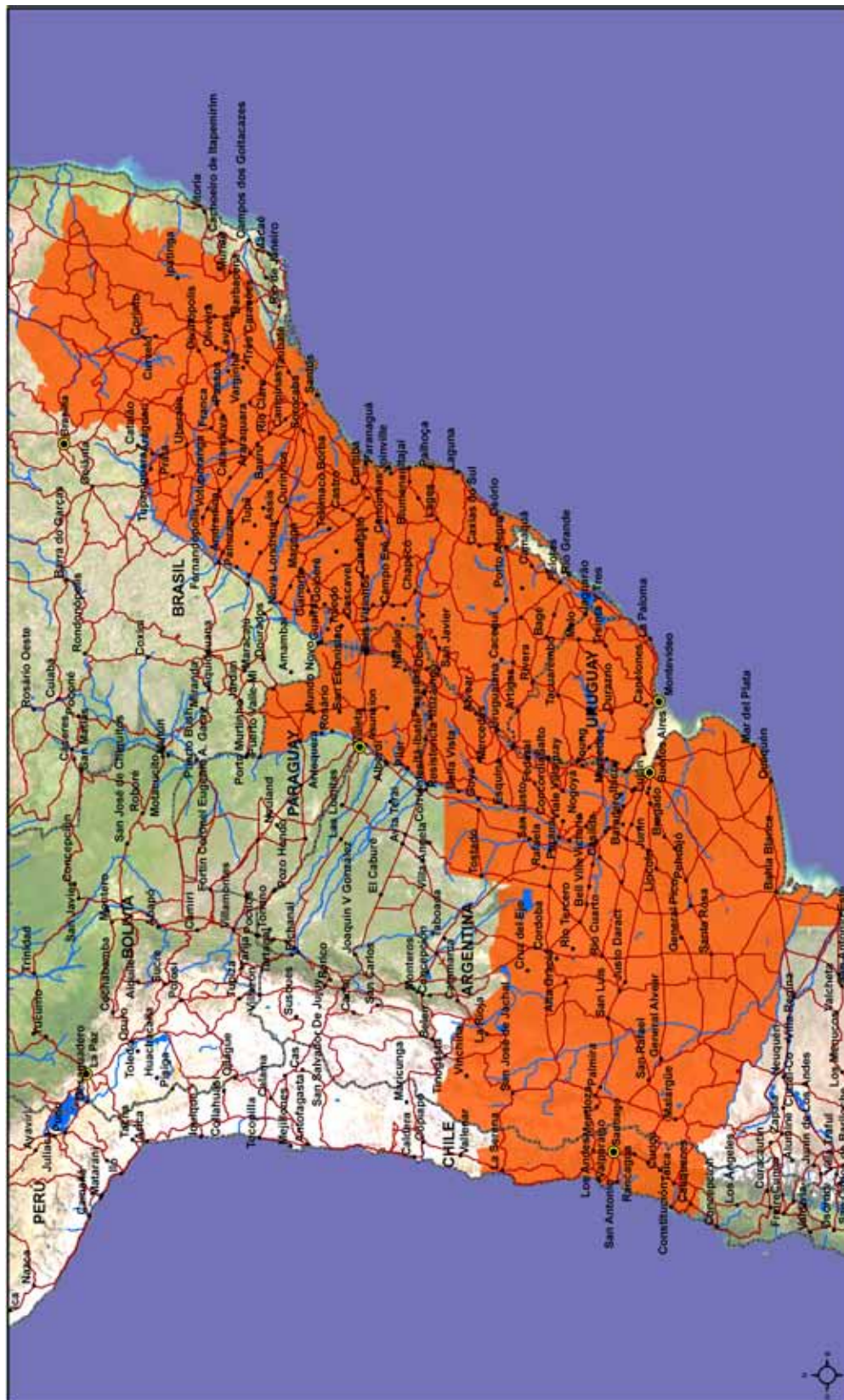


BY SOURCE OF FINANCING

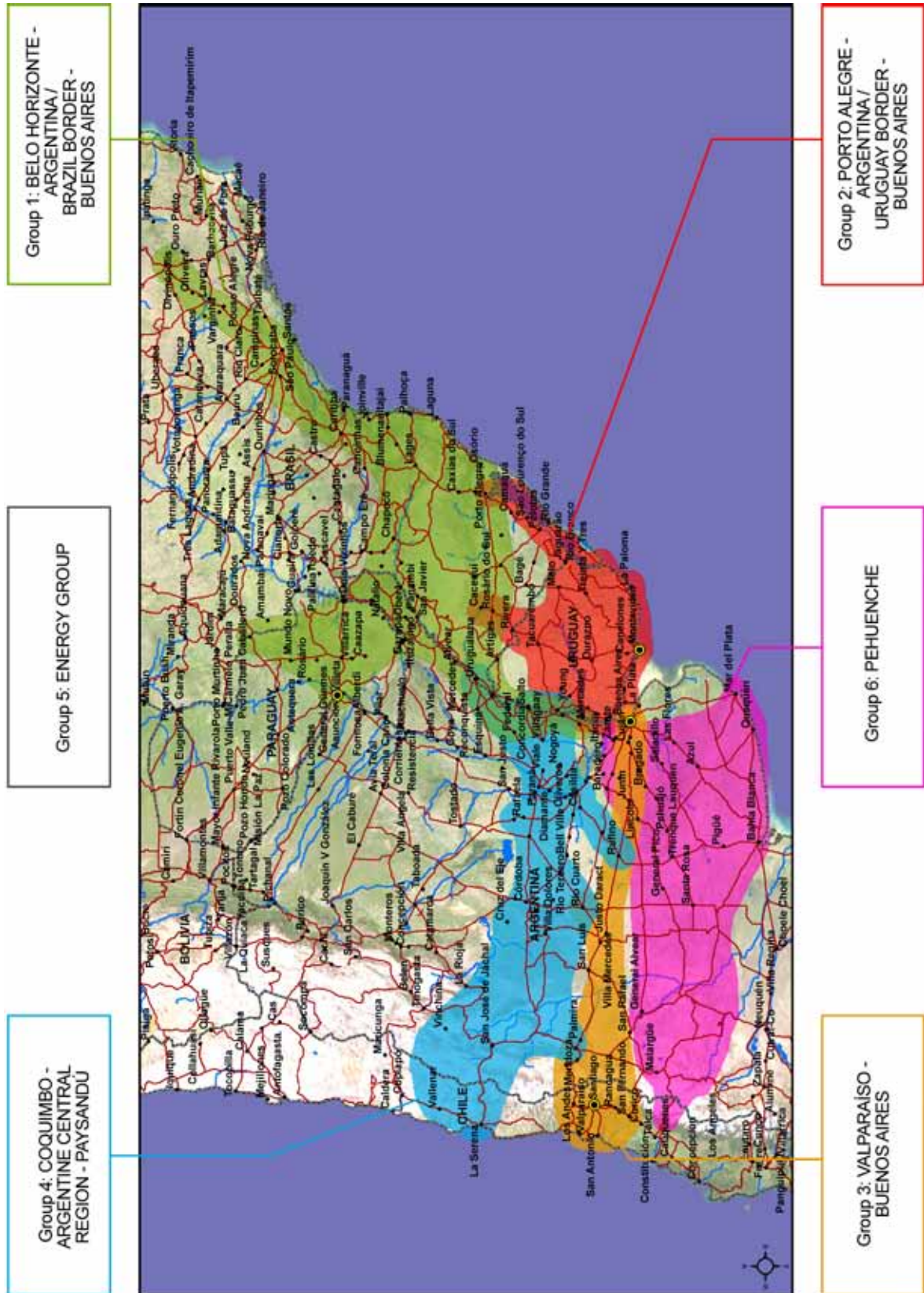


MERCOSUR-CHILE HUB

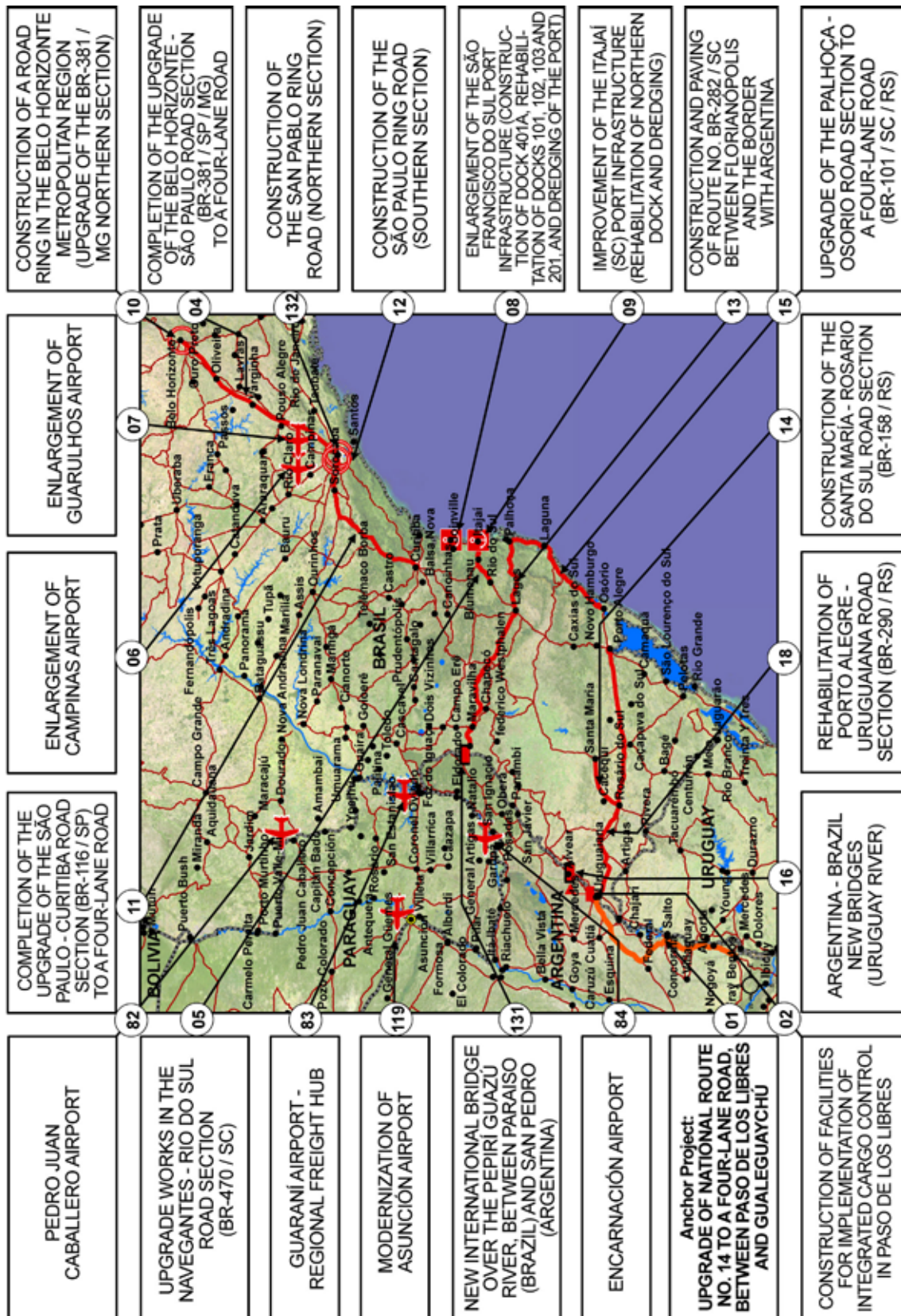
Area of Influence



Project Groups



MERCOSUR-CHILE HUB - GROUP 1: Belo Horizonte - Argentina / Brazil Border - Buenos Aires

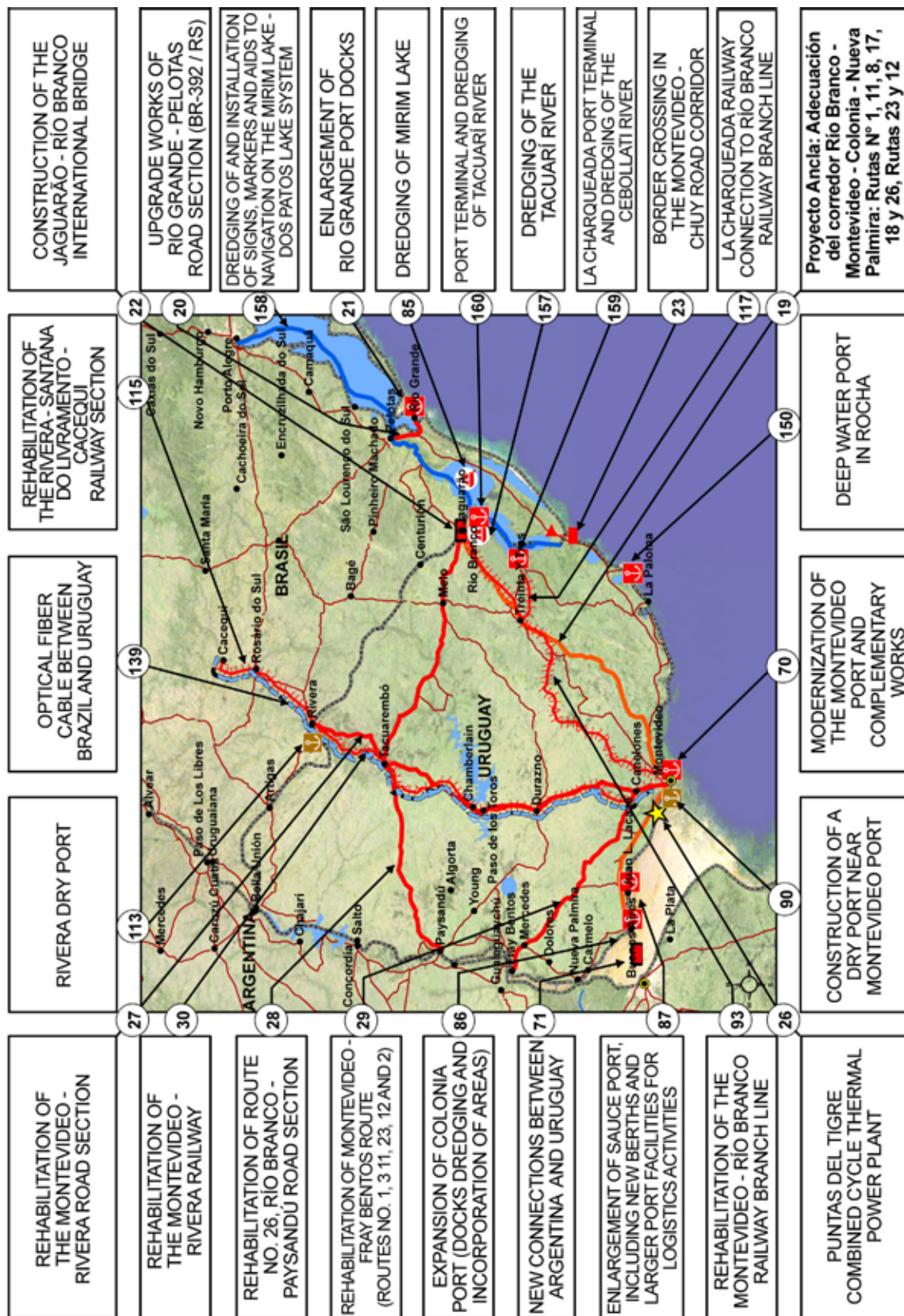


STRATEGIC FUNCTION

- Achieve, consolidate and improve the necessary infrastructure and logistics standards for the good performance of the region in intra and extra-regional markets.
- Make good use of the conditions of scale and demand in the area to attract public-private partnerships and disseminate the experience to other Hubs.
- Optimize goods and services flows between the Argentine and Brazilian economic centers.
- Optimize the logistics base so that the industry located in this area can reinforce its competitiveness at the regional global level

Code	Stage	MERCOSUR - Chile Hub: Group 1	Estimated Investment (US\$ million)
MCC01	●	UPGRADE OF NATIONAL ROUTE NO. 14 TO A FOUR-LANE ROAD, BETWEEN PASO DE LOS LIBRES AND GUALEGUAYCHÚ (AR)	780.0
MCC02	●	CONSTRUCTION OF FACILITIES FOR IMPLEMENTATION OF INTEGRATED CARGO CONTROL IN PASO DE LOS LIBRES (AR)	10.0
MCC04	●	COMPLETION OF THE UPGRADE OF THE BELO HORIZONTE - SÃO PAULO ROAD SECTION (BR-381 / SP / MG) TO A FOUR-LANE ROAD (BR)	1,300.0
MCC05	●	UPGRADE WORKS IN THE NAVEGANTES - RIO DO SUL ROAD SECTION (BR-470 / SC) (BR)	400.0
MCC06	●	ENLARGEMENT OF CAMPINAS AIRPORT (BR)	1,032.0
MCC07	●	ENLARGEMENT OF GUARULHOS AIRPORT (BR)	970.0
MCC08	●	ENLARGEMENT OF THE SÃO FRANCISCO DO SUL PORT INFRASTRUCTURE (CONSTRUCTION OF DOCK 401A, REHABILITATION OF DOCKS 101, 102, 103 AND 201, AND DREDGING OF THE PORT) (BR)	131.6
MCC09	●	IMPROVEMENT OF THE ITAJAÍ (SC) PORT INFRASTRUCTURE (REHABILITATION OF NORTHERN DOCK AND DREDGING) (BR)	68.0
MCC10	●	CONSTRUCTION OF A ROAD RING IN THE BELO HORIZONTE METROPOLITAN REGION (UPGRADE OF THE BR-381/MG NORTHERN SECTION) (BR)	650.0
MCC11	●	COMPLETION OF THE UPGRADE OF THE SAO PAULO - CURITIBA ROAD SECTION (BR-116 / SP) TO A FOUR-LANE ROAD (BR)	350.0
MCC12	●	CONSTRUCTION OF THE SÃO PAULO RING ROAD (SOUTHERN SECTION) (BR)	2,700.0
MCC13	●	CONSTRUCTION AND PAVING OF ROUTE NO. BR-282/SC, BETWEEN FLORIANÓPOLIS AND THE BORDER WITH ARGENTINA (BR)	100.0
MCC14	●	CONSTRUCTION OF THE SANTA MARÍA-ROSARIO DO SUL ROAD SECTION (BR-158/RS) (BR)	30.0
MCC15	●	UPGRADE OF THE PALHOÇA - OSORIO ROAD SECTION TO A FOUR-LANE ROAD (BR-101 / SC / RS) (BR)	2,000.0
MCC16	●	ARGENTINA - BRAZIL NEW BRIDGES (URUGUAY RIVER) (AR - BR)	0.0
MCC18	●	REHABILITATION OF PORTO ALEGRE - URUGUAIANA ROAD SECTION (BR-290/RS) (BR)	170.0
MCC82	●	PEDRO JUAN CABALLERO AIRPORT (PY)	2.5
MCC83	●	GUARANÍ AIRPORT - REGIONAL FREIGHT HUB (PY)	50.0
MCC84	●	ENCARNACIÓN AIRPORT (PY)	12.0
MCC119	●	MODERNIZATION OF ASUNCION AIRPORT (PY)	0.0
MCC131	●	NEW INTERNATIONAL BRIDGE OVER THE PEPIRÍ GUAZÚ RIVER, BETWEEN PARAISO (BRAZIL) AND SAN PEDRO (ARGENTINA) (AR - BR)	8.0
MCC132	●	CONSTRUCTION OF THE SAN PABLO RING ROAD (NORTHERN SECTION) (BR)	2,810.0
TOTAL			13,574.1

MERCOSUR-CHILE HUB - GROUP 2: Porto Alegre - Argentina / Uruguay Border - Buenos Aires

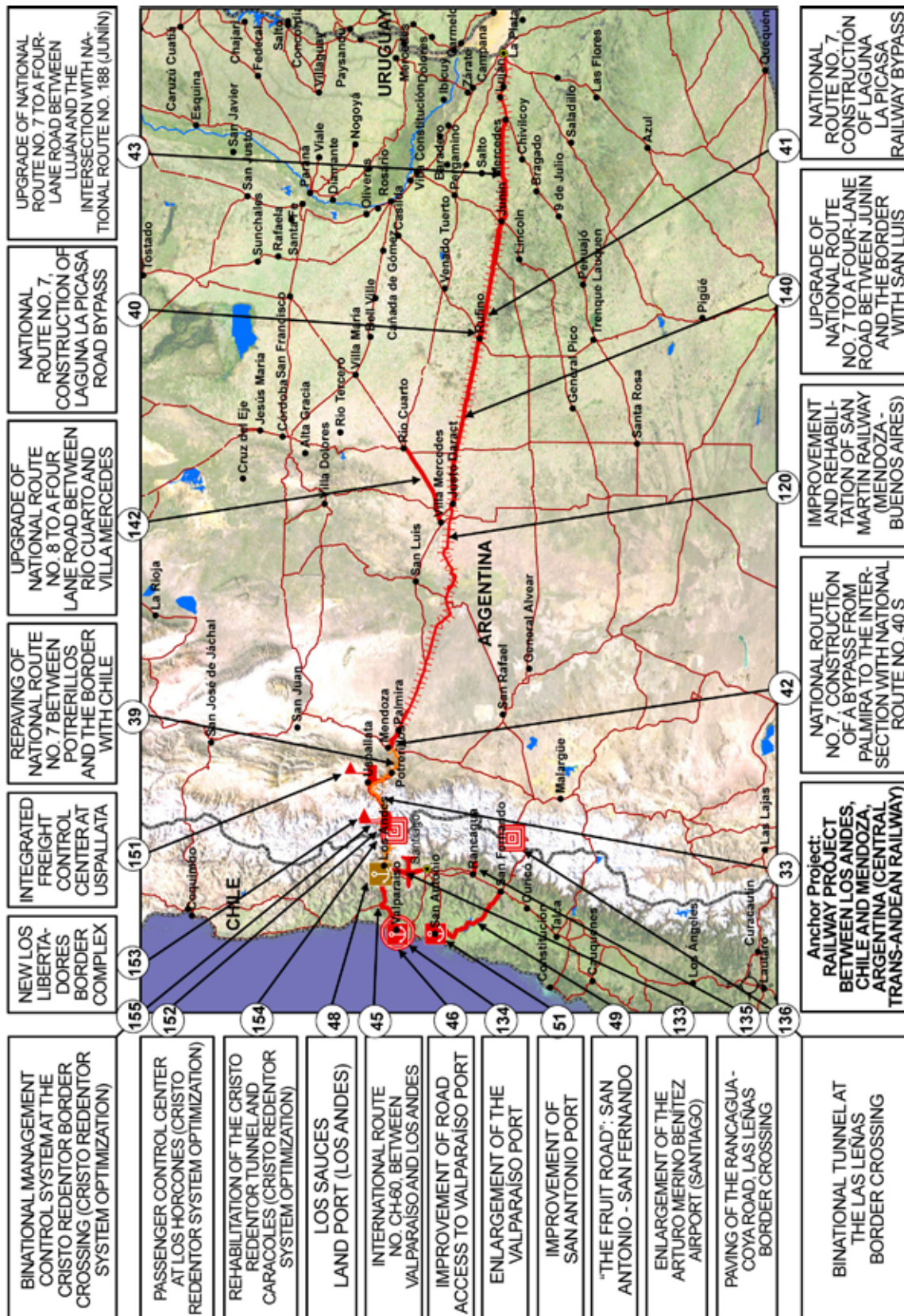


STRATEGIC FUNCTION

- Achieve, consolidate and improve the necessary infrastructure and logistics standards for the good performance of the region in global markets.
- Make good use of the conditions of scale and demand in the area to attract public-private partnerships and disseminate the experience to other Hubs.
- Optimize goods and services flows between the Argentine, Brazilian and Uruguayan economic centers.
- Facilitate the flow of people among the countries of the Group
- Optimize the logistics base so that the industry located in this area can reinforce its competitiveness at the global level.

Code	Stage	MERCOSUR - Chile Hub: Group 2	Estimated Investment (US\$ million)
MCC19	●	UPGRADE WORKS OF THE RÍO BRANCO - MONTEVIDEO - COLONIA - NUEVA PALMIRA ROAD CORRIDOR (ROUTES NO. 1, 11, 8, 17, 18 AND 26, ROUTES NO. 23 AND 12) (UY)	253.5
MCC20	●	UPGRADE WORKS OF RIO GRANDE - PELOTAS ROAD SECTION (BR-392/RS) (BR)	500.0
MCC21	●	ENLARGEMENT OF RIO GRANDE PORT DOCKS (BR)	435.7
MCC22	●	CONSTRUCTION OF THE JAGUARÃO - RÍO BRANCO INTERNATIONAL BRIDGE (BR - UY)	93.5
MCC23	●	BORDER CROSSING IN THE MONTEVIDEO - CHUY ROAD CORRIDOR (UY)	15.0
MCC26	●	PUNTAS DEL TIGRE COMBINED CYCLE THERMAL POWER PLANT (UY)	170.0
MCC27	●	REHABILITATION OF THE MONTEVIDEO - RIVERA ROAD SECTION (UY)	85.6
MCC28	●	REHABILITATION OF ROUTE NO. 26, RÍO BRANCO - PAYSANDÚ ROAD SECTION (UY)	39.8
MCC29	●	REHABILITATION OF MONTEVIDEO - FRAY BENTOS ROUTE (ROUTES NO. 1, 3, 11, 23, 12 AND 2) (UY)	37.9
MCC30	●	REHABILITATION OF THE MONTEVIDEO - RIVERA RAILWAY (UY)	134.9
MCC70	●	MODERNIZATION OF THE MONTEVIDEO PORT AND COMPLEMENTARY WORKS (UY)	189.0
MCC71	●	NEW CONNECTIONS BETWEEN ARGENTINA AND URUGUAY (AR - UY)	0.5
MCC85	●	DREDGING OF MIRIM LAKE (BR)	25.0
MCC86	●	EXPANSION OF COLONIA PORT (DOCKS, DREDGING AND INCORPORATION OF AREAS) (UY)	14.0
MCC87	●	ENLARGEMENT OF SAUCE PORT, INCLUDING NEW BERTHS AND LARGER PORT FACILITIES FOR LOGISTICS ACTIVITIES (UY)	10.0
MCC90	●	CONSTRUCTION OF A DRY PORT NEAR MONTEVIDEO PORT (UY)	25.0
MCC93	●	REHABILITATION OF THE MONTEVIDEO - RÍO BRANCO RAILWAY BRANCH LINE (UY)	200.0
MCC113	●	RIVERA DRY PORT (UY)	2.0
MCC115	●	REHABILITATION OF THE RIVERA - SANTANA DO LIVRAMENTO - CACEQUI RAILWAY SECTION (BR - UY)	5.0
MCC117	●	LA CHARQUEADA RAILWAY CONNECTION TO RÍO BRANCO RAILWAY BRANCH LINE (UY)	40.0
MCC139	●	OPTICAL FIBER CABLE BETWEEN BRAZIL AND URUGUAY (BR - UY)	0.0
MCC150	●	DEEP WATER PORT IN ROCHA (UY)	1,000.0
MCC157	●	DREDGING OF THE TACUARÍ RIVER (BR)	1.4
MCC158	●	DREDGING OF AND INSTALLATION OF SIGNS, MARKERS AND AIDS TO NAVIGATION ON THE MIRIM LAKE - DOS PATOS LAKE SYSTEM (BR)	0.0
MCC159	●	LA CHARQUEADA PORT TERMINAL AND DREDGING OF THE CEBOLLATI RIVER (UY)	7.0
MCC160	●	PORT TERMINAL AND DREDGING OF TACUARÍ (UY)	7.0
TOTAL			3,291.8

MERCOSUR-CHILE HUB - GROUP 3: Valparaíso - Buenos Aires

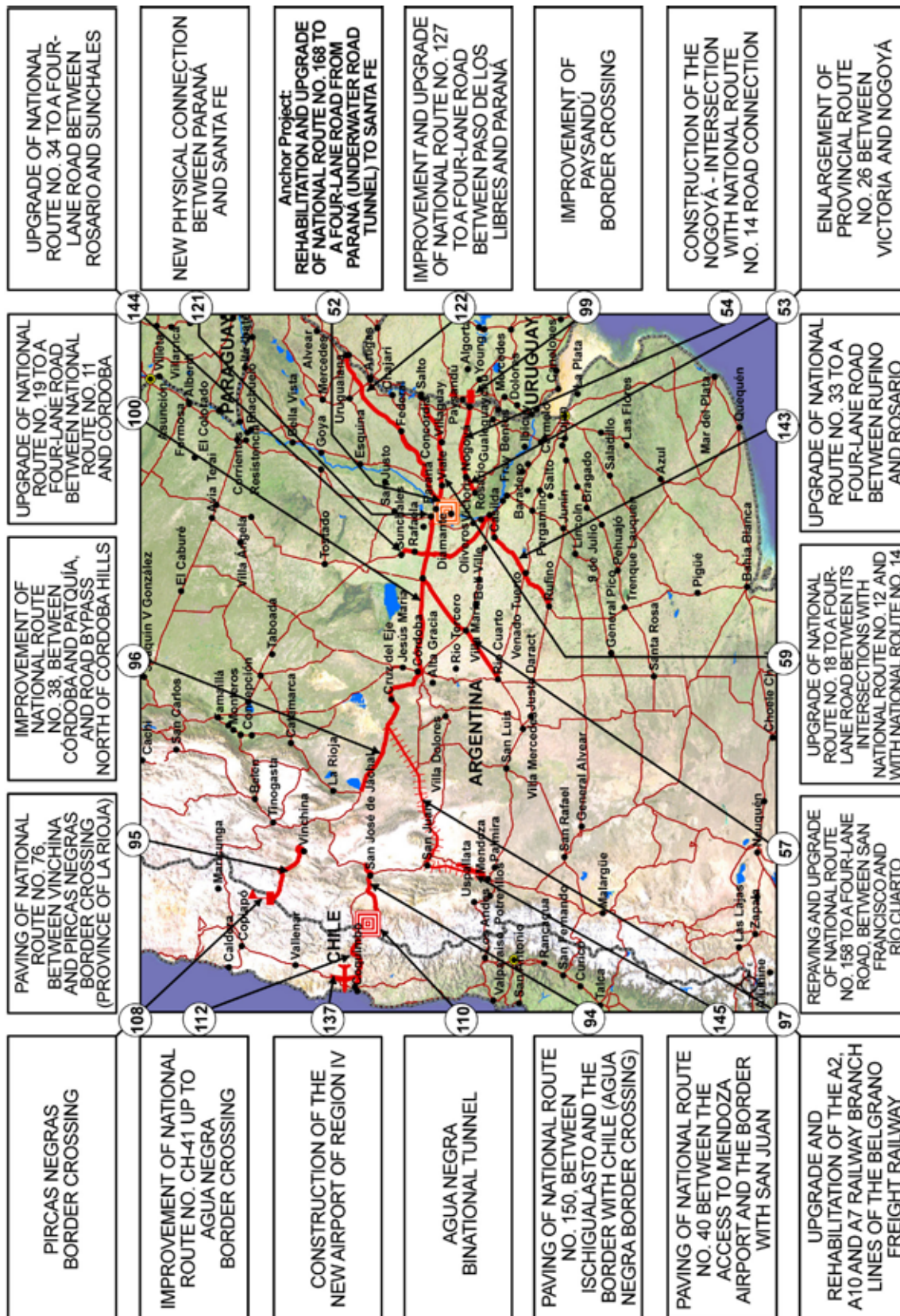


STRATEGIC FUNCTION

- Achieve, consolidate and improve the necessary infrastructure and logistics standards for the good performance of the region in global markets.
- Make good use of the conditions of scale and demand in the area to attract public-private partnerships and disseminate the experience to other Hubs.
- Optimize goods and services flows between the Argentine and Chilean economic centers.
- Optimize the logistics base so that the industry located in this area can reinforce its competitiveness at the regional and global level.
- Promote Chile to serve as a logistics platform for the remaining countries of the Hub to develop markets for their products and services in Asia

Code	Stage	MERCOSUR - Chile Hub: Group 3	Estimated Investment (US\$ million)
MCC33	●	RAILWAY PROJECT BETWEEN LOS ANDES, CHILE AND MENDOZA, ARGENTINA (CENTRAL TRANS-ANDEAN RAILWAY) (AR - CH)	5,100.0
MCC39	●	REPAVING OF NATIONAL ROUTE NO. 7 BETWEEN POTRERILLOS AND THE BORDER WITH CHILE (AR)	52.0
MCC40	●	NATIONAL ROUTE NO. 7, CONSTRUCTION OF LAGUNA LA PICASA ROAD BYPASS (AR)	20.0
MCC41	●	NATIONAL ROUTE NO. 7, CONSTRUCTION OF LAGUNA LA PICASA RAILWAY BYPASS (AR)	30.0
MCC42	●	NATIONAL ROUTE NO. 7, CONSTRUCTION OF A BYPASS FROM PALMIRA TO THE INTERSECTION WITH NATIONAL ROUTE NO. 40S (AR)	25.0
MCC43	●	UPGRADE OF NATIONAL ROUTE NO. 7 TO A FOUR-LANE ROAD BETWEEN LUJÁN AND THE INTERSECTION WITH NATIONAL ROUTE NO. 188 (JUNÍN) (AR)	237.0
MCC45	●	INTERNATIONAL ROUTE NO. CH-60, BETWEEN VALPARAÍSO AND LOS ANDES (CH)	351.0
MCC46	●	IMPROVEMENT OF ROAD ACCESS TO VALPARAÍSO PORT (CH)	105.0
MCC48	●	LOS SAUCES LAND PORT (LOS ANDES) (CH)	10.0
MCC49	●	"THE FRUIT ROAD": SAN ANTONIO - SAN FERNANDO (CH)	360.0
MCC51	●	IMPROVEMENT OF SAN ANTONIO PORT (CH)	350.0
MCC120	●	IMPROVEMENT AND REHABILITATION OF SAN MARTÍN RAILWAY (MENDOZA - BUENOS AIRES) (AR)	90.0
MCC133	●	ENLARGEMENT OF THE ARTURO MERINO BENÍTEZ AIRPORT (SANTIAGO) (CH)	696.0
MCC134	●	ENLARGEMENT OF THE VALPARAÍSO PORT (CH)	400.0
MCC135	●	PAVING OF THE RANCAGUA - COYA ROAD, LAS LEÑAS BORDER CROSSING (CH)	200.0
MCC136	●	BINATIONAL TUNNEL AT THE LAS LEÑAS BORDER CROSSING (AR -CH)	1,200.0
MCC140	●	UPGRADE OF NATIONAL ROUTE NO. 7 TO A FOUR-LANE ROAD BETWEEN JUNÍN AND THE BORDER WITH SAN LUIS (AR)	800.0
MCC142	●	UPGRADE OF NATIONAL ROUTE NO. 8 TO A FOUR-LANE ROAD BETWEEN RÍO CUARTO AND VILLA MERCEDES (AR)	240.0
MCC151	●	INTEGRATED FREIGHT CONTROL CENTER AT USPALLATA (CRISTO REDENTOR SYSTEM OPTIMIZATION) (AR)	90.0
MCC152	●	PASSENGER CONTROL CENTER AT LOS HORCONES (CRISTO REDENTOR SYSTEM OPTIMIZATION) (AR)	80.0
MCC153	●	NEW LOS LIBERTADORES BORDER COMPLEX (CRISTO REDENTOR SYSTEM OPTIMIZATION) (CH)	70.0
MCC154	●	REHABILITATION OF THE CRISTO REDENTOR TUNNEL AND CARACOL (CRISTO REDENTOR SYSTEM OPTIMIZATION) (AR - CH)	4.0
MCC155	●	BINATIONAL MANAGEMENT CONTROL SYSTEM AT THE CRISTO REDENTOR BORDER CROSSING (CRISTO REDENTOR SYSTEM OPTIMIZATION) (AR - CH)	14.0
TOTAL			10,524.0

MERCOSUR-CHILE HUB - GROUP 4: Coquimbo - Argentine Central Region – Paysandú



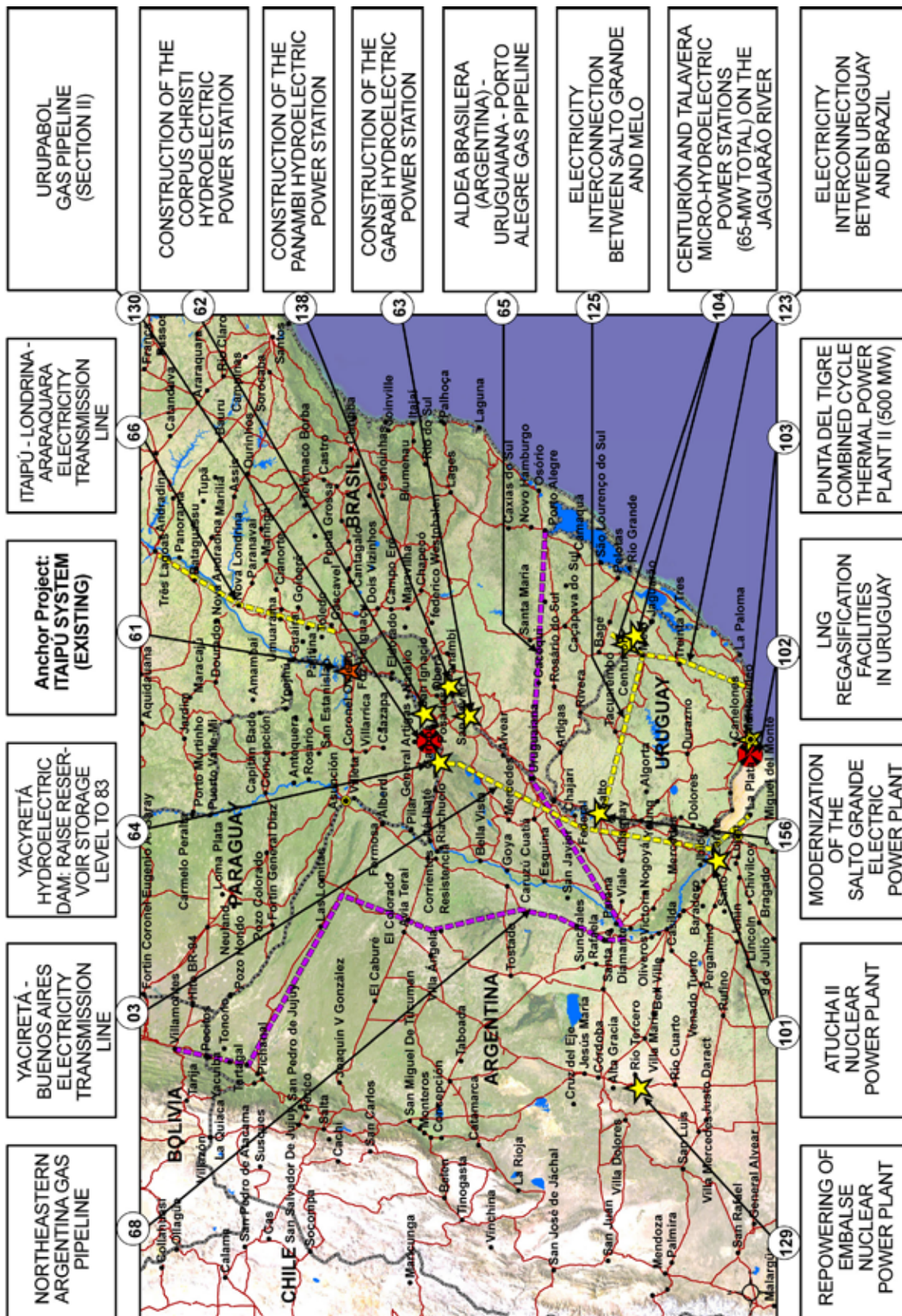
STRATEGIC FUNCTION

- Optimize goods and services flows among the economic centers in Argentina, Brazil, Chile, Paraguay and Uruguay.
- Articulate goods and services flows with the Paraguay-Paraná Waterway Hub.
- Facilitate the flow of people among the countries of the Group.
- Boost the development of ecotourism in the region.
- Develop and improve the regional productive chains.

Code	Stage	MERCOSUR - Chile Hub: Group 4	Estimated Investment (US\$ million)
MCC52	●	REHABILITATION AND UPGRADE OF NATIONAL ROUTE NO. 168 TO A FOUR-LANE ROAD FROM PARANÁ (UNDERWATER ROAD TUNNEL) TO SANTA FE (AR)	40.0
MCC53	●	ENLARGEMENT OF PROVINCIAL ROUTE NO. 26 BETWEEN VICTORIA AND NOGOYÁ (AR)	6.0
MCC54	●	CONSTRUCTION OF THE NOGOYÁ - INTERSECTION WITH NATIONAL ROUTE NO. 14 ROAD CONNECTION (AR)	0.0
MCC57	●	REPAVING AND UPGRADE OF NATIONAL ROUTE NO. 158 TO A FOUR-LANE ROAD, BETWEEN SAN FRANCISCO AND RÍO CUARTO (AR)	400.0
MCC59	●	UPGRADE OF NATIONAL ROUTE NO. 18 TO A FOUR-LANE ROAD BETWEEN ITS INTERSECTIONS WITH NATIONAL ROUTE NO. 12 AND WITH NATIONAL ROUTE NO. 14 (AR)	250.0
MCC94	●	PAVING OF NATIONAL ROUTE NO. 150, BETWEEN ISCHIGUALASTO AND THE BORDER WITH CHILE (AGUA NEGRA BORDER CROSSING) (AR)	73.0
MCC95	●	PAVING OF NATIONAL ROUTE NO. 76, BETWEEN VINCHINA AND PIRCAS NEGRAS BORDER CROSSING (PROVINCE OF LA RIOJA) (AR)	120.0
MCC96	●	IMPROVEMENT OF NATIONAL ROUTE NO. 38, BETWEEN CÓRDOBA AND PATQUÍA, AND ROAD BYPASS NORTH OF CÓRDOBA HILLS (AR)	100.0
MCC97	●	UPGRADE AND REHABILITATION OF THE A2, A10 AND A7 RAILWAY BRANCH LINES OF THE BELGRANO FREIGHT RAILWAY (AR)	225.0
MCC99	●	IMPROVEMENT OF PAYSANDÚ BORDER CROSSING (UY)	12.0
MCC100	●	UPGRADE OF NATIONAL ROUTE NO. 19 TO A FOUR-LANE ROAD BETWEEN NATIONAL ROUTE NO. 11 AND CÓRDOBA (AR)	529.0
MCC108	●	PIRCAS NEGRAS BORDER CROSSING (*) (AR - CH)	5.0
MCC110	●	AGUA NEGRA BINATIONAL TUNNEL (AR - CH)	1,600.0
MCC112	●	IMPROVEMENT OF NATIONAL ROUTE NO. CH-41 UP TO AGUA NEGRA BORDER CROSSING (CH)	60.0
MCC121	●	NEW PHYSICAL CONNECTION BETWEEN PARANÁ AND SANTA FE (AR)	1.8
MCC122	●	IMPROVEMENT AND UPGRADE OF NATIONAL ROUTE NO. 127 TO A FOUR-LANE ROAD BETWEEN PASO DE LOS LIBRES AND PARANÁ (AR)	50.0
MCC137	●	CONSTRUCTION OF THE NEW AIRPORT OF REGION IV (CH)	75.0
MCC143	●	UPGRADE OF NATIONAL ROUTE NO. 33 TO A FOUR-LANE ROAD BETWEEN RUFINO AND ROSARIO (AR)	500.0
MCC144	●	UPGRADE OF NATIONAL ROUTE NO. 34 TO A FOUR-LANE ROAD BETWEEN ROSARIO AND SUNCHALES (AR)	500.0
MCC145	●	PAVING OF NATIONAL ROUTE NO. 40 BETWEEN THE ACCESS TO MENDOZA AIRPORT AND THE BORDER WITH SAN JUAN (AR)	210.0
TOTAL			4,756.8

MERCOSUR-CHILE HUB - GROUP 5:

Energy Group

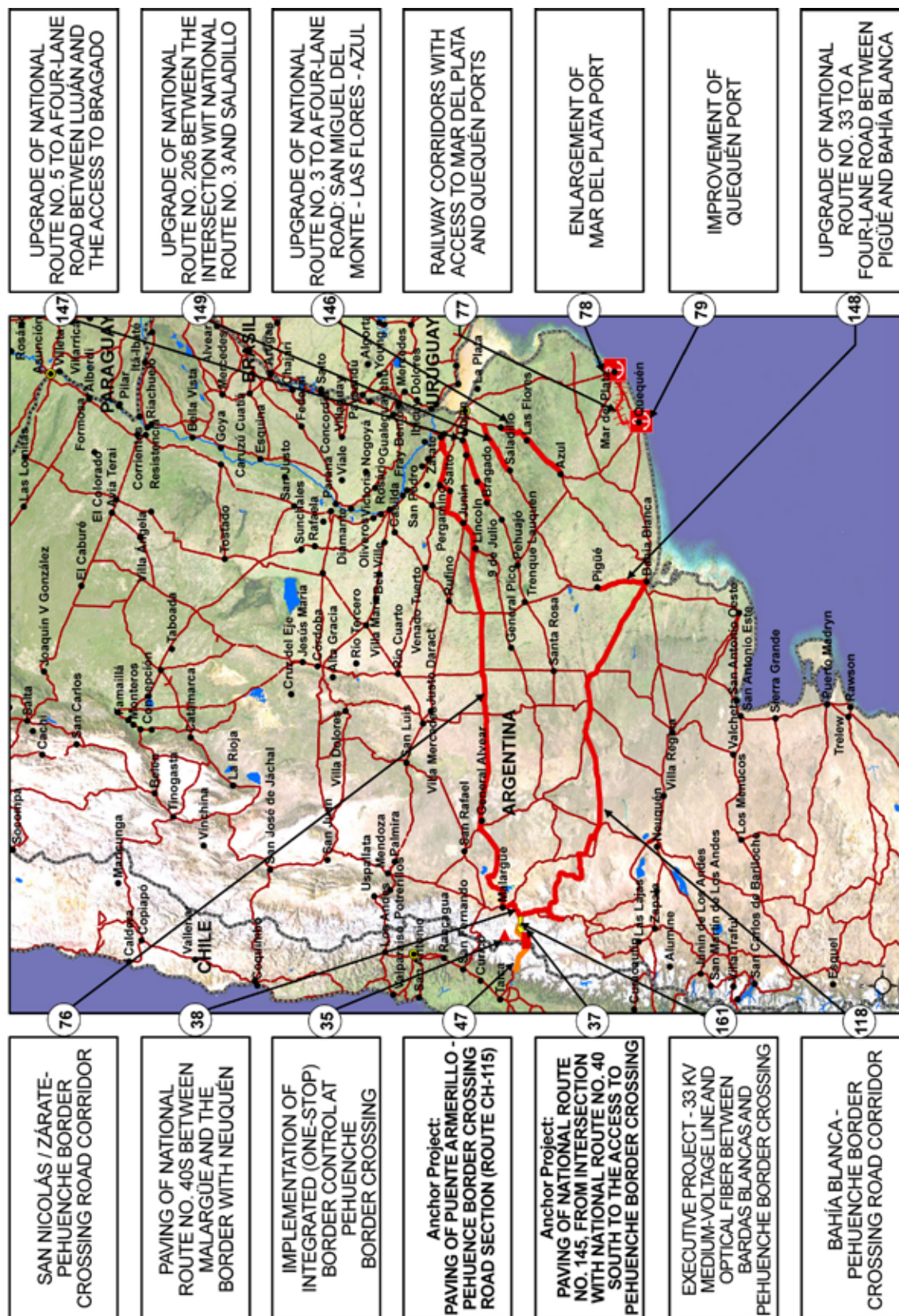


STRATEGIC FUNCTION

- Enhance the dependability of the electric and gas systems in the area
- Strengthen and increase energy generation, transmission, and distribution capacity in a densely populated, highly industrialized area
- Diversify the energy matrix of the MERCOSUR countries

Code	Stage	MERCOSUR - Chile Hub: Group 5	Estimated Investment (US\$ million)
MCC03	●	YACIRETÁ - BUENOS AIRES ELECTRICITY TRANSMISSION LINE (AR)	600.0
MCC61	●	ITAIPU SYSTEM (EXISTING) (BR - PY)	0.0
MCC62	●	CONSTRUCTION OF THE CORPUS CHRISTI HYDROELECTRIC POWER STATION (AR - PY)	4,200.0
MCC63	●	CONSTRUCTION OF THE GARABÍ HYDROELECTRIC POWER STATION (AR - BR)	2,728.0
MCC64	●	YACYRETÁ HYDROELECTRIC DAM: RAISE RESERVOIR STORAGE LEVEL TO 83 (AR - PY)	1,200.0
MCC65	●	ALDEA BRASILEIRA (ARGENTINA) - URUGUAIANA - PORTO ALEGRE GAS PIPELINE (BR)	510.0
MCC66	●	ITAIPU - LONDRINA - ARARAQUARA ELECTRICITY TRANSMISSION LINE (BR)	149.1
MCC68	●	NORTHEASTERN ARGENTINA GAS PIPELINE (AR)	1,000.0
MCC101	●	ATUCHA II NUCLEAR POWER PLANT (AR)	740.0
MCC102	●	LNG REGASIFICATION FACILITIES IN URUGUAY (UY)	500.0
MCC103	●	PUNTA DEL TIGRE COMBINED CYCLE THERMAL POWER PLANT II (500 MW) (UY)	531.0
MCC104	●	CENTURIÓN AND TALAVERA MICRO-HYDROELECTRIC POWER STATIONS (65-MW TOTAL) ON THE JAGUARÃO RIVER (UY)	60.0
MCC123	●	ELECTRICITY INTERCONNECTION BETWEEN URUGUAY AND BRAZIL (BR - UY)	349.0
MCC125	●	ELECTRICITY INTERCONNECTION BETWEEN SALTO GRANDE AND MELO (UY)	100.0
MCC129	●	REPOWERING OF EMBALSE NUCLEAR POWER PLANT (AR)	1,780.0
MCC130	●	URUPABOL GAS PIPELINE (SECTION II) (*) (PY - UY)	2,300.0
MCC138	●	CONSTRUCTION OF THE PANAMBI HYDROELECTRIC POWER STATION (AR - BR)	2,474.0
MCC156	●	MODERNIZATION OF THE SALTO GRANDE ELECTRIC POWER PLANT (AR - UY)	0.0
TOTAL			19,221.1

MERCOSUR-CHILE HUB - GROUP 6: Pehuenche



STRATEGIC FUNCTION

- Offer connectivity alternatives and services to the trade flows in the countries that make up the MERCOSUR and Chile.
- Make the intra-regional development more dynamic.
- Promote the development of integrated tourism in the region.

Code	Stage	MERCOSUR - Chile Hub: Group 6	Estimated Investment (US\$ million)
MCC35	●	IMPLEMENTATION OF INTEGRATED (ONE-STOP) BORDER CONTROL AT PEHUENCHE BORDER CROSSING (AR - CH)	40.0
MCC37	●	PAVING OF NATIONAL ROUTE NO. 145, FROM INTERSECTION WITH NATIONAL ROUTE NO. 40 SOUTH TO THE ACCESS TO PEHUENCHE BORDER CROSSING (AR)	63.0
MCC38	●	PAVING OF NATIONAL ROUTE NO. 40S BETWEEN MALARGÜE AND THE BORDER WITH NEUQUÉN (AR)	90.0
MCC47	●	PAVING OF PUENTE ARMERILLO - PEHUENCE BORDER CROSSING ROAD SECTION (ROUTE CH-115) (CH)	60.0
MCC76	●	SAN NICOLÁS/ZÁRATE- PEHUENCHE BORDER CROSSING ROAD CORRIDOR (AR)	1,000.0
MCC77	●	RAILWAY CORRIDORS WITH ACCESS TO MAR DEL PLATA AND QUEQUÉN PORTS (AR)	35.0
MCC78	●	ENLARGEMENT OF MAR DEL PLATA PORT (AR)	6.5
MCC79	●	IMPROVEMENT OF QUEQUÉN PORT (AR)	40.0
MCC118	●	BAHÍA BLANCA - PEHUENCHE BORDER CROSSING ROAD CORRIDOR (AR)	1,000.0
MCC146	●	UPGRADE OF NATIONAL ROUTE NO. 3 TO A FOUR-LANE ROAD: SAN MIGUEL DEL MONTE - LAS FLORES - AZUL (AR)	166.0
MCC147	●	UPGRADE OF NATIONAL ROUTE NO. 5 TO A FOUR-LANE ROAD BETWEEN LUJÁN AND THE ACCESS TO BRAGADO (AR)	240.0
MCC148	●	UPGRADE OF NATIONAL ROUTE NO. 33 TO A FOUR-LANE ROAD BETWEEN PIGÜÉ AND BAHÍA BLANCA (AR)	260.0
MCC149	●	UPGRADE OF NATIONAL ROUTE NO. 205 BETWEEN THE INTERSECTION WITH NATIONAL ROUTE NO. 3 AND SALADILLO (AR)	240.0
MCC161	●	EXECUTIVE PROJECT - 33 KV MEDIUM-VOLTAGE LINE AND OPTICAL FIBER BETWEEN BARDAS BLANCAS AND PEHUENCHE BORDER CROSSING (AR)	0.0
TOTAL			3,240.5

PROJECT PORTFOLIO OF THE MERCOSUR-CHILE

I. GENERAL ASPECTS

The countries have agreed to include one hundred and twenty-three projects in the MERCOSUR-Chile Hub, accounting for an estimated investment of US\$ 54,608.3 million, as summarized below:

Table J.1 • General Indicators of the MERCOSUR-Chile hub

Group	Name	Number of Projects	Estimated Investment (US\$ million)
Group 1	BELO HORIZONTE - ARGENTINA / BRAZIL BORDER - BUENOS AIRES	22	13,574.1
Group 2	PORTO ALEGRE - ARGENTINA / URUGUAY BORDER - BUENOS AIRES	26	3,291.8
Group 3	VALPARAÍSO - BUENOS AIRES	23	10,524.0
Group 4	COQUIMBO - ARGENTINE CENTRAL REGION - PAYSANDÚ	20	4,756.8
Group 5	ENERGY GROUP	18	19,221.1
Group 6	PEHUENCHE	14	3,240.5
TOTAL		123	54,608.3

II. SOURCE OF FINANCING

Table J.2 • Source of financing of the MERCOSUR-Chile Hub projects

Source of financing	Number of Projects	% Projects	Estimated Investment (US\$ million)	% Investment
Public	99	80.5	36,335.3	66.5
Private	15	12.2	10,358.0	19.0
Public/Private	9	7.3	7,915.0	14.5
TOTAL	123	100.0	54,608.3	100.0

III. API PROJECTS

Table J.3 · API Projects - MERCOSUR-Chile hub

Code	Project Name	Estimated Investment (US\$ million)
25	NORTHEASTERN ARGENTINA GAS PIPELINE (AR - BO)	1,000.0
MCC68	NORTHEASTERN ARGENTINA GAS PIPELINE (AR)	1,000.0
26	CONSTRUCTION OF THE JAGUARÃO - RÍO BRANCO INTERNATIONAL BRIDGE (BR - UY)	93.5
MCC22	CONSTRUCTION OF THE JAGUARÃO - RÍO BRANCO INTERNATIONAL BRIDGE (BR - UY)	93.5
27	MULTIMODAL TRANSPORTATION IN THE LAGUNA MERIN AND LAGOADOS PATOS SYSTEM (BR - UY)	40.4
MCC85	DREDGING OF MIRIM LAKE (BR)	25.0
MCC157	DREDGING OF THE TACUARÍ RIVER (BR)	1.4
MCC158	DREDGING OF AND INSTALLATION OF SIGNS, MARKERS AND AIDS TO NAVIGATION ON THE MIRIM LAKE - DOS PATOS LAKE SYSTEM (BR)	0.0
MCC159	LA CHARQUEADA PORT TERMINAL AND DREDGING (UY)	7.0
MCC160	PORT TERMINAL AND DREDGING OF TACUARI RIVER (UY)	7.0
28	MONTEVIDEO - CACEQUI RAILWAY CORRIDOR (BR - UY)	139.9
MCC115	REHABILITATION OF THE RIVERA - SANTANA DO LIVRAMENTO - CACEQUI RAILWAY (BR - UY)	5.0
MCC30	REHABILITATION OF THE MONTEVIDEO - RIVERA RAILWAY (UY)	134.9
29	OPTIMIZATION OF THE CRISTO REDENTOR BORDER CROSSING SYSTEM (AR - CH)	258.0
MCC151	INTEGRATED FREIGHT CONTROL CENTER AT USPALLATA (CRISTO REDENTOR SYSTEM OPTIMIZATION) (AR)	90.0
MCC152	PASSENGER CONTROL CENTER AT LOS HORCONES (CRISTO REDENTOR SYSTEM OPTIMIZATION) (AR)	80.0
MCC153	NEW LOS LIBERTADORES BORDER COMPLEX (CRISTO REDENTOR SYSTEM OPTIMIZATION) (CH)	70.0
MCC154	REHABILITATION OF THE CRISTO REDENTOR TUNNEL AND CARACOLES (CRISTO REDENTOR SYSTEM OPTIMIZATION) (AR - CH)	4.0
MCC155	BINATIONAL MANAGEMENT CONTROL SYSTEM AT THE CRISTO REDENTOR BORDER CROSSING (CRISTO REDENTOR SYSTEM OPTIMIZATION) (AR - CH)	14.0
30	AGUA NEGRA BINATIONAL TUNNEL (AR - CH)	1,600.0
MCC110	AGUA NEGRA BINATIONAL TUNNEL (AR - CH)	1,600.0
TOTAL		3,131.8

IV. SECTOR/SUBSECTORBASED BREAKDOWN AND TYPE OF WORKS INVOLVED

Table J.4 - Sector-based breakdown of the MERCOSUR-Chile hub

	Transport				Energy				Communications			
Subsector	N° Projects	% Projects	Estimated Investment (US\$ millions)	% Investment	N° Projects	% Projects	Estimated Investment (US\$ millions)	% Investment	N° Projects	% Projects	Estimated Investment (US\$ millions)	% Investment
Air	8	7.8	2,837.5	8.1								
Road	57	55.9	23,461.7	66.6								
Railway	9	8.8	5,859.9	16.6								
River	7	6.9	64.3	0.2								
Sea	9	8.8	2,620.8	7.4								
Multimodal	2	2.0	27.0	0.1								
Border Crossing	10	9.8	346.0	1.0								
Power Generation					13	65.0	14,893.0	76.8				
Power Interconnection					7	35.0	4,498.1	23.2				
Communication Interconnection									1	100.0	0.0	100.0
TOTAL	102	100.0	35,217.2	100.0	20	100.0	19,391.1	100.0	1	100.0	0.0	100.0

Table J.5 - Air Transport

	Projects	Estimated Investment
Type of Work	N°	US\$ million
Refitting of airports	6	2,750.5
New airports	2	87.0
TOTAL	8	2,837.5

Table J.6 • Road Transport

	Projects	Estimated Investment
Type of Work	N°	US\$ million
Extension of the road capacity	23	10,204.0
Road by-pass and access to cities	4	6,185.0
Paving (new work)	8	946.0
Bridges (new ones and refitting)	5	103.8
Refitting of road and structures	15	3,222.9
Tunnels (new ones and refitting)	2	2,800.0
TOTAL	57	23,461.7

Table J.7 • Railway Transport

	Projects	Estimated Investment
Type of Work	N°	US\$ million
Building of railways	1	200.0
Refitting of railways	8	5,659.9
TOTAL	9	5,859.9

Table J.8 • River Transport

	Projects	Estimated Investment
Type of Work	N°	US\$ million
REFITTING OF NEW RIVER PORTS	2	24.0
BUILDING OF NEW RIVER PORTS	2	14.0
IMPROVEMENT OF RIVER NAVIGABILITY	3	26.3
TOTAL	7	64.3

Table J.9 • Maritime Transport

	Projects	Estimated Investment
Type of Work	N°	US\$ million
Extension of the road infrastructure of the maritime ports	8	1,620.8
New sea ports	1	1,000.0
TOTAL	9	2,620.8

Table J.10 • Multimodal Transport

	Projects	Estimated Investment
Type of Work	N°	US\$ million
Transfer stations	2	27.0
TOTAL	2	27.0

Table J.11 • Border Crossings

	Projects	Estimated Investment
Type of Work	N°	US\$ million
Refitting of existing infrastructure in border control centers	5	206.0
Infrastructure for the setting up of border control centers	5	140.0
TOTAL	10	346.0

Table J.12 • Power Generation

	Projects	Estimated Investment
Type of Work	N°	US\$ million
Generation by means of nuclear power	2	2,520.0
Hydroelectric plants (new ones and refitting) - microcentrals	7	10,662.0
Other energy infrastructures	2	1,010.0
Thermoelectric plants	2	701.0
TOTAL	13	14,893.0

Table J.13 • Power Interconnection

	Projects	Estimated Investment
Type of Work	N°	US\$ million
Building of new power interconnections	7	4,498.1
TOTAL	7	4,498.1

Table J.14 • Communication Interconnection

	Projects	Estimated Investment
Type of Work	N°	US\$ million
Optic fiber	1	0.0
TOTAL	1	0.0

V. PROGRESS IN THE MERCOSUR CHILE HUB PROJECTS

Table J.15 • Projects by Progress Attained

Stage	Number of Projects	% Projects	Estimated Investment (US\$ million)	% Investment
Profiling	24	19,5	6.092,3	11,2
Pre-Execution	38	30,9	24.300,5	44,5
Execution	39	31,7	16.553,3	30,3
Concluded	22	17,9	7.662,2	14,0
TOTAL	123	100,0	54.608,3	100,0

Table J.16 • Concluded Projects

Code	Project Name	Estimated Investment (US\$ million)
MCC01	UPGRADE OF NATIONAL ROUTE NO. 14 TO A FOUR-LANE ROAD, BETWEEN PASO DE LOS LIBRES AND GUALEGUAYCHÚ (AR)	780.0
MCC02	CONSTRUCTION OF FACILITIES FOR IMPLEMENTATION OF INTEGRATED CARGO CONTROL IN PASO DE LOS LIBRES (AR)	10.0
MCC03	YACIRETÁ - BUENOS AIRES ELECTRICITY TRANSMISSION LINE (AR)	600.0
MCC04	COMPLETION OF THE UPGRADE OF THE BELO HORIZONTE - SÃO PAULO ROAD SECTION (BR-381 / SP / MG) TO A FOUR-LANE ROAD (BR)	1,300.0
MCC12	CONSTRUCTION OF THE SÃO PAULO RING ROAD (SOUTHERN SECTION) (BR)	2,700.0
MCC13	CONSTRUCTION AND PAVING OF ROUTE NO. BR-282/SC, BETWEEN FLORIANÓPOLIS AND THE BORDER WITH ARGENTINA (BR)	100.0
MCC14	CONSTRUCTION OF THE SANTA MARÍA - ROSARIO DO SUL ROAD SECTION (BR-158/RS) (BR)	30.0
MCC19	UPGRADE WORKS OF THE RÍO BRANCO - MONTEVIDEO - COLONIA - NUEVA PALMIRA ROAD CORRIDOR (ROUTES NO. 1, 11, 8, 17, 18 AND 26, ROUTES NO. 23 AND 12) (UY)	253.5
MCC26	PUNTAS DEL TIGRE COMBINED CYCLE THERMAL POWER PLANT (UY)	170.0
MCC27	REHABILITATION OF THE MONTEVIDEO - RIVERA ROAD SECTION (UY)	85.6
MCC40	NATIONAL ROUTE NO. 7, CONSTRUCTION OF LAGUNA LA PICASA ROAD BYPASS (AR)	20.0
MCC41	NATIONAL ROUTE NO. 7, CONSTRUCTION OF LAGUNA LA PICASA RAILWAY BYPASS (AR)	30.0
MCC46	IMPROVEMENT OF ROAD ACCESS TO VALPARAÍSO PORT (CH)	105.0
MCC47	PAVING OF PUENTE ARMERILLO - PEHUENCE BORDER CROSSING ROAD SECTION (ROUTE CH-115) (CH)	60.0
MCC48	LOS SAUCES LAND PORT (LOS ANDES) (CH)	10.0
MCC52	REHABILITATION AND UPGRADE OF NATIONAL ROUTE NO. 168 TO A FOUR-LANE ROAD FROM PARANÁ (UNDERWATER ROAD TUNNEL) TO SANTA FE (AR)	40.0
MCC61	ITAIPU SYSTEM (EXISTING) (BR - PY)	16,000.0
MCC64	YACYRETÁ HYDROELECTRIC DAM: RAISE RESERVOIR STORAGE LEVEL TO 83 (AR - PY)	1,200.0
MCC66	ITAIPU - LONDRINA - ARARAQUARA ELECTRICITY TRANSMISSION LINE (BR)	149.1
MCC86	EXPANSION OF COLONIA PORT (DOCKS, DREDGING AND INCORPORATION OF AREAS) (UY)	14.0
MCC115	REHABILITATION OF THE RIVERA - SANTANA DO LIVRAMENTO - CACEQUI RAILWAY SECTION (BR - UY)	5.0
MCC139	OPTICAL FIBER CABLE BETWEEN BRAZIL AND URUGUAY (BR - UY)	0.0
TOTAL		7,662.2

VI. ANCHOR PROJECTS

The countries identified seven anchor projects in the MERCOSUR-Chile Hub, totaling an estimated investment of US\$ 6,296.5 million, according to the following detail:

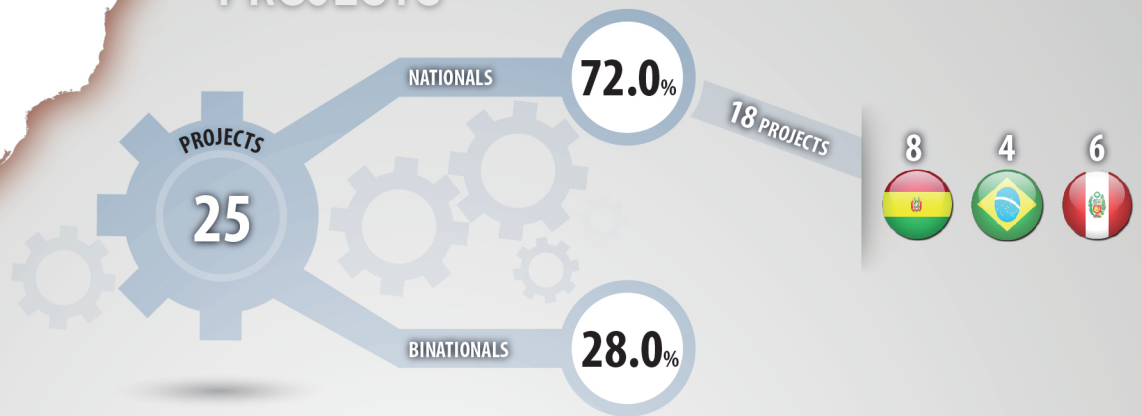
Table J.17 · Anchor Projects

Group	Code	Anchor Projects	Estimated Investment (US\$ million)	Financing Source	Scope	Project Stage
1	MCC01	UPGRADE OF NATIONAL ROUTE NO. 14 TO A FOUR-LANE ROAD, BETWEEN PASO DE LOS LIBRES AND GUALEGUAYCHÚ (AR)	780.0	Public	National	Concluded
2	MCC19	UPGRADE WORKS OF THE RÍO BRANCO - MONTEVIDEO - COLONIA - NUEVA PALMIRA ROAD CORRIDOR (ROUTES NO. 1, 11, 8, 17, 18 AND 26, ROUTES NO. 23 AND 12) (UY)	253.5	Public/ Private	National	Concluded
3	MCC33	RAILWAY PROJECT BETWEEN LOS ANDES, CHILE AND MENDOZA, ARGENTINA (CENTRAL TRANS-ANDEAN RAILWAY) (AR - CH)	5,100.0	Private	Binational	Pre-Execution
4	MCC52	REHABILITATION AND UPGRADE OF NATIONAL ROUTE NO. 168 TO A FOUR-LANE ROAD FROM PARANÁ (UNDERWATER ROAD TUNNEL) TO SANTA FE (AR)	40.0	Public	National	Concluded
5	MCC61	ITAIPU SYSTEM (EXISTING) (BR - PY)	0.0	Public	Binational	Concluded
6	MCC37	PAVING OF NATIONAL ROUTE NO. 145, FROM INTERSECTION WITH NATIONAL ROUTE NO. 40 SOUTH TO THE ACCESS TO PEHUENCHE BORDER CROSSING (AR)	63.0	Public	National	Execution
6	MCC47	PAVIMENTACIÓN DEL TRAMO PUENTE ARMERILLO - PASO PEHUENCHE (RUTA CH-115) (CH)	60.0	Public	National	Concluded
TOTAL			6,296.5			

PERU-BRASIL-BOLIVIA HUB



PROJECTS



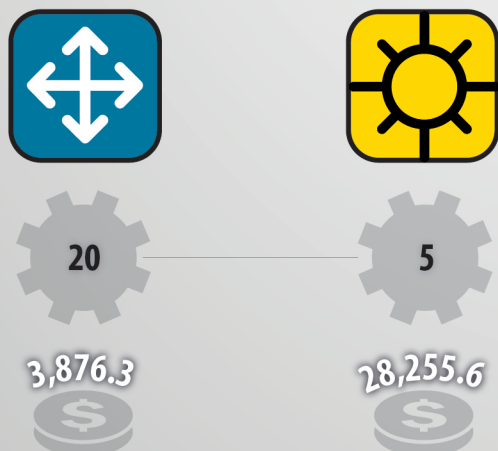
ESTIMATED INVESTMENT



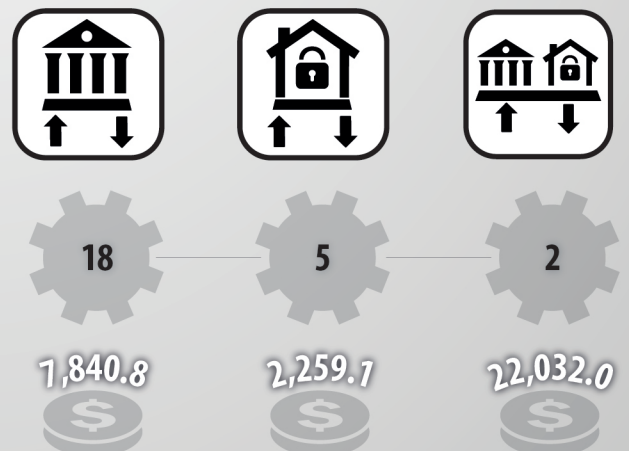
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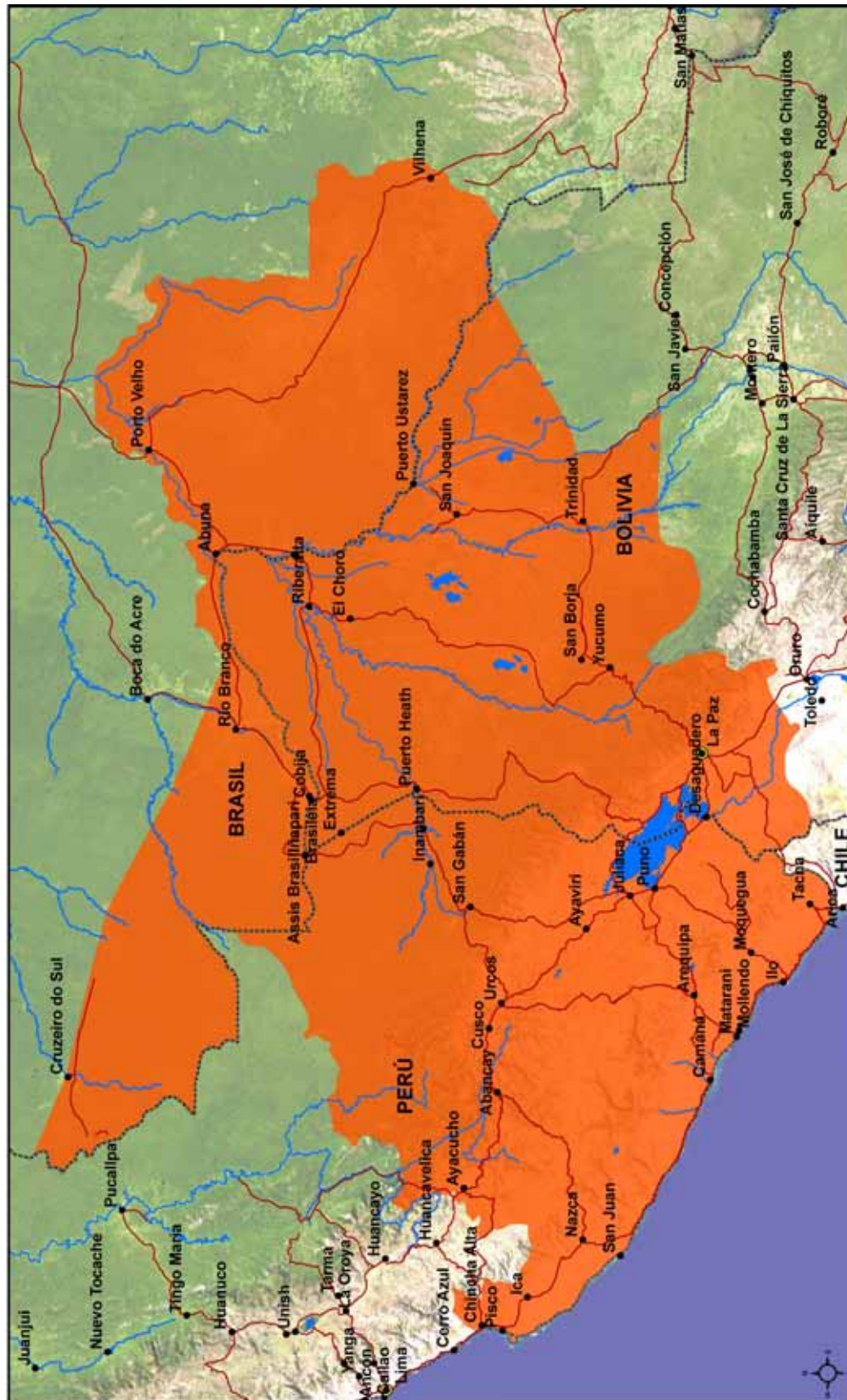
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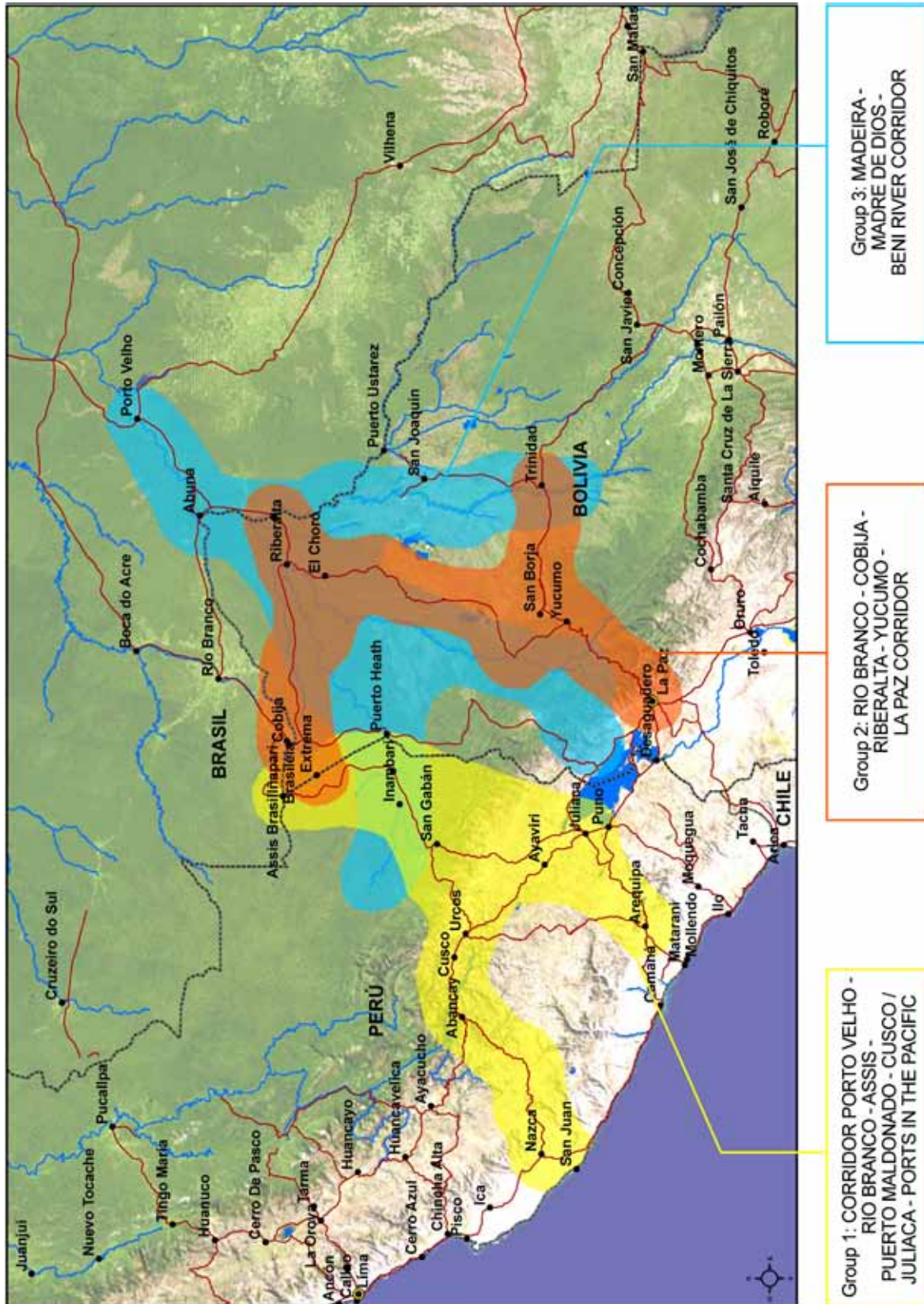


BY SOURCE OF FINANCING



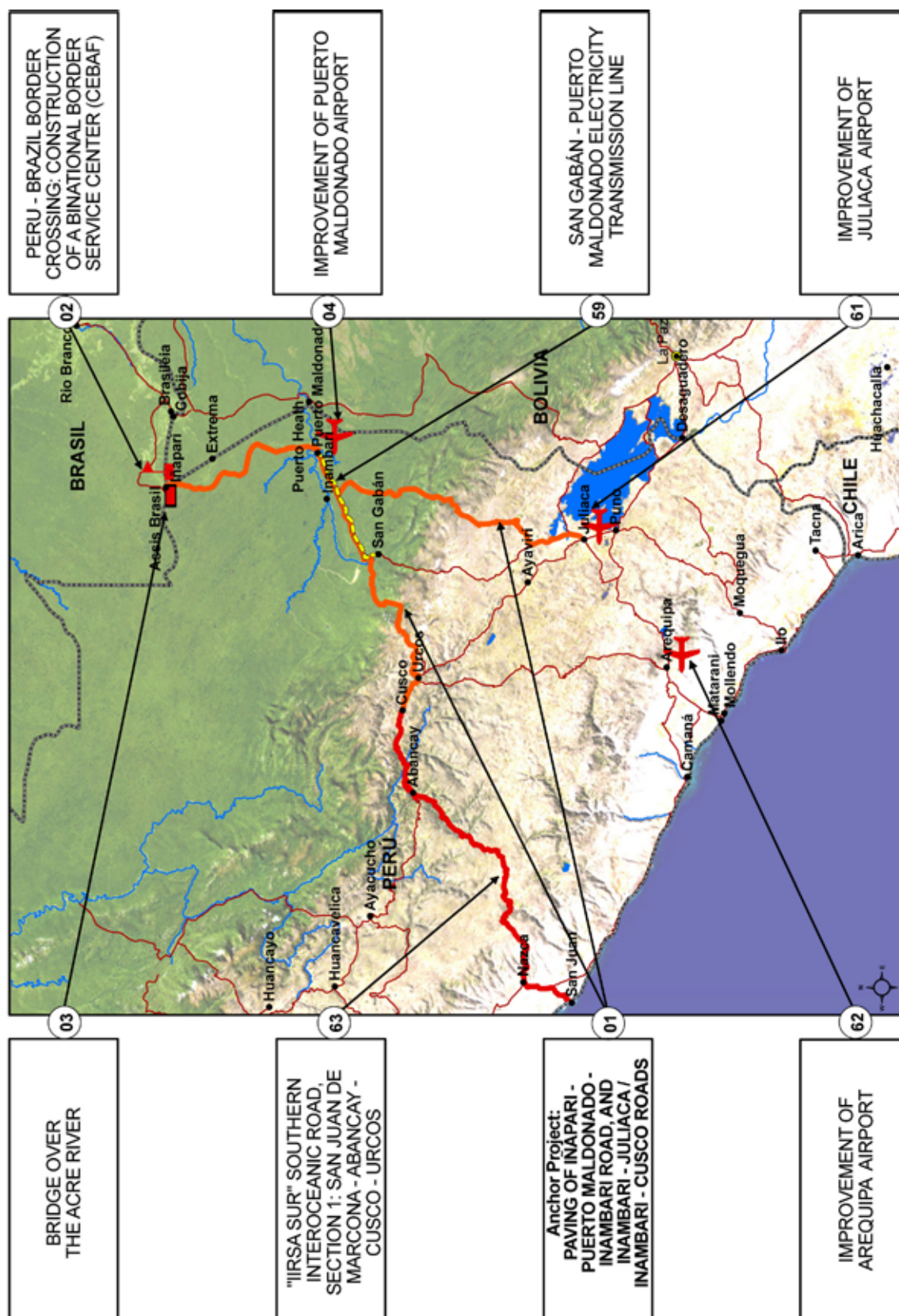
PERÚ-BRASIL-BOLIVIA HUB Area of Influence





PERÚ-BRASIL-BOLIVIA HUB GROUP 1:

Corridor Porto Velho - Rio Branco - Assis - Puerto Maldonado - Cusco / Juliaca - Ports in the Pacific

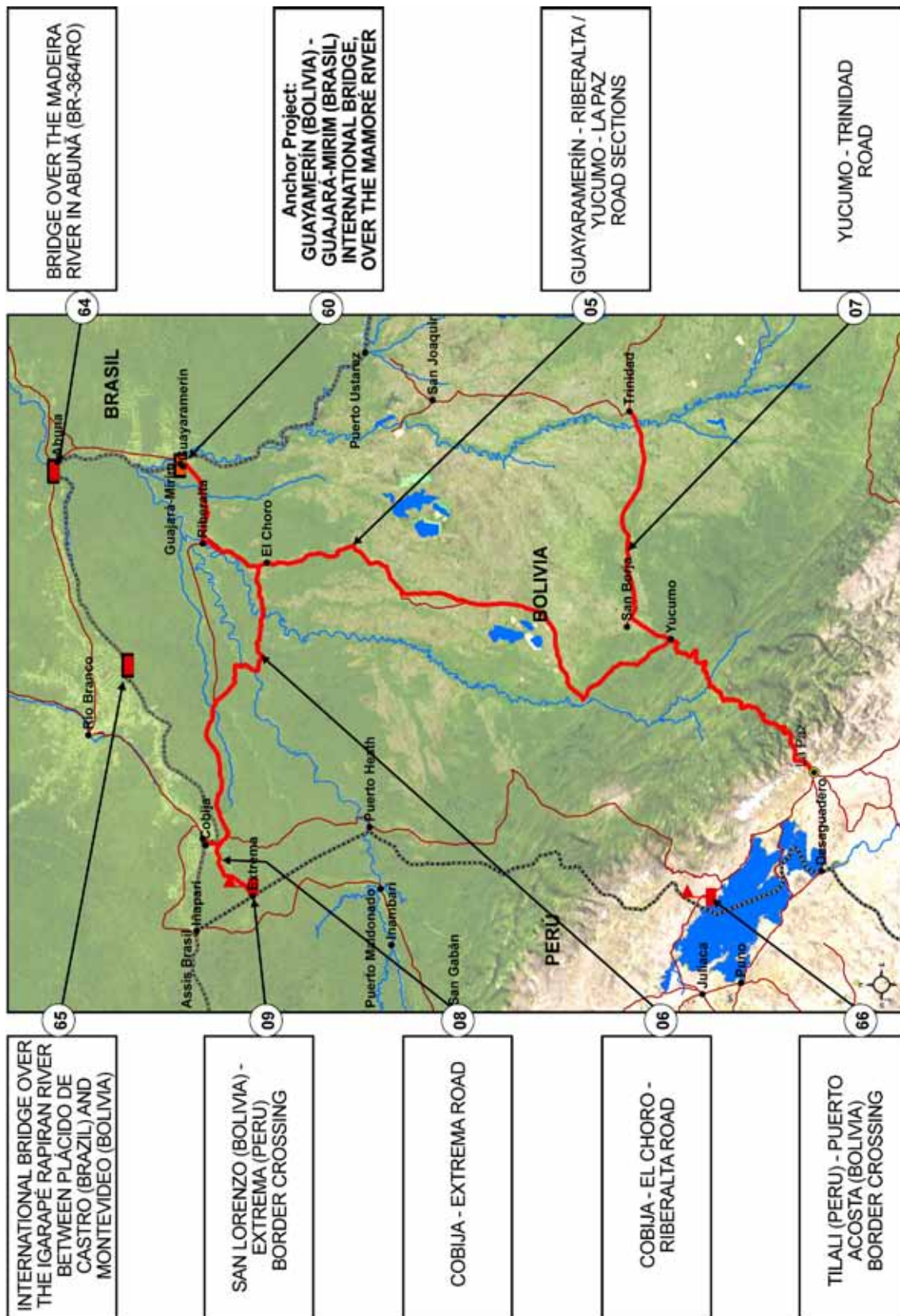


STRATEGIC FUNCTION

- Consolidate the socioeconomic development of the macro-region in the south of Peru and the states of Acre and Rondônia, in Brazil, facilitating trade and tourism, and provide logistics services that guarantee access of these Brazilian states and the macro-region in the south of Peru to international markets, promoting the regional integration process.

Code	Stage	Peru-Brazil-Bolivia Hub: Group 1	Estimated Investment (US\$ million)
PBB01	●	PAVING OF IÑAPARI - PUERTO MALDONADO - INAMBARI ROAD, AND INAMBARI - JULIACA / INAMBARI - CUSCO ROADS (PE)	1,976.0
PBB02	●	PERU - BRAZIL BORDER CROSSING: CONSTRUCTION OF A BINATIONAL BORDER SERVICE CENTER (CEBAF) (BR - PE)	25.3
PBB03	●	BRIDGE OVER THE ACRE RIVER (BR - PE)	12.0
PBB04	●	IMPROVEMENT OF PUERTO MALDONADO AIRPORT (PE)	42.4
PBB59	●	SAN GABÁN - PUERTO MALDONADO ELECTRICITY TRANSMISSION LINE (PE)	23.6
PBB61	●	IMPROVEMENT OF JULIACA AIRPORT (PE)	44.2
PBB62	●	IMPROVEMENT OF AREQUIPA AIRPORT (PE)	51.2
PBB63	●	IIRSA SUR "SOUTHERN INTEROCEANIC ROAD, SECTION 1: SAN JUAN DE MARCONA - ABANCAY - CUSCO - URCOS" (PE)	145.4
TOTAL			2,320.1

PERÚ-BRASIL-BOLIVIA HUB GROUP 2: Rio Branco - Cobija - Riberalta - Yucumo - La Paz Corridor

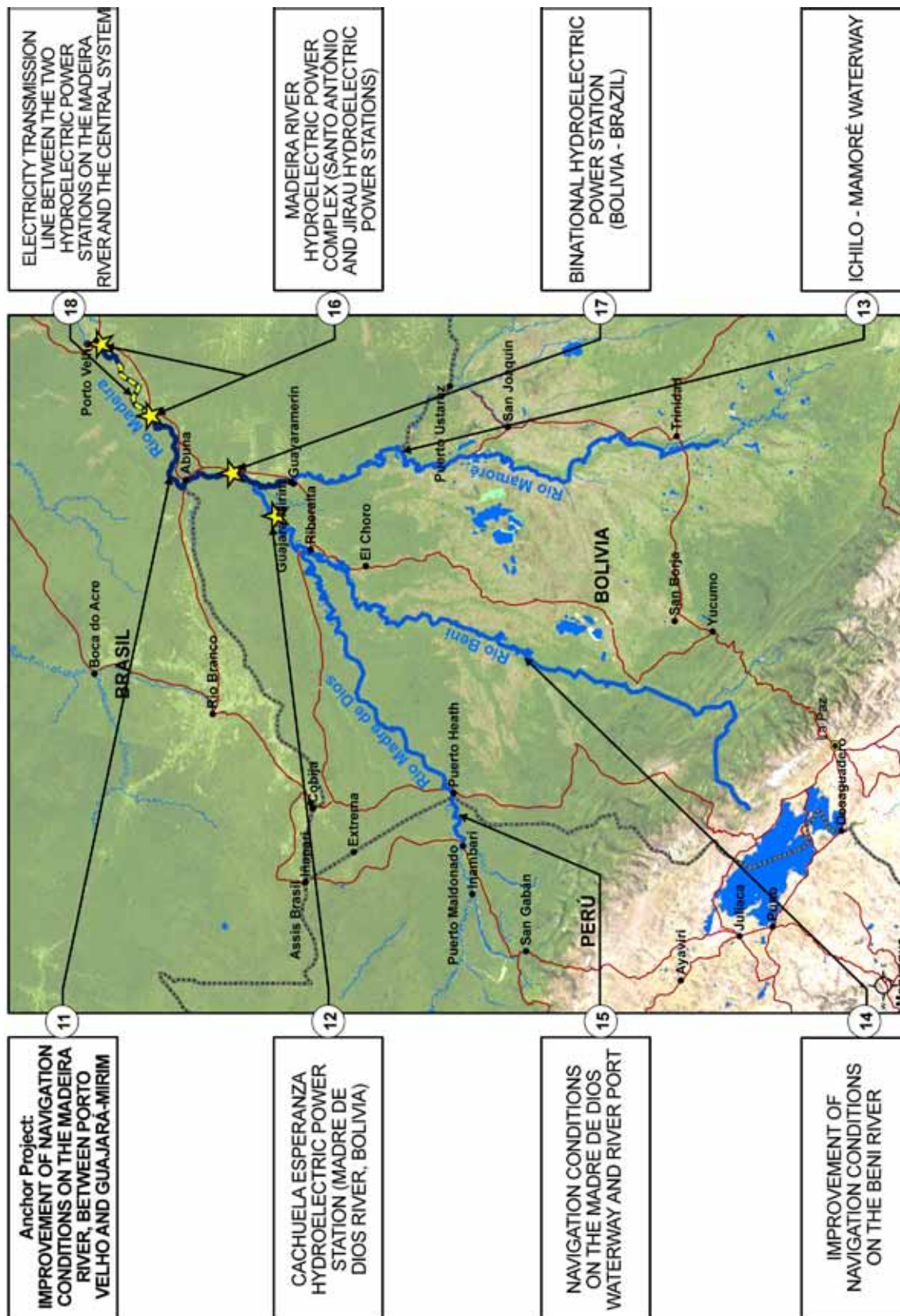


STRATEGIC FUNCTION

- Provide new possibilities for the socioeconomic development in the Madre de Dios - Acre - Pando (MAP) region through its connection to the central Bolivian hub.

Code	Stage	Peru-Brazil-Bolivia Hub: Group 2	Estimated Investment (US\$ million)
PBB05	●	GUAYARAMERÍN - RIBERALTA / YUCUMO - LA PAZ ROAD SECTIONS (BO)	594.0
PBB06	●	COBIJA - EL CHORO - RIBERALTA ROAD (BO)	56.0
PBB07	●	YUCUMO - TRINIDAD ROAD (BO)	5.5
PBB08	●	COBIJA - EXTREMA ROAD (BO)	29.0
PBB09	●	SAN LORENZO (PERU) - EXTREMA (BOLIVIA) BORDER CROSSING (BO - PE)	15.0
PBB60	●	GUAYAMERÍN (BOLIVIA) - GUAJARÁ-MIRIM (BRASIL) INTERNATIONAL BRIDGE, OVER THE MAMORÉ RIVER (BO - BR)	75.0
PBB64	●	BRIDGE OVER THE MADEIRA RIVER IN ABUNÃ (BR-364/RO) (BR)	85.3
PBB65	●	INTERNATIONAL BRIDGE OVER THE IGARAPÉ RAPIRAN RIVER BETWEEN PLÁCIDO DE CASTRO (BRAZIL) AND MONTEVIDEO (BOLIVIA) (BO - BR)	0.0
PBB66	●	TILALI (PERU) - PUERTO ACOSTA (BOLIVIA) BORDER CROSSING (BO - PE)	20.0
TOTAL			879.8

PERÚ-BRASIL-BOLIVIA HUB GROUP 3: Madeira - Madre de Dios - Beni River Corridor



STRATEGIC FUNCTION

- Consolidate an international river integration corridor that mainly impacts on the transportation logistics and the socioeconomic development of the regions of Madre de Dios, in Peru; Rondônia, in Brazil, and Pando and Beni, in Bolivia.
- Facilitate changes in the energy matrix by increasing the supply of renewable energy in the region.

Code	Stage	Peru-Brazil-Bolivia Hub: Group 3	Estimated Investment (US\$ million)
PBB11	●	IMPROVEMENT OF NAVIGATION CONDITIONS ON THE MADEIRA RIVER, BETWEEN PORTO VELHO AND GUAJARÁ-MIRIM (BR)	700.0
PBB12	●	CACHUELA ESPERANZA HYDROELECTRIC POWER STATION (MADRE DE DIOS RIVER, BOLIVIA) (BO)	1,200.0
PBB13	●	ICHILO - MAMORÉ WATERWAY (BO)	0.0
PBB14	●	IMPROVEMENT OF NAVIGATION CONDITIONS ON THE BENI RIVER (BO)	0.0
PBB15	●	NAVIGATION CONDITIONS ON THE MADRE DE DIOS WATERWAY AND RIVER PORT (BO)	0.0
PBB16	●	MADEIRA RIVER HYDROELECTRIC POWER COMPLEX (SANTO ANTÔNIO AND JIRAU HYDROELECTRIC POWER STATIONS) (BR)	18,209.0
PBB17	●	BINATIONAL HYDROELECTRIC POWER STATION (BOLIVIA - BRAZIL) (BO - BR)	5,000.0
PBB18	●	ELECTRICITY TRANSMISSION LINE BETWEEN THE TWO HYDROELECTRIC POWER STATIONS ON THE MADEIRA RIVER AND THE CENTRAL SYSTEM (BR)	3,823.0
TOTAL			28,932.0

PROJECT PORTFOLIO OF THE PERÚ-BRASIL-BOLIVIA HUB

I. GENERAL ASPECTS

The countries have agreed to include twenty-five projects in the Peru-Brazil-Bolivia Hub, accounting for an estimated investment of US\$ 32,131.9 million, as summarized below:

Table K.1 • General Indicators of the Perú-Brasil-Bolivia hub

Group	Name	Number of Projects	Estimated Investment (US\$ million)
Group 1	CORRIDOR PORTO VELHO - RIO BRANCO - ASSIS - PUERTO MALDONADO - CUSCO / JULIACA - PORTS IN THE PACIFIC	8	2,320.1
Group 2	RIO BRANCO - COBIJA - RIBERALTA - YUCUMO - LA PAZ CORRIDOR	9	879.8
Group 3	MADEIRA - MADRE DE DIOS - BENI RIVER CORRIDOR	8	28,932.0
TOTAL		25	32,131.9

II. SOURCE OF FINANCING

Table K.2 • Source of financing of the Perú-Brasil-Bolivia Hub projects

Source of financing	Number of Projects	% Projects	Estimated Investment (US\$ million)	% Investment
Public	18	72.0	7,840.8	24.4
Private	5	20.0	2,259.1	7.0
Public/Private	2	8.0	22,032.0	68.6
TOTAL	25	100.0	32,131.9	100.0

III. API PROJECTS

Table K.3 • Proyectos API del Eje Perú-Brasil-Bolivia

Code	Project Name	Estimated Investment (US\$ million)
31	PORTO VELHO - PERUVIAN COAS CONNECTION (BR - PE)	85.3
PBB64	BRIDGE OVER THE MADEIRA RIVER IN ABUNA (BR-364/RO) (BR)	85.3
TOTAL		85.3

IV. SECTOR/SUBSECTORBASED BREAKDOWN AND TYPE OF WORKS INVOLVED

Table K.4 • Sector-based breakdown of the Perú-Brasil-Bolivia Hub

Subsector	Transport				Energy			
	N° Projects	% Projects	Estimated Investment (US\$ millions)	% Investment	N° Projects	% Projects	Estimated Investment (US\$ millions)	% Investment
Air	3	15.0	137.7	3.6				
Road	10	50.0	2,978.3	76.8				
River	4	20.0	700.0	18.0				
Border Crossing	3	15.0	60.3	1.6				
Power Generation					3	60.0	24,409.0	86.4
Power Interconnection					2	40.0	3,846.6	13.6
TOTAL	20	100.0	3,876.3	100.0	5	100.0	28,255.6	100.0

Table K.5 • Air Transport

Type of Work	Projects	Estimated Investment
	N°	US\$ million
Extension of airports	3	137.7
TOTAL	3	137.7

Table K.6 • Road Transport

Type of Work	Projects	Estimated Investment
	N°	US\$ million
Extension of the road capacity	1	1,976.0
Paving (new work)	4	684.5
Bridges (new ones and refitting)	4	172.4
Refitting of road and structures	1	145.4
TOTAL	10	2,978.3

Table K.7 • River Transport

	Projects	Estimated Investment
Type of Work	N°	US\$ million
Improvement of river navigability	4	700.0
TOTAL	4	700.0

Table K.8 • Border Crossings

	Projects	Estimated Investment
Type of Work	N°	US\$ million
Infrastructure for the setting up of border control centers	3	60.3
TOTAL	3	60.3

Table K.9 • Power Generation

	Projects	Estimated Investment
Type of Work	N°	US\$ million
Hydroelectric plants (new ones and refitting) - microcentrals	3	24,409.0
TOTAL	3	24,409.0

Table K.10 • Power Interconnection

	Projects	Estimated Investment
Type of Work	N°	US\$ million
Building of new power interconnections	2	3,846.6
TOTAL	2	3,846.6

V. PROGRESS IN THE PERÚ-BRASILBOLIVIA HUB PROJECTS

Table K.11 • Projects by Progress Attained

Stage	Number of Projects	% Projects	Estimated Investment (US\$ million)	% Investment
Profiling	7	28.0	5,735.0	17.9
Pre-Execution	6	24.0	1,391.1	4.3
Execution	8	32.0	22,848.8	71.1
Concluded	4	16.0	2,157.0	6.7
TOTAL	25	100.0	32,131.9	100.0

Table K.12 • Concluded Projects

Code	Project Name	Estimated Investment (US\$ million)
PBB01	PAVING OF IÑAPARI - PUERTO MALDONADO - INAMBARI ROAD, AND INAMBARI - JULIACA / INAMBARI - CUSCO ROADS (PE)	1,976.0
PBB03	BRIDGE OVER THE ACRE RIVER (BR - PE)	12.0
PBB59	SAN GABÁN - PUERTO MALDONADO ELECTRICITY TRANSMISSION LINE (PE)	23.6
PBB63	"IIRSA SUR" SOUTHERN INTEROCEANIC ROAD, SECTION 1: SAN JUAN DE MARCONA - ABANCAY - CUSCO - URCOS (PE)	145.4
TOTAL		2,157.0

VI. ANCHOR PROJECTS

The countries identified three anchor projects in the Peru-Brazil-Bolivia Hub, totaling an estimated investment of US\$ 2,751 million, according to the following detail:

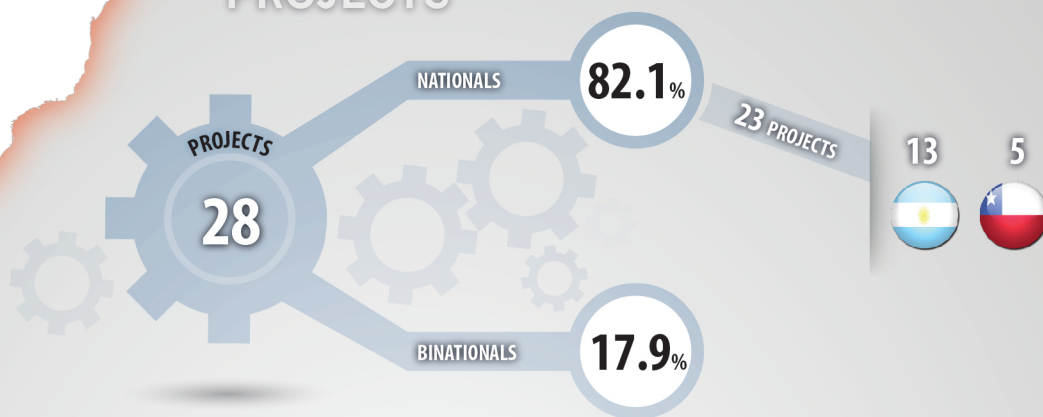
Table K.13 • Anchor Projects

Group	Code	Anchor Projects	Estimated Investment (US\$ million)	Financing Source	Scope	Project Stage
1	PBB01	PAVING OF IÑAPARI - PUERTO MALDONADO - INAMBARI ROAD, AND INAMBARI - JULIACA / INAMBARI - CUSCO ROADS (PE)	1,976.0	Private	National	Concluded
2	PBB60	GUAYAMERÍN (BOLIVIA) - GUAJARÁ-MIRIM (BRASIL) INTERNATIONAL BRIDGE, OVER THE MAMORÉ RIVER (BO - BR)	75.0	Public	Binational	Pre-execution
3	PBB11	IMPROVEMENT OF NAVIGATION CONDITIONS ON THE MADEIRA RIVER, BETWEEN PORTO VELHO AND GUAJARÁ-MIRIM (BR)	700.0	Public	National	Profiling
	TOTAL		2,751.0			

SOUTHERN HUB



PROJECTS



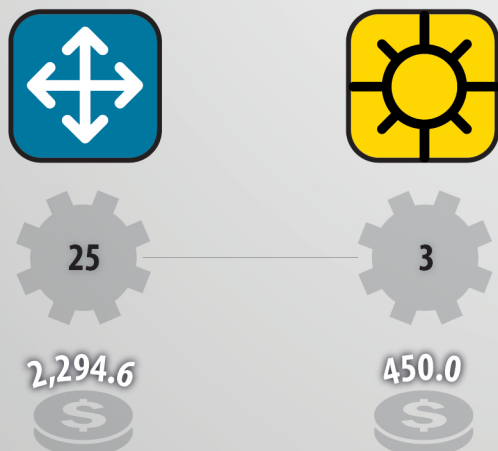
ESTIMATED INVESTMENT



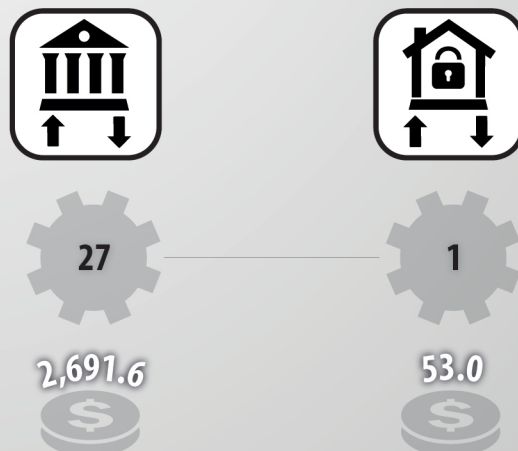
BY STAGE



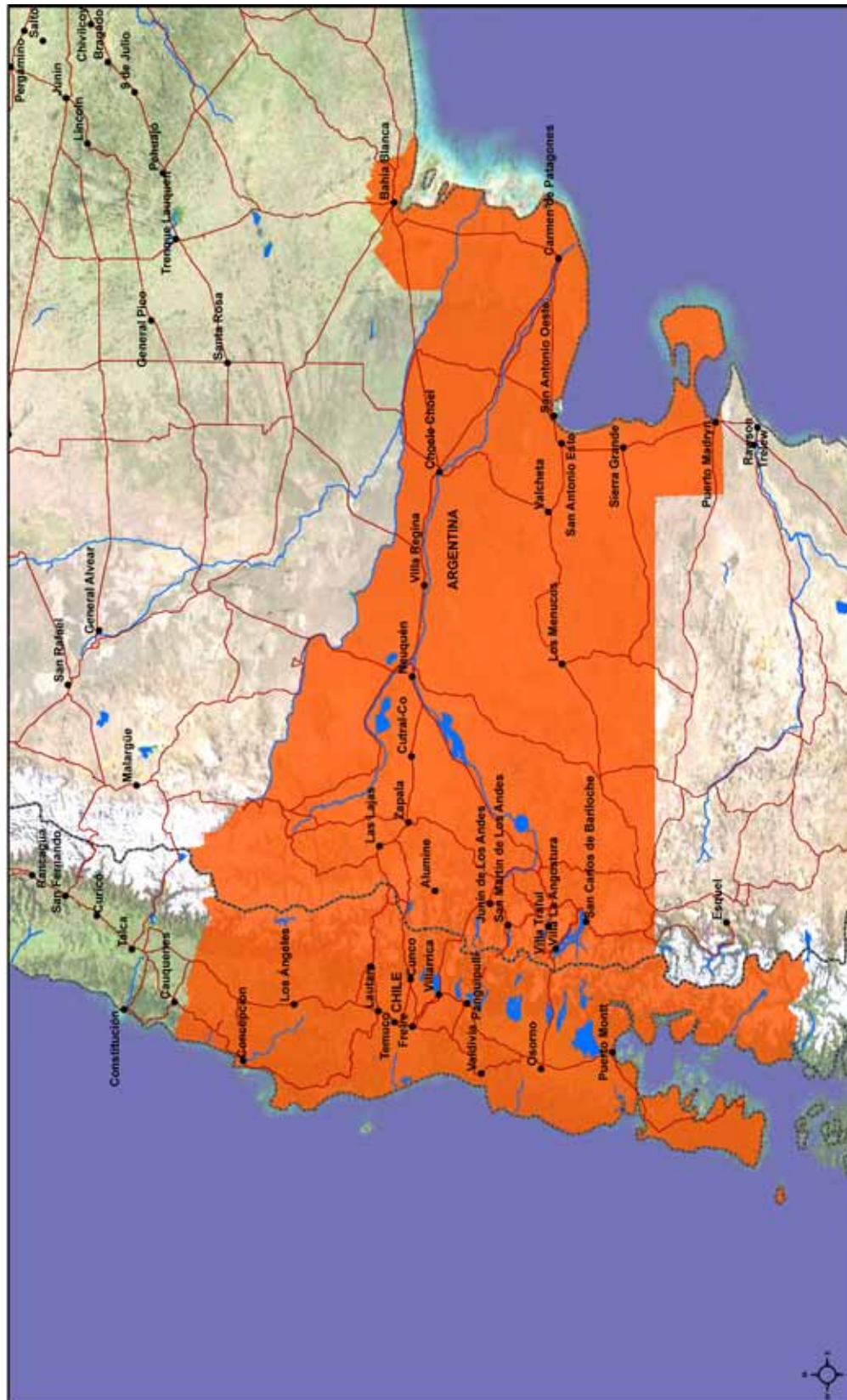
BY SECTOR

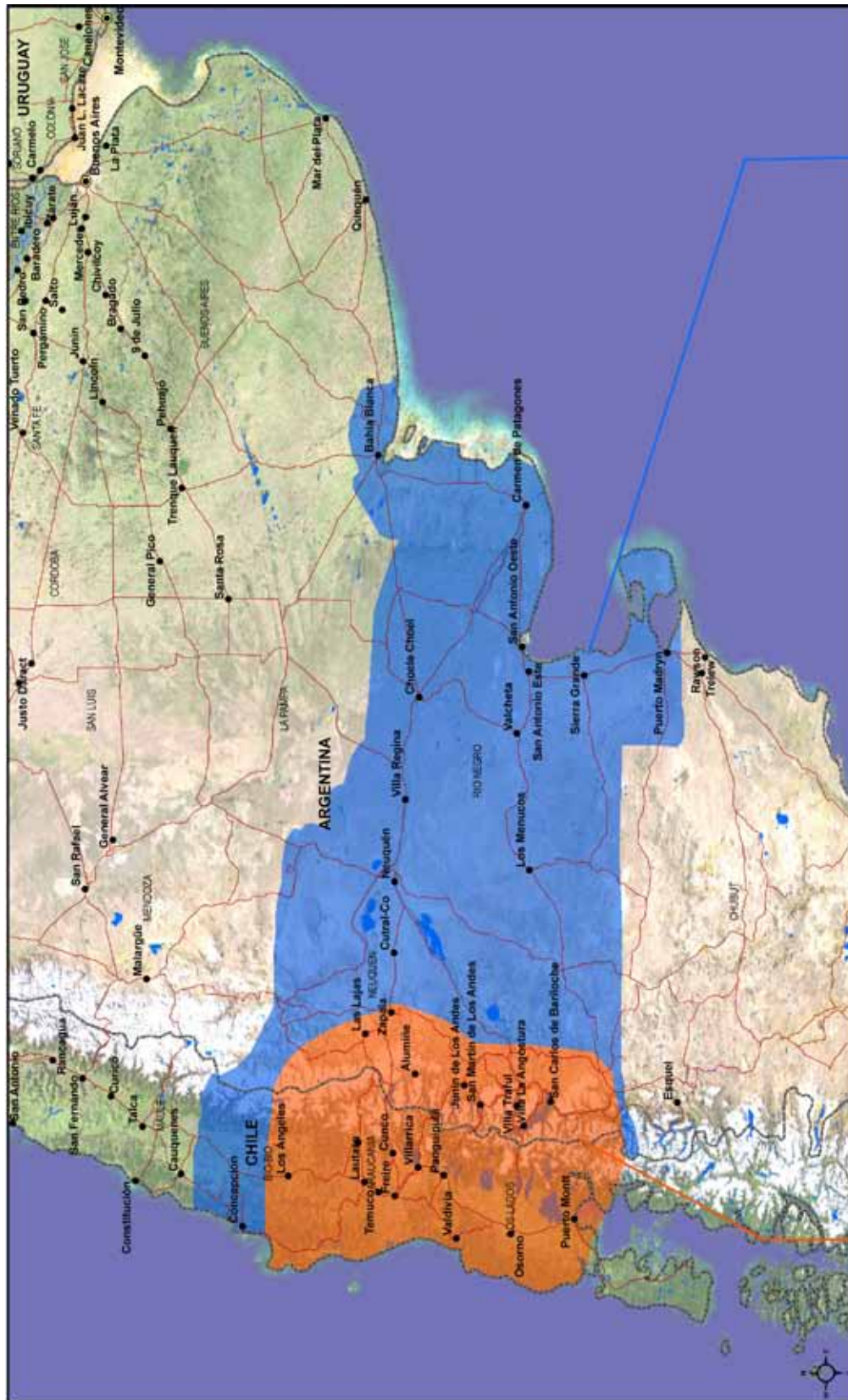


BY SOURCE OF FINANCING



SOUTHERN HUB Area of Influence

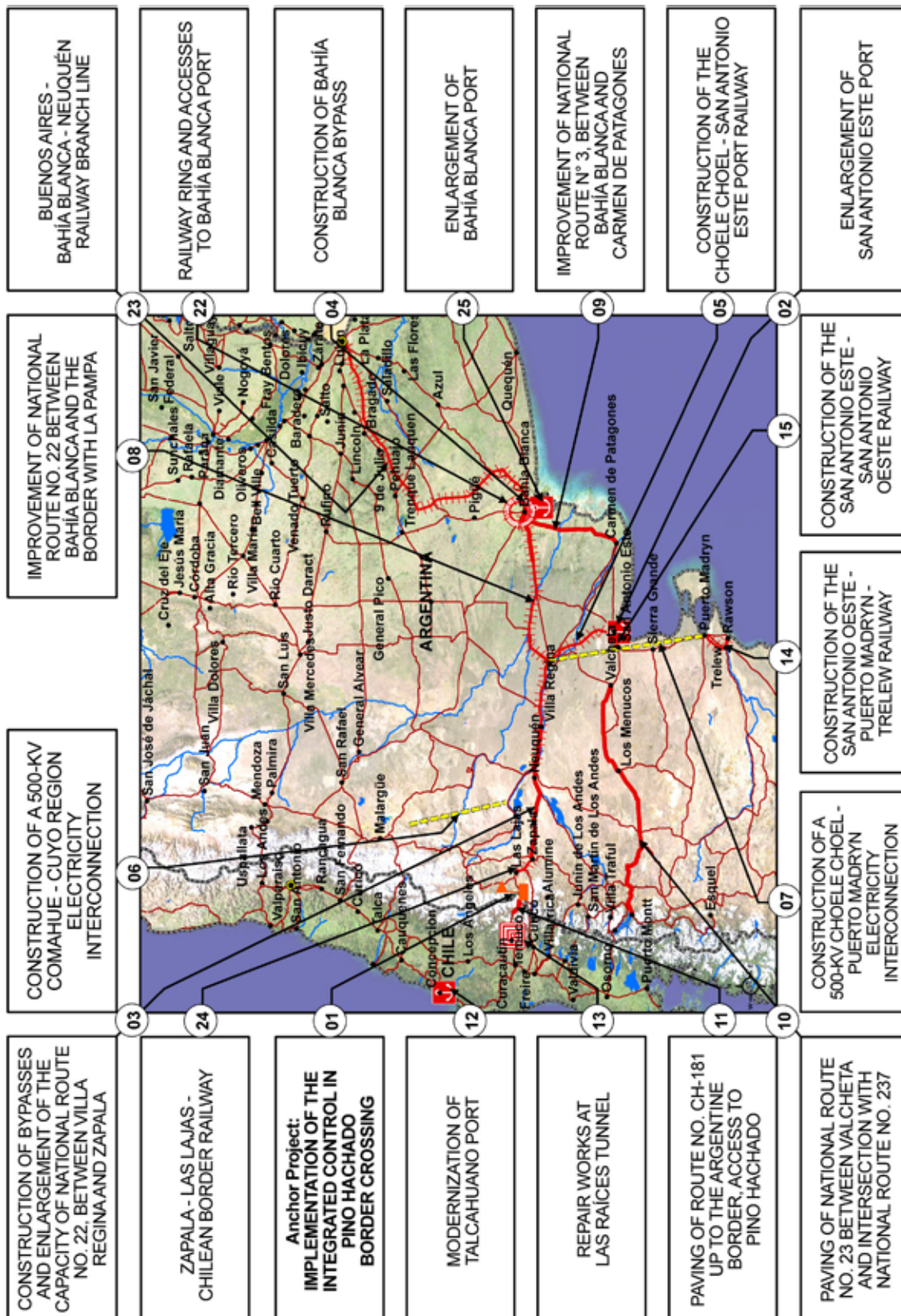




Group 1: CONCEPCIÓN -
BAHÍA BLANCA -
SAN ANTONIO ESTE PORT

Group 2: BINALTURAL TOURISTIC
CIRCUIT OF THE LAKES AREA

SOUTHERN HUB - Group 1: Concepción - Bahía Blanca - San Antonio Este port

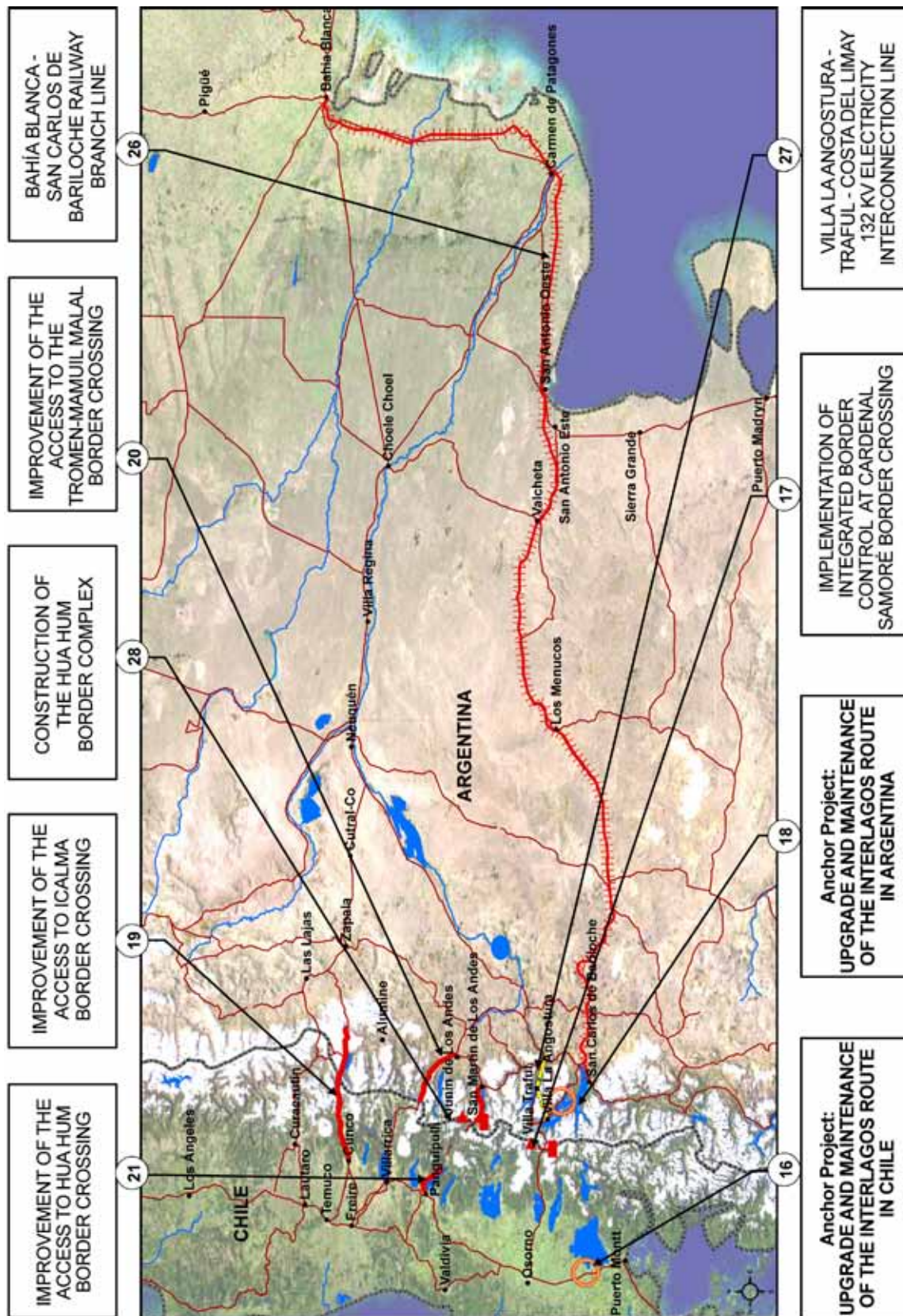


STRATEGIC FUNCTION

- Reduce logistics costs to enhance the trade of goods and services and economic complementariness between the countries.
- Create sustainable economic and social development opportunities.
- Facilitate the flow of people among the countries of the Group.

Code	Stage	Southern Hub: Group 1	Estimated Investment (US\$ million)
DES01	●	IMPLEMENTATION OF INTEGRATED BORDER CONTROL IN PINO HACHADO BORDER CROSSING (AR - CH)	8.0
DES02	●	ENLARGEMENT OF SAN ANTONIO ESTE PORT (AR)	0.0
DES03	●	CONSTRUCTION OF BYPASSES AND ENLARGEMENT OF THE CAPACITY OF NATIONAL ROUTE NO. 22, BETWEEN VILLA REGINA AND ZAPALA (AR)	100.0
DES04	●	CONSTRUCTION OF BAHÍA BLANCA BYPASS (AR)	8.0
DES05	●	CONSTRUCTION OF THE CHOELE CHOEL - SAN ANTONIO ESTE PORT RAILWAY (AR)	40.0
DES06	●	CONSTRUCTION OF A 500-KV COMAHUE - CUYO REGION ELECTRICITY INTERCONNECTION (AR)	350.0
DES07	●	CONSTRUCTION OF A 500-KV CHOELE CHOEL - PUERTO MADRYN ELECTRICITY INTERCONNECTION (AR)	70.0
DES08	●	IMPROVEMENT OF NATIONAL ROUTE NO. 22 BETWEEN BAHÍA BLANCA AND THE BORDER WITH LA PAMPA (AR)	30.0
DES09	●	IMPROVEMENT OF NATIONAL ROUTE NO. 3 BETWEEN BAHÍA BLANCA AND CARMEN DE PATAGONES (AR)	68.0
DES10	●	PAVING OF NATIONAL ROUTE NO. 23 BETWEEN VALCHETA AND INTERSECTION WITH NATIONAL ROUTE NO. 237 (AR)	225.0
DES11	●	PAVING OF ROUTE NO. CH-181 UP TO THE ARGENTINE BORDER, ACCESS TO PINO HACHADO (CH)	5.0
DES12	●	MODERNIZATION OF TALCAHUANO PORT (CH)	53.0
DES13	●	REPAIR WORKS AT LAS RAÍCES TUNNEL (CH)	10.5
DES14	●	CONSTRUCTION OF THE SAN ANTONIO OESTE - PUERTO MADRYN - TRELEW RAILWAY (AR)	48.0
DES15	●	CONSTRUCTION OF THE SAN ANTONIO ESTE - SAN ANTONIO OESTE RAILWAY (AR)	8.5
DES22	●	RAILWAY RING AND ACCESSES TO BAHÍA BLANCA PORT (AR)	250.0
DES23	●	BUENOS AIRES - BAHÍA BLANCA - NEUQUÉN RAILWAY BRANCH LINE (AR)	180.0
DES24	●	ZAPALA - LAS LAJAS - CHILEAN BORDER RAILWAY (AR)	70.0
DES25	●	ENLARGEMENT OF BAHÍA BLANCA PORT (AR)	290.0
TOTAL			1,814.0

SOUTHERN HUB - Group 2: Binational Tourist Circuit of the Lakes Area



STRATEGIC FUNCTION

- Reinforce the binational tourism system in the lake area.
- Create sustainable economic and social development opportunities.
- Favor conservation of the area's environmental resources.
- Facilitate the flow of people among the countries of the Group

Code	Stage	Southern Hub: Group 2	Estimated Investment (US\$ million)
DES16	●	UPGRADE AND MAINTENANCE OF THE INTERLAGOS ROUTE IN CHILE (CH)	175.0
DES17	●	IMPLEMENTATION OF INTEGRATED BORDER CONTROL AT CARDENAL SAMORÉ BORDER CROSSING (AR - CH)	2.0
DES18	●	UPGRADE AND MAINTENANCE OF THE INTERLAGOS ROUTE IN ARGENTINA (AR)	200.0
DES19	●	IMPROVEMENT OF THE ACCESS TO ICALMA BORDER CROSSING (AR - CH)	44.0
DES20	●	IMPROVEMENT OF THE ACCESS TO THE TROMEN-MAMUIL MALAL BORDER CROSSING (AR - CH)	30.0
DES21	●	IMPROVEMENT OF THE ACCESS TO HUA HUM BORDER CROSSING (AR - CH)	42.0
DES26	●	BAHÍA BLANCA - SAN CARLOS DE BARILOCHE RAILWAY BRANCH LINE (AR)	400.0
DES27	●	VILLA LA ANGOSTURA - TRAFUL - COSTA DEL LIMAY 132-KV ELECTRICITY INTERCONNECTION LINE (AR)	30.0
DES28	●	CONSTRUCTION OF THE HUA HUM BORDER COMPLEX (CH)	7.6
TOTAL			930.6

PROJECT PORTFOLIO OF THE SOUTHERN HUB

I. GENERAL ASPECTS

The countries have agreed to include twenty-eight projects in the Amazon Hub, accounting for an estimated investment of US\$ 2,744.6 million, as summarized below:

Table L.1 • General Indicators of the Southern Hub

Group	Name	Number of Projects	Estimated Investment (US\$ million)
Group 1	CONCEPCIÓN - BAHÍA BLANCA - SAN ANTONIO ESTE PORT	19	1,814.0
Group 2	BINATIONAL TOURISTIC CIRCUIT OF THE LAKES AREA	9	930.6
TOTAL		28	2,744.6

II. SOURCE OF FINANCING

Table L.2 • Source of financing of the Southern Hub projects

Source of financing	Number of Projects	% Projects	Estimated Investment (US\$ million)	% Investment
Public	27	96.4	2,691.6	98.1
Private	1	3.6	53.0	1.9
TOTAL	28	100.0	2,744.6	100.0

III. SECTOR/SUBSECTORBASED BREAKDOWN AND TYPE OF WORKS INVOLVED

Table L.3 • Sector-based breakdown of the Southern Hub

Subsector	Transport				Energy			
	N° Projects	% Projects	Estimated Investment (US\$ millions)	% Investment	N° Projects	% Projects	Estimated Investment (US\$ millions)	% Investment
Road	12	48.0	937.5	40.9				
Railway	7	28.0	996.5	43.4				
Sea	3	12.0	343.0	14.9				
Border Crossing	3	12.0	17.6	0.8				
Power Interconnection					3	100.0	450.0	100.0
TOTAL	25	100.0	2,294.6	100.0	3	100.0	450.0	100.0

Table L.4 • Road Transport

	Projects	Estimated Investment
Type of Work	N°	US\$ million
Extension of the road capacity	1	100.0
Road by-pass and access to cities	1	8.0
Paving (new work)	3	77.0
Refitting of road and structures	7	752.5
TOTAL	12	937.5

Table L.5 • Railway Transport

	Projects	Estimated Investment
Type of Work	N°	US\$ million
Railway by-pass	1	250.0
Building of railways	4	166.5
Refitting of railways	2	580.0
TOTAL	7	996.5

Table L.6 • Maritime Transport

	Projects	Estimated Investment
Type of Work	N°	US\$ million
Extension of the road infrastructure of the maritime ports	3	343.0
TOTAL	3	343.0

Table L.7 • **Border Crossings**

	Projects	Estimated Investment
Type of Work	N°	US\$ million
Infrastructure for the setting up of border control centers	3	17.6
TOTAL	3	17.6

Table L.8 • **Power Interconnection**

	Projects	Estimated Investment
Type of Work	N°	US\$ million
Building of new power interconnections	3	450,0
TOTAL	3	450,0

IV. PROGRESS IN THE SOUTHERN HUB PROJECTS

Table L.9 • **Projects by Progress Attained**

Stage	Number of Projects	% Projects	Estimated Investment (US\$ million)	% Investment
Profiling	6	21.4	706.5	25.8
Pre-Execution	7	25.0	642.0	23.4
Execution	10	35.7	953.0	34.7
Concluded	5	17.9	443.1	16.1
TOTAL	28	100.0	2,744.6	100.0

Table L.10 • **Concluded Projects**

Code	Project Name	Estimated Investment (US\$ million)
DES06	CONSTRUCTION OF A 500-KV COMAHUE - CUYO REGION ELECTRICITY INTERCONNECTION (AR)	350.0
DES07	CONSTRUCTION OF A 500-KV CHOELE CHOEL - PUERTO MADRYN ELECTRICITY INTERCONNECTION (AR)	70.0
DES11	PAVING OF ROUTE NO. CH-181 UP TO THE ARGENTINE BORDER, ACCESS TO PINO HACHADO (CH)	5.0
DES13	REPAIR WORKS AT LAS RAÍCES TUNNEL (CH)	10.5
DES28	CONSTRUCTION OF THE HUA HUM BORDER COMPLEX (CH)	7.6
TOTAL		443.1

V. ANCHOR PROJECTS

The countries identified three anchor projects in the Southern Hub, totaling an estimated investment of according to the following detail: US\$ 383 million, according to the following detail:

Table L.11 • **Anchor Projects**

Group	Code	Anchor Projects	Estimated Investment (US\$ million)	Financing Source	Scope	Project Stage
1	DES01	IMPLEMENTATION OF INTEGRATED BORDER CONTROL IN PINO HACHADO BORDER CROSSING (AR - CH)	8.0	Public	Binational	Pre-execution
2	DES18	UPGRADE AND MAINTENANCE OF THE INTERLAGOS ROUTE IN ARGENTINA (CH)	200.0	Public	National	Execution
2	DES16	UPGRADE AND MAINTENANCE OF THE INTERLAGOS ROUTE IN CHILE (AR)	175.0	Public	National	Execution
TOTAL			383.0			

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WEBSITES

- Iniciativa para la Integración de la Infraestructura Regional Suramericana - IIRSA
www.iirsa.org
- Sistema de Información de Proyectos del COSIPLAN
www.iirsa.org/proyectos

ACRONYMS AND ABBREVIATIONS

AIC	Agenda de Implementación Consensuada 2005-2010
AMA	Eje del Amazonas
AND	Eje Andino
API	Agenda de Proyectos Prioritarios de Integración
AR	Argentina
BID	Banco Interamericano de Desarrollo
BO	Bolivia
BR	Brasil
CAF	Banco de Desarrollo de América Latina
CAP	Eje de Capricornio
CCT	Comité de Coordinación Técnica
CEBAF	Centro Binacional de Atención de Frontera
CENAF	Centro Nacional de Atención de Frontera
CH	Chile
CO	Colombia
COSIPLAN	Consejo Suramericano de Infraestructura y Planeamiento
EASE	Evaluación Ambiental y Social con Enfoque Estratégico
EC	Ecuador
EID	Eje de Integración y Desarrollo
FONPLATA	Fondo Financiero para el Desarrollo de la Cuenca del Plata
GRD	Gestión de Riesgos de Desastres
GTE	Grupo Técnico Ejecutivo
GU	Guyana
GUY	Eje del Escudo Guayanés
HPP	Eje de la Hidrovía Paraguay-Paraná
IIRSA	Iniciativa para la Integración de la Infraestructura Regional Suramericana
IOC	Eje Interoceánico Central
IPRLG	Integración Productiva y Logística
MCC	Eje MERCOSUR-Chile
MERCOSUR	Mercado Común del Sur
NEA	Región Noreste de Argentina
NOA	Región Noroeste de Argentina
PAE	Plan de Acción Estratégico 2012-2022
PBB	Eje Perú-Brasil-Bolivia
PCV	Programación del Ciclo de Vida de los Proyectos
PTI	Programas Territoriales de Integración
PY	Paraguay
SIP	Sistema de Información de Proyectos del COSIPLAN
SMP	Sistema de Monitoreo Permanente
UNASUR	Unión de Naciones Suramericanas
UY	Uruguay
VE	Venezuela



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