

III.2. Capricorn Hub

III.2.1. Hub's Location and Area of Influence

The Hub's area of influence has been defined around the Tropic of Capricorn, in a territory located approximately between 20° and 30° S, and has important port facilities at both ends, the Atlantic and the Pacific oceans, which accounts for its bioceanic nature. Its geographic location is shown in the following map:

Map 15 - Location of the Area of Influence of the Capricorn Hub



The Hub comprises four homogeneous although differentiated regions: the Atlantic Coastal Region, formed by the states of Rio Grande do Sul, Santa Catarina and Paraná, in Brazil; the Northeast Region, comprised by Northeastern Argentina (provinces of Misiones, Corrientes, Formosa, Chaco, and the North of Santa Fe) together with the Eastern Region of Paraguay; the Northwest Region, formed by Northwestern Argentina (Santiago del Estero, Tucumán, La Rioja, Catamarca, Salta, and Jujuy), the Western Region of Paraguay and the South of Bolivia (Tarija); and the Pacific Coastal Region, including the North of Chile (Regions I, II, and III: Tarapacá, Antofagasta, and Atacama, respectively). Since IIRSA is a dynamic Initiative on account of the addition and elimination of projects, the Hub's area of influence has changed relative to the one defined in the original study by the incorporation of the state of Santa Catarina, Brazil; the department of Potosí, Bolivia; Region I, Tarapacá, Chile; and the North of Santa Fe province, Argentina.

Within the above-mentioned regions, the important cities or urban centers and interconnection nodes that articulate the Hub from East to West involve Paranaguá, Ponta Grossa, Curitiba, Florianópolis, Joinville, Chapecó, Porto Alegre, Caxias do Sul, Passo Fundo, Erechim, Santa María, Santa Cruz do Sul, São Borja, Foz do Iguaçu, Ciudad del Este, Puerto Iguazú, Encarnación, Apóstoles, Posadas, Asunción, Corrientes, Resistencia, Reconquista, Formosa, Santiago del Estero, Tucumán, Salta, Jujuy, Catamarca, La Rioja, Copiapó, Antofagasta, and Iquique. Thus, this region covers approximately 2,302,689 km².

The table below shows the area and population share of the territorial units of each country in the Capricorn Hub's area of influence, as well as the main cities, border crossings, and maritime and river ports connected to these territorial units.

Table 35 - Area, Population, Main Cities, Border Crossings, and Maritime and River Ports within the Hub

Countries - Territorial Units	Area km²	Population 2008	Main Cities	Border Crossings	Maritime and River Ports
CHILE	756,102	16,763,470			
Region I, Tarapacá	42,226	300,300	Iquique	Colchane	Iquique
Region II, Antofagasta	126,049	561,600	Antofagasta	Ollagüe	Antofagasta
Region III, Atacama	75,176	276,500	Copiapó, Vallenar	S. Francisco	Caldera
<i>Area of influence</i>	<i>243,451</i>	<i>1,138,400</i>			
BOLIVIA	1,098,581	10,027,643			
Potosí	118,218	780,392	Potosí	Villazón	
Tarija	37,623	496,988	Tarija	Yacuiba	
<i>Area of influence</i>	<i>155,841</i>	<i>1,277,380</i>			
ARGENTINA	2,780,400	39,745,613			
Formosa	72,066	539,883	Formosa	Clorinda	Formosa
Chaco	99,633	1,052,185	Resistencia	Pto Bermejo	Barranquera
Corrientes	88,199	1,013,443	Corrientes	Paso Libres	Corrientes
Misiones	29,801	1,077,987	Posadas	Posadas	Posadas
Tucumán	22,524	1,475,384	Tucumán		
Santiago del Estero	136,351	865,546	Santiago del Estero		
Jujuy	53,219	679,975	San Salvador Jujuy	Jama, La Quiaca	
Salta	155,488	1,224,022	Salta	Sico, Socompa S. Mazza	
Catamarca	102,602	388,416	Catamarca	S. Francisco	
La Rioja	89,680	341,207	La Rioja	Pircas Negras	
North of Santa Fe ¹	70,673	360,837	Reconquista		
<i>Área de Influencia</i>	<i>920,236</i>	<i>9,018,885</i>			

Countries - Territorial Units	Area km ²	Population 2008	Main Cities	Border Crossings	Maritime and River Ports
PARAGUAY	406,752	6,230,000	Asunción	Asunción	Asunción
<i>Area of influence</i>	<i>406,752</i>	<i>6,230,000</i>	<i>Ciudad del Este</i>	<i>Ciudad del Este</i>	
BRAZIL	8,514,877	189,612,814		Santa Helena	
Paraná	199,315	10,590,169	Curitiba, Londrinas	Foz do Iguaçu	Paranaguá
Santa Catarina	95,346	6,052,587	Florianópolis	D. Cerqueira	S. Francisco
Rio Grande do Sul	281,748	10,855,214	Porto Alegre	Uruguaiana	Porto Alegre
<i>Area of influence</i>	<i>576,409</i>	<i>27,497,970</i>		<i>São Borja</i>	
Total Countries in the Hub	13,556,712	262,379,540		Taqui	
Total Area of Influence	2,302,689	45,162,635		Puerto Xavier	

Note: ¹ Including the departments of 9 de Julio, Vera, Gral. Obligado, San Cristóbal, and San Javier in the province of Santa Fe.

III.2.2. Hub's Basic Characterization

Demography

The Hub has approximately 45,162,635 inhabitants according to data from statistical projections for 2008 developed by the statistical institutes of each country of the Hub, accounting for 17.21% of the sum of the total population of the countries that make up the Hub. Furthermore, an average population density of 19.61 inhabitants per km² for the Hub's area of influence was estimated, which is a medium to low level overall, with a strong geographic dispersion. This indicator ranges from a maximum 65.50 inhabitants per km² in the province of Tucumán, Argentina, to a minimum 3.68 inhabitants per km² in the territory of Region III, Atacama, Chile.

Economic Aspects

In 2007, the Hub's GDP amounted to US\$ 201,117.8 million at constant 2000 market prices, based on the 2007 statistics calculated by ECLAC for each country and on the GDP share as estimated by each national statistics institute for the territorial units of each country that makes up the Hub. This amount accounts for 15.43% of the total GDP, for the same year, of the countries within the Hub.

The GDP resulting from adding the GDPs of all the Capricorn Hub's countries at constant 2000 values has changed positively between 2000 and 2007 by 27.82%, i.e. an annual average growth rate of 3.57%. The economy of the Hub's countries is characterized by important commodity and industrial sectors, oriented to the extraction of primary products and their processing. As to the growth dynamics of the economic activities in the countries of the region, the sectors that grew the most in the last seven years were the following: transport, storage, and communications, as well as agriculture, hunting, forestry, and fisheries.

Exports from the area of influence of the Capricorn Hub amounted to US\$ 88,889.3 million in 2008, which, compared to the annual figure in 2000 (US\$ 23,307.4 million), represents a 285.67% growth in eight years. Furthermore, if the value of the exports from the Hub in 2008 is compared to the annual figure of all the exports from the countries that make up the Hub, the former accounts for 25.76% of the latter (US\$ 348,896.3 million).

In terms of value, 83.63% of the exports from the countries that make up the Capricorn Hub were extra-regional in 2008, while the exports to the countries of the Hub (i.e. intra-regional) represented 16.37% (US\$ 57,100.9 million), whereas in 2000 intra-regional exports were 21.36% of total exports (US\$ 21,784.4 million).

Refined copper is the most important among the five leading products exported from the countries in the Hub, accounting for about 6.02% of the five countries' total value of exports in 2008 and 17.72% of the total value of exports of these same countries for the five leading products, followed by soybean (4.88%). Crude oil, copper ores and concentrates, and iron ores and concentrates rank third, fourth, and fifth, respectively. In 2008, the sum of the values of the five leading products exported from each country accounted for 33.95% of the total value of exports from the countries that make up the Capricorn Hub.

International cargo movements by volume originating in exports from and imports to the countries of the Capricorn Hub (Argentina, Bolivia, Brazil, Chile, and Paraguay) in 2007 were as follows: by sea, 87.36%; by railway 3.24%; by road, 3.83%; by air, 0.27%; and by "other means," 5.30%.

By comparison, in 2000 international cargo movements by volume to and from the same countries were as follows: by sea, 85.71%; by railway, 3.36%; by road, 4.79%; by air, 0.28%; and by "other means," 5.86%.

The main economic activities carried out in the four regions that make up the Hub follow the production profiles indicated below:

- **Atlantic Coastal Region - States of Paraná, Santa Catarina and Rio Grande do Sul, Brazil:** Soybean, rice, corn and tobacco; livestock, poultry, and swine raising; textile, chemical, metallurgical, metalworking, and transport material industries.
- **Northeast Region, Northeastern Argentina** (Misiones, Corrientes, Formosa, Chaco and North of Santa Fe) **and Eastern Paraguay:** Hydroelectricity; soybean and cotton; livestock raising; wood and forestry products; tobacco, sugar cane, tea, yerba mate and citrus.
- **Northwest Region, Northwestern Argentina** (Santiago del Estero, Tucumán, La Rioja, Catamarca, Salta and Jujuy), **Western Paraguay, and the departments of Tarija and Potosí, Bolivia:** Gas and oil; metal and non-metal mining; winegrowing industry; soybean, cotton, tobacco, sugar cane and citrus; livestock raising.
- **Pacific Coastal Region - North of Chile** (Tarapacá, Antofagasta and Atacama): Copper mining and non-metal mining; port logistics and related services; fisheries; fruit growing; forestry; tourism.

Current Infrastructure

The Hub's integration infrastructure is in general not only limited but also deficient, although both circumstances can be overcome because there is potential for development and reconditioning. It should be pointed out that in the last years important road works have been concluded, completing the Hub's interoceanic connection (accesses to Paso de Jama between Chile and Argentina, and National Route 81, in Argentina).

- The Capricorn Hub's road network covers 427,886 km, accounting for 20.93% of all the national road networks in the five countries involved in the Hub. Furthermore, 15.01% of the national road networks in the Hub's area of influence is paved. Road infrastructure in most border regions cuts across important natural barriers, such as the Andes in the Argentine-Chilean border; the Pilcomayo, Paraguay, and Paraná

rivers in the Argentine-Paraguayan border; the Paraná river in the Paraguayan-Brazilian border; and the Uruguay river in most parts of the Argentine-Brazilian border. This infrastructure is set up in such a way that it restricts transport by concentrating it through a small number of border crossings up in the mountains as well as bridges that interconnect the countries. Many times the state of conservation and the structure of the Hub's road network, including bridges and border crossings, are deficient, thus forcing an arbitrary circulation that increases transport costs and brings about integration difficulties.

- **Railway transport:** The railway network of the countries that make up the Capricorn Hub covers 73,207 km, 90.83% of which are active lines. There are railways that connect Chile and Bolivia, Chile and Argentina, Bolivia and Argentina, Argentina and Paraguay, and Argentina and Brazil. In general, railway systems are old and in poor condition, which does not allow big trains to run and thus tap the economies.
- **The Hub's maritime port infrastructure** is made up of the following ten main ports, listed according to their cargo movement: Iquique, Tocopilla, Mejillones, Antofagasta, Caldera, and Huasco in Chilean Regions I, II, and III, on the Pacific ocean; and Paranaguá in Paraná, San Francisco do Sul in Santa Catarina, and Porto Alegre and Rio Grande in Rio Grande do Sul, on the Atlantic ocean. All the ports listed have adequate facilities for the traffic, movement, and conditioning of import and export goods, but there are severe congestion problems in the hinterlands due to insufficient road infrastructure and the strong mismatch between the development of the cities and their ports. Between 2000 and 2007, the total cargo movement in these ten ports grew by 55.91% (from 75,498,172 tons to 117,679,380 tons). In addition, the above Brazilian ports increased their share of the estimated total cargo movement from 80.08% in 2000 to 81.96% in 2007.
- **Airport infrastructure** in the Hub is adequate, for which reason all the area can be very well connected by air.
- **The energy sector** has been a trigger of great works that have had a positive impact on integration. This sector has undergone profound transformations in its economic and institutional organization, mainly regarding the ownership structure, changing the approach to integration projects. In general terms, this infrastructure does not pose any great problem, but calls for continuing with the task of harmonizing technical standards and structuring energy integration.

Ultimately, it can be noted that each country in the Hub has internal networks that meet current needs. International connections, however, are overall precarious and are critical points that projects in the Hub's groups will help solve.

III.2.3. The Hub's Development Potential

The area of influence of the Capricorn Hub represents a market of more than 45 million inhabitants along its 2.30 million km², with a GDP of about US\$ 201,117.8 million (88.72% of which is contributed by Argentina and Brazil). Institutionally speaking, this area is undergoing an 18-year long integration process (MERCOSUR) that has set up a clear pattern of gradual regulatory convergence and coordination of investments in transport, energy, and telecommunications interconnection infrastructure.

The region abounds in mining resources (copper, iron, silver, and precious stones, among others) located in the Andean area, and is largely suitable for agriculture. It also counts on large energy surpluses (hydroelectricity and natural gas).

- The region has a relatively low number of inhabitants but a great capacity and potential for development.
- This region is rich in resources of all kinds (energy, agriculture, industries, etc.).
- This is a consolidated Hub in terms of human settlements, use of the land, and infrastructure development, across its highly productive territories.

- Although there is an important flow of internal traffic between regions, the same does not apply to coast-to-coast traffic.
- There are adequate conditions to improve regional competitiveness by reducing electricity costs through East-to-West flows and vice versa, depending on circumstances, as soon as the NEA-NOA (Northeastern Argentina - Northwestern Argentina) electric interconnection line becomes operational, which is scheduled for the near future.
- In the mid-term, the Hub's dynamics will be determined by:
 - Energy exchange
 - Increase in cargo/passenger transport
 - Development of subregions in the Hub associated with the growth of agricultural (soy) production, metalworking industry, and metal and non-metal mining

III.2.4. The Hub's Groups

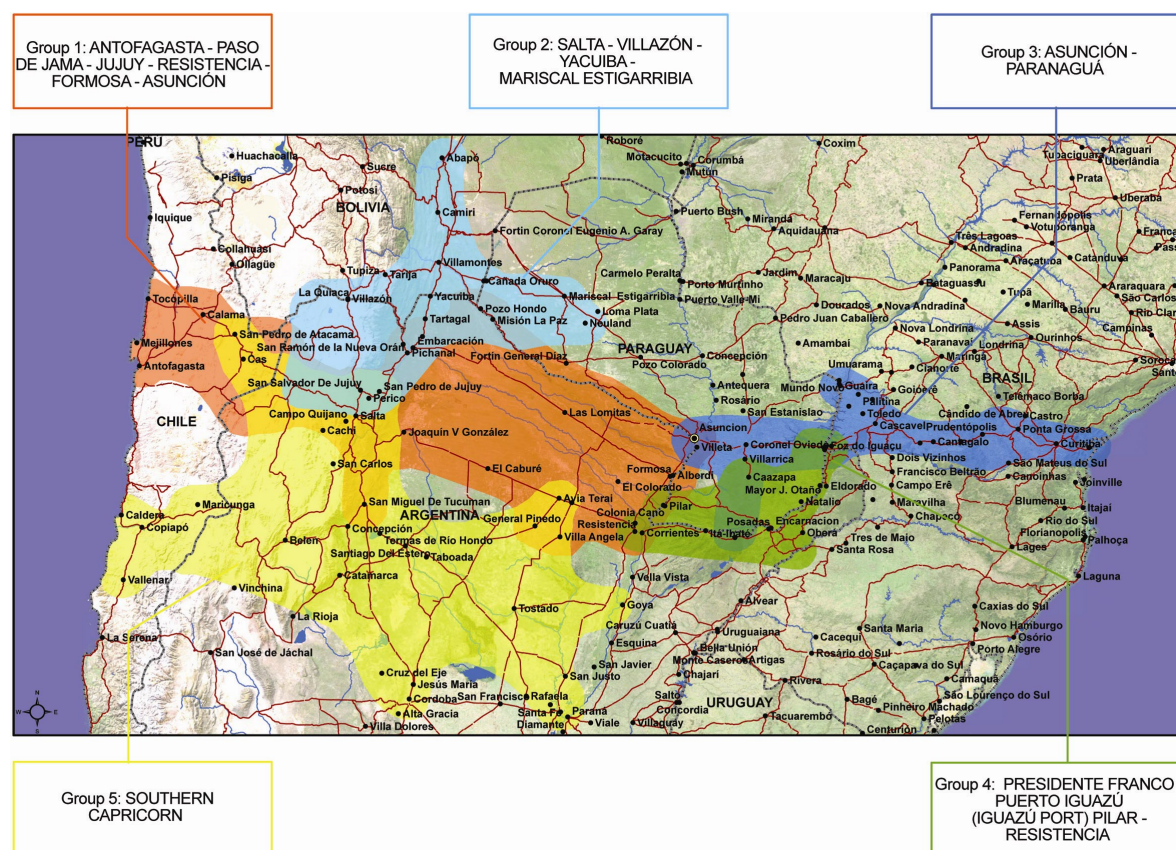
Delegations from the five countries have decided by consensus to increase the groups in the Hub to five:

Table 36 - Groups Identified in the Capricorn Hub

Groups	Countries Involved
Group 1: Antofagasta - Paso de Jama - Jujuy - Resistencia - Formosa - Asunción	Chile - Argentina - Paraguay
Group 2: Salta - Villazón - Yacuiba - Mariscal Estigarribia	Argentina - Bolivia - Paraguay
Group 3: Asunción - Paranaguá	Paraguay - Brazil
Group 4: Presidente Franco - Puerto Iguazú (Iguazú Port) - Pilar - Resistencia	Argentina - Paraguay
Group 5: Southern Capricorn	Chile - Argentina

The map below shows the geographic location and area of influence of each group:

Map 16 - Capricorn Hub's Groups



III.2.5. Project Groups and Strategic Functions

Group 1: Antofagasta - Paso de Jama - Jujuy - Resistencia - Formosa - Asunción

STRATEGIC FUNCTION

- Improve supply options in the Northwest region in Argentina, the South of Bolivia and Paraguay.
- Open an outlet from the Northwest in Argentina and South of Bolivia and Paraguay to the Pacific.
- Increase competitiveness of the Hub's products.
- Connectivity of Northwestern Argentina and the North of Chile with 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).

Map 17 - Capricorn Hub - Group 1

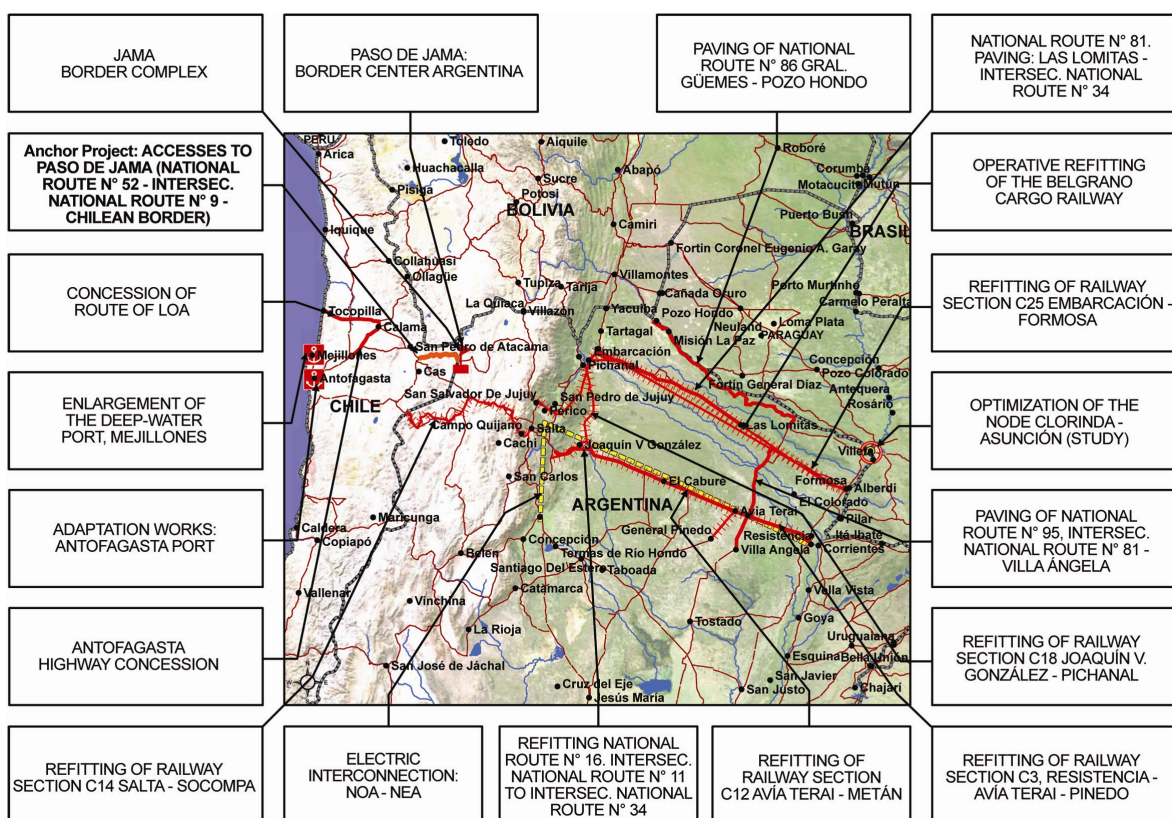


Table 37 - Capricorn Hub - Group 1: Related Investments

Capricorn Hub: Group 1	Estimated Investment (US\$ million)
Accesses to Paso de Jama (National Route No 52 - Intersec. National Route No 9 - Chilean Border)	54.0
Paso de Jama: Border Center Argentina	4.0
Electric Interconnection: NOA-NEA	725.0
Operative Refitting of the Belgrano Cargo Railway	350.0
National Route No 81. Paving: Las Lomitas - Intersec. National Route No 34	100.0
Optimization of the Node: Clorinda - Asunción (Study)	70.0
Enlargement of the Deep Water Port, Mejillones	120.0
Adaptation Works: Antofagasta Port	18.0
Refitting of Railway Section C3, Resistencia - Avía Terai - Pinedo	104.0
Refitting of Railway Section C12 Avía Terai - Metán	212.0
Refitting of Railway Section C14 Salta - Socompa	60.0
Refitting of Railway Section C25 Embarcación - Formosa	64.0
Refitting of Railway Section C18 Joaquín González - Pichanal	50.0
Refitting National Route No 16. Intersec. National Route No 11 to Intersec. National Route No 34	300.0
Paving of National Route No 86 Gral. Güemes - Pozo Hondo	100.0
Paving of National Route No 95, Intersec. National Route No 81 - Villa Ángela	90.0
Jama Border Complex	9.0
Antofagasta Highway Concession	315.0
Concession of Route of Loa	140.0
TOTAL	2,885.0

Group 2: Salta - Villazón - Yacuiba - Mariscal Estigarribia

STRATEGIC FUNCTION

- Reduce costs and provide greater security to trade in goods and services between Argentina-Bolivia-Paraguay.
- Articulate the Central Interoceanic and Capricorn Hubs.

Map 18 - Capricorn Hub - Group 2

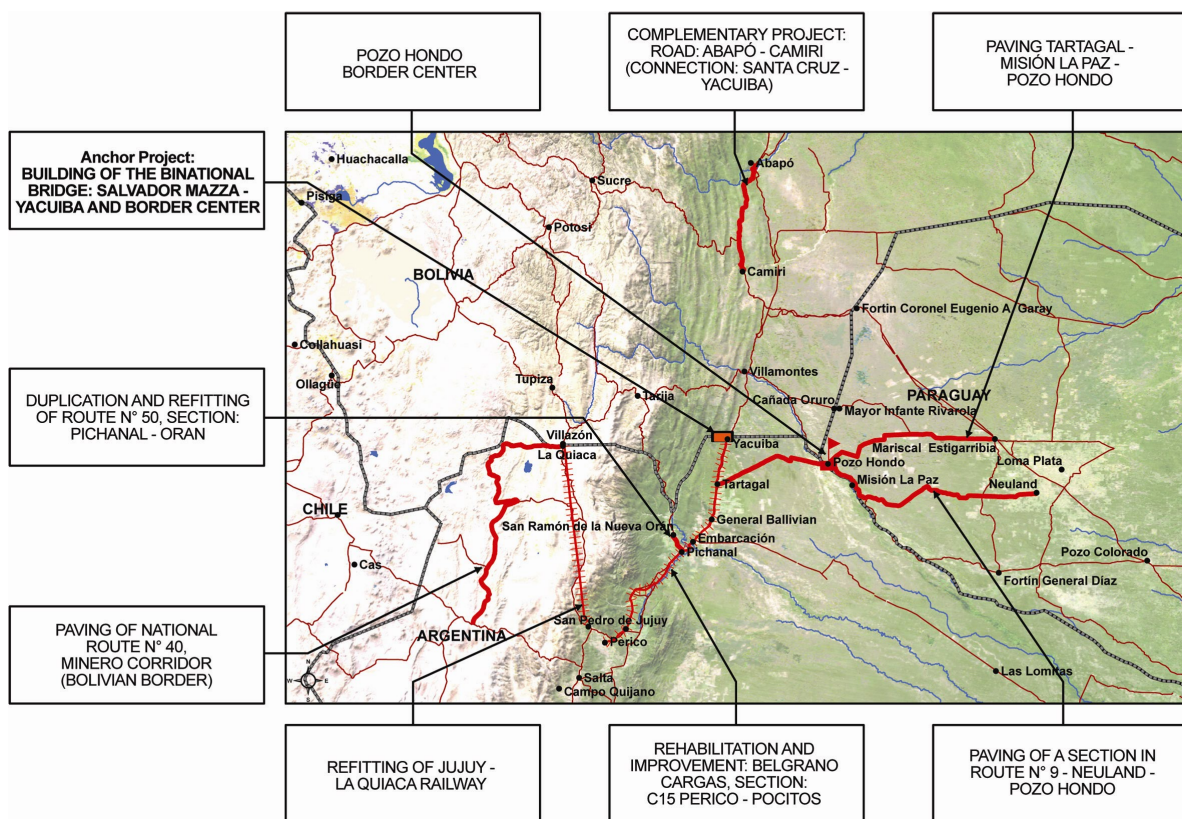


Table 38 - Capricorn Hub - Group 2: Related Investments

Capricorn Hub: Group 2	Estimated Investment (US\$ million)
Building of the Binational Bridge: Salvador Mazza - Yacuiba and Border Center	10.0
Refitting of Jujuy - La Quiaca Railway	3.0
Paving Tartagal - Misión La Paz - Pozo Hondo	250.0
Complementary Project: Road: Abapó - Camiri (Connection: Santa Cruz - Yacuiba)	107.0
Rehabilitation and Improvement: Belgrano Cargas, Section: C15 Perico - Pocitos	60.0
Duplication and Refitting of Route No 50, Section: Pichanal - Oran	45.0
Paving of National Route No 40, Minero Corridor (Bolivian Border)	200.0
Pozo Hondo Border Center	1.5
Paving of a Section in Route No 9 - Neuland - Pozo Hondo	144.0
TOTAL	820.5

Group 3: Asunción-Paranáguá

STRATEGIC FUNCTION

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

Map 19 - Capricorn Hub - Group 3

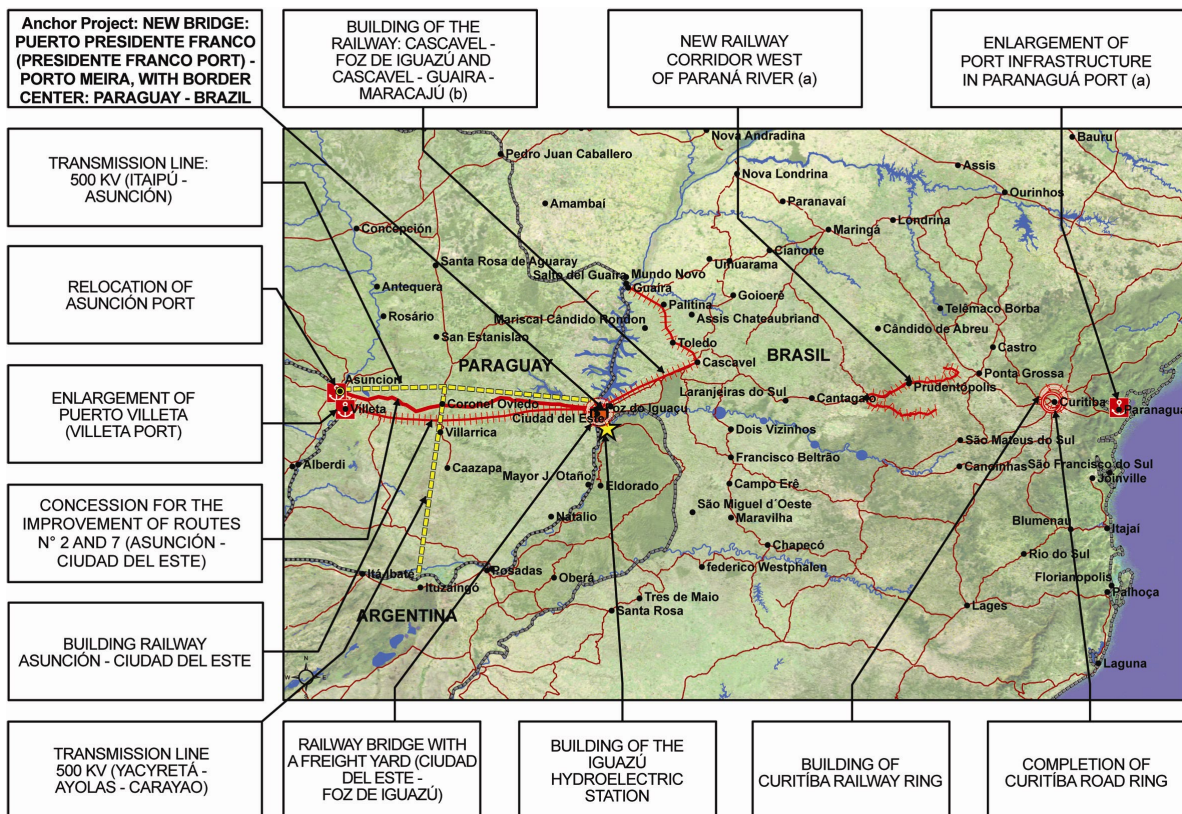


Table 39 - Capricorn Hub - Group 3: Related Investments

Capricorn Hub: Group 3	Estimated Investment (US\$ million)
New Bridge: Puerto Presidente Franco (Presidente Franco Port) - Porto Meira, with Border Center: Paraguay - Brazil	75.0
Enlargement of Port Infrastructure in Paranaguá Port ^(a)	63.5
Completion of Curitiba Road Ring	75.0
Building of Curitiba Railway Ring	70.0
Concession for the Improvement of Routes No 2 and 7 (Asunción - Ciudad del Este)	136.0
Building Railway Asunción - Ciudad del Este	297.5
Building of the Railway: Cascavel - Foz do Iguaçu and Cascavel - Guaira - Maracajú ^(b)	0.0
Relocation of Asunción Port	25.0
Railway Bridge with a Freight Yard (Ciudad del Este - Foz do Iguaçu)	70.0
New Railway Corridor West of Paraná River ^(a)	270.0
Enlargement of Puerto Villeta (Villeta Port)	30.0
Transmission Line: 500 kV (Itaipú - Asunción)	125.0
Transmission Line 500 kV (Yacyretá - Ayolas - Carayao)	130.0
Building of the Iguazú Hydroelectric Station	260.0
TOTAL	1,627.0

Notes:

^(a) A modification to this project proposed by Brazil is under the consideration of the countries.

^(b) Hinge Project with Paraguay - Paraná Waterway Hub's Group 2. A modification to this project proposed by Brazil is under the consideration of the countries.

Group 4: Presidente Franco - Puerto Iguazú (Iguazú Port) - 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.

Map 20 - Capricorn Hub - Group 4

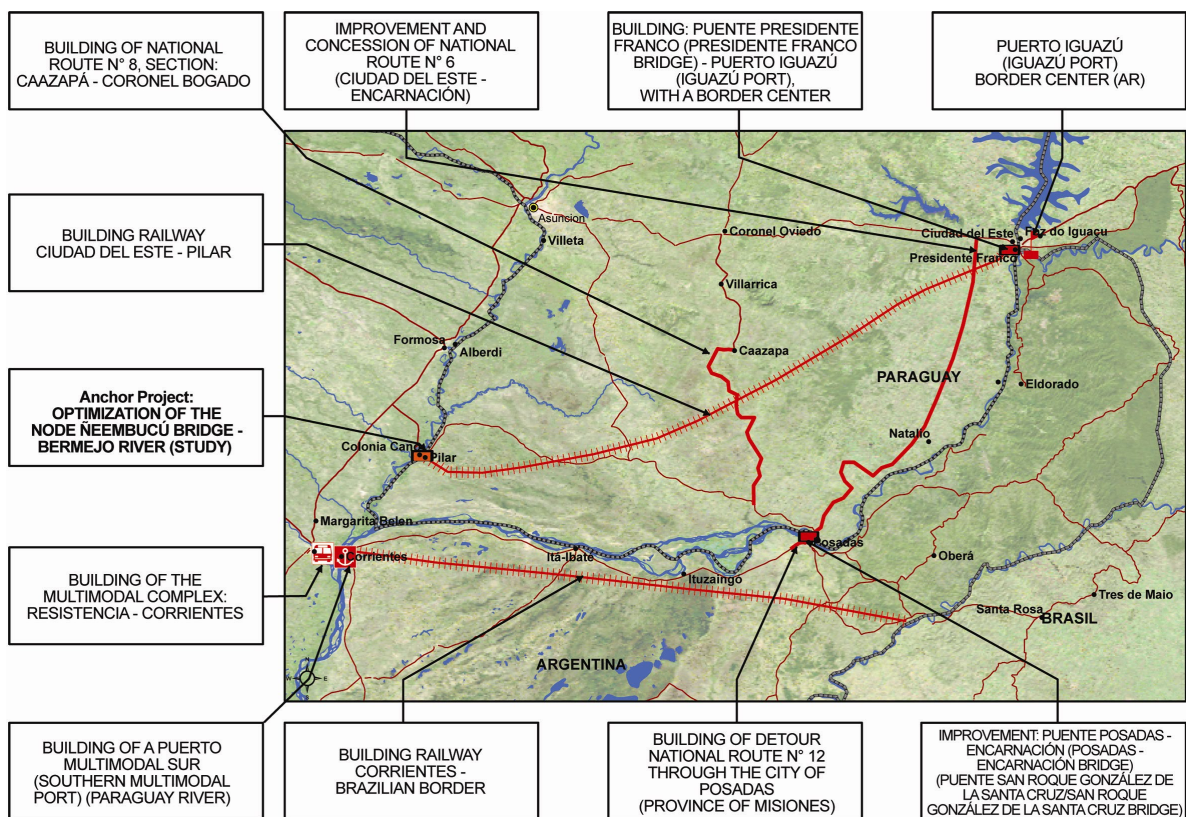


Table 40 - Capricorn Hub - Group 4: Related Investments

Capricorn Hub: Group 4	Estimated Investment (US\$ million)
Optimization of the Node Ñeembucú Bridge - Bermejo River (Study)	60.0
Building Railway Corrientes - Brazilian Border	0.0
Building of the Multimodal Complex: Resistencia - Corrientes	0.0
Puerto Iguazú (Iguazú Port) Border Center (AR)	4.0
Improvement: Puente Posadas - Encarnación (Posadas - Encarnación Bridge) (Puente San Roque González de La Santa Cruz / San Roque González de La Santa Cruz Bridge)	52.3
Building Railway Ciudad del Este - Pilar	438.6
Building: Puente Presidente Franco (Presidente Franco Bridge) - Puerto Iguazú (Iguazú Port), with a Border Center	75.0
Building of a Puerto Multimodal Sur (Southern Multimodal Port) (Paraguay River)	120.0
Building of National Route No 8, Section: Caazapá - Coronel Bogado	181.0
Improvement and Concession of National Route No 6 (Ciudad del Este - Encarnación)	136.0
Building of Detour National Route No 12 through the City of Posadas (Province of Misiones)	35.0
TOTAL	1,101.9

Group 5: Southern Capricorn

STRATEGIC FUNCTION

- Implement intermodal articulation between the groups of the Capricorn Hub, the MERCOSUR-Chile Hub, the Central Inter-oceanic Hub, and the Paraguay - Paraná Waterway Hub.
- Improve economic and social development, connectivity, and intra-regional integration.
- Enable a new option for trade flows between the region and the Pacific markets.

Map 21 - Capricorn Hub - Group 5

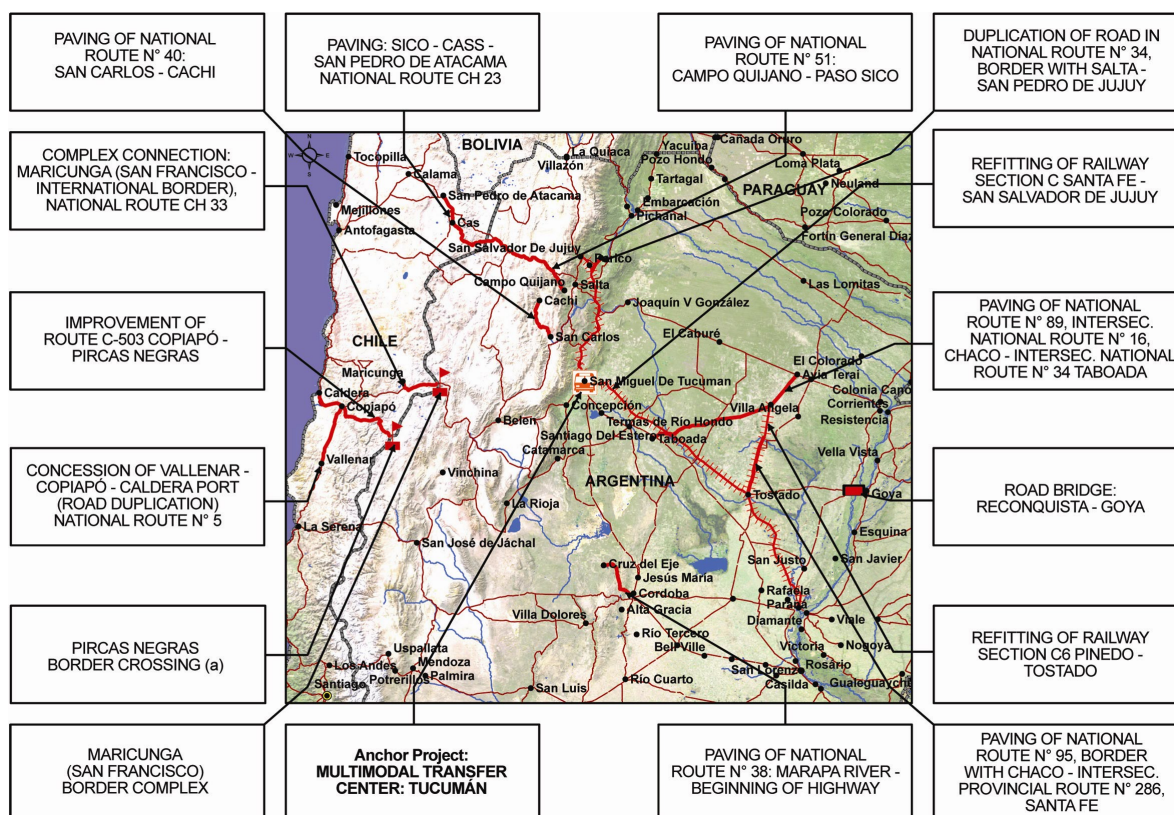


Table 41 - Capricorn Hub - Group 5: Related Investments

Capricorn Hub: Group 5	Estimated Investment (US\$ million)
Multimodal Transfer Center: Tucumán	20.0
Refitting of Railway Section C6 Pinedo - Tostado	100.0
Refitting of Railway Section C Santa Fe - San Salvador de Jujuy	270.0
Road Bridge: Reconquista - Goya	190.0
Paving of National Route No 95, Border with Chaco - Intersec. Provincial Route No 286, Santa Fe	37.0
Duplication of Road in National Route No 34, Border with Salta - San Pedro de Jujuy	135.0
Paving of National Route No 38: Marapa River - Beginning of Highway	160.0
Paving of National Route No 40: San Carlos - Cachi	80.0
Paving of National Route No 89, Intersec. National Route No 16, Chaco - Intersec. National Route No 34 Taboada	95.0
Maricunga (San Francisco) Border Complex	4.0
Complex Connection: Maricunga (San Francisco - International Border), National Route Ch 33	30.0
Concession of Vallenar - Copiapó - Caldera Port (Road Duplication) National Route No 5	300.0
Paving: Sico - Cass - San Pedro de Atacama National Route CH 23	30.0
Improvement of Route C-503 Copiapó - Pircas Negras	30.0
Pircas Negras Border Crossing ^(a)	30.0
Paving of National Route No 51: Campo Quijano - Paso Sico	0.0
TOTAL	1,511.0

Note: ^(a) Hinge project with the MERCOSUR-Chile Hub's Group 4.

III.2.6. The Capricorn Hub's Project Portfolio

General Aspects

The countries have agreed to include sixty-nine projects in the Capricorn Hub, accounting for an estimated investment of US\$ 7,945.4 million, as summarized below:

Table 42 - General Aspects of the Capricorn Hub's Portfolio

Capricorn Hub	Name	Number of Projects	Estimated Investment (US\$ million)
Group 1	Antofagasta - Paso de Jama - Jujuy - Resistencia - Formosa - Asunción	19	2,885.0
Group 2	Salta - Villazón - Yacuiba - Mariscal Estigarribia	9	820.5
Group 3	Asunción - Paranaguá	14	1,627.0
Group 4	Presidente Franco - Puerto Iguazú (Iguazú Port) - Pilar - Resistencia	11	1,101.9
Group 5	Southern Capricorn	16	1,511.0
TOTAL		69	7,945.4

Sector-Based Breakdown

The following is a sector-based breakdown of the Hub's projects:

Table 43 - Sector-based Breakdown of the Capricorn Hub's Portfolio

Sector / Subsector	Transport		Energy	
	Number of Projects	Estimated Investment (US\$ million)	Number of Projects	Estimated Investment (US\$ million)
Road	33	3,757.3		
Maritime	3	201.5		
Railway	17	2,419.1		
River	3	175.0		
Multimodal	1	20.0		
Border crossing	8	132.5		
Energy interconnection			3	980.0
Energy generation			1	260.0
TOTAL	65	6,705.4	4	1,240.0

Project Typology

The Hub's project typology is summarized in the following tables:

Table 44 - Road Transport Project Typology in the Capricorn Hub

Project Typology	Number of Projects	Estimated Investment (US\$ million)
Enlargement of road capacity	7	1,178.0
Paving (new works)	13	1,354.0
Rehabilitation of roads and structures	5	663.0
Bridges (new and rehabilitation)	6	452.3
Bypasses and city accesses	2	110.0
TOTAL	33	3,757.3

Table 45 - Maritime Transport Project Typology in the Capricorn Hub

Project Typology	Number of Projects	Estimated Investment (US\$ million)
Refitting of sea ports	1	120.0
Enlargement of land infrastructure in sea ports	1	18.0
Building of new sea ports	1	63.5
TOTAL	3	201.5

Table 46 - Railway Transport Project Typology in the Capricorn Hub

Project Typology	Number of Projects	Estimated Investment (US\$ million)
Railway belt	1	70.0
Building of new railway lines	6	1,076.1
Refitting of railway lines	10	1,273.0
TOTAL	17	2,419.1

Table 47 - Border Crossing Project Typology in the Capricorn Hub

Project Typology	Number of Projects	Estimated Investment (US\$ million)
Infrastructure for new border control centers	4	47.0
Adaptation of existing infrastructure in border control centers	1	4.0
Enlargement of infrastructure/capacity in border control centers	3	81.5
TOTAL	8	132.5

Table 48 - Energy Project Typology in the Capricorn Hub

Project Typology	Number of Projects	Estimated Investment (US\$ million)
Energy generation	1	260.0
Energy interconnection	3	980.0
TOTAL	4	1,240.0

Table 49 - River Transport Project Typology in the Capricorn Hub

Project Typology	Number of Projects	Estimated Investment (US\$ million)
Refitting of existing river ports	2	55.0
Building of new river ports	1	120.0
TOTAL	3	175.0

Table 50 - Multimodal Transport Project Typology in the Capricorn Hub

Project Typology	Number of Projects	Estimated Investment (US\$ million)
Transfer stations	1	20.0
TOTAL	1	20.0

Anchor Projects

The countries identified five anchor projects in the Hub, totaling an estimated investment of US\$ 219.0 million, according to the following detail:

Table 51 - Capricorn Hub's Anchor Projects

Group	Anchor Projects	Estimated Investment (US\$ million)	Financing Source	Scope	Project Stage
1	Accesses to Paso de Jama (National Route No 52 - Intersec. National Route No 9 - Chilean Border)	54.0	Public	National	Concluded
2	Building of the Binational Bridge: Salvador Mazza - Yacuiba and Border Center	10.0	Public	Binational	Pre-execution
3	New Bridge: Puerto Presidente Franco (Presidente Franco Port) - Porto Meira, with Border Center: Paraguay - Brazil	75.0	Public	Binational	Pre-execution
4	Optimization of the Node Bermejo River - Puente Ñeembucú (Ñeembucú Bridge)	60.0	Public	Binational	Pre-execution
5	Multimodal Transfer Center: Tucumán	20.0	Public	National	Pre-execution
	TOTAL	219.0			

