

TERRITORY, INFRA-STRUCTURE, URBANIZATION AND DEVELOPMENT



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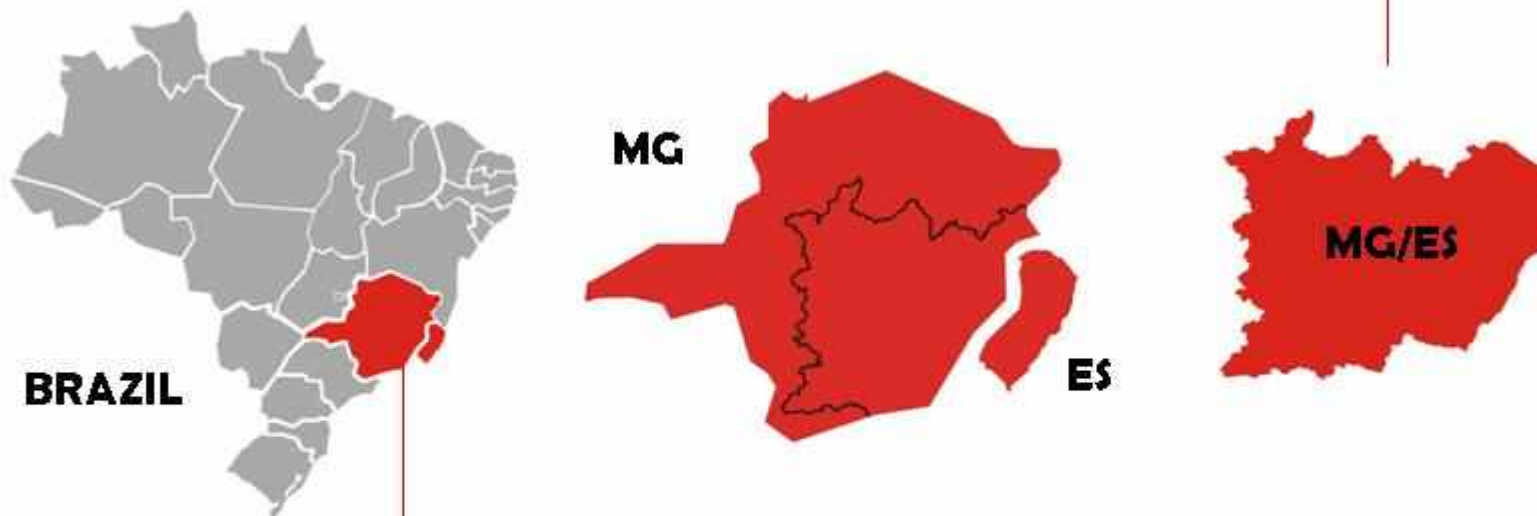
TERRITORY, INFRA-STRUCTURE, URBANIZATION AND DEVELOPMENT

- 1 Macro-territorial configurations of the MG/ES territory**
- 2 The productive systems and its function in the exchange with the exterior**
- 3 Infra-structural locations and regional differentiations**
- 4 The industrialization and the infrastructural nets**
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MACRO-TERRITORIAL CONFIGURATIONS OF THE **MG/ES** TERRITORY



Territorial configuration is defined by the implantation of industrial infra-structure and logistic in wide scale



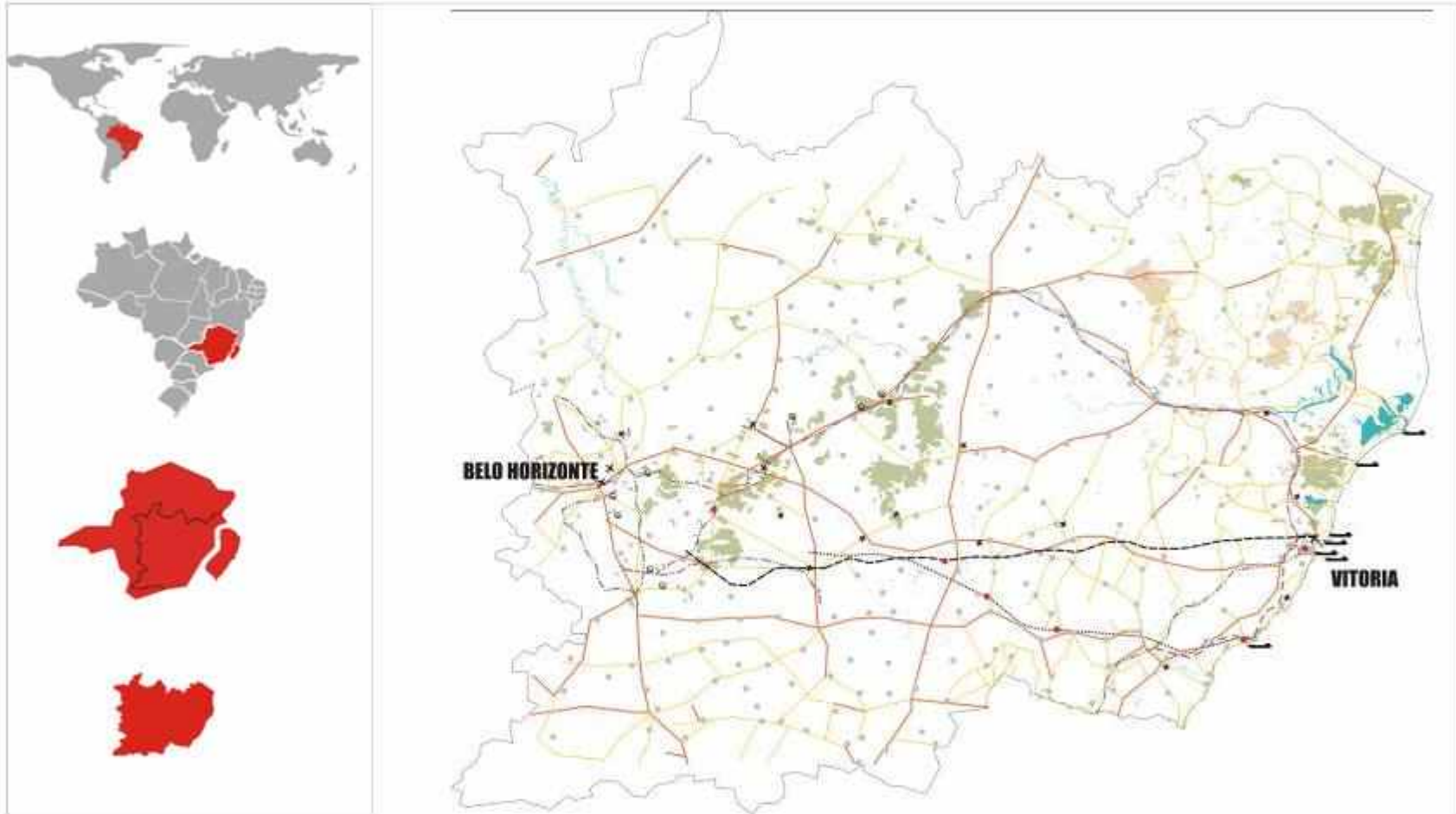
GEOGRAPHICAL LOCATION



Operational system that articulates extraction, industrial processing, distribution, exportation and capital flows, with international inclusion.

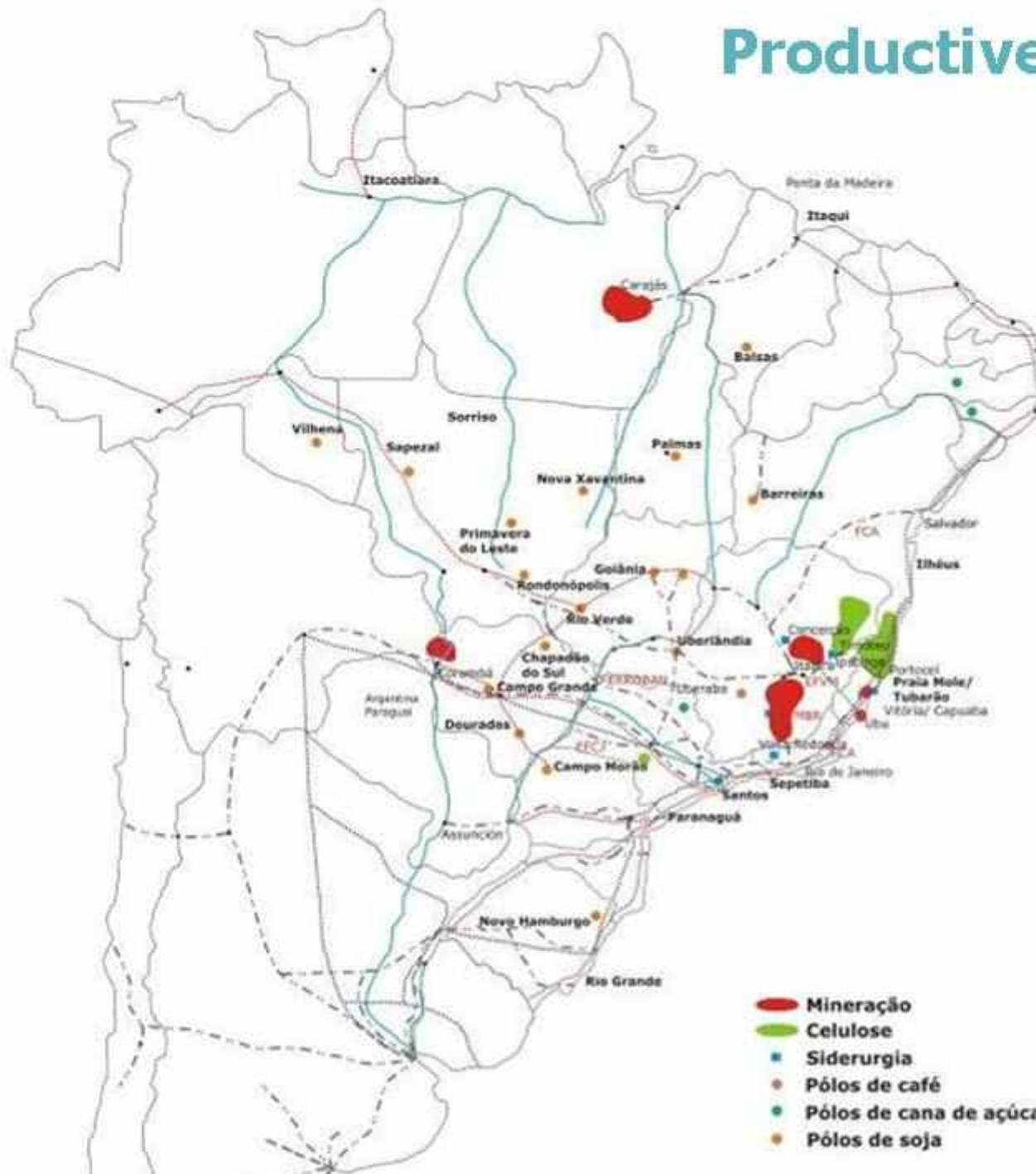
INFRA-STRUCTURAL AND LOGISTIC TERRITORY

. Complex and dynamic infra-structural system, where the implantation of mines, steel plants, reforestation projects, ports and railroads system determines the conformation of the territory.



An industrial and logistic infra-structure that becomes even more flexible and that deeply affects the urban situations and local environments.

Productive Systems

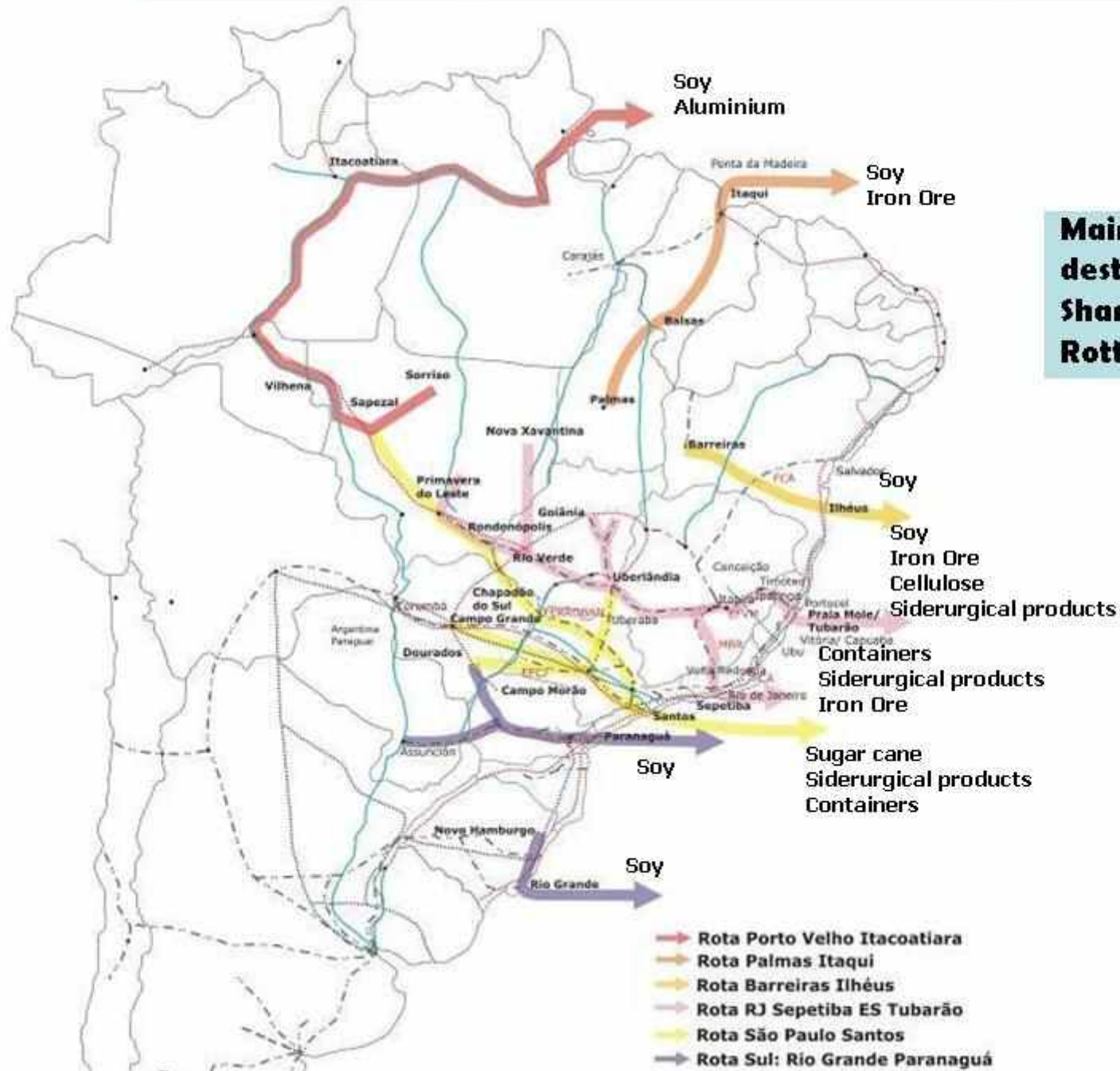


The productive system installed in the territory

(iron mines, railroads, steel plants, forests, cellulose plants, ports)

originates an emergency of new types of economical activities and of space occupation that generates new relationships among the companies, public management and communities

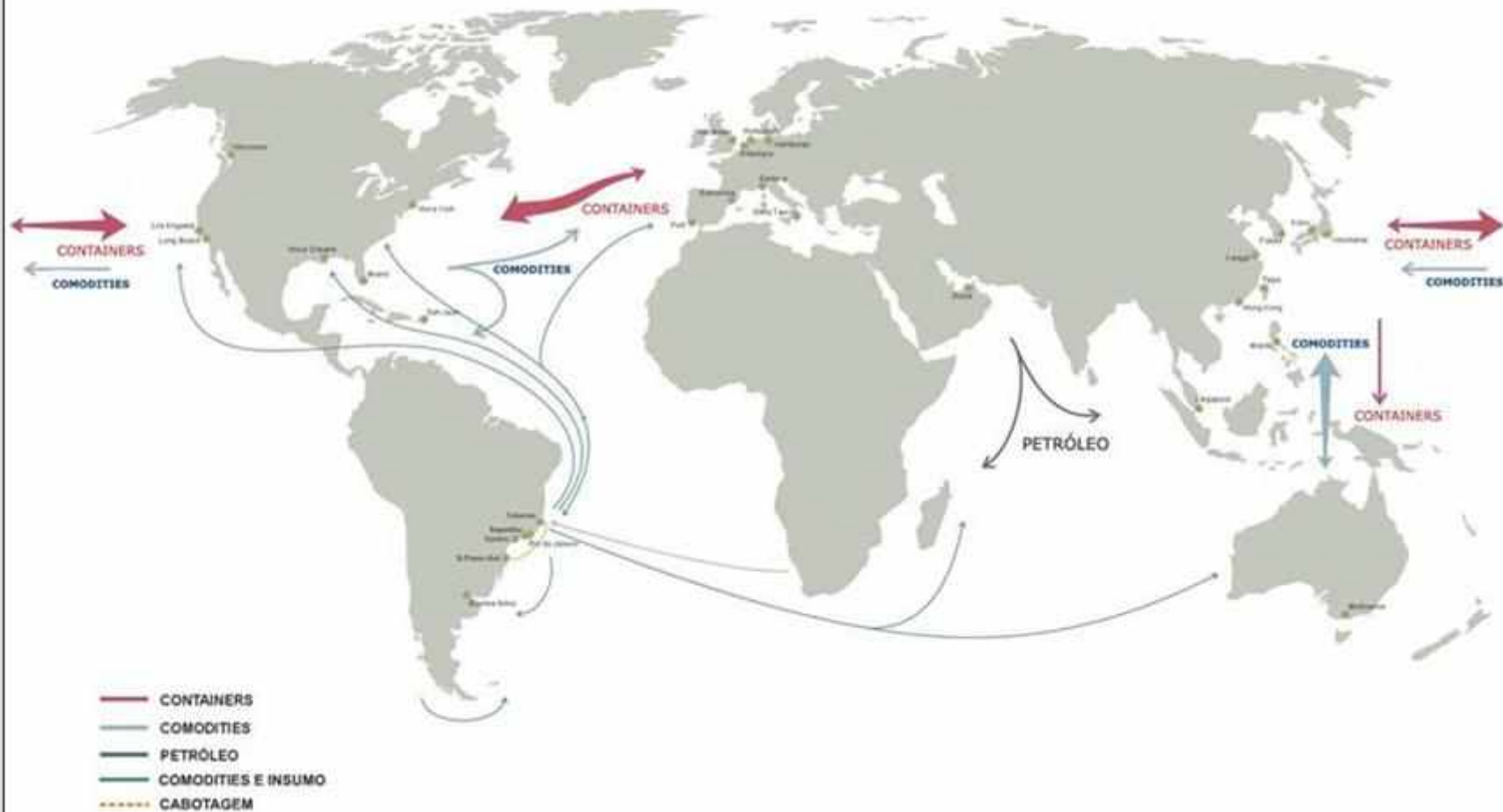
Productive systems and its role in the exchange with the exterior



Imbalance in the Global Trade

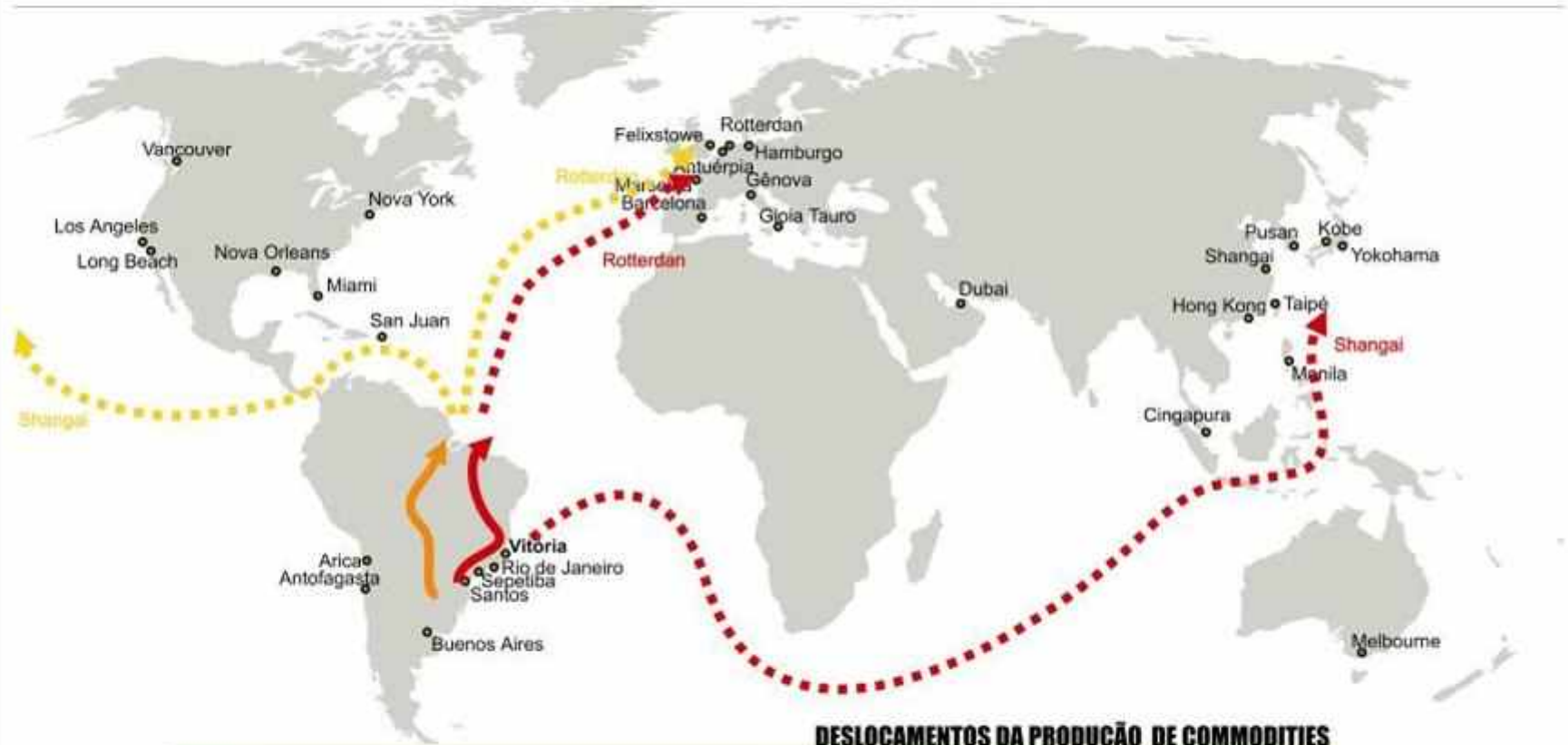
Places that influence in the global commutations: containers flows

Places of the current operations: commodities



Load flows of high added value x commodities

Iron Ore and Soy



DESLOCAMENTOS DA PRODUÇÃO DE COMMODITIES

STREAM OF COMMODITIES PRODUCTION

- Mining (productive stream)
- ⋯→ Mining (destiny)
- Grains (productive stream)
- ⋯→ Grains (destiny)

SPREAD of the steel plants (production)

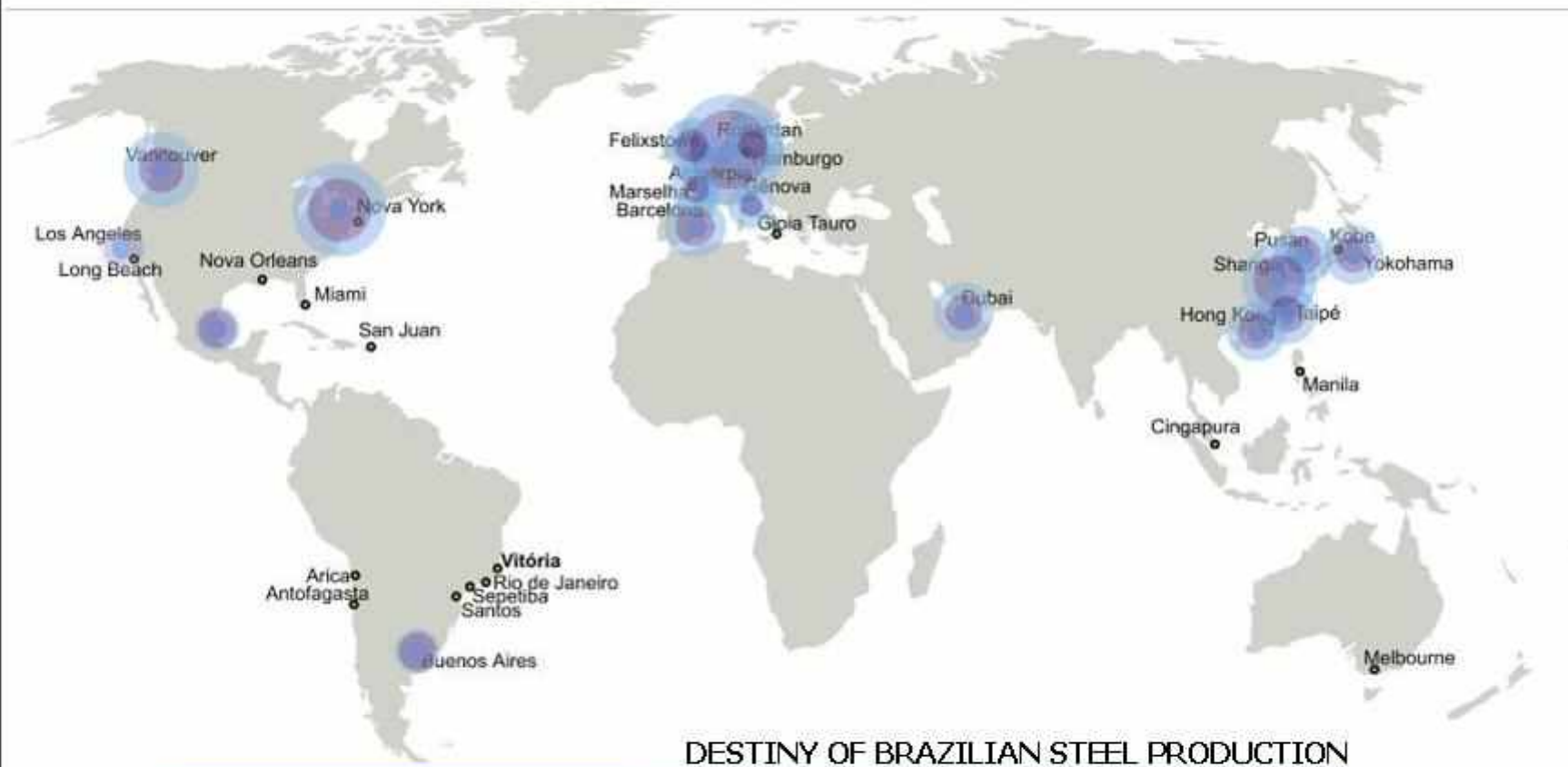


STREAM OF STEEL PRODUCTION

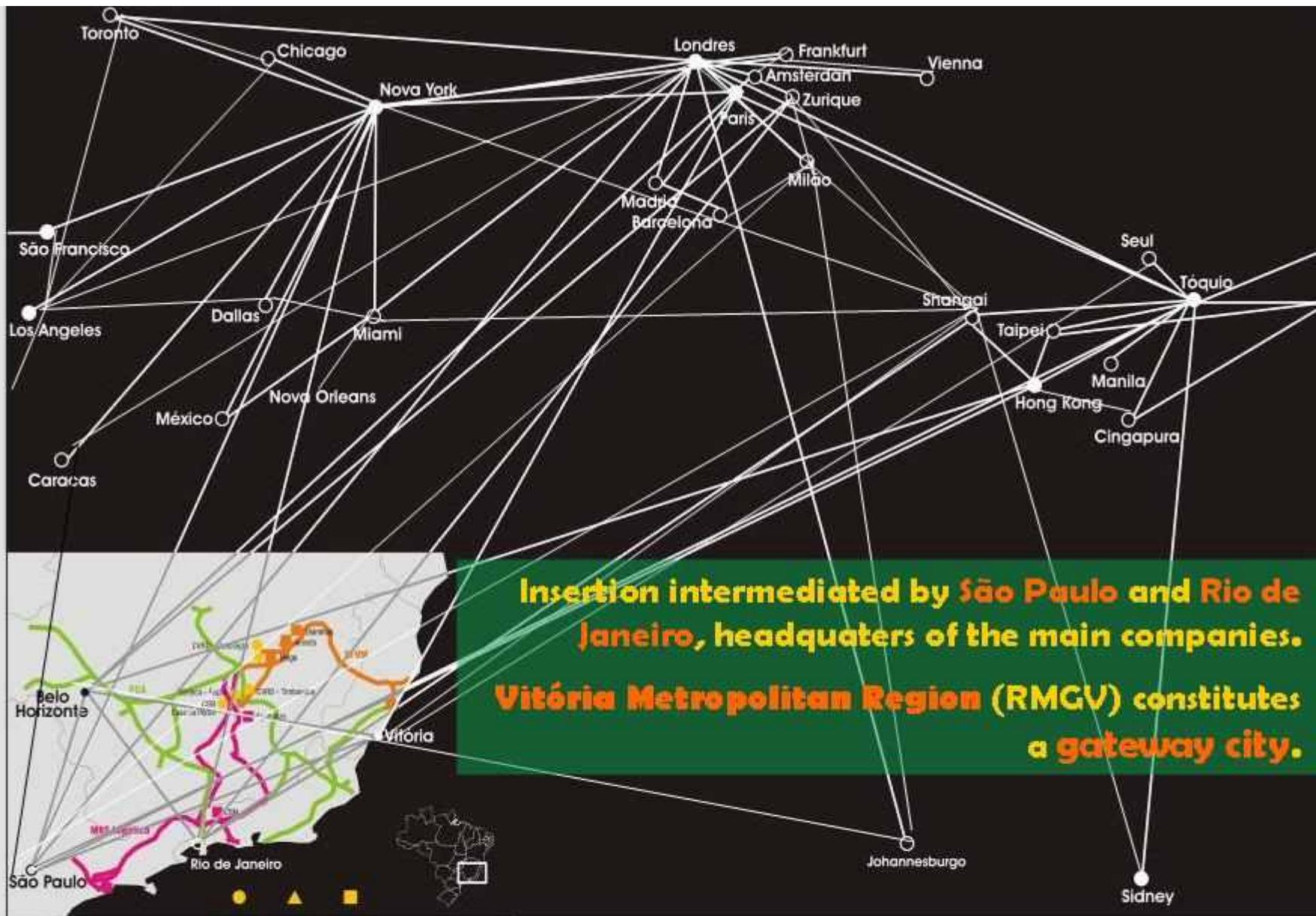
Brazil is the ninth producer of steel

■ siderurgia (produção)

DISTRIBUTION of the steel (consumption)



Gradual transfer of the steel and iron ore production and consumption of the developed countries to the countries in development, prominence to China.



Regional insertion in the nets of world cities

Infra-structural locations and regional differentiations

Devices that attracts and concentrates activities, economical dynamics and population. New production and management spaces, defined by connections in net with other units and with logistic integrated systems and combined operations with customers.

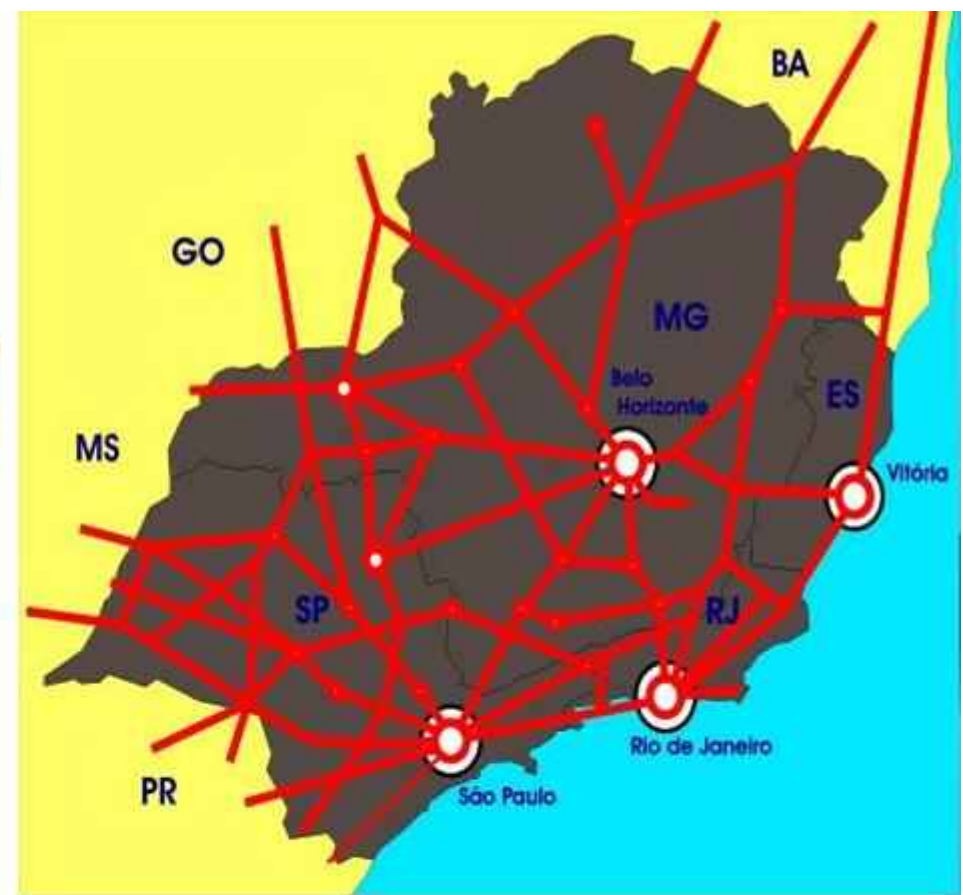
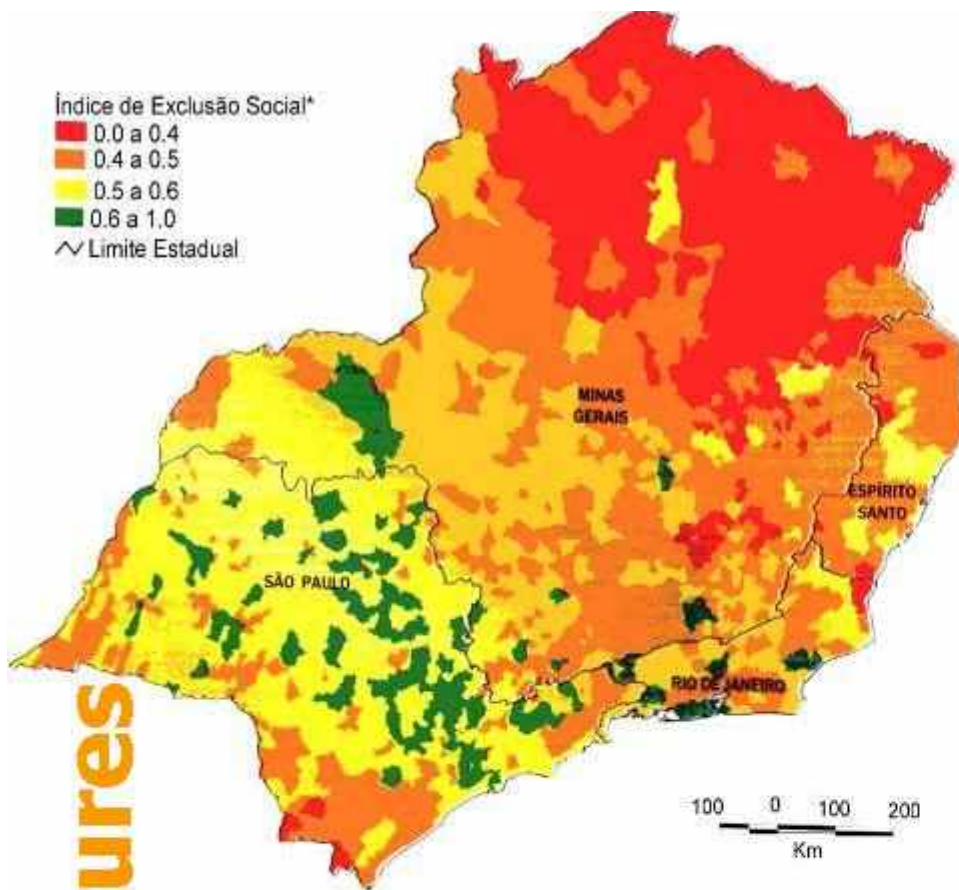


The logistics system become device of the territory rearticulation in larger scales.



LEGENDA

- Ferrovia
- Hidrovia
- Rodovia
- Conexões menores
- Conexões maiores
- Capitais



**The infrastructures become territorially selective.
Intensive articulation of all productive elements, optimizing to its maximum
operative power.**



MINING

Minas Gerais concentrates the production of iron ore **(70%)** in Brazil.

The largest mining companies of the country are located in **Quadrilátero Ferrífero** area.



CVRD . MBR . Samarco . Feterco

The mineral extraction goes by great transformations, with the deactivation of old mines and the implantation of other new ones and with the construction of new logistic devices, as rail extensions and systems of belts carriers.

Mining and Cities: Belo Horizonte

- . Metropolitan expansion in south direction
- . Presence of diggings inside of the urban perimeter - great rupture of the urban space
- . Mined areas that determine the whole drawing of the south area of the metropolis.



Mining and Cities: Itabira

ITABIRA city : important example of the mining effects on the urban space



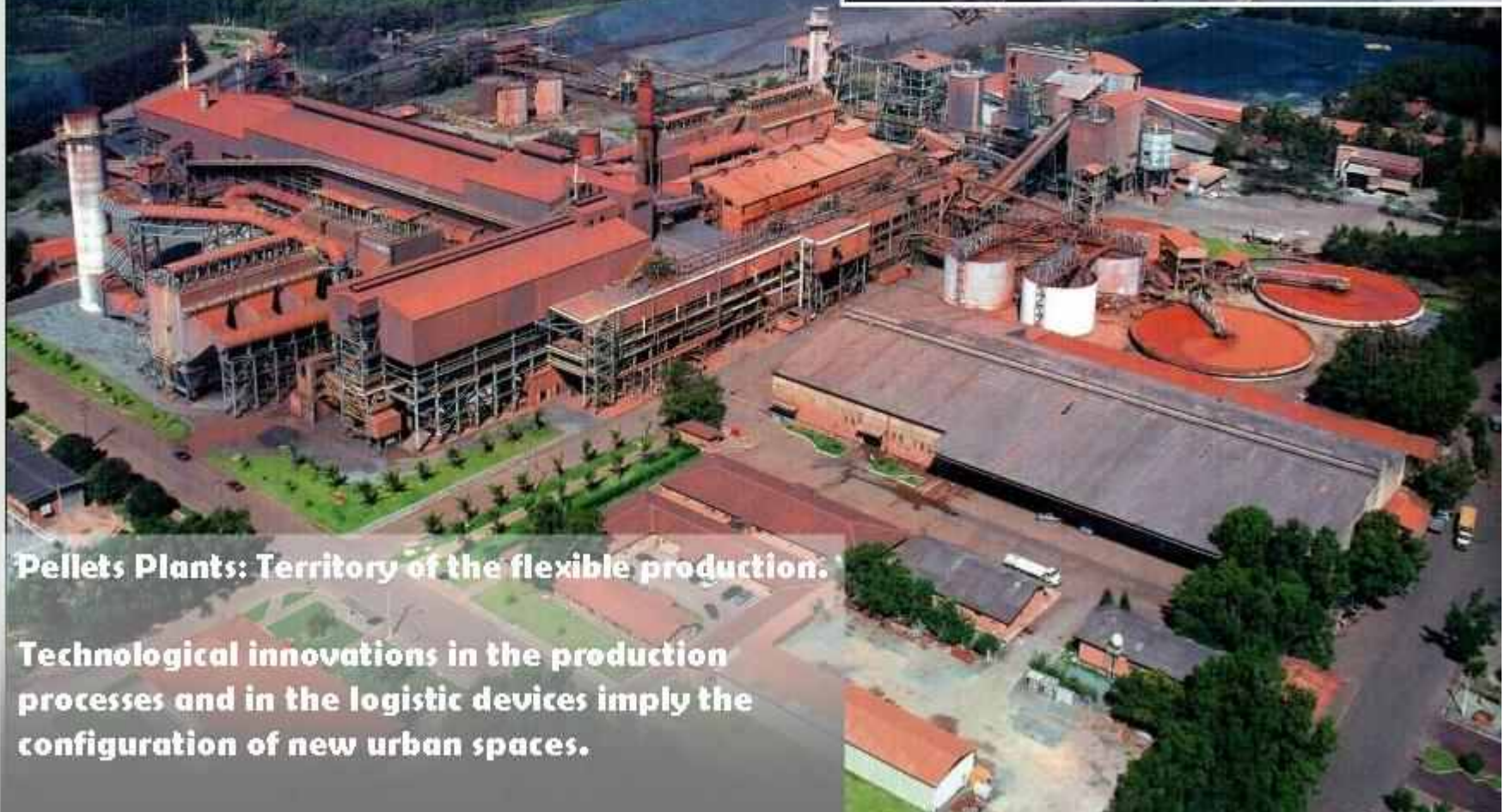
Itabira presents the largest individual production of iron ore.

Itabira urban space is interlaced and surrounded by mines.

Neighbourhoods and equipments disappear and / or new ones are built, as it is necessary of endowing the space of indispensable conditions for the monoindustry.

The city moves in the territory as exploration fronts are closed and other ones are open in the immediate territory of the city.

Mining and Cities: Grande Vitória and Anchieta



Pellets Plants: Territory of the flexible production:

Technological innovations in the production processes and in the logistic devices imply the configuration of new urban spaces.

A global process of coalitions began in the metallurgical section changing the scale of the global companies (with less than 40 million tons / year is not possible to compete globally).





Siderurgy

The Brazilian steel plants are small for the international parameters. None is among the largest of the world although the country is the ninth producer of steel.





Siderurgy: Vale do Aço

Vale do Aço is an urban complex that grew starting from the implantation of metallurgical projects of Acesita and of Usiminas, embracing the municipal districts of Timóteo, Colonel Fabriciano and Ipatinga.



Relate between city and the environment is dictated by the logic of the industrial production:

Rural spaces: eucalyptus monoculture

Urban spaces: is produced in function of the needs of the industry

Agglomeration between steel plants and pellets, companies of storage, logistic, fuel, ports and navigation

Internacional conglomerate

Knot of the urban-industrial economy

CST and CVRD

Companies



CST: Localization defined as mediation between distances of the ore supply, coal and trade / Priority in the exportation.

CVRD: More than a mining company, CVRD is a logistic company. It controls two railroads: EFVM - Vitória-Minas Railroad and FCA – Ferrovia Centro Atlântica. and has several marine terminals, as Port of Tubarão and Port of Vitória.

The macro-area possesses the two largest companies producing of whitened cellulose of the world:

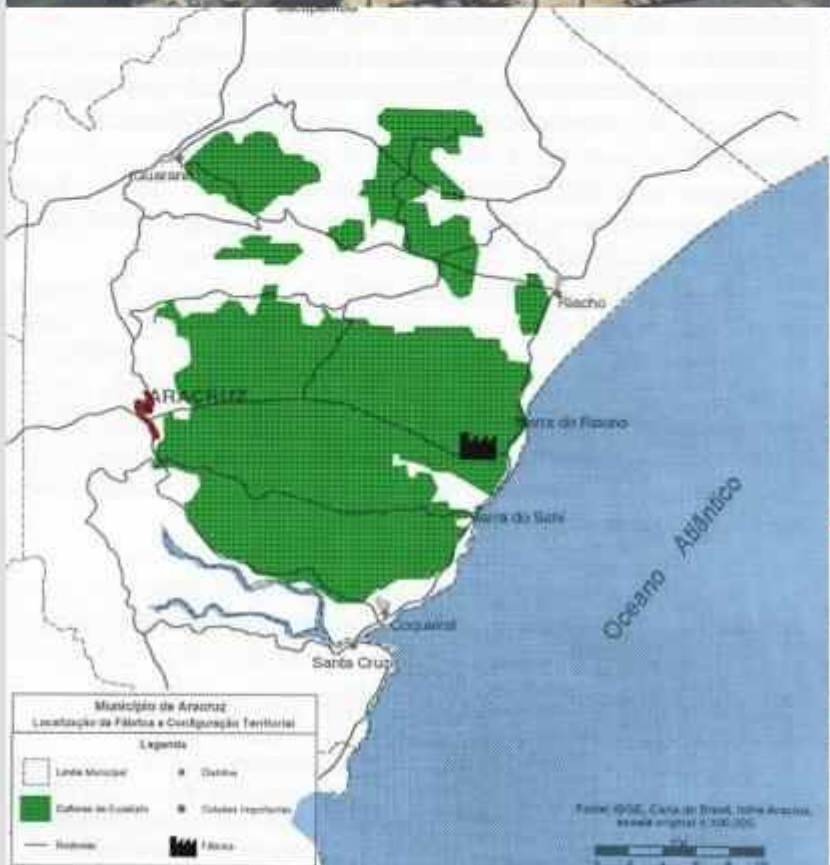
Aracruz Celulose (ES) - 1,3 million tons / year

Cenibra (MG) - 700 thousand tons / year.

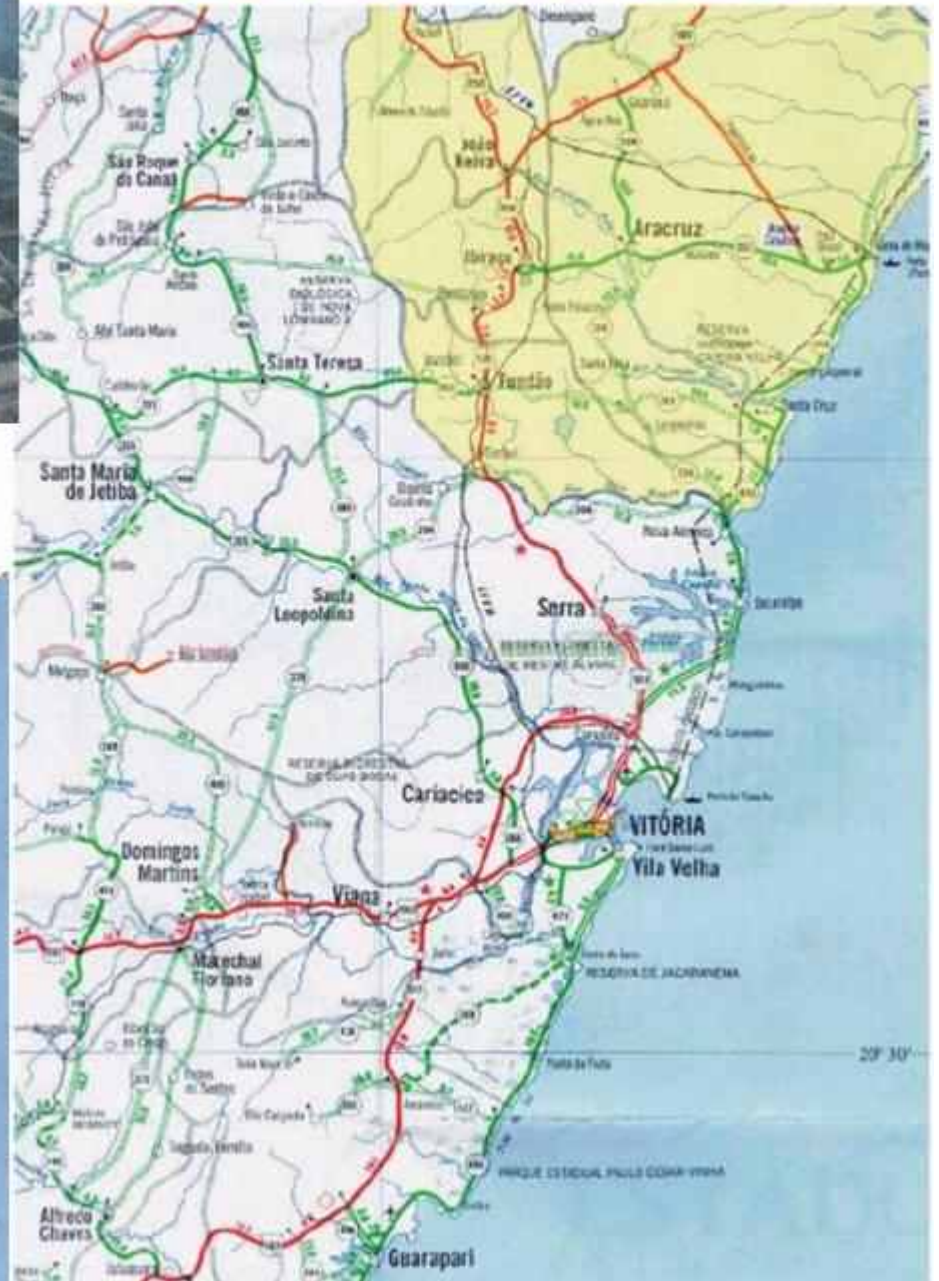
Both companies possess, in partnership, an own port, Portocel, located to the north of Vitória, in the municipal district of Aracruz.



Cellulose Territory



Aracruz Celulose



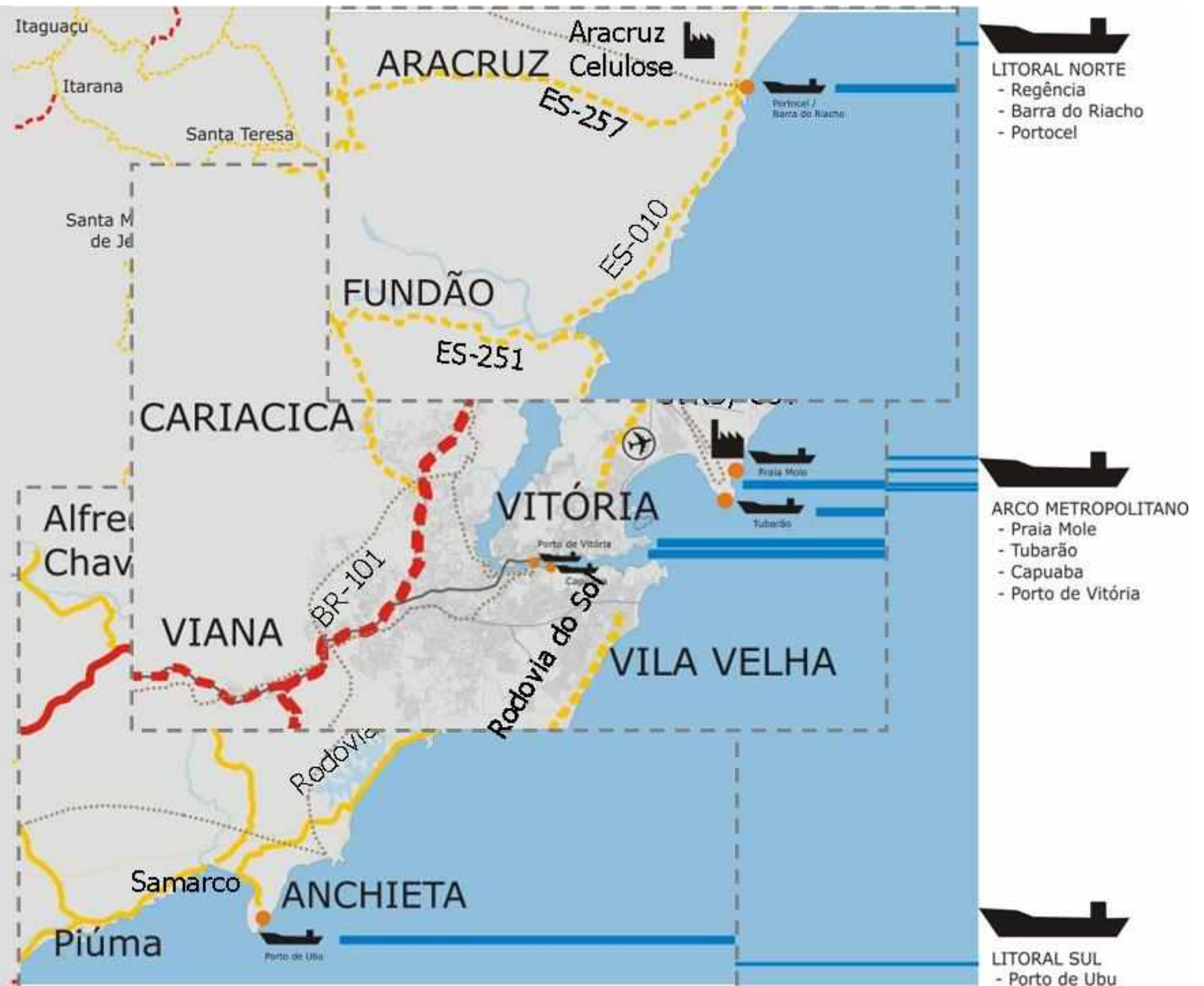
Port Territory



**The port system
and the urbanization process of the ES coastal land**

The port cities are particularly exposed to the global political economy

Port Territory



Port Territory





Port Territory

**Industrial Ports (suburbans)
Urban Ports (geral loads)**

One of the main port platforms of southwest.



Port Territory

Six ports articulated for railroad and road net, integrating logistic complex of primary industrial production of part of the southwest region and central-west of the country.



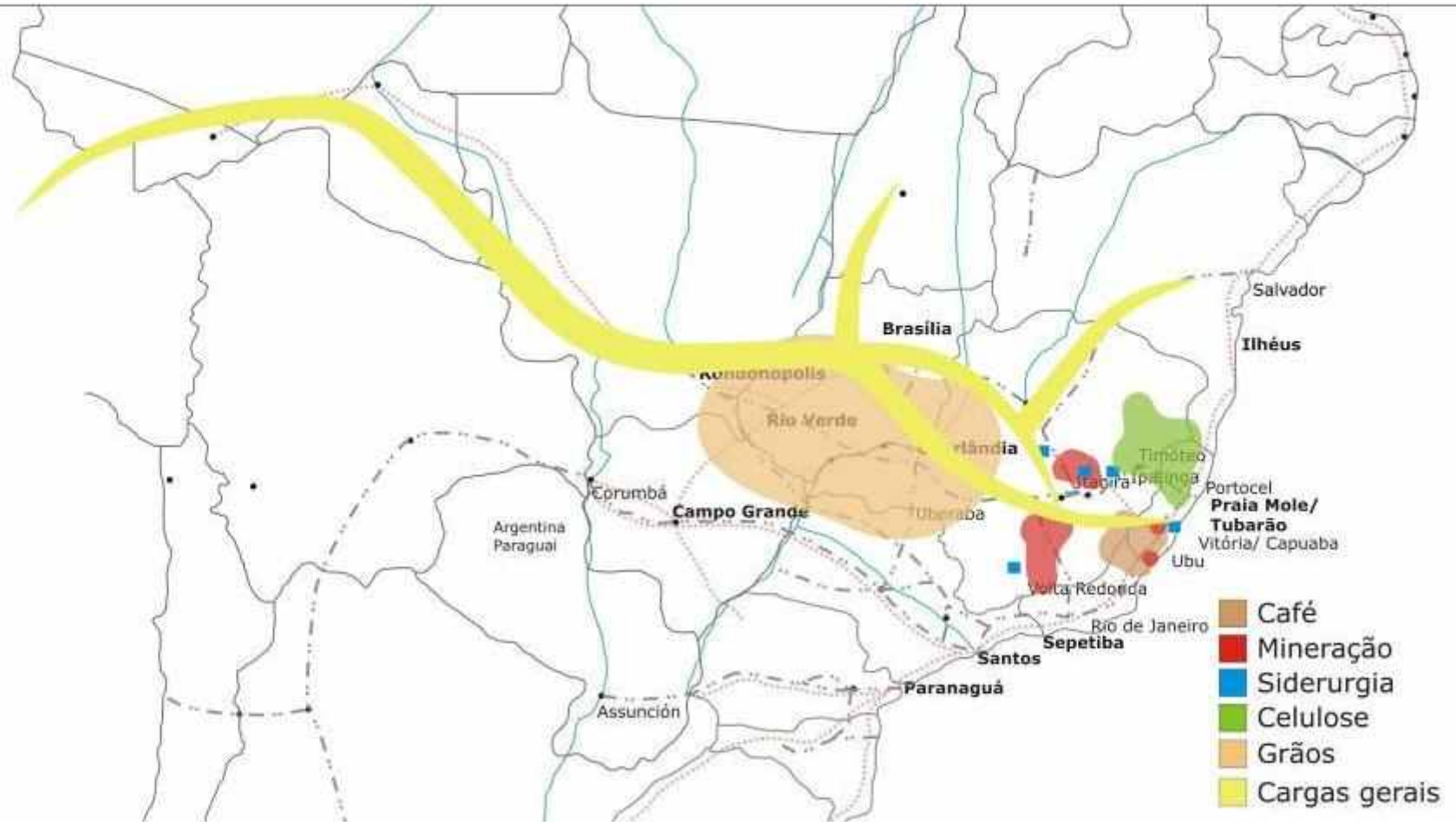
Territorial insertion of international trade

Customs Stations (EADI's) – dry ports (inland terminals)



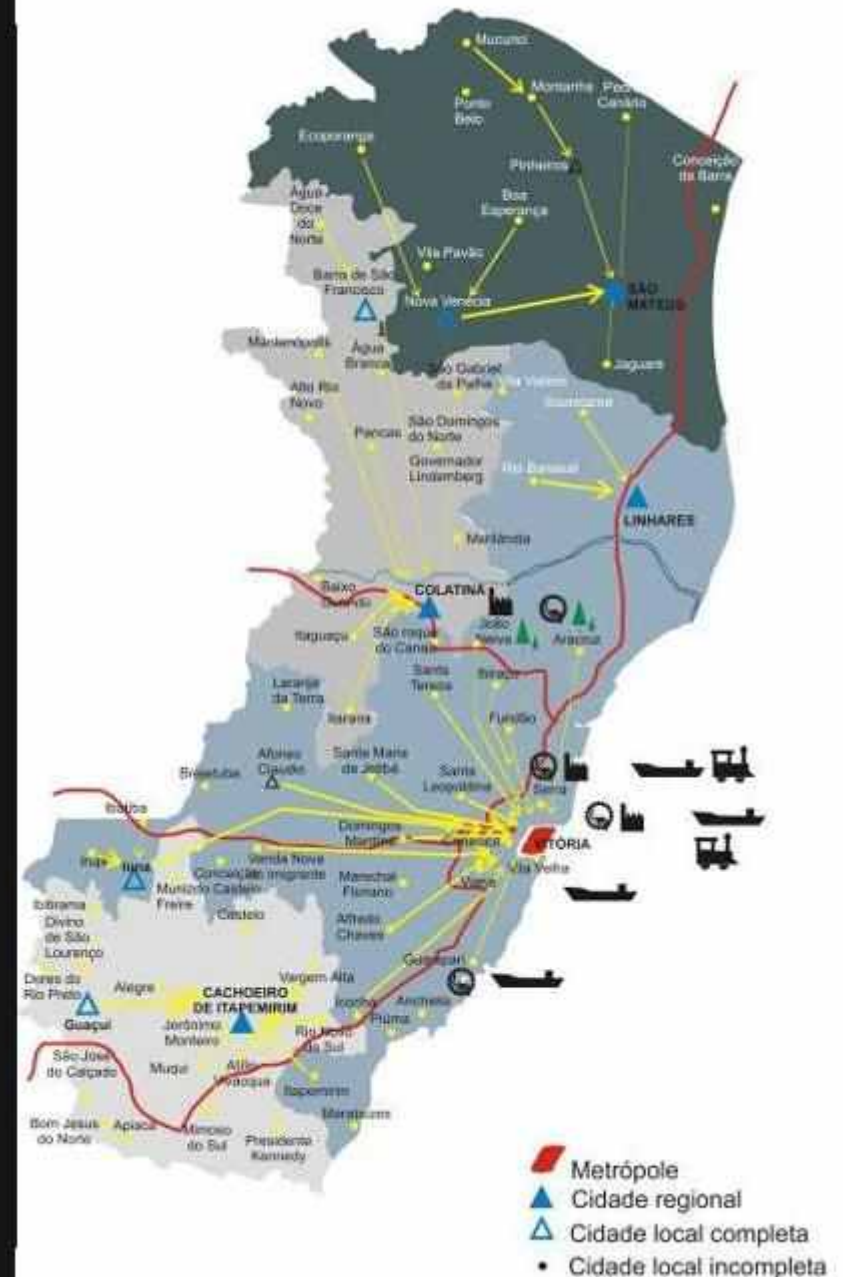
The evolution of hinterland

Port Territory

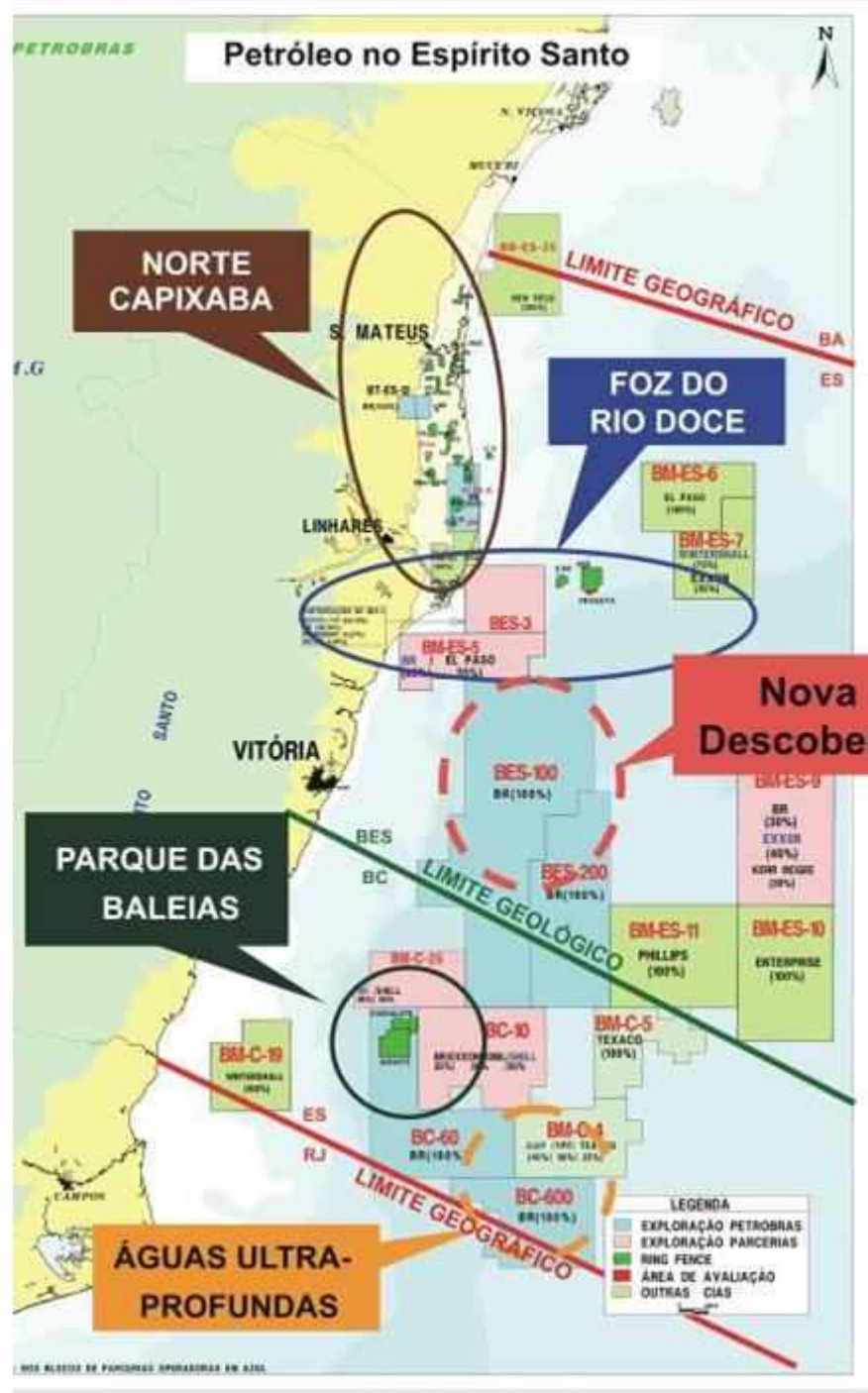
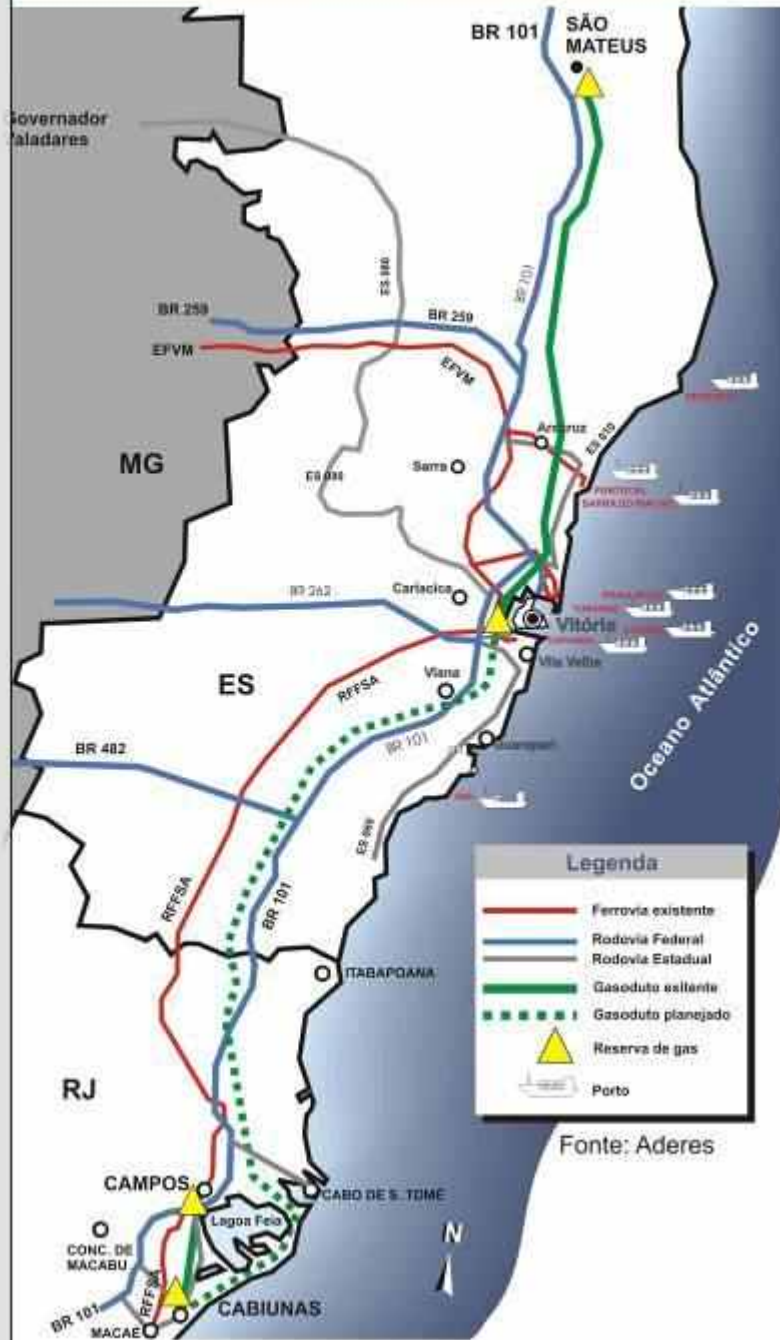


Espírito Santo

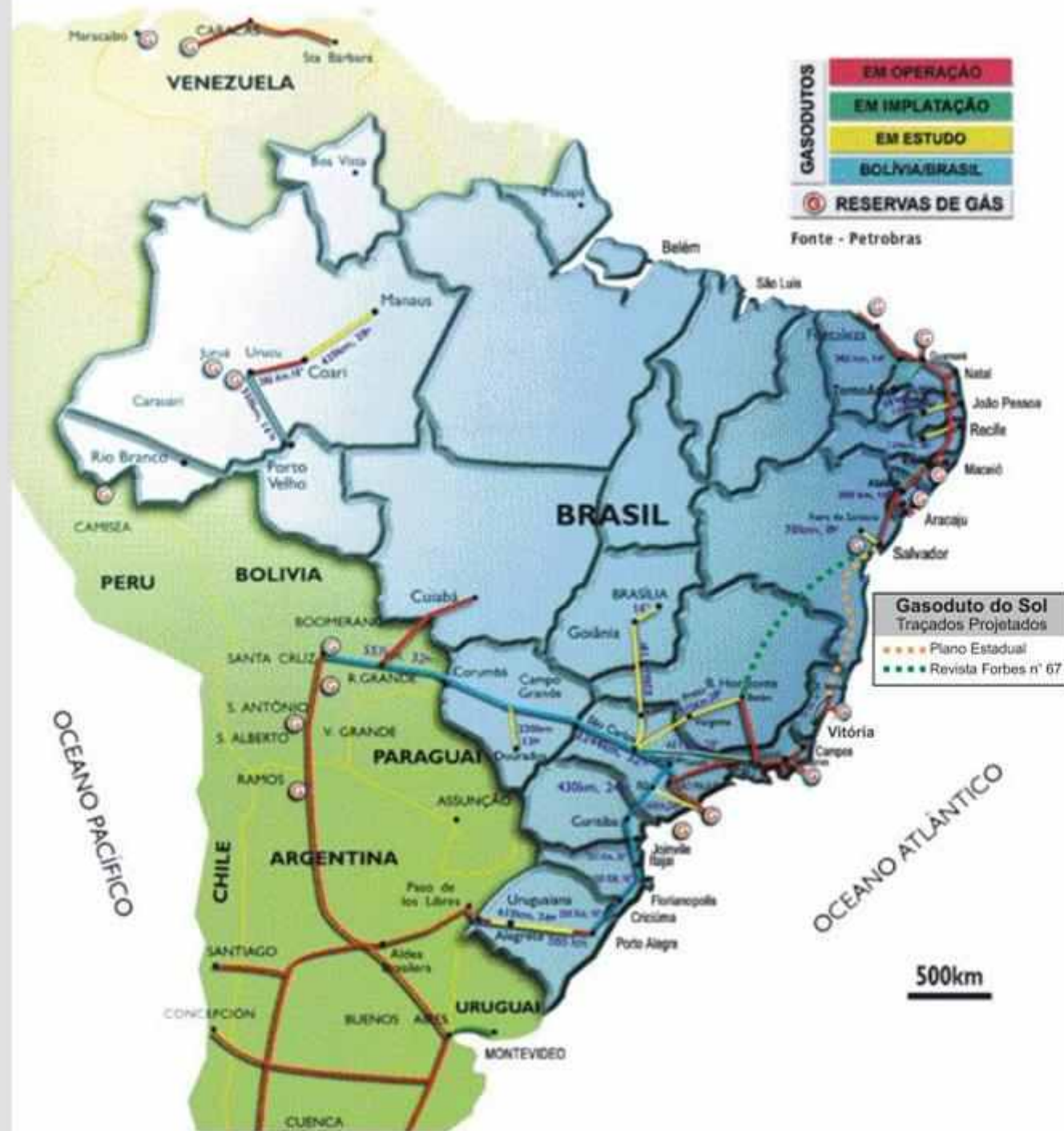
The acting of **Espírito Santo's** economy is seated in its insert in the relates with the national and international trade, what does of the logistics one of the strategic factors for its social and economical development.



Portos, Ferrovias, Rodovias e Gasodutos



Infra-Structural Corridor



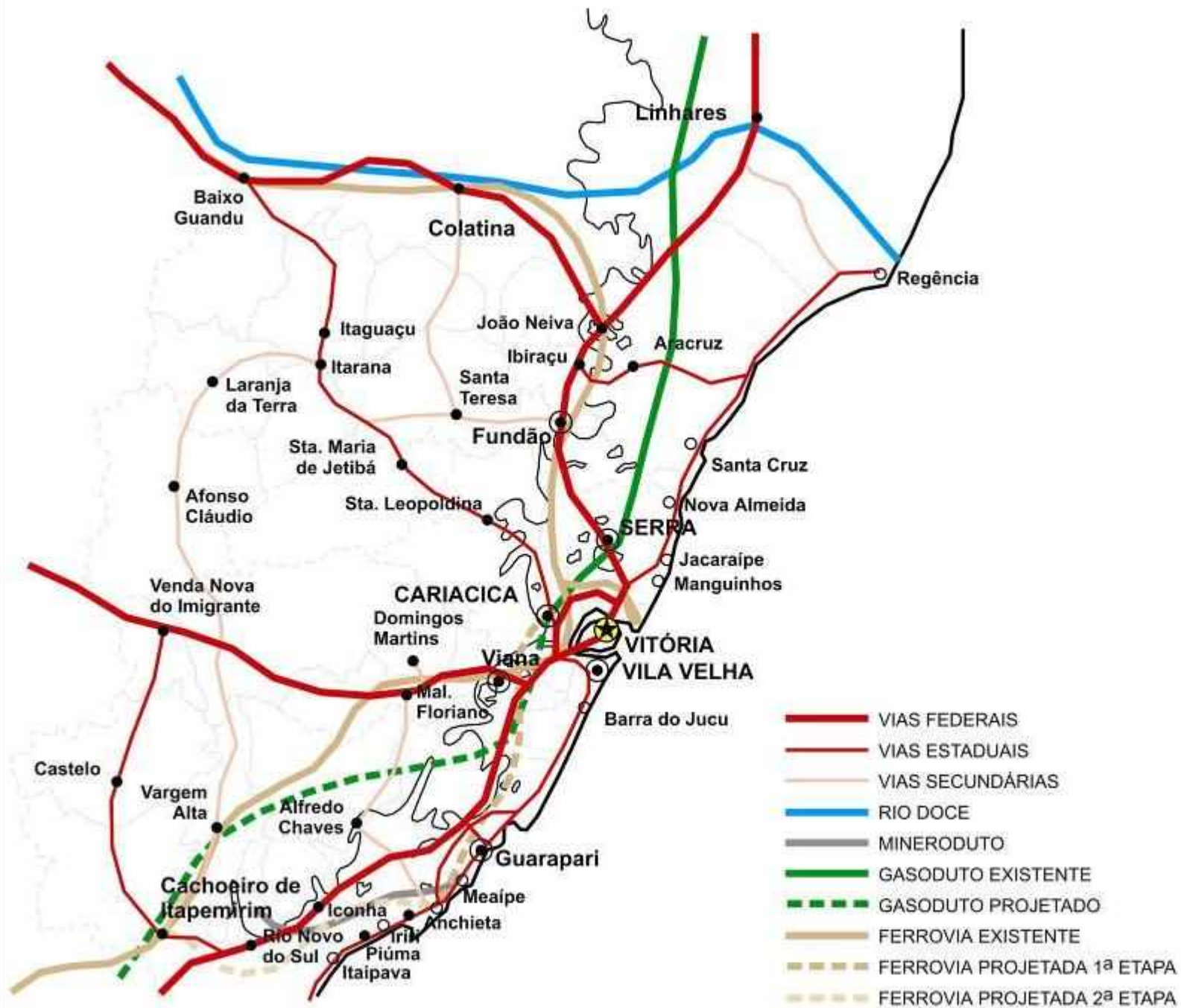
Infra-Structural Corridor



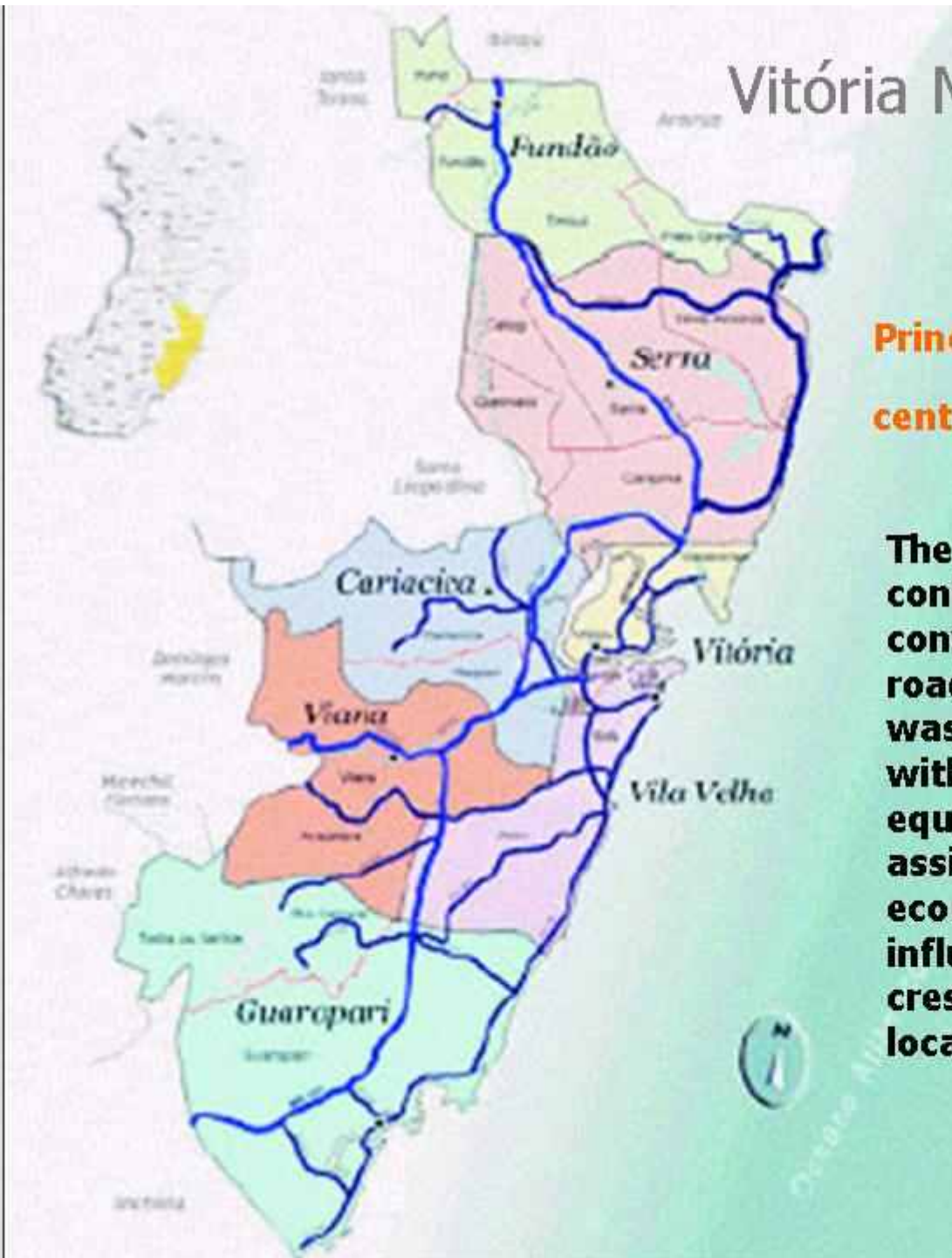
Infra-Structural

Corridor

The disposition of these infra-structures on the territory configures a logistic corridor. It is treated of a strip on which the main nets of transport are disposed, and distribution of energy in high tension, telephony and optic fiber, ore duct, gas duct and projects for your magnifying in the short and medium period.

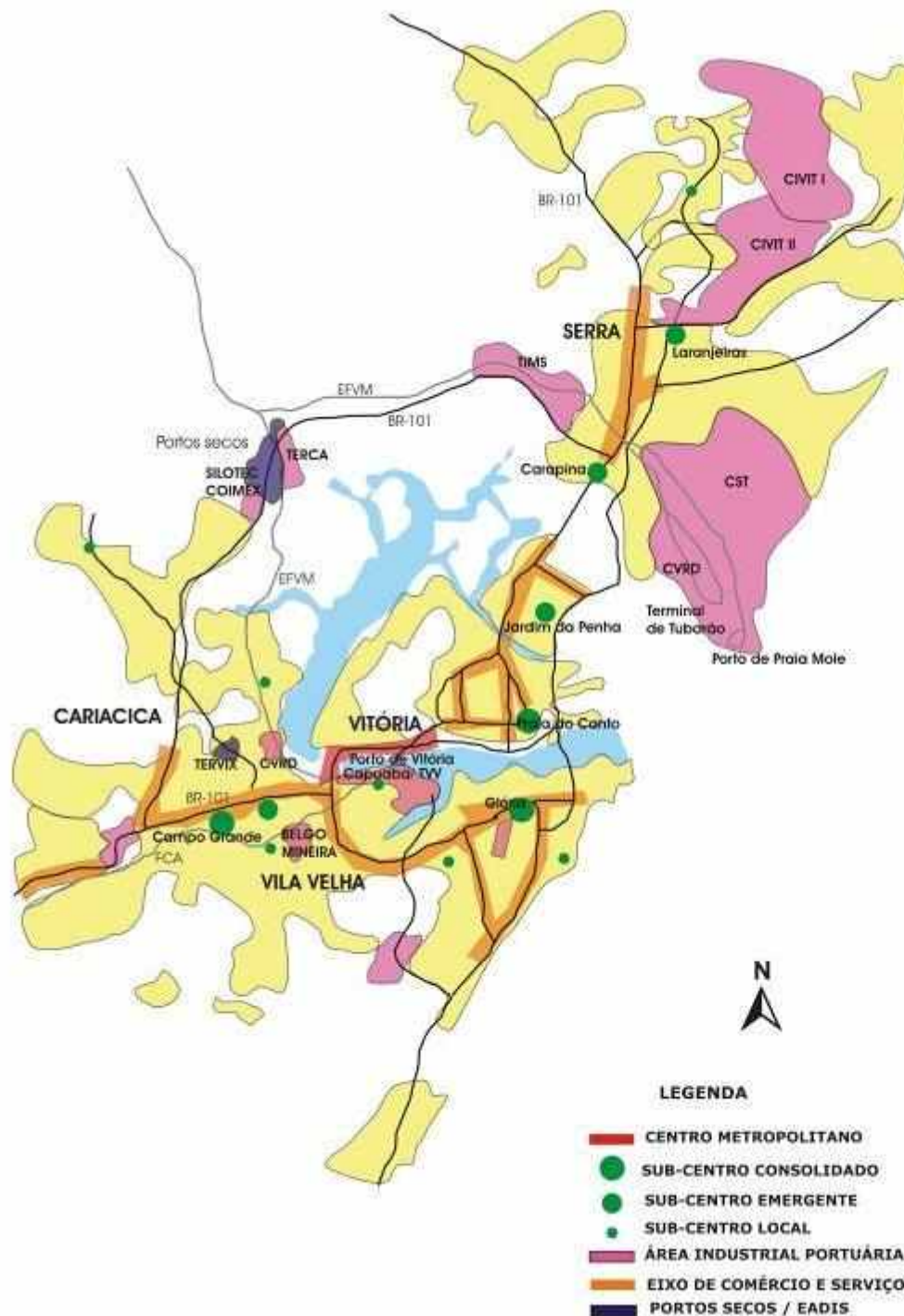


Vitória Metropolitan Region



Principal economical regional center of the ES territory

The city started to be configured as center of convergence of a including road and rail system and it was more and more endowed with a diversified and equipped port system, to assist to the articulate economical processes in its influence area and the crescents demands of the local productive processes



Logistic Devices

Logistic devices modify the nature and the function of the infra-structure: become intermodal, take part of productive chains and appearance of new urban situations.

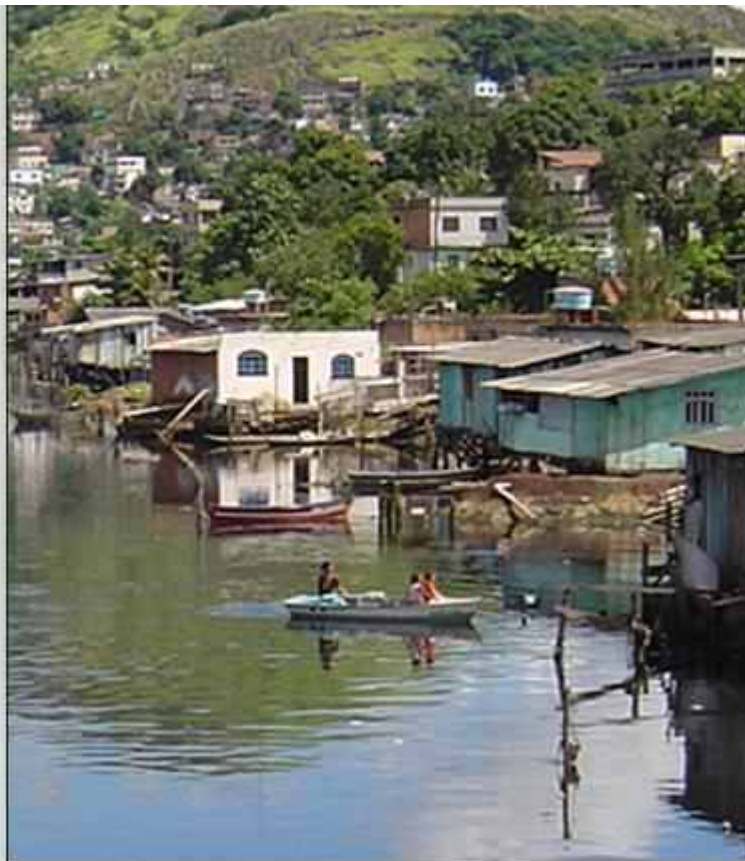
The Vitória Metropolitan Area started configuring while main polarizer nucleus urban of a wide area that extends for besides the limits of the State, including the northwest and east of Minas Gerais and the South of Bahia, assisting to the provision of specific needs related to the trade and, mainly, of specialized services in the transport sections, health education, culture and recreation.

New Urban Situations: Grande Vitória **Metropolization of the city**

The urban atmosphere became to be produced starting from the necessities of the mine-steel plants, resulting in segregated spaces and differentiated, with intense impacts in the demographic dynamics of the area, as well as in the degradation of the life quality, with the outstanding presence of pollutant industries in the daily of the population.



New Urban Situations: Grande Vitória



Urban conflicts : tension between cities and ports, cities and industries, cities and railroads, cities and roads.

Aggravation in the Public services: health, education, sanitation, transports, culture and leisure.





Metropolization process of the territory in function of the growing demands for new functional spaces, the new partner-space and economical dynamics involves the neighboring cities to the capital

Grande Vitória: 306 companies, 23 links and segments of productive chain that involve the foreign commerce (Sindiex)

Vitória city: 40% of Grande Vitória services, 130 thousand people circulating daily.

New Urban Situations: Arco Metropolitano

Development arc structuralized by the intermodal dynamic of the transports infrastructure integrated to logistic and information and communication technologies. Incentive to the Consensus Islands characterized as local territorialities of global reach, in the terms of the models of the central business districts (inexistent), of the production areas and industrial services and of the logistic platforms (in consolidation).



Systems, nets and global flows based in the absence of physical proximity and in the efficiency of the geographical distance define the role of the Arc in global mark.





Of the point of view of the spacial structuring it should emphasize the relevance of the infra-structural dispositions in the physical-territorial configurations of the Metropolitan Area, that have outstanding function as fundamental elements of the urbanization processes and of partner-space distinction, that is verified in the several municipal districts of Great Vitória

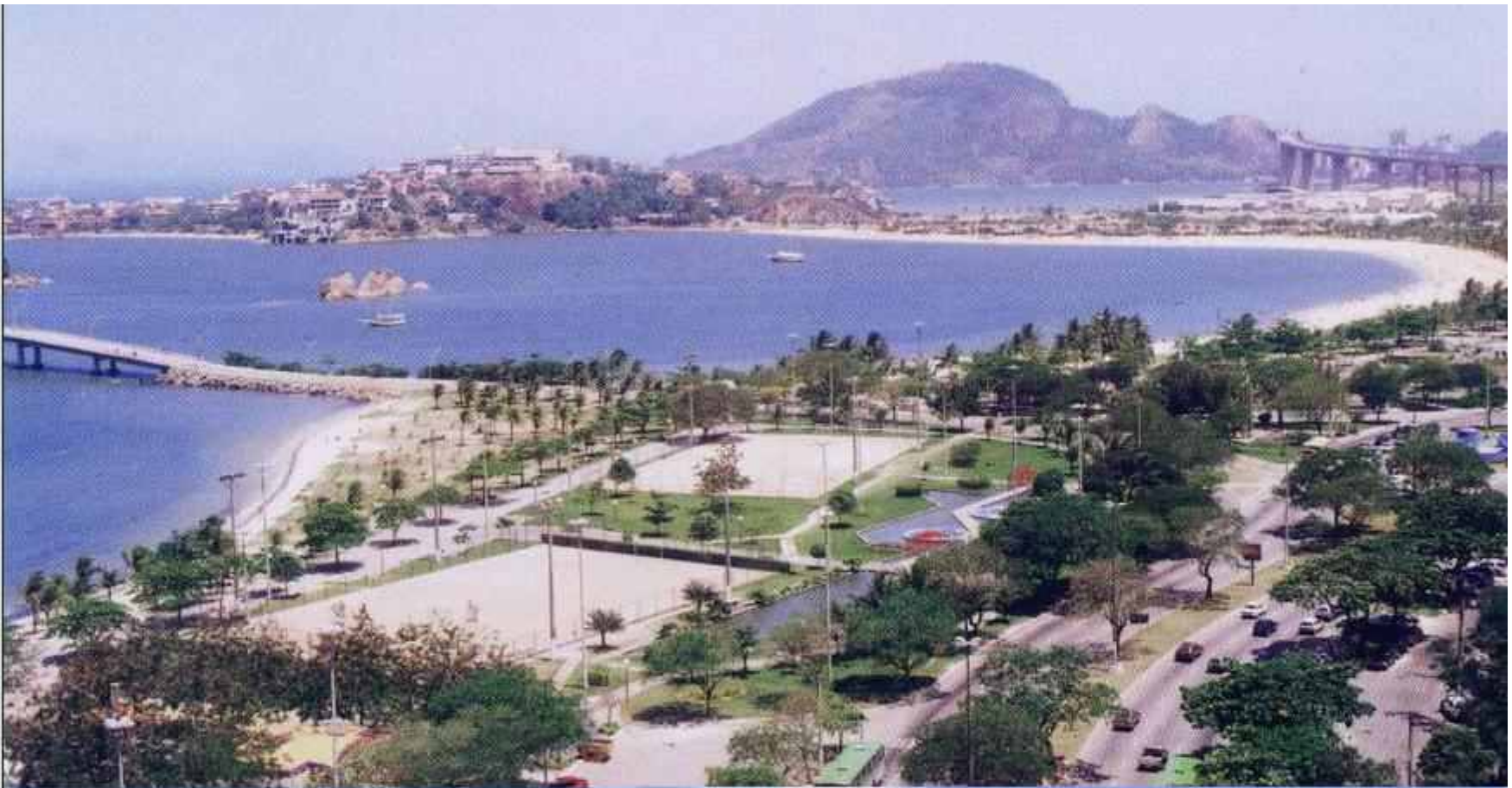


As it is going being object of investments in continuous improvements, the road system allows to enlarge the fluidity of the territory and make possible the shortening of the times of displacements inside the urban space.

The transport and the displacement possibility for the urban space with more speed and comfort almost always appears as a pressing need given to the own acceleration and increase of the flows of the city.



New Urban Situations



Geral coordination: Nelson Brissac Peixoto

Technical coordination: Paulo Vargas

Academic coordination: Milton Esteves Junior

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Associate researcher: Angela Gomes de Souza

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Students: Suzane Moulié / Karlos Rupf / Reinaldo Silva /
Fabrícia Rembiski / Patricia Hulle

**Formularization
and edition:**

Clara Luiza Miranda
Paulo Vargas

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Natalia Zago Sena
Suzane Moulié
Karlos Rupf
Patricia Hulle