



GOVERNO FEDERAL  
**BRASIL**  
PAÍS RICO É PAÍS SEM POBREZA

## **IGU COMMITTEE MEETING**

# **Natural gas in Brazil**

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Natural Gas Department  
Ministry of Mines and Energy

**Rio de Janeiro, 19 de fevereiro de 2013**



# AGENDA

Natural gas market and infrastructure

Governance of the sector in Brazil

The regulatory framework

Our challenges



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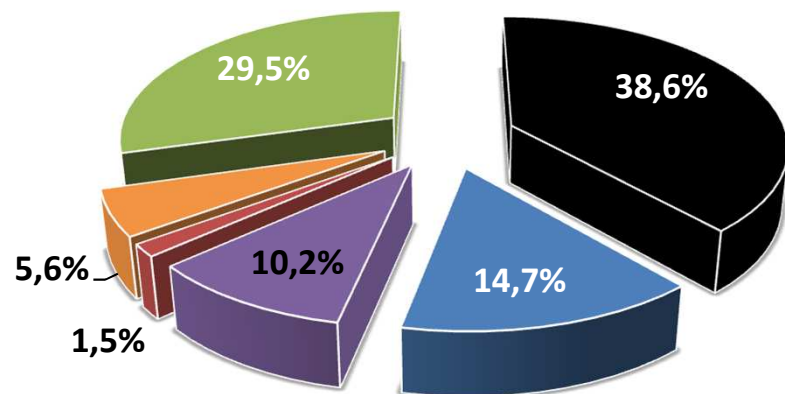
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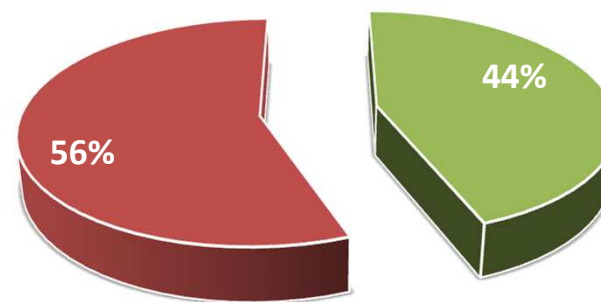


# BRAZILIAN ENERGY MIX

(Matriz energética brasileira)



- Oil and oil products
- Natural Gas
- Coal
- Hydrolic and electricity
- Nuclear
- Biomass and other renewable



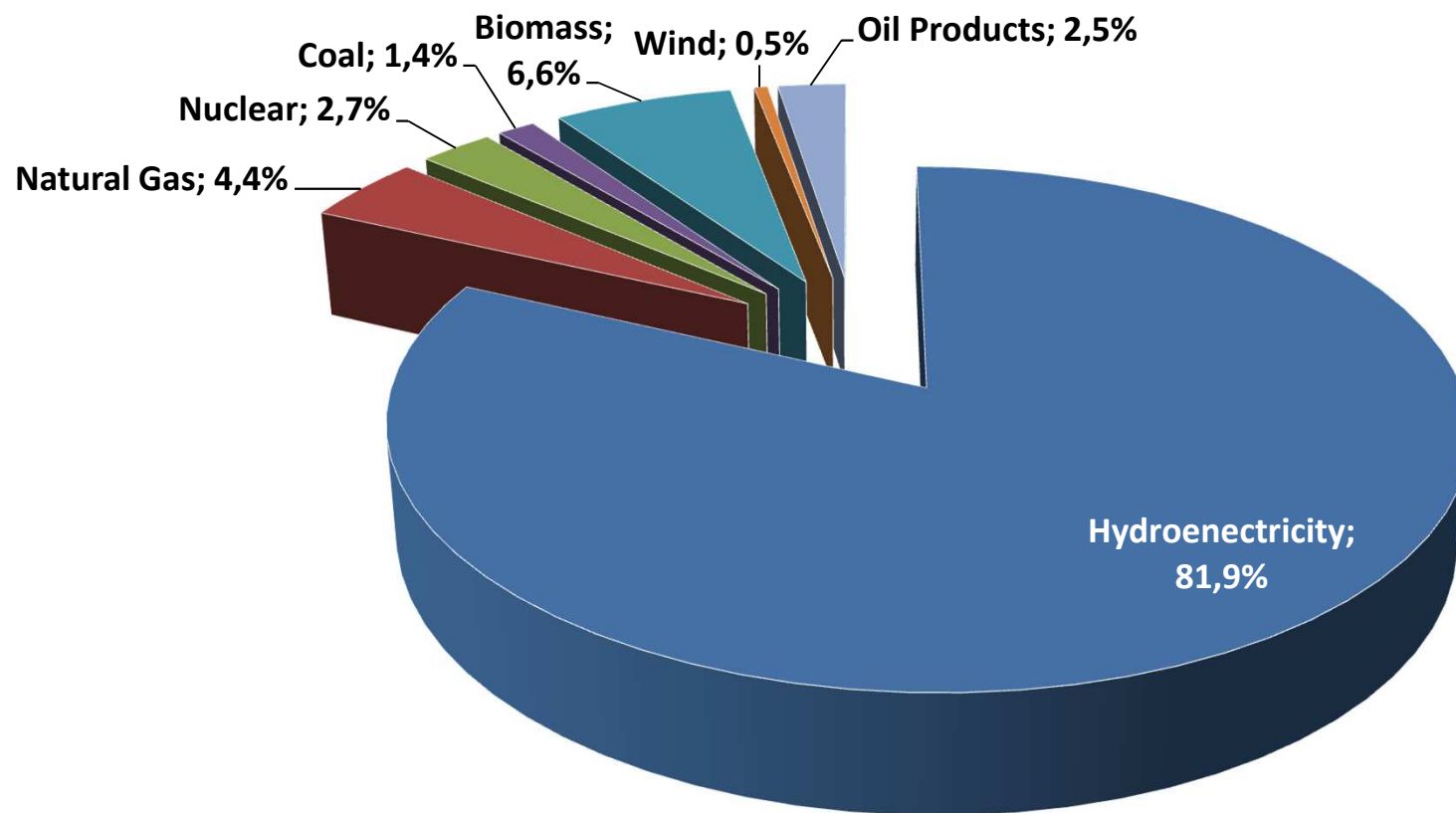
- Renewable
- Non-renewable

Source: MME, 2012 (year 2011)



# BRAZILIAN ELECTRICITY MIX

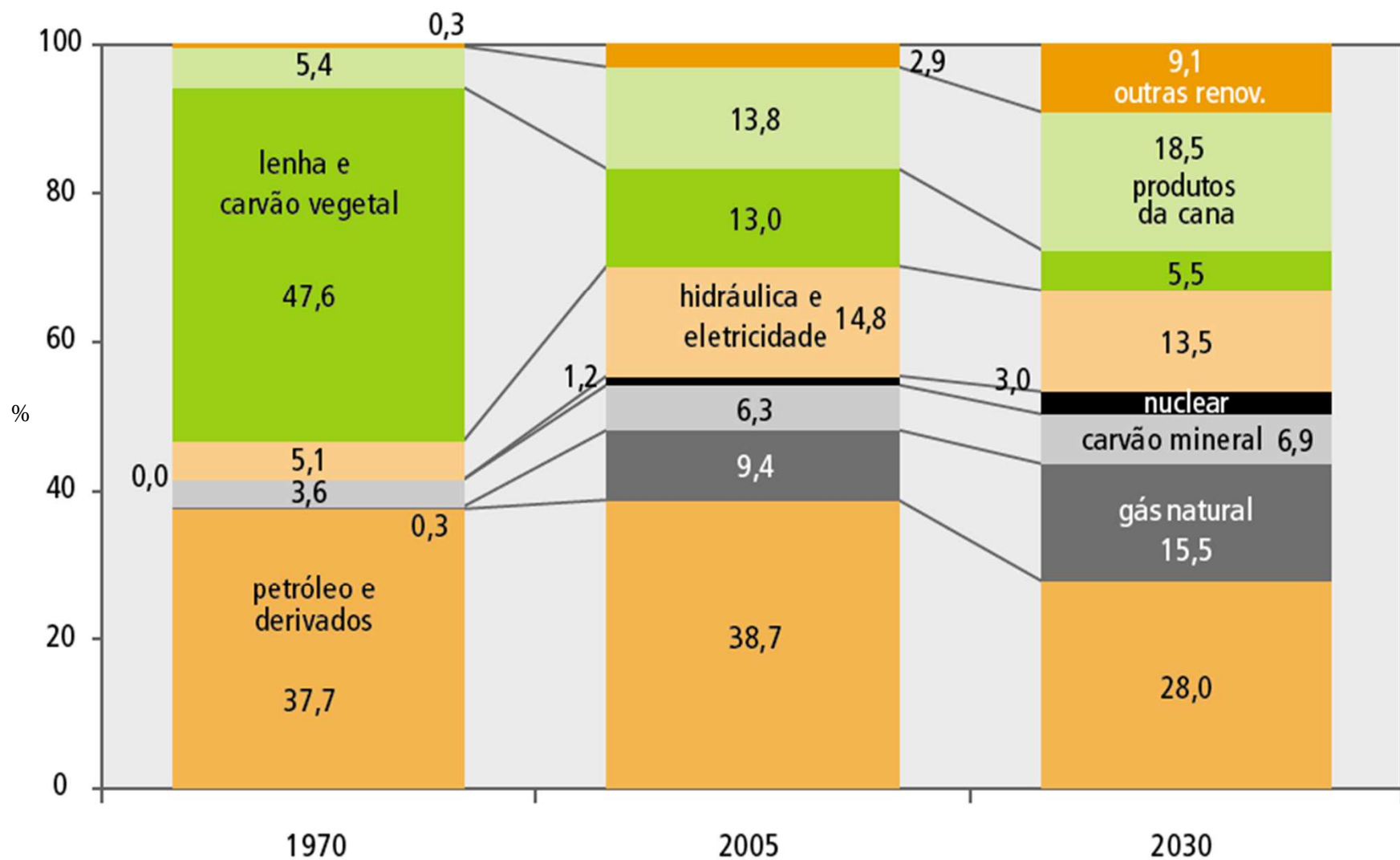
(Matriz elétrica brasileira)



Source: MME 2012 (year 2011)



# DOMESTIC ENERGY SUPPLY EVOLUTION



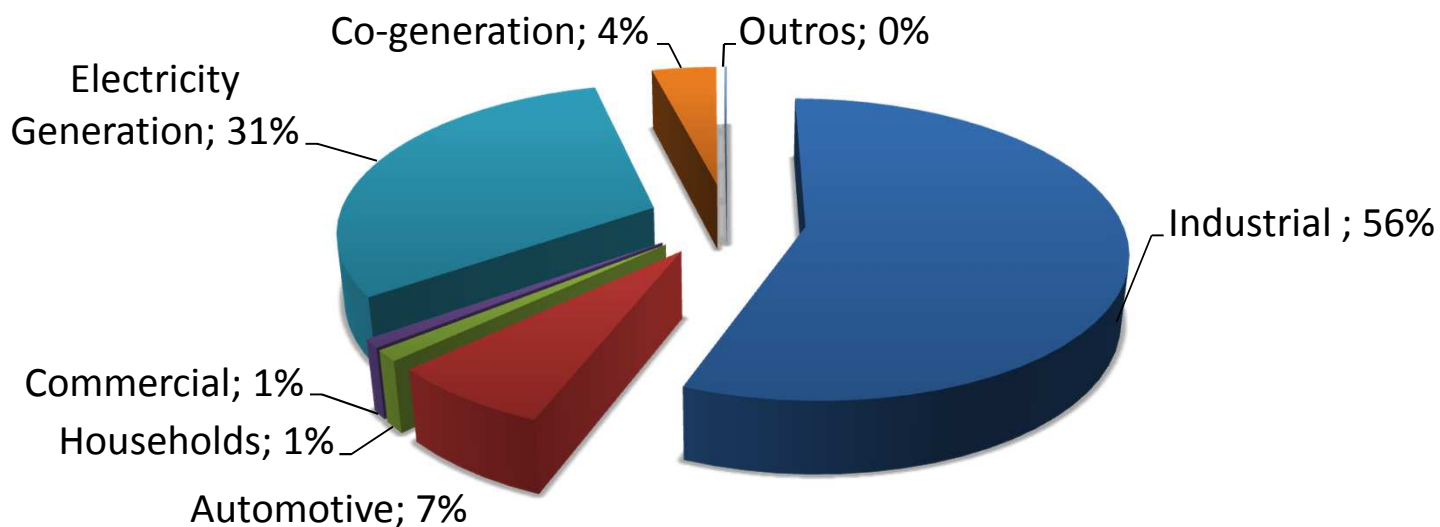
Fonte: Matriz Energética 2030 (MME, 2011)



# NATURAL GAS MARKET

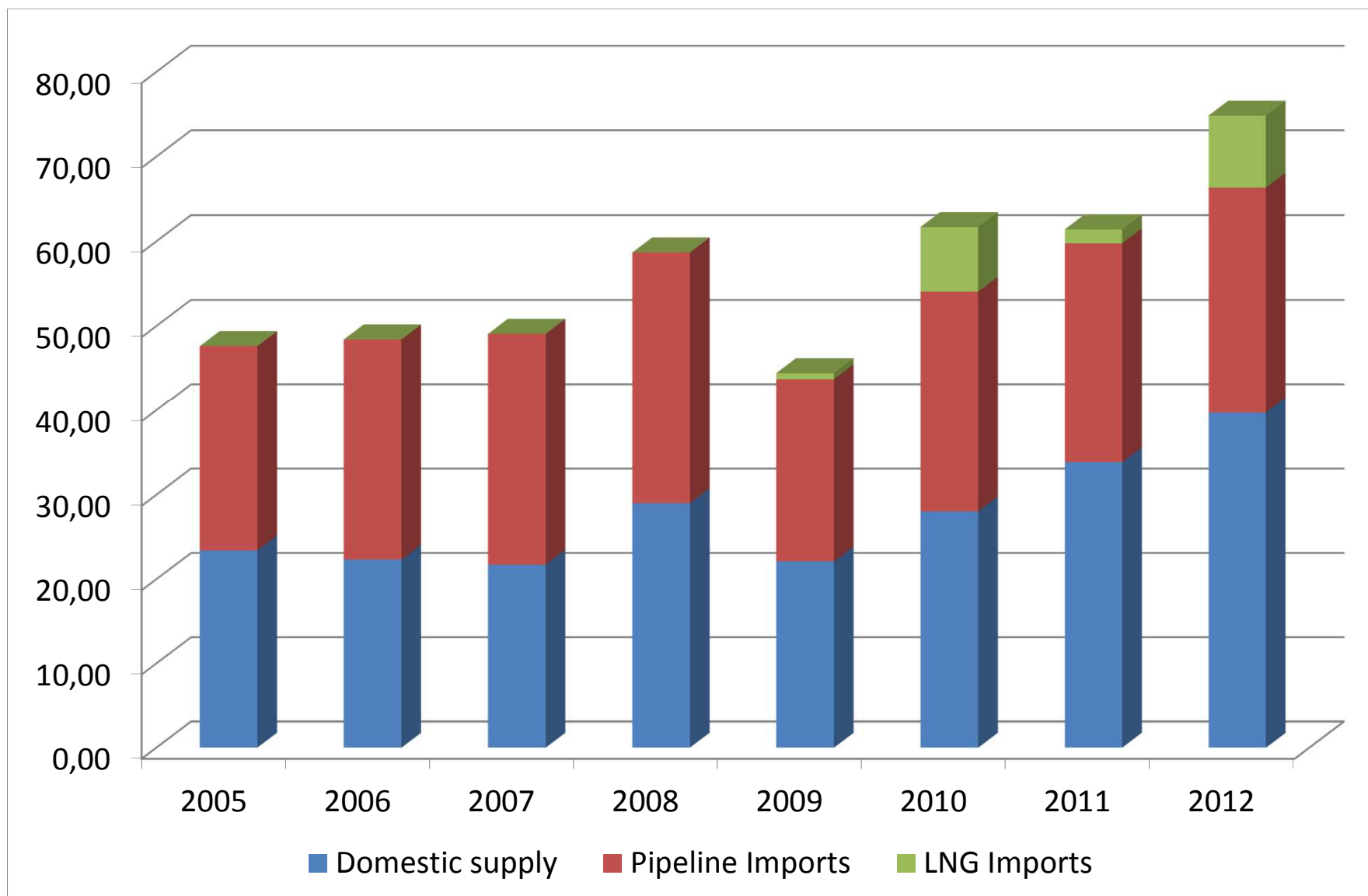
(Mercado de gás natural)

CONSUMPTION PER SECTOR (mcm/day)	Avg	Avg	Avg	Avg	Avg	Avg	%
	2007	2008	2009	2010	2011	2012	2012
Industrial	32,2	33,4	29	35,4	40,8	41,8	56%
Automotive	7	6,6	5,8	5,5	5,4	5,3	7%
Households	0,7	0,7	0,7	0,8	0,9	0,9	1%
Commercial	0,6	0,6	0,6	0,6	0,7	0,7	1%
Electricity Generation	6,4	14,9	5,3	15,8	10,4	23	31%
Co-generation	1,9	2,3	2,4	2,9	3	2,9	4%
Outros	0,2	0,2	0,6	0,7	0,2	0,1	0%
<b>TOTAL</b>	<b>49,1</b>	<b>58,7</b>	<b>44,4</b>	<b>61,7</b>	<b>61,4</b>	<b>74,7</b>	<b>100%</b>





# NATURAL GAS SUPPLY



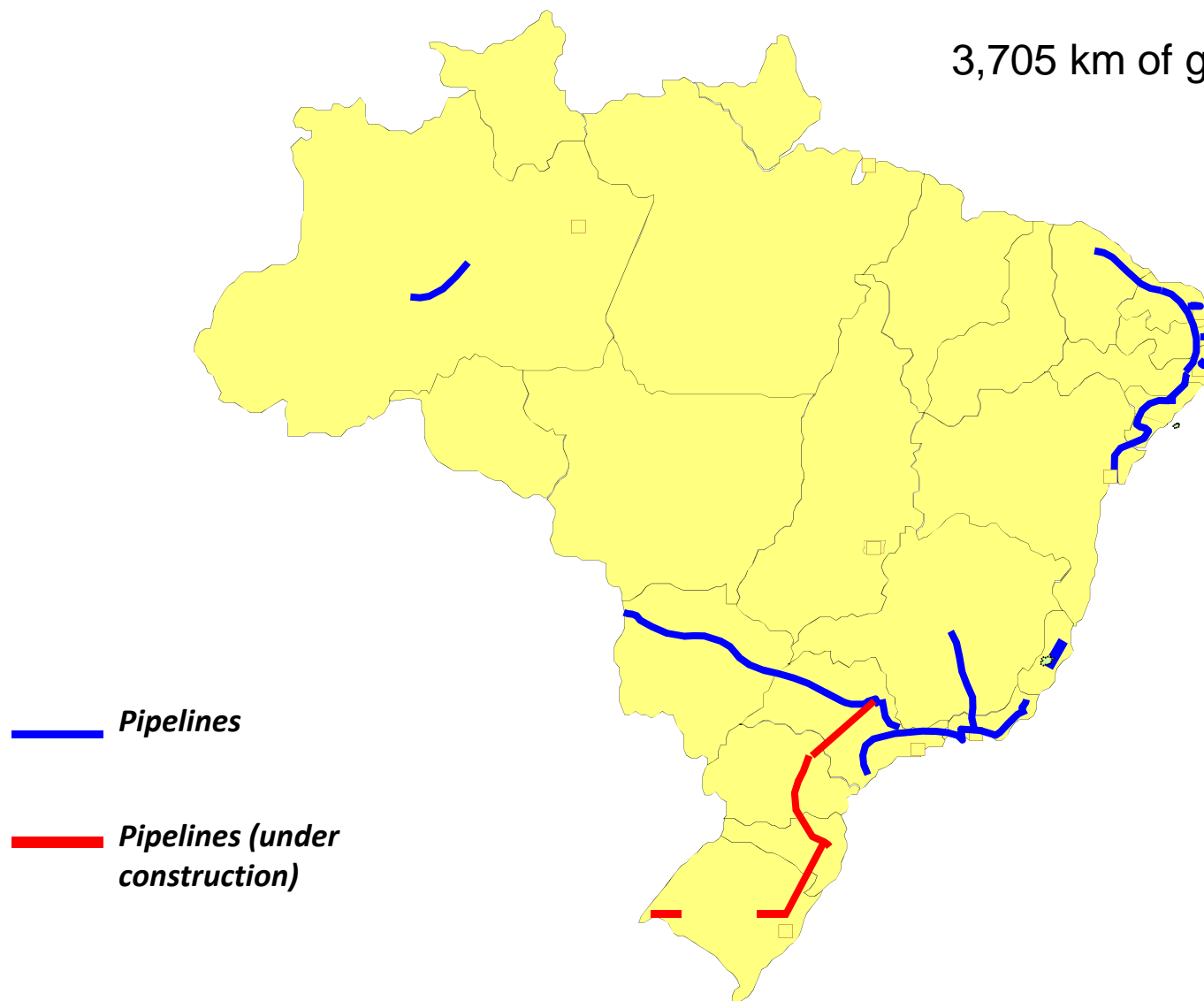
\* Regas volumes





# NATURAL GAS TRANSPORTATION GRID (1999)

3,705 km of gas pipelines

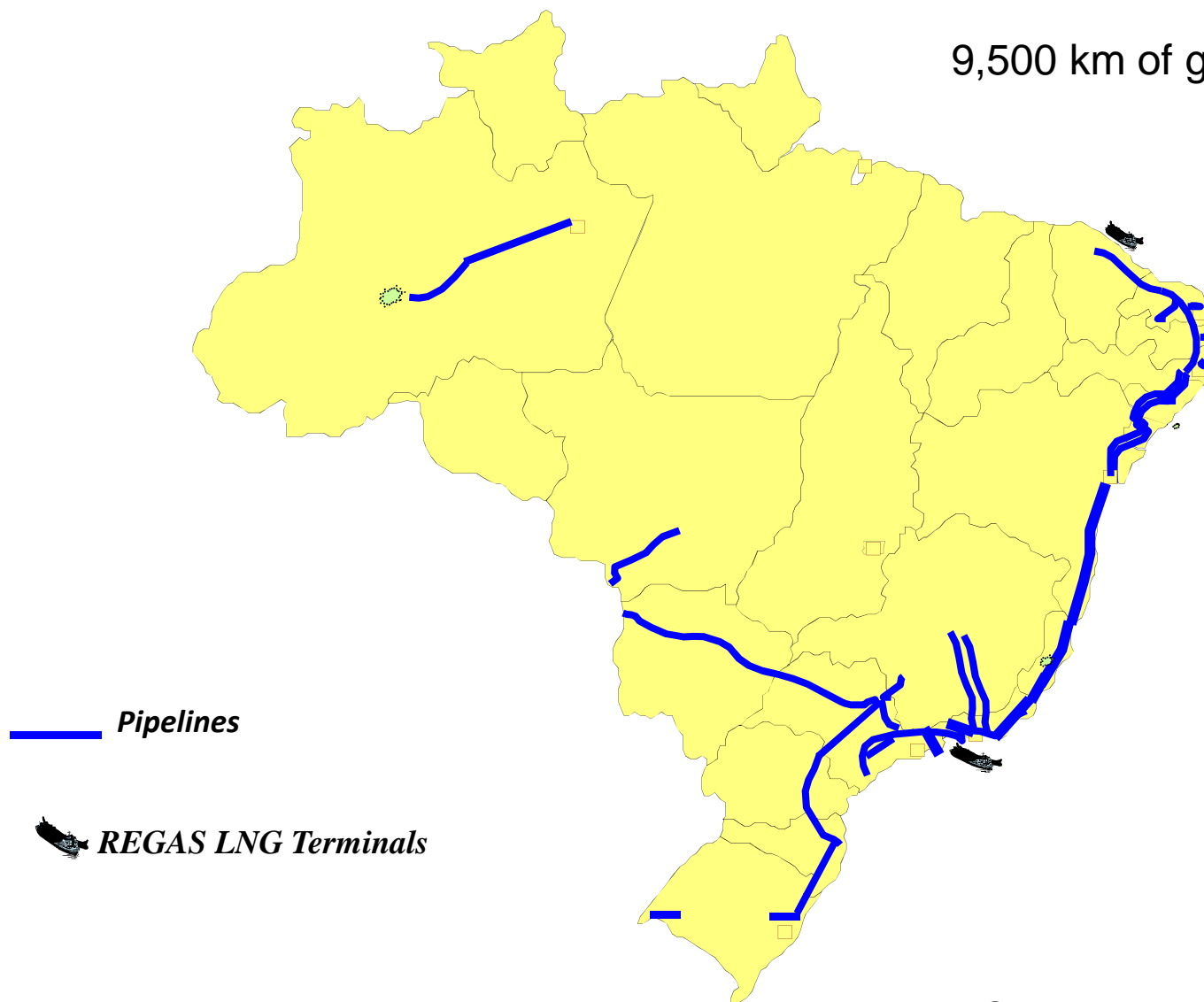


Source: ANP and Petrobras



# NATURAL GAS TRANSPORTATION GRID (2012)

9,500 km of gas pipelines



Sources: MME, ANP, Petrobras, ENA and CIA



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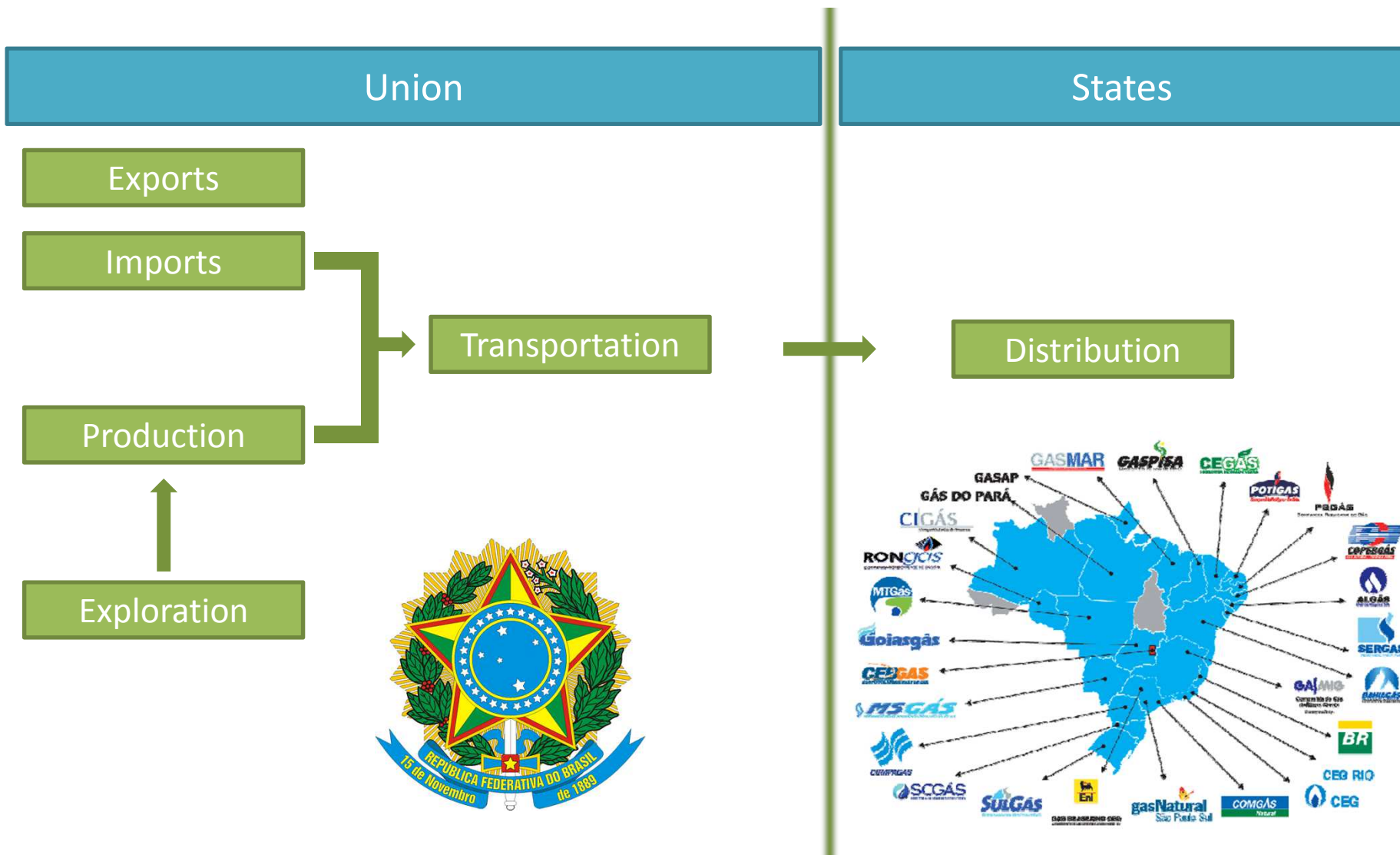
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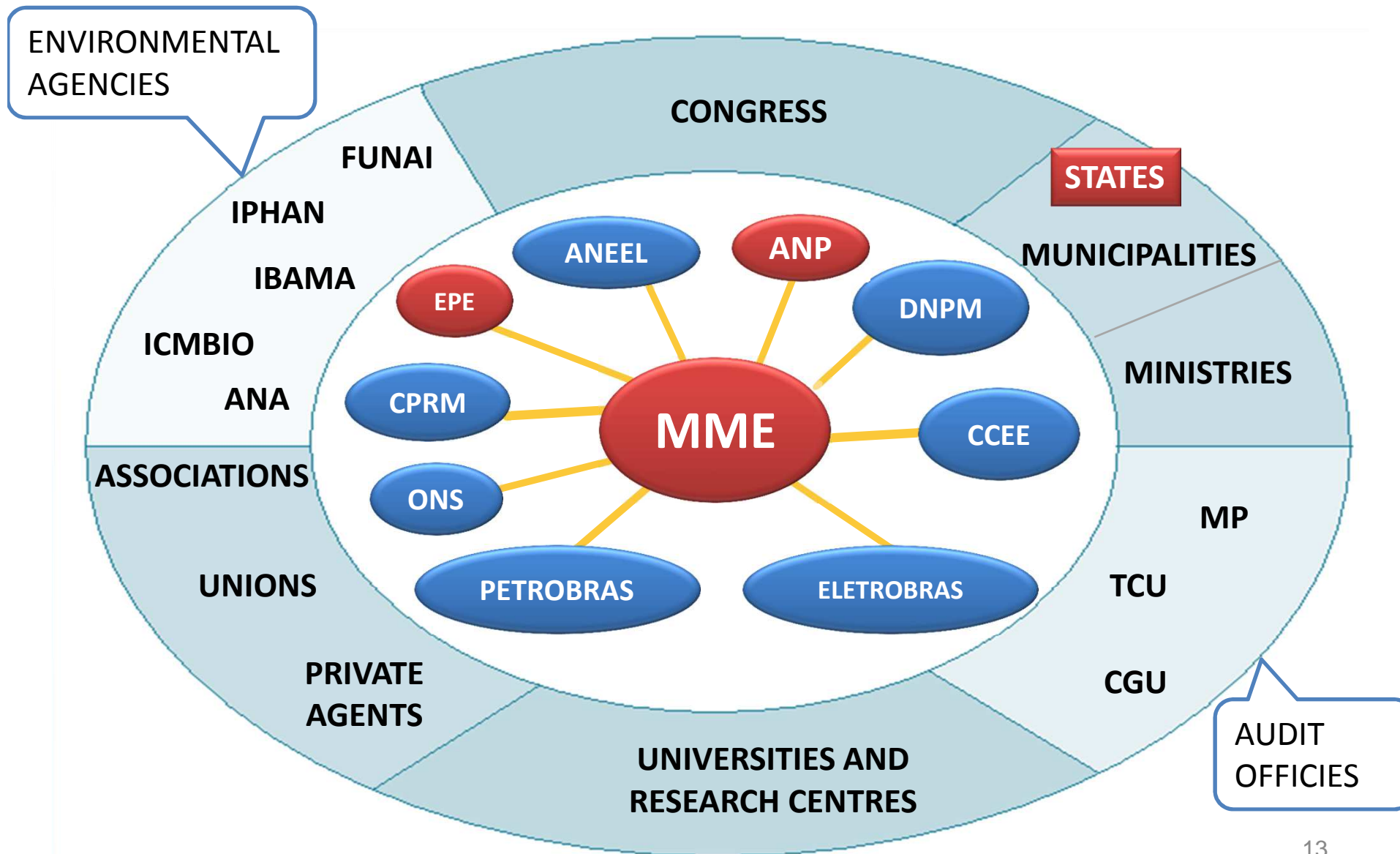
# JURISDICTIONS

(BRASIL: COMPETÊNCIAS UNIÃO VS. ESTADOS)





# INSTITUTIONAL ENVIRONMENT





# GOVERNANCE STRUCTURE

## STRATEGIC

- **CNPE – National Council for Energy Policy**
  - Guidelines for the energy policy

## POLICY MAKING

- **MME – Ministry of Mines and Energy**
  - Public policies formulation
  - Transportation Network Planning (with support of EPE)

## REGULATION

- **ANP – National Regulatory Authority**
  - Implementation, regulation and supervision of activities under federal jurisdiction
- **State Regulation Agencies**
  - Implementation, regulation and supervision of activities under state jurisdiction



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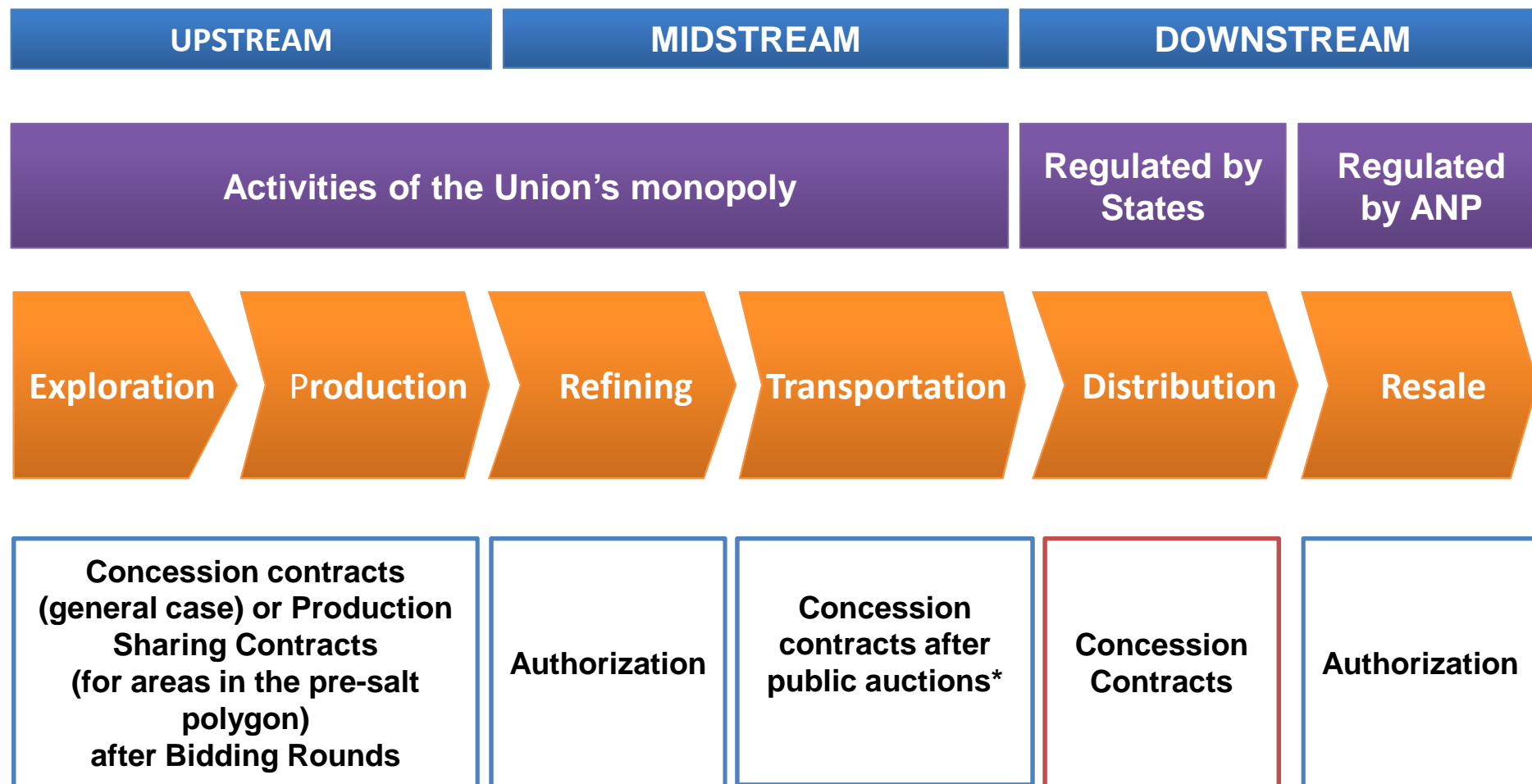
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# Regulatory Jurisdictions (more details)

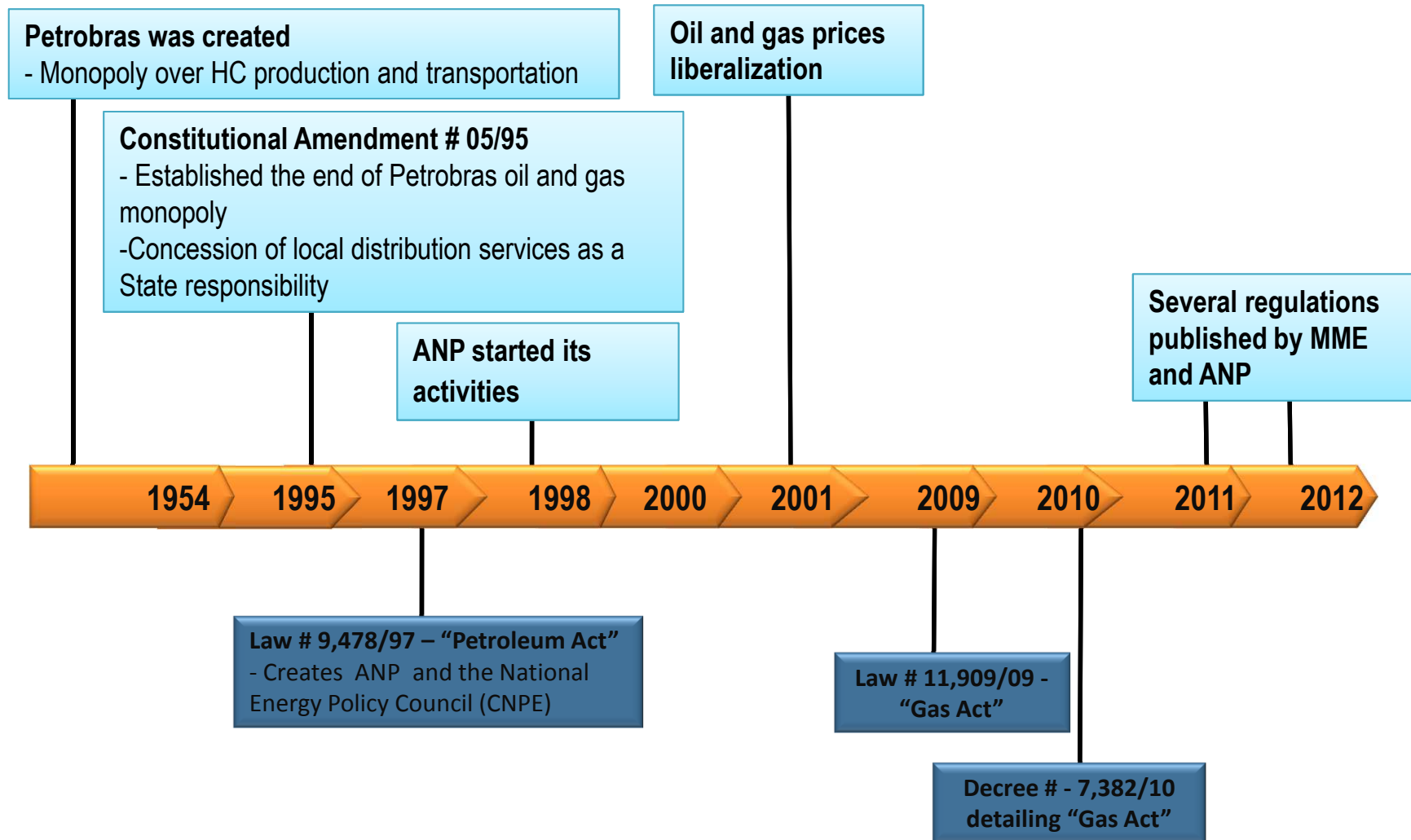


\* Authorization in case of international pipelines





# REGULATORY REGIME EVOLUTION IN BRAZIL





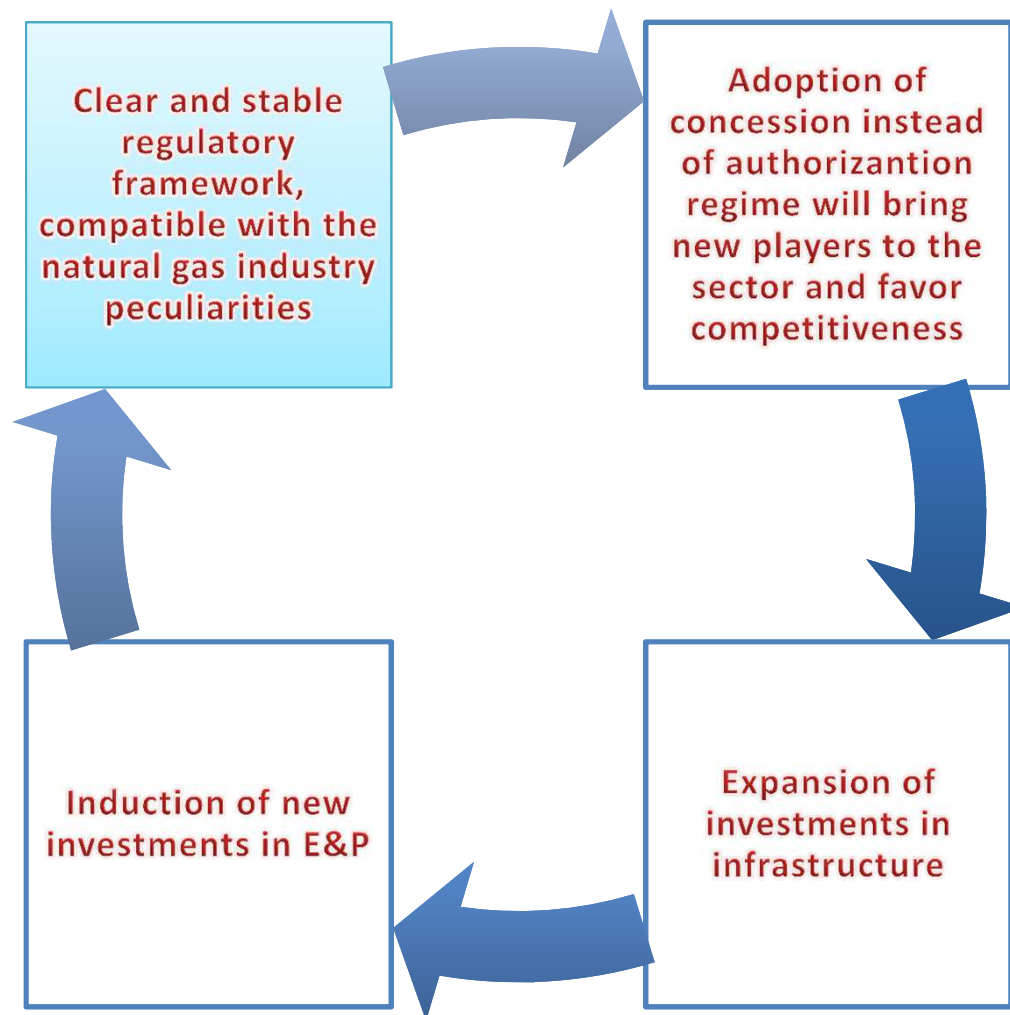
# REGULATORY FRAMEWORK HIGHLIGHTS

## COMPARATIVE CHART

	Law 9.478/97 (“Oil Act”)	Law 11.909/09 (“Gas Act”)
<b>Regime for Transportation of Natural Gas</b>	Authorization	Concession (general case) Authorization in the following situations: - pipelines involving international treaties - existing pipelines
<b>New pipelines</b>	Proposal by players	Proposal by MME based on planning studies (Open season followed by public auctions)
<b>Planning</b>	Inexistent	National Transportation Network Expansion Plan (MME/EPE)
<b>Access</b>	Negotiated between agents	Regulated (Open seasons for firm transport service)
<b>Transportation Tariffs</b>	Negotiated between agents	Established (concession) or previously approved (authorization ) by ANP
<b>GTAs</b>	Submitted to ANP after signed	Previously approved by ANP
<b>Import and Export</b>	Authorized by ANP	Authorized by MME
<b>Gas Trading</b>	Not regulated	Authorized by ANP
<b>Contingency</b>	Not regulated	ANP supervises transportation flows during contingencies Contingency Committee coordinated by MME
<b>Gas Storage</b>	Not regulated	Concession (on hydrocarbons reservoirs or geological structures without hydrocarbons) or authorization (on other structures) by ANP



# EXPECTATIONS





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# MAIN TOPICS UNDER DISCUSSION IN BRAZIL

## By now

- The first National Transportation Network Expansion Plan
- Directives for public auctions of transportation pipelines
- Third parties access and swap rules
- Tariff system

## In the near future

- Gas underground storage
- National Contingency Plan



## OTHER INITIATIVES

### Initiatives for increasing the supply of natural gas

- Unconventional gas auction (December, 2013)
- Directives for restricting natural gas burn and flare
- Directives for the use of Coal Bed Methane (CBM)

### Other initiatives

- Technical distinction between transmission and distribution gas pipelines



G O V E R N O F E D E R A L  
**BRASIL**  
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# Thank you!

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