

Gás Natural e Gás de Folhelho

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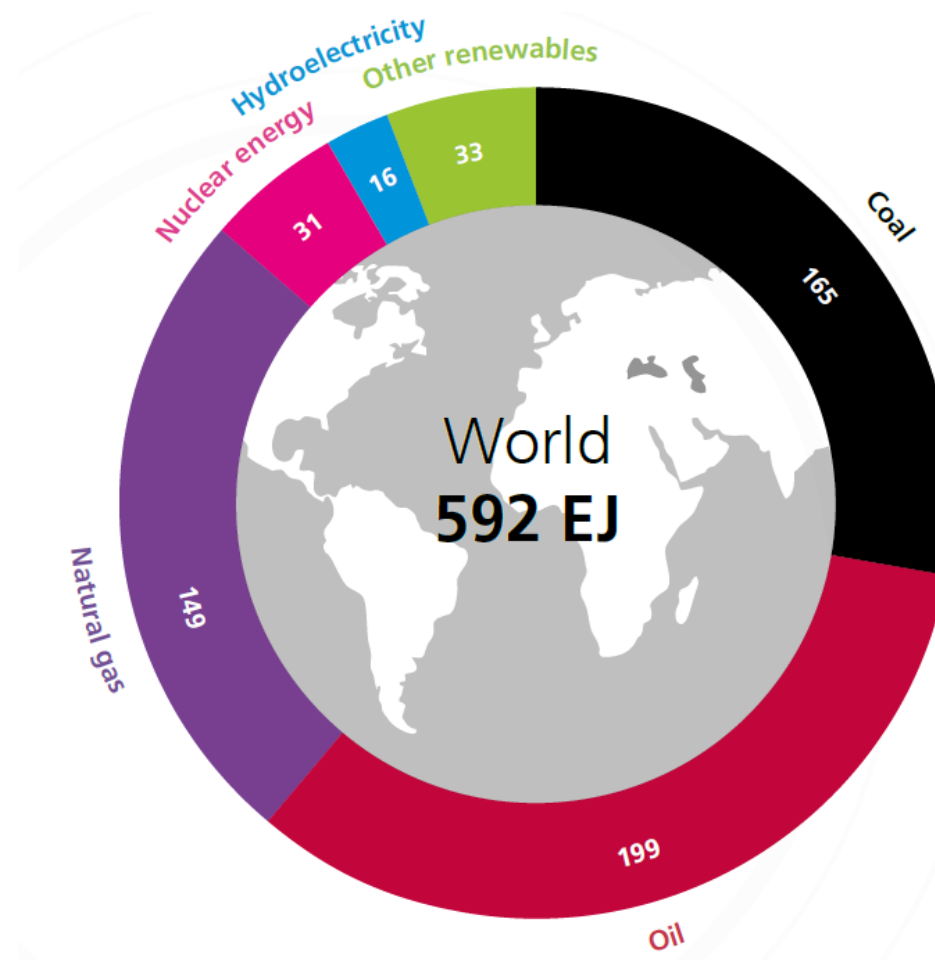
Instituto de Energia e Ambiente – USP
PEN 5002 – Recursos e Oferta de Energia
Julho de 2025

Demanda mundial de energia

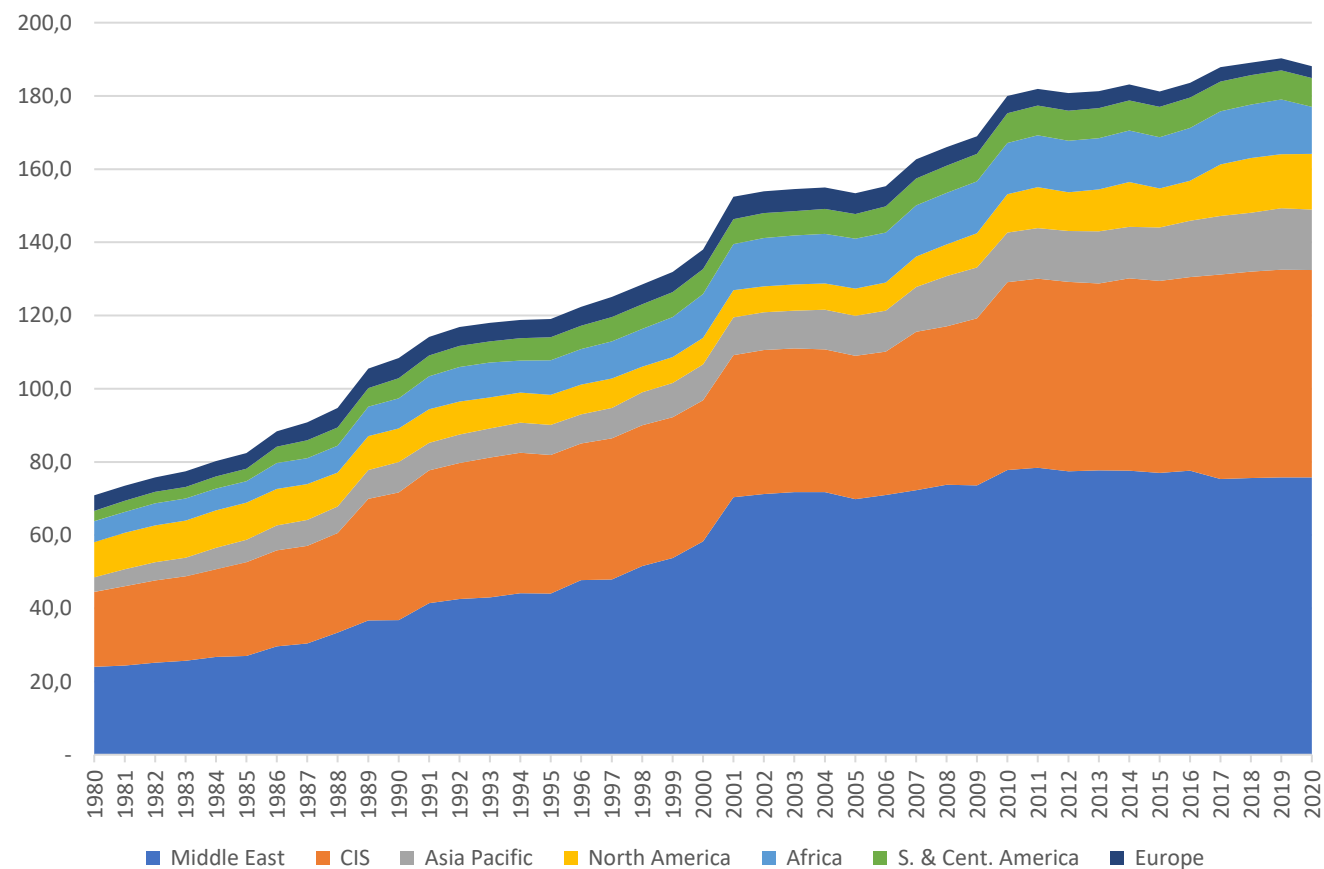
- *Petróleo 32%*
- *Carvão 26%*
- ***Gás Natural 23%***
- *Outras 19%*

Gas Natural

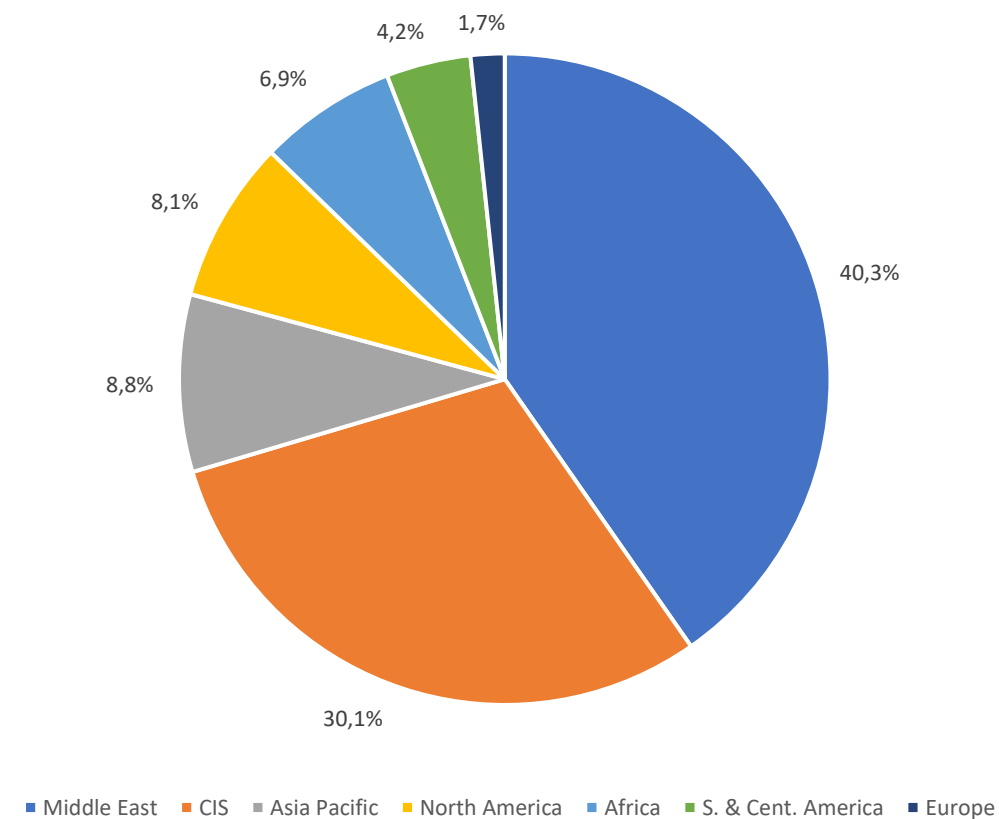
- *2014-2024*
 - *Consumo +2,0% a.a.*
 - *Produção +1,8% a.a.*
- *2023-2024*
 - *Consumo +2,5% a.a.*
 - *Produção +1,2% a.a.*



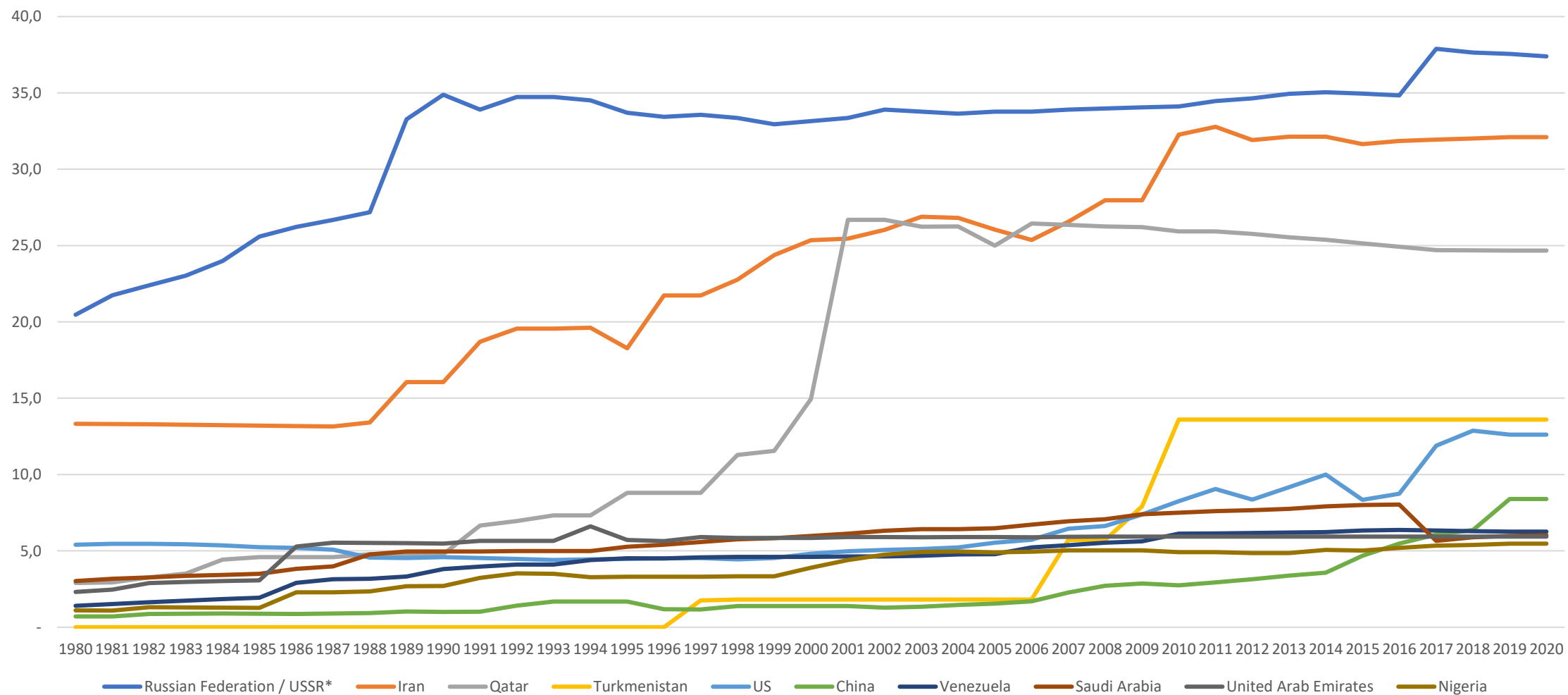
Reservas de Gás Natural
[Tm3] - @ 15°C, 1 atm



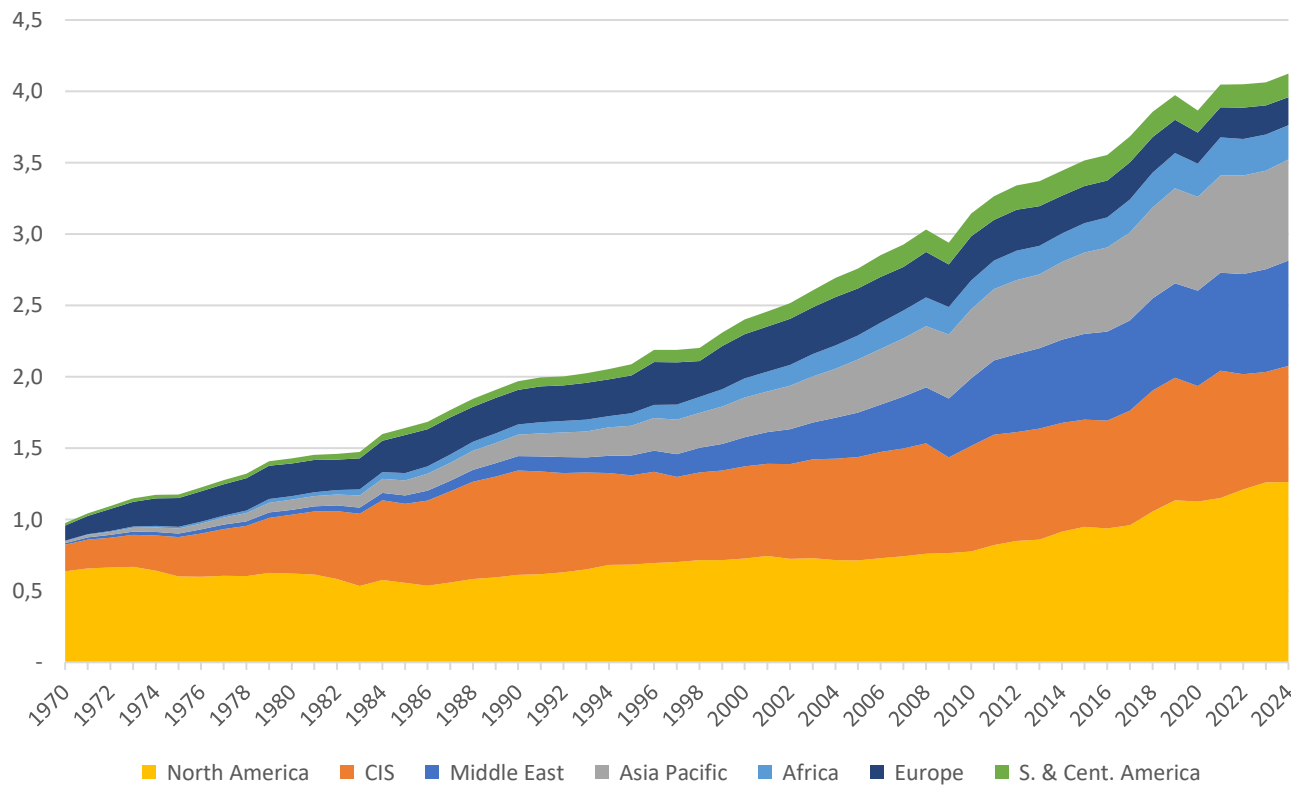
Representatividade das Reservas de Gás Natural em 2020



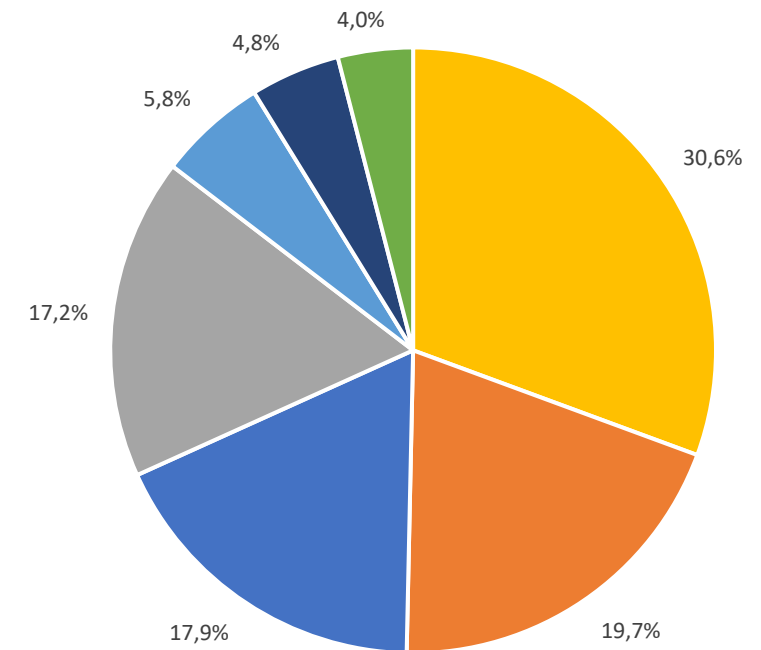
Reservas de Gás Natural - 10 maiores países em 2020
[Tm3] @ 15°C, 1 atm



Produção de Gás Natural
[Tm3] - @ 15°C, 1 atm

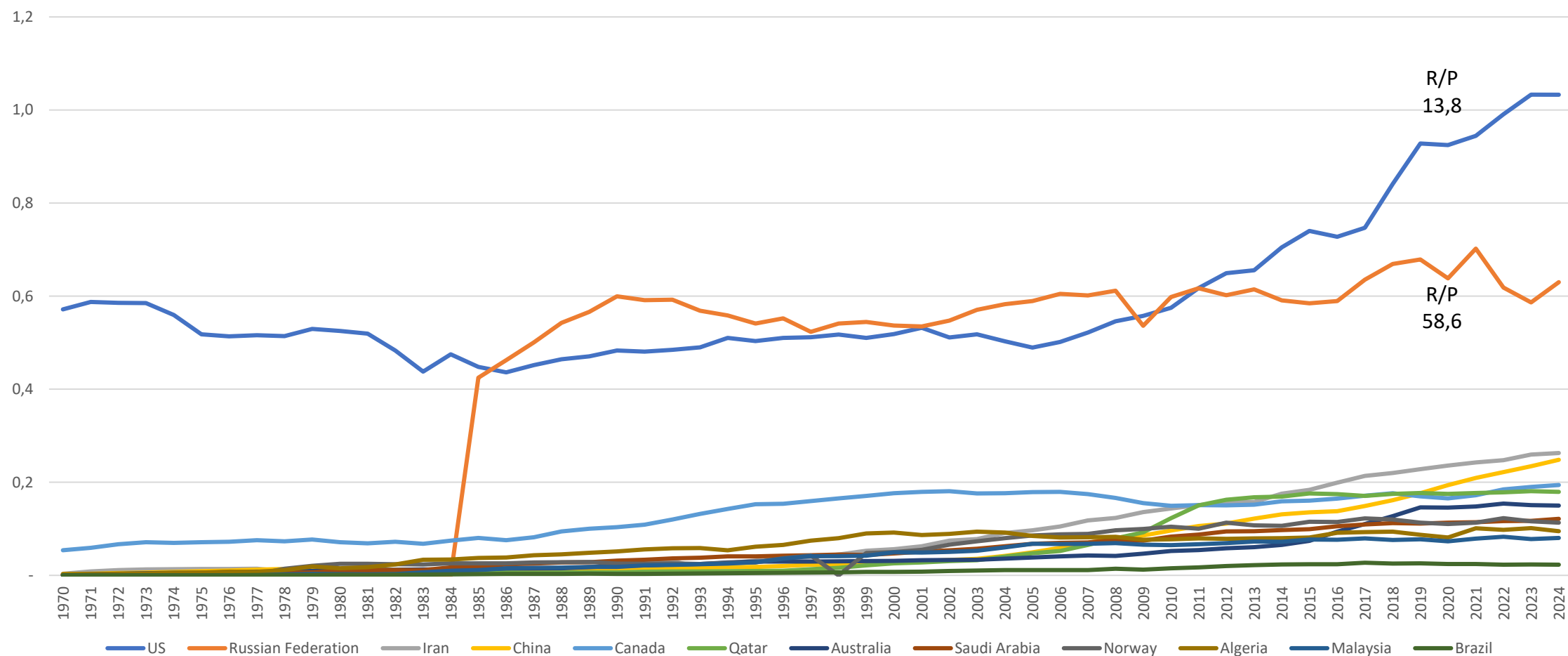


Representatividade da Produção
de Gás Natural em 2024

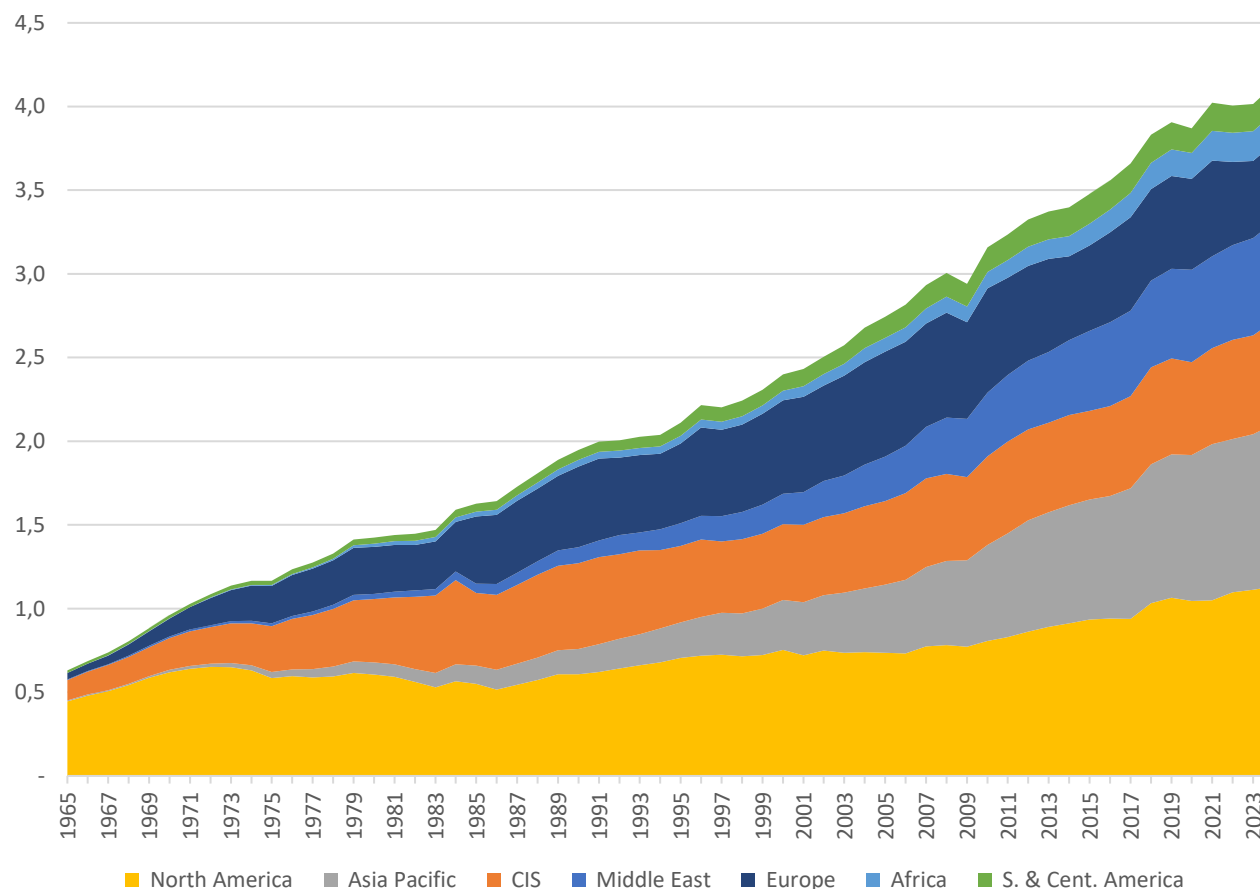


■ North America ■ CIS ■ Middle East ■ Asia Pacific ■ Africa ■ Europe ■ S. & Cent. America

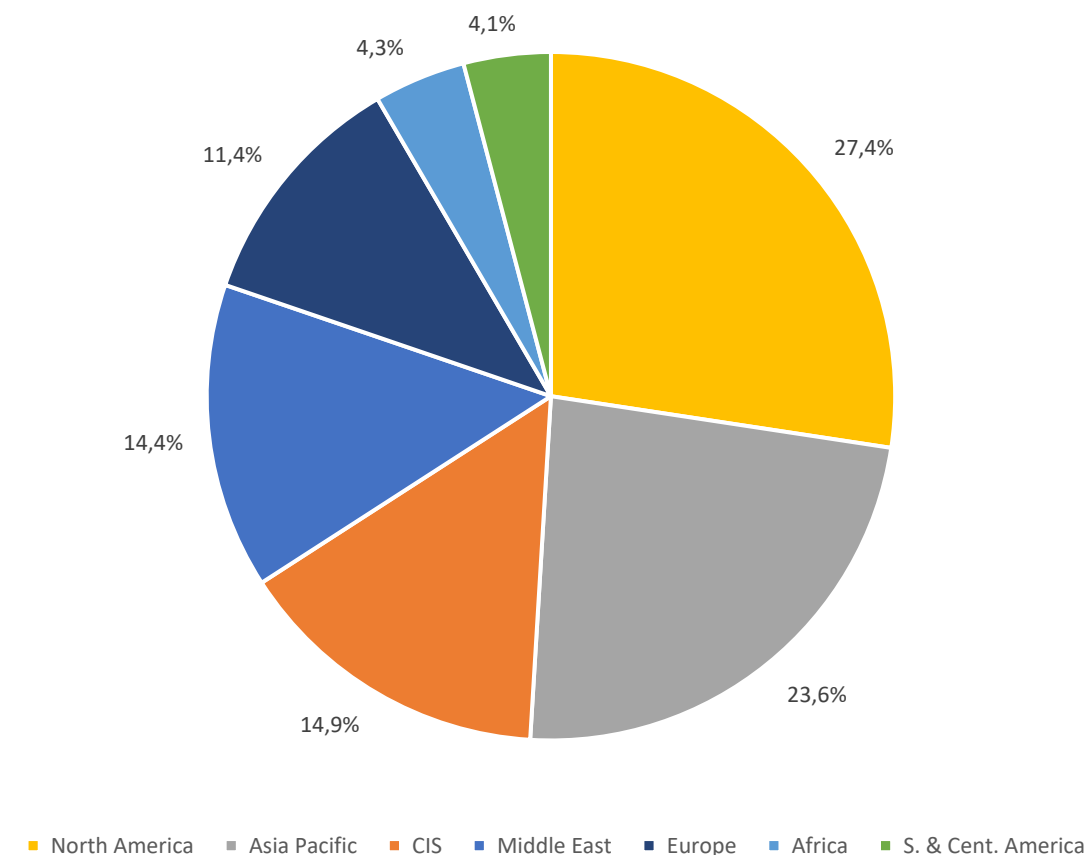
Produção de Gás Natural - 10 maiores países + Brasil em 2024
[Tm3] @ 15°C, 1 atm



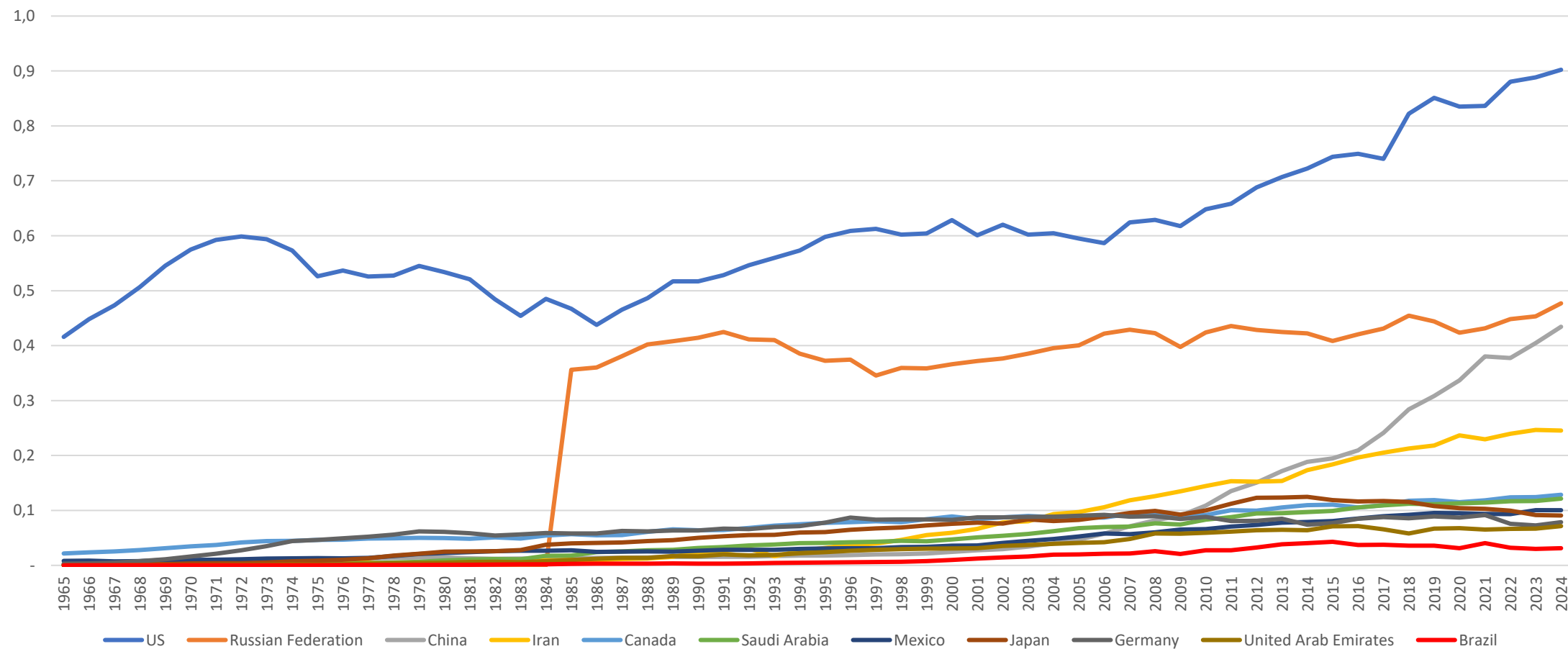
Consumo de Gás Natural
[Tm3] - @ 15°C, 1 atm



Representatividade do consumo
de Gás Natural em 2024

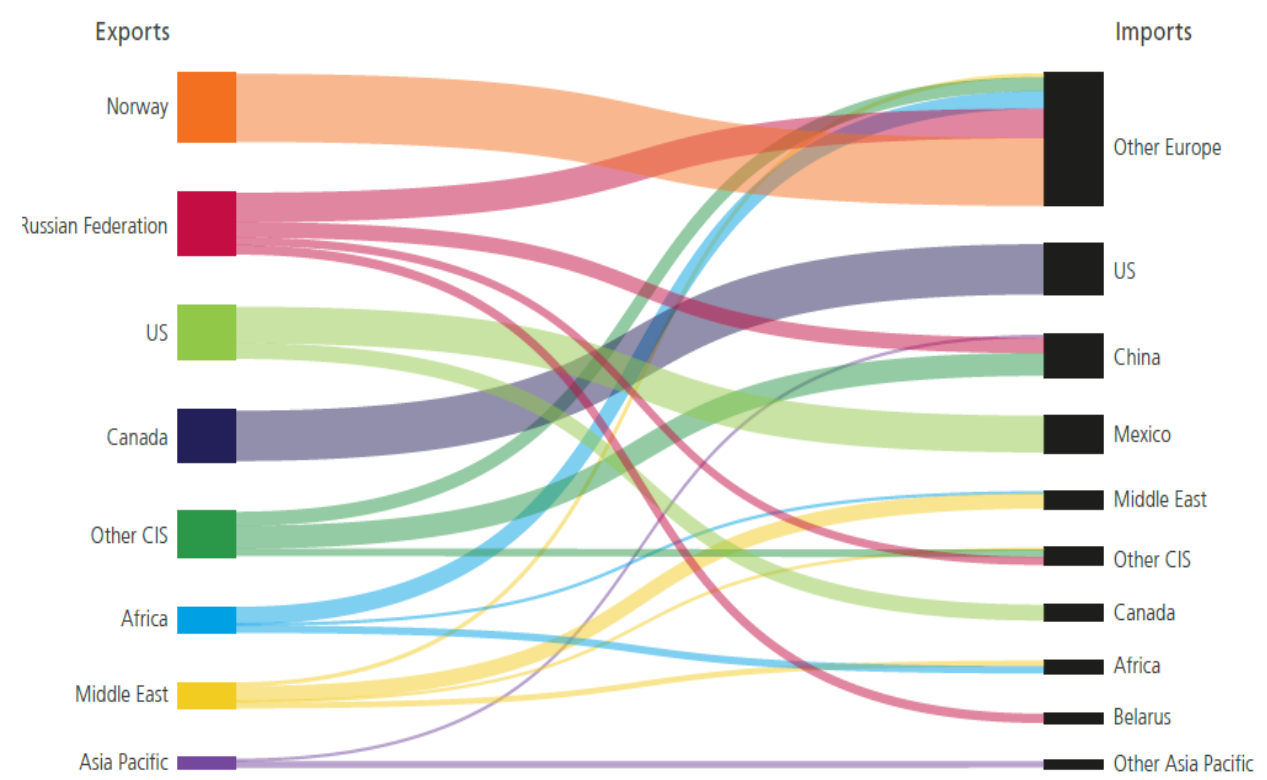


Consumo de Gás Natural - 10 maiores países + Brasil em 2024
[Tm3] @ 15°C, 1 atm



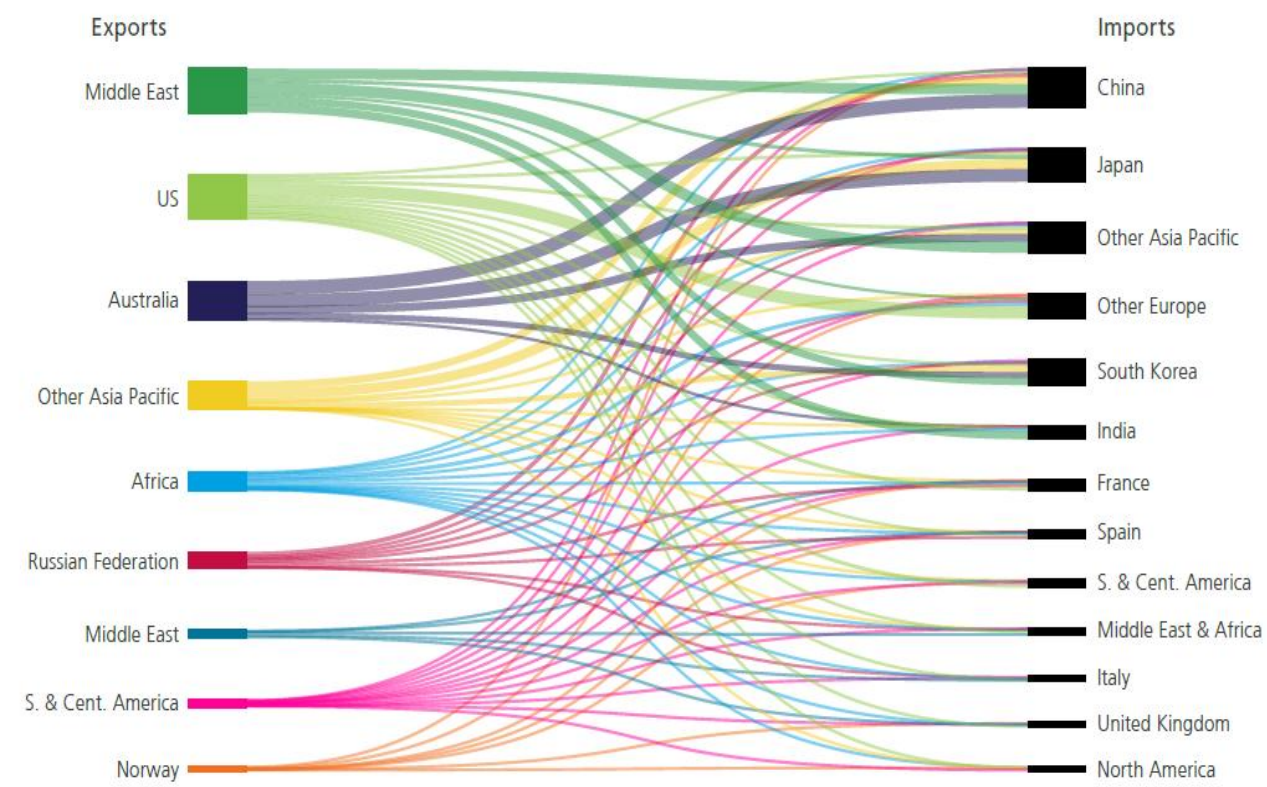


Natural gas Major trade movements 2024 – pipeline



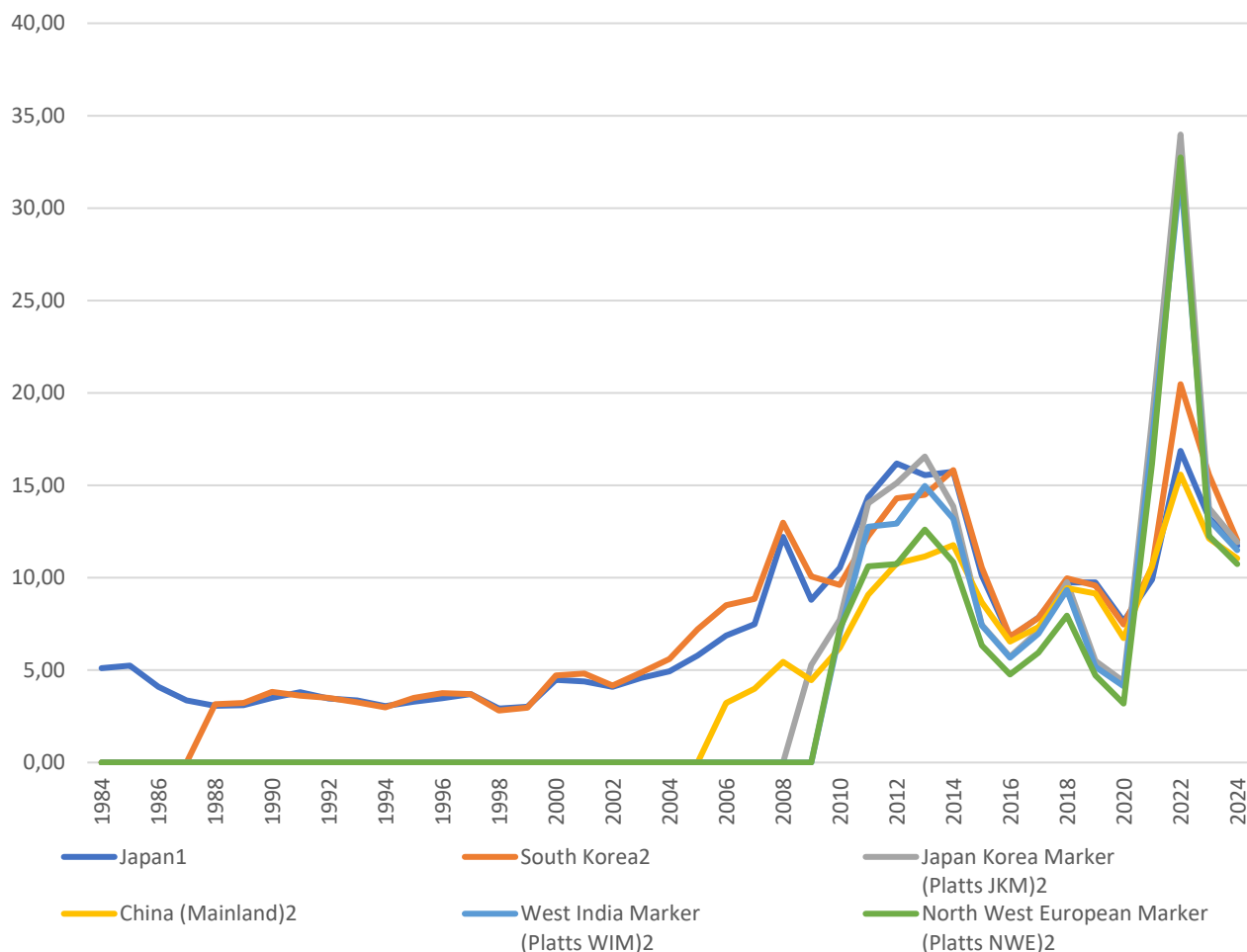
Notes: As far as possible, the data above represents standard cubic metres (measured at 15°C and 1013 mbar) and has been standardised using a gross calorific value (GCV) of 40 MJ/m³.
Source: Includes data from FGE MENAgas service, IHS.

Natural gas Major trade movements 2024 – LNG

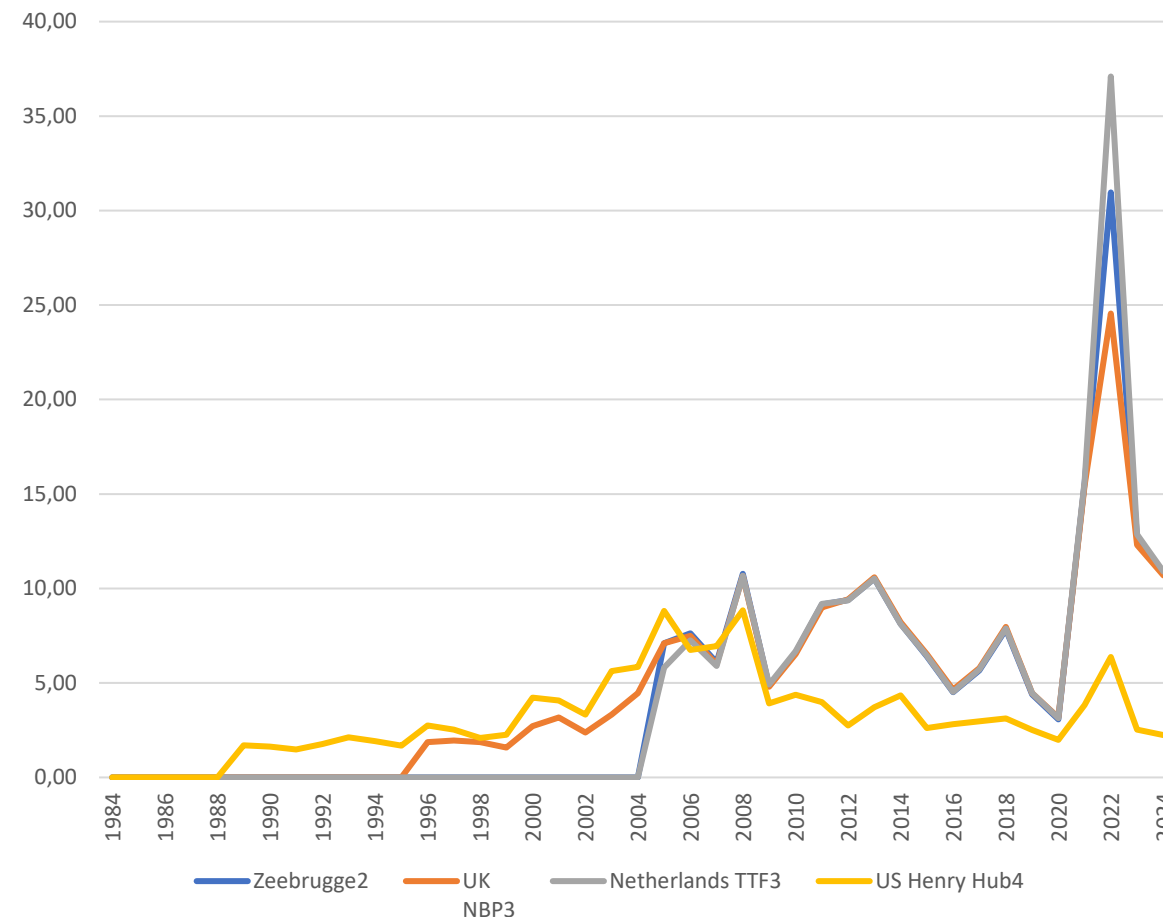


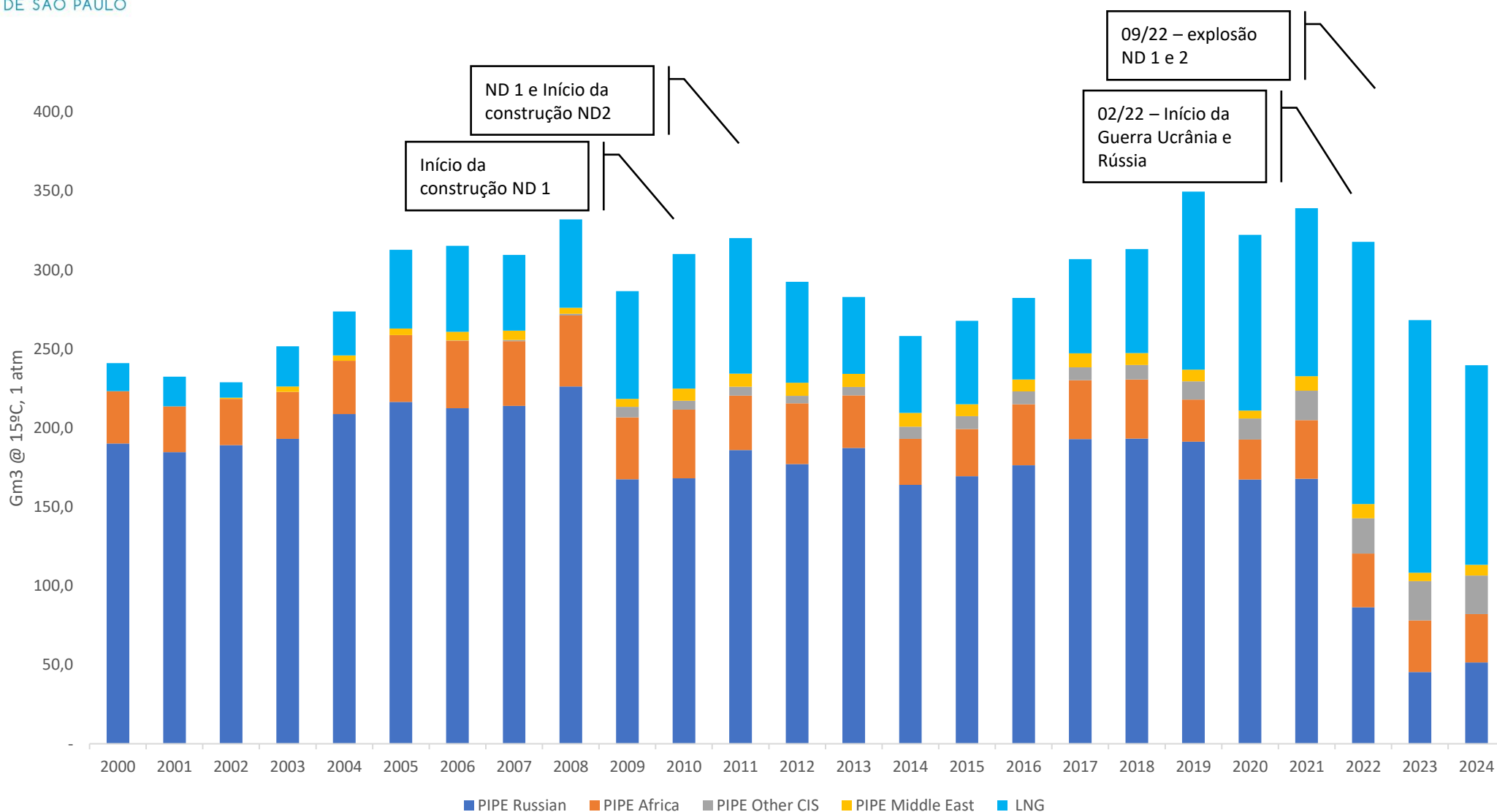
Notes: As far as possible, the data above represents standard cubic metres (measured at 15°C and 1013 mbar) and has been standardised using a gross calorific value (GCV) of 40 MJ/m³.

Preço do GNL [U\$/MMBTU]



Preço do GN [U\$/MMBTU]



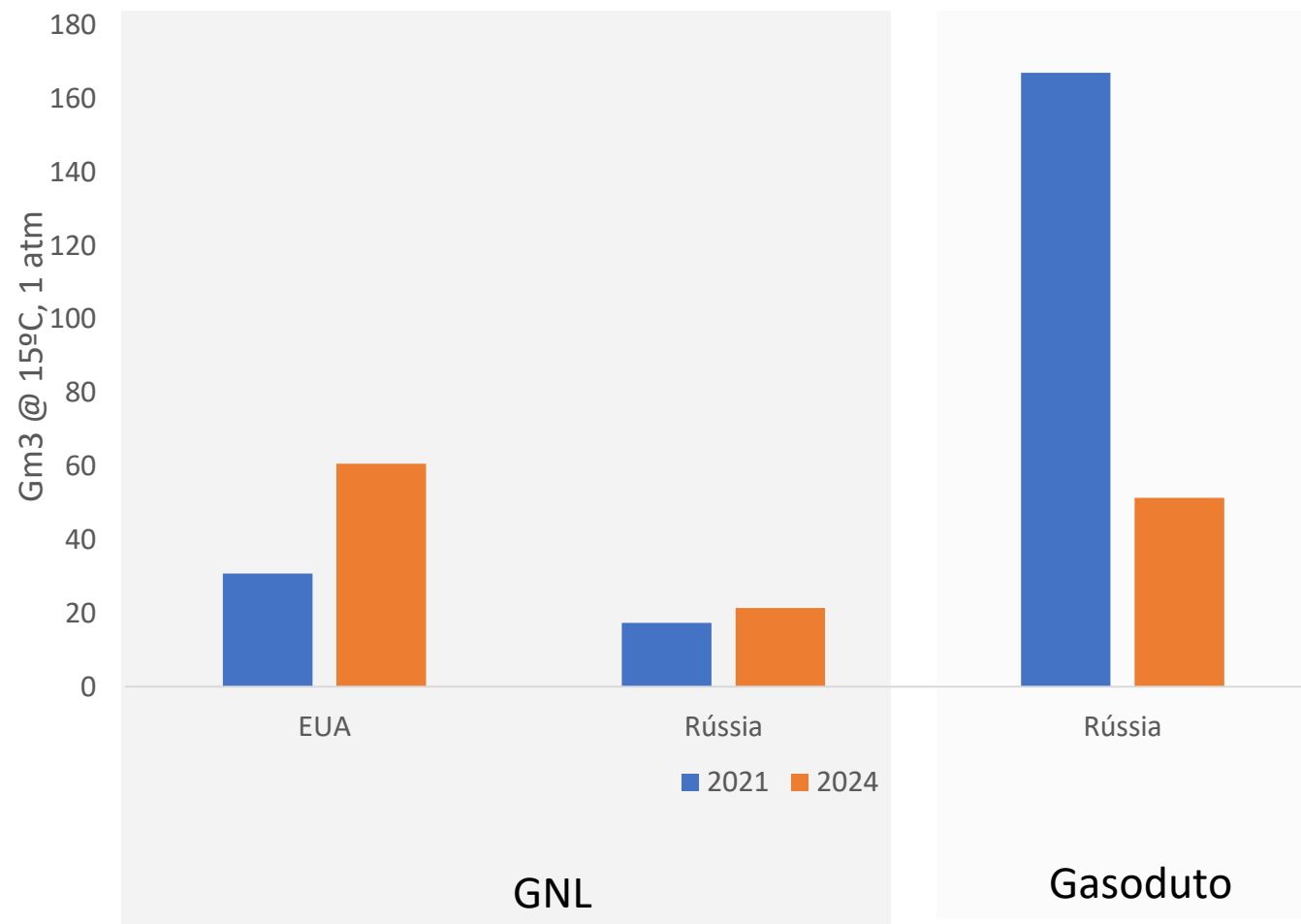


A Guerra entre Ucrânia e Rússia e o Gás Natural

Gasodutos de Transporte Rússia - UE



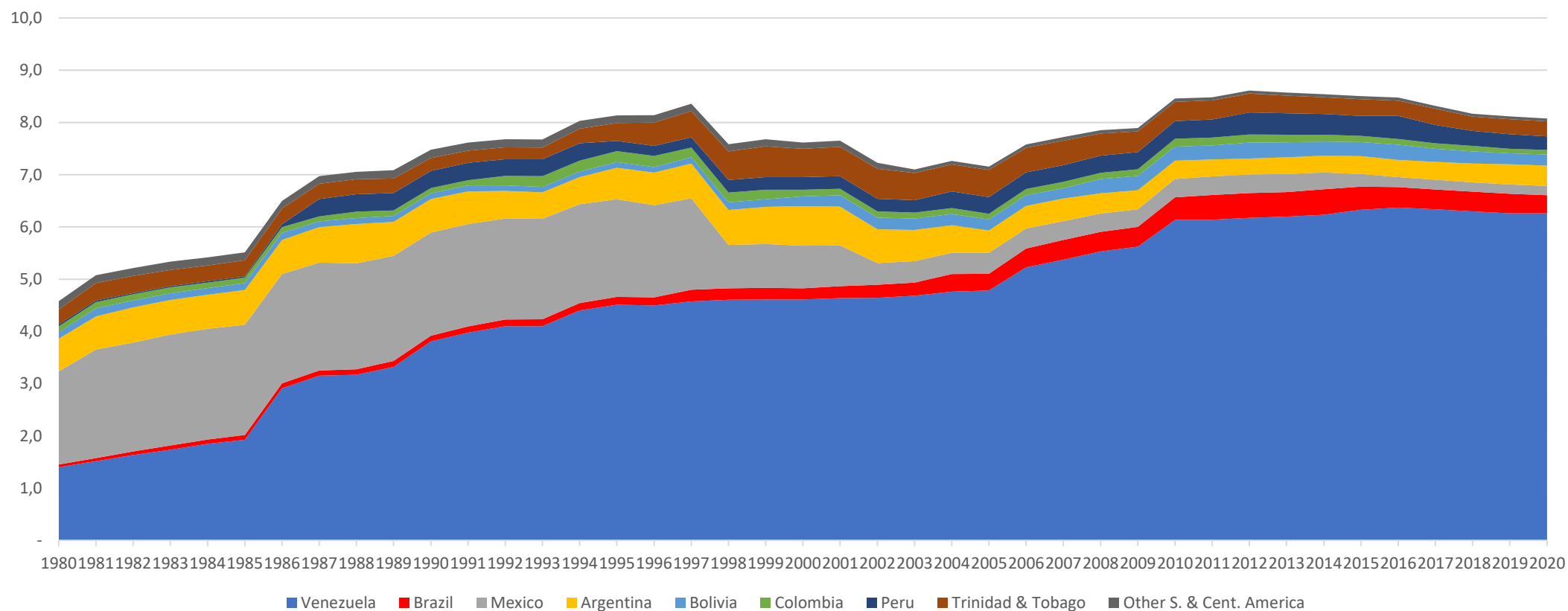
Origem da Importação Europeia do Gás Natural



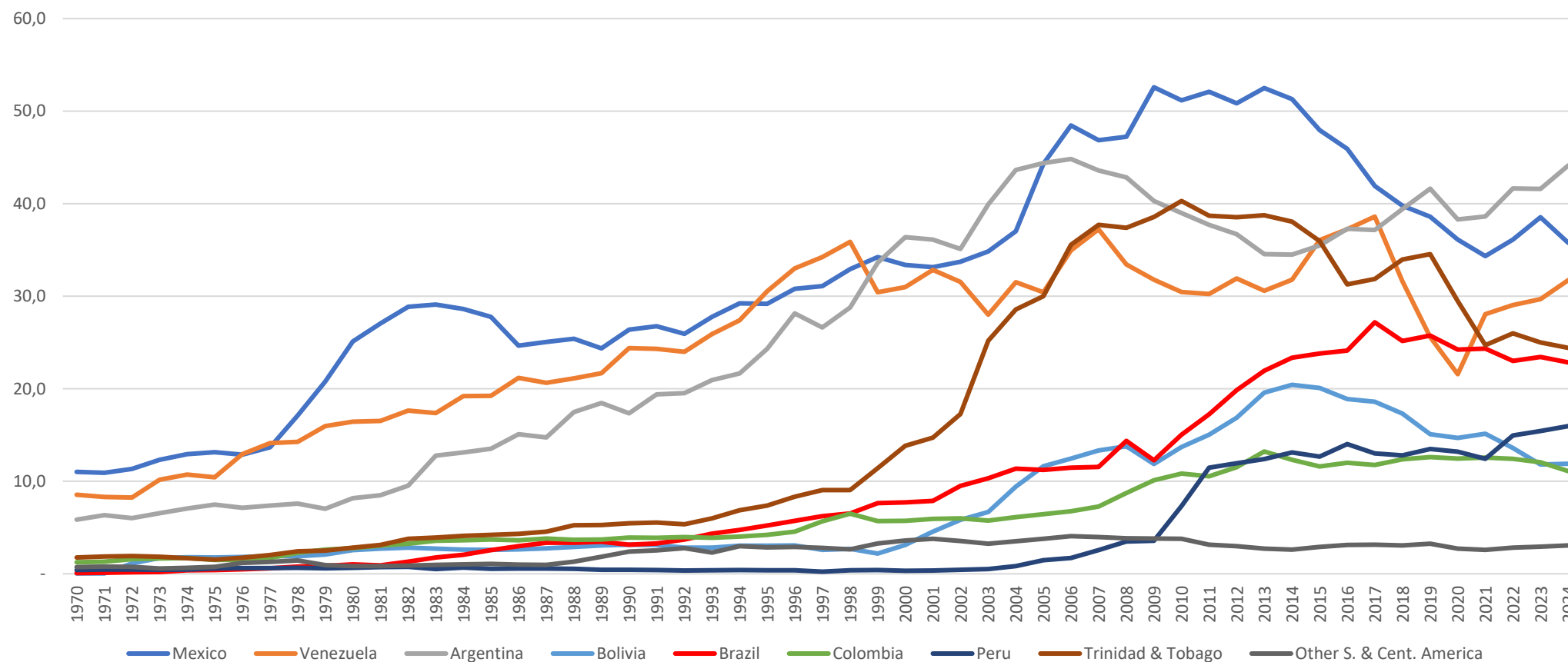


AMÉRICA LATINA E CARIBE

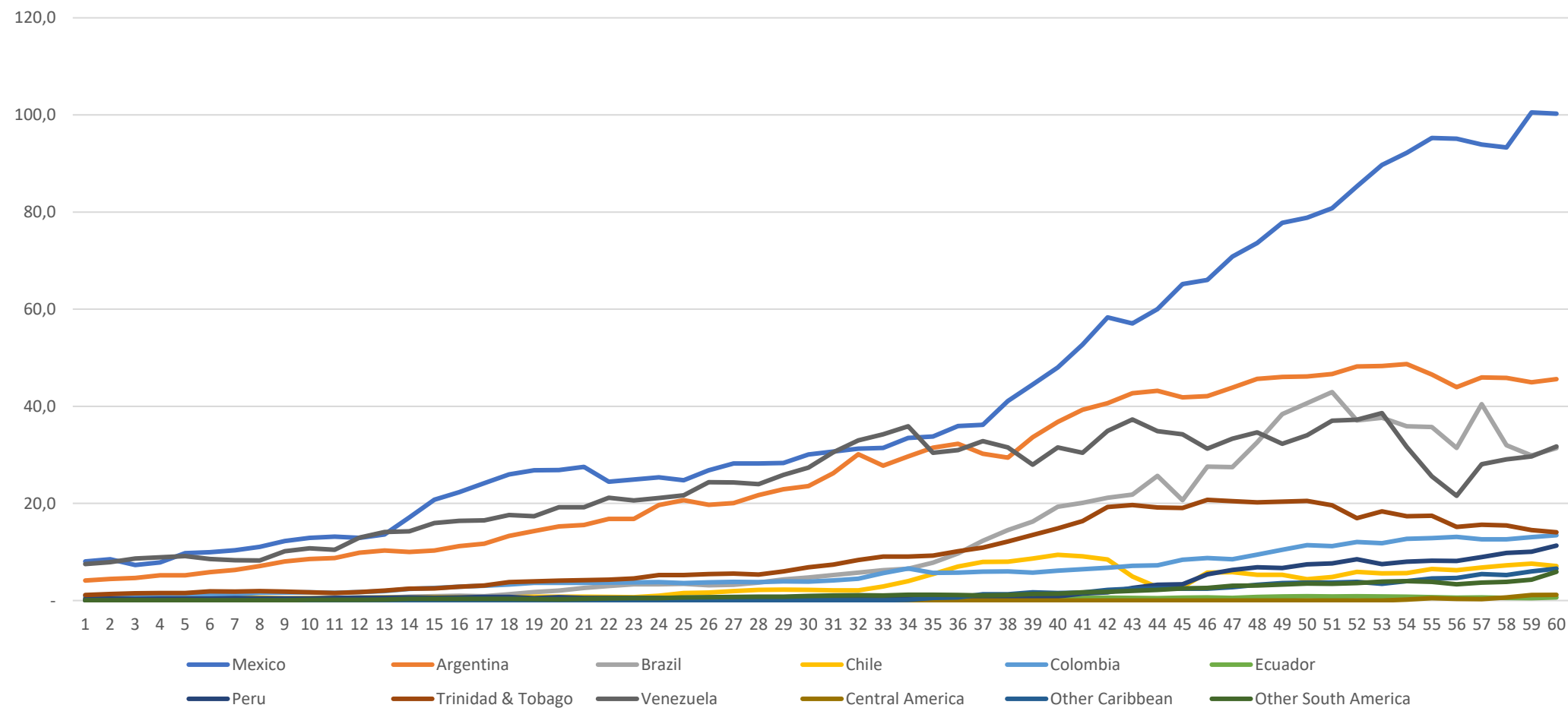
Reservas de Gás Natural – América Latina e Central
[Tm3] @ 15°C, 1 atm



Produção de Gás Natural – América Latina e Central
[Gm3] @ 15°C, 1 atm



Consumo de Gás Natural – América Latina e Central
[Gm3] @ 15°C, 1 atm





Argentina e o Shale Gas



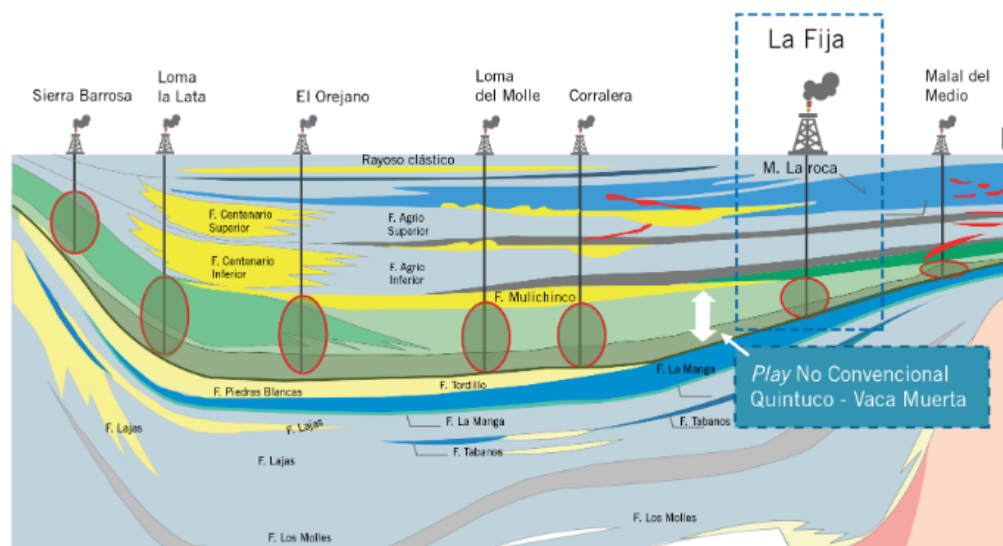
Fonte: Argentina – Secretaría de Energía de la Nación, 2025

Shale Gas em Vaca Muerta - Argentina

Vaca Muerta em números:

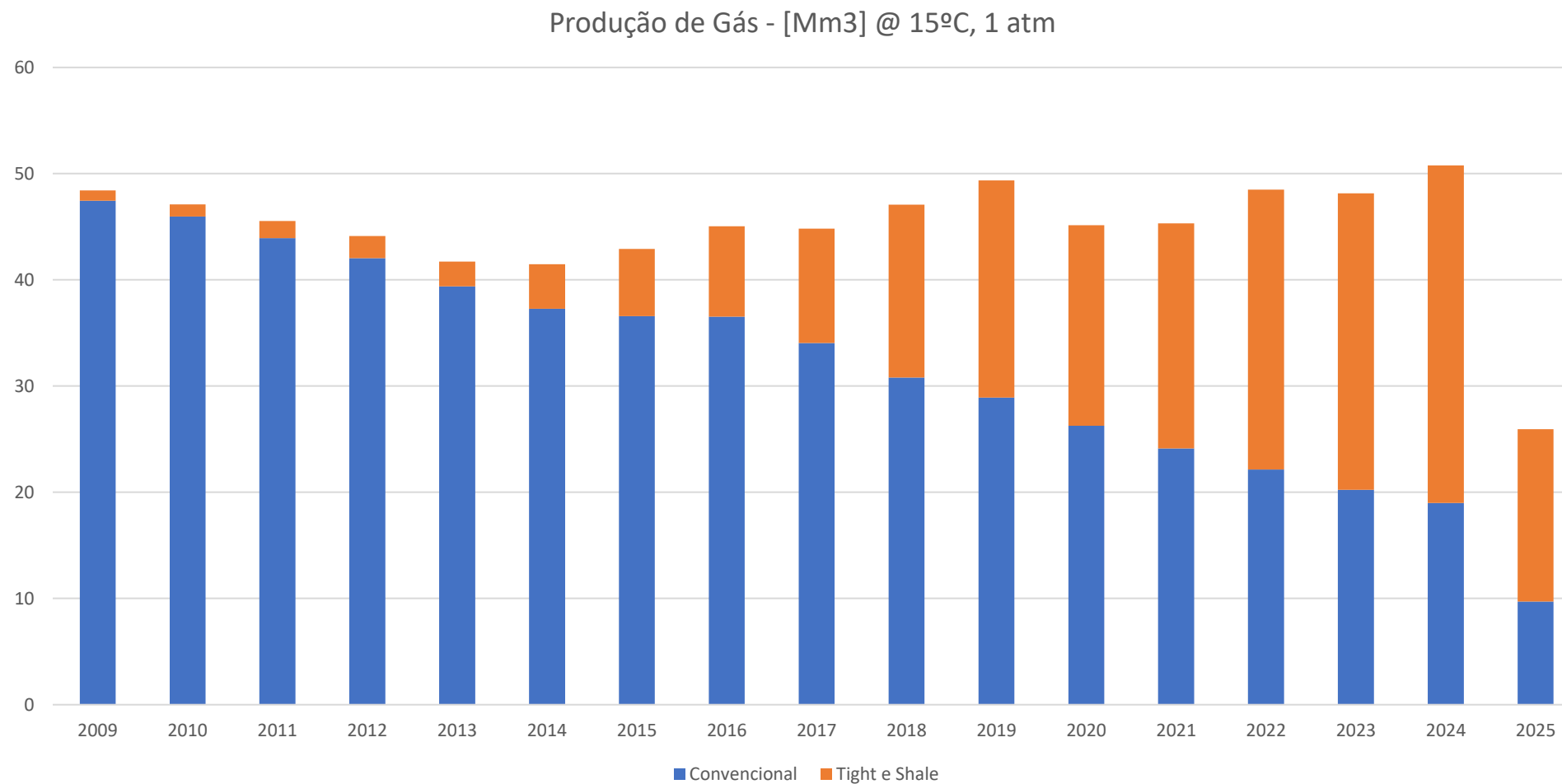
- 802 Tm³ de reservas não-provadas e tecnicamente recuperáveis;
- 308 Tm³ de reservas provadas e tecnicamente recuperáveis.

Fonte: EUA – Energy Information Administration, 2025



Trecho de sul a norte da Bacia de Neuquén, indicando a seção sedimentar onde a mineração não convencional poderia ser realizada.

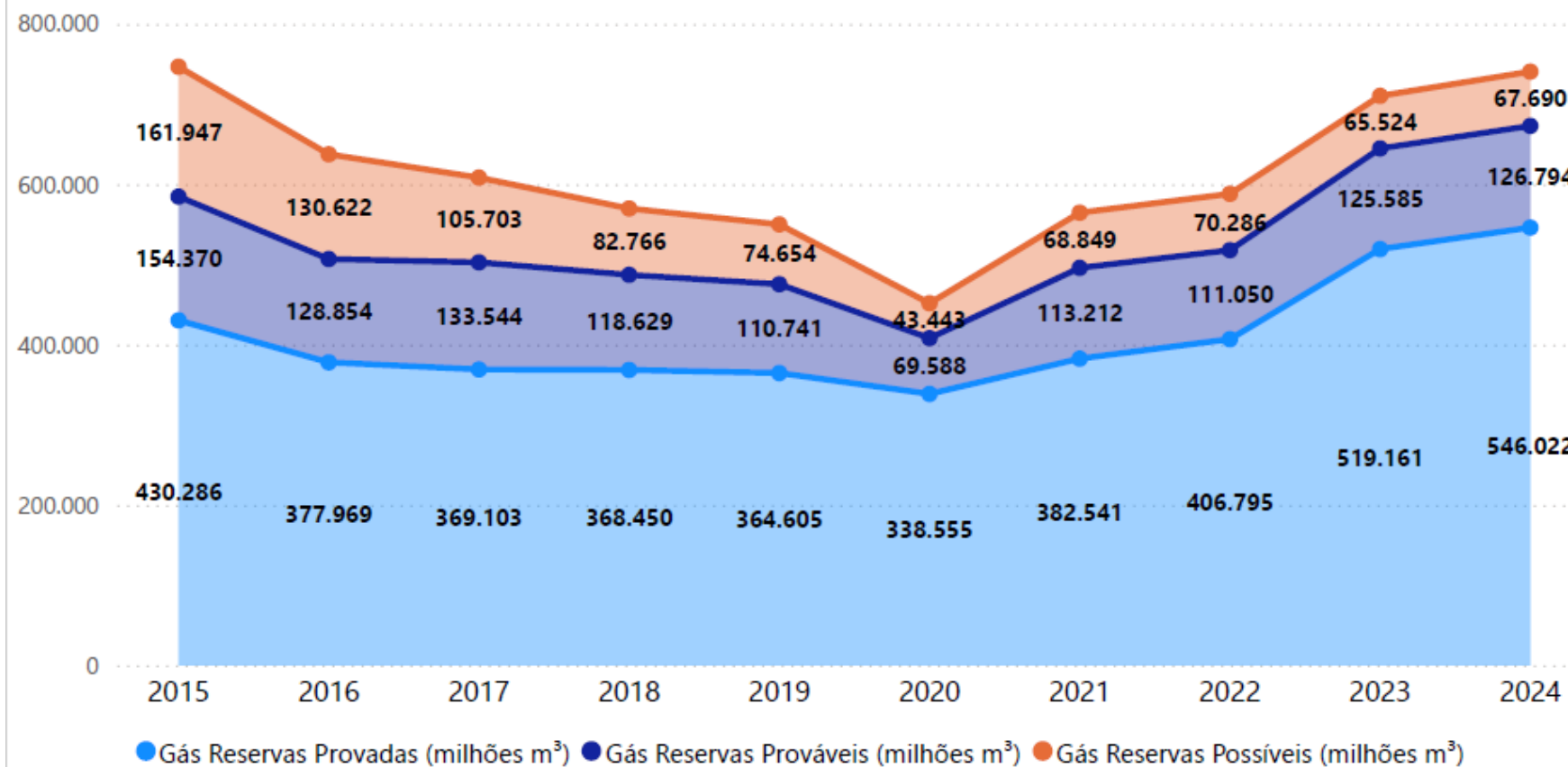
Fonte: Argentina – Secretaría de Energía de la Nación, 2025



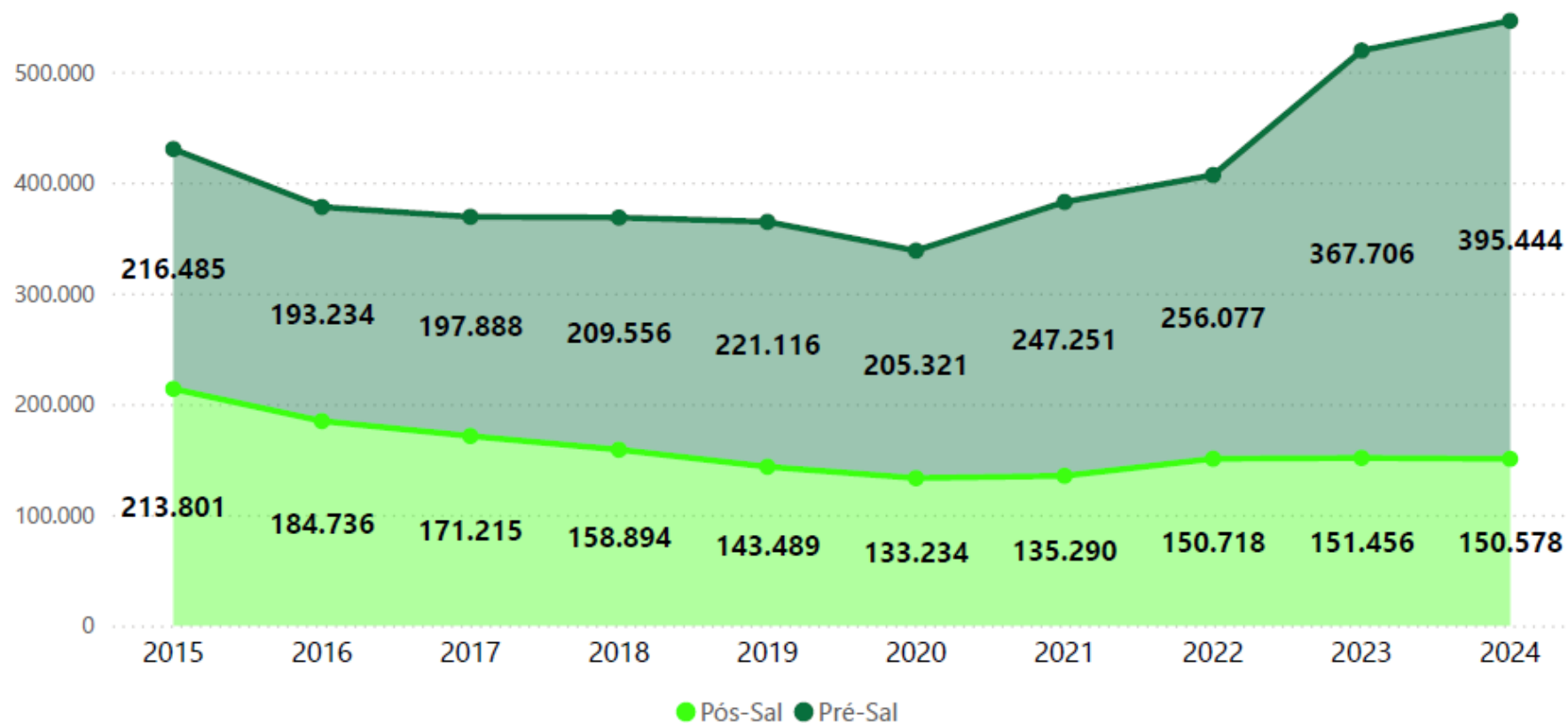


BRASIL

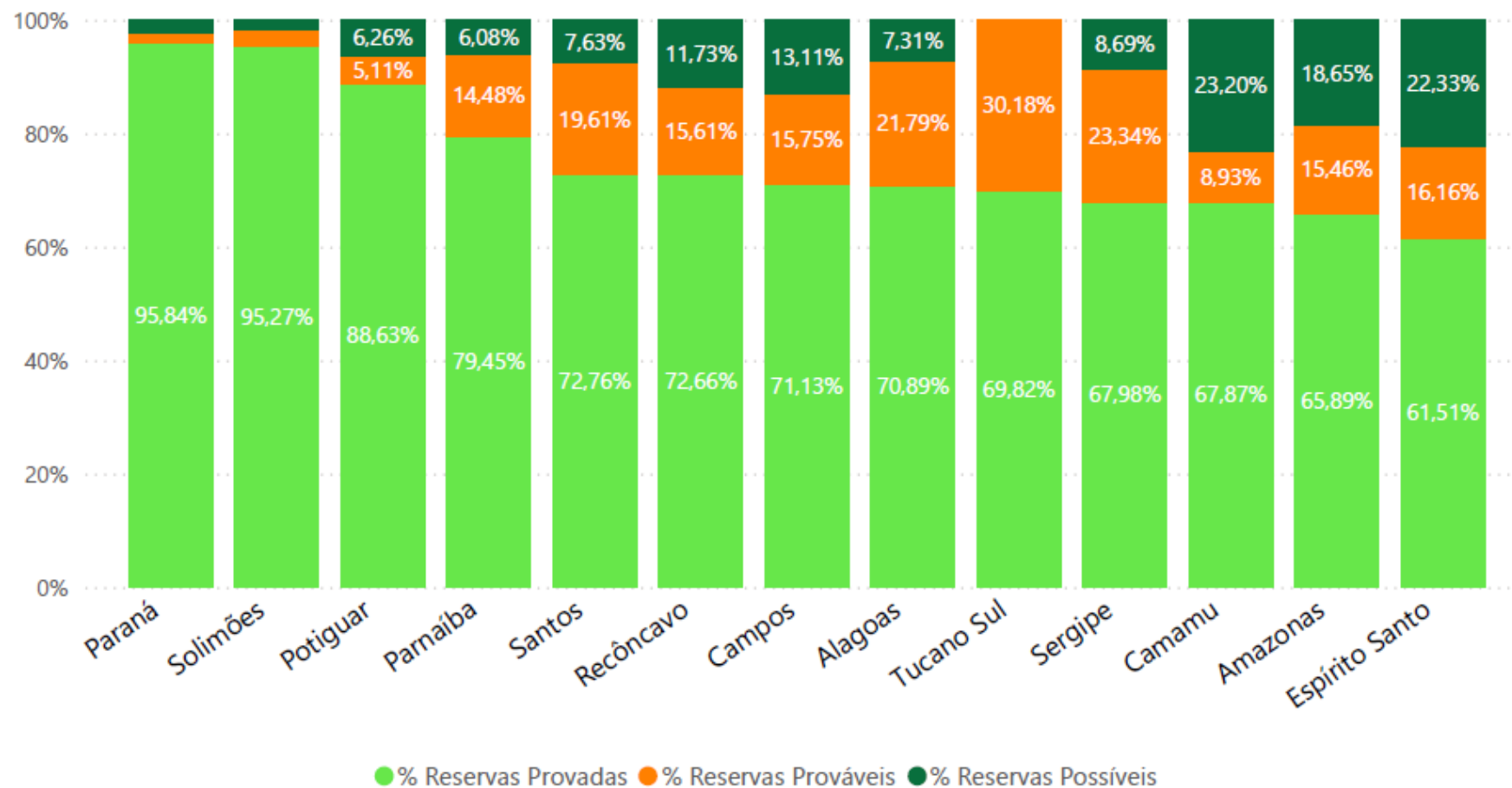
Evolução das Reservas



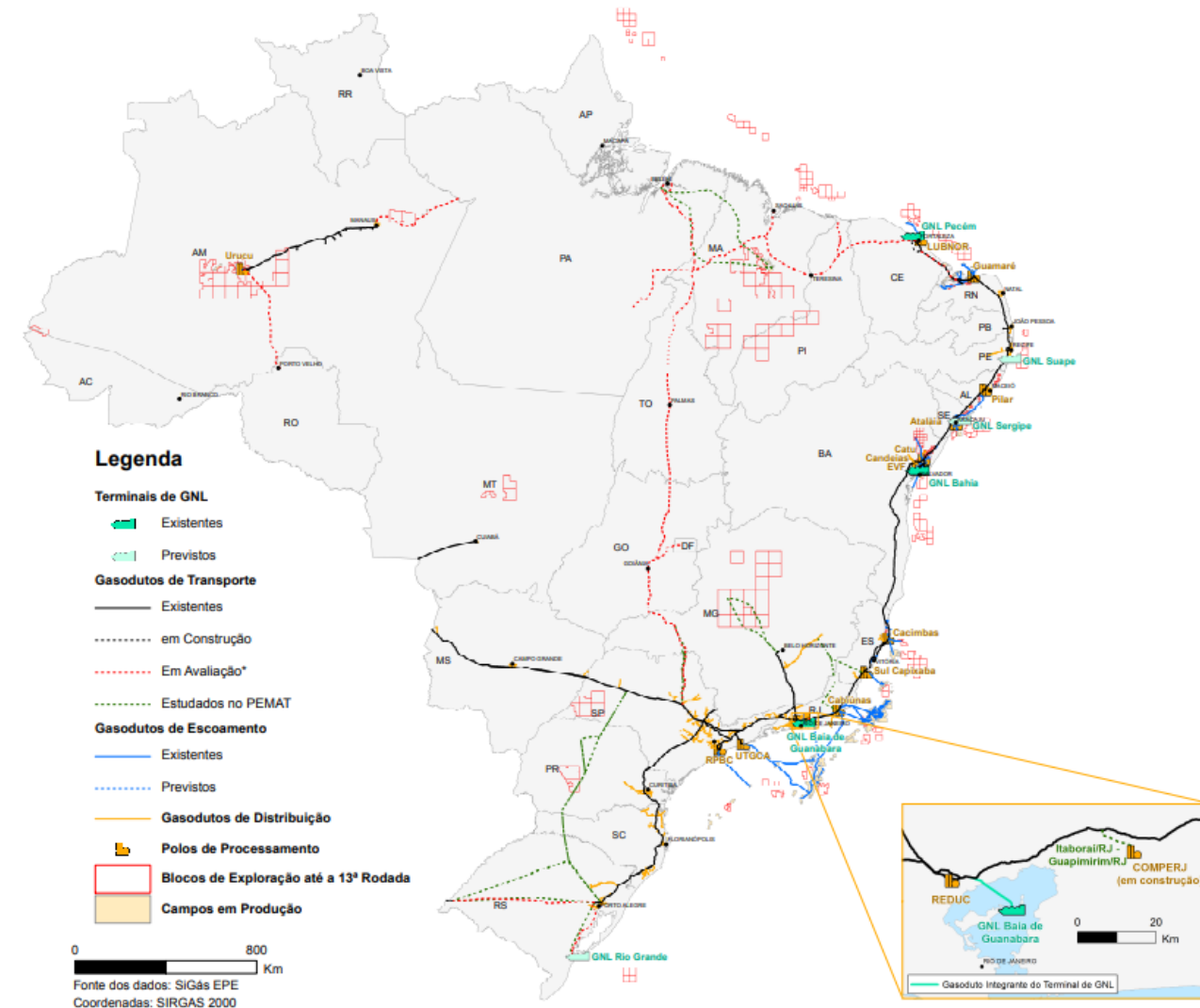
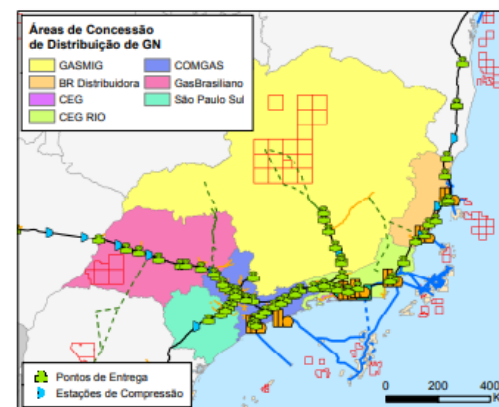
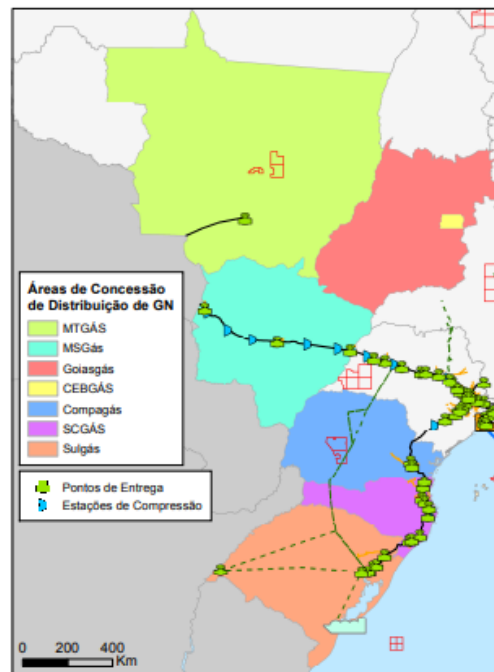
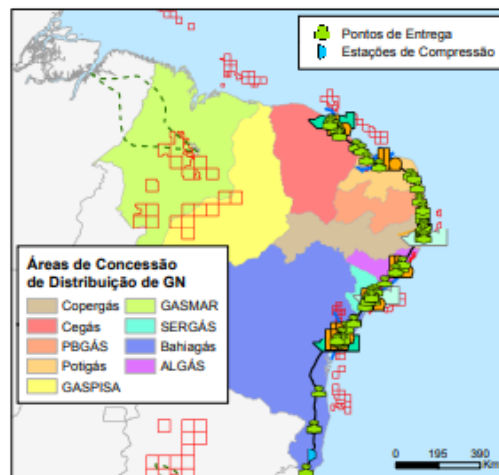
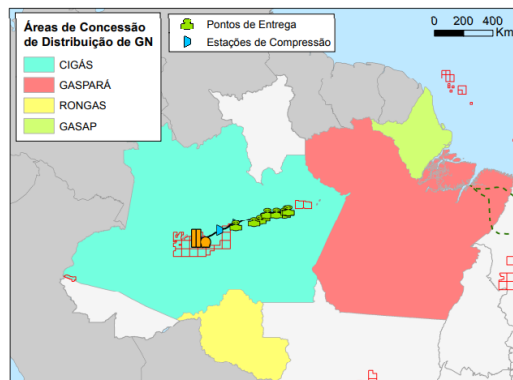
Localização Geológica das Reservas Provadas



Proporção de Reservas nas UF



Infraestrutura de Gasodutos de Transporte- Brasil



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