

Latin America (Southern Cone) Gas to Power? We have a problem

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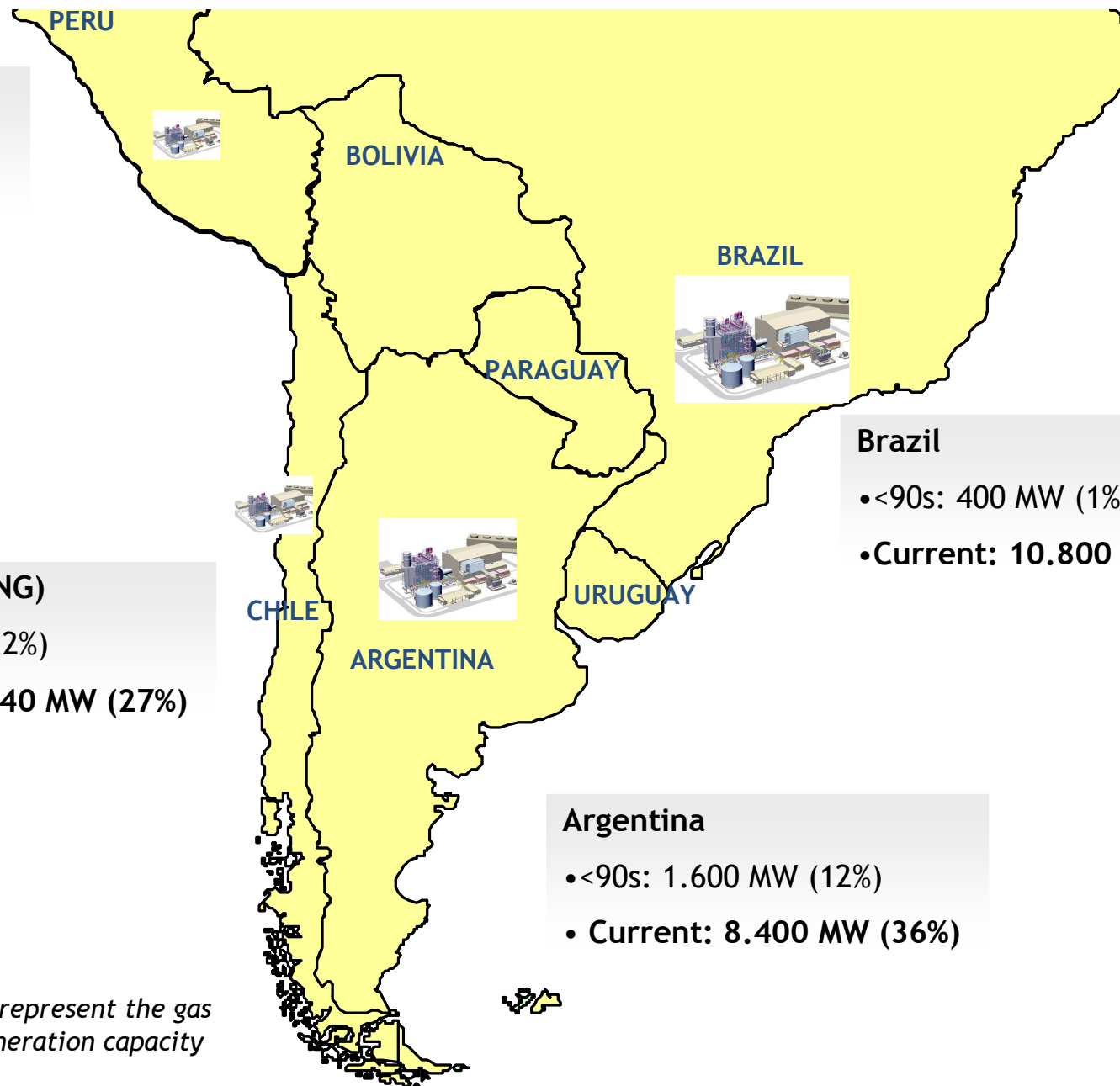
June 2006

Amsterdam - Netherlands

Infrastructure - Gas Power Generation Capacity

Peru

- <90s: 0 MW (0%)
- **Current: 800 MW (16%)**



BOLIVIA

BRAZIL

PARAGUAY

CHILE

URUGUAY

ARGENTINA

Brazil

- <90s: 400 MW (1%)
- **Current: 10.800 MW (11%)**

Chile (SIC + SING)

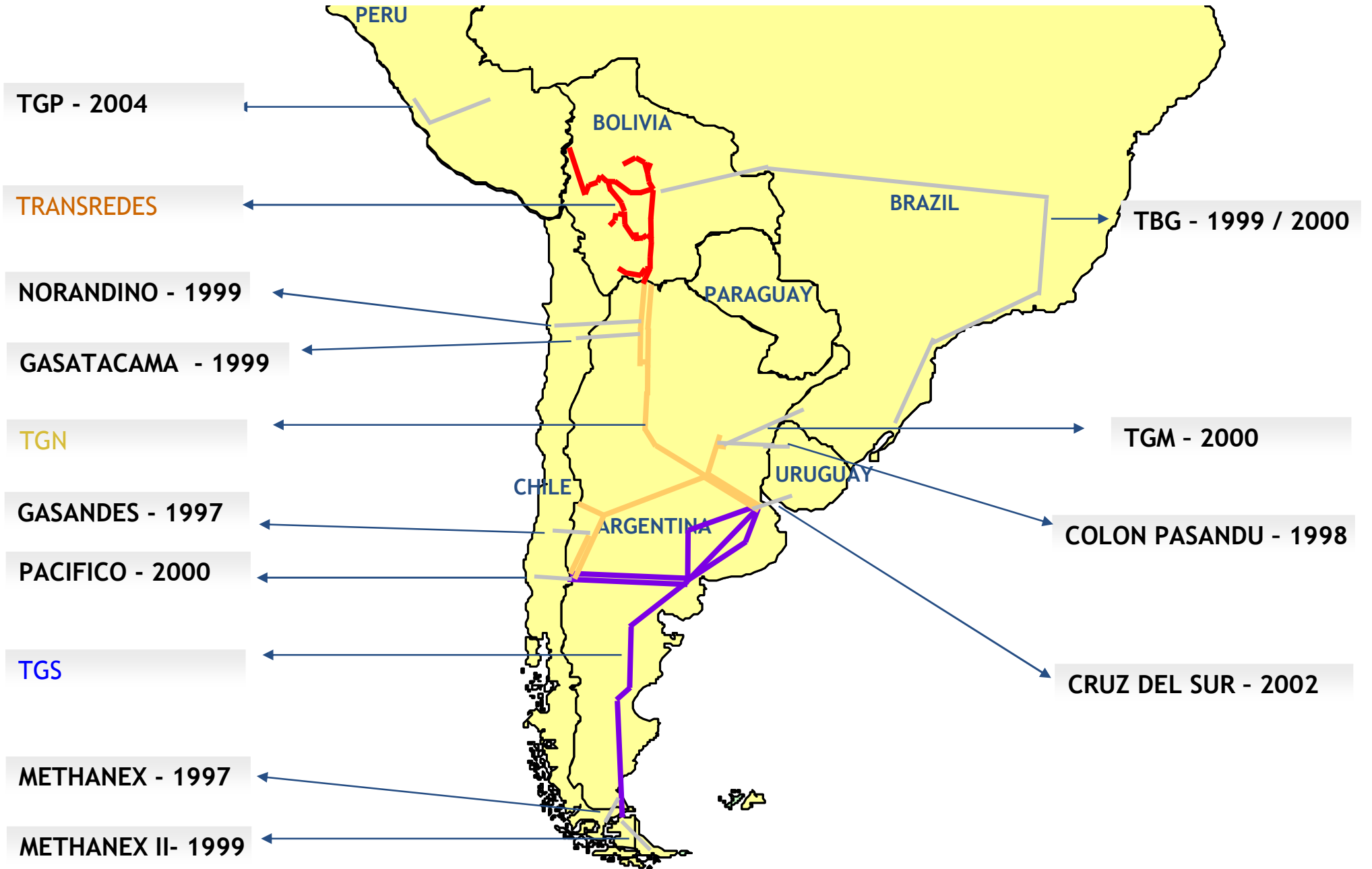
- <90s: 70 MW (2%)
- **Current: 3.240 MW (27%)**

Argentina

- <90s: 1.600 MW (12%)
- **Current: 8.400 MW (36%)**

Note: Percentages in brackets represent the gas participation in the power generation capacity matrix

Infrastructure - Gas Pipelines



■ Investment in Bolivia: Reserves Exploration & Development

- Average 1998-2001: 500 MMus\$
- Average 2002-2005: 250 MMus\$ (2005: 200 MMus\$ (150 develop; 50 exploration))
- Future: ???

■ Infrastructure: Pipelines + Gas Power plants

- Clear Internal rules= Private Investment / or Government Investment
- Integration Projects - Cross Border Issues to be addressed (Energy Charter Treaty (?))

■ Pricing

- Coal, Hydro and others sets cap price for Bolivian natural gas

Pricing - Argentina - Bs As

	Coal (PC)	Natural Gas
Investment 10 ³ u\$s/Mw	1,200	600
Investment u\$s/Mwh	20	9
Fuel + Transp. u\$s/Mwh	22	36
O&M u\$s/Mwh	7	4
Total Cost u\$s/Mwh	49	49

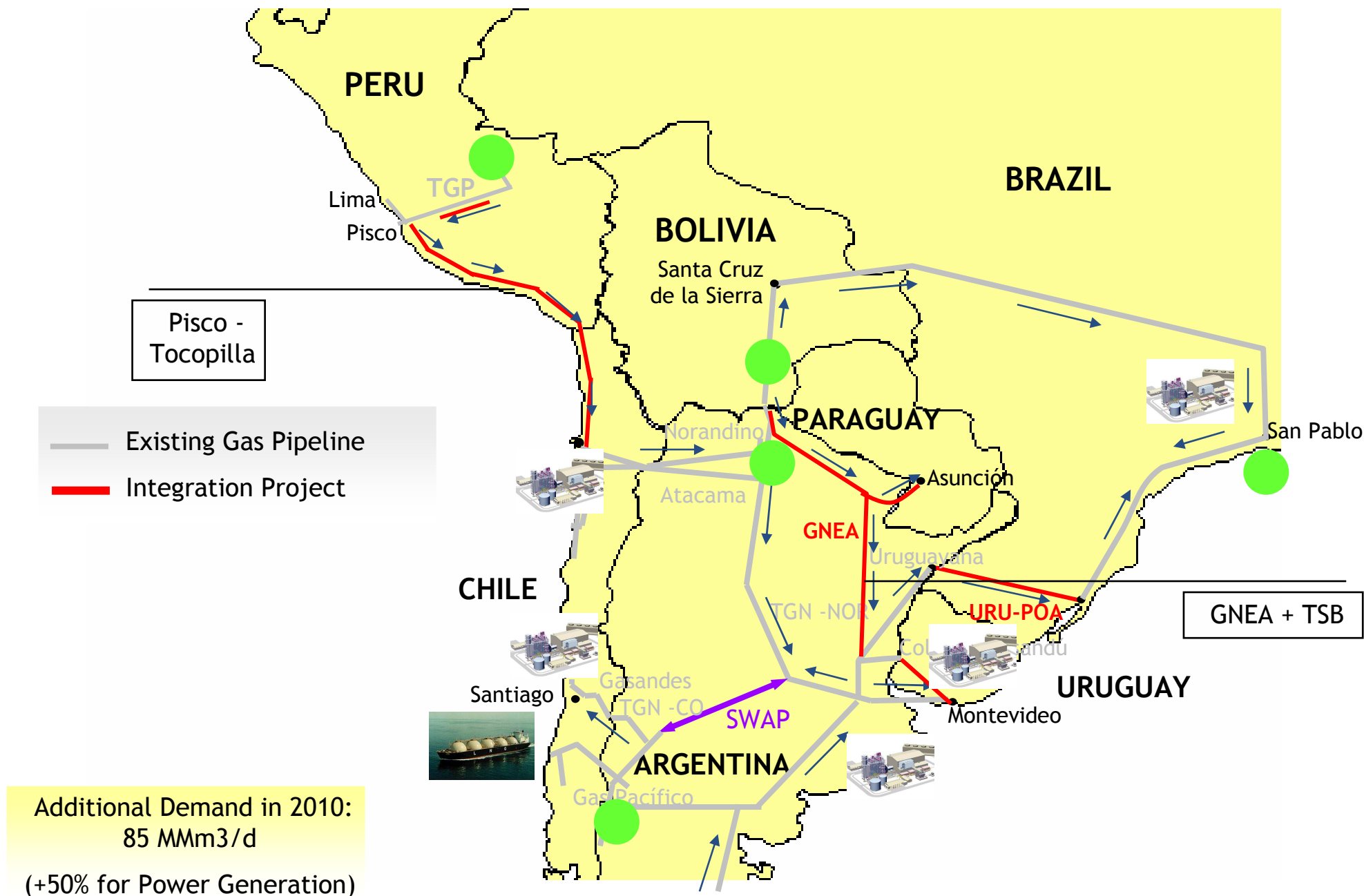
NOTE: Does not include pipeline (500 MMus\$ approx)

= 5.1 us\$/MMBTU

PC: Pulverized Coal

Natural Gas at Argentina-Bolivia border < **4 u\$s/MMBTU**

Alternative 1: With Bolivia



Alternative 2: Without Bolivia



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