

Thank you for your attention!

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Argentina and Brazil

Case Study

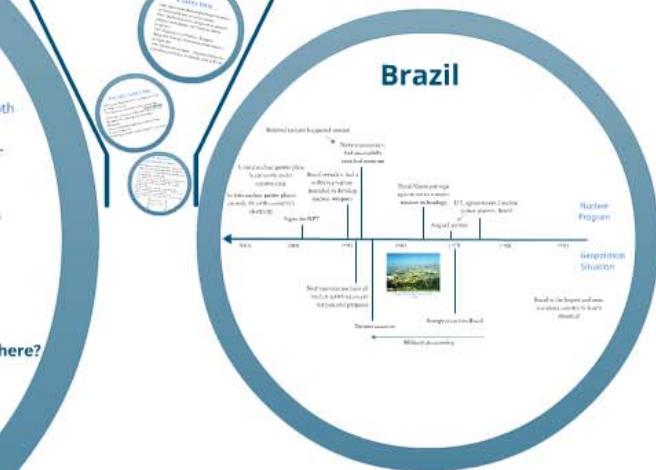
To the brink and back again...



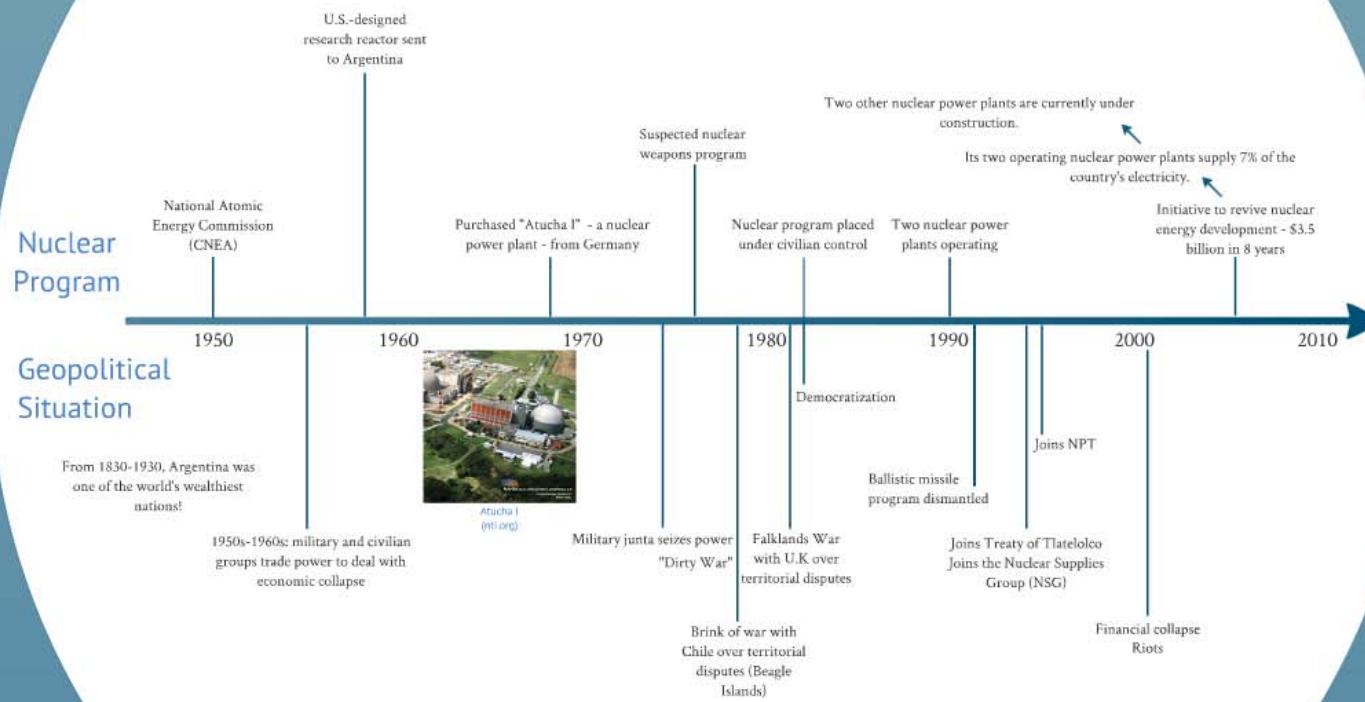
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Case Study

To the brink and back again...



Argentina



Nuclear Program

Geopolitical Situation

From 1830-1930, Argentina was one of the world's wealthiest nations!

1950s-1960s: military and civilian groups trade power to deal with economic collapse

National Atomic Energy Commission (CNEA)

U.S.-designed research reactor sent to Argentina

Purchased "Atucha I" - a nuclear power plant - from Germany

Suspected nuclear weapons program



Atucha I
(nti.org)

1960

1970

1980

Military junta seizes power
"Dirty War"

Falklands
with Chile over territorial

Brink of war with Chile over territorial

1960

1970

1980

1990

2000

2010



Atucha I
(nti.org)

Suspected nuclear weapons program

Purchased "Atucha I" - a nuclear power plant - from Germany

Nuclear program placed under civilian control

Two nuclear power plants operating

Two other nuclear power plants are currently under construction.
Its two operating nuclear power plants supply 7% of the country's electricity.

Initiative to revive nuclear energy development - \$3.5 billion in 8 years

Military junta seizes power
"Dirty War"

Falklands War
with U.K over territorial disputes

Brink of war with Chile over territorial disputes (Beagle Islands)

Democratization

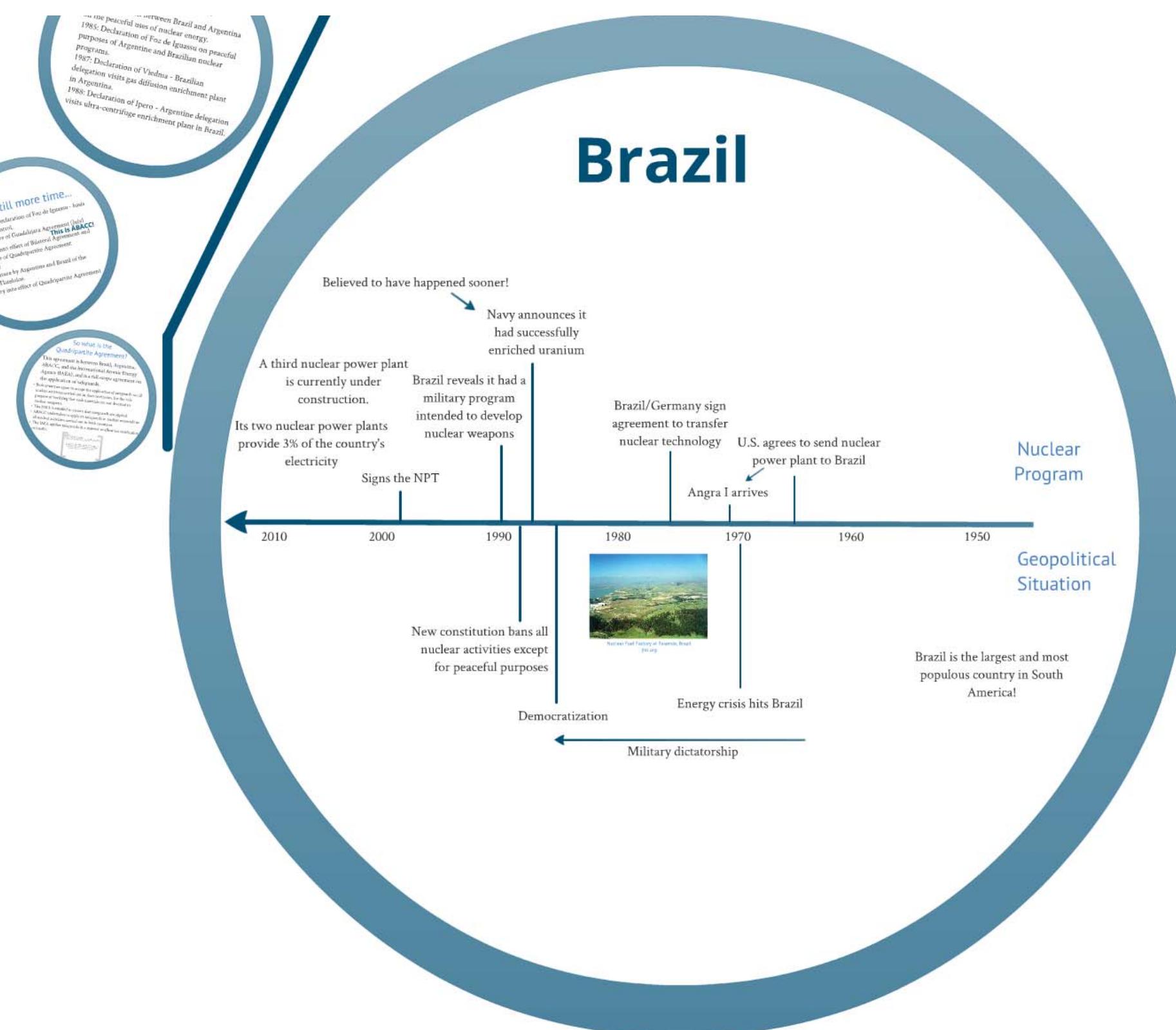
Ballistic missile program dismantled

Joins Treaty of Tlatelolco
Joins the Nuclear Supplies Group (NSG)

Financial collapse
Riots

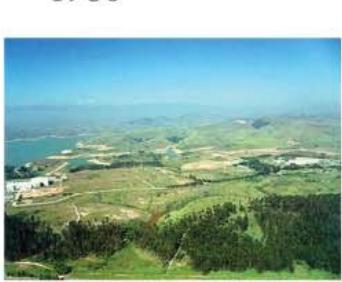
Joins NPT

Brazil



ounces it
cessfully
uranium

Brazil/Germany sign
agreement to transfer
nuclear technology U.S. agrees to send nuclear
power plant to Brazil
Angra I arrives



Nuclear Fuel Factory at Resende, Brazil
(nti.org)

1980

1970

1960

1950

Nuclear Program

Geopolitical Situation

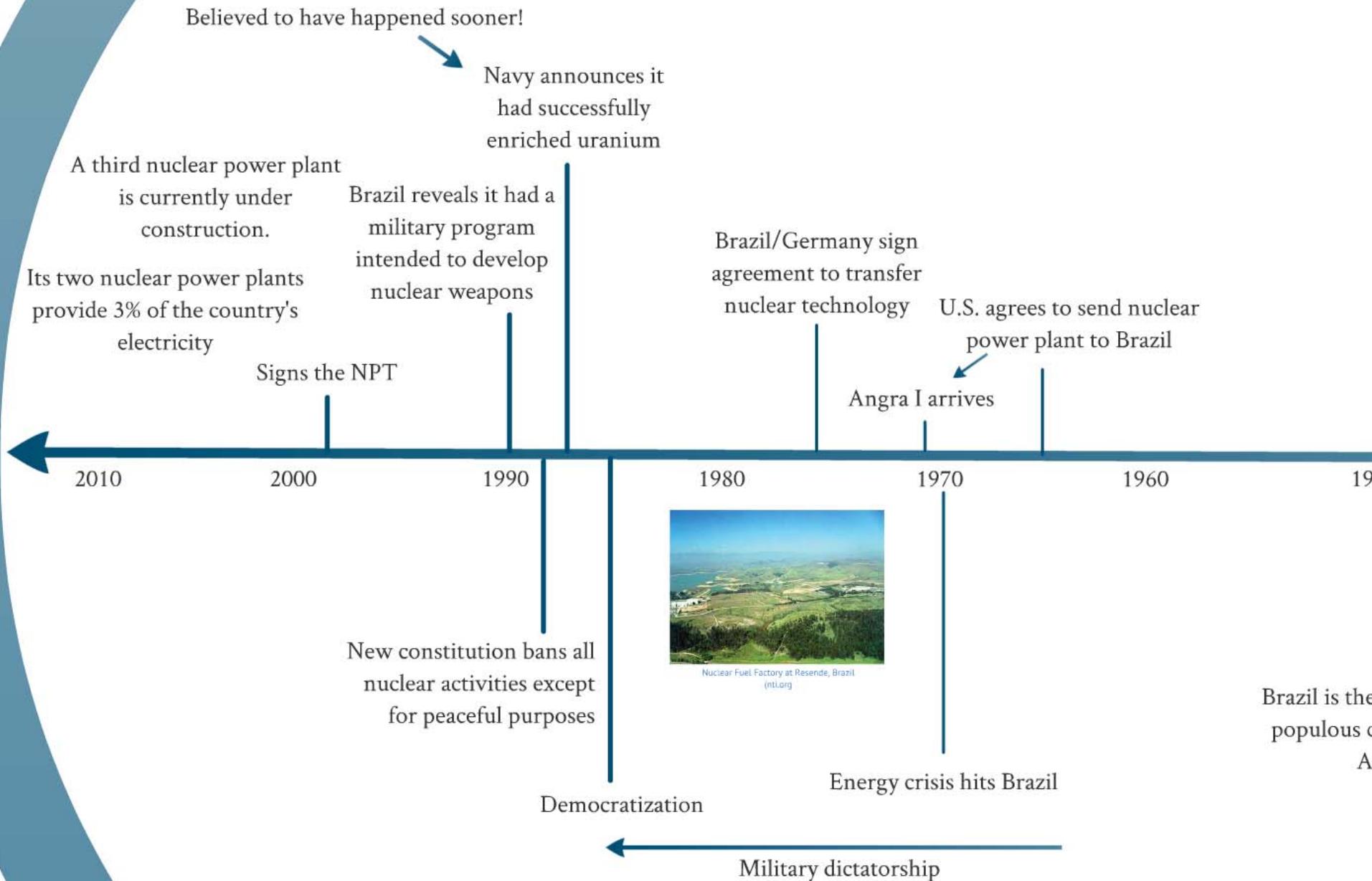
Brazil is the largest and most
populous country in South
America!

Energy crisis hits Brazil

Military dictatorship

all
cept
ses

mocratization



The Solution

Brazilian-Argentine Agency for Accounting and Control of Nuclear Materials (ABACC) is created!

Verifies that all nuclear material being used in both countries are for peaceful purposes only.

Bilateral agreement would be enforced by a Common System of Accounting and Control of Nuclear Weapons (SCCC)

SCCC includes the application of IAEA Safeguards



ABACC is the only bi-national safeguards organization in the world!

How did they get there?



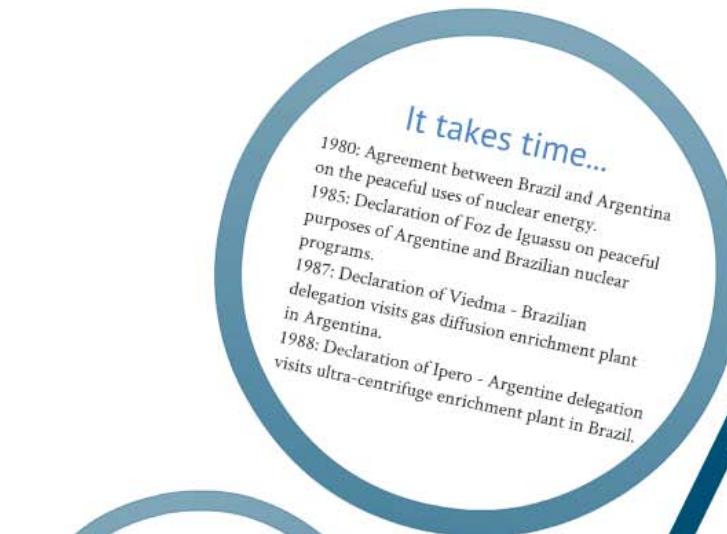
Timeline of Cooperation

It takes time...
1960 Agreement between Brazil and Argentina on the peaceful use of nuclear energy
1963 Declaration of Peace of Iquitos: joint program of Argentina and Brazilian nuclear programs
1970 Declaration of Vitoria - Brasília
Argentina and Brazil sign bilateral enrichment plan
1986 Declaration of Osasco - Argentine delegation visits subcommittee on enrichment plan in Brazil

And still more time...
1986 - 1987: Joint Commission of Nuclear Affairs
1987: Agreement on Collaboration in the Field of Nuclear Energy
1987: Creation of National Commission on Nuclear Energy (CNE) in Argentina
1989: Creation of Commission on Nuclear Energy (CNE) in Brazil
1990: Creation of the Joint Commission of Nuclear Affairs (JCN) between Argentina and Brazil
1991: Creation of the Joint Commission of Nuclear Affairs (JCN) between Argentina and Brazil

Finally...
1994: Creation of ABACC
1995: Creation of the Joint Commission of Nuclear Affairs (JCN) between Argentina and Brazil

Timeline of Cooperation



A third nuclear power plant is currently under construction.

Its two nuclear power plants provide 3% of the country's electricity

Signs the NPT

Believed to have happened sooner!

Navy announced it had successfully enriched uranium

Brazil reveals it had a military program intended to develop nuclear weapons

It takes time...

1980: Agreement between Brazil and Argentina on the peaceful uses of nuclear energy.

1985: Declaration of Foz de Iguassu on peaceful purposes of Argentine and Brazilian nuclear programs.

1987: Declaration of Viedma - Brazilian delegation visits gas diffusion enrichment plant in Argentina.

1988: Declaration of Ipero - Argentine delegation visits ultra-centrifuge enrichment plant in Brazil.

And still more time...

1990: Second Declaration of Foz de Iguassu - basis for bilateral control.

1991: Signature of Guadalajara Agreement (July)

This is ABACC!

1991: Entry into effect of Bilateral Agreement and the signature of Quadripartite Agreement (December)

1994: Signature by Argentina and Brazil of the Treaty of Tlatelolco.

1994: Entry into effect of Quadripartite Agreement

So what is the Quadripartite Agreement?

This agreement is between Brazil, Argentina, ABACC, and the International Atomic Energy Agency (IAEA), and is a full-scope agreement on the application of safeguards.

- Both countries agree to accept the application of safeguards on all nuclear activities carried out in their territories, for the sole purpose of verifying that such materials are not diverted to nuclear weapons.
- The IAEA is entitled to ensure that safeguards are applied.
- ABACC undertakes to apply its safeguards to nuclear materials in all nuclear activities carried out in both countries.
- The IAEA applies safeguards in a manner to allow for verification of results.

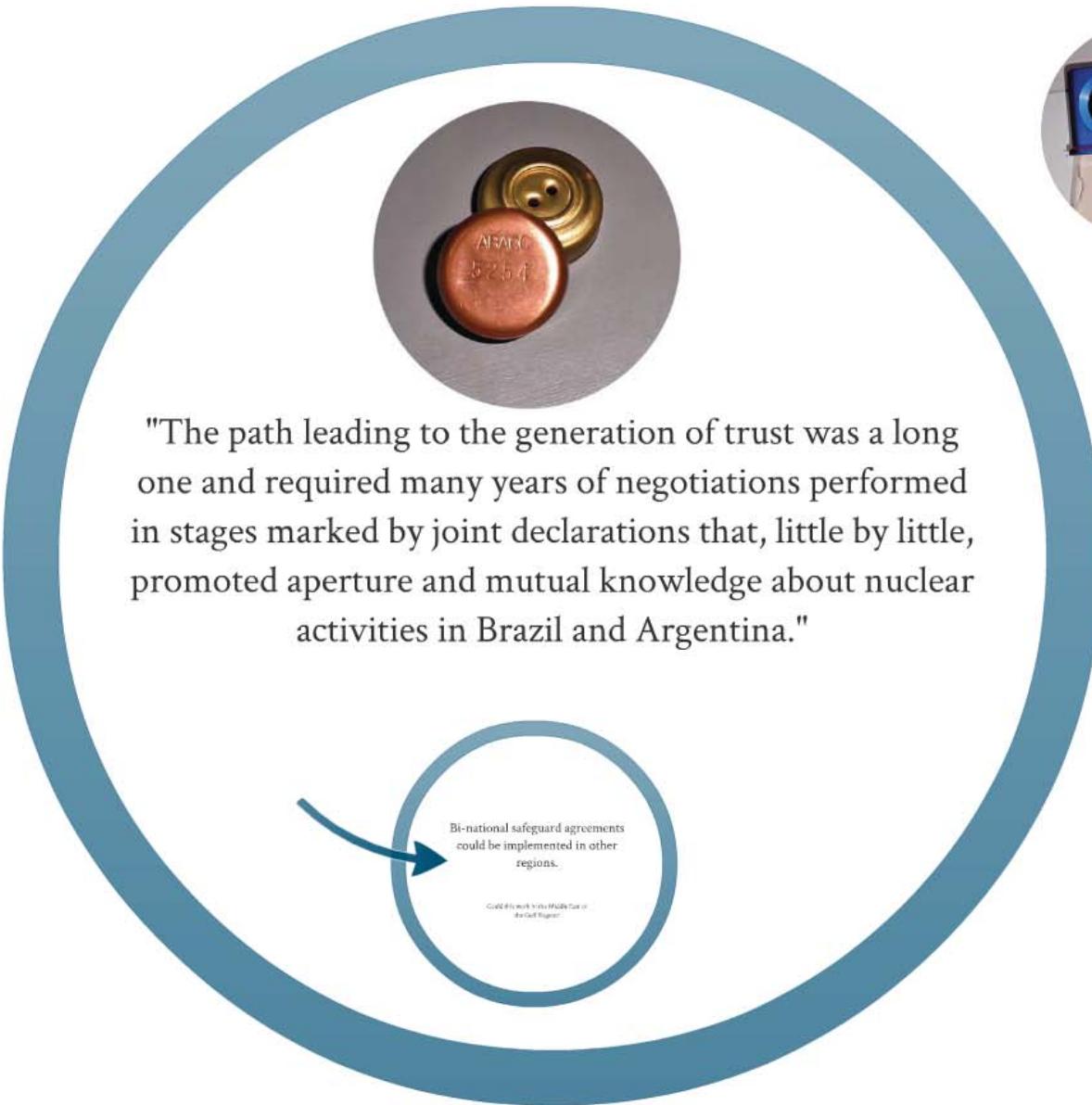
Regulatory Principles:
- ABACC and IAEA should draw independent conclusions.
- ABACC and IAEA should coordinate their activities in order to avoid unnecessary duplication of safeguards efforts.
- ABACC and IAEA should, as much as possible, work together, according to compatible safeguards criteria issued by both agencies, bearing in mind the requirement of preserving technological secrecy.

Since its establishment, ABACC has performed more than 1,200 inspections in 75 nuclear facilities of Argentina and Brazil. Accounting and control activities have been performed by a group of 10 professional technicians, with the support of 100 inspectors made available by the two countries.

Regulating Principles:

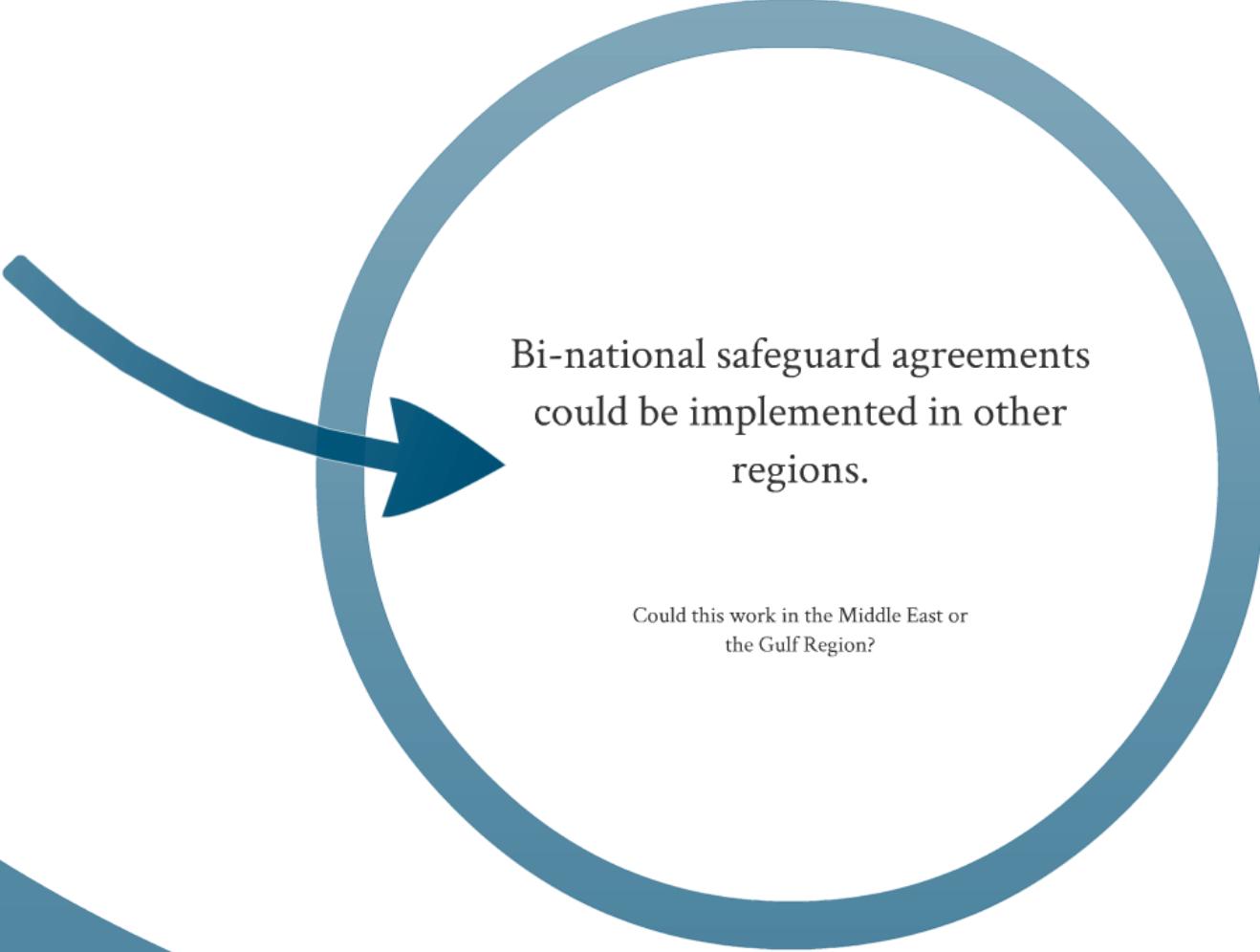
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(Pictures: abacc.org.br)

activities in Brazil and Argentina



Bi-national safeguard agreements
could be implemented in other
regions.

Could this work in the Middle East or
the Gulf Region?

REGIONS.

Could this work in the Middle East or
the Gulf Region?

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