



**Associação Brasileira da Infra-estrutura e Indústrias de Base
(Brazilian Association of Infrastructure and Basic Industries)**

**BRAZIL – GERMANY
ECONOMIC MEETING
2007**

Logistics and Infrastructure

November 18 to 20, 2007

Blumenau - SC



Adilson Primo

1o. Vice President - ABDIB



Brazil Country Risk – (EMBI+ Brazil) - (Dec 01 – Oct 07)

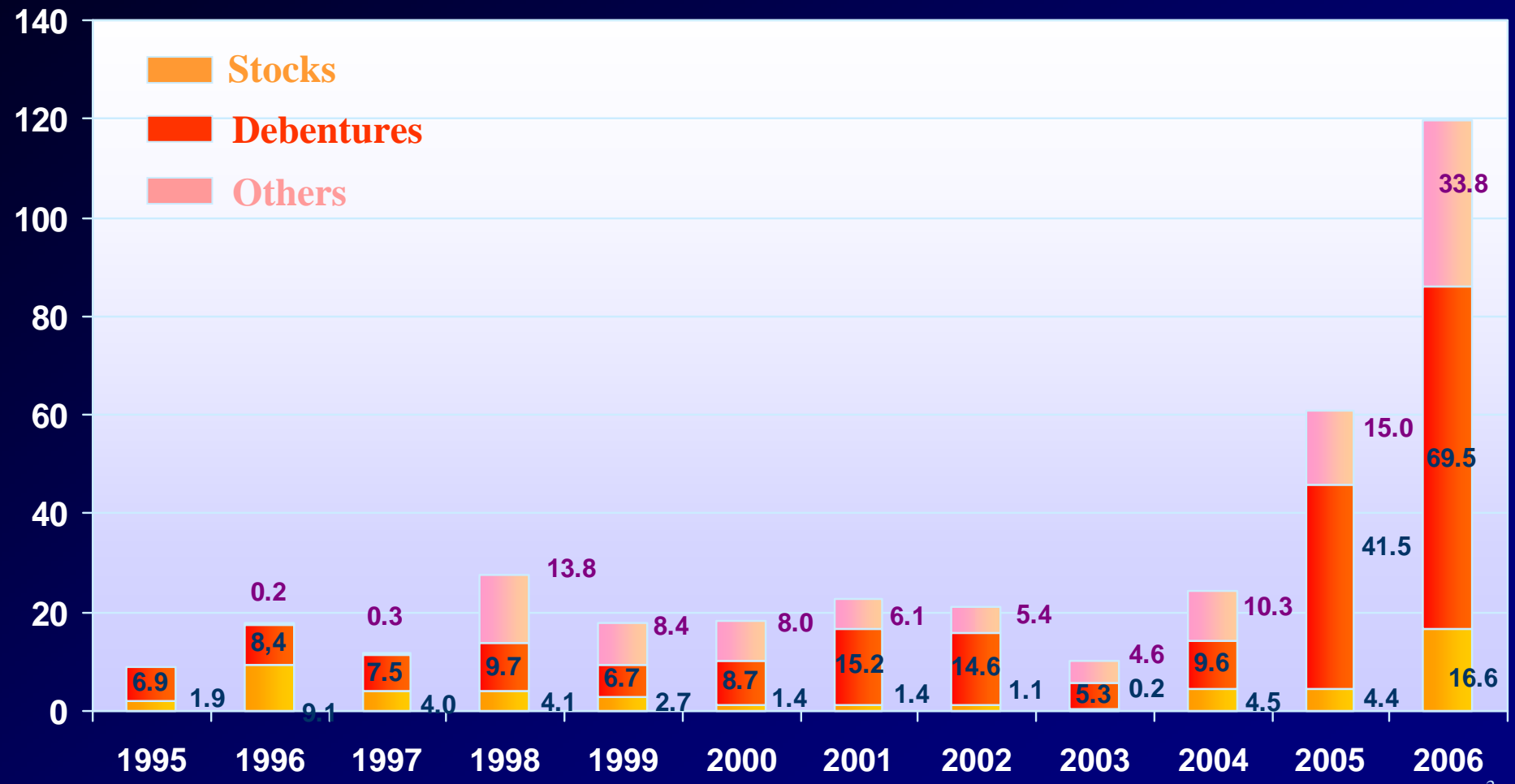
Basis points





Capital Market – Primary Issues: 1995 – 2006 (R\$ billions)

R\$ billion



* promissory notes, quotas of real estate investment funds, participation funds, collective investment bonds, among others



BNDES Outlays by Activity : 2000 - 2006 (R\$ billion and %)

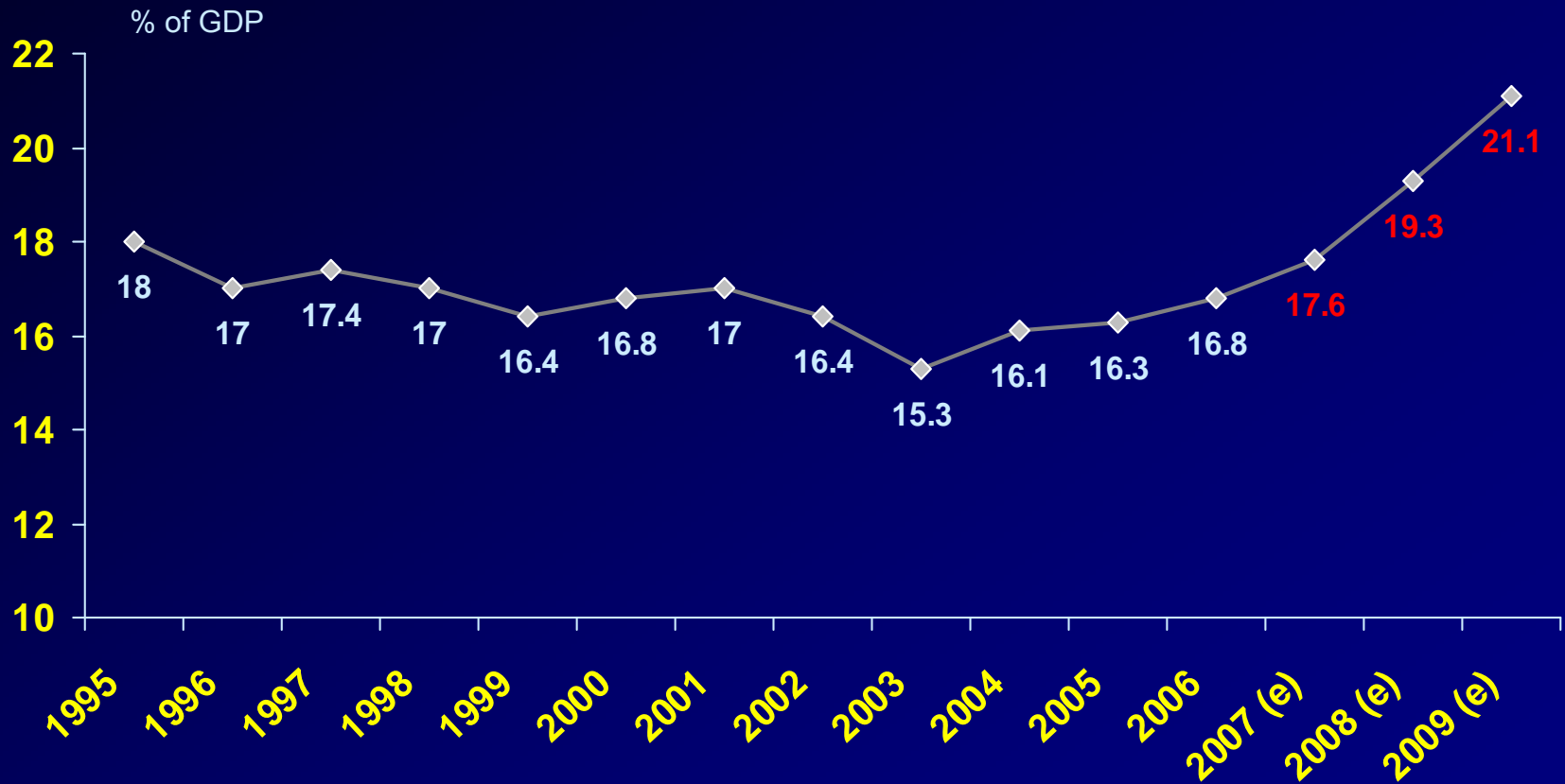
R\$ billion

Activity	2000	2001	2002	2003	2004	2005	2006
Agropecuary	1.9	2.8	4.5	4.6	6.9	4.1	3.4
Industry	7.7	9.6	14.0	14.1	13.1	18.4	19.7
Basic Industry	2.7	3.6	3.5	2.0	2.7	5.0	6.3
Commerce and Services	3.2	3.0	3.6	3.9	3.5	4.8	5.7
Infrastructure	7.6	6.3	11.9	8.9	13.6	14.6	16.2
Total	23.0	25.2	37.4	33.5	39.8	47.0	51.3
Share of basic industry	11.7%	14.2%	9.3%	5.9%	6.9%	10.7%	12.3%
Share of infrastructure	32.9%	25.0%	31.8%	26.7%	34.3%	31.2%	31.6%



BNDES - Investment Rate is Accelerating

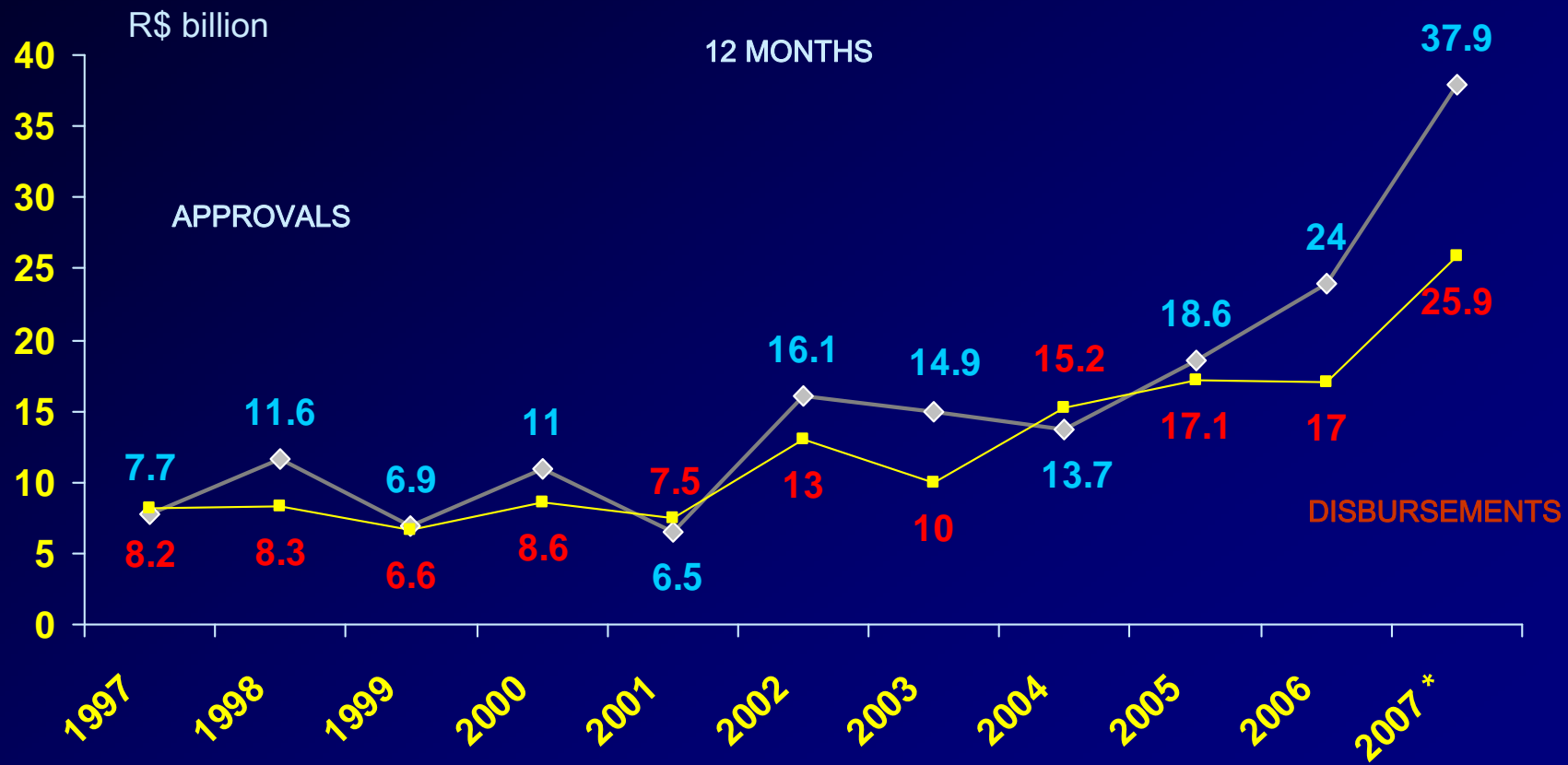
BRAZIL: Investment Rate Evolution





BNDES - Infrastructure – Disbursements and Approvals

GAP BETWEEN APPROVALS AND DISBURSEMENTS HAS CONSIDERABLY INCREASED AFTER 2005

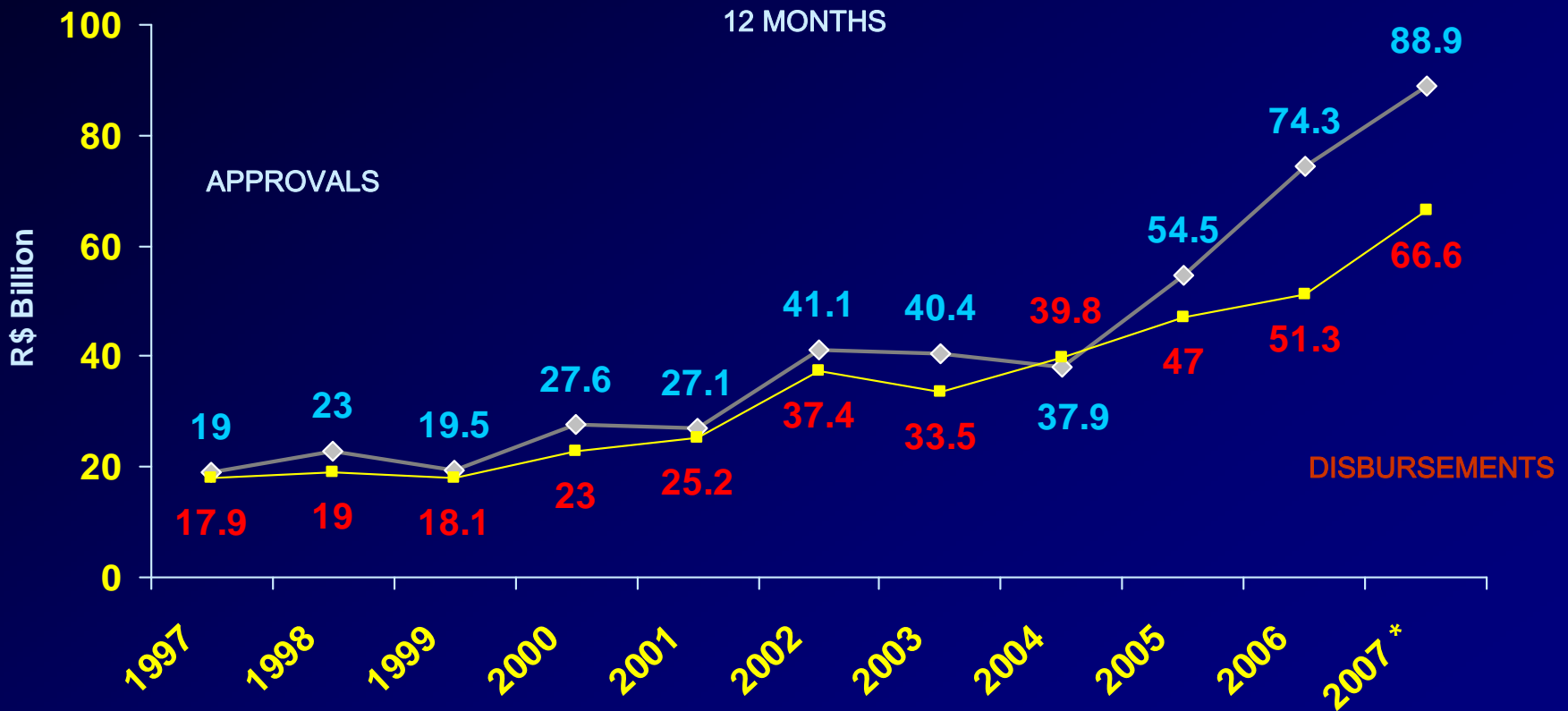


* Until October



BNDES -Infrastructure – Disbursements and Approvals

APPROVALS ARE R\$ 22 BILLION GREATER THAN DISBURSEMENTS



* Until October



PROFILE OF BRAZILIAN INFRASTRUCTURE



ELECTRIC POWER

GENERATION (2006)

	HPP	TPP	TNPP	SPP	EOL	VSHP	SOL	TOTAL
PROJECTS	158	948	2	280	15	204	1	1,608
POWER (MW)	73,807	20,412	2,007	1,642	237	108	ND	98,213

LEGEND

HPP: Hydroelectric Power Plant (\geq 30 MW)

TPP: Thermoelectric Power Plant

TNPP: Thermonuclear Power Plant

SPP: Small Power Plant (\leq 30 MW)

EOL: Eolian Plants

VSHP: Very small Hydroelectric Power Plant

SOL : Solar Power Plant



ELECTRIC POWER

TRANSMISSION - 2006

PHYSICAL SYSTEM		YEAR 1998	YEAR 2006	INCREASE %
TRANSMISSION LINE > 230 KV	NUMBER OF CIRCUITS	510	749	47 %
	KM	63,000	86,229	37 %
TRANSFORMERS	NUMBER OF UNITS	686	913	33 %
	MVA	143,200	196,800	37 %



ELECTRIC POWER

DISTRIBUTION - 2006

- Concessionaires = 64
- Invoicing of Distribution Sector = US\$ 36,2 billion (2006)
- Consumers = 58 million
- Service Rate = 97.3 % of houses
- Market consists of:
 - 18 Private Groups (36 companies)
 - 8 State Groups (15 companies)
- Power Supply by Sector: 313,151 MWh
- 2006 Investment: approx. US\$ 3,7 billion



OIL AND GAS

OIL (+ LPG)

- **Reserves Proven (2006): 12.2 billion of equivalent oil barrels, sufficient to supply the Country for the next 18 years, without considering new finds.**
- **National Product: 2,013 million barrels per day (2006 average)**
- **National Consumption: 1,908 million barrels per day (2006 average)**
- **Installed Refining Output (11 units): 1,985 million barrels per day.**

NATURAL GAS

- **Reserves Proven (2006): 347.9 billion cubic meters, a great part of this volume is related to oil reserves which cannot be produced separately.**



OIL AND GAS

NATURAL GAS

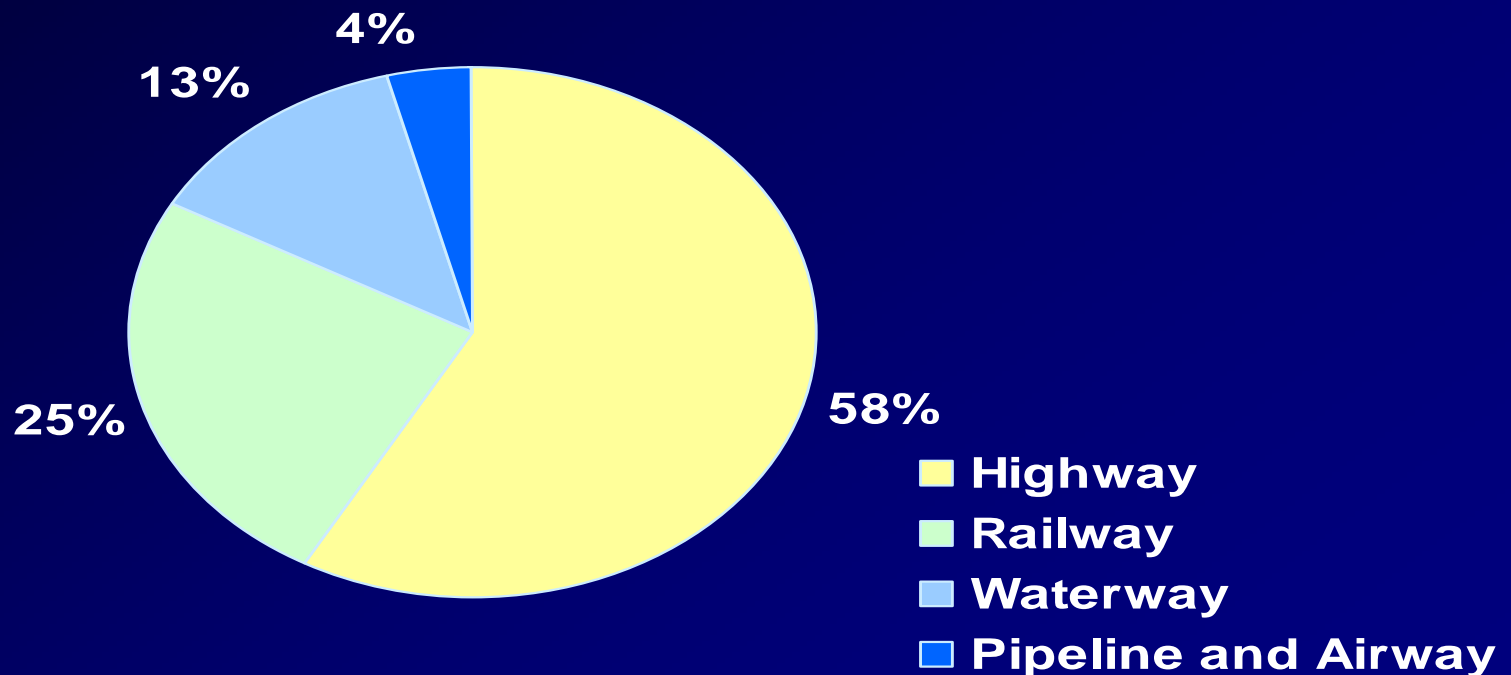
- **Foreseen Consumption Expansion (+17.7% p.y.)**
 - In 2005: 45.4 million m³/ day
 - In 2011: 121 million m³/ day
- **Foreseen Transport Network**
 - In 2005: 7.6 thousand km
 - In 2011: 16.1 thousand km
- **Foreseen Distribution Network**
 - In 2005: 11 thousand km
 - In 2011: 14.1 thousand km



TRANSPORTS

TRANSPORT MATRIX

MODAL PARTICIPATION IN LOAD TRANSPORTS





TELECOMMUNICATIONS

FIXED TELEPHONY

YEAR	Population	Installed Accesses	Density (Accesses/ 100 inhabitants)
1996	157.1 million	16.5 million	10.5
2005	186.3 million	50.3 million	27.0
2006	188.0 million	51.1 million	27.2

MOBILE TELEPHONY

YEAR	Population	Installed Accesses	Density (Accesses/ 100 inhabitants)
1996	157.1 million	2.7 million	1.72
2005	186.3 million	86.2 million	46.28
2006	188.0 million	99.9 million	53.2



BASIC SANITATION

SERVICE TO POPULATION (approx. 180 million)

✓ URBAN AREA (approx. 150 million)

- 138 million with treated water (deficit for 12 million)
- 80 millions with sewage collection (deficit for 70 million)
- 40 million with treated sewage (deficit for 110 million)
 - approx. 50% of collected sewage is treated

✓ RURAL AREA (approx. 30 million)

- 18 million with treated water (deficit for 12 million)
- 1 million with sewage disposal system (deficit for 29 million)



PRIVATE PARTICIPATION IN INFRASTRUCTURE



PRIVATE PARTICIPATION IN INFRASTRUCTURE

ELECTRIC POWER (POSTCONCESSION)

✓ Generation (1999 / 2006)

- 12,670 MW were tendered in this period, as follows:
 - 10,174 MW granted to the private sector (80.3%)
 - 2,496 MW granted to the public sector (19.7%)

✓ Transmission (1999 / 2006)

- 22,115 km were tendered in this period, as follows:
 - 17,135 km granted to the private sector (77.5%)
 - 4,980 km granted to the public sector (22.5%)

✓ Distribution (1999 / 2006)

- Private Participation = 70%
- Public Participation = 30%



PRIVATE PARTICIPATION IN INFRASTRUCTURE

OIL AND GAS (POSTCONCESSION)

ANP TENDER ROUNDS

<i>Blocks</i>	<i>Year</i>	<i>1999</i>	<i>2000</i>	<i>2001</i>	<i>2002</i>	<i>2003</i>	<i>2004</i>	<i>2005</i>	<i>1999 / 2005</i>
	<i>Round</i>	<i>1</i>	<i>2</i>	<i>3</i>	<i>4</i>	<i>5</i>	<i>6</i>	<i>7</i>	
Tendered		27	23	53	54	908	913	1,134	3,112
Awarded		12	21	34	21	101	154	251	594
New Agents		11	10	9	7	2	5	12	56

Note: 8th round suspended in 2006

ANP in the Regulatory Agency for Oil & Gas



PRIVATE PARTICIPATION IN INFRASTRUCTURE

HIGHWAYS (POSTCONCESSION)

✓ The highways under concession, although representing a small part of the total extension of Brazilian highways, are among the most important and the best in general conditions, such as pavement, signs and layout geometry.

- 36 concessionaires = 10,117 km (6.1 % of the network)
 - 13 (federal) = 4,088 km
 - 29 (state) = 8,607 km
 - 1 municipal = 25 km
- In 7 States: BA/ ES/ MG/ RJ/ SP/ PR/ RS
- Toll traffic: 657,192,402 million vehicles in 2006.
- Investment: R\$ 11.9 billion (1996/ 2006)



PRIVATE PARTICIPATION IN INFRASTRUCTURE

RAILWAYS (POSTCONCESSION)

✓ After 9 years of concession, the railway sector has much to celebrate in spite of the faced difficulties.

- National Railway Network = 29,798 km
- Railway Network under concession = 28,671 km
- Concessionaires = 11
- Locomotives = 1,587
- Railroad cars = 55,472
- Investments of Concessionaires (1997 / 2006) above R\$ 12,8 billions.
- Participation growth in freight transports in the Country from 19% to 25%
- 1997- 253.1 millions of freight ton.
- 2006- 387.4 millions of freight ton.



PRIVATE PARTICIPATION IN INFRASTRUCTURE

PORTS (POSTCONCESSION)

- Number of Ports
 - Private Terminals outside of pier = 43
 - Public Administration Ports = 36
 - Private Administration Ports = 3
 - **TOTAL = 82**

- Number of Port Terminals
 - Private use terminals = 93
 - Public use terminals = 87
 - **TOTAL = 180**

- Yearly Freight Operated in Ports
 - Solid bulk Cargo = 59%
 - Liquid Bulk Cargo = 28%
 - General Cargo = 13%
 - **TOTAL = 100%**



PRIVATE PARTICIPATION IN INFRASTRUCTURE

TELECOMMUNICATIONS (POSTCONCESSION)

✓ Prior to privatization, telecommunications were characterized by minimum services, regional inequalities and marginalization of access to population sectors of reduced purchasing power. The reform and the privatization have presented highly noteworthy positive results:

- Fixed Telephony

- Number of installed accesses was 16.5 million in 1996 and 51.1 million in 2006

- Cellular Telephony

- Number of cell terminals was 2,744,000 in 1996 and 99,9 million in 2006



BASIC SANITATION – Brazilian Experience

PRIVATE OPERATION AND SERVICES (Water Supply and Sewage Treatment)

✓ 40 operators today:

✓ 63 municipalities attended comprising 8.5 million people (R\$1.1 billion in investments until 2004 and R\$ 2.3 billion until termination of contracts).

✓ Different alternatives

- Full Concession = 43
- Partial concession and BOT = 12
- Capital Participation = 1
- Management Contract = 1



OVERALL SECTOR OPPORTUNITIES



INVESTMENT DEMAND FOR INFRASTRUCTURE

ELECTRIC POWER	US\$ 8.7 B
OIL & GAS	US\$ 16.6 B
TRANSPORTATION/ LOGISTICS	US\$ 8.8 B
BASIC SANITATION	US\$ 5.0 B
TELECOMMUNICATION	US\$ 7.0 B
TOTAL	US\$ 46.1 B /year

US\$ = R\$ 1,9 (September)



PAC

GROWTH ACCELERATION

PROGRAM



PAC IN SUMMARY

- ❑ A STRATEGIC PROGRAM ORIENTED TO INVESTMENTS MAINLY IN INFRASTRUCTURE (launched last January 22)**

- ❑ A SET OF NEW LEGAL MEASURES TO FACILITATE INVESTMENT**

- ❑ A MANAGEMENT STRUCTURE: PERIODIC REVIEWS, TRANSPARENCY, STEERING COMMITTEE (3 Ministries: Civil Cabinet, Planning, Finance)**

- ❑ MEDIUM RANGE PLANNING: OVER 1,000 IDENTIFIED ACTIONS AND PROJECTS**



2007 – 2010 EXPECTED INVESTMENT (R\$ Million)

1. ELECTRIC POWER		78,400
2. OIL & GAS		179,000
3. BIO FUEL		17,400
4. LOGISTICS		47,699
5. NAVAL INDUSTRY		10,581
6. SOCIAL & URBAN		64,500
	SUB-TOTAL	397,580
7. HOUSING		106,300
	TOTAL	503,880*

* ABDIB first estimate: 40% private, 60% public



2007 – 2010 EXPECTED INVESTMENT (R\$ Million)

1. ELECTRIC POWER	GENERATION	65,900 +	
“	TRANSMISSION	12,500 =	78,400
2. OIL & GAS			179,000
3. BIO FUEL			17,400
4. LOGISTICS	ROADWAYS	33,437 +	
“	RAILWAYS	7,863 +	
“	PORTS	2,663 +	
“	AIRPORTS	3,001 +	
	HYDROWAYS	735 =	47,699
5. NAVAL INDUSTRY			10,581
6. SOCIAL & URBAN	SANITATION	40,000 +	
“	SUBWAYS	3,100 +	
“	OTHERS	21,400 =	64,500
TOTAL			397,580



PAC IN SUMMARY

A SET OF NEW LEGAL MEASURES:

- ❑ **INCENTIVE TO CREDIT AND FINANCING.** Ex. a new investment fund (R\$ 5.0 B), additional amount to finance sanitation and housing (R\$5.2 B)
- ❑ **REDUCTION OF TAX BURDEN.** Ex. PIS/COFINS = zero on goods and services related to infrastructure projects; Income tax = zero for individuals on investment fund applications.
- ❑ **IMPROVEMENT OF TAX SYSTEM.** Ex. Depreciation period reduced from 48 to 24 months.
- ❑ **IMPROVEMENT OF INVESTMENT ENVIRONMENT.** Ex. Law bill to regulate competences on environmental matters



PAC IN SUMMARY

A SET OF NEW LEGAL MEASURES:

- ❑ MOST OF ISSUED MEASURES ALREADY APPROVED BY CONGRESS AND CONVERTED INTO LAWS

- ❑ ROOM TO IMPROVE AND OPTIMIZE PROCEDURES AS WELL AS FOR OTHER RELATED LAW BILLS
 - ❑ Gas law bill
 - ❑ Regulatory agency law bill
 - ❑ Public procurement law bill



PAC IN SUMMARY

A MANAGEMENT STRUCTURE





KEY PROJECTS BY SECTOR

TRANSPORTATION

- ✓ **Railway Projects (for concessions):**
 - North - South (Tocantins State, Goias State)
 - New Trans-northeast
 - Ferronorte (Mato Grosso State)

- ✓ **Airport Modernization and Expansion Program:**
 - 22 locations (total BR\$ 3 billion)

- ✓ **PPP Projects:**
 - BR 116 – BR 324 Federal Roads
 - Rio de Janeiro Roadway Ring
 - Sao Paulo Railway Ring



KEY PROJECTS BY SECTOR

PORTS PROGRAM

estimated US\$ million

<input type="checkbox"/> Santos (São Paulo State)	120
<input type="checkbox"/> Sepetiba (Rio State)	13
<input type="checkbox"/> Rio de Janeiro (Rio State)	20
<input type="checkbox"/> Itajaí (Santa Catarina State)	20
<input type="checkbox"/> São Francisco do Sul (Santa Catarina State)	13



KEY PROJECTS BY SECTOR

ELECTRIC POWER

- ✓ **Generation Projects (total = 12,386 MW; BR\$ 65.9):**
 - Rio Madeira (Jirau = 3,300 MW, Santo Antonio = 3,150 MW)
 - Estreito = 1,087 MW
 - Belo Monte (1st phase) = 5,681 MW (total = 11,000 MW)

- ✓ **Transmission Projects (total = 13,826 km; BR\$12.5):**
 - North – South III
 - Interconnection Madeira project x Sao Paulo State
 - Interconnection North – Northeast
 - Santa Cruz (Rio Grande do Sul State)



KEY PROJECTS BY SECTOR

OIL & GAS

✓ E & P Projects:

- 7 fields = 1,180,000 barrels/day

✓ Oil transportation:

- 42 new ships

✓ Natural Gas Projects:

- Santos Field = 15 MM m³/day
- Espirito Santo State Field = 3.5 MM m³/day

✓ Gas Pipelines:

- Southeast – Northeast = 1,371 km (“Gasene”)



ONE LAST MESSAGE



ENGINEERING AND THE CAPITAL GOODS INDUSTRY

- ✓ **Brazilian engineering companies are highly qualified to perform studies, basic and executive projects, assembly and construction, and operate under strict quality management standards in all infrastructure sectors, by using front-end technology.**
- ✓ **Brazilian capital goods industry compete in global markets with high quality standards, competitive products, technology innovation and installed capacity able to supply both internal and external markets.**



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(Brazilian Association of Infrastructure
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**Homepage - www.abdib.org.br
e-mail - abdib@abdib.org.br**