



*The Brazilian Association of Technology for
Equipment and Maintenance*

Brazil

The Construction Equipment Market: Growth and Prospects

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CONEXPO
22nd March, 2011



The Brazilian Association of Technology for Equipment and Maintenance

- Created 1988
- More than 1,000 members, counting companies and professionals.
- Brings together OEMs, parts makers, purchasers, rental companies, importers, others.
- Promotes debate and discussion on key aspects of management, use, maintenance and operation of construction and mining equipment.
 - Promotes training, specialization and retraining.
 - Annual study of equipment market.
 - Two magazines:
 - M&T (maintenance + technology)
 - Grandes Construções (major construction projects).
 - Three major fairs in Brazil.
 - Organizes technical and commercial missions.



GRANDES
CONSTRUÇÕES



Revista
M&T
Manutenção & Tecnologia



M&T EXP



CONGRESSO
SEMINÁRIO
WORKSHOP



M&T
PEÇAS E SERVIÇOS



INSTITUTO
OPUS



CONSTRUCTION
EXP 2011



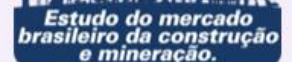
CUSTO-HORÁRIO
DE EQUIPAMENTOS



MISSÕES TÉCNICAS



Anuário
M&T
Manutenção & Tecnológico



Estudo do mercado
brasileiro da construção
e mineração.



SOBRATEMA **FÓRUM**
Brasil
Infraestrutura



Normatização de
EQUIPAMENTOS



Relações
Institucionais



Editoração
de **Livros**

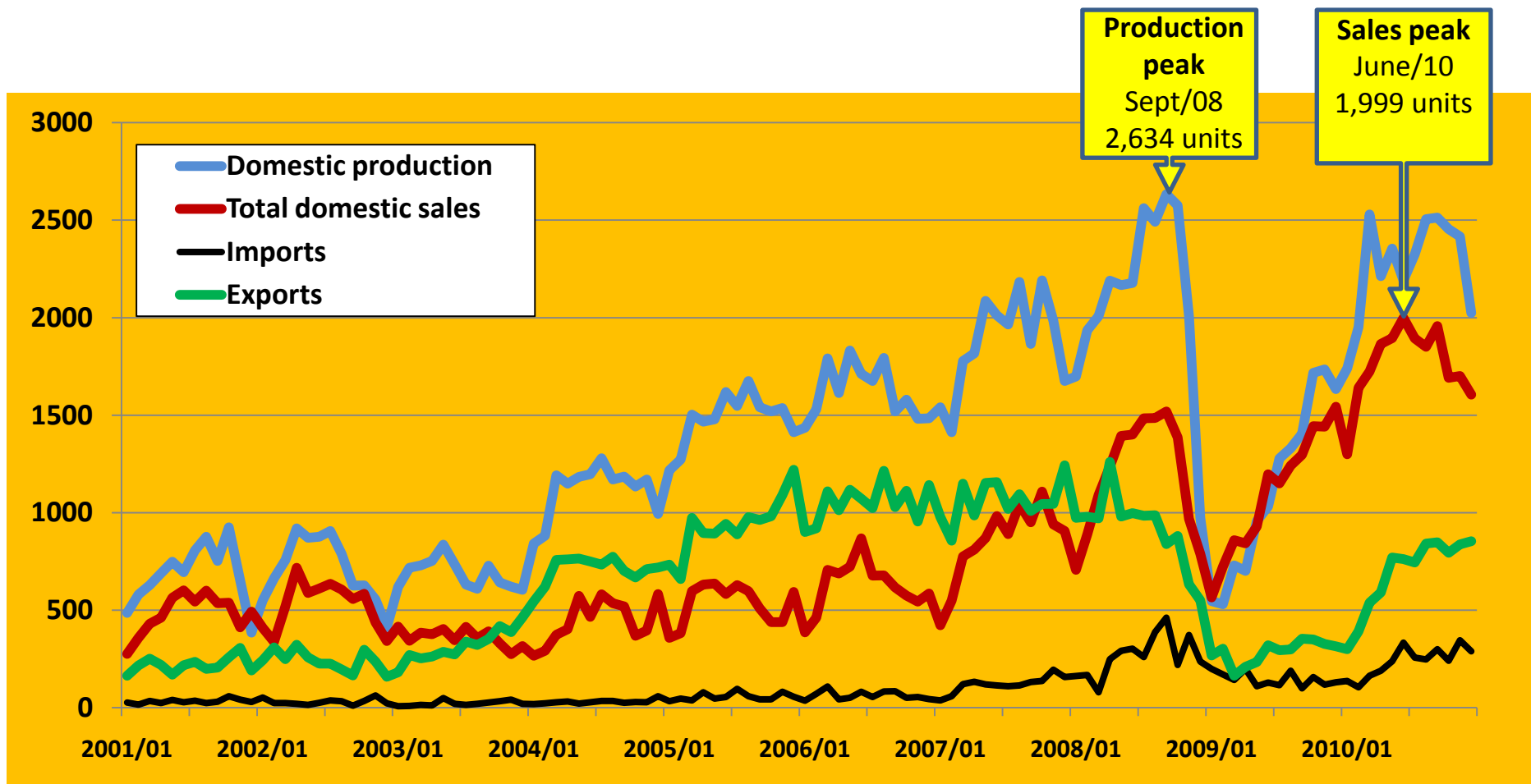


PRINCIPAIS
INVESTIMENTOS

Contents

- The Brazilian construction equipment market 2010 – 2015
- The parts market
- The new government + investment plans
- Major projects
- World Cup + Olympics

Earthmoving equipment since 2001



Data: Abimaq

The Brazilian construction equipment market: key facts

- Brazil today: about 3.5% of world market; about 40% of Latin American market
- New equipment demand:
 - Construction: 70% - 80%; Mining: 15% - 20%; Agriculture: 5% - 10%
- Rental market: estimated around 25% of fleet for earthmoving equipment; growing

Players

- OEMs (most also import and export): Caterpillar, CNH, Komatsu, JCB, Volvo, Terex, Agco, Liebherr, Atlas Copco, Proton Primus, Randon
- Expansions (2010): CNH, JCB, Terex and Caterpillar announce, open or acquire second factories for construction equipment; Dynapac expands capacity by 50%
- Importers: Hyundai (factory announced); JLG, Doosan (factory announced); XCMG (three assembly centers announced); LiuGong, Sany (assembly center opened); Manitowoc announces first factory (truck cranes), Sunward (China) starts importing

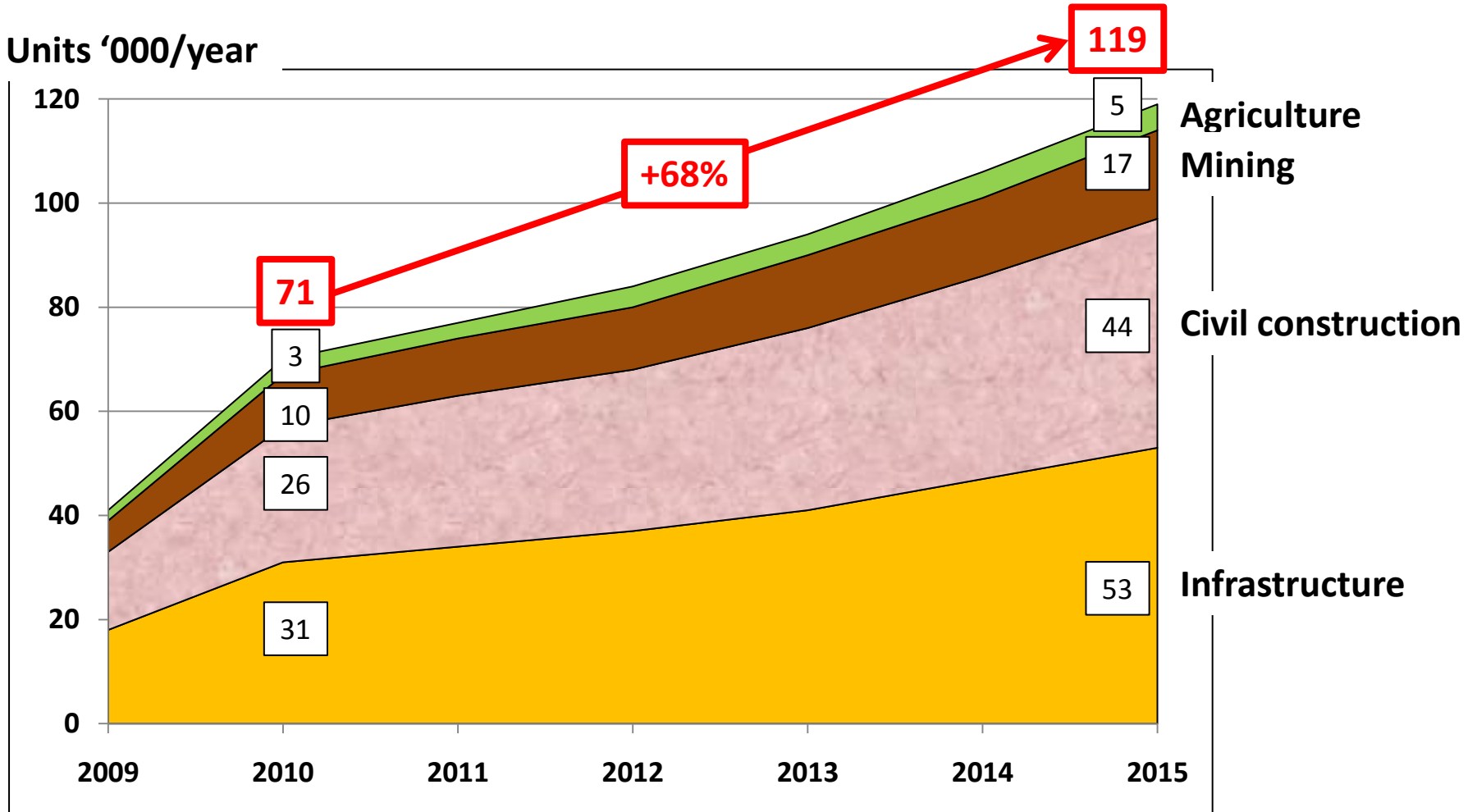
Sobratema Market Study 2010

Domestic sales (including imports)	2009*	2010	Δ	2011	Δ
Off-highway trucks	50	150	200%	230	53%
Hydraulic excavators	2,900	5,500	90%	6,150	12%
Skid steers	1,200	1,750	46%	1,930	10%
Motor graders	1,250	2,150	72%	2,400	12%
Shovel loaders	2,450	4,400	80%	5,050	15%
Back hoe loaders	4,650	7,300	57%	7,520	3%
Compactor rollers	1,500	2,540	69%	2,800	10%
Dozers	550	1,150	109%	1,270	10%
Subtotal: earthmoving equipment	14,550	24,940	71.4%	27,350	+9.7%
Portable compressors	1,400	1,800	29%	2,100	17%
Tower cranes	200	400	100%	420	5%
Truck cranes, crawler cranes	400	500	25%	600	20%
Aerial work platforms	900	3,000	233%	3,400	13%
Telehandlers	150	400	167%	500	25%
Heavy wheel tractors**	2,160	3,590	66%	3,950	10%
Subtotal: other equipment	5,210	9,690	86.0%	10,970	+13.2%
Subtotal: main construction equipment	19,760	34,630	75.3%	38,320	+10.7%
Highway trucks**	21,600	35,900	66%	39,500	10%
Total: principal equipment used in construction	41,360	70,530	70.5%	77,820	+10.3%

*2009 – revised data; **Estimates of demand in construction sector

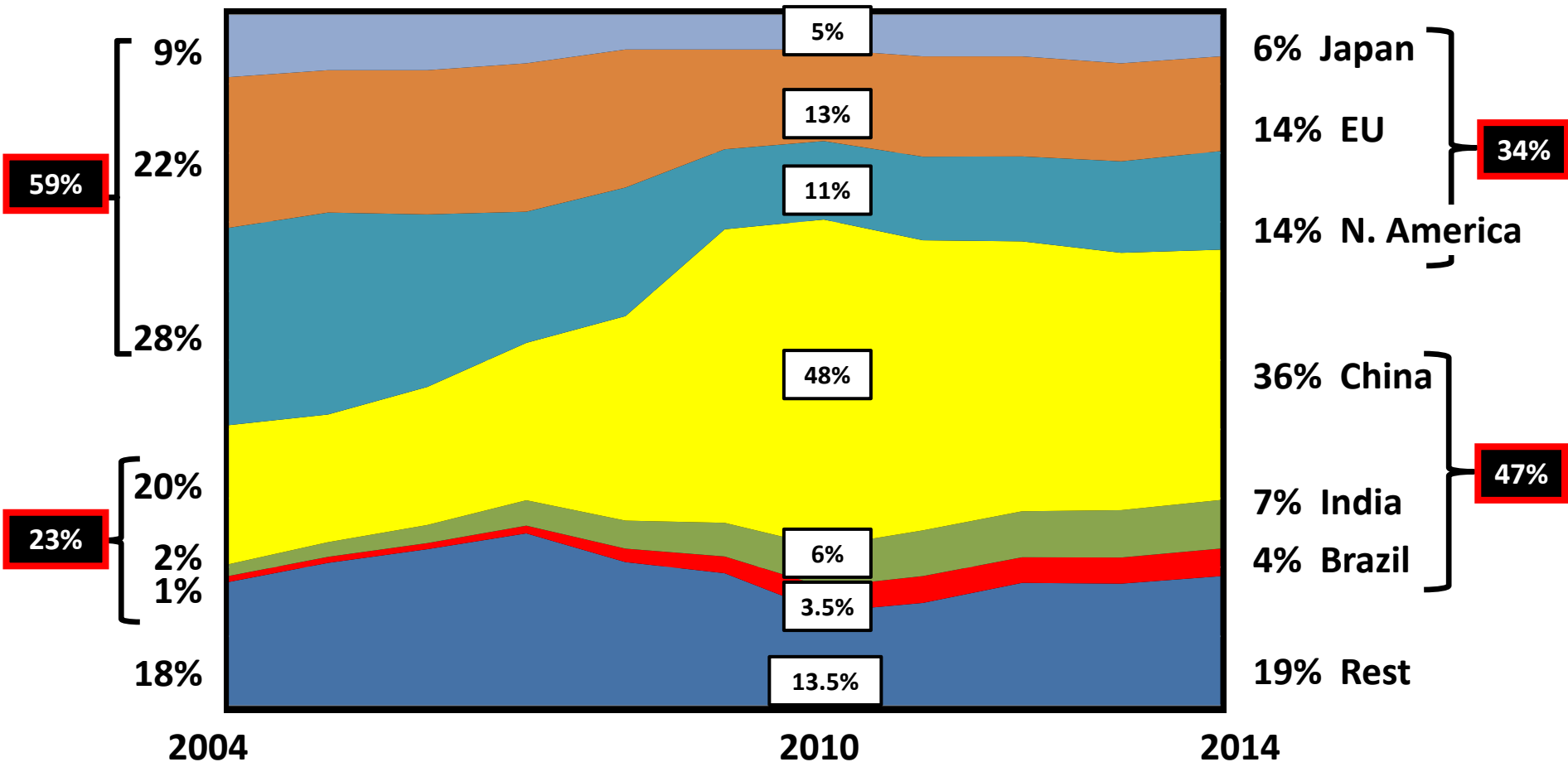
Sobratema Market Study 2010 – projection 2015

Units '000/year



The new world order

Share of world demand for construction equipment*



*Earthmoving + handling equipment

Sources – Sobratema, Abimaq, Off-Highway Research, Japan Construction Equipment Manufacturers Association; Preparation – MiniMax Editora

Equipment parts market: brief description

Most OEMs use mix of imports and local suppliers (many multinationals)

Total aftermarket:

- Initial estimate – approximately US\$2.2 billion in 2010
- Services such as engine rebore and parts reconditioning could add US\$1 billion
- Some equipment users do a lot of in-house services
- Many smaller companies have skimpy maintenance; buy cheapest parts
- Many small Chinese companies are looking at Brazilian aftermarket – M&T Expo 2009 had around 120 Chinese exhibitors, mainly aftermarket suppliers
- Foreign parts suppliers have difficulty in establishing credibility in the aftermarket

“Alternative” parts aftermarket

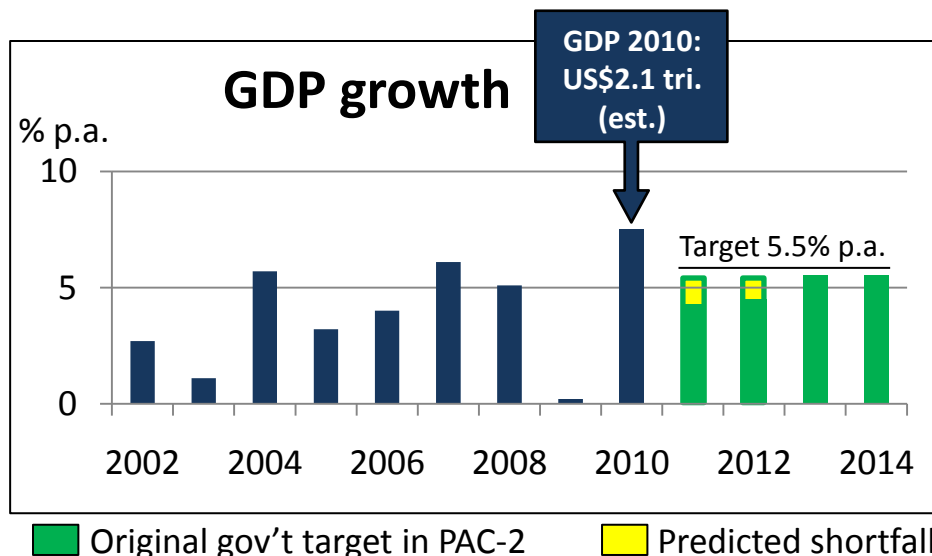
- “Alternative” market may be 50% of total aftermarket (by volume)
- “Alternative” parts cost on average half the price of “official” parts
- Leading constructors tend to use only “official” parts
- Recent equipment with higher technology has fewer “alternative” parts available

Brazil's new president... and the economy



Dilma Rousseff

- Brazil's first woman president
- Daughter of Bulgarian immigrant, Brazilian mother
- Political prisoner (1970-72)
- Divorcee, 63, one daughter
- Economist, specialization in energy
- Member of the Workers' Party (PT); chief of staff to President Lula
- Four-year term: Jan. 01, 2011-2015
- Reputation: more a manager than a politician



- Brazil is now world's 7th biggest economy
- Government overspent in 2010
- Now facing inflationary pressure
- Plans to cut R\$50 billion \approx 1.35% of GDP in 2011
- Government says social programs and infrastructure investment safe
- Market predicts GDP growth of 4.3% this year, 4.5% in 2012, against government target of 5.5%

Investment plans

The Federal Government's Faster Growth Program – PAC-2*

Major areas – US\$ billions

Area	2011-14	After 2014	Total	Share
Energy	232.75	313.55	546.30	68.70%
Housing (including MCMV)	139.10	0	139.10	17.49%
Transportation	52.25	2.25	54.50	6.85%
Better Cities	28.55	0	28.55	3.59%
Water and Electricity for All	15.30	0	15.30	1.92%
Citizen Community	11.50	0	11.50	1.45%
TOTAL	479.45	315.80	795.25	100.0%
Distribution	60.3%	39.7%	100.0%	

Sobratema investment survey:** 9,550 projects through 2016; US\$600 billion

BNDES projection: US\$2 trillion through 2014 (total investment)

*PAC-2 as announced by the federal government in March of 2010; converted at US\$1.00 – R\$2.00 ** With Cri-Active

High-speed rail

Brazil's first HSR line – likely profile:

- 430 km Rio – São Paulo + 88 km branch to Campinas
- At least 70 km in tunnels



- R\$33 billion (US\$16 – 19 billion, depending on FX rate)
- Most financing via Brazilian Development Bank
- Probable PPP, 40-year concession
- Schedule: tender this year; operating 2016
- Various Brazilian/international consortiums likely to bid
- Reported interested: Alstom, Siemens, AnsaldoBreda, Mitsubishi, Kawasaki, Toshiba, Hitachi, Hyundai, China Railway Materials

Brazilian companies in European HSR

- 150 km stretch of Lisbon-Madrid line
- Odebrecht and Andrade Gutierrez in consortium headed by Brisa



Spain's AVE 103
Portugal's Alfa Pendular



Belo Monte

World's 3rd or 4th largest* hydropower dam

✓ **US\$10.6 billion**

✓ **11,233 MW**

- Firm capacity: 4,571 MW
- Where: Xingu River
- Start: April 2011
- On stream: Feb 2015
- US\$800 m. for mitigation + sustainable development

Three main dams

- Maximum height: 90 m
- Total length: 10,144 m
- Total volume (rock/earth/concrete): 30.36 million m³
- Main turbines: 20 x 550 MW Francis
- Lake 516 km²



And coming soon: Tapajós/Jamanxim rivers, seven dams, 14,245 MW

*Three Gorges (China) 18,200 MW potentially expanding to 22,500 MW;
Itaipu 14,000 MW; Xiluodu (China) 13,860 MW, potentially on stream 2015.

Other big dams now building

Madeira River, NW Amazon



- **Santo Antonio: 3,150 MW**
- 44 x 72 MW bulb turbines
- US\$4.4 billion
- On stream 2012

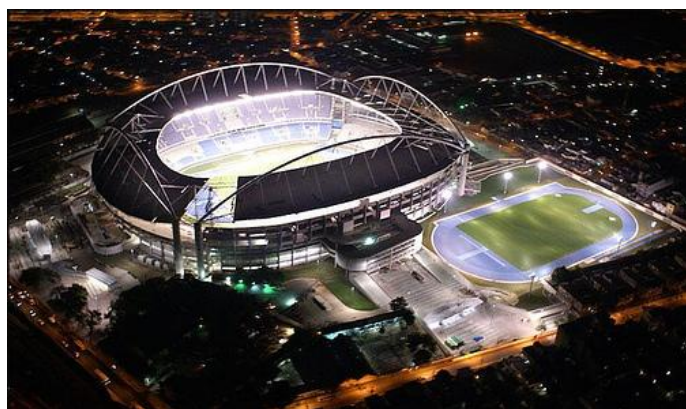


- **Jirau: 3,300 MW**
- US\$4.8 billion
- 44 x 75 MW bulb turbines
- On stream 2013



World Cup: Campo Grande

Olympics: João Havelange Stadium, built for 2007 Pan American Games



World Cup

- Matches in 12 cities nationwide
- Stadium investment: US\$2.85 bi
- Total official investment: US\$8.65 bi
- Possible total (inc. private): US\$30 bi?



Olympics

- Direct cost: US\$2.8 billion
- Stadiums, urban transport systems, etc US\$11 billion
- Rio State Industry Federation (Firjan) estimates Rio could receive investments of US\$120 billion through 2016



These events will accelerate other major infrastructure projects, like the São Paulo – Rio high speed rail link

Most important?



M&T EXP

LATIN AMERICA'S BIGGEST CONSTRUCTION EQUIPMENT FAIR!

The 2009 fair:

- Exhibitors: 436 (Brazil: 231; international: 205)
- Visitors: 41,372 (international 2,482)
- Estimated business volume: US\$0.5 billion during the event; US\$1.5 billion in next two years
- Total area: 85,000 m²
- National stands: China, Spain, Italy, South Korea
- Brands represented: 880, from 65 countries

2012: 29 May-2 June
São Paulo, Brazil
Don't miss it!
www.mtexpo.com.br

Principal exhibitors in 2009



Two new fairs in 2011



Latin American Trade Fair of Parts and Services for Construction and Mining Equipment.

- The only fair of its kind in Latin America.
- Focus on **doing business**
- U\$800 billion in the next five years
- More than 110,000 constructors and 12,000 maintenance companies, with more than 450,000 items of equipment operating in the country.



SOLUTIONS FOR:

- Specialized engineering services
 - Concreting services
 - Project management; works supervision
 - Urban infrastructure
 - Materials management
- Ground engaging tools, wear parts, drill bits, etc

Both events: 10-13 August 2011 - Imigrantes Exhibition Center, São Paulo, SP



The Brazilian Association of Technology for Equipment and Maintenance

Thank you!

Muito obrigado!

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