



**BRAZILIAN MINISTRY
OF MINES AND ENERGY**

Public Procurement of Energy Efficient Products in Brazil

World Bank Workshop on PP of EEP
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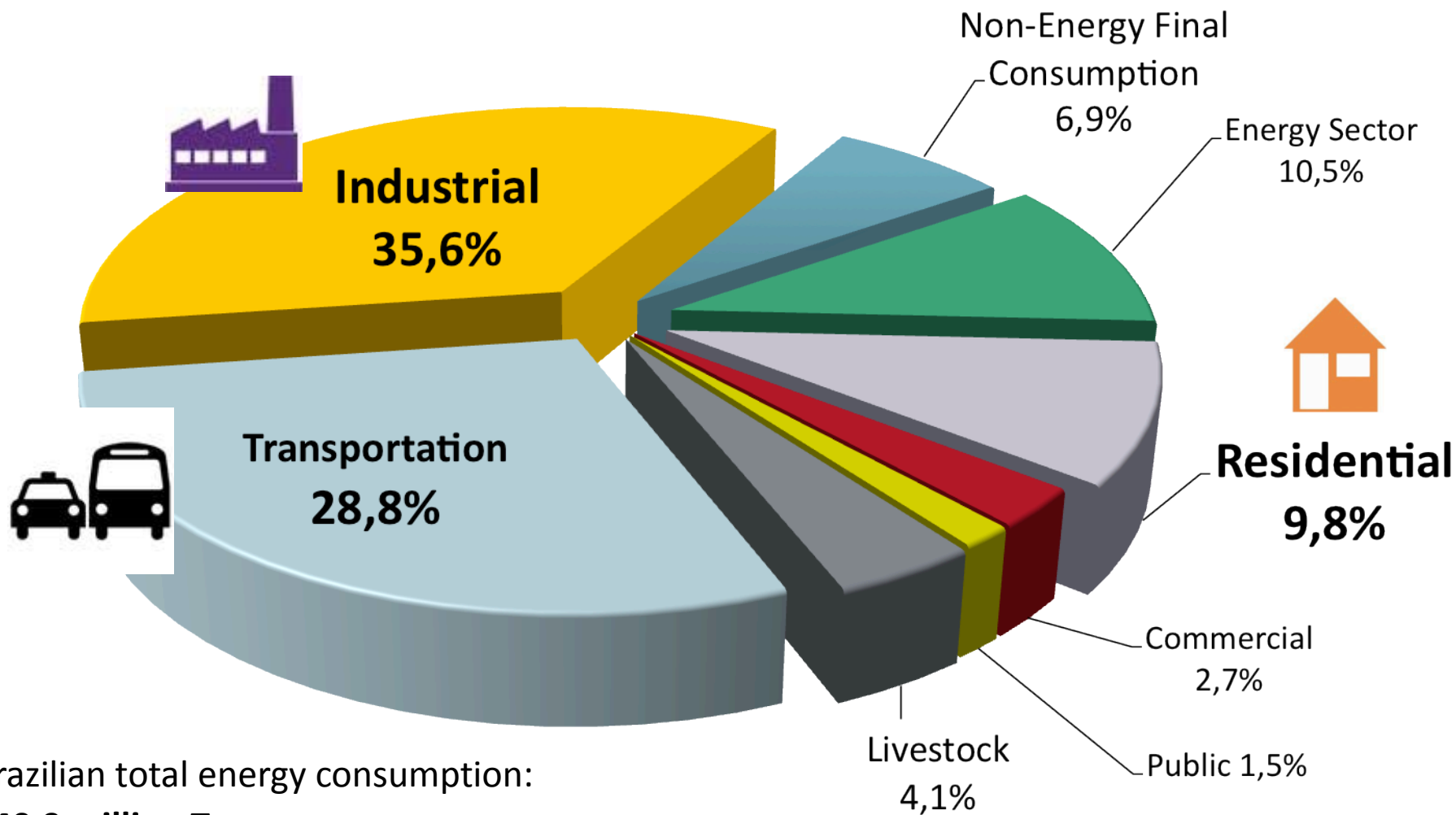


ENERGY EFFICIENCY ON PUBLIC SECTOR IN BRASIL – AN OVERVIEW

- Brazil has an overall energy efficiency policy linked with the energy sector planning process and with of the policies for reducing CO₂ emissions. There are no targets specifically driven to the public sector, but the working plan of PNEf (National Plan of Energy Efficiency) under elaboration is drawing numbers for public buildings, mainly based on air conditioning and lighting.



Brazilian Energy Consumption (%) – Fiscal Year 2010



Brazilian total energy consumption:
240,9 million Toe



ENERGY EFFICIENCY ON PUBLIC SECTOR IN BRASIL – AN OVERVIEW

- In spite of not having overall targets yet, normative instruction number 01/2010 from the Planning Ministry states that environmental sustainability criteria, Energy Efficiency (EE) included, has to be considered in public procurement process.
- To make this general guideline followed in real world it is necessary to have reliable reference for selecting the best EE products, technical support for justifying not just follow the traditional cost criteria alone and overcome what we could call “red tape cultural habits”. Solid reference for selecting products is necessary to avoid paying more for less.
- Historically consolidated energy efficiency governmental programs, mainly based on labeling, give this reference in Brazil.



ENERGY EFFICIENCY IN BRAZIL: MAIN PROGRAMMES



PBE (1984)
Brazilian Labeling Program



PEE (2000)
Energy Efficiency Program

(Power Utilities Compulsory EE Program: destinate, annually, an amount of at least 0.5% of its net operating revenue in actions aiming to prevent electricity waste and energy efficiency.



PROCEL (1985)
National Program for Electricity Conservation



Law 10.295 (2001)
Energy Efficiency Law



CONPET (1991)
National Program for Rational use of Oil Products and Natural Gas

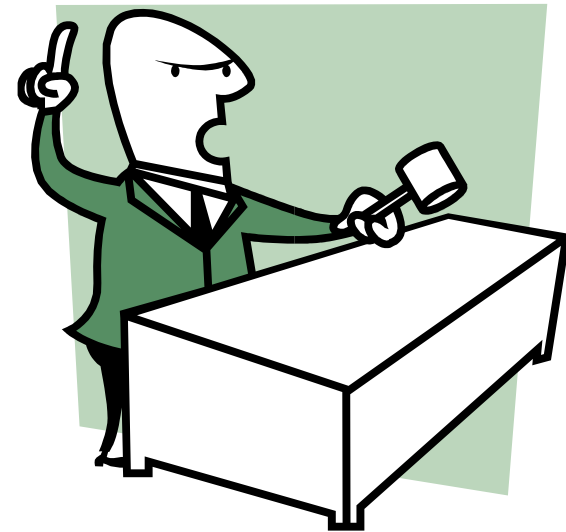


PNEf: National Energy Efficiency Plan (published in 2011)
Implementation phase



ENERGY EFFICIENCY LAW 10.295 (2001)

- The Executive Power is responsible for establishing **minimum levels of energy efficiency or maximum consumption levels** for energy-consuming equipment and machinery.
- **Mandatory**
- **Societal participation through consultations and public hearings, and World Trade Organization notification.**





ENERGY EFFICIENCY LAW – RESULTS Regulated Equipment (2002 - 2010)



Three-Phase Induction Motors

Decree N°. 4.508/2002 – (Specific Regulation)

Target Programme – Cross-Ministry Ruling N°. 553/2008



Compact fluorescent lamps

Cross-Ministry Ruling N°. 132/2006

Target Programme – Cross-Ministry Ruling N°. 1008/2010



Freezers and Refrigerators

Cross-Ministry Ruling N°. 362/2007



Gas stoves and ovens -Cross-Ministry Ruling N°. 363/2007



Air Conditioners - Cross-Ministry Ruling N°. 364/2007



Gas and Water Heaters - Cross-Ministry Ruling N°. 298/2008



Electromagnetic reactors for sodium and metal vapor lamps - Cross-Ministry Ruling N°. 959/2010





ENERGY EFFICIENCY ON PUBLIC SECTOR IN BRASIL – AN OVERVIEW

- Mandatory minimum energy efficiency levels for equipment helps a lot spreading out the best quality equipment. But the process from start voluntary labeling until the mandatory phase, has to be gradual to built reliable reference and to give time to local industry adapt their production to the new standards with reasonable prices.
- Technical training, regulatory adaptation, gradual implementation, land mark projects, showing the numbers, projects integrated with a general planning process are lessons that we are learning in the process of EE in Public Procurement.



NATIONAL PLAN ON ENERGY EFFICIENCY - PNEF published in October 2011

OBJECTIVE - PRESENT GUIDELINES TO INTRODUCE ENERGY EFFICIENCY IN THE BRAZILIAN PLANNING AGENDA

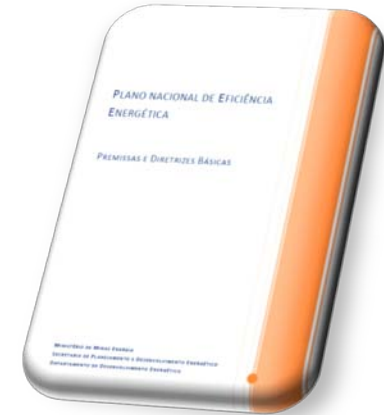


- Need for Governmental Programs in the Energy Efficiency Area in order to reduce the Final Energy Consumption by 10% up to 2030.
- Need for defining a Policy and a National Plan for Energy Efficiency.
- PNEf: to serve as a guide to several agents in meeting the long-term targets of PNE 2030.



NATIONAL PLAN ON ENERGY EFFICIENCY - PNEF

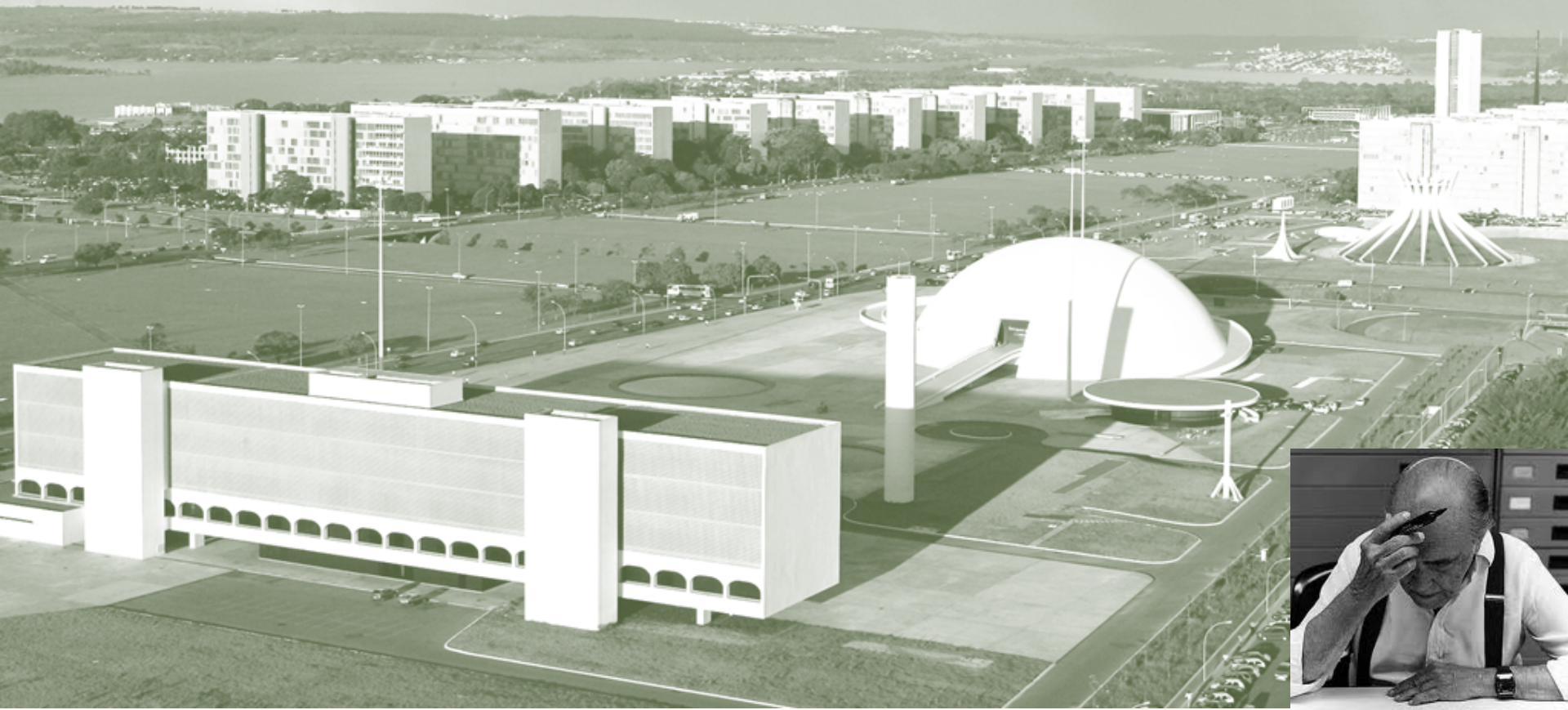
Guidelines - thematic



- Industry
- Transportation
- Education;
- **PROCEL and CONPET programs**
- **Brazilian Labeling Program – PBE**
- Buildings and construction
- **Public buildings**
- **Public lighting**
- **Sanitation**
- Programs in solar water heating
- Research and development
- Monitoring
- International partnerships
- Financing



SUSTAINABLE MINISTRIES ESPLANADE



BRASILIA: Modern architectural Cultural Heritage by the architect Oscar Niemeyer



NATIONAL ELECTRICITY CONSERVATION PROGRAM - PROCEL

RESULTS: 1986 to 2010

US\$ 570 million (Total Investment)

44 million kWh saved

US\$ 17 billion Postponed Investment



6.16 billion kWh saved in 2010 (Electrical Energy Efficiency Actions)

Support to 63 municipalities in 3 states



Launched the label for residential buildings



24% more products with PROCEL seal

Procel Label (EE Equipment)



Development of Database software for buildings





NATIONAL PROGRAM FOR THE RATIONALIZATION OF THE USE OF OIL AND NATURAL GAS DERIVATIVES – CONPET



Labeling



Passenger and cargo transportation



Award for best practices



Educational activities

Achievements

- 320 million liters of diesel saved annually
- Reduction of 860,000 tones of CO₂ emissions annually
- Reduction of 19,000 tones of particulate matter emissions annually





REFERENCES

ANEEL – Brazilian Electricity Regulatory Agency (www.aneel.gov.br).

ANP – Oil, Natural Gas and Biofuels National Agency (www.anp.gov.br).

DNPM – National Department of Mineral Production (www.dnpm.gov.br).

CPRM – Brazilian Geologic Service (<http://www.cprm.gov.br>);

EPE – Energy Research Company. Brazilian Government-Owned Corporation for Energy Research. (www.epe.gov.br);

PETROBRÁS - Brazilian Government-Owned Corporation of Oil (production and transportation of oil and sub products related to a natural gas and oil). PETROBRAS has some responsibilities for Energy Conservation Promotion like the CONPET Program; (www.petrobras.com.br)

ELETROBRAS – Brazilian Government-Owned Corporation of supply electricity (Generation, Transmission and Distribution Energy). ELETROBRÁS has some responsibilities for Energy Conservation Promotion like the PROCEL Program; (www.eletrobras.gov.br)

O.N.S - National Operator of the Electrical System. (www.ons.gov.br)

INMETRO – National Institute of Metrology, Standardization and Industrial Quality. (www.inmetro.gov.br)



MINISTRY OF MINES AND ENERGY
Secretariat for Energy Planning and Development

BRAZILIAN MINISTRY OF MINES AND ENERGY

www.mme.gov.br

Thank you!

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