Joint Workshop of the Energy Efficiency and Renewable Energy Working Parties "Enhancing the Impact of Energy Efficiency and Renewable Energy Policies"

Energy Effciency Policies for Building Systems: Brazilian challenges and achievements

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Energy Efficiency in Brazil: Timeline

Main policies and programs **Electric motors** minimum standard **Electric motors** review minimum standard Law 13.280 Vehicles and **PEE budget Buildings labels** Law 9.991 BRASILEIRO DE **PROCEL** recovery (PBE Edifica) ETIQUETAGEM **Energy efficeincy EDIFICA** obligation for utilities Labeling **National Energy** (Buildings) **Programme Efficiency Plan** 1984 1985 1991 1993 2000 2001 2003 2005 2007 2009 2010 2011 2015 2016 2017 **Electricity Regulation for** NDC crisis incandescent **Targets bulbs Energy efficiency PNE 2030** banishment requirements for **PROCEL and CONPET** new federal Law 10.295 National programs for energy buildings Minimum conservation standards 3E - Building Energy Efficiency **Program (environmental PROCEL and CONPET labels** ministry) - capacity building **Endorsement label**

Labeling Program for Buildings — "PBE Edifica"

Established in 2009







Envelope

















Commercial, service and public buildings

Residential buildings



Design stage >
After construction stage

Accredited Labs
Certification bodies

Awards Label



Achievements and challenges

- Brazilian methodology takes into account the climate and constructive characteristics of the country, encouraging the use of natural strategies (currently under review)
- Since 2014, mandatory for federal public buildings: new and retrofit must be labeled "A"
- Plans to increase mandatory labeling, but accreditation process must be simplified
- 3E Project: capacity building (training, courses, videos, technical guides, contract minutes, etc.)
- Compatible with LEED certification (Energy and Atmosphere) by Green Building Council
- Rapid growth of distributed generation (net-metering) and new technologies, increasing awareness of demand management and energy efficiency (integrated services)
- Need for investments in benchmarking studies and improvement of database on buildings in use
- NDC: electricity consumption reduction target of 10% by 2030



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