Standby Power Use: How Big is the Problem? What Policies and Technical Solutions Can Address It?

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Authors

- Paolo Bertoldi, European Commission
- Bernard Aebischer, CEPE Swiss Federal Institute of Technology
- Charles Edlington, Australian Greenhouse Office
- Craig Hershberg, U.S. Environmental Protection Agency
- Benoit Lebot, International Energy Agency
- Jiang Lin, Lawrence Berkeley National Laboratory
- Tony Marker, Australian Greenhouse Office
- Alan Meier, Lawrence Berkeley National Laboratory
- Hidetoshi Nakagami, Jyukankyo Research Institute
- Yoshiaki Shibata, Jyukankyo Research Institute
- Hans Paul Siderius, Novem
- Carrie Webber, Lawrence Berkeley National Laboratory

Definitions

- Definition:Standby power is the electricity consumed by end-use electrical equipment when it is switched off or not performing its main function.
- Stand-by power is consumed in electronic equipment (TVs and video equipment, office equipment), and electrical equipment with low-voltage power supplies (e.g., cordless telephones, devices with continuous digital display).

Why Governments are concerned by Standby Power?

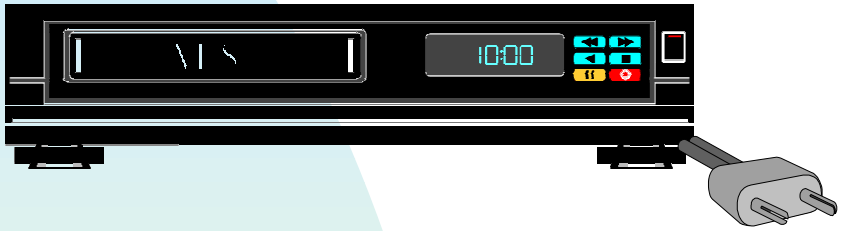
- The actual power draw in standby mode is small, typically 0.5–30 watts. However, standby power is consumed 24 hours per day, and more and more new appliances have features that consume standby power.
- Recent estimates of standby use range from 3 to 10 percent of residential electricity use, depending on the country and the specific measurement procedures used in the surveys.

Why Governments are Concerned by Standby Power?

- Standby power is also consumed in commercial buildings (by office and building equipment and appliances, e.g., personal computers, copiers, phone systems, hot-water pumps, central computing devices) but is not yet well documented.

- Both OECD countries and developing countries have introduced or will introduce policies and programmes to reduce standby power.

Total Standby Power Demand



- **OECD Standby Power**
  - **23 000 MW**
  - **200 TWh/year**
- **Installed Wind Turbine**
  - **<15 000 MW**
  - **<45 TWh/year**

Topics

- Methods to measure it and report on household surveys
- Is Standby Power Consumption Growing or Declining?
- Recent U.S. Developments in Standby Power Policies
- European Strategy for Reducing Standby Power Use
- Australia's Standby Policy Lloyd
- Japan's Standby Policies
- China's Standby Policies.
- IEC test method developments
- Toward a Harmonized Solution? (the IEA 1 Watt initiative)
- Recommendations