

Overview of Energy Use by Consumer Electronics

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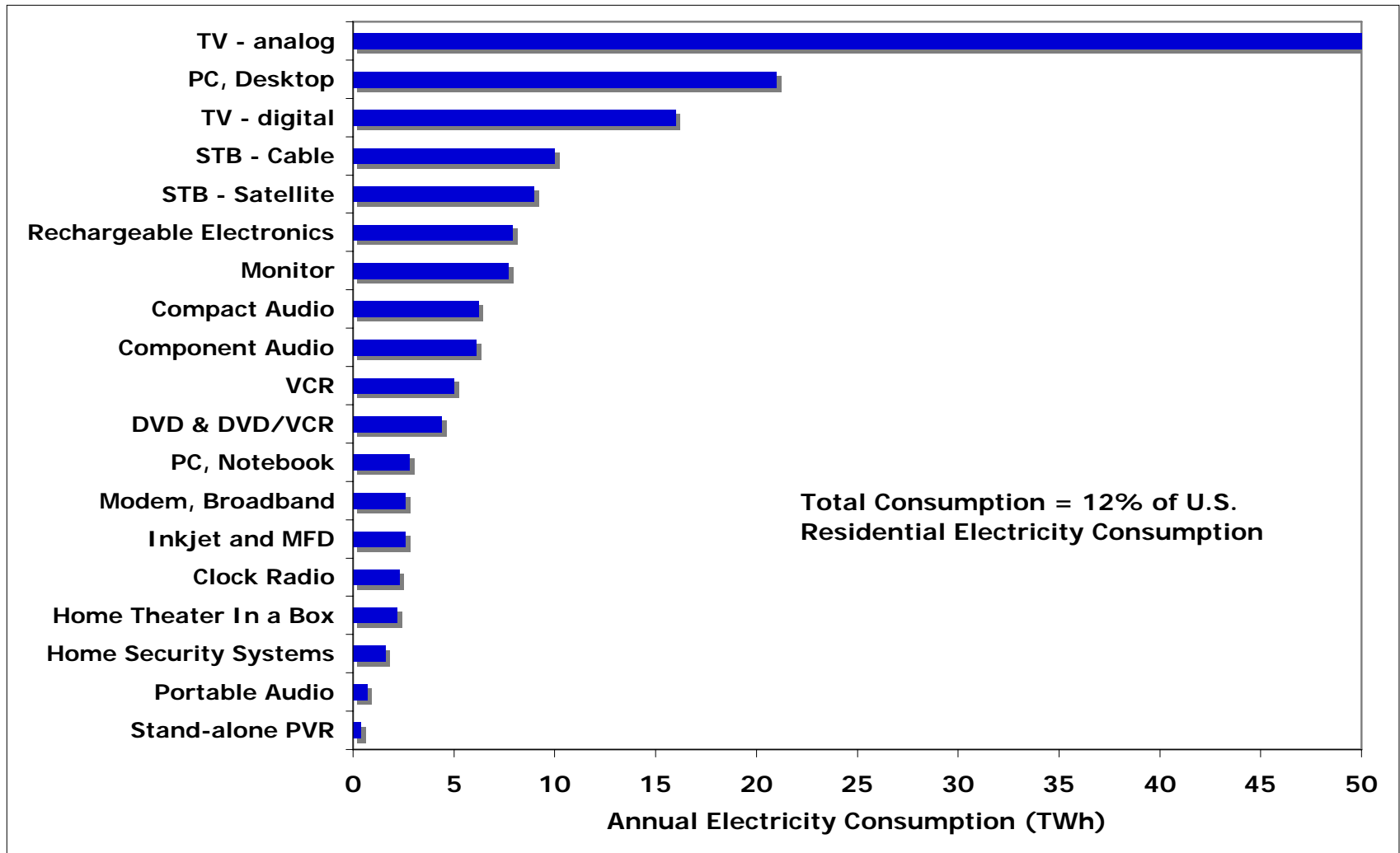
<http://enduse.lbl.gov/>

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Electronics Energy Use

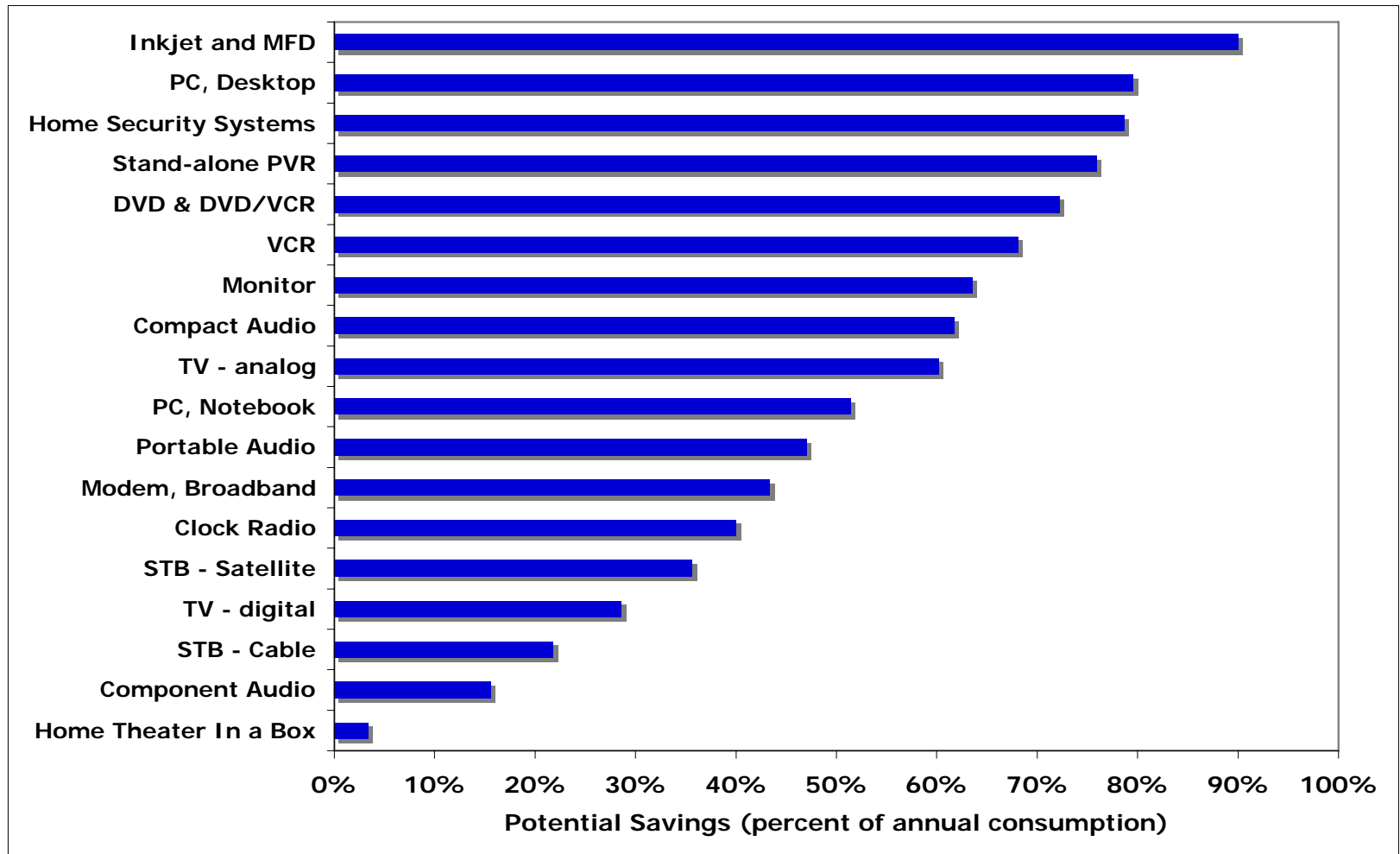
- Devices whose function is information – obtain, store, manage, present
 - Both “information technology” and “consumer electronics”
 - e.g., computers, monitors, TVs, set-top boxes, servers, printers,...
- ~12% of residential electricity use
- Growth rate: 3% to 4% per year (1.5x-2x the rate of overall electricity use)

Residential Electronics Energy Use



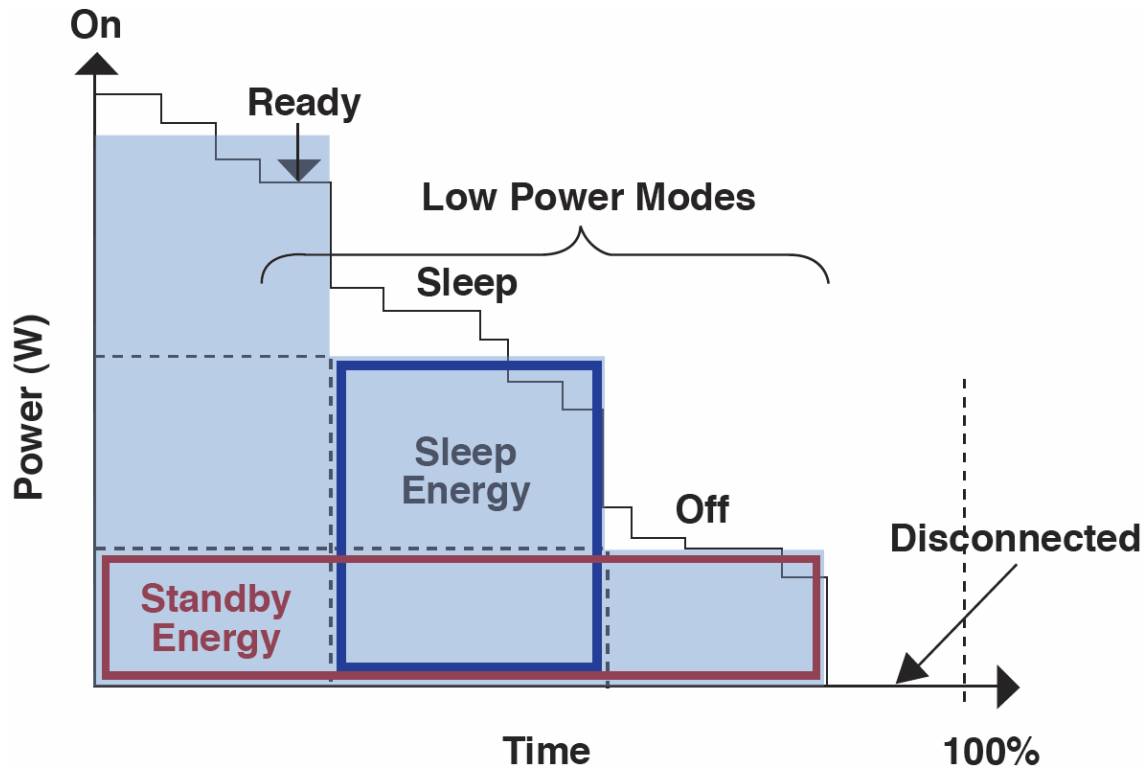
Source: Residential Miscellaneous Electrical Loads, Tiax, July 2007.

Savings Potential



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Consumer Electronic Savings Strategies



For many CE products, majority of energy used when not active (STB, printers, PCs):

- Increase time in low power modes
- Reduce power in low power modes

Other products dominated by active-mode energy (TVs):

- Reduce power in active modes

Challenges

- Tremendous variety of products
- Product categories change over time
- Features and services within a product category change over time (e.g., Set-top Box)
- Large number of products within a given building
- Energy cost usually a small fraction of purchase price
- End-users not knowledgeable about electronics energy use and how to manage it
- Products generally not designed with energy management in mind (except mobile devices)
- Networking of electronic products tends to increase energy use

Can We Avoid This?

CEPro.com

