

Looking for Energy Savings in Data Centers

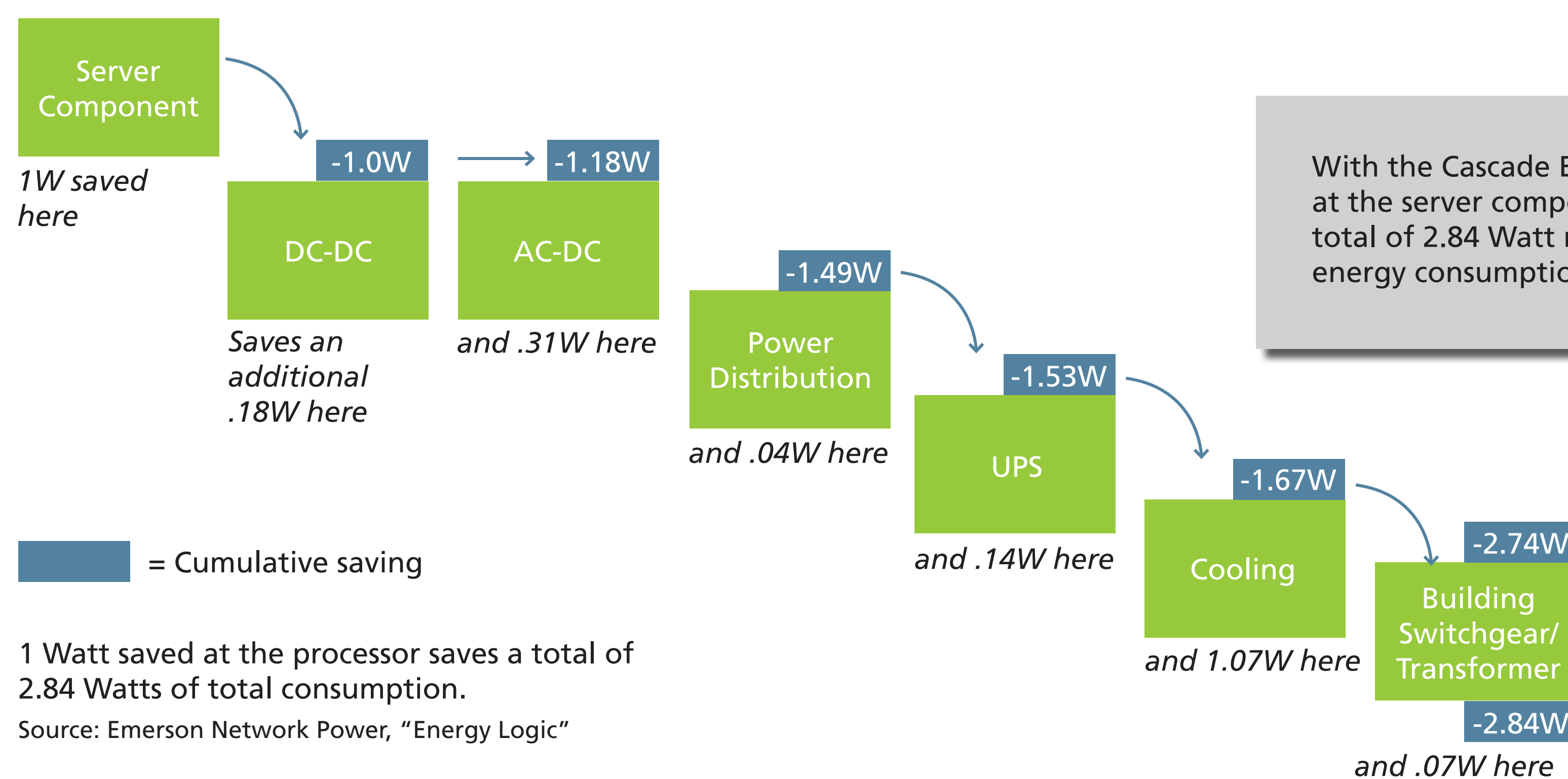
Overview

- Medium / small Data Centers and Data “closets” account for >60% of total estimated energy used by all Data Centers in U.S. (according to EPA 2007 report to Congress).
- Data Centers represent one of the fastest growing energy uses in the C&I sector, approximately doubling every five years.
- Traditional custom approach to data center programs is only cost effective for the larger data centers.
- Simple deemed savings measures with prescriptive rebates do not represent a comprehensive solution.

Evaluate Savings Potential

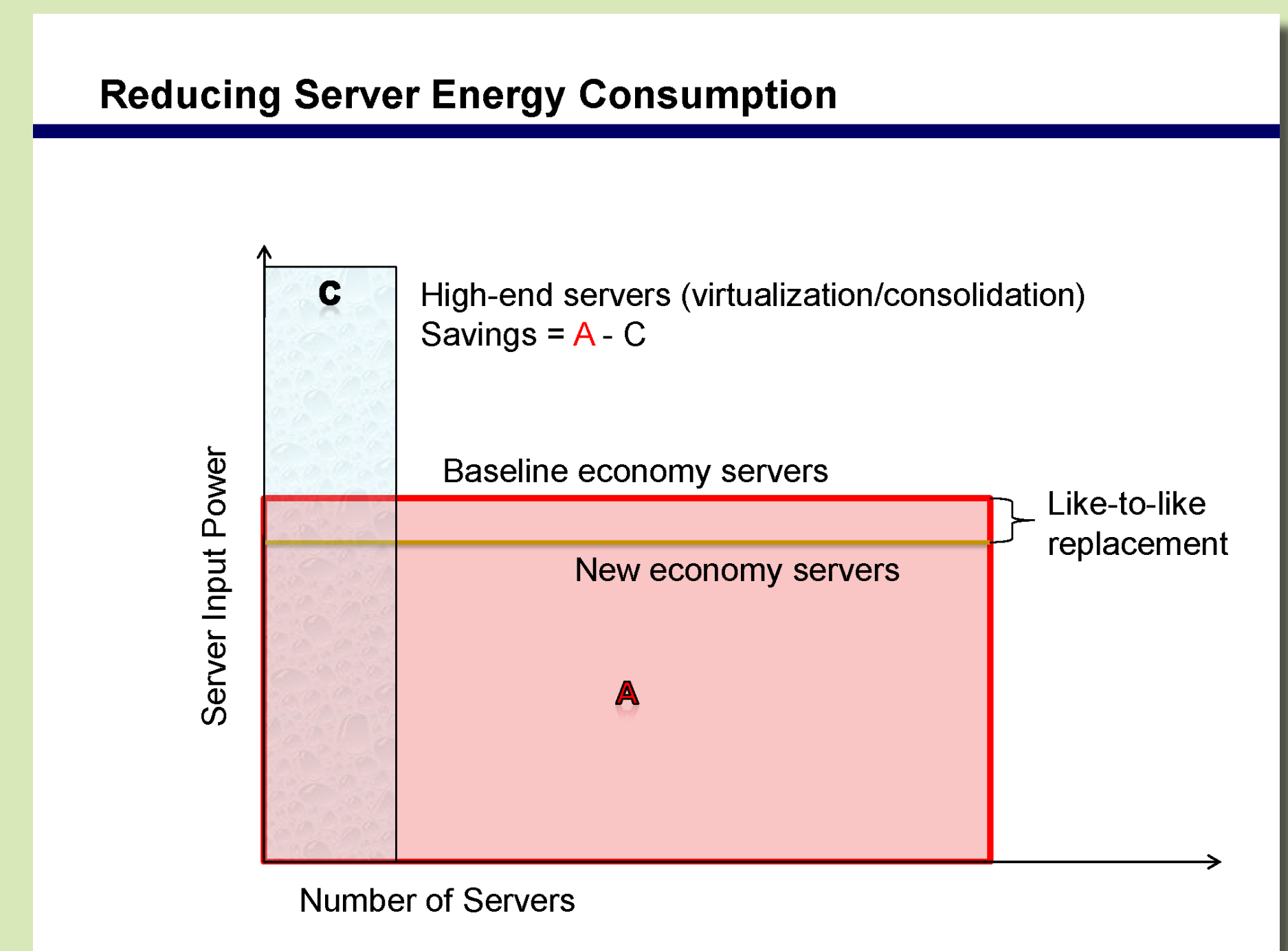
- The starting point is early replacement of the server component, which has a cascade effect on other components of a Data Center.

The Cascade Effect



Capturing the Knowledge

- Using publicly available verifiable data, any particular change in server component can drive “look up” of consequent saving.



With the Cascade Effect, a 1 Watt savings at the server component level creates a total of 2.84 Watt reduction in facility energy consumption.

Finding the Customers

- Outreach and Education approach appealing to medium / small Data Center operators.
- Collaboration with Server vendors.
- Simple offer based on before / after processor change.
- Tool enables programs to determine eligibility for rebates/incentives with option to include “cascade” effects.
- Tool to be donated to Green Grid.

