



AC-DC and DC-DC Power Conversion ICs

The Problem

Overloaded world-wide electrical grids

Regulatory Pressures

- U.S. Department of Energy
- E.U. Energy Efficiency Directive
- Korea Energy Management Corporation
- Japan Ministry of Economy, Trade, and Industry
- **Helix' technology far exceeds current and future requirements**

Helix Vision

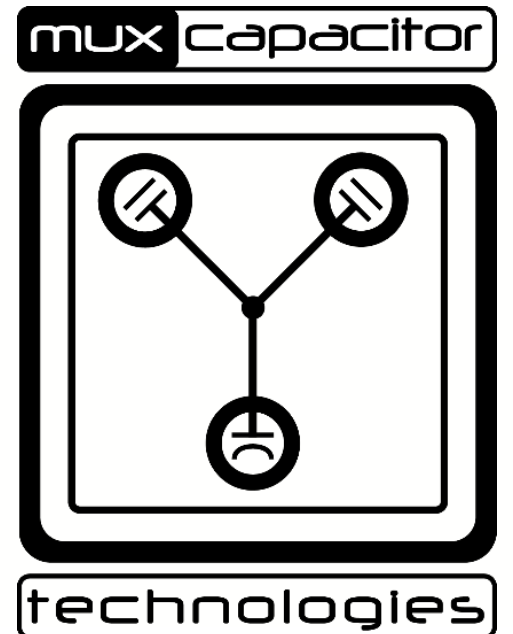
- Invent, patent, and launch disruptive technology
- **Unprecedented high-efficiency power conversion**
- Fabless semiconductor company → **revolutionary** best-in-class enabling technology
- **Vampire Killer** → Waste > \$80 B = 400TWH = 400 B lbs of CO2

Helix Results

- **> 95% efficiency** across varying loads
- **Zero Power** no-load
- Frost & Sullivan 2015 and 2016 **New Product Innovation Awards**
- “Top 10 must-have innovations for power designers from APEC 2016”
- 30 patents issued/allowed

Helix Technology

- MuxCapacitor[®] increases efficiency converting AC mains and 48VDC
- Capacitive isolation → no transformer option
- Eliminates magnetics-based losses
- Best-in-class savings with low load and Zero Power



Helix Core Value - Efficiency

- Highest system efficiency across varying loads

