Carbon Footprint Reduction

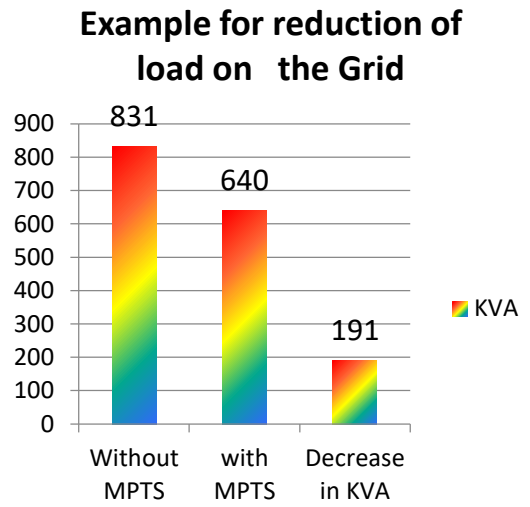
-Using MPTS Technology, MPTS decreases power generation and the carbon footprint

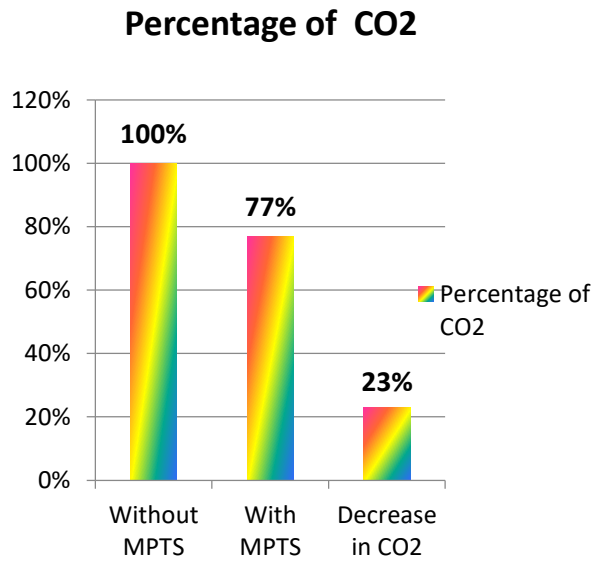
MPTS is a patented and UL listed technology device for Power Quality Improvement. It is a renewable energy unit installed in the electrical network that captures and recycles lost energy and provides Power Management for measurement and verification of performance.

Installed on the electrical panel and operating 24 hours a day, MPTS decreases the Total Electrical Energy Generation, even with changing loads, resulting in significant reduction of the Carbon Footprint. It does not require expensive replacement of any electrical or mechanical equipment existing in the network.

For more than 10 years MPTS has been operating in various applications including Energy Efficient Green Buildings, both new and old electrical systems and buildings with photovoltaic solar installations.

MPTS does this without being a source of power generation. It is a non-parasitic system that becomes the "drain" at the bottom of the electrical network both capturing and recycling energy "lost" in the network.





Benefits from MPTS Technology

Benefits to Power Generation and Utility

- Decreases total electrical demand by users
- Reduces electrical system load to the grid power provider by reducing the demand from the connected load
- When end users install MPTS the Utility sees reduced cost of transmission, distribution, operation and maintenance
- Relieves peak demand power outages

Benefits to the Customer – End User

- Maintains stability of voltage/power for connected equipment
- Protects expensive investment in electrical and mechanical equipment
- Reduces service, repair, operating, and maintenance costs
- Releases the capacity on electrical network allowing more equipment to be connected

Benefits to the Environment and Country

- Significantly decreases the carbon footprint and improves energy availability
- Supports the “Green Movement” and other environmental efforts

Business case

Campus has a total load of about 5000 KVA
It has multiple MPTS devices on campus.

This is applicable to any large customer whose load is greater than 5000 KVA.

1000 KVA Savings in Generation		
Electrical Service	5,000	KVA
Savings with MPTS	1,000	KVA
Operating Hours Per Year	3,600	Hours
Savings per year	3,600,000	KVAHs
Blended Rate	$ 0.16	per KWH (KVAH)
Savings	$ 576,000.00	per year
Investment	$ 2,000,000.00	for MPTS
Payback period	3.47	Years
CO2 Reductions	**3,060,000**	**lbs. per year**
(0.85 lbs. per Kilowatt Hour)		

For every 1000 KVA savings on the Campus with MPTS, you will see the following:

- Reduction in Power Generation = 1000 KVA
- Savings in Delivered (Kilowatt Hours) = 3,600,000 Kilowatt Hours/Year
- MPTS Investment = $2,500,000
- Estimated Dollar savings = **$576,000.00 per Year**
  (at a blended rate of 16 cents per Kilowatt Hour)
- Payback period = 3 to 5 years (Investment/Savings)
  (without applying any rebates, incentives or tax credits)
- Return on Investment (ROI) = greater than 16 percent per year

Business case - Summary

Benefits from MPTS Technology:

- Decreases Power Generation and therefore Carbon Footprint
- Protects investment in electrical and mechanical equipment
  - Increases life span of new or old electrical and mechanical equipment
  - Extends replacement costs as equipment will last longer
- Decreases operating costs (OEM)
  - Reduces costs in service, repair and maintenance
- Decreases Current in the electrical system
  - Reduces hot spots in panels and equipment (Safety)