

# 80 PLUS Power Supplies

The devices used to power desktop computers had not seen any significant improvements for many years, even as a jump in computer purchases was rapidly increasing energy consumption in the Northwest. The region's utilities estimated that the introduction of more efficient power supply technology could save 82 kWh per machine per year. The 80 PLUS program made this a reality through a partnership with the region's utilities, Ecova and ENERGY STAR®. Together, we reduced market barriers to more efficient power supply technology and aligned manufacturers with improved energy efficiency specifications.

## Our Role in Market Transformation

**Innovation:** The 80 PLUS program was launched in 2004 to set the standard for what constitutes an energy-efficient power supply. We worked with the EPA to push the market toward higher efficiency levels – labeled Bronze, Silver, Gold, Platinum and Titanium – and then encouraged their adoption by offering incentives to manufacturers for every certified unit sold.

THE 80 PLUS CERTIFICATION MEANS A POWER SUPPLY IS AT LEAST 80 PERCENT EFFICIENT IN THE AC-DC CONVERSION PROCESS.

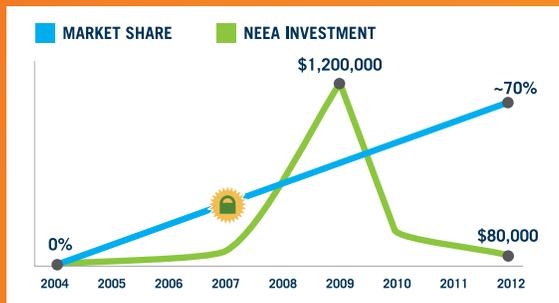
**Action:** Manufacturers began to adopt the 80 PLUS standard as ENERGY STAR certification levels grew even higher. The EPA incorporated it into the ENERGY 4.0 specification in 2007, and more consumers across the nation began to purchase the updated technology. Manufacturers also experienced increased competition, which reduced incremental costs and created a momentum that has carried the program's success into the future.

**Outcome:** 80 PLUS resulted in a transformed market in which over 70 percent of desktop systems sold now use 15 to 25 percent less energy than before. From 2005-2012, the region's utilities achieved 18.6 aMW in co-created savings, or enough to power more than 14,000 U.S. households each year. Funding of the initiative ceased in 2013 when market barriers were removed successfully; the transformed market continues to deliver regional savings.



# Innovation to Action

## DELIVERING LONG-TERM SAVINGS ON REGIONAL INVESTMENTS



Today, more than 200 computer power supply manufacturers produce certified 80 PLUS products. Market share of 80 PLUS – compliant commercial desktop computers has skyrocketed from 0 percent in 2004 to an estimated 70 percent in 2012. The EPA incorporated 80 PLUS into the new ENERGY STAR® specifications in 2007, and then into a revised version in 2013.



A lack of ENERGY STAR specifications, product differentiation and competition had led to a stagnant market for energy-efficient power supplies.



Northwest utilities worked with manufacturers and the EPA to remove barriers through new standards and incentive programs.



Manufacturers readily adopted the new ENERGY STAR specifications and now 70 percent of PCs in the U.S. use 15 to 25 percent less energy.



The EPA incorporated 80 PLUS into new national specifications, which continues to deliver savings around the country.

– 2004 TO 2012 –  
**\$2.9M**  
 INVESTED

**70%**  
 MARKET SHARE

**22.4**  
 aMW IN TOTAL  
 REGIONAL SAVINGS

**18.6**  
 aMW OF  
 CO-CREATED SAVINGS

## TOGETHER We Are Transforming the Northwest



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