

Energy-efficient Industrial Motors

In 1999, clear energy-efficiency data and life cycle analysis information were not available to customers making the decision to repair, rewind or buy new industrial motors. Rewinding a motor keeps operating costs the same or sometimes raises them, while investing money in a more energy-efficient model reduces operating costs over the motor's lifetime. Service centers believed that motor rewinds reduced the efficiency of repaired motors, and they chose to not offer the service. In reality, with appropriate procedures a rewind motor retains its original efficiency. The Drive Power initiative was established to educate service centers and motor users so they could make better decisions about replacing or repairing industrial motors and, in turn, maintaining or increasing the region's motor fleet efficiency.

Our Role in Market Transformation

Innovation: From 1999 through 2004, we partnered with the American Council for an Energy-Efficient Economy (ACEEE) and motor service centers to transform the market for energy-efficient motors and motor repair practices.

MOTORS USE ABOUT HALF OF ALL U.S. ELECTRICITY.

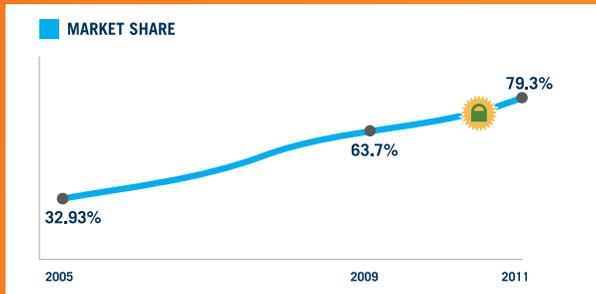
Action: Beginning in 1999, we worked with Green Motors Practices Group and prominent motor service centers in the region to effectively prove that energy-efficient rewinds could produce less than a 1 percent loss in efficiency – which led more service centers to offer the practice. Then, in 2000, the National Electrical Manufacturers Association (NEMA) Premium brand established an easily recognizable third-party brand that helps buyers identify energy-efficient motors. With these market barriers removed, the Drive Power initiative implemented a broad motor education program, including seminars, a newsletter, an information toolkit, motor inventory software and a website allowing motor users to make better decisions about replacing or repairing motors.

Outcome: Helping motor users incorporate life cycle analysis into their decisions resulted in more use of energy-efficient rewinds and increased purchases of NEMA Premium motors. Because of this, by 2011 we achieved 11.7 aMW in energy savings beyond what would have occurred naturally in the market without intervention. This is enough energy to power more than 8,000 U.S. households each year.



Innovation to Action

DELIVERING LONG-TERM SAVINGS ON REGIONAL INVESTMENTS



Funding for the Drive Power initiative ended in 2004 when we exceeded our goal and transformed the Northwest market for energy-efficient motors and motor repair practices, but, regional market share of NEMA Premium motors continued to grow well above the national average. By 2010, a new federal standard required all motors to meet the efficiency levels of the NEMA Premium brand.



A lack of energy-efficient motor information, professional support and branding led to unnecessary industry inefficiencies.

We partnered with the ACEEE and motor service centers to help make the Northwest industry more efficient, save money and increase competitiveness.

In 2011, NEMA Premium motors achieved a market share of 79 percent in the region and energy-efficient rewinds reached 40 percent.

The transformed market continues to accelerate on its own and deliver regional savings.

1999-2011

11.7
aMW
TOTAL REGIONAL SAVINGS

4.8
aMW
NET MARKET EFFECTS

5.65
aMW
IN CO-CREATED SAVINGS

TOGETHER We Are Transforming the Northwest



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