

LEED® and Retro-Commissioning



7892 W. Grand River, Brighton, MI 48114

(810) 227-3377 • info@edssenergy.com

www.edssenergy.com



Helping you achieve LEED® standards



LEED® Certification: The Leadership in Energy and Environmental Design (LEED®) program is a consensus-based Green Building rating system, developed by the United States Green Building Council (USGBC), an independent not-for-profit organization. The LEED® Program is a rating system designed to quantify various building elements and compare them to a standard of efficiency, providing a tangible level of building performance. LEED® is the recognized standard in the U.S. and many other countries for building sustainability. The program is based around performance in the design and construction of buildings in the following five areas of environmental concern:

- Sustainable sites
- Water efficiency
- Energy and atmosphere
- Materials and resources
- Indoor environmental quality

Benefits of LEED® Certification: The LEED® program was designed to benefit those willing to strive for sustainable design and construction practices. The participation of an organization in the LEED® certification process shows its dedication and leadership in ecological preservation and social responsibility. Some of the environmental and financial benefits LEED® certified projects may enjoy are:

- Increased productivity of occupants
- Energy reduction leading to lower operating costs
- Increased asset value
- Reduced construction waste and emissions
- Tax credits and other incentives in hundreds of cities
- Boost public interest in your project

The LEED® Commissioning process: a formal commissioning process is required that building components are designed installed as intended. There are five steps to this formal process:

- Engage a LEED® commissioning authority
- Review design intent and basis of design documentation
- Commissioning requirements included in construction documentation
- Develop and employ a commissioning plan
- Verify the installation, functional employment, training on systems and documentation.

This program applies to new commercial construction, major renovation projects, interior projects and existing building operations. To certify the project, a building must complete all pre-requisites and have a minimum number of credits. A detailed description of the LEED® rating system is on the USGBC website: www.USGBC.org.

Contact us to find out more about achieving LEED® Standards:

(810) 227-3377 or info@edssenergy.com



A commissioning agent will compare the original design to the current usage and inspect the operation of the temperature and lighting controls. The commissioning professional will bring in control or other specialists as needed.

Retrocommissioning: Is the process of evaluating an existing building to ensure that the building components are still calibrated properly and used as designed. The retrocommissioning process is based on the building type and current usage especially if the current usage differs from the initial design usage.

Retrocommissioning differs from other audit procedures in its attention to original design purpose and current occupancy patterns. With residential projects, the architectural components of the building play the largest role. In commercial projects HVAC and lighting systems tend to be the larger areas of focus.

The main purpose of Retrocommissioning is to bring the building as a whole back to an “as designed” state, with all building systems operating as intended and at maximum efficiency.

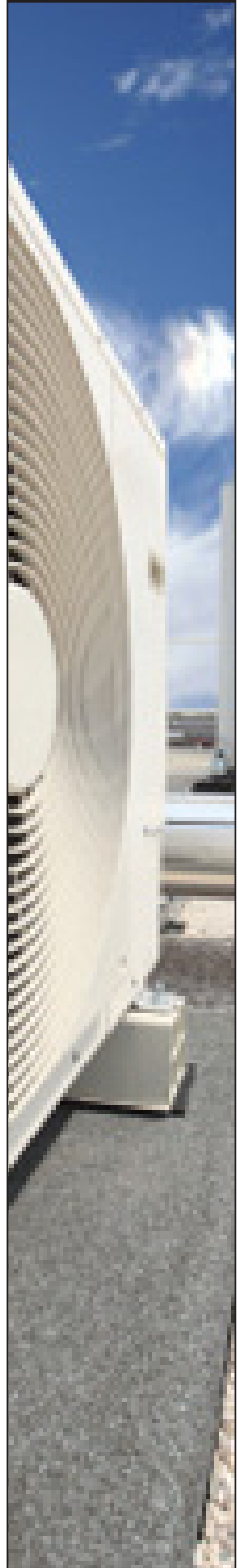
Over time buildings are used for purposes other than originally intended. Even if such controls were formally commissioned when the building was constructed, spaces will be used in a manner other than as originally designed:

- Personnel densities are shifted from one space to another.
- Equipment (plug) loads will be added or removed.
- Hardware will drift or fail.
- Operators will modify temperature control sequences to the best of their abilities.

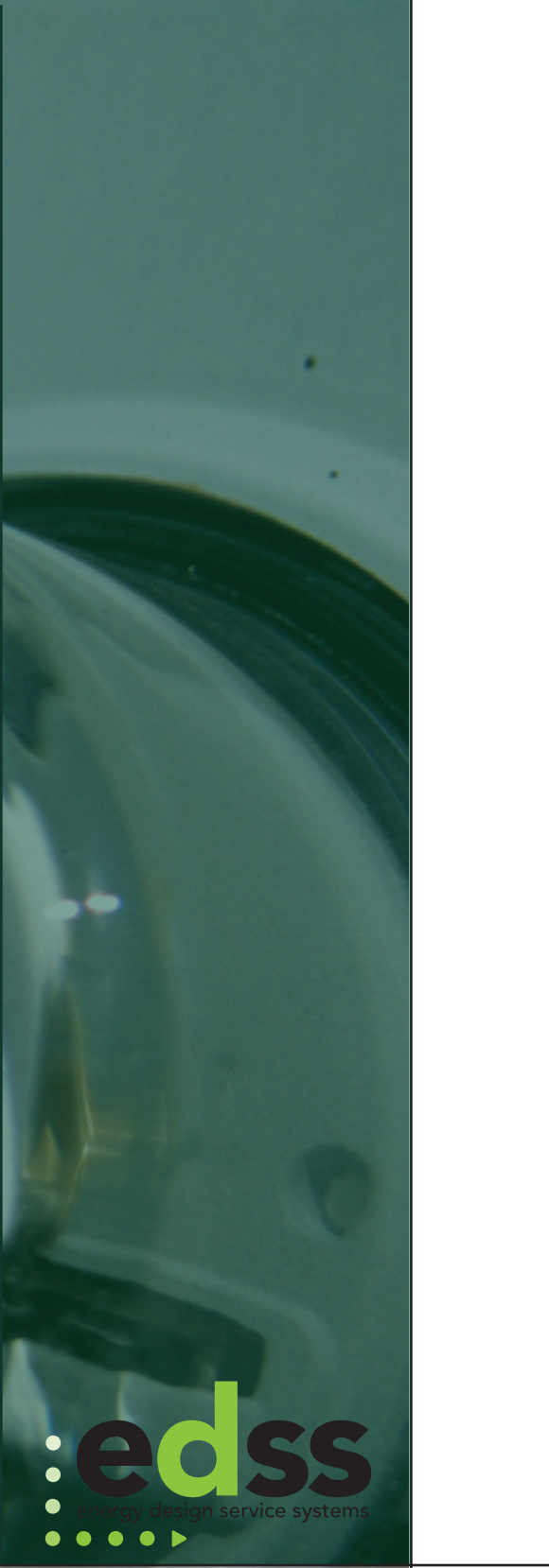
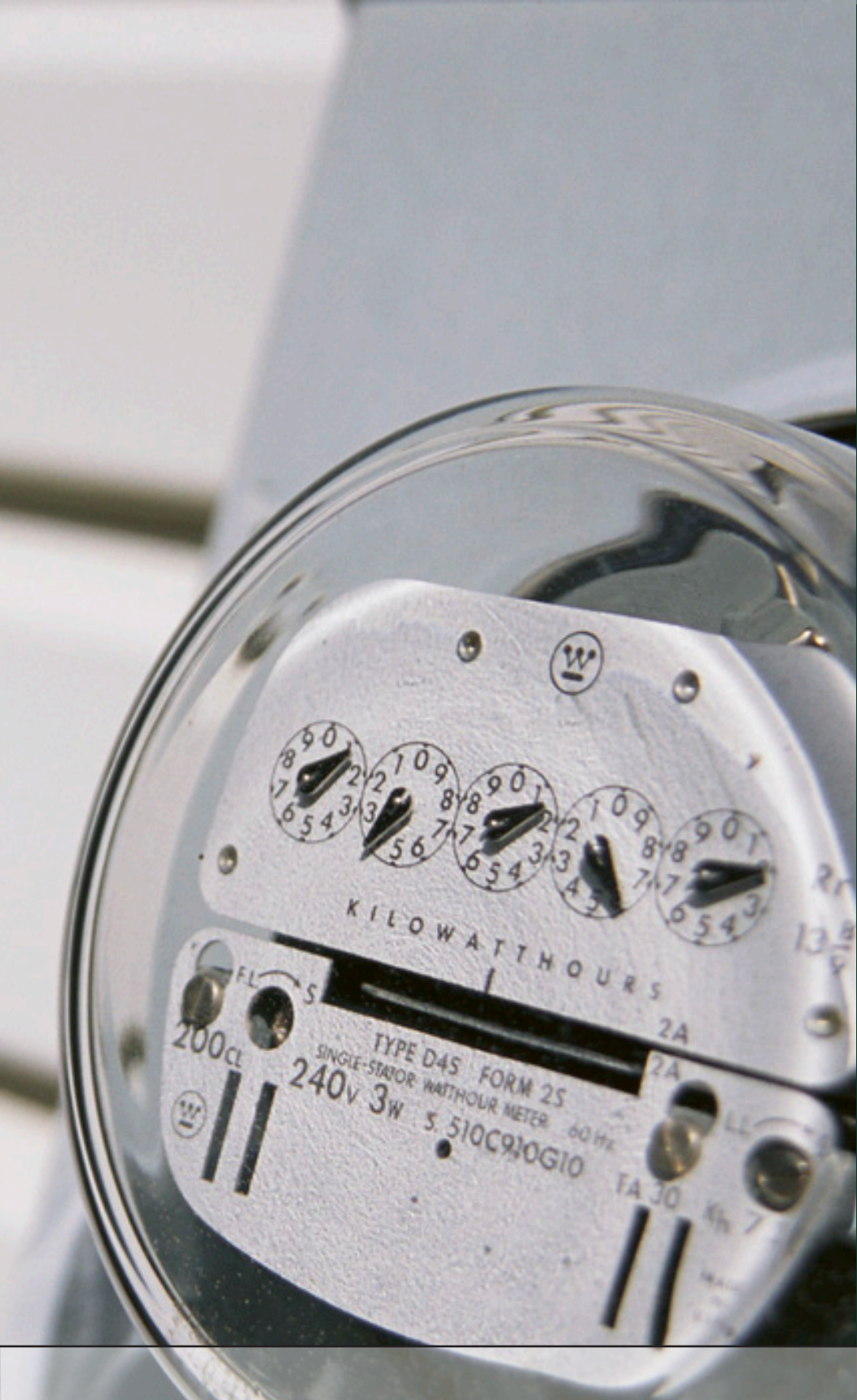
An efficient lighting retrofit can reduce the heat load in spaces dramatically. By rebalancing air flows and/or modifying temperature control sequences, the energy savings from the lighting retrofit can sometimes be doubled.

Retro -Commissioning provides:

- Increased occupant productivity
- Energy savings
- Raised asset value
- Greater efficiency of building components
- Updated component training materials



Making your building systems operate as intended for maximum employee productivity.



7892 W. Grand River,
Brighton, MI 48114
(810) 227 - 3377
info@edssenergy.com
www.edssenergy.com