

U.S. DOE PUMP EFFICIENCY REGULATION UPDATE:

ADVANCING APPLIANCE STANDARDS AND LABELS

NEW U.S. PUMP EFFICIENCY STANDARDS FINALIZED

The Hydraulic Institute (HI) helped advance a major energy efficiency policy win in the United States with:

- 2016-01-26 Energy Conservation Program: Energy Conservation Standards for Pumps; Final rule. Docket ID: EERE-2011-BT-STD-0031-0060
- 2016-01-25 Energy Conservation Program: Test Procedure for Pumps; Final rule. Docket ID: EERE-2013-BT-TP-0055-0018

The standards for pumps, which were previously unregulated, will reduce electricity consumption by about 30 billion kilowatt-hours **and save end-users up to \$1.1 billion over 30 years.**

The New Pump Standard is the carbon equivalent to:

- Removing 4.5 million cars from the road for one year
- Removing 2.22 million homes from the grid for one year

In addition to the test standards, now referenced by the DOE, HI has developed programs including Pump Test Lab Certification (PTLAP) and an Energy Rating label to create transparency in the marketplace and build confidence that the energy savings reported are achieved. Together, these programs:

- ✓ Standards
- ✓ Performance
- ✓ Testing
- ✓ Labeling
- ? Enforcement

- Link performance to the standard
- Clearly indicate energy savings
- Go “above and beyond” DOE requirements

HI Member manufacturers are committed to working in an open environment where performance and energy usage information is visible, trusted and publicly available.

HI's standards are designed to be used proscriptively in water infrastructure and other climate related legislation that would benefit from clear identification of high performance energy saving pumps and pump systems. HI programs are ideally suited for:

- Specification in GSO procurement
- Streamlining the customs process

HELP NEEDED:

GSO should be required to use ‘above and beyond’ pumps whenever feasible.

A Systems Approach to Standards

Before the new standards are implemented or the benefits seen, the DOE has already scheduled the next round of regulations. **Current rules are not evaluated before setting new rules.**

Knowing what we know today about the benefits of a systems approach and using the smart tools we now have (sensors, meters, etc.) to collect data. **We believe it is time to update the U.S. energy efficiency strategy created in 1975** with its focus on components – to one that looks at the system. Analyzing actual performance data and adopting a systems approach will yield much greater energy savings. The EPCA Standards process should reflect this approach if it hopes to have a greater impact.

Important DOE Regulation Dates:

Effective Date of Updated Standard	2027
Updated DOE Standard Due	2024
1st Federal Pump Rule Issued	2020
Potential Date of Updated Standard	2018
1st Federal Pump Rule Effective (DOE)	2016
EPACT Initial Federal Legislation	1992
Energy Policy Conservation Act	1975

Action Needed: Amend EPCA to include a ‘systems approach’ to energy efficiency, optimizing overall performance of a complex process as opposed to the current component-centric model.

Tax Reform: Common Sense Depreciation

Heating, cooling and water heating systems in commercial and residential rental properties provide for the fundamental comfort and health of their occupants. Those systems also consume the largest share of energy within a building. Upgrading these systems decreases energy consumption while increasing the overall value of the property. Combining the expected dollar savings from increased energy efficiency with a more favorable depreciation schedule can provide a strong incentive to building owners to upgrade a building’s mechanical systems. The current IRS code only allows building owners to deduct these costs over a 39-year period, the same schedule as the physical building, and over twice the average useful life of the equipment.

Action Needed: Amend the IRS Modified Accelerated Cost Recovery Method (MACRS) to provide for HVAC and water heating equipment be depreciated over 15 years, qualifying as “leasehold or retail improvement property”. This is a technology neutral, common sense approach to using the existing tax structure to improve the energy efficiency, comfort and overall value of America’s building stock.

The Hydraulic Institute (HI) was founded in 1917, and is the globally recognized authority on pumps and pumping systems. The Institute represents 120 members, primarily U.S. pump manufacturers and their suppliers. HI’s mission is to be a value-added resource for member companies, engineering consulting firms and pump users by developing and delivering comprehensive industry standards, expanding knowledge by providing education tools for effective pump testing, installation, operation, maintenance and performance operation of pumps and pumping systems.

