Clean Energy Solutions Environmental Priority

Equipment Efficiency Standards

Good for the Consumer, Good for the Environment, Good for the Economy

SHB 1017

SHB 1017 updates Washington's water efficiency rules for several plumbing products and adds two measures to the state's package of energy efficiency standards. The bill packs a lot of benefits: By 2018, SHB 1017 will deliver *$60 million* in utility bill savings to Washington families, businesses, schools and local governments, save enough electricity to power 38,000 Washington homes and cut climate pollution by 285,000 tons – *all per year.*

Specifically, this bill:

- **Targets so-called "vampire" battery chargers that waste up to 60% of the electricity they consume.** Small battery chargers for consumer electronic devices, as well as large battery chargers for forklifts and golf carts, will be required to meet efficiency standards already working in California.
- **Requires new urinals, showerheads and faucets sold and installed in Washington to use less water.** These standards conserve precious water resources and reduce energy used for heating, pumping and treatment. By 2018, we'll save about 1.9 billion gallons of water a year – roughly a year's water use in 32,000 Puget Sound-area homes. And the more efficient products cost the same as the older, less-efficient versions.
- **Requires one type of common outdoor floodlights – double-ended quartz halogen lamps – to be more energy efficient.** Washington would be the first in the nation to adopt this standard.

If enacted, SHB 1017 will become effective in June 2014, allowing retailers and distributors time to ready their inventories for the more-efficient products.

Fact: This bill is necessary. Opponents claim that U.S. Department of Energy standards will preempt the battery charger standards. But DOE is famously behind schedule, and we have no guarantee that it will finalize the standards nor do we know how stringent they will be. By establishing strong efficiency standards for battery chargers, Washington and California will ensure that its residents benefit from cost-effective energy savings and avoid becoming the dumping ground for less-efficient models.

Bottom line: Already, refrigerators, furnaces, exit signs, commercial hot-food cabinets and many more products meet federal or state efficiency standards. SHB 1017 adds the next generation of low-cost, high-benefit measures to Washington's existing efficiency standards, saving energy, reducing water waste and saving consumers millions of dollars on their utility bills.

About the Environmental Priorities Coalition

Founded in 2003, the Environmental Priorities Coalition is a network of more than 20 leading environmental groups in Washington that believe we can have a strong economy and a clean, healthy and safe environment for ourselves and our children.

For more information, visit
www.environmentalpriorities.org

PROJECTED BENEFITS SHB 1017 Efficiency Standards

Products	Annual Savings per unit		Incremental Cost per Unit	Annual Savings in 2018					Annual Savings in 2025					Economics		
				Electricity	Natural Gas	Water	CO_2 Emissions	Value of Bill Savings	Electricity	Natural Gas	Water	CO_2 Emissions	Value of Bill Savings	Pay Back Period	Benefit/Cost Ratio	Net Present Value
	Amount	Units	$	**Avg megawatts	Bbtu	Billion Gallons	1000 MT	$ Millions	**Avg megawatts	Bbtu	Billion Gallons	1000 MT	$ Millions	Years		$Millions (2011$)
Battery chargers*	11	kWh	$2.00	30			137	21.8	33.7			153	24.5	1.8	2.2	$151.60
Double Ended Quartz Halogen Lamps	329	kWh	$28.00	12			55.5	8	12			55.1	8	1.1	1.5	$29.30
Urinals (.5 gal/flush)	2340	gallons	-			0.013		0.1			0.021		0.1	immediate	no cost	$4.20
Showerheads (2.0 gpm)							83								no cost	$684.00
- Water	1200	gallons				2		12.2			3		19.2			
- Water heating - gas	4	therm			643			7.9		1,010		55	12.4			
- Water heating; electricity	63	kWh		10.5				7.6	16.46			75	11.9			
Faucets (1.5 gals/minute)			$4.00											0.8	16.6	$127.40
- Water	292	gallons				0.188		1.3			0.296		2.1			
- Water heating; gas	1	therm			71		3.8	0.9		111		6	1.4			
- Water heating; electricity	16	kWh		1.2			5.4	0.9	1.8			8	1.3			
TOTAL				**53.7**	**714**	**1.9**	**284.7**	**$60.7**	**63.96**	**1121**	**3.061**	**352.1**	**$80.9**			

* Approximately 17% of battery charger savings are from large charger systems, e.g., fork lifts. The incremental cost for forklift battery chargers is about $340; they save about 3300 kWh/year, so the simple payback at $.09/kWh is 1.3 years. The incremental costs of small battery chargers range from $0.0 (for cell phones) to $.50 (laptops, cordless phones) to $12.00 (wheelchairs, Segways)

**Generally, one average megawatt is enough electricity to serve 700 Washington homes

Savings calculated by Appliance Standards Awareness Project (ASAP) and American Council for an Energy Efficient Economy (ACEEE). Savings assumed to start approximately mid 2014. Compiled by the NW Energy Coalition 02/08/2013