

## Appliance Standards Awareness Project

### 2025 State Appliance Standards Recommendations

#### Savings estimates for: Michigan

	Potential annual savings in 2030						Potential annual savings in 2040					
	Electricity (GWh)	Natural gas (BBtu)	Water (million gallons)	NO <sub>x</sub> (tons)	SO <sub>2</sub> (tons)	CO <sub>2</sub> (thousand metric tons)	Electricity (GWh)	Natural gas (BBtu)	Water (million gallons)	NO <sub>x</sub> (tons)	SO <sub>2</sub> (tons)	CO <sub>2</sub> (thousand metric tons)
Commercial battery chargers	2.3	--	--	0.2	0.3	0.7	8.5	--	--	0.7	0.8	2.3
Commercial dishwashers	9.4	120	167	6.4	1.2	9.2	26.8	343	478	17.8	2.5	25.4
Commercial fryers	0.6	387	--	17.6	0.1	20.7	1.9	1,328	--	60.3	0.2	70.8
Commercial ovens	5.5	40	--	2.4	0.7	3.8	18.9	136	--	7.8	1.8	12.3
Commercial steam cookers	1.8	17	43	0.9	0.2	1.4	6.1	58	149	3.1	0.6	4.7
Faucets	30.3	334	1,408	18.2	3.9	26.9	86.6	954	4,018	50.5	8.0	73.9
Gas fireplaces	--	102	--	4.6	--	5.4	--	393	--	17.8	--	20.8
High CRI fluorescent lamps	36.4	--	--	3.6	4.7	11.0	17.7	--	--	1.5	1.6	4.8
Portable electric spas	99.9	--	--	9.9	12.9	30.2	250.0	--	--	20.9	23.2	67.8
Residential ventilating fans	2.8	--	--	0.3	0.4	0.9	10.9	--	--	0.9	1.0	3.0
Server power supplies	59.5	--	--	5.9	7.7	18.0	85.0	--	--	7.1	7.9	23.0
Showerheads	22.6	249	718	13.5	2.9	20.0	64.6	711	2,050	37.6	6.0	55.2
Spray sprinkler bodies	--	--	2,945	--	--	--	--	--	8,415	--	--	--
Toilets (water closets)	--	--	350	--	--	--	--	--	1,306	--	--	--
Urinals	--	--	64	--	--	--	--	--	220	--	--	--
Water coolers	20.4	--	--	2.0	2.6	6.2	58.4	--	--	4.9	5.4	15.8
<b>Total</b>	<b>292</b>	<b>1,249</b>	<b>5,696</b>	<b>86</b>	<b>38</b>	<b>154</b>	<b>635</b>	<b>3,924</b>	<b>16,637</b>	<b>231</b>	<b>59</b>	<b>380</b>

Assuming a compliance date of 2027 for all the recommended standards. While we are recommending the adoption of state-level standards for commercial hot-food holding cabinets, computers and computer monitors, and water softeners, we have not estimated savings for these products due to insufficient data on the current market.

## Savings estimates for: Michigan

	Potential annual utility bill savings (million 2023\$)		Net present value savings (million 2023\$)	Payback period (years)
	In 2030	In 2040		
Commercial battery chargers	0.2	0.7	4.0	3.7
Commercial dishwashers	4.8	15.1	133.3	0.9
Commercial fryers	2.9	10.9	66.7	3.3
Commercial ovens	0.9	3.2	9.9	6.1
Commercial steam cookers	1.1	4.1	35.8	0.8
Faucets	31.8	102.3	1,011.4	0.0
Gas fireplaces	0.8	3.6	30.1	1.5
High CRI fluorescent lamps	4.1	2.2	26.0	1.6
Portable electric spas	16.5	42.1	393.9	0.5
Residential ventilating fans	0.5	1.8	17.9	0.0
Server power supplies	6.6	9.4	82.1	0.9
Showerheads	18.0	57.7	569.3	0.0
Spray sprinkler bodies	50.3	165.7	1,519.7	0.7
Toilets (water closets)	6.0	25.7	322.9	0.0
Urinals	1.1	4.3	41.5	0.0
Water coolers	2.3	6.5	63.1	0.0
<b>Total</b>	<b>148</b>	<b>455</b>	<b>4,328</b>	<b>-</b>

Assuming a compliance date of 2027 for all the recommended standards. Net present value savings take into account both utility bill savings and estimated impacts on product costs for items sold between 2027 and 2050. While we are recommending the adoption of state-level standards for commercial hot-food holding cabinets, computers and computer monitors, and water softeners, we have not estimated savings for these products due to insufficient data on the current market.

## Cumulative savings estimates for: Michigan

	Potential cumulative savings through 2050						
	Electricity (GWh)	Natural gas (TBtu)	Water (billion gallons)	NO <sub>x</sub> (tons)	SO <sub>2</sub> (tons)	CO <sub>2</sub> (thousand metric tons)	Utility bill savings (million 2023\$)
Commercial battery chargers	156	--	--	12.3	14.7	37.6	12.2
Commercial dishwashers	509	6.5	9.1	336.5	50.4	470.5	287.6
Commercial fryers	34	23.9	--	1086.1	3.3	1273.1	192.5
Commercial ovens	340	2.5	--	138.4	32.9	212.8	56.5
Commercial steam cookers	109	1.0	2.7	55.7	10.5	81.5	73.7
Faucets	1,645	18.1	76.4	954.1	162.8	1364.4	1954.1
Gas fireplaces	--	7.2	--	326.6	--	381.3	64.4
High CRI fluorescent lamps	514	--	--	47.7	67.5	148.3	60.3
Portable electric spas	4,903	--	--	397.4	492.3	1216.8	815.7
Residential ventilating fans	200	--	--	15.8	18.8	48.1	33.4
Server power supplies	1,826	--	--	151.1	191.0	463.2	199.6
Showerheads	1,227	13.5	39.0	711.4	121.5	1017.6	1099.5
Spray sprinkler bodies	--	--	159.9	--	--	--	3181.0
Toilets (water closets)	--	--	26.7	--	--	--	540.9
Urinals	--	--	4.0	--	--	--	79.3
Water coolers	1,110	--	--	89.4	109.9	273.5	121.2
<b>Total</b>	<b>12,574</b>	<b>73</b>	<b>318</b>	<b>4,323</b>	<b>1,276</b>	<b>6,989</b>	<b>8,772</b>

Assuming a compliance date of 2027 for all the recommended standards. While we are recommending the adoption of state-level standards for commercial hot-food holding cabinets, computers and computer monitors, and water softeners, we have not estimated savings for these products due to insufficient data on the current market.