

Re: <u>S.F. 1690 Kupec</u> 20250311_SF1690_DFLEC_Support

March 10, 2025

Dear Chair Tou Xiong and members of the Senate and Local Government Committee,

We write on behalf of the DFL Environmental Caucus. Our mission is to educate and mobilize the citizens of Minnesota to address the climate crisis and to protect, preserve, and restore the natural environment. We strongly support SF1690 and urge you to vote yes on this important bill as it will benefit our health, our economy, and our environment and make it much easier for homeowners to recycle their e-waste.

Minnesota is currently capturing a mere 23.7% of its e-waste. This means that heavy metals such as mercury and lead end up being incinerated or in our landfills, creating significant harmful impacts to the environment and our health. The MDH reports that "exposure to mercury can damage the central nervous system, kidneys, and liver." There is no safe level of lead. The MDH also states that "lead can damage the brain, kidneys, and nervous system"... and is "most dangerous to infants, children and pregnant women as lead can also slow development or cause learning, behavior, and hearing problems."

We are also losing valuable metals such as copper, and silver, needed for our energy transition. According to the August 2023 <u>Study of The Economic Potential of E-Waste and Recycling in Minnesota</u>, If 100% of our e-waste was recycled, it would generate 3,345 jobs, 78 million pounds of valuable elements. Enough silver would be recovered each year to produce 441,000 solar panels and enough copper for 155,000 EVs.

Recycling rather than mining and processing new metals also saves significant amounts of energy and reduces the carbon footprint, as shown in the table below from the 2008 report by the <u>Bureau of International Recycling</u>. For example, copper recycling emits 65% less greenhouse gas pollution than mining, and nickel recycling produces 90% fewer emissions. This is a win-win for our energy transition, and helps to eliminate the need to create new toxic copper-nickel sulfide mines that have never been operated



without causing significant damage to the environment.

Energy Requirement and Savings in Terajoules (TJ/100,000t)

Material	Primary	Secondary	Saving/100,000 Tonnes
Aluminium	4700	240	4460
Copper	1690	630	1360
Ferrous	1400	1170	230
Lead	1000	13	987
Nickel	2064	186	1878
Tin	1820	20	1800
Zinc	2400	1800	600
Paper	3520	1880	1640

Carbon Footprint and Savings Expressed in Kilotonnes of CO2 (ktCO2)/100,000 Tonnes

Material	Primary	Secondary	Saving/100,000 Tonnes
Aluminium	383	29	354
Copper	125	44	81
Ferrous	167	70	97
Lead	163	2	161
Nickel	212	22	190
Tin	218	3	215
Zinc	236	56	180
Paper	0.17	0.14	0.03

Using these data, the total saving in annual carbon dioxide emissions for the production of the secondary materials that are the subject of this report is calculated to be approximately 500Mt. The savings for the individual materials are listed in the following table.

SF 1690 requires the manufacturer to cover the costs of collecting their products. This will greatly reduce the problem of homeowners who stash away old electronics or illegally put them in the trash to avoid the cost of proper disposal.

We urge you to support SF1690 to keep toxic heavy metals out of our landfills and incinerators, and to help us reach our clean energy goals, with benefits to our economy and health, and our environment.

Sincerely,

Veda Kanitz, Greg Laden, DFLEC Legislative Committee Cochairs Cc. Megan Bond, DFLEC Chair