August 2023 Creation Care Green Tips

**Caring For Our Earth, Our Common Home: Advancing Cleaner Technologies to Protect Public Health and the Planet**

1.  As the electricity grid rapidly moves away from coal and gas to wind, solar, and other renewables, the exploration for the copper, nickel and other metals necessary for the transition (**sulfide mining)** is advancing worldwide.  Unlike the traditional iron-ore mining, never-done-before in Minnesota **sulfide mining generates and leaches toxic heavy metals into ground and surface waters,** which poses a conflict between the positive goal of achieving renewable energy and a desire to preserve clean and pristine water.  According to Minnesota Environmental Policy (MEP), there is already a plentiful global supply of copper, but it is being thrown away rather than recovered and reused.  Currently, the US gets only **38% of its copper from recycling,** but if it were to recycle just **50% (similar to the European Union's current rate),** it would produce more copper each year than would be extracted by five Twin Metals or almost ten PolyMet mines.  Minnesotans throw away **6,500 cell phones every day,** all of which could avoid the "forever waste stream" if electronic products were required to be designed to avoid the intentional obsolescence that makes them wear out or break down after a certain amount of time.  Be supportive of industries such as **Tech Dump,** a Twin Cities-based organization that has processed over 35 million pounds of electronics - all while adhering to the highest levels of **data security and environmental standards.**And advocate for requiring producer responsibility in the manufacture of electronic goods.

2.  A new pilot study by Macalaster College, the Iron Range Partnership for Sustainability, and Repowered, one of Minnesota's largest e-waste recyclers, examines the potential for electronic waste (e-waste) recycling in Minnesota. E-waste is the fastest growing waste stream in the world, and the study's authors claim that Minnesota could be a pioneer in turning this waste into an economic benefit.  Recognizing that it is unethical to rely on virgin mining in areas of the world known for human rights abuses and destructive politics, the study finds that a concentrated statewide effort to recycle the valuable metals contained in electronic devices could produce nearly **2,000 jobs and provide $2.8 billion in revenue per year.**Right now, Minnesota only collects **23.7% of its e-waste for recycling,** revealing how much opportunity we are currently missing out on.  E-waste might be the solution to both jobs and revenue, while protecting our lands and water, and respecting Native treaties.  Be an advocate for making Minnesota a leader in e-waste recycling.

3.  A long-time advocate for sustainable jobs on the Range, the Iron Range Partnership for Sustainability teamed up with researchers at Macalaster College and Repowered, a St. Paul-base e-waste recycler, to produce a new pilot study that had two goals: **1)** find out how much e-waste there is in Minnesota; and **2)** to see if harvesting precious metals from the waste stream could put a dent in what we need for "building all of the things we want to build?"  Using peer-reviewed research, market prices of metals, and local data on e-waste, the researchers found that if **100% of the 266 million pounds of e-waste generated in Minnesota each year** were captured for recycling or refurbishment, the effort would generate: **1) 1,738 direct jobs; 2) 78 million** pounds of valuable metals; **3)** enough copper for **155,000 electric vehicles; 4)** enough silver to produce **441,000 solar panels; 5) $2.8 billion** in annual revenue.  What is needed is a real policy commitment in the form of legislation providing free and accessible e-waste collection that would create a "circular economy of metals," and would put Minnesota "at the head of the pack among states and alongside the commitment from European countries."  This would fit in nicely with Minnesota's new commitment to cut carbon emissions statewide while creating more clean-energy jobs.

4.  In the US, transportation is the **largest source of emissions** that contribute to global warming, with gasoline-powered cars and trucks emitting tailpipe pollution that carries significant health risks for humans, adversely impacting nearly every organ system in the body.  Since meeting transportation needs by walking, biking, or riding public transportation isn't an option for everyone, the Union of Concerned Scientists has published a guide with helpful tips on whether transitioning to an electric vehicle is right for you ([www.ucsusa.org/resources/ev-buying-guide](http://www.ucsusa.org/resources/ev-buying-guide)).  Minnesota's new Transportation Bill includes historic investment in technologies that move away from fossil-fuel power, recognizing that as Vehicle Miles Traveled (VMT) have been **increasing significantly in excess of population growth,** MNDOT and other agencies will have to make investment decisions consistent with Greenhouse Gas (GHC) reduction and VMT reduction goals.

5.  Minnesota is fast becoming a national leader on **clean energy innovations**that will address the climate crisis while creating family-sustaining jobs.  By 2040, all utilities, including cooperatives and municipalities, must get 100% of their energy from carbon-free resources.  The Minnesota Climate Innovation Finance Authority (MnCIFA) provides for community access to solar, electric vehicle charging, and getting more clean energy on the grid.  Other renewable energy initiatives include 1) electric vehicle and school bus programs; 2) a heat pump subsidy program; 3) solar on schools; 4) electrical grid interconnection improvements; 5) electric panel upgrades; 6) energy storage; and 7) clean energy grants for tribal communities.  To find out how you can benefit from **Tax Credits for Homeowners,** go to [energystar.gov](http://energystar.gov).  Find out more about federal programs at **IRA Calculator** (<https://www.rewiringamerica.org/app/ira-calculator>.