# **ENERGYMATTERS**



### **BUILDING RESILIENCE**

With extreme weather patterns this past season driving up the use of natural gas, what role do buildings play in helping regulate energy demand? Fresh Energy is looking toward the efficiency of our buildings as an essential piece in solving the clean energy puzzle.

Currently 40 percent of Minnesota's energy output is consumed by our buildings sector. Given our cold winters and hot summers, it's not hard to see why. But to meet ambitious carbon reduction goals, our state needs better energy efficiency across our buildings and places of residence.

Retrofitting existing buildings and homes to maximize energy savings is a solid start. In 2013 and 2014—the very same years we saw the last polar vortex—our state's Conservation Improvement Program achieved electric and natural gas savings equaling approximately 1.7 million tons of avoided CO<sub>2</sub> emissions. Better yet, these massive savings occurred completely through energy efficiency improvements to existing buildings. And it's cost-effective: a recent study on the economic impact of utility savings programs found that for every dollar invested, energy efficiency programs provide \$4 to \$4.30 in energy savings, environmental benefits, and new economic activity for Minnesota.

New buildings provide opportunities for much greater efficiency, which is particularly crucial during extreme weather. When a home or commercial building is developed with an efficient "envelope" it greatly reduces energy needs. Super-efficient, net zero buildings—such

as the plans for Saint Paul's Ford Site redevelopment—can put Minnesota on the map as a clean energy leader and create a model for others to emulate. Fresh Energy is working hard to make sure that new developments, particularly those with public funding, embed leading-edge efficiency measures. These highly efficient buildings could be powered without natural gas and with small amounts of renewable electricity.

We are also working to ensure that Minnesota has a strong building energy code, which sets the minimum efficiency required in any new home or commercial building. The technology for energy efficient and cost-effective construction is here and it's time to deploy it at scale. Considering the huge expense of adding a new power plant to the grid or increasing natural gas capacity infrastructure, forward-thinking building codes and retrofit programs are a much more effective way to increase the reliability of our existing utility systems.

Ultra-efficient homes and buildings are possible. Fresh Energy will be working this year to advocate for updates to the building code and to ensure energy efficiency programs work for all Minnesotans.

Curious to see how local Minnesota developers are implementing energy efficiency in their buildings? Check out our website for a story on a multifamily affordable housing developer who maximized efficiency measures—and earned thousands back in Xcel Energy rebates. www.fresh-energy.org/villa-del-sol



J. Drake Hamilton and Michael Noble

#### Dear Fresh Energy supporters:

The 2018 election changed the landscape for clean energy progress here in Minnesota and there are many reasons for optimism. As many of you may know, this is also a time for challenge at Fresh Energy. In February, our long-term science policy director, J. Drake Hamilton, sustained a severe head injury. J. is actively in the recovery process and is receiving superb medical care by a team of professionals.

Many of you have rallied behind Fresh Energy and J. during these past few months. Know that your kind words, thoughts, and concern have done much to lift spirits—for us and J.'s family. We all know and love J. for her data-driven, science-based approach to moving Minnesota to a clean energy economy that offers prosperity and opportunity for all. For a detailed update about J.'s current health status, please visit caringbridge.org/j.drakehamilton

Fresh Energy will continue to elevate Minnesota's leadership on climate and energy in our region, across the country, and around the world, just as J. has done for decades. Thank you for being part of this journey.

My very best,

EMAIL: noble@fresh-energy.org

Michaelhothe\_

TWITTER: @nobleideas

### LEARN MORE ABOUT THESE AND OTHER STORIES AT FRESH-ENERGY.ORG

#### ELECTRIC VEHICLES ON THE RISE



Last year was big for electric vehicles. Across the country, electric vehicle sales ticked up and helped enliven the entire U.S. auto market. But Minnesota still has a clean car access problem: manufacturers simply aren't shipping many plug-in electric vehicles to our state. We are working

to change that by helping Minnesota become a Clean Car state, where there are clear requirements around electric vehicle sales. Fresh Energy is also working to increase access to electric vehicles through greater charging infrastructure, increased public awareness, and continued work with utilities on electricity rates that promote charging at night when demand is low and a lot of renewables are available on the grid.

#### 100 PERCENT AT THE CAPITOL



Fresh Energy is proud to be part of the 100% Campaign, a statewide effort that is helping people and organizations advance an ambitious clean energy platform. We're playing a big role in the campaign by providing policy leadership to the group effort and are optimistic about implementing big changes at the Capitol. In March, Governor Walz announced a historic commitment to clean energy for our state: 100 percent carbon-free

electricity by 2050. Fresh Energy's executive director Michael Noble was invited by the governor to speak at the press conference where he voiced his enthusiastic support of this monumental, nation-leading announcement.

#### MODERN TRANSMISSION PLANNING



A low-cost, reliable energy future powered by wind and solar requires an upgrade to our transmission system, which was designed to transport power from coal plants. Fresh Energy is working to create a modern, flexible transmission system in the region—to bring electricity from wind-rich areas to population

centers and incorporate modern strategies to match electricity load to demand. Fresh Energy and its partners have made progress in investing in the transmission backbone of a new, modern, clean energy system. But much work remains. We are currently leading efforts to secure completion of a key transmission line between lowa and Wisconsin and are rallying support for future investments in transmission projects.

#### Minnesota's clean energy future

Our three-pronged strategy







Energy Efficiency



Beneficial Electrification

Minnesota is now one of the fastest warming states in the country, and national trends that reflect rising greenhouse gas emissions are playing out in our backyard. Fresh Energy is working to transform Minnesota's climate trajectory by decarbonizing our economy and leading our state into a clean energy future. Our strategy is three-fold:

Carbon-free energy from wind and solar. We must enable the smart integration of solar and wind power into our electric grid. Managing consumer electricity use and building storage will be essential to aligning peaks in demand with the availability of solar energy during the day and wind energy at night.

Robust energy efficiency programs. While Minnesota utilities have already been proactive in designing and implementing comprehensive, effective program models, more will need to be done to incorporate deeper energy savings, including partnering with trade groups and contractors, offering programs for larger and harder-to-reach customers, and scaling-up and coordinating projects with other utilities.

Beneficial electrification. Getting carbon out of our energy system will require a steady transition to electrification. Electrification is the conversion of end-uses powered by fossil fuels or other carbon-based fuels to electricity. We'll be advancing policies at the Capitol that prioritize swift and targeted utility action on electrification, maximizing consumer savings, enhacing grid flexibility, and driving access and equity in underresourced communities first.

Stay tuned for more details about how we're driving deep reductions in carbon from all sectors of Minnesota's economy.

Join the Alkatout family in making a donation to Fresh Energy today by visiting our website or contacting individual giving director Meggie LaValley at:

lavalley@fresh-energy.org.

JUNE EVENT | PANEL DISCUSSION: JOURNALISM AND CLIMATE CHANGE

## SHOULD JOURNALISTS TAKE A POSITION ON CLIMATE CHANGE?

Join Fresh Energy and the Energy News Network this June for an insightful panel discussion on the intersection between journalism and climate change. We'll invite experts in their field to

discuss how this interplay shows up in

their own work—and what it means for journalists across the country. Visit fresh-energy.org/events for more details.



**DONOR PROFILE** | ALKATOUT FAMILY



### FRESH ENERGY AS THE TRUSTED VOICE

Tarek and Julie Alkatout had never heard of a Passive House before starting their remodeling plans with their architect in 2014. The couple knew they needed a functional and dynamic home to accommodate their growing family of two sons and a daughter. They quickly learned their architect's specialty lay in Passive Houses, a German-inspired building standard that utilizes ultrahigh standards for energy efficiency, thereby reducing a home's ecological footprint.

The Alkatout's home relies on 17.000 pounds of insulation, an advanced air exchange system, triple pane windows, and a mini-split heat pump. Surprisingly, the home does not require a furnace. And the family's lifestyle extends beyond their energy efficient home. "It's also about reducing and conserving our energy use, not simply finding an alternative or replacement source. We're raising our kids to understand how to take good care of the limited resources we have on this planet." The family also drives an electric vehicle and they're proud subscribers in Xcel Energy's Windsource program.

Tarek has found that Fresh Energy has been a wonderful resource to them on tackling the energy crisis and influencing decision makers. "Fresh Energy is a strong voice for making changes that scale with the significance of the problem."



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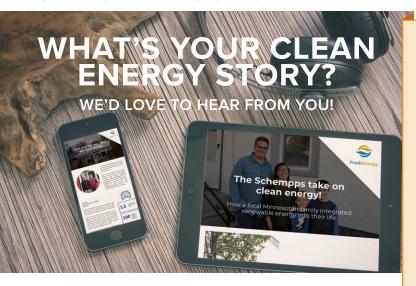


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**RECENT NEWS** | CLEAN ENERGY STORIES



Have you installed solar panels on your roof? Made the swap from gas-powered appliances to all electric? Maybe you're a proud owner of an electric vehicle? **We want to know!** 

As part of our initiative to better highlight the importance and impact of energy policies in Minnesota communities, Fresh Energy is connecting with everyday families and businesses to learn and share their clean energy stories.

### YOUR STORY COULD BE FEATURED ON THE FRESH ENERGY WEBSITE



Don and Pat / Eagan couple swaps out their hybrid for an electric vehicle, and added solar panels to their home



Lori / Saint Paul mosaic artist buys a used electric vehicle and learns a lot about public charging

Read these stories and more at fresh-energy.org/clean-energy-stories

Please contact senior communications and engagement associate, Caley Long to get started.

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