

Presentation to Flagstaff City Council 5/9/23

While the City Council has declared a “Climate Emergency” we are very concerned that the Mayor, City Council, and City Staff take this seriously in their decisions about the City’s future.

Climate Change really is an emergency. The recent report from the Intergovernmental Panel on Climate Change (IPCC) now projects that we will reach 1.5°C warming in 2028. That is only five years away.

Climate disasters are already costing the US economy hundreds of billions of dollars every year. Climate disasters are already costing Flagstaff tens to hundreds of millions of dollars in damages, not to mention the cost of human suffering from drying forests, wildfires, and wildfire risks.

The IPCC projects, based on data from the insurance industry, that the costs to the global economy when we reach 1.5°C warming will be \$54 trillion per year, not to mention the human suffering from a large array of more frequent and more intense climate disasters.

In this global and local context, the **City of Flagstaff must make decisions** about the City’s carbon footprint. Carbon footprints are additive. Every bit we emit adds to the problem. In 2020 our emissions had already put 2,400 GT of CO₂ into our atmosphere. We will reach 1.5°C warming when we have put 2,900 GT of CO₂ into our atmosphere. That means that in 2020 we only had 500 GT more that we could emit before reaching 1.5°C warming with its immense costs. **Every bit we emit matters.**

There was a group who presented to y’all in this chamber last week saying that we shouldn’t work to reduce our footprint because others, like China aren’t reducing theirs. Unfortunately, that is exactly the attitude that has gotten us into this mess in the first place. Carbon footprints are additive and **every bit we emit matters.**

People in the Flagstaff community are very concerned about the local and global effects of climate change. Year after year they see the effects of higher

temperatures and drought on our forests and rangelands. Even Juniper forests are dying now, and we all know that junipers are as ‘tough as nails’. People count the increasing numbers of wildfires and prepare to evacuate as they approach. They breathe the smoke, and some watch their homes go up in flames. They worry that Flagstaff might be the next Paradise, CA or the next Boulder County, CO and wonder if this climate change cost will be their final sacrifice.

Extreme temperatures in Central Arizona are now sending thousands of people to the emergency room every summer with symptoms of heat stress. People in Flagstaff are very concerned about the effect that people escaping extreme heat in Phoenix have on **Flagstaff’s housing markets**. The rallying cry of “**Homes not Hotels**” can be seen in more and more neighborhoods. Lack of housing and exorbitant rents are driving some folks away and others into homelessness.

Studies have now confirmed that it is not just our imagination, but monsoon downpours have actually gotten much more intense. We now get several 200-year rainfall events in the same summer. Add these to our fire-denuded watersheds and our infrastructure just can’t handle it. Flagstaff was not built for these kinds of storms. Homes, basements, and city streets were not designed for such downpours. How will homeowners and the City pay for all of the new infrastructure that is needed?

These are just a few of the costs of climate change on the Flagstaff community. Ranchers have to haul more feed and water in fall and winter because of our drying rangelands. **Food costs** will keep on rising as our agricultural systems struggle. Already corn production in Iowa has become more volatile while corn production in Northern Alberta is rising steadily. Extreme drought is wiping out corn, bean, and melon production in Guatemala, Honduras, and El Salvador, driving farmers off their land. Many of these **climate refugees** end up at our southern border and they need our help for a problem that we have largely caused. New diseases are expected to appear and become more prevalent in Flagstaff as new mosquito species move northward. These could include Zika Virus, Chikungunya, Malaria, and others.

How do these costs compare with the costs of reducing our carbon footprint? In terms of human suffering there is no comparison. The costs of climate change far outweigh the costs of investing in clean energy, conserving energy, and converting to cleaner lifestyles. In fact, all of those things have benefits to our economy and to our health and well-being.

Fortunately, wind and solar have been the least expensive ways to generate electricity for many years now and people in the Flagstaff community and our region are investing in it. Right now, we have 99 MW of clean electricity from the Perrin Ranch Wind Power Plant and 127 MW from the Dry Lake Hills Wind Power Plant. A 477 MW Wind Power Plant is being built at Chevelon Butte just outside of Winslow and Babbitt Ranches is installing 161 MW of Wind and 60-80 MW of Solar Power just north of the Peaks. Next year Babbitt Ranches want to begin installing an additional 480 MW Solar Power Plant and this will give us 1,424 MW of clean electricity. The time to shift to electric power is now.

The City Council has many decisions to make in the implementation of our **Regional Plan's goal of reaching net zero emissions by 2030**. The \$1 billion proposal to move the hospital to the outskirts of town is by far the largest carbon footprint decision in front of the City right now.

As currently stated, this proposal is likely to have an operating footprint well over 20,000 metric tons of CO₂ every year. Please require NAH to provide their estimate. The construction industry accounts for 38% of the US carbon footprint, how much CO₂ will the NAH construction produce? Please require NAH to provide their estimate. There are projected to be 53,190 additional vehicle trips because of this relocation. What will be the carbon footprint of that? This proposed relocation will require \$54 million in road improvements. What will be the carbon footprint of those? The hospital's current location will need to be repurposed for unspecified uses. What will be the carbon footprint of that?

The City must require these carbon footprint estimates of NAH so that the City's Sustainability Division can assess the impacts they will have on the City's ability to meet its goal of net zero by 2030 and hopefully work with NAH to reduce all of these carbon footprints. There are currently other hospitals being built with net zero carbon footprints and there is no reason that NAH could not follow these

new standards of their own industry. <https://www.hfmmagazine.com/articles/4274-hospitals-reduce-their-carbon-footprints-with-sustainable-solutions>

There are many things that the hospital relocation proposal has not included and here are just a few examples:

- a. PV panels on all parking lots and structures
- b. carbon absorbing cement substitutes
- c. a solid commitment to purchase electricity from only clean sources
- d. using clean hydrogen instead of fossil fuels for all back-up energy demand
- e. 150 EV charging stations
- f. 100 bike racks
- g. two all-electric buses for covering Mountain Line's newly required routes
- h. passive solar layout of the building to minimize heating and cooling costs
- i. LEED certification of building plans
- j. and many other things that responsible cities and hospitals are doing...

We urge the City Council to vote "NO" on the NAH proposal until such time as they provide their carbon footprint numbers and the City's Sustainability Division has had the opportunity to work with NAH to minimize their footprint. Please do not reverse years of progress on Flagstaff's carbon footprint. Build a legacy of reducing our carbon footprint and protecting our community from extreme heat, greater wildfire, greater flooding, and the emotional cost of doing nothing.

Every Bit We Emit Matters! The bigger the bit the more it matters!

Dr. Stefan Sommer, Board of Directors, Northern Arizona Climate Change Alliance with 9,000+ members in Flagstaff

along with 12 NAZCCA members in attendance:

Bryan Bates	John McCartney
Sat Best	Duane Ray
Satananda Best	Gisella Ray
Pat Ellsworth	Jill Stephenson
Phoenix Eskridge-Aldama	
Marcus Ford	
Dee Hoagland	
Rich Holtzin	
Cassie Malone	