## **Energy Independence!**

We need to achieve:

**National Energy Independence** 

**State Energy Independence** 

**Community Energy Independence** 

Family Energy Independence

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Every US Post Office should have solar powered direct (quick) electric vehicle chargers for public use at a modest price or free, to accommodate electric vehicle travel and charging nationwide.

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In the Uinta Basin, where I grew up, we often gathered as a community at the hydroelectric power generating plant in Uinta Canyon.

We would float gently along on inner tubes, on the nearly horizontal canal, which directed water from Uinta River, along the ridge, until it reached a point above the power plant, where the water was directed downward through a pipe, to the power plant below, to turn the turbines, which generated electricity.

Years ago, this power plant supplied all the electricity needed for the homes and businesses in the communities nearby.

Throughout Utah, power for every community was generated in similar little hydroelectric power plants, positioned on streams and rivers where canyons through the mountains entered

the valleys below.

As power needs increased, the small power plants could not produce enough electricity. So, we set forth, as a nation, to create a vast electric grid, which utilized power generated by turbines at large hydroelectric plants at large rivers which we had dammed into reservoirs. We also created large power generating plants which burned fossil fuels, to generate steam, to turn large turbines.

This system of power generation served us well for most of a century, as power needs increased throughout our nation.

New technologies, such as LED lighting, and more efficient appliances, have allowed us to lessen the individual needs of those things in our homes and businesses. Geothermal air conditioning allows us to utilize Earths temperature just below the surface, to heat and cool our homes and businesses to any comfortable temperature we desire year round.

Power generating technologies have also expanded, allowing us to generate large amounts of power directly from sunshine, wind and ocean waves.

Battery storage has improved, allowing us to store the energy from solar and wind production for use when those sources are less effective.

Utah is always on the forefront of emerging technology. We are there today, in this crucial moment of change, when humanity is replacing old thoughts and old technology with new perspectives and new technology to utilize old sources of energy.

American Indian tribes in Utah and surrounding areas became familiar with the climate and resources available and utilized the resources nearby or traveled throughout the year to climates advantageous for the season.

European immigrants arriving in Utah from other nations and from elsewhere in the United States, also carefully considered the climates and available resources. They built permanent homes, business buildings and churches, utilizing local resources. They heated these homes with wood from the surrounding forests and coal from local deposits.

The Sun which has shinned upon Utah since Earth's beginning, still shines upon us today. Currents of air which have redistributed temperatures across Utah since Earth's beginning, are still flowing as wind throughout our State.

Utah has many hydrocarbons buried as coal, oil and natural gas. Their extraction is a substantial part of families meeting their financial needs in many communities throughout Utah. It has been boom and bust economy, yet it has been the primary income for generations of families in these communities.

These precious resources are finite. Their creation requires millions of years in very particular conditions. As we continue to extract them, we need to use them wisely, so that the labor of those who work to provide them for us can be realized for generations yet to come.

These hydrocarbons contain energy from the Sun, which plants absorbed long ago, storing it in their cells, which now lie buried deep beneath Earth's surface. These hydrocarbons have many uses, some currently realized and some yet to be discovered, yet we burn most of them, releasing the stored energy at once, to power our communities and transport us from place to place. If we burn them all now, we eliminate all current and future opportunities to utilize these valuable hydrocarbons in wonderful ways.

Our nation has all of the Earth elements necessary to produce Solar panels and battery storage, and to produce the vehicles to transport people and products around our nation. We have the resources to produce all products that we use.

We need to stop pilfering these resources from other nations, leaving their environments devastated.

The people of our nation can provide all the labor to produce all products we utilize.

We have allowed corporate executives and shareholders to become wealthy by sending work to other nations, where laws don't require equitable compensation for those who labor to produce the products for those companies.

Extracting resources from other countries and manufacturing our products in other countries has led us to propping up governments and oligarchs who control them. It has cost us tremendous military resources and at times caused our soldiers to be killed in our efforts to maintain our control of resources and governments in other countries.

Utah has many Earth elements necessary for our nation's energy independence.

Each home in Utah can become independent in their family's energy needs.

We need to accommodate every family's home with solar panels and battery storage.

We need to supply geothermal, air conditioning of every family's home.

Each community in Utah can become independent in their energy needs.

Every building in every community needs to have solar panels and battery storage.

Every building in every community needs to have geothermal air conditioning.

We made a decision years ago, as a nation, to utilize combustion engines in our transportation, rather than electric vehicles.

To accommodate our use of fossil fuels in transportation, we placed fuel stations throughout every large city and in each little town and on every roadway route throughout our nation. Here in Utah, little fuel stations were placed in each town and city and along each majestic mountain highway and along each route through our beautiful deserts.

As fossil fuel transportation became dominant, the electric trolleys which had so efficiently transported people throughout the cities of our nation were replaced with buses. Our grand trolley system in Salt Lake City, Utah was abandoned an dismantled at that time.

We have now built, again, a grand electric transportation system throughout and between our cities in Utah where the trolleys once were.

Ingenious citizens of our nation rallied years ago to create unique vehicles to utilize combustion engines to transport people and products throughout our nation.

Ingenious citizens of our nation are rallying again, creating unique vehicles to utilize electric motors to transport people and products throughout our nation.

At the Utah Department of Transportation building in Salt Lake County, a solar panel array and series of chargers allow people to quickly charge electric cars for free.

By placing such panels and chargers throughout Utah and our nation, such as we once did with fuel stations, we can accommodate families travel needs and communities need to transport products.

As each family and community in our nation becomes independent

in energy needs, then we here in Utah will be independent in our energy needs and we as a nation will be independent in our energy needs.

We have already started down this critical, wonderful pathway towards, family, community, state and national energy independence.

With wars and rumors of wars abounding on Earth, it is paramount that we pick up our pace down this pathway.

It is time to run forward, towards a future, which, strangely, beautifully, resembles our past, where neighborhoods depend upon the neighborhood to meet all our energy needs.

Laird