# SUMMARY OF DRAWBACKS OF ALTERNATE ENERGY

## Introduction

The following weblink is a five minute video of "What's Wrong with Wind and Solar".

https://www.prageru.com/video/whats-wrong-with-wind-andsolar/?utm\_source=Main+Mailing+List&utm\_campaign=50f21f798c-EMAIL\_CAMPAIGN\_2020\_04\_09\_06\_29\_COPY\_01&utm\_medium=email&utm\_ter m=0\_f90832343d-50f21f798c-178947406

If the link is unavailable, below are the main points made in the video.

## **Main Points**

The maximum amount of energy that can be obtained from either conventional or alternate energy sources and batteries, are constrained by the laws of physics and chemistry. Our task is to get as close as possible to the maximum amount - although the best will never be reached.

The figure below shows us our best performance for alternate energy sources after decades of research and development.



It is hard to understand how poorly battery storage is. Telsa has built the World's largest battery factory, yet it would take 500 years for this factory to produce enough batteries to store one day of electricity used in America.



Like conventional power, all alternate power equipment must be built using non-renewable materials. Some examples

A single electric car battery weighs approximately half a ton. This needs 250 tons of earth and minerals to be dug up and processed.

A 100 MW Wind Farm which can only provide power to 75,000 homes, requires the inputs shown below.



The solar farm needed to supply the same poewer for 75,000 homes reqires 150% more inputs than wind turbines.



Rare earth minerals are needed for alternate energy. Mining for these minerals is estimated to need a 200-2,000% increase in the number of mines.



#### Waste

Alternate power equipment has a life of 15-20 years. Conventional power equipment lasts twice as long.



By 2050, the disposal of solar panels waste will be the equivalent of twice the total plastic waste that we have today.



Wind and battery waste are significantly worse, with millions of tons of additional waste.

# Efficiency Comparison.



Cost of drilling one oil well is the same as one wind turbine. Yet the turbine only produces the equivalent of one barrel of energy per hour while the oil well produces ten barrels per hour.

# Storing Energy Comparison.

It costs \$0.50 to store a barrel of oil of gas equivalent. But batteries, costing \$200 are needed to store one barrel equivalent of alternate energy.



## Conclusion

This video reinforces the web pages argument of how inadequate alternate power is, when compared to conventional power.