

Your work is as urgent as stopping nuclear warfare. Please act as if your grandchildren's lives depend on what you do now.

HOUSING

RPI, Rensselaer Polytechnical Institute, hired me to teach solar energy engineering, in part because I have lived for 40 years in an energy positive, direct gain solar house. The housing industry could reduce NYS fossil energy use by 57 % by 2033 if simple solar standards were incorporated into building codes.

TRANSPORTATION

Similarly fossil fuels released by water craft from and into NYS waterways could be reduced using solar electric marine propulsion. NYS has the United States' first US Coast Guard Certified commercial 100% solar electric tour boat operating in the Hudson Valley from Kingston. 7 years ago a solar electric boat made a round trip from the Hudson River along the length of the Erie Canal to the Niagara River delivering 4 tons of cardboard to a paper mill for recycling. These boats were charged continuously by sunlight, never plugged in. *No Range anxiety*

GENERATION

A complaint is often made of solar and wind, which happens to be the least expensive source of electricity, that it is intermittent. Give the ISO, independent system operator, the authority to use up to 2/3^d of the output of solar and wind farms. Therefore there will be a 50% reserve available from both wind and solar farms to add to the grid as ISO sees fit. This makes solar and wind power dispatchable, win, win, win. This suggestion is sometimes known as "curtailment".

URGENCY

Because of Covid slowdown I had the opportunity to take the first solar electric boat trip from Washing State to Alaska and Glacier Bay. The 1400 mile trip is equivalent to from Florida to Maine. Seeing the rapidly disappearing glaciers puts a personal urgency to reducing carbon emissions and reducing industrial use of fossil fuels.

Sincerely,



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