Subject: Date: Online Form Submittal: Board and Commission Application

Sunday, February 6, 2022 4:02:44 PM

Board and Commission Application

Step 1

Application for Appointment to Whatcom County Boards and Commissions

Public Statement

THIS IS A PUBLIC DOCUMENT: As a candidate for a public board or commission, the information provided will be available to the County Council, County Executive, and the public. All board and commission members are expected to be fair, impartial, and respectful of the public, County staff, and each other. Failure to abide by these expectations may result in revocation of appointment and removal from the appointive position.

Title	Mr.
First Name	Ray
Last Name	Kamada
Today's Date	2/6/2022
Street Address	31 Longshore Lane
City	Bellingham
Zip	98229
Do you live in & are you registered to vote in Whatcom County?	Yes
Do you have a different mailing address?	Field not completed.
Primary Telephone	3605477347
Secondary Telephone	Field not completed.
Email Address	rkamad@gmail.com
Step 2	
1. Name of Board or	Climate Impact Advisory Committee

Committee

Committee	
Climate Impact Advisory Committee Position:	I have previous work or educational experience in renewable energy development.
2. Do you meet the residency, employment, and/or affiliation requirements of the position for which you're applying?	Yes
3. Which Council district do you live in?	District 3
4. Are you a US citizen?	Yes
5. Are you registered to vote in Whatcom County?	Yes
6. Have you declared candidacy (as defined by RCW 42.17A.055) for a paid elected office in any jurisdiction within the county?	No
7. Have you ever been a member of this Board/Commission?	No
8. Do you or your spouse have a financial interest in or are you an employee or officer of any business or agency that does business with Whatcom County?	No
You may attach a resume or detailed summary of experience, qualifications, & interest in response to	Field not completed.

 Please describe your occupation (or former occupation if retired), qualifications, professional and/or community activities, and education Note that this is an amended application.

Retired DoD/NOAA consultant as meteorological turbulence/diffusion researcher, 1993-2018

Assnt. Prof., Environmental Physics Group Leader, Naval Postgraduate School, 1987-1993

PhD, Atmospheric Science UC Davis, 1985.

Recent relevant publications: See https://www.linkedin.com/in/ray-kamada-17778015/details/publications/ for links.

Why, How, and Who Can Pay to 100% Decarbonize Whatcom County, 99 pps., KSD, 1/2020

Scientist's Advice for Climate Task Force, Whatcom Watch, 5/2019

Assessing the 2018 U.N. IPCC Special Report, Global Warming of 1.5 °C, KSD 2019

What Can We Do? Renewable Energy and Energy Efficiency, Whatcom Watch, 12/2017

Changing Climate: Adaptation or Extinction, Whatcom Watch, 10/2017

U.S. Wind and Renewable Energy Review, Plus Climate Change Impacts, KSD, 3/2014

Trends in Wind Energy, Journal of Renewable and Sustainable Energy, 9/2011

Other Relevant Activities:

peer reviewer/editor for Journal of Renewable and Sustainable Energy, 2014 - 2018

peer reviewer/editor for Solar Energy Journal, 1981 - 1985

10. Please describe why you're interested in serving on this board or commission

I've lived in Whatcom County full-time since 2007. Climate change impacts us all. I've studied it in detail since 2009. We have an opportunity to mitigate, as well as adapt to it. So, I'd like to help out where I can be useful.

E.g., as one who likes market-driven solutions, our county is unique to Washington in having two major oil refineries. Yet, BP chairman Brian Looney expects it to be carbon neutral by 2050, a tall order. So, as one option, perhaps well-suited to Cherry Point, long-term energy storage in the form of large, liquified air (LAES) plants are coming to market. Using 100% clean, seasonally excess hydroelectricity from PUD-1, LAES can be 65% (round-trip) efficient, by piggy-backing waste heat from Intalco (if/when resurrected), while waste cold from LAES could also be transported and sold locally as refrigeration, e.g., to Bellingham Cold Storage a/o our hospital, using standard liquid nitrogen trucks or DOT-111 cryo-railcars. I.e., liquified air is an energy-

dense (>100Kwh/m3), non-toxic, low risk medium, storable as ~130 cubic meters or ~9 Mwh per railcar. In fact, twenty 100-car trains per day could haul ~17 Gwh/day to/from Cherry Pt., enough to power the rest of Whatcom Co. Thus, while everyone else buys batteries, Whatcom Co. could become a regional center in the coming medium to long-term energy storage market.

Anyway, I suggest we track LAES progress (versus Li-ion battery costs). BTW, I have no financial or other ties to any commercial or research LAES entities or any other renewable energy company. LAES just sounds to me like one of the cleaner, sounder, renewable energy options, perhaps highly suitable for our county.

References (please include daytime telephone number):

Ellyn Murphy 509-554-6203 Eugene Akiaten 360-820-2985 Satpal Sidhu 360-778-5200

Signature of applicant:

Ray F. Kamada

Place Signed / Submitted

Bellingham, WA

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