

Climate Impact Advisory Committee



DRAFT Meeting Minutes

Date: February 16, 2023

Location: Hybrid Meeting: In-person location at Civic Center, 322 N. Commercial, Bellingham – come to main door at 5:30PM for access. Remote access via Zoom (details below).

1) Call to Order/Roll Call

2) Review and approval of minutes from last meeting

Charles noted a typo in the minutes to add a word at the top of page 4 and Regina noted her last name was misspelled. Charles moved to approve the minutes. William seconded. Motion passed.

3) Public Comment

Attendees: Chris Heimgartner PUD-1, Jack Belcher Bellingham Herald, Jack Wellman PSE, Kayla Schott-Bresler, Gary Stoyka, Paul Schissler, Mathew Heggen, and John Gold.

Paul Schissler: Member of the Whatcom County Conservation Easement Program Oversight Committee, which is in a transition this year. County Council agreed to small increase in staffing this year, with another FT equivalent for January 2024. Will ask fellow members of committee to repeat recommendation to County Executive to improve coordination between agencies at county responsibility for conservation and natural resources. (Was taken under advisement both years made recommendation). Would be good time for other departments to engage in a dialogue about this. Maybe there’s a different way to handle conservation that is not as siloed, better funded. Conservation Futures revenue isn’t what it could be. Speaking for himself, not for the Committee.

Charles Bailey: could you explain what you mean by better coordination?

Paul: Yes, lots of agencies dealing with land, as an example. Better coordination might mean that multiple agencies involved in that type of planning could work together.

Chris Heimgartner: General Manager for Whatcom PUD. Thank you for the invite.

QUORUM	Y
Members Present	
Charles Bailey	X
William Bethel	X
Suneeta Eisenberg	X
Derek Gremban	X
Steve Harrell	X
Regina Jefferies	X
Ray Kamada	X
Ellyn Murphy	X
Imran Sheikh	
Phil Thompson	X
Eddy Ury	X
County Council Rep: Kaylee Galloway	X
County Staff: Lauren Clemens, Chris Elder	X

4) CIAC Secretary – Ellyn (10 min)

Charles has agreed to take minutes but cannot start until March due to recent eye surgery.

5) Introduction of Lauren Clemens, Climate Action Manager – (20 min)

CIAC members introduced themselves to Lauren and expressed areas they would like to work on as members of the committee.

Charles has been very interested in electrification previously working on the new Ferry committee which proposed to buy a hybrid electric ferry. He is very interested in energy resilience and resilience centers and the impact of the Inflation Reduction Act on increasing distributed energy resources (DERs) for low- to middle-income communities.

William is focused on forest restoration and wetland and how they will be impacted by climate change.

Suni: permaculture, green buildings with an emphasis of using hemp as a carbon sequestering and farming crop rotation tool, solar, high-speed transit, and accessible education systems at WWU and Skagit Community College.

Derek: was originally a founding member of CIAC but had to resign when BP transferred him to Europe. His interest working at BP is on how we deliver clean energy in the right time and place.

Steve: Worked on community research project in 2019. Interested in bringing agricultural community into our effort to mitigate and adapt to climate change. Also interested in electrification, including heat pumps, etc. Does publicity and writing. Wrote 2 ½ chapters of CAP, writes lots of op eds, etc. Climate dashboard to show data/progress toward climate action goals.

Regina: Assistant Professor at WWU & lawyer. Federal administrative law. Interest in governance, regulatory systems. Connecting university and students to work of the committee and CAP.

Ray: Former academic in applied physics. Was a consultant for Dept. of Defense and Denmark in Wind Energy. Interest is focused mainly on reducing emissions at Cherry Point Refinery. Wrote a concept paper on a solar farm adjacent to BP. Also wrote paper on the potential for electrolysis and hydrogen and the indirect impact on GHGs. Wrote a 99-page PPT on how to decarbonize Whatcom County.

Ellyn: Splits her time between forestry issues and electricity and buildings. Monitors UTC and utility progress under CETA.

Phil: Retired from WWU in 2020 from Economics Department. Taught energy economics, regulatory economics, environmental economics, and founding member of Institute for Energy Studies. Main interests in policy-related things. Following implementation of the Climate Commitment Act, what's happening at UTC.

Imran: was not present. He is an Asst. Professor in the WWU Institute for Energy Studies. His specialty is building energy. Imran was previously at Berkeley where he studied electric heating and its impacts on the electric grid.

Lauren: Lauren is from Washington but has been living in Indiana for 8 years. She moved to Indiana for grad school after finishing her undergraduate degree in economics. During the last 4 years, she was the assistant director of sustainability for City of Bloomington. Managed CAP there and started 4 programs to implement. Lauren has done regional community grantmaking. There will be many opportunities for working with county residents who may not be aware of the committee's work. Regional collaborations are also possible. It is just her 4th day, so just starting to meet everyone. By next meeting, she should have better idea of issues.

6) Update on Climate-Related Issues Before the Council and Administration – Kaylee, Lauren, Ellyn

Kaylee's Comments:

- (1) List of climate action priorities that she had for forthcoming year. Hopefully have had a chance to look them over. If any of the issues speak to you particularly and you want to help with research, outreach, etc, she welcomes assistance.
- (2) Letter around climate action priorities were hoping to send to legislators. That letter passed 7-0, with all council members supporting our climate action priorities to the legislature.

- (3) Spent 2 days with 40 and 42nd delegation. Visited with all 6 legislators.
- (4) WIRE1 adjudication – proviso that has support from county, city of Bellingham, Whatcom PUD, Lummi Nation, Nooksack Tribe, and agriculture
- (5) Was in DC for the National Association of Counties Conference. Remarkable amount of Federal investment that has and will continue to trickle down to local governments. Lots of money coming to state and local governments around renewable energy, resiliency, infrastructure needs, broadband, etc. Tremendous opportunities for the county to evolve in really critical ways.

Ellyn: Was there any discussion on the bills that we recommended for expanding renewables and DERs? **Kaylee-** I don't think there was particular discussion on those, because we only had about 15 minutes to talk. We talked a bit about electrification and transportation priorities.

Charles: Did you hear in Olympia any discussion on virtual net metering (VNM)?

Kaylee: I did 't. A lot of our conversations were budget-related.

Ellyn: HB 1509 "Fair Access to Community Solar" This bill is a compromise for VNM that would provide on-bill crediting for community solar. It's a simple system that avoids the concerns utilities have with VNM. Utilities do not like the high cost of VNM software and they want to be the sole contact with their customers. HB 1509 eliminates these issues.

Steve: Would you send the proviso on education? **Kaylee** – Yes, I will. It includes the 2.7 fully funding the Dept. of Ecology request + filing assistance and what we've historically called "solution table."

Ellyn's Comments: Ellyn gave two presentations on February 7th. She presented to the Climate Action & Natural Resources Standing Committee on recommendations for different renewable energy bills. HB 1427, HB 1509, HB 1756, and HB 1391. I also gave a presentation to the Forestry Advisory Committee (FAC) on the carbon accounting of Forests in the ClearPath model and suggestions as to how our advisory committees could work together. FAC members were interested in doing additional timeframes to determine if there are specific trends in issues like insect and weather damage, wildfires, forest health, etc. If we do further segregation of forest tax zones (e.g., rural forests, commercial forests, DNR, USFS, etc.) it could provide information on best management approaches. **Charles** – was there any mention of a joint meeting? **Ellyn** - it came up, but don't know how useful it would be at this point. FAC has formed a subcommittee to look over our CAP strategy and actions on forestry and to provide comments. There will be opportunities for joint meetings, but not sure need to force one now.

Chris: FAC is excited about reviewing the CAP to see where complementary opportunities exist, so possible to have a joint meeting after they finish their review.

Charles: did you send a letter to the DNR regarding their carbon program and did you receive a response? **Chris:** The County Council did approve and send a letter that detailed the climate impact and forestry advisory committee perspective. They softened language slightly because some schools do rely on timber revenue. DNR has been requested to provide more data, but not certain it's been delivered. Will get a copy of the letter to the Committee.

7) Progress with BP on Developing Renewable Energy – Ray and Derek

Ray presented his latest calculations in a PowerPoint presentation. We're at part of the curve that is a near-linear relationship between cumulative CO₂ emissions and global warming.

At the local level, we're trying to displace some of what PSE sends to the Cherry Point refinery, which is supposedly the 15th largest in the US. It processes about 242,000 barrels of oil per day. PSE's 2020 fuel mix was 22.96% coal, 27.04% gas.

Key points from **Ray's** Presentation

- (1) Using PSE's 2020 fuel mix, Ray calculated their emissions to be ~0.71 kg C_e/kWh

- (2) 1 sq mile Cherry Point Solar Farm may avoid >130 kilotons of CO₂ or 6.2% of refinery emissions
- (3) BP spent \$215M in 2021 for efficiency upgrades lowering emissions by 160 ktons. This is \$1.34M/kton of C_e versus \$0.94M/kton of C_e or less for a solar farm.

Derek: it is important to clarify – although I have worked for BP since 2009, on this committee I don't speak for BP. These are just my own thoughts. Anything I say cannot be construed as "BP said".

I'm very excited about the solar farm idea. Energizing meeting –folks really appreciated Ray's analyses. End of the day, they have to look at this project and as well as other local projects and compete globally for BP funding. They're looking for where they can invest money that will get the biggest emissions reductions. BP's building a solar farm in Ohio now, so they are happening. Was a good step to have Ray give them things to think about. This is one thing they're considering, but there are other renewable energy projects being considered as well.

BP is about to invest another \$8 billion in renewable energy projects. When we know more, BP would be interested in coming and speaking to the Committee.

Ellyn: When you say there's other projects being considered, is that for BP here at Cherry Point or globally? **Derek:** yes, both. Projects considered locally as well as globally. Can't really say what projects are being considered locally because I don't know what's public. When time is right, I can act as liaison or support to make these connections happen.

Ray: BP could possibly sell carbon credits from the solar field to large purchaser. PSE does have a plan to buy lots of credits to offset their emissions.

Steve: (1) build solar farm and use less carbon-emitting electricity to run refinery, but why not just get renewable energy from PSE rather than building your own since PSE is reducing emissions to net zero. (2) how long until you save as much emissions as the carbon embodied in the panel? Steve pointed out that BP has recently dialed back climate pledge amid soaring oil profits. Creates doubts about BP's transition to a clean energy company. (3) Why are we trying to help BP save relatively small amounts of carbon emissions if they are dialing back on their climate pledge?

Ray: Question (1) – PSE is now saying that they are just going to buy offsets to meet their climate goals. The purchase of these offsets are charged to PSE's customers. Regardless, a solar field will be adding green electricity to the grid. Question (2) Windmills and solar panels have a much smaller carbon footprint than a natural gas plant (30 to 1). The degradation rates of solar panels keep going down – panels can last 40-50 years.

Chris Heimgartner (PUD-1): I am probably only person present that's shut down a coal plant and commissioned a 50 MW solar farm replacement. Ray's calculations are pretty much spot on. Just doing math in head – maybe overestimating the density you can achieve, but the efficiency of panels increasing would make up for it. The panels are paid off in 2-3 years according to the U.S. Energy Information Administration (eia.gov). From a utility perspective, Ray is right that we need more power generated from non-carbon sources. It displaces otherwise carbon-based power. If you look at where it's cost-effective to locate these panels, it's Eastern Washington. Real problem is getting power from Eastern Washington over here. This is a big field you're talking about with BP – utility scale. If BP did this, they would not only get lots of positive press, but they'd help the grid here in the Puget Sound region immensely. The current grid transmission bill in the legislature creates another layer of planning new

transmission at state level. Unclear whether will eliminate local control of site issues. Nobody wants it in their backyard. Right now, you cannot build a transmission line across the Cascades. It's a problem across the U.S.

Additional Comments:

Phil: If they, BP, build a 100 MW solar farm, that's all for the good. They are just adding renewable energy to the grid.

Chris H.: I don't believe BP has any transmission other than the substation and breakers. Power is wheeled to them from an Open-Access Transmission Tariff (OATT) – its really a transmission adder. BP has negotiated bilateral contracts with sources that are independent of PSE. The price BP pays for electricity is a competitive issue that they are unlikely to share with others.

Ray: One reason to help BP set up this solar farm is because they have big bucks to do this type of project. Who else has \$150M to do this type of project? It's really a matter of what we can get done in Whatcom County to increase local renewable electricity for resilience.

Regina: Asked about the available land at Cherry Point. **Ray:** BP has about 1,100 acres, about a third of which is wetlands. This is how he came up with ~640 acres for the solar farm. There will undoubtedly be environmental reviews on the siting of such a facility.

Charles: Can you give any idea of timeline for this?

Ray: from here on, it's up-chain. Would start with BP locally selecting this project among others. Then it goes to national level, and if advanced, it would compete with other projects at the international level. We are far removed from the decision makers.

Kaylee: Would there be value in having a letter of support from County Council? Would local letters of support make it more competitive?

Derek: When BP is ready to announce, then they would likely present their plans to the CIAC and Council for their backing.

8) Old/New Business

Ellyn asked **Eddy** if he was planning on attending the County Planning meeting next week to discuss the Wind Code revisions. **Eddy** said yes, he will be there to represent the CIAC subcommittee's recommendations.

Chris: March 9th Compound Flood meeting at the Pioneer Pavilion in Ferndale, 6-8 pm. Will be presenting various sea-level rise and compound flood scenarios. Will share with community and get feedback on concerns, etc. Encourage you all to attend.

9) Adjourn

Minutes Submitted by: Joint effort starting with excellent notes taken by Regina Jefferies.