

From:
To:
Subject: Online Form Submittal: Board and Commission Application
Date: Monday, January 2, 2023 8:38:53 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 Chris

Last Name Hoops

Today's Date 1/2/2023

Street Address [REDACTED]

City [REDACTED]

Zip [REDACTED]

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 [REDACTED]

Secondary Telephone *Field not completed.*

Email Address [REDACTED]

Step 2

1. Name of Board or Committee Climate Impact Advisory Committee

Climate Impact Advisory Committee Position:	I have previous work or educational experience in the energy sector.
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 1
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 the following questions	Attached

9. Please describe your occupation (or former occupation if retired), qualifications, professional and/or community activities, and education

I am an engineering manager for Caterpillar Inc. overseeing 12 engineers and the operations of an R&D facility in Ferndale, WA. We are housed under the Energy and Transportation division in Large Power Systems focused on developing engines for power generation that operate on natural gas, biogas, and hydrogen. We are highly focused on developing solutions with reduced greenhouse gas emissions to satisfy our customers needs and closely follow the market trends for alternative power generation technologies. A large portion of our budget the past few years has been geared towards developing engines for the alternative fuels market (hydrogen, ammonia, biogas, etc.). As part of this role, I am responsible for comparing performance of gas engines to other technologies (fuel cells, batteries, solar, etc.) and how they would pair with these technologies as we transition to a carbon neutral electric grid. This requires greenhouse gas emissions and overall system efficiency calculations. I believe my background with energy systems and the knowledge of these markets can greatly contribute to the objectives of this advisory board.

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

I have been very passionate about the energy market since entering into my college education where I focused on energy systems. Our current energy infrastructure has driven the progress of humanity and will continue to provide the basis for advancements in all aspects of life, almost all progress requires reliable energy. However, I feel this needs to be accomplished in a sustainable manner so that we are not changing the environment around us while providing this fundamental aspect of life. The only way to achieve the transition to a clean and reliable energy sector is through careful planning, execution, and accountability which is the basis of this advisory board. It would be an honor for me to be part of this board to help transition Whatcom County to a brighter future that continues to provide jobs and a place for people to live and visit while not impacting the beautiful environment that is around us.

References (please include daytime telephone number):

Mike Flory (360-296-5214)
Joel Hiltner (360-296-2708)
Derek Gremban (296-808-1300)

Signature of applicant:

Chris Hoops

Place Signed / Submitted

1907 F Street Bellingham, WA 98225

(Section Break)

Christopher M. Hoops

EDUCATION

The Ohio State University, Columbus, OH

Mechanical Engineering, M.S. (August, 2010)

GPA: 3.89

Mechanical Engineering, B.S. (March, 2009)

GPA: 3.74

PROFESSIONAL EXPERIENCE

Caterpillar Inc., Ferndale, WA (Caterpillar purchased Hiltner Combustion Systems – below company)

Engineering Manager, October 2022-Present

- Manage Caterpillar R&D test facility (Power Solutions Northwest) and associated staff (engineering and technician)
- Responsible for developing combustion recipes for large gas engines operating on natural gas and alternative fuels
- Develop and maintain overall facility capabilities to support all ongoing and future projects
- Responsible for overall facility budget and deliverables to broader Caterpillar Large Power Systems Team

Hiltner Combustion Systems, Ferndale, WA

Engineering Manager, January 2020-October 2022

- Manage engineering and technician staff for an R&D engineering consulting firm
- Interface with project managers and supervisors from client interdisciplinary teams for project coordination
- Write detailed project proposals outlining technical approach, resources, timelines and costs
- Provide technical guidance to internal engineering teams and quality assurance on deliverables to our customer
- Coordinate personnel and testing resources to meet customers timelines and budgets
- Develop and implement engineering and facility process improvement and commonization plan
- Troubleshooting support for test cell and facility subsystems
- Hire new staff, develop training material, and mentor during career development
- Simulation and data analysis technical backfill as needed for ongoing projects

Hiltner Combustion Systems, Ferndale, WA

Engineering Team Lead, January 2016-December 2019

- Manage internal engineering team to produce high quality engineering deliverables to customer
- Construct detailed project plans based on high level program requirements from customer using test and simulation resources to support the overall goals most effectively
- Deliver and present overall project conclusions, recommendations, and future ideas to internal and external engineering teams
- Develop training guides for new hires on best practices and procedures for engine testing, modeling, and analysis
- Write quarterly reports to customer to summarize high level conclusions for projects under development

Hiltner Combustion Systems, Ferndale, WA

Engineering Project Lead, September 2010-December 2015

- Conduct engine experimental testing, extensive data processing, and detailed data analysis
 - Develop test methods and metrics to track improvements in emissions reductions and engine efficiency
 - Summarize and present results to customer on a weekly basis with recommendations on paths forward
 - Design test cells for dynamometer engine testing to collect and monitor performance
 - Troubleshoot test cell hardware and software problems, including emissions measurement equipment
 - Model the energy system under study using commercial and internal software with focus on emissions and efficiency
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PERSONAL and TECHNICAL SKILLS

- Project Management and Technical Leadership
 - Time and Priority Management
 - Strong Communication
 - Energy Systems Modeling
 - Computer Coding and Data Processing
 - Experimental Setup and Data Collection
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COMMUNITY INVOLVEMENT

- CHORE Program
- Nooksack Salmon Enhancement Association