Director, Building Performance

Job Description

The Director of Building Performance is a licensed architect who develops **energy performance standards** and strategies for the firm. Must possess a thorough knowledge of architecture with **emphasis on sustainable design**, building materials, construction methods, integration of engineering disciplines, and building costs/codes.

Core Tasks

Use computer modeling to identify how buildings can best support the health and well-being of their occupants with focus on sustainability.

Use climate data to inform building design and energy systems.

Develop firm-wide energy performance strategies/standards (e.g. LEED)

Workplace / Environment

- Work hours
 Approx. 40 hours/week
 (Overtime work is project-dependent)
- Environment Typical office setting with visits to customer sites.
- Travel
 Occasional visits to assess sites nationally and internationally.

Education / Prerequisites

Education Level Master of Science, Building Design Licensing AIA BEMP (ASHRAE) Pre-Job Preparation 10-15 years job experience as a Building Performance Analyst

Experience

Soft Skills

- Expert Communicator
- Problem-Solving
- Strong Collaborator
- Leadership Skills
- Public Speaking

Technical Skills

- Strong knowledge of thermal comfort, materials impact, energy use, energy performance standards and strategies
- Proficiency in AutoCAD, Revit, and Microsoft Office
- LEED®, WELL Building and Passivhaus



Career Path: Vikram Sami

About Me Director, Building Performance Olson Kundig

Master of Science in Building Design, Arizona State University

How It Started

"I grew up in India, in Bombay – and in middle school and high school, **my passions were maths, physics and art**. And I really liked writing. At one point, I wanted to be either a physicist or a writer, which is kind of two very different things. But it's always been like, a **left brain-right brain** kind of thing. My mother suggested I spend a summer in her brother's office because he's an architect in a city in the south of India... and so I did! I shadowed him for a summer. And it was the most fascinating thing, because they were using all of the things that excited me. They were using geometry and they were also very creative. I was fascinated that you could draw lines on paper, and it becomes this thing that you can inhabit. I thought, okay, **this is something that I can see myself doing**."

Combining Interests

"I think what I love the most about what I do is building science, which is the physics and the science of how buildings work, into architecture design. Kind of **bridging the gap between art and science**, so to speak. And we're bringing a creative bent of mind to scientific approach. And so it's this idea of, you know, curiosity, which is the inquiry, and then the rigor and the science that goes into responding to the inquiry, which I really like. It allows me to be creative, but also to be **inquisitive and scientific** and scratch both sides of my brain a little bit. "

Early Experiences

"In my second year of architecture school, we had this professor who taught environmental design. And he gave us this exercise, which was to design a memorial for someone. And the idea was to design it so that the sunlight would enter the building only on the person's birthday at a certain time, and I thought it was fascinating that you can actually predict what the sun is going to do. We learned to read **sun path diagrams**, and that took me on a track of getting excited about building science and **passive solar technologies** and **understanding the elements and climate** and how we can design for that. And that's kind of been my trajectory ever since."

About My Job

"When it comes to caring about climate change, and caring about what happens to our climate, we need to be more closely connected to nature. By connecting people to nature, we may get them to care more."

Pros

- "We're helping all of our projects to be more environmentally sustainable, which I think is a huge pro."
- "I work with multiple teams across the office. So I get to see a lot of projects, and then work to make them as high performing and sustainable as possible."

Cons

 "Sometimes when you're dealing with trying to address climate change through reducing the impact, you can get impatient with wanting to do more. One of the challenges is just kind of **building patience** into your process to understand that you're not going to solve everything, you know, on one project. It's an evolutionary process."

Office Work

"We do computer simulations of things like how the sun hits a building and travels across the facade. We do simulations of how a building uses energy, and the carbon emissions from that energy. We do simulations about the materials that we choose to put in a building and the impacts of manufacturing those materials and bringing them to site. We run analysis on how much daylight you will get in the building, and how comfortable you're going to be in the thermal environment."

Work Environment

- "It's mostly at the office, it's a lot of work on the computer."
- "It's a **combination** of in-person meetings and video chats."
- Lead/facilitate workshops to explore green building innovations with colleagues.
- Speak regularly at sustainable leadership conferences.

Skills

- "I'm not as concerned about whether a candidate can run Program X or Program Y – it's more of, you know, are they someone who's got a curious mind?"
- "It's hard enough to do this if you're all working together, but it's almost impossible to do it if you're not working together – so someone who wants to, you know, collaborate and be a be a team player –that's important. Communication is key."
- "You've got to have the **passion that drives curiosity**. Good analysis is not so much about finding the right answer, but it's about asking the right question."

Education/Experience

- "Figure out what it is that you're passionate about, and what you want to do, and do research on which school is actually the best for it and it might not always be like the Ivy League school that we're talking about."
- "I went to Arizona State for my Masters, where the building science program is second to none. It's truly excellent."
- "In the beginning of your career, don't get hung up on – this job pays more than that job – think about what you want to learn. And think about: is it fun to work at this place? Do you want to get up and go to work every day? Because if it's not then, you know, no amount of money is going to make up for that."

The Future of Building Design

"We have people on my team who I constantly learn from on a day-to-day basis. That's what really gets me excited."

"I'm seeing more designers and architects in the industry moving more towards addressing climate change and sustainability and I think that's really exciting. Some of my brilliant colleagues bring technology to the forefront that I wasn't even aware of which I think is also super exciting. We have to build in the patience to say, hey, you know, we couldn't do everything on this one project, but, you know, the next one, we can take it one step further."

About Sustainability Ambassadors

We are here to **RAPIDLY ADVANCE A SUSTAINABLE FUTURE.** Empowering **YOUTH** to catalyze community sustainability, **TEACHERS** to integrate rigor with relevance for real-world impact, **COMMUNITY** to drive collective impact.

We support a year-round training program for over 60 highly motivated middle and high school youth, a Teacher Fellows Program, City-County CAP internships, and college-level interns, and work with hundreds of educators to design new models of problem-based, place-based learning around *a shared vision of educating for sustainability*.

Your Green Jobs Future

Ready to explore your future in green jobs? Use Map your Career to map your trajectory!

Find career opportunities near you now! Use <u>Career Connect - Washington's</u> tool to find programs to build your career skills.

Interested in a future in solar? Take a look at the <u>Solar Jobs Census</u> to track solar job growth nationwide.

Explore <u>RVC's opportunities</u> to work with organizations led by communities of color.

Dive into the <u>Center of Excellence for Clean Energy's</u> robust career tools in the sustainable energy sector.

Grow your professional sustainability skillset with the Seattle Youth Good Program.

See Seattle's <u>Clean Energy Resources Map</u> to examine what the city is planning for a greener energy future.

Check out the U.S. Green Building Council to explore the sector's current opportunities. :

Funder Acknowledgement





Department of Natural Resources and Parks Wastewater Treatment Division



