

Position Available: Energy Modeller



Green Ideas Building Science Consultants provide support for building owners, architects, engineers, contractors and facility managers who build and maintain high-performance, sustainable buildings. Our services include high-performance building consulting, daylight / energy modelling and analysis, water efficiency consulting, LEED project management, educational programs and BIM implementation services. The Green Ideas team has completed more than 100 LEED certified projects representing over 25 million square feet of sustainable space. Due to both the technical knowledge and practical experience of our principals and consultants, Green Ideas has become a recognized leader in the green building industry throughout the United States.

DESCRIPTION OF POSITION:

A Green Ideas Energy Modeller adds value to the company by demonstrating leadership, versatile communication skills, organizational and technical skills, energy literacy, creativity and time management. An effective Energy Modeller provides clients with energy solutions, options, strategies and technologies to meet their energy efficiency objectives. The Energy Modeller also manages by implementing those strategies and technologies through scheduling, communication, research and creative problem solving. Our Consultants are efficient in organizing, documenting and finalizing projects to ensure that our clients are pleased with results and feel they have been provided a valuable service. A sincere interest in the advancement of high-performance building design is imperative to Green Ideas' team members.

RESPONSIBILITIES:

- Prepare detailed Energy Models for building types including but not limited to offices, healthcare, education, multi-family and transit oriented facilities
- Gather and interpret facility data from drawings, utility bills and on-site visits and clearly document all assumptions in reporting format
- Read and understand project documentaton of energy / sustainable design related systems & requirements related to calculations and standardized energy compliance templates
- Quantify performance of existing systems based on control system trends, data loggers, test & balance (TAB) data, and direct observations
- Calibrate baseline models referencing occupancy & equipment schedules, as-built equipment performance and existing weather and utility cosumption historical data
- Modify baseline models through iterative parametric modeling to demonstrate energy saving schemes associated with electrical and mechanical equipment, controls sequences, operating schedules, or other building components and quantify energy savings opportunities
- Format simulation output to suit required deliverbales and reporting structure through the utilization of comparable baseline models
- Prepare, document, and manipulate calculations for energy savings measures not simulated by modeling software and introduce lifecycle analysis calculations into reporting methods
- Compliance with internal and industry-wide safety standards, practices and codes is essential
- Implementation of successful projects that meets and/or exceeds company objectives, financial parameters, and technical needs required to deliver customer energy cost savings

SUBJECT MATTER EXPERTISE:

- Experience with Energy Modelling software such as eQuest, Tas, Sefaria
- Familiarity with HVAC fundamentals and basic engineering analysis including thermodynamics, heat transfer, fluid dynamics and energy/mass balance equations
- Energy simulation experience in a broad base of modeling programs with the desire to expand expertise
- Ability to interpret and correctly apply a variety of Green Building Referenced Standards & Codes

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- Interest and understanding in technologies such as underfloor air distribution, chilled beams, radiant flooring, thermal storage, geothermal, building automations systems, economizers, etc.
- Basic understanding of energy management; ability to gather and process whole-building energy usage data, utility rate information, and also identify potential energy conservation opportunities
- Ability to perform ROI and lifecycle analysis for a variety of energy conservation projects

GENERAL CONSULTING SKILLS:

- Ability to clearly and effectively communicate complex ideas and processes through strong language and writing skills
- Analytical skills for reviewing design and construction documents, technical data, regulations, standards and reports
- Expertise in MS Office Suite Programs with an aptitude for learning new software (i.e., energy analysis; glazing performance analysis; life-cycle assessment; web-based tools)
- Strong computer skills, including proficiency in MS Office suite, Adobe Acrobat, AutoCAD, Revit & Trimble SketchUp
- General understanding of the principles that guide environmental design
- Ability to synergize well with both project teams and the Green Ideas' internal team members in a flexible and consistently positive manner

EDUCATION AND EXPERIENCE:

- LEED Accredited Professional with LEED Project Management Experience
- Engineering degree from an accredited university (Electrical, Mechanical or Energy Engineering preferred) OR degree from accredited university in a related discipline
- Engineer in Training (EIT) Certification or Professional Engineer (PE) License preferred
- Certified Energy Manager (CEM) Certification preferred
- 3+ years professional experience with demonstrated advancement in sustainable building design and construction
- Certifications from, or affiliation with, industry organizations in the building sector such as AIA, ASHRAE, AEE, CSI and GBCI are desirable
- Experience or involvement with USGBC / GBCI

SALARY RANGE:

Green Ideas offers market-competitive salary packages appropriate to the applicant's experience level. The expected range is from \$30,000 to \$60,000.

APPLY FOR THIS POSITION:

Please send a letter of interest and a resume to Charlie@Egreenideas.com or call 602-635-7925.