

Posting Title: Environmental Impacts Analyst
Requisition Number: 348BR
Location: Golden, CO
Position Type: Regular Employee
Hours Per Week: 40

Job/Research Summary: Senior analyst position in the technical and environmental analysis of renewable energy and energy efficiency technologies, with particular focus on international bioenergy systems. The successful candidate will lead life cycle assessments (LCA) and technical and cost feasibility analysis of ongoing and potential electricity, fuel, and efficiency technologies. Following completion of analyses, prepare reports, including technical memos and presentations, project reports, and peer-reviewed journal articles. The position requires knowledge and experience with LCA methodologies and practice, as well as a science/engineering-based understanding of energy conversion technologies.

Job Duties: This position combines broad, in-depth knowledge of advanced energy concepts including biomass conversion technologies, renewable electricity technologies, and energy efficiency. Performs strategic analyses in modeling sustainable value chains, develops life cycle assessments and performs risk/uncertainty analyses throughout the biomass supply chain. Working with policy developers, this position evaluates ways that policy will impact implementation of biomass as a raw material for fuels and chemicals. Working with researchers, this position utilizes models to predict the effect of scale-up and process improvements on performance targets. Performs analysis with new research data to assess the environmental sustainability of biomass-related processes. Documents work in detailed technical memos and internal milestone reports. Publishes and presents key results in peer-reviewed journals and at regional, national, and international scientific meetings and conferences. Maintains exemplary attention to environmental safety and health issues. Develops annual analysis plans and assists with strategic planning efforts.

Develop and perform analyses that apply standard and state-of-the-art methodologies to:

- Perform LCA studies of conventional and alternative energy systems.
- Independently operate LCA software, evaluate results, prepare detailed graphics, and present results to senior analysts.
- Evaluate both biochemical and thermochemical biomass conversion technologies.
- Work with GIS analysts to represent data and results geographically.
- Review technical proposals.
- Initiate and develop collaborative activities with other national laboratories, universities, and industrial entities.

- Develop clearly written analyses and interpretations of LCA and technoeconomic analyses.
- Publish and present results of studies in relevant journals and at conferences, symposia, and review meetings.

Minimum Qualifications: Relevant Master's and 6 years experience or equivalent relevant education/experience.

Preferred Qualifications: Demonstrated knowledge of practices, techniques, and problem solving methodologies in policy, market, economic, and/or technology analysis. Demonstrated leadership on one or more areas of team, task, or project lead responsibilities. Very good interpersonal and communication (oral and written) skills. Experience in project management of basic projects. Multidisciplinary research exposure to both biological and thermochemical engineering systems, especially those related to corn to ethanol, biomass, bio-based products, or the biorefinery concept. Previous work on renewable energy systems and the quantification of cost and environmental profiles. Demonstrated experience in conducting environmental life cycle assessments. Familiarity with value chain analysis, risk analysis, and dynamic modeling. Experience in the development and evaluation of applied technology aimed at entering the marketplace. Ability to address these issues with respect to both domestic (US) and international scenarios. Experience with annual project/budget planning exercises. Proven ability to complete projects on time and within budget. Demonstrated publication history and proven ability to respond to appropriate solicitations to attract financial support for new and developing research areas.

Contact Garvin Heath about interest in position: garvin_heath@nrel.gov
Garvin is not the hiring manager, but can refer you to the position.

