**Energy Research Analyst**

**Job Description**

Energy research analysts conduct research and tests to improve energy practices and investment strategies for their company or clients. They often work as advisers to their stakeholders with a mix of expertise in energy and economics.

**Core Tasks**

- Explore means of improving energy technology
- Make recommendations for energy technology to stakeholders (company or clients that they advise)
- Study general energy costs and processes
- Conduct energy and market projections
- Present/publish prevalent energy and economic research findings to stakeholders

**Workplace / Environment**

- **Work hours**
  - Approx. 40 hours/week
  - (At key milestones overtime work may be required to meet deadlines)

- **Environment**
  - Frequent meeting with others
  - Office Setting: writing emails, making phone calls, and attending meetings
  - Travel: Moderate travel between sites and meetings

**Education / Prerequisites**

**Education Level**

Bachelor's degree (Master's or PhD degree is strongly recommended) in a related major

**Related Majors**

- Economics
- Engineering
- Environmental Studies/Science
- Environmental Policy
- Finance

**Pre-Job Preparation**

A few years of prior experience are often preferred for this job. Job shadowing and internships during college would be a great way to prepare. Explore internships in your department while you’re a student.

**Experience**

**Soft skills**

- Communication
- Critical Thinking
- Public Speaking
- Data Analysis

**Technical skills**

- Office Software (Word / Excel)
- Business and Financial Software
- Mathematical software

**Salary**

- Entry – $46,000
- Middle – $83,000
- Top – $136,000
High School Life

“When I was in high school, I didn’t have a lot of choice in the classes I took. I took AP Statistics because I had that choice and I wanted to get a taste of what numerical work would look like, as I planned to be an economics major in college. I was also involved in a sustainability group in High School, which got me really interested in energy because energy seemed to be the common denominator in most of the major sustainability issues.”

“During High School, I did lots of summer internships related to sustainability: one summer I built a carbon footprint calculator for the shipping of a small company. The following summer, I did research on clean energy and clean energy opportunities for the US in Latin America.”

College Choices

“I wanted to study energy, but I also wanted a quantitative way of thinking about it rigorously, so I wanted to study economics so I could think about sustainability issues related to energy in a quantitative way. When I went to college, I did my bachelor’s and my master’s in economics as well as a comprehensive minor in sustainable energy. My plan never changed in college – what I declared on day one was what I graduated with.”

Into the Real World

“After graduation I joined the BU institute for sustainable energy and was a part-time research assistant doing research on multi-user microgrids in the Northeastern US. From there I pivoted into the water space and did consulting work for water utilities in Texas for about a year. This was all done with grant funding with BU. I’m now back in the energy space, working for IHS Market, focusing on distributed energy.”
About My Job

“Research is something that you can do anywhere and everywhere at any given time”

“I lead the distributed energy resources research in North America at my company. That includes things like distributed solar, electric vehicles, demand-response programs, and microgrids.”

“I build relationships with clients. The work that we do is mainly comprised of retainer research, where you do ongoing research on a topic, and you publish your findings on the company’s website for customers to purchase and have blanket access to all of that information.”

“You have an interesting relationship with clients who receive that type of subscription service; they’ll call you to ask questions about that research, since you’re the resident expert, but you may also call them to help guide and inform your research.”

“You may also do some consulting projects as well, where you’ll receive a client request from an outside group where they ask you to help do consulting on a project that they’re working on.”

Pros
● “It’s like you’re getting paid to learn. If you enjoy learning, and you enjoy reading, that’s a lot of what the job is”
● “This job fits in the research lifestyle, so you have some flexibility in your schedule as long as your work is getting done.”

Cons
● “It can be draining - you’re really deep in the weeds and you’re reading a lot every day. You have to be on top of current research and news in your field.”

Office Work
● “Normally I work in an office environment.”
● “I mostly work at my computer all day, reading and working in Excel and PowerPoint with my team.”

Fieldwork
● “We host one of the biggest energy conferences in the world every year in Texas.”
● “We also attend conferences throughout the year and travel to work with clients”

Skills
● “Be comfortable working with data and excel”
● “Be a strong writer and communicator”
● “Read the news everyday lots of articles and research”
● “Have a strong working knowledge of your field in sustainable energy”
● “Know and understand systems thinking.”

Education/Experience
● “Get involved in research opportunities. You won’t get hired as a research analyst straight out of college without strong research experience.”
● “Take quantitative courses related to sustainability and energy in college.”
The Future of Energy Research

“My job is constantly evolving with new technologies”

“My job right now is to follow distributed energy resources, which are quickly evolving. Right now, microgrids are a big focus, and I think electric vehicles will come into more focus as well.”

“Distributed energy resources will become more prominent as different states are starting to enact their energy master plans that start to focus on how they incorporate distributed energy as well as their renewable energy goals and standards by 2030, 2040, and 2050.”

“My job wasn’t even a position that previously existed a few years ago. This was a brand-new position that they had just opened up to meet the growing need and demand for understanding distributed renewable energy. A lot of my internships and research experience were experiences that I had asked to make, as they weren’t really formal programs. My research assistant position was through grant funding for cutting edge research that BU really wanted to do.”

“This is a young and growing field with positions that are starting to open up in a formal way.”