

Terms of Reference

Research Analyst – Industrial Sustainability and Competitiveness

(Primary project: Critical Mineral Resources for India's manufacturing sector)

About Us

The Council on Energy, Environment and Water (CEEW) is one of South Asia's leading not-for-profit policy research institutions. The Council uses data, integrated analysis, and strategic outreach to explain – and change – the use, reuse, and misuse of resources. The Council addresses pressing global challenges through an integrated and internationally focused approach. It prides itself on the independence of its high-quality research, develops partnerships with public and private institutions, and engages with wider public.

In 2018, CEEW once again featured extensively across nine categories in the '2017 Global Go To Think Tank Index Report', including being ranked as South Asia's top think tank (14th globally) with an annual operating budget of less than USD 5 million for the fifth year in a row. In 2016, CEEW was also ranked 2nd in India, 4th outside Europe and North America, and 20th globally out of 240 think tanks as per the ICCG Climate Think Tank's standardised rankings. In 2013 and 2014, CEEW was rated as India's top climate change think-tank as per the ICCG standardised rankings.

In over seven years of operations, The Council has engaged in more than 180 research projects, published well over 110 peer-reviewed books, policy reports and papers, advised governments around the world over 400 times, engaged with industry to encourage investments in clean technologies and improve efficiency in resource use, promoted bilateral and multilateral initiatives between governments on more than 50 occasions, helped state governments with water and irrigation reforms, and organised more than 210 seminars and conferences.

Project description

Resource security and resource efficiency plays a crucial role in the country's economic development, as it is an important driver of a competitive manufacturing sector. Sudden supply shocks or constrictions in the supply chain make a mineral critical, especially if there are no substitutes available in specific applications. This impact is larger if these products contribute to significant value addition in the economy.

In 2016, The Council published a report titled "Critical Non-Fuel Mineral Resources for India's Manufacturing Sector: A Vision for 2030¹". The study, which began in late 2014, was funded by the Department of Science and Technology, and evaluates 49 minerals and their criticality (from 2011 to 2030) in terms of economic importance (value addition and consumption in all manufacturing sub-sectors) as well as supply risks (import dependence, geopolitical risks, substitutability, and recycling potential). It is the first-of-its-kind study undertaken in India and the most comprehensive effort to assess which minerals will be crucial for India's high-value-added manufacturing growth and the implications for India's resource security. The United States and the European Union have done some pioneering work on identifying critical minerals for their own economy. This report also draws attention towards strategic acquisition of overseas mines and need for high-priority trade ties for certain minerals, which are identified as critical for India's future, through a scientific framework and a decision tree approach.

With India's ever-growing interest towards indigenous manufacturing of modern day technology devices (smart phones, medical diagnostic equipment, etc.), and clear energy products (electric vehicles, solar panels); focus on mineral resource security becomes naturally crucial. This project

¹ Weblink: http://www.dst.gov.in/sites/default/files/CEEW_0.pdf

aims to take forward the existing work on critical minerals to the next level of policy planning. The objective is to efficiently engage policy planners, industry, and other users from mining/mineral sector through a dynamic web-based interface. Outputs from this project will include an index of critical minerals, which will be periodically revised as per realistic economic condition(s), and supply position of minerals in India. The index will also allow users to generate customised scenarios based on futuristic policy outlook. It will act as an intelligent decision-making tool for policy makers, industry captains, mining and mineral exploration agencies, and a wide pool of researchers.

Job Designation: Research Analyst (Full-time)

Job Location: New Delhi

Reporting: Senior Programme Lead

Description of the Position

We seek to hire a suitable candidate for the position of Research Analyst to expand our work on Industrial Sustainability and Competitiveness in India. The candidate must have an active interest towards policy research in the areas of resource utilisation/efficiency across industrial process; advanced technologies for material recovery and material substitutes; foreign policy and geo-politics of trade and commerce; and strategies for resource recovery from waste.

She/he is expected to predominately work upon our ongoing research to develop a '*dynamic policy decision making tool for identifying critical mineral resource for India's manufacturing sector through multiple scenarios.*' Besides, there will be endless opportunities to learn and contribute across a wide range of research activities at CEEW. The incumbent will be responsible for full range of research and associated duties as highlighted below:

Job Duties and Accountabilities

- To conduct both traditional and online secondary research using various external sources including international data sets
- To collect information and prepare databases on resource mapping, trade and commerce linkages, technology profiles, etc.
- Responsible for reviewing large amounts of data and analysing the information using a variety of software tools and methodologies
- To undertake basic modelling exercises to outline alternative scenarios for resource efficiency and security for India
- Work with research teams on specific research programmes, especially around Industrial Sustainability and Competitiveness
- To write briefs and issue notes which could be circulated among senior Government of India officials and other stakeholders
- Travel to project sites, whenever necessary, to conduct meetings/interviews or collect primary information
- Assist in developing surveys and questionnaires and help with collecting, collating and analysing responses
- To work with senior researchers on conceptualising new projects (as and when needed)
- Provide research content for organisation's web pages, blogs, policy briefs etc.

General responsibilities/Programme Assistance

- Assist with project implementation, including help with preparing presentations, factsheets and other communication material

- Prepare notes and briefs for various events (roundtable discussion, workshop, conference, etc.)
- Assist administrative team for organization of relevant events (whenever needed)
- Support efforts to use new media platforms for wide dissemination of CEEW's work and, in turn, closer engagement with the wider community
- Responsible for necessary documenting, analysing and presenting information from programme and project reports for decision making, learning and accountability
- Contribute to reports and other research products
- Participate in weekly team meetings and assist with preparing minutes
- Accompany team members for meetings with other stakeholders; prepare minutes of the meetings and assist with relevant follow up

Selection Criteria

Education and Experience

- Superior academic credentials, preferably a Master's degree with specialisation in industry-research/manufacturing systems/resource (minerals) management/international trade and economics/ or relevant streams. Applicants with Bachelor's degree (engineering/economics/etc.) and equivalent experience are also encouraged to apply.
- Candidates having relevant work experience in industry or research set-ups will be preferred

Main skills

- Self-starters with strong analytic skills including quantitative research skills (statistics), and, qualitative research methodologies to collate and analyse information in a meaningful manner
- Excellent written and oral communication skills, should be able to demonstrate good report writing skills
- Must be an adept user of MS-office suit (word, excel, and power point presentations). Advanced excel skills are desirable
- Ability to use statistical packages like Stata, R would be an advantage
- High quality publications in peer reviewed journals would be an advantage

Personality

- Willingness to learn new (research and project management) skills
- Ability to adapt to new environment and deliver under tight deadlines in a professional environment
- Striving for rigour in research and quality in work output
- Driven to create an on-ground impact, with a focused approach to achieve the same
- Ability to effectively work in a team while being able to independently drive research with minimum assistance when time demands
- Ability to dig deeper into details, while also keeping a sense of the broader objectives and big picture
- Willingness to learn, grow and develop at personal and professional front, at a rapid pace with a steep learning curve
- Ability to work in an interdisciplinary and multicultural environment

Compensation

CEEW offers competitive compensation commensurate to the experience and matching the best of standards adopted by industry or other similar organizations for similar roles.

Application process

Interested candidates are requested to share their curriculum vitae (CV) and cover letter explaining your interest in the position (in one document preferably PDF) and send it to: jobs@ceew.in with 'Application: Research Analyst – Industrial Sustainability and Competitiveness' as the subject line. We are an equal opportunities employer and female candidates are encouraged to apply. Applications will be reviewed on a rolling basis. Only shortlisted candidates will be notified by us.