# Position Details

## Research Scientist/Engineer- CSOF6

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| The following information is for applicants |
| Advertised Job Title | Economic Modeller |
| Job Reference | 94306 |
| Tenure | IndefiniteFull-time  |
| Salary Range | AU$121,455- AU$142,321 per annum plus up to 15.4% superannuation |
| Location(s) | Brisbane (Dutton Park), QLD |
| Relocation Assistance | Will be provided to the successful candidate if required |
| Applications are open to | Australian/New Zealand Citizens and Australian Permanent Residents  |
| Position reports to the | Team Leader, Consumers & Resource Use |
| Client Focus – Internal | 30% |
| Client Focus – External | 70% |
| Number of Direct Reports | 0 |
| Enquire about this job | Contact Heinz Schandl via email at heinz.schandl@csiro.au |
| How to apply | Apply online at <https://jobs.csiro.au/> Internal applicants please apply via **Jobs Central**If you experience difficulties when applying, please email careers.online@csiro.au or call 1300 984 220. |

**Acknowledgement of Country**

CSIRO acknowledges the Traditional Owners of the land, sea, and waters, of the areas that we live and work on across Australia. We acknowledge their continuing connection to their culture and pay our respects to their Elders past and present. View our [vision towards reconciliation](https://www.csiro.au/en/about/Indigenous-engagement/Reconciliation-Action-Plan).

**Child Safety**

CSIRO is committed to the safety and wellbeing of all children and young people involved in our activities and programs. View our [Child Safe Policy](https://www.csiro.au/en/about/policies/child-safe-policy).

### Role Overview

The role of Research Scientist/Engineer staff is to conduct innovative research leading to scientific achievements that are aligned with CSIRO’s strategies. The Research Scientist/Engineer may be engaged in scientific activity ranging from fundamental research to the investigation of specific industry or community problems. They will have the opportunity to build and maintain networks, play a lead role in securing project funds, provide scientific leadership, and pursue new ideas and approaches that create new concepts.

As part of the ‘Integrated Environmental and Economic Modelling’ (IEEM) Team, the Economic Modeller will help to catalyse partnerships with industry, government, and community to develop knowledge products, metrics, data, and analysis that help facilitate a transition to a net zero emissions economy in Australia. The work of the IEEM team blends innovative socio-economic analysis with robust data-driven tools and approaches to assist decision makers in government and industry in the domain of sustainable management of materials, waste and pollution reduction, greenhouse gas abatement and the circular economy.

By building and maintaining alliances and networks, the Economic Modeller will have an in-depth knowledge of the processes involved in resource efficiency, waste minimization and greenhouse gas abatement planning and decision-making and opportunities to leverage wider sustainability and resilience benefits for Australia. This includes employing an integrated environmental economic conceptual framework and methods and technical skills and capability to inform planning and decision-making using data-driven science and technology to identify net zero pathways for Australia and its regions.

The position will also provide leadership in both project delivery and business development to support the growth of the [Towards Net Zero Mission](https://www.csiro.au/en/about/challenges-missions/Towards-net-zero). Emerging areas of focus include better understanding of the contributions of sustainable materials management and decoupling of economic growth and human wellbeing from environmental pressures and impacts in shaping transitions to a circular economy and net zero emissions.

### Duties and Key Result Areas

* Provide specialist technical skills and knowledge in economics and economic modelling and methods and approaches for applying input-output tables, national accounts, detailed household surveys, and energy and emissions data to deliver to ongoing projects and to help identify strategic research opportunities and shape CSIRO science directions.
* Work collaboratively as part of a multi-disciplinary research team, developing strong working relationships and a focus on integration, in support of CSIRO’s science and impact objectives.
* Under limited direction, assist in scoping and preparation of strategic research proposals, and where appropriate, lead the delivery of projects and activities, and interactions with clients.
* Lead and supervise staff to ensure projects are undertaken in accordance with the research scope and objectives, and projects are completed within the agreed timeframes and budget.
* Build and maintain a network of collaborators within and beyond CSIRO and across multiple sectors to advance the science and impact for the future energy transition and a net zero emissions economy.
* Identify and adapt quickly to changes in policy and market trends and directions to enable economic modelling of the future energy transition and a net zero emissions economy.
* Undertake feasibility studies, demonstrate a considerable degree of originality, creativity, and innovation in solving problems, and develop and test new data-driven tools and approaches.
* Communicate research results to clients and the scientific community through oral and written reports and represent the organisation in external science forums as required.
* Engage openly, effectively, and respectfully with all staff, clients, and suppliers in the interests of good business practice, collaboration principles, and enhancement of CSIRO’s reputation.
* Adhere to the spirit and practice of CSIRO’s Values, Code of Conduct, Health, Safety and Environment procedures and policy, Diversity initiatives and Zero Harm safety goals.
* Other duties as directed.

## **Selection Criteria**

#### Essential

*Under CSIRO policy only those who meet all essential criteria can be appointed.*

1. A PhD (or an equivalent combination of qualifications and research experience) in economics and economic modelling.
2. Demonstrated high level experience in the processing and manipulation of input-output tables, national accounts, detailed household surveys, energy and emissions data and their incorporation into large-scale economic models.
3. Demonstrated ability to successfully modify and extend the theory of large-scale economic models to incorporate detailed techno-economic and other activities in the areas of energy, greenhouse gas emissions, household behaviour and spatial detail.
4. Demonstrated ability to undertake original, creative, and innovative research by generating and pursuing novel ideas and solutions to key economic, energy and emissions challenges and research problems.
5. A demonstrated history of authorship of scientific publications in relevant peer-reviewed scientific journals and reports, as well as grant applications, and tool development.
6. A strong record of accomplishment in communication of research findings and application of data-driven science and technology to influence infrastructure planning and decision-making.
7. A successful track record of engaging with industry, government, and community stakeholders to identify research needs, develop new business, and lead delivery of collaborative initiatives.

## **Desirable**

1. Ability and willingness to travel within Australia as well as internationally, as required.

## **Required Competencies**

* **Teamwork and Collaboration:** Cooperates with others to achieve organisational objectives and may share team resources in order to do this. Collaborates with other teams as well as industry colleagues.
* **Influence and Communication:** Identifies critical stakeholders and influences them via an influential third party, for example through an established network, to gain support for sometimes contentious proposals/ideas.
* **Resource Management/Leadership:** Sets up and maintains effective and efficient work teams and manages performance and resources, to achieve objectives. Chooses appropriate management strategies and communication styles to maintain high levels of motivation and productivity. Gives feedback for development purposes and provides support and direction for improvement.
* **Judgement and Problem Solving:** Anticipates and manages problems in ambiguous situations. Develops and selects an appropriate course of action and provides for contingencies. Evaluates, interprets and integrates complex bodies of information and draws logical conclusions, synthesises proposals and defends options with reasoned arguments.
* **Independence:** Assesses the risk and opportunity of identified strategies, options and actions. Overcomes problems and setbacks in achieving goals. Invariably includes consideration of value-added future impact on bottom line when determining the optimal and efficient use of resources.
* **Adaptability:**Demonstrates flexibility in thinking and adapts to, and manages, the increasing rate of organisational change by adjusting strategies, goal and priorities.

Special Requirements

Appointment to this role is subject to provision of a pre-employment background check and may be subject to other security/medical/character clearance requirements.

* The successful candidate will undertake a pre-employment background check. Please note that individuals with criminal records are not automatically deemed ineligible. Each application will be considered on its merits.

## **About CSIRO**

We solve the greatest challenges through innovative science and technology. Visit [CSIRO Online](http://www.csiro.au/) and CSIRO [Environment Business Unit](https://www.csiro.au/en/about/people/business-units/Environment) for more information.

CSIRO is a values-based organisation.  In your application and at interview you will need to demonstrate behaviours aligned to our values of:

* People First
* Further Together
* Making it Real
* Trusted