# Position Details

## Administrative Services- CSOF5

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| The following information is for applicants |
| Advertised Job Title | Manager (techno-economics) |
| Job Reference | 87221 |
| Tenure | Specified Term of 3 years Full-time |
| Salary Range | AU$102,724 to AU$111,165pa + up to 15.4% superannuation |
| Location(s) | Melbourne (Clayton + working from home), VIC |
| 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 | Lead Economist, CSIRO Futures |
| Client Focus – Internal | 50% |
| Client Focus – External | 50% |
| Number of Direct Reports | 0 |
| Enquire about this job | Contact Katherine Wynn via email at Katherine.Wynn@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. |

### Role Overview

**Background: *Make a difference. Innovation for Australia’s future.***

As the strategic advisory arm of Australia's national science organisation [CSIRO Futures](https://www.csiro.au/en/Showcase/CSIRO-Futures) transforms the biggest challenges into opportunities for sustainable growth, helping our clients achieve their goals.

We combine economic modelling, deep science and emerging technologies to solve strategic and technical problems in new ways. This ranges from strategic roadmaps that drive the creation of billion-dollar industries to game-changing business strategies.

We sit at the interface between science and industry and work closely with CSIRO’s researchers across the food and agriculture, health and energy sectors, where we help senior decision makers develop evidence-based investment strategies.

**The position**

The Techno-economic Lead will lead the delivery of the techno-economic components of industry roadmaps and bespoke advisory projects aimed at informing decisions made by senior government and industry leaders. This will involve the scoping of techno-economic components for new projects, the coordination of staff working on techno-economics, client engagement, stakeholder consultation, report writing, and the implementation of the techno-economic components of the team’s economic capability development strategy.

The projects and techno-economic activities will vary in complexity and may be oriented to diverse industries or technologies where CSIRO has current or emerging interests. Projects will typically:

* Use quantitative analysis to determine if proposed technologies are economically feasible, including those that may be technically or commercially speculative
* Compare different technology solutions in CSIRO’s national scale industry roadmaps, as well as in the context of CSIRO’s [missions](https://www.csiro.au/en/about/challenges-missions)
* Inform sequencing decisions for technological adoption and processes
* Inform advice to government and industry clients for their strategic investment decisions.

### Duties and Key Result Areas:

* Link technical parameters such as efficiency and transformation rates of inputs with economic ones (e.g. factor prices, product prices) to derive economic metrics such as capital expenditure (capex), operational expenditure (opex), and revenue.
* Scope techno-economic components of strategy projects of varying size and scale.
* Under limited direction, lead small teams to deliver the techno-economic components of projects.
* Act as internal reviewer for projects within team and provide mentoring and project support (where required), as well as providing quality assurance of economic modelling/analysis and technical outputs.
* Liaise with clients to determine their needs, tailoring solutions to potentially conflicting requirements, taking personal responsibility for client satisfaction, and correcting problems promptly and in a constructive manner.
* Succinctly and professionally communicate complex business, scientific and technical concepts to senior executives and government decision makers.
* Work collaboratively with colleagues within the team, the business unit and across CSIRO to reach objectives.
* Actively develop a working knowledge across CSIRO’s science and technology domains.
* Communicate openly, effectively and respectfully with all staff, clients and suppliers in the interests of good business practice, collaboration and enhancement of CSIRO’s reputation.
* Adhere to the spirit and practice of CSIRO’s Code of Conduct, Health, Safety and Environment procedures and policy, Diversity initiatives and Making Safety Personal goals.

## **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:** Uses knowledge of other party's priorities and adapts presentations or discussions to appeal to the interests and level of the audience. Anticipates and prepares for others reactions.
* **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:** Investigates underlying issues of complex and ill-defined problems and develops appropriate response by adapting/creating and testing alternative solutions.
* **Independence:** Plans, sets and works to meet challenging standards and goals for self and/or others. Recognises where endeavours will make the most impact or difference, decides on desired outcome and sets realistic goals to reach this target.
* **Adaptability:**Copes with ambiguity or situations that lack clarity. Adapts readily to changing circumstances and new responsibilities (which may include activities outside own preferences) in the interests of achieving team objectives. Recognises the need for and undertakes personal development as a result of changes.

## **Selection Criteria**

#### Essential

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

1. A degree in engineering, economics or a related field that includes significant quantitative and analytical components.
2. Experience leading small teams on strategic or technical consulting projects that include techno-economic modelling and analysis to support business strategy and investment decision making.
3. Experience building techno-economic models in Microsoft Excel to quantitatively estimate the relative costs and benefits of different technology solutions, in addition to their timeframes, risks and uncertainties, to determine if proposed technologies are economically feasible and to compare different technology solutions and inform sequencing decisions.
4. Experience linking technical parameters such as efficiency and transformation rates of inputs with economic ones (e.g. factor prices, product prices) to derive economic metrics such as capital expenditure (capex), operational expenditure (opex), and revenue.
5. Demonstrated experience or interest in science and technology.
6. Excellent oral communication skills and experience generating professional quality client-facing written reports and deliverables that clearly communicate economic analysis and key insights to a senior executive-level audience. This includes the ability to present a clear narrative to help communicate challenging or contentious ideas to fellow team members and clients.
7. Strong interpersonal skills with a demonstrated ability to work effectively in a team environment and to identify and build positive relationships with internal and external stakeholders.

## **Desirable:**

1. Experience in conducting flow sheeting, using simulation software (e.g. Aspen Plus) and undertaking sensitivity analysis.
2. Experience in related work such as Life Cycle Analysis (LCA) exercises, sustainability analysis, and decision frameworks (e.g. stage gates and real options analysis).

Special Requirements

Appointment to this role may be subject to conditions including provision of a national police check as well as other security/medical/character clearance requirements.

The successful candidate will be asked to obtain and provide evidence of a National Police Check or equivalent. Please note that people 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. To find out more visit us [online](http://www.csiro.au/)!

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