# Position Details

## Research Management- CSOF8

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| The following information is for applicants |
| Advertised Job Title |  Hydrogen Energy Systems Future Science Platform Leader |
| Job Reference | 76827 |
| Tenure | Specified Term of 2 years with potential to extend Full-time  |
| Salary | AU$166,056 pa (pro-rata for part-time) + up to 15.4% superannuation |
| Location(s) | Negotiable: Newcastle, Brisbane, Perth, or Melbourne preferred |
| Relocation Assistance | Will be provided to the successful candidate if required |
| Applications are open to | Australian/New Zealand Citizens and Australian Permanent Residents Only |
| Position reports to the | Science Director/Deputy Director, CSIRO Energy |
| Client Focus – Internal | 70% |
| Client Focus – External | 30% |
| Number of Direct Reports | 0 |
| Enquire about this job | Contact Dietmar Tourbier via email at dietmar.tourbier@csiro.au or phone +61 436 621 455 |
| 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

Research Managers in CSIRO initiate, develop, lead and promote CSIRO's research capability for the benefit of Australia's economy, society and/or environment. While they often have an individual research component to their roles, their primary responsibility is the management and/or leadership of research, client relationships, staff and other resources. They are responsible for ensuring delivery of scientific results to clients. In accordance with Business Unit and Sector research plans, research managers undertake the establishment and facilitation of multi-team and multi-organisational, collaborative research programs leading to the delivery of results to clients.

**CSIRO’s Energy Business Unit**

**Delivering science and technology to enable Australia’s transition to a net zero emissions energy future.**

The transition to a reliable, net zero emissions energy future at lowest cost will involve:

* A shift to decentralised electricity generation, with increased share of renewable energy
* Replacement of coal-fired power by gas-fired generation, renewables and other low-carbon technologies
* Integration of short-term and long-term storage into the grid
* A flexible distribution grid capable of balancing demand and response reliably and economically
* Decarbonisation of industry and transport, through electrification, integration of clean energy into industrial processes and increased energy efficiency
* A transforming energy export industry that manages carbon impacts and associated risks
* An emerging hydrogen industry for domestic and export markets

CSIRO Energy’s portfolio priorities focus on:

**Electricity transition**: to resolve the national challenges of electricity generation, transmission, distribution, and consumption using simulation and analysis tools, facilities and knowhow to inform investments in stable electricity grid systems. Our focus includes managing the grid including storage, gas as transition fuel, simulation and analysis and continuing focus on energy productivity.

**Industry and transport transition**: to create value chains across sectors and develop sustainable solutions for domestic and export industries through demonstrating viable technologies for creation, storage, transport and uses of hydrogen as well as for other low carbon industry processes. Our focus includes hydrogen, energy storage, distributed energy systems, primary industry decarbonisation and transport.

**Community and environment**: to understand and manage the social and environmental impacts of the key energy technologies, offer solutions for emission reduction and thereby enable generators and industry to shift from high emission fossil energy towards reduced emissions and sustainable solutions. Our focus includes supporting the closure of fossil fuel production fields and aging generation facilities, fugitive emissions and managing emissions including carbon storage and fugitive emission controls.

CSIRO Future Science Platforms (FSPs) address future scientific challenges for Australia. They are an investment in science that underpins innovation that has the potential to help reinvent and create new industries. FSPs allow the development of capability and capacity for a new generation of researchers and are designed to attract the best experts and students and to work with CSIRO on future science.

FSPs support research teams that integrate science and delivery over the long term, looking to the future science needs of CSIRO and Australia, along with our external partners and stakeholders with a five to ten-year vision.

Hydrogen is a potential means of decarbonising energy systems, and recently, as a carrier and storage medium capable of supporting a transition to large-scale renewable energy.  Australia’s vast renewable energy resources, coupled with growing international demand for clean energy, creates an opportunity for Australia to develop new low-emissions energy industries based on hydrogen.

Realising the long-term vision of large scale low-emissions Hydrogen based energy systems requires new science and technology solutions which address cost and performance challenges in production, distribution, and utilisation, as well as consideration of the social, environmental and safety issues associated with their large-scale deployment. Addressing these challenges is the focus of CSIRO’s Hydrogen Energy Systems (HES) Future Science Platform(FSP).

### The aim of the HES FSP is to catalyse Hydrogen energy innovation at the interface between CSIRO’s business units and scientific disciplines. The role of the HES FSP Leader is to develop and draw on capabilities from across CSIRO and the broader innovation system to deliver a portfolio of high risk, high reward projects that address the science and technology challenges to enable Australia to seize these opportunities and become the world’s first large-scale low-emissions energy exporter.

### Duties and Key Result Areas:

**Impact Science Leadership**

* Support and develop the 5 to 10-year science vision across the science horizons and application domains embodied in the FSP. Develop a collaborative R&D environment characterised by science excellence, creativity, innovation and flexibility.
* Develop and manage the research portfolio according to CSIRO’s Project Management Standards including prioritisation of effort, resource allocation and financial accountability
* Manage the Platform’s portfolio of Intellectual Property in partnership with Business Units
* Identify and progress opportunities and engagement with external stakeholders, in particular local and international universities and research institutions.
* Coordinate response from the FSP to internal and external review processes as required.
* Undertake long term science impact planning in partnership with the Hydrogen Industry Mission and Business Units, to address national challenges and to build CSIRO’s capacity to innovate for science discovery.
* Promote science opportunity through collaborative engagement and support of workshop events and communications across CSIRO’s Hydrogen Energy Systems research Platform.
* International research reputation and credibility with recognised contribution to an area of science leading to national and/or international output.

**Capability Leadership**

* Build and assist in the support of research capability and professional development of scientists deployed to the platform across CSIRO.
* Attract, develop and support world class talent which will meet current future needs of the CSIRO.
* Plan for resourcing of the Platform, liaise with Research Programs across the contributing Business Units to identify and secure capability and identify new opportunities for the stakeholders to contribute.
* Model appropriate and professional behaviour in the workplace and manage people matters proactively.
* Strive for ‘Zero Harm’ (physical and psychological) and actively promote a healthy, safe and environmentally sustainable workplace.

**Engagement & Partnership**

* Build strategic and collaborative relationships across CSIRO to inform and support Business Unit strategies, including fostering mobility and cross‐deployment of personnel.
* Develop and maintain national and/or international research collaborations and professional networks to keep abreast of emerging advances in relevant science fields.
* Communicate the Hydrogen Energy Systems FSP strategy and goals to internal and external stakeholders.

**Resource Leadership**

* Manage the Platform’s financial resources to ensure their effective and efficient use, and to secure appropriate financial and staff commitments from Business Units.
* Ensure best practice governance and management of commercial activities and intellectual property in the platform.
* Represent the FSP on the Energy Business Unit’s Leadership Team, providing input into strategy development and implementation activities, as well as operational aspects such as HSE.

**Personal Attributes**

* Personal effectiveness to drive and coach for performance, with a focus on leading-by-influencing.
* Credibility by demonstrating a poise and confident demeanour that is consistent with CSIRO vision and values.
* Establish and sustain trusting relationships and leveraging insights to effectively manage both self and team responsibilities.
* Passion for results by driving high standards for individual, team and organisational achievement.

## **Required Competencies:**

* **Teamwork and Collaboration:** Creates and fosters an environment in which there is a high level of cooperation within and between teams. Facilitates positive team relationships to build interactions across Business Units and the organisation.
* **Influence and Communication:** Uses complex influencing strategies, for example, assembling strategic coalitions, building behind the scenes support and the tactical use of information to gain support.
* **Resource Management/Leadership:** Contributes to or defines Business Unit / organisational policy directions, strategic planning and operationalises the vision for staff and gains commitment to the direction chosen. Plans, seeks, allocates resources and monitors to achieve outcomes. Adopts a mentor role.
* **Judgement and Problem Solving:** Resolves major conceptual scientific, technical, commercial or management problems, which have a significant impact upon the field of research, professional function, the Business Unit or the Organisation. Situations faced have little or no precedent and require original concepts and approaches.
* **Independence:** Commits significant resources in the face of uncertainty and takes calculated risks to improve performance and achieve challenging goals. Uses personal energy to drive change strategies. Formulates and implements contingency plans to minimise the impact of potential risks. Accepts personal responsibility for the outcomes of decisions/risks taken.
* **Adaptability:**Is flexible in response to external change or when faced with external constraints. Identifies and promotes the opportunities arising as a result of change.

## **Selection Criteria**

#### Essential

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

1. PhD in Science or Engineering or equivalent, combined with significant experience and science/engineering track record in relevant areas from work experience in R&D and/or Industry.
2. Demonstrated track record in establishing and leading multidisciplinary research programs comprising regionally dispersed science teams, towards agreed organizational goals.
3. Proven knowledge/understanding of the science challenges associated with development and implementation of hydrogen energy value chains.
4. Demonstrated skills and experience in successfully initiating and effectively managing large research, development, or demonstration projects.
5. Proven experience in identifying and influencing critical stakeholders and development of a portfolio of internal and external relationships leading to mission oriented collaborative R&D projects
6. **Demonstrated understanding of the technical needs of the emerging hydrogen energy sector, based on experience in working in a hydrogen industry research, government, or industry context.**
7. An outstanding record of science innovation and creativity plus the ability to apply well developed research skills to scientific investigations of significant consequence.

## **Desirable:**

1. A significant record of science innovation and creativity plus the ability to apply well developed research skills to scientific investigations.
2. Working understanding of existing CSIRO FSP models and operations and/or Working understanding of CSIRO strategy, research models and operations.

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.
* To be eligible for this position you must be willing and able to undertake significant domestic and international travel**.**

## **About CSIRO:**

We solve the greatest challenges through innovative science and technology. To find out more visit us [online](http://www.csiro.au/)!

Find out more about CSIRO [Energy](https://www.csiro.au/en/Research/EF)

## **Future Science Platforms - Hydrogen Energy Systems**

## Australia has access to vast energy resources through sun, wind, biomass, natural gas and coal, all of which can be used to produce hydrogen and/or the desired energy carrier compound. The fuel could be used domestically in transport, power generation and to offset more carbon-intensive resources, and Australia could also become a world-leading exporter of low emissions hydrogen.

Find out more about the [HES FSP](https://research.csiro.au/hydrogenfsp/)