Job Description

<table>
<thead>
<tr>
<th>College</th>
<th>UCD College of Engineering and Architecture</th>
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<tbody>
<tr>
<td>School</td>
<td>School of Electrical and Electronic Engineering</td>
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<tr>
<td>Post Title</td>
<td>Senior Energy Policy Researcher</td>
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<td>Project</td>
<td>Development of the offshore wind energy sector up to 2030</td>
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<tr>
<td>Post Duration</td>
<td>3 years</td>
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<tr>
<td>Reports to</td>
<td>Prof Andrew Keane</td>
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<tr>
<td>HR Reference No.</td>
<td>012142</td>
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<tr>
<td>HR Administrator</td>
<td>Lidija Balija</td>
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Position Summary:

Ireland has a legally binding target, under the 2009 EU Renewable Energy Directive, of meeting 16% of its total energy demand from renewable energy by 2020. Within this overall target, there is an ambitious electricity sector target, of 40% of electricity demand, being met from renewable sources. Moving beyond 2020, an ambitious EU-wide renewable energy target for 2030, of 32% of energy demand, will require continued growth of the renewable electricity sector up to 2030.

The 2019 Government Climate Action Plan set a target of increasing electricity generated from renewable sources to 70% by 2030, indicatively comprised of:

- at least 3.5 GW of offshore renewable energy
- up to 1.5 GW of grid-scale solar energy
- up to 8.2 GW total of increased onshore wind capacity

The potential for growth of the renewable electricity sector up to 2030, highlights the scale of the opportunity for Ireland.

There are offshore wind farm sites in Irish waters, with a total potential generating capacity of around 4GW, currently at various stages in the consenting process. These sites are generally in shallow waters within 10’s of km from the shore and many of these are in close proximity to Dublin – the main electricity load centre. There is therefore an adequate accessible resource to make a significant contribution to electricity demand in the period up to 2030. The cost of offshore wind energy has been decreasing rapidly internationally and Ireland’s offshore wind resource may now be exploited at a reasonable cost – lower than that of several other renewable electricity technologies. It is therefore appropriate to more precisely characterise the offshore wind energy sector in Ireland in order to make data and information available to relevant stakeholders.

Key knowledge and skills associated with this position include but is not limited to the following:

- Experience of working in energy-related research environment across the public sector, academia or industry
- A good knowledge of Ireland’s energy-related research strengths and opportunities
- An understanding of national and European sustainable energy policy priorities and how research can support achievement of these priorities
- An understanding of the challenges and opportunities faced by the offshore wind energy sector in Ireland

The successful candidate will be based in SEAI and will develop collaborative linkages with the UCD Energy Institute and the broader academic and energy policy system.

Equality, Diversity and Inclusion

UCD is committed to creating an inclusive environment where diversity is celebrated, and everyone is afforded equality of opportunity. To that end the university adheres to a range of equality, diversity and inclusion policies. We encourage applicants to consult those policies here [https://www.ucd.ie/equality/](https://www.ucd.ie/equality/) We welcome applications
from everyone, including those who identify with any of the protected characteristics that are set out in our Equality, Diversity and Inclusion policy.

**Salary:** €50,000 - €55,125 per annum
Appointment on the above range will be dependent on qualifications

**Principal Duties and Responsibilities:**

A 3-year research plan will be developed with the successful candidate upon successful appointment. The overarching aim of this SEAI-UCD Research Fellowship project will be to investigate in detail the potential development pathways for the offshore wind energy sector in Ireland. Sample expected project activities could include:

- Assemble detailed data and information on the characteristics of projects currently under development and key future development areas;
- Create an offshore wind energy project database for Ireland, to be populated with key data on the projects’ characteristics and status within the consenting processes;
- Review the current state of the art in offshore wind turbine technology and assess trends in critical parameters such as LCOE, CAPEX, OPEX, capacity factors, specific power (power/m² rotor area) power/tonne, energy/tonne, power/km², energy/km². Disaggregate cost trends according to the key parameters influencing these e.g. distance from shore, water depth, wind regime;
- Review advanced offshore wind technologies currently in late stage development and their potential for adoption in Ireland before 2030;
- Review Ireland’s port and other onshore infrastructure that may support the development of the offshore wind sector in Ireland;
- Develop scenarios for the future deployment of wind energy in Ireland under various policy regimes, including mapping of areas/zones suitable for offshore wind development;
- Develop a techno-economic model for assessing the costs and benefits of policies supporting the development of offshore wind energy under the constructed scenarios;
- Model the scenarios, develop cost of energy projections for each scenario and report on the results;
- Contribute cost data for offshore wind energy projects in Ireland to the IEA Wind Task 26 “Cost of Wind Energy” operating agent, conforming to the Task 26 template;
- Consult with industry stakeholders on the R&D, policy and other measures to support the development of the sector, update the offshore wind elements of the SEAI wind energy roadmap based upon the results of the project.
- Review and align research work with the SET-Plan Offshore Wind Energy Implementation Plan, which aims to:
  - Reduce the levelised cost of energy (LCoE) for fixed offshore wind to a no-subsidies point.
  - Develop the floating offshore wind subsector by reducing the LCoE to less than 12 CT€/kWh by 2025 and to less than 9CT€/kWh by 2030
  - Additional research activities relating to the offshore sector which may be required to support SEAI in its delivery of actions relevant to offshore wind in the Climate Action Plan

**Selection Criteria:**

Selection criteria outline the qualifications, skills, knowledge and/or experience that the successful candidate would need to demonstrate for successful discharge of the responsibilities of the post. Applications will be assessed on the basis of how well candidates satisfy these criteria.

**Mandatory:**

- A post-graduate qualification in a relevant energy-related area with a scientific or engineering background or equivalent
- A strong knowledge of National/International energy-related research strengths and opportunities
- Minimum five years’ experience of working in an energy – related area or equivalent, preferably in areas related to wind energy, offshore engineering or the electricity sector (where relevant, this may include time spent on post-graduate level studies)
• Ability to plan and execute projects with input from a number of stakeholders
• Excellent communication (written and oral) and interpersonal skills, including ability to communicate technical information to non-technical audiences where full responsibility needs to be taken for the quality of oral and written communication
• Strong project management and organisation skills
• Candidates must demonstrate an awareness of equality, diversity and inclusion agenda.

Desirable:

• Qualification at PhD level is desirable but not mandatory
• Ability to exercise initiative and to be able to operate independently
• Ability to work effectively with their own team in order to achieve the task at hand
• Must be flexible in approach in order to identify changes required in area in order to make it more effective and efficient
• Ability to engage effectively with internal and external stakeholders
• Full ownership of development, delivery, monitoring and review of relevant programmes.
• Strong proactive approach to achieving results, including managing scope, time, cost and quality
• Well-developed negotiation and influencing skills
• Well-developed IT skills

Further Information for Candidates:

Supplementary information:

The Sustainable Energy Authority of Ireland  https://www.seai.ie/
The University:  http://www.ucd.ie/aboutucd.htm
The College of Engineering and Architecture:  http://www.ucd.ie/eacollege/
The School of Electrical and Electronic Engineering:  http://www.ucd.ie/eacollege/eece/
UCD Energy Institute  https://energyinstitute.ucd.ie/

Relocation Expenses:

☑  Will not apply
☐  Will be applied in accordance with the UCD policy  http://www.ucd.ie/hr/policies/#d.en.31150

Informal Enquiries ONLY to:

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<tr>
<th>Name:</th>
<th>Professor Andrew Keane</th>
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<tr>
<td>Email address:</td>
<td><a href="mailto:Andrew.keane@ucd.ie">Andrew.keane@ucd.ie</a></td>
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Eligibility to compete and certain restrictions on eligibility

Incentivised Scheme for Early Retirement (ISER):

It is a condition of the Incentivised Scheme for Early Retirement (ISER) as set out in Department of Finance Circular 12/09 that retirees, under that Scheme, are debarred from applying for another position in the same employment or the same sector. Therefore, such retirees may not apply
<table>
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<tr>
<th><strong>Department of Health and Children Circular (7/2010):</strong></th>
<th>The Department of Health Circular 7/2010 dated 1 November 2010 introduced a Targeted Voluntary Early Retirement (VER) Scheme and Voluntary Redundancy Schemes (VRS). It is a condition of the VER scheme that persons availing of the scheme will not be eligible for re-employment in the public health sector or in the wider public service or in a body wholly or mainly funded from public moneys. The same prohibition on re-employment applies under the VRS, except that the prohibition is for a period of 7 years, after which time any re-employment will require the approval of the Minister for Public Expenditure and Reform. People who availed of either of these schemes are not eligible to complete in this competition.</th>
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<tr>
<td><strong>Collective Agreement - Redundancy Payments to Public Servants:</strong></td>
<td>The Department of Public Expenditure and Reform letter dated 28th June 2012 to Personnel Officers introduced, with effect from 1st June 2012, a Collective Agreement which had been reached between the Department of Public Expenditure and Reform and the Public Services Committee of the ICTU in relation to ex-gratia Redundancy Payments to Public Servants. It is a condition of the Collective Agreement that persons availing of the agreement will not be eligible for re-employment in the public service by any public service body (as defined by the Financial Emergency Measures in the Public Interest Acts 2009 – 2011) for a period of 2 years from termination of the employment. Thereafter the consent of the Minister for Public Expenditure and Reform will be required prior to re-employment. People who availed of this scheme and who may be successful in this competition will have to prove their eligibility (expiry of period of non-eligibility) and the Minister’s consent will have to be secured prior to employment by any public service body.</td>
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<td><strong>Declaration:</strong></td>
<td>Applicants will be required to a Pre-Employment Declaration to confirm whether they have previously availed of a public service scheme of incentivised early retirement and/or the collective agreement outlined above. The above represents the main schemes and agreements restricting a candidate’s right to be re-employed in the public service. However it is not intended to be an exhaustive list and candidates should declare details of any other exit mechanism they have availed of which restricts their right to be re-employed in the public service. Applicants will also be required to declare any entitlements to a Public Service pension benefit (in payment or preserved) from any other Public Service employment and/or where they have received a payment-in-lieu in respect of service in any Public Service employment.</td>
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<td><strong>Superannuation and Retirement:</strong></td>
<td>The successful candidate will be offered the appropriate superannuation terms and conditions as prevailing in the University, at the time of being offered an appointment. In general, and except for candidates who have worked in a pensionable (non-single scheme terms) public service job in the 26 weeks prior to appointment (see paragraph d below), this means being offered appointment based on membership of the Single Public Service Pension Scheme (“Single Scheme”). Key provisions attaching to membership of the Single Scheme are as follows:</td>
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a. **Pensionable Age** - The minimum age at which pension is payable is 66 (rising to 67 and 68) in line with State Pension age changes.

b. **Retirement Age** - Scheme members must retire at the age of 70.

c. **Pension Abatement:**
   - If the appointee was previously employed in the Civil Service or in the Public Service please note that the Public Service Pensions (Single Scheme and Other Provisions) Act 2012 includes a provision which extends abatement of pension for all Civil and Public Servants who are re-employed where a Public Service pension is in payment. This provision to apply abatement across the wider public service came into effect on 1 November 2012. This may have pension implications for any person appointed to this position who is currently in receipt of a Civil or Public Service pension or has a preserved Civil or Public Service pension which will come into payment during his/her employment in this position.

   - **Department of Education and Skills Early Retirement Scheme for Teachers Circular 102/2007**
     The Department of Education and Skills introduced an Early Retirement Scheme for Teachers. It is a condition of the Early Retirement Scheme that with the exception of the situations set out in paragraphs 10.2 and 10.3 of the relevant circular documentation, and with those exceptions only, if a teacher accepts early retirement under Strands 1, 2 or 3 of this scheme and is subsequently employed in any capacity in any area of the public sector, payment of pension to that person under the scheme will immediately cease. Pension payments will, however, be resumed on the ceasing of such employment or on the person’s 60th birthday, whichever is the later, but on resumption, the pension will be based on the person’s actual reckonable service as a teacher (i.e. the added years previously granted will not be taken into account in the calculation of the pension payment).

   - **Ill-Health-Retirement**
     Please note that where an individual has retired from a Civil/Public Service body on the grounds of ill-health his/her pension from that employment may be subject to review in accordance with the rules of ill-health retirement within the pension scheme of that employment.

d. **Prior Public Servant** - While the default pension terms, as set out in the preceding paragraphs, consist of Single Scheme membership, this may not apply to certain appointees. Full details of the conditions governing whether or not a public servant is a Single Scheme member are given in the Public Service Pensions (Single Scheme and other Provisions) Act 2012. However the key exception case (in the context of this competition and generally) is that a successful candidate who has worked in a pensionable (non-single scheme terms) capacity in the public service within 26 weeks of taking up appointment, would in general not become a member of the Single Scheme. In this case such a candidate would instead be offered membership of the UCD Pension Scheme. This would mean that the abatement provisions at (c) above would apply, and in addition there are implications in respect of pension accrual as outlined below:

e. **Pension Accrual** - A 40-year limit on total service that can be counted towards pension where a person has been a member of more than one existing public service pension scheme would apply. This 40-year limit, which is provided for in the Public Service Pensions (Single Scheme and other Provisions) Act 2012 came into effect on 28 July 2012. This may have implications for any appointee who has acquired pension rights in a previous public service employment.

f. **Pension-Related Deduction** - This appointment is subject to the pension-related deduction in accordance with the Financial Emergency Measure in the Public Interest Act 2009.

   For further information in relation to the Single Public Service Pension Scheme for Public Servants please see the following website: [http://www.per.gov.ie/pensions](http://www.per.gov.ie/pensions).