### IRENA SECRETARIAT



## Terms of Reference Secretariat of the International Renewable Energy Agency (IRENA) IRENA Innovation and Technology Centre (IITC) Division

Title and Grade:	Associate Programme Officer
Indicative Annual Remuneration:	<ul> <li>Sector Coupling and Hydrogen, P-2</li> <li>(a.) Annual Net Salary: USD 50,377 to USD 58,737<sup>1</sup></li> </ul>
	(b.) Post Adjustment: USD 19,445.52 to USD 22,672.48 <sup>2</sup>
Duration of Appointment:	One year, with possible extension
Duty Station:	Bonn, Germany
Entry on Duty:	As soon as possible

#### Introduction

The International Renewable Energy Agency (IRENA) is an inter-governmental organisation mandated with the widespread and increased adoption and sustainable use of all forms of renewable energy. At present, IRENA 169 Members (168 States and the European Union) that acceded to its Statute, and 15 additional States in the process of accession and actively engaged. IRENA supports countries in their transition to a sustainable energy future and serves as the principal platform for international cooperation, a centre of excellence, and a repository of policy, technology, resource and financial knowledge on renewable energy. The Agency implements its mandate with the view to sustainable development, increased energy security and low-carbon economic growth and prosperity.

The IRENA Innovation and Technology Centre (IITC) is one of IRENA's programmatic divisions. The IITC provides cutting-edge information on renewable energy technologies and innovation, while seeking new pathways for the global transition to a renewable energy future. Based at IRENA's office in Bonn, Germany, the centre stays abreast of the latest developments and translates them into practical, policy-friendly tools. Researchers produce data for renewable energy technologies; provide tools for planning, project development and grid management; and offer strategies to strengthen technological innovation for renewables, among many other activities.

Within the IITC, IRENA's Power Sector Transformation team assists Member Countries in

<sup>&</sup>lt;sup>1</sup> IRENA provides similar ICSC benefits and entitlements, including dependency allowances, rental subsidy, education grant (for school aged children), annual and sick leave, health insurance, Provident Fund participation, etc. as would be applicable.

<sup>&</sup>lt;sup>2</sup> The post adjustment is a variable component that is adjusted periodically to reflect changes in the cost of living in a duty station. Post adjustment multiplier for duty station Bonn is currently 38.6% determined by the International Civil Service Commission and subject to change without prior notice.

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identifying solutions to further accelerate the transformation of the power system to one dominated by renewable energy, while at the same time electrifying end-use sectors to achieve deep decarbonisation. The keyword for this work is flexibility: more flexible operations, more flexible generation, stronger grids, energy storage, demand response, hydrogen from renewable power, heat pumps and electromobility.

The PST team produces knowledge products on how to leverage flexibility across the energy sector to further accelerate the deployment of renewable energy in the power sector and applies this knowledge together with Member Countries at the national and regional levels. The PST team also supports IRENA's Member Countries in performing power system flexibility assessments taking into consideration all sources of flexibility.

Sector coupling and demand-side flexibility refer to the portion of demand in the system that can be reduced, increased or shifted within a specific duration. It must be harnessed to ensure the smooth integration of large shares of variable renewable energy (VRE) into power systems. Flexibility can be achieved on the demand side by allowing the system operator to control, provide price signals to and, allow participation in markets of various sources of electricity demand, including storage, power-to-heat, power-to-hydrogen, electric-vehicle charging, smart appliances and industrial demand response.

### **Duties and Responsibilities**

Within this scope and under the overall guidance of the Senior Programme Officer, Power Sector Investment Planning, the Associate Programme Officer will be responsible for the following duties:

- Research and explore successful sector coupling and demand-side management applications in countries to enhance power system's flexibility and stability, including the development of storage and hydrogen-related technologies
- Support the team in representing sector coupling and hydrogen-related technologies in power sector analysis for Member States and regions through the use of models like IRENA FlexTool and others. Such analyses aim at advising on the feasibility of future energy systems.
- Support the development and maintenance of IRENA's PST team power sector modelling toolkit;
- Collect and analyse global best practices on demand-side energy management strategies to support grid balancing, aggregate distributed energy resources and for provision of grid services. That should consider different energy storage technologies, electrolysers, industrial applications and others
- Develop knowledge products on power sector transformation relevant to IRENA Member States





• Perform other duties as required

### **Competencies**

**Professionalism**: Shows pride in work and achievements; demonstrates professional competence and mastery of subject matter; is conscientious and efficient in meeting commitments, observing deadlines and achieving results; shows persistence when faced with difficult problems or challenges; remains calm in stressful situations.

**Communication**: Speaks and writes clearly and effectively; listens to others, correctly interprets messages from others and responds appropriately; asks questions to clarify, and exhibits interest in having two-way communication; tailor language, tone, style and format to match audience; demonstrates openness in sharing information and keeping people informed.

Accountability: Takes ownership of all responsibilities and honours commitments; delivers outputs for which one has responsibility within the prescribed time, cost and quality standards; operates in compliance with organisational regulations and rules; supports subordinates, provides oversight and takes responsibility for delegated assignments; takes personal responsibility for his/her shortcomings and those of the work unit, where applicable.

**Teamwork**: Works collaboratively with colleagues to achieve organisational goals; solicits input by genuinely valuing others' ideas and expertise; is willing to learn from others; places team agenda before personal agenda; supports and acts in accordance with final group decision, even when such decisions may not entirely reflect own position; shares credit for team accomplishments and accepts joint responsibility for team shortcomings.

### **Qualifications**

**Education**: Advanced university degree in energy system analysis, industrial engineering, or related fields. A first-level university degree in combination with qualifying experience may be accepted in lieu of the advanced university degree.

**Experience:** A minimum of two years of relevant working experience in a relevant energy or climaterelated field at the national or international level is required. Knowledge of sector coupling-related technologies like storage, hydrogen and others is required. Analytical skills and expertise in energy data analysis, application and development of energy and power system modelling tools are required. Prior responsibility in dealing with national and international stakeholders is desired. An established track record of programming and scripting large quantities of data is desirable.

Languages: Excellent command of written and spoken English is a must. Knowledge of Spanish,

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French and other languages would be of additional benefit. Good drafting skills both in technical and non-technical outputs in English are required.