



## EUROPEAN COMMISSION

DIRECTORATE-GENERAL  
JOINT RESEARCH CENTRE

Directorate-General Human Resources and Security  
**Unit AMC.8**

**2017-IPR-C-000-8284**

### **Automated data collection for energy infrastructure models**

**Position for:**

Trainee

As the science and knowledge service of the Commission, the mission of DG Joint Research Centre is to support EU policies with independent evidence throughout the whole policy cycle.

The JRC is located in 5 Member States (Belgium, Germany, Italy, the Netherlands and Spain). Further information is available at: <http://www.jrc.ec.europa.eu>

**Short description of activity:**

Among other activities, the Unit for Energy Security, Distribution and Markets (JRC.C.3) conducts studies related to the assessment of smart electricity system challenges and options. Particularly, in the context of smart grids, smart management of Electric Vehicles and distributed storage would enable integration of more variable renewable energy sources such as PV. This research focuses on setting appropriate simulation and ex-ante test platforms to support studies related to smart management of EVs and storage systems in the grids with high level of PV penetration.

The trainee's duties will be to

- assist in setting up a real-time simulation test bed to study PV penetration potential in smart grids with electric vehicles and storage systems
- to support the use of physical and communication models where Both energy and information exchange among different actors are considered.

**Qualifications:**

**Essential:**

- Bachelor's degree in statistics, applied mathematics, informatics, engineering, physics or similar, with a strong focus on IT tools.
- Familiarity with web-oriented programming languages.

	<ul style="list-style-type: none"> <li>• Good communication skills, creativity, and the ability to search through data, to analyse, and to summarise critical information.</li> <li>• A good oral and written knowledge of English is required (level B2).</li> </ul> <p><b>Advantage:</b></p> <p>Basic knowledge of ICT in smart grids from a relevant course.</p> <p>Programming skills (e.g. Python and MATLAB)</p> <p>Basic experience of analogue and digital signal control and measurement</p> <p><b><u>For general eligibility requirements, please read the rules governing the traineeship scheme of the JRC:</u></b></p> <p><a href="https://ec.europa.eu/jrc/en/working-with-us/jobs/temporary-positions/jrc-trainees">https://ec.europa.eu/jrc/en/working-with-us/jobs/temporary-positions/jrc-trainees</a></p>
<b>Institute/Directorate Unit</b>	<p>Directorate C: Energy, transport and climate. Unit for Energy security, distribution and markets.</p> <p>Further information:  <a href="https://ec.europa.eu/jrc/en/research-topic/energy-system-and-security-supply">https://ec.europa.eu/jrc/en/research-topic/energy-system-and-security-supply</a></p>
<b>Indicative duration</b>	5 months
<b>Preferred starting date</b>	As soon as possible
<b>JRC Site</b>	Ispra
<b>Country</b>	Italy
<b><u>JRC contact details</u></b>	<p><b>For any technical problems with your application, please contact:</b>  <a href="mailto:JRC-ESRA@ec.europa.eu">JRC-ESRA@ec.europa.eu</a></p>