



**ingeniería termo-energética y energías renovables**  
**thermo-energetical engineering and renewable energies**

E4-Experts  
energía exergía economía ecología SL

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## Job offer

### Energy engineer

**to collaborate in the European IEE project  
EINSTEIN-II (expert system for an intelligent  
supply of thermal energy in industry and other  
large scale applications)**

*(Berlin, 18th of August 2010)*

energyXperts (E4-Experts SL) is a consultancy and engineering company for thermal energy systems and renewable energies, with a consolidated experience in these fields since 1991. energyXperts disposes of offices in Barcelona (Spain) and Berlin (Germany) and manages a big network of relationships with other companies and research institutes of the sector on a European and international level ([www.energyxperts.net](http://www.energyxperts.net)).

The objective of energyXperts is to offer to the customer high-quality solutions that integrate and maximise energy efficiency and renewable energies.

energyXperts at present is a private company (Ltd. - Spanish "Sociedad Limitada"). However, in the next future a shift toward a cooperative structure is foreseen, and, therefore, for new incorporations preference will be given to candidates with an affinity for this type of company organisation.

#### **Specific fields of work:**

In the last years since 2007, energyXperts, in collaboration with a European consortium, has developed the software tool EINSTEIN (expert system for an intelligent supply of thermal energy in industry), that supports energy auditors in all the steps of energy auditing and energy consultancy to industrial companies (data acquisition and analysis, generation of proposals for energy savings, reporting, ...).

EINSTEIN is a free and open source software available under [www.sourceforge.net/projects/einstein](http://www.sourceforge.net/projects/einstein). EINSTEIN is written in Python (GUI based on wxPython, graphics using matplotlib) and using MySQL as a database server.

The main tasks of the new energy engineer are:

- thermal energy audits using the EINSTEIN methodology and tool-kit in the industrial companies and in the service sector (non-residential buildings) in different European Countries
- training courses on the EINSTEIN thermal energy audit methodology and software tool in different European countries

- support for the improvement of the EINSTEIN methodology and software tool
- collaboration in other related projects and activities.

**Required skills:**

- Graduate degree in mechanical engineering, physics or equivalent
- Robust knowledge of thermal energy engineering (e.g. energy supply systems, such as steam, cogeneration / CHP, chillers ...)
- Good knowledge of spreadsheet programming (OpenOffice Calc and/or MS Excel) for engineering calculations, incl. basics of macro programming
- Experience in energy auditing
- Experience in teaching
- Capacity for teamwork; capacity to generate innovative solutions autonomously
- Languages: Good level of English required, suitable for fluid written and spoken communication in an international working environment. Good level of German would be desirable, but not strictly necessary. A good level of either **Spanish** or **French** is also desirable.

**Optional skills:**

- Basic knowledge on and interest in renewable energies, especially solar thermal energy and / or biomass.
- Basic knowledge of tools and methods for dynamic system simulation (e.g. Modelica language, TRNSYS software, Matlab-Simulink, or similar)
- Basic knowledge of programming and numerical methods in engineering

**Conditions of the contract:**

- The candidate will incorporate in the office in Berlin.
- Full-time contract (35 – 40 hours/week, depending on individual preferences and experience).
- Duration of the contract: 18 months (October 2010 – March 2012), with the possibility of extension
- Salary: to be agreed, depending on qualification and experience. Please together with your CV, indicate your expectations with respect to remuneration.

**Contact for more information and for sending your CV:**

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