Membership Employment Survey 2010

Part 1: Current Employment

The Institution of Environmental Sciences

www.ies-uk.org.uk
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About the author

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About the Institution

The Institution of Environmental Sciences (IES) is a charitable organisation which promotes and raises public awareness of environmental science by supporting professional scientists and academics working in this crucial arena. The Institution has strong ties with Higher Education and promotes and supports environmental science and sustainable development in universities and colleges both nationally and internationally. Further details can be found at http://www.ies-uk.org.uk

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Abstract
In light of the current economic climate, the Institution of Environmental Sciences (IES) is seeking to understand the current employment situation within environmental sciences, including gender differences that may pervade. In August 2010, the IES surveyed a sample of its members; the survey questioned members about their current employment situation, academic history and about their use of their rights to parental leave. The results of this survey will be published throughout 2011 in a series of reports. This first report will focus on the current employment of members.
Section 1 – Introduction and Method

Over the past few years the news has been dominated by a steady stream of reports on persistent difficulties in employment. The Institution of Environmental Sciences (IES) recognised the importance of understanding employment within its membership for a number of reasons:

- To better understand the employment situations of our membership, with the aim of improving IES services
- To seek to identify trends within the IES membership and therefore the environmental sciences, by surveying IES members at different time periods
- To identify any gender differences persisting in the field of environmental sciences

In August 2010 the IES invited its Fellows, Full and Associate Members to take part in an employment survey, which questioned them regarding their current employment. This is the first in a series of reports outlining the results of this survey. This report specifically addresses the current employment situation within our membership, looking at unemployment, salaries, representation across the sectors and fields within the environmental sciences.

This report outlines first the method of surveying the members, followed by the results relating to members’ current employment situations. From these results conclusions and recommendations are drawn for consideration by the Council and the membership.

Survey method

A questionnaire was prepared through a survey website (SurveyMonkey.com) where Fellows, Full and Associate members could complete the questionnaire. Affiliate and Student members were not invited to complete the questionnaire as they are generally not currently working in the field of environmental sciences.

Members were asked their member grade and their chartered status, and were then asked to complete sections depending upon their employment status (employed, unemployed or retired). All respondents were asked about their education, age, gender, and details regarding their use of the right to parental leave.

Employed members were asked to provide details regarding their sector, field within environmental sciences, position within their organisation, salary, benefits and job security. Unemployed members were asked how long they had been seeking work and their confidence levels in finding work. Retired members were questioned about their sector and final salary and pension.
Section 2 - Results

Responses
The survey was completed by 423 members. This represents the view of over 40% of the membership invited to participate. The membership status of those who responded was as follows:

<table>
<thead>
<tr>
<th>Member Grade</th>
<th>Percentage of Respondents</th>
<th>Survey</th>
<th>Percentage of IES Membership</th>
</tr>
</thead>
<tbody>
<tr>
<td>Fellows</td>
<td>3.8%</td>
<td></td>
<td>3.0%</td>
</tr>
<tr>
<td>Members</td>
<td>77.3%</td>
<td></td>
<td>78.5%</td>
</tr>
<tr>
<td>Associates</td>
<td>18.9%</td>
<td></td>
<td>18.5%</td>
</tr>
</tbody>
</table>

The survey respondents provide a representative sample of the Institution’s membership.

Current employment status
Survey respondents were asked to categorise their employment status at the time of answering.

78.2% of members were in full-time employment (73.5% on permanent contracts, 5.7% on temporary contracts). Following permanent full-time contracts, the second most prevalent status was self-employment (7.3%). 1.9% of members were on a career break, whilst 1.4%
of members were unemployed. A total of 1.9% of members were retired, with 0.5% of members being retired and no longer active in environmental sciences.

**Employment Sector**

Employed members were asked to categorise which sector they currently work in (see Figure 2).

![Graph showing the employment sector of respondents at the time of answering the survey (August 2010). Respondents were asked to choose between 5 sectors, or specify an alternative.](image)

Over half of the members work in consultancy (53%), with government the next largest sector (20.75%). The Third Sector is the least represented by the IES membership, making up only 2%. Members who did not work in any of the five suggested sectors were asked to specify their sector. Construction was the most frequently cited alternative sector (1.75%), followed by healthcare (1%).

**Field within employment sector**

Employed members were asked to categorise the field they work in within their sector, the results of which are shown in Figure 3. Looking first at overall numbers, air quality management is the most represented by the IES (20.5% of members), followed by contaminated land (13.5%). The third largest field is impact/risk assessments at 8.75%. No members stated that they work in biology/biogeochemistry, journalism, forestry/landscaping/land use management or tourism. Other fields with very few members working in them were: archaeology, chemistry, climatology, geology, marine science, physics and transport. 16.25% of members stated that they worked in an alternative field, with acoustics and planning being the most frequently stated.

Figure 3 breaks down the representation of each sector within the different fields. The breakdown by sector was compared with the overall representation of each sector (see Figure 2) in an attempt to identify which fields were disproportionately highly represented by
Figure 3: Graph showing the total number of respondents working in each field within environmental sciences. Each field is broken down according to the sector which member works in. The field “auditing” refers to “auditing/environmental management”, “enforcement” to enforcement/monitoring/environmental law, and “land use management” to forestry/landscaping/land use management. Respondents who listed “other” for their sector are not included on this graph.
particular sectors. This was done in an attempt to account for the difference in total numbers of members working in each sector.

Academia dominates education & training/research, and is found in disproportionately high numbers in chemistry, hydrology and sustainability. Consulting was dominated by air quality management, contaminated land, and impact/risk assessment. A disproportionately high number of members working in government identified their field as enforcement/monitoring/environmental law. Transport and waste management were also heavily represented by government. More than half the members working in auditing/environmental management are based in industry. The Third Sector is disproportionately highly represented in education & training/research, enforcement/monitoring/environmental law and waste management. The sectors are not evenly represented by each field within environmental sciences.

**Position within their organisation**

Survey respondents were asked to categorise their position within their organisation (see Figure 4).

![Current position of members within their organisation](image)

**Figure 4:** Graph showing the current position of members within their organisation (at the time of answering the survey). The positions are listed in an approximate representation of the career ladder within organisations.

Survey respondents were asked to categorise their position within their organisation (see Figure 4). The positions are listed in an approximate representation of the career ladder within organisations. 29.5% of members work at project/middle manager level. Fewest members are working at graduate/trainee level (3.5%).
Salary
Respondents were asked to identify within which £5,000 band their current salary falls.

Figure 5: Graph showing the total number of members currently earning within each salary band (£5000 salary bands).

More members are earning between £30,000 and £35,000 than any other salary band. The distribution of salary bands is skewed, with almost half the members were earning less or within this salary band (49.9%). The salary range within each sector is shown in Figure 6 below.

Figure 6: Graph showing the range of salaries within each sector. The most common salary band in each sector is indicated. On the y-axis, the salary band is represented by the lowest end of the band range i.e. between £15,000-£20,000 is shown as £15,000. Those earning under £14,999 are shown as earning £10,000. Those earning over £100,000 are shown as earning £100,000.
In all sectors the majority of people are earning within the lower half of the salary range. Members working in academia tend to be earning almost at the bottom of their pay range, compared with the other sectors. The mode average for consultancy and government is £5,000 higher than industry and the NGO/charity sector, and £10,000 higher than academia. The highest salaries are found in consultancy and industry. NGO/charity has the lowest salary range, with the top salary band achieved by members in this sector being less those in the other four sectors.

The salary range for each field within environmental field is shown in Figure 7 below.

![Range of salaries per field](image)

**Figure 7:** Graph showing the range of salaries within each field. The most commonly selected salary band is indicated. On the y-axis, the salary band is represented by the lowest end of the band range i.e. between £15,000-£20,000 is shown as £15,000. Those earning under £14,999 are shown as earning £10,000. Those earning over £100,000 are shown as earning £100,000. Marine science had a total of two answers, therefore no mode is indicated. Only one person was working in climatology and physics so no range is shown.

Looking first where the majority of members are earning, the fields where more members earn at in the top half of the salary range are: archaeology, auditing/environmental management, contaminated land, education & training/research, enforcement/monitoring/environmental law, hydrology/water quality, and transport. Those working in chemistry or conservation/ecology are more likely to earn right at the bottom of the pay scale. The fields with members earning over £100,000 are the built environment/planning, health & safety and waste management.

**Job security**

Members were asked to rate their job security in 2010 compared to 2009, stating whether they perceived it as less, equally or more secure. 45.2% stated their job was less secure, 42.1% equally secure and only 12.7% perceived their job as being more secure in 2010.

These results have been broken down by sector (see Figure 8 below).
Members working in consulting and industry are more likely to perceive their job as being equally secure in 2010 than those working in academia, government and the Third Sector.

**Unemployed members**

Six unemployed members answered the questionnaire, though two of these did not complete all sections. Unemployed members were asked to state the number of months they had been unemployed by August 2010, and whether they were not confident, confident or very confident of finding a job within six months of completing the survey. Members were asked their age bracket to identify whether unemployment was age related. The results for the four members who completed all sections about unemployment are shown in table 1 below:

<table>
<thead>
<tr>
<th>IES Grade</th>
<th>No. Months Unemployed</th>
<th>Age</th>
<th>Confident of job in 6 months</th>
</tr>
</thead>
<tbody>
<tr>
<td>Associate</td>
<td>12</td>
<td>Under 25</td>
<td>Not confident</td>
</tr>
<tr>
<td>Associate</td>
<td>8</td>
<td>25-29</td>
<td>Confident</td>
</tr>
<tr>
<td>Associate</td>
<td>7</td>
<td>40-44</td>
<td>Confident</td>
</tr>
<tr>
<td>Full</td>
<td>22</td>
<td>50-54</td>
<td>Not confident</td>
</tr>
</tbody>
</table>

*Table 1*: Table showing the results of the employment status of unemployed members. Number of months refers to the number of months the members had been unemployed for at the time of the survey (August 2010). Members were asked to state how confident they were of finding work within 6 months of completing the survey.

All the unemployed members had been seeking work for over six months. These results do not show any relationship between age and unemployment. Those who had been unemployed for a year or more were less confident of finding employment in the next six months. None of the unemployed members were very confident of finding work in the next six months.
Members seeking employment were asked which services they would like the IES to provide to assist them in their search:

- A graduate employment opportunity database
- Information on available graduate jobs and training courses
- Jobs for people over 50’s of age would be of assistance
- Links with professionals already in the industry

**Section 3 – Conclusions and Recommendations**

Surveying members of the IES is an attempt to gain a greater understanding of the current employment situation of IES members, and therefore provides a snapshot of the field of environmental sciences as a whole. At the time of the survey 94.3% of the members were employed (excluding those on a career break, retired or unemployed). Whilst it is positive that only 1.4% of members were unemployed, this may not be representative of employment rates in environmental sciences as a whole. Members who are seeking employment are less likely to remain members of the IES. With the full impact of the Spending Review yet to be felt in terms of employment, the IES is seeking to take a proactive approach to tackle unemployment within environmental sciences. The Institution is working to support its unemployed members through the recent launch of the ‘Back to Work’ scheme and the ‘Into Work’ scheme for new graduates.

The survey provided the opportunity to ask eligible scheme members what they would like the Institution to provide (see the comments in Section 2). These comments demonstrate the range of the needs of our members, from jobs for graduates to those for people in their 50s. In an effort to address this, the IES is working to extend the recruitment section of its website, advertising jobs ranging across the career ladder. At present the recruitment section of the IES website tends to lack graduate-level jobs, and so this is a particular area to target in the future. The IES is also developing a mentoring scheme, to link members seeking work with professionals already employed in their chosen field. Through these schemes specifically targeted at assisting members in finding work, the Institution hopes to help environmental professionals continue working in their chosen field.

The employment sector breakdown of IES members was heavily dominated by consultancy. This is likely to be the result of consultancy firms being in a position to support and encourage their employees in seeking membership of a professional body and taking up opportunities to become chartered. Academia and the Third Sector are currently under-represented by IES membership. The stated aims of the Institution include:

- “to promote the role of environmental sciences and sustainable development in higher education, the workplace, the professions and society at large”

According to this survey, the IES needs to seek to raise its profile amongst the professionals working in academia and charities. It is possible that member benefits are not meeting the needs of or being adequately communicated to professionals in these sectors. Further research into, for example, uptake of member services, may enable the Institution to tackle this problem.

When considering the distribution of members by field within environmental sciences, it is unsurprising that the most highly represented field is air quality management given the partnership between the IES and Institute of Air Quality Management (IAQM). The IAQM supports air quality professionals and works to enhance the development of this field. Whilst
seeking to improve its work with professionals in under-represented fields, the IES also aims to provide increasing support to existing members. The Institution might consider establishing a similar partnership with a body for professionals in land contamination, though more research into this is required.

Understanding the uneven distribution of IES members across the fields within environmental sciences will enable the IES to better target services at current members whilst also seeking to raise the organisation’s profile in less well-represented sectors. For example, despite the stated aim above to promote sustainable development, the field of sustainability is currently poorly represented by the IES membership. This sample of environmental professionals also provides a starting point for research into the diversity of environmental jobs for the future careers website.

The most represented position within organisations is at the level of project/middle managers. Given how these roles tend to dominate organisation, this is unsurprising. The low level of graduates is reflective of the poor retention rate of IES student members. The IES is looking to support the plethora of environmental graduates who are currently struggling to enter the job market. The results of this survey demonstrate the need for the IES to further develop and promote its Into Work scheme in articulating the value of belonging to a membership body on graduating from university.

In accordance with the number of people working as project/middle manager, the most frequently cited salary range was between £30,000 and £35,000. Unsurprisingly, IES members are more likely to be earning in the lower half of the salary range. Consultancy tends to be the best paid sector, with more people earning at a higher salary band, and the salary range being the greatest. Working in industry is also more likely to offer the possibility of earning at the top end of the pay range. Government and the Third Sector are least likely to offer the possibility of earning at the highest salary ranges.

Acquiring a greater understanding of the salary ranges of the different sectors and fields will assist the IES in the development of its careers services, such as the future careers website. People are motivated by a range of factors when selecting their career sector and field, and so identifying where the high and low earning fields are may assist our members in making these choices.

Job security can be a deciding factor for people when considering their chosen sector. Industry and consultancy are perceived as being more secure than other securities, indicating the comparative stability of work in these fields. The increased insecurity of public sector jobs (government and academia) is unsurprising given the cuts imposed during the last six months.

There are limitations to the conclusions which can be drawn from 2010 IES Employment Survey. The results are weighted by the number of responses from each sector. Caution is therefore required when considering salary bands and representation of fields by sector. Some of the datasets are very small, for example the number of unemployed members. This makes it difficult to identify trends within the data.

These brief conclusions are the interpretation of the author, but this report is intended as a discussion paper provoking dialogue amongst the membership and the IES Council. Comments should be addressed to Julia Heaton at the IES Project Office (enquiries@ies-uk.org.uk). Subsequent parts of the survey report will examine gender differences within environmental sciences and the impact of qualification choices on careers.