



# **Resources Industry Skills Survey**

**2009**

## **SACOME Resources Industry Skills Survey Results 2009**

### **Purpose**

The SACOME Resources Industry Skills Survey was designed to determine workforce demand requirements across the resources sector in South Australia. Sacome recognises the need to forecast demand in order to prepare for the next upturn and to ensure that our Members are not faced with a skills shortage such as that of recent years.

### **Methodology**

Twenty organisations participated in the SACOME Resources Industry Skills Survey 2009. The organisations are representative of SACOME's entire membership base. The Survey consisted of 18 questions, 17 of which related solely to current market conditions. Question 18 was optional and asked respondents to estimate long term labour requirements and levels of experience sought. The questions related directly to four key areas: Resources, Competitors, Current Resources and Required Resources. The Survey was available on line and the link was emailed directly to seventy SACOME core industry members (organisations directly involved in mining, extractive, geothermal, petroleum, oil & gas) along with a request for completion of the Survey.

### **Findings**

#### Resources

The majority of respondents employ traditional means of sourcing labour, such as internet websites, newspaper advertisements, recruitment agencies and word of mouth. About a quarter of respondents sourced primarily from areas local to their operations, while others sourced from a mixture of state, national and international pools of labour.

These sources meet the needs of 89.5 percent of respondents, while 10.5 percent found the sources they were utilising were insufficient. Of this 10.5 percent, traditional methods of sourcing were being utilised, in some cases primarily locally. These respondents were either unsure of what source to tap into next or planned to continue relying on traditional methods.

Seventy percent of respondents believe that Australian universities are able to provide sufficient numbers of graduates to meet their needs, with respondents in the main sourcing graduates from the local universities (primarily the University of Adelaide, followed by the University of South Australia to a lesser degree) with a few sourcing from universities in Queensland, Western Australia and Victoria. The majority of respondents (90.0 percent) believe that the current supply of potential employees available to them on the market hold the appropriate qualifications to enable them to perform their work.

### Competitors

Respondents advised that their main competitors for attracting labour are other South Australian organisations. The geographical areas which provide the most competition for skills are Western Australia, with a small degree of competition from Queensland. Only 10.0 percent of respondents felt that there is competition internationally for labour. The main reason cited for competition regarding labour is remuneration, followed by location. To a lesser degree and in descending order are employee benefits, culture, larger organisations, and better career opportunities.

Sixty percent of respondents currently source labour from outside of Australia or are prepared to do so. Of those respondents who have sourced labour from overseas, most have faced issues around retention and cultural differences. They also managed significant difficulties in relation to language barriers and some faced issues to do with remuneration. Other issues cited were visa problems, relocation costs, poor skills quality and difficulties with qualification recognition.

Respondents were asked to identify the key elements of their retention strategies. Most cited organisational culture and remuneration factors, with other factors such as size of organisation (small identified in the main as a positive), technical advantages (scope of projects, sound technical strategies and proficiencies, scientific focus) and stability and security of employment viewed as key.

Seventy percent of respondents state that FIFO is not an issue in relation to attraction for roles. One respondent advised that Generation Y employees actually prefer to live in the city and commute rather than live at remote residential sites. The main factors impeding attraction strategies are family matters (60.0 percent), followed by other factors including the standard of secondary schooling available in remote locations. Equally, twenty percent of respondents felt that remoteness of location and standard of living are issues which impede their ability to attract skills. Seventy five percent of respondents do not have any internal strategies aimed at attracting more women into non traditional roles within their organisations. Gender was not considered to be an issue in relation to attraction for roles, claim 94.7 percent of respondents.

### Current Resource Requirements

Respondents were asked to indicate current labour force requirements projected out to the next 12 months. A list of occupation types was agreed, and respondents were asked to segregate requirements according to level of experience (Graduate, Midlevel and Senior) and number of employees required. See **Appendix A** for full data table. The following is a list of the key roles in demand.

The skills most required by industry in South Australia now and over the next twelve months at the graduate level are as follows:

- Earth-moving plant operators
- Maintenance workers
- Boilermakers
- Civil engineers
- Diesel fitters
- Electrical engineers
- Electrical fitters
- Fixed plant operators
- Instrument technicians
- Laboratory analysts
- Mechanics
- Mechanical fitter and turners
- OH&S specialists
- Production coordinators
- Technical support staff

The skills most required by industry in South Australia now and over the next twelve months at the mid level are as follows:

- Diesel fitters (over 100)
- Earth moving plant operators (over 100)
- Boilermakers
- Electricians
- Mechanical engineers
- OH&S specialists
- Technical support staff

The skills most required by industry in South Australia now and over the next twelve months at the senior level are as follows:

- Mechanics
- Mining engineers
- Project managers
- Earth-moving plant operators
- Boilermakers
- Civil engineers
- Diesel fitters
- Drillers

### Required Resources (next 3 – 5 years)

Respondents were asked to indicate labour force requirements in 3 -5 years time. A list of occupation types was agreed, and respondents were asked to segregate requirements according to level of experience (Graduate, Midlevel and Senior) and number of employees required. Given the current economic climate and feedback from members, this question was optional. See **Appendix B** for full data table. The following is a list of the key roles which will be in demand.

The skills most required by industry in South Australia in the next 3 to 5 years are:

#### Graduates:

- Electrical engineers

#### Midlevel:

- Technical support staff
- Petroleum engineers
- Geologists
- Fixed plant operators
- Electrical engineers
- Earth-moving plant operators
- Drillers

#### Senior:

- Electrical engineers
- Geologists
- Mining engineers

## Conclusion

In relation to attracting resources, most respondents are currently employing traditional methods of recruitment and most (89.5 percent) are satisfied that this method is able to meet their needs. Seventy percent of respondents are satisfied with the number of graduates being produced by Australian universities and most source graduates from the University of Adelaide. Most are satisfied that the current pool of graduates hold appropriate qualifications to enable them to perform their work.

Respondents indicated that the main competitors in relation to attracting skills are other South Australian organisations. The geographical area providing the highest level of competition for skills is Western Australia and the main reason cited for competition is remuneration. Sixty percent of respondents source labour from outside of Australia or are prepared to do so. Of those who have done so, the issues they have faced have been around retention, cultural differences and language barriers. Cross cultural training seminars for senior managers of organisations employing international workers may be a way to address these retention issues for members. Seventy percent of respondents stated that FIFO is not an issue impeding attracting skills, but that family matters, remoteness of location and standard of living are the key impediments. Three quarters of respondents did not have any internal attraction strategies targeting women, and respondents also stated overwhelmingly that gender was not an issue in relation to attracting skills.

There is currently a high demand for graduate geologists, junior earth-moving plant operators and junior maintenance workers. Geologists are in even higher demand at the mid-level, as are earth-moving plant operators and diesel fitters, with demand for the last two numbering over 100 people. Also in demand at mid-level are Mechanical engineers, OH&S specialists and Technical support staff. Earth-moving plant operators again are in high demand (over 100 people) at the senior level, followed by a demand for experienced Geologists, Mining engineers and Project managers. Senior Mining engineers and experienced Project managers are more sought after than the same skills at the graduate and midlevel combined.

Projecting out to 3 – 5 years time, the skills which will be most in demand are graduate Electrical engineers, with Geologists featuring again, demonstrating a long term trend and need for these skills. Mid-level Petroleum engineers feature as an in-demand skill set and mid-level earth-moving plant operators are again in high demand. At the senior end, experienced Geologists, Electrical engineers and Mining engineers have the highest level of demand.

This provides us with a current snapshot of skills demands in South Australia within the resources industry. Regular Surveys of this nature are recommended to ensure that strategies which are implemented as a result of this data continue to be accurate and reflect actual demand requirements.

SACOME would like to thank all of the Member organisations who took part in this Survey for their time and effort.

## **Appendix A**

<b>Graduates/Junior</b>	<b>0-5 employees</b>	<b>5-10 employees</b>	<b>70-80 employees</b>
Boilermakers	3		
Crane Drivers	2		
Chemical engineers	2		
Civil engineers	1	1	
Commercial manager	2		
Diesel fitters	1	1	
Drillers	2		
Earth-moving plant operators	1		1
Environmental engineers	2		
Environmental scientists	2		
Electrical engineers	3		
Electrical fitters	3		
Electricians	2		
Electronic engineers	2		
Electronics technicians	2		
Exploration geophysicists	2		
Fixed plant operator	1	1	
Geologists	5		
Geotechnical engineers	2		
Geoscientists	2		
instrument technicians	3		
Laboratory analysts	3		
Maintenance workers	2	1	
Machinists	2		
Mechanics	1	1	
Mining engineers	2		
Metallurgical engineers	2		
Mechanical fitter and turners	3		
Mechanical engineers	2		
Minerals process engineers	2		
Occupational health and safety specialists	1	1	
Petroleum geoscientists	2		
Petroleum engineers	2		
Production coordinators	1	1	
Project managers	1		

<b>Graduates/Junior cont'd</b>	0-5 employees	5-10 employees	70-80 employees
Reservoir managers	2		
Reservoir engineers	2		
Riggers	2		
Scaffolders	2		
Surveying engineers	2		
Technical support staff	1	1	
Transport coordinators	2		
Toolmakers	2		
Welders	2		

<b>Mid-Level</b>	0-5 employees	5-10 employees	10-20 employees	20-30 employees	30-40 employees	40-50 employees	80-90 employees
Boilermakers	3			1			
Crane Drivers	1	1	1				
Chemical engineers	3						
Civil engineers	3	1					
Commercial manager	2	1					
Diesel fitters	3	1		1		1	
Drillers	2						
Earth-moving plant operators	1				2		1
Environmental engineers	2						
Environmental scientists	3						
Electrical engineers	5	1					
Electrical fitters	6						
Electricians	5	2					
Electronic engineers	3						
Electronics technicians	2						
Exploration geophysicists	2						
Fixed plant operator	2	4					
Geologists	6						
Geotechnical engineers	2						
Geoscientists	2						
instrument technicians	3						
Laboratory analysts	2						
Maintenance workers	1	2					
Machinists	2						
Mechanics	1		1				

<b>Midlevel cont'd</b>	0-5 employees	5-10 employees	10-20 employees	20-30 employees	30-40 employees	40-50 employees	80-90 employees
Metallurgical engineers	4						
Mechanical fitter and turners	4						
Mechanical engineers	5	1					
Minerals process engineers	3						
Occupational health and safety specialists	5	1					
Petroleum geophysicists	2						
Petroleum engineers	2						
Production coordinators	1		1				
Project managers	1	1					
Reservoir managers	2						
Reservoir engineers	2						
Riggers	2						
Scaffolders	2						
Surveying engineers	1	1					
Technical support staff	6	1					
Transport coordinators	2						
Toolmakers	2						
Welders	2						

<b>Senior</b>	0-5 employees	5-10 employees	10-20 employees	20-30 employees	50-60 employees	60-70 employees
Boilermakers	2		1			
Crane Drivers	2					
Chemical engineers	2					
Civil engineers	2		1			
Commercial manager	3	1				
Diesel fitters	2	1		1		
Drillers	4					
Earth-moving plant operators	2			1		1
Environmental engineers	2					
Environmental scientists	3					
Electrical engineers	3					
Electrical fitters	3					
Electricians	3					
Electronic engineers	2					
Electronics technicians	2					
Exploration geophysicists	3					

<b>Senior cont'd</b>	0-5 employees	5-10 employees	10-20 employees	20-30 employees	50-60 employees	60-70 employees
Geologists	5					
Geotechnical engineers	2					
Geoscientists	2					
Instrument technicians	2					
Laboratory analysts	2					
Maintenance workers	1	1				
Machinists	2					
Mechanics	1				1	
Mining engineers	5	1				
Metallurgical engineers	3					
Mechanical fitter and turners	2					
Mechanical engineers	2	1				
Minerals process engineers	2					
Occupational health and safety specialists	1	1				
Petroleum geophysicists	2					
Petroleum engineers	2					
Production coordinators	1	1				
Project managers	4	1				
Reservoir managers	2					
Reservoir engineers	2					
Riggers	2					
Scaffolders	2					
Surveying engineers	2					
Technical support staff	1	1				
Transport coordinators		2				
Toolmakers		2				
Welders		2				

## **Appendix B**

<b>Graduates/Junior</b>	<b>0-5 employees</b>	<b>5-10 employees</b>
Diesel fitters	1	
Electrical engineers		1
Geologists	1	
Technical support staff	1	

<b>Mid-Level</b>	<b>0-5 employees</b>	<b>5-10 employees</b>
Diesel fitters	1	
Drillers	2	
Earth-moving plant operators		1
Electrical engineers		1
Exploration geophysicists	1	
Fixed plant operator		1
Geologists	2	
Mining engineers	1	
Metallurgical engineers	1	
Occupational health and safety specialists	1	
Petroleum geophysicists	1	
Petroleum engineers		1
Project managers	1	
Reservoir engineers	1	
Technical support staff	1	1

<b>Senior</b>	<b>0-5 employees</b>	<b>5-10 employees</b>
Commercial manager	1	
Electrical engineers		1
Geologists	2	
Geotechnical engineers	1	
Mining engineers	2	
Production coordinators	1	