## **Common Ground**

Evaluation of Mineral Resources and Heavy Engineering Skills Centre

John Spoehr and Simon Molloy

Presented to

Department for Further Education, Employment, Science and Technology (DFEEST)

December 2013



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# EVALUATION OF MINERAL RESOURCES AND HEAVY ENGINEERING SKILLS CENTRE

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Report prepared for

Department of Further Education Employment Science & Technology (DFEEST), Adelaide

Evaluation of Mineral Resources and Heavy Engineering Skills Centre
The Australian Workplace Innovation and Social Research Centre (WISeR) focuses on work and socio- economic change. WISeR is particularly interested in how organisational structure and practices, technology and economic systems, policy and institutions, environment and culture interact to influence the performance of workplaces and the wellbeing of individuals, households and communities.
WISER also specialises in socio-economic impact assessment including the distributional impacts and human dimensions of change on different population groups and localities. Our research plays a key role in informing policy and strategy development at a national, local and international level.

## **C**ONTENTS

S	JMMA	RY OF RECOMMENDATIONS	IV
1	INT	RODUCTION	1
	1.1	Approach to the Review	1
2	RES	A AND ITS FOCUS	2
	2.1 2.2	WHAT DOES RESA DO?	
3	ECO	NOMIC RATIONALE	3
	3.1 3.2 3.2.1 3.2.2		5
4	RES	A'S ACTIVITIES, PERFORMANCE AND CHALLENGES	9
	4.1 4.2 4.2.1 4.3 4.3.1 4.3.2 4.3.3 4.4 4.4.1 4.5 4.5.1	ACHIEVEMENTS, CHALLENGES AND RISKS  Key achievements  Consultation across industry  Improving training systems  FINANCIAL PERFORMANCE  Commentary on financial performance  CHALLENGES AND RISKS	9 .1315 .15 .20 .2124 .2627
5	POL	ICY APPROPRIATENESS IN CURRENT ENVIRONMENT	. 29
	5.1	COST EFFECTIVENESS OF CURRENT FUNDING	29
Α	PPEND	IX A: RESA EVENTS AND ATTENDANCES	. 31

## LIST OF FIGURES

Figure 1: Indigenous Training Rate across all programs	16
Figure 2: Persons: Distribution of trainees by gender	16
Figure 3: Employment Status	17
Figure 4: Persons: Training age distribution	17
FIGURE 5: REVENUE PROJECTIONS BY SOURCE	26

## LIST OF TABLES

Table 1: RESA strategic priorities at funding deed	10
Table 2:RESA strategic priorities at 2011-12	12
Table 3: Summary of strategic priorities 2010-11 to 2013-14	14
Table 4: RESA brokered training	15
Table 5: Statement of surplus or loss and other comprehensive income for the year ended 30 June 2013	24
Table 6: Revenue projections by source	25

#### SUMMARY OF RECOMMENDATIONS

- RECOMMENDATION 1: IT IS RECOMMENDED THAT WORKFORCE DEMAND PROJECTION WORKSHOPS TRIANGULATING DIFFERENT SETS OF PROJECTIONS WITH INDUSTRY, ACADEMIC AND POLICYMAKER FEEDBACK BE CONVENED PERIODICALLY BY RESA. MORE BROADLY IT IS ALSO RECOMMENDED THAT RESA DEVELOP STRATEGIC RESEARCH PARTNERSHIPS WITH UNIVERSITY RESEARCH FACILITIES TO AUGMENT INDUSTRY PERSPECTIVES ON THE DEMAND FOR SKILLS WITH AVAILABLE PROJECTIONS AND FORECASTS.
- RECOMMENDATION 2: IT IS RECOMMENDED THAT RESA AND MIPO DEVELOP A MEMORANDUM OF UNDERSTANDING OUTLINING A COLLABORATIVE APPROACH TO MAXIMISING INDUSTRY AND WORKFORCE OPPORTUNITIES THAT MIGHT FLOW FROM MINERAL AND RESOURCES PROJECTS. AN EARLY FOCUS OF JOINT PROJECT ACTIVITY SHOULD BE UPON OPPORTUNITIES THAT MIGHT BE AVAILABLE FOR SOUTH AUSTRALIAN MANUFACTURING AND OTHER COMPANIES AFFECTED BY THE CLOSURE OF GMH.
- RECOMMENDATION 3: IT IS RECOMMENDED THAT AS A MATTER OF PRIORITY RESA DEVELOP A MONITORING AND EVALUATION FRAMEWORK TO SUPPORT A MORE RIGOROUS EXAMINATION OF THE EFFECTIVENESS OF OPERATIONS, ENABLING RESA TO REPORT CLEARLY ON OUTPUTS RELATIVE TO KPIS.
- RECOMMENDATION 4: It is recommended that RESA require RTOs to provide specified training data to for outcome reporting purposes and that RESA compile Training Outcome reports for consideration of the Board and appropriate funding bodies.
- RECOMMENDATION 5: It is recommended that RESA maintain a position of relative independence by not pursuing RTO status.
- RECOMMENDATION 6: It is recommended that RESA develop a business case for industry co-investment in its Upper Spencer Gulf operations to meet mutually agreed upon strategic objectives.
- RECOMMENDATION 7: IT IS RECOMMENDED THAT RESA SUBJECT ALL REVENUE RAISING STRATEGIES TO RISK ASSESSMENT TO DETERMINE THE IMPACT IF ANY OF SUCH ACTIVITIES ON THE ABILITY OF THE ORGANISATION TO PROVIDE INDEPENDENT ADVICE AND BROKERAGE SERVICES TO GOVERNMENT AND INDUSTRY.
- RECOMMENDATION 8: IT IS RECOMMENDED THAT RESA EXAMINE THESE POTENTIAL RISKS AS PART OF ITS RISK MANAGEMENT PROCESSES.
- RECOMMENDATION 9: It is recommended that RESA develop a revised schedule of strategic priorities, expected outputs and outcomes for discussion with the State Government.
- RECOMMENDATION 10: IT IS RECOMMENDED THAT RESA PREPARE A DISCUSSION PAPER BY THE END OF MARCH 2014 ON OPTIONS FOR INDUSTRY FINANCIAL CONTRIBUTIONS TO WORKFORCE AND WORKPLACE DEVELOPMENT TO HELP ENSURE THE SUSTAINABILITY OF RESA OVER THE NEXT THREE YEARS.

#### 1 INTRODUCTION

The Department of Further Education, Employment, Science and Technology. (DFEEST) commissioned WISER to undertake a review of the Resources and Engineering Skills Alliance (RESA) in November 2013. This report entitled *Common Ground* is the outcome of the process.

The terms of reference for the review of RESA are as follows:

- What is the evidence to support whether RESA has been a value for money investment for the Government from 2010 to 2013? Including:
  - The extent to which current key performance indicators (per the funding agreement) are being achieved;
  - The extent to which RESA consults with and across industry;
  - The extent to which this consultation has contributed to the achievement of intended outcomes (of the funding agreement);
  - An assessment of the cost effectiveness of the current funding arrangement given evidence of the benefits achieved.

#### 1.1 Approach to the Review

The Review of RESA was undertaken over five weeks to December 6 2013 and involved the following elements.

- An examination of RESA reporting documentation
- An examination of RESA financial statements
- An examination of RESA publication outputs
- Interviews with RESA personnel
- Interviews with DFEEST and Industry stakeholders.
- Identification of RESA strengths, weaknesses, risks and opportunities.
- An examination of performance against KPIs.
- Recommendations for consideration.

#### 2 RESA AND ITS FOCUS

#### 2.1 WHAT DOES RESA DO?

RESA describes its broad function as follows:

RESA is an advisory and consulting agency providing organisational and workforce development services to build capability and productivity for improvement of the resources sector, and its supply chain.<sup>1</sup>

Four broad areas of activity are identified by RESA as focal points for activity:

- Develop and facilitate the delivery of projects to increase the availability and productivity of the workforce, including learning and development and training projects,
- Undertake research and identify gaps and issues in skills of the resources industry workforce and develops solutions to those problems,
- Work with business and government to translate policy and navigate government programs facilitating business access to coordinated and supported solutions and
- Broker funding and support for organisational development projects<sup>2</sup>.

These activities seek in various ways to make labour markets, training systems and workplaces work more effectively and efficiently for the benefit of the mining and energy industry and its employees.

During periods of high demand for particular qualifications and skill sets there has been intense competition between employers to attract and retain people leading to the emergence of a so called 'poach and pay' culture which can have damaging colateral effects on other sectors and undermine productivity growth through excessive wage inflation. While the short-term growth outlook for the sector is more subdued than it has been in the recent past, a faster pace of growth is likely to emerge from sustained high levels of demand for commodities from China and India in particular. Significant growth in the unconventional gas sector is expected over the medium term. The emergence of capacity constraints, particularly the availability of suitably qualified and experienced employees is a risk that bodies like RESA can play a role in mitigating.

In the last four years RESA has demonstrably built its industry profile, published research, conducted industry events and attracted additional funding from Federal and State governments to conduct various training programs.

#### 2.2 Who is RESA?

RESA has employed around eight personnel over the past three years including CEO (Phil de Courcey), two project managers, a workforce development manager, a regional manager and a project manager. Background and skills of this group include private sector engineering, marketing, communications and governance.

http://www.resa.org.au/about/ accessed 25/11/2013

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#### 3 ECONOMIC RATIONALE

#### 3.1 ORIGINAL ECONOMIC RATIONALE

In reviewing RESA it is important to be clear about the rationale for establishing the organisation and to examine how changes in the economic and policy environment might impact on its future operations and *raison d'être*. RESA has multiple stakeholders with differing expectations. Industry and government are concerned with ensuring that the mining and energy industry have access to qualified and capable employees that have high quality training and career choices.

The policy rationale for organisations like RESA can be found in differing economic perspectives. Here we touch on just two – those focusing on market failure and those emphasising institutional quality and linkages as a source of innovation and performance.

One of the reasons that skills shortages develop is that individual companies are reluctant to invest in training, especially in a tight labour market, because they are concerned that newly trained employees will leave for higher paid employment elsewhere – the 'poaching problem'. This leads to investment by firms in training being lower than is economically optimal. This is a form of market failure that creates a *prima facie* case for government intervention but not a conclusive one – the operative question is always whether the intervention will lead to a better outcome taking into account the costs of intervention itself.

In terms of training and career choice, there is ample scope for market failure because of information deficiencies. In practice, the designers of training courses may not know what companies require in terms of skills, companies may find it difficult to make judgements about which training organisations offer the best services and young people may have very incomplete information about the careers they might choose between.

It can be seen that these kinds of information deficiencies in skills development and education systems are likely to reinforce the problem of skill shortages. Skill shortages, over time, can be expected to be reduced by employees responding to vacancy opportunities. But if there are market failures in the areas of skills acquisition and education, then these can be expected to limit the inflow of suitably qualified employees to fill vacancies and reduce skills shortages.

If RESA facilitates the training of more employees in occupations or skills that are identified as in shortage, then it would be contributing to correcting the market failure attributable to the disincentive that firms have to invest in training in a tight labour market.

Similarly, if RESA could provide better information to training organisations about industry skill needs, to companies about the capacities and performance of training organisations and to young people making career choices then the market failures that occur in these areas because of information deficiencies could be reduced. Equally RESA might be regarded as having a key role to play in in facilitating industry input into the design of training packages to ensure their responsiveness to industry needs. The needs of the existing and potential workforce are also primary considerations. Transferability and durability of knowledge and skills is fundamental to career development and mobility,

particularly in sectors that are subject to significant cyclical fluctuations in commodity prices and currency pressures.

From another perspective, RESA might be regarded as contributing to the development of a better functioning skills eco-system or regional innovation system. This involves playing a role in building, self-reinforcing relationships that are enhanced by the exchange of tacit knowledge and higher levels of trust in systems that benefit from continuity and collaboration. The benefits of networked institutions are widely acknowledged. They respond to the South Australian Government's policy commitments to cluster development and innovation through more integrated approaches to industry and workforce development involving business, government and the university sector. In this context RESA might be regarded as a key institutional player in a regional skills ecosystem or innovation system.

These considerations point to a more general specification of the problem of training in the mining and resources sectors that is evident from interviews conducted for this review. It is apparent that there is a consistent and recurring reluctance to act in a coordinated collective manner which would be in the interests of all companies and the industry and the economy in general.

If mining and resource companies act collectively to proactively plan and execute a coordinated training program the cost of training, both in aggregate and for each company could be reduced and the net benefits significantly increased. An appropriately skilled workforce could be scaled up at the onset of the boom times, delays in mine construction and operations could be minimised and production levels increased.

In contrast, the experience of the industry has been cyclical skill shortages during boom times. Companies respond to these shortages by poaching labour from their competitors — a behaviour which is a negative sum game for the industry in aggregate because it leads to higher labour costs in terms of salaries, recruitment and training. This behaviour also has potentially negative impacts on other sectors of the economy as mining companies seek to rapidly attract employees from wherever they can, people who must be quickly re-skilled for work in the mining sector. Consultations with key stakeholders indicate that insufficient consideration is given in this process to the employability of these personnel once boom periods have finished.

Why does this apparently counter intuitive failure to act collectively continue to occur? Could it be due to the boom and bust character of the mining and resources sector, the capital intensive character of the sectors, the remoteness of operations or particular professional judgements about strategic priorities in the industry? On the latter it has been suggested to the review that workforce planning and development functions might be viewed as dispensable during times of contraction. These may well be contributory factors but other sectors, for example, the construction sector are also subject to boom-bust cycles and mechanisms have evolved to deal with the problem. The construction industry training levy provides resources for training in the collective interests of the industry which has proved quite successful.

Probably the fundamental reason that a stable collective solution has not evolved is that it will always be in the interests of any one company to defect from a collective arrangement, enjoy the benefits of the improved workforce environment without contributing to the collective costs. This is a familiar

problem in economics - a well trained workforce has the characteristics of a 'common property resource' public good.

One of the solutions to this type of problem is for the government to support the training of the industry's workforce and the creation of RESA can be seen in this context. Another response would be for the government to require the industry to support training with its own resources, perhaps in the form of a levy with its revenue earmarked for training.

While RESA plays a role in fostering collaboration, concerns remain that a culture of poach and pay prevails. Some progress appears to have been made recently on identifying greater common ground, a foundation for enlightened self-interest that may result in a higher level of financial commitment from industry to the operations of RESA.

#### 3.2 How has the economic rationale changed since 2007?

The global financial and economic crisis had a significant negative impact on the mining and resource sectors in Australia through subdued for mineral and energy resources from major trading nations, particularly China and India. Since 2007 the demand for labour and skills and, importantly, the prospective demand for skills, has declined as the investment in mining infrastructure has tapered off and, particularly in the case of South Australia, the Olympic Dam expansion project has been put on hold. To the extent that these changes have led to a downward revision of the expected level of employment in the South Australian mining sector and the extent of any associated skills shortages, the losses associated with the market and other failures discussed above are likely to be smaller. As already pointed out, however, the mining and resources sector is still expected to be one of South Australia's main growth drivers in the near future. Therefore, the existence of or potential for skills shortages that inhibit production and growth in the resources sector is an issue of concern for State economic development.

Obviously, the critical factor determining the expected cost of market failure associated with skill and personal shortages is the forecast level of activity into the future. This is why forecasts about the level of activity are so critical in determining appropriate policy responses. South Australia's growth outlook will be affected by the decision to close GMH in 2017. RESA's role in this context requires some reassessment.

Of great policy significance is the potential for employment growth in the mining and resources sector to help offset losses being experienced in some sectors of manufacturing, principally automotive. While transferability between sectors is constrained by differing skills sets and location of employment, the expansion of mining and resources projects does create an opportunity for expansion of South Australian 'manufacturing into mining'. Efforts are currently underway within the State Government to drive this through the Mining Industry Participation Office. Close collaboration between RESA and MIPO could add significant value to this overarching objective of the State Government.

#### 3.2.1 SKILLS SHORTAGES

Skills shortages, besides being difficult to define and quantify empirically, are also multi-casual – many factors contribute to the existence of a skills shortage or the perceptions of one. Correspondingly, if skills shortages are observed to be reducing, it is difficult to attribute specific causes.

The last two years has seen a decline in the level of actual and expected investment in the mining sector, particularly in South Australia. Australia wide, mining investment is declining from higher levels over the past decade or so. In general, this means a transition from construction and development workforces to mining operational workforces. It is widely understood that operational phases of mining and resources projects are considerably less labour intensive.

Of great significance is BHP Billiton's decision to delay the Olympic Dam expansion project. This has had a significant impact on future employment expectations in the sector over the medium term. RESA emphasises, however, that South Australia still faces significant growth in mining and related employment and has collected data from industry which suggests this growth is significant. This claim is examined in the context of other data available on prospects for the sector.

RESA's recent publication, *South Australian Future Mining Workforce Report* 2014 – 2030, suggests that in the most likely scenario of employment demand, sixteen new mines will come into production resulting in the creation of 27,442 new jobs between 2014 and 2030. This comprises construction as well as mining jobs. In a more optimistic scenario, that RESA describes as 'less likely', if all 40 minerals and infrastructure projects currently being considered go forward this will create more than 36,366 new jobs. This would more than double the current level of employment in mining in South Australia during 2014 and 2030.

These projections represent very substantial growth in demand for mining industry workers and represent higher growth rates than that forecast in other sources. For example in a recent analysis of the South Australian economy to 2017, Hampton, Birch and Gelber<sup>3</sup> forecast growth in mining employment of 6.9 per cent between 2012 and 2017 which is significant but somewhat lower than RESA's forecasts above.

Another set of forecasts from the Training and Skills Commission (TaSC) provides an alternative perspective. The TaSC-defined Mining occupation group projects 2,200 net job openings over the five years to 2016-17 in what it describes as a Smart Recovery scenario — 1,700 from employment growth and 500 from the need to replace workers that leave for other occupations or retirement purposes. The demand for qualifications resulting from the need to fill job openings and from the need for existing workers to upskill or broaden their skills is expected to be around 2,000 over the projection period. The Mining occupation group includes: Mining Engineers; Geologists and Geophysicists; Drillers, Miners and Shot Firers; and Other Construction and Mining Labourers.

For the TaSC defined Civil Operations occupation group, the Training and Skills Commission projects 300 net job openings over the five years to 2016-17 in the Smart Recovery scenario – a decline in employment of 100 combined with 400 generated by the need to replace workers that leave for other occupations or retirement purposes. The demand for qualifications resulting from the need to fill job openings and from the need for existing workers to upskill and broaden their skills will be around 1,000 over the projection period. The Civil Operations occupation group includes: Cartographers and Surveyors; Civil Engineering Professionals; Civil Engineering Draftspersons and Technicians; Earthmoving Plant Operators; Paving and Surfacing Labourers; and Railway Track Workers. It

Hampton, Birch and Gelber, 2013, State of South Australia – Turbulent Times, Ed John Spoehr, p29

should be noted that mining related construction would represent a subset of this group's employment, the proportion of which is unknown.<sup>4</sup>

As mentioned above, RESA forecasts are based on input from industry and this is useful and appropriate up to a point. RESA and the State Government need to be cognisant of the potential biases the industry might have in reporting expected levels of demand for labour. It could be that, on average, industry is overly optimistic about its own prospects and it could also be the case that it may benefit from greater government assistance if it delivers estimates of activity and demand for labour that is on the high side of its actual expectations.

RESA faces a difficult task here reconciling its need to position itself as an honest broker between government and industry and its need to win the support of industry. It must give Government the best advice it can based on the information it sources from industry. At the same time it needs to be seen by industry as, to some extent, promoting the health and growth of the industry itself.

One of the ways it can provide alternative perspectives to those of industry is to seek input from other sources such as forecasting agencies, academic experts in the field and government sources of information about the mineral and resources sectors. The task is then to synthesise a balanced view with transparent reasoning emphasising consensus with respect to the results. It is then necessary to reflect on the accuracy of these projections over time.

RECOMMENDATION 1: It is recommended that workforce demand projection workshops triangulating different sets of projections with industry, academic and policymaker feedback be convened periodically by RESA. More broadly it is also recommended that RESA develop strategic research partnerships with university research facilities to augment industry perspectives on the demand for skills with available projections and forecasts.

#### 3.2.2 OTHER CHANGES TO THE ENVIRONMENT SINCE 2007

Significant reforms have been undertaken of the training system in South Australia through the *Skills for All* and subsequent *Skills for Jobs* strategies. These are designed to underpin the development of a demand driven training system at the same time as making a wide range of credentials more available through creation of an entitlement to qualifications. One consequence of these reforms is considerable settling down of the market for training as it adjusts to the new funding environment. This more dynamic environment presents challenges to organisations like RESA which has sought to act as a broker of training for the industry. According to RESA, concerns about the quality of some of this training have been raised by industry in recent times. In response RESA has considered ways it might contribute to quality improvement. This includes voluntary measures to encourage training providers to improve quality. An assessment of this strategy is provided later in this report in the context of existing training standards requirements.

There have also been changes to the Australian Apprenticeships Incentives Program between July 2012 and October 2013 as the new government has begun

<sup>&</sup>lt;sup>4</sup> Based on information provided by DFEEST

its policy changes. These changes will mean a significant loss of funding for apprenticeships in future and may therefore increase the need for State intervention in the labour market particularly where there are likely to be shortages.

The global financial and economic crisis has had a significant negative economic impact on sectors linked to mining and resources, particularly manufacturing which policymakers and industry were hoping would be a major beneficiary of key projects like the proposed expansion of Olympic Dam. In the absence of this and under pressure from a high Australia dollar and low cost manufacturing competition in Asia, manufacturing employment has declined sharply in South Australia and Australia since the GFC. A key strategic consideration going forward is what role RESA plays in helping to maximise opportunities that might flow for manufacturers from the stream of mining and resources projects it has identified? The closure of GMH in 2017 necessitates urgent consideration of the full range of opportunities that might be exploited for the benefit of South Australian automotive component suppliers and the wider automotive supply chain.

The State Government has identified maximising the wider industry and employment development opportunities that might from growth in the mineral and resources sector as a key policy priority. RESA has gathered important industry intelligence on demand for skills and occupations in the sector while the Mining Industry Participation Office has been established to look at 'factors affecting demand and supply of products and services' to the mining and resources sector. A closer institutional relationship between RESA and MIPO involving a skills and value chain approach to industry and workforce development could enhance the effectiveness of both organisations in their pursuit of maximising the local industry and workforce development opportunities that might flow from mining and resources projects over the next decade.

RECOMMENDATION 2: It is recommended that RESA and MIPO develop a memorandum of understanding outlining a collaborative approach to maximising industry and workforce opportunities that might flow from mineral and resources projects. An early focus of joint project activity should be upon opportunities that might be available for South Australian manufacturing and other companies affected by the closure of GMH.

### 4 RESA'S ACTIVITIES, PERFORMANCE AND CHALLENGES

#### 4.1 CONTRIBUTION TO INTENDED OUTCOMES

The Funding Deed for RESA 2010-14 stated that RESA was established to "address a number of issues facing the minerals, resources and heavy engineering sectors including:

- The global skills shortage in the mineral and resources sector which is exacerbated by the relatively remote locations of mining activity;
- Industry feedback that existing education and training structures and programs are confusing, complex, difficult to access and lacking in coordination:
- The need to rejuvenate the education and training system in the upper Spencer Gulf; and
- The need to attract young people in greater numbers to careers in the mining and heavy engineering industry."<sup>5</sup>

These issues underpinned the establishment of RESA and should form the basis of an evaluation of its contribution. For this purpose, the issues could be restated as the following questions:

- Has RESA contributed to an easing of skills shortages in the mineral and resources sector?
- Has RESA contributed to making education and training structures and programs less confusing, complex and more accessible and coordinated?
- Has RESA contributed to improving the education and training system in the Upper Spencer Gulf?
- Has RESA contributed to attracting greater numbers of young people to careers in mining and heavy engineering?

Below we examine RESA's activities, performance against KPI's and the challenges and risks it faces going forward.

#### 4.2 KEY PERFORMANCE INDICATORS

'Annexure B' to the RESA Funding Deed 2010-14 defined three 'Strategic Priorities' for RESA with associated 'Activities', 'Outcomes' and 'KPI Targets' (see Appendix xxx for summary table). There are 17 KPIs in the Funding Deed. In addition to the Funding Deed, WISER was provided with six progress reports as follows:

- 1. RESA Progress Report 31 December 2010 in the form of a table in a format similar to the Funding Deed
- Report as at 31 December 2011 (first half FY 11/12) in the form of a table in a format similar to the Funding Deed. This report identified all KPI Targets as being 'On Track'
- 3. End of Financial Year Report 2011-2012. This report contains a six page section on a summary of activity and strategy. This is followed by a table in the same form as the Funding Deed. KPI's 2B and 2C are not included in the

<sup>5</sup> Funding Deed 2010 – 2014 Between Minister for Employment, Training and Further Education and Mineral Resources and Heavy Engineering Skills Centre Inc, p 3

- report. In this section 'Progress' is reported against 'KPI Targets' but these are not assessed in terms of being 'On Track' or not. An additional section maps 'Projects against outcomes' and a list of proposed activities for 2012-13 is provided.
- 4. Progress Report July 2012 in the form of a 10 page document that reported 'Actions' and 'Outcomes', the latter term appearing to replace 'KPI Targets'. While this report retains the three high-level strategic priorities that appear in the Funding Deed, the 'Actions' under these headings are different from the 'Activities' of the Funding Deed.
- 5. RESA Strategic Plan and Deliverables 2012-2013. This report is presented as a five-page table. Again, the same three strategic priorities form headings but under these there appears 'Objective', 'Strategy', 'Activity' and 'Deliverable' with a statement on 'Progress' for each deliverable. The deliverables are similar to the previous KPI Targets but it is generally no longer possible to track the KPI Targets originally specified in the Funding Deed.
- 6. RESA Strategic Plan and Deliverables 1 January 2013. This is presented as a five page table with an additional strategic priority 'Corporate sustainability'.

The Funding Deed KPIs and their reporting in subsequent progress reports are summarised in Table 1 and commenting on each is provided (note, the term 'Recipient' from the Funding Deed refers to RESA):

TABLE 1: RESA STRATEGIC PRIORITIES AT FUNDING DEED

STRATEGIC	KPI Targets (from Funding Deed)	Comments
PRIORITIES	All the targets below will be completed by 30 June 11	
1. WORKFOR	RCE PLANNING	
1	1.A Establish an industry workforce planning group, which meets quarterly, to steer implementation of the Resources IWAP.	The first meeting of the Resources Workforce Planning Council was held on one December 2011.
2	1.B A joint annual skills summit is conducted reviewing available data and plans related to workforce Demand and Supply issues and summarising the outcome.	The first RESA skills summit was held on 22 February 2012.
3	1.C A report that summarises the progress against the Resources IWAP is completed communicating the outcome to industry.	'Consultation for the IWAP is completed and has been distributed to stakeholders' – EOFY report 2011-12.
2. FUTURE W	/ORKFORCE	
4	2.A A collaborative "Careers in Resources" campaign is implemented targeting a minimum of 10 schools.	More than 60% of the State has been covered by various programs and RESA's partnership with SACOME to deliver the Rock Solid Program including the APY Lands - EOFY report 2011-12.
5	2.B The Hot-Rubble web portal is developed as a career reference site which clearly articulates the pathways and benefits of employment in the sector, assisting resources to become an industry of choice.	
6	2.C Develop a collaborative skilled migration pilot project to address current skills shortages. Have achieved industry commitment to the project model and level of skilled occupation vacancies required for implementation in FY 11-12, particularly targeting: Mining Engineers, Mining Technicians, Geologists Metallurgists.	Reported 'on track' in Progress Report 31 December 2010 but no subsequently reported.
7	2.D Each program and project conducted by RECIPIENT will address under-represented employee groups.  Particularly the potential to engage  ** Aboriginal  **Regional and  **Women employees.	Reported 'on track' in Progress Report 31 December 2010 but not subsequently reported.
8	2.E An employee up-skilling project is conducted providing opportunities to increase the skills and productivity of at least 50 employees.	'RESA has Secured 222 Productivity Places for South Australian Resource sector employees contracting with 13 companies and Registered Training Organisations for delivery' - EOFY report

STRATEGIC PRIORITIES	KPI Targets (from Funding Deed) All the targets below will be completed by 30 June 11	Comments
		2011-12
9	2.F In consultation with industry a Resources sector mentoring and leadership program is developed and endorsed by industry for implementation in FY11-12.	'RESA has delivered The Resources and Indigenous Leadership Program, and developed and delivered Women in Resources and Defence Industry Leadership program in partnership with the Defence Teaming Centre' - EOFY report 2011-12.
10	2.G A review and plan for a Resources sector training fund is completed by 30/6/2011.	'Initial legal advice has been obtained and implementing the fund has proved problematic, Further development of the model is progressing. 'Progress report – July 2012.
11	2 H Two targeted education and training projects are planned and implemented in FY10/11. Target projects relating to: OH&S/HSEC/Induction, Drilling, eLearning, Simulation/Virtual training, Automation and remote operation.	'RESA Continues to develop a suite of programs including a Generic Induction, Drilling Pre Employment and aims to develop and automation project in FY 12/13'- EOFY report 2011-12.
12	2.1 Industry views regarding programs in need of change are communicated to the providers by a report.	RESA has continued in its contributions to the TaSC, the ISB forums and maintains regular contact with industry through the Workforce Planning Council and the 27 resources sector companies we are currently working with. RESA has also completed a feasibility study on a Training and Education Capability Matrix and expects the final feasibility report to be released by 30th July 2012.
13	2.J Two programs for regional areas are developed and delivered in FY2011.     - target programs supporting electronic delivery and remote learning, farming and agriculture sector, and aboriginal engagement.	RESA has run a suite of programs across regional South Australia and was also successful in leveraging funds into the Whyalla Employment and Skills Formation Network for its Resources preemployment program. This program partnered with HWE contractors and OneSteel (Arrium).RESA has delivered in: Whyalla and Eyre Region; Far North Region; Mid North and Yorke Region; Adelaide and Southern Adelaide Region - EOFY report 2011-12
3. WORKFOR	CE DEVELOPMENT - PARTNERSHIPS TO ADDRESS SKILLS IN DE	EMAND
14	3.A RECIPIENT coordinates or assists industry with six applications to access government funding support for workforce development initiatives in this financial year.	In the financial year to date RESA has been successful with a PPP application for \$808,339 and 222 training places. A CSIF application for \$3.2M of leveraged funds and 585 training places was successful and we have commenced delivery of both programs. The CSIF application included applications from eight Resources sector companies. Further opportunities are being sought though the Skills in the Work Place Program under Skills for All. In total RESA is working with 27 Resources related companies to deliver training EOFY report 2011-12.
15	3.B Two programs which share key infrastructure and resources between Resources sector companies and/or government are developed and implemented.	Reported 'on track' in Progress Report 31 December 2010 but not subsequently reported.
16	3.C. An electronic and print campaign making the South Australian Resources sector aware of RECIPIENT's capability and available support is completed.	The RESA corporate website continues to grow and has had increase traffic since its re-launch in late 2011.  Distribution of a bi-monthly e-news continues and additionally a Workforce training opportunities communication is currently being developed as a tailored and targeted means of consolidating the many and varied funding mechanisms into companies. This will position RESA further as the states leading authority on skills, training and funding opportunities for the sector EOFY report 2011-12.
17	3.D A web based information system is put in place to provide workforce support information to industry.	The RESA Board has approved the continued development of the system and budget to support the implementation. Development continues of the solution continues with phase one well under way EOFY report 2011-12.

As indicated above, from 2012 the format of the progress reports changes and the 'KPI Targets' are replaced by 'Deliverables' which are similar but not the same. Some of these changes reflect a natural progression as the earlier KPI Targets are achieved - for example, setting up the Resources Workforce Planning Council has moved on to implementing project developed by the Council.

Some of the changes also point to an increasing priority for RESA to generate income. For example, the following two strategies from the 2012-13 progress report:

- S2. Position RESA as a key SA Government advisor on resources sector workforce issues.
- S3. Establish a workforce development advisory and consulting service to assist industry.

As can be seen from Table 2 below the majority of the deliverables are identified as being 'On Track'.

TABLE 2:RESA STRATEGIC PRIORITIES AT 2011-12

Deliverable 2012-13 (Year 2)	Progress	Status
1) Run workforce planning consultation meetings and prepare a report providing the resource sector perspective and feedback to government on skills policy, strategy and implementation of the RIWAP including suggested innovative solutions and changes.	RESA continues to facilitate and coordinate the Resources Workforce Planning Council (RWPC) and Regional RWPC meetings are conducted regularly to facilitate information flow from industry.  Projects include  - Training and Education Capability Directory Phase one feasibility: COMPLETED	ON TRACK
	- Training and Education Capability Directory phase two: SCOPING - Curriculum Survey: SCOPING	
Broker workforce development solutions for industry.     -works with 10 resources companies to leverage workforce development services.	To date RESA has worked with 10 industry partners including REX, OZL, Exact, KGN and Osmoflow.  Projects include  CSIF and PPP.  Ongoing Industry engagement through RWPC.	ON TRACK
3) Conduct a survey and publish a Workforce Survey Report by 30 June 12	The Resources Workforce Scoping Study is underway. RESA is seeking to ensure that duplication is avoided and information is consistent. Data gathering phase will commence Q3FY12-13. Report will be released Q4.	ON TRACK
4) Meet regularly with these stakeholders and provide feedback on industry consultation.	Whilst ISB forums have lapsed RESA continues to meet with TASC, DFEEST, DECD, PIRSA and DMITRE and other agencies regularly to provide feedback from industry and consult on issues relevant to government.  Projects include REP Collaboration NRSET Strategy HIH DMITRE Study	ON TRACK
6) Continuing representation and presentation to key government agencies and advisory bodies and stakeholders	This related to the work representing the sector at the ISB forum and has now largely been superseded by activities under A4. above.	ON HOLD
5) Consult with industry and conduct an annual survey seeking feedback and input regarding school curriculum and training provider programs and report on the outcomes. Include identification of issues concerning existing workforce education and training programs.	Consultation with industry has revealed concerns regarding the standard of Resource sector VET Training and RTO conduct. RESA also has contracts with 25 RTOs has revealed issues that need to be addressed in order to deliver training of quality at best cost. Currently reviewing the work of Quality Directorate and Jodie Babcock to avoid any duplication. Plan and survey report to be completed	ON TRACK
14) Collaborate with the Resources and Energy Program (REP) from DECD to increase the number of apprentices for occupations in demand, such as;Diesel,electrical, Boilermaker	RESA has appointed a pathways officer and is collaborating with other industry organisations to develop pathway options. Including a program of school visits and Roadshows promoting Resources and Career opportunities.  Projects include: In conjunction with REP developed and submitted the Mentor and Advisor application; REX/SYNGAS Yorke Peninsula careers development program	ON TRACK
12) Facilitate a pilot project for engagement of women	Projects include - Women in Resources Engineering and Defence (WIRED) – application stage - Catherine House- in assessment - Women in Resources South Australia mentoring program – in development	ON TRACK

Deliverable 2012-13 (Year 2)	Progress	Status
13) Accessing targeted funding and run a pilot project to engage Indigenous people in training and employment opportunities in the resources sector and aligned industries.	Project development deferred until Q3FY12-13.	PRE-START
7) Develop and implement a business plan delivering a range products and services to industry.	The products and services envisaged act as a mechanism to engage with industry and gain industry financial contribution to training and skilling the workforce.  Projects include  Skills in Workplace applications in development.  National Workforce Development fund application in assessment.  Advisor/Mentor application in assessment.	ON TRACK
10) Facilitate at least 500 resource sector training places.	In FY11-12 RESA was able to facilitate 222 PPP and 579 CSIF places this training is being delivered. A number of further applications and projects are in development, however to date this FY no new places have been facilitated. We expect to gain this places as applications submitted during the last six months are assessed and awarded. <a href="Projects include">Projects include</a> ; Skills in Workplace applications in development and assessment and National Resources Workforce Development fund application in assessment.	ON TRACK/ ATTENTION REQ
8) A report, detailing key issues, is completed Q3.	The RWPC was used to develop understanding of key issues.	ON TRACK
Conduct an SME capability mapping and development project.	Concept in development with GMUSG expect to implement during Q3FY12-13 for delivery before the end of the FY.	ON TRACK
11) Implement - a Resources and Mining Pipeline program (RaMP) which integrates and coordinates with other organisations to deliver programs e.g. Hot Rubble, the Resources Skills Centre concept and Training places.  Develop and implement a common user skills delivery node which will increase access to resources related training opportunities by 31 Dec 13.	Project manager appointed and concept development completed. Implementation to commence Q3FY12-13.  Projects include Collaborate with other organisations to deliver programs that build the resource sector workforce, particularly by increasing participation and access to new and under-utilised sources of labour and skills. 5 programs. DPEP A web portal with SA relevant pathways, industry and opportunity Information, Developing a cluster of training providers with the ability to deliver sector training, Establishing access to shared or common-user skills delivery sites. (These are RAMP delivery nodes, conceptually, a. City b. Brukunga and c. Port Pirie). Broker government and Industry funding support 500+ places for resources related training opportunities.	ON TRACK
15) Develop and implement a Strategic Communications Plan.	Plan is completed and in implementation including media briefings and Skills Summit.	ON TRACK
16) Use Hot Rubble to deliver pathway information.  Develop Collateral material, Promote pathways at expos & presentations, Support the Resources Engineering Program (REP), Develop Pathways Map.	Hot Rubble (HR) is a key deliverable for this strategy. HR has been developed to launch stage (www.hotrubble.com.au) and will be launched at the Skills Summit 21 Feb 13.  Projects include: REP Collaboration	ON TRACK
20) The RESA Board has wide representation from the resources sector including from major sector employers in SA.		ON TRACK

#### 4.2.1 COMMENTARY ON KPI'S

RESA has generated a range of reports which provide commentary on achievements to key stakeholders. While significant internal reflection on performance is evident and this is demonstrated to some extent in reporting, RESA does not yet have in place a formal monitoring and evaluation framework. Moreover no previous independent evaluations of performance have been undertaken of RESA. In this context the Review has been reliant on RESA publications, reports and interviews to draw conclusions about performance. While this can provide useful insights into performance against agreed upon KPIs a monitoring and evaluation framework accompanied by periodic external review is a far superior foundation for reviewing performance.

In general, RESA appears to have made significant progress against its KPIs. The Resources Workforce Planning Council has been established, research has been produced, various training programs have been executed and RESA has established a presence in the industry.

The changes in strategy and reporting formats, however, make it difficult to track progress on some of the KPIs from the Funding Deed. Some of these have clearly been achieved while others remain 'On Track' towards completion but more detail is not provided.

This redefining of strategic objectives could be characterised as an undesirable 'strategic drift' in the organisation. Changes in strategy should be conscious and explicit and emerge from a considered dialogue between management and the Board. Some degree of strategic change is necessary in a rapidly changing environment but too much leads to insufficient progress on core strategic goals.

In response to our enquiries on this matter RESA responded that delays in finalising the Funding Deed which was not in place until February 2011 coupled with an internal review of strategy resulted in the board agreeing to a progressive implementation of the strategic review in the 2011-12 plan.

RESA provided Table 3 below as guidance for understanding the relationships between strategic objectives over the four year period.

Priority	2010-11	2011-2012	2012-2013	2013-14
1	Workforce	Planning the	Planning the	The Future Workforce Is Planned For
	Planning	Workforce	Workforce	Maximum Capability And Benefit To The
				Industry
2	Future Workforce	Developing the	Developing the	Develop The Existing Workforce To
		Workforce	Workforce	Enhance Safety, Effectiveness And
				Productivity
3	Workforce	Growing the	Growing the	Grow The Number Of Resources Ready
	Development	Workforce	Workforce	People To Increase Industry Capacity
4		Corporate	Corporate	RESA Is Established As An On-Going
		Sustainability	Sustainability	Industry Enhancing Organisation

TABLE 3: SUMMARY OF STRATEGIC PRIORITIES 2010-11 TO 2013-14

While this table does show strategic alignment across the four year period for the high level strategic priorities, there is nonetheless a degree of inconsistency in the lower level activities actions and KPIs.

These observations suggest the need for a monitoring and evaluation framework at RESA. Presently such a framework does not exist. This is a significant gap which should be addressed as a matter of priority. A framework would assist the board and management to define more clearly the relationships between strategic goals and activities and related KPIs. In addition RESA will be able to better qualify and quantify outputs to funding organisations such as the State Government.

RECOMMENDATION 3: It is recommended that as a matter of priority RESA develop a monitoring and evaluation framework to support a more rigorous examination of the effectiveness of operations, enabling RESA to report clearly on outputs relative to KPIs.

#### 4.3 ACHIEVEMENTS, CHALLENGES AND RISKS

In this section we examine RESA achievements, challenges and risks. We begin by examining key achievements.

#### 4.3.1 KEY ACHIEVEMENTS

#### **BROKERING TRAINING**

RESA has brokered significant levels of training and appears to be increasing the level of training it is facilitating. For example, in 2012-13, 590 people received training with RESA brokering \$1.27 million of training funding and industry contributing almost \$1 million. Table 4 summaries the information provided by RESA.

TABLE 4: RESA BROKERED TRAINING

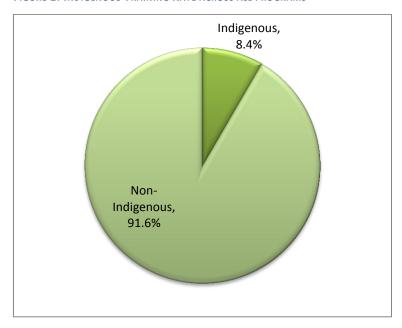
	Number trained (persons)	Brokered Funding (\$)	Industry Contribution (\$)	Total (\$)
ACTUAL				
2010-2011	312	499,528	208,216	707,744
2011-2012	345	1,443,105	369,848	1,812,953
2012-2013	590	1,270,457	986,870	2,257,327
2010-2013	1247	3,213,090	1,564,935	4,778,025
FORECAST				
	892	4,660,325	2,728,320	7,388,645
TOTAL 2010-2014	2139	7,873,415	4,293,255	12,166,670

RESA has begun collecting demographic data regarding people trained in its brokered programs. RESA's database only has information on approximately 1000 persons from the total brokered training places.

About 19% of trainees came from regional South Australia.

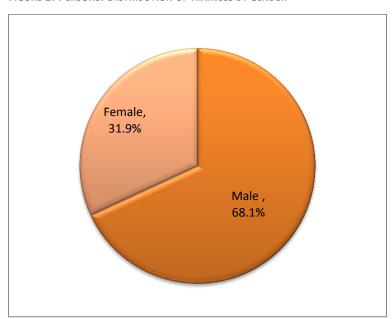
Figures 1-4, based on data provided by RESA illustrate the focus of the training effort.

FIGURE 1: INDIGENOUS TRAINING RATE ACROSS ALL PROGRAMS



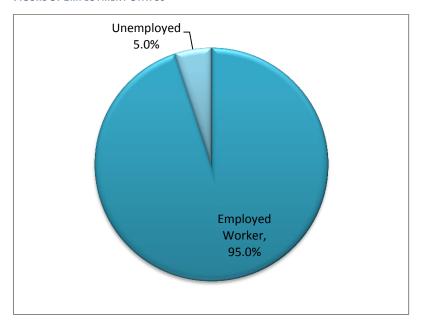
Source: provided by RESA

FIGURE 2: PERSONS: DISTRIBUTION OF TRAINEES BY GENDER



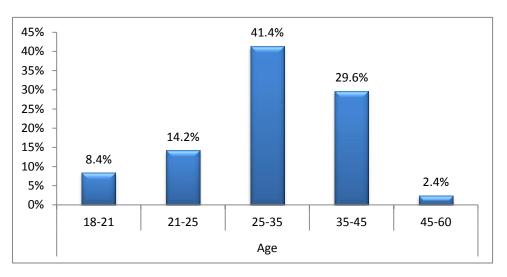
Source: provided by RESA

FIGURE 3: EMPLOYMENT STATUS



Source: provided by RESA

FIGURE 4: PERSONS: TRAINING AGE DISTRIBUTION



Source: provided by RESA

Given the scale of the training effort brokered by RESA, more detailed data on training outcomes would assist in quantifying the benefits of training effort. It is appreciated that this may require provisions in contracts with RTOs that require provision of specific training outcome data.

RECOMMENDATION 4: It is recommended that RESA require RTOs to provide specified training data to for outcome reporting purposes and that RESA compile Training Outcome reports for consideration of the Board and appropriate funding bodies.

There is evidence that RESA has been effective in pursuit of key KPI's and strategic objectives. The following summarises these, indicating the nature of the achievement.

Achievements	Comments
Establishing The South Australian Resources Workforce Planning Council (SARWPC)	The SARWPC "provides a cross section of our industry with representation from mining companies, contractors, suppliers, SMEs and labour hire companies. It was established in June 2011 to provide regular consultation
Creating profile for RESA in the	to RESA as the Industry workforce advisory body on skills and workforce issues and provide advice on feasible industry solutions."   There is significant evidence that RESA is building profile in the industry"
industry	"Leveraging \$4.8M in government funding, RESA has developed solutions and contracted with 55 Resources companies and training organisations to deliver nearly 1000 training places for the industry in the last 12 months."
The Skills and Workforce Summit (22 Feb 2012 and 21 Feb 2013)	RESA conducted a survey of the Summit and responded were general positive, for example, 76% responded positively to the question: Based on your experience, will you attend or recommend someone else attending the Summit in 2014?
End of Year Showcase & launch of Hot Rubble career guidance website	The Hot Rubble website has received multiple coverages in The Advertiser and in regional newspapers. Google Analytics provided indicates 5,845 visits to the site between 1 March and 11 November 2013, with 4,117 being unique visitors and a total of 17,419 page views.
Publication of South Australia Resources Workforce Scoping Report 2013 – 2020	By and large this publication has pooled the views of a wide spread of industry stakeholders regarding future skills demand for the resources sector. They are of high quality in terms of presentation but they are completely based on the industry perspectives. It would be useful to present other evidence on forecasts to contextualise this perspective.
Generation of almost \$300,000 of revenue in the 2012-13 financial year in the category 'RESA generated income'	RESA have been successful in attracting a level of alternative funding.
Resources Industry Leaders Round Table – 27 November 2013 attended by representatives from seven mining companies.	This recent event was attended by around seven leading industry stakeholders.
Production of a video promoting careers in the mining industry - Change Your Life - With a Career in South Australia's Resources Industry – in collaboration with SACOME	A high quality career promotion video has been produced by RESA in association with SACOME. It will be used to encourage employees to take up training and careers in the mining sector.

The Review provided RESA with an opportunity to furnish a number of case studies as illustrations of achievement. Two of these are provided in the box below.

<sup>6</sup> RESA BACKGROUND BRIEF11-12

<sup>7</sup> ibid

#### Box 1: Case studies for WIDRI and PILP

#### **CASE STUDIES**

#### Women influencing Defence and Resources Industries (WiDRI)

The Women influencing Defence and Resources Industries (WiDRI) program was developed to bring about collaboration and support for women currently employed within the defence and resources industries. As the peak bodies in South Australia focussed on developing skills for defence and resources industries, the Defence Teaming Centre (DTC) and Resources and Engineering Skills Alliance (RESA) have collaborated to develop and deliver the WiDRI program.

A total of 161 persons participated in the program of which 49 were women.

#### Resources Indigenous Leadership Program (RILP)

RESA provided a career progression pathway for existing Indigenous employees with management and leadership skills accredited to the Certificate IV Frontline Management, while actively refining skills of existing supervisors to better support, coach and mentor Indigenous employees.

RILP was taken up by participants from across regional South Australia, including:

- Iluka Resources
- Xceptional Recruitment
- ODT Australis
- Western Plains Resources (Arrium by graduation)
- Exact Mining Services

#### **COMMENTARY ON KEY ACHIEVEMENTS**

This set of achievements is consistent with the strategic priorities and the high-level goals of RESA as discussed above. RESA appears to be making significant progress on raising its profile in the industry and bringing stakeholders together. It is clearly attempting to address workforce issues on a more rational, consistent and collective basis.

Reflecting in part the functions of RESA, many of these achievements are in the nature of inputs to the fundamental problems RESA was set up to address. It should be emphasised that this problem is inherent to the KPI's specified for RESA at its establishment. In effect, both the ultimate objectives and (many of) the mechanisms to achieve these have been specified and, generally speaking, this limits organisational flexibility and also perhaps some opportunities for innovation and therefore ultimately effectiveness.

The exception to this is RESA's record of brokered funding for industry training. Clearly, this activity is impacting positively and directly on the need for more and more directed training in the industry and this represents one of the ultimate

rationales for establishing RESA. In addition to simply brokering more training, RESA is attempting to improve the quality of training:

In the delivery of these programs RESA has provided extensive value add services, in the form of workforce planning, workforce development strategies, tailored training design, training needs analysis and supported RTOs to contextualise training to meet the needs of industry.<sup>8</sup>

Analytically speaking, the only question that remains over this achievement is the extent to which this training would have occurred anyway in RESA's absence. This is a relatively difficult statistical question but it could be approached, for example, by comparing levels of training year on year perhaps adjusted for the level of activity in the sector and seeking to discern the impact RESA is having on the throughput of new training.

A more fundamental question is the challenge of quantifying the benefits to recipients and industry of training effort. As indicated earlier, greater effort is required to gather both qualitative and quantitative data on the impact of training and its benefits over time for individuals and industry. The need for monitoring and evaluation of activity supported by RESA and reporting on the value of training effort has been recommended to overcome this gap in knowledge.

#### 4.3.2 Consultation across industry

RESA's interactions with industry take several forms which are characterised below as events, training and research. All of these activities involve 'consultation with industry' in various forms: company representatives attend RESA events; data from mining companies are included in RESA research reports; and mining employees undertake RESA brokered training courses. The fact that these things happen is evidence that RESA is interacting with industry, attracting attention from industry players and engaging in various types of two-way information exchange with industry. These are positive developments and necessary steps towards RESA achieving its ultimate goals.

#### **EVENTS**

RESA has staged seven events between 2011 and 2013 attended by between 60 and 145 industry participants (see Appendix A. RESA provided results for two satisfaction surveys for these events which show general high levels of approval by attendees. The responses from event participants indicate that a high proportion rate the events as good value for money and indicate that they would be interested in attending similar events in the future.

#### RESEARCH

RESA has recently released two reports on the resources workforce:

- South Australian Future Mining Workforce Report 2014 2030
- South Australia Resources Workforce Scoping Report 2013 2020.

The production of these reports included consultation with mining companies:

<sup>8</sup> RESA BACKGROUND BRIEF 11-12

Responses were obtained from managing directors, project managers and directors of these companies; with all conclusions drawn from first-hand information.

Given the emerging status of many of these projects, a blended approach of face-to-face, phone and email interviews were conducted where necessary.<sup>9</sup>

RESA also partnered with Innovation Economics and the Training and Skills Commission to produce the Resources Whyalla and Eyre Peninsula Workforce Scoping Study published in October 2011.

We have discussed the ways in which RESA might conduct its workforce planning research by using other inputs in addition to industry. This approach also raised the possibility of attracting additional Commonwealth funding, for example, through Australian Research Council Linkage Projects.

#### 4.3.3 IMPROVING TRAINING SYSTEMS

#### **EDUCATION AND TRAINING STRUCTURES**

A key objective of RESA is to contribute to improving workforce development systems in the mining and resources sector in South Australia. RESA has insights into the operation of education and training systems and structures and has sought to influence the quality of operation of these in various ways. It has also considered being directly engaged in the provision of training by examining whether it might apply to become an RTO. This course of action has not been pursued by the RESA Board which does not support RESA seeking to become an RTO. The Review supports this decision as RESA would encounter various conflicts of interest as an RTO that would make it impossible for it to act as a source of independent advice and brokerage.

RECOMMENDATION 5: It is recommended that RESA maintain a position of relative independence by not pursuing RTO status.

In material supplied for this Review, RESA made the following observations about training systems for the resources sector:

- Existing RTOs have inadequately consulted or affiliated with Industry partners prior to developing 'contextualised' industry training solutions, resulting in the failure to meet the vital up skilling demands of the sector.
- Limited number of Industry experienced trainers, resulting in limited transference of learning back into the workplace.
- Reliance on off-the-shelf generic training resources by RTOs is not reflective of a live workplace.
- Lack of flexibility around training delivery and timings: participants are either rushed through training or left to fend for themselves.
- Limited consistency in agreed resource industry standards applied to training delivery.
- Lack of collaboration in training, resulting in increased cost of one-off programs.
- Lack of understanding and or desire to navigate through the skills funding and policy maze.

South Australian Future Mining Workforce Report 2014 – 2030, p 14.

Clearly, it is part of RESA's core role to influence the positive development of education and training structures for the mining and resources sectors. There are a number of ways it might do this including:

- assessing industries training requirements and communicating these to training organisations
- influencing the content of training programs
- attempting to improve the quality of delivery of training programs
- undertaking training itself
- assessing and quality assuring the programs of training organisations.

The question of how RESA positions itself to improve the quality and responsiveness of the education and training system raises some broader issues. It's possible responses include activities that are in the commercial sphere and activities that are more in the public interest domain and are addressing potential market or system failures which have already been discussed. RESA should not be expected to undertake activities that are in the public interest without support from government nor should it be expected to cross subsidise from commercial activities to support public interest ones. Indeed there is a risk that RESA's capacity to provide a source of independent advice might be compromised by becoming overly dependent on consultancy sources of income. There is also a question of the appropriateness of RESA undertaking commercial activities that might compete with existing commercial players. These issues are further discussed below in Section 4.5.

On the issue of whether RESA should undertake an assessment and quality assurance of existing training organisations and courses there are substantive arguments for and against. On the one hand there are organisations that already deal with training quality assurance - The Australian Skills Quality Authority (ASQA) and Skills DMC which positions itself as "the Industry and Australian Government recognised advisory body providing consultancy services and advocacy to Industry and governments on the skills and workforce development needs of the Resources and Infrastructure Industry"<sup>10</sup>. On the other hand, RESA has developed good connections with industry and expertise in resource sector training and is therefore well positioned to assess and provide advice to industry on what training is most likely to meet its needs. Again, this issue points to larger questions regarding the South Australian Government strategy toward skills development in the mineral and resources sectors. This is discussed further in our overall assessment in Section 5.

#### EDUCATION AND TRAINING IN THE UPPER SPENCER GULF

A priority for the Review is an assessment of RESAs activities in the Upper Spencer Gulf region where it has a presence.

RESA provided the following information in relation to the Upper Spencer Gulf:

Since inception, RESA has been working in the Upper Spence Gulf to assist in the development of school pathway programs. During the first funding deed RESA was able to assist with the transition to new programs when the Australian Technical Colleges program was discontinued. In particular when the Commonwealth Government and the South Australian state government

http://www.skillsdmc.com.au/about\_us\_accessed 10/12/2013

developed the Resources and Energy Program (REP) from residual funds left over from the discontinuation of the Australian Technical Colleges.

RESA has worked with the REP in several areas including:

- Promote Careers in the resources and energy sectors in schools
- Provide access to employers in the industry
- Assist in the construction of training programs endorsed by RESA and Industry (IPPs)
- Promote the benefits and improve the uptake of traineeships/apprenticeships
- Work with employees encouraging them to take students for Work Experience
- Link REP and schools to like organisations such as SACOME, SkillsDMC and RTOs.

RESA points to the following outcomes from these efforts:

- 2 Career Promotion Roadshows across 3 USG cities (Whyalla, Port Augusta & Port Pirie)
- 600 students participate and 10 Employers involved and 20 Presenters
- 23 Industry Pathway Programs (Endorsed by industry and RESA)
- 300 Students undergoing Certificate I and II across Years 11 and 12 in resources and energy
- 10 Secondary Schools across the USG, Mid North, Far North, YP and EP.

RESA maintains an office in Port Augusta which enables it to have a significant presence in the region. It is doubtful that RESA would be able to achieve significant outcomes in the region without a physical presence. Like its other activities RESAs operations in the Upper Spencer Gulf have not been formally evaluated by RESA using a monitoring and evaluation framework. In the absence of this, the reported activity appears of significant value but should be subject to reassessment in light of the Review and the recent reduction in resources available to RESA for its operations. Given the significance of the Upper Spencer Gulf as a site for growth in mineral and resource sector projects it is difficult to envisage RESA being able to offer an effective service in the region without maintaining a physical presence. Co-investment in this by industry would demonstrate its value.

RECOMMENDATION 6: It is recommended that RESA develop a business case for industry co-investment in its Upper Spencer Gulf operations to meet mutually agreed upon strategic objectives.

#### ATTRACTING YOUNG PEOPLE TO MINING AND ENGINEERING CAREERS

RESA has established the 'Hot Rubble' career advice website and recently completed a high quality video promoting careers in the resources sector. These are aimed at any persons considering work in the resources sector but are likely to have particular appeal to younger people.

It is also worth noting that the brokered training facilitated by RESA (see Figure 4) is dominated by persons in the 25 to 35 age bracket with significant representation in the 21 to 25 age bracket as well.

In addition, as the previous section indicates, RESA has been active in promoting the resources sector in schools.

#### 4.4 FINANCIAL PERFORMANCE

RESA's operations have depended on significant ongoing funding from the South Australian Government. Until recently funding of around \$900,000 per annum has been provided to RESA by the State Government. This amount was recently reduced to \$450,000 per annum. The implications of this reduction in funding are discussed later in this section.

The statement of surplus or loss for year ended 30 June for 2013 and 2012 (Table 5) shows that the main expense items are wages and salaries (2013: \$718, 399, 2012: 506,857) and project expenditure (2013: \$238,434, 2012: \$894,497). Both of these items showed significant increase, especially the latter, in these increases are presumably linked to the ramping up of activity in the 2012-13 financial year.

TABLE 5: STATEMENT OF SURPLUS OR LOSS AND OTHER COMPREHENSIVE INCOME FOR THE YEAR ENDED 30 JUNE 2013

	NOTE	2013 \$	2012 \$
Revenue	2	2,954,425	1,243,577
Expenses			
Advertising Expenses		18,759	1,423
Accounting & Consulting Services		132,349	39,633
Bank Fees & Charges		2,500	1,214
Online Services		74,717	42,506
Depreciation		21,440	14,631
Entertainment		3,174	1,150
Insurance		14,114	16,116
Legal Fees		14,456	9,327
Contractor expense		37,865	47,820
Office Admin		172,462	90,105
Superannuation		63,296	43,885
Wages & Salaries		718,399	506,857
Workers' Compensation		3,175	2,373
Holiday Leave		13,385	26,329
Long Service Leave Accrual		3,181	2,750
Rent expense		56,593	47,311
Marketing & Promotions		99,021	29,742
Travel and Accommodation		50,293	63,558
Motor Vehicles Costs		53,090	49,100
Board/Directors Fees		4,525	(10,574)
Telephone		12,915	11,131
Project expenditure		894,497	238,434
Loss on disposal of assets		384	270
Total expense from operating activities		2,464,590	1,275,091
Other comprehensive income			_
OPERATING SURPLUS/(LOSS)		489,835	(31,514)
Accumulated surplus at the beginning of the finan		669,696	701,210
ACCUMULATED SURPLUS AT THE END OF T	HE PERIOD	1,159,531	669,696

Source: Mineral resources and heavy engineering skills centre Inc

Table 6 shows actual and projected sources of income for the period 2009-10 to 2017-18. It is noteworthy that 'RESA generated income' has increased from \$123,184 in 2011-12 to \$295,188 in 2012-13. This figure is forecast to rise to over \$0.5 million by 2017-18. Also of note is the reduction in State Government income that has required RESA to reassess its activity and staffing levels.

TABLE 6: REVENUE PROJECTIONS BY SOURCE

	Actual							
Year	09/10		10/11		11/12		12/13	
SA Govt Grant	\$866,000	94%	\$329,000	60%	\$898,860	72%	\$914,000	31%
Industry Contributions			\$6,642	1%	\$78,856	6%	\$278,731	9%
Project Income - Commonwealth							\$1,064,653	36%
Project Income – State			\$163,180	30%	\$89,028	7%	\$351,853	12%
RESA Generated Income					\$123,184	10%	\$295,188	10%
Other Income	\$51,410	6%	\$47,014	9%	\$53,649	4%	\$50,000	2%
Total Income	\$917,410	100%	\$545,836	100%	\$1,243,577	100%	\$2,954,425	100%

	Actual/For	ecast	Fc				ecast			
Year	13/14		14/15		15/16		16/17		17/18	
SA Govt Grant	\$600,000	23%	\$450,000	33%	\$450,000	30%	\$450,000	28%	\$450,000	26%
Industry Contributions	80,000	3%	100,000	7%	120,000	8%	145,000	9%	185,000	11%
Project Income- Commonwealth	970,817	37%	400,000	29%	420,000	28%	440,000	27%	450,000	26%
Project Income–State	321,458	12%	100,000	7%	120,000	8%	120,000	7%	130,000	7%
RESA Generated Income	607,166	23%	300,000	22%	360,000	24%	432,000	27%	518,000	30%
Other Income	33,167	1%	20,000	1%	20,000	1%	20,000	1%	20,000	1%
Total Income	\$2,612,608	100%	\$1,370,000	100%	\$1,490,000	100%	\$1,607,000	100%	\$1,753,000	100%

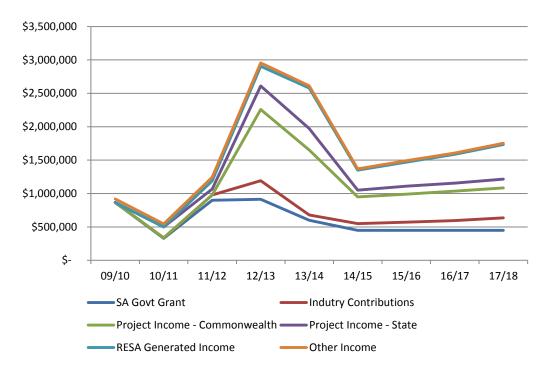


FIGURE 5: REVENUE PROJECTIONS BY SOURCE

#### 4.4.1 COMMENTARY ON FINANCIAL PERFORMANCE

It is noteworthy that RESA has devoted significant resources to staging projects of various kinds. Clearly, with projected lower levels of support from the State government it is at risk of not being able to undertake as many projects in the future without significant sources of alternative income. Looking at its projections up to 2017-18, income from sources other than the State Government grant constitute the majority (74%) of income. This will be a significant achievement if realised.

This move to diversify its funding base is a positive shift and must be predicated on generating value for the mining industry in the State while also ensuring that it can provide a source of independent advice to both government and industry.

Can RESA achieve the income targets it has set? It is likely that this will prove very challenging unless the industries engaged with RESA assume a greater level of responsibility for its future including a commitment to a significant contribution to core-funding its operations. More broadly, realising a significant increase in alternative sources of income may require skill sets not currently available in the organisation. A financial diversification strategy would assist RESA to broaden its funding base. We are aware that RESA has done considerable recent work to this end. Decisions about which alternatives might be the most appropriate going forward should be the subject of careful consideration by key stakeholders and the State Government as the major provider of base funding. Tensions between public /shared interests and commercial activities will need to be resolved.

RECOMMENDATION 7: It is recommended that RESA subject all revenue raising strategies to risk assessment to determine the impact if any of such activities on the ability of the organisation to provide independent advice and brokerage services to government and industry.

#### 4.5 CHALLENGES AND RISKS

#### 4.5.1 CHALLENGES

As part of the review process, WISER submitted a number of questions to RESA and received written responses. One of the questions concerned RESA's view about its own challenges and weaknesses to which it responded as follows:

"RESA's weaknesses are that it has been building from a low base of profile and awareness. Engaging with industry is costly and time consuming for a small organisation. The current business environment is constrained and that does not have the appetite for workforce development that it did a year ago. RESA is limited in its financial and human resources and needs to build capability and capacity over time."

It is true that, as a relatively small-scale operation, RESA faces challenges in 'cutting through' and making industry aware of its activities and value propositions. The issue of scale is an important one going forward – if RESA is overly constrained by budget reductions it will find it even more difficult to make an impression on the local resources industry. If the view was taken that RESA has been meeting its objectives then this suggests an element of caution in assuming that it can continue to meet its objectives on a reduced budget.

This raises the question of what goals and activities RESA should be focused on going forward. It is important that any new agreement with RESA clearly identify mutually agreed upon, achievable strategic objectives and activities. As much as possible KPIs should reflect both outputs and outcomes to enable judgements about performance to be more easily and objectively made.

#### 4.5.2 RISKS

RESA operates in an environment where risks must be identified and managed. The Review notes that RESA has implemented a risk management process which it applies to assessment of key decisions.

To manage risk, RESA uses a risk assessment tool called 'Scuta'. This tool has been applied to its business model as recently as June 2013. Assessments have made undertaken is relation to a number of strategic options including developing a "consulting service, an RTO and an e-learning capability." <sup>11</sup>

Uncertainty about funding and sustainability has led to RESA including corporate sustainability as an additional strategic priority. This raises the somewhat intractable problem that has been faced by many organisations set up by government that subsequently face reduced funding. If such an organisation is to raise revenue from non-government sources it must necessarily do so on commercial terms. This will, however, in almost all cases lead to the organisation competing with pre-existing commercial operations. Such organisations may regard, often with some justification, competition from government supported organisations as unfair. One exception to this situation may be that a government supported organisation enters a field of commercial activity that has not previously been undertaken by existing commercial players. Even in such a

Document from RESA: RISK ASSESSMENT ON THE RESA SUSTAINABLE BUSINESS MODEL – CONSULTING SERVICE, AN RTO AND AN E-LEARNING CAPABILITY

situation, however, commercial players may argue that government is, to some extent, foreclosing legitimate commercial opportunities to legitimate commercial players.

RESA will need to carefully consider how commercial activities impact on the mission of the organisation, particularly its capacity to provide some degree of independent advice and brokerage to government and industry.

RESA faces a number of potential risks related to general industry uncertainty and funding uncertainty. Close examination of these over the next year is warranted. Some key risks include:

- RESA is unable to become recognised in the long term by industry as an authoritative source of advice on industry education, training and workforce development
- RESA is unable to encourage the mining sector to invest more in education, training and workforce development
- RESA is unable to successfully assess and make consistent recommendations about training quality
- RESA is unable to successfully assess the training needs of industry and/or successfully communicate these to training organisations
- RESA may lose key employees
- RESA is unable to generate sufficient income from other sources to be sustainable.

RECOMMENDATION 8: It is recommended that RESA examine these potential risks as part of its risk management processes.

#### 5 POLICY APPROPRIATENESS IN CURRENT ENVIRONMENT

Despite the dampening impact of the GFC on the demand for commodities and the consequent implications of this for the demand for mining and resources sectors skills, demand is expected to be relatively strong over the next few decades. The intense competition for skilled and qualified people that prevailed prior to the GFC and to some extent post GFC does warrant a reassessment of the level of service that RESA provides to industry and government and the focus and priorities of RESA over the next three years.

While the interviews undertaken for the Review reveal a desire from the core stakeholders to continue the operations of RESA, there is acknowledgement of a need to reassess priorities in the light of the current policy and economic environment. The role that RESA might play in mitigating some of the impacts of the closure of GMH is regarded by the Review as warranting urgent consideration. The development of strong collaborative relationship between RESA, MIPO and CITB would appear to be an important vehicle for better extracting wider industry and workforce development benefits from mineral and energy resource development over coming years.

On the question of possible industry contributions to the future operation of RESA there is considerable uncertainty. Like government, industry is seeking to reduce its operating costs in various ways. A financial contribution from industry to a collective resource like RESA would demonstrate commitment of the industry to RESA. Crucially it may help to establish a more stable foundation for RESA based on co-investment rather than dependence on government.

The State Government have recently reduced funding to RESA requiring RESA to reassess focus and priorities. This process was underway during the Review. RESA has indicated that it can deliver beneficial and significant outcomes on a reduced level of funding, but it will need to work with the State Government and industry to develop a new set of agreed upon strategic priorities and KPIs as part of any future funding agreement that might be developed.

RECOMMENDATION 9: It is recommended that RESA develop a revised schedule of strategic priorities, expected outputs and outcomes for discussion with the State Government.

#### 5.1 Cost effectiveness of current funding

Under current funding arrangements involving reduced State Government funding, RESA are operating a leaner organisation. This includes absorbing administrative officer support functions into each of the RESA roles. The reduced funding envelope has generated discussion within RESA about alternative funding sources and efficiencies that might be realised through arrangements with different organisations such as the CITB. While it has not been possible for the Review to undertake forensic examination of costs, consideration might be given to opportunities to reduce accommodation overheads.

Considerable pressure is now upon RESA to examine how it can most efficiently and effectively deploy a reduced funding envelope from Government over coming years. RESA has been a beneficiary of relatively high levels of State Government funding compared to similar organisations operating in different sectors. In part this was likely to be a response to expectations of a very rapidly

growth mining sector flowing from the proposed, but subsequently postponed, expansion of the Olympic Dam mine. RESA argues that demand generated from remaining projects will be substantial, requiring a well-resourced organisation to play a leadership role in fostering and brokering greater industry collaboration and engagement in education, training, workforce and industry development in South Australia.

As indicated earlier it is desirable for industry to play a key role in ensuring the future success of RESA through co-investment in collectively agreed strategic objectives and functions.

RECOMMENDATION 10: It is recommended that RESA prepare a discussion paper by the end of March 2014 on options for industry financial contributions to workforce and workplace development to help ensure the sustainability of RESA over the next three years.

#### APPENDIX A: RESA EVENTS AND ATTENDANCES

#### **RESA events 2010 to 2013**

Date	Event	No. Attended
TBC	Launch of Resources Ready	Yet to be staged
6-Jun-14	Skills and Productivity Summit	Yet to be staged
27-Nov-13	CEO Round table discussion group	7
27-Nov-13	End of Year Thank You for your Support Event	Yet to be staged
14-Nov-13	How to Prepare a Tender Bid Course	15
17-Oct-13	Resources Sector Productivity Breakfast	120
21-Feb-13	Skills and Workforce Summit	140
19-Dec-12	End of Year Showcase & launch of Hot Rubble	145
22-Feb-12	Skills and Workforce Summit	122
11-Dec-11	Christmas Networking Event	65
4-Mar-11	Breakfast launch of new look RESA	60

#### Events attended to leverage industry knowledge:

- SACOME Breakfasts and Lunches
- AMCHAM Business Lunches
- CEDA Forums
- Top 100 SA Luncheon
- SACOME Annual Gala Dinners
- Resources Charity Golf Day 2011
- Skills Australia Conference
- Skills DMC Conference
- Global Maintenance Upper Spencer Gulf Conference
- Mining Industry Skills Centre Conference
- China Mining Expo
- DETCRC Conference
- SA Exploration and Mining Conference

#### List of presentations made by RESA:

- National Resources Sector Workforce Strategy (NRSWS) Phil
- HSEC Upskilling Concept Phil
- Mines, Minerals, Metals Conference Phil
- CRCDET Drill Trade School Phil
- Perth productivity conference Phil
- Various Training and Skills Commission presentations Phil
- RDA Yorke and Mid North presentation Phil
- Global Maintenance Upper Spencer Gulf Trade Expo Phil
- Agrifoods Summit Sean
- Simulation Australia Conference Sean
- South Australian Resources and Energy Investment Conference (SARIEC) Phil
- South Australian Resources and Infrastructure Conference (SARIEC) Phil
- Mining SA (Whyalla) Phil
- Various school presentations (see separate document on careers) Andrea

Evaluation of Mineral Resources and Heavy Engineering Skills Centre

