CADIA VALLEY OPERATIONS Socio-Economic Study



November 2020

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- The study was completed by Umwelt's social team.
- Passionate team of social specialists and community practitioners from a range of social science disciplines
- Extensive experience in SIA and community engagement practice, particularly within the mining sector
- Worked in a range of communities across NSW strong familiarity with the region
- Involved in development of SIA guidance within NSW providing communities with a voice in project development, planning and operational practice
- Developed and implemented innovative ways of involving stakeholders and communities in SIA and engagement processes





Key Project Team Members



Project Director – Sherie Coakes



Project Manager – Karen Lamb



Senior Social Consultant – Sarah Bell



Social Consultant – Sheree Ansen

Jetty Research – random household survey

Murray Meaton (ECS) – economic analysis



Cadia conducts Socio-Economic Studies every 5 years to:

- Ground truth predictions made in Cadia East Project Approval
- Assess the positive and negative impacts we have in the community and provide recommendations on how we can improve
- Assist in shaping our economic contributions to the community in future
- Enhance the community engagement programs in the future
- Aligns our programs with industry standards

Examples of how the Socio-Economic Study data is used:

- Implementation of the CDEP Program
- Step change in Partnership Program to focus on long term investments in three key industries





Socio-Economic Study Objectives

Sought to support the:

- company's future planning and decision making with regards to engagement and investment
- implementation of relevant requirements of the Newcrest Social Performance Standards.

To gain an improved understanding of the:

- **Socio-economic Trends** Existing socio-economic environment in which Cadia operates and future trends in the region.
- Community Attitudes Stakeholder and community attitudes towards
 Cadia and its operations.
- Impacts Identification Negative and positive impacts / risks associated with Cadia's operations and how the company could better manage these in the future.
- Enhancement / Mitigation Opportunities for improvement in Cadia's social investment activities and how the company could better enhance the economic and community benefits it provides in the region.









• To note – this Socio-Economic Study was conducted differently to previous studies due to the COVID-19 restrictions in place at the time.





- **Community Capital Analysis:** Assessment and analysis of ABS Census data and other relevant social and community indicators/data sets to develop a detailed social baseline profile of the communities of interest.
- **Documentary Analysis:** Collation and review of relevant reports/studies /background information relating to the program.
- Post Impact Studies Analysis: Review and analysis of secondary data (including local histories, local government strategic plans and assessment studies, local media, and primary data collected through stakeholder interviews, to understand historical, existing and emerging issues and opportunities across the target communities.
- **Economic Impact Assessment:** to assist Cadia in identifying the economic impacts and flow on effects of its business. Multiplier analysis used to estimate the flow on effects in terms of output and employment.
- **Township Resource Cluster (TRC) Analysis:** Assessment and analysis of the socio-economic associations and contribution of Cadia employees and suppliers to the region.
- **Issues analysis impacts and opportunities** Qualitative analysis of key issues emerging from the consultation program.
- Social Partnership Deep Dive: A qualitative evaluation of the social and economic value of the Orange Newcrest Challenge supported by Newcrest.

Stakeholder Participation				
Stakeholder Group	Sample size	Engagement Mechanism		
Key Stakeholders	22	Personal telephone survey		
Neighbouring Landholders	15	Personal telephone survey		
Broader Community Residents	501	Random telephone survey		
Cadia Suppliers	31	Online Survey		
Cadia Employees / Contractors	429	Online Survey		
TOTAL	1,004			

Random Community Survey		
LGA	Sample Size (Households)	
Orange	150	
Blayney	101	
Cabonne	150	
Bathurst	40	
Cowra	40	
Dubbo Regional	20	
TOTAL	501	













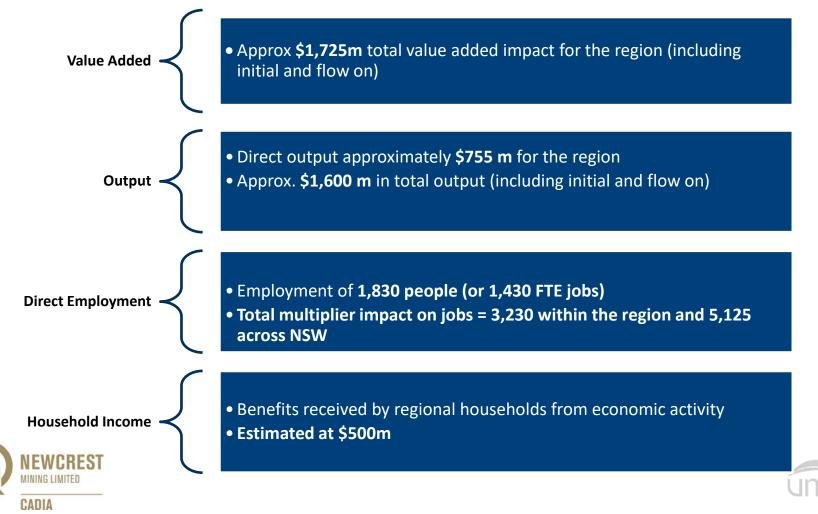
Outcomes





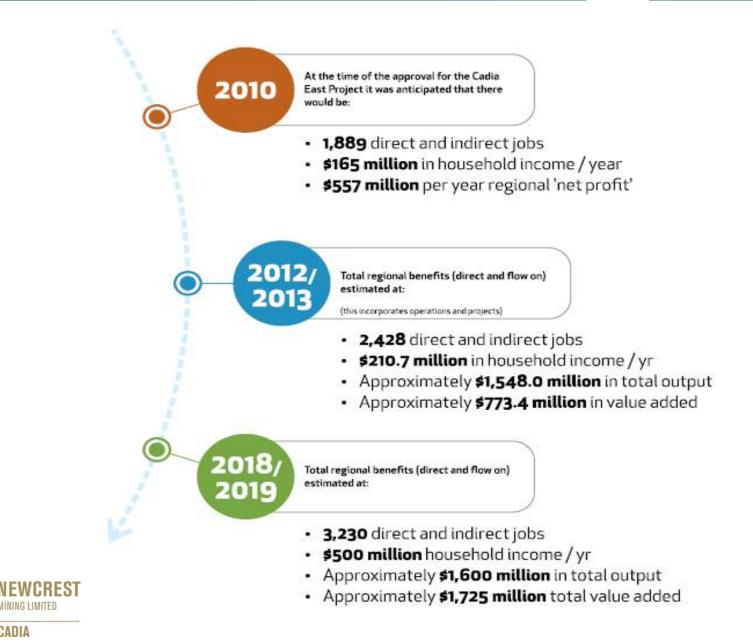
Cadia is a significant part of the local economy

Cadia's total spend for the financial year 2018/19 was estimated at \$893m, of which \$306m was distributed within the local area across the LGAs of Orange, Blayney and Cabonne



Economic contributions over time

CADIA





The Cadia workforce has a strong commitment to the area:

- 80% live locally in Orange, Blayney and Cabonne
- 60% of the workforce **already lived locally** prior to commencing employment at Cadia
- 53% were either likely or extremely likely to **stay in the region** should they no longer be employed at Cadia, or if mining were to cease.
- 70% of the workforce indicated that at least one member of their household **participates in local community groups** and activities.
- 28% have made **donations to local community groups.**
- 26% of employees **volunteer** their time.

Cadia Suppliers:

• 62% of supplier's income is **dependent on the mining** industry broadly and 23% specifically reported a **reliance on Cadia contracts**.

• 93% of suppliers believed that the local economy benefits from the presence of Cadia NEWCREST MINING LIMITED CADIA



"Cadia makes an important contribution to the region's local economy" was endorsed by:

- 95% of key stakeholders
- 94% of the broader community
- 93% of neighbouring landholders

Key focus areas for improved economic benefits:

Local business and service procurement Profits to remain in Australia and distributed locally/regionally

Economic impact of mine closure





Areas of social disadvantage were identified:

Wage Disparity Wage Disparity Educational attainment	Aged Care – Assisted Living	Retaining Youth
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Stakeholders identified areas for future social investment by Cadia:

- Health (17%)
- Education and training (13%)
- Environmental projects and programs (12%)
- Employment and training opportunities (11%)
- Sports and recreation (11%).
- Civic and community (10%)
- Tourism (10%)





Stakeholders held concerns for their economic sustainability, should operations cease, including:

- Direct employment opportunities
- Indirect economic impacts / regional flow on effects
- Population decline
- Reduced community investment

Opportunities:

- Return to agriculture and/or recreational use, including historical mining elements
- Improve water availability and security
- Increase skilled labour (transitional skills to other industries)

"Loss of employment, as a lot of local families rely on it. It does bring money into town and to a lot of industries e.g. hospitality/accommodation and that loss would filter on to the community."

"The local community would need other forms of industry to take up the loss."





Issues Scoping





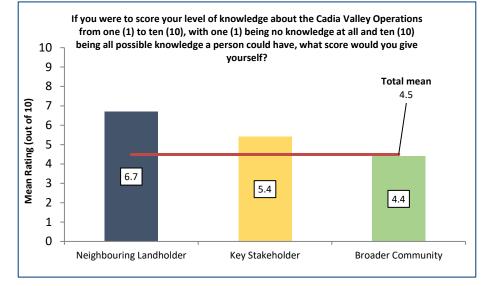




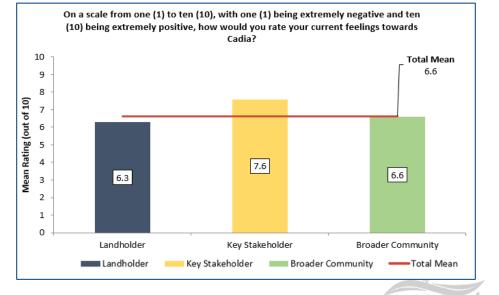


Knowledge & Attitude Ratings toward Cadia

 Average knowledge of Cadia is reasonably low, but highest amongst neighbouring landholders

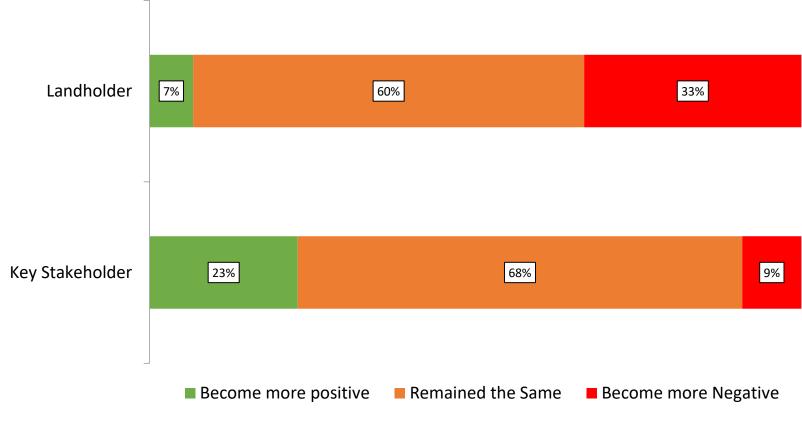


 Average attitude ratings were largely positive, but lowest amongst neighbouring landholders





In the past year, have your feelings towards the Cadia Valley Operations become more positive, remained the same, or become more negative?





Overall measurement of Cadia's Social Licence to Operate has been achieved through the inclusion of a series of attitude statements addressing:

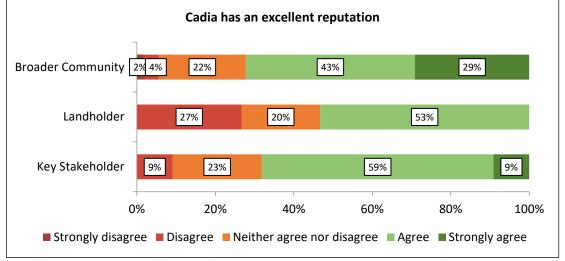
Indicators	Description	Attitudinal Statements
Reputation	The extent to which people believe the company is respected, compared to others	 Cadia has an excellent reputation That compared to other mine sites, Cadia is among the best
Trust	The extent to which stakeholders have a general faith in the company to do the "right thing" and "do what they say they will do"	 Cadia cares about local communities in the region Cadia always tries to address concerns raised by the community People around here don't really trust Cadia Cadia as a company keeps its promises and does what it says it will
Procedural Justice/ Fairness	Being respected, listened to, and being provided with a genuine opportunity to participate	 Cadia fairly considers the community when making decisions about its operations and activities in the area I feel that I have ample opportunity to present my views about Cadia's activities in the area
Community Benefit	Perceptions relating to perceived community benefits associated with Cadia's activities	 Cadia makes an important contribution to the local economy in the region Cadia's activities in the local area negatively affect my family and me The benefits of Cadia's presence to the community outweigh the disadvantages Cadia supports local community groups and organisations



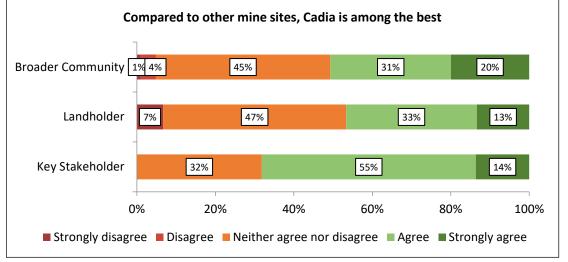
The above statements have collectively informed the development of a SLTO indicator.



 The majority of all consulted stakeholders felt that Cadia has an excellent reputation although landholders were less likely to agree

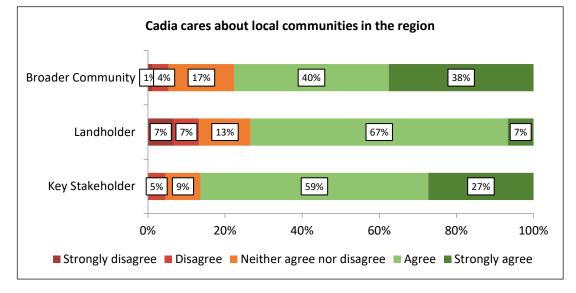


 Most respondents agreed that compared to other mine sites that Cadia is among the best





 The majority of those consulted agreed that Cadia cares about local communities

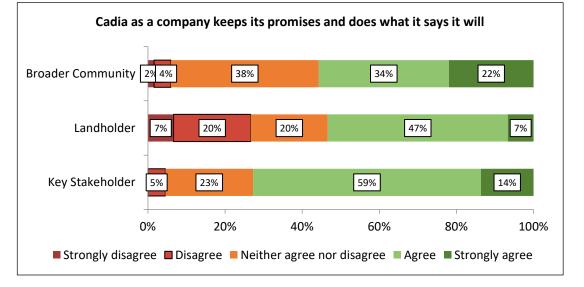


 Overall, all stakeholders feel that Cadia will keep its promises and do what it says it will, however, neighbouring landholders were less confident

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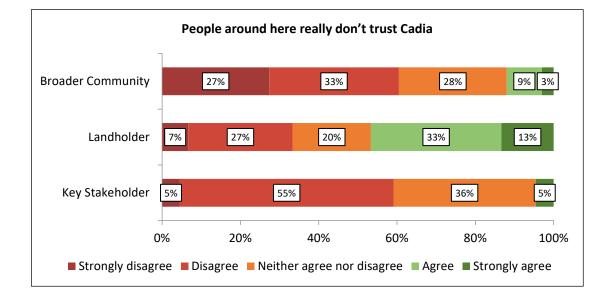
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 Over 60% of the Broader Community and Key Stakeholders do have trust in Cadia

(Disagree/Strongly Disagreeing with this statement)

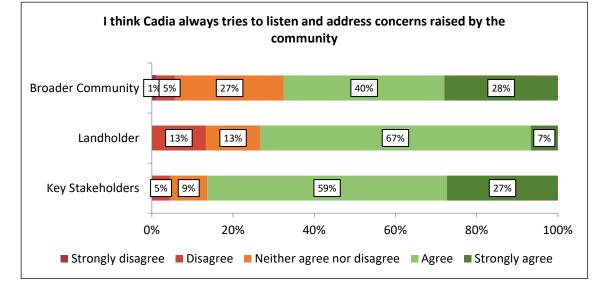


 There was a general belief that Cadia always tries to listen and address concerns raised by the community

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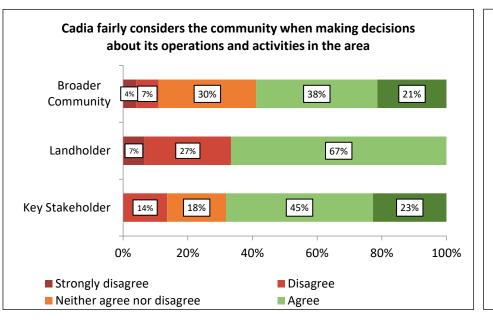
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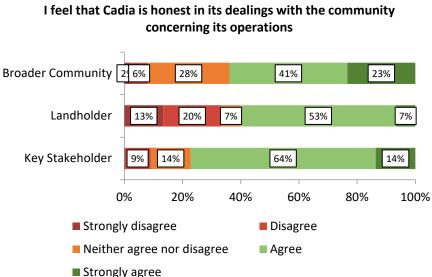


Trust	2010	2016	2020
Cadia is a good neighbour	3.42	3.91	3.89
Cadia is open and honest about its activities and plans	2.96	3.6	3.57



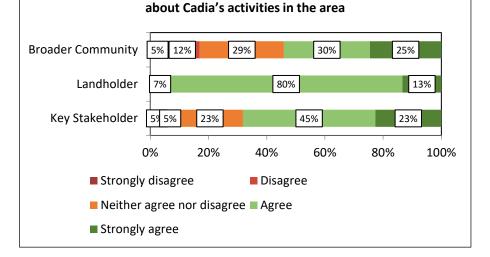
Procedural Justice and Fairness





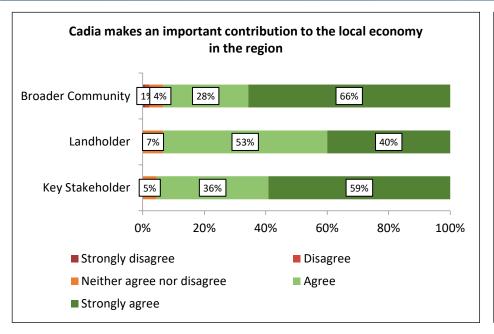
 While neighbouring landholders largely agreed that they had ample opportunity to present their views to Cadia, one-third felt that Cadia doesn't fairly consider their perspectives when making decisions (34%), nor felt that Cadia is honest with the community (33%)

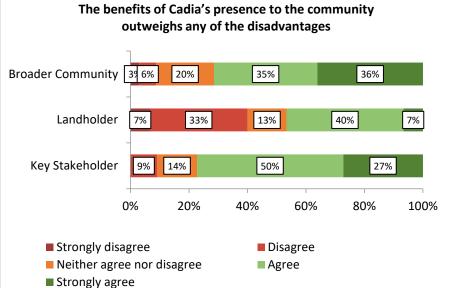


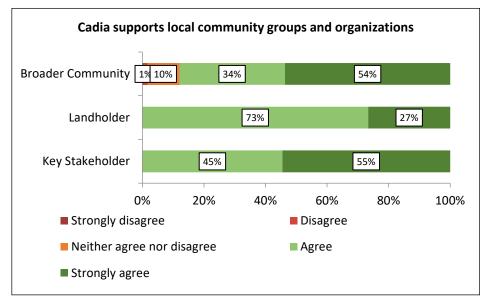


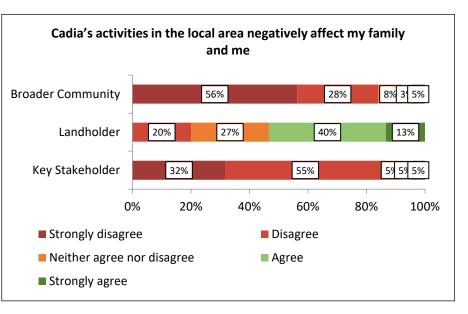
I feel that I have ample opportunity to present my views

Community Benefit provided by Cadia







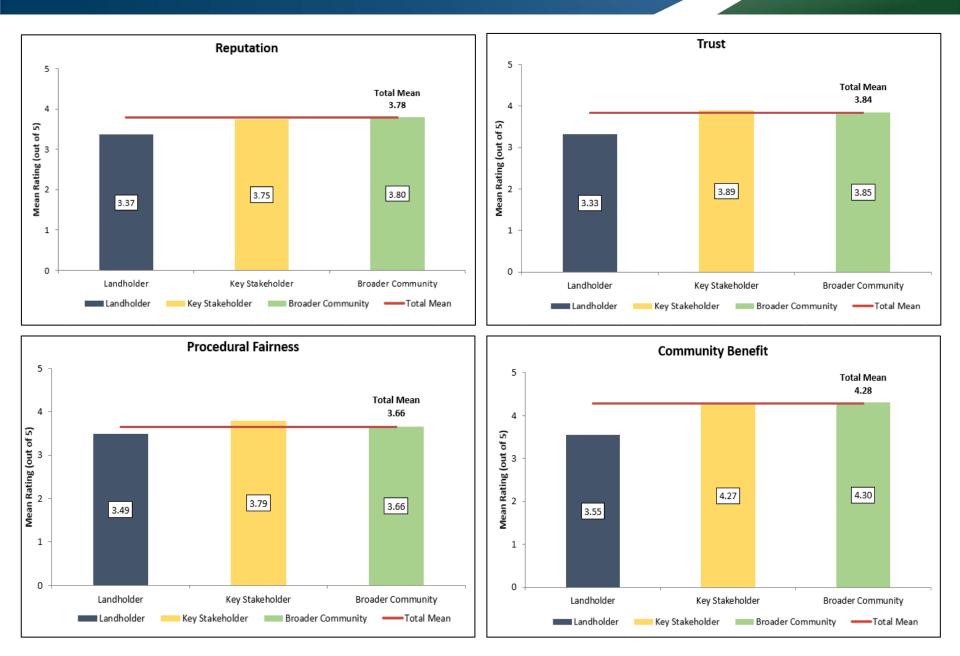


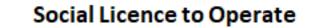
Community benefit	2010	2016	2020
Cadia makes a worthwhile contribution to the Cadia district	3.83	4.08	4.46

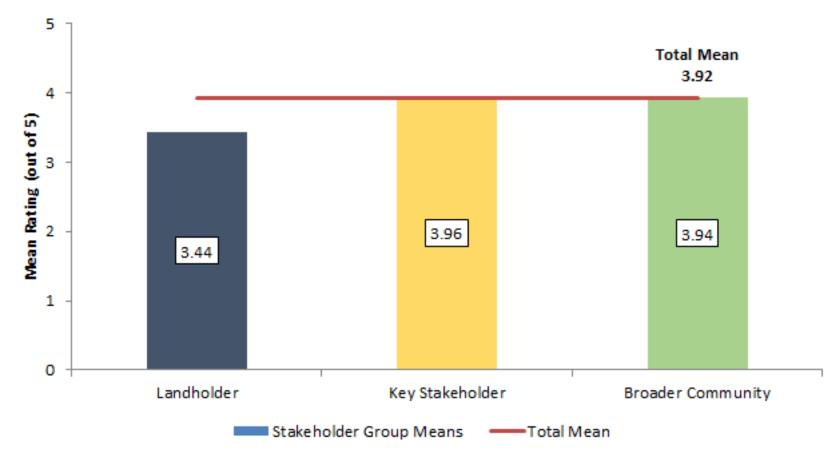


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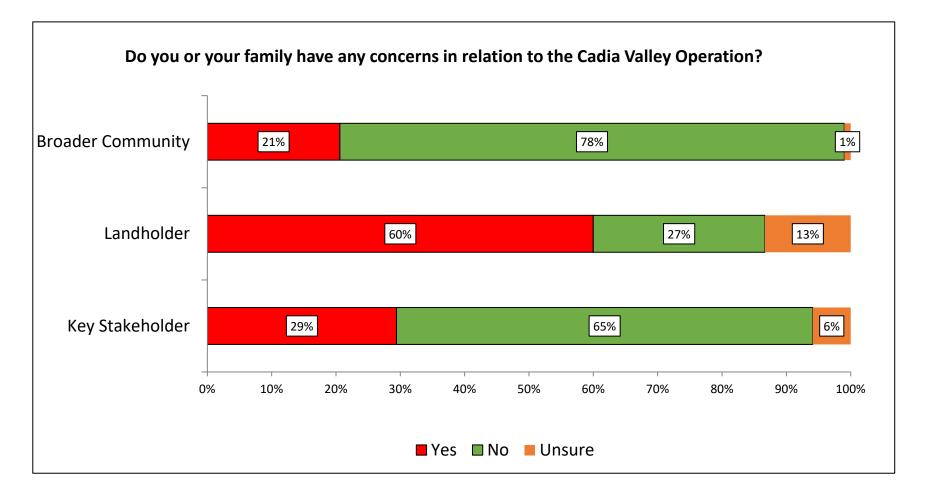
While Cadia had reasonable reputation, trust, procedural fairness & community benefit scores, neighbouring landholders reported lower levels across all...







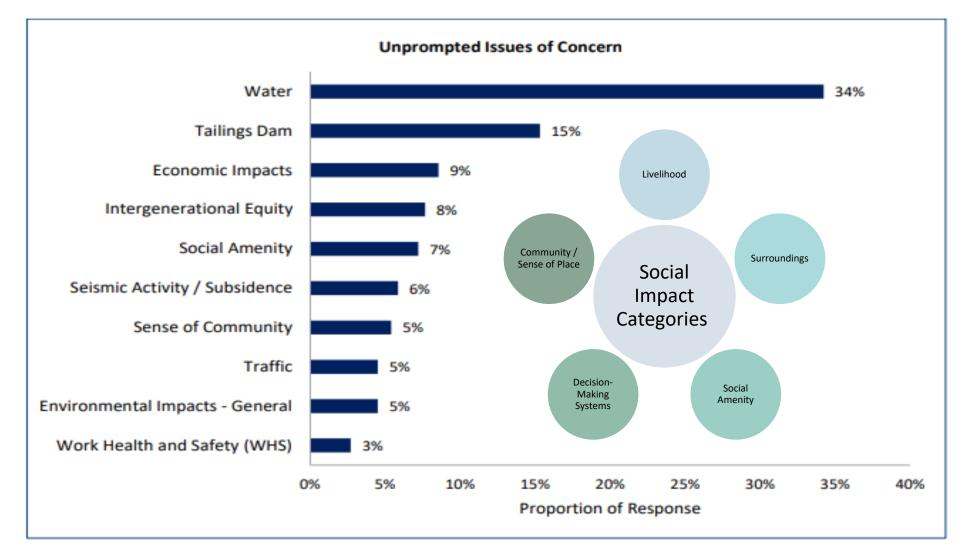








Social and Economic Issues of Concern and SIA Categories







Impacts of Greatest Concern

Scarcity of water and long-term water security

- Equitable distribution of water
- Education regarding water source
- Protection of private bore supply

Tailings Storage Facility

- Reduce dust
- Additional reinforcement measures

"If the mine is using local water, the effect on local water sources for residents and agriculture becomes more restricted."

"I really don't think that Cadia gets the information out as well as they could, as to how Cadia get that water."

"Dust from the Northern Tailing dam is an issue for people living up there. The wind just blows it straight off the surface."

"Polymer hydro mulch applied only lasts for a short period, it's a band-aid solution, they are taking action, but it is incredibly slow and tedious and only lasts a month. They had a third-party contractor arrive on site but it was meant to be June last year, so 12 months to get this sorted "





Intergenerational Equity

- Rehabilitation
- Competing Land Use

Social Amenity

- Visual impacts
- Dust

Seismic Activity / Subsidence

- Sink holes
- Property damage

Sense of Community

- Competing demand for accommodation
- High costs of living / wage disparity

Traffic Safety

- Speeding on rural roads
- Driver behaviour
- (Reduced impact since 2016)

"Mining takes over farming industry. I know a number of farmers out around the Cadia area who are in discussion about selling their farms."



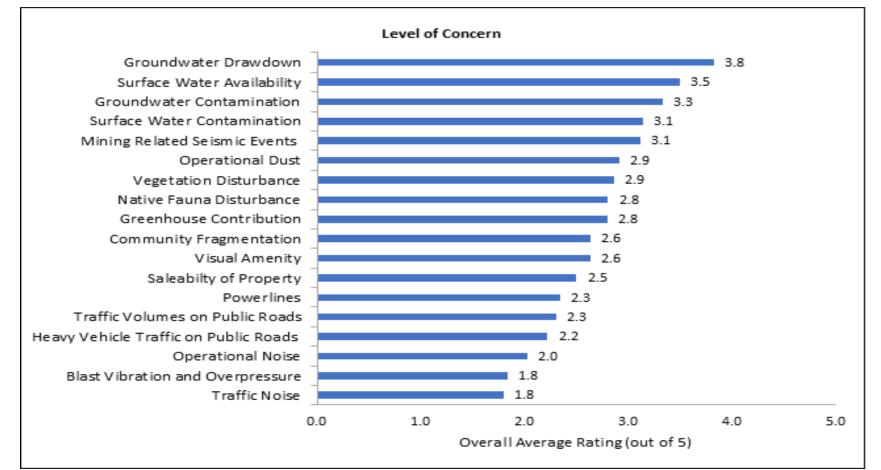


Issue / Impact	Stakeholder Comment
Water	 Underground water and water quality. Their activities are effecting groundwater. Without ground water my business in farming is nonexistent. In drought times, Cadia is guaranteed water volume regardless of whether there is enough for the local populace.
Tailings Storage Facility	 Fear of the tailings dam collapsing again. They keep building the walls for extra storage, but what happens when these fail like last time? Lack of operations is causing significant impact to the community in generating dust Dust - It comes off the tailings dam, you can see it coming off the dam.
Economic Impacts	 When the mine closes it will mean economic loss for the community. When mining is booming, they employee locals. When it shuts down, our locals will not have their jobs. Financially I don't know whether it's a benefit to Australia. Do most of the profits go overseas? I don't want profits going out of Australia.
Intergenerational Equity	 Mining land taking the prime agricultural land and not managing the land creating noxious weed issues for generations. Concerned about where the mine is going into the future. We've got another generation coming up and need more land in the community and we are not sure that they even know where they're headed in next 5-10 years I'm not sure if the remediation does bring the site back to the same standard that the site was prior to mining.
Social Amenity	 Approval on southern and northern walls, there is a lift height of 40 metres - we won't be able to see Canobolas - the aesthetic screen that will occur for some is not great. They have obstructed my view. We are sitting on a hill. It was absolutely beautiful, now I am embarrassed when people come over and ask what that building is that is blocking my view.
Seismic Activity / Subsidence	 The prevalence of the earth tremors and we do not know if or when they are caused by the mining, but they have been more frequent since the Cadia underground operations has expanded. We've had movement in our house, and it opens cracks and stuff. It's been when earthquakes and the epicentres are close to the mine site.

What we heard...

Issue / Impact	Stakeholder Comment
Sense of Community	 When they go through heavy construction phases, we get large influxes of employees and creates pressure on residential rents and tourist beds. It increases the rents for houses and low wage earners would find it hard to get social housing. The mine also has lots of people they fly in and fly out. They don't do anything in the community, not contributing or a part of the community
Environmental Impacts - General	 They should leave the ground alone; nature is best left undamaged. It is going to leave a scar on the countryside. Cadia puts a lot of money into the economy but not in comparison to what they take away from our resources.
Traffic	 Particularly heavy vehicle traffic; Dangerous for families and kids. I live on one of those local rural roads and there are no dividing lanes and the traffic is often moving faster than the speed limits. Speeding and littering outside their vehicles
Work Health and Safety (WHS)	 I do not think that they have adequate safety procedures. When there have been problems, I do not think they rectify it so it does not happen again. Safety for the workers, there's been a couple of accidents out there. It's people's lives.
Decision-Making Systems	 In the past they looked after locals a bit more and were more in touch with what might affect us. They could have been more forthcoming about the tailings dam failure of the wall and the resulting dust problem this generated. Too little information released. I've lost some confidence in them in regard to the potential for them putting in a solar farm next door to us. I think it's more to appease their shareholders/customers, then something they'd like to focus on.

 Matched Unprompted concerns – Water, Dust and Intergenerational Equity







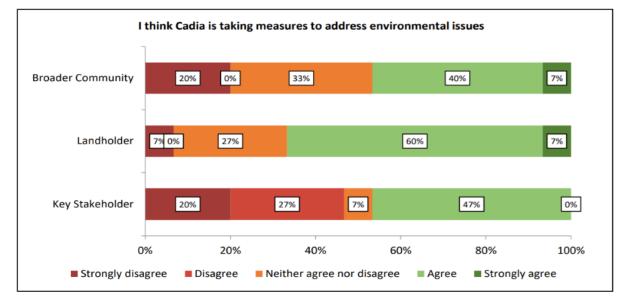
	2010	2016	2020
1.	Traffic Volumes on Public Roads	Traffic Volumes on Public Roads	Groundwater Drawdown
2.	Heavy Vehicle Traffic on Public Roads	Heavy Vehicle Traffic on Public Roads	Surface Water Availability
3.	Saleability of Property	Saleability of Property	Groundwater Contamination
4.	Groundwater Drawdown	Groundwater Drawdown	Surface Water Contamination
5.	Community Fragmentation	Traffic Noise	Mining Related Seismic Events





Environmental Performance

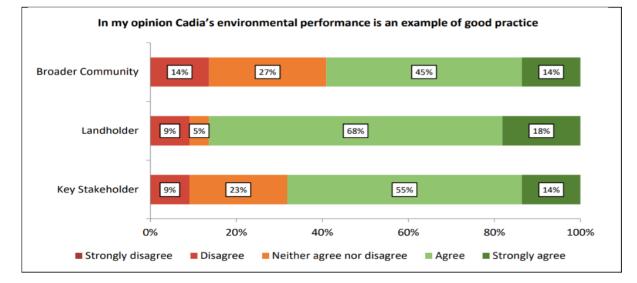
 Most stakeholders felt that Cadia's environmental performance to date has been reasonably good, and that Cadia is taking measures to address environmental issues



 Stakeholders also believe that Cadia's environmental performance is an example of good practice.

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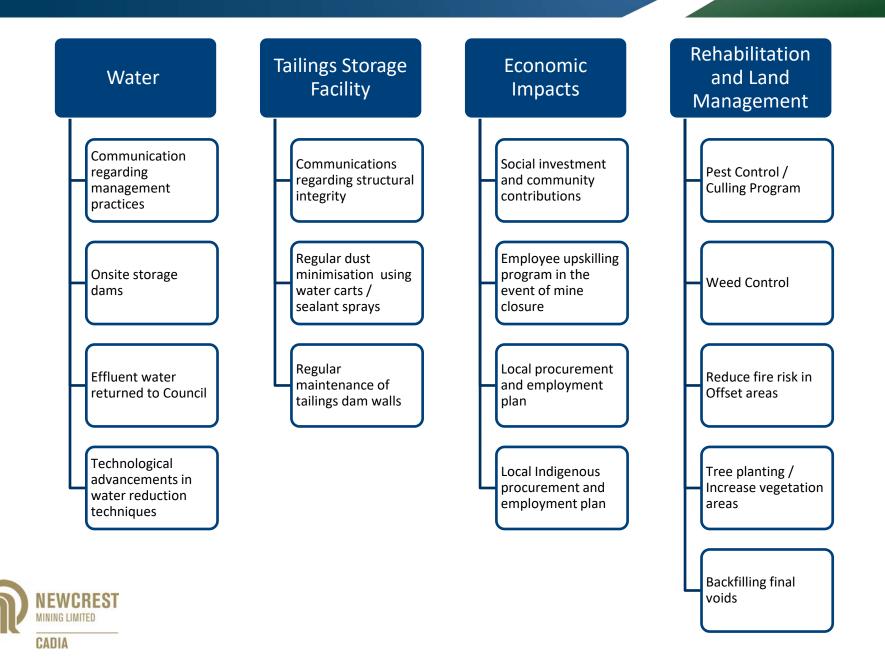


Environmental performance	2010	2016	2020
Cadia has a good environmental track record	3.11	3.62	3.35
Cadia does sufficient monitoring of its environmental impacts	3.10	3.68	3.81



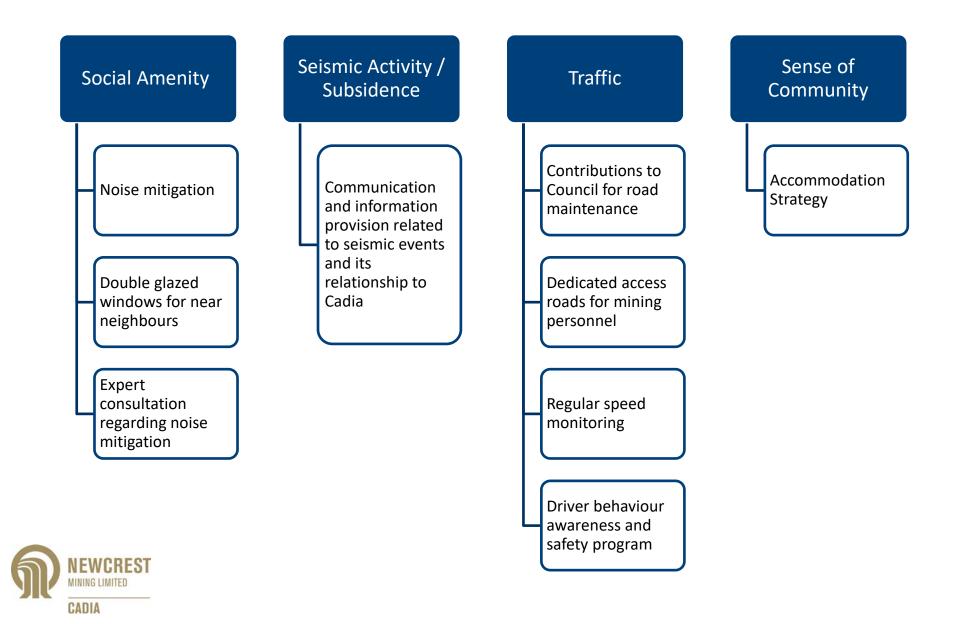
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Community Identified Management Strategies



Community Identified Management Strategies -Continued

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 Key stakeholders and landholders noted a preference for email communications and/or phone calls

 Updates via Social Media and Local Newspapers was strongly preferred by the wider community



Stakeholder Group	Engagement Method	Preferred (Top 3)
• • •	Email	30%
	Phone Calls	26%
Key stakeholders	Face to Face Meetings	17%
	Phone Calls	18%
Neighbouring landholders	Email	20%
	Community Meetings/BBQs	14%
	Local Newspaper	24%
Broader community residents	Social Media	17%
	Local TV News	17%

Information of most interest to landholders included:

- Quarterly communications regarding progress updates and the future plans of Cadia
- How Cadia are managing their environmental impacts





- In appreciation of the time taken to participate in the socio-economic survey, Cadia has pledged to donate a **combined total of \$20,000** to nominated preferences.
- Recipients are:

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Questions?



