

Part of the Rio Tinto Group



INTRODUCTION

Bell Bay Aluminium (BBA), located on the mouth of the Tamar River, approximately 45 kilometres north of the City of Launceston in Northern Tasmania and approximately five kilometres from George Town has a defining role in both local and national history as being the first aluminium smelter in the Southern Hemisphere. Operating as the Australia Aluminium Production Commission and formed under the Australian Aluminium Act in 1944, the smelter has played a significant role in the Northern Tasmanian economy. Benefits have flowed both directly and indirectly through jobs, supply purchases, and investment as well as less tangible forms such as the air of commercial confidence and community optimism generated to expose and nurture the enterprising spirit and innovation of many Tasmanian businesses.

In 2019, the smelter's annual output was approximately 190,000 tonnes of which more than 80% was exported to international markets.

BBA is the largest commercial electricity consumer in Tasmania consuming approximately 355 megawatts. Electricity is the key input into the production of aluminium, accounting for nearly 40% of the cost of converting alumina to aluminium. Electricity price is a key determinant in the commercial viability of any smelter. BBA has a take or pay power contract with Hydro Tasmania to 2025 and accounts for more than a quarter of Tasmania's electricity demand during the day and up to 40% overnight.

At 65 years of age, BBA is Australia's oldest and smallest smelter. Yet despite this, it has continued to innovate its operations, pushing to the limit of its technical capacity and technical improvements in aluminium smelting particularly over the past 20 years.

The global aluminium industry has undergone major structural change in recent years and significant uncertainty remains in Aluminium markets post COVID-19. In a highly competitive global industry, BBA must be able to produce high quality low cost aluminium to access

international markets and absorb the freight differential for future continued operations.

There is a fine balance between smelter life and actively working in partnership with key external stakeholders to work towards a positive legacy for Northern Tasmania and in particular for the community of George Town for a time when the smelter is no longer operational.

In 2020, Rio Tinto and BBA engaged consultants to undertake a Social and Economic Baseline and Impact Assessment (SEIA) study. Based on 2019 data, the study aims to assess the social and economic contribution the smelter operation makes to Tasmania.

This document summarises the SEIA undertaken in 2020 and the findings over the study period.

It will assist in actively guiding business planning and operational decision making, as well as ongoing discussions with key external stakeholders and community on how we work in partnership and support initiatives that will create a progressive, prosperous and proud future for the region and in particular the George Town community.







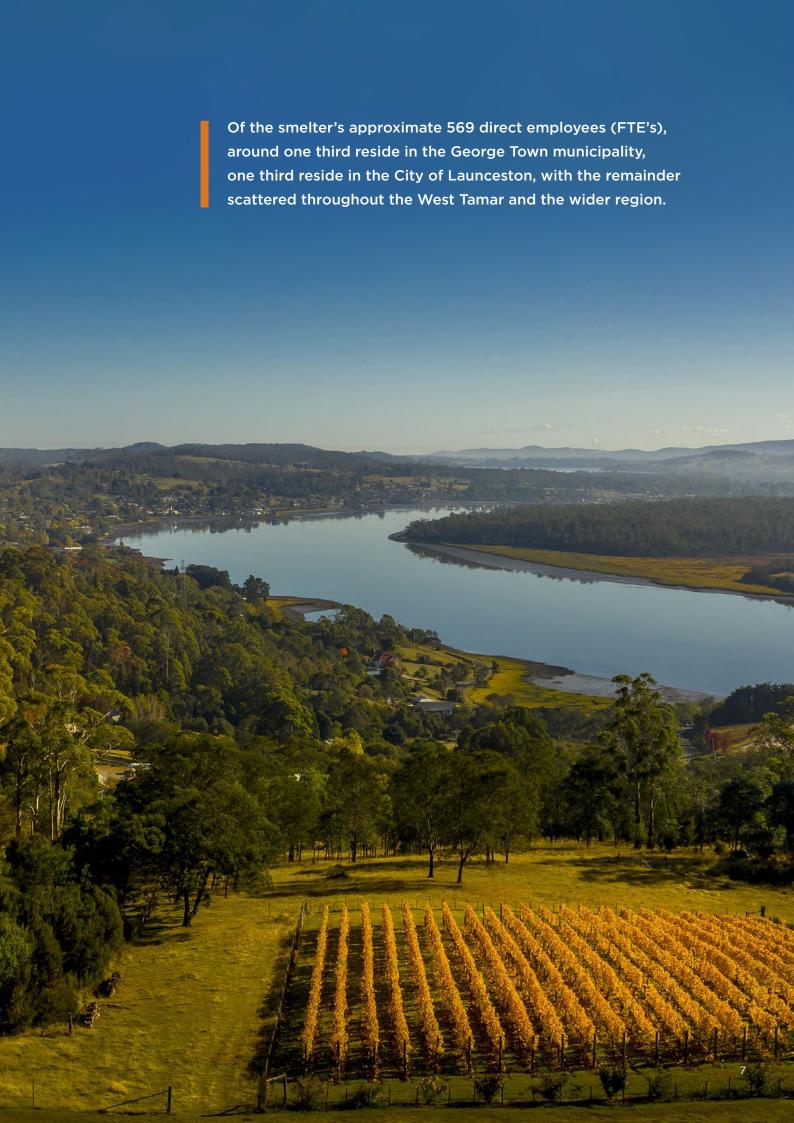
DEMOGRAPHIC

The study area has taken into consideration BBA's social and economic area of influence supporting the smelter's operation, West Tamar, George Town and Launceston Local Government Areas but also the broader Northern Tasmania Region and State in recognition of the flow-on effects of people living and working in the wider region.

LOCAL GOVERNMENT AREA (LGA)	GEORGE TOWN LGA	LAUNCESTON LGA	WEST TAMAR LGA	NORTHERN TASMANIA REGION**	TASMANIA
Population 2019	6,968	68,007	24,070	146,258	537,012
Population forecast % to 2042	-4%	+5%	+14%	-	+9%
Median Age	46	37	45	43	42
Indigenous population	4.4%	3.5%	2.4%	3.3%	4.6%
Unemployment rate	12.4%	8.3%	6.4%	7.6%	7.0%
Youth disengagement rate (15-24 years)	24.6%	12.7%	10.3%	12.7%	12.2%
Educational attainment (Yr 12 or equivalent)	26.1%	39.1%	37.9%	35.2%	38.3%
Proportion of vocational qualifications	22.2%	20.3%	23.3%	21.6%	21.3%
Proportion of non-school qualifications (eg Bachelor degrees or diplomas)	12.9%	23.1%	25.3%	21.2%	23.7%
Housing tenure:					
Owned or mortgaged	61.5%	58.6%	74.6%	64.8%	65.9%
Renting (private and Social)	27.8%	31.9%	18.4%	26.7%	26.3%
Household income (median weekly)	\$854	\$1,042	\$1,139	\$1,015	\$1,100
SEIFA* relative advantage and disadvantage	848 (lowest LGA in Tasmania)	926	976	931.2	942.6
Key industries of employment:	Manufacturing (19%) Health care and social	Health care and social assistance (16.5%)	Health care and social assistance (14.8%)	Health care and social assistance (14.7%)	
	assistance (11.5%)	Retail trade (12.3%)	Retail trade (10.9%)	Retail trade (11.5%)	
	Retail trade (10.9%)	Education & Training (10.4%)	Education & Training (10.7%)	Education & Training (9.2%)	
Employment in manufacturing: 2006	25.7%	10.5%	11.2%	11.2%	
2016	19.0%	6.7%	7.3%	7.7%	

* SEIFA Ranking

The Socio-Economic Indexes for Areas (SEIFA) advantage and disadvantage index score is derived from attributes that reflect disadvantage such as low income, low educational attainment, high unemployment, and jobs in relatively unskilled occupations. A lower score indicates more disadvantage, with a higher score meaning less disadvantage based on these attributes in the community profile.



ECONOMIC IMPACT

Northern Tasmania is a diversified economy with a wide variety of significant industry sectors including competitive manufacturing (chemicals, smelting, metal fabrication, wood chipping) which currently accounts for a quarter of the region's exports.

The Northern Tasmania Development Corporation (NTDC) prepared a Regional Economic Development Strategy in 2019 that focuses on strategic priorities for the region to 2031.



The strategy also identifies BBA as important to the renewable energy sector and an existing key anchor tenant in the Bell Bay Advanced Manufacturing Zone. NTDC's future vision of a diverse and internationally connected economy with growing productivity supports BBA's strategy to invest in local and regional economic and community development partnerships that target sustainable outcomes and underpin future growth and prosperity for the region.

While manufacturing; mining; electricity, gas, water and waste services experienced a sharp decline in the 2018 / 2019 period, the manufacturing sector remains a major contributor to the Tasmanian economy and during that period was Tasmania's second largest industry in terms of output.

The economic baseline provides an assessment of the economic impacts from current operations at BBA based on 2019 calendar year data including employment levels, wages and salaries, goods and services purchased and annual revenue. This primary data has been used to calculate the current levels of economic contribution to Tasmania and Northern Tasmania using input-output modelling*.

This SEIA illustrates the significant impact of BBA's operation on Tasmania's economy as measured through output, employment, wages and value-added contributions.

Direct, indirect and flow on impacts* directly attributable to BBA activity in 2019:

IMPACTS	OUTPUT (\$M)	EMPLOYMENT (FTE)	WAGES AND SALARIES (\$M)	VALUE-ADDED (\$M)
DIRECT BBA	\$456	569	\$55	\$69
Supply-chain effect	\$177	421	\$35	\$70
Consumption effect (of employees)	\$103	308	\$23	\$55
TOTAL	\$736	1,299	\$113	\$194
Proportion of Northern Tasmania (GRP)	\$736 3.4%	1,299 1.6%	\$113 2.0%	\$194 1.6%

^{*} Economic impacts for the SEIA are based on the use of an input/output (IO) modelling methodology. IO assessments identify inter-industry relationships of industries within an economy, identifying which purchases from one industry go into producing an output from another industry. IO modelling can be used to assess the economic impact of an industry on the overall economy and how much the economy relies on the identified industry.

Output: the recorded value of products and services produced annually by an economic activity (revenue).

Employment: the number of employed people supported by an economic activity, calculated in terms of Full -Time Equivalent FTE positions (=35 hours/week)

Wages and Salaries: estimate of wages and salaries supported by an economic activity, calculated based on the share of output value going to wages and salaries for each industry impacted.

Value-add: the share of output from economic activity (profit, wages, net taxes) after deducting the cost of goods and services paid to other businesses as part of the production process.

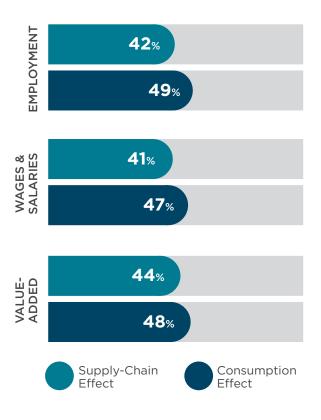
ECONOMY DEPENDENCE

BBA's economic impact amounts to 1.1% of overall output in the state of Tasmania. BBA's activity had a more modest proportional impact on Tasmania's employment and GSP, both at 0.6%.

BBA's activity supported 1.6% of the Northern Tasmania region's employment. It also contributed to 2.0% of wages and salaries in Northern Tasmania and 1.6% of GRP for Northern Tasmania.

Between 40% and 50% of supply-chain and consumption flow-on impacts from BBA to Tasmania are retained in the Northern Tasmania region.

Share of Tasmanian flow on impacts retained in Northern Tasmania



FLOW-ON IMPACTS BY INDUSTRY FROM BBA OPERATIONS

The six main industries most impacted in value-added, wages and salaries and employment through flow-on activity from BBA are:

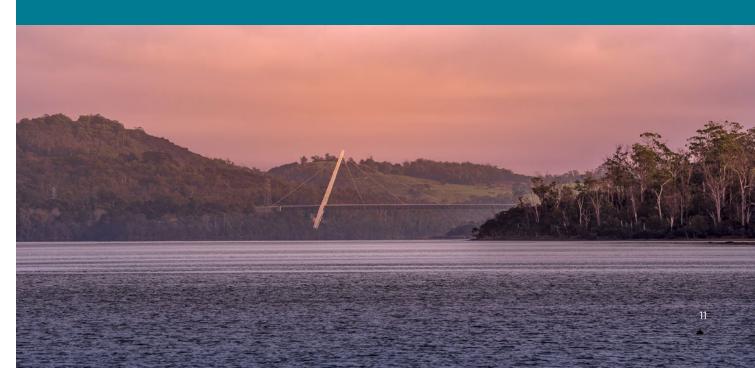


FLOW-ON INDUSTRY DEPENDENCE

The eight industries with the highest proportion of activity supported by flow-on activity from BBA are shown in the chart below, each with over 0.5% of Tasmanian jobs dependent on BBA's operations.

These are not the same as those industries most impacted by BBA. Notably manufacturing, construction and retail trade receive a high impact from supply chain and consumption effects but do not have high dependence on BBA's operation directly.





CONSULTATION - WHAT WE HEARD

An important input into the SEIA involved understanding the perspectives of key stakeholders. Thank you to the businesses, employees, key stakeholders and partners who participated and provided valuable feedback.

Due to COVID-19 restrictions, consultation sessions were managed by telephone and video conferencing.

37 STAKEHOLDERS INTERVIEWED

15 X ONE-ON-ONE INTERVIEWS

8 X FOCUS GROUP SESSIONS (2-6 PARTICIPANTS PER GROUP)

BUSINESS SURVEYS WITH 30 BBA SUPPLIERS

Federal, State and Local
Government elected representatives

State and Local Government agencies

Key community organisations in George Town, West Tamar and Launceston

Industry bodies and businesses in George Town, West Tamar and Launceston

BBA employees from procurement, environment, energy and power supply, human resources and operations



HERE IS A SUMMARY OF WHAT WE HEARD ACROSS FIVE KEY THEMES:



COMMUNITY CONTRIBUTION

BBA is recognised as a major contributor through its community programs and initiatives such as the George Town Mountain Bike Trail project, Business Action Learning Tasmania and the Bell Bay Advanced Manufacturing Zone. It is also seen as a community leader through its representation on various industry and community groups.

BBA is recognised for the direct and indirect employment opportunities available at the smelter and the significant multiplier benefits provided through the supply chain.

BBA is recognised for its strong focus in recent years on helping local businesses to improve their safety practices and diversify their customer base.

BBA has contributed to a higher level of provision of community facilities and services for the size of the local population in the George Town municipality.

BBA generates significant demand for local health and education services.

BBA has an important role in maintaining the integrity of power supply for Tasmania.

Opportunity to increase the profile of some community, social and economic development initiatives undertaken by BBA which are not broadly recognised in the local community.

There is very real concern about what would happen in the event BBA ceased operation. The direct and indirect flow-on impacts particularly to the supply chain and local employment were frequently cited as likely significant impacts if this were to occur. Additionally, the broader State implications, specifically around loss of revenue and ability to pivot were also strong themes, particularly with elected representatives.

BBA plays an important, long-standing role within the Northern Tasmanian community, as an employer foremost, but also a key contributor to local sense of community and identity. BBA's enduring relationship and commitment with the communities of George Town, West Tamar and Launceston were recognised by all stakeholders.



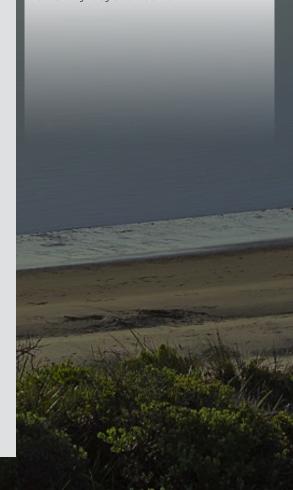
ECONOMIC DRIVERS

The Northern Tasmanian community relies upon a small selection of industries for both employment and revenue generation.

BBA jobs are highly prized by the community and there is a strong sense of pride associated with working at the smelter.

There are aspirations to diversify the economy, particularly capitalising on tourism opportunities in the region, to ensure economic prosperity and retain younger people and families.

At the same time, some concerns were expressed about having 'too many eggs in one basket' and the need to diversify beyond tourism.







EMPLOYEE EXPERIENCE

It was recognised by employees, that the total number of employees at BBA is less than it used to be, due to changes in the operation such as efficiencies.

The commute for employees has increased as people have moved further away after upgrades to the East Tamar Highway. This means that employees are drawn from a much broader area than in the past.

Employees stated they value their employment at BBA and 'feel supported' by the company.

Significant personal benefits associated with employment at BBA were identified such as financial security, health support (e.g. private health insurance), training/career advancement opportunities and exposure to different types of experience within the business.



LOCAL COMMUNITIES

George Town is heavily dependent on major industry such as BBA and Liberty Bell Bay for employment, alongside agriculture, wine production and tourism.

The George Town community holds traditional values including strong family connections, given many have lived in the area for generations.

The George Town community is described as:

- A small town with big aspirations to diversify and move beyond the low SEIFA rankings and lower educational attainment.
- A strong and involved community committed to making positive change.





OPERATIONAL IMPACTS

While stakeholders noted that BBA has an overall positive impact on local communities, a number of negative impacts typically associated with environmental management of industrial operations were highlighted including:

- alumina dust and emissions
- waste management
- light and noise
- greenhouse gas profile from nonhydro energy use.

Business survey respondents noted that while BBA has high workplace health and safety standards, a downside of this is significant overhead and compliance costs incurred by local suppliers and contractors.

A number of respondents to the business survey stated that tender arrangements can pose difficulties for small and medium businesses to plan for their future.

The consultation identified opportunities around cultural heritage such as contributing to cultural tourism in the Tamar Valley region.







BUSINESS SURVEYS

Surveys conducted with 30 local tier one supply-chain businesses, were aimed at understanding the level of dependency on BBA for revenue generation, the level of dependency on BBA as a customer and the level to which transaction volume, revenue and suppliers were dependent on BBA.

The respondents were largely business owners or people employed in senior positions and were from a range of blue collar and white-collar industries including civil construction, electrical, engineering fabrication, retail, recruitment and labour hire. The size of business varied with almost half (46%) reporting that they employed 11-40 employees. of respondents identified a positive Impact on local communities of businesses were somewhat dependent on BBA for **BUSINESS TRANSACTIONS** of businesses relied on BBA for over 50% of business revenue of businesses stated that (\$value) the level of dependency of local businesses and local community on BBA was major or significant supply businesses provide goods and services to a further 10 to 50 customers of businesses see their relationship with BBA includes engineering and services/products, construction **STRENGTHENING** materials & supplies, paper & IN THE FUTURE printing goods businesses stated of businesses stated of businesses their reliance on BBA stated their reliance their reliance on BBA has over the last 10 years on BBA has **INCREASED** REMAINED LESSENED

THE SAME

BBA'S ROLE IN FUTURE ECONOMIC AND COMMUNITY DEVELOPMENT

BBA's work in this space is focused on strategic initiatives in partnership with community, industry and Government such as the Bell Bay Advanced Manufacturing Zone, the George Town Future Impact Group and the George Town Mountain Bike Trails project.

The smelter is a prominent and active community leader. Representation and involvement across a broad range of organisational groups connects the community directly to BBA's employees and thought leadership. Stakeholders suggested that BBA is a crucial facilitator in driving development, industry, educational and community initiatives to improve the economic and social viability of the George Town Municipality in particular. Many of the stakeholders interviewed for the SEIA recognised the smelter's involvement in the George Town Mountain Bike Trail project which will introduce tourism opportunities to the region, to the George Town Future Impact Group collective impact initiative and the development of Bell Bay Advanced Manufacturing Zone that will encourage diversification of industry sectors and employment opportunities in the region. 20

BELL BAY ADVANCED MANUFACTURING ZONE (BBAMZ)

Established in 2015, chaired and led by BBA since inception, BBAMZ transitioned out of BBA's George Town based community consultative committee that identified the need for an industry based group to support future economic growth and business diversification in the George Town Municipality.

BBAMZ, now a not for profit company in its own right is a catalyst for accelerated manufacturing and economic growth in the region. BBAMZ is working with all levels of government and the community to support growth, investment and business diversification in the Bell Bay and Tamar Valley regions.

LAND HOLDINGS

The smelter is a significant private landowner in the Tamar Valley owning freehold title between George Town and East Arm that is largely zoned heavy industrial and parts of which are in demand for development.

BBA has over the past two years, sold freehold land within the BBAMZ to attract new business and support the capability of local businesses in the region.

Land and associated facilities are also utilised by a range of community groups under lease at a minimal rent including the George Town Golf Club, George Town Black Powder and Pistol club and the Launceston Junior Motorcycle Club. Lauriston Park, located on the East Tamar Highway is owned and maintained by the smelter as a recreational area for community use and will be utilised for one of two trail heads for the George Town Mountain Bike trails.



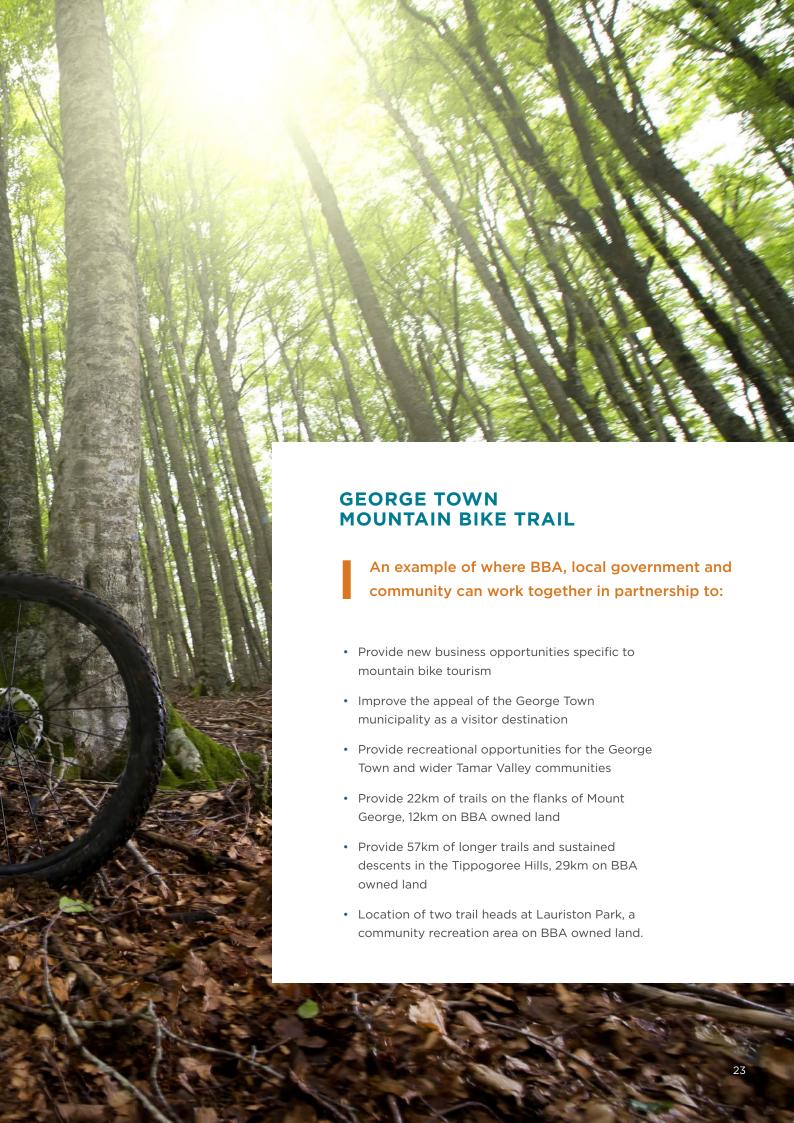
GEORGE TOWN FUTURE IMPACT GROUP (GTFIG)

In 2016 over 70 community representatives from across the George Town municipality, including business, service providers, not-for-profits, government, and volunteer groups gathered for a 'Your Voice. Your Choice. Our future' workshop.

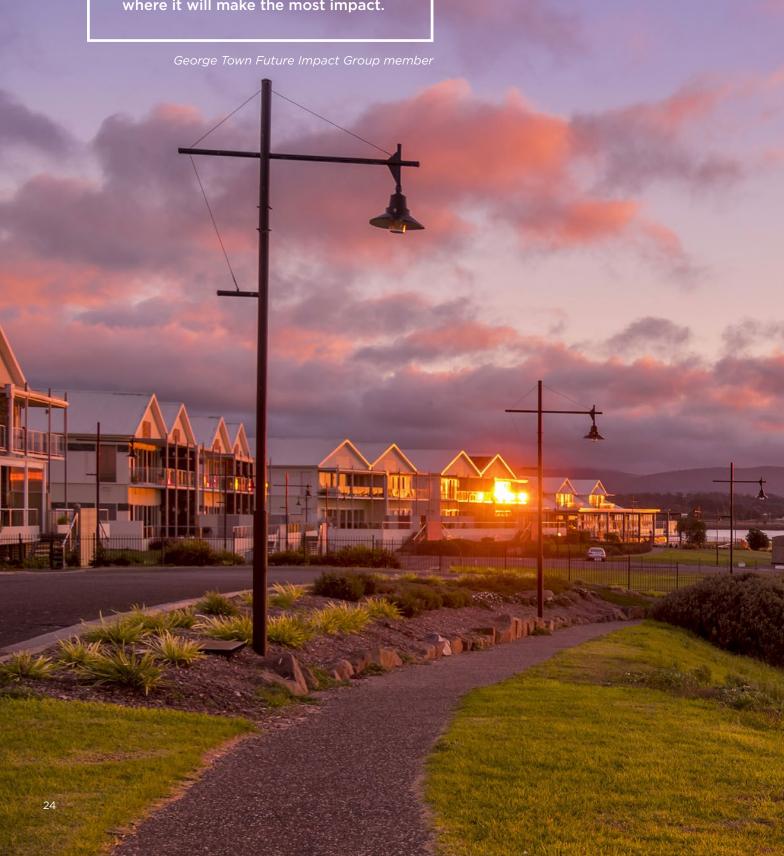
A Future Impact Group, emerged from the workshop to harness all these community voices into a Collective Impact Initiative. With funding, administrative and in kind support from multiple stakeholders, including the Tasmanian State Government, George Town Council, Beacon Foundation, BBA and Liberty Bell Bay, the GTFIG is driving its Collective Impact Vision for the George Town Municipality.

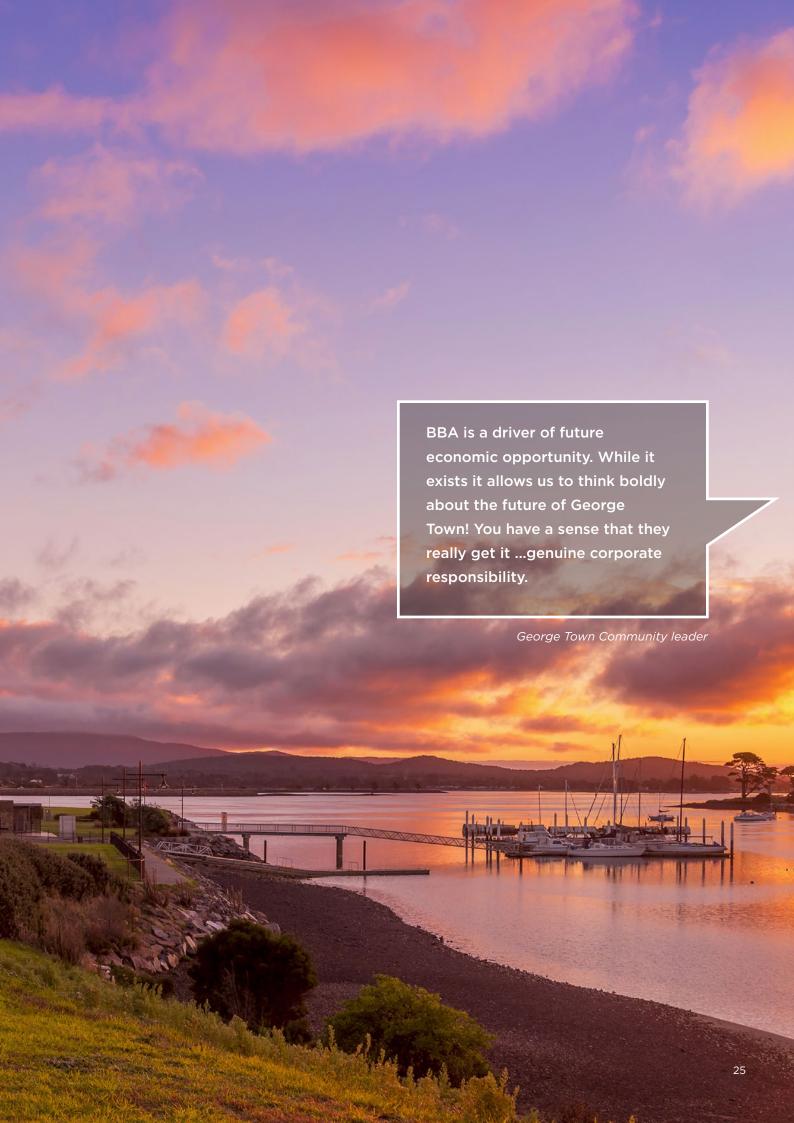
The GTFIG is showing George Town that it can do things differently and that an all-inclusive, whole of-community movement is creating pathways towards a better life and improved outcomes for the people of the George Town Municipality.











SOCIAL IMPACTS AND BENEFITS

This SEIA provides a review of the social impacts and benefits of Bell Bay Aluminium's operations in Northern Tasmania.

The assessment results show there are many social benefits to BBA's operations considered as significant or major.

Discussions with various targeted stakeholders during the engagement process highlighted that BBA has supported multigenerational employment opportunities and that employees have a strong connection with the smelter.

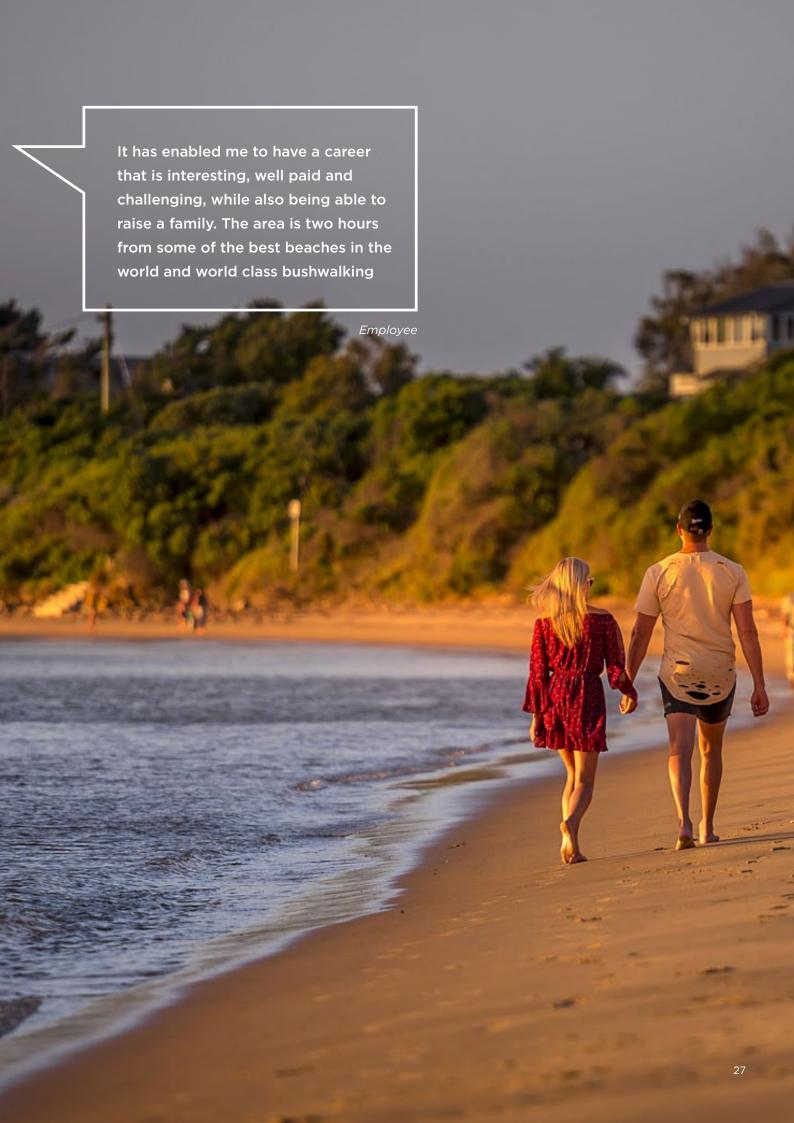
Stakeholder sentiment speaks to the strength of BBA's ties to, and connection with the local community, which is a consequence of its long history in the area and the ongoing benefits it provides to local people and families.

The benefits BBA provides assessed as significant and increasing in trend include:

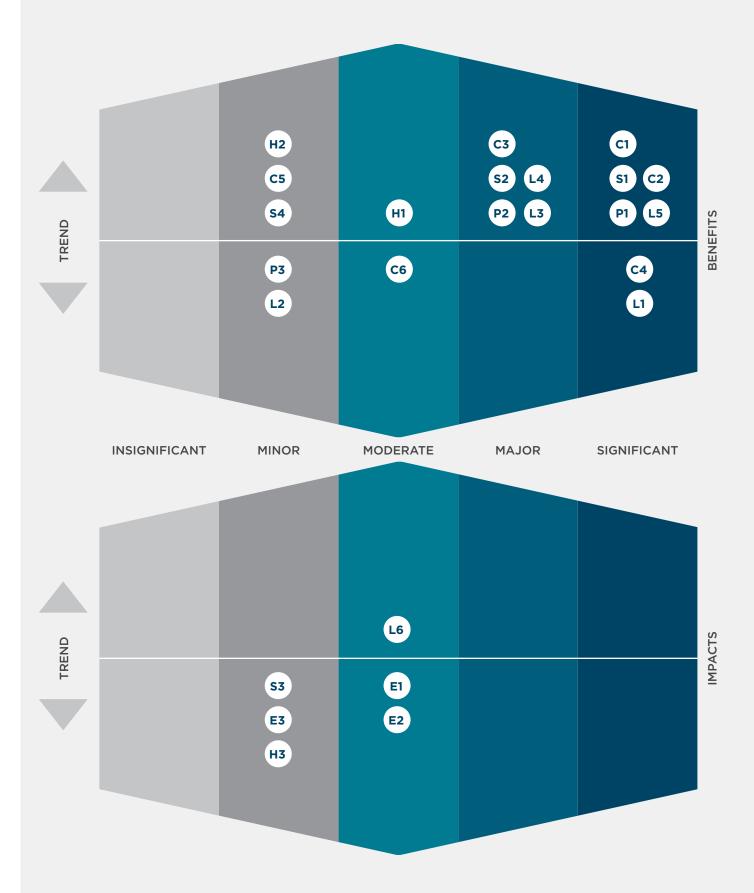
- Increased employment opportunities within the George Town community that has had the effect of lowering the unemployment rate by an estimated 6%.
- Longstanding contribution to local sense of identity particularly among George Town residents, and to a lesser extent, the surrounding communities within the Launceston LGA and West Tamar LGA.
- Contribution towards accessible and diverse range of medical and emergency services to support the George Town community.

- The benefit the smelter provides in terms of load shedding on local electricity demand to maintain power supply to the rest of the state in the event of issues across Basslink or bushfires in the state.
- Apprenticeship, graduate and vacation student programs, and training opportunities assist in addressing youth disengagement particularly within George Town and the Tamar Valley region.

Importantly, the social baseline analysis suggests that the local context differs substantially across the three local government areas of George Town, West Tamar and Launceston. It was found that employment and economic benefits have a greater impact in George Town due to the smaller population size of the community and the higher rate of unemployment and social challenges, particularly around youth disengagement. This has been identified by stakeholders as a significant challenge and concern and one that is likely to worsen under the effects of COVID-19 and in the event of major industry closing where closure is not strategically planned.



Key findings of the social impact assessment in themes and trends:



POPULATION & EMPLOYMENT PROFILE

- P1 Increased employment within the George Town community, which has had the effect of lowering the unemployment rate.
- P2 Increased employment and associated population growth across Northern Tasmania (569 employees and an estimated 1,300 additional population).
- P3 Employment with BBA may provide the benefit of avoiding some of the social issues associated with FIFO working arrangements (i.e. some employees report they would have to take up FIFO employment if employment at BBA was not available).

SENSE OF COMMUNITY & IDENTITY

- 51 Longstanding contribution to local sense of identity particularly among George Town residents, and to a lesser extent, the surrounding communities within the Launceston LGA and West Tamar LGA.
- **S2** Proactive and vested community leadership through involvement in community and industry initiatives, leading to increased social capital.
- **S3** Opportunity to improve representation of females in the workforce.
- 54 Existing Cultural Heritage management initiatives are indicative of BBAs commitment for ongoing consultation and co-management with local Tasmanian Aboriginal people and representative organisations.

COMMUNITY INFRASTRUCTURE

- C1 The benefit BBA provides in terms of load shedding on local electricity demand to maintain power supply to the rest of the state (examples include potlines can be turned off in the event of power supply issues across Basslink or in the event of a bushfire).
- C2 Contribution towards accessible and diverse range of medical and emergency services to support the community, particularly benefiting employees and the ageing population in George Town, Launceston and surrounding communities (examples include the hospital, ambulance and GP medical services at George Town).
- C3 Increased investment and in-kind contribution to recreational infrastructure and facilities to support tourism opportunities and recreational needs of local community.

- C4 BBA has facilitated investment in community infrastructure and services at George Town to support growing population needs over time, which has led to a comparatively higher level of infrastructure and service provision.
- **C5** Reduced profiling of BBA results in limited awareness of its community.
- **C6** Direct contributions to educational, sporting and cultural services through community grants.

LOCAL EMPLOYMENT, ECONOMIC EFFECTS & LIVELIHOODS

- **L1** BBA has created economic development and employment opportunities.
- **L2** Contributions to Tasmanian Gross State

 Product
- **L3** Financial security, health and wellbeing and sense of belonging benefits associated with employment and economic independence.
- **L4** BBA assists with training and business diversity to reduce dependency on BBA in the supply chain.
- L5 BBA apprenticeship, graduate and vacation student programs, and training opportunities assist in addressing youth disengagement within George Town and the broader Northern Tasmania region.
- L6 Growing community concern regarding possibility of worsening socio-economic disadvantage and future timing of smelter operations potentially ceasing.

ENVIRONMENTAL IMPACTS & NUISANCE

- E1 Impact of alumina dust, emissions and light on visual amenity and perception about health and environmental impacts from surrounding residents.
- **E2** Noise associated with the smelter operation (particularly impacts new tourism uses in the area).
- **E3** Production, storage and burial of hazardous waste on site.

HEALTH WELLBEING & SAFETY

- **H1** Provision of medical benefits and health care to employees.
- **H2** Sense of loyalty and pride in BBA employees.
- **H3** Work-related injuries.



OPPORTUNITIES AND FUTURE THINKING

This SEIA provided insights into factors and opportunities that may influence BBA's operations and the communities in which it operates into the future, such as environmental issues, cultural heritage, community, social and economic development opportunities and COVID-19 impacts.

SEIA research into the Tasmanian market indicated that manufacturing employment may decline due to the competitive nature of the global economy, as well as future trends indicating that in the short term aluminium export demands may decline.

The nature of COVID-19 impacts are not yet fully known, however, it is expected that the pandemic will cause some disruption to the aluminium smelter industry in Australia in the short to medium term, due to lower projected global aluminium consumption which in turn is likely to lead to lower aluminium prices, export earnings and potentially volumes. In the longer term, as with other industries, it is expected that the reliance on locally produced goods may increase due to the desire to be self-sustainable and increase reliability through unexpected changes in the market.

Economic and employment growth is a key focus for the communities of Northern Tasmania – an ambition that will prove challenging over the next few years (at least in the short term to 2021), especially within the context of the current COVID-19 pandemic. The desire to transition and diversify into new industries and encourage entrepreneurial endeavours highlighted in local policy documents and strategies was also identified through SEIA stakeholder engagement activities.

The last time work of this nature was undertaken was in 2010. Based on 2016 census data, this SEIA importantly includes current community and business perceptions of BBA's economic and social performance.

An essential part of the SEIA process has been the participation from internal and external stakeholders through interviews, focus groups and business surveys. BBA would like to extend sincere thanks to all those who participated directly in this engagement process.

The combination of valuable data and feedback from the SEIA will help inform operational decision-making and BBA's approach to working with the communities of George Town, West Tamar and Launceston. BBA will continue to work in collaboratively with those communities to develop and invest in strategic partnerships and initiatives that support social, cultural heritage and economic opportunities and benefits as well as address future challenges together.

Despite the highly challenging economic climate within which the smelter operates, it is clear from the SEIA that BBA continues to make a significant social and economic contribution to Tasmania and Northern Tasmania in particular.



Should you have any questions or would like more information in relation to the SEIA, contact Lou Clark, principal advisor, Communities & Communication:

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