

ANNUAL BUSINESS PLAN 2021-2022

20 October 2021





Contents

EXECUTIVE SUMMARY	4
SECTION 01 METS SECTOR OVERVIEW	6
1.1 Commercialisation of Technology	8
1.2 Regional Development and Future Skills	8
SECTION 02 METS IGNITED ACTIVITIES	10
2.1 Strategic Priorities	12
2.2 Operational Programmes	14
2.2.1 Masterclasses	14
2.2.2 Accelerators	14
2.2.3 Clustering	15
2.2.4 International Markets	15
2.2.5 Regulatory Reform	16
2.2.5 Project Funds	16
SECTION 03 MEMBERS	18
SECTION 04 BUDGET	20
4.1 Budget Summary	20
4.2 Budget Revenue – Core	21
4.3 Budget Expenses	21
4.4 Project Funds	22
4.5 Queensland Work Program	22

Executive Summary

At METS Ignited we are very proud of what we have already achieved, establishing a strong technology ecosystem that can be leveraged to support the country through adversity. METS Ignited 2021–22 business plan builds on our success, capitalising on a high-impact opportunity; accelerating the commercialisation of stranded technologies, starting with Resources Technology and Critical Mineral Processing National Manufacturing Priority.

Over the six years of operations as an Industry Growth Centre, METS Ignited has supported Australia's Mining Equipment, Technology, and Services sector in becoming globally recognised as a world leader. METS Ignited is deeply embedded in the resources sector, enabling Australian technology to serve and support global markets within our national economy.

In October 2020, the Prime Minister announced the Modern Manufacturing Strategy to build Australia's manufacturing capabilities to strengthen future national resilience, drive economic recovery and enhance sovereign capability. Included were six National Manufacturing Priorities including Resources Technology and Critical Mineral Processing.

METS Ignited will capitalised on the value created from the investment in our Industry Growth Centre, by addressing a high-impact opportunity – to establish a centre for accelerating the productisation of 'Stranded Technologies' initially for Resources Technology and Critical Mineral Processing.

Our future ambition is realising the true value of viable technologies developed by researchers, technology innovators and resources communities that have not been commercialised. There is an opportunity for METS Ignited to address the gap in productisation of under-utilised innovative technology and research outcomes within our local economy. By utilising the skills, assets and industry knowledge developed within METS Ignited, pathways to commercialise these stranded technologies have been identified, with the generation of revenue through service fees to pay the future costs of operation.

The commercialisation support program is aligned with the Modern Manufacturing Strategy and will build Australia's manufacturing capabilities to strengthen future national resilience, drive economic



recovery from the impacts of COVID-19 and enhance sovereign capability. Through aligning to the National Manufacturing Priorities, METS Ignited has identified a high-impact purpose – to establish a centre for accelerating the productisation of stranded technologies, starting with Resources Technology and Critical Mineral Processing.

The proposed strategic direction of METS Ignited ensures alignment with the National Manufacturing Priorities, and builds a pathway to sustainability from the value created in METS Ignited. Our 2021-22 Business Plan is heavily focussed on delivery and execution, ensuring that we capitalise on the investments of the past, and realise a sustainable future delivering value to national economy.





METS Sector Overview

Australia recognises the critical importance and the potential opportunity of our mining and METS sectors. There is almost \$250Bn of economic contribution as defined by Deloitte on behalf of the Minerals Council of Australia¹, which is predominantly derived from exports of commodities, procurement of local services and equipment, which include minerals extraction industries (i.e. excludes oil and gas), exploration activities and metal processing to a primary product such as a refined metal.

As further outlined in Australia's Global Resource Statement², the Australian resources sector is sophisticated and one of the most technologically-advanced in the world, with strong long-term growth potential. Geoscience Australia, the Critical Mineral Facilitation Office in conjunction with the Exploring for the Future program have continued to demonstrate the future demands for our mineral wealth. CSIRO have also undertaken detailed analysis of Australia's Critical Energy Minerals Roadmap³ that determines the potential for our existing Economic Demonstrated Resources (EDR). Austrade has defined the potential in terms of market attractiveness for Australia for investment through the Australian Critical Minerals Prospectus⁴.

The resources sector is undergoing transformation driven by ESG (Environment, Sustainability, Governance) pressures and commitments, diminishing ore grades, and skills shortages overlaid with increasing demands for most minerals. The application of advanced technologies is providing the solutions to these pressures and will enable miners to meet the future demands of society in a sustainable way. Key to this transformation is the rapid implementation and successful commercialisation of technological advances.

Advances in low emission technology and future energy minerals is rapidly increasing demand for Australia's critical minerals and energy materials. To increase the economic viability of these resource deposits, technology is required to enable to sustainable and cost-effective extraction that is required to attract investment in these new mining operations. With the increased demand for ESG, and the future needs of the sector for technology to enable access to our future resources, there is a significant and immediate opportunity to establish Australia as the nation that leads the development, production and manufacturing of these technologies.

- 1. Deloitte economic contribution of the mining and METS sector
- https://www.minerals.org.au/sites/default/files/DAE%20-%20Contribution%20of%20Australian%20mining%20&%20METS%202019-20.pdf
- 2. Australian Global Resources Statement
- https://www.industry.gov.au/sites/default/files/2021-06/australias_global_resources_statement.pdf
- 3. Critical Energy Minerals Roadmap
 - https://www.csiro.au/-/media/Do-Business/Files/Futures/Critical-energy-minerals-roadmap/21-00041_MR_REPORT_CriticalEnergyMineralsRoadmap_WEB_210420.pdf
- 4. Australian Critical Minerals Prospectus
- https://www.austrade.gov.au/ArticleDocuments/5572/Australian Critical Minerals Prospectus.pdf.aspx





METS Sector Overview (continued)

1.1 COMMERCIALISATION OF TECHNOLOGY

Australia has long held some of the world's largest mineral resources, and as a consequence attracted and sustained continuous investment in local research, technology and innovation. While Australia has benefited from over four decades of sustained industry investment in research and innovation directly by our global operators, it has been for the direct benefit of producers for their operations. Australia has yet to realise the full economic potential this investment has created.

One of those major shifts is the adoption of new technology over the enhancement of existing solutions. The METS sector has extended well beyond its traditional markets, as other industry segments look to learn from the success of the Australian METS sector.

METS Ignited is driving this shift from operational profit-led research to commercially focussed outcomes, utilising Australian vendors to translate research outcomes as a major strategic focus of our Business Plan.

Enabling commercialisation of such technologies will help Australia to lead in the technological transformation of the resources sector. Whilst utilising the capabilities built in METS Ignited will initially be targeted at releasing stranded technologies in the resources sector, success will logically lead to application across other key segments of the Australian economy

1.2 REGIONAL DEVELOPMENT AND FUTURE SKILLS

The objectives are aligned with the Modernising Manufacturing Strategy with an emphasis on commercialisation. The Australian Technology Centre would continue to enable key regional partners created with the support of METS Ignited, including Mack Hack (Dawson), CQ Accelerator Program (Capricornia), Gladstone Engineering Alliance (Flynn), UWA Living Labs (Curtin), ERDi Testlab (Perth), Automation and Robotics Precinct (Pearce), NIER (Hunter), Resources and Engineering Skills Alliance (Adelaide) and will leverage our extensive industry network for the successful roll-out of this commercialisation activity.



The objectives of the METS Ignited Growth Centre align with the initiatives within the Department of Industry, Science, Energy and Resources and the needs of the METS sector which are:

- Accelerating the commercialisation of innovation
- Enhancing industry skills and capabilities
- Growing exports
- Improving the regulatory environment

In October 2020, the Hon. Karen Andrews, then Minister for Industry Science and Technology wrote to METS Ignited outlining the role of the Growth Centres in the new Modern Manufacturing Strategy. The new strategic direction required alignment of our activities to the National Manufacturing Priorities, while establishing a sustainability plan beyond Growth Centre funding. Our sustainability plan was submitted to the Minister 30th September 2021.

In March 2021, the Department launched the Resources Technology and Critical Mineral Processing Roadmap. The goal is for Australia to become a global centre for commercialising and manufacturing cutting-edge technology products and services for the global resources sector that also benefit a range of other industries. Australia will have a strategic critical minerals processing industry that captures

significant additional value, strengthens our global position downstream from our resource endowments and underpin a range of advanced manufacturing opportunities.

METS Ignited has identified as a significant opportunity to enhance the Australian innovation ecosystem.

From our Growth Centre experience, METS Ignited's Strategic Priority will enable Australian companies to accelerate the productisation of 'Stranded Technologies' - starting with Resources Technology and Critical Mineral Processing.

Our focus now is shifting towards scaling and building upon the successful programs, to 'double down' on success and accelerate and leverage those programs that have delivered the greatest value and benefit against our objectives.



As we strive to move to a sustainable business model, our goal is to move faster and achieve more. For 2021-22 METS Ignited will focus on three priority areas:

1. STRATEGIC PRIORITIES

METS Ignited has identified as a significant opportunity to enhance the Australian innovation ecosystem. From our Growth Centre experience, METS Ignited will enable Australian companies to accelerate the productisation of 'Stranded Technologies' - starting with Resources Technology and Critical Mineral Processing. The establishment of a centre to support the commercialisation of stranded technology forms the basis of our Strategic Priority.

2. OPERATIONAL PROGRAMMES

These continue to be an important part of the day to day activities of the Growth Centre. These activities provide significant value to the communities that we support and influence. With the overwhelming success of last year's programs, METS Ignited will continue our focus on enhancing the commercial skills and capabilities of the sector, and developing our export capabilities in a new global environment. Our programs include:

- ▶ Masterclasses—Sales and Marketing, Intellectual Property, Skills and Capability
- Accelerators—Commercial maturity for METS, cross sector collaboration
- Clustering—Creating and sustaining a collaborative ecosystem
- International Markets—Market Access Strategy

3. PROJECT FUNDS

2021-22 will see the completion of the remaining collaborative projects and the commencement of a limited round of project funding for resources technology and critical minerals related projects to align with National Manufacturing Priorities.



METS Ignited Activities (continued)

2.1 STRATEGIC PRIORITIES

The vision of METS Ignited is to establish a technology exchange program, enabling Australia's vendors as the 'go to channel' for bringing stranded technology and new innovation to market. Our mission is to productise stranded technologies that address the needs of National Manufacturing Priority sectors in the local Australian economy, starting with Resources Technology and Critical Minerals Processing.

The goal of our Strategic Priority is to ensure technology and innovation created within research undertaken for and on behalf of the end market operators (mining companies) or developed by SME innovative companies, is available for the wider Australian Resources Sector and for export to international markets.

METS Ignited will undertake fee generating activities to enable Australia's technology vendors to harness the full potential of this world leading capability. The Australian Technology Centre will ensure our world leading innovation is available to all sectors. Success will be measured by the demand for our local skills, the increase in exports of technologies and services, and the increased local demand for raw materials for downstream manufacturing.

Should the Centre be successful for Resources Technology and Critical Mineral Processing, the medium-term objective would expand the commercialisation of technology across additional industries, starting with those outlined under the Government's National Manufacturing Priority Sectors.

METS Ignited is supporting the translation of innovation into products and services to serve global markets, that will be delivered by Australian technology companies from within our national economy.





2.2 OPERATIONAL PROGRAMMES

In addition to the strategic initiatives of METS Ignited, the Growth Centre will continue to build upon the successful operational programs to support the enhancement and growth of the Australian METS sector.

2.2.1 MASTERCLASSES

METS Ignited is focussed on enhancing industry skills and capabilities. Through industry consultation, it was identified that the sector would benefit from programs to improve commercial maturity.

The 2021–22 Masterclasses will build on the program delivered during 2020-21. The IP and Sales and Marketing Strategy Implementation classes will be run again. Masterclasses will also be expanded to include skills to address the next generation of industry opportunities with new masterclasses planned with an export focus –International Sales and Marketing and an Export Ready Masterclass.

The KPIs for 2021-22 are to have 40 Masterclass events with an average of 25 participants per Masterclass.

2.2.2 ACCELERATORS

Since 2017, METS Ignited has piloted a series of

collaborative accelerator programs with funding and support from state and federal governments, local innovation hubs and industry mentors. The accelerators have been pitched at scale-up businesses looking to increase their skills and capability development, to realise their commercial maturity, become globally competitive and break into new markets. These programs have attracted a mix of regional and metropolitan scale-up companies with solutions for the mining and resources industry.

Since their inception, METS Ignited has broadened the scope of the programs to provide commercialisation pathways to technology innovators with solutions in Robotics and Automation, Digital and Data, and Sustainability and Responsible Mining. METS Ignited's partnership with Quantum Technology Exchange in 2020 has expanded the opportunity again, providing cross-sector business accelerators to scale-ups in Mining, Energy, Agriculture, Defence and Space.

2021-22 will see further expansion with a major National cross-sector accelerator scheduled. In addition, a series of regional accelerators joint funded with State Governments are planned across the country.

The KPIs for 2021-22 are 10 Accelerators each containing an average of 6 topics, with a total of approximately 80 sessions/webinars throughout the year.



2.2.3 CLUSTERING

METS Ignited has expanded its Cluster program nationally, supported by a number of state governments with Cluster Development Managers in Queensland, Western Australia and a shared resource in South Australia

METS Ignited is engaged directly and indirectly with the following Clusters:

- Queensland Robotics
- Tailings TEQ (QLD)
- RoboWest (WA)
- ► Space Technologies (QLD, SA + WA) in development
- ▶ Innovation (Mackay) in development
- ▶ TCI Oceania

In 2021-22 we will support the development of new clusters in WA following the appointment of a dedicated Cluster Development Manager in 2020-21. Our focus is to help clusters establish their own sustainment programs to ensure that they can continue beyond METS Ignited's support.

METS Ignited will continue to support clusters formed through our other partner Growth Centres such as NERA's Australian Hydrogen Technology Clusters.

2.2.4 INTERNATIONAL MARKETS

Australia has a strong international reputation as a global hub for mining technology and innovation that has created significant demand internationally. There are a number of major global technology companies coming to Australia to develop their solutions in collaboration with our local mining community.

The METS Ignited International Markets initiative provides support to Australian METS companies to accelerate and grow into global mining hubs.

METS Ignited's programs build METS companies' capabilities in addressing international markets in a commercially sustainable and profitable way. To date, METS Ignited has established a series of collaborations including:

- ▶ Peru Mining Innovation Hub, Mining Cluster of Southern Peru, Chile Expande Open Innovation Program
- Canada: Engaged with CEMI and potentially extending to CMIC, NORCAT, SAMSSA on the back of the FTA with Canada in force since 2018
- ▶ Locally, over 30 Australian METS companies have benefitted from facilitated introductions to internal partners.



METS Ignited Activities (continued)

2.2.5 REGULATORY REFORM

Australia sets the global industry benchmark in terms of safety and environmental operating standards when it comes to international mining regulations.

METS Ignited will continue its work with international mining regions to share the industry benchmark for safety and environmental standard for the protection of both people and the future sustainability of our ecosystem.

METS Ignited is supporting a range of technology products and services to simplify the compliance with a wide range of regulations that span the Australian mining industry, including national COVID-19 management plans and sharing of compliance platforms. The focus on regulatory reform will be targeted to the implementation of digital platforms for each state to manage exploration and mining lease applications.

2.2.6 PROJECT FUNDS

METS Ignited has overseen a large number of highly successful collaborative projects. The companies involved have achieved significant commercial success, many facing now overwhelming demand. Our focus in our final year is to ensure the market sees what value has been created, and to celebrate the success of our project funds.

Since the formation of METS Ignited, a total of 25 projects have been awarded, with 12 projects completed. Of our project fund allocations, almost 80% of committed funds have been expended. The remaining 13 active projects are scheduled for completion within the 2021-22 period. The balance of project funds available (\$2.6m) will be allocated to new projects in the current financial period. A contingency of 5% of funds invested has been allocated for variations and acceleration activities to ensure projects are complete.

In addition to the Projects Funds provided under Commonwealth funding, we also had funding from the Queensland Government. Of the five projects funded, four will be completed in H1 2021-22 with the remaining project completing in August 2022.





METS Ignited Members

3. MEMBERS

There have been no changes to the membership of METS Ignited and there is not expected there will be any further changes during the 2021-22 Plan year. Members are not expected to provide financial contributions to METS Ignited during the period.

As at September 2021, there are nearly 7,400 Network Associate registrations. Whilst there was a increase in the number of registrations over the preceding year, Network Associates are a representative sample of the Growth Centre's sector participants, and are primarily used by the Growth Centre for the purpose of indicating the effectiveness of the various programs on the sector. The predominate engagement method for the sector is through the METS sector ecosystem which comprises a range of industry associations, membership organisations, research communities, regional hubs as well as the Clusters and working groups facilitated by the Growth Centre

AT 30 SEPTEMBER 2021, METS IGNITED MEMBERS COMPRISED:

Name	ABN	Organisation Type	Address
Orica	69 009 781 257	Multi-National Corp.	GPO Box 4311, Melbourne Victoria 3001
AMIRA	60 176 687 975	Research	Level 2, 271 William Street, Melbourne VIC 3000
Russell Mineral Equipment	20 010 708 406	METS (SME)	141/143 Russell St, Toowoomba, QLD 4350
Whittle Consulting	71 086 470 457	METS (SME)	Suite 8, 660 Canterbury Road Surrey Hills, Victoria 3127
Gekko Systems	77 064 618 293	METS (SME)	321 Learmonth Road, Ballarat, Victoria 3350



Budget

4.1 BUDGET SUMMARY

Set out below is the consolidated budget for the Financial Year ended 30 June 2022. Details are provided for revenue and expenditure in the tables following this summary. The carried forward balance is calculated on the basis of funds remaining at 30

June 2021. All amounts presented in the budget are Australian \$'s net of GST. The Funding Agreement requires the declaration of in-kind revenue and expenditure. No in-kind contributions are expected in the budget year.

FINANCIAL YEAR ENDED 30 JUNE 2021 - BUDGET

	Core Funds	Project Funds	Total DISER Funds	QLD Funds	WA Funds	Total Funds
Revenue	5,394,471	-	5,394,471	814,490	29,710	6,238,671
Surplus Carried Forward From FY2020	3,069,824	8,740,044	11,809,868			11,809,868
Total Funds Available	8,464,295	8,740,044	17,204,339	814,490	29,710	18,048,539
Administration Expenses	307,729		307,729			aa
Operating Expenses	2,560,430		2,560,430			aa
Toal Administration & Operating Expenses	2,868,159	-	2,868,159	-	-	aa
Revenue Available For Project Expenditure	5,596,136	8,740,044	14,336,180	814,490	29,710	15,180,380
Industry Engagement Expenses	415,391		415,391			415,391
Marketing & Communications Expenses	371,373		371,373			371,373
Research & Reporting Expenses	283,150		283,150			283,150
Strategic Initiatives Expenses	458,476		458,476			458,476
System, Tools & Data Expenses	176,507		176,507			176,507
Project Funds Expenses		3,422,209	3,422,209			3,422,209
State Government Work Programs			-	938,953	29,710	968,663
Total Project Expenses	1,704,897	3,422,209	5,127,106	938,953	29,710	6,095,769
In-Kind Expenses	271,375		271,375			271,375
Total All Expenses	4,884,431	3,422,209	8,266,640	938,953	29,710	9,235,303
Total Surplus June FY2022	3,619,864	5,317,835	8,937,699	(124,463)	-	8,813,236



4.2 BUDGET REVENUE - CORE

Budget revenue consists of four quarterly payments under the extended Funding Agreement of \$1,250,000 each. Note that funding for the budget period is dependent upon meeting the milestones contained within the Funding Agreement Deed of Variation.

Interest of \$10,000 is calculated on the balance of funds held on deposit. Interest bearing accounts have been established for on demand, 30 day and 90 day deposits. Cash deposits are reviewed monthly.

Queensland Funds are provided under a Funding Agreement with the Queensland Government are a reciprocal arrangement where all pre-approved expenduiture is reimbursed in full. The \$500,000 is an estimate of the vale of activities in the Plan year.

WA funds are provided by the Western Australian government under a Funding Agreement that supports the employment of a Cluster Development Manager. This is cost neutral to METS Ignited.

4.3 BUDGET EXPENSES

The full year budget of \$4,077,320 represents an increase over the FY2021 budget allowance. The major variance of the FY22 budget increase compared to the FY21 budget is a result of the introduction of new staff roles within the organisation including on-costs and travel requirements.

A nominal budget allowance of \$200,000 has been provided for Strategic initiatives to cover the costs of revenue generating activites. The Operational Program Expenses total \$1,396,200.

A budget of \$569,000 has been set aside for Events and Sponsorships, and \$312,000 for Marketing and Communications Expenses.



4.4 PROJECT FUNDS

As at 30 June 2021, of the \$15.6M received in Project Funding, \$12,748,329 has been committed to collaborative projects across four tranches, leaving an uncommitted balance of \$2,851,671.

For budget purposes, the Project Funds have been presented as if they were all paid during the financial year, however some funds may be carried over to FY2023.

4.5 QUEENSLAND WORK PROGRAM ACTIVITIES

The following table sets out the status of the Queensland Work Program as at 30 June 2021. The program is cost neutral to METS Ignited with each program of work agreed in advance, with costs incurred reimbursed by the Queensland Government. All transactions relating to Work Programs 1, 2 & 3 have been settled with the Queensland Government.

Work Program 4 has been approved by the Queensland Government and is budgeted to deliver up to \$2,231,818 in funding for Queensland Approved Activities. For the purposes of the budget it is assumed the revenue and expenses for the Queensland Work Program for the FY2022 equates to the unspent value of Work Program #4 of approximately \$1million.

		Receipts		Expenditure				
Description	Grant Value \$	FY 2020 \$	FY 2021 \$	Recovered to date	FY 2020 \$	FY 2021 \$	Expended To Date \$	Net Activity Position
32 Queensland Cluster Program	325,455	183,095	80,018	272,113	183,095	105,326	288,421	(16,308)
33 Collaborative Project Funds	1,000,000		349,868	349,868		435,526	435,526	(85,657)
34 BBC Cluster Development Program	50,000		3,0002	3,002		3,0002	3,0002	0
35 METS Capabilities Workshops	13,636							
36A Regional Accelerator Program	136,364	60,434	66,299	126,732	60,434	88,796		(22,498)
36B Accelerator Program	454,545		300,000	300,000		300,000	300,000	0
37 Scale Up & Take Off Program	31,818							
38 METS SME AV Promotion Program	100,000	23,818	16,701	40,519	23,818	16,701	40,519	0
39 CEEC Research & Workshop Program	33,636	33,318		33,318	33,318		33,318	0
40 Sector Capability Promotion Program	81,818	25,751	(10,398)	15,353	25,751	(10,398)	15,353	0
41 Stakeholder Engagement Program	0							
42 Significant Industry Challenges	4,545							
Total Work Program 4	2,231,818	326,416	814,490	1,140,906	326,416	938,953	1,265,369	(124,463)

The (\$124,463) balance represents a timing difference that will be recovered in the 2022 financial year.





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