# **Report to the Future Melbourne Committee**

Agenda item 6.1

# Melbourne's emerging, globally competitive innovation sectors

5 September 2023

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# Purpose and background

- 1. The purpose of this report is to propose innovation sectors that should be the focus of Council's economic development efforts.
- 2. On 3 May 2022, the Future Melbourne Committee (FMC) resolved that management should 'undertake further research into sectors in which the City of Melbourne (CoM) has a globally competitive position, as well as emerging sectors that CoM can harness and lead.'
- 3. Similarly, Major Initiative 9 in the Council Plan is aimed at supporting 'the development of globally competitive innovation ecosystems'.

# **Key issues**

- 3. Innovation and technology development is a key driver of economic growth. In 2020–21, technology was the third largest contributor to Australia's economy, behind mining and finance. Innovation sectors are generating jobs growth at twice the rate of other sectors.<sup>1</sup>
- 4. A focus on specific innovation sectors can support the city's longer-term economic development objectives by fostering employment opportunities and driving economic growth. Vibrant and thriving innovation sectors and ecosystems underpin the strength of Melbourne's knowledge-economy. Targeting specific innovation sectors can strengthen Melbourne's position as a hub of expertise and innovation, supporting the city's capacity to attract global investment.
- 5. Innovation sectors involve a concentration of related innovative businesses, universities, industry associations and other institutions that reinforce each other's performance through formal or informal relationships. The strength of a sector is important because relationships and support offered within a sector play an important role in the establishment and growth of innovative businesses.
- 6. Innovation sectors are supported in a variety of ways by the Commonwealth and state governments, often underpinned by sizeable budgets. Council's role in supporting innovation sectors is different, but equally important. Ways that Council can intervene to support innovation sectors include:
  - 6.1. *Convening.* Bringing together businesses, researchers and others from the sector to develop a shared identity, vision and plan.
  - 6.2. Informing. Providing data and other information that can contribute to improved decision making.
  - 6.3. *Promoting*. Marketing the capabilities of the sector, in Australia and globally, raising awareness of the opportunities that exist in Melbourne.
  - 6.4. *Precinct development*. Supporting the development of innovation precincts, in areas such as Parkville/City North, Arden and Fishermans Bend.
  - 6.5. *Advocacy*. Persuading other levels of government to provide support for the sector, and ensuring that constituent businesses and stakeholders are able to access such support.
- 7. To ensure Council's limited resources are deployed where they can have the greatest impact, management has sought to identify sectors that contain the following three critical attributes:
  - 7.1. sectors where CoM has a considerable global comparative advantage
  - 7.2. sectors that have enormous potential for economic growth
  - 7.3. sectors that would benefit from Council intervention.

<sup>&</sup>lt;sup>1</sup> Technology Council, The Economic Contribution of Australia's Tech Sector, 2021

- 8. Management examined a broad range of sectors operating in the city's economy and suggests a focus on the following sectors:
  - 8.1. Biotechnology. Melbourne performs strongly in this sector, which is poised for strong growth over the next decade. The sector can be described as the development and commercialisation of products or processes that create new drugs, therapies or related healthcare products. Significant players in the municipality include: CSL, Telix Pharmaceuticals, the Monash Institute of Pharmaceutical Sciences, the Walter and Eliza Hall Institute and many others. Parkville is one of the world's leading biomedical precincts.
  - 8.2. Climate technology. A focus on this sector leverages Council's existing commitments through Major Initiative 29 ('zero carbon jobs') and the recently established Melbourne Climate Network. Substantial global growth is projected. The sector comprises activities related to the production, distribution, and use of energy (e.g. solar, wind) that have minimal negative impact on the environment. The sector also involves energy efficiency measures, decarbonisation and innovations that optimise energy efficiency. Demand for this climate technology is expected to grow exponentially as Australia moves towards legislated net zero targets.
  - 8.3. Digital games. 44 per cent of Australia's digital games production is in Melbourne, which places the city at a unique advantage to leverage this significant global industry. The sector focuses on the development, production, and distribution of video games for various platforms. The industry includes game developers, publishers, hardware manufacturers and other supporting services like streaming platforms and e-sports. It is a significant global industry generating substantial revenue. Examples of digital games companies in the municipality include Fortress Melbourne, Zero Latency and Keywords Studios.
  - 8.4. Sports tech. Globally, this is a smaller sector. However, Melbourne's position as the world's sporting capital creates a significant competitive advantage for the city, which could provide totemic benefits for Melbourne's reputation as an innovation city. The sector includes the application of technology and innovation in various aspects of sports and athletic performance. Melbourne is home to companies such as Champion Data and Rosterfy, and hosts SportsNXT, a global sports tech conference.
  - 8.5. Education technology ('ed tech'). Melbourne's global reputation as a leading student city provides a significant platform for growth. Notwithstanding the sector's relatively small size globally, a focus on this sector could see a significant injection into the city's economy over the next decade. Activities in the sector include technology, digital tools and resources that enhance teaching, learning and educational outcomes. Melbourne is home to companies such as Xplor Education, A Cloud Guru and Keypath Education.
- 9. These five recommended sectors provide a mix between sectors that are large and established (biotechnology), medium-sized and emerging (zero carbon/clean tech) and smaller but strong (digital games, sports tech and ed tech). All leverage Melbourne's comparative advantages, have potential for significant growth and would benefit from Council support. This is shown graphically at Attachment 2.
- 10. There are a range of other strongly-performing innovation sectors in the municipality. Some of these are large (e.g. fintech, software as a service) and others are emerging (e.g. data and analytics, consumer goods). It is less obvious how Council's support would benefit these sectors; for example the fintech sector in Melbourne is already mature and well-organised. However, Council can and should continue to engage with these sectors, promoting the city's success stories where possible.
- 11. To support these priority sectors, management will engage with sector leaders to construct a "road-map" that will detail Council's support for each sector, including future interventions and support.
  - 11.1. In parallel to this effort, management will continue to explore opportunities to align its policies and programs to support the growth of these innovation sectors.
- 12. Growth in these sectors has the capacity to add many billions of dollars to the municipality's economy over the next decade, along with thousands of highly-paid jobs.

# **Recommendation from management**

- 10. That the Future Melbourne Committee:
  - 10.1. Approves a focus on the following sectors that will support Council's longer-term economic development objectives by fostering employment opportunities and driving economic growth:
    - 10.1.1. Biotechnology.
    - 10.1.2. Climate technology.
    - 10.1.3. Digital games.
    - 10.1.4. Sporting technology.
    - 10.1.5. Education technology.
  - 10.2. Requests that management conduct at least one roundtable discussion with leaders from each of the recommended sectors to validate direction and document an agreed City of Melbourne value proposition for each sector.
  - 10.3. Requests that by 31 May 2024, management provide Council with a 'road-map' for each sector that will describe a medium-term strategy and approach for each sector.

## Attachments:

- 1. Supporting Attachment (Page 4 of 31)
- 2. Rationale for Council Engagement (Page 5 of 31)
- 3. Background: Melbourne's emerging, globally competitive innovation sectors (Page 6 of 31)

# **Supporting Attachment**

# Legal

1. There are no legal implications arising out of the contents of this report.

### **Finance**

2. There is sufficient budget in this financial year's operating expenditure to support the work recommended in this report.

## **Conflict of interest**

3. A member of Council staff who is involved in advising on this report is a volunteer Board Member for the BioMelbourne Network, a not-for-profit industry association for the Victorian healthtech industry. This interest is managed internally. No other member of Council staff, or other person engaged under a contract, involved in advising on or preparing this report has declared a material or general conflict of interest in relation to the matter of the report.

## **Health and Safety**

4. In developing this proposal, no occupational health and safety issues or opportunities have been identified

# Stakeholder consultation

- 5. Engagement with LaunchVic, the Victorian government's startup agency, has informed this report. The proposed complements the approach undertaken by LaunchVic to support the Victorian startup ecosystem.
- 6. This report is based on detailed analysis of each sector, its strengths, capacities and investment flows. Further work will require significant engagement with relevant sector leaders.

# **Relation to Council policy**

- 7. Actions related to this report fall under the *Economy of the Future* objective in the Council Plan 2021–25 and supports work under the following Major Initiatives:
  - 6.1. Major Initiative 3: Economic Development Strategy
  - 6.2. Major Initiative 9: Globally competitive ecosystems
  - 6.3. Major Initiative 29: Zero Carbon Jobs

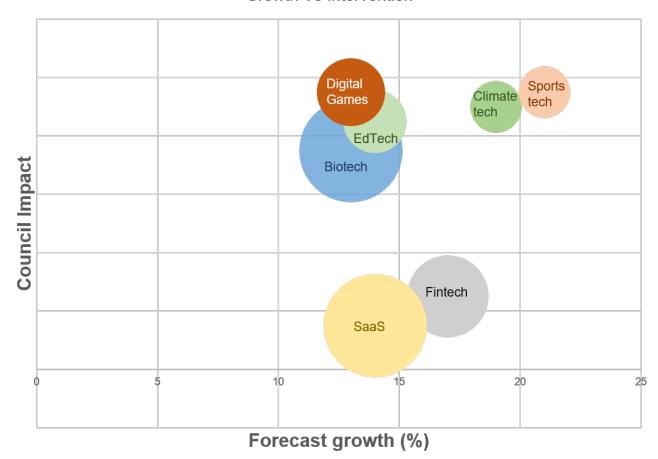
## **Environmental sustainability**

8. In broad, environmental sustainability issues and opportunities are not relevant to the proposal at this stage. A focus on supporting the climate technology sector is likely to create indirect environmental benefits.

# **Rationale for Council Engagement**

- Rationale for intervention is based on the confluence of comparative advantage, forecast growth and the likelihood of Council support being particularly beneficial.
- While sectors like Fintech and Software as a Service (SaaS) are large and offer growth potential, it is less obvious how Council's support would benefit these sectors, as they are already mature and well-organised.

# Growth Vs Intervention



## Notes:

- The relative size of each circle approximates the size of each sector in Melbourne in 2022.
- Sources: Pitchbook online database, LaunchVic

# Methodology used to calculate potential growth

- Growth projection are underpinned by an analysis of recent Asian investment. The net difference between Melbourne's contribution and the Asian sector's contribution to investment is multiplied by the investment specific to the Asian sector.
- This approach is intentionally conservative as Asian investment levels have been lower than investment levels in the rest of the world.

On 3 May 2022, FMC requested that management:

Undertake further research into sectors in which the City of Melbourne (CoM) has a globally-competitive position, as well as emerging sectors that CoM can harness and lead.







# What are the benefits of targeting sectors?

- A focus on specific sectors can support the city's longer-term economic development objectives by fostering employment opportunities, driving economic growth.
- Vibrant and thriving technology sectors and innovation ecosystems can underpin the strength of Melbourne's knowledge-economy, directly supporting the city's overarching growth objectives.
- A specialisation in specific technology sectors, can strengthen Melbourne's position as a hub of expertise and innovation, supporting the city's capacity to attract global investment.
- Supports deliberate and targeted efforts, providing direction to management, maximising use of limited resources.





In formulating an appropriate mix of sectors on which to focus, management developed some guiding principles:

- The city must have an existing strength or competitive advantage in that sector
- There is an economic upside to the sector (e.g. projected growth)
- The sector is readily identifiable and has a concrete link with the municipality
- avoid supporting/encouraging activities that would otherwise occur organically
- The role for Council is clear and able to be resourced





# Five sectors recommended for consideration Page 10 of 31

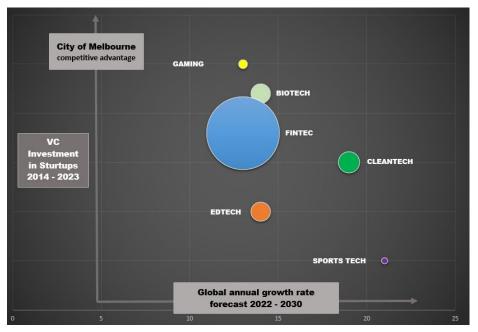


- 1. Biotechnology
- 2. Climate technology
- 3. Education technology
- 4. Digital games
- 5. Sports technology

- Overlapping sectors provide an \$11.2 billion opportunity to potentiate effort
  - Melbourne's strength in biotech leverages an unrivalled opportunity for growth
  - Climate tech focus complements Net Zero Melbourne (MI29)
  - Ed tech reflects Melbourne as an education city
  - Digital games is one of Melbourne's "quiet achievers"
  - Sports tech leverages unrivalled strength across Asia Pacific



# City of Melbourne – Venture Capital Overview (2014-2023)



- Melbourne positioned well in selected sectors with >35% of all Australian activity (except sport, which has other advantages)
- Completive advantage (Y-axis) represents consolidated, published global rankings
- Projected growth rates of 13-21% represent solid opportunity for city to leverage
- Fintech provided for comparison, but not recommended

		Australia		2022 - 2030 Grand View Research
Sector	Annual Revenue (2020-2021)	Jobs	Num. of business	Forecasted Annual Global Growth Trend
BIOTECH	A\$ 8B	264K	2.6K	13%
CLEANTECH	A\$ 6.2B	53K	1.3K	19%
EDTECH	A\$ 2.2B	13K	600	14%
GAMING	A\$ 227M	3.3K	405	13%
SPORTTECH	A\$ 4.2B	13.5K	758	21%
FINTECH	A\$ 5.9B	130K	850	17%



Share of Total VC investment by sector for the period 2014 - 2023								
	GLOBAL ASIA AUSTRALIA City of Melbourne							
BIOTECH	9%	<b>5</b> %	2%	1.8%				
CLEANTECH	<b>7</b> %	6%	3%	2.2%				
EDTECH	2%	3%	1%	1.8%				
GAMING	1.6%	2.0%	0.4%	0.4%				
SPORTTECH	1%	1%	0%	0.2%				
FINTECH	12%	13%	26%	27%				

- Melbourne is under-represented for VC investment in selected sectors, which represents opportunities for growth, particularly in the medium and longer-terms
- Melbourne's natural advantage in "small" sectors (e.g. digital games, sport, edtech) can translate into billions of dollars for the local economy



# A well-constructed sector focus can realise billions for CoM's economy

City of Melbourne potential sector revenue growth (2022 - 2030) based on Asian relevant industry sector contribution in A\$B					
BIOTECH \$4B					
CLEANTECH	\$5B				
EDTECH	\$1B				
GAMING	\$1B				
SPORTTECH	\$200M				

There is a **potential benefit of \$11.2 billion** for Melbourne based on Asian performance over last decade, projected over the next ten years.

- Benefits are calculated by applying the difference between local and Asian levels of VC investment to actual levels of investment over the past decade.
- The underpinning assumption is that CoM support/ intervention will grow the relevant ecosystem to attract further investment

	Difference between CoM V C sector contribution and Asia's VC sector contribution	ASIA's VC Sector Investment A\$	Potential sector revenue growth A \$B (2022-2030)
BIOTECH	3%	122	4
CLEANTECH	4%	150	5
EDTECH	1%	67	1
GAMING	2%	52	1
SPORTTECH	1%	29	0.2





# **Rationale for CoM engagement**

- Estimated \$4bn sector growth over next ten years
- Sector overlaps and reciprocally potentiates other sectors like finance, professional services, ICT and Sports Tech
- CoM engagement to focus on precinct development, advocacy and promotion

- Products or processes that manipulate biological systems to create new drugs, therapies, diagnostic tools, genetically modified organisms, and biologically based chemicals.
- Significant players in CoM include: CSL, CSIRO, Mesoblast and many others
- The established industry cluster –
  BioMelbourne Network –already plays a key
  role
- Commonwealth's \$2.2bn expansion of PBS can create additional demand for the sector

	Australia			2022 - 2030 Grand View Research
BIOTECH Sector Snapshot	Annual Revenue	Forecasted Annual Global Growth Trend		
	A\$ 8B	264K	2.6K	13%

Potential A\$ (2022-2031) g	4B			
2014 - 2023	City of Melbourne			
A\$ billion	585	122	7	3
Sector Share of VC by Locality	9%	5%	2%	2%



# Climate technology (Clean Technology) sector – Overview & Analysis



# Context

- Activities related to the production, distribution, and use of energy (e.g. solar, wind) that have minimal negative impact on the environment. The clean energy sector also involves energy efficiency measures, decarbonisation and innovations that optimise energy efficiency.
- Demand for this sector will grow exponentially as Australia moves towards legislated net-zero targets
- Commonwealth and State government investment totals (2023-4 budgets) more than \$3bn, including initiatives such as the State Electricity Commission and the Net Zero Authority

# **Rationale for CoM engagement**

- Aligns with the recently established Melbourne Climate Network
- Projected ten year growth of \$5bn
- Complements the city's commitment to net-zero transition
- CoM engagement to focus on convening, promotion and advocacy

01 54 11 56 11	Australia			2022 - 2030 Grand View Research
CLEANTECH Sector Snapshot	Annual Revenue	Jobs	Num. of business	Forecasted Annual Global Growth Trend
	A\$ 6.2B	53K	1.3K	19%

Potential A\$ (2022-2031) g	5B			
2014 - 2023	City of Melbourne			
A\$ billion	455	150	10	4
Sector Share of VC by Locality	7%	6%	3%	2%





# **Rationale for CoM engagement**

- Potential growth of \$1bn could more than triple the size of the sector
- Overlaps with both Sports Tech and Ed Tech and can also interface with Biotech and ICT
- High profile sector, actively contributing to Melbourne's brand as a knowledge city
- CoM engagement to focus on convening, information provision and advocacy

- Development, production, and distribution of video games for various platforms. The industry includes game developers, publishers, hardware manufacturers, and other supporting services like streaming platforms and esports. It is a significant global industry generating substantial revenue.
- 44% of Australia's production in Melbourne. Including an EA Sports studio, which has contributed to the globally successful FIFA game

	Australia			2022 - 2030 Grand View Research
GAMING			Forecasted Annual	
Sector Snapshot	Annual Revenue	Jobs	Num. of business	Global Growth Trend
	AU\$ 227M	3.3K	405	13%

Potential A\$ (2022-2031) g	1B			
2014 - 2023	City of Melbourne			
A\$ billion	105	52	1.7	0.6
Sector Share of VC by Locality	1.6%	2.0%	0.4%	0.4%





- Application of technology and innovation in various aspects of sports and athletic performance, including the development and use of advanced tools, equipment, software, and data analytics to enhance training, performance and fan engagement and experiences; combining elements of sports science, engineering, data analysis, and digital media.
- Melbourne's position as one of the world's sporting capitals, creates a significant competitive advantage.
- Melbourne is home to companies like Champion Data, which provides analytics for professional sports.

- Rationale for CoM engagementCould create a "totemic" opportunity to promote Melbourne as a tech leader
- Projected USD \$200M growth
- Investor-friendly sector, given preference for software-based opportunities
- Overlaps with biotech, digital games, edtech and ICT
- CoM engagement to focus on convening, promotion (global) and advocacy
- Gambling to be excluded

		2022 - 2030 Grand View Research		
SPORTS TECH Sector Snapshot	Annual Revenue	Jobs	Num. of business	Forecasted Annual Global Growth Trend
	AU\$ 4.2B	13.5K	758	21%

Potential A\$ (2022-2031) g	200M			
2014 - 2023	City of Melbourne			
A\$ billion	52	29	1.4	0.3
Sector Share of VC by Locality	0.8%	1.1%	0.3%	0.2%







# Rationale for CoM engagement

- Melbourne's global reputation as a leading student city provides a significant platform for growth
- \$1bn growth potential over ten years
- Gamification of technologies interfaces with digital games sector; also with ICT
- CoM engagement to focus on information provision and promotion

- Technology, digital tools, and resources that enhance teaching, learning, and educational outcomes. It involves software applications, online platforms, virtual reality, augmented reality, artificial intelligence, and data analytics, to support and transform traditional educational methods and processes.
- Education is Victoria's largest services export -\$6.9bn and 41,000 jobs
- Commonwealth 2023-24 includes >\$200m to support education including \$90m for an ICT platform

EDTECH Sector Snapshot		2022 - 2030 Grand View Research		
	Annual Revenue	Jobs	Num. of business	Forecasted Annual Global Growth Trend
	A\$ 2.2B	14K	600	14%

Potential A\$ (2022-2031) g	1B			
2014 - 2023	City of Melbourne			
A\$ billion	124	67	6	3
Sector Share of VC by Locality	2%	3%	1%	2%





# **Rationale for CoM non-engagement**

- The fintech sector in Melbourne is already mature and well-organised. It is less obvious how Council's support would benefit this sector.
- All sectors, to some degree, are users or reliant on Fintech products, which indirectly support the further development of the Fintech sector itself.

- The fintech sector aims to provide convenient, cost-effective, and user-friendly financial services by leveraging technology to streamline processes, enhance security, and improve customer experiences. Its disruptive nature has led to significant changes in the financial industry, driving innovation and reshaping traditional business models.
- According to a report by KPMG, in 2020, the total investment in Australian fintech companies reached a record high of \$1.35 billion.

		2022 - 2030 Grand View Research		
FINTECH Sector Snapshot	Annual Revenue	Jobs	Num. of business	Forecasted Annual Global Growth Trend
	AU\$ 5.9B	130K	850	17%

Potential A\$ (2022-2031) g	Two times larger sector investment than in Asia			
2014 - 2023	City of Melbourne			
A\$ billion	522	221	71.0	29.5
Significant Sector Investment Share when compare to global VC		42%		
Significant Sector Investment Share when compare to Asian VC			32%	13%
Sector Share of VC by Locality	12.3%	13.1%	26.4%	26.8%



# Overall Sector Engagement Matrix – Areas for focus

- Varying characteristics of each sector requires a differentiated approach to development
- Broad categories of support will require sector engagement for validation to ensure complementarity of effort
- Management to develop road-maps for each sector

Sector	Convening	Information Provision	Promotion	Precinct development	Advocacy
Biotech					
Zero Carbon	<b>✓</b>		<b>✓</b>	<b>✓</b>	<b>✓</b>
Digital games	$\checkmark$	<b>✓</b>			$\checkmark$
Sports tech	$\checkmark$		$\checkmark$		$\overline{}$
Ed tech		$\overline{}$	$\checkmark$		



Industry Contribution						
	GLOBAL	ASIA	AUSTRALIA	City of Melbourne		
ВІОТЕСН	9%	5%	2%	1.8%		
CLEANTECH	7%	6%	3%	2.2%		
EDTECH	2%	3%	1%	1.8%		
DIGITAL GAMES	2%	2%	0%	0.4%		
SPORTTECH	1%	1%	0%	0.2%		
FINTECH	12%	13%	26%	27%		
SaaS	21%	23%		54%		

- To ensure prudence and conservatism in assessing our potential future gains in different sectors, Management compared the overall sector contributions in Asia, which are often lower than the global average.
- Based on these figures, we can draw conclusions about sectors with potential that still fall short of matching Asian industry investments.
- Conversely, investments that are already excessive, such as Fintech and Software as a Service, have experienced over-investments of 14 percent and 31 percent, respectively, compared to Asian VC investments in thse respective sectors, and are therefore not recommended for consideration



# Appendix I – Rationale for selection of sectors: Biotechnology

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### **Definition**

# **Life Sciences - Biotech**

The biotechnology industry, refers to a field of applied biology that utilizes living organisms or their components to develop and manufacture products or processes for various sectors, including healthcare, agriculture, and industrial applications. It involves the use of scientific and technological advancements to manipulate biological systems, such as genes and proteins, to create new drugs, therapies, diagnostic tools, genetically modified organisms, and biologically based chemicals.

### **Top 5 Biotech companies in Melbourne**

**CSL Limited** is one of the largest biotech companies in Australia and a global leader in developing and manufacturing innovative biotherapies.

**Mesoblast** is a leading biopharmaceutical company focused on developing cell-based medicines.

**Starpharma** is a pharmaceutical company that develops and commercializes innovative dendrimer products for applications in the pharmaceutical, life sciences, and agrochemical sectors.

**Benitec Biopharma** is a biotechnology company focused on developing and commercialising gene silencing therapies using their proprietary DNA-directed RNA interference (ddRNAi) technology.

Prescient Therapeutics is a clinical-stage biotechnology company that specialises in developing targeted small-molecule therapies for cancer.

- Melbourne Biotech lags slightly behind the Australian average by 0.2 percent, but it falls further behind in comparison to Asian investment contributions, which stand at 3.2 percent.
- If developed to match the levels of Asian investment breakdown in this industry, Melbourne Biotech has the potential to generate an additional \$4 billion.
- Additionally, the sector's forecasted global growth of 13 percent by 2030 provides further reason to pay attention to its development.



# Appendix I – Rationale for selection of sectors: Climate tech/clean tech

# Clean Tech - Zero Carbon

The clean energy sector refers to the industry and activities related to the production, distribution, and use of energy from renewable sources that have minimal negative impact on the environment. Clean energy sources include solar power, wind power, hydropower, geothermal energy, bioenergy, and other forms of renewable energy. The clean energy sector also involves energy efficiency measures and innovations in energy storage and grid management to optimize the use and integration of clean energy resources.

# Top 5 Cleantech companies in Melbourne

Relectrify is a cleantech company that focuses on battery management and control systems. They specialise in advanced battery storage technologies and software solutions to optimise the performance and lifespan of batteries, making energy storage systems more efficient and cost-effective.

Hepburn Energy - Wind is Australia's first community-owned wind farm located near Daylesford, just outside of Melbourne. It is a prime example of community-led renewable energy projects. Hepburn Wind provides clean and sustainable energy to the local region.

GreenSync is a technology company that offers innovative software solutions for managing and optimising distributed energy resources. Their platform enables utilities, businesses, and consumers to efficiently integrate renewable energy, energy storage, and demand response programs into the grid.

Green Li-ion is revolutionising the energy storage industry with world first technology that fully remanufactures spent Lithium-lon batteries and waste.

RayGen is a cleantech company that specialises in concentrated solar power and energy storage systems. They have developed a unique technology called "solar hydro" that combines concentrated solar thermal with liquid nitrogen energy storage, allowing for continuous and dispatchable renewable energy generation.

- Melbourne is underinvesting in climate technology by 3.8 percent looking at Asian VC investment levels.
- Rectifying this shortfall has the potential to bring an additional \$5 billion to the city's economy.
- Furthermore, the exceptional forecasted global growth of 19 percent by 2030 makes climate technology an important sector to consider.



# Appendix I – Rationale for selection of sectors: Digital games

### **Definition**

# **Gaming**

The gaming industry sector encompasses the development, production, and distribution of video games for various platforms, including consoles, computers, mobile devices, and online platforms. The gaming industry includes game developers, publishers, hardware manufacturers, and other supporting services like streaming platforms and esports organizations. It has become a significant global industry, providing entertainment to millions of people worldwide and generating substantial revenue through game sales, in-game purchases, advertising, and esports events.

## **Top 5 Gaming Tech companies in Melbourne**

**Electronic Arts** is one of the largest video game companies worldwide, and they have a studio in Melbourne. The studio has worked on various titles, including the highly successful "FIFA" series.

**Firemonkeys Studios** is a subsidiary of Electronic Arts. They are known for developing mobile racing games, particularly the "Real Racing" series and "Need for Speed: No Limits".

**League of Geeks** is an independent video game development studio based in Melbourne. They are the creators of the critically acclaimed digital board game "Armello," which combines strategy, RPG, and card game elements.

**The Voxel Agents** is an independent game studio based in Melbourne. They have developed several successful mobile games, including "Train Conductor" series and "The Gardens Between".

**Mountains** is a small independent game development studio located in Melbourne. They are known for their critically acclaimed game "GRIS," a visually stunning and emotionally evocative platformer.

- Considering the projected global growth of the digital games sector at 13
  percent by 2030, as well as the potential for investment improvement based
  on Asia's digital games industry contribution, Melbourne can expect an
  additional
  - \$1 billion in revenue.
- Despite being a relatively small sector, Melbourne's digital games industry possesses the healthiest competitive advantages among all sectors due to its strong creative and physical assets.



# Appendix I – Rationale for selection of sectors: Sports tech

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### **Definition**

# **Sports Tech**

The Sports Tech industry sector encompasses the application of technology and innovation in various aspects of sports and athletic performance. It involves the development and use of advanced tools, equipment, software, and data analytics to enhance training, performance, fan engagement, and overall sports experiences. Sports Tech combines elements of sports science, engineering, data analysis, and digital media to revolutionize the way sports are played, managed, and consumed. The industry aims to improve athletic performance, optimize training methods, provide immersive fan experiences, and drive innovation in the sports ecosystem.

### **Top 5 Sports Tech companies in Melbourne**

Catapult is a leading sports technology company that specialises in athlete tracking and performance analysis. They develop wearable devices and software solutions to track and analyse athlete performance data. Catapult's technology is widely used in various sports, including football, basketball, rugby, and more.

Spalk is a sports technology company that offers a platform for remote sports commentary. Their software allows commentators to call games from anywhere in the world, providing alternative commentary options and increasing accessibility for fans. Spalk has collaborated with major sports leagues and broadcasters globally Champion Data is an Australian sports analytics company that provides comprehensive data and statistical analysis for various sports. They collect and analyze data to provide insights into player and team performance, which is utilized by sports teams, media organizations, and betting agencies.

Although Hudl is not based solely in Melbourne, they have a significant presence in the city. Hudl provides sports performance analysis software, primarily targeting team sports. Their platform allows coaches and athletes to review game footage, analyze statistics, and create video highlights to enhance performance and Genius Sports is a global sports data and technology company that focuses on sports integrity and data-driven solutions. They provide real-time data collection, analytics, and integrity services to sports organizations.

- As the sporting capital of Australia and the sole city hosting major tennis tournaments and Formula 1 races, supporting the sports tech sector is an obvious choice.
- Not only can this sector generate an additional \$0.2 billion in revenue, but global growth predictions indicate a near 21 percent increase.



# Appendix I – Rationale for selection of sectors: Education technology

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### Definition

## **Ed Tech**

Education technology, also known as edtech, refers to the use of technology, digital tools, and resources to enhance teaching, learning, and educational outcomes. It involves the application of various technological innovations, such as software applications, online platforms, virtual reality, augmented reality, artificial intelligence, and data analytics, to support and transform traditional educational methods and processes. Education technology aims to improve access to quality education, increase student engagement and motivation, personalize learning experiences, facilitate communication and collaboration, provide effective assessment and feedback, and enable lifelong learning opportunities.

## **Top 5 Ed Tech companies in Melbourne**

Education Perfect is an online learning platform that provides resources and tools for teachers and students across various subjects. It offers interactive lessons, assessments, and analytics to enhance learning outcomes.

Verso is an educational app that promotes student engagement and collaboration in the classroom. It allows teachers to create interactive lessons, assessments, and discussions, enabling students to participate actively in their learning.

Matific is a mathematics learning platform for primary school students. It offers a wide range of interactive activities, games, and lessons designed to improve mathematical understanding and problem-solving skills.

ClickView is an educational video platform that provides schools with access to a vast library of educational videos. It allows teachers to create and share videos with their students, facilitating flipped classrooms and personalized learning.

Compass Education is a comprehensive school management system that integrates various administrative and teaching tools. It includes features such as attendance tracking, grade management, communication tools, and parent portals.

- The focus on Edtech is primarily based on Melbourne's global competitive advantage in this sector.
- While investment in the sector exceeds the domestic average by 0.8 percent, it still falls short in comparison to Asia's investment contribution of 1.2 percent.
- Bridging this gap could potentially bring an additional \$1 billion in revenue.
- The forecasted global growth of 13 percent by 2030 further supports the strategic importance of this sector.



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