

Zero-Carbon Jobs Summit Outcomes and Arrangements for Cluster

7 March 2023

Presenter: Andrew Wear, Director, Economic Development and International

Purpose and background

1. The purpose of this report is to provide an update on Major Initiative 29 in the Council Plan – ‘Create an enabling environment for Melbourne businesses and universities to become the employment centre of a resilient zero-carbon economy’.
2. On 12 July 2022, Future Melbourne Committee agreed to the establishment of a ‘Zero-carbon Industry and Jobs Cluster’ by 30 June 2023. The initial pieces of work have been delivered and management is now focussing on the establishment of the cluster.
3. Early work included a market opportunities assessment and the November 2022 Zero Carbon Jobs Summit, which both highlighted that Melbourne is well placed to grow this sector given the city’s key assets in: economic diversity; access to talent; liveability; strong knowledge-based industries; and robust linkages between the university and start-up sectors.

Key issues

4. The transition to a zero carbon economy represents an enormous economic opportunity. Globally, investments in companies involved in ‘climate tech’ are growing exponentially. In 2022, venture capital funding for climate tech was US\$70.1 billion, up 89 per cent on 2021, despite a broader market that fell significantly. Climate tech venture funding is now 40 times larger than it was a decade ago.¹ Growth in demand for green goods and services will create a global opportunity worth US\$10.3 trillion by 2050 (approximately 5 per cent of global GDP).
5. The introduction of new legislation into the Australian Parliament in 2022 set emission reduction targets of 43 per cent of 2005 levels by 2030 and net zero emissions by 2050. Achievement of these targets will see significant growth within the zero-carbon sector through the realisation of new business and employment opportunities. Expert consensus is that in Victoria, the zero-carbon sector could catalyse in excess of 100,000 new jobs by 2030.
6. Melbourne has an unprecedented opportunity to maximise the number of jobs for the city while positioning itself as a centre for the zero-carbon workforce and as a global climate tech hub. This can be achieved while supporting the city’s economic recovery by meeting the predicted surge in jobs required for the deployment of renewable energy, circular economy and climate adaptation initiatives.
7. A **Market Opportunities Assessment** was delivered in November 2022 (summary at Attachment 2).
 - 7.1 The assessment identified: relevant local organisations active within the zero-carbon sector; opportunities and barriers for collaboration; and advice on the establishment of a Zero-Carbon Industry Cluster.
 - 7.1 It identified that key areas of focus for the cluster are likely to be drawn from: construction and the built environment; renewable energies; food and agricultural technology; transport and logistics, finance; professional services; tertiary education/research; and technology (i.e. digital, artificial intelligence, advanced manufacturing and the circular economy).
8. The **City of Melbourne Zero-Carbon Jobs Summit** was held on 23 November 2022 and engaged approximately 120 people (summary at Attachment 3).
 - 8.1 Participants heard that the commitment to reduce greenhouse gases will boost Victoria’s labour market by about 100,000 jobs.
 - 8.2 This represents a significant opportunity for the city to leverage and grow jobs, while also supporting local economic development targets.
 - 8.3 Summit contributors identified a clear role for the City of Melbourne to implement and seed a cluster.

¹ [Defying gravity, 2022 Climate Tech VC funding totals \\$70.1 billion, up 89% on 2021](#), Holon IQ, 3 January 2023

9. The initial cluster meeting was held on 15 February 2023 with approximately 40 local thought and sector leaders attending. There was broad enthusiasm to pursue further cluster development work. Discussion canvassed the breadth of opportunities in Melbourne and identified the need to tightly identify the focus of the cluster.
 - 9.1 Further work with stakeholders is planned as management collaborates with an industry working group to clearly define cluster objectives and strategic deliverables, with the primary focus on the creation of jobs within the zero-carbon sector.
 - 9.2 Focus areas for the cluster may potentially include: talent and business attraction; the city as zero carbon jobs training hub; city representation at national and international events; branding; continued development of R&D; and commercialisation opportunities.
10. Planning is underway to position the City of Melbourne as a world leader in the transition to a zero-carbon economy and in support for associated industry and jobs. Actions are subject to further collaboration with cluster stakeholders, but are likely to include:
 - 10.1 The development of a Zero-Carbon Investment Plan that highlights Melbourne's unique value as a location for zero-carbon businesses to establish and grow.
 - 10.2 The delivery of a series of networking events and communications to promote local case studies, success stories, news and events.
 - 10.3 Engagement to promote the Melbourne cluster's capabilities at domestic and international events.
 - 10.4 A potential partnership between COM and a major university to foster zero-carbon research and design.
 - 10.5 Exploration of the potential for a zero-carbon innovation hub and/or co-working space within COM.

Recommendation from management

11. That the Future Melbourne Committee requests management:
 - 11.1 Works with stakeholders to develop and deliver further initiatives as part of the first year of the Zero-Carbon cluster's operations.
 - 11.2 Reports back to the Committee to provide an update on the cluster formation and work plan activities by October 2023.

Attachments:

1. Supporting Attachment (Page 3 of 5)
2. Executive Summary – Market Opportunities Assessment (Page 4 of 5)
3. Summary of Zero-Carbon Jobs Summit (Page 5 of 5)

Supporting Attachment

Legal

1. There are no direct legal implications for council in the recommendation of this report.

Finance

2. There are no direct financial implications arising from the recommendation from management. Provision of funding for activities to support the implementation of the initiative during the current financial year has been confirmed.

Conflict of interest

3. No 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. The development of the Market Opportunities Assessment report included stakeholder interviews, undertaken by external consultants in October – November 2022. A large number of additional stakeholders were engaged through the Zero Carbon Jobs Summit in November 2022 and the initial cluster meeting on 15 February 2023.

Relation to Council policy

6. This initiative delivers against Major Initiative 29 in the Council Plan– ‘Create an enabling environment for Melbourne businesses and universities to become the employment centre of a resilient zero-carbon economy’. It is also an action identified in the Economic Development Strategy 2031. Other relevant strategies include, Climate and Biodiversity Emergency Response, Climate Change Mitigation Strategy and the Climate Adaption Strategy.

Environmental sustainability

7. In developing this report, environmental sustainability issues have been considered and no direct concerns were identified.

Attachment 2 – Executive Summary – Market Opportunities Assessment

Extract from report prepared by Startupbootcamp

There is support for the City of Melbourne to establish a Zero Carbon Jobs Cluster for the city and neighbouring areas. Our research confirms a local abundance of sustainability related technical innovation however business and industry support is essential in realising the economic and social potential.

The opportunities for jobs growth in the zero carbon economy and hence the areas of focus for the proposed cluster are likely to be drawn from the following emissions intensive and enabling sectors:

Emissions Intensive Sectors	Enabling Sub-Sectors
<ul style="list-style-type: none"> - Construction and the built environment - Renewable energies - Food and agricultural technology - Transport - particularly last-mile mobility and logistics 	<ul style="list-style-type: none"> - Technology (including but not limited to digital technology, artificial intelligence, advanced manufacturing, circular economy) - Professional Services - Finance - Tertiary education and research

The two main barriers to achieving zero carbon economy jobs growth were identified as a lack of awareness and a skills shortage to meet zero carbon objectives.

The primary role of City of Melbourne in supporting the cluster is identified as providing the forum for collaboration both physically and virtually as well as the near term funding to establish and support the cluster.

The cluster needs to have a clear vision, mission and priorities, aligned to City of Melbourne's overall strategic vision. Ideally, this combines net zero goals with Melbourne's continued status as one of the world's most liveable cities.

The cluster should also have specific measurable goals - such as new jobs created and/or economic value added. Cluster activities should be prioritised towards achievable near term objectives and organised into work streams and/or flagship projects that support the vision.

All of these matters should be co-developed by a leadership group drawn from relevant sectors. The cluster leadership should be comprised of leaders with a sense of purpose beyond their own organisation's interests.

The cluster should seek to create synergies and collaborate with other cluster 'nodes' and/or commercialisation activities - such as Circular Economy, Advanced Manufacturing, rather than competing or reinventing the wheel. Early consideration should be given to governance and determining the appropriate structure for achievement of the mission.

Consideration also needs to be given to the funding model, including providing or securing funding for an initial period of 3 years. An exit plan based on achievement of the mission should also be considered as part of formation of the cluster. Suggested next steps include:-

- Use the Zero Carbon summit to gauge support, and test and validate insights and opportunities from this report
- Initiate a small representative working group to formulate/validate cluster objectives and strategy
- Map current clusters, precincts, hub across Melbourne to understand synergies

Attachment 3 – Summary of Zero-Carbon Jobs Summit

1. The City of Melbourne Zero-Carbon Jobs Summit engaged some 120 participants throughout the day. Discussions explored the benefits of collective action within the city; an examination of the opportunities and obstacles for adopting a zero-carbon approach; and opportunities for jobs growth.
2. Keynote speakers highlighted the Commonwealth Government's new legislation that aims to reduce greenhouse gas emissions to 43 per cent below 2005 levels by 2030, and the associated opportunities.
 - 2.1. The commitment to reduce greenhouse gases would mean at least 400,000 new jobs nationally (approximately 100,000 for Victoria). This represents a significant opportunity for the city to leverage and grow jobs, while also supporting local economic development targets.
3. Most speakers and attendees saw a clear role for the City of Melbourne in supporting and seeding a cluster by bringing key stakeholders together for the collective benefit of all and to support the growth of jobs in the sector.
4. 40 expressions of interest have subsequently been received from attendees, expressing a desire to be a contributor to the Zero-Carbon cluster.
5. Opportunities for employment growth that the cluster could pursue, include:
 - 5.1. Sub-sector development including technology, advanced engineering, new energy and agricultural-technology.
 - 5.2. Clean technology, which is seen as a growth area for start-ups as a result of business demand and a need to decarbonise supply chains.
 - 5.3. Data and artificial intelligence that support better energy production, sustainability and resilience management.
 - 5.4. Skills that are in-demand in construction, infrastructure and technology for new buildings and retrofitting existing building assets.
 - 5.5. A transport sector focus and development in order to decrease emissions.
 - 5.6. Circular economy initiatives, including the development of waste and plastic recycling policies.
 - 5.7. Advanced manufacturing on-shoring for large scale renewable energy projects.
 - 5.8. TAFE and university capacity-building to create new training programs and approaches with government and industry bodies.