

Agenda

Inner Melbourne Action Plan Implementation Committee

Meeting No 14

8.00 am – 10.00 am Friday 29 May 2009

City of Yarra

Richmond Town Hall – Bridge Road, Richmond

Meeting Room 3 (upstairs)

Committee Members	<p>Cr Amanda Stone – Mayor, City of Yarra (Chair)</p> <p>Cr Frank O'Connor – Mayor, City of Port Phillip</p> <p>Cr Claude Ullin – Mayor, City of Stonnington</p> <p>Cr Peter Clarke – Chair Planning Committee, City of Melbourne</p> <p>Mr Bruce Phillips - Acting Chief Executive Officer, City of Yarra</p> <p>Ms Kay Rundle – Chief Executive Officer, City of Port Phillip</p> <p>Mr Warren Roberts – Chief Executive Officer, City of Stonnington</p> <p>Mr Geoff Lawler – Director Sustainability and Regulatory Services, City of Melbourne</p>
Associate Partner Representatives	<p>Clare McArdle - Executive Director Melbourne 2030 Implementation Unit, DPCD</p> <p>Sally Semmens - Urban and Regional Planning, Department of Transport</p> <p>Diane Sydenham - Department of Innovation, Industry and Regional Development;</p>
IMAP	<p>Alison Fitzgerald – IMAP Implementation Officer</p>
Guests	<p>George Borg, Manager City Development, City of Port Phillip</p> <p>Kelly Martini, Corporate and Community Planner, City of Stonnington</p> <p>Caroline Chandler, Senior Sustainable Environment Officer, City of Port Phillip</p> <p>Martin Hartigan, Coordinator Sustainable Environment, City of Port Phillip</p> <p>Alex Fearnside, Team Leader Sustainability, City of Melbourne</p> <p>Dan Costa, Project Manager, City of Melbourne</p> <p>Bruce Herbes, Wayfinding Consultant, Visual Voice</p> <p>Jan Jacklin, Manager Venues, Events & Community Relations, City of Stonnington</p> <p>Clare Malone, Policy Manager, Responsible Alcohol Victoria, Dept of Justice</p> <p>Con Tsotsoris, Executive Director DPCD</p> <p>Alice Dunt, Secretariat of the Inter Departmental Committee</p> <p>Sarah Kaushik, Senior Policy Officer, Alcohol Policy Unit, Dept of Justice</p>

PRELIMINARIES

Item	Time Alloc.	Agenda Topic	Responsibility
1.	1 min	Appointment of Chair	Chair
2	1 min	Apologies Clare McArdle - Executive Director, DPCD	Chair
3.	1 min	Suspension of City of Melbourne's Local Law No. 1 Conduct of Meetings (No 1 of 2001) <u>Recommendation</u> 3.1 That pursuant to Division 6, clause 14 of the Melbourne City Council's Conduct of Meetings Local Law 2001, the provisions of the Local Law be suspended for the duration of the meeting of the Inner Melbourne Action Plan Implementation Committee.	Chair

ITEMS

4	1 min	Confirmation of Minutes (Attachment 1) <u>Recommendation</u> 4.1 That the IMAP Implementation Committee resolves to confirm the minutes of the IMAP Implementation Committee held on 6 February 2009.	Chair
5.	1 min	Confirmation of Minutes (Attachment 2) <u>Recommendation</u> 5.1 That the IMAP Implementation Committee resolves to confirm the minutes of the IMAP Senior Executive Forum held on 26 March 2009.	Chair
6.	1 min	Business Arising (Attachment 3) <u>Recommendation</u> 6.1 That the IMAP Implementation Committee resolves to note the actions undertaken in response to business arising from previous minutes. Correspondence From: Department of Justice – Cumulative Impact To: Department of Planning and Community Development – Submission to Planning and Environment Act Review	Chair
7.	2 mins	Financial Report (Attachment 4) <u>Recommendation</u> 7.1 That the IMAP Implementation Committee resolves to receive the IMAP Financial Report for the 3rd quarter 08-09	Chair
8.	15 mins	IMAP Progress Presentation <u>Recommendation</u> 8.1 That the IMAP Implementation Committee resolves to note the IMAP Progress Presentation May 2009	Implementation Officer
9.	10 mins	IMAP Governance Initial discussion with Office of Local Government	Geoff Lawler
10.	10 mins	Sustainability CoM Adaptation Strategy Opportunities for IMAP	Geoff Lawler Implementation Officer
11.	15 mins	Action 9.3 Water Sensitive Urban Design (Attachment 5) <u>Recommendation</u> 11.1 That the IMAP Implementation Committee resolves to <ul style="list-style-type: none"> (a) note the assessment and successful outcomes of the IMAP council planning trial of the Stormwater Management (Water Sensitive Urban Design) local planning policy; (b) approve the completion of Action 9.3 and support continued communications and collaboration across the IMAP councils, DPCD and partnering organisations (Melbourne Water and Retail Water Authorities. (c) determine how best to have the Stormwater Management (Water Sensitive Urban Design) draft local planning policy into the Planning Schemes of the Cities Melbourne, Stonnington, Yarra and Port Phillip). 	Caroline Chandler (CoPP)
12.	15 mins	Action 9.1 Regional Sustainability Targets (Attachment 6) <u>Recommendation</u> 12.1 That the IMAP Implementation Committee resolves to: <ul style="list-style-type: none"> (a) Note the progress of Action 9.1 (b) Provide guidance on the next steps for Action 9.1 	Alex Fearnside (CoM) Bruce Herbes (Visual Voice)

13.	15 mins	Action 2.2 Wayfinding (Attachment 7) <u>Recommendation</u> 13.1 That the IMAP Implementation Committee resolves to: a) Note the progress of Action 2.2 demonstration project. b) Support an invitation to Minister Pallas to officially launch the IMAP Wayfinding demonstration project.	Dan Costa (CoM)
14.	15 mins	Strategy 11 - Tourism (Attachment 8) <u>Recommendation</u> 14.1 That the IMAP Implementation Committee resolves to: a) Note the progress of the IMAP Tourism working group b) Agree that the IMAP Tourism working group present outcomes to the IMAP Implementation Committee in August 2009.	Jan Jacklin (CoS)
15.	15 mins	Presentation on the Interdepartmental Committee (IDC) by Department of Justice	Con Tsotsoris (DoJ)

CONFIDENTIAL ITEMS

Meeting to be closed in accordance with Sections 89 (2) (d, e, f, h) of the Local Government Act (1989)

16.	1 min		
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OTHER BUSINESS

17.	1 min	Close Next Meeting – Friday 28 August 2009 (8.00am) City of Melbourne	Chair
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ATTACHMENTS

Item No	Attachment No	Attachment Topic
4	Attachment 1	DRAFT Minutes of Meeting No. 13 (6 February 2009)
5	Attachment 2	DRAFT Minutes of IMAP Senior Executive Forum (26 March 2009)
6	Attachment 3 Attachment 3a Attachment 3b	Business Arising + Correspondence <ul style="list-style-type: none"> - Outgoing Correspondence to DPCD - Incoming Correspondence from DoJ
7	Attachment 4 Attachment 4a	Financial Report <ul style="list-style-type: none"> - Budget 08-09
11	Attachment 5 Attachment 5a Attachment 5b Attachment 5c Attachment 5d Attachment 5e	Action 9.3 WSUD <ul style="list-style-type: none"> - Background and Context - MW Letter of Approval - Draft Planning Scheme - Explanatory Note - Policy Assessment
12	Attachment 6 Attachment 6a Attachment 6b Attachment 6c Attachment 6d	Action 9.1 Regional Sustainability Targets <ul style="list-style-type: none"> - Targets, Baseline and Methodologies - LSA Sustainability Programs Audit - Carbon Footprint for City of Port Phillip - Carbon Footprint for City of Stonnington
13	Attachment 7 Attachment 7a Attachment 7b	Action 2.2 Briefing Paper <ul style="list-style-type: none"> - Signage Locations - Map-base Signs
14	Attachment 8	Strategy 11 Tourism Progress Report

DRAFT MINUTES
Inner Melbourne Action Plan
Implementation Committee
Meeting No 13 (6 February 2009)
City of Port Phillip – St Kilda Town Hall

Attendees	<p>Cr Frank O'Connor – Mayor, City of Port Phillip (Chair)</p> <p>Cr Claude Ullin – Mayor, City of Stonnington</p> <p>Cr Amanda Stone – Mayor, City of Yarra</p> <p>Cr Peter Clarke – Chair Planning Committee, City of Melbourne</p> <p>Dr Andi Diamond - Chief Executive Officer, City of Yarra</p> <p>Ms Sally Calder – Acting Chief Executive Officer, City of Port Phillip</p> <p>Mr Geoff Lawler – Director Sustainability and Regulatory Services, City of Melbourne</p> <p>Mr Hadley Sides – Chief Executive Officer, City of Stonnington</p>
Associate Partner Representatives	<p>Clare McArdle - Executive Director Melbourne 2030 Implementation Unit, DPCD</p> <p>Sally Semmens – Urban and Regional Planning, Department of Transport</p> <p>Diane Sydenham - Director Strategic Policy, DIIRD</p>
IMAP	<p>Alison Fitzgerald, IMAP Implementation Officer</p>
Guests	<p>Malcolm Baalman, Director Stakeholder Engagement, Department of Transport</p> <p>Bruce Phillips, Director City Development, City of Yarra</p> <p>Haig Poulson, Principal Engineer Traffic Engineering, City of Melbourne</p> <p>Kelly Martini, Corporate and Community Planner, City of Stonnington</p> <p>Leonie Kirkwood, Senior Strategic Planner, City of Port Phillip</p> <p>Alex Fearnside, Team Leader Sustainability, City of Melbourne</p> <p>Michaela Lang, Community Sustainability Officer, City of Melbourne</p> <p>Ian McLauchlan, Transport and Parking Manager, City of Stonnington</p> <p>Helen Steel, Projects Coordinator, Office of Knowledge Capital, City of Melbourne</p>

PRELIMINARIES

1.	<p>Appointment of Chair</p> <p><u>Recommendation</u></p> <p>1.1 That the IMAP Implementation Committee resolve to appoint Cr Frank O'Connor as the Chair of the meeting.</p> <p>MOVED Mr LAWLER / Cr Sides</p> <p>A vote was taken and the MOTION was CARRIED</p>
2.	<p>Apologies</p> <p><u>Recommendation</u></p> <p>2.1 That the IMAP Implementation Committee resolve to note the following apologies:</p> <p>Sally Semmens – Urban and Regional Planning, Department of Transport</p> <p>Diane Sydenham - Director Strategic Policy, DIIRD</p> <p>Andrew Korr, Senior Adviser, Office of the Minister for Public Transport and the Arts</p> <p>MOVED CR SIDES / Cr Stone</p> <p>A vote was taken and the MOTION was CARRIED</p>
3.	<p>Suspension of City of Melbourne's Local Law No. 1 Conduct of Meetings (No 1 of 2001)</p> <p><u>Recommendation</u></p> <p>3.1 That pursuant to Division 6, clause 14 of the Melbourne City Council's Conduct of Meetings Local Law 2001, the provisions of the Local Law be suspended for the duration of the meeting of the Inner Melbourne Action Plan Implementation Committee.</p> <p>MOVED Mr SIDES / Cr Ullin</p> <p>A vote was taken and the MOTION was CARRIED</p>

ITEMS

<p>4</p>	<p>Confirmation of Minutes (Attachment 1) <u>Recommendation</u> 4.1 That the IMAP Implementation Committee resolves to confirm the minutes of the IMAP Implementation Committee held on 31 October 2008.</p> <p>MOVED Mr SIDES / Mr Lawler A vote was taken and the MOTION was CARRIED</p>
<p>5.</p>	<p>Business Arising (Attachment 2) Sally Semmens (an apology) was to provide an update from the Department of Transport in respect to the Victorian Transport Plan.</p> <p>Correspondence</p> <ul style="list-style-type: none"> • Reminder Letter to Chief of Staff following Minister's offer for IMAP to partner with State Govt on development of Tram Strategy. • Response Letters to Ministers Wynn and Madden following Ministerial Briefing 11 Sept 08. <p>Agenda Items from IMAP Implementation Committee meeting 31 October 2008</p> <ul style="list-style-type: none"> • Decision made to refer Melbourne 2030 DACS topic and Building Heights topic to the Inner South Metropolitan Mayors Forum. • Funding for Action 2.5 Bicycle Network resource still being explored with Department of Transport. <p>IMAP Annual Forum to be scheduled for June 09.</p> <p>Annual Report 07-08 has been completed and distribution is being undertaken.</p> <p><u>Recommendation</u> 5.1 That the IMAP Implementation Committee resolves to note the actions undertaken in response to business arising from the minutes of the IMAP Implementation Committee held on 31 October 2008.</p> <p>MOVED Cr SIDES / Cr Stone A vote was taken and the MOTION was CARRIED</p> <p>Actions:</p> <ul style="list-style-type: none"> ▪ IMAP Implementation Officer to follow-up with Sally Semmens on DoT update ▪ IMAP Implementation Officer to continue to liaise with Minister Kosky's office re: Tram Strategy.
<p>6.</p>	<p>Budget (Attachment 3) <u>Recommendation</u> 6.1 That the IMAP Implementation Committee resolves to receive the IMAP Financial Report for the 2nd quarter 08-09.</p> <p>MOVED MS CALDER / Mr Lawler A vote was taken and the MOTION was CARRIED</p>
<p>7.</p>	<p>Progress Report - Implementation Officer (Attachment 4) <u>Recommendation</u> 7.1 That the IMAP Implementation Committee resolves to note the IMAP Progress Report February 2009.</p> <p>MOVED CR CLARKE / Ms Calder A vote was taken and the MOTION was CARRIED</p> <p>Actions:</p> <ul style="list-style-type: none"> ▪ IMAP Implementation Officer to circulate quarterly IMAP Progress Report prepared for the City of Yarra to other IMAP Councils.
<p>8.</p>	<p>3 Year Implementation Plan (Attachment 5) – Implementation Officer Discussion It was considered appropriate to review the Inner Melbourne Action Plan (going into year 4) with consideration for the following:</p> <ul style="list-style-type: none"> • Leverage off IMAP Actions already completed e.g. City Tourist Bus (Actions 11.1 / 11.2 Tourism) • Increase focus on 'Sustainability' and 'Public Transport' • Deliver a revised and updated Plan not a re-written Plan • Synergies coming from 4 Year Council Plans (developed in June 09)

- State and Federal Government Budgets (May 09), Policies and Strategies
- Shift from 'aspirational' statements to delivery and implementation
- Distinguish between short and long term implementation
- 'Desk-top' look to re-focus
- Timing of when the original Actions were written (some statements may now appear tentative)
- Existing Actions that do not have 'traction', question whether they should proceed
- No need for broad-based consultation
- New Plan must be adopted unanimously
- Approach Minister Local Govt

Recommendation

8.1 That the IMAP Implementation Committee resolves to:

- Support** a review of the Inner Melbourne Action Plan in September 2009, reporting back to the IMAP Implementation Committee in November 2009.
- Note** the attached *Status of Progress* table and support the recommendations for the remainder of Year 3 (08-09) and Year 4 (09-10) pending the review of the Inner Melbourne Action Plan.
- Support** discussion and provide direction to working groups at next Senior Executive Forum, scheduled for March 2009 with the aim to complete Actions in progress.
- Support** further discussions on the extension of 'demonstration' projects to advocate for a 'Flagship' project in partnership with the State Government.

MOVED CR STONE / Mr Hides

A vote was taken and the MOTION was CARRIED

Actions:

- IMAP Implementation Officer to focus on identifying opportunities relating to 'sustainability' from the Inner Melbourne Action Plan and report back to the IMAP Committee May 2009.
- IMAP Implementation Officer to identify opportunities for advocacy in the area of public and sustainable transport and initiate such opportunities e.g. Cycling Strategy.

9. IMAP Governance and Relationships Report (Attachment 6)

Discussion

- Continuity of IMAP knowledge is necessary, particularly with changeover of Mayors.
- Requires alternative representation of elected representative as 'nominee' (to be nominated by Mayor)
Note: In CoM's case, nominated by the Chair of the Planning Committee
- Changes to the Operational Protocol and potential changes to the Terms of Reference requirements – approval by individual IMAP Councils?
- Consideration of a regional collaborative model in the Local Government Act

Recommendation

9.1 That the IMAP Implementation Committee resolves to:

- Note** the actions undertaken by the IMAP Implementation Officer to improve the 'Co-ordination Communication' as per minutes of the Sub-group Meeting held 24 July.
- Adopt** the amended Operational Protocols of the Inner Melbourne Action Plan as per the recommendation in the Review of IMAP Governance and Relationships Report subject to approval by 4 IMAP Councils.
- Support** an approach to the Minister for Local Government to 'modernise' the Section 86 Provisions of the Local Government Act to accommodate a regional collaborative model such as IMAP.
- Encourage** the continued progress of implementing priority actions identified by the sub-group including further discussion on item 11.

NOTE: Recommendation (b) was not endorsed pending confirmation of the need to gain formal approval from each IMAP Council.

MOVED MR LAWLER / Cr Ullin

A vote was taken and the MOTION was CARRIED

Actions:

- Implementation Officer to confirm statutory requirements for amendments to the IMAP Operating Protocol and IMAP Terms of Reference
- Implementation Officer to coordinate recommendation c) to explore alternative governance models prior to undertaking changes to 4 X Terms of Reference

10. Overview of The Victorian Transport Plan – Malcolm Baalman

- Cycling Strategy includes \$115M boost to cycling (majority within the inner 10km radius of Melbourne)
- Companion document – *Freight Futures* aims to reduce unnecessary freight movements from inner area. 3 'nodes' will move traffic away from the Port of Melbourne relieving congestion in the area.

Discussion:

- 12 year Plan - sequence of priorities may be affected by budget allocations
- IMAP would appreciate the sharing of a detailed timetable of projects – minimises disruption on council infrastructure and provides councils with the ability to work with partners to plan for land use.
- Immediate cash flow, increased employment and construction are key drivers
- Ability of funds to flow to Local Government to assist with joint implementation with partners

11. Strategy 11 Tourism ([Attachment 7](#))Recommendation

11.1 That the IMAP Implementation Committee resolves to:

- a) Note the progress of the IMAP Tourism working group
- b) Agree that the working group present outcomes to the IMAP Implementation Committee in May 2009.

MOVED MR SIDES / Ms Calder
A vote was taken and the MOTION was CARRIED

12. Action 2.2 Wayfinding ([Attachment 8](#))Recommendation

12.1 That the IMAP Implementation Committee resolves to **note** the progress of Action 2.2 demonstration project.

MOVED CR STONE / Ms Calder
A vote was taken and the MOTION was CARRIED

13. Action 2.5 Bicycle Network ([Attachment 9](#))

Discussion

- A 150% increase in usage across 30 routes
- Many points of the Network require major treatment and large sums of funding

Recommendation

13.1 That the IMAP Implementation Committee resolves to:

- a) Note the current progress of implementing the 'red' and 'blue' priority routes as per 'Bicycle Victoria's Review of the Priority Bike Route Network for IMAP' (January 2008)
- b) Approve the initiative of a collaborative facilitated 'Senior Transport Forum'. Outcome of Forum will be presented to the IMAP Implementation Committee in May 2009.
- c) Support the scoping of a formal structure and program by the Working group in liaison with all key stakeholders to be presented to the IMAP Implementation Committee in August 2009.
- d) Agree to a deputation to Minister Pallas to include IMAP's offer to assist with treatments of St Kilda Road and recommendation of a Victorian Government supported 'Flagship project' as an extension of the current demonstration project.

NOTE: Recommendations (b) and (d) were not endorsed. They require further discussion and planning and should be focussed and consider external factors such as State and Federal budget (+ stimulus package). Department of Transport should be engaged for assistance and support.

MOVED CR ULLIN / Mr Lawler
A vote was taken and the MOTION was CARRIED

Actions:

- IMAP Implementation Officer to progress discussions and planning of 'Transport Forum' and deputation to Minister Pallas.

14. Action 9.1 Regional Sustainability Targets ([Attachment 10](#))

Discussion

- City Switch (CoM) – joint funding bid extended to CoPP
- Residential Project (CoM) – extend across IMAP councils
- Consistent measurement will build 'body of knowledge'
- CoPP are using a 'bottom up' methodology
- CoS confirmed that they will pay their component of the work to be undertaken by Arup

Recommendation

14.1 That the IMAP Implementation Committee resolves to approve funding of \$14,500 to conduct standardised greenhouse emission measurements and note current progress of the program audit.

MOVED CR CLARKE / Mr Lawler
A vote was taken and the MOTION was CARRIED

15. Action 3.3 Regional Approach to Parking Management (Attachment 11)Discussion

- The IMAP region is experiencing an increase in congestion
- The working group identified that no further work was needed on residents parking permits
- Parking management has been considered from a sustainability perspective
- Guidelines developed to guide allocation of kerbside road space
- What is a good Travel Plan?
- Develop an IMAP position on 'car sharing' across the region
- Existing parking supply – need to expand working group to include transport planners
- Increase in scooter purchases and use – consider pedestrian impact with footpath parking
- Include motorcycles and scooters in future IMAP work (not included in 52:06 review)
- Awaiting State Govt review of Clause 52:06 prior to commencing recommendation d)
- Consider strategic review of State Govt strategies (e.g. Melbourne 2020 Plan and Transport Plan) to identify opportunities for IMAP
- Consider benefits from 'Park and Ride' facilities
- Congestion is a bigger issue with cars generating bad environmental outcomes – longer term project, not within the scope of Action 3.3

Recommendation

- 15.1 That the IMAP Implementation Committee resolves to:
- a) Note the progress of Action 3.3 Regional Approach to Parking Management.
 - b) Endorse the IMAP Sustainable Transport Framework for use by member Councils in determining the allocation of road-side kerb space, where Council has the relevant highway authority power.
 - c) Agree to a joint approach for the development of tools to influence the consistency and value of Integrated Travel Plans submitted as part of Planning Applications
 - d) Endorse car sharing as a valid parking mitigation initiative and encourage member councils to develop an IMAP regional car sharing guideline (consistent with the CoM draft guideline and any subsequent State Government guidelines released).
 - e) Approve the development of a Resource Document and Action Plan based on the outcome of the State Government's Review of CL52.06

MOVED CR ULLIN / Cr Clarke
A vote was taken and the MOTION was CARRIED

16. Action 6.3 Activity Centres – Cumulative Impact (Attachment 12)

Bruce Phillips from the City of Yarra spoke to the Briefing Paper

- Amenity impacts on late night conflict
- Action 6.3 responds to ICEPT, particularly recommendations 5 & 6 (cumulative impact)
- Working group has asked the questions "what is cumulative impact", "how do we assess it?"
- A performance based approach versus a prescriptive approach
- Considered 'meaningful indicators' – what information is readily available?
- Indicators can be presented in many forms – GIS Map, Bar chart or in text
- CoM not mapping restaurants?

Discussion:

- Difference of views exist between owners and licensee - professional development and education would assist
- Position IMAP to recommend an extension of the 'freeze'. An understanding of the impact of the 'freeze' would be an advantage
- Mr Lawler responded to the question of City of Melbourne not mapping restaurants and spoke about the Cumulative Impact clause in the Planning Scheme not applying to Capital Cities
- Consider using baseline in major precincts as a comparative tool - include indicators such as; number of operating hours and number of patrons (would assist decision makers)

Recommendation

- 16.1 That the IMAP Implementation Committee resolves to:
- a) Endorse the proposed set of indicators
 - b) Support the individual Councils in the operational implementation of the indicators and the Cumulative Impacts Assessment Tool
 - c) Request the Action 6.3 Working Group report back to the Implementation Committee on the refinement and finalisation of the indicators and tool in May 2009

MOVED MR SIDES / Cr Stone
A vote was taken and the MOTION was CARRIED

17. Action 7.7 Universities and Regional Development (Attachment 13)

Helen Steel from the Office of Knowledge Capital (OKC) spoke to the Briefing Paper

- Brief overview of OKC – partnership between City of Melbourne, Committee for Melbourne and 8 Universities.
- Councils hosting universities in Melbourne (CHUM) – an initiative to promote universities through local government
- Summary of the 'round table' workshop held 9th December 2008
- Education is Victoria's No 1 export and Australia's No 3 export

Discussion

- Advise that the areas of strategic planning, human resources, economic development, social planning and policy should be represented on working groups in order to scope 2 initiatives proposed
- Benefits of collaboration include; better communication and increased employment opportunities
- Universities offer stability to a community
- Opportunity exists to 'incorporate' universities into the community

Recommendation

17.1 That the IMAP Implementation Committee resolves to:

- a) Support the formation of an IMAP Action 7.7 Working group by recommending the appropriate internal representatives from each IMAP Council.
- b) Support the further exploration and scoping of the Town Gown and Integrated Workplace Learning program initiatives.

MOVED CR ULLIN / Mr Lawler
A vote was taken and the MOTION was CARRIED

CONFIDENTIAL ITEMS

Meeting to be closed in accordance with Sections 89 (2) (d,e,f,h) of the Local Government Act (1989)

18. None listed

OTHER BUSINESS

- 19.** Cr Ullin formally thanked Mr Hadley Sides for his contribution to the IMAP Implementation Committee (upon his pending retirement from the City of Stonnington).

Next Meeting

Friday 29 May 2009 (8.00am) City of Yarra

As there was no further business, the meeting was closed at **10.05 am**

Confirmed: **Next meeting 29 May 2009**

Chairperson: Mayor, City of Port Phillip _____

RESOLUTIONS

- 1.1 That the IMAP Implementation Committee resolve to appoint Cr Frank O'Connor as the Chair of the meeting.
- 2.1 That the IMAP Implementation Committee resolve to note the following apologies:
Sally Semmens – Urban and Regional Planning, Department of Transport
Diane Sydenham - Director Strategic Policy, DIIRD
Andrew Korr, Senior Adviser, Office of the Minister for Public Transport and the Arts
- 3.1 That pursuant to Division 6, clause 14 of the Melbourne City Council's Conduct of Meetings Local Law 2001, the provisions of the Local Law be suspended for the duration of the meeting of the Inner Melbourne Action Plan Implementation Committee.
- 4.1 That the IMAP Implementation Committee resolves to confirm the minutes of the IMAP Implementation Committee held on 31 October 2008.
- 5.1 That the IMAP Implementation Committee resolves to note the actions undertaken in response to business arising from the minutes of the IMAP Implementation Committee held on 31 October 2008.
- 6.1 That the IMAP Implementation Committee resolves to receive the IMAP Financial Report for the 2nd quarter 08-09.
- 7.1 That the IMAP Implementation Committee resolves to note the IMAP Progress Report January 2009.
- 8.1 That the IMAP Implementation Committee resolves to:
 - a) Support a review of the Inner Melbourne Action Plan in September 2009, reporting back to the IMAP Implementation Committee in November 2009.
 - b) Note the attached *Status of Progress* table and support the recommendations for the remainder of Year 3 (08-09) and Year 4 (09-10) pending the review of the Inner Melbourne Action Plan.
 - c) Support discussion and provide direction to working groups at next Senior Executive Forum, scheduled for March 2009 with the aim to complete Actions in progress.
 - d) Support further discussions on the extension of 'demonstration' projects to advocate for a 'Flagship' project in partnership with the State Government.
- 9.1 That the IMAP Implementation Committee resolves to:
 - a) Note the actions undertaken by the IMAP Implementation Officer to improve the 'Co-ordination and Communication' as per minutes of the Sub-group Meeting held 24 July.
 - c) Support an approach to the Minister for Local Government to 'modernise' the Section 86 Provisions of the Local Government Act to accommodate a regional collaborative model such as IMAP.
 - d) Encourage the continued progress of implementing priority actions identified by the sub-group including further discussion on item 11.
- 11.1 That the IMAP Implementation Committee resolves to:
 - a) Note the progress of the IMAP Tourism working group
 - b) Agree that the working group present outcomes to the IMAP Implementation Committee in May 2009.
- 12.1 That the IMAP Implementation Committee resolves to note the progress of Action 2.2 demonstration project
- 13.1 That the IMAP Implementation Committee resolves to:
 - a) Note the current progress of implementing the 'red' and 'blue' priority routes as per 'Bicycle Victoria's Review of the Priority Bike Route Network for IMAP' (January 2008)
 - c) Support the scoping of a formal structure and program by the Working group in liaison with all key stakeholders to be presented to the IMAP Implementation Committee in August 2009.
- 14.1 That the IMAP Implementation Committee resolves to approve funding of \$14,500 to conduct standardised greenhouse emission measurements and note current progress of the program audit.
- 15.1 That the IMAP Implementation Committee resolves to:
 - a) Note the progress of Action 3.3 Regional Approach to Parking Management.
 - b) Endorse the IMAP Sustainable Transport Framework for use by member Councils in determining the allocation of road-side kerb space, where Council has the relevant highway authority power.
 - c) Agree to a joint approach for the development of tools to influence the consistency and value of Integrated Travel Plans submitted as part of Planning Applications
 - d) Endorse car sharing as a valid parking mitigation initiative and encourage member councils to develop an IMAP regional car sharing guideline (consistent with the CoM draft guideline and any subsequent State Government guidelines released)
 - e) Approve the development of a Resource Document and Action Plan based on the outcome of the State Government's Review of CL52.06

- 16.1 That the IMAP Implementation Committee resolves to:
- Endorse the proposed set of indicators
 - Support the individual Councils in the operational implementation of the indicators and the Cumulative Impacts Assessment Tool
 - Request the Action 6.3 Working Group report back to the Implementation Committee on the refinement and finalisation of the indicators and tool in April 2009.
- 17.1 That the IMAP Implementation Committee resolves to:
- Support the formation of an IMAP Action 7.7 Working group by recommending the appropriate internal representatives from each IMAP Council.
 - Support the further exploration and scoping of the Town Gown and Integrated Workplace Learning program initiatives

ACTIONS PUBLIC RECORD

06 February 2009 – Meeting number 13

Responsibility	Item	Action	Due
IMAP Implementation Officer	5	Follow-up with Sally Semmens on DoT update	March 09
IMAP Implementation Officer	5	Continue to liaise with Minister Kosky's office re: Tram Strategy	Ongoing
IMAP Implementation Officer	7	Circulate quarterly IMAP Progress Report prepared for the City of Yarra to other IMAP Councils	March 09
IMAP Implementation Officer	8	Focus on identifying opportunities relating to 'sustainability' from the Inner Melbourne Action Plan and report back to the IMAP Committee May 2009	May 09
IMAP Implementation Officer	8	Identify opportunities for advocacy in the area of public and sustainable transport and initiate such opportunities e.g. Cycling Strategy	Ongoing
IMAP Implementation Officer	9	Confirm statutory requirements for amendments to the IMAP Operating Protocol and IMAP Terms of Reference	May 09
IMAP Implementation Officer	9	Coordinate recommendation c) to explore alternative governance models prior to undertaking changes to 4 X Terms of Reference	May 09
IMAP Implementation Officer	13	Progress discussions and planning of 'Transport Forum' and deputation to Minister Pallas	May 09

Draft MINUTES

Inner Melbourne Action Plan Senior Executive Forum

Meeting No 5

8.00 am – 10.00 am Thursday 26 March 2009

City of Yarra

Richmond Town Hall – Room 3 (upstairs)

Attendees	Andi Diamond – Chief Executive Officer, City of Yarra
Forum Members	Geoff Lawler – Director Sustainability and Regulatory Services, City of Melbourne Warren Roberts – Acting Executive Officer, City of Stonnington
Associate Partner Representatives	Clare McArdle - Executive Director Melbourne 2030 Implementation Unit, DPCD Sally Semmens - Urban and Regional Planning, Department of Transport Diane Sydenham - Department of Innovation, Industry and Regional Development;
IMAP	Alison Fitzgerald – IMAP Implementation Officer
Guests	Bruce Phillips, Director City Development, City of Yarra Geoff Oulton, Director Community Development & Planning, City of Port Phillip George Borg, Manager City Development, City of Port Phillip Geoff Robinson, Manager Engineering Services, City of Melbourne

PRELIMINARIES

Item	Time Alloc.	Agenda Topic	Responsibility
1.	1 min	Appointment of Chair – CEO, City of Yarra	Chair
2	1 min	Apologies Darrell Treloar – Acting Chief Executive Officer, City of Port Phillip Kelly Martini, Corporate and Community Planner, City of Stonnington	Chair

ITEMS

3	5 min	Update from Department of Transport (DoT) <ul style="list-style-type: none"> Bicycle Strategy has been launched and will be now be distributed Walking & Cycling Branch has been split into 2 teams – Sustainable Transport Unit (Policy) and Program Operational Unit (LAAP) Key contact for IMAP is Sally Semmens, Senior Strategic Planner, Urban & Regional Planning, Integrated Transport Planning. DoT representation at IMAP Action working groups (or sub-group meetings) should be coordinated through Sally. 	Sally Semmens
4	5 min	City of Melbourne Redevelopment of Swanston Street <ul style="list-style-type: none"> 6 options (and a possible 7th option) will be presented 31 March Public will be invited to 'score' options Redevelopment is Flinders St to Franklin St 	Geoff Lawler
5	10 min	Update from Dept of Innovation, Industry and Regional Development <ul style="list-style-type: none"> Restructure of DIIRD is underway 7 Ministers and 10 Portfolios included Main focus is the 'Stimulus Package' – will impact on future budget Tourism Victoria have been focusing on impact from bushfires In the Strategic Policy area, Melb 5Million and Transport Plan being 	Diane Sydenham (DIIRD)

		<p>considered from an employment and skills perspective with prioritisation on investment attraction and export growth</p> <ul style="list-style-type: none"> ▪ Beyond 2020 being considered with the Finish government in respect to the big technology areas that Victoria should be investing in for the long term future. <p>Discussion:</p> <ul style="list-style-type: none"> • Opportunity for IMAP to review the work undertaken in the development of the IMAP Economic Development Statement (May 2008) with consideration of changing environment and government strategies, policies and priorities. <p><i>Action: Implementation Officer to reconvene Action 7.4 working group, review and identify opportunities and communicate to DIIRD.</i></p> <ul style="list-style-type: none"> • Australian Retailers Association is expressing level of confidence in retail sales with employment in retail increasing. <p><i>Action: Implementation Officer to consider meeting with Australian Retailers Association to communicate the IMAP 'collaborative model'.</i></p>	
6	10 min	<p>Update from Department of Planning and Community Development</p> <ul style="list-style-type: none"> • IMAP to lodge submission for the Planning and Environment Act Review <i>Action: IMAP to forward a submission for the Planning and Environment Act Review (by 1st May). Geoff Lawler and Geoff Oulton to co-ordinate and submit.</i> • A Mayoral Forum (hosted by DPCD) is being held late April to consider the 'overall plan' for Melbourne @5 million. • Integrated Land Use and Transport are priority considerations along employment corridors and Activity Centres. <p>Discussion:</p> <ul style="list-style-type: none"> • Planning and Environment Act encouraging regional planning? • Opportunities for a regional collaborative model to be discussed initially with representative from Local Government Victoria. • Rob Adams Corridor model • Are co-operative approaches recognised in the 'system'? 	Clare McArdle (DPCD)
7.	10 mins	<p>Business Arising Building Heights (Attachment 1)</p> <p>Discussion:</p> <ul style="list-style-type: none"> • Where can local Government house population increase? • Relevance to IMAP - Regional Housing Statement (IMAP developed and accepted by State Government) / Activity Centres / Housing Affordability / Economic Development. • Most appropriate use of key development sites? • Considered outside of IMAP's Actions • Note Rob Adams's Modelling for DoT (housing density along transport corridors) • CoY to pursue its interest in the topic with Govt & State Architect <p><i>Action: Clare McArdle to raise with DPCD - "Relationship on Statement" and notify Implementation Officer (confirmation of status and currency of Regional Housing Statement)</i></p> <p><u>Resolution</u> 7.1 That the IMAP Senior Executive Forum resolves to note the information presented on Mandatory Building Heights.</p>	Bruce Phillips
8	20 mins	<p>IMAP Actions Discussion (Attachment 2)</p> <p>A. Action 2.2 Wayfinding</p> <p>Issue of additional budget requirements</p> <ul style="list-style-type: none"> ▪ DoT advised that no further funding is available from DoT (The Wayfinding project has received the greatest amount of funding of all DoT funded projects). 	Implementation Officer

		<ul style="list-style-type: none"> ▪ In order to reduce over expenditure, re-scope? Current status <ul style="list-style-type: none"> – level 1 signs are being manufactured – level 2 signs have been quoted and contract awarded – level 3 & 4 signs will be quoted in April – installation costs are indicative only (at this stage) – LED's are being redesigned to reduce costs <p><i>Action: Geoff Robinson to discuss re-scoping opportunities with project manager, Dan Costa in order to reduce over expenditure.</i></p> <ul style="list-style-type: none"> ▪ IMAP Senior Executive agreed to an additional \$25,000 funding to come from the IMAP General Account. ▪ City of Stonnington and City of Yarra agreed to co-fund the balance of funding required to complete the Project. <p><i>Action: Implementation Officer to notify IMAP Implementation Committee of budget deficit and decisions made to deliver a quality and 'best practice' demonstration project.</i></p> <p>Discussion on 'Authority of Delegation' The City of Melbourne as the lead council has undertaken procurement of goods and services as per their procurement policy. Due to over expenditure, the question has been asked, "Who can authorise payment?" Previous documents were reviewed to confirm levels of endorsement made by the IMAP Committee.</p> <p>Discussion on Intellectual Property (IP) City of Moreland is proceeding with Wayfinding project (using the IMAP model as a base and LAAP funding). DoT advised that the Intellectual Property developed as a result of the Wayfinding project rests with DoT (as per Grant documentation)</p> <p>Discussion This demonstration project sets a precedent, however consideration should be given to the cost of further rollout of signage across the region (extension of demonstration project).</p> <p>Consider a project coordination group to guide Authority of Expenditure, Governance and development of ongoing Strategies and Projects (e.g. extension of demonstration projects).</p> <p><u>Resolution</u> 8.1 That the IMAP Senior Executive Forum resolves to:</p> <ol style="list-style-type: none"> Agree to the Delegation of Authority and Governance process for expenditure. Approve the additional funding required for completion of Action 2.2 stage 2 from the IMAP Budget. Agree to a regional position on the use of IMAP's Intellectual Property 	
		<p>B. Action 2.4 Greenlight</p> <p>Discussion No communication with VicRoads (update on works undertaken or outstanding Invoices)</p> <p>Sally Semmens is the key contact and can assist with VicRoads relationships. <i>Action: Implementation Officer to forward VicRoads contacts to DoT for follow up.</i></p> <p><u>Resolution</u> 8.2 That the IMAP Senior Executive Forum resolves to:</p> <ol style="list-style-type: none"> Support the completion of the Action 2.4 Greenlight demonstration project by influencing relationships with VicRoads. Advocate for a 'partnership' with VicRoads to develop 'Walk Notes' 	
		<p>C. Action 5.2 Affordable Housing</p> <ul style="list-style-type: none"> • An 'environmental snapshot' would be of advantage (OHS / DPCD officers) • Suggest deputation to DPCD should be Prue Digby • Bruce Phillips and Geoff Oulton to discuss 'way forward' for Action 5.2 	

		<u>Resolution</u> 8.3 That the IMAP Senior Executive Forum resolves to: a) Agree with proposed 'next steps', specifically lobbying for a response from the Ministers and supporting a deputation to DPCD. b) Provide leadership on the proposed '2-pronged' approach.	
		D. Action 9.2 Regional Sustainability Targets Nil discussion due to time constraints <u>Resolution</u> 8.4 That the IMAP Senior Executive Forum resolves to support the opportunity for a committed structured approach, a 'model for change' at a regional level that greater reflects the needs of the IMAP communities.	
9	10 mins	Potential Deputation to Minister Pallas (Discussion) Discussion Key messages require further discussion and planning. Suggest initial interaction with Minister by inviting to Launch the Wayfinding demonstration project. <i>Action: Implementation Officer to commence process with DoT to invite Minister Pallas to Launch Wayfinding Demonstration project</i> <u>Resolution</u> 9.1 That the IMAP Senior Executive Forum resolves to agree to the key messages to present to Minister Pallas and supports a deputation from the IMAP Implementation Committee.	Chair
10	10 mins	Role of IMAP Implementation Officer (Attachment 4) <ul style="list-style-type: none"> Current IMAP Governance Model does not allow for recruitment Recommendation endorsed for the role to move to CoS Recommendation endorsed to accept Alison Fitzgerald in the position <i>Action: Senior Executive to forward comments to Implementation Officer</i> <u>Resolution</u> 10.1 That the IMAP Senior Executive's Forum note that the City of Stonnington will host the position of the IMAP Implementation Officer responsibility for 2009-2010	Chair
11	10 mins	IMAP Communications Update (Attachment 3) Nil discussion due to time constraints	Implementation Officer
12	10 mins	Annual Forum Discussion (proposed for June 09) Nil discussion due to time constraints <i>Action: Senior Executive to forward comments to Implementation Officer</i>	Implementation Officer
OTHER BUSINESS			
13	2 mins	Close Next Meeting – A required	Chair

**IMAP Implementation Committee
Business Arising
29 May 2009**

Senior Executive's Forum Action Items (26 March 2009)

Responsibility	Action	Due	Progress
IMAP Implementation Officer	Reconvene Action 7.4 working group, review and identify opportunities and communicate to DIIRD.		In Progress
IMAP Implementation Officer	Consider meeting with Australian Retailers Association to communicate the IMAP 'collaborative model'.		In Progress
GL / GO	IMAP to forward a submission for the Planning and Environment Act Review (by 1 st May). Geoff Lawler and Geoff Oulton to co-ordinate and submit.		Complete
DPCD	Clare McArdle to raise with DPCD - "Relationship on Statement" and notify Implementation Officer (confirmation of status and currency of Regional Housing Statement).		In Progress
CoM	Geoff Robinson to discuss re-scoping opportunities with project manager, Dan Costa in order to reduce over expenditure.		Complete
IMAP Implementation Officer	Notify IMAP Implementation Committee of budget deficit and decisions made to deliver a quality and 'best practice' demonstration project.		Complete
IMAP Implementation Officer	Forward VicRoads contacts to DoT for follow up		Complete
IMAP Implementation Officer	Commence process with DoT to invite Minister Pallas to Launch Wayfinding Demonstration project.		Complete
Senior Executive	Senior Executive to forward comments on the role of Implementation Officer		In Progress
Senior Executive	Senior Executive to forward comments on future Annual Forum to Implementation Officer		In Progress

IMAP Implementation Committee Action Items (6 February 2009)

Responsibility	Action	Due	Progress
IMAP Implementation Officer	Follow-up with Sally Semmens on DoT update	March 09	Complete
IMAP Implementation Officer	Continue liaison with Minister Kosky's office re: Tram Strategy	Ongoing	In Progress
IMAP Implementation Officer	Circulate quarterly IMAP Progress Report prepared for the City of Yarra to other IMAP Councils	March 09	Complete
IMAP Implementation Officer	Focus on identifying opportunities relating to 'sustainability' from the Inner Melbourne Action Plan and report back to the IMAP Committee May 2009.	May 09	In Progress
IMAP Implementation Officer	Identify opportunities for advocacy in the area of public and sustainable transport and initiate such opportunities e.g. Cycling Strategy.	Ongoing	In Progress
IMAP Implementation Officer	Confirm statutory requirements for amendments to the IMAP Operating Protocol and IMAP Terms of Reference	May 09	In Progress
IMAP Implementation Officer	Coordinate recommendation c) to explore alternative governance models prior to undertaking changes to 4 X Terms of Reference	May 09	In Progress
IMAP Implementation Officer	Progress discussions and planning of 'Transport Forum' and deputation to Minister Pallas	May 09	In Progress

Correspondence

From	Regarding
Department of Justice	Cumulative Impact
To	Regarding
Department of Planning and Community Development	IMAP Submission - Planning and Environment Act Review (1 May 2009)

Enquires: Geoff Oulton
Contact: 9209 6304
File Reference: 66/09/12-03



CITY OF
PORT PHILLIP

ABN 21 762 977 945

1 May 2009

Statutory Planning Systems Reform
Department of Planning and Community Development
GPO Box 2392
Melbourne Vic 3001

Dear Sir/Madam

**RE: MODERNISING VICTORIA'S PLANNING ACT
SUBMISSION ON BEHALF OF IMAP SENIOR EXECUTIVE FORUM**

Background

Melbourne's Inner Regional Councils and VicUrban have worked together to develop the Inner Melbourne Action Plan (IMAP) to strengthen the liveability, attractiveness and prosperity of the Inner Region and to respond to the demands of Melbourne 2030.

The Inner Melbourne Action Plan (IMAP) is a collaborative project between the four IMAP Councils, Melbourne, Port Phillip, Stonnington and Yarra and the State Government with the objective to: "to make Melbourne more liveable".

Following preparation of the Plan the IMAP Implementation Committee was established under Section 86 of the Local Government Act to facilitate and oversee the implementation of the Plan. This Committee comprises the Mayors and Chief Executive Officers of each of the member Councils, and in Melbourne's case the Chair of the Planning Committee and the Director Sustainability and Regulatory Services. The Committee's first task was to establish priorities and approve a 3 Year Implementation Plan. Joint cross project teams were then established to implement the actions. In some cases these teams include relevant government agencies and stakeholders.

The IMAP model was established to facilitate a collaborative and strategic approach to the future development of the Inner Region and provides a strong regional decision making model. It reinforces the commitment to common goals and the effectiveness of regional action and provides a valuable forum through which to advocate for improvement and change that will benefit the regional community.

IMAP is essentially an Action Plan that focuses on the on-ground delivery of projects. The Plan is well aligned with the principles of Melbourne 2030, but importantly reflects and responds to the particular priorities and conditions of the Inner Region. On-going support of IMAP initiatives by the Government and its agencies, in partnership with IMAP Councils, is a key opportunity to implement the State's metropolitan strategy.

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St Kilda Victoria 3182

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PO St Kilda Victoria 3182,
DX 35706 Balclutha

Phone (03) 9209 6777

Facsimile (03) 9534 9105

Context

The individual Council's that participate in IMAP will make their own submissions in relation to this review. These submissions will likely touch on:

- the need for simplicity in language,
- enabling legislation,
- respect for the role of local government,
- increased certainty and
- consideration of sustainability

However there are some issues that are best addressed regionally. This submission addresses the particular aspects of the legislative review that are relevant to IMAP as a model of regional collaboration.

Submission

IMAP is seen by its participants and the State Government as a successful model of planning and action. The IMAP experience has been that there are both efficiency dividends in undertaking research collaboratively and effectiveness benefits when implemented cooperatively. It also makes the work of government easier, as a clear priority of agreed actions is created. The Planning & Environment Act review should support this success.

The Planning & Environment Act is an enabling piece of legislation. The IMAP experience suggests that both the Planning & Environment Act and the Local Government Act could be made more enabling of regional collaboration. Issues of regional planning are particularly relevant in the implementation of metropolitan strategy, particularly around "borderless" issues such as economic development, transport, tourism and housing.

Further discussion

Representatives of the IMAP group of Council's would be pleased to present and further discuss this submission and other matters of regional importance with the review committee.

I, on behalf of the IMAP group of Councils, can be contacted on 9209 6300. Alternately, Alison Fitzgerald, IMAP Implementation Officer, can be contacted on 9205 5039.

Yours sincerely



GEOFF OULTON

Executive Director Community Development & Planning
City of Port Phillip

On behalf of the IMAP Senior Executive Forum

Cc: Andi Diamond, CEO, City of Yarra
Geoff Lawler, Director Sustainability & Regulatory Services, City of Melbourne
Warren Roberts, CEO, City of Stonnington
Alison Fitzgerald, IMAP Implementation Officer, City of Yarra



Department of Justice

Responsible Alcohol Victoria

30 / 121 Exhibition Street
Melbourne, Victoria 3000
GPO Box 4356
Melbourne, Victoria 3001
Telephone: (03) 8684 1552
Facsimile: (03) 8684 1555
DX 210077
www.justice.vic.gov.au

Our Ref: CD/09/132495

Ms Alison Fitzgerald
Inner Melbourne Action Plan Implementation Officer
Richmond Town Hall
333 Bridge Road
RICHMOND VIC 3121

Dear Ms Fitzgerald

DEVELOPMENT OF A CUMULATIVE IMPACT MODEL

I am writing to inform you of work that Responsible Alcohol Victoria (RAV) is undertaking to develop an appropriate model for Victoria that can be applied by local councils to measure cumulative impact.

In 2008, the Victorian Government amended Clause 52.27 of the VPP to require that before a council decides on an application for a planning permit for a licensed premise, it must consider:

- the impact on the amenity of the surrounding area of the sale or consumption of liquor permitted by the liquor licence, of the hours of operation, and of the number of patrons; and
- the cumulative impact on the amenity of the area of any existing and the proposed liquor licence, the hours of operation and number of patrons.

Clause 52.27 does not apply in the Capital City Zone or Dockland Zone in the City of Melbourne and for obtaining a planning permit for a packaged liquor licence.

Local councils are required to develop local planning policies to meet Clause 52.27 requirements. To assist councils in meeting the new amendments, it has been identified that there is need for a model that councils from across Victoria can use to assess cumulative impact. RAV has recently appointed a consultant, SGS Economics and Planning Pty Ltd (SGS) to undertake this work. As part of the development of the model, SGS will consult with a range of stakeholders to inform this work.

As a key stakeholder in this area, I would like to invite Victoria Police to participate in these consultations. To facilitate a meeting between yourself and SGS, Mr Mark Burton from SGS will be in contact shortly. If you have any questions regarding the nature of the consultations, please contact Ms Alice Dunt, Senior Project and Policy Officer at RAV on 8684 1605 or via email (alice.dunt@justice.vic.gov.au).

Yours sincerely

A handwritten signature in blue ink, appearing to read 'Clare Malone', written in a cursive style.

CLARE MALONE
Manager, Alcohol Policy

IMAP Implementation Committee**Quarterly Financial Report****1 January 2009 - 31 March 2009**

Background

1. The IMAP budget was last noted at the IMAP Implementation Committee meeting held 6 February 2009.
2. The IMAP finances were successfully transferred from the City of Melbourne to the City of Yarra at the end of the financial year and the 07-08 Financial Statement was presented to the IMAP Implementation Committee 29 August 08.
3. The process to finalise Expenditure and receive outstanding Income prior to 30 June 2009 is underway. Surplus funds as at 30 June 2009 will be transferred from the City of Yarra to the City of Stonnington (host council for 09-10) at the commencement of the next financial year.

Income

4. **1st Quarter** - Income for 1st Quarter totalled \$264, 476.73
 - Income of \$144,476.73 (as at 1 July 2008) was received (transfer from the City of Melbourne).
 - Annual Contributions and additional committed income totalling \$120,000 was received from the four IMAP Councils.

2nd Quarter - Nil Income was received this Quarter

3rd Quarter - Income received for the 3rd Quarter was \$393,818, made up of committed LAAP funding and additional contributions from IMAP Councils.

4th Quarter Forecast - Estimated Income expected to be received for the 4th Quarter is \$136,636, made up of final payment of committed LAAP funding.

Total Income 2008 / 2009 of \$801,930 is expected to be received for the 2008-2009 financial year (Total Income 07-08 was \$397,954)

Expenditure

5. **1st Quarter** - Expenditure of \$63,628 including professional services costs relating to Action 2.4 Greenlight project and Action 9.6 Recycled Water for Open Spaces

2nd Quarter - Expenditure of \$19,508 including professional services costs relating to Actions 9.6, 11.2 and Website development.

3rd Quarter Forecast - Expenditure for the 3rd Quarter was \$67,940 for implementation of Actions.

4th Quarter Forecast - Estimated Expenditure expected for the 4th Quarter is \$650,170 for further implementation and completion of Actions.

Total Expenditure Forecast for 2008 / 2009 is expected to total \$784,200 (Total Expenditure 07-08 was \$313,875)

Recommendation

6. That the IMAP Implementation Committee resolves to **receive** the IMAP Financial Report for the 2nd Quarter 2008-2009

Innner Melbourne Action Plan - Budget 2008 / 09						Attachment 4a
	YTD	YTD	YTD	Forecast	Forecast	Comments
	1st Quart	2nd Quart	3rd Quart	4th Quart	TOTAL	
	30/09/08	31/12/08	31/03/09	30/06/09	2008 / 09	
Opening Surplus - 1 July 2008	144,476				144,476	
Income						
Sundry	80,000				80,000	4x \$20K IMAP Council Partner Contributions
Action 11.1 & 11.2 Tourism Programme	40,000				40,000	Contributions from IMAP Council Partners
Action 2.2 Pedestrian Wayfinding Project			133,000	0	133,000	Contributions from IMAP Council Partners
Action 2.2 Pedestrian Wayfinding Project					7,000	Additional Contributions from CoY / CoS
Action 2.4 Greenlight Project			69,000	3,000	72,000	Contributions from IMAP Council Partners
DOI (LAAP) - Action 2.2 Pedestrian Wayfinding Project			48,636	72,273	120,909	LAAP Funding
DOI (LAAP) - Action 2.4 Regional Greenlight Project			143,182	61,363	204,545	LAAP Funding
Total Operating Income	264,476	0	393,818	136,636	801,930	
Expenditure						
IMAP Actions						
Action 2.2 Pedestrian Wayfinding Signage	0	0	26,040	239,960	266,000	Committed Expenditure 08/09
Action 2.2 Pedestrian Wayfinding Signage				32,000		Additional Committed funds
Action 2.4 Regional Greenlight Project	8,859	0	0	288,141	297,000	Committed Expenditure 08/09
Action 2.5 Bicycle Network	0	0	0	0		
Action 3.3 Regional Parking	0	0	0	0		
Action 5.2 Affordable Housing (Overlay) project	0	0	0	0		
Action 6.3 Managing Conflict in Activity Centres	0	0	0	0		
Action 7.7 Universities & Regional Development	0	0	1,500	0	2,000	Committed Expenditure 08/09
Action 9.1 Regional Sustainability Targets	0	0	8,400	3,000	9,000	Committed Expenditure 08/09
Action 9.6 Recycled Water on Parks	41,601	9,978	4,382	0	56,000	Committed Expenditure 08/09
Actions 10.1 / 10.4 Open Space	0	0	0	0		
Action 11.1 & 11.2 Tourism Program	3,410	5,503	16,659	74,000	100,000	Committed Expenditure 08/09
Sub-total	53,870	15,481	56,981	637,101	730,000	
Other Expenditure						
Annual Report	0	380	9,150	0	10,000	Annual Report 07-08 Design / Print
Comms / Photography / PR / Design	2,958	0	228	0	5,000	Website design, Photography, Banners
Printing, Copying & Fax	0	0	0	500	4,000	Estimated cost
Stationary	0	272	0	300	1,000	Estimated cost
General Admin Expenses	0	0	0	0	2,000	Sundry Items
Telephone	0	0	0	800	800	Mobile expenses - Implementation Officer
Website Development	6,300	3,375	0	5,325	15,000	Website Initial Development
Training (Wiki)	0	0	0	5,000	5,000	Training for Working Groups + Administrator
Website Maintenance / Server Hosting	56	0	0	1,144	2,400	Annual Cost
Conference & Courses	0	0	700	0	1,000	Mainstreet Australia Conference
Annual Forum	0	0	0	0	3,000	IMAP Annual Forum (June 09)
Interstate Travel	0	0	376	0	1,000	Mainstreet Australia Conference
Catering	500	0	1,505	0	2,000	IMAP Meetings / Club IMAP
Legal Services	0	0	0	0	2,000	Estimated cost
Sub-total	9,758	4,027	11,959	13,069	54,200	
Total Operating Expenditure	63,628	19,508	67,940	650,170	784,200	
Note: Salaries & Wages costs (met by City of Yarra as host council)						

IMAP Implementation Committee

Briefing Paper

Action 9.3 Water Sensitive Urban Design

BACKGROUND

1. IMAP Item 9.3 seeks the widespread implementation of 'water sensitive urban design' (WSUD) practices in the region as a means of improving catchment water quality and aquatic habitats. The project scope, as approved by the IMAP Implementation Committee, is to develop a regional approach and strategy to achieve water sensitive urban design, including:
 - *advocating for, and designing, a common Local Planning Scheme Policy outlining requirements for developments to treat stormwater quality and flow, reduce wastewater and conserve potable water.*

A background paper to IMAP Action 9.3 'Water Sensitive Urban Design' is provided as Attachment 5a.

2. At the IMAP Implementation Committee meeting of 29 August 2008, the following resolution was passed.
 - 16.1 That the IMAP Implementation Committee resolves to:
 - (a) *Seek approval of the Model WSUD Guidelines from Melbourne Water.*
 - (b) *Subject to Melbourne Water approval, endorse the Model WSUD Guidelines for each IMAP Council to localise and adopt for their own use.*
 - (c) *Request that a report be presented back at an IMAP Committee meeting in early/mid 2009 on the implementation of the WSUD Guidelines and the practicality of the proposed Local Planning Policy.*
 - (d) *Request MW to advocate on behalf of IMAP.*

DISCUSSION

3. Melbourne Water provided approval of the Model WSUD Guidelines on 7 October 2008. Their letter of approval is provided as attached (5b). Each council is currently localising these Guidelines for their own use.
4. The local planning policy (attachment 5c) and explanatory report (attachment 5d) are provided as attachments. The assessment of the proposed policy was undertaken in February to March 2009. Initially, the policy was tested against previously approved planning applications by statutory planners at the City of Port Phillip. This was to ensure that statutory planners, who already commonly assess applications against environmentally sustainable design criteria, were comfortable with the policy and its requirements. Subsequently, a joint workshop was undertaken with statutory planners from across the four IMAP councils on 10 March 2009. The purpose of this workshop was to: further test the policy against the IMAP council's planning schemes; receive feedback from statutory planners less familiar with environmentally sustainable design criteria; and assess whether any further amendment was required to the draft policy.
5. The assessment report is provided as Attachment 5e. In summary, the outcomes of the trial were positive. Council officers found no difficulty in understanding or conceptually applying the policy's *Policy Basis, Objectives, Policy or Decision Guidelines*. Small amendments were made to the policy to better reflect the responsibilities of applicants. In addition, the computer modelling tools STORM and MUSIC were trialled without any difficulties raised by IMAP statutory planners. It should be noted that council planners would not be required to undertake the modelling themselves on receipt of applications, this is a requirement of applicants as part of policy requirements for a Water Sensitive Urban Design response. However, it is necessary that council planners be capable of understanding the outcomes from any such modelling undertaken.
6. In addition, the Action 9.3 working group has made initial contact with the Director State Planning Services DPCD providing the draft policy and requesting feedback on the proposed approach. DPCD's formal response is expected to progress discussions.

RECOMMENDATION

7. That the IMAP Implementation Committee resolves to:
- (a) **note** the assessment and successful outcomes of the IMAP council planning trial of the Stormwater Management (Water Sensitive Urban Design) local planning policy.
 - (b) **approve** the completion of Action 9.3 and **support** continued communications and collaboration across the IMAP councils, DPCD and partnering organisations (Melbourne Water and Retail Water Authorities).
 - (c) **determine** how best to have the Stormwater Management (Water Sensitive Urban Design) draft local planning policy into the Planning Schemes of the Cities Melbourne, Stonnington, Yarra and Port Phillip.

IMAP Action 9.3

Water Sensitive Urban Design

Background and Context

1. *What is the objective of IMAP Action 9.3 Water Sensitive Urban Design?*

IMAP Item 9.3 seeks the widespread implementation of 'water sensitive urban design' (WSUD) practices in the region as a means of improving catchment water quality and aquatic habitats.

The project scope, as approved by the IMAP Implementation Committee is to:

Develop a regional approach and strategy to achieve water sensitive urban design including:

- advocating for, and designing, a common Local Planning Scheme Policy outlining requirements for developments to treat stormwater quality and flow, reduce wastewater and conserve potable water;
- sharing WSUD tools that help protect catchment hydrology and water quality, particularly aquatic habitats by reducing the impact of urban development;
- advocating relevant stakeholders for WSUD information, education and professional development opportunities.

The development of a Local Planning Policy is a key part of the scope of the project.

2. *Why is the group seeking Local Planning Policy amendments for all IMAP Councils?*

The Victorian Planning Provisions require incorporation of WSUD when a subdivision permit is issued (clause 56), however there is a gap in the planning system for supporting the application of WSUD in existing and small-scale developments not requiring subdivision.

Ideally this gap would be addressed in the State section of the planning scheme. However, the Department of Planning and Community Development (DPCD) consider that WSUD in built up inner areas should be addressed in the upcoming review of the five-star energy provisions in the Building Code of Australia (BCA) which are due to be expanded to cover water in approximately December 2010.

IMAP considers that the uncertainty and delay in relying on BCA provisions is not reflective of the rapid industry and local government progress in achieving WSUD outcomes on the ground and has proposed a Ministerial 20(4) amendment to require WSUD to be addressed on development sites. This 20(4) amendment would have a sunset clause stating that the provision is to be revoked at such time the BCA addresses WSUD.

The Ministerial Amendment has been drafted and was considered by the IMAP Implementation Committee in August 2008. It was resolved to undertake a brief assessment of the policy, as a first step in jointly requesting a Ministerial planning scheme amendment.

The key reference document of the planning policy is the *Water Sensitive Urban Design Guidelines, Melbourne Water, 2008*.

3. *What do the proposed Water Sensitive Urban Design Guidelines 2008 cover?*

The proposed Local Planning Policy refers to the IMAP-wide *Water Sensitive Urban Design Guidelines 2008* which have been developed in concert with IMAP councils and Melbourne Water.

The IMAP-wide *WSUD Guidelines 2008* are an update and expansion of the existing City of Melbourne and City of Yarra *WSUD Guidelines*.

All IMAP Council's have been working together to develop these Guidelines which will be updated to include advancements in technology, design and case studies. They will also

incorporate new management tools including decision-making guidelines, stormwater targets, risk management and carbon-sensitive calculators. The *WSUD Guidelines* will be web-based.

4. What is the involvement of relevant State agencies in developing the WSUD Guidelines?

Melbourne Water has been an active partner in the IMAP WSUD working group.

Melbourne Water are leaders in the WSUD field, and have agreed to fund the development of the *WSUD Guidelines* for the IMAP region. It was quickly determined that the *WSUD Guidelines* are a useful tool for greater Melbourne, and as such they are being designed to accommodate this role. This will be useful in helping to achieve consistency in the communication and implementation of WSUD.

The IMAP WSUD working group has also involved the active involvement of City of Maribyrnong and City of Bayside, which reflects the broader value of the proposed *WSUD Guidelines*.

5. What is the process for requesting the Ministerial Amendment?

The following process of implementation is recommended:

1. Trial the proposed policy through City of Port Phillip statutory planners – late February 2009 (Completed).
2. Undertake a single workshop with statutory planners, and other interested council staff, from the four IMAP councils to test the requirements and process of the policy and consider their feedback - early March 2009 (Completed)
3. Complete an assessment of the trial to consider any required amendments (Completed).
4. Provide 'briefing to IMAP Implementation Committee about the trial and assessment of the draft local planning policy (May 2009).
5. Provide an IMAP deputisation to Sue Wilkinson, Director State Planning Services DPCD to discuss the proposed amendment and request her support.
6. IMAP Implementation Committee to submit the amendment to the Minister for his action.

7 October 2008

Alison Fitzgerald
IMAP Implementation Officer
PO Box 168
RICHMOND VIC 3121

CITY OF YARRA RECEIVED	
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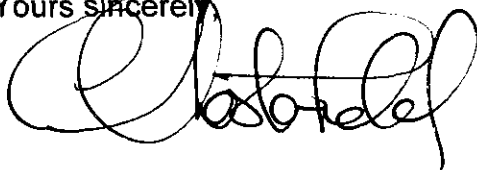
Dear Alison,

Thank you for your letter 8 September 2008 requesting our endorsement of Inner Melbourne Action Plan (IMAP) Water Sensitive Design Model Guidelines. It gives me great pleasure to write in support of this IMAP project.

The work done by the IMAP Action 9.3 Working Group to develop Water Sensitive Urban Design (WSUD) Model Guidelines is a critical component of the work needed to make Melbourne a more sustainable city. We acknowledge the applicability of the Guidelines to all of metropolitan Melbourne, and we will endeavour to develop them further for this purpose following the trial by IMAP Councils.

The work your councils have done to create the Guidelines is at the forefront of best practice. We value the relationship and look forward to working with you on implementation.

Yours sincerely,



CHRIS CHESTERFIELD
GENERAL MANAGER, WATERWAYS

XX Planning Scheme

22.0? STORMWATER MANAGEMENT (WATER SENSITIVE URBAN DESIGN)

This policy applies to applications for new buildings.

22.0?-1 Policy Basis

This policy:

- builds on the SPPF objective at Clause 12.05-1 and specifically, provides a local response to the 'Coastal areas' strategy at Clause 12.05-2;
- implements the SPPF objective at Clause 12.07-1 and specifically, the "Stormwater management" strategy at Clause 12.07-2;
- responds to the SPPF objective at Clause 15.01-1 relating to the protection of waterways, and
- responds to the SPPF objective at Clause 18.09-1 relating to the stormwater management and protection of the environment.

Water sensitive urban design (WSUD) is the design of buildings, subdivisions and works to minimise the hydrological impact of urban development on the surrounding environment. WSUD provides the means for treating stormwater run-off in a variety of ways so that the flow is reduced, and the quality of run-off is improved. Stormwater management can take various forms in the urban environment including infrastructure upgrades, streetscape layout changes, piping reconfigurations, storage tanks, and the use of different paving.

22.0?-2 Objectives

- To encourage best practice water sensitive urban design to be incorporated into all new developments
- To minimise peak stormwater flows and stormwater pollutants to improve the health of water bodies, including creeks, rivers and bays.

22.0?-3 Policy

It is policy to

- Encourage the use of design and stormwater treatment measures to improve the quality and reduce the flow of water discharged to waterways, including, but not limited to:
 - collection and reuse of rainwater and stormwater on site
 - vegetated swales and buffer strips
 - rain gardens
 - installation of water recycling systems
 - multiple uses of water within a single manufacturing site
- Encourage developments to comply with the best practice performance objectives for suspended solids, total phosphorus and total nitrogen, as set out in the Water Sensitive Urban Design Guidelines, Melbourne Water 2008. Currently these water quality performance objectives seek to achieve:
 - 80% reduction in Total Suspended Solids
 - 45% reduction in Total Nitrogen
 - 45% reduction in Total Phosphorus
 - 70% reduction in Litter from typical urban loads
- Encourage the use of measures to prevent litter being carried off-site in stormwater flows, including:
 - appropriately designed waste enclosures and storage bins, and
 - the use of litter traps for developments with the potential to generate significant amounts of litter.

- Whilst it is policy to encourage compliance with the best practice objectives, where this is not achievable, the responsible authority will consider whether the development has demonstrated that reasonable opportunities for water sensitive urban design have been included in the design of the proposal. In considering what is reasonable, the responsible authority will have regard to the relative size of the development and the opportunities and constraints of the particular site.

22.0?-4 Application requirement

An application for a new building should be accompanied by:

- A Water Sensitive Urban Design Response

22.0?-4 Water Sensitive Urban Design Response

The Water Sensitive Urban Design Response should include an assessment of the development proposal's achievement of the water quality performance objectives set out in the 'Water Sensitive Urban Design Guidelines, Melbourne Water, 2008 by either:

- Using computer software accepted by the Responsible Authority, such as STORM or MUSIC, OR
- Undertaking an assessment of the site's opportunities and constraints in relation to the provision of water sensitive urban design, including:
 - A description of how the development will improve the quality and reduce the flow of water discharged to waterways.
 - A description of how the development will prevent litter being carried off-site in stormwater flows.

If the water quality performance objectives set out in the "Water Sensitive Urban Design Guidelines, Melbourne Water, 2008" are not met, an application must include justification for how the development meets the policy intent.

22.0?-5 Decision guidelines

Before deciding on an application, the responsible authority must consider:

- The extent to which the development meets the policy requirements
- The Water Sensitive Urban Design Response

22.0?-6 Reference documents

Water Sensitive Urban Design Guidelines, Melbourne Water, 2008

22.0?-7 Expiry

[date of adoption + 2 years] or when superseded by Building Code of Australia Regulations, whichever happens first.

*Planning and Environment Act 1987***YARRA PLANNING SCHEME****AMENDMENT C_____***(add individual Council Amendment Number)***EXPLANATORY REPORT**

Who is the planning authority?

This amendment has been prepared by the Inner Melbourne Councils of Melbourne, Port Phillip, Stonnington and Yarra, which are the planning authorities for this amendment as it relates to each municipal area.

This amendment has been made at the request of all members of the Inner Melbourne Region of Councils that have come together to form the Inner Melbourne Action Plan (IMAP). The formal request to amend the four planning schemes is a direct action of the work of IMAP.

Land affected by the amendment.

The amendment applies to all land in the municipality of Melbourne, Port Phillip, Stonnington and Yarra.

What the amendment does.

The amendment proposes to:

- Introduce a new local policy for Stormwater Management (Water Sensitive Urban Design) which encourages the use of water sensitive urban design techniques in the design of new buildings and works to reduce the impact of development on stormwater run-off.
- Reference the following document into the Planning Schemes of the City's of Melbourne, Port Phillip and Stonnington and Yarra to assist in the implementation of the local policy:
 - Water Sensitive Urban Design Guidelines, Melbourne Water, 2008.

Strategic assessment of the amendment**1. Why is the amendment required?**

An 'Inner Melbourne Action Plan' (IMAP) was developed by the four inner Melbourne Councils. The plan includes agreed regional outcomes to be achieved through the implementation of a number of regional actions. Sustainability is a guiding principle underpinning IMAP decisions and actions. In particular, Strategy 9 seeks to "Substantially improve the environmental performance of the Inner Melbourne Region" through a series of actions including the development of a local planning policy on Stormwater Management (Water Sensitive Urban Design). This

amendment is required to implement the sustainability objectives of the *Inner Melbourne Action Plan*.

The amendment aims to:

- Encourage best practice water sensitive urban design to be incorporated into all new developments
- Minimise peak stormwater flows and stormwater pollutants to improve the health of waterways, including creeks, rivers and bays
- Promote the use of water sensitive urban design.

At present, the Victorian Planning Provisions require incorporation of water sensitive urban design (WSUD) when a subdivision permit is issued under clause 56. However this clause does not apply to existing and small-scale developments that do not trigger the need for a subdivision permit.

Ideally this gap should be addressed either through the State sections of planning schemes, such as the particular provisions, or in a revised Building Code of Australia. The BCA provisions relating to the five-star energy provisions are currently being reviewed and expanded to cover water, however these are not due for completion until 2010. IMAP considers that the delay and uncertainty does not reflect the rapid progress of both industry and local government in achieving WSUD outcomes on the ground. Therefore this amendment is considered necessary as an interim measure until such time as either the BCA or State sections of planning schemes are amended and updated to include WSUD principles.

2. How does the amendment implement the objectives of planning in Victoria?

The amendment implements the following objectives of planning in Victoria:

- (a) to provide for the fair, orderly, economic and sustainable use, and development of land;
- (b) to provide for the protection of natural and man-made resources and the maintenance of ecological processes and genetic diversity;
- (c) to secure a pleasant, efficient and safe working, living and recreational environment for all Victorians and visitors to Victoria.

3. How does the amendment address the environmental effects and any relevant social and economic effects?

The amendment promotes the use of water sensitive urban design to reduce the impact of development on stormwater run-off. This will have positive environmental effects on urban waterways and Port Phillip Bay.

The amendment is expected to have very positive economic and social benefits. Melbourne's waterways and coastal foreshore areas are important social and cultural assets. Good water quality contributes significantly to the environmental and aesthetic quality and values of Port Phillip Bay and our metropolitan waterways. Better water quality can be achieved through effective management of stormwater and improved water sensitive urban design. Consequently, this will encourage residents and visitors to continue to enjoy access to safe and clean waterways and beaches, in turn enhancing sport, recreation and tourism opportunities for Melbourne.

By improving the environmental performance of individual properties, the amendment will contribute to a reduction in the need for future costly engineering solutions to managing larger quantities of stormwater. With progressive urban development, the capacity to provide such solutions is increasingly limited. The introduction of a local policy on stormwater management will provide Councils with a practical tool for improving water quality.

4. Does the amendment comply with the requirements of any Minister's Direction applicable to the amendment?

The amendment is consistent with the Ministerial Direction on the Form and Content of Planning Schemes under section 7(5) of the Act.

The amendment complies with *Ministerial Direction No.9 – Metropolitan Strategy*. The following aspects of the Metropolitan Strategy are relevant to the amendment.

Direction 7 - A greener city

Policy 7.1 - Ensure that water resources are managed in a sustainable way

Policy 7.4 - Reduce the impact of stormwater on bays and catchments

Several *Melbourne 2030* initiatives support implementation of the above policy statements. These include:

- 7.1.4 Adopt guidelines to encourage use of alternative water sources such as rainwater tanks, stormwater and recycled water by local government, developers and households.
- 7.1.7 Ensure that local treatment and recycling of stormwater for non-potable uses is considered in new developments, in accordance with the *Best Practice Environmental Management Guidelines for Urban Stormwater (BPEM Guidelines)* and EPA Victoria guidelines;
- 7.4.1 Develop measures to achieve best practice performance objectives as outlined in the BPEM Guidelines for Urban Stormwater (prepared by the Victorian Stormwater Committee) to ensure water quality objectives are met;
- 7.4.2 Support integrated planning of stormwater quality at all scales, through a mix of on-site measures and development contributions;
- 7.4.3 Promote measures to achieve more effective mitigation of stormwater pollution from construction sites in line with the EPA Victoria's Environmental Guidelines for Major Construction Sites;
- 7.4.4 Work with local government to develop and implement stormwater management plans that incorporate integrated drainage management principles consistent with the BPEM, and include measures for annual monitoring and reporting;
- 7.4.6 Include water sensitive urban design criteria in an amended Clause 56 (Residential Subdivision Provisions) of the Victoria Planning Provisions.

The above policies and initiatives of *Melbourne 2030* support the intent of the amendment which is to reduce the negative effects of urban stormwater on Port Phillip Bay and also reduce the demand on potable water supplies.

5. How does the amendment support or implement the State Planning Policy Framework?

The amendment supports and implements State Planning Policy Framework, particularly the clauses 12.05, 12.07, 15.01 and 18.09 as follows;

12.05 A great place to be

12.05-1 Objective

To create urban environments that are of better quality, safer and more functional, provide more open space and an easily recognisable sense of place and cultural identity.

12.05-2 Strategies - Coastal areas

Improve the environmental health of the bays and their catchments by:

- Reducing major environmental pressures associated with urban growth and development within catchments of Port Phillip Bay and Western Port by:
- Requiring growth area planning to protect significant natural assets.
- Improving the quality of stormwater entering waterways, particularly that emanating from construction sites and road development.

12.07 Metropolitan Development – A greener city.

12.07-1 Objective

To minimise impacts on the environment to create a sustainable path for future growth and development.

12.07-2 Strategies - Stormwater management

Reduce the impact of stormwater on bays and catchments by:

- Supporting integrated planning of stormwater quality through a mix of on-site measures and developer contributions
- Mitigating stormwater pollution from construction sites.
- Ensuring stormwater and groundwater entering wetlands do not have a detrimental effect on the wetlands
- Incorporating water-sensitive urban design techniques into developments to;
 - protect and enhance natural water systems
 - integrate stormwater treatment into the landscape
 - protect quality of water
 - reduce run-off and peak flows
 - minimise drainage and infrastructure costs.

15.01 Protection of catchments, waterways and groundwater

15.01-1 Objective

To assist the protection and, where possible, restoration of catchments, waterways, water bodies, groundwater, and the marine environment.

15.01-2 Strategies - Water quality protection

Planning and responsible authorities should ensure that land use activities potentially discharging contaminated run-off or wastes to waterways are sited and managed to minimise such discharges and to protect the quality of surface water and ground water resources, rivers, streams, wetlands, estuaries and marine environments.

Planning and responsible authorities should ensure land use and development proposals minimise nutrient contributions to waterways and water bodies and the potential for the development of algal blooms, consistent with the Preliminary Nutrient Guidelines for Victorian Inland Streams (EPA 1995), the *Victorian Nutrient Management Strategy (Government of Victoria 1995)* and the *Urban Stormwater Best Practice Environmental Management Guidelines (CSIRO 1999)*.

18.09 Water supply, sewerage and drainage

18.09-1 Objective

To plan for the provision of water supply, sewerage and drainage services that efficiently and effectively meet State and community needs and protect the environment.

18.09-2 General implementation

Planning and responsible authorities should ensure that water quality in water supply catchments is protected from possible contamination by urban, industrial and agricultural land uses.

Planning and responsible authorities should ensure that:

- planning for urban stormwater drainage systems considers the catchment context and is coordinated with adjacent municipalities.
- best environmental management practice is used where practicable in the design and management of urban stormwater drainage systems, including measures to reduce peak flows and assist screening, filtering and treatment of stormwater, to enhance flood protection and minimise impacts on water quality in receiving waters.
- drainage systems are protected where practicable from the intrusion of litter, in accordance with strategies set out in *Victoria's Litter Reduction Strategy (EPA 1995)*.

18.09-3 Geographic strategies

Planning and responsible authorities should have regard to the *Urban Stormwater Best Practice Environmental Management Guidelines (CSIRO 1999)*.

6. How does the amendment support or implement the Local Planning Policy Framework?

The amendment is consistent with the Local Planning Policy Frameworks of each of the IMAP Councils. In particular, the amendment supports relevant objectives and strategies included in the Municipal Strategic Statements (MSS) of the IMAP Councils as they relate to water sensitive urban design and improved stormwater management. Strategic justification can be found in each Council's MSS as highlighted below:

*City of Stonnington MSS***21.02 Settlement and the Environment****21.02-01 Natural Environment and Open Space****Objective**

To minimise the impacts of use and development on the natural environment in relation to air and water quality, recycling, protecting waterways and enhancing public open space.

*City of Melbourne MSS***21.07-1 Environmentally sustainable development****2. To improve water quality in waterways and the Bay.**

2.1 Ensure residential, commercial and industrial development adopts a best practice approach to stormwater treatment and management.

*City of Port Phillip MSS***21.04 Port Phillip's Vision**

Heritage places, neighbourhood character and natural systems are protected by:

- Managing development in a way which is environmentally sustainable - in terms of air and water quality, energy and resource consumption, waste minimisation and protection of natural systems.

*City of Yarra MSS***21.05-6 Element 6: Yarra River Corridor****Strategies to achieve objectives**

Ensure that new development near the City's waterways:

- minimises the potential for environmental impacts (through management of stormwater run-off, soil erosion, noise and silt deposition) both during and following construction.

7. Does the amendment make proper use of the Victoria Planning Provisions?

The new Local Planning Policy is the proper VPP tool to implement the strategic objectives of the IMAP Councils regarding stormwater management and water sensitive urban design. The policy was prepared using the *VPP Practice Note – Writing a Local Planning Policy*.

8. How does the amendment address the views of any relevant agency?

Melbourne Water and Environment Protection Authority have been active partners in the IMAP development of the WSUD Guidelines, which are proposed to be a reference document supporting the local policy proposed by this amendment. In correspondence received from Melbourne Water on 7th October 2008, the collective work undertaken by IMAP Councils with respect to the development of water sensitive urban design guidelines was noted as being, '*at the forefront of best practice*'. Additionally, Melbourne Water have expressed a wish to remain actively involved during implementation, particularly as the guidelines are regarded as being applicable to all of Metropolitan Melbourne.

9. What impact will the new planning provisions have on the resource and administrative costs of the responsible authority?

The amendment is not expected to have a significant effect on the resources of the IMAP Councils. There will be some implications for the assessment of applications and their compliance with the WSUD tools; however, all IMAP Councils are supportive of the application of Stormwater Management policy and WSUD guidelines for appropriate development.

Where you may inspect this Amendment?

The amendment can be inspected free of charge at the Department of Planning and Community Development web site at www.dpdc.vic.gov.au/planning/publicinspection .

IMAP Action 9.3 WSUD**LOCAL PLANNING POLICY ASSESSMENT REPORT**

Introduction

1. Following the IMAP Implementation Committee's request for assessment on 29 August 2008 on the practicality of the proposed Local Planning Policy, an assessment was completed as follows:
 - a. Initial assessment by the City of Port Phillip of previously approved planning applications in February 2009
 - b. Joint assessment workshop with statutory planners, strategic planners, and internal referrals from across the four IMAP councils on 10 March 2009.
2. The purpose of the assessment process was to:
 - a. further test the policy against the IMAP council's planning schemes;
 - b. receive feedback from statutory planners less familiar with environmentally sustainable design criteria; and
 - c. assess whether any further amendment was required to the draft policy.
3. The joint assessment workshop was delivered as follows:
 - a. Introduction to the draft policy and key references within, including Water Sensitive Urban Design and best practice stormwater performance objectives on which the policy is based;
 - b. Introduction to the use and interpretation of stormwater modelling tools which may be used to demonstrate compliance with the policy;
 - c. Discussion of City of Port Phillip case studies, including opportunities to optimize each application's ability to meet policy objectives;
 - d. Application of the policy to a range of development applications typical of each municipality;
 - e. Evaluation of the policy and assessment process undertaken; and
 - f. Discussion of the communication needs required for policy implementation

Workshop Outcomes

4. A range of applications deemed typical for the IMAP Councils were assessed as follows:
 - a. Multi-unit residential development
 - b. Semi-detached residential dwelling
 - c. Commercial development (Medical Centre, Commercial Building)
 - d. Multi-storey mixed use development
 - e. Serviced apartments
 - f. Industrial development
5. As most of these applications did not have accompanying stormwater treatment reports, workshop participants were required to use STORM to identify the application's current compliance with the policy.
6. Workshop participants attempted to optimise the application's ability to integrate water sensitive urban design and meet best practice stormwater treatment objectives. This was achieved with the assistance of STORM, application of applicable WSUD solutions, and advice from internal referral staff in ESD and engineering. Options for optimizing applications included resizing rainwater tanks and catchment areas, plumbing tanks to toilets, and applying raingardens and porous paving as a measure to increase permeability of the site.
7. Workshop participants noted that Council is not required under the policy to undertake this modelling and that the applicant is required to demonstrate the development's compliance with policy. However planners will need to interpret this modelling, for which this assessment process proved useful.
8. The assessment process raised recommendations for minor amendment to the draft policy for greater clarity around the key responsibilities of the applicant, and for a more generalised reference to stormwater modelling tools to keep the policy current. These recommendations are documented under Policy Assessment.

9. Whilst the WSUD Guidelines provide significant support for the interpretation and implementation of the draft policy, it was noted that additional practice notes will be required to support planners, together with a community fact sheet on understanding and conceptually applying stormwater modelling tools. These materials can be easily developed based on existing material and workshop outcomes, and appropriate capacity building programs can be developed based on this workshop's structure and components.

Policy Assessment

10. Policy Basis

- a. Planners responded well to the presentation on water sensitive urban design and stormwater management. It was noted that the policy rationale will be a necessary component of policy implementation, together with supporting materials to increase planner's knowledge of WSUD solutions most applicable to different development types.
- b. **Recommendation:** retain the current wording of this section.

11. Policy Objectives

- a. As above, clear presentation to planners of the objectives of water sensitive urban design and stormwater management is sufficient to clarify the policy objectives detailed within.
- b. **Recommendation:** retain the current wording of this section.

12. Policy

- a. The range of options that could be applied to increase an application's ability to meet policy objectives is outlined within. This includes rainwater tanks, raingardens and buffer strips. These items are referenced in stormwater modelling tools such as STORM providing further guidance to planners on how policy objectives can be met
- b. These options were briefly presented to statutory planners at the workshop. As the policy was applied, planners became increasingly familiar with the range of design and stormwater treatment measures that could be applied to meet policy objectives. For more complex options planners were comfortable with approaching internal ESD and engineering referral staff for advice.
- c. The Model WSUD Guidelines contain fact sheets that provide additional advice and support. These fact sheets were briefly presented noting that any emerging gaps can be managed with additional fact sheets as the policy is implemented.
- d. **Recommendation:** water quality performance objectives detailed in the Decision Guidelines section to be moved to the Policy section, to provide a clearer indication of the intent of the policy.

13. Decision Guidelines

- a. IMAP statutory planners had no difficulty in understanding or conceptually applying the stormwater modelling tool STORM to each development application, noting that this is not a requirement of the policy and that the applicant is required to undertake this modelling.
- b. Capacity building in the interpretation of results will be required for statutory planners engaged in the assessment of reports generated by such tools, and this was delivered without difficulty at the assessment workshop. An appropriate capacity building program can be developed and delivered based on this workshop
- c. It is expected that it will take some time to bring the community up to speed in understanding best practice stormwater performance objectives and conceptually applying stormwater modelling tools. Planners and internal ESD/WSUD referrals should be prepared to provide some advisory support in the initial stages in addition to what is available in key reference documents, until the community is more adept at understanding and meeting policy requirements. The direct impact on planners will be a closer relationship with internal referral staff in the initial stages, and some impact on the length of assessment, which will become more streamlined as the process and key references become business as usual.
- d. **Recommendation:** clarify the policy requirement of applicants, by breaking this section into
 - i. Application Requirement, requesting the provision of a WSUD Response;
 - ii. WSUD Response, outlining what the applicant's accompanying documentation should include; and
 - iii. Decision Guidelines, outlining what the responsible authority must consider when assessing the application.

14. Reference Documents

- a. IMAP councils are currently localising the Model WSUD Guidelines for use. These Guidelines contain a range of fact sheets that will assist planners and the community to meet policy objectives.
- b. It was noted that there may be a need to prepare additional support material to assist applicants to apply the range of stormwater modelling tools available. Simple fact sheets advising the community how such tools can be used to demonstrate policy compliance should suffice.
- c. It was also noted that practice notes for planners will need to be prepared covering a range of areas such as policy rationale, guidelines for optimizing application's compliance with policy, interpretation of relevant stormwater modelling tools, and a list of FAQs likely to be raised by the community.
- d. A targeted capacity building program should be rolled out to planners as part of policy implementation.
- e. **Recommendation:** retain the current wording of this section.

15. Expiry date

- a. **Recommendation:** modify wording to '[date of adoption + 2 years] or when superseded by Building Code of Australia Regulations, whichever happens first.'

Next Steps

16. Wording of the draft policy to be amended to reflect the above recommendations.

17. Development of a targeted Policy Implementation Plan covering capacity building and communication needs moving forward.

Inner Melbourne Action Plan**Briefing Paper****Action 9.1 Regional Sustainability Targets**

Establish common greenhouse emissions, water and waste targets and programs for the Inner Melbourne Region.

Purpose

1. To provide the IMAP Implementation Committee with an update on the progress of Action 9.1.
2. To seek approval to develop a plan for a community focused sustainability program for the region.

Background

3. In February 2008 the Implementation Committee agreed that:
 - a. Each council is responsible for setting its own environmental targets and that different targets do not limit councils' ability to work collaboratively.
 - b. Action 9.1 focus is on aligning data collection methodologies and increased program collaboration.
4. An audit of all councils' water, waste, and greenhouse emissions targets and baseline years was undertaken and presented to the August 2008 IMAP Implementation Committee. This audit (Attachment 6a) showed that:
 - a. Water and waste methodologies were broadly aligned between all councils.
 - b. The methodology for calculating greenhouse gas emissions varies significantly between councils.
5. In August 2008 the Implementation Committee agreed to fund work to establish a standardised baseline for community greenhouse gas emissions in each council. Draft reports for this work have been completed and are attached (Attachments 6c and 6d).
6. In addition, an audit and analysis of environmental programs available to residents and small to medium enterprises (SMEs) in the IMAP region has been completed and is at Attachment 6b.

Discussion*Greenhouse gas emission baseline*

7. Yarra and Melbourne used the same methodology to establish their community greenhouse gas emissions. This methodology meets international reporting protocols and is also being used by the Northern Alliance for Greenhouse Action councils (Cities of Banyule, Darebin, Hume, Manningham, Melbourne, Moreland, Whittlesea, Yarra, and Nillumbik Shire Council).
8. The City of Port Phillip had calculated their emissions using a different methodology and the City of Stonnington was yet to calculate their community emissions.
9. Arup calculated the baseline emissions for the Cities of Port Philip (Attachment 6c) and Stonnington (Attachment 6d) and produced a comparative report (to be distributed at Meeting 29 May) of total and normalised emissions for each IMAP Council for 2005-2006 and the detailed methodology for undertaking these calculations.
10. Baseline work for all councils has been completed, final reports will be circulated directly to councils in June 2009.

Sustainability programs audit

11. An audit of all programs available to residents and small to medium enterprises in the region has been conducted by Leicester Street Alliance. The audit examined Council, government, and non-government programs.

Key findings are:

- a. Most state and federal government sustainability programs are 'passive' programs such as grants, rebates, or web-based information programs that do not actively engage the community.
 - b. A few non-government agencies provide small-scale programs to actively engage the community but these are very localised. An exception is the Victorian Government's *Grow Me the Money* program, which is widely available to SMEs only.
 - c. Councils are the only agencies making wide-scale efforts to directly engage the community in sustainability programs.
12. The research indicates that Councils currently play a unique role in actively engaging the community in sustainability programs. Councils may benefit from offering comprehensive programs appropriate to different household types and environmental understanding.
13. The program audit work has been completed; the final report will be circulated to councils in June 2009.

Next steps

14. The baseline work and program audit provide a solid platform for IMAP to develop a strategic plan for a residential program to be delivered across the region.
15. This strategic plan would outline key program elements, costs, timing and delivery mechanisms. Importantly it would make a case for the proposed program to be appropriately funded by state or federal government.
16. This strategic plan could be developed as part of Action 9.1, alternatively it could be developed under Action 9.5:
"Community capacity for sustainability (Sustainability Victoria, DSE, EPA). Work with service providers to build community capacity through local sustainability programs for residents and businesses across the Inner Melbourne Region."
17. Cost to develop this plan is estimated to be \$10,000 to \$15,000.

Recommendations

18. That the IMAP Implementation Committee resolves to:
- a) **note** the progress of Action 9.1.
 - b) **provide** guidance on the next steps for Action 9.1.

Attachments

- 6a Targets, Baseline and Methodologies
- 6b LSA Sustainability Programs Audit
- 6c Carbon Footprint for City of Port Phillip
- 6d Carbon Footprint for City of Stonnington

Additional Attachment *Arup Comparative Report - Carbon Footprint for IMAP region* will be distributed at the meeting 29 May.

Appendix 1- Targets Baselines and Methodologies

(as at August 2008)

Targets and Baselines

Table 1. Greenhouse gas Emissions

Council	Community Target	Council Operations Target	Baseline Year
City of Melbourne	<p>20% reduction in residential and commercial energy use by 2010 (2001 base year)</p> <p>Zero net emissions by 2020</p> <p>50-60% reduction of 2006 with the remaining being offset</p> <p>Residents reduce their greenhouse gas emissions by 35 per cent per capita by 2020 (from 2006 levels). CO2 Emissions per resident per year.</p> <p>Target: 5.1t per resident per year</p> <p>Current: 7.8t</p> <p>reported every two years</p> <p>Workers reduce their greenhouse gas emissions by 59 per cent per capita by 2020 (from 2006 levels).</p> <p>Target: 4.1t per worker per year</p> <p>Current: 9.9t</p> <p>reported every two years</p>	<p>50% reduction in corporate energy use by 2010 (1999 base year)</p> <p>Zero net emissions by 2020.</p>	<p>2005/2006</p> <p>formerly</p> <p>2002(community)</p> <p>1999/00 (council)</p>
City of Port Phillip	<p>50% reduction on current calculated greenhouse gas emissions by 2020, in collaboration with regional, state and federal partners.</p> <p>NOTE: Calculated GREENHOUSE GAS emissions are = electricity, gas, transport & waste only.</p>	<p>Zero greenhouse gas emissions (current calculated emissions) by 2020</p> <p>NOTE: Calculated GREENHOUSE GAS emissions are = electricity, gas & transport (fleet) only. GREENHOUSE GAS emissions from Council waste is currently estimated to be at about 0.1-0.3%. Does not include GREENHOUSE GAS emissions from contracted services at this stage).</p>	<p>2006 (formerly 1996)</p>
City of Yarra	<p>20% reduction by 2010</p>	<p>25% reduction by 2010</p>	<p>1996 (community)</p> <p>2000/01 (council)</p>
City of Stonnington	<p>Stonnington has not set a community greenhouse gas emission reduction target</p>	<p>Stonnington has not set a corporate greenhouse gas emission reduction target</p>	<p>2005</p>

Table 2. Potable Water Use

Council	Community Target	Council Operations Target	Baseline Year
City of Melbourne	<ul style="list-style-type: none"> 40% reduction in water use per employee and per resident by 2020 Also expressed as a 12% absolute reduction in water use (as 141% increase in population will absorb many of the water savings) <i>*subject to change in accordance with City as a Catchment</i>	40% reduction in corporate water use by 2020 <i>*subject to change in accordance with City as a Catchment</i>	1999/00
City of Port Phillip	50% reduction on potable water use by 2020, in collaboration with regional, state and federal partners.	70% reduction on potable water use by 2020	2001
City of Yarra	25% reduction in consumption by 2015	40% reduction in consumption by 2015	2000/01
City of Stonnington	15% reduction in use of potable water by 2010/11	50% reduction in use of potable water by 2010/11	2000/01

Table 3. Waste

Council	Community Target	Council Operations Target	Baseline Year
City of Melbourne	65% recovery rate of municipal solid waste for reuse and recycling by 2014 (State target)	N/A (will be guided by Waste Wise)	N/A
City of Port Phillip	75% reduction in per capita community waste to landfill by 2020, in collaboration with regional, state and federal partners.	80% reduction in council waste to landfill by 2020 (based on 1999 levels of waste).	1999
City of Yarra	N/A	N/A	N/A
City of Stonnington	<ul style="list-style-type: none"> - Diversion of 45% of household waste from landfill by 2008/09 - Household waste to landfill below 420kg / household / year by 2008/09 - Total household waste generation less than 700kg / household / year by 2008/09 	N/A	2006/07

Methodologies

Table 1. Greenhouse Emissions

Council	Community Data Collection Methodology	Council Operations Data Collection Methodology
City of Melbourne	ICLEI community data protocol	Stark Essentials Software
City of Port Phillip	Data from electricity and gas retailers, aggregated by postcode and sector.	Utility Tracker Software
City of Yarra	ICLEI community data protocol (will be guided by NAGA's Zero Net Emissions policy)	Utility Tracker Software
City of Stonnington	ICLEI community data protocol	Utility Tracker Software

Table 2. Water

Council	Community Data Collection Methodology	Council Operations Data Collection Methodology
City of Melbourne	Data from retailers aggregated by postcode and sector (commercial and industrial merged)	Stark Essentials & Oracle Financial Software
City of Port Phillip	Data from retailers aggregated by postcode and sector	Utility Tracker Software
City of Yarra	Calendar year information from retailers	WaterMap data (high use sites), estimates (low use sites)
City of Stonnington	Data from retailers aggregated by postcode and sector	Utility Tracker Software

Waste

All councils have a broadly consistent methodology reliant on volume data from contractors.

IMAP Action 9.1 Regional Sustainability Targets

Leicester Street Alliance

Background

The Leicester Street Alliance (LSA) consulting team has been commissioned to conduct a desktop review of water, waste and energy efficiency programs directed at residents and businesses within the IMAP region. The data gathered is to feed into IMAP Action item **9.1: Regional Sustainability Targets**.

Review parameters

1. Collect data regarding the operation, jurisdiction, timeline and current status of non-council programs addressing water, waste or energy efficiency within the IMAP region.
2. Collate council data, provided by the IMAP councils, with non-council data, categorising for program size.
3. Analyse all data, highlighting any gaps and/or overlaps in the program pool and identifying any opportunities for collaboration.

The review should cover any programs available to the community, including business (small and medium), individuals, groups (not-for-profit, sport, environment, etc.).

Data gathered should be as up-to-date as possible, and all entries validated through direct communication rather than relying on web-based information.

Review process

Conducted throughout December 2008 and early January 2009, the review required us to:

1. Conduct a web search of federal, state and local sites to identify current environmental programs, review their criteria and sort as to applicability for residents and businesses in the IMAP region;
2. Interview environmental officers within the four IMAP councils to create a list of specific Council generated and delivered activities (whether directing state and federal funding, or using local funding);
3. Collate the two lists;
4. Check for accuracy and timeliness of data;
5. Identify gaps and overlaps in the provision of services that emerge from the review.

Findings: General

Before we go any further, it is important to note that we have been asked to highlight some of the gaps and overlaps in service delivery. Accordingly, the comments below tend to look critical when taken out of context. The truth is that many people of goodwill and energy are working hard to achieve what needs to be done in this area. They experience difficulties, which they have made clear, because they are working **IN** the problem, not **ON** the problem.

The fully detailed lists that represent the main output of this task are available upon request.

The points below describe the main issues, gaps and overlaps that emerged for us during our conduct of the review.

1. Accuracy and timeliness of web-based information. It proved extremely hard to verify information. The various information systems have been automated to the point where it is almost impossible to contact an individual who has detailed program knowledge, particularly about the budget of a program and the length of time funds will be available, and who has the freedom to communicate that information.
2. Information on funding cycles. Many departments are unwilling to provide anything more than the most basic information. Every organisation operates with its own policy and review cycle, which means there is no point in time where decisions about funding, naming and timing of programs align.
3. User-friendly support and interpretation. In both the desktop review and the interviews it emerged that the system did not provide much useful interpretative data for users. What products to buy/install, how to bundle funding opportunities, how to prioritise environmental actions – these critical components of the decision-making process were ignored in the majority of cases. Strict interpretation of Privacy and Competition Policy may be a significant hindrance here. Users look to information sites to provide information that they can act on.
4. Targets and measurement. The past decade has seen major advances in our ability to understand and measure qualitative change in the intersection of environmental and social programs. However, the measurement process still seems to rely heavily on quantitative targets derived from individual events/action. This results in sub-optimisation of resources: potential users are unable to identify ways of achieving synergy (e.g. undertaking group or street-level action, bundling programs strategically, developing a schedule of implementation that results in incremental improvement, understanding the lifestyle trade-offs required). This lack of co-ordination tends to mean evaluation is conducted in terms of outputs (what we did), rather than outcomes (what changed as a result of our actions/investment).
5. Opportunistic or reactive action. At the Council level much good work is being done. However, those interviewed saw their work as opportunistic and reactive – responding to individual questions and requests, identifying an ally with whom to work, attaching an environmental element to a larger pre-existing program. The interviewees were agreed that the system encouraged them to operate in this way: it discourages holistic, systemic action that would remove blockages to large-scale change. (This said, internal or cross-Council collaboration was emerging, but was largely dependent on the will and energy of individuals.)
6. Experimental action. The price of opportunistic action (see point 5 above) is that what we do tends to be experimental – one-off applications of theory to test viability. While a specific action may work, there is not a pathway for standardising, transferring and replicating what was learned. Many existing programs are aimed at experimental action in the sense that they promote the situation of an individual experimenting with a single discreet action. This applies to both citizens who engage in a program and to Council officers interacting with their communities.

7. Demographic data. Each of the Councils in the IMAP region is significantly different in its citizen or business make-up as well as its priorities and resources. At the same time, each conducts its own research and analysis of demographic data, apparently using no shared model or formal sharing process.
8. Focus on 'opt-in' programs. Programs that rely on the participation of interested and committed people alone will not achieve change. It is important to reach and convert those who are NOT on the path to sustainability. Yet most programs are designed for people who are already doing things to reduce their environmental impact. This rests on assumptions about trickle-down or critical mass change that are not justified by the research or literature into environmental change.
9. Related to the above point is an emphasis on programs and blitzes rather than on-going service provision that will take residents through a developmental process that achieves improvement on several fronts.
10. Politics. As an emerging issue, environmental action is hostage to the forces of electoral politics. There is no reason why this should not be the case in a democratic society. However, the degree of variation in commitment to change across Melbourne seems to indicate environmental action is still seen as a discretionary issue rather than one that is at the centre of responsible local government.
11. Council perspectives. Each of the IMAP Councils has a different approach to delivering sustainability. All integrate the three main themes of Behaviour Change, Funding and Information. However, there are differences which emerge from the spreadsheets (available on request):
 - a. City of Melbourne programs emphasise funding and information. Behaviour change is not an obvious component of the mix, unless it is seen as likely to emerge from increased awareness and funding incentives. There is not a lot of evidence to support this as a viable community change strategy;
 - b. City of Port Phillip programs rely heavily on information and awareness-raising. However, there are more tightly targeted programs, and additionally, in what the literature tells us is a good move, the community (users) can define their own projects and activities under several programs;
 - c. City of Stonnington programs appear to be smaller, more opportunistic, and created more as one-offs in response to interest expressed by groups, businesses and individuals. The emphasis is on a mix of information and behaviour change, often built around events, often with low-cost incentives rather than grants;
 - d. City of Yarra again emphasises information and behaviour change. Like Port Phillip, Yarra is also using citizen involvement as a foundation with trial projects and community designed projects.

Findings: Specific Overlaps and Gaps

There are many overlaps in the provision of services. Usually, where there is an overlap, there is a matching gap.

Some specific overlap areas include:

1. Packaging and marketing of grants and rebates. There are multiple 'versions' of a relatively few total number of interventions. For example: insulation, showerhead replacement, green power, or solar rebates. These are all presented in a variety of guises through many levels of government, mostly as if each offer was unique and different.
2. There are also many websites that operate at the lower end of awareness about environmental matters. These cover off the same issues, tips and reasons for action repeatedly. A structured approach that allowed users to understand the process of engaging in environmental change would be useful (MEFL has a good model).
3. Data use. Most agencies, departments and councils have conducted surveys and data searches to underpin decisions and shape strategy. While the resulting data is shared informally at the officer level, there appears to be no co-ordination through, perhaps, a clearing house, or shared data portal, that enables officers at a variety of levels to compare data and expand their understanding of the situation.
4. Evaluation. Evaluation processes appear to focus on outputs (did we spend the money and produce what we said we would). This is an administrative and financial measure that has its place and importance but does not illuminate the changing face of community awareness or what the programs achieve for the community.
5. Individual solutions. Another overlap aspect is the emphasis on individual solutions. This is a little harder to describe because it is a reasonable expectation that individual action should drive change. Most programs are geared to the action that individuals can take, rather than communities of interest. The fallacy of the people-reliant approach is that the literature tells us that individual commitment or willingness to change is critical, it is not enough to guarantee effective action. Action is far easier when effort is directed *as well* to the group/community level. Currently there seem to be too many disconnected individually based programs that do not then link to group programs that can achieve step-change.
6. Website design. Most websites carry similar, repetitive information. They address the very early stages of change: those most concerned with awareness and information rather than the middle and later stages that revolve around action, collaboration and management of change. We could do a lot better, particularly given the social networking capacities of Web 2.0.

Opportunities

Let's call them opportunities rather than gaps. Some key opportunities we saw include:

1. Collaborative action. While some collaborative action is evident, most programs operate either as proprietary or, at best, collegiate, activities. By this we mean that the act of working together is not necessarily collaboration. Agendas and organisational needs still exist and conflict, particularly at the higher levels of decision making. The best examples of true collaboration (sharing, learning and taking action) exist at the individual officer level where we see proactive, responsive and opportunistic change undertaken by individuals not organisations. These should be studied and integrated.
2. The model of change. How does change happen? How long does it take? What helps it emerge? What hinders? Do we want change in behaviour or attitudes, or both? There appears to be no coherent or constant model of change anywhere in this system. Direction seems to be intuitive, personalised and dependent on the energy of the individual. There are hierarchical, top-down assumptions operating alongside bottom-up, community-designed solutions. While the *let a thousand flowers bloom* approach might have benefits, it usually results in wasted resources and poor outcomes if it is promoted without an understanding of the arc of change.
3. Explore the heart and mind of the user. We have argued that most websites and printed material (and possibly workshops) operate at the low end of effective behavioural change. That is, they are not designed to threaten the status quo. (Whether such design is intentional or accidental is another question to be considered). It is possible, given a range of evidence we do not have the space for here that the community is in advance of the program funders. How can we test for that and re-gear service provision to better meet the real concerns and needs of people rather than those we assume are their interest?
4. Go where the clients are. The majority of offerings are geared towards those who are already committed to environmental change. Perhaps this is the right approach, but if it is, the information that accompanies the offering is way behind. Those ready to take action want advice – on where to buy, what to pay, which is best, etc. They are making commercial decisions as well as environmental ones and the majority of programs and information avoid this crucial need.
5. A common critique, when we talked to council and agency officers was that they were forced to work with programs that were piecemeal, ad hoc and not geared towards systemic results. The gap here resides around the policy decisions that set boundaries and barriers between programs and agencies. Again, we have observed that while the individuals work to overcome these difficulties, the top-down system design works to institutionalise silos and lack of co-operation.
6. Measurement of progress. Commentary on measurement and evaluation highlighted several opportunities:
 - a. The term 'progress' could be clarified and linked to systemic change;
 - b. Measurement focussed too heavily on quantitative targets (number of units, homes, trees, sites, etc.) and lacked a dimension that dealt with qualitative change;

- c. Measures were developed to make sense to the funding/delivery organisation, not the consumer;
- d. There was some confusion about what we should be measuring / evaluating (this is linked to the point above re: the model of change). This fed back into program design when decisions were made about where to apply resources. Do we look at the first, the biggest, the best, the most impactful, and the cheapest?

7. Websites

- a. Provide a single portal/entry point (we understand this is underway at the federal level);
- b. Reduce the rhetoric and motherhood statements (especially the marketing of the government) they make the programs and funding hard to find and contextualise;
- c. Provide bundling opportunities/advice so that users can i) prioritise their action, ii) build synergies in their action;
- d. Language is often incoherent and inconsistent;
- e. Provide links and advice on purchasing. Doing so will increase the take up of funding opportunities, as it will be possible to make a link between funding and action via the purchase decision.

Possible action

This was not a detailed review of the effectiveness of programs, nor is it possible to compare the virtues or otherwise of specific programs.

However, beyond simply gathering together a list of available opportunities for funding, it is possible to draw some conclusions from the points above that deal with gaps and overlaps.

The common language of all those we talked to on this project was full of terms such as, ad-hoc, piecemeal, unimportant, irrelevant, inconsistent and incoherent.

It seems that Council planners, environmental officers, project co-ordinators and others can clearly see the need to bundle, organise, redesign or simplify the funding process, but are caught up in a system that seems designed (probably for promotional reasons) without the end user in mind.

We can suggest the following:

Council/officer level:

Councils are the interface between the funder's intent and the citizen's uptake of environmental improvement opportunities. At the officer/ co-ordinator level, there are many experienced and capable people working to deliver services. Their work could be improved by:

- Encouraging upwards negotiation and collaborative processes. Currently, collaboration exists mainly as a result of individual initiative, not as a result of systemic intent;
- The same goes for feedback processes. This review did not look at feedback processes, specifically, but the websites, application forms and guidelines are constructed for the most part to avoid information passing back up the chain from those at the delivery end. In simple terms, a system that does not allow feedback cannot improve.

Information:

- Address problems with the non-use of readily available information, for example rates databases;
- Many programs are designed with a 'blitz' orientation – short, sharp and directed towards specific audiences. As indicated earlier, this methodology is based on assumptions about marketing change, not social change. A service orientation might be preferable, where the consumer/end user is able to make choices against a background of integrated services.

To summarise

Looking at the number of programs that are currently deployed to help citizens change their environmental impact, one is left with the distinct impression that they are designed to suit the needs of marketers and spin doctors rather than the citizens themselves.

While there a vast number of programs, they mostly adhere to two simple types:

- *Post-hoc* technology fixes that are designed as discrete events rather than as a plan of works, and;
- Individual behaviour change based on marketing theory rather than social change theory.

These programs constantly reiterate that people (who produce too much greenhouse gas) and things (that are poorly designed) are the problem; that there is nothing wrong in the broader systems of consumption and lifestyle that those with more influence on the system need to change.

As such, those at the leading edge of commitment to environmental change – whether working inside councils or as members of the general community, find their activism co-opted by a funding disbursement system that focuses on avoiding collective action other than in a narrow political sense.

This is not an unknown approach or result. We have been seeing evidence coming out of the social/welfare sector for more than fifteen years of similar processes. So it is not surprising that we are now seeing a similar institutional response being played out in the social/environmental arena.

Common themes are vague intent, lack of research or modelling, advertising spin at the expense of facts, unnecessary complexity, obfuscation and unjustified promises.

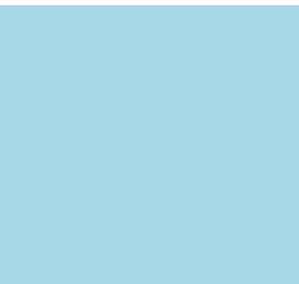
There are effective actions that citizens can take on the basis of some programs and these are important. As we said earlier, much is being done, but the current focus of programs tends to lose the synergies that research overseas has proved can be attained by programs that work across streets, communities and regions. This is at odds with the provision of similar programs for business, where it has long been accepted that the best results emerge from industry and sector based interventions with appropriate incentives and clear regulatory boundaries.

The system has, as a resource, a cadre of committed and capable people who are well used to working across boundaries to achieve results.

These people can easily describe the shortfalls of the current system in operational terms.

There are some additional aspects of program design and delivery that could be affected positively by an organisation such as IMAP to reduce overlaps and ensure services are better targeted. These include:

- Co-ordinated and user-friendly web resources that provide levels of information, especially for those ready to make purchasing decisions;
- A funded clearing-house approach to information sharing and strategy development;
- Investigate and apply an integrated change model that can be used to develop future strategy (many are available: CBSM, Stages of Concern, TTM, or Prochaska's model);
- Evaluation of system performance as well as project outputs. There is little information on how and why some things work as opposed to other interventions that fail;
- Negotiate upwards with funders to adapt funding to suit community-level and citizen-designed solutions. This is a missing element currently;
- Review funding descriptors, application processes and forms for consistency of language, purpose, timing cycles and requirements. This should include better bracketing of the amounts available so as to assist applicants.
- Develop a model that helps people achieve synergistic solutions that build to deliver step change. Currently, programs are organised as discrete, unconnected activities, where the really big benefits lie in developing a works program where each step contributes to the next.



City of Port Phillip

Carbon Footprint of Community Emissions

May 2009

The City of Port Phillip

**Carbon Footprint of
Community Emissions
for the City of Port
Phillip**

Final Draft Report

Draft

ARUP

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It is not intended for and should not be relied upon by any third party and no responsibility is undertaken to any third party

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Figure 1 Port Phillip's emissions by type (kt CO₂-e)

Figure 2 Port Phillip Stationary energy emissions by sector

Figure 3 Port Phillip transport-based emissions

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Glossary

Abbreviation	Meaning
5 Star	5 Star standard as required in the <i>Building Code of Australia, Victoria Appendix Volume 2</i> . From 1 May 2008, this requirement will be extended to home renovations and relocations.
ABARE	Australian Bureau of Agriculture and Resource Economics
ABGR	Australian Building Greenhouse Rating Scheme
ABS	Australian Bureau of Statistics
ANZSIC	Australia and New Zealand Standard Industrial Classification
CCI	Clinton Climate Initiative
CEO	Chief Executive Officer
CH ₄	methane
CHP	Combined heat and power
CLUE	City of Melbourne Census of Land Use and Employment
CNG	compressed natural gas
CO ₂ -e	carbon dioxide equivalents
CO ₂	carbon dioxide
DCC	Department of Climate Change
GDP	Gross Domestic Product
HFC	hydrofluorocarbons
IPCC	Intergovernmental Panel on Climate Change
kt	kilotonnes
LGA	Local government area
N ₂ O	nitrous oxide
PFC	perfluorocarbons
Ppm	parts per million
PV	photovoltaic cells
SF ₆	sulphur hexafluoride
VGGI	Victorian Greenhouse Gas Inventory
VEET	Victorian Energy Efficiency Target

Executive Summary

This carbon footprint report for the City of Port Phillip (CoPP) is designed to enable Council to compare emission profiles with other councils across the Inner Melbourne Action Plan (IMAP) area, with a view to designing and monitoring regional carbon emission reduction strategies. The calculations utilise a common methodology with carbon footprints undertaken for the Cities of Melbourne, Port Phillip and Yarra.

The following summarises the key highlights of the carbon footprint:

- The total emissions produced within the CoPP during 2005/2006 is 1,468.16 kt CO₂-e.
- Residential emissions were evaluated on a per resident basis and equated to 5.3 t CO₂-e per resident within the CoPP. Residential emissions were also considered on a per household basis and emissions were estimated at 11.9 t CO₂-e per household within the LGA for the 2005 / 2006 period.
- Commercial emissions were considered for the commercial employees working within the CoPP area and a per employee emissions figure of 11.3 t CO₂-e was obtained.
- Stationary energy emissions comprise the majority (67.4 per cent) of the emissions within the municipality. The end-use of this energy reflects the primary activities within the municipality, which are commercial (41.0 per cent of stationary emissions), residential (30.7 per cent) and manufacturing (19.4 per cent).
- Transport comprises of 26.5 per cent (576.4 kt CO₂-e) of emissions within the Council area. The road freight transport within the municipality comprises of the majority of transport emissions, with 59.8 per cent. This is a reflection of the transport associated with activity at the Port of Melbourne.
- Waste comprises the only other key emissions source with 132.8 kt CO₂-e.

The following is a visual representation of the emission profile for the CoPP.

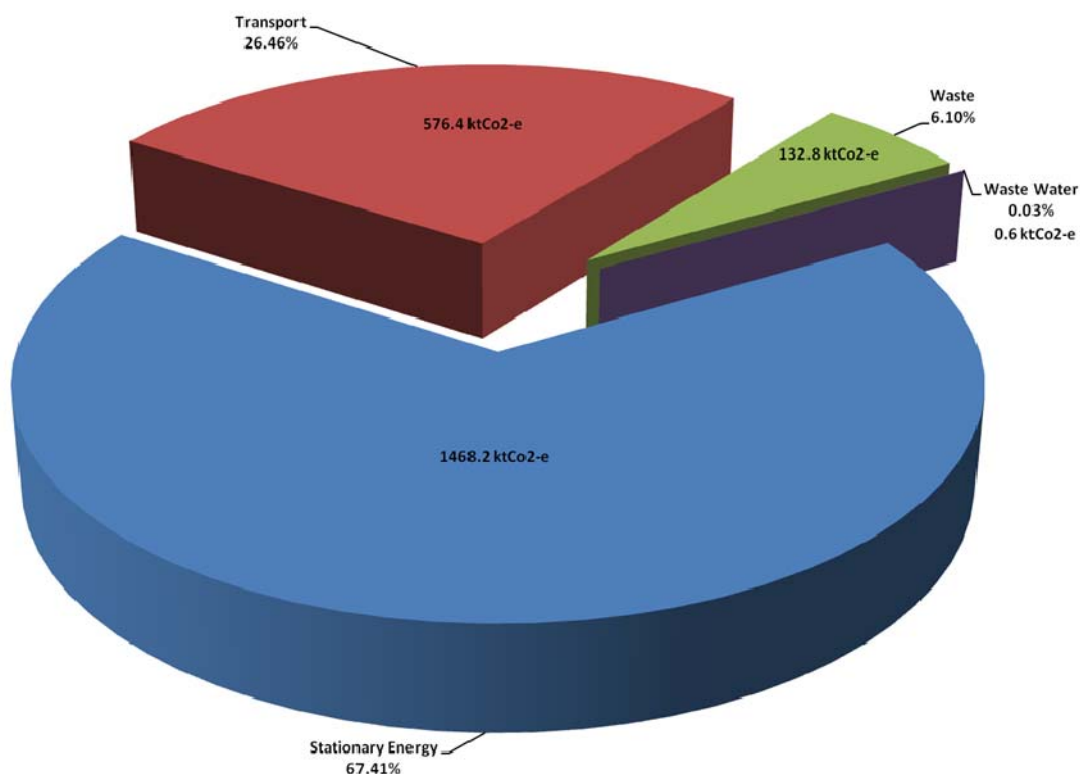


Figure A CoPP emissions by type (kt CO₂-e)

As stationary energy emissions account for over 70 per cent of the CoPP emissions, it is important to understand the end uses which drive those emissions. A break down of end use emissions within the stationary energy category are displayed in Figure B below. The share of electricity and gas emissions within the residential and commercial end use sectors are also displayed in Tables A and B below, alongside the corresponding Victorian figures.

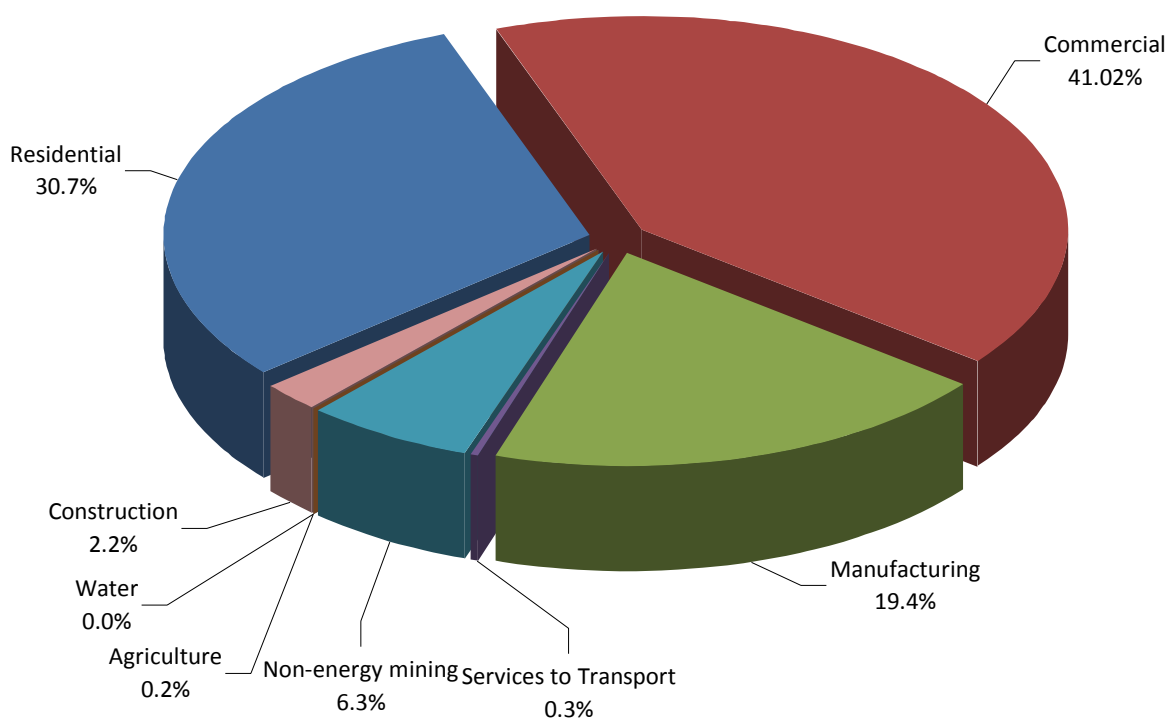


Figure B Stationary Emissions End Use

It is important to notice that the normalised Stonnington residential emissions are higher than the corresponding Victorian figures across all areas.

Table A City of Port Phillip Residential Emissions (t CO₂-e)

Residential Emissions Type	Port Phillip Emissions	Victorian Emissions
Total residential emissions per resident	5.3	4.1
Total residential emissions per household	11.9	10.8
Residential electricity emissions per household	8.4	7.9
Residential gas emissions per household	2.9	2.7

Conversely, normalised commercial emissions figures are lower than the corresponding Victorian values.

Table B City of Port Phillip Commercial Emissions (t CO2-e)

Commercial Emissions Type	Port Phillip Emissions	Victorian Emissions
Total commercial emissions per commercial employee	11.3	12.4
Commercial electricity emissions per commercial employee	6.8	7.5
Commercial gas emissions per commercial employee	3.8	4.1

Draft

1 Introduction

Carbon Footprint of Community Emissions for the City of Port Phillip provides the carbon footprint for the CoPP for 2005 / 2006. It has been largely prepared in accordance with the categories specified by the Intergovernmental Panel on Climate Change (IPCC).

2 Approach to the carbon footprint for 2005/2006

2.1 Overview

The general approach adopted in the preparation of the CoPP carbon footprint uses standard group emissions categories specified by the Intergovernmental Panel on Climate Change (IPCC), which have been adopted for reporting of the national and state level inventories. However the CoPP requires data to be further disaggregated by end-use sector, in order to enable understanding of the emissions associated with specific activities.

The community inventory generally applies a top down approach, firstly determining emissions at a wider geographical scale (Australia, Victoria or Melbourne Statistical Division) and then assigning a percentage to the CoPP, based on the most appropriate indicator. Where sufficient local data was available, such as in the stationary energy section, a bottom up approach has been applied.

In accordance with the categories specified by the IPCC a methodology for the following sectors has been developed:

- Stationary energy
- Transport
- Waste
- Waste water
- Agriculture
- Land-use change
- Industrial processes.

The following provides an overview of the methodology applied to the calculation of the 2005 / 2006 emissions.

2.2 Stationary energy

The determination of stationary energy emissions encompasses the following sectors:

- Residential
- Commercial
- Manufacturing
- Non-energy mining
- Agriculture
- Transport services and storage
- Construction
- Water

2.2.1 Methodology for 2005 / 2006 footprint

Emissions associated with the stationary energy sector were calculated using Victorian end-use data segregated by economic sector (under Australia and New Zealand Standard

Industrial Classification (ANZSIC) 1993) and fuel type published by the Australian Bureau of Agriculture and Resource Economics (ABARE).

This approach is similar to the methodology used to develop the Victorian Greenhouse Gas Inventory (VGGI) by the Department of Climate Change (DCC). However for the purposes of this study it was important to only include emissions associated with end-use within Victoria.

The Victorian Department of Sustainability and Environment (DSE) commissioned George Wilkenfeld & Associates to produce a comprehensive report on end-use allocation of emissions in Victoria for the 2005 inventory (Wilkenfeld, 2008). This was used for full fuel cycle emission factors for Victoria for the inventory year and to cross check results and account for emissions associated with fuel extraction production, as well as electricity generation, transmission and distribution. For this report energy associated with fuel extraction, power generation and fuel production for energy forms which were ultimately exported from Victoria were to be omitted from the emission calculations. It is for this reason that the VGGI data by ANZSIC category was not able to be directly used for the stationary energy sector for the purposes of this study.

For some subsectors, ABARE fuel-use data is not reported separately and is aggregated at either the sector level, total Victorian or Australian level. This particularly impacts the calculations for end-use by the manufacturing sector, and for these categories, the ABARE data was not able to be used. In these instances the data reported by Wilkenfeld for these sectors was used.

Furthermore, the Wilkenfeld report reallocates the emissions between the commercial and residential sectors resulting in an increase in the commercial sector and decrease in the residential sector compared to the ABARE data. This is explained as below:

"Detailed bottom-up modelling by Energy Efficient Strategies (EES 2008) estimates significantly lower consumption of electricity than was reported by ABARE for the period 2002-2005. The EES and ABARE trends for residential electricity use are very close from 1990 to 2002, but diverge sharply in 2003, and in 2005 the EES estimate was 14per cent lower than the ABARE trend... Residential electricity sales forecasts by Victoria's electricity distributors compiled by the Essential Services Commission (ESC) are very close to EES's projections.

As the residential sector end-use breakdown in the present report is based on the EES study, the EES electricity estimates are used in preference to the ABARE estimates. However, it is likely that the ABARE estimates of total Victorian electricity consumed are correct, because they can be checked against NEMMCO and ESAA data. Therefore the electricity removed from the residential sector must be reallocated elsewhere. The most likely sector is the commercial sector, where the ABARE data show a complete cessation of growth after 2002. There is no obvious reason why this should have been so – the economic output of the commercial sector, continued to increase at a roughly constant rate from 2000 to 2005.

The conclusion is that there is a high probability that ABARE misallocated some of the electricity use in the commercial sector to the residential sector in the period 2003-2005, and this has been adjusted for the present study."
(Wilkenfeld, 2008)

Determining End-use Emissions on the LGA Scale

LGA associated emissions are derived from a percentage of Victorian end-use emissions using an appropriate sectoral indicator. Sectoral indicators were selected based on the availability of Victorian and Port Phillip data and the correlation to emissions, as further detailed below.

Residential

Energy consumption variables in the residential sector include dwelling type and construction, climate and connection to natural gas. Ownership and use of appliances varies greatly depending on socio-economic factors. While the total residential energy consumption for Victoria is known, apportioning the total residential energy consumption by

population or dwelling numbers (as is done for ICLEI purposes) does not reflect this complexity.

Electricity distributors' data for residential electricity and gas consumption for the CoPP was supplied by the DSE and used to calculate emissions resulting from electricity.

To determine the consumption of all other fuels, it was assumed that dwellings in the CoPP consumed different fuel types in the same proportion as for Victoria. Consumption figures were then converted to emissions using the full fuel cycle emission factors published in Wilkenfeld, 2008, which are considered to represent the most accurate data for the 2005 / 2006 period. These factors vary from the Department of Climate Change published emission factors which represent a three-year average.

Commercial

For the combined commercial sector, the total emissions for Victoria were calculated from the ABARE 2005 / 2006 energy use data and full fuel cycle emission factors. The commercial sector ABARE data includes the combined fuel use for the following ANZSIC 1993 divisions:

- Wholesale Trade
- Retail Trade
- Accommodation, Cafes and Restaurants
- Communication Services
- Finance and Insurance
- Property and Business Services
- Government Administration and Defence
- Education
- Health and Community Services
- Cultural and Recreational Services
- Personal and Other Services.

To further disaggregate the 2005 Victorian end-use emissions by commercial division, the 1999 End-use allocation breakdown (Wilkenfeld, 2002) was used to distribute the Victorian 2005 / 2006 commercial emission total amongst subsectors as illustrated in Table 1.

Table 1 Victorian Commercial Emissions by Subsector 2005 / 2006

Wholesale and Retail Trade	37.7%
Finance, Insurance, Property and Business Services	16.5%
Education, Health and Community Services	14.9%
Accommodation, Cultural and Personal Services	13.8%
Government Administration and Defence	13.6%
Communication	3.5%

The Wilkenfeld 2008 report for the 2005 end-use allocation does not provide this breakdown of emissions by subdivision due to further aggregation of the ABARE data since the previous report.

This methodology assumes that the:

- growth in each commercial sector in Victoria between 1999 and 2005 / 2006 was the same; and
- relative emission intensity of these sectors within Victoria has not changed over this time.

An indicator was developed to assign a proportional quantity of Victoria's emissions to each commercial subsector in the CoPP. While a number of indicators were considered including; floor area, contribution to gross regional product and number of facilities, the number of employees in each sector has been selected as the most appropriate indicator due to data availability. The study therefore assumes that the emissions in each subsector are directly attributable to the number of persons employed in that subsector. This would result in inaccuracies if there were gross operational differences between facilities operating in each subsector affecting employment numbers. However, Victoria is considered an adequately refined boundary and the sectors adequately disaggregated to avoid such gross differences. The LGA calculation is presented in Table 2

Table 2 Calculation for LGA Commercial Emissions

Sector	Vic Commercial Emissions (a)	LGA Employment as a % Vic Employment by Sector (b)	LGA Emissions as a % of Vic Total Commercial Emissions (a) x (b)
Wholesale and Retail Trade	37.7%	2.12%	0.80%
Finance, Insurance, Property and Business Services	16.5%	3.83%	0.13%
Communication	3.5%	7.54%	1.24%
Government Administration and Defence	13.6%	1.12%	0.15%
Education, Health and Community Services	14.9%	1.39%	0.21%
Accommodation, Cultural and Personal Services	13.8%	4.93%	0.68%
Total Commercial	100%	3.22%	3.22%

Manufacturing

For the manufacturing sectors, the total emissions for Victoria were sourced from the Wilkenfeld 2008 report and further distributed amongst subsectors as outlined in Table 3.

Table 3 Victorian Manufacturing Emissions by Subsector 2005 / 2006

Non ferrous and other metal products	53.8%
Chemicals	11.0%
Food, Beverages, Tobacco	8.9%
Wood, paper and printing	8.3%
Iron and Steel	7.4%
Machinery, equipment and other	4.7%
Non-Metal Mineral Products	4.3%
Textiles, Clothing, Footwear	1.7%

This analysis excludes energy used in refining of petroleum fuels in the chemical sector and the emissions from coke ovens are excluded to avoid double counting as the related emissions are included in the iron and steel industry. Emissions from the chemicals sector are further adjusted for fuel-derived carbon sequestered in long-lived products such as plastics.

For each manufacturing subsector, an indicator was developed to assign a proportional quantity of Victoria's emissions to the CoPP. Due to data availability, number of employees for each sector was selected to be the most appropriate indicator. The study therefore assumes that emissions in each subsector are directly proportional to the number of persons employed in that subsector. This would result in inaccuracies if there were gross operational or level of automation differences between facilities operating within each subsector affecting employment numbers. However, Victoria is considered an adequately refined boundary and the sectors adequately disaggregated to avoid such gross differences. The LGA calculation is presented in Table 4.

Table 4 Calculation for LGA Manufacturing Emissions

Sector	% Vic Manufacturing Emissions (a)	LGA Employment as a % Vic Employment by Sector (b)	LGA Emissions as a % of Vic Total Manufacturing Emissions (a) x (b)
Food, Beverages, Tobacco	8.90%	1.93%	0.17%
Textiles, Clothing, Footwear	1.70%	1.11%	0.02%
Wood, paper and printing	8.30%	3.59%	0.30%
Chemicals	11.00%	1.05%	0.12%
Non-Metal Mineral Products	4.30%	0.19%	0.01%
Metal Products	7.40%	0.27%	0.02%
Non ferrous and other metal products	53.80%	0.18%	0.10%
Machinery, equipment and other	4.70%	2.14%	0.10%
Total Manufacturing	100.00%	0.83%	0.83%

Non-Energy mining

For the non-energy mining sector the total emissions for Victoria were sourced from the ABARE 2005 / 2006 energy use data and full fuel cycle emission factors.

The non-energy mining sector emissions were then allocated to the CoPP based on employment data. It should be noted that this methodology assigns mining sector emissions to office-based services to mining as well as actual mines. This may represent an overestimation in the CoPP. Notwithstanding, there is an argument that the support services do have some control over the on site mining emissions and therefore should be reported in this way.

Agriculture

For the combined agricultural sector, the total emissions for Victoria were able to be calculated from the ABARE 2005 / 2006 energy use data and full fuel cycle emission factors. These emissions were then attributed to the CoPP based on employment numbers.

Transport services and storage

For the combined transport services and storage sector, the total emissions for Victoria were able to be calculated from the ABARE 2005 / 2006 energy use data and full fuel cycle emission factors. These emissions were then attributed to the CoPP based on employment numbers in this industry.

Construction

For the construction sector, the total emissions for Victoria were able to be calculated from the ABARE 2005 / 2006 energy use data and full fuel cycle emission factors. These emissions were then attributed to the CoPP, based on employment numbers. The employment numbers were sourced from ABS Census data which may not be representative of the construction occurring within the CoPP boundary. Contractors may not

be picked up in this employment category, where their main place of employment is off site and not within location of construction activity.

Water

For the water sector, the total emissions for Victoria were able to be calculated from the ABARE 2005 / 2006 energy use data and full fuel cycle emission factors. These emissions were then attributed to the CoPP based on employment numbers in this industry.

2.3 Transport

The methodology applied is outlined below for the following forms of transport:

- Passenger vehicles, motorcycles, non freight carrying trucks
- Buses
- Passenger trains and passenger trams
- Road based freight
- Rail based freight.

Passenger Vehicles, Motorcycles, Non-freight carrying trucks,

1. Proportion of Annual Vehicle Kilometers as a proportion of total Vehicle Kilometers for the Metropolitan Statistical District (MSD) was calculated.
2. Total Fuel Use by vehicle types and associated emissions for Victoria was calculated.
3. Using proportion calculated in Step 1, Fuel Use by vehicle type for the MSD was calculated.
4. The number of registered vehicles within the CoPP (based on post Codes) as a proportion of the total vehicles registered in the MSD was calculated.
5. Proportions calculated in Step 4 are applied to Fuel Use data calculated in Step 3 to determine GHG emissions by vehicle for the municipality.

Buses

1. Proportion of Annual Bus Kilometers to MSD was calculated.
2. Total Bus Fuel Use and associated emissions for Victoria was calculated.
3. Using proportion calculated in Step 1. Bus Fuel Use for MSD calculated.
4. Number of Journeys to Work by Bus data sourced from 2006 Census¹ for the CoPP and the MSD.
5. Proportion of Bus Journeys to Work for the CoPP in comparison to total bus journeys to work for MSD was calculated.
6. Proportion calculated in Step 5 applied to fuel use from Step 3 to determine Bus GHG emissions for the CoPP.

Passenger Trains and Passenger Trams

1. Using data provided by State Government Victoria - DOI ("Calculation of greenhouse gas intensities of public transport modes - Current occupancy") the total annual train and tram GHG emissions for MSD was calculated.
2. Number of journeys to work by train & tram data sourced from 2006 Census for the CoPP.

¹ ABS: B45 Method Of Travel To Work By Sex, By Place of Usual Residence

3. Proportion of train & tram journeys to work for the CoPP in comparison to total train & tram journeys to work for the MSD calculated.
4. Proportion calculated in Step 3 applied to GHG emissions from Step 3 to determine train and tram GHG emissions for the CoPP.

Road Based Freight

1. Total Vehicle Fuel Use and associated emissions for Victoria was calculated for Light commercial vehicles, Rigid Trucks and Articulated trucks.
2. Data sourced on 'Tonne-kilometres Moved By Statistical Subdivision, Road (b), Year Ending 31 March 2001' for each of the 6 Statistical Subdivisions from Australia to SSD and from SSD to Australia²
3. Proportion of Tonne Kilometers for each LGA as a proportion of total Tonne Kilometers for each SSD and Victoria calculated was based on the number of employees by freight based industry (Employment figures include employees within; agriculture, forestry & fishing, mining, manufacturing, electricity, gas, water & waste services, construction, wholesale trade, retail trade, transport, postal & warehousing)³.
4. Proportion calculated in Step 3 applied to emission figures from Step 1 to obtain emissions for the CoPP.

Rail Based Freight

1. Total Rail Freight emissions for Australia sourced (Source: Australian Railway Association Inc.
<http://www.ara.net.au/dbdoc/FULL%20AUST%20RAIL%20TRANS%20FACTS%202008%20REPORT%20-%20MAY%2008.pdf> AUSTRALIAN RAIL TRANSPORT FACTS 2008 - May 2008, Apelbaum Consulting Group, Commissioned by the Australian Transport Energy Data and Analysis Centre, Page 66, Table 5.1-4).
2. Proportion of emissions for the City of Port Phillip as a proportion of the total emissions for Australia calculated based on the number of employees by freight based industry (employment figures include employees within: agriculture, forestry & fishing, mining, manufacturing, electricity, gas, water & waste services, construction, wholesale trade, retail trade, transport, postal & warehousing)³ Error! Bookmark not defined.
3. Proportion calculated in Step 2 applied to emission figures from Step 1 to obtain emissions for each the CoPP.

2.4 Waste

2.4.1 Municipal

The calculation for determining greenhouse gas emissions from municipal waste is potentially very complex (DCC, 2007) and requires complete data on waste composition. In the absence of complete data, the default emissions factor for municipal waste (DCC, 2008) has been applied to total tonnages for the CoPP.

2.4.2 Commercial and Industrial

Data was requested but not available from council on total commercial and industrial waste and on typical waste composition. Instead, the total tonnage of commercial and industrial waste at a Victoria wide level was apportioned by waste composition type to form a data baseline. Employment against ANZSIC categories for commercial and industrial sectors was used as a proxy measure to apportion the amount of waste to the CoPP. A default emissions factor was applied to determine emissions.

² ABS Cat No 9220.0 Freight Movements (a), Australia, Summary - companion data

³ ABS 2006 Census W12 INDUSTRY OF EMPLOYMENT(A) BY OCCUPATION(B))

2.4.3 Construction and demolition

Data was requested but not available from councils on total construction and demolition waste and on typical waste composition. Instead, the total tonnage of construction and demolition waste at a Victoria wide level was apportioned by waste composition type to form a data baseline. Employment in the construction industry was used as a proxy measure to apportion the amount of waste to the CoPP. A default emissions factor was applied to determine emissions.

2.5 Waste water

Data was requested but not available from the CoPP on total volumes of waste water produced within the LGA. Waste water within the CoPP is managed by South East Water, who supplied an estimated figure of waste water volumes for the LGA. Most of CoPP's wastewater is then sent to the Western Treatment Plant for treatment, which has total emissions data.

Data from the treatment of the City of Melbourne's wastewater at the Western Treatment Plant was used to determine a per mega litre emissions load which could be applied to wastewater for the CoPP. It is important to note that this is only a broad approximation as treatment technologies will impact on the greenhouse gas intensity of wastewater.

2.6 Agriculture

Information supplied by the CoPP indicated that no material agricultural activities took place within the council boundaries. There are therefore no agricultural emissions associated with the CoPP community emissions carbon footprint.

If agricultural activities had occurred within the council boundaries, then any data would have utilised *ABS 2005/2006 Agricultural Census* data as well as the *Cities for Climate Protection (CCP) Default Community Data Workbook for CCP Rural Victoria*. Data from the ABS would have been inputted into the CCP workbook which, in turn, would calculate the carbon emissions and formulate results. Certain assumptions would have been made about animal classifications in determining total emissions.

2.7 Land-use change

The AGO FullCAM model was used to calculate the carbon sequestration of areas of 'dense' and 'medium dense' vegetation within the Port Phillip area. There were none of these areas of sufficient size within the CoPP and as such it was concluded that there were no net sequestration/emission of carbon for Port Phillip vegetation.

Had there been areas of 'dense' or 'medium dense' vegetation within the CoPP, accounting for the sequestration of carbon into vegetation would have been calculated on a broader, ecosystem scale, and would not have been based on the carbon sequestered by the vegetation only. This is because the sequestration of carbon into vegetation biomass may be offset by emissions of carbon from other elements of the ecosystem (e.g. emissions from the decomposition of vegetation debris). Factors for consideration when modelling the sequestration of vegetated areas include:

- The emissions of carbon from the soils via decomposition of plant matter
- The emissions of carbon from above-ground vegetation debris due to decomposition
- The emissions of carbon from the vegetation during respiration
- The sequestration of carbon into the biomass of the vegetation.

FullCAM takes into account these factors when modelling the net mass of carbon that is sequestered into an area of vegetation. The model is based on the cycle of carbon from the atmosphere and into the vegetation via photosynthesis. Carbon in the model is then either emitted through decomposition of debris, stored in biomass or as inert carbon in the soil.

The net sequestration of a plot of vegetation is equal to the uptake of carbon (into the biomass of the vegetation and into the soil as inert carbon) minus the emissions of carbon as part of the carbon cycle.

For the purposes of carbon cycle modelling of the CoPP, all the mature remnant vegetation in the LGA areas would have been considered in equilibrium between emissions (from soil and debris decomposition) and sequestration from plant growth. In addition, any fires that may have occurred would be likely to generate negligible amounts of net sequestration during regeneration.

2.8 Industrial processes

Emissions associated with the industrial processes were to be calculated using the methodology as outlined in the *Australian Methodology for the Estimation of Greenhouse Gas Emissions and Sinks 2006: Industrial Processes*⁴. The Methodology outlines the industrial processes of relevance, methods and emission factors to be applied to estimate emissions from each of the relevant industrial processes.

Industrial process data (as set out below) was requested from the CoPP for the following ANZSIC 1993 divisions:

- Cement Clinker
- Lime Production
- Limestone and Dolomite Use
- Magnesia Production
- Nitric Acid
- Other Organic Chemical
- Synthetic Rutile and Titanium Dioxide Products
- Iron and Steel Production
- Aluminium Production
- Magnesium Production.

On the basis of the responses received from the CoPP there are no emissions from Industrial Processes.

2.9 Data improvement recommendations

An absence of end-use data impacts the quality, reliability and standardisation of footprint calculations. Without appropriate indicator data, emission assessments rely primarily on population statistics published every five years. This results in a delay in assessing the success of reduction programs.

The following outlines recommendations for data improvement to increase the accuracy and comparability of emission assessments.

2.9.1 Stationary Energy

As the Residential, Manufacturing and Commercial subsectors comprise the majority of sectoral emissions the recommendations focus initially on these areas.

Residential subsector

For the purposes of this study, actual data was available from the electricity distributors via the DSE. A project to collect all distribution data is currently being implemented by the DSE

⁴ *Australian Methodology for the Estimation of Greenhouse Gas Emissions and Sinks 2006: Industrial Processes*, Department of Climate Change, December 2007

and it is recommended that this collection be undertaken on a regular basis and developed into a data repository.

Manufacturing and Commercial subsector

No end-use data currently exists for either the manufacturing or commercial sectors. The analysis for this study assumes consistent growth through the commercial sector and no change with the emission intensity across the time which could result in inaccuracies associated with operational differences across subsectors. It is recommended that a project is established through a government entity to collect real-time data on a regular basis. It is proposed that this data be managed in a centralised data repository, with access provided to local governments.

Construction subsector

Emissions attributed to the CoPP for the construction subsector are derived from ABS census employment data. As this subsector represents a high-proportion of contractors whose main place of employment is not within the location of the construction activity, this projection may not reflect an accurate energy use. It is recommended that a project is established through a government entity to collect real-time data on a regular basis. It is proposed that this data be managed in a centralised data repository, with access provided to local governments.

2.9.2 Waste

The CoPP was not able to supply sufficient information on the waste composition of municipal waste to landfill. It is recommended that data collection on this aspect is undertaken on a regular basis in the future

2.9.3 Emission factors

The full fuel cycle emission factors used in this study are derived from the Wilkenfeld report which represents the most accurate factor for 2005 / 2006. Other emission studies (including ICLEI reports) rely on the figures published in the National Greenhouse Accounts (NGA) Factors by the Department of Climate Change, which utilise three-year average factors. It is recommended that the emission factors published in the Workbook reflect annual usage patterns rather than a three-year average.

3 2005/2006 carbon footprint

3.1 Overall Emissions

Port Phillip's community emissions for the 2005 / 2006 period were calculated as 2,178 kt CO₂-e. Close to 70 per cent of these emissions were attributable to stationary energy use within the LGA, while transport made up the other significant portion of emissions, accounting over a 25 per cent. Emissions associated with waste represented approximately 6 per cent of emissions while waste water emissions provided less than 1 per cent to overall emissions figures.

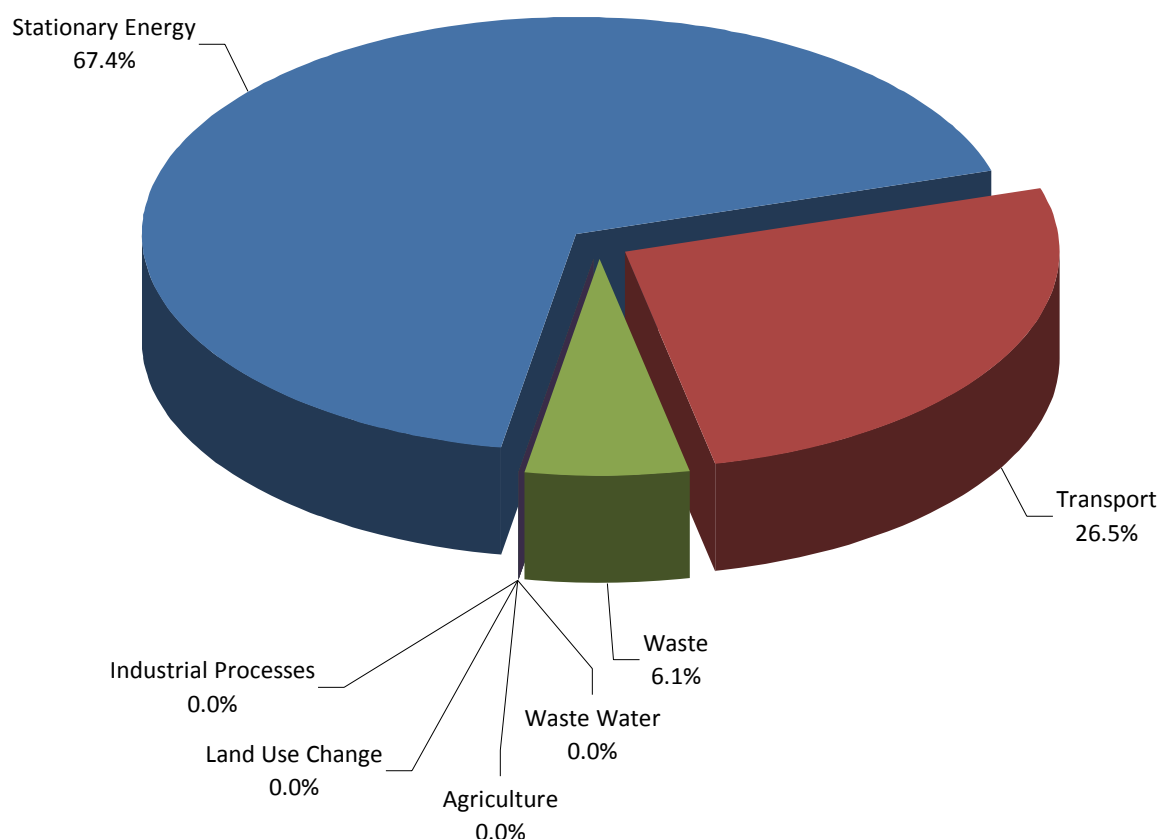


Figure 1 Port Phillip's emissions by type (kt CO₂-e)

3.2 Stationary energy

Port Phillip's stationary energy emissions represented 67.4 per cent of the total community emissions for the LGA.

Emissions associated with residential and commercial activities were by far the largest contributors to this emissions type, accounting for 30.7 per cent and 41.0 per cent respectively. Manufacturing activities also contributed close to 20 per cent of the emissions for this category.

Non-energy mining activities accounted for 6.3 per cent of stationary energy emissions while construction represented 2.2 per cent. All other categories contributed less than 1 per cent.

Table 5 Stationary energy emissions by sector (kt CO₂-e)

Sector	Emissions	%	% of Total Emissions
Commercial	602.30	41.0%	27.7%
Residential	450.24	30.7%	20.7%
Manufacturing	285.17	19.4%	13.1%
Non-energy mining	91.99	6.3%	4.2%
Construction	31.82	2.2%	1.5%
Services to Transport	4.19	0.3%	0.2%
Agriculture	2.45	0.2%	0.1%
Water	0.00	0.0%	0.0%
Stationary Energy Total	1,468.16	100.0%	67.4%

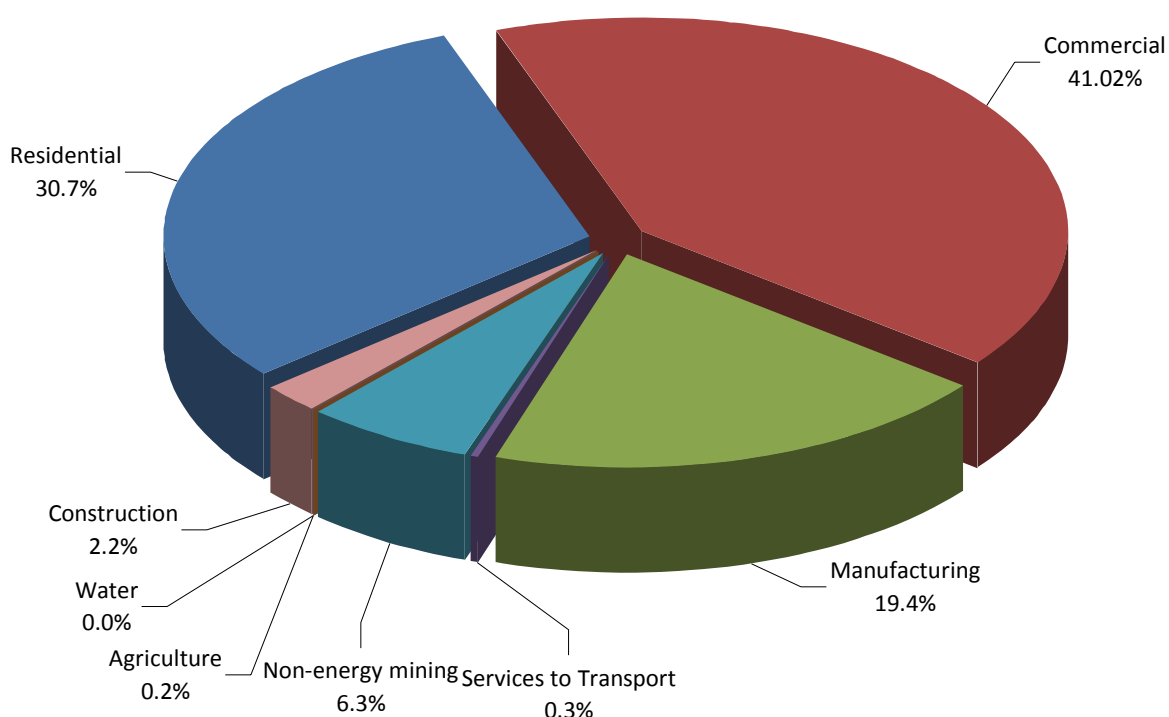


Figure 2 Port Phillip Stationary energy emissions by sector

3.2.1 Normalised emissions

2005 / 2006 residential emissions were evaluated on a per resident basis and equated to 5.3 t CO₂-e per resident within the CoPP. Residential emissions were also considered on a per household basis and emissions were estimated at 11.9 t CO₂-e per household within the LGA for the 2005 / 2006 period. The electricity and gas based residential emissions per household for were also identified as 11.6 t CO₂-e and 4.0 t CO₂-e respectively. These figures are summarised in Table 6 below.

Table 6 City of Port Phillip Residential Emissions (t CO₂-e)

Residential Emissions Type	Port Phillip Emissions	Victorian Emissions
Total residential emissions per resident	5.3	4.1
Total residential emissions per household	11.9	10.8
Residential electricity emissions per household	8.4	7.9
Residential gas emissions per household	2.9	2.7

Commercial emissions were considered for the commercial employees working within the council and a per employee emissions figure of 11.3 t CO₂-e was obtained. The electricity and gas based commercial emissions per commercial employee were also calculated and are summarised in Table 7 below.

Table 7 City of Port Phillip Commercial Emissions (t CO₂-e)

Commercial Emissions Type	Port Phillip Emissions	Victorian Emissions
Total commercial emissions per commercial employee	11.3	12.4
Commercial electricity emissions per commercial employee	6.8	7.5
Commercial gas emissions per commercial employee	3.8	4.1

3.3 Transport

The emissions profile for transport is dominated by Road Freight, representing almost 60 per cent of transport based emissions for the CoPP. This is consistent with the location and proximity of the docks and manufacturing industries within the municipality.

Table 8 Port Phillip Transport Emissions (kt CO₂-e)

Mode	Emissions	%
Total Road-Freight (Light commercial vehicles, rigid trucks, articulated trucks)	344.9	59.8%
Total Road Non-Freight (Passenger vehicles, motor cycles, trucks)	191.9	33.3%
Total Public Transport (Passenger trains, trams, buses)	27.6	4.8%
Rail Freight Emissions	11.9	2.1%
Total Transport Emissions	576.4	100.0%

However, as demonstrated in Figure 3, when looking at individual vehicle modes, passenger vehicles are the highest individual generators at 33.1 per cent of transport based emissions. This could in part be attributed to the limited access to heavy passenger rail within the municipality and the physical barriers separating the municipality from the rest of the transport network.

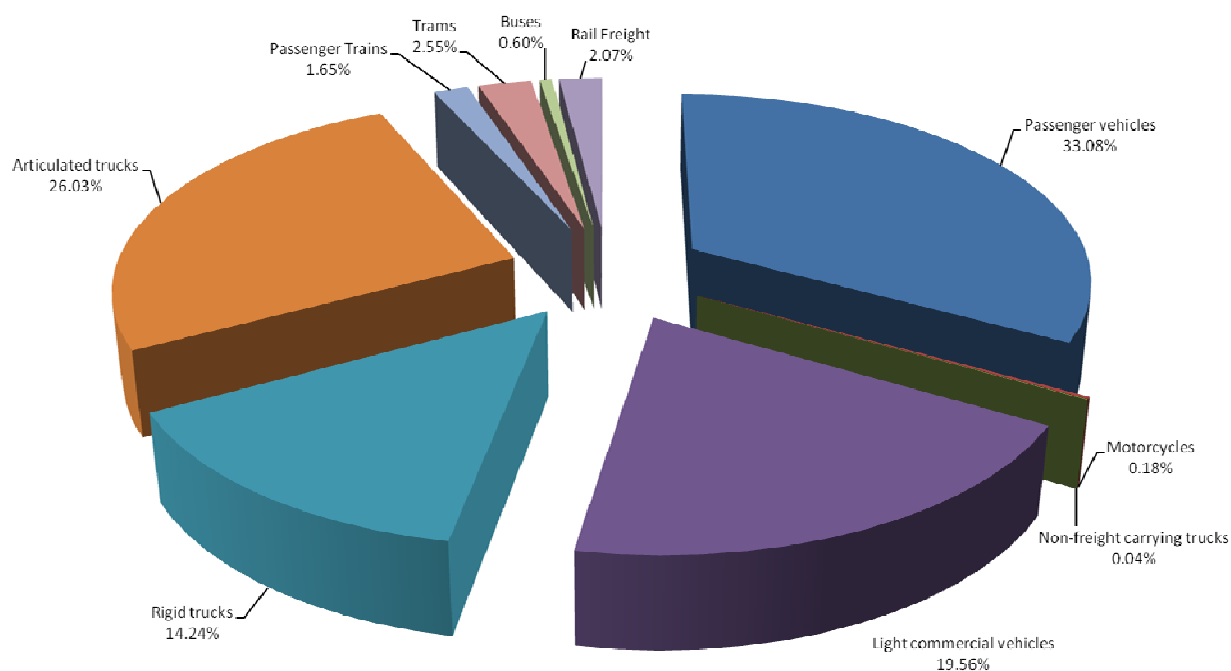


Figure 3 Port Phillip transport-based emissions

3.4 Waste

Representing 6.1 per cent of the overall community emissions for the CoPP, waste emissions were calculated for municipal, commercial and industrial, and construction and demolition waste. Of these, commercial and industrial waste was by far the greatest contributor to waste emissions, accounting for just over two thirds of the total waste emissions for the council. The majority of those commercial and industrial emissions can be tracked back to emissions associated with paper and cardboard waste.

Table 9 Waste emissions by waste type (kt CO₂-e)

Sector	Emissions	%
Commercial & Industrial	89.8	67.6%
Municipal	34.0	25.6%
Construction & Demolition	9.0	6.8%
Waste Emissions Total	132.8	100.0%

3.5

3.6 Waste Water

Waste water was only a minor contributor to the CoPP's community emissions footprint, representing less than 0.1 per cent of overall emissions, however it is an important element in the overall picture of emissions and thus, necessary to include in the carbon footprint.

Table 10 Waste water emissions (kt CO₂-e)

Sector	Treatment Volume (ML)	Emissions
Port Phillip Waste Water	7,100	0.6

3.7 Agriculture

As discussed in earlier sections of the report, no material agricultural activities take place within the CoPP boundaries, and as such, there are no agricultural emissions which contribute to the community emissions carbon footprint for the Council.

Table 11 Agriculture emissions (kt CO₂-e)

	Emissions	%
Port Phillip Agriculture	0.0	0.0%

3.8 Land-use change

There were no land use change emissions to consider within the CoPP during the 2005 / 2006 period.

Table 12 Land Use Change emissions (kt CO₂-e)

	Emissions	%
Land Use Change	0.0	0.0%

3.9 Industrial processes

There are no emissions from industrial processes within the CoPP.

Table 13 Emissions from Industrial Processes (t CO₂-e)

	Port Phillip Emissions
Process emissions of CO ₂ from the production of cement clinker (Gg/yr)	0
Quantity of cement clinker produced annually (tonnes)	0
Quantity of cement kiln dust (CKD) produced annually (tonnes)	0
Process emissions of CO ₂ from the production of cement clinker (Gg)	0
Lime	Port Phillip Emissions
Process emissions of CO ₂ from the production of quicklime (Gg/yr)	0
Commercial lime (steel production) – quicklime production (tonnes/yr)	0
Quantity of cement kiln dust (CKD) produced annually (tonnes)	0
In-house lime (alumina production) - quicklime production (tonnes/ yr)	0
Limestone and Dolomite	Port Phillip Emissions
Process emissions of CO ₂ from limestone use (Gg/yr)	0
Process emissions of CO ₂ from dolomite use (Gg/yr)	0
Consumption of limestone (tonnes/ yr)	0
Consumption of dolomite (tonnes/ yr)	0
Magnesia	Port Phillip Emissions
Process emissions of CO ₂ from magnesia production (Gg/yr)	0
Production of magnesia (tonnes/ yr)	0
Nitric Acid	Port Phillip Emissions
Process emissions of N ₂ O from nitric acid production (Gg/yr)	0
Production of nitric acid (tonnes/ yr)	0
Iron and Steel Production	Port Phillip Emissions
Process emissions of CO ₂ from iron and steel production (Gg/yr)	0
Process emissions of N ₂ O from iron and steel production (Gg/yr)	0
Process emissions of CO from iron and steel production (Gg/yr)	0
Process emissions of NO _x from iron and steel production (Gg/yr)	0
Process emissions of NMVOC from iron and steel production (Gg/yr)	0
Process emissions of SO ₂ from iron and steel production (Gg/yr)	0
Quantity of coke consumed as reluctant (tonnes/ yr)	0
SF₆ used in Aluminium and Magnesium	Port Phillip Emissions
Total annual quantity of SF ₆ used as a cover gas (Gg/yr)	0

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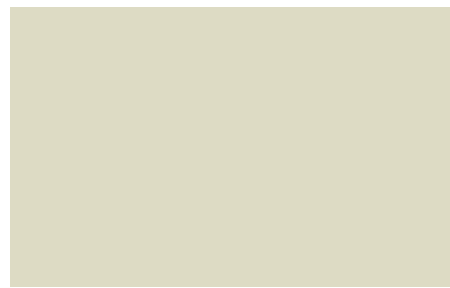
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City of Stonnington

Carbon Footprint of Community Emissions

May 2009

City of Stonnington

**Carbon Footprint of
Community Emissions
for City of Stonnington**

Final Draft Report

Draft

ARUP

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It is not intended for and should not be relied upon by any third party and no responsibility is undertaken to any third party

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Glossary

Abbreviation	Meaning
5 Star	5 Star standard as required in the <i>Building Code of Australia, Victoria Appendix Volume 2</i> . From 1 May 2008, this requirement will be extended to home renovations and relocations.
ABARE	Australian Bureau of Agriculture and Resource Economics
ABGR	Australian Building Greenhouse Rating Scheme
ABS	Australian Bureau of Statistics
ANZSIC	Australia and New Zealand Standard Industrial Classification
CCI	Clinton Climate Initiative
CEO	Chief Executive Officer
CH ₄	methane
CHP	Combined heat and power
CLUE	City of Melbourne Census of Land Use and Employment
CNG	compressed natural gas
CO ₂ -e	carbon dioxide equivalents
CO ₂	carbon dioxide
DCC	Department of Climate Change
GDP	Gross Domestic Product
HFC	hydrofluorocarbons
IPCC	Intergovernmental Panel on Climate Change
kt	kilotonnes
LGA	Local government area
N ₂ O	nitrous oxide
PFC	perfluorocarbons
Ppm	parts per million
PV	photovoltaic cells
SF ₆	sulphur hexafluoride
VGGI	Victorian Greenhouse Gas Inventory
VEET	Victorian Energy Efficiency Target

Executive Summary

This carbon footprint report for the City of Stonnington is designed to enable Council to compare emission profiles with other councils across the Inner Melbourne Action Plan (IMAP) area, with a view to designing and monitoring regional carbon emission reduction strategies. The calculations utilise a common methodology with carbon footprints undertaken for the Cities of Melbourne, Port Phillip and Yarra.

The following summarises the key highlights of the carbon footprint:

- Total emissions in 2005/2006 was 1,679 kilotonnes carbon dioxide equivalents (kt CO₂-e).
- 2005 / 2006 residential emissions were evaluated on a per resident basis and equated to 6.8 t CO₂-e per resident within City of Stonnington. Residential emissions were also considered on a per household basis and emissions were estimated at 16.5 t CO₂-e per household within the LGA for the 2005 / 2006 period.
- Commercial emissions were considered for the commercial employees working within the City of Stonnington area and a per employee emissions figure of 11.7 t CO₂-e was obtained.
- The stationary energy emissions comprise the majority (72.8 per cent) (1,222.2 kt CO₂-e) of the emissions within the municipality. The end-use of this energy reflects the primary activities within the municipality, which are residential and commercial.
- Transport comprises of 20.0 per cent (335.5 kt CO₂-e) of emissions within the Council area. Road transport by far represents the bulk of these emissions, with non-freight comprising of 48.5 per cent and freight 39.9 per cent. Public transport is responsible for a small proportion of emissions at 8 per cent.
- Waste comprises the only other material emissions source with 7.2 per cent (120.3 kt CO₂-e). The bulk of this is represented from commercial and industrial activities (74.6 per cent).

The following is a visual representation of the emission profile for the City of Stonnington.

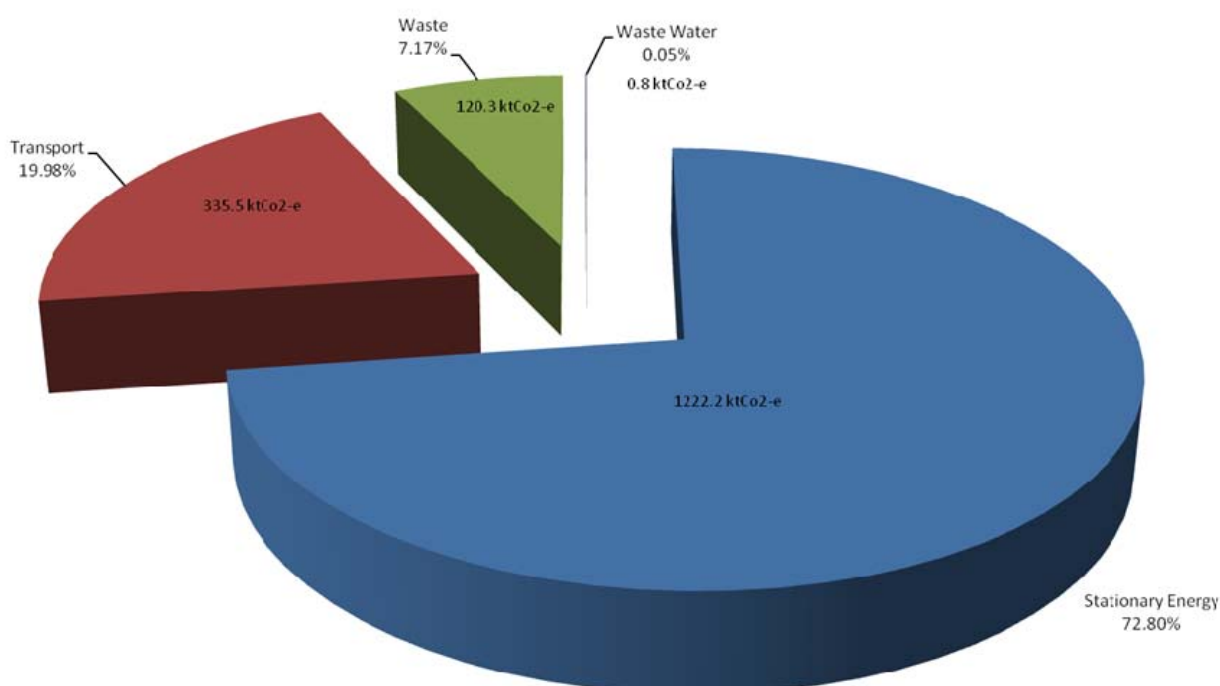


Figure A City of Stonnington carbon emission profile (kt CO₂-e)

As stationary energy emissions account for over 70 per cent of the City of Stonnington emissions, it is important to understand the end uses which drive those emissions. A break down of end use emissions within the stationary energy category are displayed in Figure B below. The share of electricity and gas emissions within the residential and commercial end use sectors are also displayed in Tables A and B below, alongside the corresponding Victorian figures.

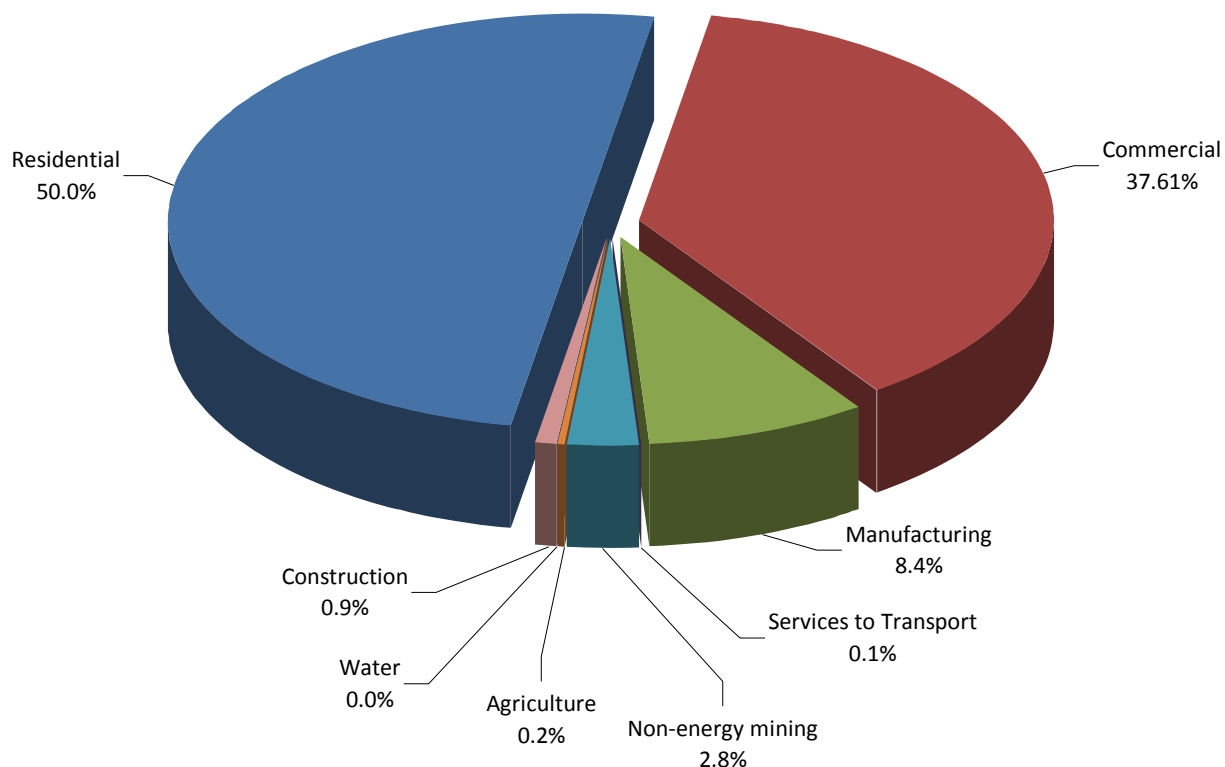


Figure B Stationary Energy End Use

It is important to note that the normalised Stonnington residential emissions are higher than the corresponding Victorian figures across all areas.

Table A City of Stonnington Residential Emissions (t CO2-e)

Residential Emissions Type	Stonnington Emissions	Victorian Emissions
Total residential emissions per resident	6.8	4.1
Total residential emissions per household	16.5	10.8
Residential electricity emissions per household	11.6	7.9
Residential gas emissions per household	4.0	2.7

Conversely, normalised commercial emissions are marginally lower than the corresponding Victorian values.

Table B City of Stonnington Commercial Emissions (t CO2-e)

Commercial Emissions Type	Stonnington Emissions	Victorian Emissions
Total commercial emissions per commercial employee	11.7	12.4
Commercial electricity emissions per commercial employee	7.1	7.5
Commercial gas emissions per commercial employee	3.9	4.1

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1 Introduction

Carbon Footprint of Community Emissions for City of Stonnington provides the carbon footprint for the City of Stonnington for 2005 / 2006. It has been largely prepared in accordance with the categories specified by the Intergovernmental Panel on Climate Change (IPCC).

2 Approach to the carbon footprint for 2005 / 2006

2.1 Overview

The general approach adopted in the preparation of the Stonnington carbon footprint groups emissions under the standard categories specified by the Intergovernmental Panel on Climate Change (IPCC), which have been adopted for reporting of national and state level inventories. However Stonnington requires data to be further disaggregated by end-use sector, in order to enable understanding of the emissions associated with specific activities.

The community inventory generally applies a top down approach, firstly determining emissions at a wider geographical scale (Australia, Victoria or Melbourne Statistical Division) and then assigning a percentage to Stonnington, based on the most appropriate indicator. Where sufficient local data was available, such as in the stationary energy section, a bottom up approach has been applied.

In accordance with the categories specified by the IPCC a methodology for the following sectors has been developed:

- Stationary energy
- Transport
- Waste
- Waste water
- Agriculture
- Land-use change
- Industrial processes.

The following provides an overview of the methodology applied to the calculation of the 2005 / 2006 emissions.

2.2 Stationary energy

The determination of stationary energy emissions encompasses the following sectors:

- Residential
- Commercial
- Manufacturing
- Non-energy mining
- Agriculture
- Transport services and storage
- Construction
- Water

2.2.1 Methodology for 2005 / 2006 footprint

Emissions associated with the stationary energy sector were calculated using Victorian end-use data segregated by economic sector (under Australia and New Zealand Standard

Industrial Classification (ANZSIC) 1993) and fuel type published by the Australian Bureau of Agriculture and Resource Economics (ABARE).

This approach is similar to the methodology used to develop the Victorian Greenhouse Gas Inventory (VGGI) by the Department of Climate Change (DCC). However for the purposes of this study it was important to only include emissions associated with end-use within Victoria.

The Victorian Department of Sustainability and Environment (DSE) commissioned George Wilkenfeld & Associates to produce a comprehensive report on end-use allocation of emissions in Victoria for the 2005 inventory (Wilkenfeld, 2008). This was used for full fuel cycle emission factors for Victoria for the inventory year and to cross check results. These account for emissions associated with fuel extraction production, as well as electricity generation, transmission and distribution. This approach requires energy use reported for the sectors involved in fuel extraction, fuel production, transmission and distribution to be omitted from the emission calculations. Therefore energy associated with fuel extraction, power generation and fuel production for energy forms which were ultimately exported from Victoria was not included. It is for this reason that the VGGI data by ANZSIC category was not able to be directly used for the stationary energy sector for the purposes of this study.

For some subsectors, ABARE fuel-use data is not reported separately and is aggregated at either the sector level, total Victorian or Australian level. This particularly impacts the calculations for end-use by the manufacturing sector to the extent that for these categories, the ABARE data was not able to be used. In these instances the data reported by Wilkenfeld for these sectors was used.

Furthermore, the Wilkenfeld report reallocates the emissions between the commercial and residential sectors resulting in an increase in the commercial sector and decrease in the residential sector compared to the ABARE data. This is explained as below:

“Detailed bottom-up modelling by Energy Efficient Strategies (EES 2008) estimates significantly lower consumption of electricity than was reported by ABARE for the period 2002-2005. The EES and ABARE trends for residential electricity use are very close from 1990 to 2002, but diverge sharply in 2003, and in 2005 the EES estimate was 14per cent lower than the ABARE trend... Residential electricity sales forecasts by Victoria’s electricity distributors compiled by the Essential Services Commission (ESC) are very close to EES’s projections.

As the residential sector end-use breakdown in the present report is based on the EES study, the EES electricity estimates are used in preference to the ABARE estimates. However, it is likely that the ABARE estimates of total Victorian electricity consumed are correct, because they can be checked against NEMMCO and ESAA data. Therefore the electricity removed from the residential sector must be reallocated elsewhere. The most likely sector is the commercial sector, where the ABARE data show a complete cessation of growth after 2002. There is no obvious reason why this should have been so – the economic output of the commercial sector, continued to increase at a roughly constant rate from 2000 to 2005.

The conclusion is that there is a high probability that ABARE misallocated some of the electricity use in the commercial sector to the residential sector in the period 2003-2005, and this has been adjusted for the present study.”
(Wilkenfeld, 2008)

Determining End-use Emissions on the LGA Scale

LGA associated emissions are derived from a percentage of Victorian end-use emissions using an appropriate sectoral indicator. Sectoral indicators were selected based on the availability of Victorian and Stonnington data and the correlation to emissions, as further detailed below.

Residential

Energy consumption variables in the residential sector include dwelling type and construction, climate and connection to natural gas. Ownership and use of appliances varies greatly depending on socio-economic factors. While the total residential energy

consumption for Victoria is known, apportioning the total residential energy consumption by population or dwelling numbers (as is done for ICLEI purposes) does not reflect this complexity.

Electricity distributors' data for residential electricity and gas consumption for Stonnington was supplied by the DSE and used to calculate emissions resulting from electricity.

To determine the consumption of all other fuels, it was assumed that dwellings in Stonnington consumed different fuel types in the same proportion as for Victoria. Consumption figures were then converted to emissions using the full fuel cycle emission factors published in Wilkenfeld, 2008, which are considered to represent the most accurate data for the 2005 / 2006 period. These factors vary from the Department of Climate Change published emission factors which represent a three-year average.

Commercial

For the combined commercial sector, the total emissions for Victoria were calculated from the ABARE 2005 / 2006 energy use data and full fuel cycle emission factors. The commercial sector ABARE data includes the combined fuel use for the following ANZSIC 1993 divisions:

- Wholesale Trade
- Retail Trade
- Accommodation, Cafes and Restaurants
- Communication Services
- Finance and Insurance
- Property and Business Services
- Government Administration and Defence
- Education
- Health and Community Services
- Cultural and Recreational Services
- Personal and Other Services.

To further disaggregate the 2005 Victorian end-use emissions by commercial division, the 1999 End-use allocation breakdown (Wilkenfeld, 2002) was used to distribute the Victorian 2005 / 2006 commercial emission total amongst subsectors as illustrated in Table 1.

Table 1 Victorian Commercial Emissions by Subsector 2005 / 2006

Wholesale and Retail Trade	37.7%
Finance, Insurance, Property and Business Services	16.5%
Education, Health and Community Services	14.9%
Accommodation, Cultural and Personal Services	13.8%
Government Administration and Defence	13.6%
Communication	3.5%

The Wilkenfeld 2008 report for the 2005 end-use allocation does not provide this breakdown of emissions by subdivision due to further aggregation of the ABARE data since the previous report.

This methodology assumes that the:

- growth in each commercial sector in Victoria between 1999 and 2005 / 2006 was the same; and
- relative emission intensity of these sectors within Victoria has not changed over this time.

An indicator was developed to assign a proportional quantity of Victoria's emissions to each commercial subsector in Stonnington. While a number of indicators were considered including; floor area, contribution to gross regional product and number of facilities, the number of employees in each sector has been selected as the most appropriate indicator due to data availability. The study therefore assumes that the emissions in each subsector are directly attributable to the number of persons employed in that subsector. This would result in inaccuracies if there were gross operational differences between facilities operating in each subsector affecting employment numbers. However, Victoria is considered an adequately refined boundary and the sectors adequately disaggregated to avoid such gross differences. The LGA calculation is presented in Table 2.

Table 2 Calculation for LGA Commercial Emissions

Sector	Vic Commercial Emissions (a)	LGA Employment as a % Vic Employment by Sector (b)	LGA Emissions as a % of Vic Total Commercial Emissions (a) x (b)
Wholesale and Retail Trade	37.70%	2.86%	1.08%
Finance, Insurance, Property and Business Services	16.50%	2.69%	0.44%
Communication	3.50%	1.25%	0.04%
Government Administration and Defence	13.60%	0.71%	0.10%
Education, Health and Community Services	14.90%	2.43%	0.36%
Accommodation, Cultural and Personal Services	13.80%	3.14%	0.43%
Total Commercial	100.00%	2.46%	2.46%

Manufacturing

For the manufacturing sectors, the total emissions for Victoria were sourced from the Wilkenfeld 2008 report and further distributed amongst subsectors as outlined in Table 3.

Table 3 Victorian Manufacturing Emissions by Subsector 2005 / 2006

Food, Beverages, Tobacco	8.9%
Textiles, Clothing, Footwear	1.7%
Wood, paper and printing	8.3%
Chemicals	11.0%
Non-Metal Mineral Products	4.3%
Iron and Steel	7.4%
Non ferrous and other metal products	53.8%
Machinery, equipment and other	4.7%

This analysis excludes energy used in refining of petroleum fuels in the chemical sector and the emissions from coke ovens are excluded to avoid double counting as the related emissions are included in the iron and steel industry. Emissions from the chemicals sector are further adjusted for fuel-derived carbon sequestered in long-lived products such as plastics.

For each manufacturing subsector, an indicator was developed to assign a proportional quantity of Victoria's emissions to Stonnington Council. Due to data availability, number of employees for each sector was selected to be the most appropriate indicator. The study therefore assumes that emissions in each subsector are directly proportional to the number of persons employed in that subsector. This would result in inaccuracies if there were gross operational or level of automation differences between facilities operating within each subsector affecting employment numbers. However, Victoria is considered an adequately refined boundary and the sectors adequately disaggregated to avoid such gross differences. The LGA calculation is presented in Table 4.

Table 4 Calculation for LGA Manufacturing Emissions

Sector	% Vic Manufacturing Emissions (a)	LGA Employment as a % Vic Employment by Sector (b)	LGA Emissions as a % of Vic Total Manufacturing Emissions (a) x (b)
Food, Beverages, Tobacco	8.90%	0.54%	0.05%
Textiles, Clothing, Footwear	1.70%	2.06%	0.04%
Wood, paper and printing	8.30%	1.08%	0.09%
Chemicals	11.00%	0.34%	0.04%
Non-Metal Mineral Products	4.30%	0.81%	0.03%
Metal Products	7.40%	0.07%	0.01%
Non ferrous and other metal products	53.80%	0.06%	0.03%
Machinery, equipment and other	4.70%	0.37%	0.02%
Total Manufacturing	100.00%	0.30%	0.30%

Non-Energy mining

For the non-energy mining sector the total emissions for Victoria were sourced from the ABARE 2005 / 2006 energy use data and full fuel cycle emission factors.

The non-energy mining sector emissions were then allocated to Stonnington Council based on employment data. It should be noted that this methodology assigns mining sector emissions to office-based services to mining as well as actual mines. This may represent an overestimation in the Stonnington LGA. Notwithstanding, there is an argument that the support services do have some control over the on site mining emissions and therefore should be reported in this way.

Agriculture

For the agricultural sector, the total emissions for Victoria were able to be calculated from the ABARE 2005 / 2006 energy use data and full fuel cycle emission factors. While these

These

emissions were then attributed to Stonnington based on employment numbers.

Transport services and storage

For the combined transport services and storage sector, the total emissions for Victoria were able to be calculated from the ABARE 2005 / 2006 energy use data and full fuel cycle emission factors. These emissions were then attributed to Stonnington based on employment numbers in this industry.

Construction

For the construction sector, the total emissions for Victoria were able to be calculated from the ABARE 2005 / 2006 energy use data and full fuel cycle emission factors. These emissions were then attributed to Stonnington Council based on employment numbers. The employment numbers were sourced from ABS Census data which may not be

representative of the construction occurring within the Stonnington Council boundary. Contractors may not be picked up in this employment category, where their main place of employment is off site and not within location of construction activity.

Water

For the water sector, the total emissions for Victoria were able to be calculated from the ABARE 2005 / 2006 energy use data and full fuel cycle emission factors. These emissions were then attributed to Stonnington based on employment numbers in this industry.

2.3 Transport

The methodology applied is outlined below for the following forms of transport:

- Passenger vehicles, motorcycles, non freight carrying trucks
- Buses
- Passenger trains and passenger trams
- Road based freight
- Rail based freight.

Passenger Vehicles, Motorcycles, Non-freight carrying trucks,

1. Proportion of Annual Vehicle Kilometers as a proportion of total Vehicle Kilometers for the Metropolitan Statistical District (MSD) was calculated.
2. Total Fuel Use by vehicle types and associated emissions for Victoria was calculated.
3. Using proportion calculated in Step 1, Fuel Use by vehicle type for the MSD was calculated.
4. The number of registered vehicles within Stonnington Council (based on postcodes) as a proportion of the total vehicles registered in the MSD was calculated.
5. Proportions calculated in Step 4 are applied to Fuel Use data calculated in Step 3 to determine GHG emissions by vehicle for the municipality.

Buses

1. Proportion of Annual Bus Kilometers to MSD was calculated.
2. Total Bus Fuel Use and associated emissions for Victoria was calculated.
3. Using proportion calculated in Step 1. Bus Fuel Use for MSD calculated.
4. Number of Journeys to Work by Bus data sourced from 2006 Census¹ for Stonnington Council and the MSD (B45 METHOD OF TRAVEL TO WORK BY SEX, By Place of Usual Residence).
5. Proportion of Bus Journeys to Work for Stonnington Council in comparison to total bus journeys to work for MSD was calculated.
6. Proportion calculated in Step 5 applied to fuel use from Step 3 to determine Bus GHG emissions for the City of Stonnington.

Passenger Trains and Passenger Trams

1. Using data provided by State Government Victoria - DOI ("Calculation of greenhouse gas intensities of public transport modes - Current occupancy") the total annual train and tram GHG emissions for MSD was calculated.
2. Number of journeys to work by train & tram data sourced from 2006 Census for Stonnington Council.

¹ ABS: B45 Method Of Travel To Work By Sex, By Place of Usual Residence

3. Proportion of train & tram journeys to work for City of Stonnington in comparison to total train & tram journeys to work for the MSD calculated.
4. Proportion calculated in Step 3 applied to GHG emissions from Step 3 to determine train and tram GHG emissions for City of Stonnington.

Road Based Freight

1. Total Vehicle Fuel Use and associated emissions for Victoria was calculated for Light commercial vehicles, Rigid Trucks and Articulated trucks.
2. Data sourced on 'Tonne-kilometres Moved By Statistical Subdivision, Road (b), Year Ending 31 March 2001' for each of the 6 Statistical Subdivisions from Australia to SSD and from SSD to Australia²
3. Proportion of Tonne Kilometers for each LGA as a proportion of total Tonne Kilometers for each SSD and Victoria calculated was based on the number of employees by freight based industry (Employment figures include employees within; agriculture, forestry & fishing, mining, manufacturing, electricity, gas, water & waste services, construction, wholesale trade, retail trade, transport, postal & warehousing)³.
4. Proportion calculated in Step 3 applied to emission figures from Step 1 to obtain emissions for City of Stonnington.

Rail Based Freight

1. Total Rail Freight emissions for Australia sourced (Source: Australian Railway Association Inc.
<http://www.ara.net.au/dbdoc/FULL%20AUST%20RAIL%20TRANS%20FACTS%202008%20REPORT%20-%20MAY%2008.pdf> AUSTRALIAN RAIL TRANSPORT FACTS 2008 - May 2008, Apelbaum Consulting Group, Commissioned by the Australian Transport Energy Data and Analysis Centre, Page 66, Table 5.1-4).
2. Proportion of emissions for City of Stonnington as a proportion of the total emissions for Australia calculated based on the number of employees by freight based industry (Employment figures include employees within; Agriculture, forestry & fishing, Mining, Manufacturing, Electricity, gas, water & waste services, Construction, Wholesale trade, Retail trade, Transport, postal & warehousing) (source: 2006 Census W12 INDUSTRY OF EMPLOYMENT(a) BY OCCUPATION(b)).
3. Proportion calculated in Step 2 applied to emission figures from Step 1 to obtain emissions for the City of Stonnington.

2.4 Waste

2.4.1 Municipal

The calculation for determining greenhouse gas emissions from municipal waste is potentially very complex (DCC, 2007) and requires complete data on waste composition. In the absence of complete data, the default emissions factor for municipal waste (DCC, 2008) has been applied to total tonnages for the Stonnington LGA.

2.4.2 Commercial and Industrial

Data was requested but not available from council on total commercial and industrial waste and on typical waste composition. Instead, the total tonnage of commercial and industrial waste at a Victoria wide level was apportioned by waste composition type to form a data baseline. Employment against ANZSIC categories for commercial and industrial sectors

² ABS Cat No 9220.0 Freight Movements (a), Australia, Summary - companion data

³ ABS 2006 Census W12 INDUSTRY OF EMPLOYMENT(A) BY OCCUPATION(B))

was used as a proxy measure to apportion the amount of waste to City of Stonnington. A default emissions factor was applied to determine emissions.

2.4.3 Construction and demolition

Data was requested but not available from councils on total construction and demolition waste and on typical waste composition. Instead, the total tonnage of construction and demolition waste at a Victoria wide level was apportioned by waste composition type to form a data baseline. Employment in the construction industry was used as a proxy measure to apportion the amount of waste to the City of Stonnington. A default emissions factor was applied to determine emissions.

2.5 Waste water

Data was requested but not available from City of Stonnington on total volumes of waste water produced within the LGA. Waste water within Stonnington is carried by both Yarra Valley Water, and South East Water. Waste water volumes were supplied by both councils to produce one overall waste water volume figure. Most of Stonnington's wastewater is then sent to the Western Treatment Plant for treatment, which has total emissions data.

Data from the treatment of the City of Melbourne's wastewater at the Western Treatment Plant was used to determine a per mega litre emissions load which could be applied to wastewater for City of Stonnington. It is important to note that this is only a broad approximation as treatment technologies will impact on the greenhouse gas intensity of wastewater.

2.6 Agriculture

Information supplied by City of Stonnington indicated that no material agricultural activities took place within the council boundaries. There are therefore no agricultural emissions associated with the City of Stonnington community emissions carbon footprint.

If agricultural activities had occurred within the council boundaries, then any data would have utilised *ABS 2005/2006 Agricultural Census* data as well as the *Cities for Climate Protection (CCP) Default Community Data Workbook for CCP Rural Victoria*. Data from the ABS would have been inputted into the CCP workbook which, in turn, would calculate the carbon emissions and formulate results. Certain assumptions would have been made about animal classifications in determining total emissions.

2.7 Land-use change

The AGO FullCAM model was used to calculate the carbon sequestration of areas of 'dense' and 'medium dense' vegetation within the Stonnington area. There were none of these areas of sufficient size within the City of Stonnington and as such it was concluded that there were no net sequestration/emission of carbon for Stonnington vegetation.

Had there been areas of 'dense' or 'medium dense' vegetation within Stonnington, accounting for the sequestration of carbon into vegetation would have been calculated on a broader, ecosystem scale, and would not have been based on the carbon sequestered by the vegetation only. This is because the sequestration of carbon into vegetation biomass may be offset by emissions of carbon from other elements of the ecosystem (e.g. emissions from the decomposition of vegetation debris). Factors for consideration when modelling the sequestration of vegetated areas include:

- The emissions of carbon from the soils via decomposition of plant matter
- The emissions of carbon from above-ground vegetation debris due to decomposition
- The emissions of carbon from the vegetation during respiration
- The sequestration of carbon into the biomass of the vegetation.

FullCAM takes into account these factors when modelling the net mass of carbon that is sequestered into an area of vegetation. The model is based on the cycle of carbon from the atmosphere and into the vegetation via photosynthesis. Carbon in the model is then either emitted through decomposition of debris, stored in biomass or as inert carbon in the soil.

The net sequestration of a plot of vegetation is equal to the uptake of carbon (into the biomass of the vegetation and into the soil as inert carbon) minus the emissions of carbon as part of the carbon cycle.

For the purposes of carbon cycle modelling of Stonnington, all the mature remnant vegetation in the LGA areas would have been considered in equilibrium between emissions (from soil and debris decomposition) and sequestration from plant growth. In addition, any fires that may have occurred would be likely to generate negligible amounts of net sequestration during regeneration.

Further, it is worth noting that as this carbon footprint exercise is for the Community Emissions, council owned assets, such as parks and street trees are not included in the modelling.

2.8 Industrial processes

Emissions associated with the industrial processes were to be calculated using the methodology as outlined in the *Australian Methodology for the Estimation of Greenhouse Gas Emissions and Sinks 2006: Industrial Processes*⁴. The Methodology outlines the industrial processes of relevance, methods and emission factors to be applied to estimate emissions from each of the relevant industrial processes.

Industrial process data (as set out below) was requested from Stonnington for the following ANZSIC 1993 divisions:

- Cement Clinker
- Lime Production
- Limestone and Dolomite Use
- Magnesia Production
- Nitric Acid
- Other Organic Chemical
- Synthetic Rutile and Titanium Dioxide Products
- Iron and Steel Production
- Aluminium Production
- Magnesium Production.

On the basis of the responses received from City of Stonnington there are no emissions from Industrial Processes.

2.9 Data improvement recommendations

An absence of end-use data impacts the quality, reliability and standardisation of footprint calculations. Without appropriate indicator data, emission assessments rely primarily on population statistics published every five years. This results in a delay in assessing the success of reduction programs.

The following outlines recommendations for data improvement to increase the accuracy and comparability of emission assessments.

⁴ *Australian Methodology for the Estimation of Greenhouse Gas Emissions and Sinks 2006: Industrial Processes*, Department of Climate Change, December 2007

2.9.1 Stationary Energy

As the Residential, Manufacturing and Commercial subsectors represented the majority of the sectoral emissions, the recommendations focus initially on these areas.

Residential subsector

For the purposes of this study, actual data was available from the electricity distributors via the DSE. A project to collect all distribution data is currently being implemented by the DSE and it is recommended that this collection be undertaken on a regular basis and developed into a data repository.

Manufacturing and Commercial subsector

No end-use data currently exists for either the manufacturing or commercial sectors. The analysis for this study assumes consistent growth through the commercial sector and no change with the emission intensity across the time which could result in inaccuracies associated with operational differences across subsectors. It is recommended that a project is established through a government entity to collect real-time data on a regular basis. It is proposed that this data be managed in a centralised data repository, with access provided to local governments.

Construction subsector

Emissions attributed to City of Stonnington for the construction subsector are derived from ABS census employment data. As this subsector represents a high-proportion of contractors whose main place of employment is not within the location of the construction activity, this projection may not reflect an accurate energy use. It is recommended that a project is established through a government entity to collect real-time data on a regular basis. It is proposed that this data be managed in a centralised data repository, with access provided to local governments.

2.9.2 Waste

City of Stonnington was not able to supply sufficient information on the waste composition of municipal waste to landfill. It is recommended that data collection on this aspect is undertaken on a regular basis in the future

2.9.3 Emission factors

The full fuel cycle emission factors used in this study are derived from the Wilkenfeld report which represents the most accurate factor for 2005 / 2006. Other emission studies (including ICLEI reports) rely on the figures published in the National Greenhouse Accounts (NGA) Factors by the Department of Climate Change, which utilise three-year average factors. It is recommended that the emission factors published in the Workbook reflect annual usage patterns rather than a three-year average.

3 2005 / 2006 Carbon footprint

3.1 Overall Emissions

City of Stonnington's community emissions for the 2005 / 2006 period were 1,679 kt CO₂-e. Over 70 per cent of these emissions were attributable to stationary energy use within the LGA, while transport made up the other significant portion of emissions, accounting for 20 per cent. Emissions associated with waste represented approximately 7 per cent of emissions while waste water emissions provided less than 1 per cent to overall emissions figures.

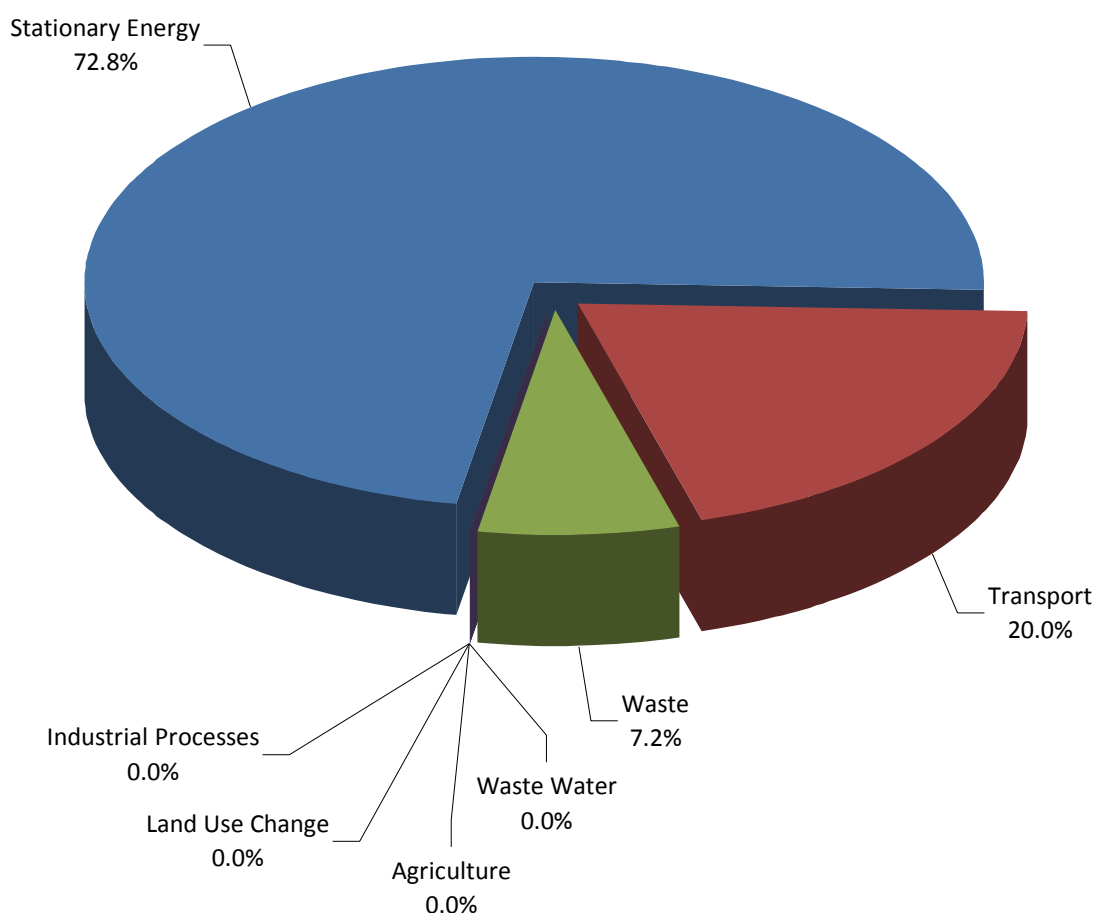


Figure 1 City of Stonnington emissions by type (kt CO₂-e)

3.2 Stationary energy

3.2.1 Total emissions

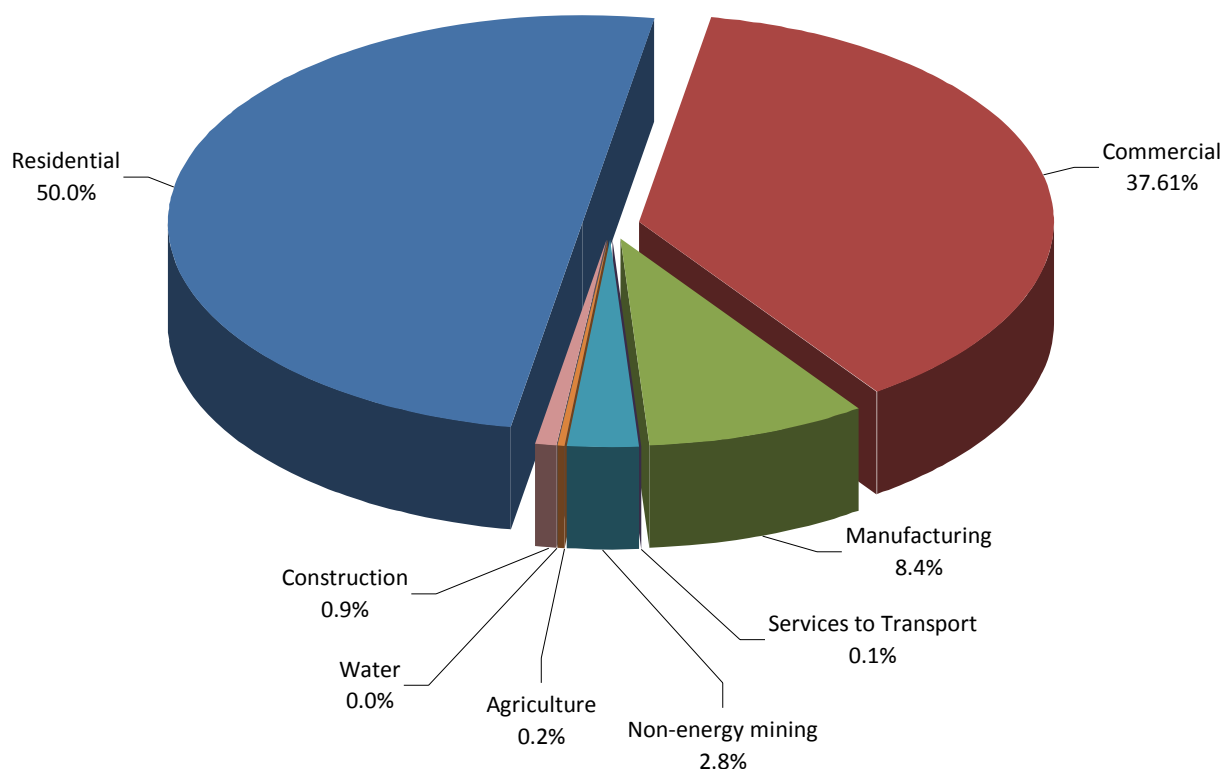
City of Stonnington's stationary energy emissions represented 70 per cent of the total community emissions for the LGA.

Emissions associated with residential and commercial activities were by far the largest contributors to this emissions type, accounting for 50 per cent and 37.6 per cent respectively. Manufacturing activities also contributed over 8 per cent of the emissions for this category.

Non-energy mining activities accounted for 2.8 per cent of stationary energy emissions while all other categories contributed less than 1 per cent.

Table 5 Stationary energy emissions by sector (kt CO₂-e)

Sector	Emissions	%	% of Total Emissions
Residential	610.7	50.0%	36.4%
Commercial	459.7	37.6%	27.4%
Manufacturing	102.7	8.4%	6.1%
Non-energy mining	34.1	2.8%	0.1%
Construction	11.3	0.9%	2.0%
Agriculture	2.2	0.2%	0.1%
Services to Transport	1.1	0.1%	0.0%
Water	0.4	0.0%	0.7%
Stationary Energy Total	1,222.2	100.0%	72.8%

**Figure 2 Stonnington Stationary energy emissions by sector**

3.2.2 Normalised emissions

2005 / 2006 residential emissions were evaluated on a per resident basis and equated to 6.8 t CO₂-e per resident within the City of Stonnington. Residential emissions were also considered on a per household basis and emissions were estimated at 16.5 t CO₂-e per household within the LGA for the 2005 / 2006 period. The electricity and gas based residential emissions per household for were also identified as 11.6 t CO₂-e and 4.0 t CO₂-e respectively. These figures are summarised in Table 6.

Table 6 City of Stonnington Residential Emissions (t CO₂-e)

Residential Emissions Type	Stonnington Emissions	Victorian Emissions
Total residential emissions per resident	6.8	4.1
Total residential emissions per household	16.5	10.8
Residential electricity emissions per household	11.6	7.9
Residential gas emissions per household	4.0	2.7

Commercial emissions were considered for the commercial employees working within the Council area and a per employee emissions figure of 11.7 t CO₂-e was obtained. The electricity and gas based commercial emissions per commercial employee were also calculated and are summarised in Table 7 below.

Table 7 City of Stonnington Commercial Emissions (t CO₂-e)

Commercial Emissions Type	Stonnington Emissions	Victorian Emissions
Total commercial emissions per commercial employee	11.7	12.4
Commercial electricity emissions per commercial employee	7.1	7.5
Commercial gas emissions per commercial employee	3.9	4.1

3.3 Transport

The emissions profile for transport is dominated by Road Non-Freight (Passenger Vehicles, motor cycles, trucks) representing almost 50 per cent of transport based emissions for City of Stonnington, of which passenger vehicles comprise more than 99 per cent. Passenger trains were found to represent 73 per cent of public transport emissions for the municipality.

Table 8 City of Stonnington Transport Emissions (kt CO₂-e)

Mode	Emissions	%
Total Road Non-Freight (Passenger vehicles, motor cycles, trucks)	163.5	48.5%
Total Road-Freight (Light commercial vehicles, rigid trucks, articulated trucks)	133.1	39.9%
Total Public Transport (Passenger trains, trams, buses)	28.5	8.5%
Rail Freight Emissions	10.2	3.1%
Total Transport Emissions	335.5	100.0%

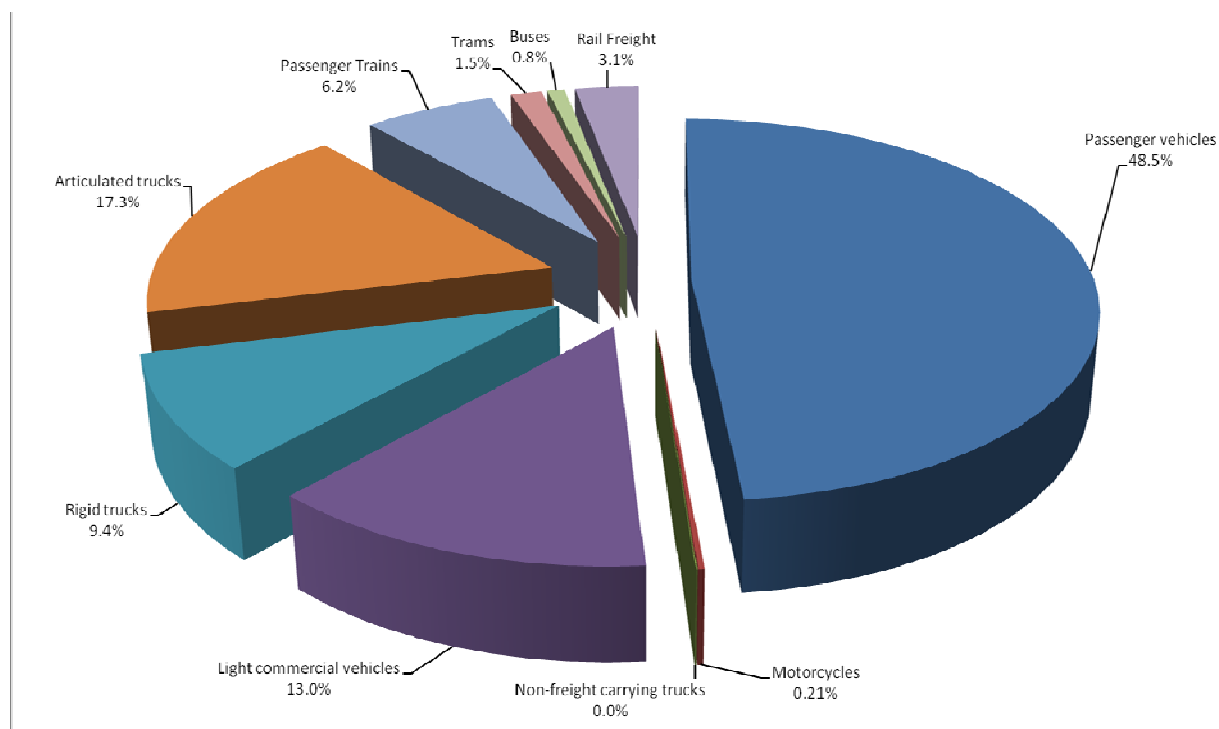


Figure 3 Transport emissions profile

3.4 Waste

Representing close to 7 per cent of the overall community emissions for City of Stonnington, waste emissions were calculated for municipal, commercial and industrial, and construction and demolition waste. Of these, commercial and industrial waste was by far the greatest contributor to waste emissions, accounting for close to three quarters of the total waste emissions for the Council. The majority of those commercial and industrial emissions can be tracked back to emissions associated with paper and cardboard waste, which is more waste intensive than other waste sources.

Table 9 Waste emissions by waste type (kt CO₂-e)

Sector	Emissions	%
Commercial & Industrial	89.8	74.6%
Municipal	25.5	21.2%
Construction & Demolition	5.0	4.2%
Waste Emissions Total	120.3	100.0%

3.5 Waste Water

Waste water was only a minor contributor to City of Stonnington's community emissions footprint, representing less than 0.1 per cent of overall emissions, however it is an important element in the overall picture of emissions and thus, necessary to include in the carbon footprint.

Table 10 Waste water emissions (kt CO₂-e)

	Treatment Volume (ML)	Emissions kt CO ₂ -e
Stonnington Waste Water	9,543.6	0.8

3.6 Agriculture

As discussed in earlier sections of the report, no material agricultural activities take place within the City of Stonnington boundaries, and as such, there are no agricultural emissions which contribute to the community emissions carbon footprint for the Council.

Table 11 Agriculture emissions (kt CO₂-e)

	Emissions	%
Stonnington Agriculture	0.0	0.0%

3.7 Land-use change

There were no land use change emissions to consider within City of Stonnington during the 2005 / 2006 period.

Table 12 Land Use Change emissions (kt CO₂-e)

	Emissions	%
Land Use Change	0.0	0.0%

3.8 Industrial processes

There are no emissions from industrial processes within City of Stonnington.

Table 13 Emissions from Industrial Processes (t CO₂-e)

	Stonnington Emissions
Process emissions of CO ₂ from the production of cement clinker (Gg/yr)	0
Quantity of cement clinker produced annually (tonnes)	0
Quantity of cement kiln dust (CKD) produced annually (tonnes)	0
Process emissions of CO ₂ from the production of cement clinker (Gg)	0
Lime	Stonnington Emissions
Process emissions of CO ₂ from the production of quicklime (Gg/yr)	0
Commercial lime (steel production) – quicklime production (tonnes/yr)	0
Quantity of cement kiln dust (CKD) produced annually (tonnes)	0
In-house lime (alumina production) - quicklime production (tonnes/ yr)	0
Limestone and Dolomite	Stonnington Emissions
Process emissions of CO ₂ from limestone use (Gg/yr)	0
Process emissions of CO ₂ from dolomite use (Gg/yr)	0
Consumption of limestone (tonnes/ yr)	0
Consumption of dolomite (tonnes/ yr)	0
Magnesia	Stonnington Emissions
Process emissions of CO ₂ from magnesia production (Gg/yr)	0
Production of magnesia (tonnes/ yr)	0
Nitric Acid	Stonnington Emissions
Process emissions of N ₂ O from nitric acid production (Gg/yr)	0
Production of nitric acid (tonnes/ yr)	0
Iron and Steel Production	Stonnington Emissions
Process emissions of CO ₂ from iron and steel production (Gg/yr)	0
Process emissions of N ₂ O from iron and steel production (Gg/yr)	0
Process emissions of CO from iron and steel production (Gg/yr)	0
Process emissions of NO _x from iron and steel production (Gg/yr)	0
Process emissions of NMVOC from iron and steel production (Gg/yr)	0
Process emissions of SO ₂ from iron and steel production (Gg/yr)	0
Quantity of coke consumed as reluctant (tonnes/ yr)	0
SF₆ used in Aluminium and Magnesium	Stonnington Emissions
Total annual quantity of SF ₆ used as a cover gas (Gg/yr)	0

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George Wilkenfeld & Associates, 2008 Victoria's Greenhouse Gas Emissions 1990, 1995, 2000 and 2005: End-Use Allocation of Emissions,

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Inner Melbourne Action Plan

Progress Report

Action 2.2 - Coordinated Pedestrian And Public Transport Signage System (Way-Finding)

Purpose

1. To update the IMAP Implementation Committee on the progress of Action 2.2 Wayfinding, stage 2 implementation of demonstration project.

Background

2. The Inner Melbourne Region currently provides an attractive and pedestrian friendly walking environment that will continue to be enhanced by the provision of well-located informative signs across the Region. IMAP Action 2.2, 'to introduce consistent pedestrian oriented and public transport signage systems across the Region' seeks to contribute to the delivery of IMAP Strategy 2, which is to 'effectively link transport routes so that the Inner Melbourne Region is accessible throughout by walking, cycling and public transport.'
3. Ensuring that new signage is consistent with existing signage is a priority and the knowledge gained from installations already undertaken within the Cities of Melbourne and Port Phillip has assisted in evaluation, design refinement and installation techniques.
4. As Stage 1 of Action 2.2, J.A. Grant and Associates developed the *Inner Melbourne Wayfinding Signage Report* in December 2007. This report identifies and recommends the locations for a hierarchy of signs that lead people to and through the network of routes, linking origins to destinations within and between the IMAP precincts (pedestrian priority areas).
5. The report recommended a proposed demonstration project as an example of an 'integrated walking, cycling and public transport signage strategy'. Presented to the IMAP Committee in late 2007, a resolution was passed to support progression of implementing the recommended demonstration route, located primarily within the Cities of Yarra and Stonnington.
6. The demonstration project route leads from the CBD (Federation Square) via the Sports Precinct, to the Swan Street Precinct, via Church Street to the Chapel Street Precinct, and back to Federation Square via residential streets and parklands.
7. Stage 1 of Action 2.2 was co-funded through contributions from the four IMAP councils and a \$25,000 grant from the Department of Transport's Local Area Access Program (LAAP). Stage 2, is also co-funded by IMAP councils and LAAP funding of \$133,500.

Progress

8. The implementation stage of Action 2.2 is being led by the the City of Melbourne. The project includes Design, Manufacturing, Installation and Evaluation phases.

9. Design of Signage Hardware

Design of the signage hardware for the Level 1 and 2 signs, including industrial and structural design, was completed in January. The Level 1 signs have been designed at 2.16 metres tall and 0.6 metres wide, while the Level 2 signs sit at 1.8 metres tall and are 0.5 metres wide. Both signs are composed of a powder-coated mild steel inner frame, with a stainless steel exterior. Maps will be printed on posters that are mounted within the sign, held behind a laminated glass panel.

Level 3 and 4 signs will be designed as per typical pole-mounted street signs, which consist of a 210mm high aluminium extrusion. The length of these signs will be around 800mm long, although the overall length will be dependent on the design content.

10. Design of the Content of the Signage

VisualVoice (also responsible for the development of the IMAP Visitors Map) was engaged in January to develop the hierarchy of content maps and directional signage. The IMAP Visitors Map has been used as the base for an IMAP Sign 'Family', which includes the four different levels of signage. To manage the design process, a sub-group with representatives from Cities of Yarra and Stonnington have been working closely with VisualVoice to produce the artwork for the level one and two signs.

Throughout this process, a number of Council officers have also been consulted during the development of the signage across the relevant areas of urban design, accessibility, economic development & tourism, planning, traffic management and engineering services.

Design work is due to be completed mid-June.

11. Manufacture of Signage Hardware

The contract for the supply and delivery of the 12 No. Level 1 signs was awarded in January. Manufacture is now complete, with the signs to be delivered to the installation contractor upon award of that contract.

The contract for the supply and delivery of the 6 No. Level 2 signs was awarded in March. Signs are due to be completed by the end of May, again delivery will coincide with the award of the installation contract.

Quotes will be sought for the Level 3 and 4 signs late May, upon completion of the content design by Visual Voice.

12. Installation

Installation of signage for the demonstration route has been coordinated by the City of Melbourne, with facilitation from the other Councils. Locations for each of the Level 1 and 2 signs have been confirmed in cooperation with the engineering and traffic teams from the relevant Councils. Community consultation is also being undertaken by each individual Council for each of the sign locations.

Quotations have now been issued for the installation of the Level 1 and 2 signs, with contract award expected by 22 May. Installation works are due to commence immediately thereafter, with completion by mid-June.

Installation of the map-based posters within the signs will commence at the start of June or upon completion of the design content, with completion by the end of June.

Installation of the Level 3 and 4 signs will be undertaken throughout June.

13. Pre and Post Evaluation

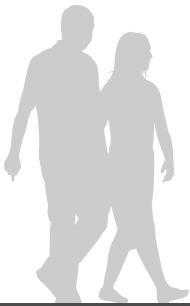
Pre-evaluation will take place using staff from the City of Melbourne's Visitor Center. They will walk the demonstration route before and after installation. Their expertise in assisting visitors in the CAD makes them ideal for evaluating the project.

Recommendation

14. That the IMAP Implementation Committee resolve to:

- a) **note** the progress of Action 2.2 demonstration project.
- b) **support** an invitation to Minister Pallas to officially launch the IMAP Wayfinding Demonstration project.

Sign Family



s35 E4

Existing signs

Precinct Signage



Sign number

Sign type & number

s37 MB16

New map-based signs

Links Signage



s40 IDS8

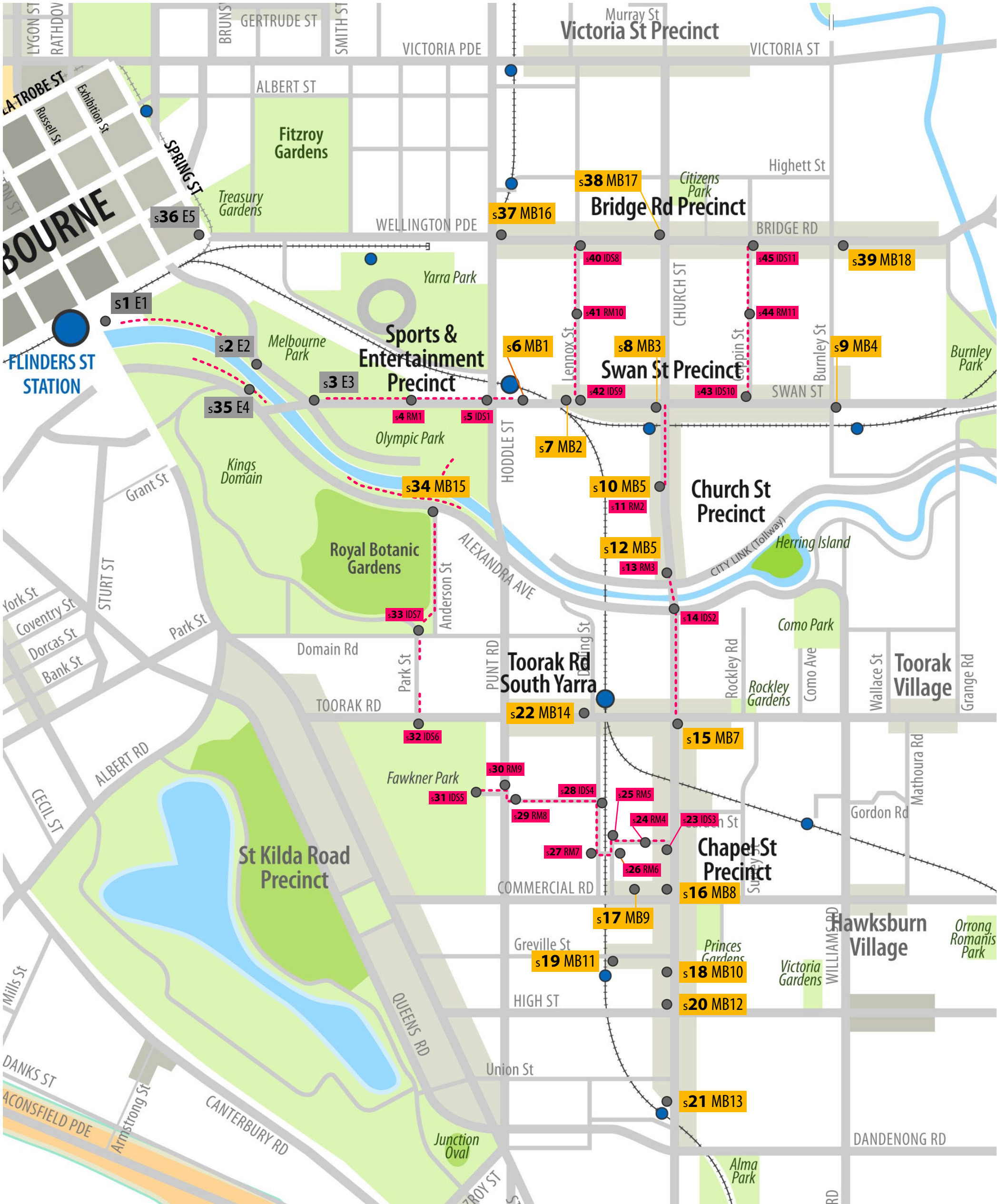
New Independent Directional signs



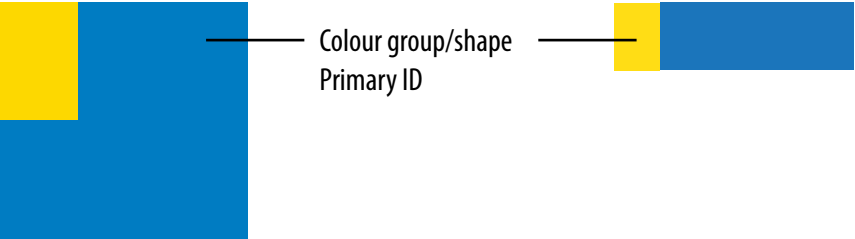
s40 RM8

New Route Marker signs

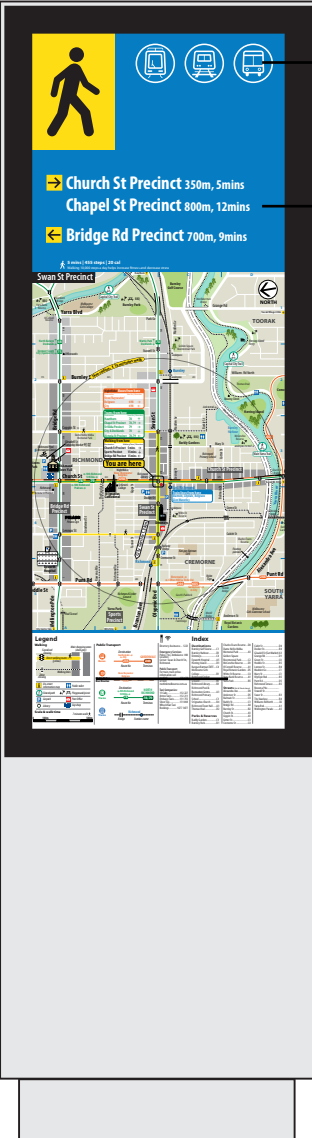
Demonstration Project Signage Locations



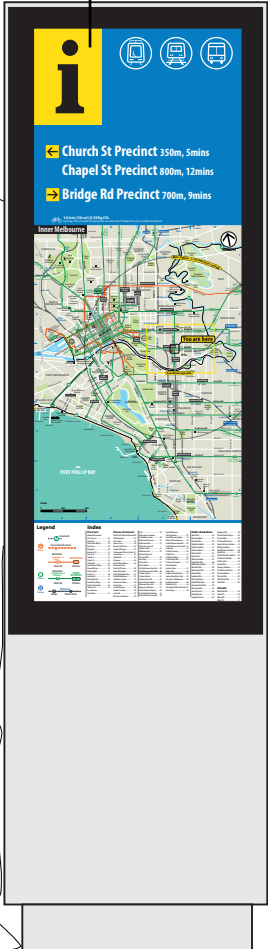
Long distance (50m) system identity



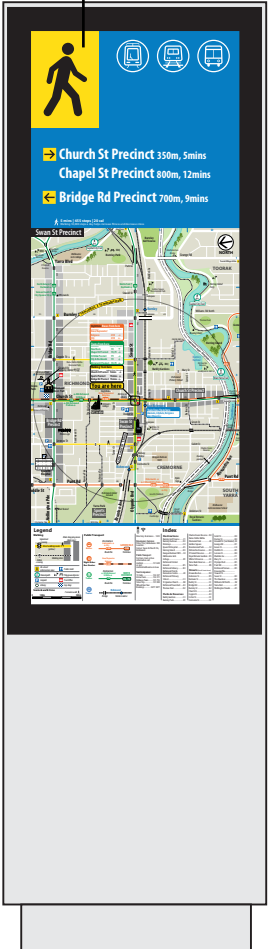
Side A



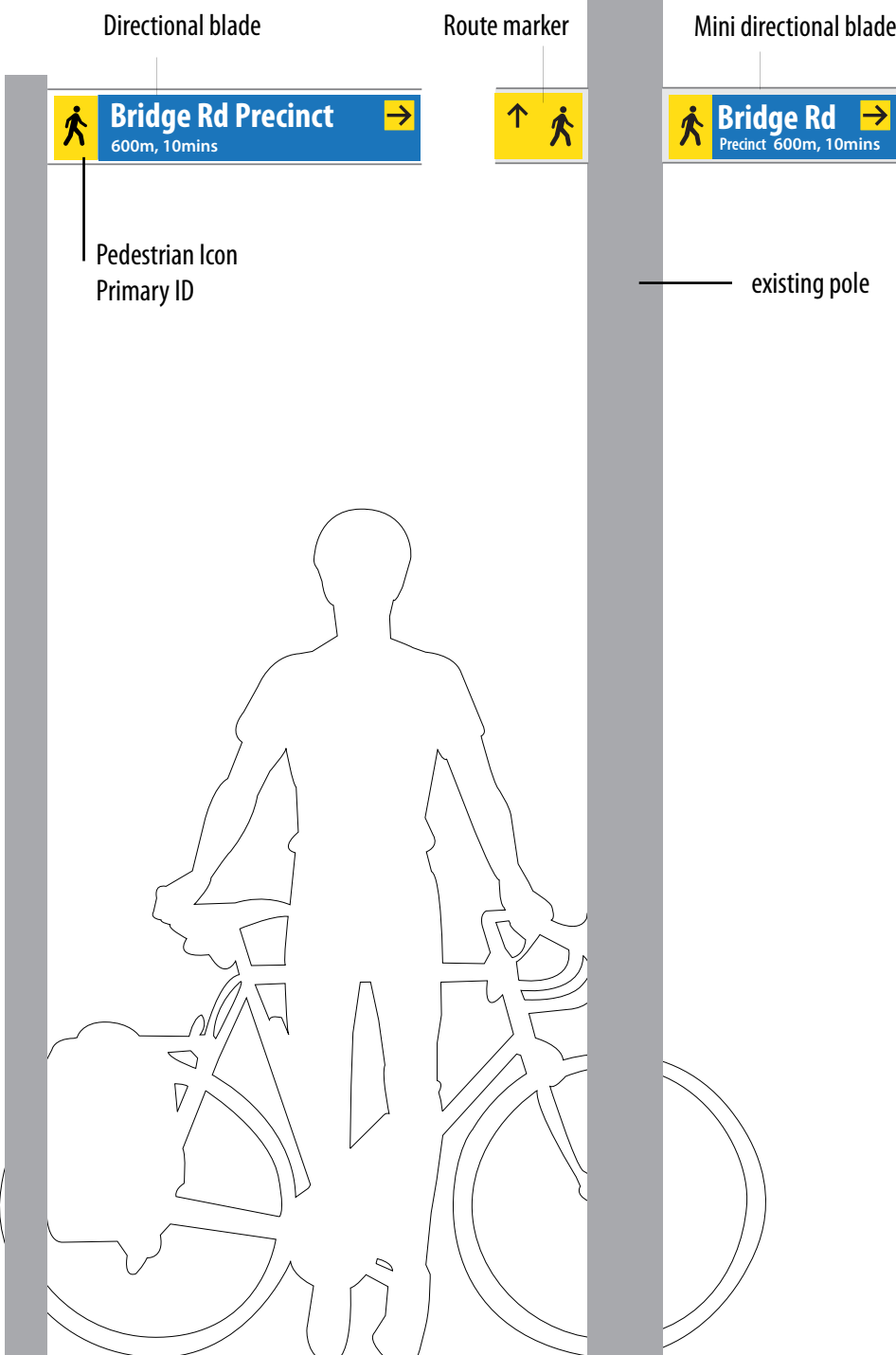
Side B



Side A



Side B



Level 1
Map-based signs

Level 2

Level 3
Directional signs

Level 4

Inner Melbourne Action Plan**Progress Report****Strategy 11: Promote the Inner Melbourne region as a tourism destination**

Purpose

1. To update the IMAP Committee on the projects undertaken by the IMAP Tourism working group including:
 - One-day Itineraries;
 - Research on the Value of Tourism and Visitor Profile & Satisfaction Study
 - Industry Development Forums;
 - Inner Melbourne Map; and
 - Budget Priorities for 2009/10.

Background***One-Day Itineraries***

2. 10 x one-day visitor itineraries have been drafted by a consultant and will be finalised in June. The itineraries have been developed around several themes: *Fashion and Fun*, *Cool Hunting*, *Cultural Discovery*, *Romantic Melbourne* and *Relax and Rejuvenate*. The aim is to strengthen the promotion of the Inner Melbourne Region, by delivering key and consistent messages. The itineraries will be made available electronically and will leverage from Tourism Victoria's '*It's Easy to Lose Yourself in Melbourne*' campaign to maximise marketing efforts. This component of the project is being managed by the City of Yarra with \$10,000 allocated from the approved budget.

Research on the Value of Tourism and Visitor Profile & Satisfaction Study

3. Two separate research projects are currently underway. Further to the 2006 Value of Tourism Research undertaken by the group, a consultant has been engaged to produce a yearly snapshot of the economic contribution tourism makes to the Inner Melbourne region, including daytrip and overnight visitation, total visitor expenditure, employment in tourism as well as trends in yield and key markets. Snapshots for years ending 2007 and 2008 will be available in June 2009 and the 2009 snapshot will be provided April 2010. The project is managed by the City of Yarra and is costed at \$1,500 per snapshot.
4. The Visitor Profile & Satisfaction Study is a comprehensive research project to be delivered in June 2009. The IMAP Committee agreed to fund this research at a cost of \$50,000 and there have been additional funds provided by the Cities of Yarra, Port Phillip and Stonnington to enable more in-depth research in their respective municipalities. The research will profile Inner Melbourne visitors - including demographics, motivation for visiting as well as satisfaction with information, visitor services, products and services. Face-to-face interviews are being conducted across the Inner Melbourne Region in key visitor areas, and an online survey will be completed as well. Findings will be formally presented to the IMAP Tourism working group by the end of June 2009. The research will assist with making informed decisions about future tourism planning.

Industry Development Forums

5. The first in a series of quarterly forums was held at the City of Yarra on 5 May 2009, jointly hosted by IMAP and Destination Melbourne Limited (DML). The Marketing Masterclass, aimed at Inner Melbourne Business Associations, was opened by Cr Amanda Stone, Mayor of the City of Yarra and attended by over 30 participants. Destination Melbourne's CEO Chris Buckingham addressed the forum followed by a marketing case study presented by Oskar Cebergs, Marketing Director of Streets Ahead Promotions Inc (Chapel Street Traders Association) highlighting the development of the Chapel Street brand. Feedback from the forum was very positive. The next forum will be hosted by City of Melbourne in June. In partnership with DML, four forums will be hosted by IMAP councils in 2009/10.

Inner Melbourne Map

6. The Inner Melbourne Map continues to be popular with visitors - with the clarity and usability of the map seen as its key attributes. The working group is currently considering the future of the map including the license agreement and project management as well as options to increase production and widen distribution. A number of options are being assessed including working in partnership with City of Melbourne, Destination Melbourne and Metlink. A decision will be made on the future direction of the map early in July 2009.
7. Due to the success of the map, Tourism Victoria will distribute the map to over 2,500 international tourism buyers and wholesalers at the Australian Tourism Exchange (ATE), to be held in Melbourne June 2009. The map is also being distributed at G'day UK - a trade mission to London highlighting the investment, work and holiday opportunities in Australia.
8. Comparative research on three Inner Melbourne visitor maps was conducted in December 2008 at a cost of \$5,000. The key objective of the research was to gain an understanding of the value of the Inner Melbourne Map compared to the other two maps available to visitors.

The research established 'good practice' criteria for the useability and usefulness to visitors of tourist-oriented maps via desk-top analysis which has assisted the IMAP Tourism working group in understanding what makes a good map for a visitor. The research assisted the working group in their decision to continue to fund the production of the Inner Melbourne map.

Budget Priorities

9. The IMAP Tourism working group is now formulating budget activities for 2009/10. The group's key priority is the development of a three year strategic plan. A will be sent to suitable consultants for a response in July 2009. It is anticipated the strategic plan will be delivered before the end of the year.
10. Other priorities for 2009/10 include:
 - Determining the future direction / project management of the Inner Melbourne Map;
 - Supporting industry development via forums that will link local businesses with government and industry;
 - Conducting annual research on the Value of Tourism in the Inner Melbourne Region; and
 - Delivering tactical marketing initiatives to leverage from Destination Melbourne and Tourism Victoria's seasonal campaigns.

2009 Project Management

11. City of Yarra and City of Stonnington continue to share the project lead and chairing of meetings.

IMAP Tourism Case Study

12. The success of the IMAP Tourism working group was highlighted at the recent 2009 National Mainstreet Conference in Fremantle. Implementation Officer Alison Fitzgerald and Billy Redmond from the City of Stonnington presented the success of the collaboration and key achievements, including the production of the Inner Melbourne Map. The concept of IMAP and collaboration between councils to achieve results was praised by the delegates - economic development managers, property developers, strip shopping marketing coordinators and place managers from around Australia.

Recommendations

13. That the IMAP Implementation Committee resolves to:
 - (a) **Note** the progress of the IMAP Tourism working group
 - (b) **Agree** that the IMAP Tourism working group present outcomes to the IMAP Implementation Committee in August 2009.