

## **Status of Climate Change and Peak Oil Adaptation Plan - Immediate Actions to commence by 2010**

Council Services		Responsibility	Status
1	Identify infrastructure and assets at risk (e.g. roads in flood prone areas) and infrastructure that poses risk (e.g. street debris, vulnerable trees) and develop long term plan to increase resilience. Undertake hazard audit and reduce hazard incidence (or hazard expenditure) by 5% by 2011, 15% by 2013, and 30% by 2015. Investigate and action when reductions are not achieved.	City Works and Development  City Design and Environment	Flood mapping review underway.  Park tree pruning undertaken, and under review.
2	Review fleet and plant policies and practice to ensure that they are in line with adopted fuel and greenhouse emission reduction targets. Identify transition to higher efficiencies and alternative fuels where possible.	City Works and Development  Corporate and Business Services  City Design and Environment	Fleet policy under review
3	Continue Energy Efficiency and Carbon Neutral Buildings programs to reduce energy requirements. Identify sites that could be considered to transition to energy self sufficiency. Continue to invest in renewable energy.	City Design and Environment  City Works and Development	Underway
4	Educate Council staff so they are well positioned to identify and respond to potential climate change and peak oil risks.	City Design and Environment  Corporate and Business Services	Underway
5	Review street tree and planting policies in relation to adaptation issues. Develop tree data base including identification and scheduled treatment of vulnerable trees (to adapt to low water conditions, heat island reduction and reduce risk from storms and climatic conditions). Scope opportunities for fruit and nut trees in public spaces to support urban food production.	City Design and Environment	Project has commenced
Emergency Services		Responsibility	Status
6	Work collaboratively to support Victoria State Emergency Service and other emergency services (including healthcare, police, fire) to incorporate climate change and peak oil hazards into Emergency Management Plans. Identify areas where climate change and peak oil specific considerations may be required. Use data obtained from Action 8 to identify best practice risk reduction measures.	Corporate Services  Emergency Management	Officer discussions commenced with intent to include in Emergency Management Plan 2011.
7	Review emergency response centre sites to improve resilience to climate change and oil dependency threats.	Corporate and Business Services  Emergency Management	Generator purchased for civic centre
8	Review and advocate for peak bodies (MAV) and State Government to review international and national emergency	Corporate and Business	MAV has provided advocacy and support

	response case studies to identify best practice risk reduction measures.	Services	for heat waves and commenced transition towns program.
9	Work collaboratively and support key stakeholders: schools and education providers, aged care facilities and disability services & other agencies, and large shopping centres, etc, to educate the community about preventing casualties during emergency.	Community Services Emergency Management	Undertook work with heat wave policy with aged care institutions 2010  Heat wave information disseminated to vulnerable residents.
10	Review Fire Management Plan and ensure that increased fire risk scenarios are considered and planned for.	City Works and Development	Work undertaken regarding building regulations changes
<b>Waste Collection and Disposal</b>		<b>Responsibility</b>	<b>Status</b>
11	Continue to implement and review waste management strategy including: minimisation target and incentives to reduce waste (e.g. technology, service charges).	City Design and Environment	Underway
12	Provide information to public and businesses on waste minimisation. Review communication tools to maximise community knowledge.	City Design and Environment	Underway
13	Encourage Metropolitan Waste Management Group to investigate sustainable opportunities for energy including biofuel generation from waste sites.	City Design and Environment	Underway – considered in tenders.
<b>Infrastructure</b>		<b>Responsibility</b>	<b>Status</b>
14	Identify infrastructure responsibilities (e.g. State, Federal, and Local) and lobby State and Federal agencies to ensure that they are aware of adaptation issues and that their assets and infrastructure in Darebin meet the levels required under predicted conditions.  Work collaboratively with these agencies to advocate that proposed strategies/policies do not constrain Council's adaptation responses to climate change and peak oil.	City Works and Development	To date flood issues have been primary issue raised.
15	Investigate and prioritise critical Council and community infrastructure to ensure its resilience during extreme weather events and energy disruptions.	City Works and Development  Emergency Management	Generator purchased for civic centre
16	Include adaptation issues in the Leisure Strategy: review to determine future adaptation requirements (e.g. more indoor facilities, changed insurance, risk procedures, diversity of sports to reduce reliance on irrigated ovals).	City Design and Environment	Leisure Strategy and implementation strategies include adaptation issues.

17	Audit/measure the urban heat island effect in critical areas (e.g. community infrastructure, public transport nodes) and commence preparation of a strategy to ensure that temperature in these areas are mitigated (using shade, light colored paving, etc).	Infrastructure	Audit has not been commenced, however considerations are being taken in design work (Route 86) and bus stop review.
18	Continue to identify and implement energy, fuel and water efficiency improvements in Council's building portfolio and operations to reduce Council's exposure to anticipated increase in energy and fuel costs and water depletion.	City Works and Development City Design and Environment	Ongoing
19	Adopt the Oil Depletion Protocol by 2010, which calls for an annual 2.6% reduction in oil consumption within Council operations <sup>1</sup> .	City Design and Environment All departments	Needs to be considered in line with fleet review considerations.
20	Lobby State Government to review current building and infrastructure standards to meet potential climate change impacts. Continue to offer incentives for achieving environmentally sustainable design requirements.	City Design and Environment City Works and Development	Darebin continues as a member to Local Government ESD advocacy group
21	Ensure that strategic infrastructure development and maintenance plans include an assessment of climate change and peak oil.	City Works and Development	Asset management and new designs consider adaptation issues.
22	Continue to develop incentive based policies and programs for community and business to adopt climate change and peak oil resilience measures (e.g. facilitate insulation, bulk roll outs of energy efficient technologies and voluntary oil vulnerability audits for businesses).	City Design and Environment  Corporate and Business Services	Ongoing Insulation, Solar hot water, business light, pedestal fan "Fan Fair" project etc.
23	Continue to review asset management and maintenance practices and prioritise at risk infrastructure (where appropriate use alternative materials to reduce fossil fuels dependence).	City Works and Development	Ongoing
24	Continue to implement the Darebin Transport Strategy to reduce car use and support petroleum-free transport modes through: restructuring of local street environments, working with State Government Agencies and other stakeholders to prioritise sustainable transport modes across the transport network and implement behaviour change programs. Aim to "double the share of walking, cycling and public transport trips for all trips and trips to work by 2027."	City Works and Development	Ongoing
25	Identify high users of fossil fuels (across Council) and investigate alternative materials to reduce the reliance on fossil fuel based supplies.	All Departments	Ongoing through Climate Change Action Plan

	Planning	Responsibility	Status
26	Investigate and facilitate transport structural improvements needed to ensure that transport facilities are appealing for community ridership (e.g. shelters with seats at all bus/tram stops, availability of maps and timetables at stops). Work with State Government Agencies to improve the coverage and service levels of public transport across the municipality.	Infrastructure	Ongoing
27	Encourage Sustainable Tool for Environmental Performance Strategy (STEPS) for all new multi-unit developments including partial embodied greenhouse gas emissions accounting.	City Works and Development	Ongoing
28	Review strategic planning goals and modify when necessary to ensure their compatibility with a carbon constrained future.	City Works and Development	Ongoing. MSS review is considering Adaptation issues.
29	Continue to participate in Local Government ESD advocacy group to advocate for improved environmental legislation and support for better sustainability outcomes in built form (e.g. encourage the greatest energy and water efficiency, including stormwater harvesting in new and existing developments).	City Works and Development	Ongoing
30	Consider flexibility for localised economy, including food production when reviewing planning zones, structure plans and strategic planning goals.	City Works and Development City Design and Environment	Ongoing. Council considered this issue in their support for Sustainable Food.
31	Balance planning scheme requirements to ensure that existing planning regulations do not become a transaction cost or hurdle for implementing resilience based strategies (e.g. heritage objectives may reduce water tank/solar panel).	City Works and Development	Ongoing
32	Investigate ways to increase planning support for low carbon businesses and those that provide energy efficient solutions (e.g. assistance with application processing).	Corporate and Business Services	Economic development and employment are providing assistance to businesses through Lightsmart program and advice.  Business Development and employment strategy will consider this issue in 2011.
33	Ensure appropriate development in risk prone areas (e.g. flood zone, poor public transport access) to guarantee that an adequate risk management approach is implemented prior to development approval.	City Works and Development	Ongoing
34	Review national and international case studies on a regular basis to identify effective planning mechanisms that reduce vulnerability to climate change and peak oil.	City Works and Development	Ongoing
35	Identify areas vulnerable to increased energy pricing (e.g. using advanced Vulnerability Assessment for Mortgage, Petrol and Inflation Risks and Expenditure modelling (VAMPIRE)).	City Works and Development	Transport issues and gaps have been identified though strategy.

36	Advocate for research undertaken by State and Federal Government around: sustainable precincts, sustainable buildings and sustainable renovations.	City Works and Development City Design and Environment	Ongoing
37	Establish tele-working protocols.	Corporate and Business Services People and Performance	Project being undertaken with IT and OSD
38	Continue to provide and promote advice around sustainable and resilient buildings through planning and building processes.	City Works and Development City Design and Environment	Ongoing
<b>Organisational Knowledge and Capacity</b>		<b>Responsibility</b>	<b>Status</b>
39	Review Council insurance policies (including professional indemnity) requirements for climate change and peak oil risks to minimise potential litigation.	People and Performance	Not commenced, however recent risk audit considered adaptation issues.
40	Identify a data collection and dissemination method to ensure that relevant officers are informed of the latest data available on climate change and peak oil. Data collection should follow established themes of interest: for example: impacts, latest projections, adaptation options, etc). Special attention is needed to ensure quality of data and accessibility for relevant stakeholders.	City Design and Environment People and Performance	Ad/hoc data is provided however strategic method not commenced
41	Establish a system for managing and storing the data collected, possibly a 'one stop shop' website where decision-makers and their advisers can access the information.	City Design and Environment Corporate and Business Services	Not yet commenced
42	Promote resilience among Council workers, for example encourage Council workers to use sustainable transport modes and consider proximity to work.	People and Performance	Ongoing
43	Work with Local Government Associations, State and Federal Governments and other institutions to identify best practice tools for organisational support.	All Departments	Ongoing
<b>Community</b>		<b>Responsibility</b>	<b>Status</b>
44	Advocate and lobby State and National Governments for large scale planning and communications regarding peak oil.	City Design and Environment	Ongoing
45	Ongoing review of building specifications for community infrastructure (Council owned) to ensure their resilience to extreme weather events.	City Works and Development	Under consideration
46	Develop Food Security Policy and action plan to address impacts on local food supply and access. Review Council's role in the development and maintenance of community gardens in Darebin.	People and Performance City Design and Environment	Food Security Policy adopted in 2010; Funding provided to support sustainable food programs; work on community gardens in East Reservoir and Northcote.

47	Work collaboratively with State Government to develop heatwave plan and integrate it into existing Municipal Health and Emergency Management plans.	People and Performance Community Services	Plan developed
48	Undertake scenario based planning exercises for changing demographics and identify how Council might respond to new trends.	Community Services People and Performance	Ongoing
49	Investigate specific energy and oil use reduction targets for the community to encourage and support resilience.	City Design and Environment	Specific targets not identified, though general targets are.
50	Facilitate development of local economic networks through the provision of technical, regulatory and knowledge based support.	City Works and Development	Ongoing
51	Continue to encourage residential development in better serviced areas through structure and activity centre planning.	City Works and Development	Ongoing
52	Undertake community survey to explore community needs under a peak oil scenario.	City Design and Environment People and Performance	Not commenced
53	Continue to advocate for environmental refugee status and adequate support for people forced to relocate due to the impacts of climate change. This includes supporting the Climate Displacement Coalition.	City Design and Environment People and Performance	Ongoing
54	Engage with Darebin's Transition Town Movement and examine opportunities for collaborative work between Council and the community.	City Design and Environment People and Performance	Ongoing, discussions regarding sustainable food and seminars
55	Advocate for, develop and support educational and training programs to re-skill Darebin's diverse community for living under carbon constrained economy. Work collaboratively with NGOs, universities, State agencies, Neighbourhood Houses etc. to design these programs and ensure cultural relevance.	City Design and Environment People and Performance	Ongoing
56	Develop/advocate for a communications plan to raise community awareness around Peak Oil issues	City Design and Environment People and Performance	Advocated to other levels of Government for a communications plan.
	<b>Business, Economics &amp; Jobs</b>	<b>Responsibility</b>	<b>Status</b>
57	Identify strategies and incentives to attract business, particularly sustainable businesses (e.g. Photo Voltaic providers) to Darebin (refer to Action 32 for an example).	Corporate and Business Services	Business Development and employment strategy will consider this issue in 2011.
58	Continue to advocate for Government policy and investment in mechanisms to reduce community and business energy consumption.	City Design and Environment	Ongoing
59	Continue to identify and provide incentives for reduced energy consumption in business and industry (e.g. Darebin	Corporate and Business Services	Ongoing – Lightsmart program and business

	Climate Wise Business Program). Ensure that energy efficiency programs are well marketed.	City Design and Environment	breakfast seminars
60	Advocate for Government policy and investment to facilitate high efficiency/alternate fuel/ vehicles.	City Design and Environment	Ongoing
61	Conduct a comprehensive analysis of future budget requirements, taking into consideration: possible changes in revenue from rates, increased demand for services, and increased costs of infrastructure maintenance.	Corporate and Business Services	Budget reviews ongoing
	<b>Environment</b>	<b>Responsibility</b>	<b>Status</b>
62	Work collaboratively with State Government, Melbourne Water, Yarra Valley Water and businesses to increase resilience around low water availability.	City Design and Environment City Works and Development	Ongoing
63	Advocate for development assessment criteria to ensure that adequate water saving measures are embedded.	City Design and Environment City Works and Development	Ongoing through STEPS and under consideration in MSS review
64	Complete the flood mapping of Council to identify flood prone areas and detail results in planning overlay.	City Works and Development	Commenced 2009, Completing 2011/12