

GREEN ICT STRATEGIC PLAN 2009-2012

OBJECTIVE 1: Align with the University's targets to reduce carbon emissions through the development of Key Performance Indicators and measurement techniques for Sustainable ICT

Strategies	Actions	Targets/KPIs	Responsibility
Identify and establish sustainable ICT KPIs and recommend measurement tools and techniques	From KPMG review (2008), select KPIs and determine targets and measurement techniques Develop a strategy for benchmarking KPIs with like institutions by July 2009	KPIs to be identified by March of each year In conjunction with CAUDIT, develop a strategy for benchmarking KPIs with like institutions by July 2009	Green IT Steering Committee (Steering Committee)

OBJECTIVE 2: Engage the Monash community in Green ICT issues and activities

Strategies	Actions	Targets/KPIs	Responsibility
Establish appropriate governance structures for Green ICT and continue to engage the Monash community	The established Green ICT Steering Committee to remain in place and ensure cross University participation on this committee continues	Green ICT Steering Committee to meet at least 4 times per annum	Steering Committee
	Promote Green ICT	Ensure that all ICT strategic planning documents contain Green ICT content	ITS & Steering Committee
		Increase the content of the Green ICT	ITS

	<p>Explore options for highlighting the importance of environmental factors and ICT equipment</p>	<p>website</p> <p>Explore options for improving participation on the Green ICT blog</p> <p>Consider the development of a carbon footprint calculator for students on the my.monash portal in 2009; similar for staff to be researched and considered for introduction late 2009 or early 2010</p> <p>Annually review the environmental factors currently receiving a 30% weighting for desktop and laptop computers in the procurement process for all ICT equipment</p> <p>Consider in 2009 the introduction of controls to ensure that procurement policies and procedures are adhered to and reviewed/updated on a regular basis</p> <p>Continually specify the demand for lower emission options for goods and services to be purchased (both ICT and other)(see Green Purchasing below)</p>	<p>ITS & Steering Committee</p> <p>tOES/ITS</p> <p>tOES/ITS</p> <p>tOES/ITS/Facilities & Services</p> <p>tOES/ITS/Facilities & Services</p>
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OBJECTIVE 3: Optimise the reduction in energy usage focusing on improving the environmental sustainability of ICT

Strategies	Actions	KPIs	Responsibility
Reduce the energy consumption in data centres	Develop options for investigation for a second data centre including Green ICT initiatives and cost effectiveness	Continue planning in 2009 for an outsourced data centre or new data centre incorporating advanced energy efficiency measures (including cogeneration)	ITS
		In line with the above, finalise the tender evaluations in March 2009 and make a recommendation for outsourcing data centre services in collaboration with Melbourne University & RMIT to a shared service	ITS
	Continue the initiative for a shared Data Centre with CSIRO at Clayton	Further explore the option of a shared data centre with CSIRO with resolution by end of 2009	ITS
	Implement energy saving measures within current data centres, for example, lighting	Energy saving measures introduced into current data centres, for example, lighting and cooling, in 2008, to be monitored and improved whenever newer more environmentally favourable equipment etc is released	ITS
	Further develop the planning and implementation of server consolidation and virtualisation within physical ITS Data Centres	Server consolidation and virtualisation project for servers within ITS to proceed and plans to implement server consolidation across the University as part of the Shared Services program to continue	ITS
Actively pursue the implementation of power savings measures in		All new tenders for PCs from 2009 onwards embed power save settings as the default	ITS/Procurement Board

	<p>computer laboratories and pilot model green laboratories</p> <p>Institute appropriate measures to determine the electricity consumption across ICT, more particularly data centres as underlying energy consumption will increase and there will be a need to plan for the operational, financial and technology consequences and develop programs to manage</p>	<p>setting</p> <p>An energy reduction of 10% to be achieved over the three year period through the replacement of all equipment within computer labs across Monash with highest energy rating equipment</p> <p>Determine metering capabilities in 2009 (for example, electricity) and liaise with Facilities and Services division to determine where these can be upgraded to allow measurement of consumption for specific purposes (for example, data centres)</p> <p>Refresh the University's central high performance computing infrastructure with newer equipment up to 20 times more power efficient such that total power consumption is reduced while delivering greatly more computing capacity to Monash researchers; ongoing program commenced 2009</p>	<p>ITS/the Steering Committee</p> <p>ITS/Facilities & Services/tOES</p> <p>Research Support Group/ITS</p>
Reduce the energy consumed by telephony	Continue with the VoIP roll out	Continue with the VoIP roll out in 2009 – 2010 and institute appropriate disposal mechanisms for 13,500 telephones replaced with VoIP 'phones	ITS
Reduce the energy consumed by computer users within computing laboratories and at the work place	Conduct education campaigns to encourage computer users to implement personal power saving measures (e.g. turn off screen savers)	Power management settings to be configured in all new PCs from 2009 The current education plan to continue in 2009 with emphasis upon "Turn off computer" and screen savers (reduce use of screen savers to reduce energy consumption)	ITS/the Steering Committee

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OBJECTIVE4: Optimise the opportunities for energy savings and environmental responsibility through the adoption of sound recycling and ewaste programs

Strategies	Actions	Targets/KPIs	Responsibility
Implementation of programs for environmentally responsible disposal and recycling of ICT and AV equipment	Review and make recommendations to improve ICT and AV equipment re-use/recycle programs within Monash	<p>A University-wide e-waste program is to be developed by June 2009</p> <p>Policy recommendations for recycling/re-use are to be in place by December 2009</p> <p>An electronic Monash Marketplace specifically for ICT equipment is to be explored and for possible introduction in 2009 – 2010</p> <p>Standards to be embedded in IT equipment preferred supplier arrangements that facilitate e-waste disposal - RoHS - see under Green Purchasing</p>	<p>ITS/tOES</p> <p>ITS/tOES</p> <p>ITS/tOES</p> <p>ITS/tOES</p>
The reduction in printing costs/paper usage/ increase in use of recycled paper	<p>Review and improve uptake of duplex printing, and embed into Standard Operating Environment (SOE) with duplex and black and white options as default</p> <p>Encourage the use of shared printers</p>	<p>Further explore measures to improve the uptake of duplex printing, and embed duplex and black and white options as default into the Standard Operating Environment (SOE) to save energy, paper and to benefit students financially</p> <p>An uptake in the use of shared printers during 2009-2012 through education and procurement policies</p>	<p>ITS/tOES</p> <p>ITS/tOES</p>

	<p>Implement new Monash Fax service (reduce paper) and develop disposal strategy for obsolete fax machines</p>	<p>Further the use of recycled paper from the current 80% to 100% by 2012</p> <p>Implement the new Monash Fax service to help reduce paper usage and energy consumption</p>	<p>tOES/the Steering Committee</p> <p>ITS</p>
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OBJECTIVE6: Establishing user acceptance, support and buy-in of criteria for environmentally sustainable ICT

Strategies	Actions	Targets/KPIs	Responsibility
<p>The promotion of green purchasing</p>	<p>Ensuring that tenders for preferred suppliers for desktop and laptop PCs include enhanced green IT criteria</p> <ul style="list-style-type: none"> - energy efficiency - RoHS compliance or equivalent - consideration of vendor managed e-waste disposal 	<p>Through 2009 and onward the replacement of equipment within IT labs is to be with highest energy rated equipment</p> <p>Over the next three years, all service providers are to detail their activities in reducing greenhouse gas emissions as well as their broader environmental policies; institute these activities into the tender process (their environmental programs). For example:</p> <ul style="list-style-type: none"> o <i>look for products compliant with relevant restriction of hazardous substances (RoHS) measure</i> o <i>seek supplier input as to how their product/s has/have been designed for recycling and how much recycled content it includes</i> o <i>negotiate for reduced packaging, manuals and reduced physical shipments. Similarly, negotiate for the vendor to collect and recycle the packaging; this commenced in 2008 and must be built upon in 2009 through 2012</i> <p>Continue to challenge the environmental</p>	<p>ITS/the Steering Committee/tOES</p> <p>The Steering Committee/ITS/tOES/Facilities & Services</p> <p>The Steering Committee/ITS/tOES/Facilities & Services</p>

<p>To meet all relevant State and Commonwealth legislation in relation to green house emissions, carbon offsets and other environmental issues</p>		<p>sustainability of technology providers' products</p> <p>The maintenance of a briefing watch through 2009 – 2012 on the introduction of relevant State and Commonwealth legislation in relation to Greenhouse emissions and compliance requirements</p> <p>All purchasing arrangements and tenders must reflect the legislation requirements</p>	<p>The Steering Committee/ITS/tOES</p> <p>The Steering Committee/ITS/tOES/Facilities</p>
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