

CONFERENCE SCHEDULE

MONDAY 27 NOVEMBER 2006

1600 - 1800	Registration in Foyer	
1800 - 2000	WELCOME RECEPTION	Sponsor: Exxon Mobil

TUESDAY 28 NOVEMBER 2006

0800-0900	Registration in Foyer	
0900 - 1015	Session 1A The Road Ahead	
1015 - 1045	MORNING TEA	Sponsor: Hydro Tasmania
1045 - 1215	Session 2A Policies and Regulation	
1215 - 1330	LUNCH	Sponsor: Victorian Government (DSE and DoI)
1330 - 1510	Session 3A Transport Fuels	
1330 - 1510	Session 3B Directions for Electricity Generation	
1510 - 1540	AFTERNOON TEA	Sponsor: Monash Energy
1540 - 1720	Session 4A Reducing CO ₂ Emissions	
1540 - 1720	Session 4B Future for Coal	
1900 - 2300	CONFERENCE DINNER	Sponsor: Shell Australia

WEDNESDAY 29 NOVEMBER 2006

0800-0830	Registration in Foyer	
0830 - 1000	Session 5A The Road Ahead 2	
1000 - 1115	MORNING TEA & EXTENDED STUDENT POSTER SESSION	Sponsor: CSIRO
1115 - 1215	Session 6A Addressing CO ₂ Issues	
1115 - 1215	Session 6B Nuclear Options	
1155 - 1215	LUNCH	Sponsor: EPA Victoria
1330 - 1450	Session 7A Market Demand Issues	
1330 - 1450	Session 7B Renewable Energy Options	
1450 - 1520	AFTERNOON TEA	Sponsor: Australian Greenhouse Office
1520 - 1640	Session 8A Gas and Hydrogen	
1520 - 1640	Session 8B Case Studies	
1640 - 1715	CLOSING SESSION & AWARD PRESENTATIONS	

STUDENT POSTER INSPECTION TIMES

Student Posters will be available for inspection and explanations by the students at each of the Lunch, Morning and Afternoon Tea Breaks. An extended session has been scheduled, following Morning Tea on Wednesday 29 November. Presentation of the Student Awards will be made in the Closing Session on Wednesday 29 November. Summaries of the individual projects are included in this publication.

DETAILED PROGRAM

TUESDAY 28 NOVEMBER 2006

0800-0900	Registration in Foyer		
0900 - 1015	Session 1A	The Road Ahead	
0900 - 0915	Paper 1A1	Opening Remarks	
0915 - 0945	Paper 1A2	<u>R Caplan</u>	Meeting the Energy Challenge
0945 - 1015	Paper 1A3	<u>G Bourne</u>	Climate Change - The Problems and Pointers to Solutions.
1015 - 1045	MORNING TEA		Sponsor: Hydro Tasmania
1045 - 1215	Session 2A	Policies and Regulation	
1045 - 1115	Paper 2A1	<u>D Clarke</u>	Energy White Paper - Implementation and New Developments
1115 - 1145	Paper 2A2	<u>S Edwell</u>	National Energy Regulation - The Way Forward
1145 - 1215	Paper 2A3	<u>F P Sioshansi</u>	International Experience in Restructured Electricity Markets.
1215 - 1330	LUNCH		Sponsor: Victorian Government (DSE and DoI)
1330 - 1510	Session 3A	Transport Fuels	
1330 - 1350	Paper 3A1	<u>G Henson</u>	The Outlook for Fuels - A View to 2030
1350 - 1410	Paper 3A2	<u>G I Eagle</u>	The Monash Energy Project: Unlocking the Energy Value from Victorian Brown Coal
1410 - 1430	Paper 3A3	<u>C J Hamilton</u>	Are Biofuels in Australia at a Crossroad?
1430 - 1450	Paper 3A4	<u>P Hart</u>	Peak Oil: A Change in Direction
1450 - 1510	Paper 3A5	<u>T Beer</u> , D Batten, M Dunlop, T Grant, B Keating, T Miller, D O'Connell, D Trimm	An Integrated Assessment Framework for Alternative Transport Fuels in Australia
1330 - 1510	Session 3B	Directions for Electricity Generation	
1330 - 1350	Paper 3B1	<u>R Gillespie</u>	Zero Carbon Power from Coal Seams
1350 - 1410	Paper 3B2	<u>J Muir</u>	Financial Implications for Coal-fired Power Stations: Meeting Emissions Scenarios and Stakeholder Expectations
1410 - 1430	Paper 3B3	<u>M Nelson</u> , L Malmone, G Schuster	Options for Power Generators to Respond to the Threat of a Cost of Carbon.
1430 - 1450	Paper 3B4	<u>E Ikeda</u> , A Lowe, C Spero, J Stubington	Comparison of Technical Performance of Fossil Fuel-Based Electrical Power Generation Technologies Under Australian Conditions
1450 - 1510	Paper 3B5	<u>T Orton</u>	Meeting the Challenge of Future Skill Shortages in the Energy Sector
1510 - 1540	AFTERNOON TEA		Sponsor: Monash Energy
1540 - 1720	Session 4A	Reducing CO₂ Emissions	
1540 - 1600	Paper 4A1	<u>D Smedley</u>	Australian Government Support for Low Emission Technology
1600 - 1620	Paper 4A2	<u>J Titchen</u>	Pathways to Low Emission Technology Development
1620 - 1640	Paper 4A3	<u>P Ashworth</u> , A Pisarski, K Thambimuthu	Low Emission Technologies: What does the Public Think? What does the Public Know?
1640 - 1700	Paper 4A4	<u>J A Marsiglio</u>	EPA Victoria's Industry Greenhouse Program: Bottom Line Benefits Through Energy Efficiency.
1700 - 1720	Paper 4A5	<u>R W Meynink</u> , CJ Borough	Forestry Sequestration of CO ₂ - An Industry Case Study
1540 - 1720	Session 4B	Future for Coal	
1540 - 1600	Paper 4B1	<u>B Beasley</u>	COAL21 - The Road to Low Emissions
1600 - 1620	Paper 4B2	<u>S Kentish</u> , B Hooper, G Stevens, J Perrera, G Qiao	An Overview of Technologies for Carbon Capture
1620 - 1640	Paper 4B3	<u>L K Walker</u>	The Future Role for Underground Coal Gasification in Australia
1640 - 1700	Paper 4B4	<u>T Takanohashi</u> , T Shishido, I Saito	Caking Property of HyperCoal Blending Samples
1700 - 1720	Paper 4B5	Withdrawn	
1900 - 2300	CONFERENCE DINNER		Sponsor: Shell Australia

DETAILED PROGRAM (Continued)

WEDNESDAY 29 NOVEMBER 2006

0800-0830	Registration In Foyer		
0830 - 1000	Session 5A	The Road Ahead (2)	
0830 - 0900	Paper 5A1	R Batterham, <u>C Goodes</u>	An Energy Supplier's View of the Market
0900 - 0930	Paper 5A2	<u>I Lowe</u>	Energy for Sustainable Futures
0930 - 1000	Paper 5A3	<u>H Schaap</u>	Australia's Electricity Supply in a Carbon Constrained World
1000 - 1115	MORNING TEA AND EXTENDED STUDENT POSTER SESSION		Sponsor: CSIRO
1115 - 1215	Session 6A	Addressing CO₂ Issues	
1115 - 1135	Paper 6A1	<u>J K Wright</u>	The CSIRO Energy Transformed Flagship Program: 3 Years in, how are we Going?
1135 - 1155	Paper 6A2	<u>B N Hooper</u>	Pathway to Large Scale Carbon Capture and Storage
1155 - 1215	Paper 6A3	<u>G Latimer</u> , L Perrin, P Nichols	Greenhouse Gas Emissions Reporting and Disclosure: Pilot Findings from Data Collection and Disclosure
115 - 1215	Session 6B	Nuclear Options	
1115 - 1135	Paper 6B1	H Outhred, <u>I MacGill</u>	What role for Nuclear Power in the Australian Electricity Industry?
1135 - 1155	Paper 6B2	<u>R Storer</u>	Energy from Nuclear Fusion –Latest Developments
1155 - 1215	Paper 6B3	<u>L G Kemeny</u>	Nuclear Power at the Crossroads in Australia.
1155 - 1215	LUNCH		Sponsor: EPA Victoria
1330 - 1450	Session 7A	Market Demand Issues	
1330 - 1350	Paper 7A1	<u>H Murphy</u>	Valuing Demand Response
1350 - 1410	Paper 7A2	<u>A L Marxsen</u>	How can Long Term Infrastructure Planning Work in a Competitive Market?
1410 - 1430	Paper 7A3	<u>G S Whitfield</u> , B C Young	Business Analysis of Victoria's Energy-Related Strategic Intent
1430 - 1450	Paper 7A4	<u>R Cantley-Smith</u>	Demanding More: Engendering Environmentally Beneficial Outcomes in Electricity Markets
1330 - 1450	Session 7B	Renewable Energy Options	
1330 - 1350	Paper 7B1	<u>G White</u>	Wind Energy Market in Australia
1350 - 1410	Paper 7B2	<u>W E Hollier</u>	Ocean Current Energy
1410 - 1430	Paper 7B3	<u>T Teoh</u>	Great Artesian Basin Geothermal Project: Why Wait for Hot Rock?
1430 - 1450	Paper 7B4	<u>K J Weber</u> , A W Blakers, VA Everett, E Franklin	Results of a Cost Model For Silver Cells
1450 - 1520	AFTERNOON TEA		Sponsor: Australian Greenhouse Office
1520 - 1640	Session 8A	Gas and Hydrogen	
1520 - 1540	Paper 8A1	<u>R Lewis</u>	Gas's Role in Australia's Energy Future
1540 - 1600	Paper 8A2	<u>H Duo</u> , M Reed	Co-generation Application in Commercial Buildings – A Case Study
1600 - 1620	Paper 8A3	<u>A L Dicks</u>	Hydrogen Energy Directions for Australia
1620 - 1640	Paper 8A4	<u>S P S Badwal</u> , S Giddey, J W Phait	Do All Energy Crossroads Converge to Hydrogen?
1520 - 1640	Session 8B	Case Studies	
1520 - 1540	Paper 8B1	<u>J Boland</u> , L Magnano, B Ridley	Synthetic Weather Generation for Estimating House Energy Consumption Calculations
1540 - 1600	Paper 8B2	<u>J Leblanc</u> , J Andrews	Modelling and Experimental Study of a Small-Scale Solar-Thermal Multi-Stage Flash Desalination System
1600 - 1620	Paper 8B3	<u>C L Fouvy</u>	Energy Efficiency in Melbourne's Passenger Transport System
1620 - 1640	Paper 8B4	Withdrawn	
1640 - 1715	CLOSING SESSION & STUDENT AWARD PRESENTATIONS		

STUDENT PROJECT/POSTER LIST AND CATEGORIES

Group 1 - Oil, Gas and Carbon Capture		
Poster 1	Seamus Delaney Monash University	Electrically Regenerable Mesoporous Carbons for CO ₂ Capture
Poster 2	Bandar Fadhel Monash University	Adsorption of CO ₂ by Impregnated NH ₂ -Terminated PAMAM Dendrimers
Poster 3	Julianna Franco University of Melbourne	Using Membrane Gas Absorption for Carbon Dioxide Separation
Poster 4	Jeremy Graham Monash University	Inorganic-Organic, Mesoporous Membranes for CO ₂ Separation
Poster 5	Mohammad Haghghi Curtin University of Technology	Direct Methane to Methanol as a Key Solution in GTL Technology
Poster 6	Raza Hasan University of Melbourne	Impact of Impurities on Polyimide Membrane Performance
Poster 7	Tina Hunter Bond University	Regulation of Licencing and JDA's in the Norwegian Petroleum Industry: Lessons for Australia
Poster 8	Mursheda Jahan Monash University	CO ₂ Sorption-Desorption by MgO-Based Mixed Metal Oxides at High Temperature
Poster 9	Nipen Shah Monash University	A New Multistage Gas Phase Auto-Refrigeration Process For LNG
Group 2 - Alternative Energy Pathways		
Poster 10	Hassan Al-Khalidi Victoria University	Technical Considerations and Impact of Converting Overhead Power Lines to Underground Power Cables
Poster 11	Maria Kordjamshidi University of New South Wales	Development of a New Framework for House Rating Scheme (HRS)
Poster 12	Luciana Magnano University of South Australia	Generation of Synthetic Temperature and Demand with Applications
Poster 13	Barbara Ridley University of South Australia	Quality Assured Data for Energy Related Computer Simulation Packages
Poster 14	Akshat Tanksale University of Queensland	Nanostructured Catalyst For H ₂ Production From Sugars
Poster 15	Amanullah Than Oo Victoria University	Experimental Investigation and Development of Information Embedded Power System
Poster 16	Doki Yamaguchi University of Melbourne	Supercritical Water Gasification of Sewage Sludge
Poster 17	Yuchun Zhao RMIT University	Combined Desalination and Power Generation Using Renewable Energy
Group 3 - Coal and Combustion		
Poster 18	Yusuf Badat University of Newcastle	An Investigation into the Behaviour of SiO ₂ -Bearing Mineral Matter of Coking Coals During Coking and in Blast Furnace
Poster 19	Elizabeth Hodge University of New South Wales	The Char-CO ₂ Reaction at High Temperature and Pressure
Poster 20	Renu Rathnam University of Newcastle	Differences in Reactivity of Pulverised Coal in Air (O ₂ /N ₂) and Oxy-Fuel (O ₂ /CO ₂) Environments
Poster 21	Georgina Rees University of Queensland	Timing and Controls of Intrusives in the German Creek Coal Measures, Bowen Basin, QLD
Poster 22	Yansong Shen University of New South Wales	Modelling of Coal Blends Combustion - Achieving More In-Depth Information with Less Cost and Time
Poster 23	George Szego University of Adelaide	MILD Combustion Technology: Integrating Energy Efficiency and Low Emissions
Poster 24	Philip van Eyk University of Adelaide	Release Of Sodium Atoms During Coal Combustion
Poster 25	Susie Wood University of Sydney	Oxidation of Methane in Mine Ventilation Air Using Porous Burners
Poster 26	Kongvui Yip Curtin University of Technology	Collie Coal Pyrolysis and Coal Matter Reaction Studies