



Economics and Industry Standing Committee
Annual Report 2015—2016

Report No. 8
September 2016

Legislative Assembly
Parliament of Western Australia

Committee Members

Chair	Mr I.C. Blayney, MLA Member for Geraldton
Deputy Chair	Hon F.M. Logan, MLA Member for Cockburn
Members	Mr J. Norberger, MLA Member for Joondalup
	Mr P.C. Tinley, AM, MLA Member for Willagee
	Hon T.K. Waldron, MLA Member for Wagin

Committee Staff

Principal Research Officer	Dr Loraine Abernethie, PhD
Acting Principal Research Officer (2 November 2015 to 12 February 2016)	Mr Michael Burton, BEc, BA (Hons)
Research Officer	Mr Michael Burton, BEc, BA (Hons)

Legislative Assembly	Tel: (08) 9222 7494
Parliament House	Fax: (08) 9222 7804
Harvest Terrace	Email: laeisc@parliament.wa.gov.au
PERTH WA 6000	Website: www.parliament.wa.gov.au

**Published by the Legislative Assembly, Parliament of Western Australia, Perth.
September 2016.**

ISBN: 9781925116748

(Series: Western Australia. Parliament. Legislative Assembly. Committees.
Economics and Industry Standing Committee. Report 8)

328.365

Economics and Industry Standing Committee

Annual Report 2015–2016

Report No. 8

Presented by

Mr I.C. Blayney, MLA

Laid on the Table of the Legislative Assembly on 15 September 2016

Chairman's Foreword

As Chairman of the Economics and Industry Standing Committee (the Committee) of the 39th Parliament, I am pleased to present its fourth Annual Report.

During the reporting period the Committee focussed its attention on a major inquiry into how technological and service innovation could be encouraged to expand and diversify the Western Australian economy. This most interesting and informative inquiry revealed just how much research and development is currently happening in Western Australia, how much creative talent there is in this state and, most importantly, the absolute necessity for the Western Australian Government to be much more proactive in helping to diversify the state's economy through innovation.

The Committee's original intent with this inquiry was to pay particular attention to three sectors of the economy, namely agriculture and food; mining and energy; and advanced manufacturing. However, the evidence demonstrated that any initiative for individual sectors would require, first, a healthy and effective innovation ecosystem to be developed and maintained. The Committee's report details the many things the government can do to help fill the gaps in Western Australia's innovation ecosystem. It also demonstrates that, most of all, the Western Australian Government needs to show leadership. While acknowledging the recent appointment of a Minister for Innovation, the report also makes recommendations as to how the government can improve its leadership in this area.

During this inquiry I had the opportunity to visit the Warwick Manufacturing Group and the HMV (High Value Manufacturing) Catapult Centre at Warwick University, and the Royal Agricultural University at Cirencester in the UK. I was also fortunate to be able to spend three days in Israel visiting research facilities of interest. While it would be naive to suggest that programs from other jurisdictions can be simply imported to Western Australia, there is a lot this state can learn from the ways in which they target, foster and support innovation and innovators.

As the final step in its innovation inquiry, the Committee will host an Innovation Forum at Technology Park Bentley in August 2016. The forum will provide a unique opportunity for members to speak to the report and its findings and recommendations, and for participants to make comments and ask questions of members. Through the lens of the innovation inquiry report, this extended community engagement by the Committee will help promote the work of parliamentary committees in general.

I would like to formally thank the members of the Committee—Hon Fran Logan, MLA, Member for Cockburn, Mr Jan Norberger, MLA, Member for Joondalup, Mr Peter

Tinley, AM, MLA, Member for Willagee, and Hon Terry Waldron, MLA, Member for Wagin —for their continued dedication and commitment to the work of the Committee during this parliamentary term.

As this is the last annual report for the Committee in this term of parliament I want to make special mention of the exemplary way in which the members of the Committee have conducted themselves and worked together. While there was robust discussion on issues considered by the Committee, members always approached inquiries from a bi-partisan perspective and reached consensus positions on which our recommendations were made to government.

Finally, I would like to thank the Committee staff, Dr Loraine Abernethie, Principal Research Officer, and Mr Michael Burton, Research Officer, who have supported the Committee throughout this term.



MR I.C. BLAYNEY, MLA
CHAIRMAN

Contents

Chapter 1	Committee activities	1
<hr/>		
	Introduction	1
	Public hearings	1
	Briefings	6
	Investigative travel	13
	Reports tabled	14
	Work in progress	14
Chapter 2	Financial statement	15
Appendices		17
<hr/>		
1	Committee's functions and powers	17

Chapter 1

Committee activities

Introduction

- 1.1 During the course of this reporting period (Table 1.1), the Committee:
- conducted 1 inquiry;
 - held 30 deliberative meetings;
 - has taken evidence from/or was briefed by 178 persons; and
 - undertook investigative travel to Adelaide, Melbourne, Canberra, Sydney, Brisbane, the United Kingdom and Israel.

Table 1.1: Summary of the activities of the Committee, 1 July 2015–30 June 2016

Activity	Number
Briefings	53
Deliberative meetings	30
Formal evidence hearings	30
Witnesses appearing	65
Reports tabled	2
Report findings tabled	32
Report recommendations tabled	18

Public hearings

- 1.2 Pursuant to Assembly Standing Order 264, the Committee has power to send for persons, papers and records. During the period 1 July 2015—30 June 2016, the Committee conducted 30 public hearings, taking evidence from 65 witnesses to assist with its investigations (Table 1.2).

Chapter 1

Table 1.2: Public Hearings of the Committee, 1 July 2015–30 June 2016

Date	Name	Position	Organisation
11 Feb 2016	Prof Peter Klinken	Chief Scientist	Office of Science
11 Feb 2016	Mr Peter Kasprzak	Chief Executive Officer	Innovate Australia
	Dr Adam Osseiran	Director	
	Ms Carol Wallbank	Director	
11 Feb 2016	Mr Alan Bansemer	Chair	Technology and Industry Advisory Council
	Mr Andy Farrant	Member	
	Prof Shaun Collin	Member	
11 Feb 2016	Mr Mark Shelton	Director	StartupWA
	Ms Sheryl Frame	Director	
11 Feb 2016	Mr Zane Prickett	Director	Resource Innovation and Information Technology
	Mr Justin Strharsky	Director	
11 Feb 2016	Mr Peter Clarke		Innovation Consulting Australia
11 Feb 2016	Prof Joseph Luca	Dean, Graduate Research School	Edith Cowan University
	Dr Natasha Ayers	iPREPWA Coordinator	
12 Feb 2016	Dr Darren Gibson	Manager, Collaboration and Innovation	Edith Cowan University
12 Feb 2016	Prof Christopher Hutchison	Director of Research and Development	Murdoch University
	Prof Steve Wilton	Medical Researcher/ Foundation Chair in Molecular Therapies	
	Prof Richard Harper	Leader of Agricultural Sciences	

Date	Name	Position	Organisation
12 Feb 2016	Prof Graeme Wright	Deputy Vice-Chancellor, Research	Curtin University
	Mr Rohan McDougall	Director, IP Commercialisation	
12 Feb 2016	Mr David Harrison	Director, Government and Corporate Communications	University of Western Australia
	Mr Mark Stickells	Director, Energy and Minerals institute	
	Mr Timothy Shanahan	Principal Adviser	
17 Feb 2016	Prof Ross Kingwell	Chief Economist	Australian Export Grain Innovation Centre
17 Feb 2016	Mr Lindsay O'Sullivan	Chief Operating Officer	Chamber of Commerce and Industry of Western Australia (Inc)
	Mr Dale Leggett	Director of Policy	
	Mr Luke Hoare	Principal Policy Adviser	
24 Feb 2016	Dr Mark Sweetingham	Executive Director, Grains Research and Development	Department of Agriculture and Food
24 Feb 2016	Mr Owen Whittle	Assistant Secretary	UnionsWA
	Dr Tim Dymond	Organising and Strategic Research Officer	
16 March 2016	Ms Anne Driscoll	Acting Director General	Department of Commerce
	Mr John O'Hare	Acting Director, Industry and Innovation	
	Mr Michael Dickson	Manager, Strategic Projects; Labour Relations, Industry and Innovation	
	Ms Kristin Berger	A/Executive Director, Labour Relations, Industry and Innovation	

Chapter 1

Date	Name	Position	Organisation
16 March 2016	Dr Claus Otto	Technology Manager	Shell Australia
	Mr John Dagostino	Government Relations Adviser	
16 March 2016	Mr Shaun Gregory	Senior Vice President and Chief Technology Officer	Woodside Energy
	Mr Brian Haggerty	Vic President, Innovation Capability	
23 March 2016	Dr Alan Bye	Vice President, Technology	BHP Billiton Iron Ore Pty Ltd
	Mr Julius Matthys	Vice President, Corporate Affairs Western Australia	
23 March 2016	Mr Andrew Harding	Product Group Executive, Iron Ore	Rio Tinto Iron Ore
	Mr Michael Gollschewski	Managing Director, Pilbara Mines	
	Mr Clayton Walker	Managing Director, Ports, Rail and Core Services	
6 April 2016	Mr Mark Titley	Global Technology Centre Manager	Chevron Australia
	Mr Peter Fairclough	General manager, Policy, Government and Public Affairs	
6 April 2016	Mr Simon Walker	Executive Director Policy Planning and Innovation	Department of Training and Workforce Development
	Mr Gary Fitzgerald	Director State Workforce Planning	
6 April 2016	Mr Mark Webb	Acting Director General	Department of Agriculture and Food
	Dr Bruce Mullan	Director, Sheep Industry Development	
	Ms Catherine Lyons	Acting Director, Strategy and Governance	

Date	Name	Position	Organisation
7 April 2016	Mr Ken Fitzpatrick	Chair	National Energy Resources Australia
	Ms Miranda Taylor	Chief Executive Officer	
12 April 2016	Mr Frank Marra	Chief Executive Officer	LandCorp
	Mr John Clifton	Manager, Strategy and Innovation	
	Ms Kerry Anne Fijac	Manager, Business Development and Marketing	
19 April 2016	Mr David Eaton	Small Business Commissioner	Small Business Development Commission
	Ms Jacqueline Finlayson	Executive Director, Small Business Services	
	Mr Martin Hasselbacher	Director, Policy and Advocacy	
	Mrs Caragh Waller	Manager, Business Information and Programs	
19 April 2016	Dr Alex Wonhas	Executive Director, Energy, Environment and Resources	CSIRO
19 April 2016	Mr Emmanuel Hondros	Manager, People Strategies	Chamber of Minerals and Energy of Western Australia
	Mr Stedman Ellis	Chief Operating Officer, Western Region	APPEA
	Mr Adam Welch	Senior Policy Advisor	
18 May 2016	Prof Andris Stelbovics	Pro Vice-Chancellor	Curtin University
	Prof Brian Evans	Director Oil & Gas Initiatives, Faculty of Science & Engineering	

Chapter 1

Briefings

- 1.5 In addition to gathering evidence during the formal hearings, the Committee received a number of informal briefings. The briefings were used to gain information in relation to the Committee's inquiries as well as other matters (Table 1.3).

Table 1.3: Briefings provided to the Committee, 1 July 2015–30 June 2016

Date	Name	Position	Organisation
29 Sept 2015	Mr Neil Stringfellow	Executive Director	Pawsey Supercomputing Centre
29 Sept 2015	Dr Steve Harvey	Science Director & Deputy Director	Mineral Resources Flagship CSIRO
29 Sept 2015	Mr Kym Bills	CEO	WA:ERA
29 Sept 2015	Prof Graeme Wright	Deputy Vice Chancellor	Curtin University
	Prof Craig Buckley	Deputy Director	Fuels and Energy Technology Institute, Curtin University
	Dr Richard Gunawan	Research Fellow	
	Mr Tim Walton	Director, Energy Research Initiatives	Office of Research and Development, Curtin University
8 Oct 2015	Prof Hugh Durrant-Whyte	Chair	New South Wales Innovation and Productivity Council
15 Oct 2015	Dr Janakan Krishnarajah	CEO/Medical Director	Linear Clinical Research Limited
	Mr John Fitzgerald	Chief Operating Officer	Harry Perkins Institute of Medical Research
28 Oct 2015	Mr Stuart Whiley	Interim CEO	ASC
	Mr Mark Lamarre	Interim CEO Shipbuilding	
	Mr Paul Gay	General Manager Collins Class Submarines	
	Mr Jim Burnside	Future Submarine Manager	

Date	Name	Position	Organisation
28 Oct 2015	Dr Don Russell	Chief Executive	South Australian Department of State Development
	Mr Paul Goiak	Director Industry Participation, Industry & Innovation	
	Mr Barry Goldstein	Executive Director, Energy Resources Division	
	Mr Vince Duffy	Executive Director, Energy Markets and Programs Division	
	Dr Andrew Dunbar	Director, Office of Science, Technology and Research	
	Mr Rob Esvelt-Allen	Principal Economist	
	Mr Paul Heithersay	Deputy Chief Executive	
	Mr Adam Reid	Deputy Executive Director, Industry & Innovation	
	Dr Leanna Read	Chief Scientist of South Australia	
29 Oct 2015	Mr Stuart Elliott	Managing Director	Planet Innovation
	Mr Roger Langsdon	Marketing Manager	
29 Oct 2015	Dr Anita Hill	Executive Director, Future Industries	Manufacturing Flagship, CSIRO
	Mr Ben Aldham	Executive Officer	
	Mr Jonathan Law	Flagship Director, Mineral Resources	
	Dr Martin Keogh		
	Dr Keith McLean	Manufacturing Flagship Director	
	Ms Alexandra Kingsbury	Research Manager	
	Dr Kristina Konstas	Research Scientist	
	Dr Anastasios Polyzos	Senior Research Scientist	

Chapter 1

Date	Name	Position	Organisation
29 Oct 2015	Dr Leonie Walsh	Lead Scientist	Victorian Office of the Lead Scientist
29 Oct 2015	Mr Justin Hanney	Lead Deputy Secretary	Victorian Department of Economic Development, Jobs, Transport and Resources
	Mr Tim Ada	Executive Director, Sector Development	
	Dr Michael Green	Executive Director, Future Industries Project	
30 Oct 2015	Mrs Jane Urquhart	Acting Head of Division, Science & Commercialisation Policy	Commonwealth Department of Industry, Innovation and Science
	Mr Peter Chesworth	Head of Division, Sectoral Growth Policy	
	Mr Abrie Swanepoel	Senior Economist, Industry Economics & Analysis Division	
30 Oct 2015	Dr Lachlan Blackhall	Co-founder and Chief Technology Officer	Reposit Power
	Mr Dean Spaccavento	Co-founder	
30 Oct 2015	Dr Patrick Hone	Executive Director	Fisheries Research and Development Corporation
	Mr John Wilson	Business Development Manager	

Date	Name	Position	Organisation
2 Nov 2015	Mr Simon Smith	Secretary	New South Wales Department of Industry
	Mr Scott Hansen	Director General, Department of Primary Industries	
	Mr Jonathan Gregory	Executive Director, Department of Primary Industries Business Operations	
	Mr Michael Bullen	Deputy Director General, Department of Primary Industries Agriculture	
	Ms Kylie Hargreaves	Deputy Secretary, Resources and Energy	
	Ms Clare Sykes	Senior Project Officer, METS, Resources and Energy	
2 Nov 2015	Mr Paul Shetler	Chief Executive Officer	Commonwealth Digital Transformation Office
2 Nov 2015	Mr Yasser El-Ansary	Chief Executive	Australian Private Equity & Venture Capital Association
2 Nov 2015	Ms Sri Wahidah Masturi	Business Development Manager	The Old Clare Hotel
3 Nov 2015	Prof Roy Green	Dean, UTS Business School	University of Technology Sydney
3 Nov 2015	Mr Richard Kell, AM	Chair	The Warren Centre for Advanced Engineering
	Mr Ashley Brinson	Executive Director	
	Ms Alexandra Harrington	Chief Operating Officer	
3 Nov 2015	Prof Mary O'Kane	NSW Chief Scientist & Engineer	Office of the New South Wales Chief Scientist & Engineer

Chapter 1

Date	Name	Position	Organisation
4 Nov 2015	Prof Peter Gray	Director	Australian Institute for Bioengineering and Nanotechnology, The University of Queensland
	Mr Bob McCarthy AM	Adjunct Professor	
4 Nov 2015	Mr Andrew Sanderson	General Manager	TAE
	Mr Greg Mason	Manager Innovation & Strategic Projects	
	Mr Greg Twiner	Business Development Manager & Contracting Manager	
4 Nov 2015	Dr Sue Hooper	Director Health and Medical Research	Health and Medical Research Unit, Queensland Health
5 Nov 2015	Mr Paul Russell	Acting Chief Strategic Policy and Innovation Officer	Queensland Department of Science, Information Technology and Innovation
	Mr Leslie Hodgson	Director, Digital Economy	
	Mr Mal Lane	Manager, Industry Development	
	Mr Alan Murgatroyd	Principal Project Officer, Innovation Policy and Programs	
	Dr Christine Williams	Assistant Director-General, Science Division	
	Mr Andrew Dungan	Director, Industry Development	
	Ms Kylie Hickling	Director, Commercialisation	
	Ms Clare Hoey	Manager, Innovation Policy and Programs	
5 Nov 2015	Dr Geoff Garrett AO	Queensland Chief Scientist	Office of the Chief Scientist, QLD

Date	Name	Position	Organisation
5 Nov 2015	Dr Mark Jacobs	Executive Director Science Delivery, EcoSciences Precinct	Department of Science, Information Technology and Innovation, QLD
	Ms Sonya Winnington-Martin	Science Infrastructure and Operations	
	Mr David Wainwright	Director, Air Quality Sciences, Science Division	
	Ms Christina Jones	Remote Sensing Centre	
	Ms Lauren O'Brien	Soil and Land Resources Division	
18 Nov 2015	Mr Matt Taylor MLA	Member for Bateman	Legislative Assembly Parliament of Western Australia
27 Nov 2015	Mr Doron Ben-Meir	Executive Director of Research, Innovation & Commercialisation	University of Melbourne
12 April 2016	Dr Matt Lamont	Managing Director	DownUnder GeoSolutions
18 April 2016	Mr Brodie McCulloch	Managing Director	Spacecubed
18 April 2016	Mr John Fitzgerald	Chief Operating Officer	Harry Perkins Institute of Medical Research
18 April 2016	Mr Julius Matthys	Vice-President, Corporate Affairs Western Australia	BHP Billiton Iron Ore Pty Ltd
	Ms Cecelia Haddad	Manager Supply Chain Scheduling	
	Mr Gary Warden	Vice President Technology	
	Mr Rob Carruthers	Manager Government Relations	
	Ms Natalee Connor	Government Relations Specialist	

Chapter 1

Date	Name	Position	Organisation
18 April 2016	Mr Michael Gollshewski	Managing Director, Pilbara Mines	Rio Tinto Iron Ore
	Mr John Lehfeldt	Manager, Production Systems	
28 April 2016	Mr Archie MacPherson	Chief Executive	WMG HVM Catapult, University of Warwick, United Kingdom
	Dr Mark Swift	International Manufacturing Centre	
29 April 2016	Prof David W Hopkins	Professor of Soil Science; Dean of the School of Agriculture, Food & Environment	Royal Agricultural University, United Kingdom
2 May 2016	Prof Shmuel Wolf	Dean; Professor of Plant Physiology, Faculty of Agriculture, Food and Environment	The Hebrew University of Jerusalem
	Prof Benny Chefetz	Vice Dean for Research	
	Prof Ram Reifen	Director, Research Centre for Nutrigenomics and Functional Foods	
	Dr Zvi Peleg	Faculty member, Institute of Plant Sciences and Genetics in Agriculture	
	Mr Yaacov Michlin	President & CEO, Yisum	
2 May 2016	Mr Avi Luvton	Executive Director, Business Development —Asia Pacific	MATIMOP—Israeli Industry Center for R&D
	Ms Hadas Kroitoru	Program Manager	
3 May 2016	Ms Daphna Nissenbaum	CEO & Co-Founder	TIPA Sustainable Packaging, Israel
3 May 2016	Mr Gideon Soesman	Co-Founder & Managing Partner	Greensoil Investments, Israel

Date	Name	Position	Organisation
3 May 2016	Mr Amir Veresh	CP Investor Relations & Admin	Massivit 3D, Israel
3 May 2016	Mr Roni Zehavi	Chief Executive Officer	CyberSpark, Israel
4 May 2016	Dr Anat Bonshtien	Technology & Regulation Manager, Fuel Choices Initiative	Office of the Prime Minister, Israel
4 May 2016	Dr Yochi Hagay	Chief Executive Officer	BioHarvest, Israel
4 May 2016	Mr Hanan Bazak	Director	Ministry of Agriculture & Rural Development, Israel
	Ms Anat Lowengart-Aycicegi	Division Head; Agro-Ecology and Field Crops Division	
4 May 2016	Dr Arie Regev	Director, Foreign Relations Department Deputy Director, Foreign Trade Center	Ministry of Agriculture & Rural Development
	Mr Jacob Mualem Marom	Director; 'Kidum' R&D Application; Agricultural Research Organization	Ministry of Agriculture
	Mr Gil Shalev	Chief Executive Officer	EQUInom, Israel
4 May 2016	Mr Paul Israel	Executive Director	Israel-Australia, New Zealand & Oceania Chamber of Commerce
13 May 2016	Hon Dr Mal Bryce AO	Former Deputy Premier of Western Australia	

Investigative travel

During this year, the Committee undertook investigative travel to a number of Australian capital cities. This travel to Adelaide, Canberra, Melbourne, Sydney and Brisbane was in support of its major inquiry into how technological and service innovation could be supported to help grow and diversity the state's economy. To further assist, the Chairman also travelled to the United Kingdom and Israel. The Chairman's travel was not funded by the Legislative Assembly.

Chapter 1

The purpose of the Committee's travel was to help members better understand the research and development work being undertaken in those jurisdictions as well as the commercialisation activities and the different approaches taken by research organisations, industry and governments in fostering innovation.

1.78 The people the Committee spoke with are listed above in Tables 1.2 and 1.3.

Reports tabled

1.79 The Committee tabled two reports during the period 1 July 2015–30 June 2016, as follows:

- *Annual Report 2014–2015* (24 September 2015)
- *Growing WA through Innovation. The Western Australian Government's role in fostering innovation to expand and diversify the economy* (30 June 2016)

Work in progress

1.80 The Committee's view is that the *Growing WA through Innovation* report not only examines a current issue of great importance to Western Australia, it also exemplifies what can be achieved by a bi-partisan committee working together toward a common goal. In light of this, the Committee is currently organising a media and business forum to raise awareness of the report, to provide inquiry stakeholders with an opportunity to comment on the report and its recommendations, and to promote the work of parliamentary committees in general through the lens of this inquiry. The forum will be held at Technology Park Bentley on 17 August 2016, which is during Science Week. The Committee believes that this provides an excellent opportunity for extended community engagement by parliament in relation to the work of its committees.

1.81 Having tabled a major report on 30 June 2016, the Committee is currently considering its work program for the coming year.

Chapter 2

Financial statement

- 2.1 The Committee does not have its own formal budget and is funded out of the budget of the Legislative Assembly. Approval for major expenditures is required on a case-by-case basis and is entirely at the discretion of the Speaker.
- 2.2 The Committee's expenditure for the financial year 1 July 2015—30 June 2016 (in accordance with Standing Order 276) is detailed below.

Table 2.1: Expenditure items of the Committee 1 July 2015–30 June 2016

Expenditure Item	\$
Advertising	5,900
Seminar fees	300
Travel	48,900
Staff amenities	1,600
Printing	2,200
TOTAL	58,900

Notes:

- *All figures rounded off to the nearest \$100.*
- *Salaries of committee staff are not included.*
- *Costs of shared administrative expenses, including lease costs for committee accommodation are not included.*



MR I.C. BLAYNEY, MLA
CHAIRMAN

Appendix One

Committee's functions and powers

The functions of the Committee are to review and report to the Assembly on: -

- a) the outcomes and administration of the departments within the Committee's portfolio responsibilities;
- b) annual reports of government departments laid on the Table of the House;
- c) the adequacy of legislation and regulations within its jurisdiction; and
- d) any matters referred to it by the Assembly including a bill, motion, petition, vote or expenditure, other financial matter, report or paper.

At the commencement of each Parliament and as often thereafter as the Speaker considers necessary, the Speaker will determine and table a schedule showing the portfolio responsibilities for each committee. Annual reports of government departments and authorities tabled in the Assembly will stand referred to the relevant committee for any inquiry the committee may make.

Whenever a committee receives or determines for itself fresh or amended terms of reference, the committee will forward them to each standing and select committee of the Assembly and Joint Committee of the Assembly and Council. The Speaker will announce them to the Assembly at the next opportunity and arrange for them to be placed on the notice boards of the Assembly.