



Our Ref: D15/63555

7 September 2015

Environment and Planning Committee
Parliamentary Inquiry into Unconventional Gas in Victoria
Parliament House, Spring Street
EAST MELBOURNE VIC 3002

To whom it may concern

Information for the Parliamentary Inquiry into Onshore Unconventional Gas in Victoria

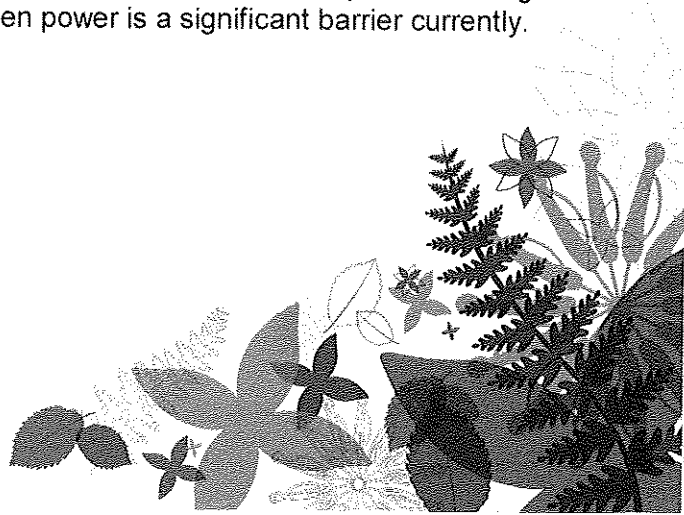
I am writing to provide additional information to the Parliamentary Inquiry into Onshore Unconventional Gas in Victoria. As you are aware Council made a formal submission to the inquiry and also presented at the public session at Torquay on 12 August 2015. During the session Council’s representatives were asked if they could provide extra information on the renewable energy projects undertaken in the Colac Otway region that Council has been involved with along with more information on the agriculture and tourism sectors in the region.

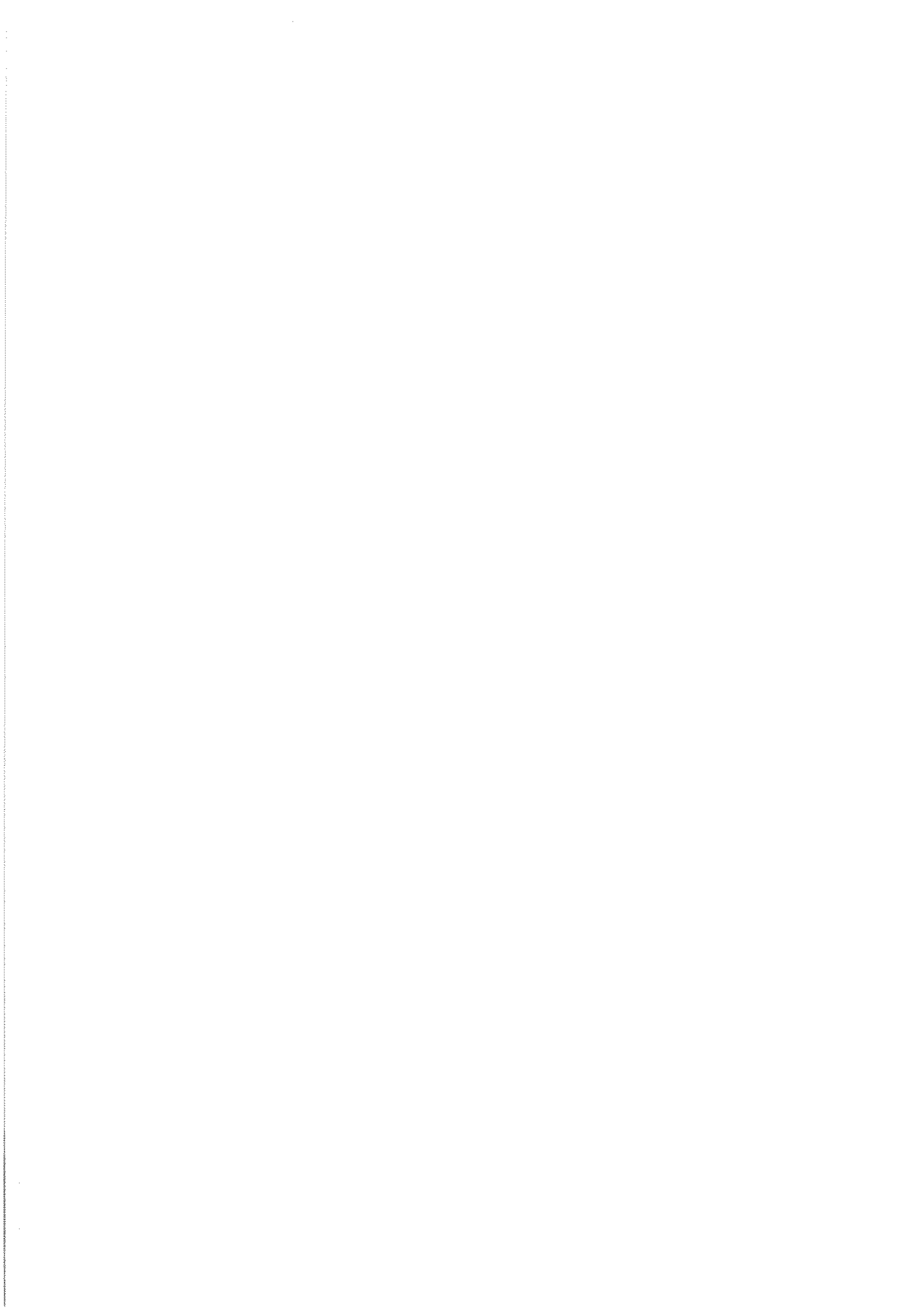
In 2010 Council set a target to be Carbon Neutral by 2020. While the target only relates to the emissions generated through Council’s operations it demonstrates to the community a strong commitment to embrace renewable energy production and energy saving measures in general. The table below is a summary of the solar systems Council has installed. In addition Council has installed nine Solar Hot Water Systems on various facilities, three of which were large commercial scale systems.

Table 1: Solar PV Systems installed by Colac Otway Shire

Council Facility	System size	Year of Installation
Colac Visitor Information Centre	1.5kW solar PV system	2008
Apollo Bay Visitor Information Centre	2.8kW solar PV system	2010
Development & Community Services Office	6kW solar PV system	2011
Colac Saleyards	5kW solar PV system	2014
Rae Street Offices/COPACC	100kW solar PV system	2015

Council purchases green power for environmental events and has considered the purchase of green power for all its small facilities, however the high cost of green power is a significant barrier currently.





Colac Otway Shire has a long-standing commitment to energy efficiency. Energy efficiency projects undertaken by Council include de-lamping, lighting upgrades (T5 and LED), improved insulation, double glazing, HVAC control and demand management works, lighting controls, occupancy sensors and installation of energy efficient appliances (computers, monitors, photocopiers, printers, fridges, etc.).

The most significant energy efficiency project undertaken by Colac Otway Shire Council is the retrofit of 1370 Mercury Vapour 80W streetlights to LED luminaires in residential streets across the shire as part of the Great South Coast Street Smart Lighting Project. This project was a collaborative project of 6 South West Victorian councils upgrading 7000+ streetlights from Colac to the South Australian border. This project resulted in savings of 70% in terms of operating costs of street lights and associated CO₂ emissions.

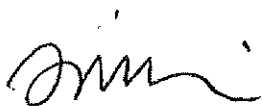
In the broader community there have been a number of initiatives undertaken for example in 2011 the community based Colac Otway Sustainability Group Pty Ltd ran a very successful solar PV bulk buy project for Colac Otway residents which saw the installation of 300kW solar generation capacity installed on residential buildings within the shire. Currently the proposed Mount Gellibrand Wind Farm is the most significant renewable energy generation project planned within Colac Otway and will see the installation of 44 wind turbines within our shire. Council continues to work with the company where required to help the project goes ahead.

As stated in Council's original submission it is estimated that agricultural industries bring \$167,971,000 to the Shire annually and employs 12% of residents while tourism activities are estimated to bring approximately \$133,500,000 to the Shire annually and employ 8.5% of residents. I have attached documentation to this letter that provides more detail on these sectors. Due to the high value of agriculture and tourism in the region the community is understandably very concerned about the potential risk posed by an Onshore Unconventional Gas industry on these existing industries that rely heavily on our precious natural environment to thrive.

Please find attached data confirming the role of agriculture and tourism in the Colac Otway Shire economy.

If you have any questions about this information or would like anything further please feel free to contact Stewart Anderson, Manager Environment and Community Safety on 5232 9414.

Yours faithfully,



SUE WILKINSON
Chief Executive Officer



Output Report with Tourism Sector

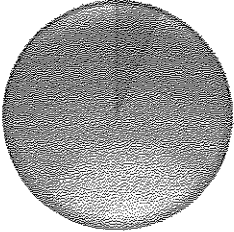
This report shows the gross revenue generated by businesses and organisations in Colac Otway (S).

The estimated output generated by tourism for each industry sector has been deducted and consolidated into a separate tourism sector.

The total output estimate for Colac Otway (S) is \$2,171.655 million.

The Tourism sector contributes \$133.542 million (6.1 %) of total output.

Output (with separate Tourism Sector) (\$M) - Colac Otway (S) (Aug 2015)



- Tourism \$133.542
- Other \$2,038.113

REEMPLAN

Employment Report with Tourism Sector

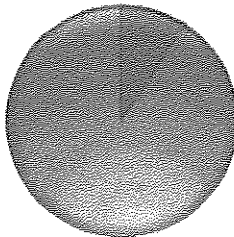
This report shows the number of employees whose place of work is located within Colac Otway (S).

The estimated employment generated by tourism for each industry sector has been deducted and consolidated into a separate tourism sector.

The total employment estimate for Colac Otway (S) is 8,279 jobs

The Tourism sector contributes 758 jobs (9.2 %) to total employment.

Employment (with separate Tourism Sector) (Jobs) - Colac Otway (S) (Aug 2015)



- Tourism 758
- Other 7,521

REEMPLAN

Wages and Salaries Report with Tourism Sector

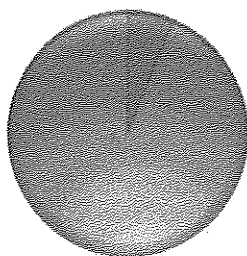
This report shows the wages and salaries paid to employees who work in Colac Otway (S).

The estimated wages and salaries generated by tourism for each industry sector has been deducted and consolidated into a separate tourism sector.

The total wages and salaries estimate for Colac Otway (S) is \$512.962 million.

The Tourism sector contributes \$31.633 million (6.2 %) of total wages and salaries.

**Wages and Salaries (with
separate Tourism Sector) (\$M)
- Colac Otway (S) (Aug 2015)**



● Tourism \$31.633
● Other \$481.329

REEMPLAN

Value Added Report with Tourism Sector

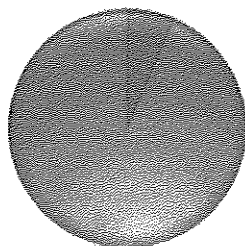
This report shows the value that is added by industry sectors in Colac Otway (S) to intermediate inputs.

The estimated value-added generated by tourism for each industry sector has been deducted and consolidated into a separate tourism sector.

The total value-added estimate for Colac Otway (S) is \$1,001.101 million.

The Tourism sector contributes \$63.317 million (6.3 %) of total value-added.

**Value-Added (with separate
Tourism Sector) (\$M) - Colac
Otway (S) (Aug 2015)**



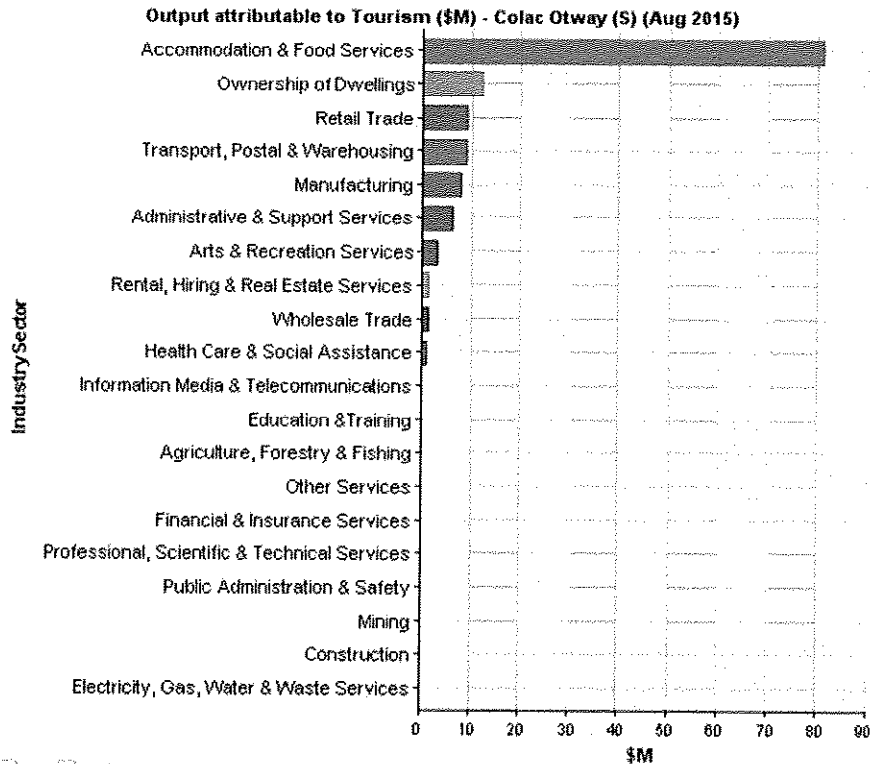
● Tourism \$63.317
● Other \$937.783

REEMPLAN

Output attributable to Tourism

This report shows the gross revenue generated by businesses and organisations in Colac Otway (S) to service demand generated by tourists to the area.

The total value of tourism related output for Colac Otway (S) is estimated at \$133.542 million.



All industry sectors in Colac Otway (S) ranked by Tourism related Output

Colac Otway (S) (Aug 2015)		
Industry Sector	\$M	%
Accommodation & Food Services	\$80.810	60.5 %
Ownership of Dwellings	\$12.106	9.1 %
Retail Trade	\$9.043	6.8 %
Transport, Postal & Warehousing	\$8.964	6.7 %
Manufacturing	\$7.799	5.8 %
Administrative & Support Services	\$6.028	4.5 %
Arts & Recreation Services	\$3.110	2.3 %
Rental, Hiring & Real Estate Services	\$1.354	1.0 %
Wholesale Trade	\$1.339	1.0 %
Health Care & Social Assistance	\$0.984	0.7 %
Information Media & Telecommunications	\$0.529	0.4 %
Education & Training	\$0.515	0.4 %
Agriculture, Forestry & Fishing	\$0.492	0.4 %
Other Services	\$0.434	0.3 %
Financial & Insurance Services	\$0.035	0.0 %
Professional, Scientific & Technical Services	\$0.000	0.0 %
Public Administration & Safety	\$0.000	0.0 %
Mining	\$0.000	0.0 %
Construction	\$0.000	0.0 %
Electricity, Gas, Water & Waste Services	\$0.000	0.0 %
Total	\$133.542	

Calculation Method

The above estimates of the value of tourism by industry sector for Colac Otway (S) are based on Australian Bureau of Statistics estimates of National Tourism Product Output by industry, and the degree to which tourism industry related jobs are located in Colac Otway (S). The greater the number of tourism related jobs in an area, the greater the estimated value of tourism in the local economy.

Industry Sector	% of Tourism Activity
Accommodation & Food Services	78.24 %
Arts & Recreation Services	19.55 %
Transport, Postal & Warehousing	13.48 %
Retail Trade	9.11 %
Ownership of Dwellings	7.02 %
Administrative & Support Services	4.28 %
Rental, Hiring & Real Estate Services	4.09 %
Wholesale Trade	1.79 %
Information Media & Telecommunications	1.48 %
Manufacturing	1.48 %
Other Services	1.36 %
Education & Training	0.92 %
Health Care & Social Assistance	0.83 %
Agriculture, Forestry & Fishing	0.23 %
Financial & Insurance Services	0.05 %

Source: 2013-14, Australian Bureau of Statistics (ABS), Tourism Satellite Account

The percentages above are based on the specific structure of the Colac Otway (S) economy. The greater the number of visitors to the area, the greater the employment in tourism related industry sectors, and therefore the higher the estimated value of tourism in Colac Otway (S).



Tourism

Tourism

Comprising the activities of persons travelling to and staying in places outside their usual environment for not more than one consecutive year for leisure, business and other purposes not related to the exercise of an activity remunerated from within the place visited.

Where is the tourism sector?

The answer is that tourism is an amalgam of activities across various industry sectors such as retail, accommodation, cafes & restaurants, cultural & recreational services.

In order to capture the value of tourism surveying may be conducted to gather direct expenditure data from people attending specific festivals or events. Once this survey data is collated and coded it can be applied to REPLAN to model the direct and flow-on economic implications for the region from hosting such activities.

Where representative samples of data are captured in relation to specific events the combination of market research and economic analysis is a powerful basis upon which to make strategic decisions about growing tourism activities in the region. A shortcoming of such approaches is that they can be expensive in terms of time and resources. In some circumstances secondary data may represent a cost effective alternative while still providing the insights required. In the above table and graphs secondary datasets have been applied to estimate the contribution of tourists to the area's economy.

The Australian National Accounts provides estimates of output by industry sector, and the Tourism Satellite Account (TSA), also from the Australian Bureau of Statistics, provides estimates of the value of industry sectors' contributions to total tourism product output. Combined, it possible to estimate the proportion of output for each industry sector that is generated to service demand created by tourists at the national level.

In the TSA, tourism is defined as:

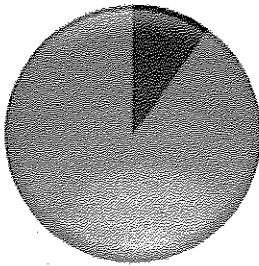
"Comprising the activities of persons travelling to and staying in places outside their usual environment for not more than one consecutive year for leisure, business and other purposes not related to the exercise of an activity remunerated from within the place visited."

Under this definition of tourism, the expenditure of domestic, international, business and government travellers are included.

In the Colac Otway (S) economy it is estimated that the following percentages relate to industry sectors' output that is generated to service demand from tourists.

Industry Report for Agriculture, Forestry & Fishing in Colac Otway (S) (Aug 2015)

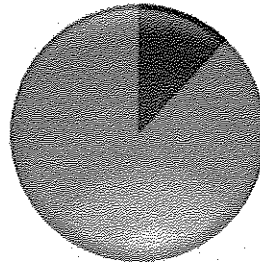
Output (\$M) - Output



● Agriculture, Forestry & Fishing \$211.686
● Other \$1,959.969

REMPIAN

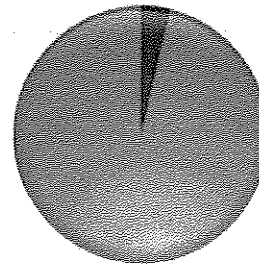
Employment (Jobs) - Employment



● Agriculture, Forestry & Fishing 995
● Other 7,284

REMPIAN

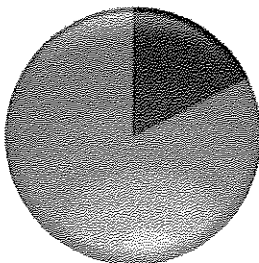
Wages and Salaries (\$M) - Wages and Salaries



● Agriculture, Forestry & Fishing \$18.162
● Other \$494.800

REMPIAN

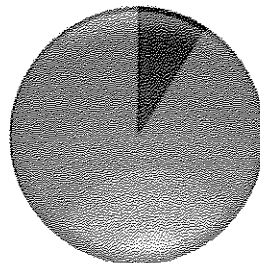
Local Sales (\$M) - Local Sales



● Agriculture, Forestry & Fishing \$105.234
● Other \$498.913

REMPIAN

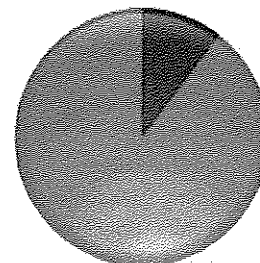
Local Expenditure (\$M) - Local Expenditure



● Agriculture, Forestry & Fishing \$54.283
● Other \$549.864

REMPIAN

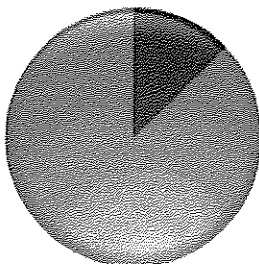
Regional Imports (\$M) - Regional Imports



● Agriculture, Forestry & Fishing \$58.576
● Other \$507.831

REMPIAN

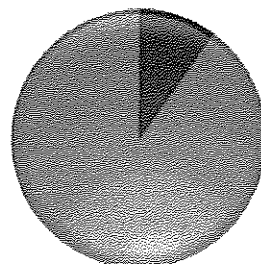
Regional Exports (\$M) - Regional Exports



● Agriculture, Forestry & Fishing \$94.953
● Other \$657.151

REMPIAN

Value-Added (\$M) - Value-Added



● Agriculture, Forestry & Fishing \$98.826
● Other \$902.275

REMPIAN

Total annual output (\$M):	\$211.686
% of total regional output:	9.7 %
Number of people employed by this sector in the region:	995
% of total regional employment:	12.0 %
Annual wages and salaries earned by people employed by this sector in the region (\$M):	\$18.162
% of total wages and salaries earned in the region:	3.5 %
Value of annual regional exports by the industry sector (\$M):	\$94.953
% of total regional exports:	12.6 %
Value of annual regional imports by the industry sector (\$M):	\$58.576

% of total regional imports:	10.3 %
Value of sector's contribution to Gross Regional Product (\$M):	\$98.826
% of total Gross Regional Product:	9.9 %
Total value of local expenditure on intermediate goods and services (\$M):	\$54.283
% of total local expenditure:	9.0 %
Total value of sales to industry sectors in the region (\$M):	\$105.234
% of total sales to industry sectors:	17.4 %

Agriculture, Forestry & Fishing

Agriculture, Forestry & Fishing

The Agriculture, Forestry and Fishing Division includes units mainly engaged in growing crops, raising animals, growing and harvesting timber, and harvesting fish and other animals from farms or their natural habitats. The division makes a distinction between two basic activities: production and support services to production. Included as production activities are horticulture, livestock production, aquaculture, forestry and logging, and fishing, hunting and trapping.

The term 'agriculture' is used broadly to refer to both the growing and cultivation of horticultural and other crops (excluding forestry), and the controlled breeding, raising or farming of animals (excluding aquaculture).

Aquacultural activities include the controlled breeding, raising or farming of fish, molluscs and crustaceans.

Forestry and logging activities include growing, maintaining and harvesting forests, as well as gathering forest products.

Fishing, hunting and trapping includes gathering or catching marine life such as fish or shellfish, or other animals, from their uncontrolled natural environments in water or on land.

Also included in the division are units engaged in providing support services to the units engaged in production activities.

Includes the following sub-sectors:

Sheep, Grains, Beef & Dairy Cattle

- 0141 Sheep Farming (Specialised)
- 0142 Beef Cattle Farming (Specialised)
- 0143 Beef Cattle Feedlots (Specialised)
- 0144 Sheep-Beef Cattle Farming
- 0145 Grain-Sheep or Grain-Beef Cattle Farming
- 0146 Rice Growing
- 0149 Other Grain Growing
- 0160 Dairy Cattle Farming

Poultry & Other Livestock

- 0171 Poultry Farming (Meat)
- 0172 Poultry Farming (Eggs)
- 0180 Deer Farming
- 0191 Horse Farming
- 0192 Pig Farming
- 0193 Beekeeping
- 0199 Other Livestock Farming n.e.c.

Other Agriculture

- 0111 Nursery Production (Under Cover)
- 0112 Nursery Production (Outdoors)
- 0113 Turf Growing
- 0114 Floriculture Production (Under Cover)
- 0115 Floriculture Production (Outdoors)
- 0121 Mushroom Growing
- 0122 Vegetable Growing (Under Cover)
- 0123 Vegetable Growing (Outdoors)
- 0131 Grape Growing
- 0132 Kiwifruit Growing
- 0133 Berry Fruit Growing
- 0134 Apple and Pear Growing
- 0135 Stone Fruit Growing
- 0136 Citrus Fruit Growing
- 0137 Olive Growing
- 0139 Other Fruit and Tree Nut Growing
- 0151 Sugar Cane Growing
- 0152 Cotton Growing
- 0159 Other Crop Growing n.e.c.

Aquaculture

- 0201 Offshore Longline and Rack Aquaculture
- 0202 Offshore Caged Aquaculture
- 0203 Onshore Aquaculture

Forestry & Logging

- 0301 Forestry
- 0302 Logging

Fishing, Hunting & Trapping

- 0411 Rock Lobster and Crab Potting
- 0412 Prawn Fishing
- 0413 Line Fishing
- 0414 Fish Trawling, Seining and Netting
- 0419 Other Fishing
- 0420 Hunting and Trapping

Agriculture, Forestry & Fishing Support Services

- 0510 Forestry Support Services
- 0521 Cotton Ginning
- 0522 Shearing Services
- 0529 Other Agriculture and Fishing Support Services

