

A contribution to
An analysis of medium to long-term impacts on the Australian Oceans

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1.1 Maritime Transport

The projected trends in maritime transport (including domestic and international commercial shipping, and cruise shipping) reported by the Bureau of Infrastructure, Transport and Regional Economics (BITRE) are expected to increase by 2030 (Figure 1; (BITRE 2014) . For example, the bulk freight shipping will increase by 50%, and the national container throughput is projected to double by 2030(BITRE 2014). Similar trends are projected for containerised international exports (including meat products, cotton, paper, timber, wood pulp, cereals) where it is expected to double by 2033 thanks to a strong demand by China and South East Asia (Figure 1;(BITRE 2014)). Economic models developed by BITRE also forecast that the export and import demand for containerised and non-containerised trades (i.e. coal, iron ore and LNG products) are driven mainly by industrial and mining activities, future population, income and exchange rates(BITRE 2015).

Cruise shipping is also likely to increase by 2030 following trends in sea passengers visiting Australia (mainly by the USA;(BITRE 2019). The trend in number of cruise vessels operating in Australia has doubled from 2010 to 2016 and it is expected to continue expanding in the future(BITRE 2019). Based on the projected positive economic outlook for Australia, and continuing economic recovery following the global financial crisis, the numbers of temporary arrivals and departures is projected to increase by 1.8% pa from 41 000 in 2012-13 to 59 100 by 2032-33 (Figure 2;(BITRE 2014)) (BITRE 2014)(BITRE 2014)(BITRE 2014)(BITRE 2014). The predicted growth in cruise shipping in Australia is driven by per capita income, but also influenced by factors such as major sport events, disease outbreaks, and international terrorist threats(BITRE 2010).

Drivers

- Global and Australian GDPs.
- Demand for containerised and non-containerised trades
- Exchange rates and Australia per capita income

Restrains

- Disease outbreaks, international terrorist threats
- Government regulations and compliances

Interaction with other sectors

- Global trade, extractive land and marine products (i.e. oil, gas, minerals), future population, tourism.

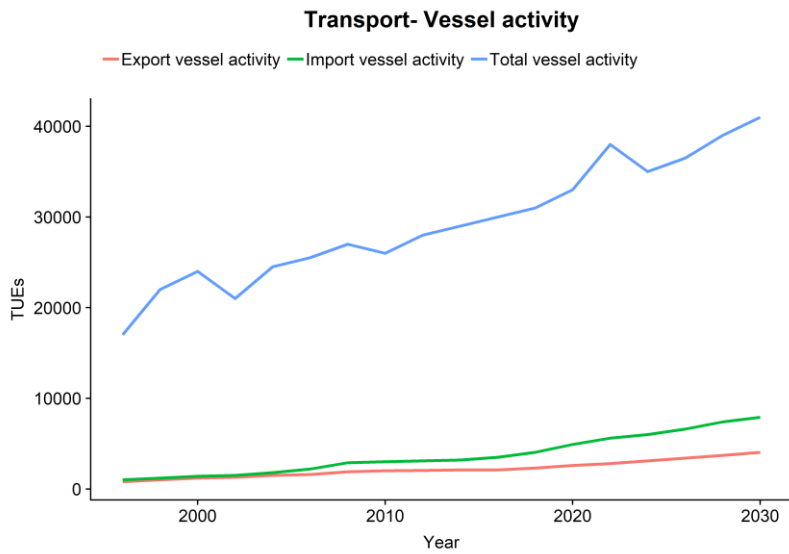


Figure 1. Projected vessel activity to Australian ports, including export and import vessel activities.

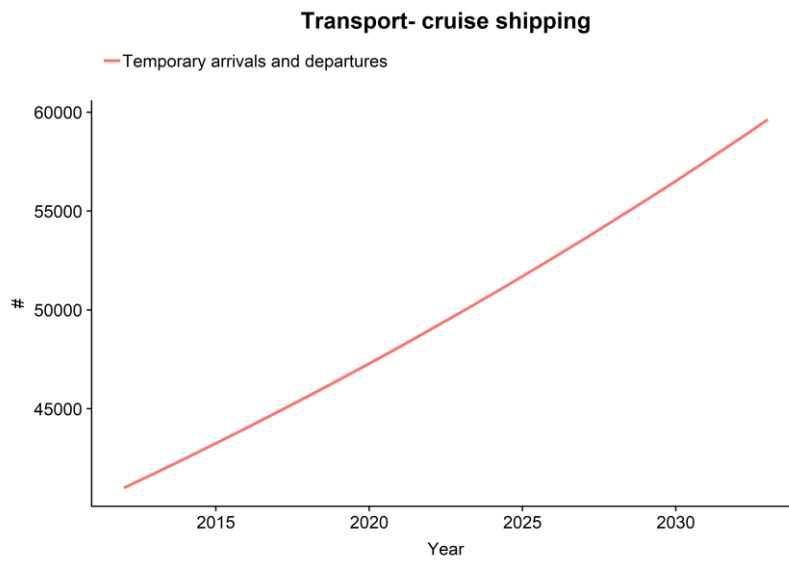
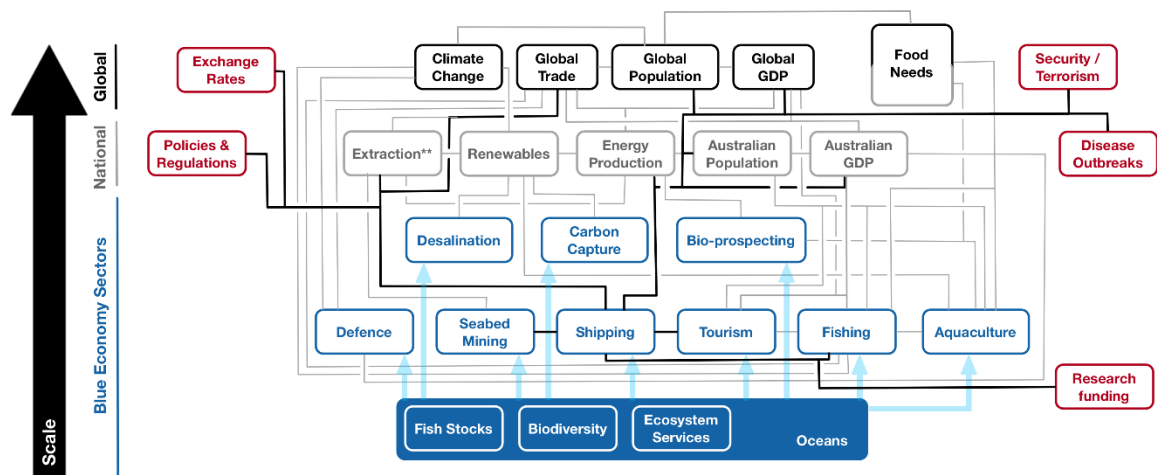


Figure 2. Predicted growth in number of temporary arrivals and departures of cruise shipping at 2033.

1.2 Sector-specific conceptual model



** Extraction - land and sea

Figure 3. The initial conceptual model in Figure 1 in the main document, complemented with information about sector-specific drivers obtained from the analysis of sector projections. See main text for more information.

1.3 References

- BITRE (2010). Australian Maritime Activity to 2029-2030. Canberra, BITRE.
- BITRE (2014). Containerised and non-containerised trade through Australian ports to 2032-33. Report 138. Canberra, ACT, BITRE.
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- BITRE (2019). Transport and regional economics data, analysis and projections. Bureau of Infrastructure, Transport and Regional Economics (BITRE).