



**Total economic value  
of the Great Barrier Reef**

What you need to know

February 2017

# Why value the Reef?

The motivation for conducting a total economic valuation of the Reef.

Intrinsically Australians appreciate nature and the wonders of the natural environment. The Australian psyche holds images of a sunburnt country, of sprawling arid bushland, vast mountain ranges, dense tropical rainforests and crystal clear oceans.

We know what it is like to see the sunrise over the ocean, to hear a rainforest's natural choir, to take in the stillness of the bush and to take a deep breathe atop a mountain.

Australians have that feeling, that instinctive understanding, of what nature means and the power of it.

Put simply, we value it. We value being able to eat, drink, swim, sleep, laugh and cry in it. We value its diversity, its wonder and its beauty.

We value it whether we are using it or not – because valuing nature is not only part of what it means to be Australian, it is part of being human.

This value often does not come with a price tag, it cannot be bought or sold. Nor should it necessarily have a price tag because to most of us nature is priceless. However, often nature is let down from a failure to capture its value in the same way we value items commercially in our economy.



Image Credit: Gary Cranitch, Queensland Museum

Economic benefits can conflict with the environment, leading to a trade-off. How policy makers approach such trade-offs is a matter of considerable debate. Some believe that environmental outcomes should take priority, while others argue that economic development must come first. Both of these views are limited in that the former effectively assigns an infinite value to the environment, and the latter assigns no value.

Identifying, measuring and reporting on the total value of nature to an economy gives it a significance in decision making and provides a middle ground. Valuing nature in monetary terms can effectively inform policy settings and help industry, government, the science community and the wider public fully understand the contribution of the environment to the economy and society.

At a time when the global natural environment is under threat from the pressures of humankind, particularly climate change, it has never been more important to understand the total value of nature.

When looking to our own Australian backyard, the case for putting a total economic value on nature has never been stronger, especially when considering the Great Barrier Reef ('the Reef').

As the largest living structure on the planet, the Reef is incredibly rich, diverse – and under threat.

To capture and quantify the unique role the Reef plays economically, socially and environmentally, is to capture and quantify the value of an Australian icon and one of the seven natural wonders of the world.

We know this value to be priceless and we know that there is only one Great Barrier Reef. But we also know the threats to the Reef demand that the total value Australians and the international community associate with the Reef be understood in the best way they can.

That is why Deloitte Access Economics, with the support of the Great Barrier Reef Foundation, the National Australia Bank and the community of people and organisations that work on and for the Reef, is estimating the total economic value of the Reef.





Image Credit: Gary Cranitch, Queensland Museum



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# What you need to know

## Timing

The journey to complete this study began in late 2016.

Currently the project is in the primary research phase and a survey is going out with results expected back to Deloitte Access Economics in early April 2017.

Following the research and analytical phase, it is expected the final report will be launched in early June 2017.

## Details

### The economic contribution

Economic contribution studies provide a snapshot of the contribution of a company or industry, or in this case the Great Barrier Reef Marine Park, to the economy at a point in time.

The economic contribution analysis will use modelling to explore the contribution of the Great Barrier Reef Marine Park to tourism, commercial fishing and aquaculture, recreation, scientific research and reef management, and international education.

### The total economic value

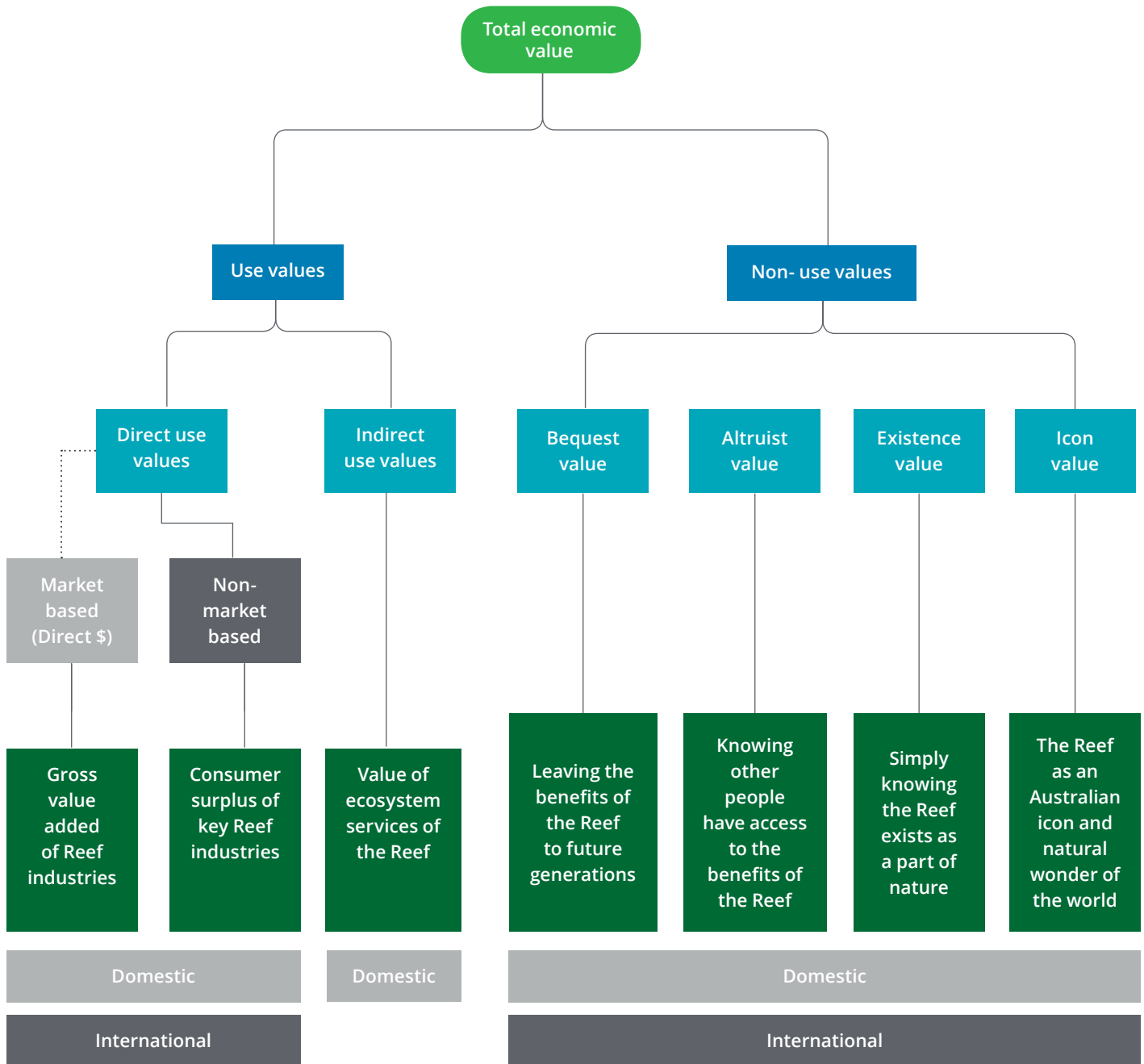
The total economic value framework for the Reef (Figure 1.1) is a context specific valuation, as the value people attribute to the Reef, and the various elements of value, depend on the conditions and specific source of the benefit from the Reef.

Total economic value is essentially a welfare measure. In this case, it measures the consumer and producer surplus (benefits) associated with the Reef, from both use and non-use values.

It is important to note the economic contribution analysis will be completed independently of the total economic value analysis. Some components will be used to estimate the market-based direct use values in the total economic valuation in terms of producer surplus.

**Figure 1.1**

Total economic value framework





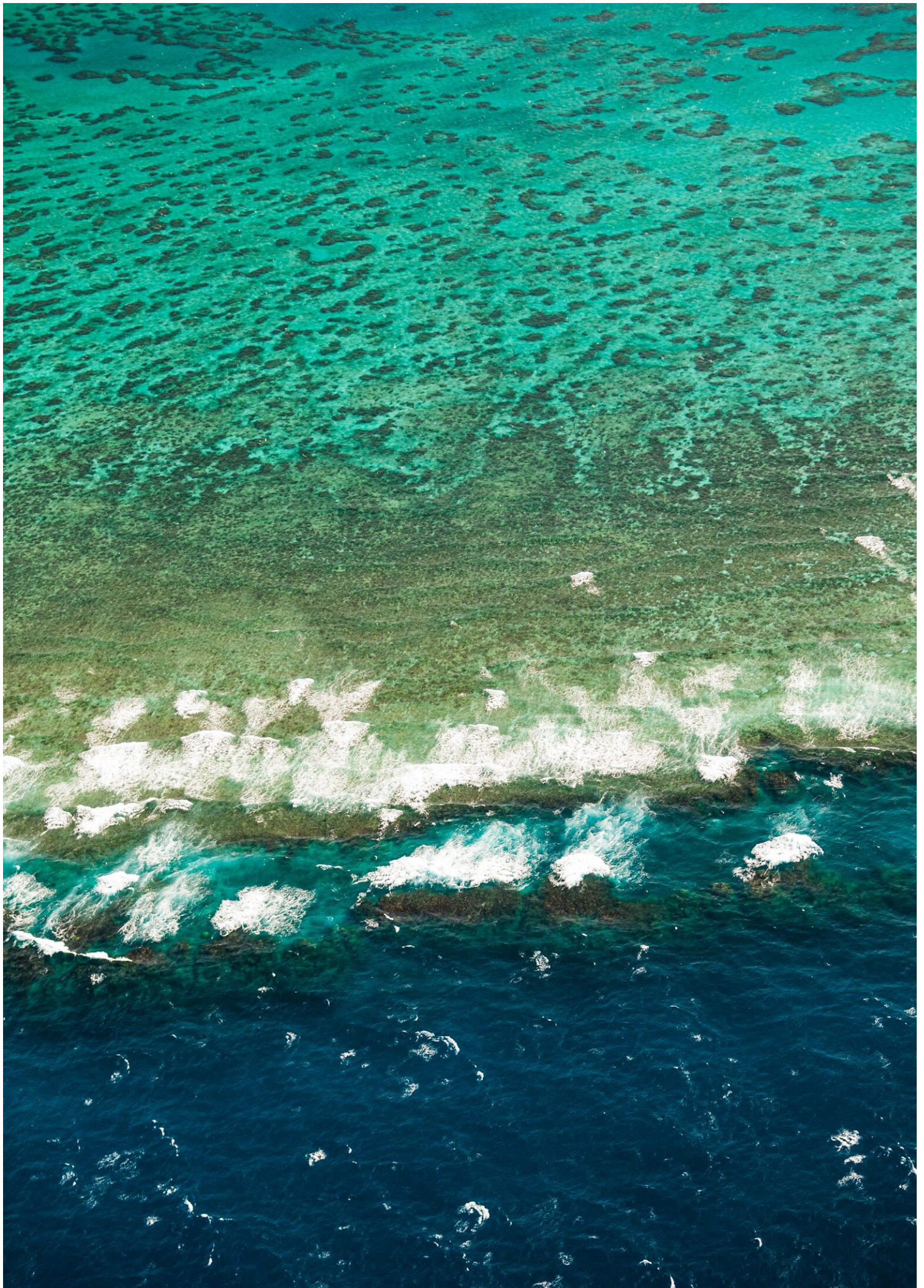


Image Credit: Gary Cranitch, Queensland Museum



# How this study is different?

A gap analysis of key literature (Table 1.1) identified what the Deloitte Access Economics study will value compared to other Reef related studies.

**Table 1.1**

DAE (2017) study compared to existing studies

TEV component	Value category	Value	DAE study (2017)	Previous studies
Use value	Direct use	Tourism	✓	✓
		Recreation	✓	✓
		Indigenous value	Qualitative	×
	Indirect use	Ecosystem services	✓	✓
Non-use values <sup>1</sup>	Bequest	Leaving benefits to future generations	✓	×
	Altruist	Benefits available to others (presently)	✓	×
	Existence	Benefits available to individuals	✓	×
	Icon	Benefits available from 'icon' status	✓	×

<sup>1</sup> Non-use values for the Reef have been valued by Windle and Rolfe (2005) and Oxford Economics (2009) however these values are not in the same context as this study.

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