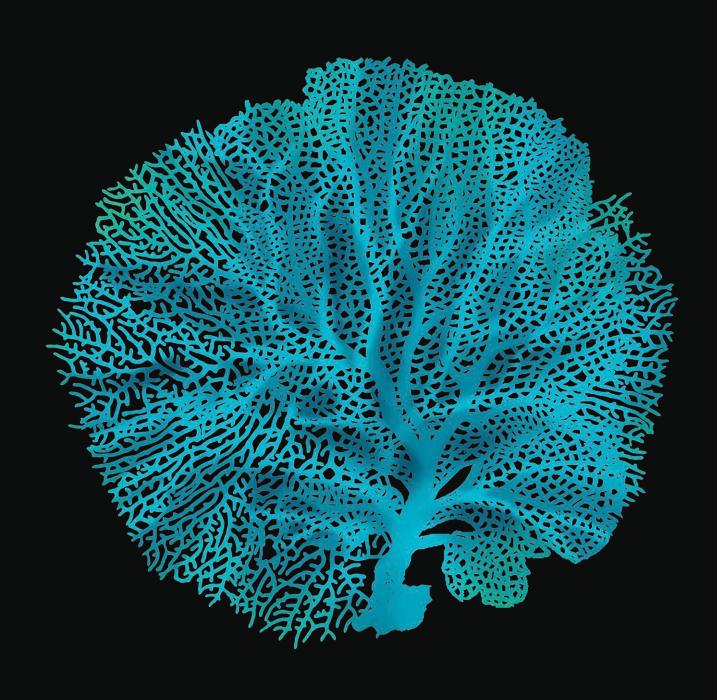
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At what price?

The economic, social and icon value of the Great Barrier Reef

Executive summary

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Executive summary

The Great Barrier Reef has a economic, social and icon asset value of **\$56 billion**. It supports **64,000** jobs and contributes **\$6.4 billion** to the Australian economy.

The Great Barrier Reef is the largest living structure on Earth. It is as big in size as Japan, and bigger than the United Kingdom, Switzerland and the Netherlands put together. Spanning 2,300 kilometres, the Great Barrier Reef can even be seen from space. The hundreds of thousands of marine and coral species that make up its rich tapestry of biodiversity make it one of the most unique and complex ecosystems in the world.

But it is more than a coral reef.

The Great Barrier Reef is in Australia's cultural DNA. It is integral to the identity of Australia's Traditional Owners. What's more, its status as one the seven natural wonders of the world makes it an *international* asset. In many ways, it hardly seems necessary to quantify its value. The value of the Great Barrier Reef is priceless and we know that there is no replacement.

However, identifying, measuring and reporting on the economic and social value of the environment elevates its significance in decision making. Valuing nature in monetary terms can effectively inform policy settings and help industry, government, the scientific community and the wider public understand the contribution of the environment, or in this case the Great Barrier Reef, 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 economic and social value of the natural environment.

The Great Barrier Reef is incredibly rich, diverse – and under threat. The tight and unforgiving deadline the Great Barrier Reef is up against necessitates an understanding of its true value to know what kind of policy action is required in response.

This report assesses the economic, social, icon and brand value of the Great Barrier Reef. Its purpose is to gauge the Great Barrier Reef's value to Australians and understand how the international community values it. This research synthesises the results from a range of publicly available data sources, a new survey of over 1,500 Australians and residents from 10 countries world-wide, fresh insights from stakeholder consultations and the efforts of previous research. The sample was representative and the size statistically significant.

The report estimates the Great Barrier Reef's:

- Contribution to the Australian economy in 2015–16 through industry value added and employment,
- Economic, social and icon value,
- Significance to Aboriginal and Torres Strait Islander Traditional Owners, and brand value to Australia and the international community.

Economic contribution in 2015–2016





The first way of valuing the Reef is through its annual contribution to the Australian economy in terms of value added (Gross Domestic Product) and employment.

Our research has shown the Great Barrier Reef contributed \$6.4 billion in value added and over 64,000 jobs to the Australian economy in 2015–16 (direct and indirect). Most of these jobs came from tourism activities generated by the Great Barrier Reef, but there were also important economic contributions from fishing, recreational and scientific activities.

The annual employment supported by the Great Barrier Reef is more than most of Australia's major banks, and many corporates including the likes of Qantas and Deloitte Australia.

Considering this, the Reef is critical to supporting economic activity and jobs in Australia. The livelihoods and businesses it supports across Australia far exceeds the numbers supported by many industries we would consider too big to fail.

Another way of valuing the Reef is its economic, social and icon asset value. This figure captures the broader aspects of why we value the Reef, and cannot be added to the annual economic contribution figure.

More than the jobs it supports and the value it adds to the economy each year, the Great Barrier Reef is valued at \$56 billion as an Australian economic, social and iconic asset.

That's more than 12 Sydney Opera Houses, or the cost of building Australia's new submarines. It's even more than 4 times the length of the Great Wall of China in \$100 notes.

This is Australia's Reef. This is our natural asset. If we split the \$56 billion asset value down into its parts:

- Australians who have visited the Reef as tourists on their honeymoon, on a family holiday, on a bucket-list trip – derive \$29 billion in value
- Australians that have not yet visited the Reef but value knowing that it exists – derive \$24 billion in value
- And the lucky Australians that are recreational users of the Reef – going to the beach, taking the boat out, diving on the weekends – derive \$3 billion in value.

The above figures are estimates based on reasonable assumptions about the length of analysis and the 'discount rate' – how much we value the Reef in the future. Varying these produces a range of \$37 billion to \$77 billion. The estimates do not include quantified estimates of the value Traditional Owners place on the Reef. Another approach that analyses how the Reef is natural capital that provides ecosystem services is also explored qualitatively in this report.

So why do people value the Great Barrier Reef? What makes it worth \$56 billion? Australians and the international community value the Great Barrier Reef for a range of reasons. Some reasons are more concrete such as their belief in its importance for tourism, while some are more abstract such as their belief that Australia would just not be 'the same' without it.

Australians want their children and future generations to be able to visit the Great Barrier Reef and enjoy it. From a global perspective, the Great Barrier Reef's importance to the planet and to biodiversity is paramount. By every measure, the Great Barrier Reef is seen as the natural asset contributing most powerfully to Australia's global brand. In our research, the Great Barrier Reef left other Australian land-based natural assets far behind in terms of visitor preference, reputation and experience.

Total economic, social and icon value to Australia



Why is this? Of the almost 1,000 respondents who named the Great Barrier Reef as Australia's most iconic natural asset, their justification includes: they consider it to be one of the most beautiful places in Australia; it's the most famous UNESCO natural site in Australia, and it is one of the seven natural wonders of the world.

Two-thirds of Australian and international respondents were prepared to pay to protect the Great Barrier Reef. Of these respondents:

- 61% alluded to its importance to the planet
- 59% felt future generations should be able to visit it
- 59% cited its importance to biodiversity
- 52% felt it was morally and ethically right to pay for its protection.

On one level, all of these figures seem enormous, but when you reflect on it, it's also clear how inadequate financial measures are for something as important to the planet as the Great Barrier Reef.

The Great Barrier Reef is an immense and unique ecosystem that holds a significant value to humans and other interlinked systems. In this sense, the Reef performs important environmental and ecological functions. These functions, if quantified, would show that the Great Barrier Reef is worth much more than the 64,000 jobs annually and \$56 billion asset value reported here.

This isn't the first report to consider the importance of the Great Barrier Reef – some of the significant examples include Costanza et al. (2014) analysis of Reefs globally, Windle and Rolfe's (2005a) application of choice modelling, Oxford Economics (2009), Stoeckl et al (2011) comprehensive account of literature and Deloitte Access Economics' various contribution analyses.

There have also been decades of effort to protect the Reef. The Commonwealth and Queensland Governments have implemented various policies to mitigate the impacts of local threats and build resilience against other pressures. The Great Barrier Reef 2050 Long-term Sustainability Plan was established in 2015 for greater coordination between stakeholders to protect the future health of the Reef. In addition, significant government funding is committed each year to the research effort of understanding – and protecting – the complex nature of the Reef.

While efforts to date have been substantial, the significance of the Great Barrier Reef's contribution to the Australian economy, to Australian jobs and its remarkable asset value strongly indicates the Reef should be given even greater priority by all citizens, businesses and levels of government.

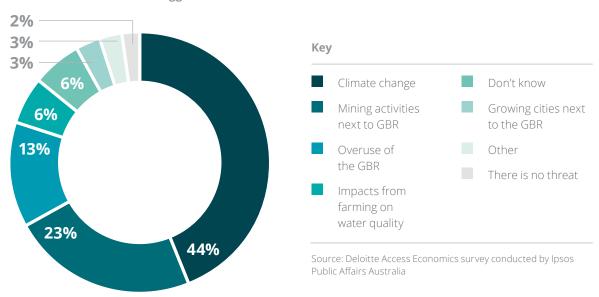
There is an opportunity – and a need – now more than ever for action on a universal level.

But more than just getting the policy settings right and investing wisely, understanding the true value of the Great Barrier Reef shows us what is at stake. And when called on, it is this knowledge that allows us to make it clear that the Great Barrier Reef's protection is not only an Australian priority, or an international one – it is a human one.

To view the full report, please visit

www.deloitte.com/au/greatbarrierreef

Australian's views' on the biggest threats to the GBR



Weekly willingness to pay by state and territory



Source: Deloitte Access Economics survey conducted by Ipsos Public Affairs Australia

Let's put it in perspective



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