

# CLIMATE CHANGE, CORAL REEFS AND ECOTOURISM

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# Tourism contributes to climate change

longhaul travel disproportionate

offsets are ineffective or fake

offsets are not taken up (<1%)

“carbon neutral” islands are not

# Reefs and islands affected by climate change

rapid sea-level rise

storminess, surge break corals

tropical ocean acidification

gradual temperature increases

brief temperature extremes

# Climate impact cases

storms, Tuvalu

temperatures, Maldives

acidification, GBRMP

sealevel, Holocene analogue

# Reef tourism

coast and island resorts

diving and snorkeling

surf and kiteboarding

sailing and seakayaking

whale and dolphin watching



































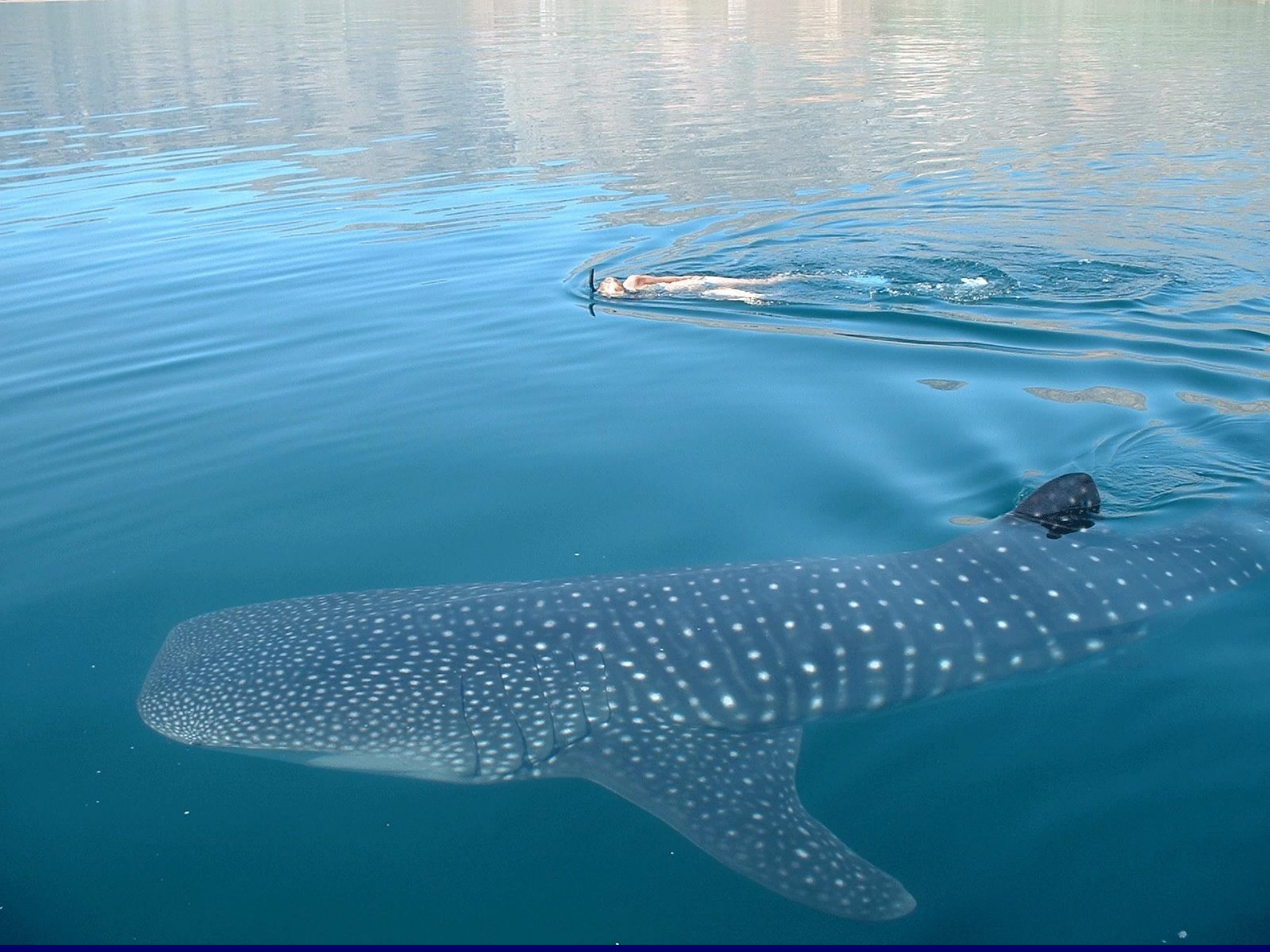
















# Global scale

outdoor JPY 100,000,000,000,000 p.a.

valuation difficulties for reef subsector:

inclusions, accounting, data

large high-impact: marinas, cruiseships

small low-impact: dive, whales, surf

economics: travel, infrastructure,  
equipment, clothing > activity

# Tourism impacts on reefs

construction, blasting, turbidity

power and water supplies

sewage treatment and discharge

invasive species, marine & land

moorings, anchoring, diver damage

disturbance to nesting seabirds



# Tourism impact research

lots re trampling damage

some re diver behaviour

lots on shorebirds, nesting

little on marine invasive spp

older work re eutrophication

# Conservation

political and economic support

public reserves: eg GBRMP

community reserves: eg Bega

private: eg Chumbe, Mnemba

islands: eg North, Cousin (birds)

# Conclusions

**tourism can't combat climate change**

**it can support reef conservation**

**but at cost of tourism impacts**

**small eco has low political impact**

**mainstream management is key**

**and counter vs other industries**

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adventure tourism management

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**Ecotourism: Principles & Practices**

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