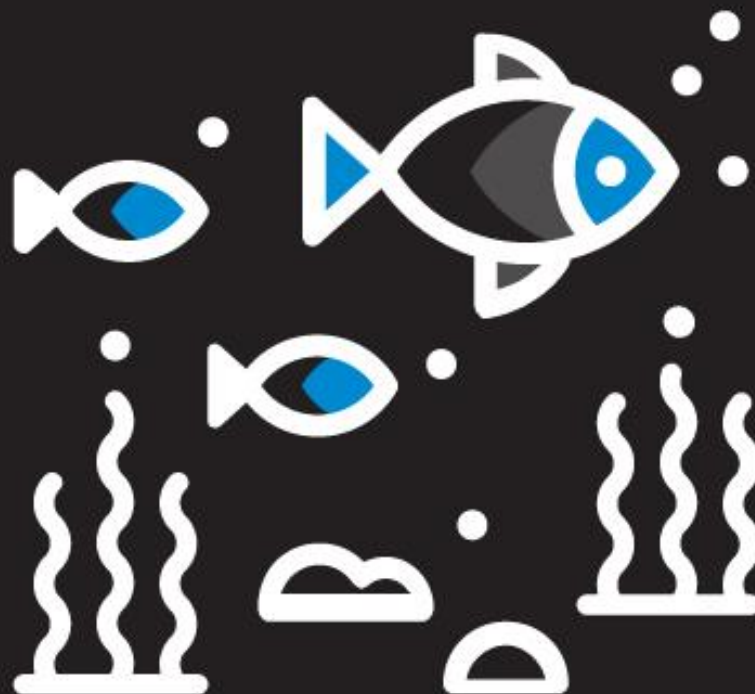


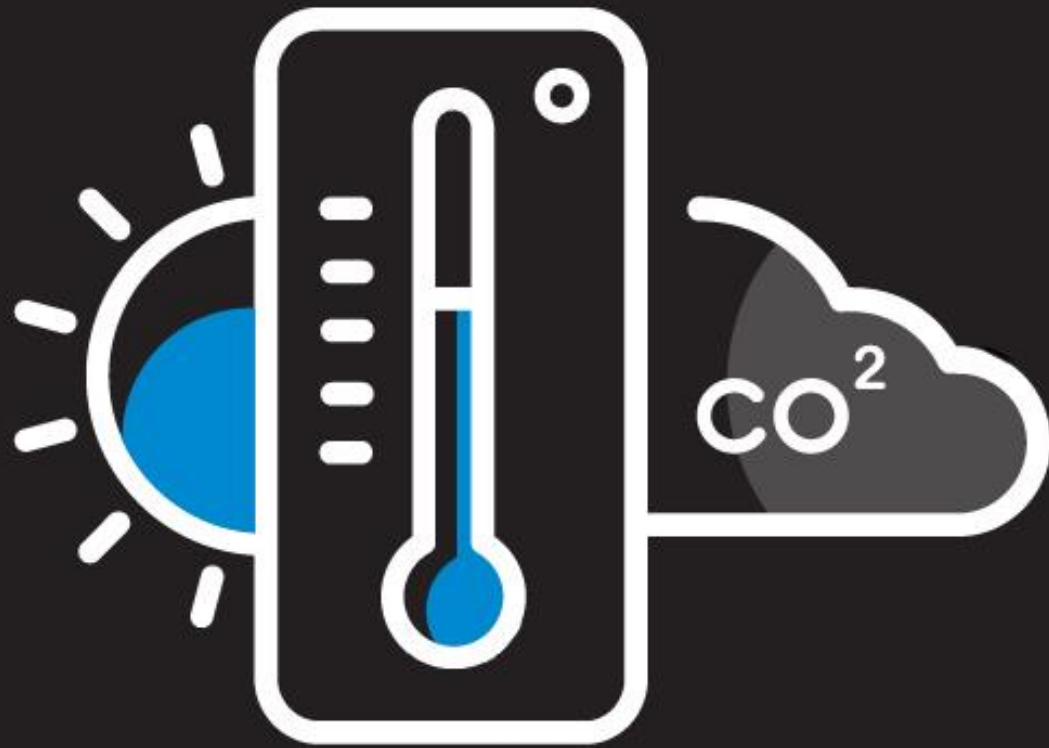
# What are Marine Protected Areas (MPAs)

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*An MPA is a clearly defined geographical space, recognised, dedicated and managed, through legal or other effective means, to achieve the **long-term conservation of nature with associated ecosystem services and cultural values.***



**Protect ecosystems, habitats  
and threatened species**

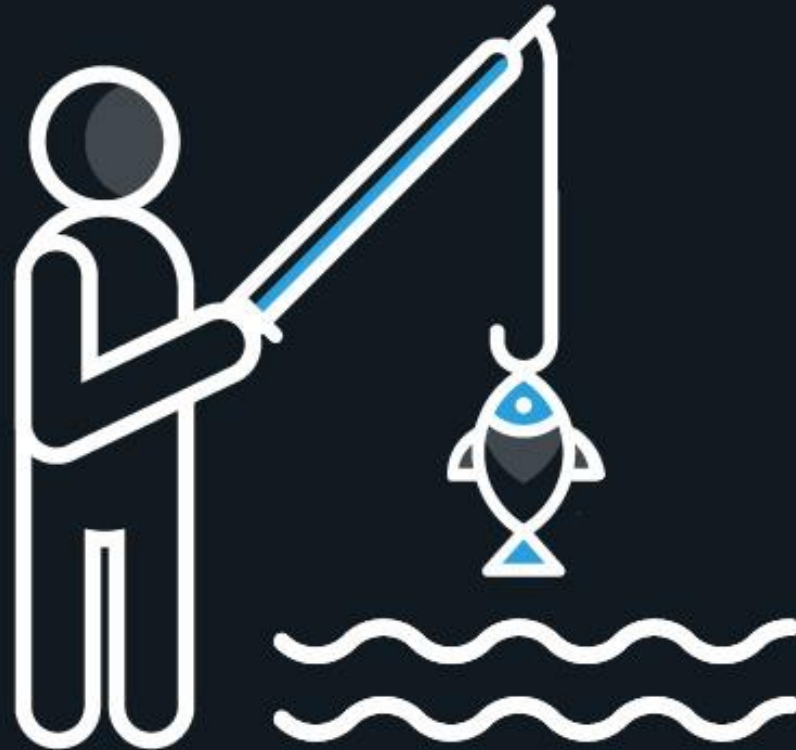


**Combat the effects  
of climate change**

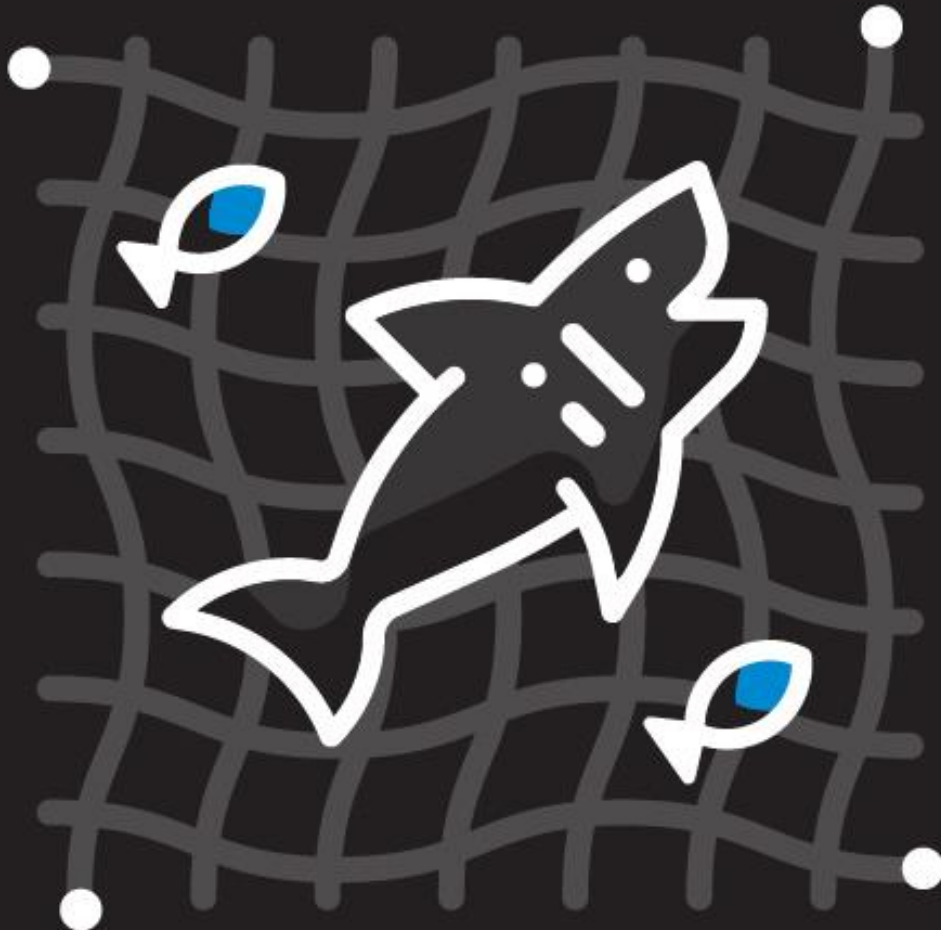




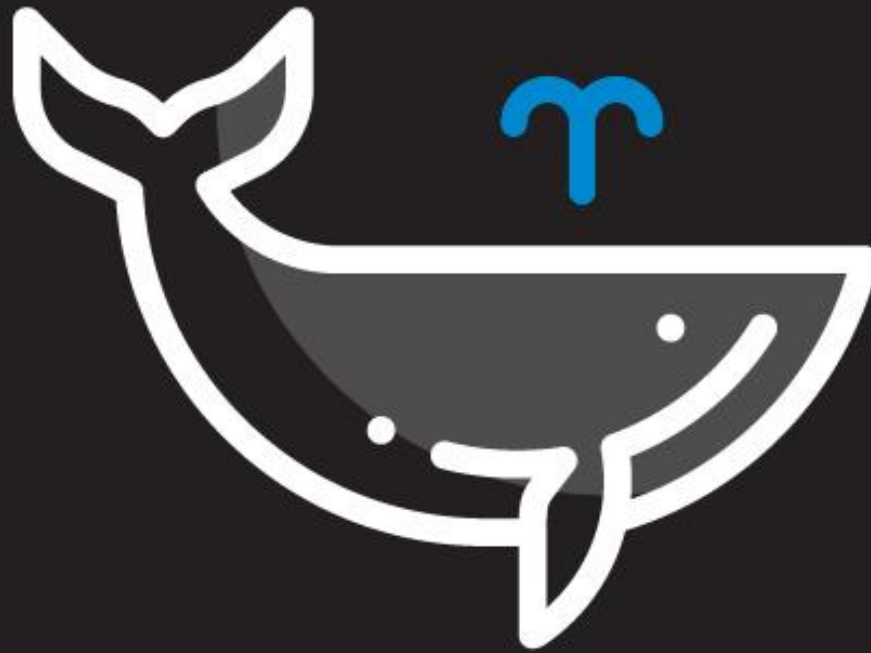
**Support fisheries**



**Provide for a sustainable  
use of our ocean resources**



**Help address  
bycatch problems**

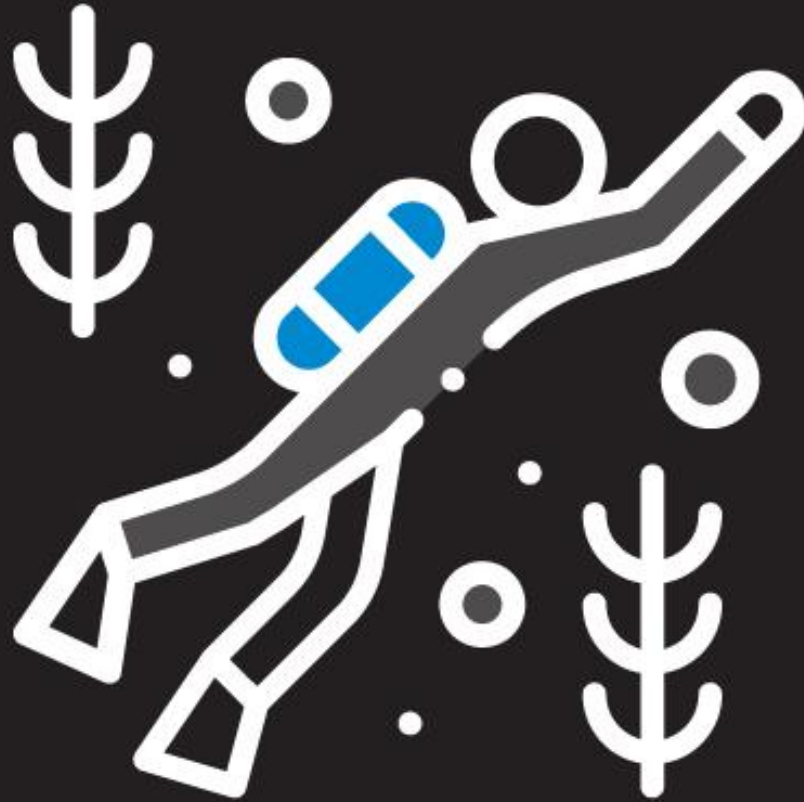


**Conservation of threatened  
species and sensitive areas**



**Undisturbed  
benchmark areas**





**Promote tourism**



**Provide sites for  
education and awareness**





**Conflict resolution**



An illustration of an offshore oil rig in the upper half, with a large, dark, irregular shape representing an oil spill extending from the rig across the middle of the image. The background is a solid blue color. The bottom of the image features silhouettes of seaweed and small fish. The title 'SERIAL SPILLERS' is written in large, white, bold, sans-serif capital letters across the center of the image.

# SERIAL SPILLERS

ENI reported in their 2018 "sustainability report" that  
**spills increased from 55 in 2017 to 72 in 2018**



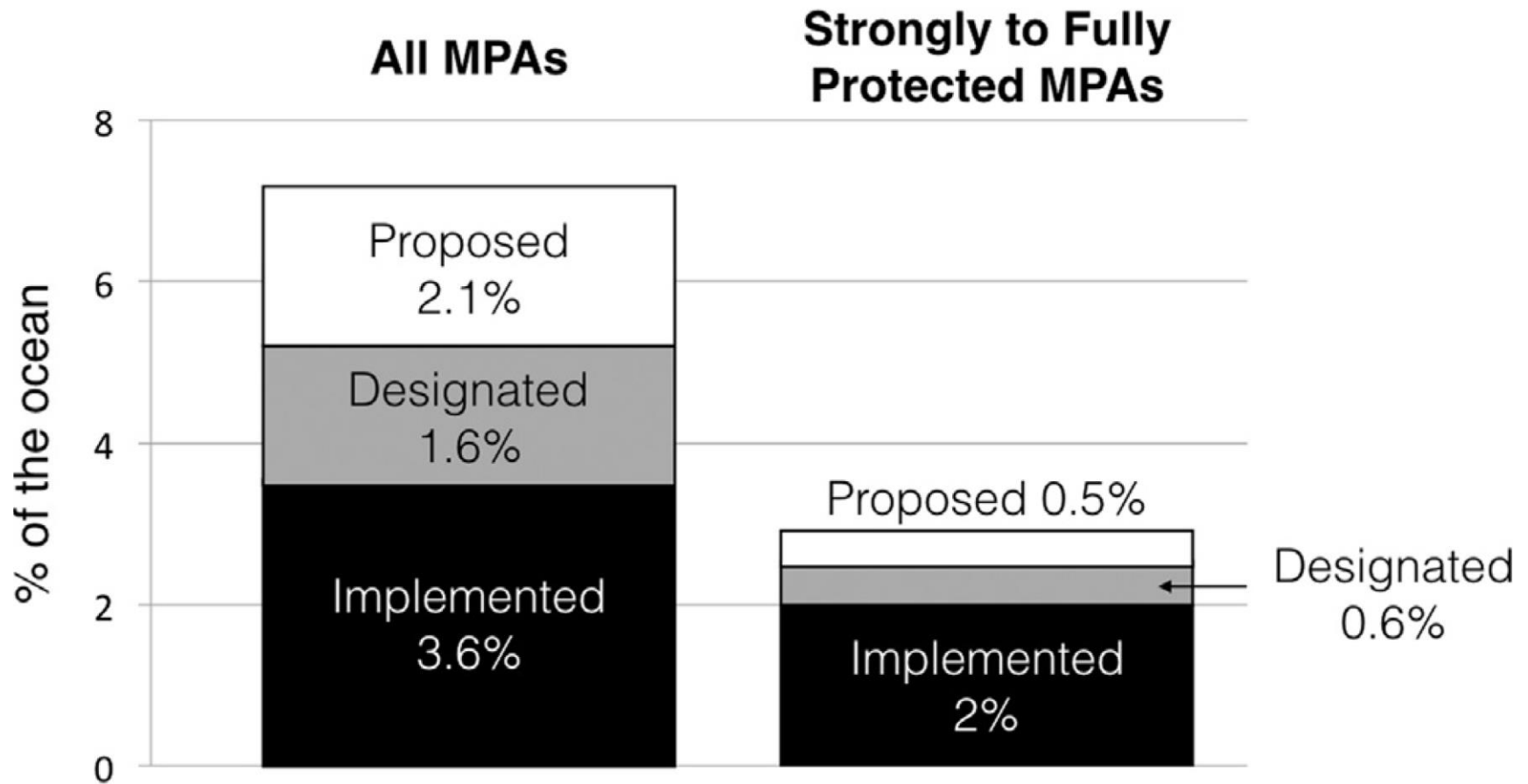
# Convention on Biological Diversity (CBD)

# Aichi Targets

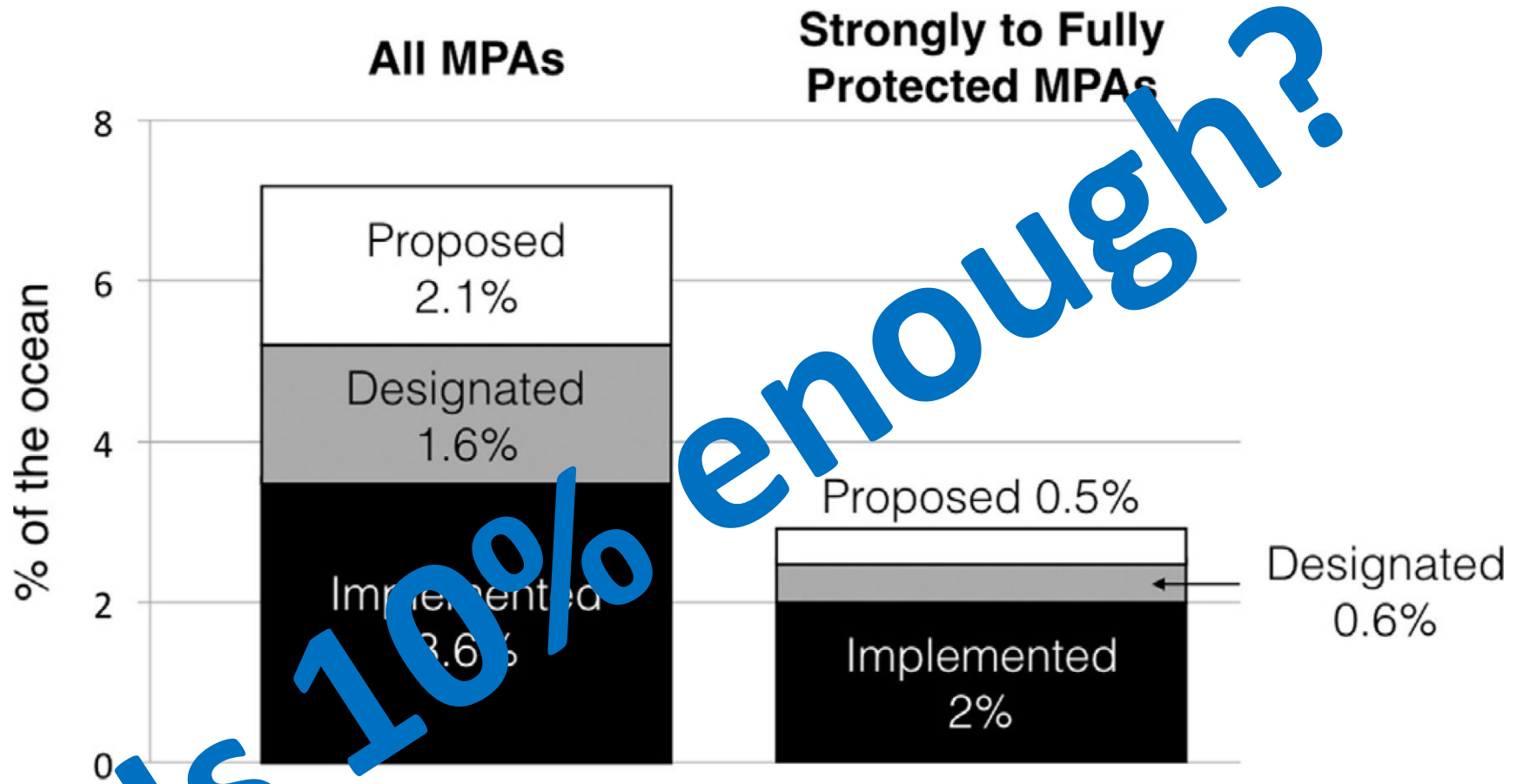
# Target 11

# To protect 10% of the sea by 2020

# How are we doing towards achievement of Target 11?

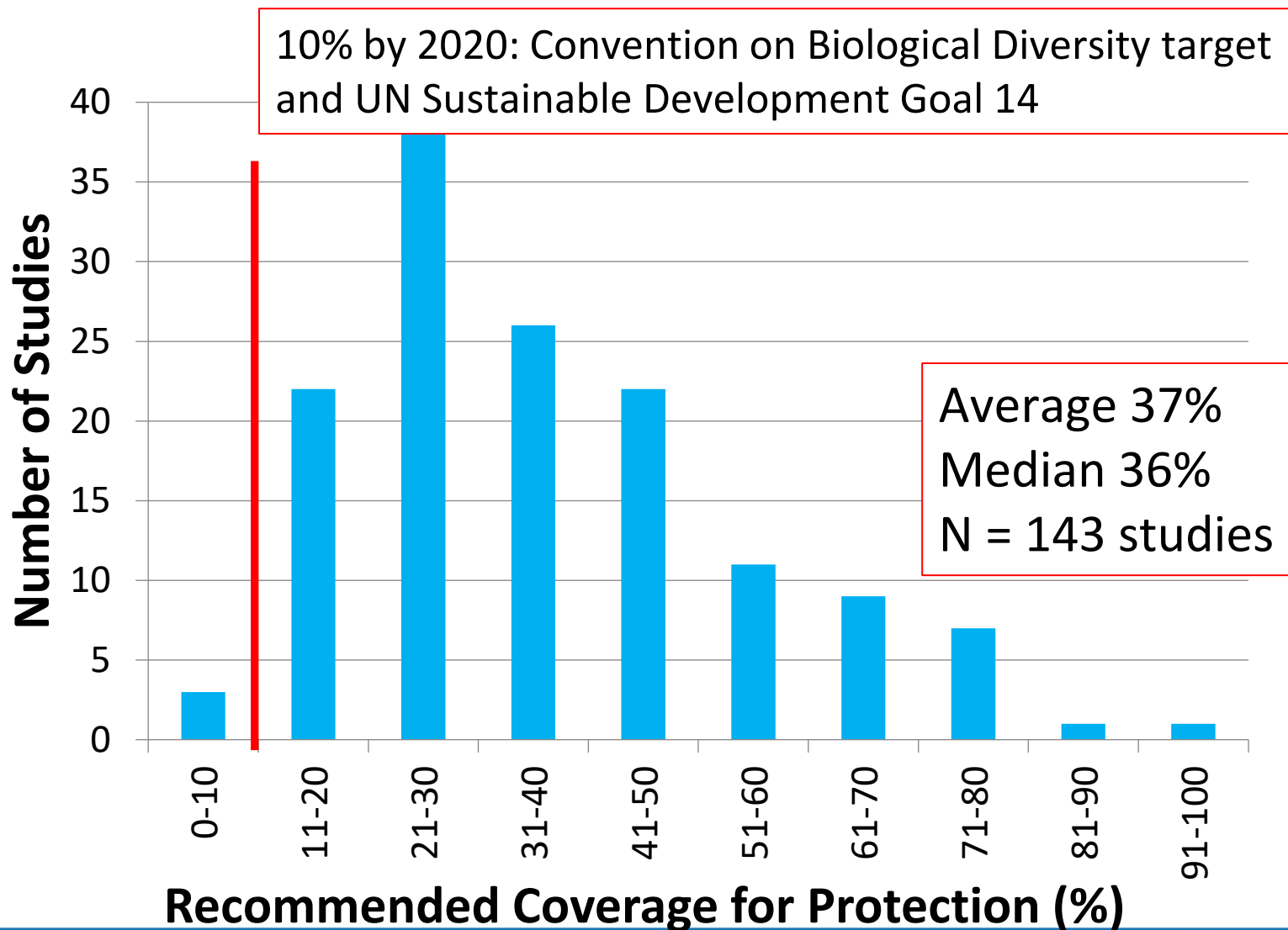


Sala et al. (2018) Assessing real progress towards effective ocean protection.  
Marine Policy 91: 11-18

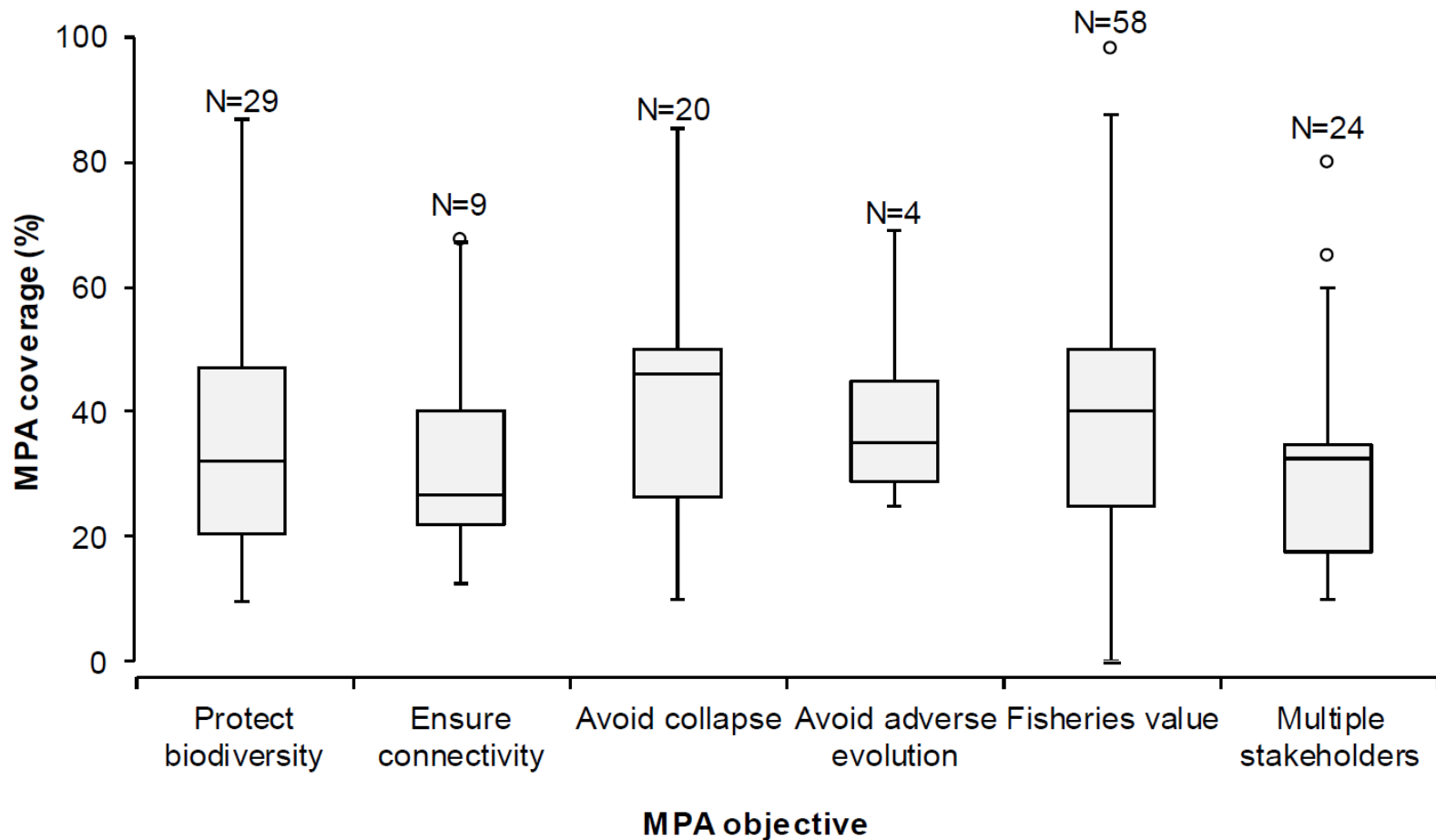


Sala et al. (2018) Assessing real progress towards effective ocean protection.  
Marine Policy 91: 11-18

# What does science say about how much we need to protect? O'Leary et al (2016) undertook a global review of the evidence to find out. Synthesis of 143 studies







The coverage of MPAs needed is very similar for different goals, so networks can be designed for multiple benefits



**10% protection not nearly enough to protect species and ecosystems, boost resilience to climate change, maintain ecosystem services, and support socio-economic needs and expectations.**







**At least 30% (possibly 50%) protection is needed  
in HIGHLY PROTECTED MPAs**



# ECONOMIC BENEFITS OF PROTECTION

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- The **insurance value** of marine protection alone is enough to justify their creation
- **Recreational value** - a shark is more valuable alive than dead!
- The medium & long-term **fisheries benefits**
- **Carbon sink value** of an ocean teeming with life
- Protects **option values** for future generations
- **Climate mitigation and resilience value** of protection
- **Equity values** - can support a fairer distribution of benefits between groups (high seas protection)

**Rashid Sumaila 2019, Durban Ocean Risk Workshop**

Lauck *et al.* (1998); Sumaila (1998); ); Rogers *et al.* (2014); Sala *et al.* (2016); Roberts *et al.* (2017).

# ECONOMIC BENEFITS OF PROTECTION

- The **insurance value** of marine protection is enough to justify their creation
- **Recreational value** - a shark is more valuable alive than dead!
- The medium & long term **financial benefits**
- **Carbon sink value** of an ecosystem teeming with life
- Protects **option value** for future generations
- **Climate mitigation** & **resilience value** of protection
- **Equity value** to support a fairer distribution of benefits between groups (from marine protection)

**Rashid Sumaila 2019, Durban Ocean Risk Workshop**

Lauck *et al.* (1998); Sumaila (1998); ); Rogers *et al.* (2014); Sala *et al.* (2016);  
Roberts *et al.* (2017).