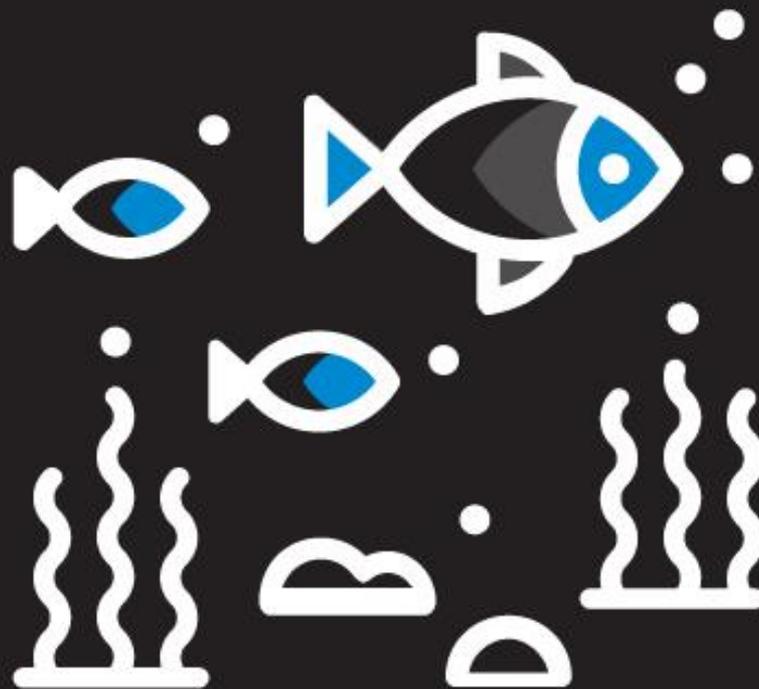


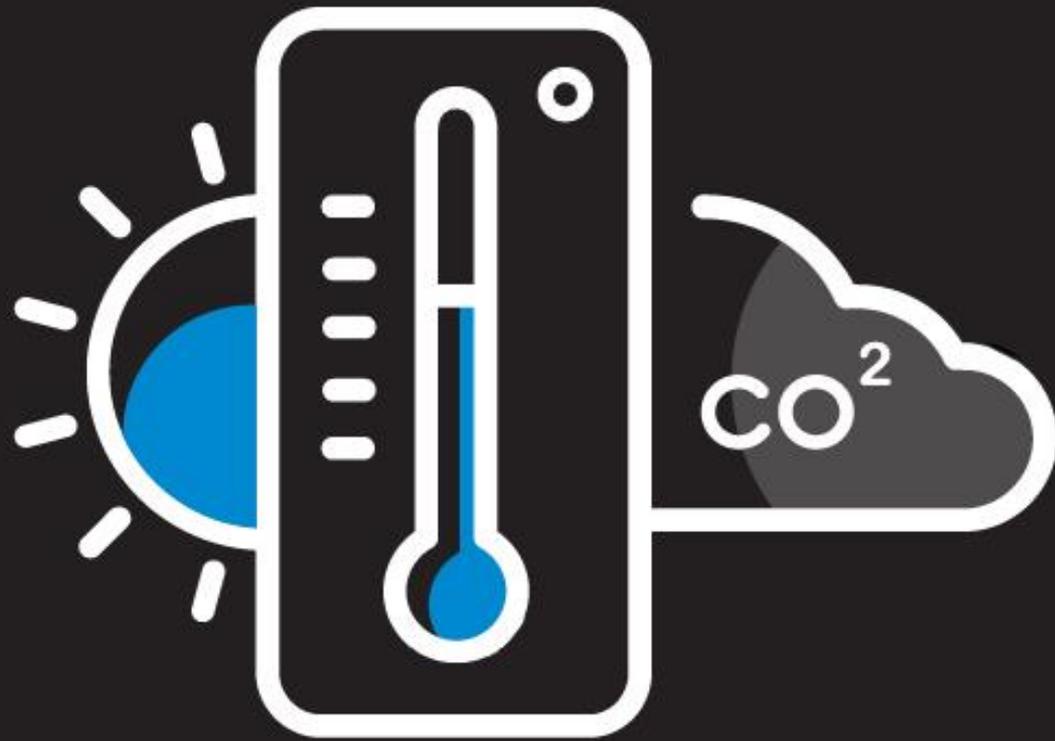
What are Marine Protected Areas (MPAs)

*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**

01



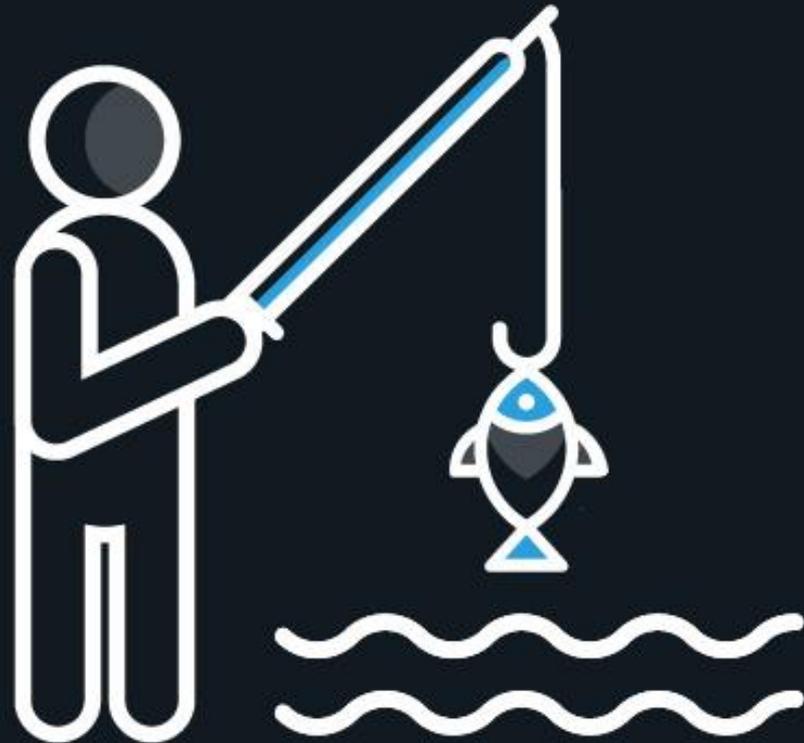
**Combat the effects
of climate change**

02



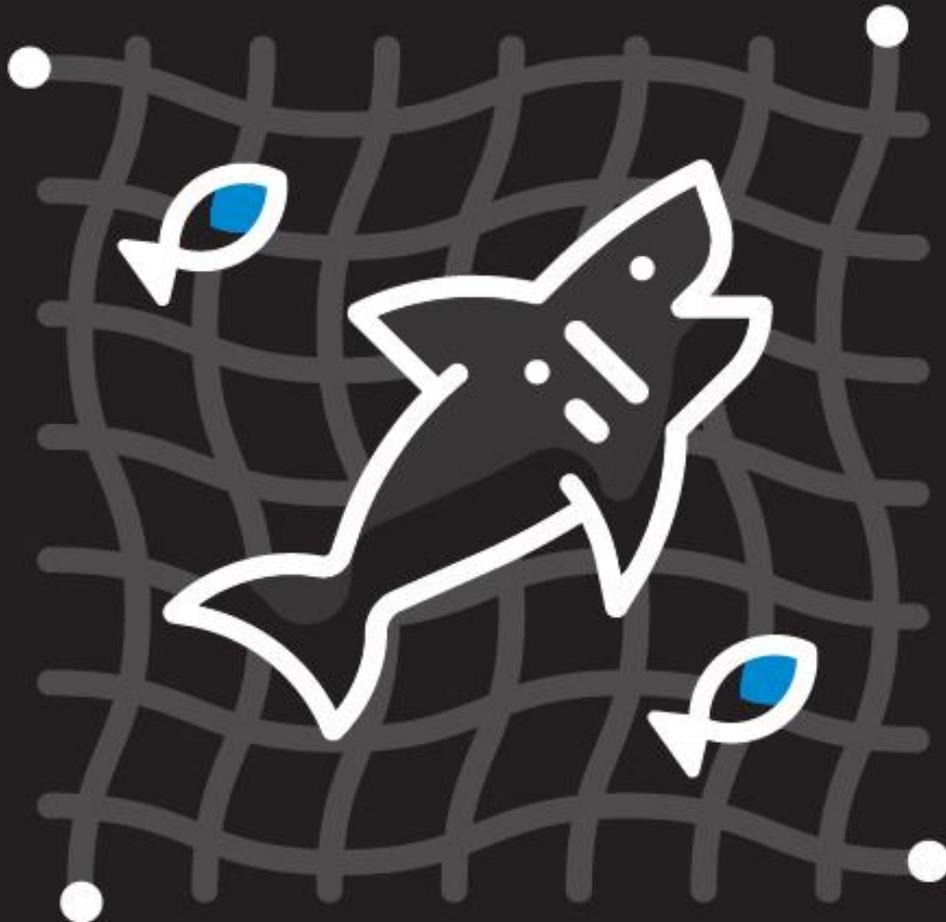
Support fisheries

03



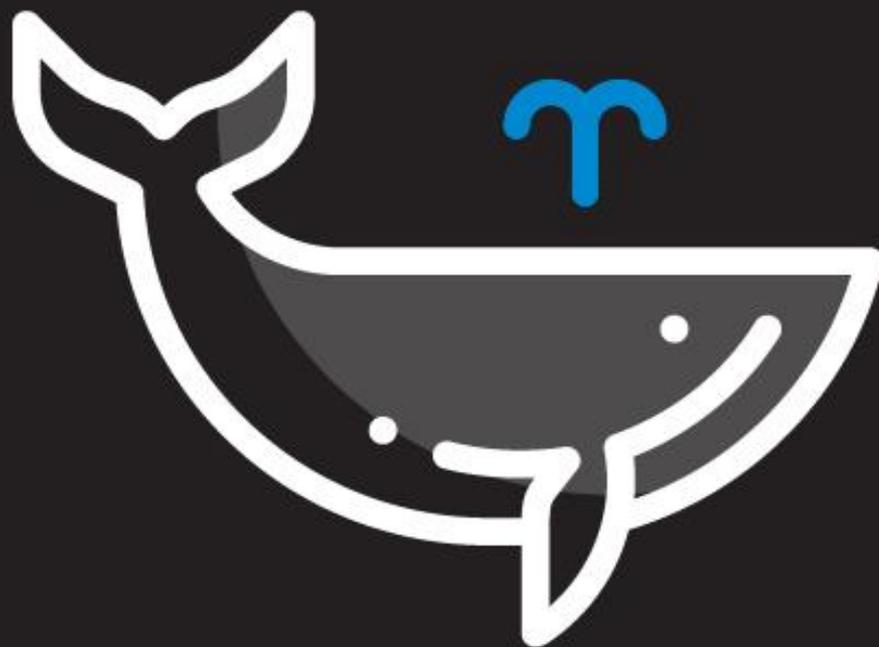
**Provide for a sustainable
use of our ocean resources**

04



**Help address
bycatch problems**

05

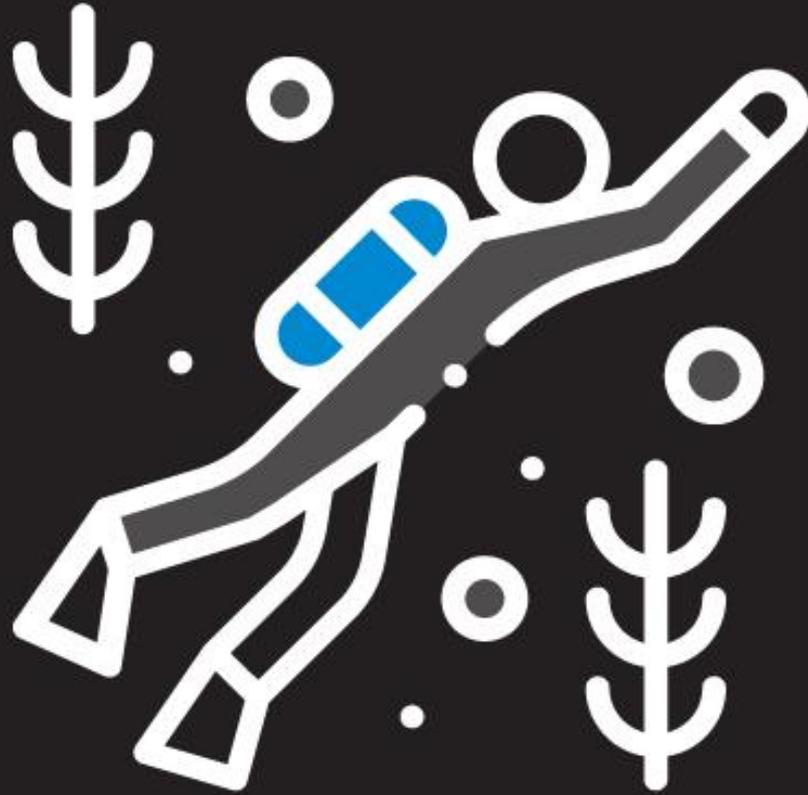


**Conservation of threatened
species and sensitive areas**



**Undisturbed
benchmark areas**

07



Promote tourism

08



**Provide sites for
education and awareness**

09



Conflict resolution



An illustration of an offshore oil rig in white silhouette against a light blue sky. Below the rig, a large, dark blue/black spill spreads across the water surface. The background is a gradient of blue, with stylized waves at the top and bottom. The bottom of the image features silhouettes of fish and coral.

SERIAL SPILLERS

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

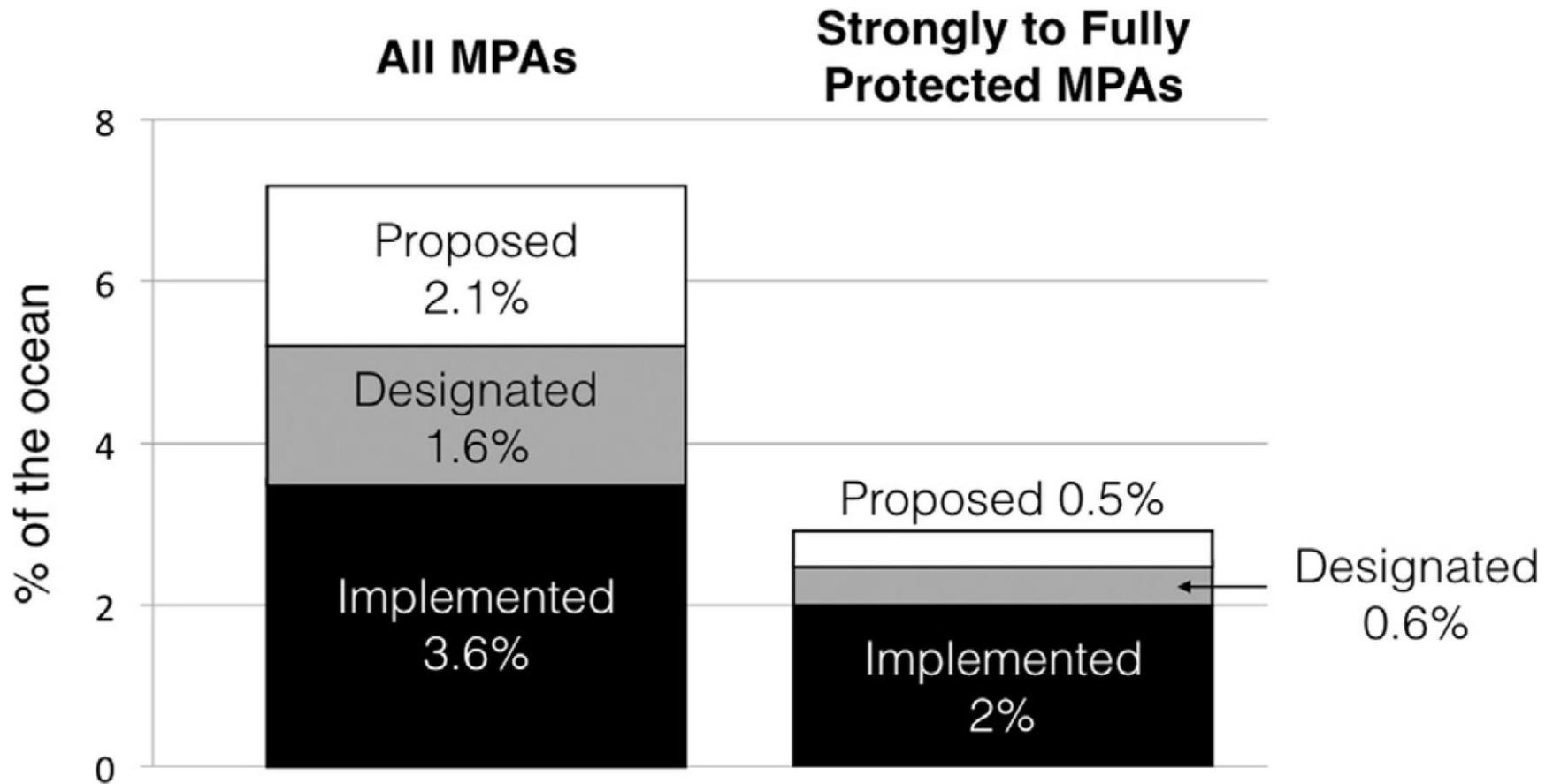


**Convention
on
Biological
Diversity (CBD)
Aichi Targets**

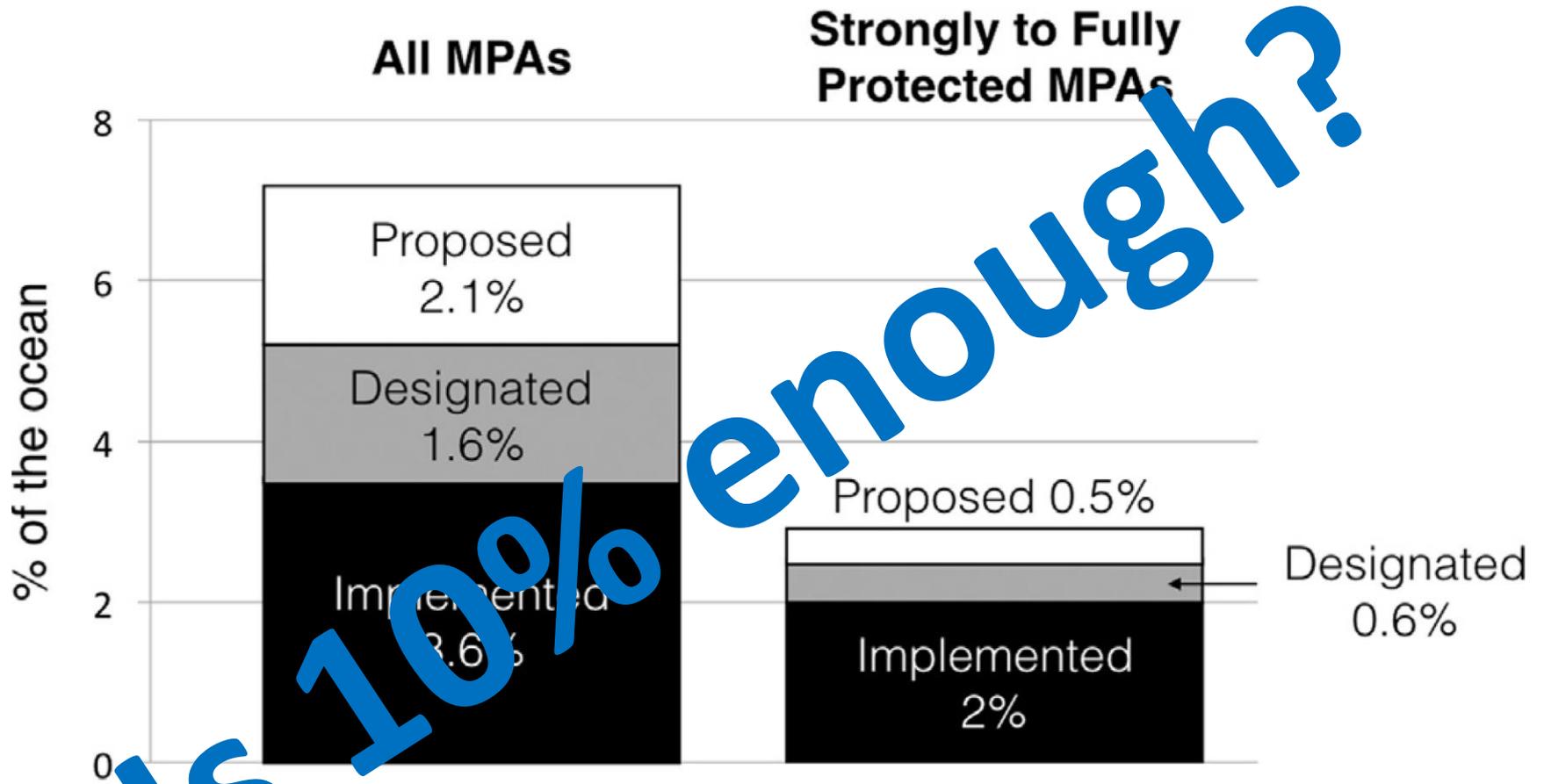
Target 11

To protect 10% of the sea by 2020

How are we doing towards achievement of Target 11?

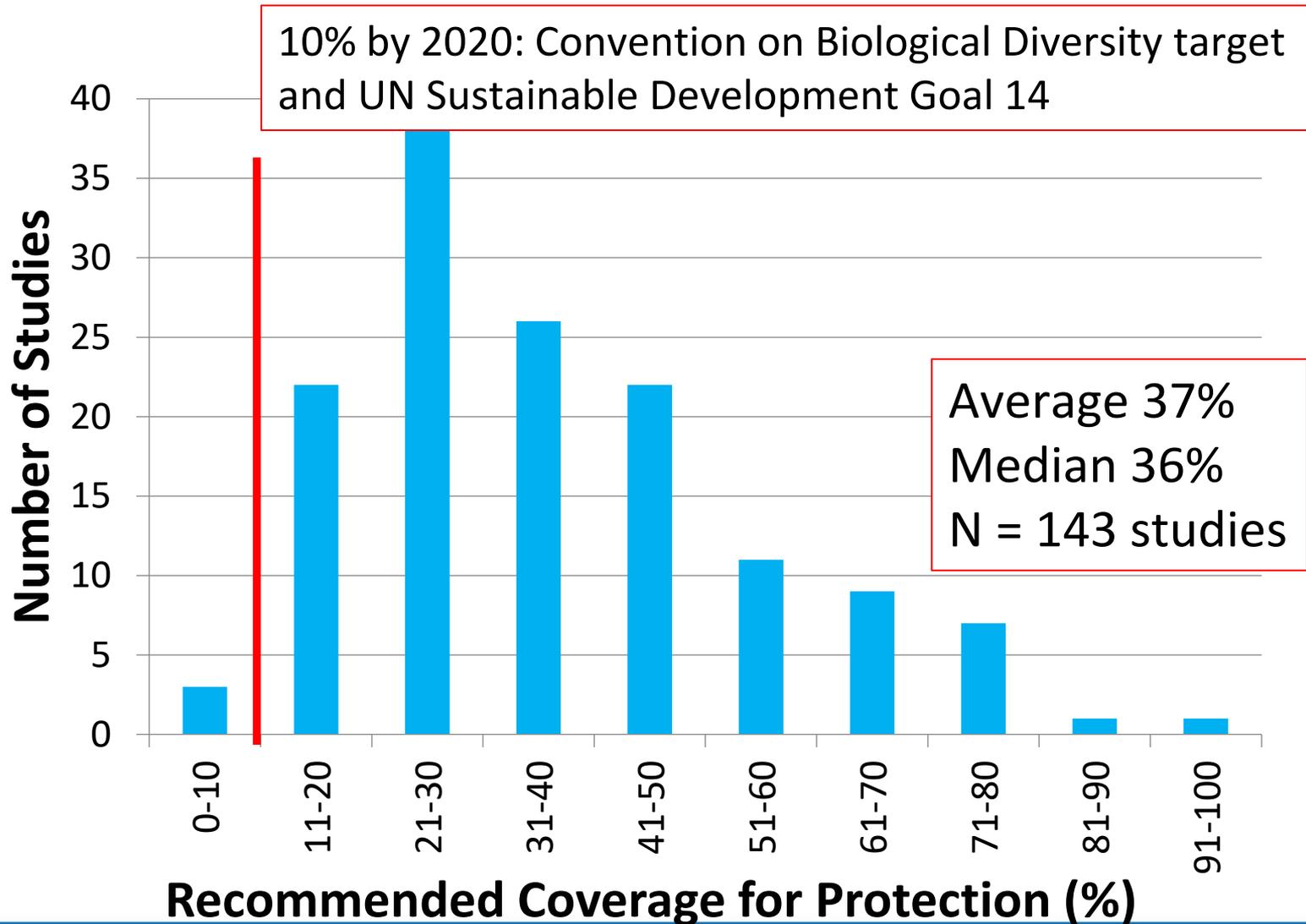


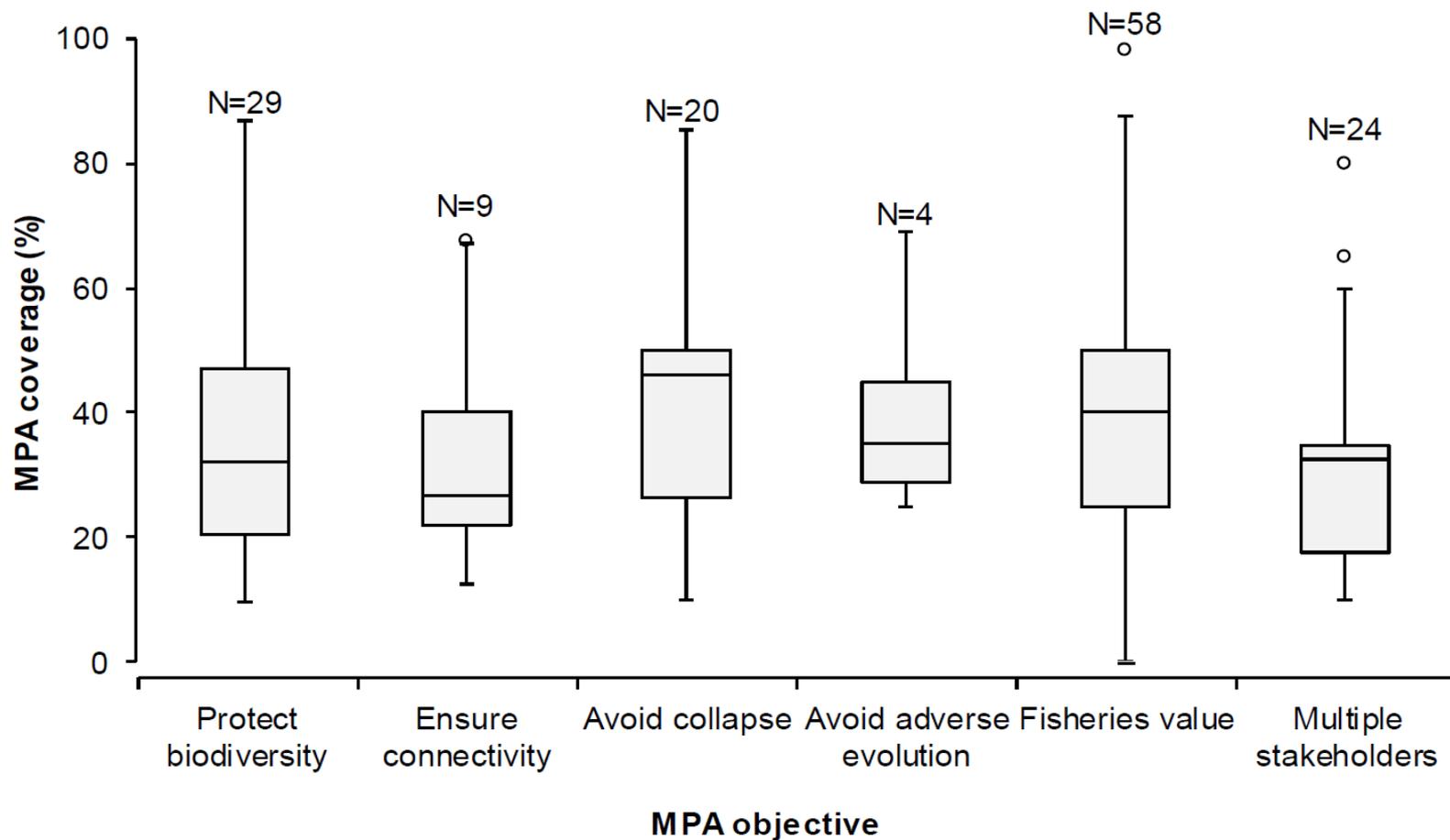
Sala et al. (2018) Assessing real progress towards effective ocean protection.
Marine Policy 91: 11-18



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

- 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).

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How can we afford not to?

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).