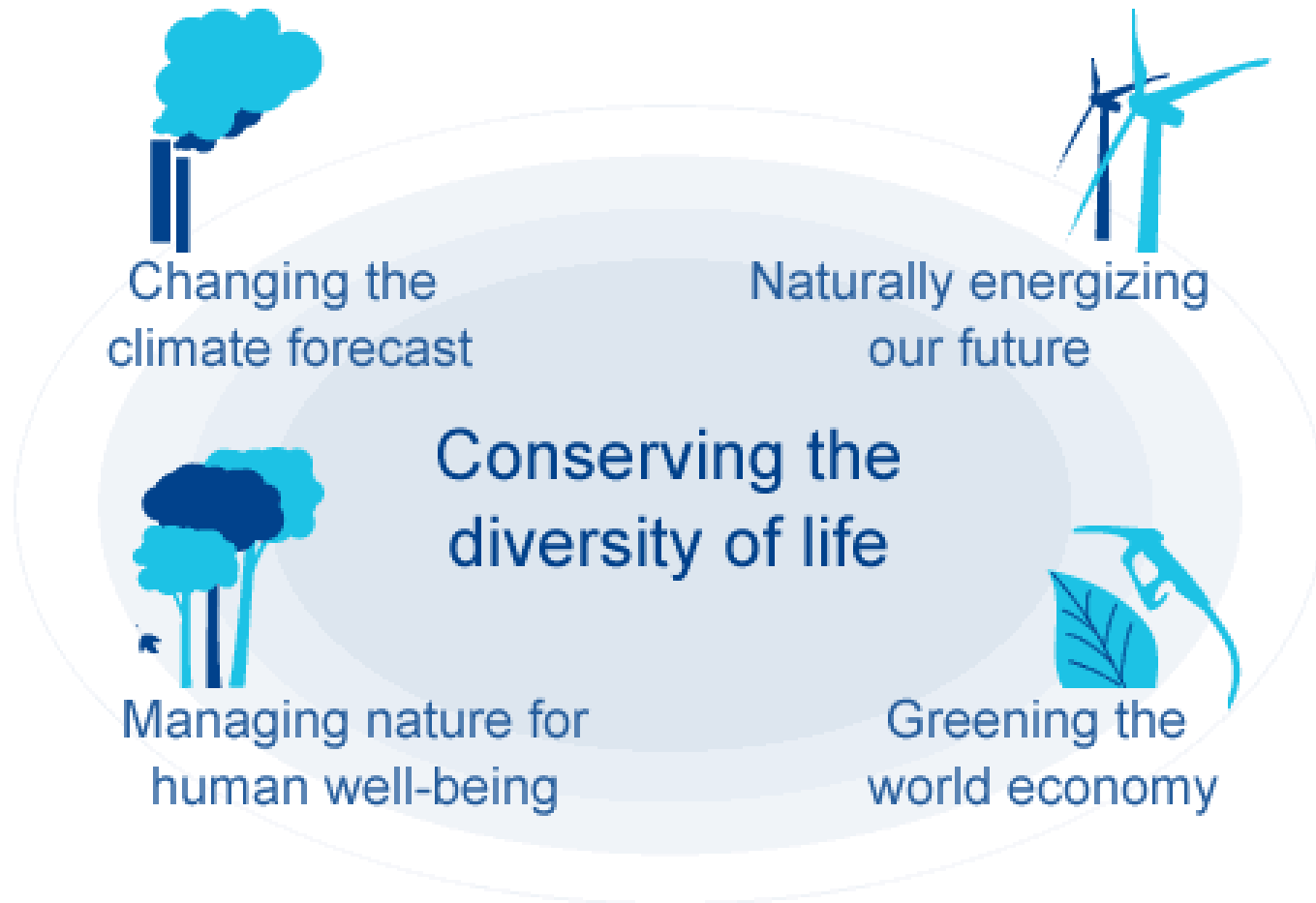


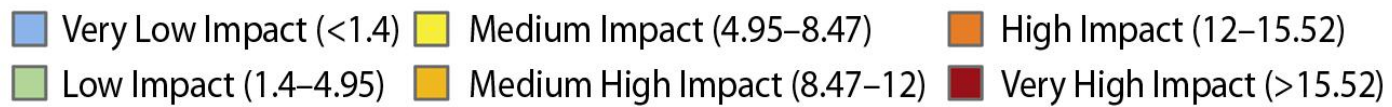
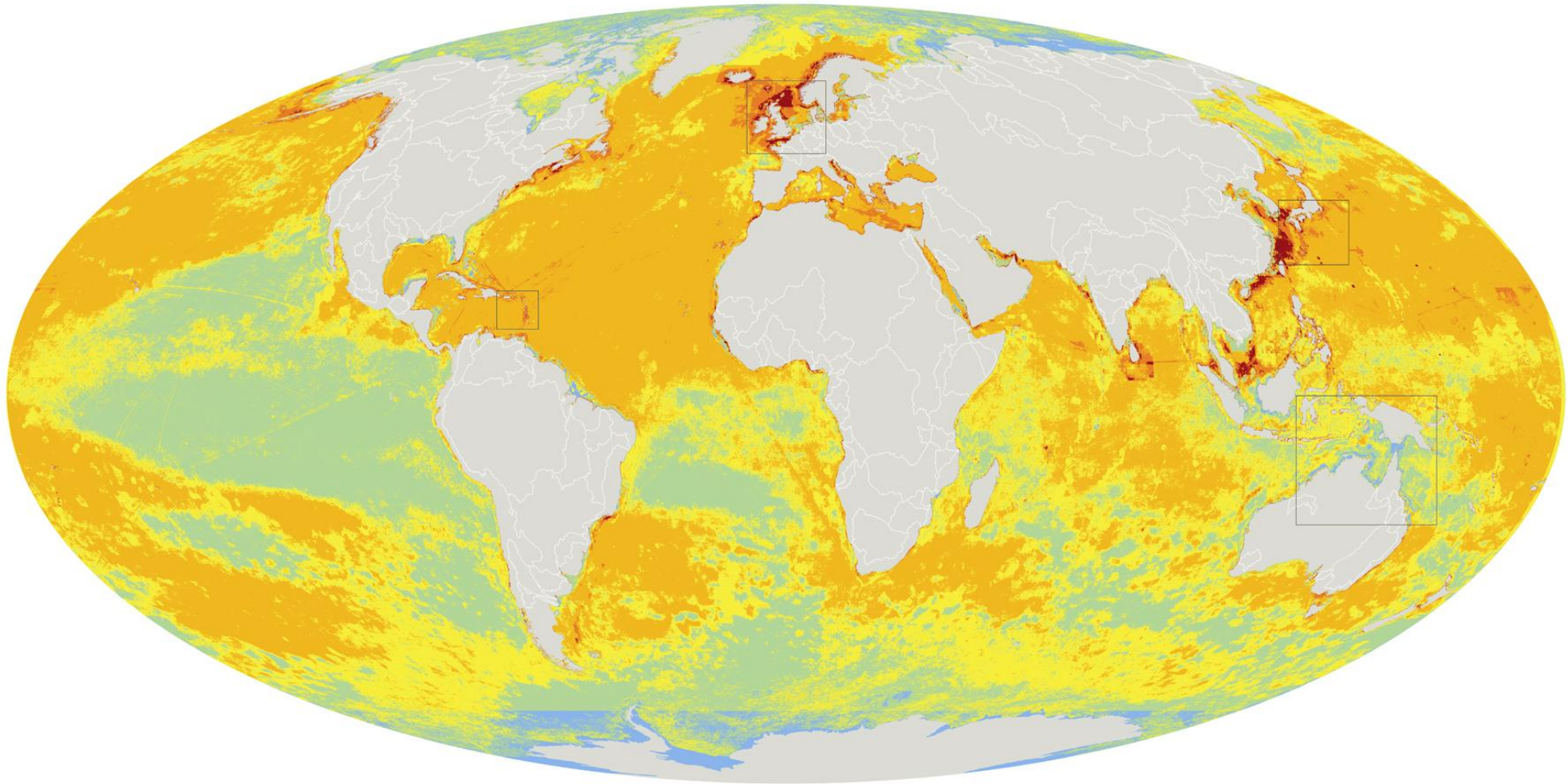


Adapting Fisheries to Climate Change: an NGO perspective

Jerker Tamelander, Harlan Cohen, Kristina Gjerde, Francois Simard
IUCN Global Marine Programme

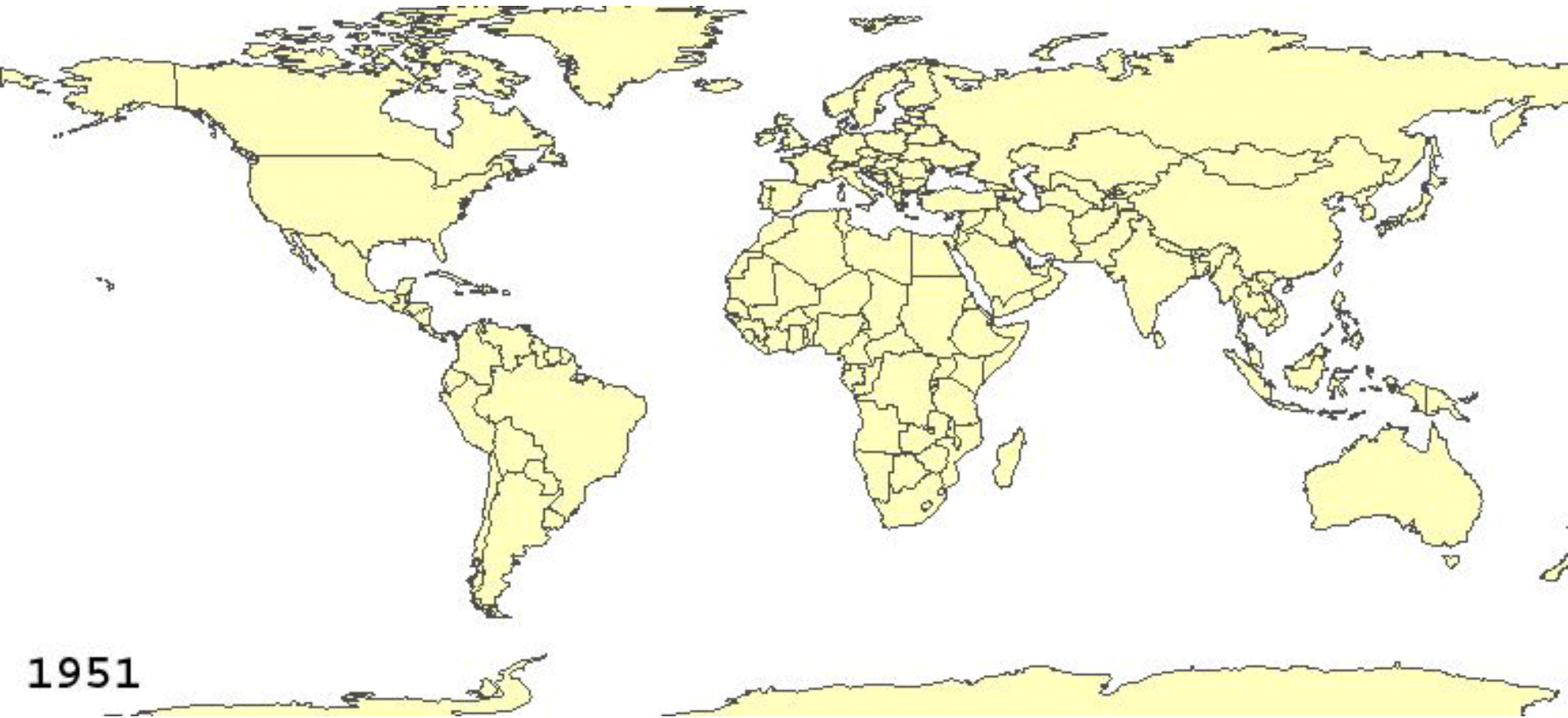
OECD Workshop: The Economics of Adapting Fisheries to Climate Change
10-11 June 2010, Busan, Republic of Korea





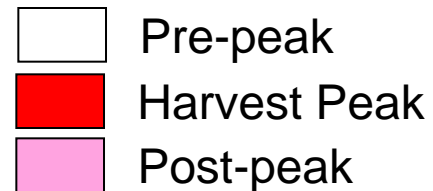


The Great Depletion

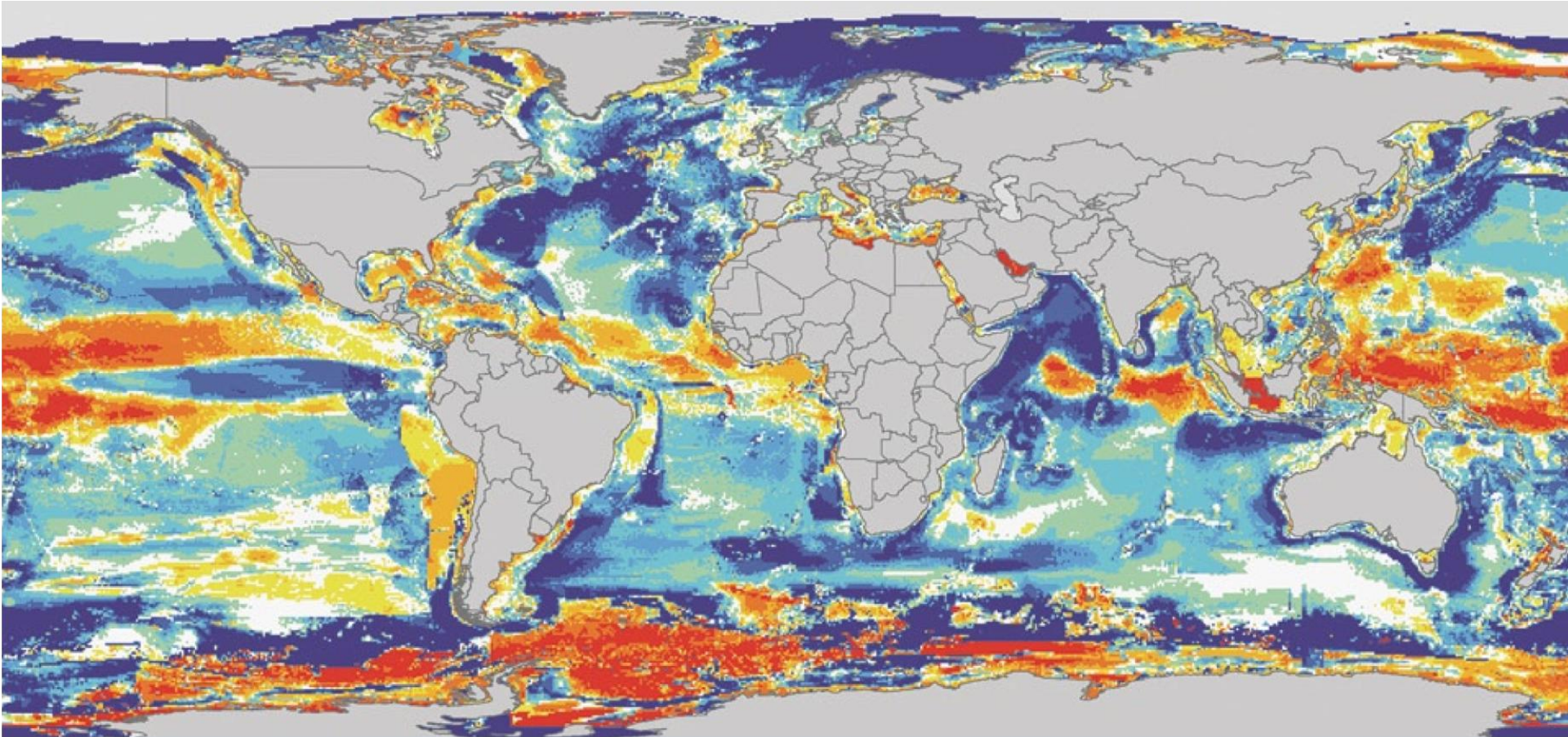


Year of Peak Fish Harvest

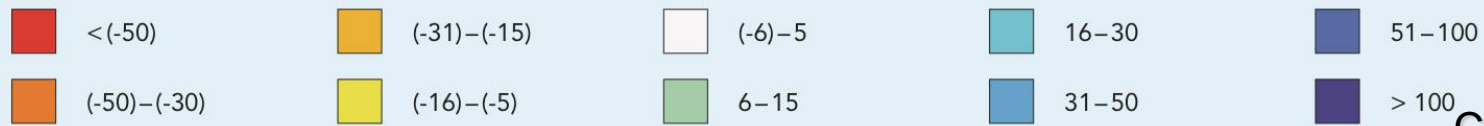
Source: Millennium Ecosystem Assessment and Sea Around Us project



Climate Change and Fisheries



Change in Catch Potential (% relative to 2005)





Current State of Affairs

- Fisheries Management: maximum yield, optimize return on investment, subsidize, catch technology improvement
- Fish Conservation Status: globally deficient, deteriorating, marginal consideration in most management regimes
- Climate Change: warming, ocean acidification, altered productivity patterns, food webs and habitats



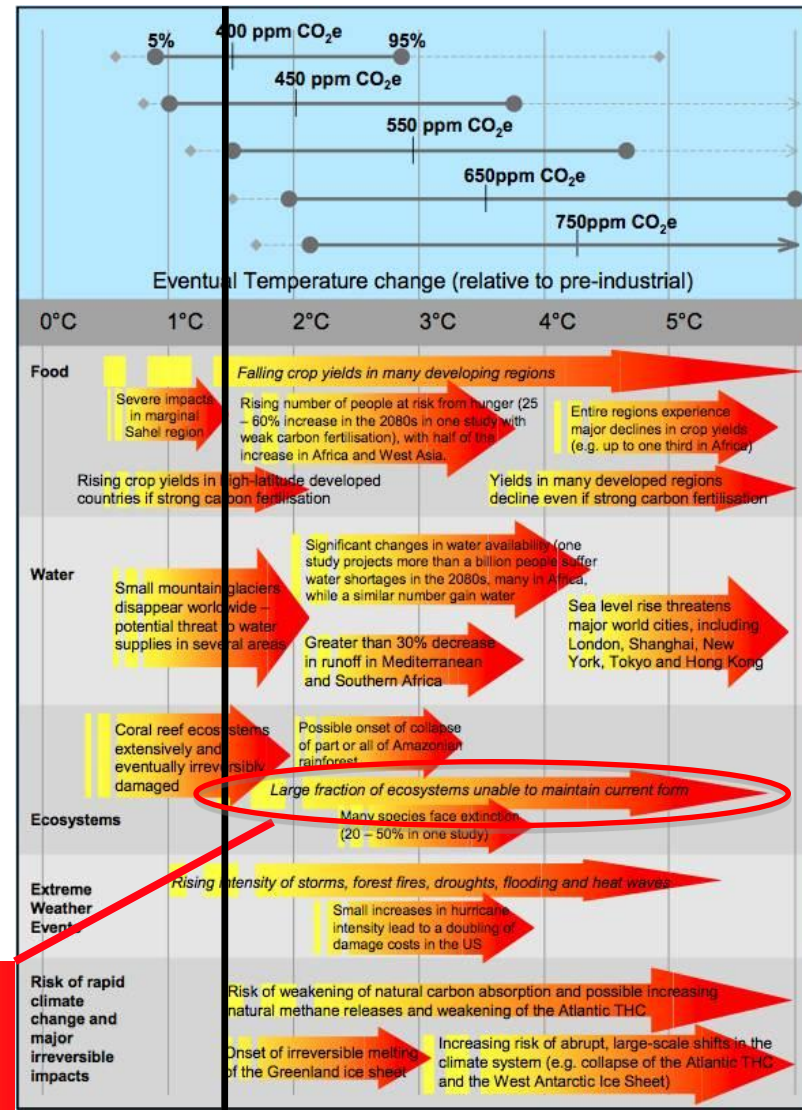


Adaptation

Recognize

- the need to improve fisheries management
- the climate change vulnerability of fisheries
- that adaptation can bring ecological, social, and economic gains
- Adaptation must be implemented in the context of fisheries reform

pCO₂ currently at 383 ppm



“Large fraction of ecosystems unable to maintain current form”

Stern review 2006



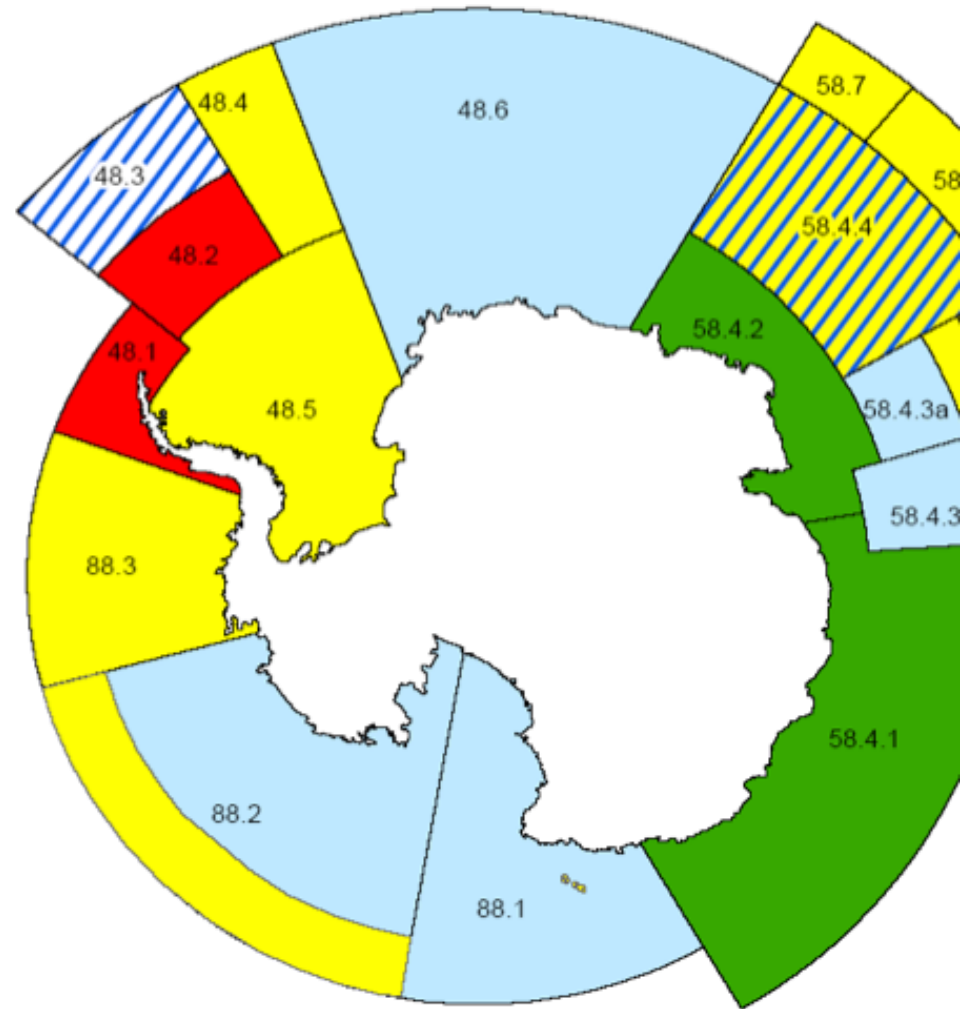
Key Actions

- Strengthen global governance system
- Rights-based management
- Protect ecosystems
- Industry transformation, phasing out capacity, livelihoods transition
- Increase demand for sustainably caught seafood
- End perverse subsidies, provide incentives for reform

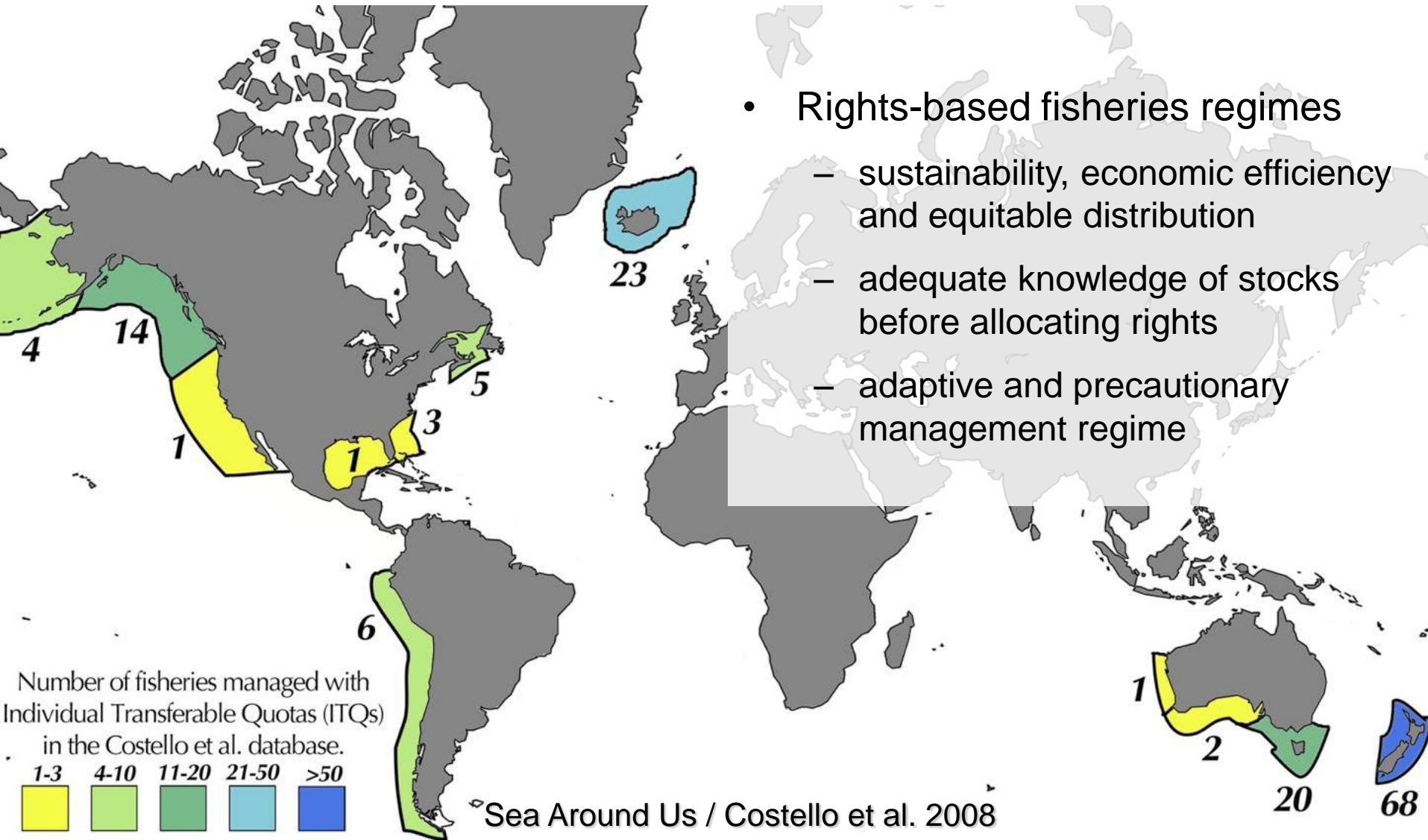


Strengthen Global Ocean Governance

- Ecosystem-based
- Comprehensive coverage of RFMOs, reflecting stocks
- No fishing without competent RFMO in place
- Science-based, precautionary decision-making
- Full reporting, performance assessment
- Enforcement



Ocean Governance – by whom?



- Rights-based fisheries regimes
 - sustainability, economic efficiency and equitable distribution
 - adequate knowledge of stocks before allocating rights
 - adaptive and precautionary management regime



Build Ecosystem Resilience



Establishing Resilient Marine Protected Area Networks – Making It Happen

Full Technical Version, including Ecological, Social and Governance Considerations, as well as Case Studies

2008

- Marine Protected Area (MPA) Networks
- CBD: “establishment of marine protected areas... including representative networks by 2012”
- Ecosystem approach, proven concept
- Relatively inexpensive
- Available to Government, NGO, private sector, local communities





Build Social/Industry Resilience



PRE-RELEASE VERSION

A Framework for Social Adaptation to Climate Change

Sustaining Tropical Coastal Communities & Industries

NA Marshall, PA Marshall, J Tarnelander, D Obura, D Malleret-King and JE Cinner
December 2009



IUCN Climate Change and Coral Reefs Working Group

- Secure resource health
- Diversify strategies
- Support transformation

- Training
- Participatory assessment and planning
- Opportunities, incentives
- Supportive policy framework
- Rights and responsibilities





Create Sustainable Seafood Markets



FISH

A CONSUMER'S GUIDE



- Awareness and conscience
- Certification and labeling
- Transparency

- Fisheries, Processors, Suppliers, Trade Organizations, Retailers, Consumers...



Marine Stewardship Council
Certified sustainable seafood

Fish to eat



Think twice

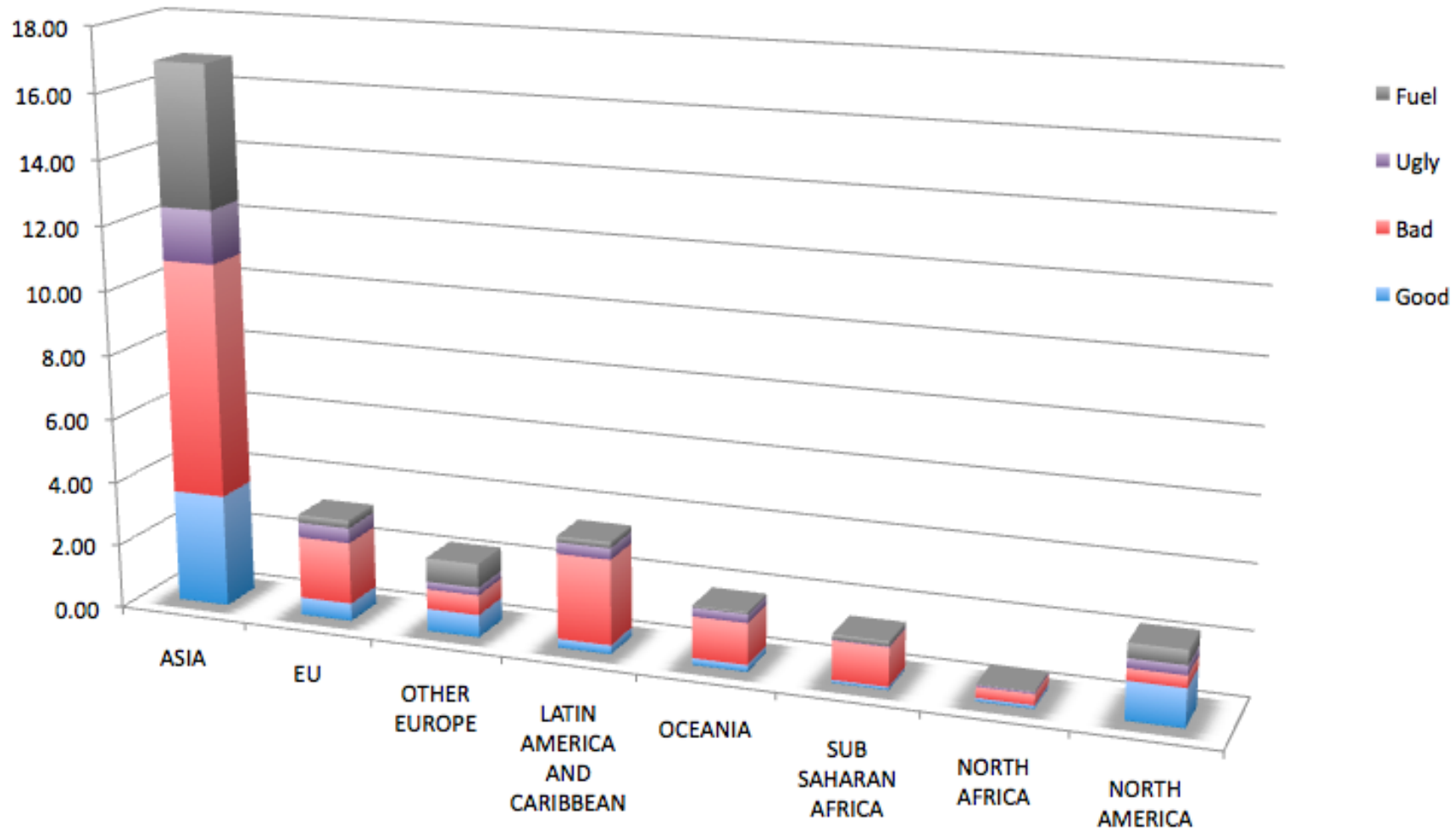


Don't buy





Fisheries Subsidies

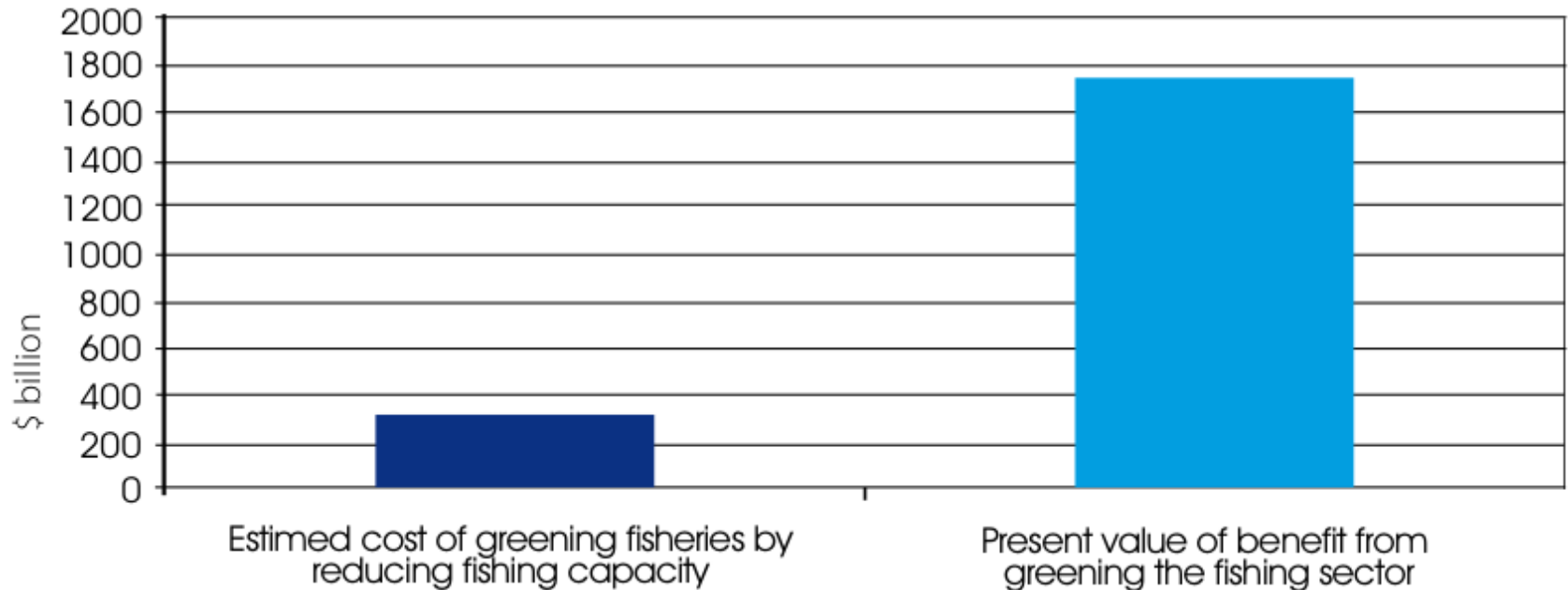


Source: Sumaila, U.R. and D. Pauly (Eds.) 2007. Catching More Bait: A Bottom-up Re-estimation of Global Fisheries Subsidies.



Financing Adaptation

- Investing US\$8 billion a year could raise catches and catch value by 40% over 40 years
- Benefits of sustainable fishing are 3-5 times higher than the cost of greening fisheries





Thank You