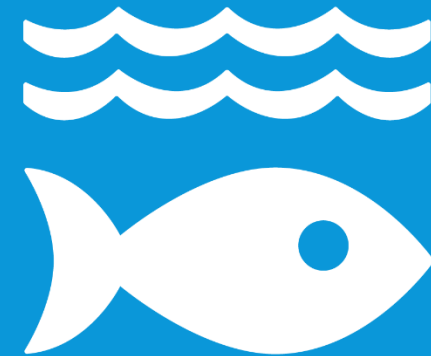


# Snapshot of progress on SDG 14

IAEG-SDG 15 June 2022

**14** LIFE  
BELOW WATER



# The global call to collect ocean acidification data?



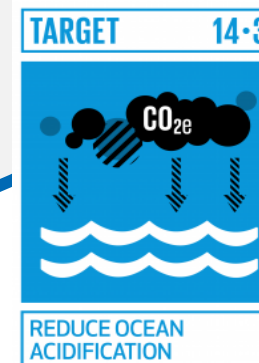
unesco

Intergovernmental  
Oceanographic  
Commission

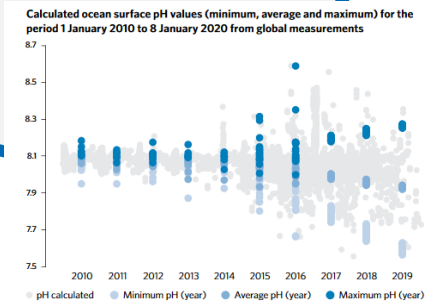
**Goal 14.** Conserve and sustainably use the oceans, seas and marine resources for sustainable development.



**Target 14.3** Minimize and address the impacts of ocean acidification, incl. through enhanced scientific cooperation at all levels.



**Indicator 14.3.1** Average marine acidity (pH) measured at agreed suite of representative sampling stations.



# Current 14.3.1 portal <http://oa.iode.org>

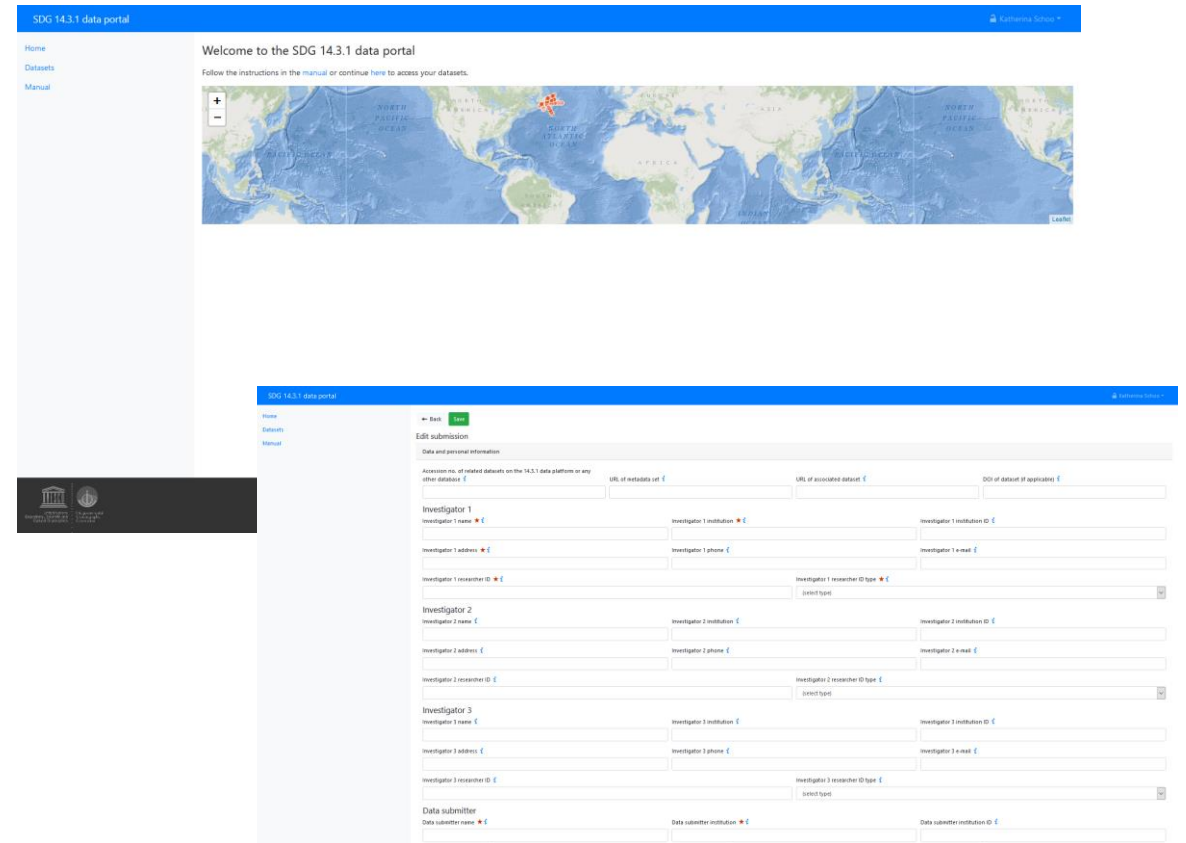


unesco

Intergovernmental  
Oceanographic  
Commission

Currently the portal fulfils basic functions related to the collection of data towards the SDG 14.3.1 Indicator. Users can:

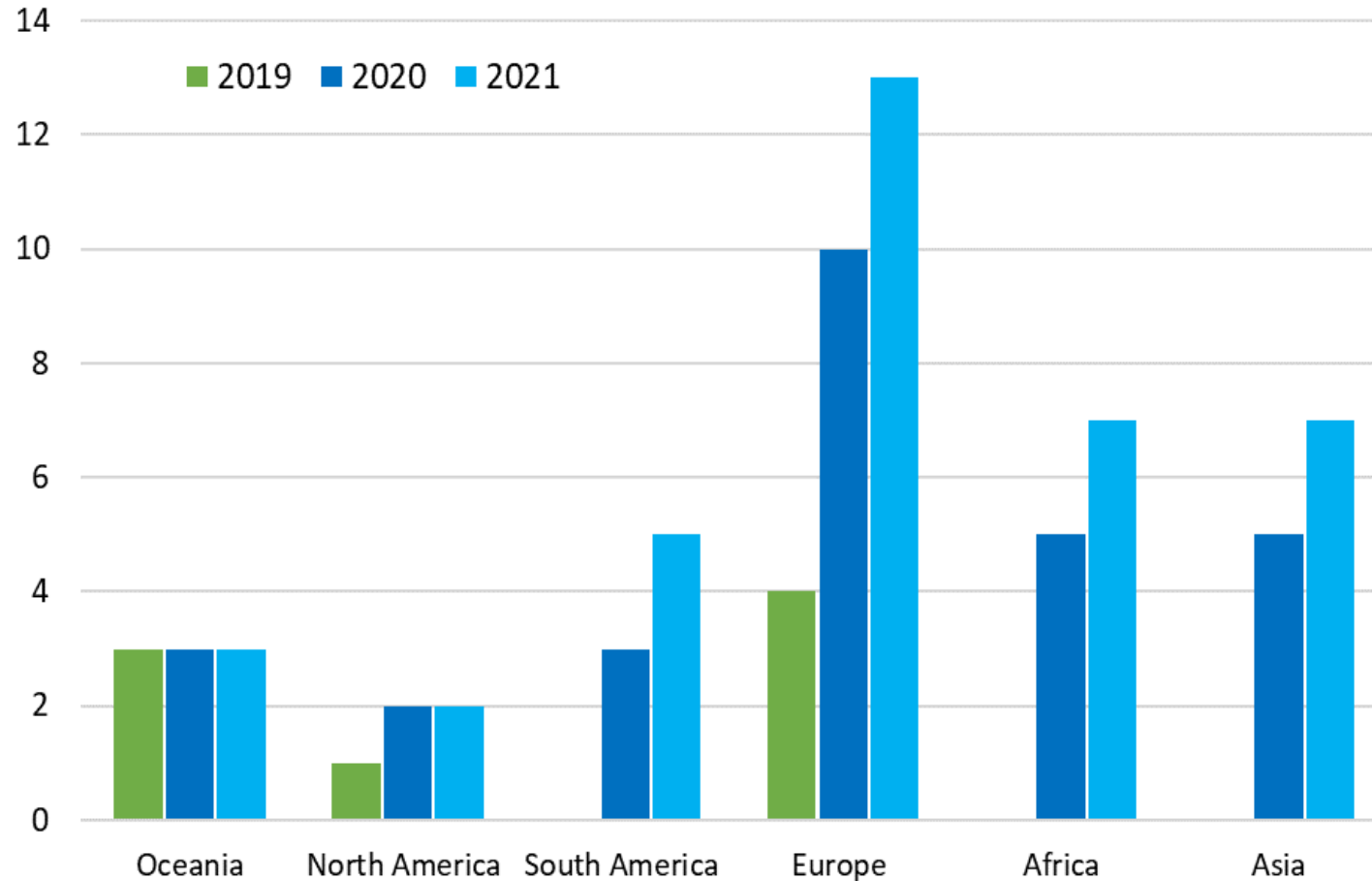
1. upload data and metadata files in excel format directly to the portal;
2. fill in the metadata information online;
3. include several data sets per metadata file (e.g. for repeated measurements);
4. check data automatically to ensure the files were uploaded/prepared correctly;
5. verify the localization data on a map.
6. search for data sets submitted and download;
7. see available data sets on the map,
8. find more information on a dedicated FAQ webpage.



# SDG 14.3.1 reporting – GOOD news



**unesco**  
Intergovernmental  
Oceanographic  
Commission



**2019** – 8 countries submitted data and information

**2020** – 28 countries submitted data and information

**2021** – 37 countries submitted data and information



- i. **Set up a federated data integration/ingestion system using DAP (preferably ERDDAP) services for data relevant to the SDG 14.3.1 Indicator.** The main outcome would be to establish ways to harvest data and metadata from different NODCs, and international data bases to obtain information relevant for the 14.3.1 SDG indicator involving relevant NODCs, NOAA, SOCAT, EMODNET, GLODAP among others, to **agree on the metadata and data** as well as with IODE's Ocean Data and Information System (ODIS) and IODE Ocean InfoHub
- ii. **Develop visualization tools embedded in the federated system**, according to the SDG 14.3.1 methodology, to include maps showing the origin of the datasets received, organised by data quality; maps depicting trends for long-term datasets (>5 years).
- iii. **Improve the ingestion of relevant data provided by individual scientists, research organizations, as well as other data centres and data platforms to the SDG 14.3.1 Data Portal**, and ensure interoperability of relevant data; Update and upgrade the SDG 14.3.1 Data Portal to include additional settings for data providers and users, including search functions, downloading of data sets, data quality assurance mechanisms, FAQs and help desk. **The newly established 14.3.1 data portal would be part of the federated system; however, to ensure the compatibility and that it in turn feeds into the other relevant databases some further work is required**, such as enabling the uploading of different formats in addition to the excel.

# From SDG 14 to indicator 14.a.1



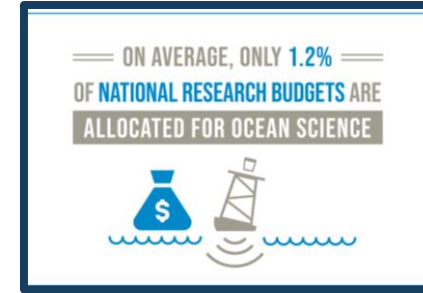
**unesco**

Intergovernmental  
Oceanographic  
Commission



***SDG 14: Conserve and sustainably use the oceans, seas and marine resources for sustainable development***

***Target 14.a - Increase scientific knowledge, develop research capacity and transfer marine technology, ....***



***Indicator 14.a.1 - Proportion of total research budget allocated to research in the field of marine technology***

# GOSR2020 more than just a document

---

250 pages serving as a resource for policymakers, academics and other stakeholders seeking to assess progress towards the Sustainable Development Goals of the UN 2030 Agenda

Executive Summary – highlighting some of the key findings and main conclusions (all UNESCO languages)

GOSR portal – place to access and update data  
<https://gosr.ioc-unesco.org/>



Charting Capacity for Ocean Sustainability



# Questionnaire - inviting MS to contribute

## In addition:

Direct communication with MS focal points,  
Involvement of IOC Chair and Vice Chairs,  
Head of IOC Sub-Commissions encouraged to address the respective MS directly,  
Presentations at IOC Sub-Commissions' meetings and IODE 25,

## Problems encountered:

Online questionnaire not suitable for national consultations  
Focal points email are not correct  
Delayed communication between focal points and scientists  
Questionnaire too difficult? But we know not easy therefore nobody did it before and the exercise is and will continue to be difficult. – IOC Secretariat offered/offers help



# GOSR2020 Investments

There are large differences in countries' investment in ocean research.

On average, only 1.7% of national research budgets are allocated for ocean science, with percentages ranging from around 0.03% to 11.8%. This is a small proportion compared to the modestly estimated US\$1.5 trillion contribution of the ocean to the global economy in 2010.

## SDG indicator 14.a.1

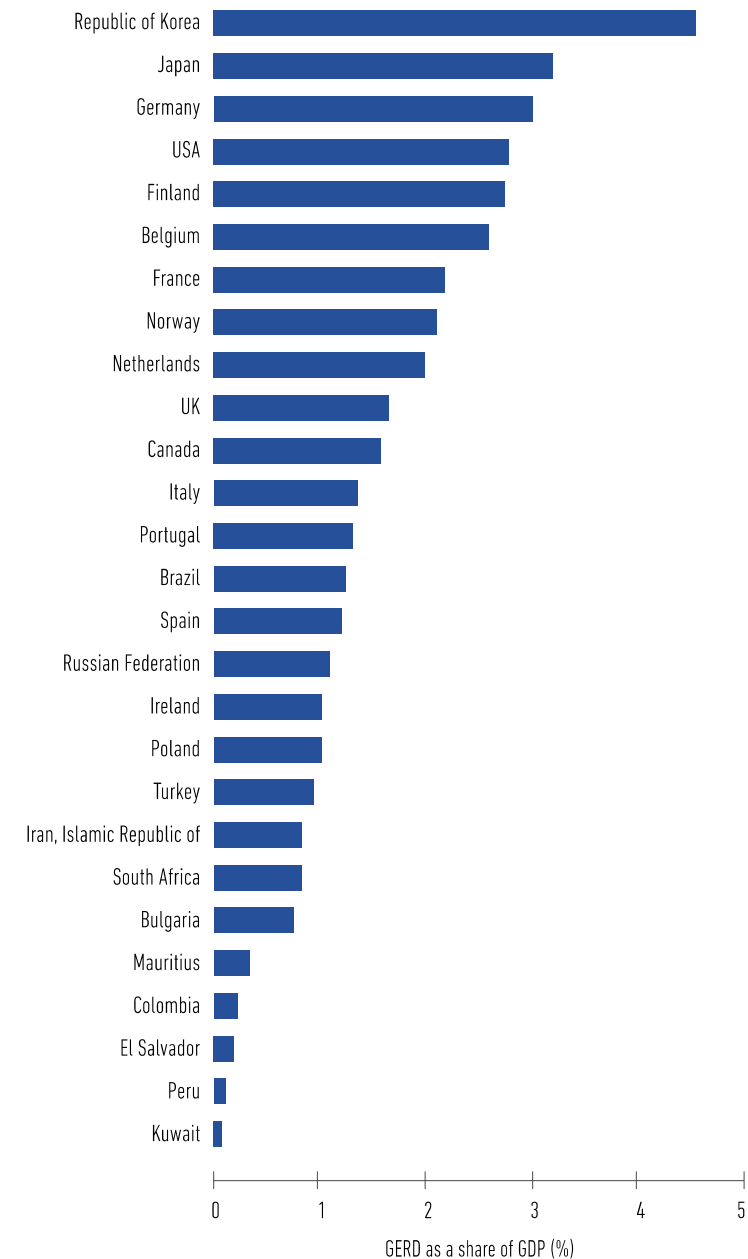
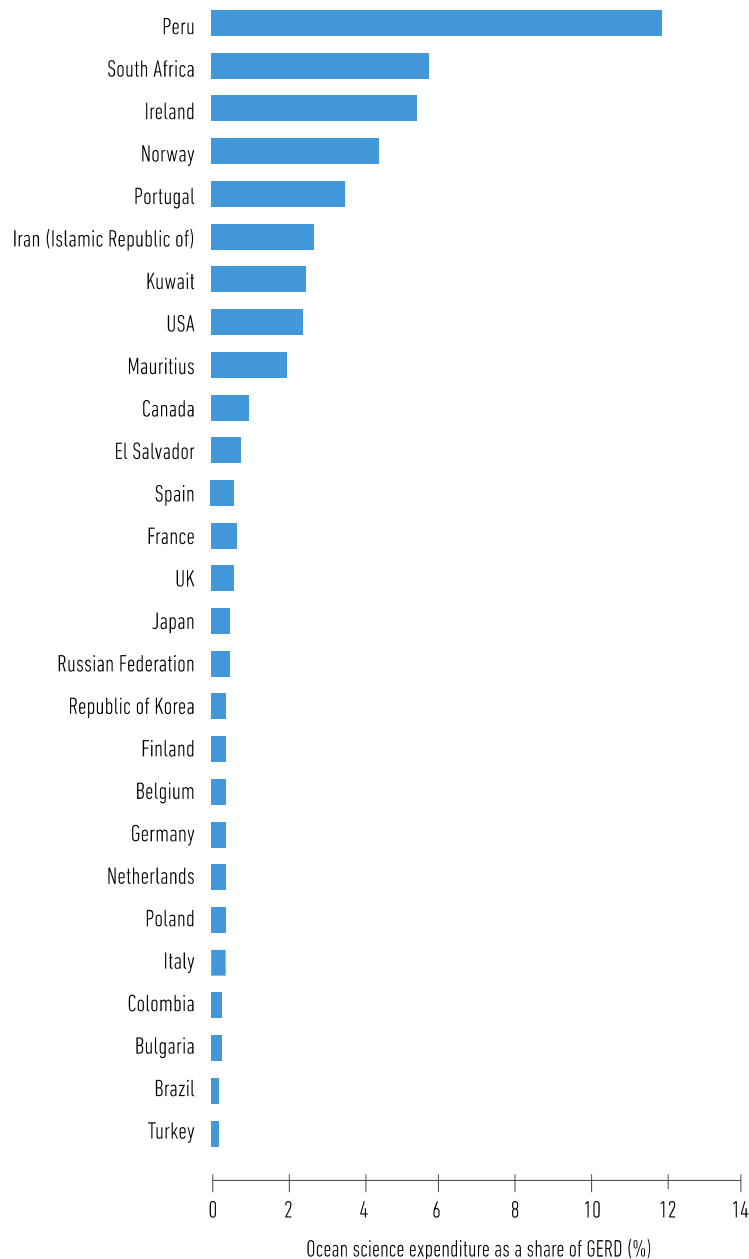
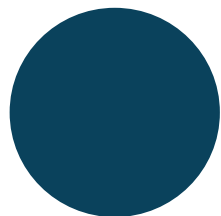


Figure ES.19. Estimates of ocean science funding as a share of GERD and GERD as a share of GDP in 2017.

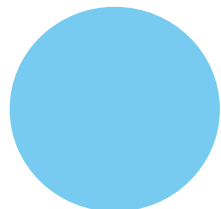
Sources: Data adapted from GOSR2020 questionnaire and UNESCO Institute for Statistics database. Note that ocean science funding is not identified as such in GERD data and can be found in natural sciences and other categories.

# ROADMAP

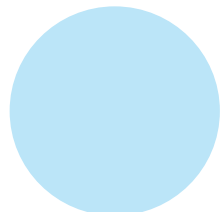
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**Full GOSR publication in 2024/2025, preparation to start in 2023**



**Intermediate report to be prepared for next SDG data collection cycle: Ocean Science **Capacitytracker****



**Short 10-15 questionnaire focusing on human and technical resources as well as SDG 14.a.1 and ocean science investment more general to be send to Member States 3rd quarter of 2022**

# Overview of the Goal 14 - Indicator 14.4.1



14.1

14.2

14.3

14.4

14.5

14.6

14.7

14.a

14.b

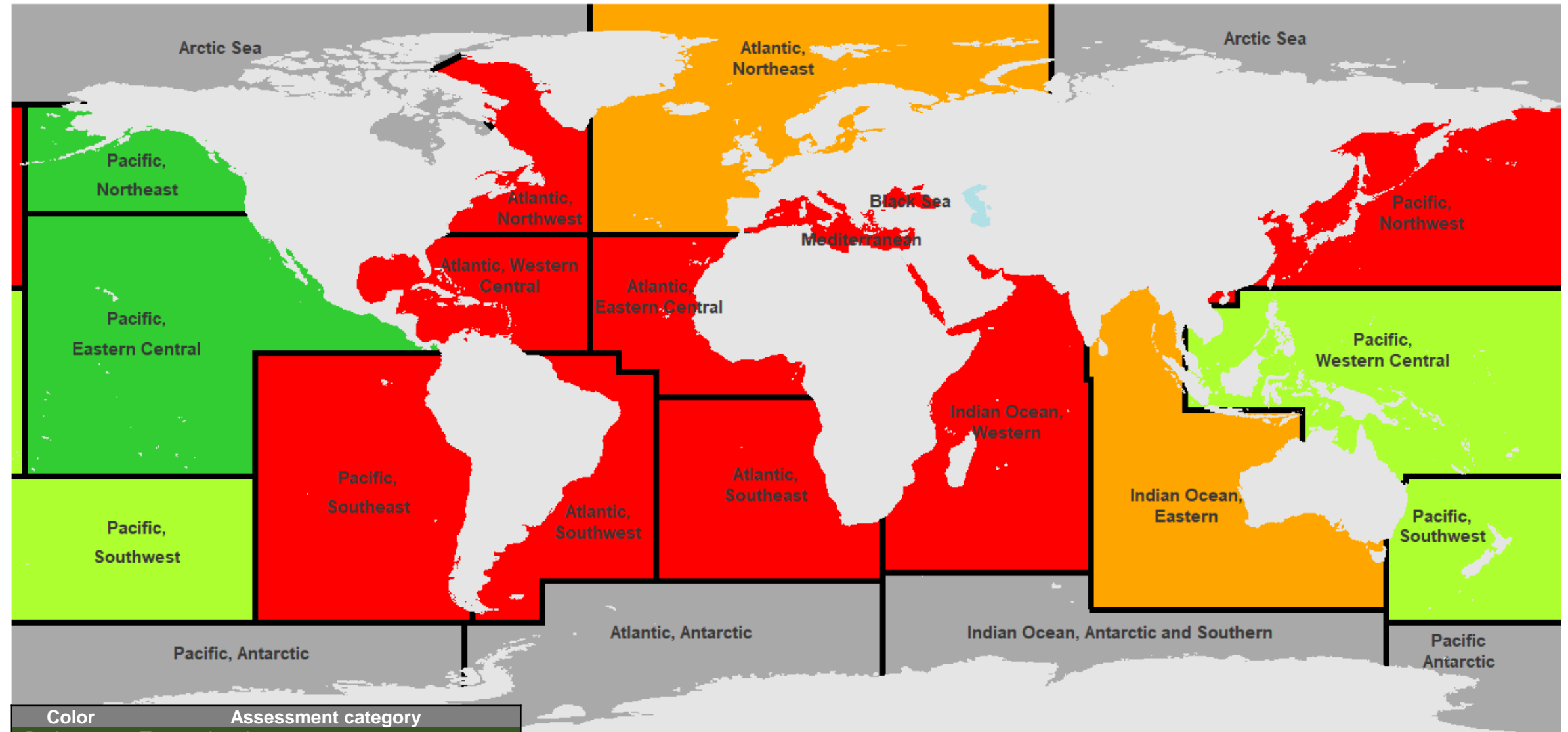
14.c

- Indicator reported only at global/regional level until 2019
- Thereafter, FAO introduced a new national-level data collection and reporting process
- Very challenging to produce the indicator because it requires a combination of fish catch and effort data and biological information
- To date, out of the 165 countries with a marine border, FAO has collected data from 86 countries
- Of these countries, FAO has produced validated indicator values for 58 countries, of which 29 are deemed low reliability

**Target 14.4:**  
sustainably manage fisheries and end destructive fishing practices, to restore fish stocks at MSY levels

**Indicator  
14.4.1 -  
Proportion of  
fish stocks  
within  
biologically  
sustainable  
levels**

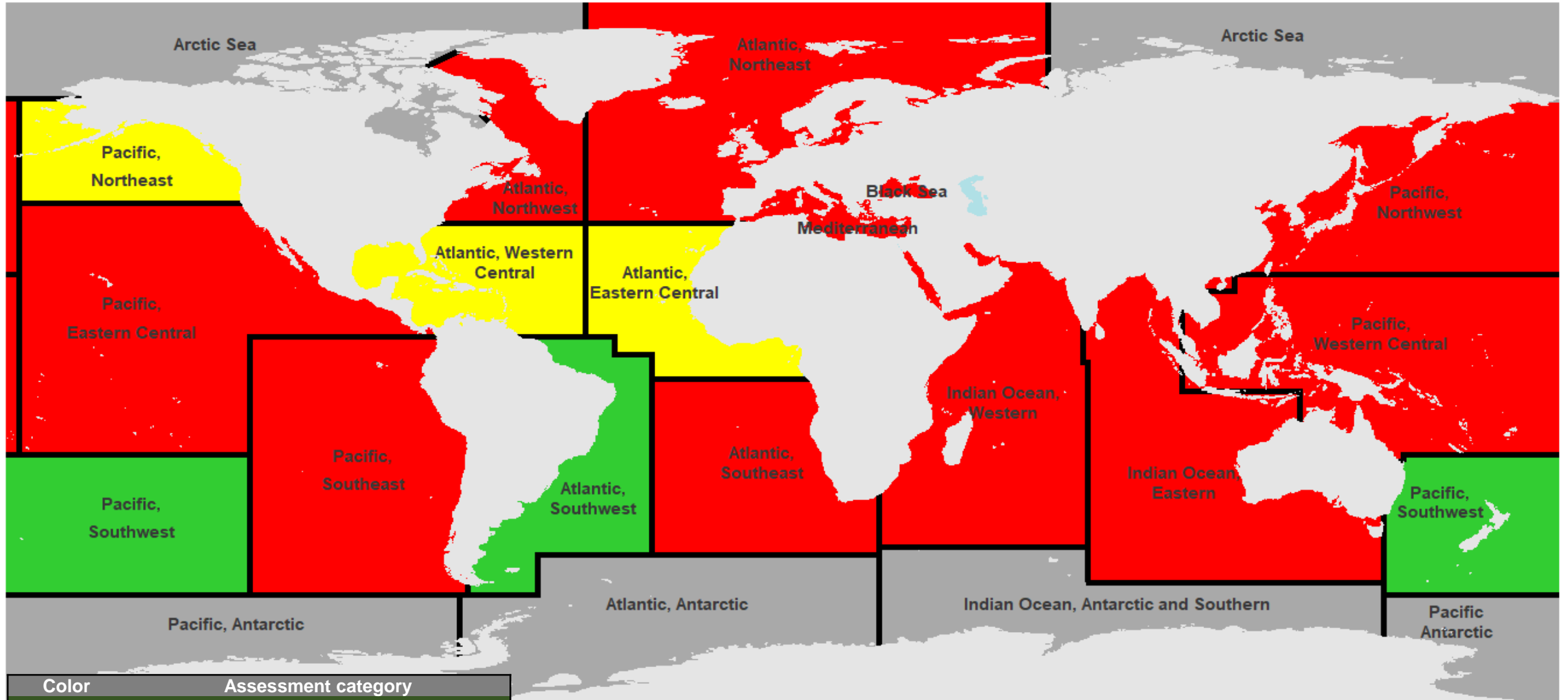
### 14.4.1: Distance to the target by FAO Marine Regions (2019 data)



**World** assessment for distance to the target: **very far from the target**

Color	Assessment category
Dark green	Target already met
Green	Very close to the target
Light green	Close to the target
Orange	Far from the target
Red	Very far from the target
Grey	Data not available

### 14.4.1: Trend, by FAO Marine Regions (2019 data)



Color	Assessment category
Dark green	Target already met
Green	On-track to achieve the target
Yellow	On-path, but too slow to achieve the target
Orange	No improvement (stagnation) since baseline
Red	Deterioration/movement away from the target
Grey	Data not available

**World assessment for trend: Deterioration/movement away from the target**

# Overview of the Goal 14 - Indicator 14.7.1



Target 14.7:  
Increase economic  
benefits from  
sustainable use of  
marine  
resources

## Indicator 14.7.1

- Sustainable  
fisheries as a  
percentage of  
GDP in small  
island  
developing  
States, least  
developed  
countries and  
all countries

14.1

14.2

14.3

14.4

14.5

14.6

14.7

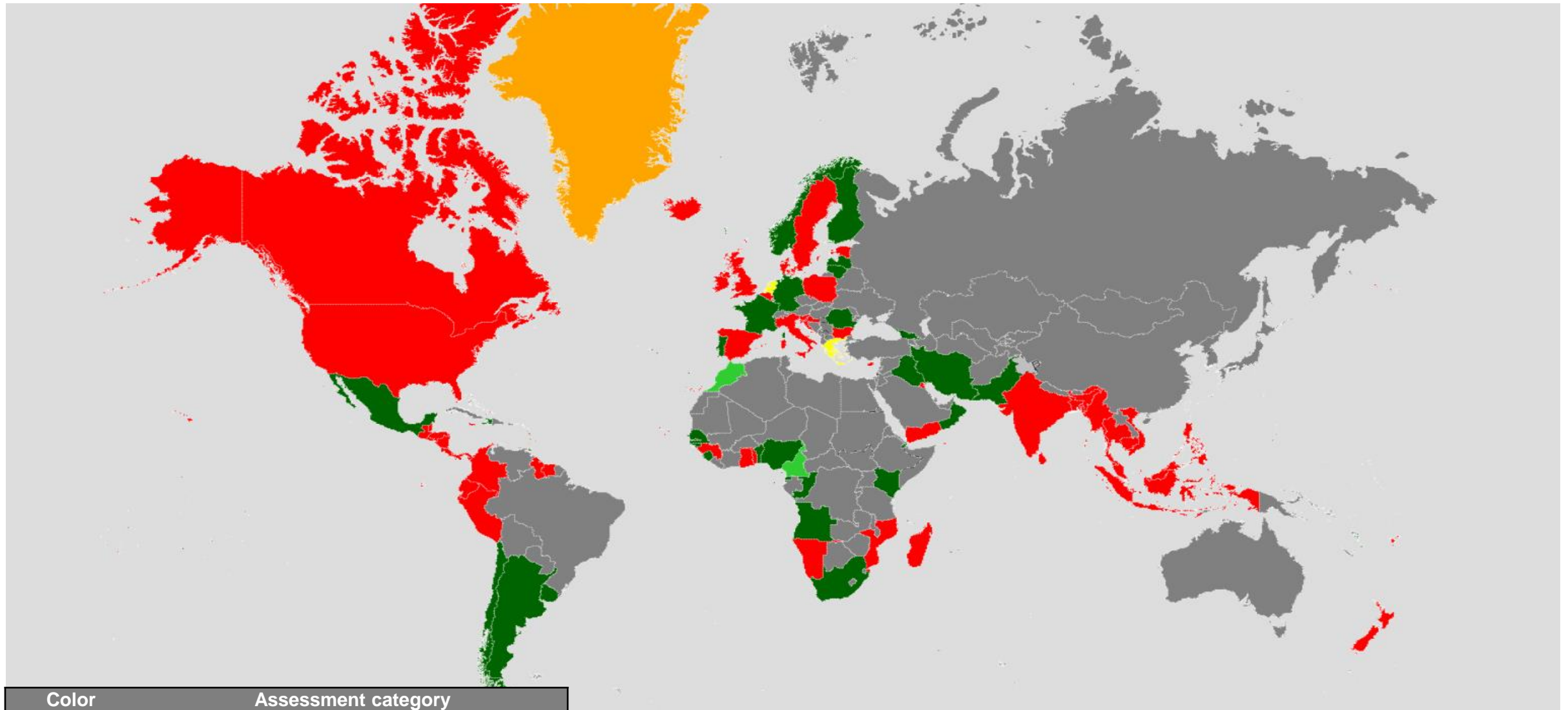
14.a

14.b

14.c

- **Global reporting rate (past five years): 54%**
- **Main constraints for country reporting:**
  - ✓ Countries report aggregated data for value added for the fisheries and aquaculture sector (not split for marine capture fisheries)
  - ✓ Lack of value of marine capture fisheries is still a limitation
  - ✓ Dependency on national indicator on fish stock sustainability, often unavailable
- **No numerical yardstick, therefore we can only assess trend (but not current distance to the target)**

### 14.7.1: Trend (2019 data)



Color	Assessment category
Dark green	Improvement since baseline year
Green	Slight improvement since baseline year
Yellow	No improvement since baseline year
Orange	Slight deterioration since baseline year
Red	Deterioration since baseline-year
Grey	Data not available

**World** assessment for trend: Slight deterioration since baseline year

# Overview of the Goal 14 - Indicators 14.6.1/14.b.1



14.1

14.2

14.3

14.4

14.5

14.6

14.7

14.a

14.b

14.c

- Global reporting rate (past five years): over 70%
- Main challenge: countries are not completing the *Code of Conduct on Responsible Fisheries* (CCRF) FAO questionnaire (the data source for both indicators) mainly due to poor inter-institutional coordination at country level

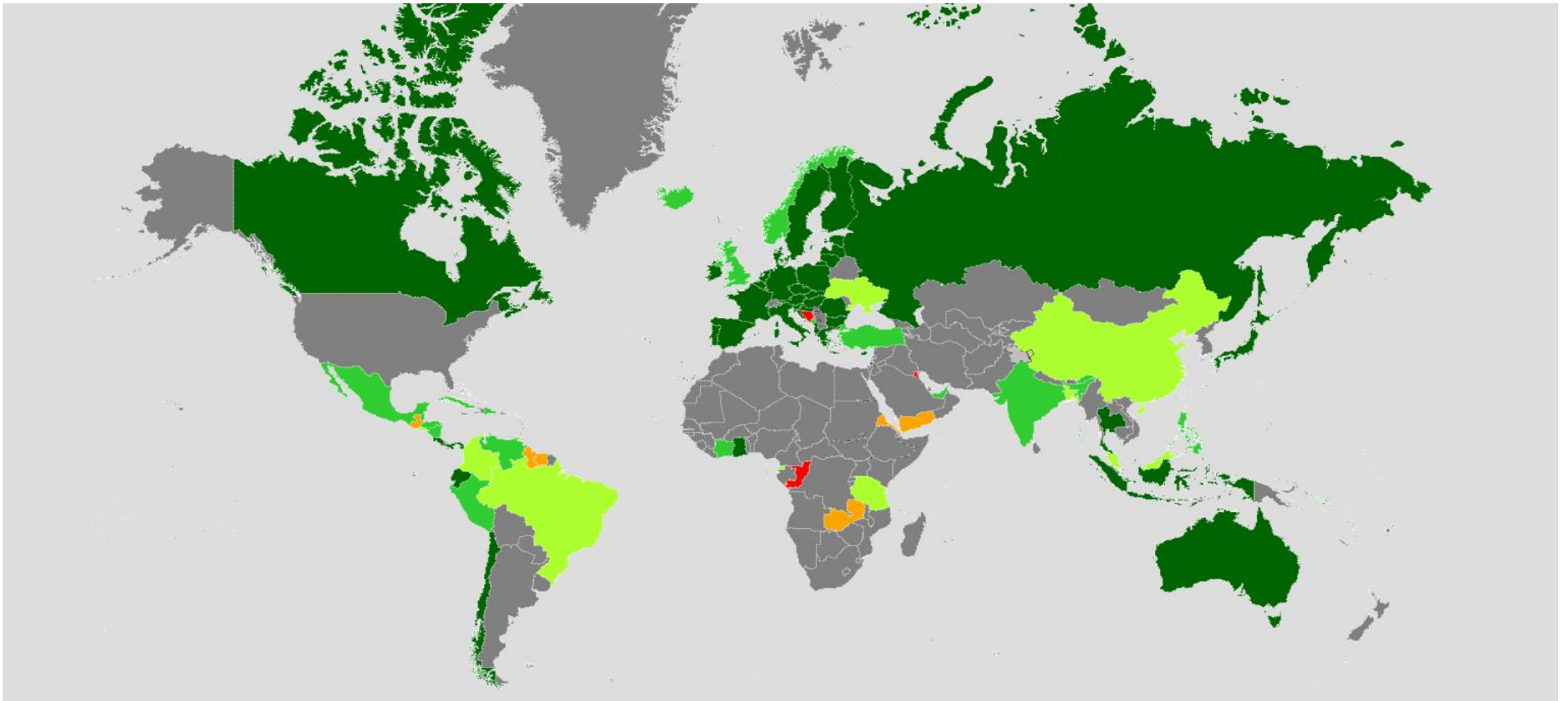
**Target 14.6:** prohibit forms of fisheries subsidies which contribute to overcapacity and IUU

**Target 14.b:** Promote access for small-scale artisanal fishers to marine resources and markets

**Indicators 14.6.1 and 14.b.1 -**  
Degree of implementation of international instruments aiming to combat IUU fishing / promote small-scale fisheries



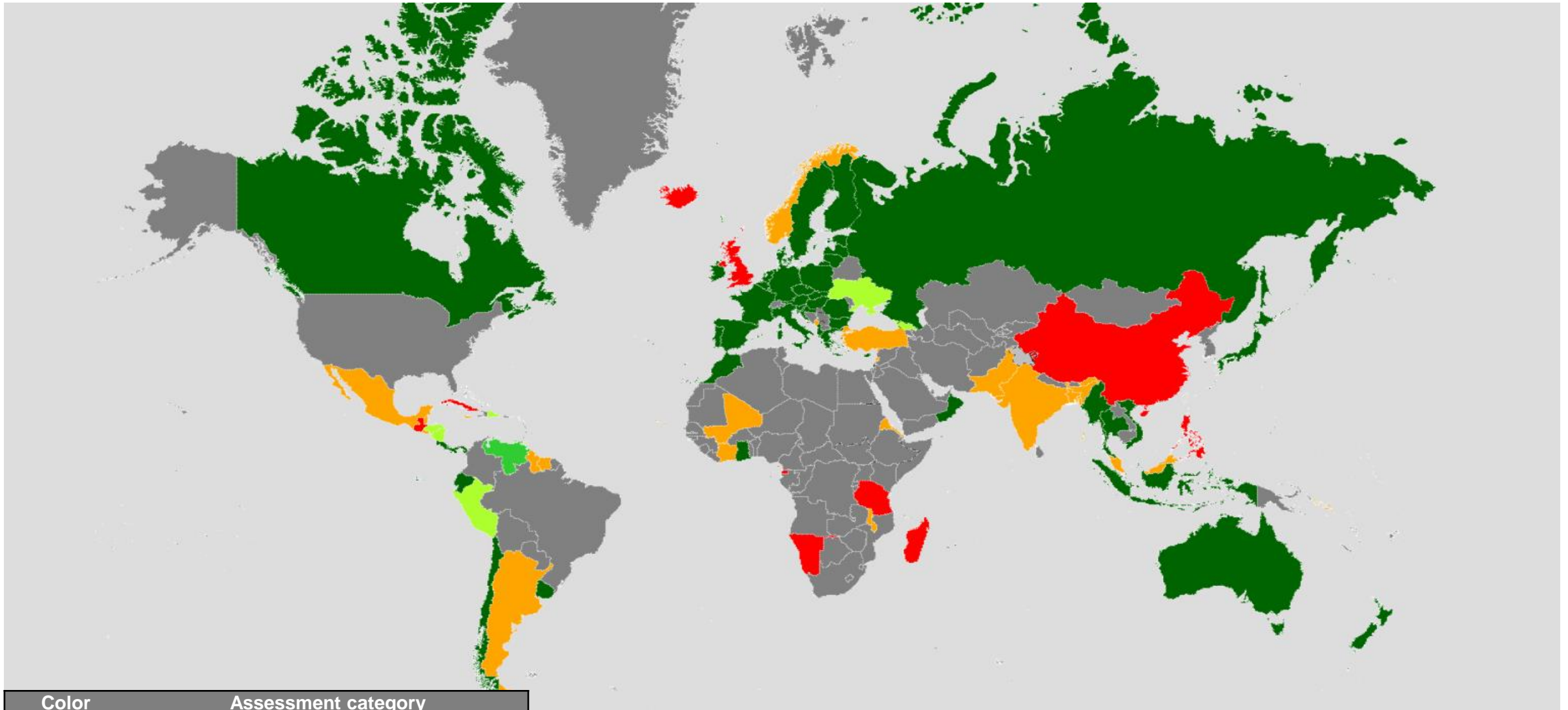
### 14.6.1: Distance to the target (2022 data)



Color	Assessment category
Dark green	Target already met
Green	Very close to the target
Light green	Close to the target
Orange	Far from the target
Red	Very far from the target
Grey	Data not available

**World** assessment for distance to the target: close to the target

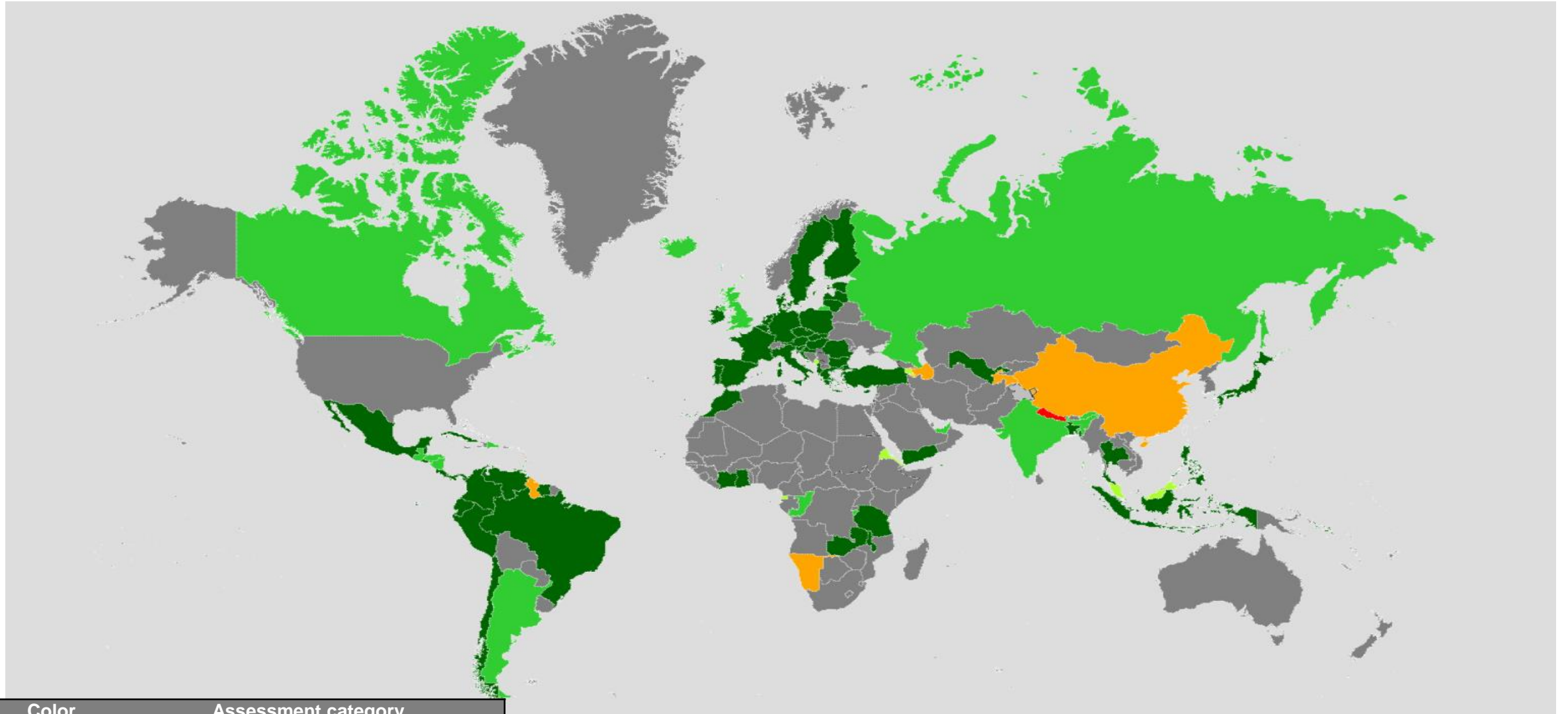
## 14.6.1: Trend (2022 data)



Color	Assessment category
Dark green	Target already met
Green	Improvement
Light green	Slight improvement
Orange	No improvement (stagnation) since baseline
Red	Deterioration/movement away from the target
Grey	Data not available

**World** assessment for trend: slight improvement

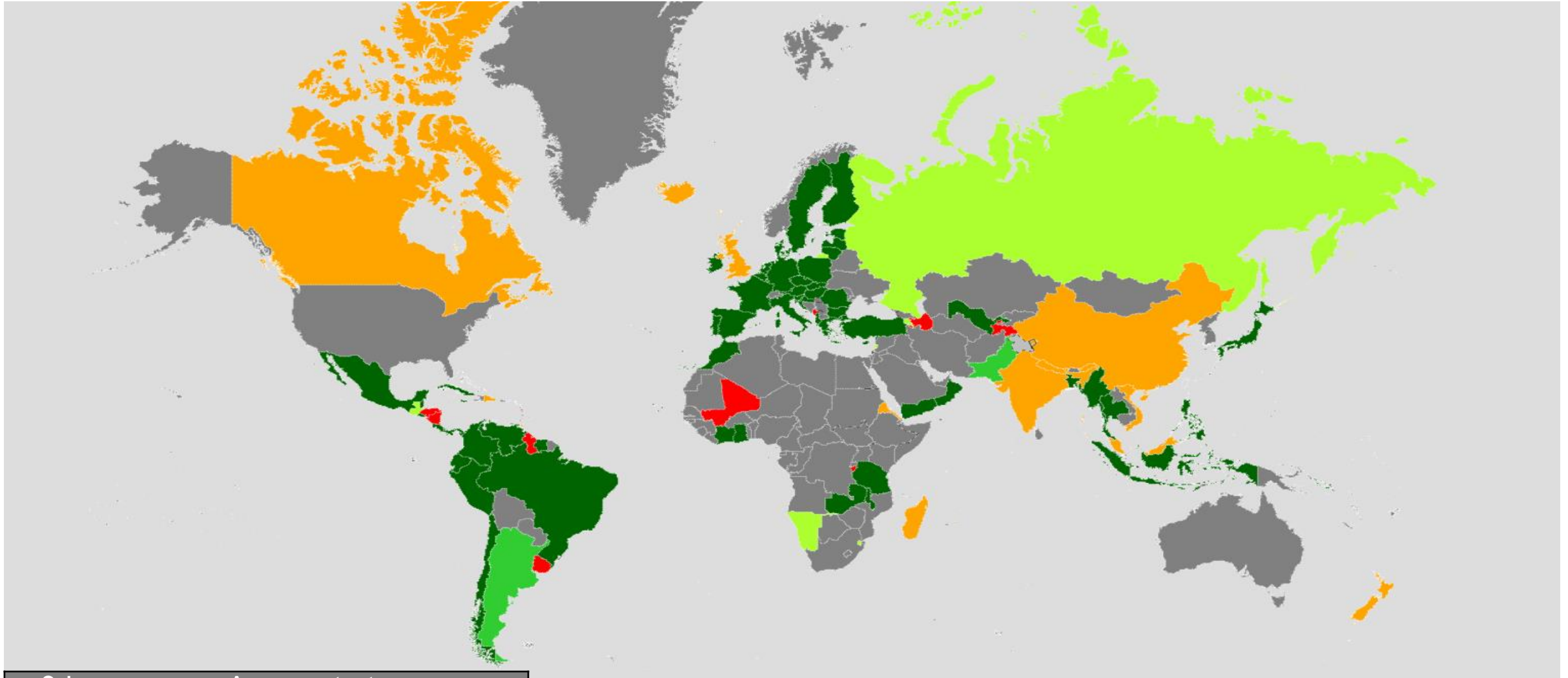
## 14.b.1: Distance to the target (2022 data)



Color	Assessment category
Dark green	Target already met
Green	Very close to the target
Light green	Close to the target
Orange	Far from the target
Red	Very far from the target
Grey	Data not available

**World assessment for distance to the target: target already met**

## 14.b.1: Trend (2022 data)



Color	Assessment category
Dark green	Target already met
Green	Improvement
Light green	Slight improvement
Orange	No improvement (stagnation) since baseline
Red	Deterioration/movement away from the target
Grey	Data not available

**World assessment for trend: target already met**

# Overview of the Goal 14 - Indicator 14.5.1

14.5 By 2020,  
conserve at least 10  
per cent of coastal  
and marine areas [...]

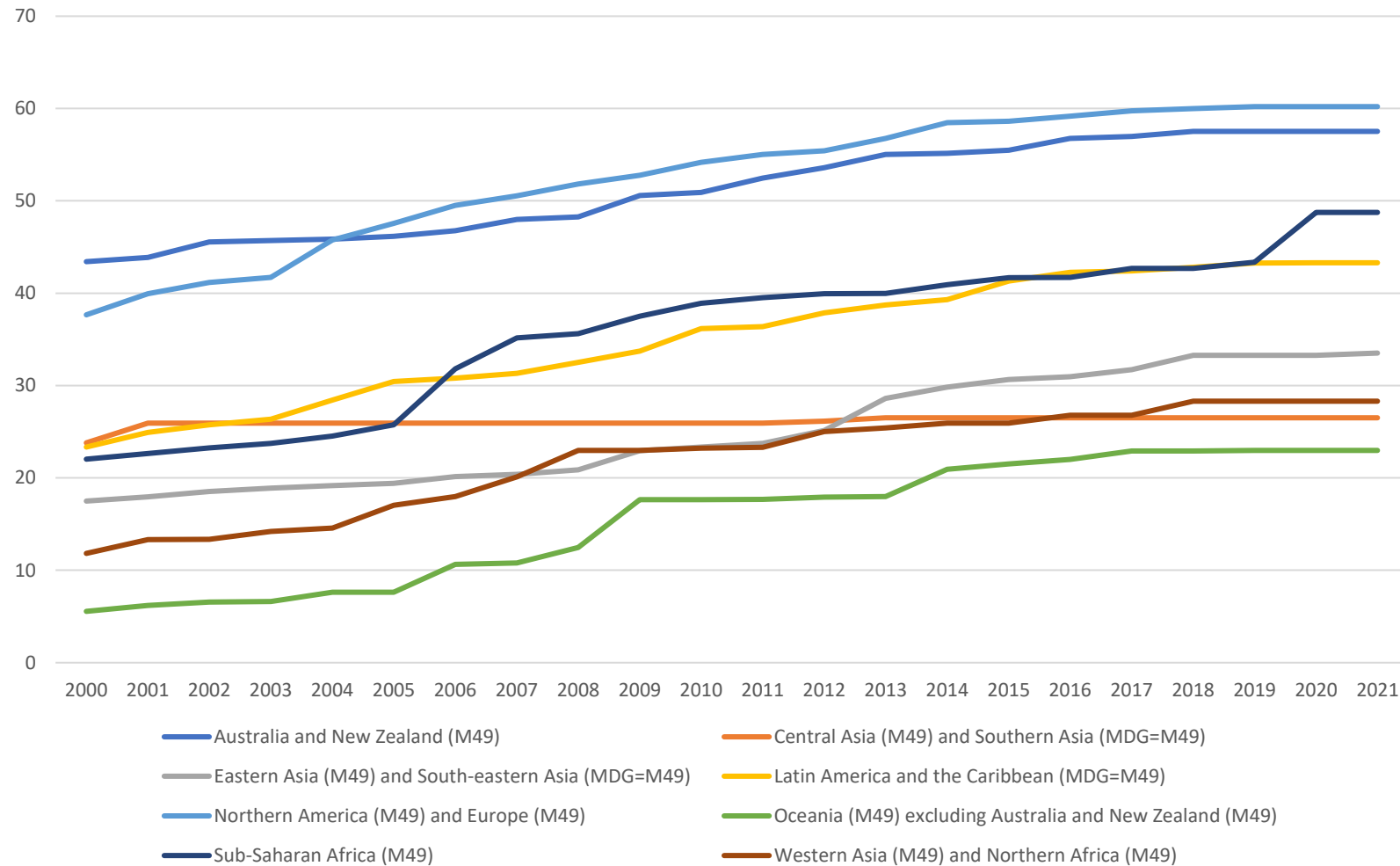
## 14.5.1

Coverage of  
protected areas  
in relation to  
marine areas

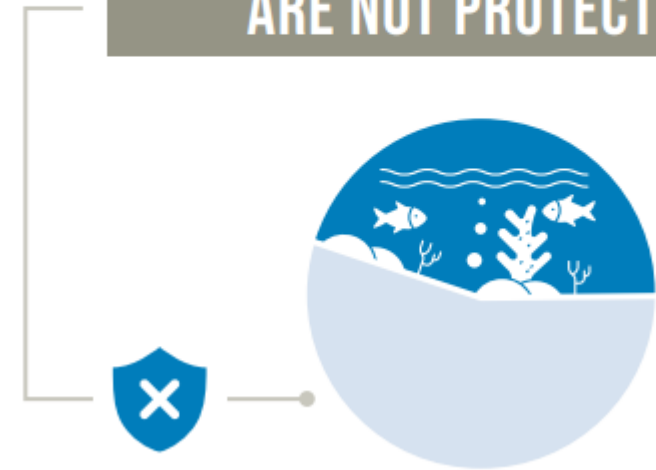


- Indicator derived from overlay of nationally-reported data from WDPA (<https://www.protectedplanet.net>) with WDKBA (<https://www.keybiodiversityareas.org>)
- Universal country coverage: WDPA and WDKBA encompass data from all countries
- Main constraints in country reporting:
  - While PAs are well-documented in most countries, “Other Effective area-based Conservation Measures” (OECMs) are not yet widely documented
  - KBA data are robust for birds but not yet comprehensively identified for other elements of biodiversity

## Trend and status (2021 data)



OVER HALF OF  
MARINE KEY BIODIVERSITY AREAS  
ARE NOT PROTECTED



Color	Assessment category
Dark green	Improvement
Green	Slight or no improvement
Orange	Slight deterioration
Red	Deterioration
Grey	Data not available

**World assessment for trend:** Progress stalled over recent years  
**World assessment for status:** Moderate distance to target for Sub-Saharan Africa, E & SE Asia, LAC, WEOG; Far from target for other regions

Thank you

The image features a solid blue background. In the bottom right corner, there is a decorative graphic consisting of several thin, parallel white lines that run diagonally from the bottom edge towards the top right corner.