

SDG Indicator 6.3.2 on ambient water quality

2023 Data Drive Updates

Europe 20th June 2023

UNEP GEMS/Water



- **Context**
- **Indicator recap**
- **Timeline**
- **2021 Progress Report findings**
- **Updates**
 - New SDG Water Quality Hub
 - Level 2 Reporting
- **Water Framework Directive Countries**
- **Summary**
- **Q&A Session**



SDG 6 indicators



UN WATER

6 CLEAN WATER AND SANITATION

INTEGRATED MONITORING INITIATIVE FOR SDG 6



United Nations
Statistics Division



UNECE



World Health
Organization

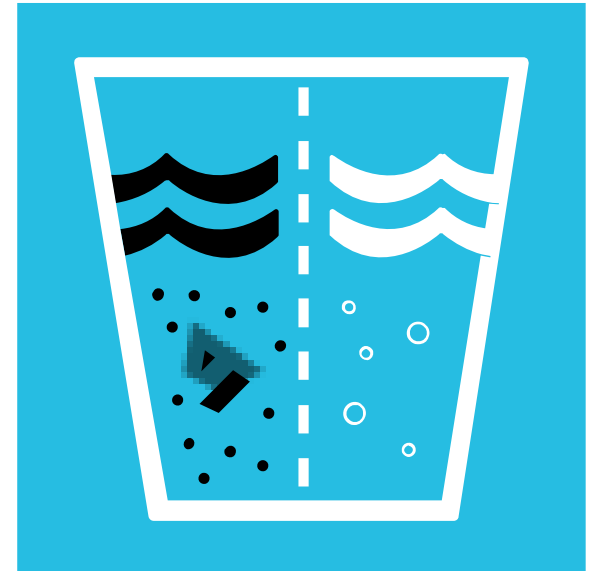


Target 6.3 and Indicator 6.3.2

By 2030, **improve water quality** by reducing pollution, eliminating dumping and minimizing release of hazardous chemicals and materials, halving the proportion of untreated wastewater and substantially increasing recycling and safe reuse globally

- Indicator 6.3.1 - Proportion of wastewater safely treated
- **Indicator 6.3.2 - Proportion of bodies of water with good ambient water quality**

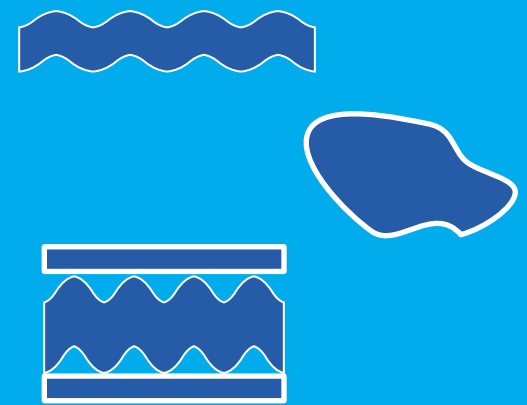
TARGET **6.3**



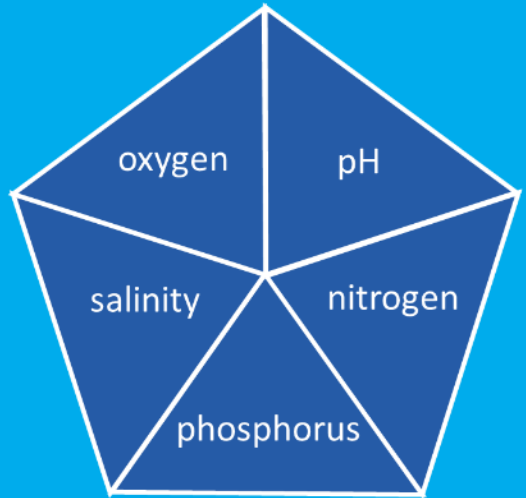
**IMPROVE WATER
QUALITY, WASTEWATER
TREATMENT AND SAFE
REUSE**

Proportion of bodies of water with good ambient water quality

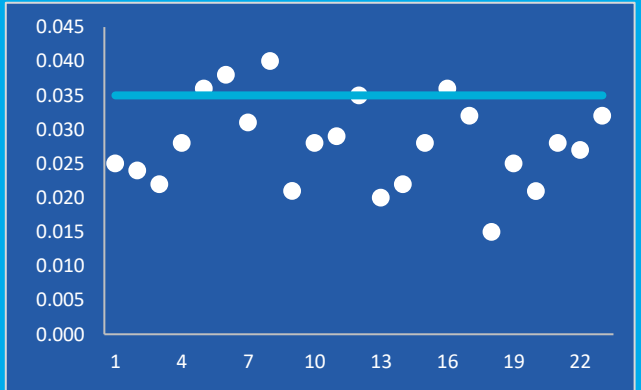
Waterbodies need to be defined within the country:
rivers,
lakes, and
groundwaters



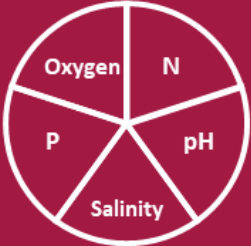













Water quality is classified by comparing measurements with **target values** for specific **parameters** from specific **parameter groups**



Good water quality represents at least **80%** compliance of measurements with target values



Level 1 and Level 2

Reporting Level	Level 1	Level 2
Data Collection	In-situ only	In-situ or remote
Data Type	 <p>Physico-chemical</p>	<p>Physico-chemical</p>  <p>Biological / Ecosystem</p>  <p>Pathogens</p> 
Data Source	<p>National monitoring programme</p>  <p>Private sector</p>  <p>Academic sector</p>  <p>Citizen</p> 	<p>National monitoring programme</p>  <p>Private sector</p>  <p>Academic sector</p>  <p>Citizen</p>  <p>Earth observation</p>  <p>Models</p> 

SDG Indicator 6.3.2 - Timeline

2016 - Method development and testing

2017 - Global data drive

2018 – Progress Reporting

2019 – Feedback process and prepare for data drive

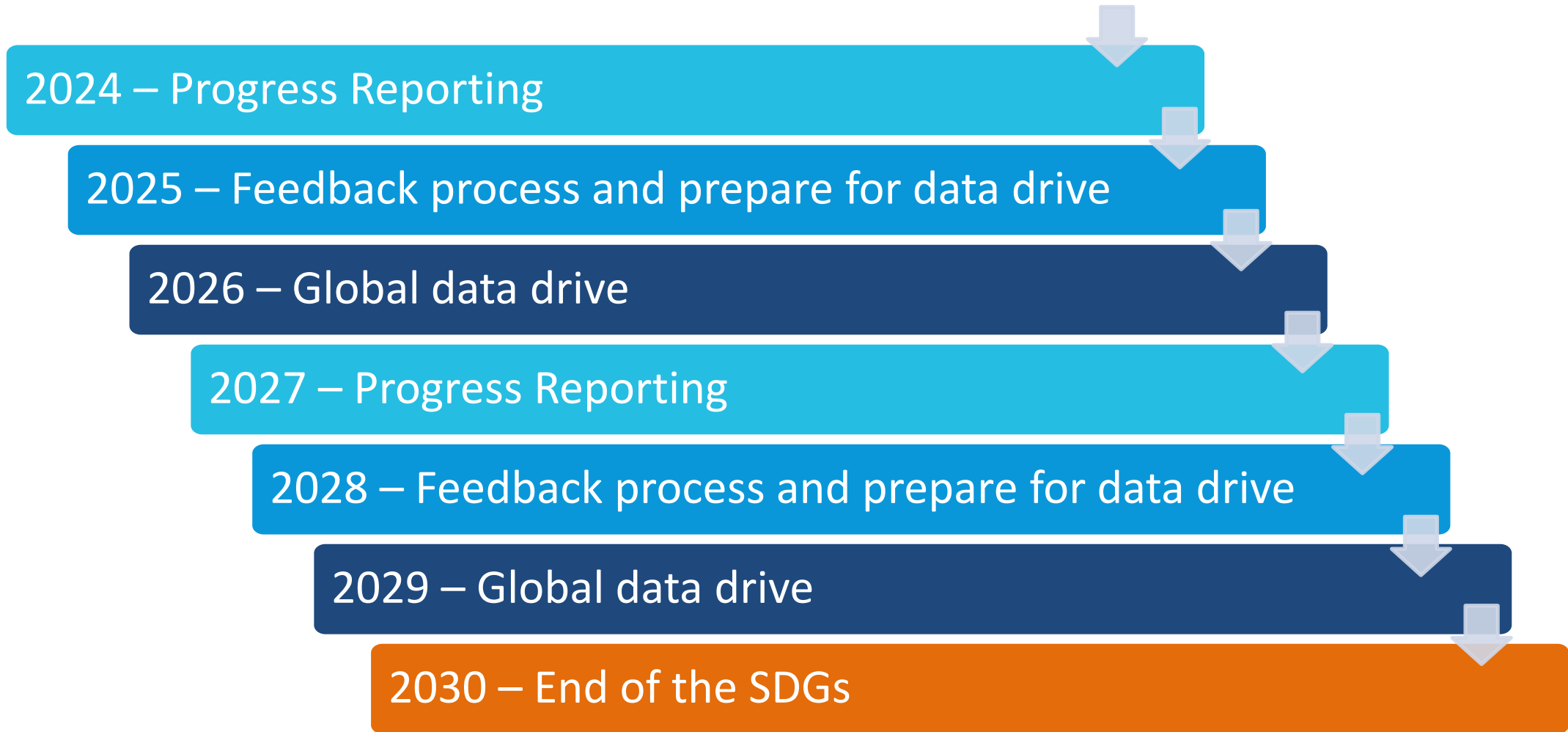
2020 – Global data drive

2021 – Progress Reporting

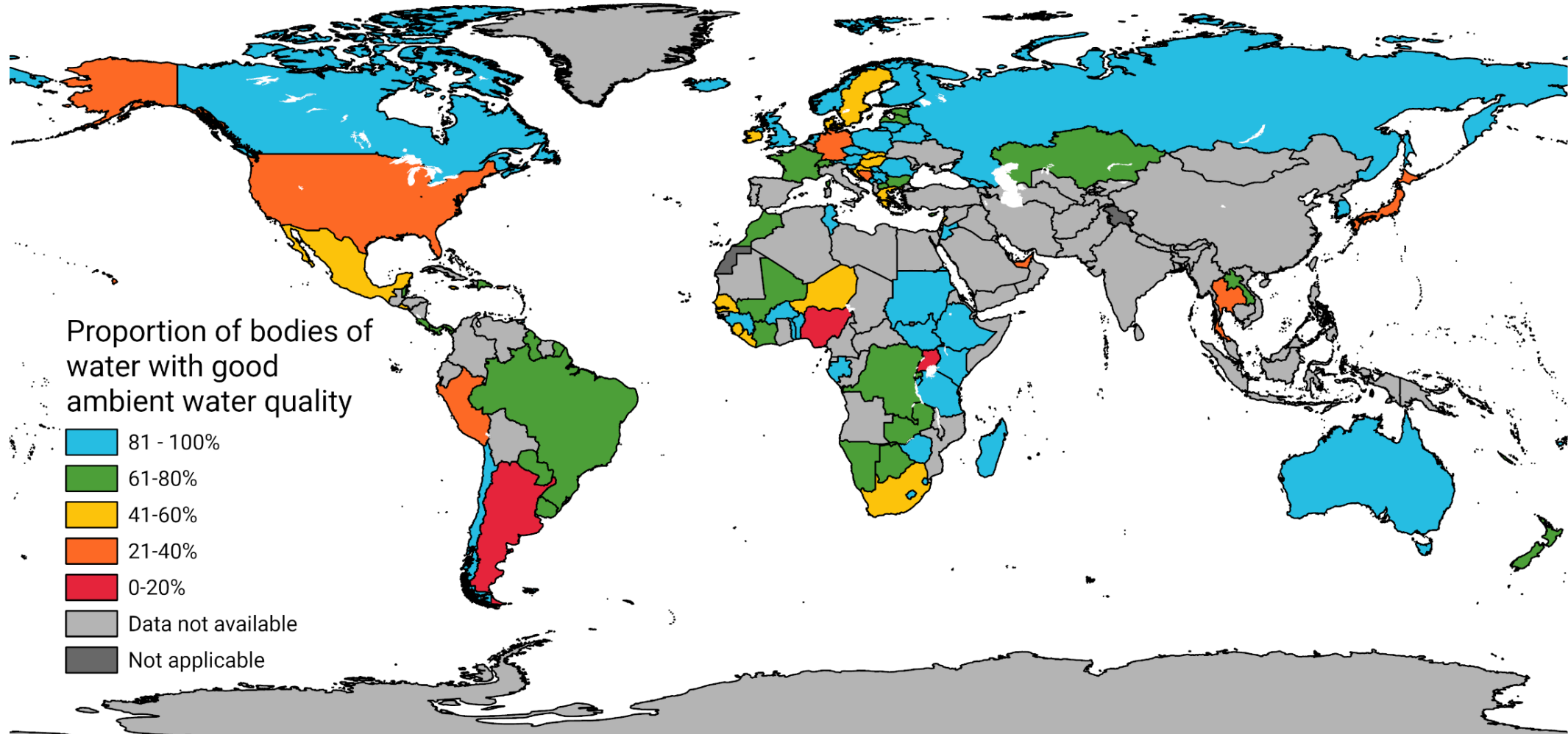
2022 – Feedback process and prepare for data drive

2023 – Global data drive (Deadline - Oct 1st)

SDG Indicator 6.3.2 - Future

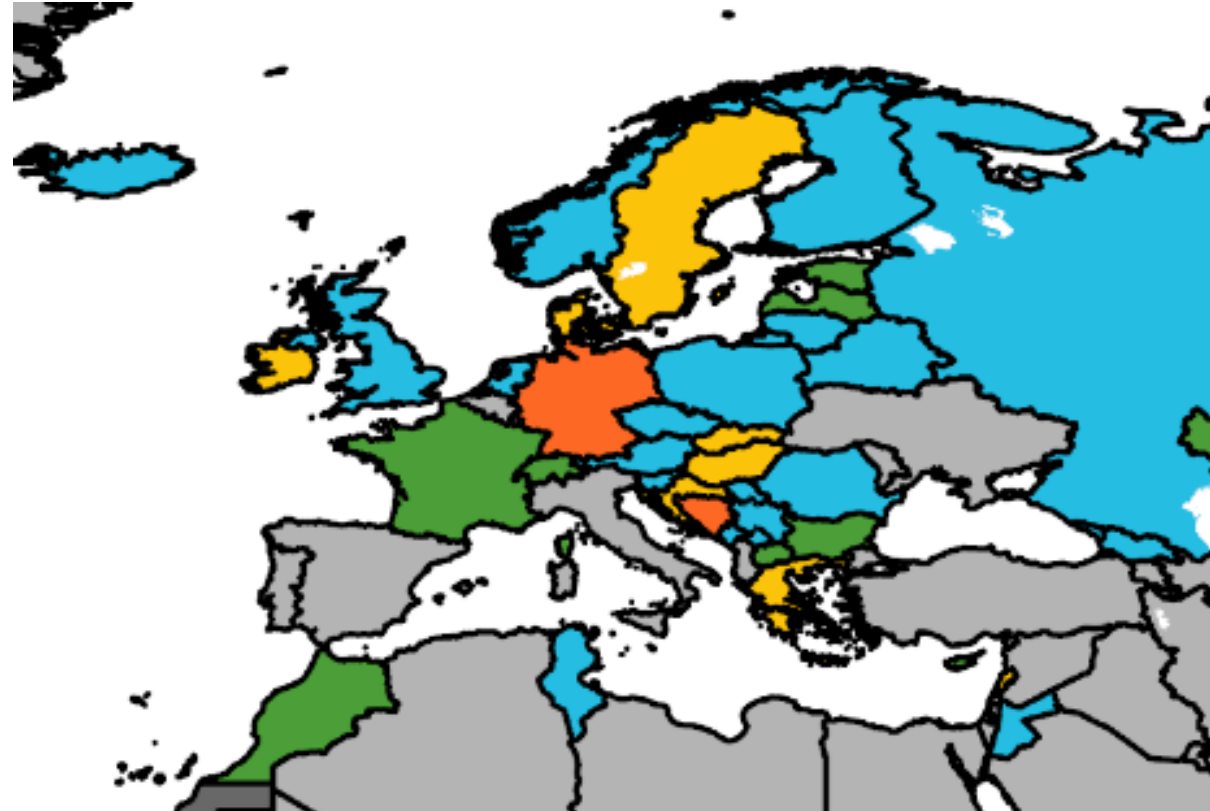
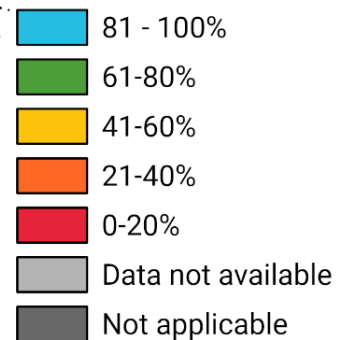


SDG Indicator 6.3.2 - Latest Results



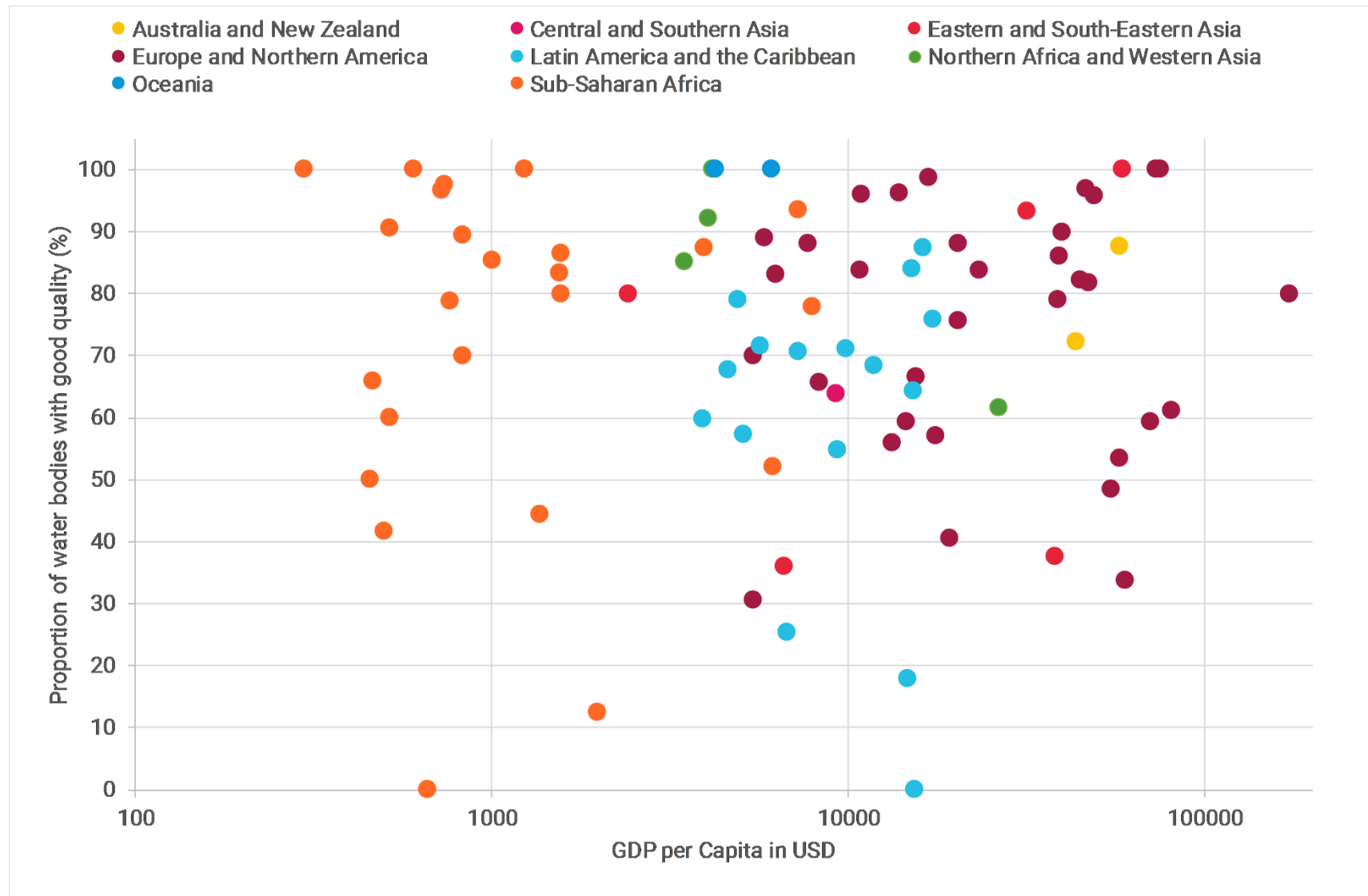
SDG Indicator 6.3.2 - Latest Results

Proportion of bodies of water with good ambient water quality

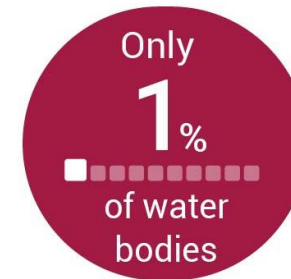
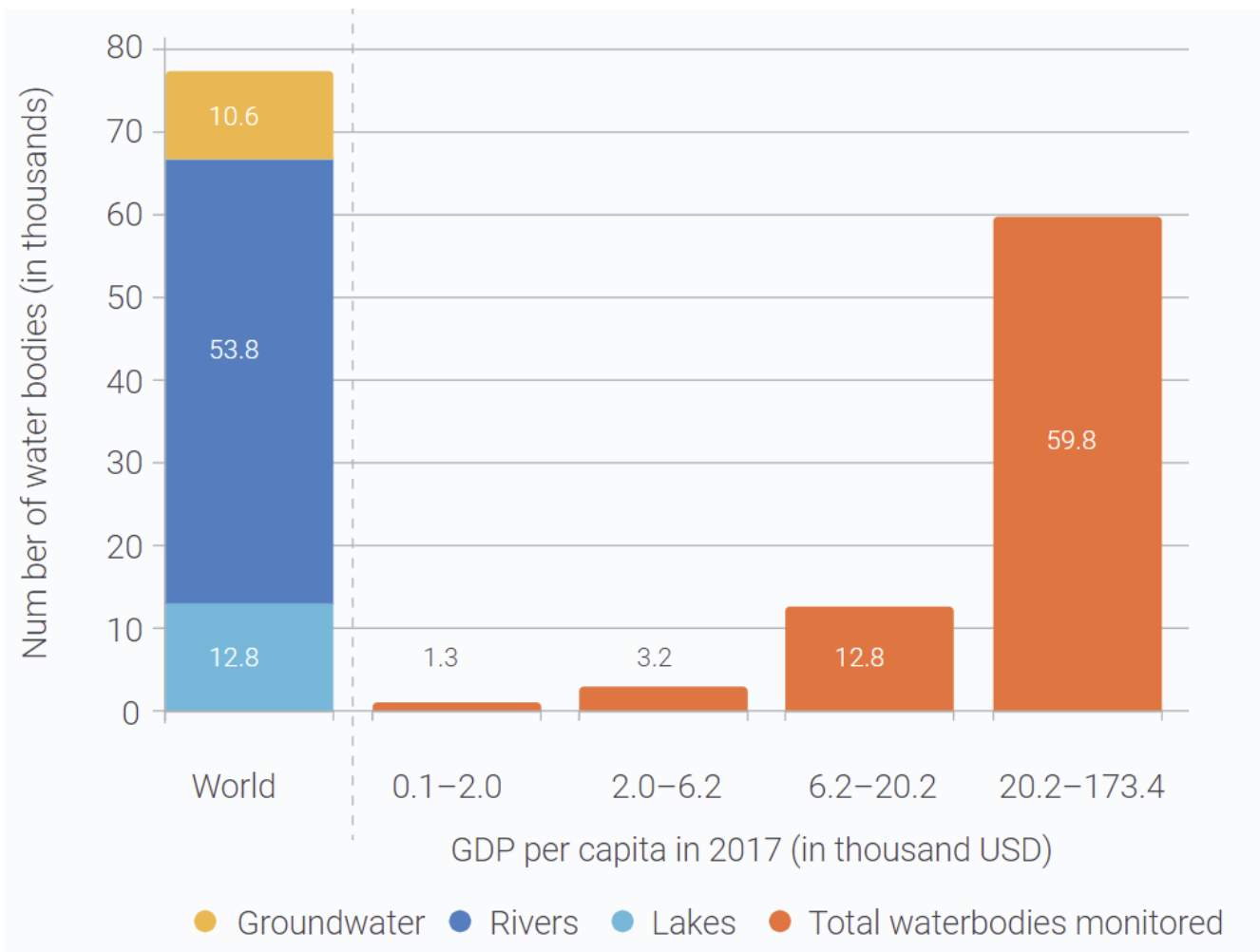


Summary results from 2020 data drive

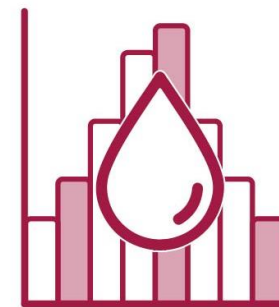
Good and poor water quality reported in all world regions



Summary results from 2020 data drive



where we have information are in the **20** lowest GDP countries



In low-GDP countries, there is an **urgent need** for **better data** on the **health** of rivers, lakes and groundwater

SDG Water Quality Hub



UN WFP SDG Water Quality Hub Submission Results 2020

Quick guide Log in

SDG Water Quality Hub

SDG Indicator 6.3.2 tracks progress towards SDG target 6.3. This target aims to improve water quality of rivers, lakes and aquifers globally.

This portal is designed for those tasked with reporting on this indicator for their country. It streamlines the reporting process, provides real-time feedback and insight into submissions, as well as information on the supports available.

The third global data drive is taking place in 2023. During previous drives of 2020 and 2017, 97 countries have reported on this indicator so far. Those countries, as well as those that report in 2023 are shown on the map.

Translate page to other languages

Reported Not reported

Sustainable Development Goal 6: Ensure access to water and sanitation for all.

SDG Target 6.3: By 2030, improve water quality by reducing pollution, eliminating dumping and minimizing release of hazardous chemicals and materials, halving the proportion of untreated wastewater and substantially increasing recycling and safe reuse globally.

SDG indicator 6.3.2: Proportion of bodies with good ambient water quality.

Submit data for SDG indicator 6.3.2: Level 1

Level 1 reporting focusses on the five core parameters. This is the same as that reported during previous data drives in 2017 and 2020.

Prepare for submission

Submit Level 1 Data

Submit data for SDG indicator 6.3.2: Level 2

Level 2 reporting is optional and allows countries to report on water quality beyond the five core parameters of Level 1.

Prepare for submission

Submit Level 2 Data

Results

Summary results for current and previous reporting years.

2017 Results

2020 Results

2023 Results

Support Available

Support is available to help with key aspects of the indicator methodology.

- Support platform
- Indicator calculation service
- Establish target values
- Additional support

Read more

Important Concepts

Level 1 and Level 2 Reporting

Level 1 reporting covers the pressures on water quality that are relevant at the global scale, whereas Level 2 goes further and provides the opportunity to include information that relates to pressures of national or sub-national relevance.

Level 1 reporting is essential because it provides global comparability which is essential for all SDG indicators.

Level 2 provides this flexibility and makes it possible to make water quality information available through the SDG reporting framework.

Read more

📍 National and subnational reporting

This indicator can be reported at three spatial scales: water body level, reporting basin district level (based on river basin delineations), or, at the national level.

If the water body or RBD levels are chosen, the national indicator will be calculated automatically.

Countries are encouraged to report at sub-national scales because national scores fail to provide insight into where water quality is improving or degrading within a country. Reporting at this finer resolution allows other data to be overlaid to provide greater insight into drivers of water quality and also, it allows transboundary water quality trends to be identified.

Read more

🌊 Water body definitions

SDG indicator 6.3.2 is relevant for rivers, lakes and aquifers.

It is these hydrological units which are classified as either good or not good water quality. Defining lake water bodies is relatively straightforward, whereas for rivers and aquifers the task is more difficult.

Read more

🎯 Target-based approach to classify water quality

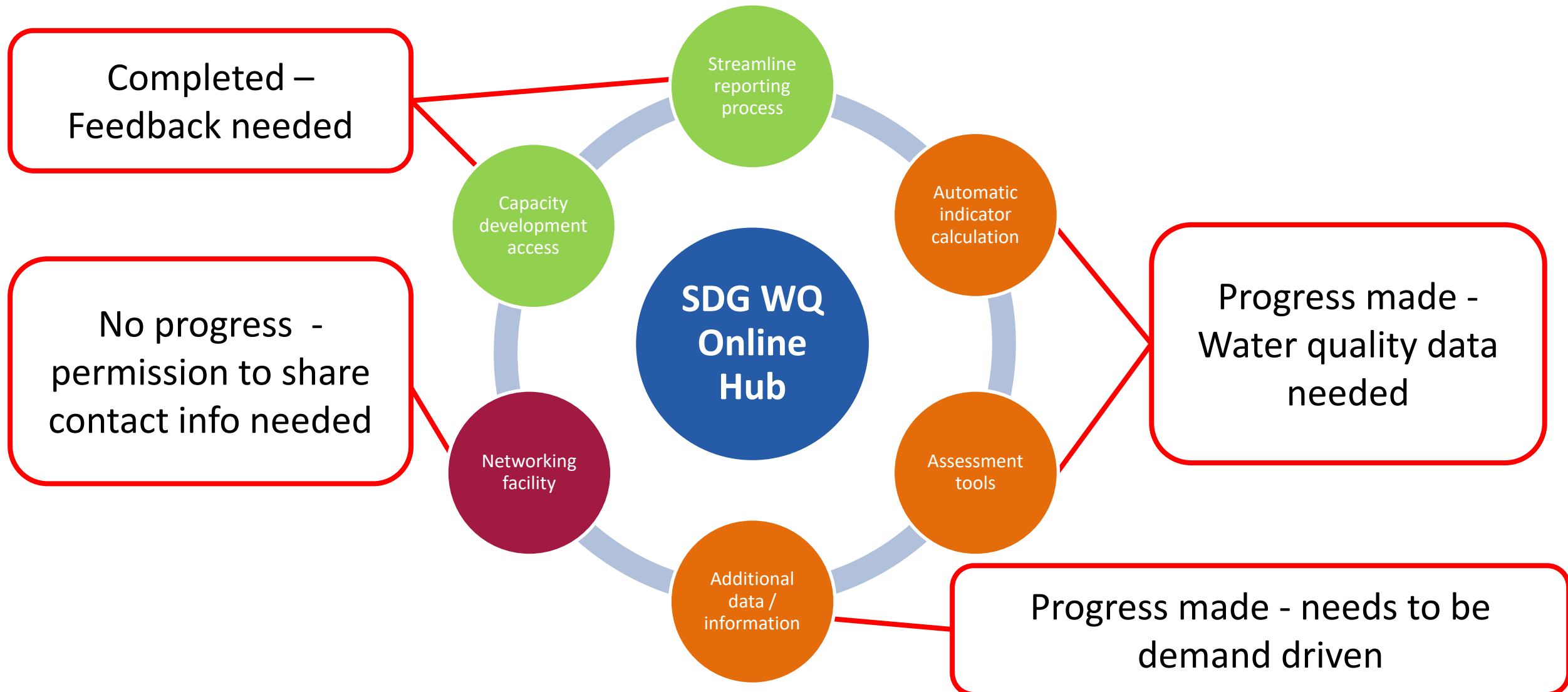
Indicator 6.3.2 uses a target-based approach to classify water quality. This means that the measured values are compared with numerical values that represent "good water quality".

Show more

<https://sdg632hub.org/>



SDG Water Quality Hub



SDG Water Quality Hub – Scorecard

SDG 6.3.2 water quality score card

Choose CSV File

Browse... SL_Data_for Joe_20230418_v2.csv

Upload complete

Please make sure that:
 - First row is the header,
 - There are no merged cells, and
 - Each row is a single monitoring event for one parameter.

Select relevant columns

Water body type

Water type

Reporting basin district

Sub Catchments/Geology

Water body

Sample Location

Monitoring location

Sample ID

Monitoring event date

Sample Date

Parameter

Parameters

Unit of measure

Unit

Monitoring value

Measurement

WQ score (good=1, not good=0)

SDG 6.3.2 water quality score card

Choose CSV File

Browse... SL_Data_for Joe_20230418_v2.csv

Upload complete

Please make sure that:
 - First row is the header,
 - There are no merged cells, and
 - Each row is a single monitoring event for one parameter.

Select relevant columns

Water body type

Water type

Reporting basin district

Sub Catchments/Geology

Water body

WB

Monitoring location

Sample Location

Monitoring event date

Sample Date

Parameter

Parameters

Unit of measure

Unit

Monitoring value

Measurement

WQ score (good=1, not good=0)

Your data | Score card | Score card by water body type

Water quality status by water body type

Water Body Type	Parameter	Good (%)	Not good (%)
Groundwater	Acidification	100	0
	Nitrogen	100	0
	Oxygenation	100	0
	Phosphorus	100	0
	Salinity	50	50
River	Acidification	65	35
	Nitrogen	95	5
	Oxygenation	75	25
	Phosphorus	100	0
	Salinity	100	0

Groundwater

River

Legend for Pie Charts:
 Poor (Red), Marginal (Orange), Fair (Yellow), Good (Light Green), Excellent (Dark Green)

SDG Water Quality Hub

Map of reporting status

Quick Start Guide

Submission preparation

The screenshot shows the SDG Water Quality Hub website interface. At the top, there are logos for UN, Water Quality Hub, and navigation links for Submission, Results, and 2020. A 'Quick guide' button is highlighted in the top right corner. The main content area features a world map titled 'SDG Water Quality Hub' showing reporting status by country, with a legend for 'Reported' (blue) and 'Not reported' (red). Text on the left explains the indicator and provides a 'Translate page to other languages' link. Below the map, there is a section for 'Sustainable Development Goal 6' and 'SDG Target 6.3', including a video thumbnail 'Measuring ambient w...'. A 'Submit data for SDG indicator 6.3.2: Level 1' section is highlighted with a red box, containing 'Prepare for submission' and 'Submit Level 1 Data' buttons. Other sections include 'Submit data for SDG indicator 6.3.2: Level 2', 'Results' (with buttons for 2017, 2020, and 2023), and 'Support Available'. The bottom section, 'Important Concepts', includes 'Level 1 and Level 2 Reporting', 'National and subnational reporting', 'Water body definitions', and 'Target-based approach to classify water quality'.

<https://sdg632hub.org/>



SDG Water Quality Hub – Prepare for Submission

The screenshot displays the 'Checklist for Data Preparation' page on the SDG632hub.org website. The page is titled 'Checklist for Data Preparation' and contains the following content:

- A thank you message: "Thank you for going through the preparation steps for SDG indicator 6.3.2 Level 1 submission."
- A section titled 'Download template' with the instruction: "Click on the button below to download the Level 1 reporting template." Below this is a blue 'Download' button with an Excel icon.
- A note: "This template is also available in [Français](#), [Español](#), [Русский](#)"
- A 'Start Submission' button.
- Support information: "For support in Français, Español, العربية, 中文, Русский - [click here](#)"
- Help desk contact: "For support or clarification on any aspect of the indicator methodology or submission process then please contact the SDG 632 Help Desk: SDG632@un.org"
- Additional resources: "You can also browse the supporting materials at the SDG Indicator 6.3.2 Information Page: <https://communities.unep.org/display/sdg632/Documents+and+Materials>"
- A footer note: "If you have already been through this flow and you are sure you know how to use the data in connection with the right template [skip these steps](#)"

<https://sdg632hub.org/>

SDG Water Quality Hub – Submission Process

Data Upload

Upload your E...
Note: the submission...

You have not down...

Back

Data review

Please review the data...

National level
 Reporting basin
 Water Body

Below you see the data...

Reporting basin district code

1	
2	
3	
4	
5	

Back

Review Targets

Below you see the data...

Water body or Reporting basin specific target?

No
No
No
Yes
Yes

Back

Summary

Please review the data...

Contact Info

Name
Email
Country

Upload data

Upload data
Upload

Data review
Verified

Target review
Verified

Back

Data preview

Score

71.02

very low low moderate high very high

0% 20% 40% 60% 80% 100%

Parameters

National summary
2023 data drive

Characteristics	Lake	River	Groundwater
Number of assessed water bodies	460	2300	28
Percentage of assessed water bodies with good water quality	47.0 %	75.9 %	67.9 %
Number of monitoring locations	705	5559	166

Back

Save draft

Next

Map Legend
Quality(%)

- Very high (81-100)
- High (61 to 80)
- Moderate (41 to 60)
- Low (21 to 40)
- Very low (0 - 20)
- No data
- Not applicable

SDG Water Quality Hub

Map of reporting status

Quick guide

Submission preparation

Results pages

The screenshot shows the SDG Water Quality Hub website interface. At the top, there are logos for UN, Water Quality Hub, and navigation links for Submission, Results, and 2020. The main heading is "SDG Water Quality Hub". Below it, there is a world map showing reporting status, with a legend indicating "Reported" (light blue) and "Not reported" (dark red). To the right of the map is a "Quick guide" button. Below the map, there is a section for "Sustainable Development Goal 6: Ensure access to water and sanitation for all." and "SDG Target 6.3: By 2030, improve water quality by reducing pollution, eliminating dumping and minimizing release of hazardous chemicals and materials, halving the proportion of untreated wastewater and substantially increasing recycling and safe reuse globally." Below this, there is a video thumbnail titled "Measuring ambient water quality". The "Submission preparation" section is divided into three columns: "Submit data for SDG indicator 6.3.2: Level 1", "Submit data for SDG indicator 6.3.2: Level 2", and "Results". The "Results" column has buttons for "2017 Results", "2020 Results", and "2023 Results". Below this is the "Important Concepts" section, which includes four sub-sections: "Level 1 and Level 2 Reporting", "National and subnational reporting", "Water body definitions", and "Target-based approach to classify water quality".



SDG Water Quality Hub – Results

Submission info

Results - Kenya

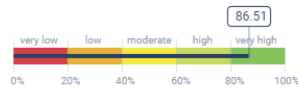
Period considered for the data submitted:
2017 - 2020

Status:
Approved

Data visibility:
National level

Score

Parameters



National summary

2020 data drive

Characteristics	Lake	River	Groundwater
Number of assessed water bodies	6	52	31
Percentage of assessed water bodies with good water quality	33.3 %	90.4 %	90.3 %
Number of monitoring locations	43	75	31

Target values

2020 data drive

Target values are used to compare a measured value to a numerical concentration limit that represents water of good ambient quality. Target values are specific to each water quality parameter and represent concentrations that aim to preserve these ecosystems or to return them to their natural or near-natural condition.

The data below is aggregated based on the target values sheet

LAKES

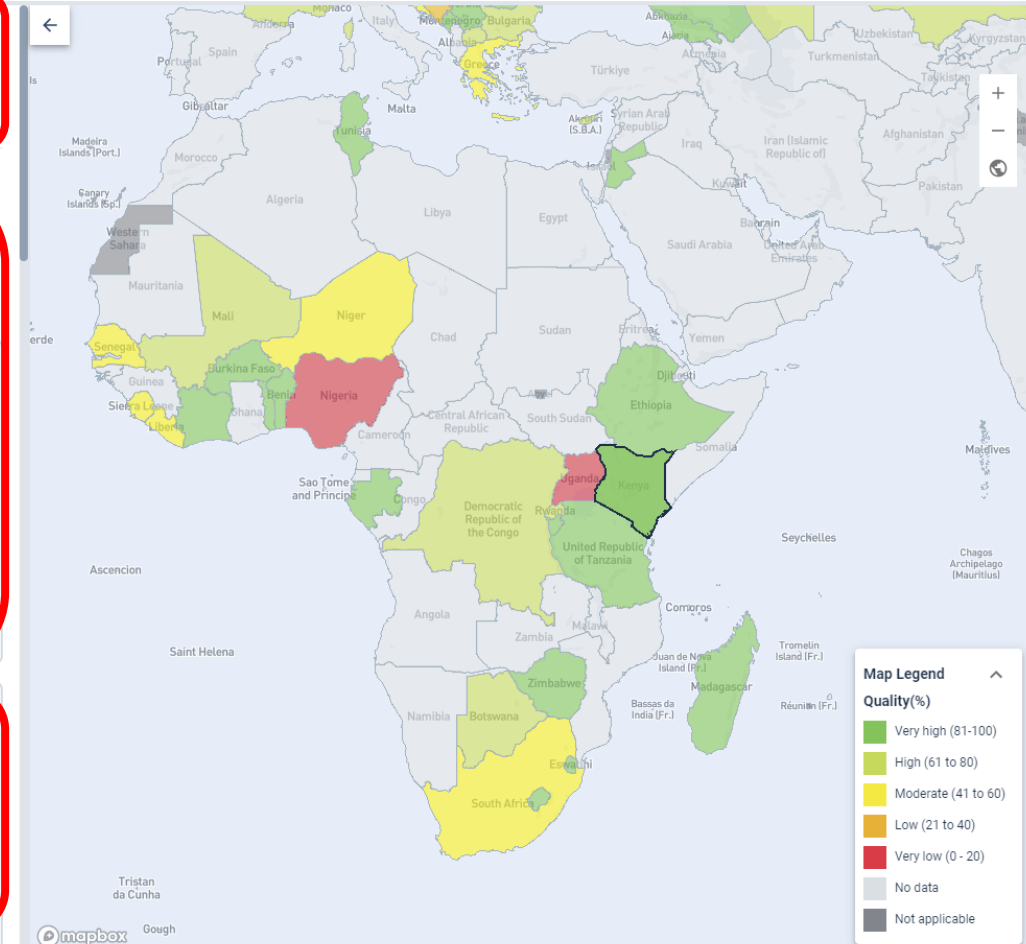
RIVERS

GROUND WATER

Uploaded values found in the target values sheet* suggested as optional minimum range target* suggested as optional maximum range target*

National summary info

Target value info



SDG Water Quality Hub

Map of reporting status

Quick guide

Submission preparation

Results pages

Link to supports page

The screenshot shows the SDG Water Quality Hub website interface. At the top, there are logos for UN, Water Quality Hub, and navigation links for Submission, Results, and 2020. The main heading is "SDG Water Quality Hub". Below this, there is a world map showing reporting status, with a legend indicating "Reported" (light blue) and "Not reported" (dark red). Text to the left of the map explains the indicator and provides a link to translate the page. Below the map, there is a section for "Sustainable Development Goal 6" and "SDG Target 6.3", including a video thumbnail titled "Measuring ambient water quality". The "Submission preparation" section is divided into two columns: "Submit data for SDG indicator 6.3.2: Level 1" and "Submit data for SDG indicator 6.3.2: Level 2", each with a "Prepare for submission" button and a "Submit" button. To the right, there is a "Results" section with buttons for "2017 Results", "2020 Results", and "2023 Results", and a "Support Available" section with a "Read more" button. The "Important Concepts" section includes four sub-sections: "Level 1 and Level 2 Reporting", "National and subnational reporting", "Water body definitions", and "Target-based approach to classify water quality", each with a "Read more" or "Show more" link.



SDG Water Quality Hub – Support

The screenshot shows the 'Support Available' section of the SDG Water Quality Hub website. It features four columns of support services, each with a red callout box highlighting key text and a red-bordered box below it with a simplified label. The callouts are connected to the labels by red lines.

- Support Platform:** The Support Platform contains introductory and technical documents and videos as well as country case studies and reports. <https://communities.unep.org/display/sdg632/Documents+and+Materials>
Link to Support Platform
- Indicator Calculation Service:** UNEP GEMS/Water provides an indicator calculation service. The indicator will be calculated and returned to the country focal point for validation. This iterative process between the country focal point and GEMS/Water involves working together to establish suitable target threshold values and hydrological units (water bodies and RBDs). The indicator is then calculated using the available national data. The most straightforward way to avail of this service is for the national water quality data to be added to GEMStat, GEMS/Waters' Global Water Quality Database.
Indicator Calculation Service
- Target Values Support:** Setting suitable target threshold values to be used in the indicator calculation is a significant challenge for most countries. A technical guidance document is available on the support platform, but more in-depth support and guidance can be provided through the Help Desk. SDG632@un.org
Target Value Support
- Additional Support:** Please contact the SDG 632 Help Desk if you have any queries or need further information. SDG632@un.org GEMS/Water's Capacity Development Centre has online courses available on freshwater quality monitoring and assessment including short 12-week continuous professional development courses, a Postgraduate Diploma and Master's Degree Programmes. <https://www.ucc.ie/en/gemscdc/> Free online courses on freshwater quality monitoring and assessment are available on UNEP's eLearning platform. https://elearning.unep.org/course/search.php?reads=core_course-course&q=water
Additional Support

SDG Water Quality Hub

Map of reporting status

Quick guide

Submission preparation

Results pages

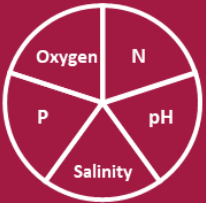













Link to supports page

Important concepts

The screenshot shows the SDG Water Quality Hub website. At the top, there are logos for UN, Water Quality Hub, and Submission Results 2020. A 'Quick guide' button is in the top right. The main content area includes a world map titled 'SDG Water Quality Hub' showing reporting status by country, with a legend for 'Reported' (blue) and 'Not reported' (red). Below the map is a 'Sustainable Development Goal 6' section with a video thumbnail 'Measuring ambient water quality'. The 'Submission preparation' section has three columns: 'Submit data for SDG indicator 6.3.2: Level 1', 'Submit data for SDG indicator 6.3.2: Level 2', and 'Results' (with buttons for 2017, 2020, and 2023). A 'Support Available' section lists support options. The 'Important Concepts' section contains four articles: '# Level 1 and Level 2 Reporting', 'National and subnational reporting', 'Water body definitions', and 'Target-based approach to classify water quality'. Red callout boxes connect the text on the left to these specific elements on the website.

Level 2 Reporting

- Optional
- 2023 first time countries asked to report at Level 2
- Separate reporting template
- Undertaken either in parallel or in sequence to Level 1 reporting
- Flexible by design
- Developed in response to feedback received from countries
- New technical document

Reporting Level	Level 1	Level 2
Data Collection	In-situ only	In-situ or remote
Data Type	 Physico-chemical	Physico-chemical  Biological / Ecosystem  Pathogens 
Data Source	National monitoring programme  Private sector  Academic sector  Citizen 	National monitoring programme  Private sector  Academic sector  Citizen  Earth observation  Models 

What is Level 2 Reporting?

Level 1

maintains the global comparability

covers the parameters that are relevant at the global scale

it is limited in scope and cannot represent all pressures to freshwater quality

Level 2

provides the opportunity to report any water quality data

to report on parameters and using approaches that match national capacity

provides the flexibility to report beyond Level 1

and to focus on water quality issues that may be significant locally, nationally or regionally

What is Level 2 Reporting?

Level 1

maintains the global comparability

covers the parameters that are relevant at the global scale

it is limited in scope and cannot represent all pressures to freshwater quality

Level 2

provides the opportunity to report any water quality data

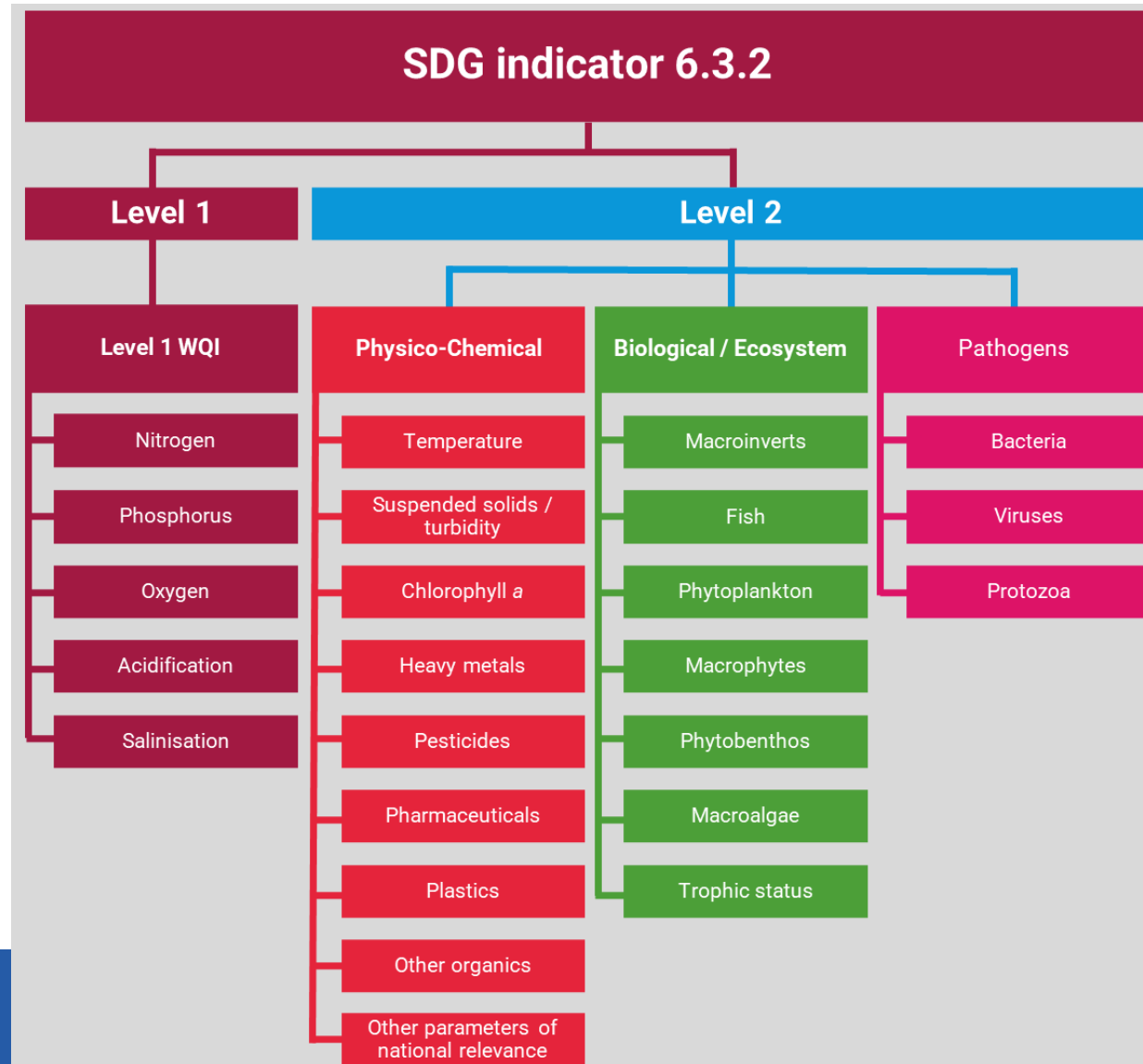
to report on parameters and using approaches that match national capacity

provides the flexibility to report beyond Level 1

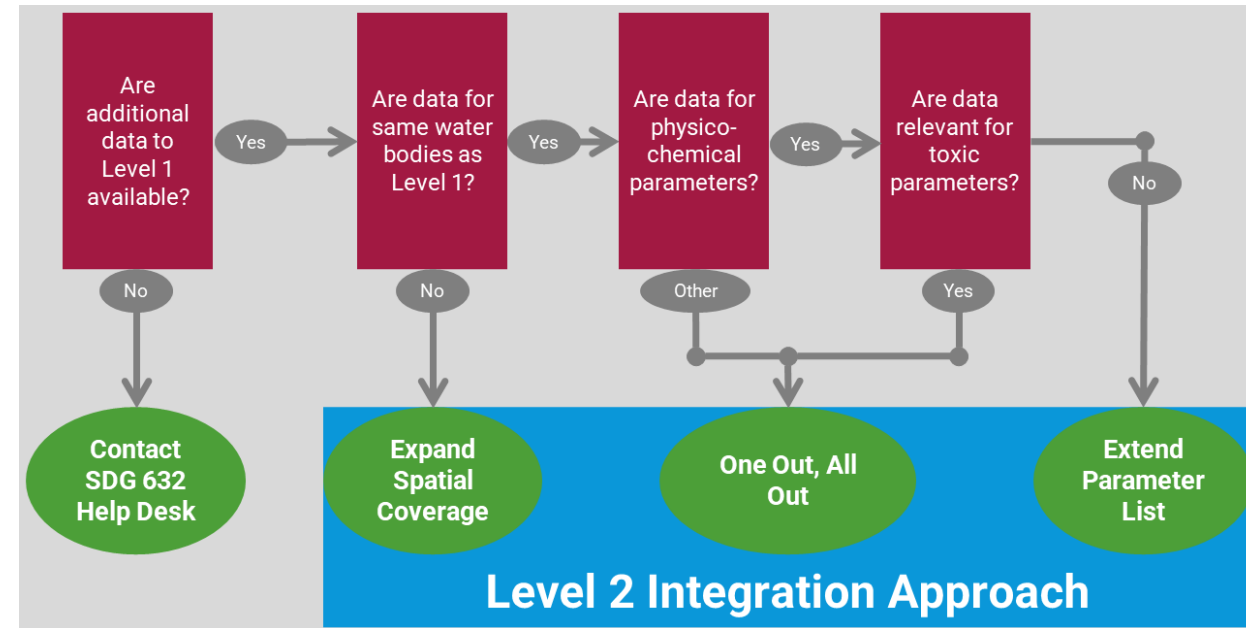
and to focus on water quality issues that may be significant locally, nationally or regionally

Level 2 Concepts

Sub-indicators



Different approaches to integration



Aligning with the Water Framework Directive

- 2017 - only a few European countries reported on SDG Indicator 6.3.2 using different data sources (SoE, WFD)
- Request to re-use existing European data
- Development of options to harmonize reporting in Europe with EEA
- Presentation of options during webinar 22 April 2020
- Pilot to trial Waterbase data re-use for indicator calculation and reporting



Options for WFD Countries

Current

1. apply the global SDG methodology
2. directly reuse 2nd RBMP information from 2016 that aligns most closely with 2017 SDG reporting window

Future

3. Further develop 2020 pilot pre-calculated indicator based on State of the Environment data

Way Forward for WFD Countries

- UNEP will continue to work bilaterally with each country
- For 2017 SDG 632 reporting window, 2nd RBMP submissions have been used to pre-fill the SDG 632 reporting template – these will be shared.
- Encourage EC's Working Group on Data and Information Sharing (WG-DIS) to continue to work with Water Directors and EEA to update the 2020 pilot project with UNEP's support

Summary

- 2023 Data drive **launched**
- Reporting deadline - **October 1st**
- 97 countries reported so far
- low-income countries report on far fewer water bodies
- New **SDG Water Quality Hub** is available
- Countries have option to report at **Level 2** for first time
- For WFD countries, our ambition to align with existing reporting framework



Questions or clarification?

Thank you

Further info:

- Latest progress report: <https://www.unwater.org/publications/progress-on-ambient-water-quality-632-2021-update/>
- Contact: SDG632@un.org
- SDG Water Quality Hub: <https://sdg632hub.org/>

