



Water4allSDGs®

**Methodology for analysing
the impacts of a project, strategy or policy
related to freshwater
on all the SDG targets of the 2030 Agenda**

Version 29 June 2023

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Summary

The generic *4allSDGs*[®] methodology aims to analyse the impacts of a project, strategy or sectoral policy on all the SDG targets of the 2030 Agenda.

Its application to the freshwater sector has been named *Water4allSDGs*[®].

The field of study is freshwater, that is to say, freshwater resources used by nature and human activities, their management, their pollution, aquatic ecosystems, drinking water, sanitation, water-related disasters, and adaptation to the corresponding societal and climate changes.

Water4allSDGs enables a 'project' to be assigned a positive impact score and, where applicable, a negative impact score for each SDG target affected. These scores are calculated based on the scores assigned during the preparatory phase to the impacting situations of the pre-identified cases.

Although these scores are calculated in a rough manner, they are sufficient to:

- detect the SDG targets affected by the 'project';
- identify the SDG targets most affected by the 'project';
- detect the negative impacts of the 'project' on the 2030 Agenda.

This allows a more detailed analysis of these impacts to be carried out and the project to be improved by increasing the positive impacts or by seeking compensatory measures to neutralise the negative impacts.

The preparatory phase, which involved identifying and assessing typical scenarios in the water sector that contribute to the SDG targets, was carried out by a group of experts from the French Water Partnership.

In total, nearly 300 'impacting situations' generating positive or negative impacts have been identified in the water sector. These 'impacting situations' affect all 17 SDGs through some 40 SDG targets. They have been linked to the relevant thematic areas, the 'themes'. The detailed list of these pre-identified 'impacting situations' is set out 'theme' by 'theme' in paragraph 5 below, with, for each one, the targets affected and the factors 0, 1, 2 and 3 used to calculate the impact scores.

Following the release of an initial *Water4allSDGs* Excel spreadsheet designed by the methodology's author, the French Water Partnership launched the first *Water4allSDGs* digital application, available free of charge to the public, in March 2022. This web application had been developed by drawing on the work of experts using the *4allSDGs* methodology.

The results of the *Water4allSDGs* assessment are presented in several formats: a detailed list of impacts on the various SDG targets and a bar chart showing which SDGs and SDG targets have been positively and negatively affected.

The *Water4allSDGs* methodology has led to numerous assessments of the impacts of actual 'projects' on the SDG targets. In particular, the methodology has been used on several occasions by an international panel. Experience shows that most users are surprised to discover that the 'projects' they are assessing have an impact on far more SDG targets than they had imagined. The systemic nature of the 2030 Agenda becomes clear to them in concrete terms.

This note describes the version of the *Water4allSDGs* methodology that has been used from June 2023 to spring 2026.

The names 4allSDGs and Water4allSDGs are registered with the National Institute of Industrial Property (INPI France). The 4allSDGs and Water4allSDGs methodologies are protected by copyright.

Terminology / Glossary

<i>Action</i>	'Action' is a generic term used here to designate any type of action, such as the execution of a project or the implementation of a programme, strategy or policy. Individual actions are not covered because the progress they can make towards global objectives is too small.
<i>Impact</i>	An 'action', a 'project' or a 'situation' has a positive impact on a SDG target if it results in effective progress towards achieving at least one of the global objectives targeted by this SDG target.
<i>Impacting situation</i>	The term 'impacting situation' refers here to a specific, precisely described situation that has an 'impact', positive or negative, on at least one SDG target.
<i>Partial impact</i>	An 'impact' on a SDG target is partial if the 'action', 'project' or 'situation' results in : - either effective progress towards an intermediate step towards an objective of this SDG target - or effective progress towards a principal component of an 'objective' of this SDG target. but is not sufficient in itself to constitute effective progress towards an 'objective' of this SDG target.
<i>Indirect impact</i>	An 'impact' on an SDG target is indirect if the 'action', 'project' or 'situation' results in progress that is not effective progress towards an 'objective' of an SDG target but is effective progress towards a situation that is indispensable for achieving such progress.
<i>Objective</i>	All SDG targets aim at achieving results. But many SDG targets aim at achieving several different results. Some of these results might be achieved even if others are not achieved. They constitute the different 'objectives' of the target and can be called sub-targets.
<i>Project</i>	'Project' is the word used in this document to designate the project, programme, strategy or policy whose effects are being evaluated in terms of the SDG targets.
<i>Situation</i>	The term "situation" is used here to designate a precisely described concrete situation that creates an "impact" on at least one SDG target.
<i>Positive situations</i>	A distinction is made between 'positive situations', which have a positive impact on at least one SDG target, and 'negative situations', which have a negative impact on at least one SDG target.
<i>Opposite situations</i>	A 'negative situation' is the opposite of a 'positive situation' if it produces effects opposite to its impact on the relevant SDG targets.
<i>Topic</i>	A "topic" is that which is common to the set of neighbouring impacting situations intermediate between a 'positive situation' and the opposite 'negative situation'.
<i>Theme</i>	A 'theme' is a thematic area in which the 'topics' and 'situations' relating to this area are grouped together.

1. Purpose of this note

The purpose of this note is to describe how the generic *4allSDGs*¹ methodology has been used in the field of freshwater through the *Water4allSDGs*² digital application in its version dated 29 June 2023.

The *4allSDGs* generic methodology aims to analyse the impacts of a project, strategy or policy in a given sector of activity on all the SDG targets of the 2030 Agenda.

This methodology makes it possible to assign the 'project' a positive impact score and, potentially, a negative impact score on any SDG target affected. These scores are based on the scores assigned during the preparatory phase to the impacting situations of pre-identified cases. Even if these scores are calculated roughly, they are sufficient to:

- detect the SDG targets impacted by the 'project';
- detect the SDG targets most impacted by the 'project';
- detect the negative impacts of the 'project' on the 2030 Agenda.

This assessment allows for a more detailed analysis of these impacts and, where necessary, improvements to the project by increasing the positive impacts or seeking compensatory measures to neutralise the negative impacts.

The first digital application using this methodology concerned the field of freshwater. It initially led (step 01 of *4allSDGs*) to the identification of a set of 'impacting situations' and then (step 02 of *4allSDGs*) to a digital application developed by the French Water Partnership. This application has been publicly available at <https://water4allsdgs.org> since March 2022. It underwent several methodological improvements until the version of 29 June 2023, which operated from summer 2023 to spring 2026.

The application of the *4allSDGs* methodology to the field of Education has enabled the development of an application dedicated to educational activities between 2023 and 2026, called *Education4allSDGs*. Its development has led to the complete rewriting of the *Water4allSDGs* application in order to provide a generic application that can be easily configured for each field of activity. On this occasion, the *4allSDGs* methodology was improved and refined, and its application to freshwater was refined. This resulted in a new version of the *Water4allSDGs* methodology, which has been in use since spring 2026.

The field studied is freshwater, i.e. freshwater resources used by nature and human activities, their management, their pollution, water ecosystems, drinking water, sanitation, water-related disasters and adaptation to corresponding societal and climate change.

This note presents the pre-identified 'impacting situations' in this area of action, grouping them by 'theme' and sub-theme. It also specifies the methods used to calculate impact scores.

This note describes in detail the methodology used from June 2023 to spring 2026 in the Water4allSDGs application dedicated to actions in the field of freshwater.

¹ Name registered with the INPI. No. 23 5015049 of 18/12/2023. Methodology covered by copyright.

² Name registered with the INPI. No. 21 4789777 of 30/7/2021. Methodology covered by copyright.

2. Overview of Water4allSDGs

Preliminary identification of actions related to water that have positive or negative impacts on SDG targets (Step 01)

To enable non-SDG specialists to identify the impacts of the water components of their 'projects' (projects, programmes, policies or strategies) on the SDGs, a group of water and SDG specialists from the French Water Partnership, led by Gérard Payen, researched actions in this field that are likely to impact one of the 169 SDG targets and then characterised them by creating statements of 'positive situations' and statements of 'opposite negative situations'. This group also organised the various corresponding situations (the 'impacting situations') into 20 categories (the 'themes') that are understandable to stakeholders in the field and structured in such a way that a given 'project' falls under only a small number of them. These themes are described in paragraph 3 below.

In total, nearly 300 'impacting situations' creating positive or negative impacts have been identified in the field of freshwater. These 'impacting situations' affect all 17 SDGs through some 40 SDG targets. They have been linked to relevant thematic areas, known as 'themes'. The detailed list of these pre-identified 'impacting situations' is provided 'theme' by 'theme' in paragraph 5 below. This list includes their respective impacted targets and and factors zero, 1, 2 and 3 used to calculate the impact scores for each one.

Digital application Water4allSDGs (Step 02)

A digital web application using the *4allSDGs* method and pre-identified 'impacting situations' in the field of water has been developed by the French Water Partnership³. It is publicly available free of charge at <https://water4allsdgs.org>. It allows users to quickly and easily (in less than an hour) detect and roughly assess the impact of a water-related action on SDG targets.

Use

The *Water4allSDGs* methodology was tested for a year with the Dakar 2022 international jury, first on a pilot Excel spreadsheet and then on a web application. Projects of very different natures in all kinds of countries were thus evaluated by the application and the results were discussed with the jury's experts.

The *water4allsdgs.org* application was launched by the French Water Partnership in March 2022. Since then, it has been freely accessible at no cost.

It is used by a wide range of stakeholders to assess the impact on SDGs of water-related projects, the water components of industrial or development projects, national policies, organisational strategies, etc.

in 2024-2025, SDG Champions France developed a sister application, *Education4allSDGs*, for the field of Education. This provided an opportunity to refine the *4allSDGs* methodology. A new version of *Water4allSDGs* using the latest *4allSDGs* methodology has been developed. and has been launched online by the French Water Partnership in Spring 2026.

³ <https://www.partenariat-francais-eau.fr/>

3. Freshwater thematic areas

Table 1 below shows the 20 thematic areas selected for the freshwater sector and specifies the SDG targets impacted by the pre-identified situations attached to each thematic area. The content of the relevant parts of these targets is detailed in paragraph 2.2 at the beginning of each theme.

<u>Table 1 - List of freshwater thematic areas</u>	
<i>Thematic area</i>	<i>Related SDG Targets</i>
A Drinking water	6.1, 1.4, 5.4, 5.c, 6.3, 6.5, 6.b, 10.3, 10.4, 11.1, 13.1, 16.6, 16.9
B Access to sanitation	6.2, 1.4, 6.3, 6.b, 10.3, 10.4, 11.1, 13.1, 16.6
C Access to hand hygiene	6.2
D Freshwater quality in the natural environment	6.3
E Wastewater treatment and discharge	6.3, 3.9, 6.3, 6.6, 6.b, 9.4, 13.1, 14.1
F Reuse of treated wastewater	6.3, 6.4
G Freshwater use efficiency	6.4, 12.2
H Quantitative management of freshwater resources	6.4, 6.b, 9.4
I IWRM – Integrated water resources management	6.5, 16.6
J Transboundary water cooperation	6.5
K Protection and area of freshwater ecosystems	6.6, 6.b, 15.1
L Freshwater for agriculture	2.3, 2.4, 6.3, 6.4, 6.5, 13.1
M Freshwater and energy	6.1, 6.4, 6.5, 6.6, 6.b, 7.1, 7.2, 12.2, 13.2, 15.1
N Water and Health : combating water-related diseases	3.3, 3.9, 4.a, , 5.1, 6.1, 11.5
O Water and education	3.3, 4.a, 4.7, 5.1
P Mitigation and adaptation to climate change (excluding floods and droughts)	2.4, 3.3, 6.4, 6.6, 11.5, 11.b, 13.1, 13.2, 15.1
Q Limiting the impacts of water-related disasters (including floods and droughts)	1.5, 3.3, 9.1, 11.5, 11.b, 13.1
R Reducing inequalities	5.1, 5.2, 5.4, 10.3, 10.4
S Decent work	2.3, 8.5, 8.6
T Partnerships	17.9, 17.16

4. Scales used for the various factors

4.1. Zero Factor

The application uses 1, 2/3, 1/2, 1/3 as values of Zero Factor. The selection between these values depends on the 'topics'

4.2. Factor 1

Six different ladders are used.

Factor 1 - Ladders	
N°	score maximum if
1F1	Positive impact
1F2	Direct Major
1F3	Decrease > 10 %
1F4	Decrease > 20 %
1F5	Increase > 10 %
1F6	Proportion > 70%

Each ladder can be used to answer different questions.

Ladder		Question	Example of topic	score maximum if
1F1		Direction of impact ?	A1	Positive impact
1F2	a d e f	Degree of proximity with the impact statement Degree of reduction Importance of the new knowledge ? Importance of variation ?	K6 Q1 N8 Q2	Direct Major
1F3	a b c d e f	Magnitude of change ? % change from existing ? % of change in consumption ? % of change ? % reduction relative to existing or to a typical project? Change in % of overexploitation ?	G1 G3 à G6 L5=P9 N1, L2, L3 P5 H1	Decrease > 10 %
1F4	a b	Magnitude of change ? Integrated decrease of volumes relative to current or planned volumes	P3	Decrease > 20 %
1F5	a b c d e	Magnitude of change ? % increase in number of establishments ? % variation relative to existing ? Degree of contribution Variation of income	N4, O1 N7 M1 G2, I3 L8=S5	Increase > 10 %
1F6		Proportion of women among beneficiaries?	R1, R2	Proportion > 70%

4.3. Factor 2 : size

A size criterion is identified for each 'topic' with a threshold defined as the level yielding the maximum score of 100 points.

The application uses five factor 2 ladders, each differing in the threshold of the range yielding the maximum score. These ladders comprise 11 brackets. They are used for five different variables.

Echelles de facteur 2			
N°	Variable	Unit	Max score above
2F1	Surface	km ²	1,000
2F2	Surface	km ²	10,000
	Electrical power	MW	
2F3	Population	inhabitants	100,000
	Water flow	m ³ /d	
	Electrical power	kW	
2F4	Population	Inhabitants	1,000,000
	Water flow	m ³ /d	
	Pollution	Equivalent-inhabitants	
2F5	Population	inhabitants	10,000,000

Each ladder includes 11 brackets:

Bracket (‘threshold’ = level of maximum score)	Score Factor 2
<0.0001 threshold	1
> 0.0001 threshold and < 0.0003 threshold	3
> 0.0003 threshold and < 0.001 threshold	7
> 0.001 threshold and < 0,003 threshold	13
> 0.003 threshold and 0.01 threshold	21
> 0.01 threshold and < 0.03 threshold	34
> 0.03 threshold and < 0.06 threshold	53
> 0.06 threshold and < threshold x 0.1	65
> 0.1 threshold and < threshold x 0.3	80
> threshold x 0,3 and < threshold	90
> threshold	100

Examples for each ladder:

Ladder 2F1 (example with surface)	Points
< 10 ha	1
≥ 10 and < 30 ha	3
≥ 30 and < 100 ha	7
≥ 1 and < 3 km ²	13
≥ 3 and < 10 km ²	21
≥ 10 and < 30 km ²	34
≥ 30 and < 60 km ²	53
≥ 60 and < 100 km ²	65
≥ 100 and < 300 km ²	80
≥ 300 and < 1,000 km ²	90
≥ 1,000 km ²	100

Ladder 2F2 (example with power)	Points
< 1 MW	1
≥ 1 and < 3 MW	3
≥ 3 and < 10 MW	7
≥ 10 and < 30 MW	13
≥ 30 and < 100 MW	21
≥ 100 and < 300 MW	34
≥ 300 and < 600 MW	53
≥ 600 and < 1,000 MW	65
≥ 1,000 and < 3,000 MW	80
≥ 3,000 and < 10,000 MW	90
≥ 10,000 MW	100

Ladder 2F3 (example : population)	Points
< 10 inhabitants	1
≥ 10 and < 30 inhabitants	3
≥ 30 and < 100 inhabitants	7
≥ 100 and < 300 inhabitants	13
≥ 300 and < 1,000 inhabitants	21
≥ 1,000 and < 3,000 inhabitants	34
≥ 3,000 and < 6,000 inhabitants	53
≥ 6,000 and < 10,000 inhabitants	65
≥ 10,000 and < 30,000 inhabitants	80
≥ 30,000 and < 100,000 inhabitants	90
≥ 100,000 inhabitants	100

Ladder 2F4 (example : population)	Points
< 100 inhabitants	1
≥ 100 and < 300 inhabitants	3
≥ 300 and < 1,000 inhabitants	7
≥ 1,000 and < 3,000 inhabitants	13
≥ 3,000 and < 10,000 inhabitants	21
≥ 10,000 and < 30,000 inhabitants	34
≥ 30,000 and < 60,000 inhabitants	53
≥ 60,000 and < 100,000 inhabitants	65
≥ 100,000 and < 300,000 inhabitants	80
≥ 300,000 and < 1,000,000 inhabitants	90
≥ 1,000,000 inhabitants	100

Ladder 2F5 (example : population)	Points
< 1,000 inhabitants	1
≥ 1,000 and < 3,000 inhabitants	3
≥ 3,000 and < 10,000 inhabitants	7
≥ 10,000 and < 30,000 inhabitants	13
≥ 30,000 and < 100,000 inhabitants	21
≥ 100,000 and < 300,000 inhabitants	34
≥ 300,000 and < 600,000 inhabitants	53

≥ 600 000 and < 1,000,000 inhabitants	65
≥ 1 000 000 and < 3,000,000 inhabitants	80
≥ 3,000,000 and < 10,000,000 inhabitants	90
≥ 10,000,000 inhabitants	100

Table 2 below presents the various size criteria used for pre-identified 'impacting situations' in the water sector.

F2 Code	Size criterion	Unit	Example topic	High threshold
2F1	a Surface areas affected	Km ²	K3	1,000
	b Variation in surface area	Km ²	K1, K2	
	c Wetland areas affected	Km ²	K6	
2F2	a Electrical power concerned	MW	M3=P7	10,000
	b Hydroelectric power	MW	M1	
	c Production of these plants	MW	G6	
	d Relevant agricultural area	Km ²	L2 à 4	
2F3	a Variation of average daily volume	m ³ /d	H4	100,000
	b Volume saved	m ³ /d	L5=P9	
	c Population whose situation will change	inhab.	A4, B8	
	d Poor or vulnerable population whose situation will change	inhab.	A3	
	e Population affected by floods	inhab.	Q7	
	g Initial power consumption	kW	M6	
	h Recovered energy	kW	E8=M9	
	2F4	a Average daily volume concerned	m ³ /d	
b Current average daily volume		m ³ /d	G3=L9	
c Daily volume used		m ³ /d	G4	
d New volume		m ³ /d	L1	
e Population whose situation will change		inhab.	A1, E2	
f Agricultural population concerned		inhab.	L7, S5	
g Female population concerned		inhab.	R1 à R5	
h Number of jobs created		inhab.	S3,S4	
i Number of people involved		inhab.	O6	
j Number of women involved		inhab.	S2	
k Number of young people involved		inhab.	S1	
m Plant capacity measured in Population Equivalent		Eq-inhab.	E9	
n Population (or livestock) whose situation will change		inhab.	E6	
o Population Equivalent to the deleted pollution load		Eq-inhab.	E14	
p Population Equivalent to the polluting load treated in the plant before disinfection		Eq-inhab.	E7=N3	
q Population Equivalent to pollution load (before treatment) of reused wastewater		Eq-inhab.	F1,F2	
r Population Equivalent to polluting load		Eq-inhab.	E4	
s Population whose situation will approach that of the majority	inhab.	R7, R8		
t Total population of the relevant area / territory	inhab.	G5		
2F5	a Population whose situation will change	inhab.		10,000,000
	b Involved population	inhab.	M5	
	c Population affected by the cuts	inhab.	M2	
	d Population Equivalent to polluting load being treated	Eq-hab.	E3	
	e Total population of the relevant area / territory	inhab..	P6	
	f Population concerned by this infrastructure	inhab.	P5	
	g Population of the relevant catchment areas	inhab.	M4	
	h Population of the relevant catchment areas	inhab.	D1,D3	
	i Population of the relevant river basins	inhab.	J1,J5	
	j Population of the territory using these aquifers	inhab.	D2, H1	
	k Population whose situation will approach that of the majority	inhab.	A19, A20	
	l Total population of the area / territory	inhab.	A2, B2	
	m Total population of the relevant area / territory	inhab.	H6	

4.4. Factor 3

Regardless of the 'topic', the application uses the same factor 3: 1 if the impact has been or will be measured, and 0.80 otherwise.

5. Pre-identified 'topics' related to freshwater

Each of the 20 themes below is the subject of a paragraph describing a number of pre-identified 'impacting situations', grouped in pairs into 'topics'. Each paragraph is structured in two parts.

The SDG targets impacted by these pre-identified 'impacting situations' are listed and detailed at the beginning of the paragraph.

Then a table presents for each 'topic':

- positive and negative statements of the pre-identified 'impacting situations'. Positive statements are typed in normal black letters. Negative statements are typed in green italic letters.
- the Zero factor. Multiplied by 100, the zero factor is the maximum score attainable with this 'topic', i.e. the number of points reported by the positive statement
- the size factor criterion.
- the size criterion threshold above which the maximum number of points can be obtained.

5.1. Theme A – Drinking water

SDG targets impacted by the pre-identified situations of this theme :

No one left behind: "We pledge that no one will be left behind", principle of the preamble of the 2030 Agenda

Target 1.4: By 2030, ensure that all women and men, particularly the poor and vulnerable, have equal rights to economic resources as well as access to basic services, ownership and control over land and other forms of property, inheritance, natural resources, appropriate new technologies and financial services, including microfinance

Target 3.3: By 2030, end the epidemics of AIDS, tuberculosis, malaria and neglected tropical diseases, and combat hepatitis, water-borne and other communicable diseases

Target 5.4: Recognize and value unpaid care and domestic work through the provision of public services, infrastructure and social protection policies and the promotion of shared responsibility in the household and family as nationally appropriate

Target 6.1: By 2030, achieve universal and equitable access to safe and affordable water for all

Target 6.b: Support and strengthen the participation of local community in improving water and sanitation management

Target 9.1: Develop quality, reliable, sustainable and resilient infrastructure, including regional and transborder infrastructure, to support economic development and human well-being, with a focus on affordable and equitable access for all

Target 10.3: Ensure equal opportunity and reduce inequalities of outcome, including by eliminating discriminatory laws, policies and practices and promoting appropriate legislation, policies and action in this regard

Target 10.4: Adopt policies, especially fiscal, wage and social protection policies, and progressively achieve greater equality

Target 11.1: By 2030, ensure access to all to adequate, safe and affordable housing and basic services and upgrade slums

Target 13.1: Strengthen resilience and adaptive capacity to climate-related hazards and natural disasters in all countries

Target 16.6: Develop effective, accountable and transparent institutions at all levels

Target 16.9: By 2030, provide legal identity for all, including birth registration

Topic	Targets	Statement of situation impacting SDG targets positively <i>Statement of situation impacting SDG targets negatively</i>	Factor Zero	Factor 1	Size criterion <i>Max if size ></i>
A1	6.1	People will have new access to "safely managed water services" ^{***} <i>People will lose access to "safely managed water services"</i> ^{**}	1	1F1	Population whose situation will change <i>1,000,000</i>
A2	6.1 10.4 behind*	All inhabitants of an underserved area will benefit from at least one of the three criteria (non-contamination, regularity of access, access at home) of "safely managed water services" ^{***} <i>Access to "safely managed water services" ** will no longer be provided to everybody in the neighbourhood/area</i>	1	1F1	Total population of the area / territory <i>10,000,000</i>
A3	1.4 6.1	Poor or vulnerable people will have new access to "safely managed water services" ^{***} <i>Poor or vulnerable people will lose access to 'safely managed water services'</i> ^{***}	1	1F1	Poor or vulnerable population whose situation will change <i>100,000</i>
A4	6.1 11.1	Residents of informal settlements will have new access to "safely managed water services" ^{***} <i>Residents of informal settlements will lose access to 'safely managed water services'</i> ^{***}	1	1F1	Population whose situation will change <i>100,000</i>
A5	6.1	People will have better access to clean water <i>People will have less access to clean water</i>	2/3	1F2a	Population whose situation will change <i>1,000,000</i>
A6	1.4 6.1 10.3 10.4	The project will improve access to drinking water for mostly poor or vulnerable people <i>Poor or vulnerable people will have a lower quality access to drinking water</i>	2/3	1F2a	Population whose situation will change <i>1,000,000</i>
A7	6.1 10.3 10.4 behind*	The project will improve access to clean water for people who are homeless or staying in unauthorised areas <i>The project will reduce access to water for people who are homeless or staying in unauthorised locations</i>	2/3	1F2a	Population whose situation will change <i>100,000</i>
A8 = R9	5.4 10.3 10.4	Thanks to the project, people will be freed from water chores, which will free up their time for school, work and domestic activities <i>As a result of the project, more people will be required to do water chores</i>	2/3	1F1	Population whose situation will change <i>1,000,000</i>

A9	6.1	Existing drinking water services*** will be concretely secured or strengthened <i>Existing drinking water services will be put under greater strain with potential pressure drops</i>	2/3	1F2a	Total population of the area/territory <i>10,000,000</i>
A10 = Q8	9.1 13.1	The project will enable the establishment of water transport or distribution networks capable of operating at their design flow rate irrespective of the risk of flooding, drought or sea level rise or will secure existing networks against the same risks <i>The project will lead to an increased risk of failure to supply existing water systems in the event of flooding, drought or marine intrusion</i>	1	1F2a	Total population of the area/territory <i>10,000,000</i>
A11	6.1 1.4	Poor people will spend less on their drinking water <i>Poor people could spend more on their drinking water</i>	1/2	1F2a	Population whose situation will change <i>1,000,000</i>
A12	1.4 6.1 behind*	People who do not have access to the public water supply service because of their inability to pay the normal price of the service or the connection costs**** will be able to access it thanks to the economic provisions of the project <i>People will lose access to the public water supply service due to their inability to pay their water bills</i>	1	1F2a	Population whose situation will change <i>100,000</i>
A13	6.b	A population will be more involved in decisions concerning its drinking water <i>People may complain that they have not been involved enough in decisions about their drinking water supply</i>	1	1F2a	Total population of the area/territory <i>10,000,000</i>
A14	6.1	The project will contribute to the improvement of financing conditions***** for drinking water supply <i>The project will weaken the conditions for financing drinking water supply</i>	1/3	1F2a	Total population of the area/territory <i>10,000,000h</i>
A15	6.1 6.5	The project will contribute to the improvement of governance conditions or the institutional organisation of the drinking water supply <i>The project will weaken the governance conditions or institutional organisation of the drinking water supply</i>	1/3	1F2a	Total population of the area/territory <i>10,000,000</i>
A16	16.9 behind*	Thanks to the project, residents will now have nominative water bills that can be used as proof of address <i>As a result of the project, residents will lose the ability to use named water bills as proof of address</i>	1	1F2a	Population whose situation will change <i>1,000,000</i>
A17	16.6 6.b	As a result of the project, public authorities responsible for access to drinking water or the management of water services will report publicly and regularly on the results they are achieving, which they did not do until now <i>The project will lead to a reduction in the information made available to the public by public authorities responsible for access to drinking water or for the management of water services.</i>	2/3	1F2a	Total population of the area/territory <i>10,000,000</i>

A18	16.6 6.b	Thanks to the project, the results obtained by public authorities responsible for access to drinking water or for the management of water services will be publicly accessible on the Internet and updated regularly <i>The project will lead to a reduction in the information made available online to the public by public authorities responsible for access to drinking water or for the management of water services</i>	2/3	1F2a	Total population of the area/territory <i>10,000,000</i>
A19 =R7	10.4	Inequalities in the cost of drinking water for users will be reduced in a territory <i>Inequalities in the cost of drinking water for users will increase in a territory</i>	2/3	1F2a	Total population of the area/territory <i>10,000,000</i>
A20 =R8	10.4	Territorial inequalities in modes of access to drinking water or in the quantity of drinking water will be reduced <i>Territorial inequalities in modes of access to drinking water or in the quantity of drinking water will worsen</i>	2/3	1F2a	Total population of the area/territory <i>10,000,000</i>
A21 =N2	3.3 6.1	A number of people currently using water of uncertain quality will be able to use drinking water that meets national standards and is therefore free of contamination <i>Increase in the number of people using water of uncertain quality due to the project</i>	1	1F1	Population whose situation will change <i>1,000,000</i>

* behind = No one left behind = “We commit ourselves to leave no one behind”, principle of the preamble of the 2030 Agenda

** Access to 'safely managed' drinking water services is measured by SDG indicator 6.1.1. It is only achieved if access is to 'improved' sources (i.e. not shared with animals) meeting the 3 criteria of non-contamination (faecal or fluoride or arsenic), regularity of access (at least 12 hours per day) and access at or near the home. See <https://washdata.org/monitoring/drinking-water>

*** It is a matter of improving the reliability of services already provided to a population

**** The 'connection costs' here include all the expenses that a future beneficiary must pay to be able to effectively connect to the public network.

***** The 'financing conditions' are the conditions under which the organisations operating the drinking water services have access to subsidies, user payments or solidarity transfers (3Ts) as well as their ability to borrow from banks or the financial market

5.2. Theme B – Access to sanitation

SDG targets impacted by the pre-identified situations of this theme:

No one left behind: "We pledge that no one will be left behind", principle of the preamble of the 2030 Agenda

Targets 1.4 , ensure that all women and men, particularly the poor and vulnerable, have equal rights to economic resources as well as access to basic services, ... , natural resources, ...

Target 6.2: achieve access to adequate and equitable sanitation and hygiene for all and end open defecation ...

Target 6.3 (partial) By 2030, improve water quality by reducing pollution, ... halving the proportion of untreated wastewater ...

Target 6.b : Support and strengthen the participation of local communities in improving water and sanitation management

Target 10.3 and 10.4 for reduced inequalities

Target 11.1: Ensure access for all to adequate and safe housing and basic services at an affordable cost

Target 16.6 : Develop effective, accountable and transparent institutions at all levels

Sujet	Targets	Statement of situation impacting SDG targets positively <i>Statement of situation impacting SDG targets negatively</i>	Factor zero	Factor 1	Size criterion <i>Max if size ></i>
B1	6.2	People will get access to 'safely managed' sanitation services** <i>People will lose access to 'safely managed'*** sanitation services</i>	1	1F1	Population whose situation will change <i>1,000,000</i>
B2	6.2 10.4 behind*	All residents of an underserved area will have "safely managed" sanitation services** <i>Access to "safely managed" sanitation services** will no longer be provided to all inhabitants in the neighbourhood/area</i>	1	1F1	Total population of the area/territory <i>10,000,000</i>
B3	1.4	Poor or vulnerable people will get access to 'safely managed' sanitation services** <i>Poor or vulnerable people will lose access to 'safely managed' sanitation services**</i>	1	1F1	Population whose situation will change <i>100,000</i>
B4	11.1	Residents of informal settlements will get new access to 'safely managed' sanitation services** <i>Residents of informal settlements will lose access to 'safely managed' sanitation services**</i>	1	1F1	Population whose situation will change <i>100,000</i>
B5	6.2	People will get access to "basic sanitation services" (hygienic, dignified, non-shared toilets)*** <i>People will have less access to "basic sanitation services" (hygienic, dignified, non-shared toilets)</i>	2/3	1F1	Population whose situation will change <i>1,000,000</i>

B6	1.4	Poor or vulnerable people will get access to "basic sanitation services" (hygienic, dignified, non-shared toilets)*** <i>Poor or vulnerable people will have less access to "basic sanitation services" (hygienic, dignified, non-shared toilets)</i>	2/3	1F1	Population whose situation will change <i>100,000</i>
B7	11.1	Residents of informal settlements will get access to "basic sanitation services" (hygienic, dignified, non-shared toilets)*** <i>People living in informal settlements will have less access to "basic sanitation services" (hygienic, dignified, non-shared toilets)</i>	2/3	1F1	Population whose situation will change <i>100,000</i>
B8	6.2	People may no longer defecate in the open air <i>More people are likely to have to defecate in the open</i>	1	1F1	Population whose situation will change <i>100,000</i>
B9	6.2 10.3 10.4	The project will improve access to sanitation for predominantly poor or vulnerable people <i>Access to sanitation of poor or vulnerable people will deteriorate</i>	2/3	1F2a	Population whose situation will change <i>1,000,000</i>
B10	6.2 10.3 10.4 behind*	The project will improve access to sanitation for people who are homeless or staying in unauthorised locations <i>The project will reduce access to sanitation for people who are homeless or staying in unauthorised locations</i>	2/3	1F2a	Population whose situation will change <i>100,000</i>
B11	6.2	People will have better access to sanitation <i>People may have a worse access to sanitation than before</i>	½	1F2a	Population whose situation will change <i>1,000,000</i>
B12	6.2 6.3	Existing sanitation services**** will be concretely secured or strengthened <i>Existing sewerage infrastructure will be more stressed and potentially overloaded</i>	2/3	1F2a	Total population of the area/territory <i>10,000,000</i>
B13	6.2 1.4	Poor people will spend less on sanitation <i>Poor people may have to spend more on sanitation</i>	1	1F2a	Population whose situation will change <i>100,000</i>
B14	6.b	A population will be more involved in decisions concerning its sanitation <i>People may complain that they were not involved enough in decisions about their sanitation</i>	1	1F2a	Population whose situation will change <i>10,000,000</i>
B15	6.2 6.3 6.5	The project will contribute to the improvement of governance conditions and institutional organisation of sanitation <i>The project will weaken the governance conditions of public sanitation services</i>	1/3	1F2a	Total population of the area/territory <i>10,000,000</i>
B16	6.2 6.3	The project will contribute to improving the financing conditions ***** for sanitation <i>The project will weaken the financing conditions***** of public sanitation services</i>	1/3	1F2a	Total population of the area/territory <i>10,000,000</i>

B17	16.6 6.b	As a result of the project, public authorities responsible for access to sanitation or the management of wastewater services will be report publicly and regularly on the results they are achieving, which they did not do until now <i>The project will lead to a reduction in the information made available to the public by public authorities responsible for sanitation or for the management of wastewater services</i>	2/3	1F2a	Total population of the area/territory 10,000,000
B18	16.6 6.b	Thanks to the project, the results achieved by public authorities responsible for access to sanitation or for the management of wastewater services will be publicly available on the Internet and updated regularly <i>The project will lead to a reduction in the information made available online to the public by public authorities responsible for access to sanitation or for the management of wastewater services</i>	2/3	1F2a	Total population of the area/territory 10,000,000

* Behind = No one left behind = “We commit ourselves to leave no one behind”, principle of the preamble of the 2030 Agenda

** Access to "safely managed" sanitation services is the level measured by SDG indicator 6.2.1. It requires private hygienic toilets with safe disposal of excreta either on site or removed and treated off site. For network discharges, this requires collection and treatment at secondary level in a wastewater treatment plant. See <https://washdata.org/monitoring/sanitation>

*** To benefit from 'basic sanitation' services means to have private and hygienic toilets, i.e. in which there is no possibility of contact with faecal matter

**** It is a matter of improving the reliability of services already provided to a population

***** 'Financing conditions' are the conditions under which the organisations operating sanitation services have access to subsidies, user payments or solidarity transfers (3Ts) as well as their ability to borrow from banks or from the financial market

5.3. Theme C – Access to hand hygiene

SDG targets impacted by the pre-identified situations of this theme:

Target 6.2: achieve access to adequate and equitable sanitation and hygiene for all

Indicator 6.2.1.b: Proportion of population with basic handwashing facilities at home

Topic	Targets	Statement of situation impacting SDG targets positively <i>Statement of situation impacting SDG targets negatively</i>	Factor Zero	Factor 1	Size criterion <i>Max if size ></i>
C1	6.2	All people living in the geographical area of the project (not just some) will have a sanitation facility in their home (tap, sink) and enough water and soap to wash their hands at home regularly <i>People will lose the ability to wash their hands at home</i>	1	1F1	Population whose situation will change 1,000,000
C2	6.2	People will have better hygiene with a new sanitary installation (tap, washbasin) or more soap at home allowing them to wash their hands regularly <i>People will lose the ability to wash their hands at home</i>	1	1F2a	Population whose situation will change 1,000,000

C3	6.2	The project will contribute to the improvement of the conditions of access to hand hygiene at home (governance, financing, etc) <i>The project will weaken the conditions of access to hand hygiene at home (governance, financing, etc)</i>	1/3	1F2a	Total population of the area/territory <i>10,000,000</i>
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5.4. Theme D – Freshwater quality in the natural environment

SDG target impacted by the pre-identified situations of this theme:

Target 6.3 (partial): Improve water quality by reducing pollution, eliminating dumping and minimising emissions of chemicals and hazardous materials

Topic	Targets	Statement of situation impacting SDG targets positively <i>Statement of situation impacting SDG targets negatively</i>	Factor zero	Factor 1	Size criterion <i>Max if size ></i>
D1	6.3	The chemical quality of rivers or other important watercourses or associated ecosystems will improve <i>The chemical quality of rivers or other important watercourses or associated ecosystems will deteriorate.</i>	1	1F2a	Population of the relevant catchment areas <i>10,000,000</i>
D2	6.3	The chemical quality of important groundwater resources will improve <i>The chemical quality of important groundwater resources will deteriorate</i>	1	1F2a	Population of the territory using these aquifers <i>10,000,000</i>
D3	6.3	Microbiological quality of rivers or other important watercourses will improve <i>The microbiological quality of rivers or other important watercourses will deteriorate</i>	1	1F2a	Population of the relevant catchment areas <i>10,000,000</i>

5.5. Theme E - Wastewater treatment and discharge

SDG targets impacted by the pre-identified 'impacting situations' of this theme:

Target 3.9 : substantially reduce the number of deaths and illnesses from hazardous chemicals and air, water and soil pollution and contamination

Target 6.2: achieve access to adequate and equitable sanitation and hygiene for all

Target 6.3 (partial) : improve water quality by reducing pollution, eliminating dumping and minimizing release of hazardous chemicals and materials, halving the proportion of untreated wastewater ...

Target 6.6 : By 2020, protect and restore water-related ecosystems, including mountains, forests, wetlands, rivers, aquifers and lakes

Target 6.b : Support and strengthen the participation of local communities in improving water and sanitation management

Target 9.1: Develop quality, reliable, sustainable and resilient infrastructure, including regional and transborder infrastructure, to support economic development and human well-being, with a focus on affordable and equitable access for all

Target 9.4 : upgrade infrastructure and retrofit industries to make them sustainable, with increased resource-use efficiency and greater adoption of clean and environmentally sound technologies and industrial processes, with all countries taking action in accordance with their respective capabilities

Target 13.1 : Strengthen resilience and adaptive capacity to climate-related hazards and natural disasters in all countries

Target 13.2: Integrate climate change measures into national policies, strategies and planning

Target 14.1 : By 2025, prevent and significantly reduce marine pollution of all kinds, in particular from land-based activities, including marine debris and nutrient pollution.

Topic	Targets	Statement of situation impacting SDG targets positively <i>Statement of situation impacting SDG targets negatively</i>	Factor zero	Factor 1	Size criterion <i>Max if size ></i>
E1	6.3	Untreated domestic wastewater flows will be treated before discharge in accordance with national standards* <i>Less domestic wastewater will be treated to national standards* before discharge to the environment</i>	1	1F1	Population whose situation will change <i>1,000,000</i>
E2	6.2	Untreated domestic wastewater flows will be treated prior to discharge to a secondary treatment level** <i>Less domestic wastewater will be treated to a secondary treatment level before discharge into the natural environment</i>	2/3	1F1	Population whose situation will change <i>1,000,000</i>
E3	6.3	Previously untreated industrial wastewater flows will be treated before discharge in accordance with national standards*** <i>Less industrial wastewater will be treated to national standards before discharge to the environment***</i>	1	1F1	Population Equivalent* to polluting load being treated <i>10,000,000</i>

E4	14.1	Discharges of chemical or nutrient pollution into the river system will be eliminated <i>Discharge of chemical or nutrient pollution into the river system will increase.</i>	2/3	1F1	Population Equivalent* to polluting load <i>1,000,000</i>
E5	6.3	Previously uncollected**** domestic wastewater flows will be collected and transferred to a treatment plant <i>There will be a reduction in the flows of domestic wastewater collected and transferred to a treatment plant****</i>	1/2	1F1	Population whose situation will change <i>1,000,000</i>
E6	6.2 6.3	Liquid manure***** and sewage products***** from individual sanitation systems that are currently discharged into the environment will be transported to and treated in a wastewater treatment plant <i>Liquid manure and sewage products will no longer go to a sewage treatment plant</i>	1	1F2a	Population (or livestock) whose situation will change <i>1,000,000</i>
E7 = N3	3.9	Discharges from wastewater treatment plants will be disinfected to protect bathing areas <i>Disinfection of certain discharges to the natural environment will be stopped</i>	1	1F1	Population Equivalent* to the polluting load treated in the plant before disinfection <i>1,000,000</i>
E8 = M9	13.2	Part of the calorific capacity of the sewage sludge will be recovered, which will reduce the consumption of non-renewable energy <i>Energy recovery from sewage sludge will stop and lead to an increased need for external energy</i>	2/3	1F1	Recovered energy <i>100,000 kW</i>
E9	6.3	Measures will be taken to reduce pollution discharged into the natural environment by preventing stormwater from overflowing wastewater treatment plants. <i>Risk of overflowing sewage plants will increase</i>	2/3	1F2a	Plant capacity measured in Population Equivalent* <i>1,000,000</i>
E10	6.b	A population will be more involved in decisions concerning its wastewater <i>A population may complain that it has not been involved enough in decisions about its wastewater</i>	1	1F2a	Population whose situation will change <i>1,000,000</i>
E11	6.3 6.5	The project will contribute to the improvement of governance and institutional organisation of wastewater management <i>The project will weaken the conditions of governance and institutional organisation of wastewater management</i>	1/3	1F2a	Total population of the relevant area/territory <i>10,000,000</i>
E12	6.3	The project will contribute to improved financing conditions of wastewater management <i>The project will weaken the financing conditions for wastewater management</i>	1/3	1F2a	Total population of the relevant area/territory <i>10,000,000</i>
E13	9.1 13.1	The project will enable the establishment of sewers networks capable of operating reliably and sustainably regardless of the risk of flooding, drought or sea level rise or will secure existing networks against the same risks <i>The project will lead to an increased risk of malfunctioning of the wastewater systems, particularly in the event of flooding, drought or marine intrusion.</i>	1	1F2a	Total population of the relevant area/territory <i>10,000,000</i>

E14	9.4	<p>The project will enable an industrial complex to reduce its pollution discharges into the water system to a level that complies with regulations</p> <p><i>As a result of the project, the pollution discharges into the hydrological network from an industrial complex will increase at a constant economic volume</i></p>	1	1F2a	<p>Population Equivalent* to the deleted pollution load</p> <p><i>1,000,000</i></p>
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* SDG target 6.3 aims at halving untreated wastewater flows. In this context, SDG indicator 6.3.1a requires domestic wastewater to be treated at secondary level or at the level of national standards if more demanding.

** Households connected to a sewerage system have access to "safely managed" sanitation services (SDG indicator 6.2.1, see B1) only if their wastewater is treated to a secondary level of treatment, i.e. biological treatment such as activated sludge or equivalent.

See <https://washdata.org/monitoring/methods/estimation-methods>

*** Pre-discharge treatment to national standards for industrial wastewater is measured by SDG indicator 6.3.1b

**** SDG indicator 6.3.1a measures domestic wastewater flows collected and treated. Wastewater collection is thus a partial component of target 6.3 of halving untreated wastewater flows

***** The reduction of pollution discharges, the subject of SDG target 6.3, requires the control of pollution discharged by livestock

***** Access to "safely managed" sanitation services, the subject of target 6.2, requires that simple individual installations (like 'pit latrines' or 'septic tanks') be emptied and that the emptying products be treated in a suitable facility.

5.6. Theme F – Reuse of treated wastewater

SDG target impacted by the pre-identified situations of this theme:

Target 6.3 (partial): ... halving the proportion of untreated wastewater and substantially increasing recycling and safe reuse globally

Target 6.4: substantially increase water-use efficiency across all sectors and ensure sustainable withdrawals and supply of freshwater to address water scarcity ...

Topic	Targets	Statement of situation impacting SDG targets positively <i>Statement of situation impacting SDG targets negatively</i>	Factor zero	Factor 1	Size criterion <i>Max if size ></i>
F1	6.3 6.4	Wastewater flows from wastewater treatment plants will be reused for irrigation (agriculture, green spaces), industry or urban uses <i>The reuse of wastewater in irrigation or industry will be reduced</i>	1	1F1	Population Equivalent* to pollution load (before treatment) of reused wastewater <i>1,000,000</i>
F2	6.3 6.4	Wastewater flows from wastewater treatment plants will be used to recharge water resources (reservoirs, groundwater) <i>Recharge of water resources from treated wastewater will be reduced</i>	1	1F1	Population Equivalent* to pollution load (before treatment) of reused wastewater <i>1,000,000</i>
F3	6.3 6.4	The project will contribute to the improvement of regulations concerning the recycling or reuse of wastewater after treatment <i>The project will increase the administrative requirements for recycling or reusing wastewater</i>	1/3	1F2a	Total population of the relevant area/territory <i>10,000,000</i>

* Population Equivalent = population which would produce the same BOD polluting load (BOD = Biological Oxygen Demand)

5.7. Theme G – Freshwater use efficiency

SDG targets impacted by the pre-identified situations of this theme

Target 6.4 : substantially increase water-use efficiency across all sectors and ensure sustainable withdrawals and supply of freshwater to address water scarcity ...

Indicator 6.4.1: Change in water-use efficiency over time (United States dollars per cubic meter"), measured as the ratio of dollar value added to the volume of water used while aggregating several components

Target 12.2 : achieve the sustainable management and efficient use of natural resources

Topic	Targets	Statement of situation impacting SDG targets positively <i>Statement of situation impacting SDG targets negatively</i>	Factor zero	Factor 1	Size criterion <i>Max if size ></i>
G1	6.4	Reduction in the amount of water withdrawn* per capita for human activities (including agriculture, industry and energy) in a territory <i>Increase in the amount of water withdrawn for human activities (including agriculture, industry and energy) in a territory in relation to the population in that territory</i>	1	1F3a	Total population of the relevant area/territory <i>10,000,000</i>
G2	6.4	Increase in the value of SDG indicator 6.4.1** (economic efficiency of water uses in US\$/m3) of a country <i>Decrease in the value of SDG indicator 6.4.1** (economic efficiency of water uses) of a country</i>	1	1F5d	Total population of the relevant area/territory <i>10,000,000</i>
G3	6.4 12.2	Reduction in the amount of water (withdrawals or net consumption***) used annually to irrigate a currently irrigated agricultural or recreational area <i>More water will be used annually to irrigate an agricultural or recreational area that is irrigated today</i>	2/3	1F3a	Current average daily volume <i>1,000,000 m³/j</i>
G4	6.4 12.2	Reduction in the annual amount of water (withdrawals or net consumption****) used by one or more industrial plants <i>More water will be used annually for the net consumption of one or more industrial plants</i>	2/3	1F3a	Daily volume used <i>1,000,000 m³/j</i>
G5	6.4 12.2	One or more urbanised areas will reduce the ratio of their annual freshwater withdrawals from the natural environment to their population (reduction of losses, demand management, etc) <i>One or more urbanised areas will increase the ratio of their annual freshwater withdrawals from the natural environment to their population</i>	2/3	1F3a	Total population of the relevant area/territory <i>1,000,000</i>
G6 = M8	6.4 12.2	Reduction of the annual water withdrawals***** (or of net water consumption) of electrical power generation facilities in relation to their annual production of KWh <i>Increase in the annual net water consumption of electrical power generation facilities in relation to their annual production of KWh</i>	2/3	1F3a	Production of these plants <i>10,000 MW</i>

* Withdrawals are the quantities of freshwater taken from rivers, lakes and groundwater independently of the quantities released after use

** SDG Indicator 6.4.1 relates the economic value added of the agricultural, industrial and service sectors to the amount of freshwater withdrawn by all human activities. See its detailed definition and metadata on

<https://unstats.un.org/sdqs/metadata/files/Metadata-06-04-01.pdf>

*** This reduction can have different origins such as a change in irrigation practices or a change in crop varieties

**** The reduction of agricultural withdrawals contributes to the agricultural component of indicator 6.4.1, while the reduction of net consumption (difference between the flows of water coming from outside and the flows discharged downstream of the irrigation system) contributes to the sustainable management of water resources (part of target 6.4)

***** The reduction of industrial withdrawals contributes to the industrial component of indicator 6.4.1, while the reduction of net consumption (difference between the flows of water arriving from outside the site and the flows discharged outside the site) contributes to the sustainable management of water resources (part of target 6.4)

***** The reduction of withdrawals per KWh is a component of indicator 6.4.1 while the reduction of net consumption (withdrawals minus discharges) contributes to the sustainable management of water resources (part of target 6.4)

5.8. Theme H – Quantitative management of freshwater resources

SDG targets impacted by the pre-identified situations of this theme

Target 6.4 (partial): substantially increase water-use efficiency across all sectors and ensure sustainable withdrawals and supply of freshwater to address water scarcity ...

Target 6.b: Support and strengthen the participation of local community in improving water and sanitation management

Target 9.4: upgrade infrastructure and retrofit industries to make them sustainable, with increased resource-use efficiency and greater adoption of clean and environmentally sound technologies and industrial processes, with all countries taking action in accordance with their respective capabilities

Topic	Targets	Statement of situation impacting SDG targets positively <i>Statement of situation impacting SDG targets negatively</i>	Factor zero	Factor 1	Size criterion <i>Max if size ></i>
H1	6.4	Reduction of overexploitation* of groundwater bodies <i>Increased overexploitation of groundwater bodies</i>	1	1F3f	Population of the territory using these aquifers <i>10,000,000</i>
H2	6.4	The future needs of the various human activities (agriculture, industry, cities), taking into account climate change, will be made compatible with those of the ecosystems without non-renewable abstraction of water resources <i>In the future, non-renewable withdrawals of water resources will result from the difficulty of meeting the needs of human activities and ecosystems</i>	1	1F2a	Population of the relevant area/territory <i>10,000,000</i>

H3	6.4	Compensation for freshwater abstraction or reuse of treated wastewater leading to an increase in resources available for other uses <i>Decrease in resources available for other uses as freshwater withdrawals will increase without any compensation or pollution removal allowing reuse</i>	2/3	1F1	Average daily volume concerned <i>1,000,000 m³/d</i>
H4	6.4	Decrease in net freshwater consumption (withdrawals not discharged into the river system) <i>Increase in net freshwater consumption (withdrawals not released into the river system)</i>	1	1F1	Variation of average daily volume <i>100,000 m³/d</i>
H5	6.4 9.4	The project will enable an industrial complex to secure its water resources for several decades by significantly reducing its net external water consumption at constant economic volume <i>The project will increase the water insecurity of an industrial complex</i>	1	1F2a	Average daily volume concerned <i>1,000,000 m³/d</i>
H6	6.4 6.b	The population will be more involved in decisions concerning the management, allocation or recycling of the water resources available on their territory <i>Some people may complain that they are not sufficiently involved in decisions concerning the management, allocation or recycling of water resources available in their area</i>	1	1F2a	Total population of the relevant area/territory <i>10,000,000</i>

* the sustainability of withdrawals and supply requires that groundwater resources not be overexploited, i.e. that only self-renewing volumes be withdrawn

5.9. Theme I – IWRM - Integrated Water Resources Management

SDG targets impacted by the pre-identified situations of this theme

Target 6.5 : (...) implement integrated water resources management at all levels, including through transboundary cooperation as appropriate

Target 16.6 : Develop effective, accountable and transparent institutions at all levels

Topic	Targets	Statement of situation impacting SDG targets positively <i>Statement of situation impacting SDG targets negatively</i>	Factor zero	Factor 1	Size criterion <i>Max if size ></i>
I1	6.5	The project will contribute to the establishment or strengthening of policies, laws, plans, institutions, or strategies necessary to create an 'enabling environment'* for the Integrated water resources management (IWRM)*** <i>Weakening of policies, laws, plans, institutions, or strategies needed to create an 'enabling environment'* for IWRM***</i>	2/3	1F2a	Total population of the relevant area/territory <i>10,000,000</i>
I2	6.5	The project will help decision makers and/or water users to make rational and informed choices between alternative actions impacting the resource** <i>The project will impact water resources without studying alternative options</i>	1/3	1F2a	Total population of the relevant area/territory <i>10,000,000</i>

I3	6.5	Significant progress of SDG indicator 6.5.1 on Integrated Water Resources Management (IWRM) ^{***} in the country <i>Significant decrease of SDG indicator 6.5.1 on IWRM^{***}</i>	1	1F5d	Total population of the relevant area/territory <i>10,000,000</i>
I4	6.5	Capacity building of one or more local governments/authorities to establish or better operate multi-stakeholder participatory procedures related to water or sanitation management ^{****} <i>Reduced capacity of one or more local government(s)/authority(ies) to establish or better operate multi-stakeholder participatory procedures related to water or sanitation management</i>	2/3	1F2a	Total population of the relevant area/territory <i>10,000,000</i>
I5	16.6	As a result of the project, public authorities responsible for the management, use or protection of water resources will report publicly and regularly on the results they achieve, which they did not do before <i>The project will lead to a reduction in the information made available to the public by public authorities responsible for the management, use or protection of water resources</i>	2/3	1F2a	Total population of the relevant area/territory <i>10,000,000</i>
I6	16.6	Through the project, the results obtained by public authorities responsible for the management, use or protection of water resources will be publicly accessible on the Internet and updated regularly <i>The project will lead to a reduction in the information made available online to the public by public authorities responsible for the management, use or protection of water resources</i>	2/3	1F2a	Total population of the relevant area/territory <i>10,000,000</i>

* This refers to the 'enabling regulatory environment' dimension of indicator [SDG 6.5.1](#). This indicator distinguishes 5 levels: very low, low, medium to low, medium to high, high, very high. See also I4 below.

** This statement relates to the 'management tools' dimension of indicator SDG 6.5.1.

*** According to the UN, Integrated Water Resources Management (IWRM) is "a process that promotes the coordinated development and management of water, land and associated resources, with a view to maximising the resulting economic and social welfare in an equitable manner, without compromising the sustainability of vital ecosystems". Indicator SDG 6.5.1, which measures progress, is structured in 4 dimensions: i) enabling regulatory environment, ii) multi-sectoral, multi-level institutional frameworks with user participation, iii) management tools (including water monitoring and data collection and tracking) and iv) financing for water management. For each dimension, it distinguishes 6 levels: very low, low, medium to low, medium to high, high, very high. The precise definition and metadata of this indicator are available at <https://unstats.un.org/sdgs/metadata/files/Metadata-06-05-01.pdf>

**** This statement contributes to the 'user participation' dimension of indicator [SDG 6.5.1](#).

5.10. Theme J – Transboundary water cooperation

SDG targets impacted by the pre-identified situations of this theme

Target 6.5 : (...) implement integrated water resources management at all levels, including through transboundary cooperation as appropriate

Indicator 6.5.2 : Proportion of transboundary basin area (rivers, lakes aquifers) with an operational arrangement for water cooperation

Topic	Targets	Statement of situation impacting SDG targets positively <i>Statement of situation impacting SDG targets negatively</i>	Factor zero	Factor 1	Size criterion <i>Max if size ></i>
J1	6.5	The project will improve/strengthen the "operationalisation"* of an existing cooperation agreement as defined in SDG indicator 6.5.2*** (or other existing formal cooperation modality) concerning transboundary waters (surface waters and/or aquifers) <i>The project will undermine the "operationalisation" of an existing formal cooperation agreement or modality concerning transboundary waters (surface waters and/or aquifers)</i>	1	1F2a	Population of the relevant river basins <i>10,000,000</i>
J2	6.5	The project will result in new formal and operational* cooperation on transboundary waters (surface waters or aquifers) <i>The project will result in the abandonment of formal and operational cooperation on transboundary waters (surface waters or aquifers)</i>	1	1F2a	Population of the relevant river basins <i>10,000,000</i>
J3	6.5	The project will strengthen the 'enabling environment'** necessary for cooperation on transboundary waters (surface waters and/or aquifers) to take place <i>The project will make it more difficult for cooperation to emerge on transboundary waters (surface waters and/or aquifers)</i>	1/3	1F2a	Population of the relevant river basins <i>10,000,000</i>
J4	6.5	The project will contribute to strengthening / improving cooperation between actors involved in the management / use of a transboundary basin (surface waters and/or aquifers) <i>The project will make it more difficult for cooperation to emerge on transboundary waters (surface waters and/or aquifers)</i>	1/3	1F2a	Population of the relevant river basins <i>10,000,000</i>
J5	6.5	The project will give credibility to an existing cross-border cooperation agreement <i>The project will contradict an existing cross-border cooperation agreement</i>	2/3	1F2a	Population of the relevant river basins <i>10,000,000</i>

* An arrangement can only be considered operational if it meets the following four criteria: (i) there is a joint body or mechanism; (ii) meetings between riparian countries are held at least once a year; (iii) a joint or coordinated water management plan has been established or joint objectives have been set; (iv) data and information exchanges take place at least once a year (UN methodology for SDG indicator 6.5.2). The precise definition and metadata of SDG indicator 6.5.2 are available at <https://unstats.un.org/sdgs/metadata/files/Metadata-06-05-02.pdf>

** An arrangement can only be considered operational if it meets the following four criteria: (i) there is a joint body or mechanism; (ii) meetings between riparian countries are held at least once a year; (iii) a joint or coordinated water management plan has been established or joint objectives have been set; and (iv) data and information exchanges take place at least once a year (UN methodology for SDG indicator 6.5.2).

*** SDG indicator 6.5.2 requires agreements between countries that meet 4 criteria. But before an agreement can be reached, countries sharing the same water resources need to talk to each other, exchange information and develop common goals

5.11. Theme K – Protection and area of freshwater ecosystems

SDG targets impacted by the pre-identified situations of this theme

Target 6.6: Protect and restore water-related ecosystems, including mountains, forests, wetlands, rivers, aquifers and lakes

Indicator 6.6.1: changes over time of the area covered by water-related ecosystems such as lakes, rivers, wetlands and mangroves

Target 6.b : Support and strengthen the participation of local community in improving water and sanitation management

Target 15.1: ensure the conservation, restoration and sustainable use of terrestrial and inland freshwater ecosystems and their services, in particular forests, wetlands, mountains and drylands, in line with obligations under international agreements

Topic	Targets	Statement of situation impacting SDG targets positively <i>Statement of situation impacting SDG targets negatively</i>	Factor zero	Factor 1	Size criterion <i>Max if size ></i>
K1	6.6 15.1	Increase in the area of aquatic ecosystems related to rivers, lakes or ponds <i>Reduction in the area of aquatic ecosystems associated with rivers, lakes or ponds</i>	1	1F1	Variation in surface area <i>1,000 km²</i>
K2	6.6 15.1	Increase in the area of wetland-related aquatic ecosystems <i>Reduction in the area of wetland-related aquatic ecosystems</i>	1	1F1	Variation in surface area <i>1,000 km²</i>
K3	6.6 15.1	The project will legally protect aquatic ecosystems, allowing them to be extended, restored or managed in a sustainable manner <i>The project will weaken the legal protection of aquatic ecosystems</i>	1/3	1F1	Surface areas affected <i>1,000 km²</i>
K4 =P8	6.6 15.1	The project increases the territory's resilience to climate change while conserving aquatic ecosystems <i>Aquatic ecosystems will suffer from climate change both directly and indirectly due to human activities</i>	1/3	1F2a	Total population of the relevant area/territory <i>10,000,000</i>
K5	6.6 6.b	The public will be more involved in decisions concerning the protection and extension of aquatic ecosystems <i>Some people may complain that they are not sufficiently involved in decisions concerning the protection and extension of aquatic ecosystems</i>	1	1F2a	Total population of the relevant area/territory <i>10,000,000</i>

K6	6.6	The project will contribute to improved funding for the protection of aquatic ecosystems <i>The project will weaken the funding conditions for the protection of aquatic ecosystems</i>	1/3	1F2a	Wetlands areas affected 1,000 km ²
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5.12. Theme L – Freshwater for agriculture

SDG targets impacted by the pre-identified situations of this theme

Target 2.3 : double the agricultural productivity and incomes of small-scale food producers, in particular women, indigenous peoples, family farmers, pastoralists and fishers, ...

Target 2.4: ... implement resilient agricultural practices that increase productivity and production, that help maintain ecosystems, that strengthen capacity for adaptation to climate change, extreme weather, drought, flooding and other disasters and that progressively improve land and soil quality

Target 6.3 : (partial) : ...improve water quality by reducing pollution, ... , halving the proportion of untreated wastewater ...

Target 6.4: ... substantially increase the efficient use of water resources in all sectors and ensure sustainable withdrawals and supply of freshwater to address water scarcity ...

Indicator 6.4.1: Change in water-use efficiency over time (United States dollars per cubic meter"), measured as the ratio of dollar value added to the volume of water used while aggregating several components)

Target 6.5 : (...) implement integrated water resources management at all levels, including through transboundary cooperation as appropriate

Target 8.5 : achieve ... decent work for all women and men, including for young people and persons with disabilities, and equal pay for work of equal value

Target 12.2 : achieve the sustainable management and efficient use of natural resources

Target 13.1 : strengthen resilience and adaptive capacity to climate-related hazards and natural disasters in all countries

Topic	Targets	Statement of situation impacting SDG targets positively <i>Statement of situation impacting SDG targets negatively</i>	Factor zero	Factor 1	Size criterion <i>Max if size ></i>
L1	2.4 6.4 6.5	The new water resources for irrigation mobilised by the project have been the subject of studies showing their sustainability and impact on ecosystems as well as consultation with other water users <i>The new water resources for irrigation mobilised by the project have not been the subject of studies showing their sustainability and impact on ecosystems, nor of consultation with other water users</i>	2/3	1F2a	New volume 1,000,000 m ³ /d
L2	6.3	Reduction in the amount of nutrients released from an agricultural area <i>Increase in the amount of nutrients released from an agricultural area</i>	1/2	1F3d	Relevant agricultural area 10,000 km ²
L3	6.3	Reduction of the quantity of plant protection products used on an agricultural area <i>Increase in the quantity of plant protection products used on an agricultural area</i>	1/2	1F3d	Relevant agricultural area 10,000 km ²

L4	2.4	The project will allow adaptation* to periods of drought by increasing the amount of water or moisture available in the cultivated fields in the dry season <i>The project will make agricultural production more fragile in the event of unusually severe drought</i>	2/3	1F2a	Relevant agricultural area 10,000 km ²
L5 = P9	2.4 13.1	The project will enable agriculture to adapt to local decreases in water resources through less water-intensive irrigation practices in dry seasons <i>The project will increase the local need for irrigation water despite the risk of decreasing water resources</i>	2/3	1F3a	Volume saved 100,000 m ³ /d
L6	2.4	The project will increase agricultural production while returning nutrients to the soil <i>The project will decrease agricultural production or degrade the quality of agricultural soils</i>	1/2	1F2a	Agricultural area affected 10,000 km ²
L7	2.3 8.5	Small farmers' incomes will be more secure through more resilient farms <i>The project will increase the risks to agricultural production</i>	1/2	1F2a	Agricultural population concerned 1,000,000 h
L8 = S5	2.3	Small farmers' incomes will increase <i>Small farmers' incomes will fall</i>	1/2	1F5e	Agricultural population concerned 1,000,000 h
L9 = G3	6.4 12.2	Reduction** in the amount of water used annually to irrigate a currently irrigated agricultural or recreational area (withdrawals or net consumption) <i>More water will be used annually to irrigate an agricultural or recreational area that is irrigated today</i>	2/3	1F3a	Current average daily volume 1,000,000 m ³ /d

* This adaptation is related to the presence of water in the soil. Reductions in water consumption are addressed by topic G3=L9

** This reduction can have different origins such as a change in irrigation practices or a change in cultivated varieties

5.13. Theme M – Freshwater and energy

SDG targets impacted by the pre-identified situations of this theme:

Target 6.1 : achieve universal and equitable access to safe and affordable water for all

Target 6.4 : substantially increase water-use efficiency across all sectors and ensure sustainable withdrawals and supply of freshwater to address water scarcity ...

Indicator 6.4.1: Change in water-use efficiency over time (United States dollars per cubic meter), measured as the ratio of dollar value added to the volume of water used while aggregating several components

Target 6.5 : (...) implement integrated water resources management at all levels, including through transboundary cooperation as appropriate

Target 6.6: protect and restore water-related ecosystems, including mountains, forests, wetlands, rivers, aquifers and lakes

Target 6.b: support and strengthen the participation of local community in improving water and sanitation management

Target 7.1: ensure universal access to affordable, reliable and modern energy services

Indicator 7.1.2 : proportion of population with primary reliance on clean fuels and technology

Target 7.2 : increase substantially the share of renewable energy in the global energy mix

Indicator 7.2.1 : renewable energy share in the total final energy consumption

Target 12.2 : achieve the sustainable management and efficient use of natural resources

Target 13.2 : Integrate climate change measures into national policies, strategies and planning

Indicator 13.2.2 : total greenhouse gas emissions per year

Target 15.1 : ensure the conservation, restoration and sustainable use of terrestrial and inland freshwater ecosystems and their services, ...

Topic	Targets	Statement of situation impacting SDG targets positively <i>Statement of situation impacting SDG targets negatively</i>	Factor zero	Factor 1	Size criterion <i>Max if size ></i>
M1	7.2	Hydropower production will increase in the national energy mix <i>Hydroelectricity production will decrease in the national energy mix</i>	2/3	1F5c	Hydroelectric power <i>10,000 MW</i>
M2	6.1	The regularity of the drinking water supply will be increased due to a more reliable power supply <i>The regularity of the drinking water supply will be weakened due to a less reliable or more strained power supply</i>	2/3	1F2a	Population affected by the cuts <i>10,000,000</i>
M3 =P7	6.6 15.1	Despite the effects of climate change, the maximum temperature difference between the water withdrawn and the water discharged after cooling from power plants will be maintained at the current level (measured according to regulations) <i>The maximum temperature difference between water withdrawn and water discharged after cooling from power plants will not be maintained at the current level due to climate change</i>	2/3	1F1	Electrical power concerned <i>10,000 MW</i>
M4	6.4 6.5	The project to abstract water for cooling a power plant does not compromise integrated water resources management and respects the water needs of other users, as identified during the multi-user water consultation <i>The project to abstract water for cooling a power plant will mobilise water resources that will no longer be available for other uses</i>	2/3	1F2a	Population of the relevant catchment areas <i>10,000,000</i>
M5	6.b	The public and water users will be more involved in decisions about the design, construction and management of power generation facilities <i>Some water users may complain that they are not sufficiently involved in decisions about the design, construction and management of power generation facilities</i>	2/3	1F2a	Involved population <i>10,000,000</i>
M6	12.2	Reduction in energy consumption compared to the current situation for the same hydraulic infrastructure <i>Increase in energy consumption compared to the current situation for the same water infrastructure</i>	2/3	1F3a	Initial power consumption <i>100,000 kW</i>

M7	7.1	The project will enable some people to switch from non-renewable primary energy consumption to renewable energy <i>The project will force some people to switch from renewable to non-renewable primary energy consumption</i>	1	1F2a	Population whose situation will change <i>1,000,000</i>
M8 =G6	6.4	Reduction of the annual withdrawals or net water consumption* of electricity generation facilities in relation to their annual production of KWh <i>Increase in the annual net water consumption of electricity generation facilities in relation to their annual production of KWh</i>	2/3	1F3a	Production of these plants <i>10,000 MW</i>
M9 =E8	13.2	Part of the calorific capacity of the sewage sludge will be recovered, which will reduce the consumption of non-renewable energy <i>Energy recovery from sewage sludge will stop and lead to an increased need for external energy</i>	2/3	1F1	Recovered energy <i>100,000 kW</i>

* The reduction of withdrawals per KWh is a component of indicator 6.4.1 while the reduction of net consumption (withdrawals minus discharges) contributes to the sustainable management of water resources (part of target 6.4)

5.14. Theme N – Water and Health. Combating water-related diseases

SDG targets impacted by the pre-identified situations of this theme:

Target 3.3: ... combat hepatitis, water-borne and other communicable diseases

Target 3.9 : substantially reduce the number of deaths and illnesses from hazardous chemicals and air, water and soil pollution and contamination

Indicator 3.9.2 : mortality rate attributed to unsafe water, unsafe sanitation and lack of hygiene (deaths per 100,000 population)

Target 4.a : ... build and upgrade education facilities that are child, disability and gender sensitive ...

Indicator 4.a.1 : Proportion of schools offering basic services, by type of service (including safe drinking water, separate toilets and handwashing facilities)

Target 5.1 : end all forms of discrimination against all women and girls everywhere

Target 6.1 : achieve universal and equitable access to safe and affordable water for all

Target 11.5 : significantly reduce the number of deaths and the number of people affected and substantially decrease the direct economic losses relative to global gross domestic product caused by disasters, including water-related disasters, with a focus on protecting the poor and people in vulnerable situations

Topic	Targets	Statement of situation impacting SDG targets positively <i>Statement of situation impacting SDG targets negatively</i>	Factor zero	Factor 1	Size criterion <i>Max if size ></i>
N1	3.9	Reduction in the annual number of deaths per 100,000 people attributed to inadequate access to safe water, sanitation or hygiene in the territory <i>Potential increase in the number of deaths per 100,000 people attributed to inadequate access to safe water, sanitation or hygiene in the territory</i>	1	1F3d	Total population of the concerned area/territory <i>10,000,000</i>
N2 = A21	3.3 6.1	A number of people currently using water of uncertain quality will be able to use drinking water that meets national standards and is therefore free of contamination <i>Potential increase in the number of people using water of uncertain quality due to the project</i>	1	1F1	Population whose situation will change <i>1,000,000</i>
N3 = E7	3.9	Discharges from wastewater treatment plants will be disinfected to protect bathing areas <i>Disinfection of certain discharges to the natural environment will be stopped</i>	1	1F1	Population Equivalent* to the pollution load of the flows before disinfection <i>1,000,000</i>
N4 = O1	3.3 4.a	The number of schools with basic access to drinking water*, sanitation** and hand washing with soap*** will increase <i>The number of schools with basic access to drinking water, sanitation** and hand washing with soap** will decrease</i>	1	1F5a	Total population of the concerned area/territory <i>10,000,000</i>
N5 = O2	3.3 4.a	The number of schools with basic access to drinking water* will increase <i>The number of schools with basic access to drinking water* will decrease</i>	2/3	1F5a	Total population of the concerned area/territory <i>10,000,000</i>

N6 = O3	3.3 4.a 5.1	The number of schools with basic access to sanitation** will increase <i>The number of schools with basic access to sanitation** will decrease</i>	1	1F5a	Total population of the concerned area/territory <i>10,000,000</i>
N7 = O4	3.3 4.a	The number of schools with basic access to handwashing with soap*** will increase <i>The number of schools with basic access to handwashing with soap*** will decrease</i>	2/3	1F5b	Total population of the concerned area/territory <i>10,000,000</i>
N8 = O5	3.3 4.a	The proportion of schools lacking basic access to drinking water*, separate toilets or handwashing with soap will be better known statistically <i>The proportion of schools lacking basic access to drinking water, separate toilets or handwashing with soap will be less well known statistically</i>	1/4	1F2a	Total population of the concerned area/territory <i>10,000,000</i>
N9 = Q5	11.5 3.3	The risks of sewer overflows and waterborne disease outbreaks in the event of exceptional rainfall will decrease <i>Increased risk of sewer overflows or waterborne disease outbreaks in the event of exceptional rainfall</i>	1	1F2a	Total population of the concerned area/territory <i>10,000,000</i>

* For a school, to have 'basic access to drinking water', water from 'improved sources', i.e. not likely to have been contaminated by animals, must be available to students. This availability criterion is imperative

** For a school to have 'basic access to sanitation', it must have toilets for students that are functional, non-mixed and 'improved', i.e. without direct user-faeces contact. All 3 criteria are imperative

*** A school has 'basic access to hygiene' if students can wash their hands with soap and water

5.15. Theme O – Water and Education

SDG targets impacted by the pre-identified situations of this theme:

Target 3.3: ... combat hepatitis, water-borne and other communicable diseases

Indicator 4.a.1 : Proportion of schools offering basic services, by type of service.

7 components out of which:

- schools with basic access to water (%)
- schools with separate toilets (%)
- schools with basic handwashing facilities (%)

Target 4.7 : ensure that all learners acquire the knowledge and skills needed to promote sustainable development, including, among others, through education for sustainable development and sustainable lifestyles, ...

Target 5.1 : end all forms of discrimination against all women and girls everywhere

Topic	Targets	Statement of situation impacting SDG targets positively <i>Statement of situation impacting SDG targets negatively</i>	Factor zero	Factor 1	Size criterion <i>Max if size ></i>
O1 = N4	3.3 4.a	The number of schools with basic access to drinking water*, sanitation** and hand washing with soap*** will increase <i>The number of schools with basic access to drinking water*, sanitation** and hand washing with soap*** will decrease</i>	1	1F5a	Total population of the concerned area/territory <i>10,000,000</i>
O2 = N5	3.3 4.a	The number of schools with basic access to drinking water* will increase <i>The number of schools with basic access to drinking water* will decrease</i>	2/3	1F5a	Total population of the concerned area/territory <i>10,000,000</i>
O3 = N6	3.3 4.a 5.1	The number of schools with basic access to sanitation** will increase <i>The number of schools with basic access to sanitation** will decrease</i>	1	1F5a	Total population of the concerned area/territory <i>10,000,000</i>
O4 = N7	3.3 4.a	The number of schools with basic access to handwashing with soap*** will increase <i>The number of schools with basic access to handwashing with soap*** will decrease</i>	2/3	1F5a	Total population of the concerned area/territory <i>10,000,000</i>
O5 = N8	3.3 4.a	The proportion of schools lacking basic access to drinking water*, separate toilets or handwashing with soap will be better known statistically <i>The proportion of schools lacking basic access to drinking water, separate toilets or handwashing with soap will be less well known statistically</i>	1/4	1F2a	Total population of the concerned area/territory <i>10,000,000</i>
O6	4.7	Increase in the number of pupils, students or teachers informed about the functioning of water cycles, the needs of sustainable water resources management and the collective objectives related to water <i>The project will increase pupils', students' or teachers' confusion about the meaning of sustainable development, water-related collective goals or the functioning of water cycles and the needs for sustainable water resources management</i>	2/3	1F2a	Number of people involved <i>1,000,000</i>

* For a school to have 'basic access to drinking water', water from 'improved sources', i.e. not likely to have been contaminated by animals, must be available to students. This availability criterion is imperative

** For a school to have 'basic access to sanitation', it must have toilets for students that are functional, non-mixed and 'improved', i.e. without direct contact between user and excreta. All 3 criteria are imperative

*** A school has 'basic access to hygiene' if students can wash their hands with soap and water

5.16. Theme P – Mitigation and Adaptation to Climate Change (excluding floods and droughts)

SDG targets impacted by the pre-identified situations of this theme:

Target 2.4 : ... implement resilient agricultural practices that increase productivity and production, that help maintain ecosystems, that strengthen capacity for adaptation to climate change, extreme weather, drought, flooding and other disasters and that progressively improve land and soil quality

Target 3.3: ... combat hepatitis, water-borne and other communicable diseases

Target 6.4 : substantially increase water-use efficiency across all sectors and ensure sustainable withdrawals and supply of freshwater to address water scarcity ...

Target 6.6 : By 2020, protect and restore water-related ecosystems, including mountains, forests, wetlands, rivers, aquifers and lakes

Target 11.5 : significantly reduce the number of deaths and the number of people affected and substantially decrease the direct economic losses relative to global gross domestic product caused by disasters, including water-related disasters, with a focus on protecting the poor and people in vulnerable situations

Target 11.b : substantially increase the number of cities and human settlements adopting and implementing integrated policies and plans towards inclusion, resource efficiency, mitigation and adaptation to climate change, resilience to disasters, and develop and implement, in line with the Sendai Framework for Disaster Risk Reduction 2015–2030, holistic disaster risk management at all levels

Target 13.1 : Strengthen resilience and adaptive capacity to climate-related hazards and natural disasters in all countries

Target 13.2 : Integrate climate change measures into national policies, strategies and planning

Target 15.1 : ensure the conservation, restoration and sustainable use of terrestrial and inland freshwater ecosystems and their services ...

Topic	Targets	Statement of situation impacting SDG targets positively <i>Statement of situation impacting SDG targets negatively</i>	Factor zero	Factor 1	Size criterion <i>Max if size ></i>
P1	6.4 13.1	The project is based on recent data on water resources, taking into account future climate change scenarios within the framework of an integrated and concerted management of water resources <i>The project is not adapted to recent water resources data taking into account future climate change scenarios in the context of integrated and concerted water resources management</i>	2/3	1F2a	Population of the concerned area <i>10,000,000</i>
P2	6.3 13.1	The project takes into account the risks associated with changes in freshwater quality* in the context of climate change (deterioration of quality of water resources, impacts on aquatic ecosystems)	1	1F2a	Population of the concerned area <i>10,000,000</i>

		<i>The project is not adapted to the risks associated with changes in freshwater quality in the context of climate change (deterioration of quality of water resources, impacts on aquatic ecosystems)</i>			
P3	6.4 13.1	The project integrates measures to adapt to possible decreases in resources due to climate change: water savings, mobilisation of new resources, non-conventional water, limiting pollution to adapt to lower flows, etc. <i>The project is not adapted to the possible decreases in water resources due to anticipated climate change.</i>	1	1F4b	Population of the concerned area <i>1,000,000 h</i>
P4	13.1	The project incorporates measures to adapt** to increases in sea level or water temperatures that will result from anticipated climate change <i>The project is inadequate for the effects of climate change on sea level or water temperatures</i>	1	1F2a	Population of the area concerned by the project <i>10,000,000</i>
P5	13.2	The project includes measures to limit greenhouse gas emissions from the water infrastructure (reduced energy consumption, autonomous energy production, energy recovery, etc.) <i>The project will lead to an increase in greenhouse gas emissions</i>	1	1F3e	Population concerned by this infrastructure <i>10,000,000</i>
P6	11.b	The project is a component of the national climate change adaptation strategy*** <i>The project undermines the national climate change adaptation strategy</i>	2/3	1F2a	Total population of the area/territory <i>10,000,000</i>
P7 =M3	6.6 15.1	Despite the effects of climate change, the maximum temperature difference between the water withdrawn and the water discharged after cooling from power plants will be maintained at the current level (measured according to regulations) <i>The maximum temperature difference between water withdrawn and water discharged after cooling from power plants will not be maintained at the current level due to climate change</i>	2/3	1F1	Electrical power concerned <i>10,000 MW</i>
P8 =K4	6.6 15.1	The project increases the territory's resilience to climate change while conserving aquatic ecosystems <i>Aquatic ecosystems will suffer from climate change both directly and indirectly due to human activities</i>	1/3	1F2a	Total population of the concerned area/territory <i>10,000,000</i>
P9 = L5	2.4 13.1	The project will enable agriculture to adapt to local decreases in water resources through less water-intensive irrigation practices in dry seasons <i>The project will increase the local need for irrigation water despite the risk of decreasing water resources</i>	2/3	1F3a	Volume saved <i>100,000 m³/d</i>

* Quantitative changes are not covered by this statement but by statement P3

** Adaptation measures are actions aimed at maintaining the relevance of the project or the resilience of the territory in the event that sea level or temperature rises do occur

*** Only projects that fall within a type of action identified in the national climate change adaptation strategy are covered by this statement

5.17. Theme Q – Limiting the impacts of water-related disasters (including floods and droughts)

SDG targets impacted by the pre-identified situations of this theme:

Target 1.5 : build the resilience of the poor and those in vulnerable situations and reduce their exposure and vulnerability to climate-related extreme events and other economic, social and environmental shocks and disasters

Target 3.3: ... combat hepatitis, water-borne and other communicable diseases

Target 9.1 : develop quality, reliable, sustainable and resilient infrastructure ...

Target 11.5 : significantly reduce the number of deaths and the number of people affected and substantially decrease the direct economic losses relative to global gross domestic product caused by disasters, including water-related disasters, with a focus on protecting the poor and people in vulnerable situations

Indicator 11.5.1 : Number of deaths, missing persons and directly affected persons attributed to disasters per 100,000 population

Indicator 11.5.2: Direct economic loss in relation to global GDP, damage to critical infrastructure and number of disruptions to basic services, attributed to disaster

Target 11.b : substantially increase the number of cities and human settlements adopting and implementing integrated policies and plans towards inclusion, resource efficiency, mitigation and adaptation to climate change, resilience to disasters, and develop and implement, in line with the Sendai Framework for Disaster Risk Reduction 2015–2030, holistic disaster risk management at all levels

Target 13.1 : Strengthen resilience and adaptive capacity to climate-related hazards and natural disasters in all countries.

Sujet	Targets	Statement of situation impacting SDG targets positively <i>Statement of situation impacting SDG targets negatively</i>	Factor zero	Factor 1	Size criterion <i>Max if size ></i>
Q1	11.5	Reduction in the number of potential victims in the event of exceptional flooding by freshwater or seawater* <i>Increase in the number of potential victims in the event of exceptional flooding by freshwater or seawater*</i>	1	1F2a	Total population of the concerned area/territory <i>10,000,000</i>
Q2	11.5	The risk of disruption to public water and sanitation services** in the event of exceptional freshwater or marine flooding or exceptional drought will decrease <i>Increased risk of disruption of public water and sanitation services** in the event of exceptional freshwater or marine flooding or exceptional drought</i>	1	1F2a	Total population of the concerned area/territory <i>10,000,000</i>
Q3	11.5	Thanks to the project, the impacts of possible future exceptional floods will be better known <i>Loss of knowledge or lack of anticipation of risks associated with potential flood disasters</i>	1/3	1F2a	Total population of the concerned area/territory <i>10,000,000</i>
Q4	11.5	Reduction of potential damage to property in the event of exceptional flooding*** compared to the previous situation <i>Likely increase in potential damage to property in the event of exceptional flooding*** compared to the previous situation</i>	2/3	1F2a	Total population of the concerned area/territory <i>10,000,000</i>
Q5 = N9	11.5 3.3	The risks of sewer overflows and waterborne disease outbreaks in the event of exceptional rainfall will decrease <i>Increased risk of sewer overflows or waterborne disease outbreaks in the event of exceptional rainfall</i>	1	1F2a	Total population of the concerned area/territory <i>10,000,000</i>

Q6	11.5 13.1	People at risk of flooding will be warned further in advance <i>People at risk of flooding will be warned later or not warned at all</i>	1	1F2a	Population whose situation will change <i>1,000,000</i>
Q7	1.5	Better anticipation of floods will contribute to the resilience of the most vulnerable populations or informal settlements exposed to flood risks. <i>Less anticipation of floods will aggravate the risks of the most vulnerable populations or informal settlements exposed to flood risks.</i>	1	1F2a	Population affected by floods <i>100,000</i>
Q8 =A10	9.1 13.1	The project will enable the establishment of water transport or distribution networks capable of operating at their design flow rate irrespective of the risk of flooding, drought or sea level rise or will secure existing networks against the same risks <i>The project will lead to an increased risk of failure to supply existing water systems in the event of flooding, drought or marine intrusion.</i>	1	1F2a	Total population of the area/territory <i>10,000,000</i>

* This is a component of indicator 11.5.1, which measures the number of disaster victims.

** In the event of flooding, several causes can lead to the interruption of drinking water services: power cuts, broken pipes, blockage of treatment plants, impossibility of transport by trucks, etc. Sewerage services can also be interrupted in the event of blockages in the collection networks, loss of electricity in lift plants or treatment plants, interruption of gravity flows or truck transport, cessation of operation of treatment plants, etc.

*** This is a component of indicator 11.5.2, which measures the economic losses resulting from disasters.

5.18. Theme R – Reducing inequalities

SDG targets impacted by the pre-identified situations of this theme:

Target 5.1. End all forms of discrimination against all women and girls everywhere

Target 5.2 : Eliminate all forms of violence against all women and girls ...

Target 5.4 : Recognize and value unpaid care and domestic work through the provision of public services, infrastructure and social protection policies and the promotion of shared responsibility within the household and the family as nationally appropriate

Target 10.3 : Ensure equal opportunity and reduce inequalities of outcome, including by eliminating discriminatory laws, policies and practices

Target 10.4 : Adopt policies, ..., and progressively achieve greater equality

Topic	Targets	Statement of situation impacting SDG targets positively <i>Statement of situation impacting SDG targets negatively</i>	Factor zero	Factor 1	Size criterion <i>Max if size ></i>
R1	5.1	The project will benefit more women than men <i>The project will benefit more men than women</i>	½	1F6	Female population concerned <i>1,000,000</i>
R2	5.1	The new equipment will be used more by women than by men because of specific project provisions for women <i>New equipment is not designed to take into account the specific needs of women and girls</i>	1	1F6	Female population concerned <i>1,000,000</i>
R3	5.1	Women who are in more difficult situations than men will have the same opportunities as men <i>Women who experience more difficult situations than men will see these difficulties worsen</i>	1	1F2a	Female population concerned <i>1,000,000</i>
R4	5.1	The women impacted by the project will be involved in the development of the project with at least as much weight as the men <i>The women affected by the project will not be involved in the development of the project</i>	2/3	1F2a	Female population concerned <i>1,000,000</i>
R5	5.1	The draft includes specific provisions for women or girls*	1	1F2a	Female population concerned <i>1,000,000</i>
R6	5.2	The safety of women or girls from the risk of violence when fetching or using water will be enhanced <i>The risk of violence against women or girls when fetching or using water will increase</i>	1	1F2a	Total population of the concerned area/territory <i>10,000,000</i>
R7	10.4	Inequalities** in the cost of drinking water for users will be reduced in a territory <i>Inequalities in the cost of drinking water for users will increase in a territory</i>	2/3	1F2a	Part of population which will get closer to the majority <i>1,000,000</i>
R8 =A20	10.4	Territorial inequalities in modes of access to drinking water or in the quantity of drinking water will be reduced <i>Territorial inequalities in modes of access to drinking water or in the quantity of drinking water will worsen</i>	2/3	1F2a	Part of population which will get closer to the majority <i>1,000,000</i>

R9 = A8	5.4 10.3 10.4	Thanks to the project, people will be freed from water chores, which will free up their time for school, work and domestic activities <i>As a result of the project, more people will be required to do water chores</i>	2/3	1F1	Population whose situation will change <i>1,000,000</i>
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* These are provisions that affect women or girls but not men

** The inequalities referred to in this statement are the differences in cost for daily needs between different users connected to the networks, between them and those who have to go to standpipes or with those who have to buy water from tankers

5.19. Theme S - Decent work

SDG targets impacted by the pre-identified situations of this theme

Target 2.3 : double the agricultural productivity and incomes of small-scale food producers, in particular women, indigenous peoples, family farmers, pastoralists and fishers, ...

Target 8.5 : achieve ... decent work for all women and men, including for young people ...

Target 8.6 : substantially reduce the proportion of youth not in employment, education or training

Topic	Targets	Statement of situation impacting SDG targets positively <i>Statement of situation impacting SDG targets negatively</i>	Factor zero	Factor 1	Size criterion <i>Max if size ></i>
S1	8.5	Sustainable jobs will be secured for many young people <i>Increased precariousness or loss of jobs for many young people</i>	1	1F1	Number of young people involved <i>1,000,000</i>
S2	8.5	Securing sustainable jobs for many women <i>Increased precariousness or loss of employment for many women</i>	1	1F1	Number of women involved <i>1,000,000</i>
S3	8.5	Creation of sustainable jobs <i>Many jobs will become precarious or will be lost</i>	1	1F1	Number of jobs created <i>1,000,000</i>
S4	8.6	Creation of jobs held by young people for whom real training is organised <i>Lack of training efforts for the jobs created, effectively excluding young people without training</i>	1	1F1	Number of jobs created <i>1,000,000</i>
S5 =L8	2.3	Small farmers' incomes will increase <i>Small farmers' incomes will fall</i>	1/2	1F5e	Agricultural population concerned <i>1,000,000</i>

5.20. Theme T – Partnerships

SDG targets impacted by the pre-identified situations of this theme:

Target 17.9 : Enhance international support for implementing effective and targeted capacity-building in developing countries to support national plans to implement all the Sustainable Development Goals, including through North-South, South-South and triangular cooperation

Target 17.16 : Enhance the Global Partnership for Sustainable Development, complemented by multi-stakeholder partnerships that mobilize and share knowledge, expertise, technology and financial resources, to support the achievement of the Sustainable Development Goals in all countries, in particular developing countries

Topic	Targets	Statement of situation impacting SDG targets positively <i>Statement of situation impacting SDG targets negatively</i>	Factor zero	Factor 1	Size criterion <i>Max if size ></i>
T1	17.9	Through international partnership, local capacity to achieve the SDGs will be strengthened <i>Despite international partnership, local capacities to achieve the SDGs will be diminished</i>	1	1F2a	Total population of the concerned area/territory <i>10,000,000</i>
T2	17.16	The international partnership will mobilise and share knowledge or technologies useful for achieving the SDGs <i>The international partnership will encourage the use of technologies that are detrimental to the achievement of the SDGs</i>	1	1F2a	Total population of the concerned area/territory <i>10,000,000</i>

6. Case of non-pre-identified impacts of a water-related action

An evaluator first selects the themes concerned by the project (usually between 1 and 4). Then, for each of them, he/she assesses the relevance of the 'impacting situations' whose statements are proposed. For those 'topics' that are relevant, the evaluator estimates the 3 factors leading to a score.

It may happen in particular cases that the evaluator discovers an aspect of the project that clearly has an impact (positive or negative) on the SDGs but is not described in the proposed impacting statements. In such cases, the evaluator may add this particular 'topic' under theme X- "Other topics".

As this topic is not covered in advance, the evaluator will have to :

- first write the statement of the 'impacting situation' ;
- then enter the number of the SDG target that is impacted;
- write justifications for the reality of this impact;
- then proceed with the evaluation by answering 4 questions (instead of 3 for the pre-identified subjects) in order to calibrate the score as homogeneously as possible with the pre-identified 'topics'.

These four questions are as follows:

- Q1: Meaning and nature of change?
This question determines the zero factor of the new 'impactful situation'.
- Q2 : How should the scale of this change be measured?
This question determines the scale of the size factor (Factor 2).
- Q3 : What is the size range of the project?
- Q4 : Is the change measured?

The two tables below show the different options to choose from in response to questions 1 and 2, as well as the factors or scales that result from the options chosen.

Options for Question 1 Meaning and nature of change?		Zero Factor
If this situation creates a POSITIVE change, select the best of the 4 following options. This positive change is ...		
<input type="checkbox"/>	an effective progress on the ground towards the achievement of at least part of the target	12
<input type="checkbox"/>	a progress necessary to achieve at least part of the target but insufficient on its own to determine ground progress towards it	8
<input type="checkbox"/>	a factor favourable to the achievement of the target but not constituting an effective progress towards it (indirect factor)	4
<input type="checkbox"/>	an improvement of funding or governance of actions towards the target	4
If this situation creates a NEGATIVE change, select the best of the 4 following options. This negative change is ...		
<input type="checkbox"/>	a setback in the field that takes away from the achievement of the target	-12
<input type="checkbox"/>	a complication in the field making it more difficult to reach the target	- 8
<input type="checkbox"/>	an unfavourable context factor for reaching the target	- 4
<input type="checkbox"/>	a deterioration in funding or governance of actions towards the target	- 4

Options for Question 2 How should the size of the project be measured?		Echelle de facteur 2	Score max pour
<input type="checkbox"/>	according to the population of the territory concerned by the project (inhabitants) ?	2F5	10,000,000
<input type="checkbox"/>	according to the population whose situation will change (inhabitants) ?	2F4	1,000,000
<input type="checkbox"/>	according to the poor, marginal or excluded population whose situation will change (inhabitants) ?	2F3	100,000
<input type="checkbox"/>	according to the volumes of raw water (m3/d)	2F4	1,000,000
<input type="checkbox"/>	according to the population equivalent of the pollution of the flows concerned ?	2F3	100,000
<input type="checkbox"/>	according to the electrical power produced (MW) ?	2F2	10,000
<input type="checkbox"/>	according to the electrical power saved (MW) ?	2F3	100,000
<input type="checkbox"/>	according to the natural wetland surface considered (km ²) ?	2F1	1,000
<input type="checkbox"/>	according to the agricultural surface concerned (km ²) ?	2F2	10,000

7. Assessment results

As with any application using the *4allSDGs* methodology, the *Water4allSDGs* application provides two types of results:

- lists classified by SDG or by 'themes' of impacts on SDG targets with their descriptions and justifications;
- bar charts grouping these impacts by SDG or theme, facilitating understanding of the results.

Example of a bar chart:

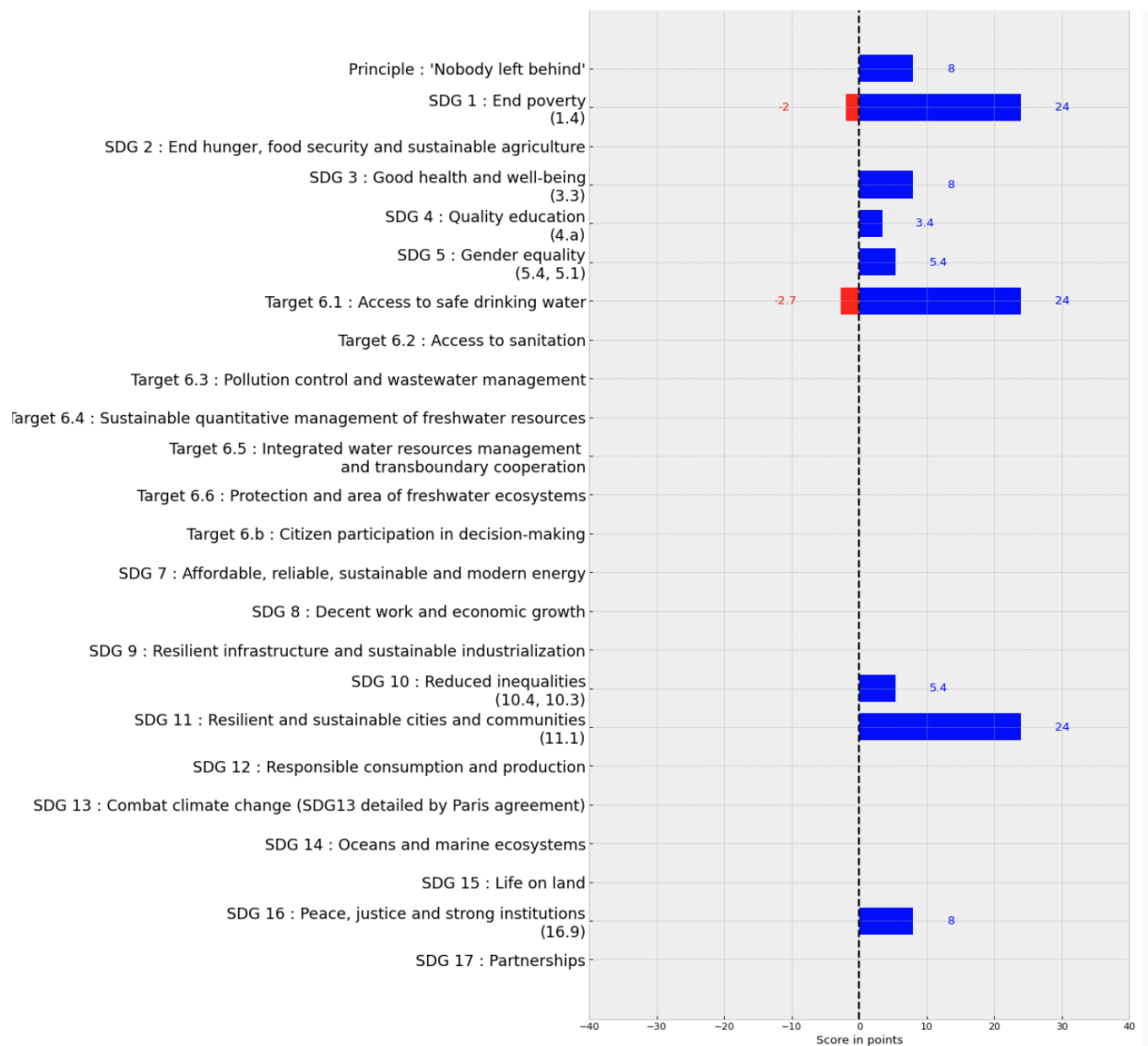


Figure 1: Example of SDG impact scores for a drinking water network development project in a slum