

# Welcome to your CDP Water Security Questionnaire 2022

## **W0. Introduction**

## W0.1

#### (W0.1) Give a general description of and introduction to your organization. Company Profile

PT Semen Indonesia (Persero) Tbk (SIG) is one of the largest company in building material sector in Southeast Asia. It is providing building material solutions, which are cement, readymix, and other building material solutions. SIG is an Stated Owned Enterprise with 51% of it shares owned by the Government of Indonesia and it was established in 1957. SIG cement production capacity is 52.6 million tons per year in 8 locations in Indonesia (50.3 million tons) and Vietnam (2.3 million tons). SIG is a holding company with subsidiaries conducting cement related business activities, from production, distribution, manufacturing downstream cement products/services, and other supporting business. Cement production segment of SIG contribute more than 75% of SIG revenue in 2020.

Cement manufacturing begins with mining and then grinding raw materials that include limestone, silica stone, iron sand and clay, to a fine powder, called raw meal, which is then heated to a sintering temperature in a cement kiln. In this process, the chemical bonds of the raw materials are broken down and then they are recombined into new compounds. The result is called clinker, which then ground to a fine powder in a cement mill and mixed with other additional materials to create cement.

In cement business, emissions are produced mostly during the process of clinker production & electricity generation from our power plant (scope 1), and electricity from national grid (scope 2).

#### Sustainability Strategy

As a part of our long term strategy, Sustainability issue become our concern which is part of pillar in strategy implementation. As a prove of that commitment SIG design the future of sustainability strategy on SIG Sustainability Roadmap 2030. As part of State-owned Enterprise, SIG carries the mandate to deliver the greatest benefit for the society as well as the country. The company's commitment that is explained on the roadmap are our commitment to develop



and support 3 pillars such Driving Sustainable Solutions & Innovations, Protecting The Environment, and Creating Value For Peoples & Communities. These three pillars are supported by Board Commitment and supervision, Governance, Sustainability Policy and Risk Management.

These three pillars describe more details into 11 topics which are Sustainable Product & Services and Sustainable Procurement (Pillar : Driving Sustainable Solutions & Innovation), Climate & Energy, Circular Economy, Air Emission, Water, and Biodiversity (Pillar : Protecting The Environment), Employment, Occupational Health & Safety, Ethics & Compliance, and Community Development (Pillar : Creating Values for Peoples & Communities)

SIG supports Indonesia's commitment to COP21 through emission reduction and reduction of energy consumption.

SIG committed to use all materials in a responsible manner by using raw materials efficiently through product development and utilizing renewable resources (waste-derived) as alternative fuels.

And as we value our people and community highly, we committed to promote health and safety for employees and contractors as well as creating shared values for community

## W0.2

(W0.2) State the start and end date of the year for which you are reporting data.

	Start date	End date	
Reporting year	January 1, 2021	December 1, 2021	

## W0.3

(W0.3) Select the countries/areas in which you operate.

Indonesia

### W0.4

(W0.4) Select the currency used for all financial information disclosed throughout your response.

IDR

### W0.5

(W0.5) Select the option that best describes the reporting boundary for companies, entities, or groups for which water impacts on your business are being reported.

Companies, entities or groups over which financial control is exercised



## W0.6

(W0.6) Within this boundary, are there any geographies, facilities, water aspects, or other exclusions from your disclosure?

Yes

## W0.6a

#### (W0.6a) Please report the exclusions.

Exclusion	Please explain
The use of water from packing plants outside our integrated plant locations, and water used in power plants are not included.	Monitoring of water usage is carried out at the integrated cement plants in all operating companies which consume the most water in our Company.
Thang Long Cement JSC, SIG subsidiary in cement manufacture business in Vietnam with capacity of 2.3 million tons per year.	We did not include our subsidiary in Vietnam (Thang Long Cement JSC) in line with our Sustaianability Report 2021
Ready mix and agregate plant	We did not include our subsidiary in Ready Mix & Aggregate plant which is in line with our Sustainability Report

## W0.7

(W0.7) Does your organization have an ISIN code or another unique identifier (e.g., Ticker, CUSIP, etc.)?

Indicate whether you are able to provide a unique identifier for your organization.

## W1. Current state

## W1.1

	Direct use importance rating	Indirect use importance rating	Please explain
Sufficient amounts of good quality freshwater available for use	Not very important	Neutral	The cement factory uses a dry process so it doesn't need as much water as other companies. But water is quite important for the company. Water in the factory is used for cooling equipment (cooling) and spray/conditioning for ESP for emission control. We chose Not very important for direct use in factories such as for cooling, spraying and watering for dust control, so the water needed does not have to be of

(W1.1) Rate the importance (current and future) of water quality and water quantity to the success of your business.



			good quality. The water will be processed through a water treatment facility so that it meets the required quality. Neutral options for indirect uses such as concrete manufacture by customers/concrete suppliers depend on the needs of each customer. Water quality affects concrete properties such as setting time, workability, strength and durability. However, for readymix concrete produced through the SIG batching plant, we use the standard environmentally friendly concrete production process that we have compiled and registered with the ministry of environment and forestry, one of which is done by saving the use of resources, especially raw materials and water.
Sufficient amounts of recycled, brackish and/or produced water available for use	Important	Neutral	The factory implements the recycle process. Water from the cooling process is flowed back into the water treatment after use. The factory has an irrigation system that drains the water left over from the factory's use to the internal reservoir (bozem) which will be reused later. We choose important for direct use because water is needed in sufficient quantities even though the quality does not have to be good. For indirect use, neutral is chosen because it depends on customer needs.

## W1.2

(W1.2) Across all your operations, what proportion of the following water aspects are regularly measured and monitored?

	% of sites/facilities/operations	Please explain
Water withdrawals – total volumes	100%	Water withdrawal from all operating companies is measured regularly at each production facility, and reported annually. As one of its commitment to sustainability, SIG conducts water management with the main objective to reduce the surface and ground water extraction and to support nature conservation efforts.
Water withdrawals – volumes by source	100%	Water withdrawal from all operating companies is measured regularly at each production facility, and reported annually. As one of its commitment to sustainability, SIG conducts water management with the main objective to reduce



		the surface and ground water extraction and to support nature conservation efforts.
Water withdrawals quality	100%	The use of water for watering roads, gardens, and stockpiles does not require good water quality. Meanwhile, the use for cooling equipment and spraying gas conditioning towers requires good quality water. The quality of the water taken is measured such as TSS, pH, color, odor, heavy metal, etc.
Water discharges – total volumes	26-50	With the in Plant reservoir internal storage facility as a buffer, discharge water is very rare and only occurs when the reservoir is full, such as during the rainy season. However, SIG is committed to improve water management by carrying out complete records of both withdrawal, consumption and discharge of water.
Water discharges – volumes by destination	26-50	With the in Plant reservoir internal storage facility as a buffer, discharge water is very rare and only occurs when the in Plant reservoir is full, such as during the rainy season. However, SIG is committed to improve water management by carrying out complete records of both withdrawal, consumption and discharge of water.
Water discharges – volumes by treatment method	26-50	With the in Plant reservoir internal storage facility as a buffer, discharge water is very rare and only occurs when the in Plant reservoir is full, such as during the rainy season. Before entering in Plant reservoir, the water passes through the setting pond first to separate the oil and solids content. Monitoring of water quality on in Plant reservoir such as pH, TSS, BOD,COD, and others is still being carried out.
Water discharge quality – by standard effluent parameters	100%	With the in Plant reservoir internal storage facility as a buffer, discharge water is very rare and only occurs when the in Plant reservoir is full, such as during the rainy season. Before entering in Plant reservoir, the water passes through the setting pond first to separate the oil and solids content. Monitoring of water quality on in Plant reservoir such as pH, TSS, BOD,COD, and others is still being carried out.



Water discharge quality – temperature	100%	With the in Plant reservoir buffer, the water will be cooled for a long time. If any water is discharged, the temperature will be in accordance with the ambient temperature.
Water consumption – total volume	Not monitored	Some SIG plants have maintained records of water use but have not quite detail. In 2021, weare improving the management of water consumption records at factories in accordance with SIG commitments to improve water management, both water withdrawal, consumption and discharge.
Water recycled/reused	Not monitored	Water from the factory after use is flowed back to the in Plant reservoir/buffer, while the rest is like spraying, watering for dust control will evaporate with the air. The company is in the process of adding a water meter installation so that detailed records can be carried out.
The provision of fully- functioning, safely managed WASH services to all workers	100%	The company is committed to provide access to water for drinking and sanitation. Water for sanitation comes from water treatment plants which the quality has been monitored.

## W1.2b

(W1.2b) What are the total volumes of water withdrawn, discharged, and consumed across all your operations, and how do these volumes compare to the previous reporting year?

	Volume (megaliters/year)	Comparison with previous reporting year	Please explain
Total withdrawals	13,662	Higher	The water usage increase by 10% compared to last year. The number of water usage was higher because of operational changing by using different coal. The significant different occurred in SIG Tuban and Semen Padang. Despite this increase number, the risk of the water was not significantly affected to the company. The probability and the impact of water shortage can be neglected.
Total discharges			The monitoring of the water discharged was still on progress to be improved. We're heading to monitor and evaluate all related water management process so that we can properly



		managed the impact of the operation to water related risk
Total		
consumption		

## W1.2d

(W1.2d) Indicate whether water is withdrawn from areas with water stress and provide the proportion.

	Withdrawals are from areas with water stress	% withdrawn from areas with water stress	Comparison with previous reporting year	Identification tool	Please explain
Row 1	Yes	51-75	Higher	WRI Aqueduct	From the framework of WRI Aqueduct, There are 5 out 8 facility of SIG that was been placed on Medium-High water stress. Whereas, the other facilities, are located in low- water stress. However, in 2021 there is no significant water problem that disturbed SIG operational.

## W1.2h

#### (W1.2h) Provide total water withdrawal data by source.

	Relevance	Volume (megaliters/year)	Comparison with previous reporting year	Please explain
Fresh surface water, including rainwater, water from wetlands, rivers, and lakes	Relevant	12,331	Higher	Relevant because the process at the factory requires water. The water taken comes from rainwater reservoirs in ex- mining areas, wells, and rivers (Padang and Tonasa plants). while the factory in Narogong buys from a third party.
Brackish surface water/Seawater	Relevant	0	Lower	Some of the process need water as part of the



				production cycle. However, The company has committed to reduce and monitor water usage as reflected in our Sustainability Roadmap 2030
Groundwater – renewable	Not relevant			SIG follows the CSI/GCCA water guidelines which do not differentiate between renewable and non- renewable water
Groundwater – non- renewable	Not relevant			SIG follows the CSI/GCCA water guidelines which do not differentiate between renewable and non- renewable water
Produced/Entrained water	Not relevant			As technology more advance, SIG has been using dry technique within the process. Therefore, as a direct impact, water is not used in the process
Third party sources	Relevant	38.55	Higher	Some of our plant using third party sources as their water supply.

## W1.2i

#### (W1.2i) Provide total water discharge data by destination.

	Relevance	Please explain
Fresh surface water	Relevant but volume unknown	For the year of 2021, the measurement weren't not standardized in all plant (only one plant that measured water discharged. However, in 2022 the recording of water discharged was planed to manage in all operational of SIG. In addition, There is still one subsidiary that will not be recorded as the others because of the low relative issue than the other plant.
Brackish surface water/seawater	Not relevant	N/A
Groundwater	Not relevant	N/A
Third-party destinations	Not relevant	N/A



## W1.2j

## (W1.2j) Within your direct operations, indicate the highest level(s) to which you treat your discharge.

	Relevanc e of treatment level to discharge	Volume (megaliters/year )	Comparison of treated volume with previous reporting year	% of your sites/facilities/operation s this volume applies to	Please explain
Tertiary treatment	Not relevant				N/A
Secondary treatment	Not relevant				N/A
Primary treatment only	Relevant	23	This is our first year of measuremen t	41-50	In a group level, SIG plan to recording all water discharged by plant. Although water discharged volume was unknown, SIG has a policy to process all water with primary treatment facility (sedimentary , oil, and coal trap). This process ensure the quality of water before it discharged to the environment.



Discharge	Not		N/A
to the	relevant		
natural			
environmen			
t without			
treatment			
Discharge	Not		N/A
to a third	relevant		
party			
without			
treatment			
Other	Not		N/A
	relevant		

## W1.3

#### (W1.3) Provide a figure for your organization's total water withdrawal efficiency.

	Revenue	Total water withdrawal volume (megaliters)	Total water withdrawal efficiency	Anticipated forward trend
Row 1	28,543,000,000,000	13,662	2,089,225,589.22559	Water withdrawal efficiency was estimated not to be significantly changed. This condition because of the business dynamic within the national cement industry. As a result, there will not significantly changing on revenue.

## W1.4

(W1.4) Do you engage with your value chain on water-related issues?

No, not currently but we intend to within two years

## W1.4d

## (W1.4d) Why do you not engage with any stages of your value chain on water-related issues and what are your plans?

	Primary reason	Please explain
Row	We are	As water is vital in our society need, we've built some reservoir to facilitate
1	planning to do	local society using that water for daily live needs. In addition, we've also
		provided this reservoir to facilitate paddy field agricultural that previously was



so within the	depends on rainy water resources. Before using our facility, the cultivation of
next two years	paddy field can be done once a year. After facilitating, the local citizen can
	cultivate the rice 3 or 4 times a year. This improvement increase social
	license to operate across the group

## W2. Business impacts

## W2.1

(W2.1) Has your organization experienced any detrimental water-related impacts? No

## W2.2

(W2.2) In the reporting year, was your organization subject to any fines, enforcement orders, and/or other penalties for water-related regulatory violations?

No

## **W3. Procedures**

## W3.3

(W3.3) Does your organization undertake a water-related risk assessment? Yes, water-related risks are assessed

## W3.3a

(W3.3a) Select the options that best describe your procedures for identifying and assessing water-related risks.

Value chain stage Direct operations

Coverage

Partial

#### **Risk assessment procedure**

Water risks are assessed as part of an established enterprise risk management framework

Frequency of assessment

Annually

#### How far into the future are risks considered?



Up to 1 year

#### Type of tools and methods used

Enterprise risk management

#### Tools and methods used

Enterprise Risk Management ISO 31000 Risk Management Standard

#### **Contextual issues considered**

Water availability at a basin/catchment level Water regulatory frameworks Status of ecosystems and habitats

#### Stakeholders considered

Local communities NGOs Water utilities at a local level

#### Comment

Enterprise Risk Management (ERM) has been applied in a group level. As part of the criteria, ERM identified all risk driver that contribute to the operational level. In a operational level, risk assessment has been quantified although not thoroughly analyeze. SIG plan to identified this issue embedded into our risk maangement cycle.

### W3.3b

# (W3.3b) Describe your organization's process for identifying, assessing, and responding to water-related risks within your direct operations and other stages of your value chain.

The SIG risk management process is structured around several coordinated approaches conducted within the Group and it is subject to continuous improvement.

It includes bottom-up and top-down risk assessments which cover all kinds of risks: financial, market dynamics, operational (production, logistics, environmental, HSE and other operational aspects), legal compliance, and strategic (corporate strategy, projects, long-term plan, climate related, water related) risks.

These assessments are currently implemented as a basis for the Group risk profile, which is updated annually and submitted and reviewed by the Board of Directors and the Board of Commissioners.

## W4. Risks and opportunities

#### W4.1

(W4.1) Have you identified any inherent water-related risks with the potential to have a substantive financial or strategic impact on your business?



## W4.1a

## (W4.1a) How does your organization define substantive financial or strategic impact on your business?

The SIG risk management process is structured around several coordinated approaches conducted within the Group and it is subject to continuous improvement.

It includes bottom-up and top-down risk assessments which cover all kinds of risks: financial, market dynamics, operational (production, logistics, environmental, HSE and other operational aspects), legal compliance, and strategic (corporate strategy, projects, long-term plan, climate related, water related) risks.

These assessments are currently implemented as a basis for the Group risk profile, which is updated annually and submitted and reviewed by the Board of Directors and the Board of Commissioners.

The risk assessment process is carried out throughout the group, including but not limited to cement producing companies to gain a comprehensive view on SIG's success factors in achieving its goals. To support the ERM system implementation, every business process owner is facilitated by risk management function to assess, manage, monitor, and mitigate their risks. In the ERM system, SIG defines substantive financial or strategic impacts of risks those might occur in the company's activities which would affect the achievements of goals and optimum and sustainable growth where climate also holds an important role in those risks that needs to be mitigated. The risk horizon of SIG ERM system where risks are assessed in three different terms, such as short term (1-year period), medium term (1 to 3-year period), and long term (3 to 10-year period).

In the assessments of water-related risks we assess risks in direct operations and value chain on cement and building material production.

Definition of likelihood

SIG defines likelihood as the probability of occurrence of climate related risks in the following year as:

- Almost Certain > 90%
- Most Likely between 60% and 90%
- Likely between 40% and 60%
- Less Likely between 10% and 40%
- Unlikely <10%
- Definition of consequence

SIG defines consequence (substantive financial impacts) based on:

a. The overall financial impact of the respective risk on the following year's (yearly average if the horizon is not short term) EBITDA:

- Impacts below 1% EBITDA are considered as Very Low
- Impacts between 1-2.5% EBITDA are considered Low
- Impacts between 2.5-4% EBITDA are considered Medium
- Impacts between 4-5% EBITDA are considered High
- Impacts above 5% EBITDA are considered Very High

A consequence would be considered as substantive as soon as it reaches high or very high.

b. Furthermore consequence could also be considered substantive impact based on

operational parameters, corporate image (reputation), legal aspects, and/or SHE standards (OHSAS & Indonesian SHE Standards ("SMK3")).



The bottom-up assessment is performed at the country level and includes several stages: i) Risk identification and assessment, ii) Description of current mitigation or action plans, iii) Monitoring and reporting.

The top-down assessment at Group level is performed through interviews with Heads of functions, Board of Directors and Executive Committee members and External Auditors.

## W4.2b

(W4.2b) Why does your organization not consider itself exposed to water risks in its direct operations with the potential to have a substantive financial or strategic impact?

	Primary reason	Please explain
Row	Risks exist, but	Current water use is mainly for cooling purpose in our operations which
1	no substantive	consumption has been reduced compared to at the production stage. With
	impact anticipated	respect to financial aspect, the cost of water use is considered minimum.
		The availability of ground water and rain fall is predicted to be sufficient to
		run the operations based on site water meter collection. The existence of
		water reservoir could also provide more clear water access to the people
		surrounding our facilities in Rembang (maximum capacity of 27000m3) &
		Tuban (maximum capacity of 150.000 m3) which could help with irrigation
		and affect harvesting frequency up to thrice a year. Furthermore, former
		clay mining pit is being reused to provide irrigation to surrounding farm
		increasing the social license to operate. Also, water treatment plant is
		established at every facility to ensure water quality and recycling process
		for production.

## W4.2c

(W4.2c) Why does your organization not consider itself exposed to water risks in its value chain (beyond direct operations) with the potential to have a substantive financial or strategic impact?

	Primary reason	Please explain
Row	Risks exist, but	Current water use is mainly for cooling purpose in our operations which
1	no substantive	consumption has been reduced compared to at the production stage. With
	impact anticipated	respect to financial aspect, the cost of water use is considered minimum.
		The availability of ground water and rain fall is predicted to be sufficient to
		run the operations based on site water meter collection. The existence of
		water reservoir could also provide more clear water access to the people
		surrounding our facilities in Rembang (maximum capacity of 27000m3) &
		Tuban (maximum capacity of 150.000 m3) which could help with irrigation
		and affect harvesting frequency up to thrice a year. Furthermore, former
		clay mining pit is being reused to provide irrigation to surrounding farm



	increasing the social license to operate. Also, water treatment plant is
	established at every facility to ensure water quality and recycling process
	for production.

#### W4.3

(W4.3) Have you identified any water-related opportunities with the potential to have a substantive financial or strategic impact on your business?

Yes, we have identified opportunities, and some/all are being realized

## W4.3a

(W4.3a) Provide details of opportunities currently being realized that could have a substantive financial or strategic impact on your business.

Type of opportunity Markets

#### Primary water-related opportunity

Stronger competitive advantage

#### **Company-specific description & strategy to realize opportunity** Government projects on infrastructures related to water dams, porous concrete etc

#### Estimated timeframe for realization Unknown

#### Magnitude of potential financial impact Medium

#### Are you able to provide a potential financial impact figure? No, we do not have this figure

Potential financial impact figure (currency)

Potential financial impact figure – minimum (currency)

Potential financial impact figure - maximum (currency)

## Explanation of financial impact

Type of opportunity



#### Efficiency

#### Primary water-related opportunity

Improved water efficiency in operations

#### Company-specific description & strategy to realize opportunity

We take initiatives to reduce water consumption by harvesting rainwater. Also, current water use is primarily for cooling purpose and being recycled in the water treatment plant in each facility. This leads to efficiency and cost savings. More efficiency in water processes equals less cost. Having several facilities in Indonesia and the acquisition of ex-Lafarge Holcim facility provides benchmark in the operational aspect, including water treatment facility. Thus, we could have several options to select the best practice as operating standards to be implemented at each facility.

#### Estimated timeframe for realization

Current - up to 1 year

#### Magnitude of potential financial impact

Low

- Are you able to provide a potential financial impact figure? No, we do not have this figure
- Potential financial impact figure (currency)

Potential financial impact figure – minimum (currency)

Potential financial impact figure – maximum (currency)

#### **Explanation of financial impact**

N/A

#### Type of opportunity

Markets

#### Primary water-related opportunity

Strengthened social license to operate

#### Company-specific description & strategy to realize opportunity

Water reservoir has been established at every facility to add water storage on site. Moderate to high rainfall intensity at the facilities due to monsoon season leads to water harvesting from the reservoir will provide more clear and sufficient in quality water access to the local community surrounding our facilities, such as the water supply enables the local farmer to have increased harvesting frequency up to thrice annualy.

#### Estimated timeframe for realization



Current - up to 1 year

#### Magnitude of potential financial impact Low-medium

Are you able to provide a potential financial impact figure? No, we do not have this figure

Potential financial impact figure (currency)

Potential financial impact figure – minimum (currency)

Potential financial impact figure - maximum (currency)

#### **Explanation of financial impact**

N/A

#### Type of opportunity

Products and services

#### Primary water-related opportunity

Reduced impact of product use on water resources

#### Company-specific description & strategy to realize opportunity

SIG have commercialised porous concrete (THRU - Crete) material as solution to reduce flooding probability at low porosity areas. Cement production operation consist of several process and has gone through technological breakthrough changing from wet processing into dry processing and looking at the current technology there is no significant improvement regarding water intake & usage. The current opportunities exist as mitigation through building material product that could lower the probability of flooding in infrastructure and to support high rise building structure to be more compact and adapt to corrosion and water impact.

#### Estimated timeframe for realization

1 to 3 years

#### Magnitude of potential financial impact

Low

#### Are you able to provide a potential financial impact figure?

No, we do not have this figure

#### Potential financial impact figure (currency)

Potential financial impact figure – minimum (currency)



#### Potential financial impact figure – maximum (currency)

#### **Explanation of financial impact**

With these innovations of new products, we expect to see a potential increase in our sales and annual revenues.

## W6. Governance

### W6.1

#### (W6.1) Does your organization have a water policy?

Yes, we have a documented water policy, but it is not publicly available

### W6.1a

## (W6.1a) Select the options that best describe the scope and content of your water policy.

	Scope	Content	Please explain
Row 1	Select facilities, businesses, or geographies only	Reference to international standards and widely-recognized water initiatives Company water targets and goals Commitment to align with public policy initiatives, such as the SDGs Commitment to water-related innovation Commitment to stakeholder awareness and education	Water policy has been described by each subsidiaries as a mandatory based on Ministry of Forestry and Environment regulation. Every year, each of subsidiaries will be assessed all related issue regarding to environment as well as water issue. This regulation as mandatory obligation for the company which operated in Indonesia as a Public Disclosure Program for Environmental Compliance. There are a lot of category and questionnaire, from which of the question asking about water policy. In conclusion, SIG as a holding company which operating plant across Indonesia, has been made a water policy as its operational guidance to control and monitor water related issue.

### W6.2

(W6.2) Is there board level oversight of water-related issues within your organization? Yes



## W6.2a

## (W6.2a) Identify the position(s) (do not include any names) of the individual(s) on the board with responsibility for water-related issues.

Position of individual	Please explain
Board-level committee	As a commitment of its performance achieving the target, SIG has published its sustainability committee in Sustainability Report 2021.
	This committee guide all policy and direction related to sustainability issue, especially water related issue. SIG also has committed to decrease its performance on water withdrawal.
	By guiding, monitoring, and evaluating, SIG prove themselves to be better on managing water operational in all plant across Indonesia.
Chief Operating Officer (COO)	COO direct all policy related to operational production in all subsidiaries, especially cement sector. COO having a mandate to make the production process as efficient as possible. This happen with other indicator such as Clinker factor reduction, energy efficiency, and other climate related indicator as well as water related indicator.
Other, please specify Department of Sustainability	Since the year of 2021, as a part of its commitment SIG made a governance structure which is related to manage sustainability issue. SIG published its organization structure related to sustainability as we called it as Dept. of Sustainability.
	This department of division's role and responsibilities is manage and evaluating the performance and achievement of all initiative and indicator sustainability initiative across SIG. This department managing operational and tactical level to align operational with SIG Sustainability Roadmap.

## W6.2b

#### (W6.2b) Provide further details on the board's oversight of water-related issues.

	Frequency that water-related issues are a scheduled agenda item	Governance mechanisms into which water-related issues are integrated	Please explain
Row 1	Other, please specify Committee Meeting	Monitoring implementation and performance Reviewing and guiding major plans of action	In board level, the directive especially for the operational purpose. As well as operational issue, we put important issue on social license to operate because water issues has been raised as social issue



Revie	wing and guiding	
risk n	nanagement policies	
Revie	wing and guiding	
strate	gy	
Settir	ig performance	
objec	tives	

## W6.2d

(W6.2d) Does your organization have at least one board member with competence on water-related issues?

Board member(s) have competence on water-related issues		
Row 1	Not assessed	

## W6.3

(W6.3) Provide the highest management-level position(s) or committee(s) with responsibility for water-related issues (do not include the names of individuals).

### Name of the position(s) and/or committee(s)

Sustainability committee

#### Responsibility

Assessing water-related risks and opportunities Managing water-related risks and opportunities

Frequency of reporting to the board on water-related issues

Quarterly

#### Please explain

The committee will conducting a quarterly meeting to monitor and evaluate all related indicator of Sustainability strategy. This is included water related issue which is one of our pillar in sustainability strategy.

#### Name of the position(s) and/or committee(s)

Chief Operating Officer (COO)

#### Responsibility

Assessing water-related risks and opportunities Managing water-related risks and opportunities

#### Frequency of reporting to the board on water-related issues

More frequently than quarterly



#### Please explain

As an operational director, COO will directly guide all operational which is grouping as corporate high risk. SIG tends to place the ESG risk as important among the other risk. As a result, all indicator related to sustainability strategy will be monitor periodically

#### Name of the position(s) and/or committee(s)

Other, please specify GM of Sustainability

#### Responsibility

Assessing water-related risks and opportunities Managing water-related risks and opportunities

#### Frequency of reporting to the board on water-related issues

More frequently than quarterly

#### Please explain

GM of Sustainability directly in charge in managing implementation of sustainability strategy across the company. All initiative will directly monitor by GM of Sustainability whether they are align with strategy or not. The alignment itself also monitoring all important indicator. So that, SIG can self assess whether the implementation has fully success or not.

### W6.4

## (W6.4) Do you provide incentives to C-suite employees or board members for the management of water-related issues?

	Provide incentives for management of water-related issues	Comment
Row 1	No, and we do not plan to introduce them in the next two years	N/A

#### W6.5

(W6.5) Do you engage in activities that could either directly or indirectly influence public policy on water through any of the following?

Yes, direct engagement with policy makers

### W6.5a

# (W6.5a) What processes do you have in place to ensure that all of your direct and indirect activities seeking to influence policy are consistent with your water policy/water commitments?

In all activities regarding to plant operational, SIG directly involved with stakeholder especially regulator to make sure that SIG's operational will not disturbed surrounding environment. This process started when SIG plan to construct a new plant. SIG keenly conduct hydro geology study to clarify whether SIG's plant operation will affect the environment significantly especially



water. This process ensure the activity will not negatively impacted based on regulation. The government itself will get some important information about the environment nearby the plant.

## W6.6

## (W6.6) Did your organization include information about its response to water-related risks in its most recent mainstream financial report?

(W7.1) Are water-related issues integrated into any aspects of your long-term

No, and we have no plans to do so

## W7. Business strategy

## W7.1

	Are water-related issues integrated?	Long- term time horizon (years)	Please explain
Long-term business objectives	Yes, water-related issues are integrated	5-10	SIG is committed to encourage sustainability. One of the company's missions is to focus on environmental protection and sustainable social responsibility, by reducing the impact of the use of fresh water (water impact) on the environment.
Strategy for achieving long-term objectives	Yes, water-related issues are integrated	5-10	Strategic initiatives to achieve water sustainability targets: Routine monitoring of ground water levels, Installation of measuring instruments (flow meters), Implementing water management directives, Building rainwater harvesting, Installing engine cooling equipment with closed circulation.
Financial planning	No, water-related issues were reviewed but not considered as strategically relevant/significant	5-10	N/A

strategic business plan, and if so how?

## W7.2

(W7.2) What is the trend in your organization's water-related capital expenditure (CAPEX) and operating expenditure (OPEX) for the reporting year, and the anticipated trend for the next reporting year?



#### Row 1

Water-related CAPEX (+/- % change)

543

Anticipated forward trend for CAPEX (+/- % change) 30

#### Water-related OPEX (+/- % change)

726

## Anticipated forward trend for OPEX (+/- % change) 30

#### Please explain

The increasing of figure on Capex seems high because the Capex planning was started in 2020. The execution mostly in 2021 which is mostly related to water management improvement. In 2022 forward, the increasing figure seems to be normal because the program will continue the previous initiative. The most important message here is SIG continue to be more focus and aware for managing water related issue as capex and opex tends to increase year by year.

## W7.3

#### (W7.3) Does your organization use scenario analysis to inform its business strategy?

		Use of scenario analysis	Comment
R	low	No, but we anticipate doing so	Since water related issues have been raised in our business
1		within the next two years	objective, we're plan to study more further on the issue

## W7.4

#### (W7.4) Does your company use an internal price on water?

#### Row 1

#### Does your company use an internal price on water?

No, but we are currently exploring water valuation practices

Please explain

N/A

## W7.5

(W7.5) Do you classify any of your current products and/or services as low water impact?



	Products and/or services classified as low water impact	Definition used to classify low water impact	Please explain
Row 1	Yes	Less water on processing the product.	With advancement of technology, there is no process that required much within the process. The process of cement making relied to dry process in which there is less water in processing cement product

## W8. Targets

## W8.1

(W8.1) Describe your approach to setting and monitoring water-related targets and/or goals.

	Levels for targets and/or goals	Monitoring at corporate level	Approach to setting and monitoring targets and/or goals
Row 1	Company- wide targets and goals	Targets are monitored at the corporate level	SIG Board of Directors (BoD) has established sustainability pillars and sustainability roadmap which includes environmental aspects including water management, the related commitment, targets, and initiatives that are then embeded in SIG long term plan. The Long term Plan is approved by Board of Commissioners (BoC), who also conduct supervision and provide advice to the BoD on implementing the overall execution of the long term plan. Annually the BoD will set up a Business Plan which consist of the Company strategy, targets, risk, opportunity, and capex, which include climate related strategy, targets, risk, opportunity, and capex. The Business Plan is also being approved, supervise, and monitored by BoC.

## W8.1a

(W8.1a) Provide details of your water targets that are monitored at the corporate level, and the progress made.

Target reference number Target 1

Category of target Water withdrawals



Level

Company-wide

#### **Primary motivation**

Shared value

#### **Description of target**

Reduced use of specific stress water (surface & ground) withdrawal from the 2019 base line of 255.8 liters/ton cement equivalent to 227.67 liters/ton cement equivalent in 2030.

#### **Quantitative metric**

Other, please specify

% reduction of stress water (surface & ground) withdrawal

#### **Baseline year**

2019

Start year 2020

Target year

2030

#### % of target achieved

0

#### **Please explain**

In 2021 backward, we're still developing our approach to manage water related issue more comprehensive across the group. This foundation can give better understanding about our system on managing water. Our commitment was describe in preparing financial resources into our operational and capital expenditure on managing water related issues

## **W9. Verification**

### **W9.1**

(W9.1) Do you verify any other water information reported in your CDP disclosure (not already covered by W5.1a)?

No, but we are actively considering verifying within the next two years



## W10. Sign off

## W-FI

(W-FI) Use this field to provide any additional information or context that you feel is relevant to your organization's response. Please note that this field is optional and is not scored.

## W10.1

(W10.1) Provide details for the person that has signed off (approved) your CDP water response.

	Job title	Corresponding job category
Row 1	SVP of Sustainability Office	Chief Sustainability Officer (CSO)

## W10.2

(W10.2) Please indicate whether your organization agrees for CDP to transfer your publicly disclosed data on your impact and risk response strategies to the CEO Water Mandate's Water Action Hub [applies only to W2.1a (response to impacts), W4.2 and W4.2a (response to risks)].

Yes

## Submit your response

In which language are you submitting your response?

#### Please confirm how your response should be handled by CDP

olders	permission
	Public
)	Iders

#### Please confirm below