

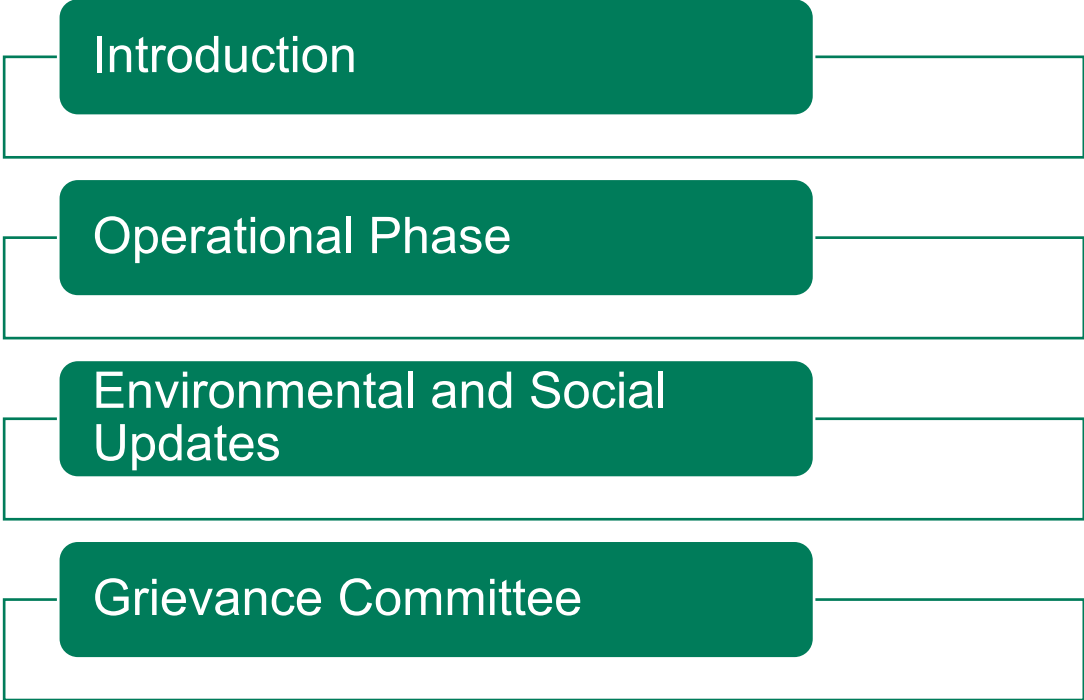
Sembcorp Myingyan Power Company Limited

Annual Public Stakeholders Engagement

November 2023



Objective



Who are we? (1/2)

1. Myanmar
2. UAE
3. Oman
4. China
5. India
6. United Kingdom
7. Bangladesh
8. Vietnam
9. Singapore
10. Indonesia



- Sembcorp Industries is a leading renewable, energy and water group with operations across 10 Countries in worldwide.

Who are we? (2/2)

- Sembcorp has a balanced energy portfolio of 19.4GW, with 11.9GW of renewable energy capacity comprising solar, wind and energy storage globally.
- Myingyan IPP is the first international project financed Independent Power Producer (IPP) Project in Myanmar and is 100% owned by Sembcorp Myingyan Power Company Limited



Plant Location



Project Facilities Overview



230 kV Transmission Tower



6.6kV Overhead Transmission Line



225MW CCGT



River Barge



Water Pipeline (Intake & Discharge)

Our role in Myanmar (1/2)



- ❑ Semcorp Myingyan Power Company Limited has been selected by the Ministry of Electric Power - MOEP (former known MOEE) in 2015 to develop a 225MW Combined Cycle Gas Turbine (CCGT) power plant in Myingyan Township.
- ❑ The plant started Phase 1 commercial operation started on 7 May 2018 and full commercial operations started on 2 Oct 2018.

- ❑ The report on environment and social impacts has been undertaken by experts to understand potential environmental and social impacts and opportunities in accordance with national and international standards. Our ESIA has been approved by the Ministry of Natural Resources and Environmental Conservation (MONREC).
- ❑ The MONREC has awarded Semcorp Myingyan Power Company Limited with an Environmental Compliance Certificate-ECC.



Our role in Myanmar (2/2)



- Sembcorp Myingyan IPP is a landmark Power Plant in Myanmar. Myingyan 225 MW Combine Cycle Power Plant is one of the largest and the most efficient Power Plant.

- We are the first Power Plant in Myanmar which generate enough renewable energy to the power entire Admin Building and Warehouse by Solar Panel.

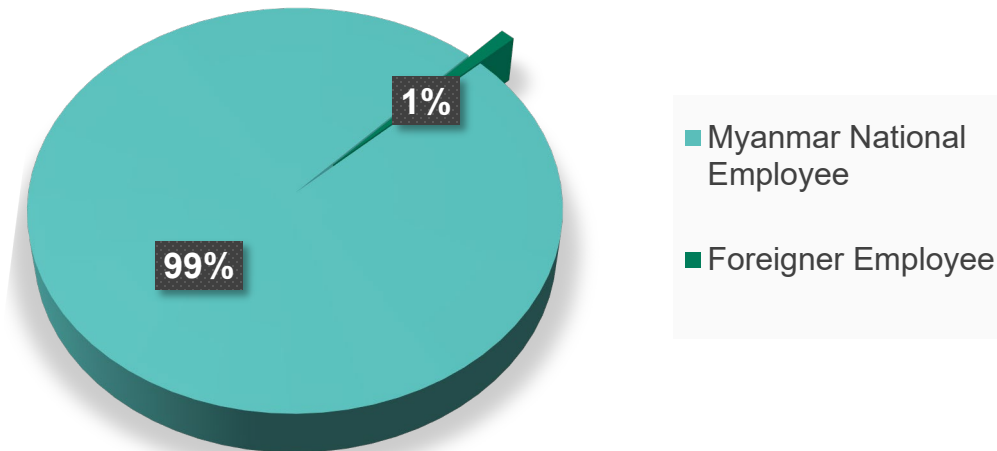


Job Opportunity

- As of 31 October 2022, Sembcorp Myingyan Power Company

99 % Myanmar National Employees.

Employment



Environmental Management Plan

- Currently in the Operational Phase, the company continuously monitoring environmental impact of the community according to government guideline.
- Year 2023 our environmental monitoring plan as below

Serviced by;	Category	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
3rd party	Ambient Air Quality & Noise			Done			Done			Done			Plan
	Soil Quality						Done						Plan
	Surface Water Quality			Done			Done			Done			Plan
Plant Internal	Surface Water Quality	Done	Done	Done	Done	Done	Done	Done	Done	Done	Done	Done	Plan

Updated as of 28 November 2023

Plan Done

Environmental Management Plan

A. Air Quality Management



B. Noise Monitoring



C. Waste Management



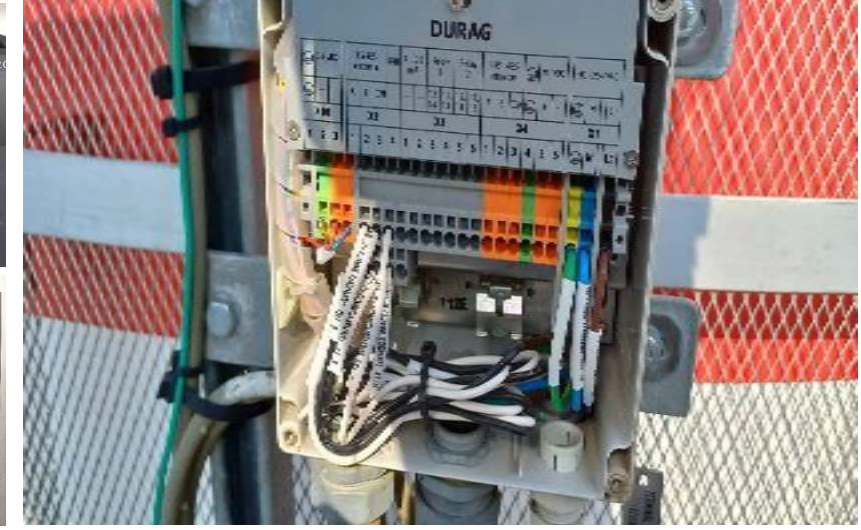
D. Wastewater Management

Environmental Management Plan

(A) Air Quality Management (1/2)

We have mechanisms to reduce and monitor our emissions to ensure it is in line with the Ministry of Natural Resources and Environmental Conservation (MONREC).

- ❖ Two air emission stacks – main and by-pass stacks of 40m and 30m height respectively were constructed to disperse air pollutants such that the ground level concentration of air pollutants do not exceed the relevant MONREC standard.
- ❖ Built-in dry low NOx burners reduce NOx emission at stack to below 25ppm at all times
- ❖ Continuous Emission Monitoring System (CEMS) installed on BOTH GT Bypass Stack & Boiler Outlet Stack
- ❖ Ambient air quality around the Plant area monitored as per the Environment Monitoring Programmer formulated for the Plant



GT#12 #11 CEMS Calibration, Terminal Tighten, filter replacement, sensor cleaning

Environmental Management Plan

(A) Air Quality Management (2/2)

Ambient Air Quality (quarterly)

Parameters	Mar 2023				Jun 2023				Sep 2023				Myanmar Guideline	World Bank Guideline	Unit
	ASR 4	ASR 3	ASR 5	ASR 14	ASR 4	ASR 3	ASR 5	ASR 14	ASR 4	ASR 3	**ASR 5	ASR 14			
PM ₁₀	7.48	7.23	5.16	4.29	6.95	7.17	4.69	7.31	6.98	9.22		8	-	50	µg/m ³
PM _{2.5}	4.14	3.78	2.65	2.3	3.62	5.58	2.46	5.68	3.7	4.85		4.04	-	25	µg/m ³
CO	0.00011	0.00025	0.00006	0.00008	0.0004	0.0006	0.0007	0.0006	0.00023	0.0002		0.0001	-	9	ppm
CO ₂	345.5	347.24	424.04	491.51	458.41	432.97	470.98	462.18	243.05	324.84		319.64	-	5000	ppm
SO ₂	0.18	0.22	0.15	0.13	0.54	0.74	0.65	0.73	0.12	0.18		0.21	20	20	µg/m ³
NO ₂	13.16	15.85	10.81	5.92	12.63	15.64	15.29	14.19	12.53	9.62		11.09	200	200	ug/m ³

*MONREC emission guidelines 2015

** ASR 5 (Gyoke Pin Village) monitoring point was skipped due to security issue.

Noise Monitoring (Quarterly)

Monitoring point		Mar-23	Jun-23	Sep-23	World bank , Myanmar Guideline	Unit
Sembcorp Myingyan power plant	Day	55.16	52.8	52.73	70	db
	Night	58.62	53.81	56.86	70	db

Environmental Management Plan

(B) Regular Noise Monitoring (inside & outside the plant)

- ❖ Noise quality around the Plant area monitored as per the Environment Monitoring Programme formulated for the Plant
- ❖ Noise inside the plant area also monitored by HSSE Team

Observed Values of Noise Level Measurement				
No.	Observed Mean Value (Source)	Location	Day/Night	Industrial, commercial
1	59.5	SMPC Plant inside	Day	70
2	53.9	SMPC Internal Security Gate #2	Day	
3	68.8	SMPC Internal Security Gate #3	Day	
4	66.4	EPGE Guard House	Day	
5	68.2	SMPC Internal Security Gate #1	Day	



Environmental Management Plan

(C) Waste Management (1/2)

- ❖ Domestic waste generated by the operations workforce (including paper, plastics and putrescible wastes) as well as waste materials such as steel, excess cables etc. associated with routine and non-routine maintenance will be stored and disposed by an authorized collector.
- ❖ Both Hazardous and Non-hazardous waste will be collected & disposed by a Myingyan City Development Committee (MCDC)-approved contractor.
- ❖ Medical waste is incinerated in the Myingyan Hospital compound.



Environmental Management Plan

(C) Waste Management (2/2)



**Sludge are disposed to the designated area.

Environmental Management Plan

(D) Wastewater Management (1/2)

- ❖ Liquid effluents from operations are treated to meet the MONREC guideline prior to discharge. The sewage from the entire plant area are collected and treated in a Sewage Treatment Plant (STP).
- ❖ Regular monitoring of wastewater quality are conducted by internal & external parties.
- ❖ Online sensors installed at Central Monitoring Basin for PH, Turbidity & Chlorine
- ❖ Wastewater collected from canteen kitchens, including that from basins, sinks and floor drains, are discharged into sanitary sewers via grease traps.
- ❖ Regular monitoring of wastewater quality are conducted by internal team at lab and discharged points. .



Environmental Management Plan

(D) Wastewater Management (2/2)

Surface Water Quality

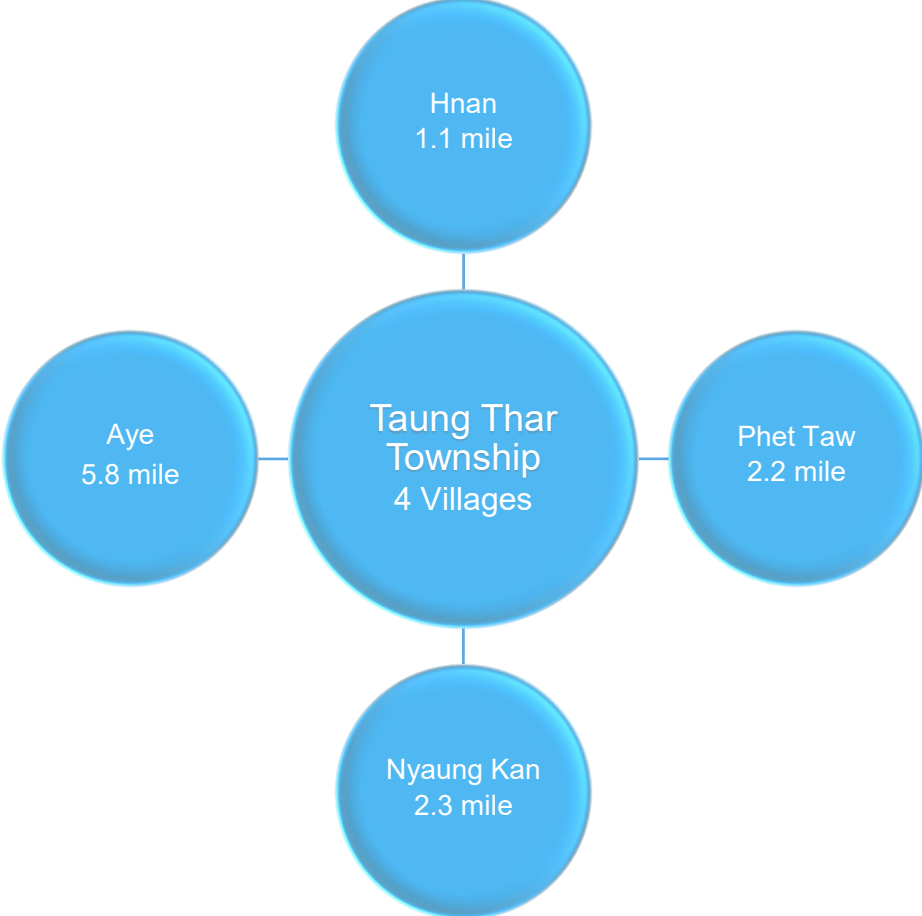
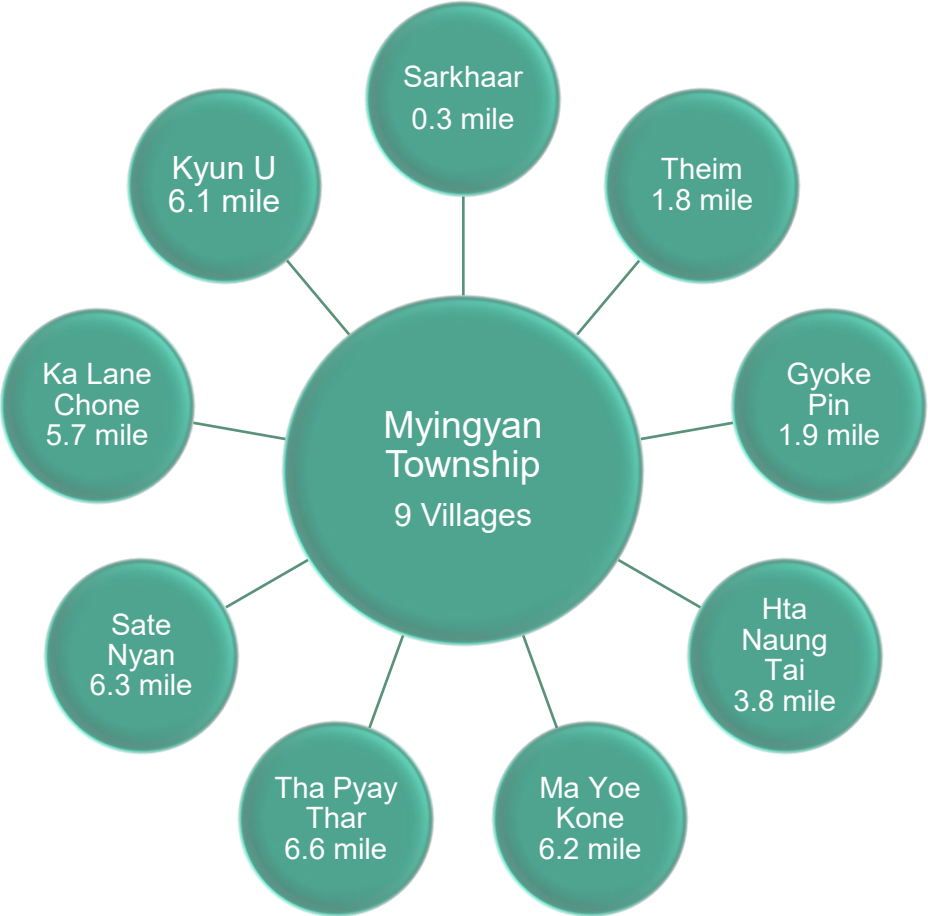
No.	Parameters	Unit	Mar	Jun	Sep	Dec	Myanmar Guideline Value	World Bank Guideline Value
1	Wastewater Discharge (pH)	S.U.	7.35	7.88	7.51		6~9	6~9
2	TSS ¹	mg/l	26	4	2		50	50
3	COD	mg/l	13.3	29.6	13.50		125	125
4	Oil & Grease ¹	mg/l	<3.1	<3.1	<3.1		10	10
5	Total Nitrogen	mg/l	2.7	4.9	2.10		10	10
6	Total Phosphorus	mg/l	1.64	1.22	1.28		2	2
7	Mercury ¹	mg/l	<0.002	≤ 0.002	≤ 0.002		0.005	0.005
8	Zinc ¹	mg/l	0.702	0.868	0.402		1	1
9	Arsenic ¹	mg/l	<0.010	≤ 0.010	≤ 0.010		0.5	0.5
10	Total Chromium ¹	mg/l	<0.002	≤ 0.002	≤ 0.002		0.5	0.5
11	Cadmium ¹	mg/l	<0.002	≤ 0.002	≤ 0.002		0.1	0.1
12	Copper ¹	mg/l	<0.002	≤ 0.002	≤ 0.002		0.5	0.5
13	Lead ¹	mg/l	<0.002	≤ 0.002	≤ 0.002		0.5	0.5
14	Iron	mg/l	0.558	0.971	0.50		1	1
15	Total Chlorine	mg/l	<0.1	<0.1	0.10		0.2	0.2
16	Temperature Increase	°C	2.2	2.3	1.43		< 3	-

**National Environmental Quality emission guidelines 2015

*IFC EHS Guidelines 2008 (Thermal Power)

Parameters are taken every quarter by a third party as per ESIA

Our Community – 13 Villages



Corporate Social Responsibility

Community Development Focus Area

- Clean Energy Support to Community (5kW – Solar Energy System)
- Educational Support
- Community Health Awareness and Health Care Facilities
- Enhance Access to Ground Water
- Contribution Clean Container to Communities
- Support Social Welfare and Youth Development
- Only based on genuine needs (e.g., flood relief, COVID-19 Support, etc..)

Selected Activities in Affected Community for Year 2023

Focus	Activity	No. of Activities
Education	5kW – Solar Energy System	11
Health Facility	5kW – Solar Energy System	2
Health Care Awareness	Community Health Awareness Program	2
Enhance Access to clean drinking Water	Water Treatment Filters support to Community (14 units of Water Treatment Plants)	1
Social Welfare	Basic Tailoring and Designer Training	3
Sembcorp Gives Back	Plastic waste collection around Myingyan Plant	1

*** With the exception of the ongoing initiatives (community health awareness campaign, support for water treatment filters), every program was developed with the consent of village representatives from each of the thirteen villages separately.

Corporate Social Responsibility

Completion Status of CSR Activity Plan for Year 2023 as of 28 November 2023

No.	Activity	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
1	Tailor and Designer Class (Gyoke Pin)		Completed	Completed	Completed								
2	Water Treatment Plant Filter Refill			Completed									
3	Community Health Awareness Program - 13 Villages (1st cycle)					Completed							
4	Tailor and Designer Class (Hta Naung Tai)						Completed	Completed	Completed				
5	Sarkhaar Village School – Solar Energy Support								Completed				
6	Hnan Village School – Solar Energy Support								Completed				
7	Phet Taw Village School – Solar Energy Support								Completed				
8	Nyaung Kan Village School – Solar Energy Support								Completed				
9	Theim Village School – Solar Energy Support								Completed				
10	Gyoke Pin Village School – Solar Energy Support								Completed				
11	Hta Naung Tai Village Hospital – Solar Energy Support								Completed				
12	Aye Village School – Solar Energy Support									Completed			
13	Sate Nyan Village School – Solar Energy Support									Completed			
14	Kyun U Village School – Solar Energy Support									Completed			
15	Ma Yoe Kone Village Clinic – Solar Energy Support										Completed		
16	Tha Pyay Thar Village School – Solar Energy Support										Completed		
17	Ka Lain Chone Village School – Solar Energy Support										Completed		
18	Plastic waste collection around Myingyan Plant											Scheduled	
19	Tailor and Designer Class									On-going	On-going	On-going	
20	Community Health Awareness Program - 13 Villages (2nd cycle)											Scheduled	

Completed

On-going

Scheduled

Corporate Social Responsibility

Clean Energy Support to Community
(5kW – Solar Energy System) (1/3)



Corporate Social Responsibility

Clean Energy Support to Community
(5kW – Solar Energy System) (2/3)



Corporate Social Responsibility

Clean Energy Support to Community (5kW – Solar Energy System) (3/3)



PV Module Capacity (575Wp x 6 Module) Ground Mounted



PV Module Capacity (575Wp x 6 Module) Rooftop



PV Module Capacity (575Wp x 6 Module)



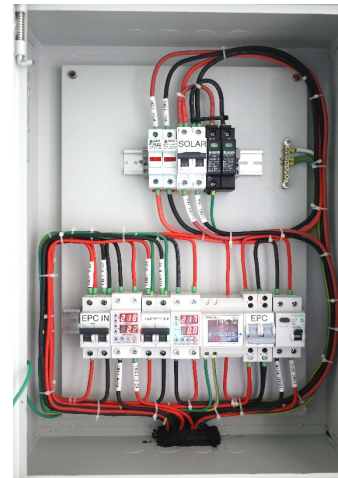
Panel Box, Inverter & Battery



Inverter



Panel Box



Lightning Protection

Corporate Social Responsibility

Sembcorp Gives Back Week

Plastic waste collection around Myingyan Plant



Corporate Social Responsibility

Tree Planting

Planted outside of the plant with 600 plants of Nyaung Shay and 100 plants of Ngu War and Mahua trees.



Corporate Social Responsibility

Community Health Awareness Program Year 2023



Corporate Social Responsibility

Enhancing Drinking Water Quality

Water Treatment Filters support to Community (14 units of Water Treatment Plants)



Corporate Social Responsibility

Contribution Clean Containers to Communities (13 villages)



Corporate Social Responsibility

Improving Livelihood Skill

- Basic Tailoring and Designer Training (Gyoke Pin, Hta Naung Tai, Aye, Ma Yoe Kone, Tha Pyay Thar, Sate Nyan and Kyun U)
- 36 Ladies benefited



Corporate Social Responsibility

Stakeholder Engagement

- ❖ Public stakeholder meetings to be continued in annual basis



Stakeholder Engagement

- Engagement will continue throughout the entire lifecycle of the Project.



Corporate Social Responsibility

Grievance Management

A Grievance Mechanism has been established to address suggestions submitted by affected individuals.

- Available for anyone to report



- Place it in suggestion boxes near your village or contact Sembcorp staff directly.



- If you have any suggestion for improvement, issue or concerns, Sembcorp is happy to listen to them.



- Your village representative is also part of grievance committee.



Corporate Social Responsibility

Grievance Committee

1. Village Representative
2. EPGE Representative (Government)
3. Government Affairs Manager (SMPC)
4. Plant Manager (SMPC)
5. HR & Admin Manager (SMPC)
6. HSSE Manager (SMPC)
7. Community Relation Team (SMPC)
8. Group Sustainability – Singapore (Optional)
9. Township Administrator (Optional)



Feedback Form

**Sender's
Information**
***Optional**

Name:

Address:

Contact:

**Remarks on the
presented
information**

**Feedback
&
Suggestion**