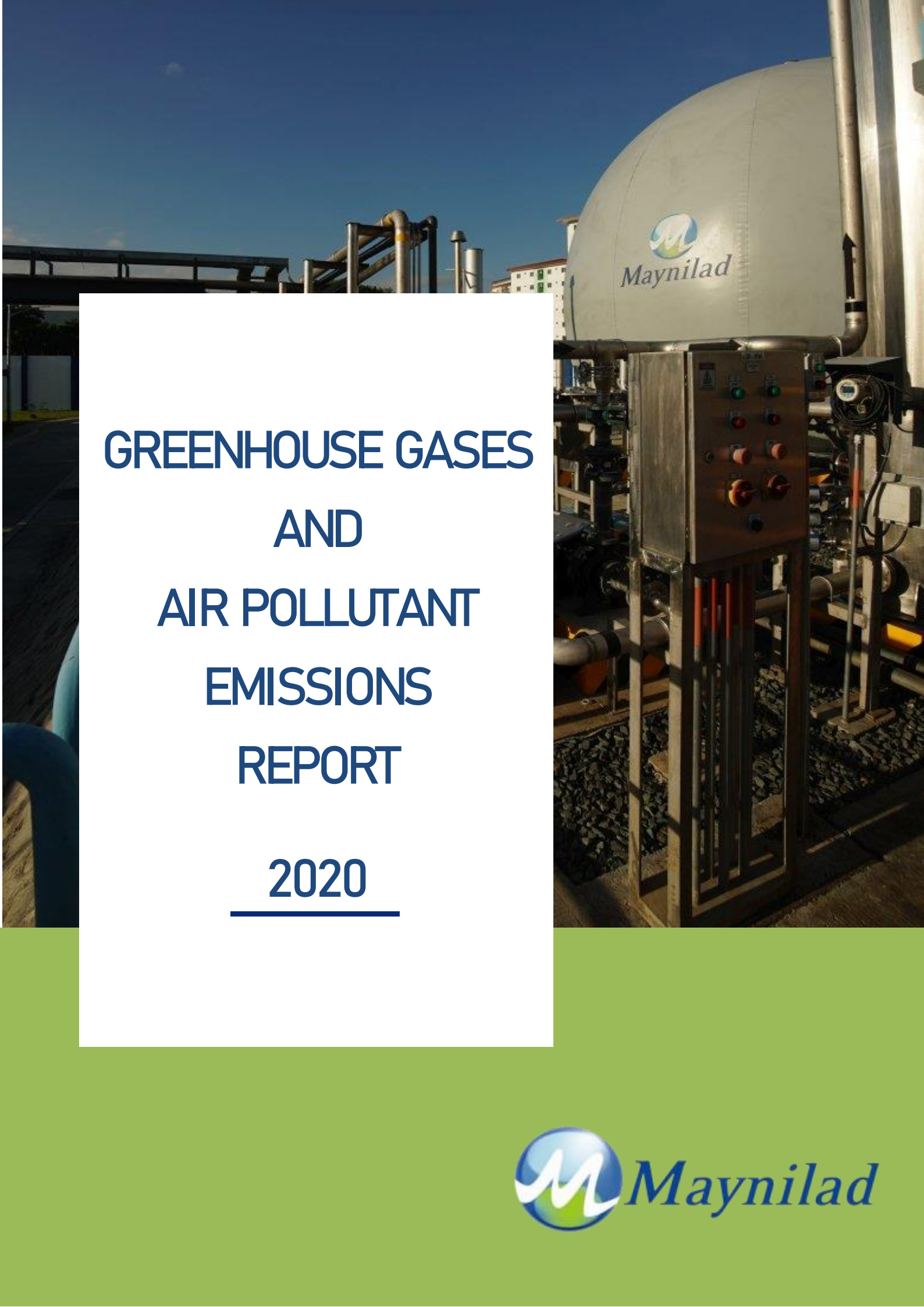




GREENHOUSE GASES AND AIR POLLUTANT EMISSIONS REPORT 2020

Table of Contents

CHAPTER 1: GENERAL DETAILS, PURPOSE AND POLICY	2
1.1 Introduction	2
1.2 Purpose	2
1.3 Description of Maynilad	2
1.4 Persons Responsible	3
1.4.1 Team Training for the Preparation of this Emissions Inventory and GHG Report	4
1.5 Audience and Dissemination Policy	4
1.6 Reporting Period and Frequency Reporting	4
1.7 Reporting Standards, Approach and Verification	4
1.7.1 Compliance with ISO 14064-1:2018	4
1.7.2 Audit of GHG Inventory	4
CHAPTER 2: ORGANIZATIONAL BOUNDARIES	5
2.1 Consolidation Approach	5
2.2 List of Facilities	5
CHAPTER 3: REPORTING BOUNDARIES	6
3.1 Emission Categories and Classifications	6
3.2 Significance and Materiality	6
3.3 Summary of Emissions Source Inclusions	6
3.4 Summary of Emissions Source Exclusions	7
CHAPTER 4: QUANTIFIED GHG INVENTORY OF EMISSIONS	8
4.1 Consolidated Statement of Greenhouse Gas Emissions	8
4.2 Methodologies for the Collection and Quantification of Data	9
4.2.1 Approach to Emission Factors	9
4.2.2 Changes in Methodologies on prior/ base year	10
4.2.3 GWP Calculation and Source	10
4.2.4 Review, internal Audit and Improvement	10
4.3 Information Management Procedure	11
4.4 Assessment of Uncertainty	11
4.5 Changes to Base Year	11
4.6 Removals and Reductions/ Increases	11
4.6.1 Removal	11
4.6.2 Emissions Reductions/ Increases	12
4.6.3 Other Initiatives	12
CHAPTER 5: INTERNAL REPORTING & PERFORMANCE	14
5.1 Emissions by Category, Gas and air Pollutants	14
5.2 Emissions per Business Unit (Scope 1: Category1)	15
5.3 Emissions per Business Unit (Air Pollutants)	15
5.4 Performance Measures, Targets and benchmarks	15
5.5 2018-2020 Top 10 New Facilities with Highest Power Consumption	15
5.6 2020 Top New Facilities with Highest Power Consumption	16
5.7 GHG Emission Intensity	16
APPENDICES	17
Appendix 1 – ISO 14064-1:2018 Reporting Index	17
Appendix 2 – List of Facilities	18
Appendix 3 – Information Management (Data Collection)	27

CHAPTER 1: GENERAL DETAILS, PURPOSE AND POLICY

1.1 Introduction

This document provides the Maynilad Water Services, Inc. (Maynilad) greenhouse gas (GHG) and air pollutant emissions inventory for calendar year 2020.

Maynilad's reporting processes and emissions classifications are consistent with international protocols and standards. This report has been prepared in accordance with the ISO 14064-1:2018 Standard. The information provided follows the requirements outlined in Clause 9.3.1 and where applicable, Clause 9.3.2 of the standard.

1.2 Purpose

Maynilad's intent in undertaking the Greenhouse Gas (GHG) and Air Pollutant Emissions Inventory is to demonstrate commitment and best practices with respect to the accounting of greenhouse gas and air pollutant emissions as the company gears toward the long-term goal of carbon neutrality.

This report:

- Relates to emissions of Maynilad.
- Has been prepared in accordance with the requirements of the ISO 14064-1: 2018 standard.
- Endeavors to use primary data wherever possible but especially surrounding all major emissions sources. Where primary data is not available, a consistent and conservative approach to calculation will be applied.
- Reflects our commitment to better understanding and ultimately improving our operational performance with respect to emissions.

1.3 Description of Maynilad

Maynilad Water Services, Inc. (Maynilad) is the water and wastewater services provider for the 17 cities and municipalities that comprise the West Zone of the Metropolitan Manila area. It is an agent and contractor of the Metropolitan Waterworks and Sewerage System (MWSS).

Maynilad is managed by Maynilad Water Holdings Company, Inc. —a joint venture between Metro Pacific Investments Corporation (MPIC), DMCI Holdings, Inc. (DMCI) and Marubeni Corporation. The consortium took control of Maynilad on January 24, 2007.

In 1997, Maynilad was granted a 25-year exclusive concession by the Philippine Government to operate, maintain, and invest in the water and sewerage systems in the cities of Manila (all but portions of San Andres and Sta. Ana), Quezon City (west of San Juan River, West Avenue, EDSA, Congressional, Mindanao Avenue, the northern part starting from the Districts of Holy Spirit and Batasan Hills), Makati (west of South Super Highway), Caloocan, Pasay, Parañaque, Las Piñas, Muntinlupa, Valenzuela, Navotas and Malabon, all in Metro Manila; the cities of Cavite, Bacoar and Imus, and the towns of Kawit, Noveleta and Rosario, all in the Province of Cavite.

On September 10, 2009, the MWSS Board of Trustees approved the extension of the expiry of its Concession Agreement with Maynilad by an additional 15 years, or up to May 2037.

1.4 Persons Responsible

The process for preparing the Integrated Greenhouse Gases and Air Pollutants (GHG/AP) Emissions Inventory is led by the “Maynilad Green Team”. This team was first organized through a memorandum from the President dated March 10, 2010. The latest update as of July 2021 was issued by the Head of Quality, Environment, Safety and Health (QESH).

The key contacts are:

ROEL S. ESPIRITU

Project Head

Head –Quality, Environment, Safety and Health (QESH)

roel.espiritu@mayniladwater.com.ph

+(63 2) 981-3481

+(63) 918-9209183251

ENRIQUE G. DE GUZMAN

Deputy Project Head

Head, Integrated Management System

enrique.deguzman@mayniladwater.com.ph

+(63 2) 981-3484

+(63) 998-5626504

The team is composed of representatives from the following operational units and departments:

Department	Name
QESH-IMS	Chester Y. Del Rosario
QESH-IMS	Merliza P. Masiglat
QESH-EMD	Rose Ann E. Eugenio
QESH-SAFETY	Rogelio V. Mendoza Jr.
HR	Alissa Daniella D. Nepomuceno
HR	Emma A. Argote
CXRO	Flordeliza Z. Carpiz
CXRO	Gracelyn F. Dinglasan
CXRO	Vilma T. Villacarillo
WSO – WNET	Ginny Vivien T. Calaycay
WSO - LMTP 1	Kenji Michael D. P. Kusaka
WSO - LMTP 1	Maureen H. Encomienda
WSO - LMTP 2	Roxanne R. Madarang
WSO - LMTP 2	Francis Richard P. Sotto
WSO – TPM	Fher Bryan H. Binuya
WSO - PWTP 1	Rommel D.C. Sarsonas
WSO - PWTP 1	Donn Aldren L. Lapitan
WSO - PWTP 2	Mark Vincent Q. Talosig
WSO - PWTP 2	Edgardo D. Borja
Water Source	Marvin M. Villanueva
Water Source	Alvin L. Sarita
Water Source	Shirley L. Rubante
CNRW	Mary Dominique R. Calanoc

Department	Name
CNRW	Shiela Jean C. Carreon
CNRW	Rachel Ann D. Villarosa
CORPORATE	Grace A. Laguardia
CORPORATE	Glenneth S. Magtalas
CORPORATE	Samuel Gerald T. Saludez II
CORPORATE	Roselle Ann L. Navarro
WMD	Benerly D. S. Ampo
WMD	Dirk Jan Dinno B. Coligado
WMD	Kharren Mae C. Rosario
WMD	Jamille Kriza V. Miranda
FINANCE	Lolita M. Lota

Table 1. Green Team Members.

1.4.1 Team Training for the Preparation of this Emissions Inventory and GHG Report

Members of the GHG Core Team are given an Appreciation Course on Greenhouse Gas Management System based on ISO 14064-1:2018 and ISO 14064-3:2019 Standard to gain better understanding on the principles and requirements of the standard.

They are also provided with the GHG calculation tool and orientation on how to use the tool including instructions on data collection in line with the requirements of the standard.

1.5 Audience and Dissemination Policy

This report is intended for all Maynilad stakeholders interested in its greenhouse gas and air pollutant emissions inventory and the associated reporting structure, notation and explanations. It is provided publicly on Maynilad's website.

1.6 Reporting Period and Frequency of Reporting

This GHG report covers the calendar year 1st January 2020 to 31st December 2020. Maynilad's GHG reports are produced and published annually.

1.7 Reporting Standards, Approach and Verification

1.7.1 Compliance with ISO 14064-1:2018

The GHG report for the year ending 31st December 2020 has been prepared in accordance with ISO 14064-1:2018. A reporting index has been provided in Appendix 1.

1.7.2 Audit of GHG Inventory

The GHG inventory reports of Maynilad have been externally verified since 2009 and have met the requirements of ISO 14064-1 standard. The 2020 GHG Inventory report will also be verified to reasonable assurance by a reputable verifier.

CHAPTER 2: ORGANIZATIONAL BOUNDARIES

2.1 Consolidation Approach

Maynilad utilizes the “operational control” consolidation method for emissions inventory. This approach considers emissions of which Maynilad have an operational control. This means that Maynilad accounts for emissions of facilities over which it has full control as well as for shared facilities (i.e., office buildings, treatment plants, reservoirs, common purpose facilities, etc.). Emissions from contracted-out activities are included in cases where reliable data are available.

2.2 List of Facilities

The initial list of facilities that are considered for the inventory can be found in Appendix 2. For purposes of operation and emissions accounting, these are categorized into the following groups:

- **Central Non-Revenue Water (CNRW)** – covers the CNRW Main Office in Balara Quezon City and CNRW Office in Arroceros Manila and the Integrated Meter Management Office and Meter Laboratory in Pasay City;
- **Corporate** – covers the Maynilad Head Office in Balara Quezon City. It also includes the following divisions namely Quality, Environment, Safety and Health (QESH) Information Technology Services (ITS), Human Resource, Finance, Program Management, Supply Chain Management, Technical Services, and Commercial and Marketing Divisions. In addition, different warehouses (Central and Cordillera warehouses in Quezon City and Arroceros warehouse in Manila are also included. For the GHG/AP inventory, it also considers the Water Laboratory and Safety Center in Quezon City;
- **Business Areas** – covers the 12 Business Area offices of Maynilad. For the GHG and air pollutant accounting, satellite warehouses are included in the corresponding business areas;
- **Water Network** – covers the Water Pump Stations, Reservoirs, Mini Boosters, Deep Well Stations, In-line Boosters and other special equipment, Maintenance Shop (within La Mesa Compound), Water Network training facility and Arroceros Head Office;
- **Water Production** – covers the La Mesa Water Treatment Plants 1 & 2, Putatan Water Treatment Plant 1 & 2;
- **Water Source Management** – covers the Common Purpose Facilities (CPF) Office, Ipo Office Building, and Bicti Desilting Basin; and
- **Wastewater Management** – covers Sewage and Septage Treatment Plants, Water Reclamation Facilities, Lift Stations and Pump Stations.

Maynilad also shares the following facilities with other companies:

- **Head Office Building** - Located in MWSS Complex in Balara, Quezon City; and
- **Common Purpose Facilities** namely Ipo Dam and Office Building, Bicti Desilting Basin, CPF Office (La Mesa).

The inventory only includes sources which are operational and are significant contributors to the total emissions of the company.

CHAPTER 3: REPORTING BOUNDARIES

3.1 Emissions Categories and Classifications

Greenhouse gas emissions sources have been identified and grouped in accordance with the Greenhouse Gas Protocol's Scopes 1 through 3 and further categorized following the ISO 14064-1:2018 Standard.

- Scope 1 Direct Sources
 - Category 1: Direct GHG emissions and removals
- Scope 2 Indirect Sources
 - Category 2: Indirect GHG emissions from imported energy
- Scope 3 Other Indirect Sources
 - Category 3: Indirect GHG emissions from transportation
 - Category 4: Indirect GHG emissions from products used by the organization
 - Category 5: Indirect GHG emissions associated with the use of products from organization
 - Category 6: Indirect GHG emissions from other sources

3.2 Significance and Materiality

Factors for consideration in assessing significance and materiality include:

- Size of the emissions
- Maynilad's influence on the emission source
- Difficulty in obtaining data
- Poor validity in available estimation approaches

While all the above would be considered in materiality assessments, the criteria that would mandate disclosure of emission sources as significant are:

- a. Where there is a single source with estimated emissions likely to be at least 1% of Maynilad's total emissions. In this case, that emission source must be included.
- b. Where the total of 'insignificant' sources has estimated emissions likely to be at least 5% of Maynilad's total emissions. In this case, 'insignificant' emissions must be included until the estimate of excluded emissions is below 5%.

3.3 Summary of Emissions Source Inclusions

Scope	Category	Emission Source	Data Source	Methodology & Materiality
1	1	Fuel used by Company-owned Vehicles	Fuel billing	Fuel use (liters)
1	1	Fuel used by Internal Combustion Engines	Monitoring Reports of facility	Fuel use (liters)
1	1	Fuel used by Company managers and executives through employee car plan	Fuel billing/ HR monitoring	Fuel use (liters)
1	1	Fugitive emissions from wastewater treatment	Monitoring Reports of facility	Volume (m ³)
1	1	Fugitive emissions from biosolids production	Monitoring Reports of facility	Volume (m ³)
2	2	Purchased Electricity from Grid	Electricity billing	kWh
3	3	Business Travel by Air	Airline Ticket (Distance traveled)	Emissions/ km

Table 2. Emission Source Inclusions.

3.4 Summary of Emissions Source Exclusions

The following are emission sources that have been identified but excluded from the emissions inventory. These sources are not considered significant or material to stakeholders, the context of inventory, and/or are not feasible or practical to calculate at the current point of time.

Scope	Category	Emission Source	Data Source	Methodology & Materiality
1	1	Fugitive emissions from air conditioning units	[1]	Difficult to obtain, just started to establish baseline data for possible reporting next year
1	1	Fugitive emissions from fire extinguishers	[2]	Difficult to obtain, just started to establish baseline data for possible reporting next year
3	4	Solid Wastes	Self-Monitoring Report (SMR)	Tons of general waste, yet to establish baseline data, estimated to be <1% at 441 Tonnes CO _{2e}
3	4	Emissions from use of consumables	[3]	Difficult to obtain, estimated to be <1%
3	6	Accommodation	Human Resources Division	Night stayed, estimated to be <1%

Table 3. Emission Source Exclusions.

Notes to Table 3:

1. Inventory of Air-conditioning (AC) units and refrigerants used and discussion with maintenance service provider on data needed for calculation of GHG emissions are on-going. Inclusion of a condition on specific reportorial requirements relevant to GHG calculation in the service agreement is being considered. Baseline data is being established for possible reporting next year.
2. Inventory of fire extinguishers on-going. Discussion with the service provider on data needed for calculation of GHG emissions is yet to be made. Inclusion of a condition on specific reportorial requirements relevant to GHG calculation in the service agreement is being considered. Baseline data is being established for possible reporting next year.
3. Consumables include common office supplies. While estimated to be below levels of significance, these remain a point of interest for future examination.

CHAPTER 4: QUANTIFIED GHG INVENTORY OF EMISSIONS

4.1 Consolidated Statement of Greenhouse Gas Emissions

EMISSIONS		Notes	CO ₂ e TOTAL	Carbon Dioxide (CO ₂)	Methane (CH ₄)	Nitrous Oxide (N ₂ O)	Fluorinated Gases
		1	GWP	1	28	265	
S1	Category 1: Direct GHG emissions and removals in tonnes CO ₂ e	2	9,875	8,516	770	588	
	Direct emissions from stationary combustion		3,829	3,665	4	160	
	Direct emissions from mobile combustion		3,550	3,390	13	146	
	Direct process and removals from industrial processes	NS					
	Direct fugitive emissions from the release of GHGs in anthropogenic systems		2,496	1,461	753	282	
	Direct emissions and removals from land use and forest change	NS					
Direct emissions in tonnes from biomass		3					
	Indirect emissions in tonnes CO ₂ e	4	94,741	94,425	32	284	
S2	Category 2: Indirect GHG emissions from imported energy		94,735	94,419	32	284	
	Indirect emissions from imported electricity		94,735	94,419	32	284	
	Indirect emissions from imported energy	NS					
S3	Category 3: Indirect GHG Emissions from Transportation		6	6	0	0	
	Emissions from upstream transportation and distribution of goods	NS					
	Emissions from downstream transportation and distribution of goods	NS					
	Emissions from employee commuting	NS					
	Emissions from client and visitor transport	NS					
	Emissions from business travels		6	6	0	0	
S3	Category 4: Indirect GHG emissions associated with the use of products by the organization						
	Emissions from purchased goods and services	NS					
	Emissions from capital goods	NS					
	Emissions from the disposal of solid and liquid waste	NS					
	Emissions from the use of assets	NS					
	Emissions from other services not described above						
S3	Category 5: Indirect GHG emissions associated with the use of products from the organization						
	Emissions or removals from the usage of product	NS					
	Emissions from downstream leased assets	NS					
	Emissions from end-of-life stage of the product	NS					
	Emissions from investments	NS					
S3	Category 6: Other indirect GHG emissions sources						
	Emissions from accommodation	NS					
TOTAL EMISSIONS CATEGORIES 1-6			104,616	102,941	803	872	
REMOVALS		5	18,514				
	Direct removals in tonnes CO ₂ e (Mangrove)		9,305				
	Direct removals in tonnes CO ₂ e (IPO Tree Planting)		9,209				
STORAGE		6					
	Total storage as of year-end in tonnes CO ₂ e						
[*] Significant [NS] Non-significant [S#] Scope							

Notes to Consolidated Statement of Greenhouse Gas Emissions:

1. *Direct and indirect emissions have been prepared in accordance with the recommendations of Annex B. Gas types CO₂, CH₄ and N₂O have been included as those relevant to direct emissions.*
2. *Fluorinated gases have a very high Global Warming Potential (GWP). Although we have none to disclose over this period, we do hold significant amounts as refrigerants, gathering of baseline data is ongoing for possible inclusion in the next reporting period.*
3. *Biomass emissions relate to the use of biofuels, while not significant in scale they are a key area of interest and as such are included here. As per the ISO 14064-1: 2018 Standard the CO₂ emissions are recorded against biomass whereas the other gases (CH₄, N₂O etc. are grouped within Category 1).*
4. *This includes the emissions of purchased electricity from grid.*
5. *This includes the carbon sequestered of Maynilad's Mangrove Rehabilitation Sites in Cavite Province and tree planting at IPO watershed in Norzagaray Bulacan.*
6. *Storage is not addressed in this document as we have none to disclose.*

4.2 Methodologies for the Collection and Quantification of Data

In a large enterprise, the collection of emissions data spans a broad range of business units and facilities, consequently data sources. The emission summary represents the best attempt to consolidate and standardize emission data and provide a detailed explanation of working and estimation in line with ISO 14064-1:2018 Standard.

Section 3.3 describes the overview of emissions sources and their respective data sources. Where an estimation approach is required, the best available data and calculation method is applied. Where two or more estimation approaches are considered equally valid, that which produces the more conservative figure is used.

4.2.1 Approach to Emission Factors

The GHG and AP emissions of Maynilad are estimated using the emission factor approach. Published emission factors from globally accepted emissions quantification tools and guidance materials are used while actual activity data (e.g., electricity consumption, fuel consumption, etc.) are used whenever possible. The basic formula used in the emission factor approach is:

$$A \times EF \times (1-ER/100) = E$$

Wherein:

A	= activity data
EF	= emission factor
ER	= emission reduction efficiency
E	= emissions

The calculation methodologies and emission factors are derived from various notable sources such as Greenhouse Gas Protocol, World Business Council for Sustainable Development, World Resources Institutes, Anthesis, Clean Air Initiative for Asian Cities, Intergovernmental Panel for Climate Change (IPCC), U.S. Environmental Protection Agency (EPA), UK Department for Environment, Food and Rural Affairs (DEFRA), United Nations Environment Programme (UNEP),

and Department of Energy (DOE). The GHG calculations in the developed tools are consistent with those of the tools of the GHG protocol. Moreover, these tools were developed to calculate GHGs as well as criteria air pollutants, which are currently not covered by the GHG Protocol.

4.2.2 Changes in Methodologies on prior year/ base year

The base year is the year that will be used in assessing the direction of the emissions of Maynilad in the future. The year 2009 was selected as the base year to account for the transition and re-organization, which took place in 2008. The following represent changes in methodology with respect to the base year and our commitment to improve the accuracy and breadth of reporting year on year:

- Emission factor updates
- Calculation tool
- Improvements identified from our review, across data sourcing, quality, completeness and consistency

4.2.3 GWP Calculation and Source

Quantities of GHG emissions are expressed as tonnes of CO₂e (Carbon Dioxide Equivalents) using the global warming potentials (GWP). The time horizon is 100 years. Direct emissions sources (Category 1) are expressed as both CO₂e and their detailed GHG breakdown, including the GWP (Global Warming Potential) value. The most notable GHGs include:

GHG	Chemical Formula	GWP
Carbon dioxide	CO ₂	1
Methane	CH ₄	28
Nitrous oxide	N ₂ O	265

Table 4. Greenhouse Gases and their respective Global Warming Potentials.

Note to Table 4:

1. IPCC Fifth Assessment Report (AR5) published in 2013 is the source of the global warming potentials of the GHGs listed above.

4.2.4 Review, Internal Audit and Improvement

Review, internal audit and improvement of primary data have been sought for all significant emissions sources. Where data is unavailable or not comparable, conservative estimation methods have been applied such that incentives lie in continually improving the ratio of primary data to estimation approaches. Preparation of the inventory is done iteratively with several internal draft, check and resubmission stages in the lead up to verification.

Following reporting for the 2018 and 2019 years, a post audit review was done. Some improvements identified and to be possibly enacted for the 2021 reporting are the following:

- Extended timeline for compiling data
- Better data quality and completeness
- More comprehensive and better organized source data
- Transition to better units of measure
- Addition of GHG emissions from AC units and fire extinguishers
- Addition of GHG emissions from Accommodation (hotel stay)
- Addition of GHG emissions from Waste dispose to landfill
- Addition of GHG removal sources

4.3 Information Management Procedure

The GHG measurement and reporting process has been developed to ensure conformance to the principles of the ISO 14064-1:2018 Standard and to be consistent with the intended use of the GHG inventory. The information management procedure is provided in Appendix 3.

4.4 Assessment of Uncertainty

For this 2020 report, a qualitative rather than quantitative assessment of uncertainty has been applied. With the current tools and variety of emission sources, our view is that a quantitative assessment would be complex, time consuming, and offer little validity in respect to statistical uncertainty. For example, many direct and indirect factors related with global warming potentials (GWP) values that are used to combine emission estimates for various GHG involve significant scientific uncertainty. Analyzing and quantifying such uncertainty is likely to be beyond the capacity of most company inventory programs. Moreover, it is also believed that all emissions or removal quantification are associated with estimation uncertainty. The applicability of these quantitative assessments will be reviewed in each reporting period.

4.5 Changes to Base Year

The base year for emissions inventory assessments is the 2009 calendar year. There are several underlying reasons for the selection of the 2009 calendar year as the base year:

1. As the earliest reported period 2009 was selected as the base year; and
2. Recalculation of the base year will only be applied where it is necessary to maintain an effective base year comparison. Reasons for this might include:
 - If the emission factors used change significantly and are relevant to prior years
 - If a significant estimation method has been changed/improved
 - If a significant data sourcing strategy has been changed/improved
 - If the scope of the inventory is changed

Recalculation of the base year will also consider whether the historical data has the required detail to perform recalculation or whether it is in the right form (i.e., unit of measure) to apply a different emission factor. There is no change to the base year calculation in this reporting period.

4.6 Removals and Reductions/ Increases

4.6.1 Removals

A Survival Rate and Carbon Stock Assessment of Maynilad's Mangrove Rehabilitation Sites in Cavite (2013-2019) was conducted. The four (4) mangrove rehabilitation sites of Maynilad in Cavite Province are located at Kawit, Noveleta, Bacoar and Cavite City. The study reported a total carbon stock of 2,535 tonnes, resulting to a total GHG removal of 9,305 tonnes CO₂e from 36.6 hectares of mangrove plantation.

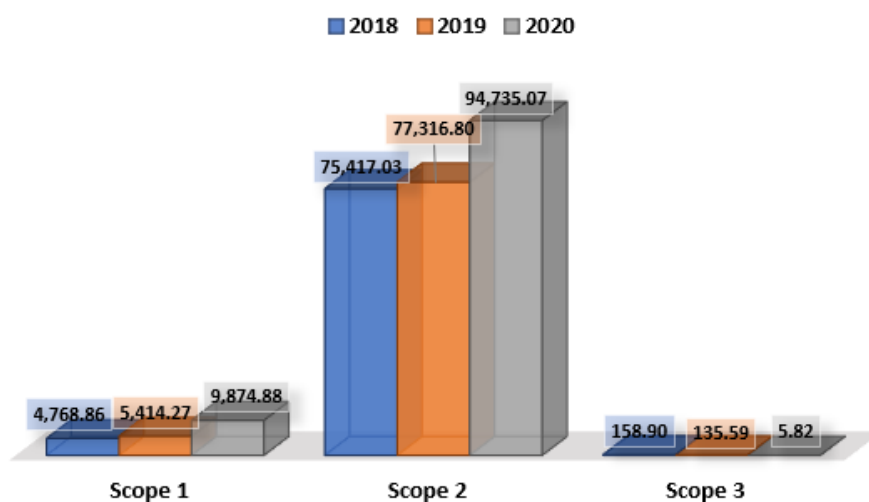
In addition, another study was conducted (2012-2017) for the Survival Rate and Carbon Stock Assessment for the tree species planted in the IPO Watershed located in Norzagaray Bulacan. The study reported a total carbon stock of 2,509 tonnes, resulting to a total GHG removal of 9,209 tonnes CO₂e covering an area of 272 hectares of plantation.

4.6.2 Emissions Reductions/ Increases

Year on year, we have recorded an increase in carbon dioxide equivalents across our operations in gross greenhouse gas emissions. This year, the increase is notably driven by surge of 82% in the direct GHG emissions arising from additional facilities like water and wastewater treatment plants, new pump stations and increase in fuel usage. These additional facilities also resulted in a 22% increase in scope 2 emissions. Overall, there is a 26% increase in the total carbon dioxide equivalents from 2019.

2020 was not however a typical year. The COVID-19 pandemic and subsequent rolling countrywide lockdowns contributed to a reduction in business travel by air which resulted in a drastic decrease of 96% from 2019. While any reduction in impact is positive, we would caution that the above likely doesn't convey an accurate picture of year-on-year trend. We do expect and strive to continuously reduce the emissions intensity of our operations.

2018 to 2020 GHG Emissions (tCO₂e)



	Tonnes of CO ₂ e		
	2018	2019	2020
Scope 1	4,768.86	5,414.27	9,874.88
Scope 2	75,417.03	77,316.80	94,735.07
Scope 3	158.90	135.59	5.82
Total	80,344.79	82,866.66	104,615.77

Table 5. Trend of GHG Emissions from 2018 to 2020.

4.6.3 Other Initiatives

Plant for Life Campaign

Maynilad's Plant for Life Campaign is an ongoing program since 2007 that is dedicated to the adoption of planting areas within identified watersheds. The program involves planting saplings and seedlings as well as mangrove propagules with the hope of rehabilitating the watersheds and their surrounding natural spaces

Ensuring environmental conservation, the Plant for Life campaign was conceptualized to adopt, establish, monitor, maintain, and protect the watersheds within Maynilad's concession area.

The campaign covers the four critical watersheds for freshwater supply, namely the La Mesa, Angat, Ipo, and Manila Bay watersheds.

For almost 14 years since the Plant for Life campaign was conceptualized, Maynilad has planted close to 600,000 indigenous trees in the Ipo Watershed. These trees include, but not limited to, Cupang, Narra, Acacia, and Amisan. Maynilad also successfully planted 208,000 mangrove propagules in the coastal areas of Cavite since 2013.

La Mesa Solar Power Plant

One of the projects envisioned to reduce Maynilad's energy consumption is the Maynilad Solar Power Plant. It includes the supply and installation of a solar power plant with a minimum of 1 Megawatt Peak (DC) capacity. The Maynilad Solar Power Farm was constructed on top of the Angat Water Supply Optimization Project (AWSOP) Reservoir and Pump Stations with approximately 8,250 square meters. It will augment the power supply for the La Mesa Pumping Station North C.

Once fully operational, the Maynilad Solar Power Farm will reduce the overall non-renewable power consumption of La Mesa Pumping Station North C by approximately 10% annually. The solar power plant has an expected useful project life of over 40 years and operates on direct input to an electrical system also known as a Photovoltaic (PV) Solar Power Grid Tied System. This project was partially energized on May 2021 and full energization is scheduled on the fourth quarter of 2021.



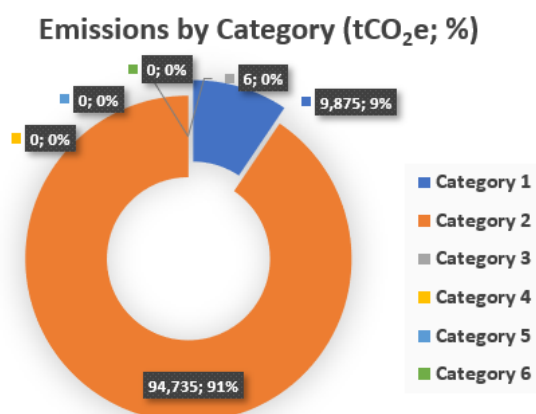
Photo of Maynilad Solar Power Plant (top view)



Photo of Maynilad Solar Power Plant (front view)

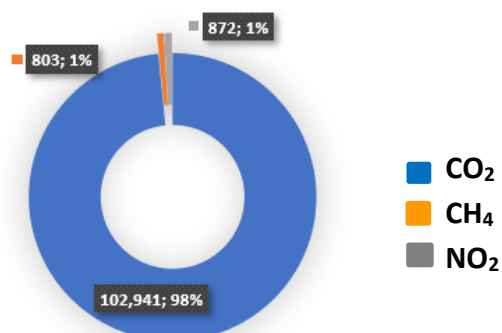
CHAPTER 5: INTERNAL REPORTING & PERFORMANCE

5.1 Emissions by Category, Gas and Air Pollutants

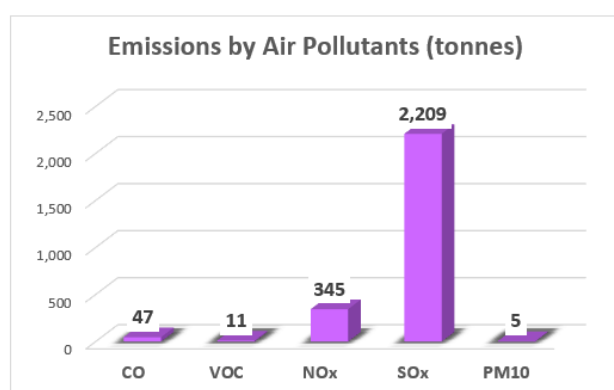


Indirect emission from purchased electricity (represented by Category 2) is the main contributor of the gross GHG emissions constituting 91% of the total carbon dioxide equivalent. This is followed by the direct emissions from vehicles and engines constituted 9% of the total emissions. The GHG emissions generated by other categories are negligible.

Emissions by Greenhouse Gas (tCO₂e; %)



The top greenhouse gas emitted by Maynilad in 2020 is carbon dioxide (CO₂) with 102,941 tonnes or 98% of the total GHG emissions. Nitrous oxide (N₂O) is the second highest emitted GHG with 872 tonnes or 1%. Methane (CH₄) is the least emitted GHG with 803 tonnes or 1% of the total GHG emissions.

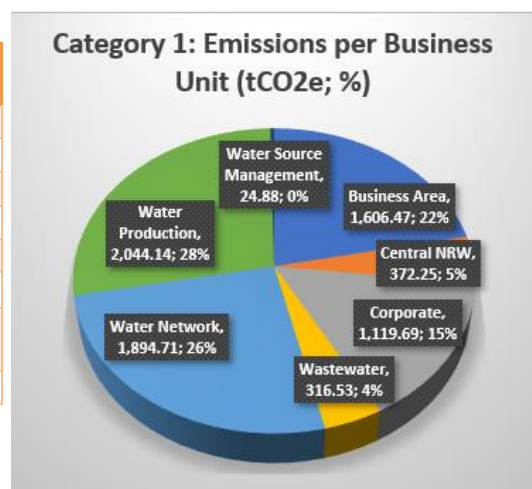


In terms of the air pollutants emitted from the operations of the company, Sulfur Oxides (SO_x) represents the highest number of pollutants with 2,209 tonnes. This is followed by Nitrogen Oxide (NO_x) with 345 tonnes, Volatile Organic Compounds (VOC) with 11 tonnes, and Particulate Matter with a diameter of 10 microns or less (PM₁₀) with 5 tonnes. The significant sources of these air pollutants are the purchased electricity and direct emissions from stationary and mobile combustions.

5.2 Emissions per Business Unit (Scope 1: Category 1)

Business Unit	Fuel of Vehicles Liters	Fuel of Engines Liters	Emissions Tonnes CO ₂ e
Business Area	594,852.46	15,126.67	1,606.47
Central NRW	140,935.41	51.54	372.25
Corporate	392,302.01	8,239.42	1,119.69
Wastewater	95,978.84	21,150.90	316.54
Water Network	71,951.14	606,697.15	1,894.71
Water Production	15,051.32	782,203.43	2,044.14
Water Source Management	9,129.56	294.67	24.88
TOTAL	1,323,200.74	1,437,763.78	7,378.68

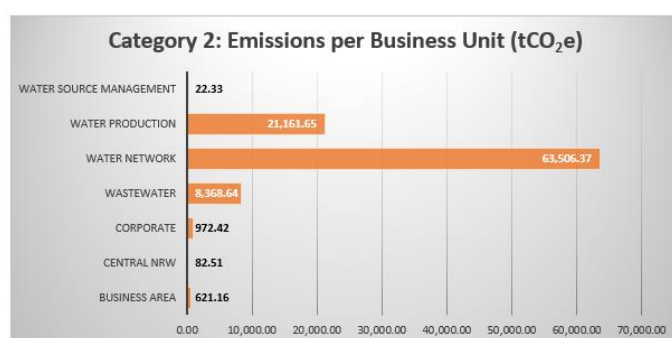
Table 5. Emissions per Business Unit (Scope 1: Category 1).



5.3 Emissions per Business Unit (Scope 2: Category 2)

Business Unit	Electricity Consumption kWh	Emissions Tonnes CO ₂ e
Business Area	1,028,940.00	621.15
Central NRW	136,669.50	82.51
Corporate	1,610,805.21	972.42
Wastewater	13,862,562.38	8,368.64
Water Network	105,197,636.18	63,506.37
Water Production	35,054,059.51	21,161.65
Water Source Management	36,988.10	22.33
TOTAL	156,927,660.88	94,735.07

Table 5. Emissions per Business Unit (Scope 2: Category 2).



5.4 Performance Measures, Targets and Benchmarks

Performance against fixed emissions targets is not currently practical to determine especially given Maynilad's rate of growth. We do however aim to continuously reduce the emissions intensity of our activities year on year and will assess the relevance of new measures and targets in each reporting period.

5.5 2018 – 2020 Top 10 Facilities with Highest Power Consumption

Business Unit (kWh)	2018	2019	2020	% Increase
La Mesa PS (Including North A & C Annex)	36,931,271.66	36,780,261.47	38,758,484.24	5.38%
Putatan Water Treatment Plant 1	15,903,919.40	16,584,458.36	17,411,283.50	4.99%
Pagcor	14,996,366.43	13,391,218.93	12,480,326.95	-6.80%
Putatan 1 PS	10,765,520.00	10,875,302.64	11,680,500.00	7.40%
Villamor	9,903,039.83	9,020,541.25	8,807,668.28	-2.36%
Pasay PS	7,438,718.63	7,502,573.12	7,274,857.45	-3.04%
La Mesa Treatment Plant 1	2,347,680.14	2,004,331.78	2,102,722.15	4.91%
Tondo Pumping Plant	1,986,250.00	1,933,750.00	1,851,818.18	-4.24%
Alazap PS	1,692,633.04	973,793.31	1,424,094.84	46.24%
La Mesa Treatment Plant 2	1,171,493.04	1,436,308.15	1,333,027.35	-7.19%

5.6 2020 Top New Facilities with Highest Power Consumption

Business Unit	2020 (kWh)
Putatan Water Treatment Plant 2	14,204,961.51
Putatan 2 PS	7,009,204.00
Pasay Water Reclamation Facility	2,226,000.00
Paranaque Water Reclamation Facility	2,237,009.09

5.7 GHG Emission Intensity

In tonnes CO ₂ e	2018	2019 (Published)	2019 (Adjusted)	2020
Scope 1	4,768.86	5,414.27	4,851.49	9,874.88
Scope 2	75,417.03	77,316.80	78,206.77	94,735.07
Total Annual Gross Emissions	80,185.89	82,731.07	83,058.25	104,609.95
Water Produced + Treated Wastewater	936,075.84	955,854.09	955,854.09	989,659.00
GHG Emission Intensity in Tonnes CO ₂ e per Million Liters (ML) of water produced and water treated	0.0857	0.0866	0.0869	0.1057

Note: The 2019 data in the adjusted column is the result of recalculation using the new tool.

As part of our GHG accounting and reporting practice, we conduct internal audits and have submitted the results for verification by an international certification body. GHG audit verification by third party is done every three years for three reporting years.

The increase in stationary emissions from 2019 is attributed to the operation of generator sets (genset) powering some treatment plants and facilities during power outages and interruptions. In addition, additional fuel usage was from other administrative equipment like small generators, dewatering pumps and grass cutters. Other cause for this increase in stationary emissions was shifting of overhead power line to underground power line and energization of Ring Main Unit (RMU) in La Mesa Treatment Plants.

The inclusion of 4 new facilities in section 5.6 caused an increase in the amount of scope 2 emissions this year. The Putatan Water Treatment Plant 2 is Maynilad's 4th water treatment facility which uses ultra-filtration and reverse osmosis to treat water from Laguna Lake. The Pasay and Paranaque WRFs are two of the largest wastewater treatment facilities of Maynilad which employs the conventional activated sludge technology.

***Maynilad released 104,609.95 tonnes of CO₂ equivalent for
Scope 1 and 2. For every liter of water and wastewater
treated, Maynilad emitted 0.1057 grams of CO₂.***



APPENDICES

Appendix 1 – ISO 14064-1:2018 Reporting Index

ISO Reporting	Section in this Report
9.3.1 (a)	1.3
9.3.1 (b)	1.4
9.3.1 (c)	1.6
9.3.1 (d)	2
9.3.1 (e)	3
9.3.1 (f)	4.1
9.3.1 (g)	4.1
9.3.1 (h)	4.6
9.3.1 (i)	3.3
9.3.1 (j)	4.1
9.3.1 (k)	4.5
9.3.1 (l)	4.5
9.3.1 (m)	4.2
9.3.1 (n)	4.2
9.3.1 (o)	4.2
9.3.1 (p)	4.4
9.3.1 (q)	4.4
9.3.1 (r)	1.7
9.3.1 (s)	1.7
9.3.1 (t)	4.2

ISO Reporting	Section in this Report
9.3.2 (a)	1.3
9.3.2 (b)	4.6
9.3.2 (c)	NA
9.3.2 (d)	NA
9.3.2 (e)	4.6
9.3.2 (f)	4.1
9.3.2 (g)	NA
9.3.2 (h)	5.5
9.3.2 (i)	4.3
9.3.2 (j)	4.6
9.3.2 (k)	4.6

ISO Reporting	Section in this Report
9.3.3	NA

Appendix 2 – List of Facilities

	Facility	Excluded?	Reasons for Exclusion
Corporate	Arroceros Warehouse	No	
Corporate	Central Laboratory	No	
Corporate	Central Materials Depot (Socea Bonna)	No	
Corporate	Head Office	No	
Corporate	Premises	No	
Corporate	Quirino-Rosevelt Warehouse	No	
Corporate	Safety Center	No	
Business Areas	Cavite Warehouse	No	
Business Areas	Cavite/Las Piñas Business Area	No	
Business Areas	Fairview/Commonwealth Business Area	No	
Business Areas	Malabon/Navotas Business Area	No	
Business Areas	Muntinlupa Business Area	No	
Business Areas	Muntinlupa Warehouse	No	
Business Areas	North Caloocan Business Area	No	
Business Areas	Novaliches/Valenzuela Business Area	No	
Business Areas	Novaliches/Valenzuela Warehouse	No	
Business Areas	Parañaque Business Area	No	
Business Areas	Parañaque Warehouse	No	
Business Areas	Quirino/Roosevelt Business Area	No	
Business Areas	Sampaloc Business Area	No	
Business Areas	South Caloocan Business Area	No	
Business Areas	South Manila /Pasay/Makati Business Area	No	
Business Areas	Tondo Business Area	No	
Central NRW	Arroceros Office	No	
Central NRW	Gauging Points	No	
Central NRW	IMM Office (old Pasay Business Area)	No	
Central NRW	Meter Lab (La Mesa Compound)	Yes	still under construction
Wastewater Management	Alabang Water Reclamation Facility and Lift Station D	No	
Wastewater Management	Alabang Lift Station A	No	
Wastewater Management	Alabang Lift Station B	No	
Wastewater Management	Alabang Lift Station C	No	
Wastewater Management	Alabang-Zapote Septage Treatment Plant	No	
Wastewater Management	Baesa Water Reclamation Facility	No	
Wastewater Management	Bagbag Water Reclamation Facility	No	
Wastewater Management	Bagbag Pump Station (PS)	No	
Wastewater Management	Bahay Toro Water Reclamation Facility	No	
Wastewater Management	Bahay Toro Lift Station (LS)	No	
Wastewater Management	Bahay Toro Pump Station (PS-1)	No	

	Facility	Excluded?	Reasons for Exclusion
Wastewater Management	Bahay Toro Pump Station (PS-2)	No	
Wastewater Management	Bahay Toro Pump Station (PS-3)	No	
Wastewater Management	Bahay Toro Pump Station (PS-4)	No	
Wastewater Management	Bahay Toro Pump Station (PS-5)	No	
Wastewater Management	Bahay Toro Pump Station (PS-6)	No	
Wastewater Management	Bahay Toro Pump Station (PS-8)	No	
Wastewater Management	Bahay Toro Pump Station (PS-9)	No	
Wastewater Management	Bahay Toro Pump Station (PS-10)	No	
Wastewater Management	Bahay Toro Pump Station (PS-11)	No	
Wastewater Management	Bahay Toro Pump Station (PS-12)	No	
Wastewater Management	Bahay Toro Pump Station (PS-13)	No	
Wastewater Management	Bahay Toro Pump Station (PS-14)	No	
Wastewater Management	Bahay Toro Weir	No	
Wastewater Management	Congressional Water Reclamation Facility	No	
Wastewater Management	Dagat-dagatan Water Reclamation Facility	No	
Wastewater Management	Dagat-dagatan Pump Station	No	
Wastewater Management	Del Monte Water Reclamation Facility	No	
Wastewater Management	Del Monte Lift Station (LS-1)	No	
Wastewater Management	Del Monte Pump Station (PS-1)	No	
Wastewater Management	Del Monte Pump Station (PS-2)	Yes	Decommissioned
Wastewater Management	Del Monte Pump Station (PS-4)	No	
Wastewater Management	Grant Water Reclamation Facility	No	
Wastewater Management	Kapiligan Lift Station (LS-1)	No	
Wastewater Management	Kapiligan Pump Station (PS-1)	Yes	Decommissioned
Wastewater Management	Kapiligan Pump Station (PS-2)	No	
Wastewater Management	Legal Water Reclamation Facility	No	
Wastewater Management	Legarda Lift Station	No	
Wastewater Management	Luneta Lift Station	No	
Wastewater Management	Malate Lift Station	No	
Wastewater Management	Paco Lift Station	No	
Wastewater Management	Paco Lift Station (LS-1)	No	
Wastewater Management	Paco Phase 2 Lift Station	No	
Wastewater Management	Paco Pump Station (PS-1)	No	
Wastewater Management	Paco Water Reclamation Facility	No	
Wastewater Management	Paltok Water Reclamation Facility	No	
Wastewater Management	Paltok Pump Station (PS-1)	No	
Wastewater Management	Paltok Pump Station (PS-2 and PS-4)	No	
Wastewater Management	Paltok Pump Station (PS-3)	No	
Wastewater Management	Paranaque Water Reclamation Facility	No	Under contractor's in 2019
Wastewater Management	Paranaque MHP A03	No	
Wastewater Management	Paranaque PS-13	No	

	Facility	Excluded?	Reasons for Exclusion
Wastewater Management	Paranaque PS-14	No	
Wastewater Management	Paranaque PS-16	No	
Wastewater Management	Paranaque PS-17	No	
Wastewater Management	Paranaque PS-21	No	
Wastewater Management	Paranaque PS-22	No	
Wastewater Management	Paranaque PS-25	No	
Wastewater Management	Paranaque PS-29	No	
Wastewater Management	Paranaque PS-34	No	
Wastewater Management	Paranaque PS-35	No	
Wastewater Management	Paranaque PS-36	No	
Wastewater Management	Paranaque PS-38	No	
Wastewater Management	Paranaque PS-39	No	
Wastewater Management	Paranaque PS-40	No	
Wastewater Management	Paranaque PS-41	No	
Wastewater Management	Paranaque PS-43	No	
Wastewater Management	Paranaque PS-44	No	
Wastewater Management	Paranaque PS-45	No	
Wastewater Management	Paranaque PS-47	No	
Wastewater Management	Paranaque PS-48	No	
Wastewater Management	Paranaque PS-51	No	
Wastewater Management	Paranaque PS-52	No	
Wastewater Management	Paranaque PS-53	No	
Wastewater Management	Paranaque PS-54	No	
Wastewater Management	Paranaque PS-58	No	
Wastewater Management	Paranaque PS-59	No	
Wastewater Management	Paranaque PS-61	No	
Wastewater Management	Paranaque PS-81	No	
Wastewater Management	Paranaque PS-82	No	
Wastewater Management	Paranaque PS-84	No	
Wastewater Management	Paranaque PS-86	No	
Wastewater Management	Pasay Water Reclamation Facility	No	
Wastewater Management	Pasay PS-1	No	
Wastewater Management	Pasay PS-2	No	
Wastewater Management	Pasay PS-3	No	
Wastewater Management	PhilamLife Imhoff	No	
Wastewater Management	Port Area Lift Station	No	
Wastewater Management	Project 7 Water Reclamation Facility	No	
Wastewater Management	Project 7 Pump Station (PS)	No	
Wastewater Management	Samson Water Reclamation Facility	No	
Wastewater Management	San Antonio Water Reclamation Facility	No	
Wastewater Management	San Antonio Pump Station (PS-1)	No	

	Facility	Excluded?	Reasons for Exclusion
Wastewater Management	Sewer Network Maintenance Office	No	
Wastewater Management	Sta. Cruz Lift Station	No	
Wastewater Management	Talayan Water Reclamation Facility	No	
Wastewater Management	Talayan Lift Station (LS-1)	No	
Wastewater Management	Talayan Lift Station (LS-2)	No	
Wastewater Management	Talayan Pump Station (PS-1)	No	
Wastewater Management	Talayan Pump Station (PS-2)	No	
Wastewater Management	Talayan Pump Station (PS-3)	No	
Wastewater Management	Talayan Weir	No	
Wastewater Management	Tandang Sora Water Reclamation Facility and Pump Station (PS-2)	No	
Wastewater Management	Tandang Sora Pump Station (PS-1)	No	
Wastewater Management	Tandang Sora Pump Station (PS-3)	No	
Wastewater Management	Tandang Sora Pump Station (PS-4)	No	
Wastewater Management	Tatalon Water Reclamation Facility	No	
Wastewater Management	Tatalon Pump Station (PS-1)	No	
Wastewater Management	Tatalon Pump Station (PS-2)	No	
Wastewater Management	Tatalon Lift Station (LS-2)	No	
Wastewater Management	Tatalon Lift Station (LS-3)	No	
Wastewater Management	Tondo Sewage Pumping Plant	No	
Wastewater Management	Vitas Barge Loading Facility	No	
Water Production	La Mesa Treatment Plant 1	No	
Water Production	La Mesa Treatment Plant 2	No	
Water Production	Putatan Treatment Plant 1	No	
Water Production	Putatan Treatment Plant 2	No	
Water Source	CPF Office	No	
Water Source	Bicti Desilting Basin	No	
Water Source	Ipo-Office Building	No	
Water Network	Acacia Pump	Yes	Decommissioned
Water Network	Acacia-Adelfa Pump	Yes	Decommissioned
Water Network	Aguinaldo	No	
Water Network	Alabang Junction	Yes	Inactive
Water Network	Alazap Pump Station	No	
Water Network	Algeciras Pumping Station and Reservoir	No	
Water Network	Amlac	No	
Water Network	Antonio	Yes	Decommissioned
Water Network	Apitong Pump	Yes	Decommissioned
Water Network	Assistant 1	Yes	Standby
Water Network	Assistant 2	No	
Water Network	ASV DW# 4 (St. Jude)	No	
Water Network	ASV DW#3 (Southvale)	No	
Water Network	Ayala Alabang Reservoir 1	No	

	Facility	Excluded?	Reasons for Exclusion
Water Network	Ayala Alabang Reservoir 2	No	
Water Network	Ayala Southvale	No	
Water Network	Bacoor Central	Yes	Decommissioned
Water Network	Bacoor Pump Station	No	
Water Network	Baesa on-line	No	
Water Network	Baesa Pump Station	No	
Water Network	Bagbag Reservoir & Pumping Station	No	
Water Network	Bagong Pook	Yes	Decommissioned
Water Network	Bagong Silang Phase 10	No	
Water Network	Bagong Silang Phase 4	Yes	Decommissioned
Water Network	Bagong Silang Phase 9	No	
Water Network	Baler	No	
Water Network	Balsahan	Yes	Decommissioned
Water Network	Binuksuk Reservoir	No	
Water Network	Bliss	Yes	Decommissioned
Water Network	Bougainvilla pump	Yes	Decommissioned
Water Network	Brittany	Yes	Decommissioned
Water Network	Buendia	Yes	Decommissioned
Water Network	Buensuceso	Yes	Decommissioned
Water Network	Caloocan Pumping Station and Reservoir	No	
Water Network	Castle Spring	Yes	Not operational since Sept. 15, 2008
Water Network	Champaca	Yes	Decommissioned
Water Network	Christina	Yes	Decommissioned
Water Network	Commonwealth Pump Station	No	
Water Network	Coral	Yes	Decommissioned
Water Network	Country Club Pump	Yes	Decommissioned
Water Network	D. Tuazon Pump Station	No	
Water Network	Daang Bukid	Yes	Decommissioned
Water Network	Daang Hari Pump Station	No	
Water Network	Dangay	No	
Water Network	Dampalit Mini Booster	Yes	Decommissioned
Water Network	Del Rey III	Yes	Decommissioned
Water Network	DMMA	No	
Water Network	Don Aguedo	Yes	Decommissioned
Water Network	Don Jesus	No	
Water Network	Don Jose	Yes	Decommissioned
Water Network	Don Vicente	No	
Water Network	Dona Juana	Yes	Decommissioned
Water Network	Dulong Bayan	Yes	Decommissioned
Water Network	EDSA	Yes	Decommissioned
Water Network	Ermita Pump Station	No	

	Facility	Excluded?	Reasons for Exclusion
Water Network	Esmeralda	Yes	Decommissioned
Water Network	Espiritu Pump Station	No	
Water Network	Fairview # 3 Pumping and Reservoir	No	
Water Network	Fairview # 4 Pumping and Reservoir	Yes	Decommissioned
Water Network	Fairview Ruby Booster Station	No	
Water Network	Fatima	No	
Water Network	France-Germany	No	
Water Network	Filinvest 1 Deepwell 1	Yes	Decommissioned
Water Network	Filinvest 2 Deepwell 3	Yes	Inactive
Water Network	Filinvest 2 Deepwell 4	Yes	Not Operational since May 22, 2009
Water Network	Filinvest 2 Deepwell 5	Yes	Not Operational since May 22, 2009
Water Network	Filinvest 2 Deepwell 6	Yes	Inactive
Water Network	Filinvest 2 Deepwell 7	Yes	Inactive/Standby
Water Network	Filinvest 2 Deepwell 8	Yes	Inactive
Water Network	Garcia Extension	Yes	Inactive
Water Network	Georosville	Yes	Decommissioned
Water Network	Good Harvest	Yes	Inactive/Standby
Water Network	Goodwill	No	
Water Network	Greenfields #1	Yes	Decommissioned
Water Network	Greenfields #3	Yes	Decommissioned
Water Network	Greenview # 1	Yes	Decommissioned
Water Network	Greenview #2	Yes	Decommissioned
Water Network	Greenview #3	Yes	Decommissioned
Water Network	Hemlock Mini Booster	Yes	Decommissioned
Water Network	IBP Deepwell	Yes	Decommissioned
Water Network	Imus Sector	Yes	Inactive
Water Network	J. Felipe	No	
Water Network	Jordan Park Homes	Yes	Inactive/Standby
Water Network	Josephine	Yes	Decommissioned
Water Network	JPA Subdivision	Yes	Decommissioned
Water Network	Karuhatan	No	
Water Network	Kingstown Deepwell 1	Yes	Inactive/Standby
Water Network	Kingstown Deepwell 2	Yes	Inactive/Standby
Water Network	La Mesa North A Annex	No	
Water Network	La Mesa North C Annex	No	
Water Network	La Mesa Pump Station	No	
Water Network	La Salle Mini Booster Ayala Alabang	Yes	Decommissioned
Water Network	Lagro Deepwell 1	Yes	Decommissioned
Water Network	Lakeview	Yes	Inactive/Standby
Water Network	Lebanon Mini Booster	No	

	Facility	Excluded?	Reasons for Exclusion
Water Network	Litex Pump Station	No	
Water Network	Luzon Pump	Yes	Standby
Water Network	Ma. Cristina Pump	Yes	Inactive/Standby
Water Network	Madrigal pump	Yes	Inactive/Standby
Water Network	Magallanes	No	
Water Network	Magasalang 2A	Yes	Inactive/Standby
Water Network	Magasalang 2D	No	Inactive/Standby
Water Network	Magcauas	Yes	Decommissioned
Water Network	Magdalo	Yes	Inactive/Standby
Water Network	Magdiwang	No	
Water Network	Maharlika Mini Booster	No	
Water Network	Maligaya	No	
Water Network	Malamok	Yes	Decommissioned
Water Network	Manalac	Yes	Decommissioned
Water Network	Manga Mini Booster	No	
Water Network	Marcos Alavrez Pump Station	No	
Water Network	Maricaban 1	Yes	Decommissioned
Water Network	Maricaban 2	Yes	Decommissioned
Water Network	Maricaban 3	Yes	Decommissioned
Water Network	Mc Donalds Pump	Yes	Inactive as of Apr. 25, 2012
Water Network	Militar	Yes	Decommissioned
Water Network	Mindanao	No	
Water Network	Molino DW	No	
Water Network	Molino IB	No	
Water Network	Mutual Homes 1	No	
Water Network	Naga	Yes	Inactive/Standby
Water Network	Natividad 1 (Deparo)	Yes	Inactive
Water Network	Natividad 2 (Deparo)	Yes	Inactive
Water Network	Natividad 4 (Deparo)	Yes	Inactive
Water Network	Nelsonville	Yes	Inactive
Water Network	New Crescini	No	
Water Network	New Mutual	Yes	Inactive/Standby
Water Network	New Noveleta 4	Yes	Standby
Water Network	New Noveleta Central Deepwell	Yes	Decommissioned
Water Network	New Pio online booster	Yes	Inactive
Water Network	New Reparo	Yes	Inactive
Water Network	New Well Field 1	Yes	Inactive
Water Network	New Well Field 2	Yes	Inactive/Standby
Water Network	New Well Field 3	Yes	Inactive
Water Network	New Well Field 5	Yes	Inactive
Water Network	New Well Field 6	Yes	Inactive

	Facility	Excluded?	Reasons for Exclusion
Water Network	New Well Field 7	Yes	Inactive
Water Network	New Well Field 8	Yes	Inactive
Water Network	Niog	Yes	Decommissioned
Water Network	North Point	Yes	Inactive
Water Network	Northridge Park	Yes	Inactive
Water Network	Novaliches Pumping Station	No	
Water Network	Noveleta Pump Station	No	
Water Network	Old Villamor Booster Station	Yes	Inactive
Water Network	Pag-asa Mini Booster	Yes	Inactive
Water Network	Pagcor Pump Station	No	
Water Network	Pamahay Homes	Yes	Inactive
Water Network	Pandawan	No	
Water Network	Parkland	No	
Water Network	Pasay Pumping Station and Reservoir	No	
Water Network	Patindig Araw Pump Station	No	
Water Network	Pedro Diaz	Yes	Inactive
Water Network	Phase 10 Mini Booster	Yes	Inactive/Standby
Water Network	Philtrade Mini Booster Plant	Yes	Inactive/Standby
Water Network	Pio Mini Booster	No	
Water Network	Plaza Garcia	Yes	Decommissioned
Water Network	Poblacion	No	
Water Network	Primary Network	No	
Water Network	Putatan	No	
Water Network	Putatan Deepwell # 2	Yes	Inactive/Standby
Water Network	Putatan Deepwell # 3	Yes	Inactive/Standby
Water Network	Putatan Deepwell # 6	Yes	Inactive/Standby
Water Network	R. Valenzuela	No	
Water Network	Rainbow	No	
Water Network	Remarville	No	
Water Network	Reparo	No	
Water Network	Richland 1	Yes	Inactive
Water Network	Rivero	No	
Water Network	Rockville 2	No	
Water Network	Rolling Meadows 1	No	
Water Network	Rolling Meadows 2	Yes	Decommissioned
Water Network	Rosal Pump	Yes	Inactive
Water Network	Sacred Heart Pump Station	No	
Water Network	Sacred Heart Reservior	No	
Water Network	Samonte Park	Yes	Decommissioned
Water Network	Sampaguita	No	
Water Network	San Juanico Pump	Yes	Inactive/Standby

	Facility	Excluded?	Reasons for Exclusion
Water Network	San Nicolas	Yes	Decommissioned
Water Network	San Pedro 7	Yes	Inactive
Water Network	Saranay	No	Inactive
Water Network	Severina	No	
Water Network	Silverio	Yes	Inactive
Water Network	Smile Citihomes	Yes	Inactive
Water Network	South Greenheights	No	
Water Network	Southvale Deepwell 3	Yes	Inactive
Water Network	Southvale Deepwell 4	Yes	Inactive
Water Network	Sta. Quiteria	No	
Water Network	Sucat	Yes	Decommissioned
Water Network	Sugartowne	Yes	Inactive/Standby
Water Network	Sunriser	No	
Water Network	Talaba	Yes	Decommissioned
Water Network	Talisay Pump	Yes	Inactive/Standby
Water Network	Tamaraw	No	
Water Network	Tanada	Yes	Inactive
Water Network	Tandang Sora	No	
Water Network	Taysan Pump	Yes	Inactive/Standby
Water Network	Tirona	Yes	Decommissioned
Water Network	Tondo Pumping Station	No	
Water Network	Torresville	No	
Water Network	Tunasan	Yes	Decommissioned
Water Network	University Pump	Yes	Inactive/Standby
Water Network	Versailles	No	
Water Network	Victoria	No	
Water Network	Villa Carolina	Yes	Decommissioned
Water Network	Villa Gracia	Yes	Inactive
Water Network	Villamor Pump Station	No	
Water Network	Vitalezz	Yes	Inactive
Water Network	Vitas 1 Mini Booster	No	
Water Network	Vitas 2 Mini Booster	No	
Water Network	WNET Office	No	
Water Network	Yengco Street	Yes	Decommissioned
Water Network	Zapote Mini Booster	Yes	Decommissioned
Water Network	Toclong	No	

Appendix 3 – Information Management Procedure (Data Collection)

