

Chapter 5

Environmental Impacts

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Chapter 5: Summary of 2021 Highlights



To achieve sustainable development, the impacts of commercial activities on the environment is significant. PEC comprehensively examines all management activities related to environmental impacts and influences, from the climate governance management approach, water resource and waste management, to the toxic and priority substances of concern. We further took the strategies to mitigate the effects of climate change in response to the climate emergency faced by all humankind. The greenhouse gas (GHG) taskforce has been formulated at the Taichung Plant, which pioneers our efforts toward climate governance, have formulated the “Greenhouse Gas Management Procedures” currently, as well as the GHG inventories for 2019 had been completed and was verified by a third-party for ISO 14064-1 in October 2021. In 2022, we expect to continue the GHG inventories of Taichung Plant for 2020 and 2021. We also plan to deploy ISO 45001: 2015 Environmental Management System in 2023. By building an environmental management system, enterprises can find potential environmental problems during the entire product life cycle, including production, sales, consumption, and waste disposal, and to improve accordingly, thereby reducing environmental impacts and energy consumption, as well as the waste of raw material. This would enhance the enterprise's productivity and increase its operating revenues, and furthermore, to ensure that the goal of being friendly to the environment during operating processes could be met.



Performance Highlights

Zero penalty

No incidents of violation of environmental laws and regulations

Zero leakage

Toxic substances are properly managed without accidental leakage

Zero emission

No Ozone Depleting Substances (ODS) were emitted during production process

Introduction of the Management System

It is expected to implement ISO 45001:2015 Occupational Safety and Health Management System by 2023

Greenhouse Gas Management

Completed ISO 14064-1:2018 Greenhouse Gas Inventories In 2019, and received third-party certifications

7.779 million liters of process water is recycled and reused

Effectively utilize water resources throughout the production process

Air pollutant emissions are lower than the legal value

Monitor air pollutant emission data actively

Reduce CO₂e intensity per unit output by 40.5%

Mitigate the impacts of GHGs on the globe

Reduce waste intensity per unit output by 21.3%

Improve productivity and reduce the impacts on the environment

5-1 Climate Governance

Management Approach to Climate Governance

★ Materiality Topic

GRI | 103-2-3

Climate change has become an ongoing issue in the environment. To respond to the United Nations' Sustainable Development Goals (SDGs) 13 - Climate Action, PEC has introduced the training course for Task Force on Climate-related Financial Disclosures (TCFD) framework for the first time. By actively addressing the challenges and opportunities from climate change and providing relevant and reliable financial information to stakeholders, we aim to jointly preserve the sustainable development of the environment.



Policies

Internal Policy

Comply with the "Greenhouse Gas Management Procedures"

External Guidelines

"ISO 14064-1:2018 Greenhouse Gas Inventories", Taiwan's Greenhouse Gas Reduction and Management Act, Task Force on Climate-related Financial Disclosures (TCFD) framework, and Corporate Governance 3.0 - Sustainable Development Blueprint, and the Regulations Governing Information to be Published in [Annual Reports](#) of Public Companies.



Commitments

In line with SDG 13 - Climate Action, PEC has introduced the training course for TCFD framework for the first time. The four core elements of TCFD will be formally introduced in 2023, including Governance, Strategy, Risk Management, Metrics and Targets. By actively addressing the challenges and opportunities from drastic climate change and providing relevant and reliable financial information to stakeholders, we aim to jointly preserve the sustainable development of the environment.



Responsibilities

- The Board of Directors, Auditing Office, Corporate Governance Officer
- Execution Center for Corporate Sustainability - Environmental Friendliness Taskforce
- Greenhouse Gas Inventories Promotional Taskforce at Taichung Plant



Resources

- GHG Taskforce at Taichung Plant is comprised of the following departments: 15 persons from administrations department, factory affairs department, biopharmaceutical manufacturing department, injection preparations department, materials management, and quality analysis department
- Task Force on Climate-related Financial Disclosures (TCFD) training was attended by 40 members from the ESG functional groups
- Expense for setting up the GHG inventories project at Taichung Plant: Approximately NT\$300,000 for external consultants and verification fees



Goals & Targets

Short-term Goals for 2022

- GHG inventory improvement plan at Taichung Plant - systematic procedural improvements or optimizations
- Continuing the ISO 14064-1: 2018 GHG inventory at Taichung Plant, we expect to take inventories of GHG emissions in 2020 and 2021 by 2022 to meet the criteria for Corporate Governance 3.0
- In line with regulatory requirements and the criteria for Corporate Governance 3.0, information on climate governance is disclosed in the [Annual Report](#) and Sustainability Report

Mid-term Goals for 2023-2025

- Implement ISO 14001 Environmental Management System to strengthen the environmental, safety, and health management system
- Continue to implement ISO 14064-1: 2018 GHG Inventories
- Continue to strengthen the TCFD organizational risk management identification system training.

Long-term Goals for 2026

- Continue to implement ISO 14064-1: 2018 GHG inventories
- Continue to implement ISO 14001 Environmental Management System
- Continue to evaluate potential impacts from climate change in PEC's strategic planning, analysis, and risk management in line with the TCFD framework



Evaluation of Management Approach

Mechanism of Evaluation

- Internal audit mechanisms: Carry out internal training, data collection, internal audit, and external verifications in line with “Greenhouse Gas Procedures”
- External audit mechanisms: Corporate governance 3.0 evaluation indicators
- TCFD framework

2021 Assessment Result

- Taichung Plant was the first in PEC to form a GHG Taskforce, the plant has already completed the 2019 GHG inventories in October 2021 and received ISO 14064-1 third-party external assurance certification.
- Introduced TCFD educational training course for the first time; total number of participants from the ESG functional groups was 40, reaching a 76.92% attendance rate. Expected benefits from current training: By understanding the climate-related risks and opportunities in our corporation and value chain, we hope to use such awareness as important information in internal decision-making to help PEC to effectively communicate with the competent authority, investors, and other stakeholders.
- Replaced 36 T5 lights with LED lights at the office, each can conserve 26 watts of electricity per hour.

CPDC GHG Emission Statistics

Total CO₂ emissions have been reduced by 11.9%.

Mitigate the impacts of GHG on the globe

CO₂ equivalent emission intensity per unit output has been reduced by 40.6%.

In 2021, PEC’s Taichung Plant completed ISO 14064:2018 GHG inventories for 2019 and third-party assurance has been received. In 2019, PEC cumulatively emitted 4,585.027 tons CO₂e of greenhouse gases, and we expect to take inventories by 2022 for the emission in 2020 and 2021. We hope that we can use the TCFD framework to disclose our risks and opportunities related to climate change gradually.

PEC’s energy consumption mostly consists of two major categories, namely purchased electricity and natural gas. As a pharmaceutical industry, we are required to comply with Good Manufacturing Practice (GMP) regulations and have to maintain a certain level of cleanliness and quality control even during non-production periods, which made it difficult to reduce the total amount of basic electricity consumption and carbon emissions. But we are still devoted in several energy-saving actions, and regularly reviewing the results of the implementation of purchasing and replacing the equipment and appliances, saving electricity and water, and formulating of improvement measures through tracking mechanisms and difference analysis. We will continue to work towards the goal of reducing the intensity of energy consumption and reducing the impact of our operations on the environment.



2019 Statement on GHG Inventories

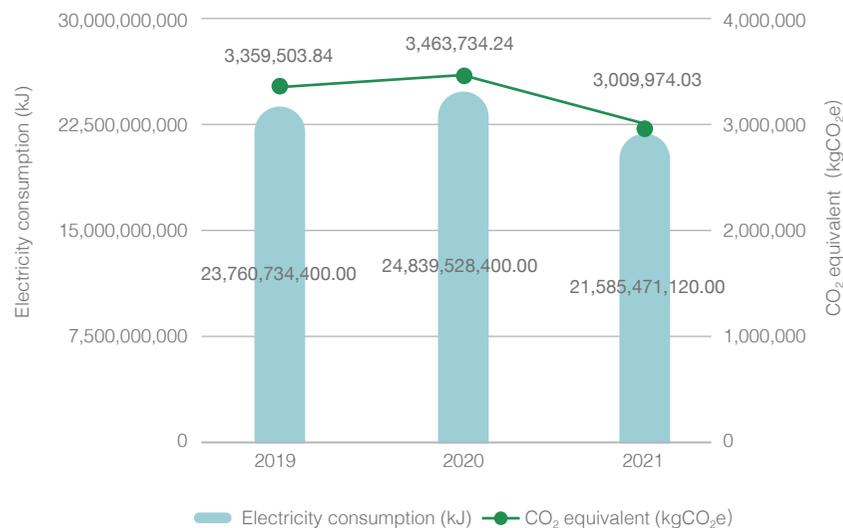
Energy consumption and greenhouse gas emission statistics of PharmaEssentia headquarters and Panco Healthcare for the past 3 years

GRI | 302-1 GRI | 302-3

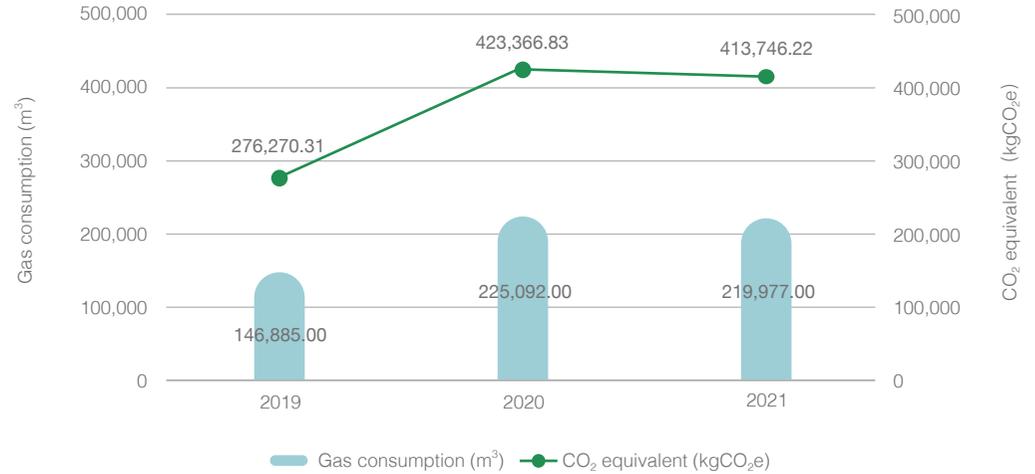
Type	Electricity				Natural Gas			Total	Emission intensity per unit product
	Electricity from renewable energy (kJ)	Electricity from non-renewable energy (kJ)	Total electricity intensity (kJ/g)	CO ₂ equivalent (kgCO ₂ e)	m ³	Natural gas intensity (kJ/g)	CO ₂ equivalent (kgCO ₂ e)	CO ₂ equivalent (kgCO ₂ e)	kgCO ₂ e/g
2019	0	23,760,734,400.00	387,613,938.01	3,359,503.84	146,885.00	2,396.17	276,270.31	3,635,774.15	59,311.16
2020	0	24,839,528,400.00	577,394,895.40	3,463,734.24	225,092.00	5,232.26	423,366.83	3,887,101.07	90,355.67
2021	2,789,564,400.00	21,585,471,120.00	382,894,054.67	3,009,974.03	219,977.00	3,455.50	413,746.22	3,423,720.25	53,781.34

- Note 1: The data of electricity, natural gas and GHG emissions in 2019 do not include Panco Healthcare.
- Note 2: The GHG statistics method uses the “emission coefficient method,” i.e., “activity data” is multiplied with the corresponding “emission coefficients,” and then the various GHGs global warming potential (GWP) is converted into CO₂ emission equivalents.
- Note 3: Electricity emissions are calculated according to Article 28 of the Electricity Law (110.11.03), and the carbon dioxide equivalent coefficients announced by the Bureau of Energy, Ministry of Economic Affairs, are used to convert the carbon dioxide equivalent coefficients of electricity. The coefficients used for 2019 and 2020 are 0.509 and 0.502 kilograms of carbon dioxide equivalent (kgCO₂e) for 1 kWh of electricity. The latest known coefficient for 2021 is 0.502.
- Note 4: The greenhouse gas emission coefficient required for greenhouse gas emissions is based on the “Greenhouse Gas Emission Coefficient Management Table 6.0.4 Edition” announced by the Environmental Protection Administration, Executive Yuan, and use the GWP of various GHGs in the IPCC AR5 (2014) report as the basis for calculation.
- Note 5: Emissions intensity is measured using total annual production. Since we mostly adjusted total production output based on clinical trial requirements from 2019 to 2020, and since we have not yet entered into mass production and stable productivity, there still remains some fluctuations in our CO₂ emission intensity per unit output production.

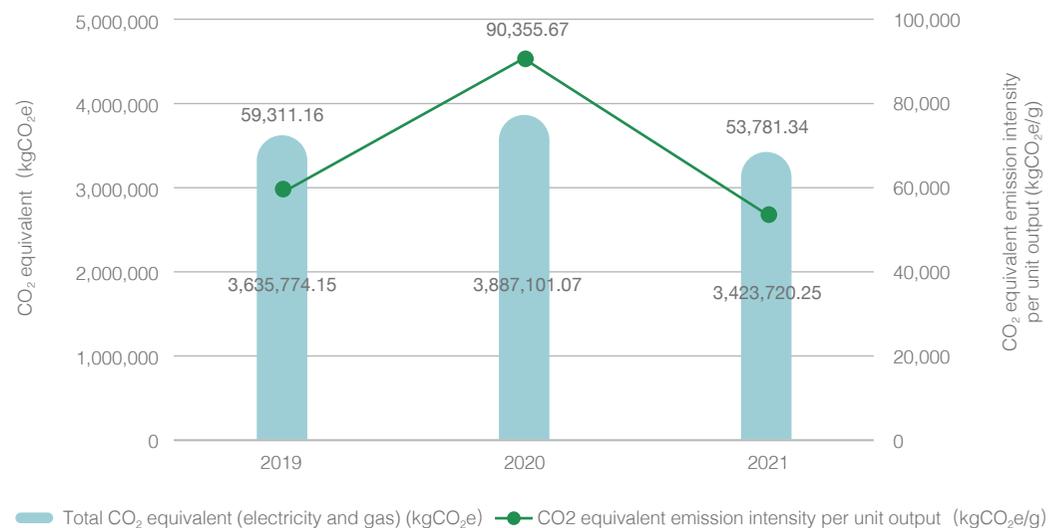
Electricity use and greenhouse gas emissions in the past three years



Gas consumption and greenhouse gas emissions in the past three years



Statistics of carbon dioxide equivalent emission intensity per unit output in the past three years



Statistics of Air Pollution GRI | 305-6-7

Regarding the emission of air pollutants, as PEC uses boilers in the manufacturing process, the main emission source is the nitrogen oxides from combustion of the boilers. PEC prudently treats our emissions, and does not use or emit ozone depleting substances (ODS), which are regulated by the Montreal Protocol, nor do we emit any Persistent Organic Pollutants (POPs). Additionally, we also regularly test and report fixed air pollution sources in line with the regulations from the Environmental Protection Administration, which is outsourced once a year to EPA-certified testing agency Ji Chuan Environmental Technology Co., Ltd. The testing results indicated that air pollutant emissions are lower than the statutory levels, and there were no incidents of violation of environmental laws and regulations, thereby fulfilling our responsibilities to environmental friendliness in all production processes.

PharmaEssentia Headquarter - Information on major gas emissions affecting the environment for the past 3 years (Unit: kg)

Air pollutants	Nitrogen oxides (NO _x)	Sulfur oxides (SO _x)	Volatile Organic Compounds (VOCs)	Hazardous Air Pollutants (HAP)	Particulate Matter (PM)
2019	649.00	102.00	10.00	8.00	8.00
2020	415.70	29.60	13.30	Lack of Data	7.00
2021	352.41	0	734.31	168.54	14.77

Note: Panco Healthcare does not emit any air pollutant included in these items.

5-2 Waste Management

Waste Management Approach Materiality Topic

In order to manage our waste effectively, we review the detailed processes of waste generation, removal, treatment and recycling from a life-cycle perspective. Through a systematic waste management policy, we avoid the risk of improper treatment that may lead to illegal concerns or pollution of the environment. We also actively assign our business executives to participate in external environmental seminars and regulatory presentations. In 2021, we sent our staff to eight external training sessions to keep abreast of various environmental regulations and the latest trends. By doing so, we can effectively follow the changes in regulations and keep up with the trends when we promote the actions to reduce emissions at source, adjust our process design, or improve the utilization of consumables. With that, we can reduce the waste of resources, minimize the environmental pollution, and achieve the specific practice of friendly environment. For our environmental protection expenditure, please see our [2021 Annual Report](#) for relevant disclosures.

GRI | 103-2-3 GRI | 306-1-2



Policies

Internal Policy

Follow the "Environmental Safety and Health Policy" and "Waste Management Procedures."

External Guidelines

Regulations for the Review of Business Waste Cleaning Plans



Commitments

In addition to complying with environmental protection laws and regulations, the manufacturers are also required to implement waste flow control together to fulfill the commitment of being friendly to the environment.



Responsibilities

- The environment friendly team is responsible for developing, planning and promoting waste management issues, and collaborating with R&D, environmental safety and production units to implement waste management responsibilities.
- Execution Center for Corporate Sustainability- Environmental Friendliness Taskforce



Resources

In 2021, the cost of business waste removal and disposal amounted to approximately NT\$608,000, consisted of NT\$223,000 for non-hazardous waste and NT\$385,000 for hazardous waste, and have set up dedicated personnel to such tasks.

Short-term Goals for 2022

- Following the efforts in 2021, we will continue to check the output of waste chemicals (including toxic substances) and follow-up treatment procedures; besides, we will submit the amendment of the "Industrial Waste Cleanup Plan" and apply the approval of the disposal of toxic substances to the environmental protection authority. And we will keep the treatment of waste chemicals (including toxic substances) legally to avoid violating environmental protection laws and regulations.

Mid-term Goals for 2023~2025

- To reduce the burden and impact on the environment and implement environmental protection obligations, we will introduce the ISO14001 environmental management system through PDCA to strengthen the environmental management in the factory and incorporate the concept of life cycle assessment.
- Reinforce the waste management responsibilities of each unit.
- Seek alternative solutions for green products based on waste materials, increase the frequency of reuse, promote resource recycling, and reduce the total generated amount of waste.
- Strengthen the auditing of waste manufacturers and use compliance performance as the evaluation criterion for the selection of future manufacturers.

Long-term Goals for 2026

- Implement the ISO14001 environmental management system, and follow the environmental assessment results and recommendations for improvement.



Goals & Targets



Evaluation of Management Approach

Mechanism of Evaluation

- Internal audits: Audit the waste management companies from time to time in each year and review our internal waste classification and storage management process, as well as evaluate the waste intensity per unit output routinely. The calculation method is based on an evaluation standard of "Waste output (unit: ton)/production output (unit: per gram)".
- External verifications: Competent authorities including the Central Taiwan Science Park Administration and Environmental Protection Bureau of Taichung City Government will conduct routine legal compliance audits on the "Business Waste Cleanup Plan," waste removal and disposal procedures, and waste storage sites.

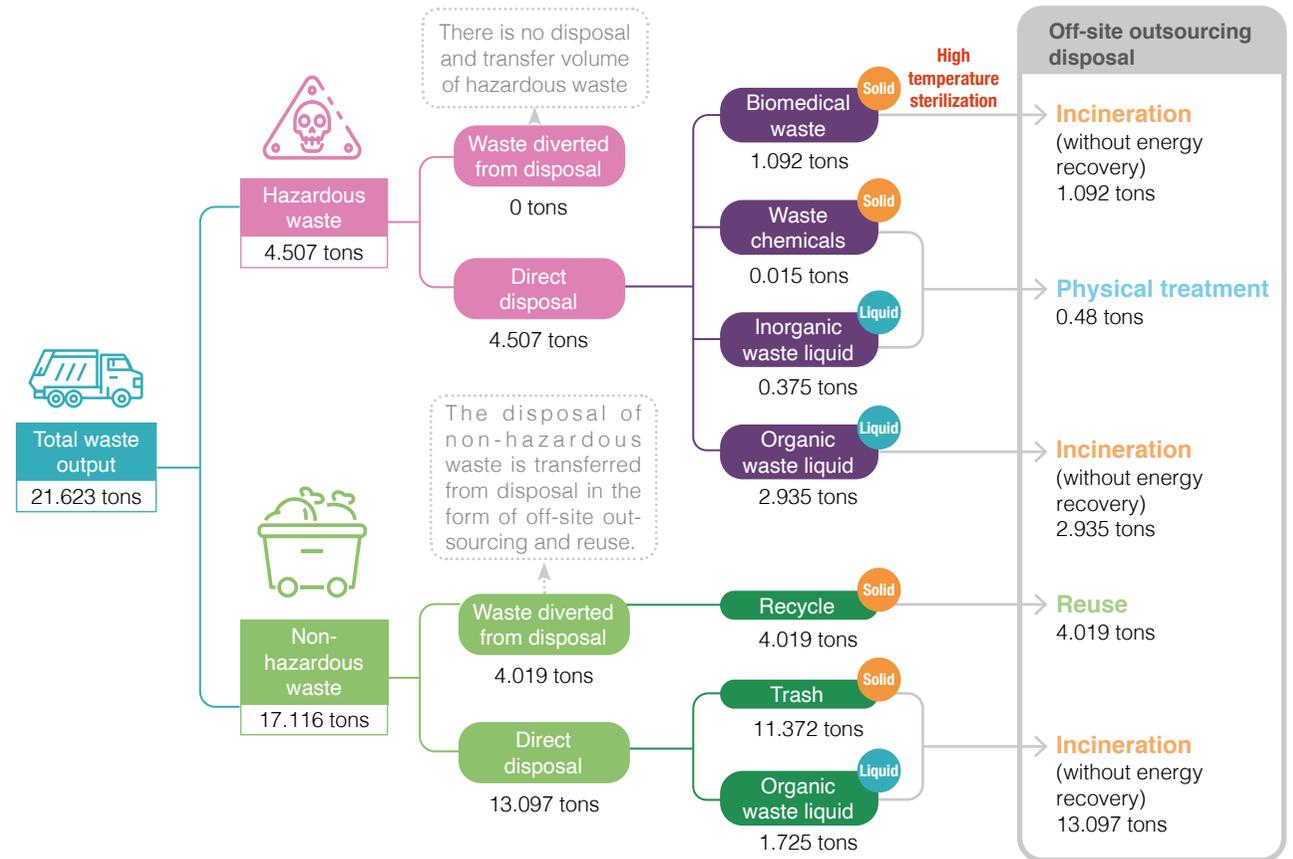
2021 Assessment Result

- In 2021, every 1 gram of product produced generates 0.3397 tons of waste, showing a 21.3% decrease from 2020.
- Auditing results: We audited 2 waste disposal vendors and conducted 4 audits over temporary waste storage areas, all complied with regulations.
- Improvements: We continue to implement the existing SOP and to review and amend the "Best Waste Cleanup Plan" on a timely basis to meet regulatory requirements. The Taichung plant commissioned a legal vendor to assist in the removal of waste chemicals (including toxic chemicals) in 2021, and after the environmental protection authority agreed to complete proper disposal of the waste, a copy was made available for inspection.

Waste Output and Disposal GRI | 306-2-5

The hazardous waste of PEC is specially classified and sealed in specific containers, and labeled with information including its name, weight, waste code and date, and then entrusted to qualified vendors for further processing. Hazardous liquid waste related to biopharmaceuticals, which may be infectious, are first sterilized using high temperature, then entrusted to qualified vendors for further processing. Moreover, the toxic liquid wastes are mostly chemical wastes, which are stored according to their flammability or acid-base value. When liquid wastes are collected, the handling personnel must pay attention to potential chemical reactions caused by the mixing of the liquid wastes, and at the same time, fill out the “Liquid waste mixture form” and affix it on the liquid wastes container to facilitate subsequent clearance and processing from contractors.

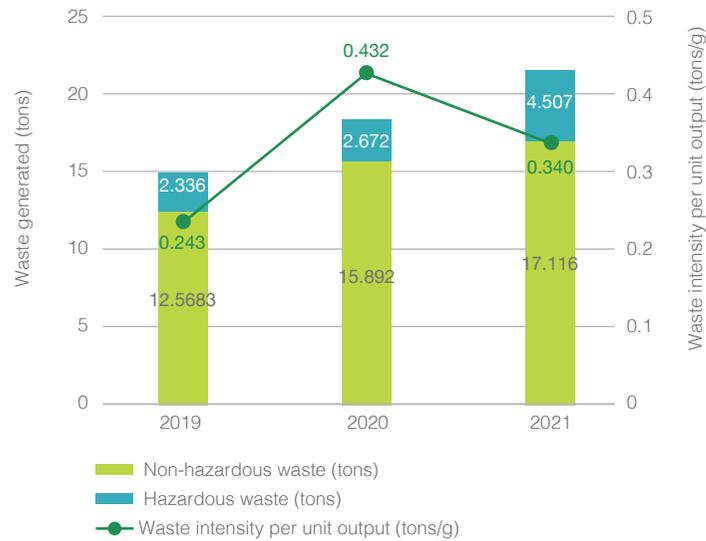
Non-hazardous waste is separately stored at temporary waste storage area based on its nature before further processing. Our waste disposal methods include: General trash and recyclable trash. In terms of waste disposal, we prioritize reuse, which is the friendliest to the environment, followed by recycling; if the wastes cannot be recycled and reused, they will undergo intermediate handling procedures, such as incineration or burial, or final disposal. The waste disposal companies contracted by the Company are legally registered class A licensed waste removal/processors regardless responsible for removal or final disposal. We also operate in a “tripartite checklist operation,” which requires the completion of the process by the Company, the cleaning company, and the final treatment plant with a seal, and then finally reporting to the EPD official website to complete the process in order to control and manage the final flow of waste.



GRI | 306-3

Through capacity and efficiency enhancements in 2021, the waste intensity from PEC’s headquarters and Taichung Plant have been reduced by 21.3% from the previous year. In the future, we will continue to reduce the amount of waste, improve the efficiency of unit output, and reduce the intensity of unit waste output as our goal, and follow short-, medium-, and long-term goals and action to refine management policies and implement management actions. Panco Healthcare did not generate any hazardous waste, and the only waste generated was domestic refuse, which is lower than the lowest 0.5 tons threshold set for businesses. The waste was entrusted to a qualified vendor for clearance and incineration.

Statistics of waste generated and waste intensity per unit output in the past three years



Note 1: The data for 2019 do not include Panco Healthcare.

Note 2: Emissions intensity is measured using total annual production. Since we mostly adjusted total production output based on clinical trial requirements from 2019 to 2020, and since we have not yet entered into mass production and stable productivity, there still remains some fluctuations in our waste emission intensity per unit output production.

5-3 Hazardous Substance Management

★ Materiality Topic

Hazardous Substance Management Approach

PEC production processes use certain toxic and concern chemical substances regulated by the EPA. Therefore, in terms of chemical toxicant management, PEC is focused on source management and its proper storage and usage. At the same time, we also stipulate written records of usage status to manage the flow of chemical toxicants and prevents toxicant pollution on the environment and human health.

GRI | 103-2-3

Policies

Internal Policy
Adhere to the "Environmental Safety and Health Policy" and "Chemical Hazard Management Procedure."

External Guidelines
Toxic and Concerned Chemical Substances Control Act

Commitments

Comply with environmental laws and regulations, implement toxic chemical management to avoid disasters that cause environmental pollution or harm to human health.

Responsibilities

The actual use, maintenance, management and operation of toxic chemicals are the responsibility of the research and development or use unit, while the rest are the joint responsibility of environmental safety, use and storage units for the management of toxic chemicals.

Resources

- The cost of disposal of hazardous waste in 2021 amounted to approximately NT\$385,000 and the dedicated personnel was set up to handle all issues related to waste management. The annual chemical toxicant hazard drill was postponed to January 11, 2022 due to the pandemic.
- The QC department has designated 2 persons to participate in the professional chemical and toxicant response - operator training organized by the Management Center of the Central Taiwan Science Park, and they passed the training and obtained professional licenses (fees were paid by the CTSP project plan).
- ESH department designated 1 person to participate in the professional chemical and toxicant response - general training, and passed the training and obtained professional license (the person will serve as a point of contact for the chemical and toxicant disaster response organization at the plant).



Goals & Targets

Short-term Goals for 2022

- Implement the concepts of toxic chemical hazards and emergency response for toxic chemical operators (and departments), assign personnel to participate in external training to obtain qualifications, and implement daily toxic chemical disaster response and drills.

Mid-term Goals for 2023~2025

- Strengthen the awareness of chemical hazards (including toxic chemicals), risk assessment, and disaster emergency response management in the plant to reduce the risk of chemical operation to personnel.

Long-term Goals for 2026

- Extend the use period of chemicals and reduce chemical waste by reducing 2~3% per year to achieve chemical waste reduction measures.



Evaluation of Management Approach

Mechanism of Evaluation

Taichung Environmental Protection Bureau visits the plant to check the implementation of toxic chemical operations.

2021 Assessment Result

No major violations

Classification and Control of Toxic and Chemical Substances

PharmaEssentia classifies toxic chemicals according to the definition of the Toxic and Concerned Chemical Substances Control Act, and stores the listed toxic chemicals in explosion-proof fume hood in the laboratory according to different categories. The Company's classification and control measures are as follows.

Category

Type 1 chemicals

Difficult to decompose material, meaning that it is not easy to decompose in the environment or due to bioaccumulation, bioconcentration, biotransformation and other effects, resulting in pollution of the environment or harmful to human health.

Type 2 chemicals

Chronic toxic substances, which have the effect of causing tumors, impaired fertility, malformations, mutations of genetic factors or other chronic diseases.

Type 3 chemicals

Acute toxic substance, the chemical substance will immediately endanger human health or biological life after exposure.

Type 4 chemicals

Endocrine disruptors or those who pollute the environment and endanger human health.



Fume hood for toxic chemical operations.



Explosion-proof fume hood for storage of toxic substances in tubes.

Management procedures



Toxic Chemical Disaster Response

To protect the safety of employees, we have formulated emergency response procedures for toxicant leakage and subsequent containment, and we can quickly and effectively complete response procedures by following the four major steps: report, special dressing, leakage treatment, and decontamination. Emergency response equipment are also prepared in the laboratories and are available for employees to use in emergencies. The status of the equipment and their safety inventory levels are also checked on a monthly basis. In addition, we also conduct toxic and chemical spill management disaster drills and biosafety drills from time to time in each year to ensure that employees can respond immediately and quickly to reduce the impact of disasters and maintain workplace safety in the event of an emergency.

Future, in accordance with the Toxic and Concerned Chemical Substances Control Act, we will also set up professional response personnel for toxic and chemical substances in plants to take necessary protective, response and cleanup measures in the event of an accident, and to implement toxic and chemical disaster response operations and education and training for toxic and chemical substance operators in plants.

Case Study

Emergency Response Exercise for Toxic and Chemical Leakage

- Setting the drill scenario: Type 1 toxic chemical accidentally leaked during operation
- Participants: A total of 16 colleagues from departments related to manufacturing processes from Taichung Plant.

Drill response procedures

1

Report

1. Initiate toxic chemical spill reporting procedure
2. Alert the ESH personnel and ESH supervisor at the plant
3. Notify toxic chemical emergency response personnel to prepare for response materials and to support in response measures
4. Personnel evacuation and access control outside the parameters of the disaster site



2

Special dressing

Before entering the site, emergency personnel should wear Class C protective clothing, filter canister type gas mask, chemical protective gloves, chemical protective boots and other equipment.



3

Leakage treatment

1. After the emergency personnel enter the site they should check and confirm that the operator has completed the decontamination and ask the enforcement personnel to retreat and leave.
2. Emergency personnel perform disaster control operations.
3. After the spilled solution is cleaned, put it into the chemical waste bin together with the collection bag and the cleaning and absorbing cotton, and confirm whether the cleaning of the site is completed.



4

Response personnel to remove pollutants

1. Before evacuating the site, the emergency personnel should enter the emergency shower room to decontaminate and put the protective clothing into the chemical waste bin before evacuating.
2. The emergency personnel shall inform the environmental safety personnel that the disaster site has been decontaminated, and then the environmental safety personnel shall report to the plant supervisor that the disaster condition has been lifted.
3. Follow-up disposal of waste in accordance with hazardous waste treatment procedures.



5-4 Water Resources Management

Although the nature of our main pharmaceutical research and development business and the manufacturing process do not consume a large amount of water resources, we do take measures to conserve water resources. In terms of Taichung Plant, which accounts for the largest water withdrawal, discharge and consumption throughout PEC, according to the statistics in 2021, the annual water consumption of the Taichung Plant, approximately 5.6 million liters, only accounts for 0.014% of the Taichung Park of the Central Science Park. Moreover, Panco Healthcare's water intake was 0.115 million liters, and a rainwater collection tower has been established. To conserve water use, tap water is only used when the rainwater is insufficient.

Statistics of water withdrawal, discharge and consumption of the Taichung plant for the past 3 years (unit: million liters)

	2019	2020	2021
Water withdrawal	15.91	15.64	16.1
Water discharge	9.08	9.46	10.5
Water consumption	6.83	6.18	5.6

Note: The Company's water sources are fresh water from third-party. Wastewater is also discharged through a third-party, the Sewage Treatment Plant of the Central Taiwan Science Park.

The water quality monitoring of the discharge water of Taichung Plant is carried out in line with regulations from the EPA in each year. The relevant testing is conducted by EPA-approved testing agency every six months to meet the water discharge and effluents standard. The discharged water is properly treated at the wastewater treatment plant in the Taichung Science Park of the Central Taiwan Science and Technology Administration (CSTA) and discharged in accordance with the standards for the pharmaceutical manufacturing industry under the CSTA Taichung Science Park wastewater treatment system. We rigorously control all processes to ensure that we do not raise any concerns regarding major environmental impacts. In terms of recycling and reusing water resources, Taichung Plant recycles the reverse osmosis brine and wastewater from the manufacturing process to the cooling water tower in the air conditioning system, thus enhancing the efficiency of water recycling and reuse. In 2021, the cumulative volume of recycled water reached 7.779 million liters. More information about water discharge treatment procedure, please refer to page 139 in [PharmaEssentia Corporation 2020 Sustainability Report](#).

