

RUNNING A SAFE, EFFICIENT, RESPONSIBLE, AND PROFITABLE BUSINESS

We have global standards, processes, and tools to manage safety, the environment, and community involvement. We aim to continuously improve the way we operate to prevent incidents and identify, avoid where possible, and minimise adverse environmental and social impacts across our projects and facilities. We also report on our performance in our Annual and Sustainability Report.



FINANCIAL PERFORMANCE

We conduct our business responsibly to attain sustainable profitability and deliver value to our stakeholders. To contribute to a sustainable energy future, it is critical that we also manage our financial performance.

Pilipinas Shell is expected to maximise value, maintain cash flow, manage costs, and generate strong returns for shareholders. All these contribute to the longevity of the business, and help us fulfil our mandate. (103-1)

Business Performance Management (BPM) is our principal tool to monitor, manage, and meet the Company's business goals. Below are the four steps of our BPM: (103-2)

- 1. Strategic Planning.** Management develops a strategic and medium-term plan that is:
 - a. Credible. Specific interventions are laid out to deliver the plan;
 - b. Competitive. Ambitious goals are set to achieve competitive returns within the planning period; and
 - c. Affordable. The plan is achievable with the resources available.

2. Operational Planning. Strategic plans with one-year and three-year targets are operationalised by the businesses. After securing approval from the Board of Directors, capital is allocated to support these plans.

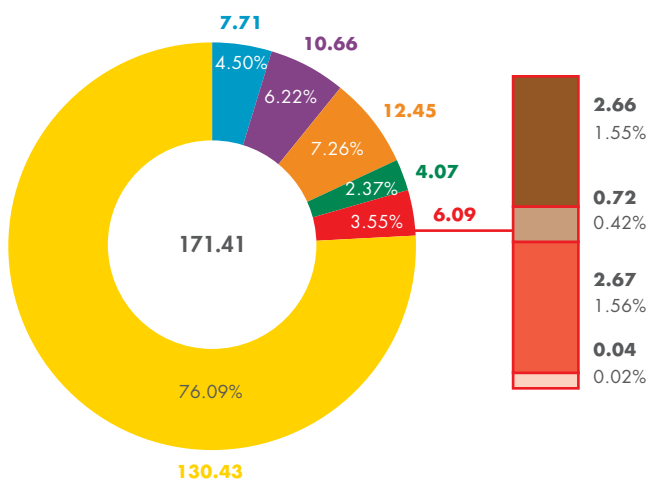
3. Reporting. Businesses report if their financial and operational targets have been met, and which areas need improvement.

4. Appraisal. The Board of Directors and upper management appraise the overall performance of the businesses of Pilipinas Shell.

It is the Board's responsibility to foster the long-term success of Pilipinas Shell. Board-level quarterly operational updates and reviews are done to evaluate the effectiveness of our strategy against set targets and key metrics for financial performance. Upper management also holds monthly meetings to discuss our financial and operational performance. Monthly finance forums and regular business meetings are also conducted to serve as our primary controls for evaluating performance at the business and function level. (103-3)

In 2017, Pilipinas Shell generated a direct economic value amounting to Php 171.41 billion, of which Php 2.67 billion and Php 2.66 billion were distributed to employees and shareholders, respectively, and Php 400 million invested in community development.

2017 ECONOMIC VALUE GENERATED AND DISTRIBUTED (in Php billion) (201-1)



LEGEND

- Economic Value Retained
- Government (taxes, duties, levies)
- Payments to Suppliers**
 - Crude and Finished Products Suppliers
 - Service Providers
 - Equipment, Property and Other Suppliers
- Providers of Capital**
 - Employees
 - Communities
 - Shareholders
 - Creditors

OPERATIONAL EXCELLENCE

Beyond cost management, we also measure our operational performance. We track our “No More Big Stuff” Health, Safety, Security, and Environment (HSSE) targets of zero fatality and zero significant recordable events. We also track what we call the “Four Halves,” namely: Process Safety, Personal Safety, Transport Safety, and Environmental Impacts.

The way we conduct our business is equally important as the quality of our products and services. We train our people to continuously look for improvement opportunities within our operational processes. Through programmes like the Excellence Every Day VP Award, we recognise personnel for the outstanding performance of their duties.

The 2017 Shell People Survey (SPS) showed respondents giving Pilipinas Shell 78% for operational excellence (compared to Shell’s overall score of 72% and the top quartile benchmark of 77%) and an average score of 86% for being a “responsible business” (against 81% for Shell, and 85% for the top quartile benchmark).

FUELLING LEGACY AND INNOVATION



Retail remains the largest growing segment of the business, and contributes a significant portion of our total sales.

Our Retail business ranked 6th in profitability and 9th in sales volume versus other Shell Retail businesses globally in 2017.

“We sell more per station than any other company in the marketplace,” observed Cesar A. Buenaventura, independent director and former Chief Executive Officer of Pilipinas Shell.

At less than half the retail network footprint of our closest rival, we compete in terms of operational efficiency, quality products, and customer service.

A legacy that spans generations

Pilipinas Shell’s 1,000th retail station, located along Greenfield Parkway, Eton Road in Sta. Rosa, Laguna, opened in May 2017. Dubbed the “Makati of the South,” Sta. Rosa has become a bustling business, residential, and commercial district.

“We are very excited to contribute to the growth of this area,” said Jenny Tan, owner and operator of Shell Eton Road.

Tan’s grandfather was also a Shell distributor, while Tan’s father operated their family’s first Shell retail station. She entered the business in 1996 and now manages 11 Shell retail stations—the largest cluster surrounding the South Luzon Expressway (SLEX). Her success is one example of Pilipinas Shell’s enduring relationships with retailers that span generations.

Redefining the retail station concept

Pilipinas Shell gives motorists a truly satisfying stopover experience. Apart from refuelling and maintenance and repair services, our customers can also find Shell Select, quick-service restaurants, ATMs, deluxe comfort rooms, and Pilipinas Shell’s latest café concept offering, deli2go, in Shell stations.

“We understand that the needs of our customers are evolving,” said Anthony Lawrence Yam, Vice President - Retail of Pilipinas Shell. “Our food at deli2go does not compromise on the taste and quality that Filipinos deserve.”



**SAFETY DAY
AT SHELL:
Working together
for everyone's
safety**

2017 marks the 11th year that Pilipinas Shell observed Shell Safety Day.

Safety Day, an annual event held by Shell worldwide, engages Shell employees and contractors to improve their safety performance.

In the Philippines, Safety Day has been observed for 11 years, most recently on May 10, 2017 with renewed focus on three Safety Leadership themes: Care, Risk Normalisation, and Dilemmas.

Some retail stations took the opportunity to tie up with organisations that would lend their expertise on safety and security. The Shell station in Kapalong, Davao del Norte, for one, partnered with the Kapalong Municipal Police Station to conduct an information campaign on crime prevention and illegal drugs.

Meanwhile, Shell Aviation (SAV) Philippines combined fun and games with a formal lecture and sharing sessions. Participants included station managers, ground crew, and suppliers who are regular ramp users. "We invited not only our [airline] customers, but also all the airport users," said Boyet Pastrana, Airport Operations Manager.

Goal Zero Day at Shell Aviation

SAV Philippines also held Goal Zero Day on October 11, 2017. The event taught personal, process, and transport safety to airport users.

The occasion marked two milestones of SAV's Into-Plane Operations: 7,002 days of no harm, and 3,715 days of no leaks. As of December 2017, the record has gone up to 7,093 days of no harm, and 3,806 days of no leaks — bringing SAV closer to a Double Platinum Award for Safety to add to their platinum and gold trophies since 1998.

Through the years, Shell Aviation in particular has been very focused on teaching safety protocols in the airport.

"Since [we have celebrated Safety Day and Goal Zero Day], we have had no troubles. We are the priority in positioning under the aircraft, because now they understand our concern about safety," said Pastrana.

ASSET INTEGRITY AND PROCESS SAFETY

At Pilipinas Shell, we conduct our operations responsibly and abide by stringent policies on asset integrity and process safety at all levels. Our leaders fully understand the process safety risks and require controls to educate and engage their employees in delivering the right outcomes. (103-1)

We follow the Health, Safety, Security, Environment, and Social Performance (HSSE&SP) Control Framework regarding asset management and safety processes. We make sure our assets are fit for use and work to preserve their integrity through regular maintenance and inspections. We follow procedures that should reduce chances of a technical breakdown or a safety incident, such as a leak, fire, or explosion. Our vigilance minimises the risk of harm to our people, and enables the Company to be a good neighbour in the communities where we operate. (103-2)

We have various asset integrity management procedures that are implemented based on Shell's Global Manufacturing Standards and Best Practices. It is embedded in the 22 Requirements of the Process Safety section of the HSSE&SP Control Framework. (103-2)

Examples of these safeguards include:

1. Design and Engineering Manuals (DEM)
2. Design and Engineering Practices
3. Process Safety Basic Requirements
4. Manufacturing Site Requirements Manual
5. Pressure Equipment Integrity Management Standard



Pilipinas Shell adheres to permit to work guidelines.

ASSET INTEGRITY PRINCIPLES

Asset integrity refers to the way we manage our facilities throughout their complete life cycle with the goal of never unintentionally releasing hazardous material. We follow four asset integrity principles: Design Integrity, Technical Integrity, Operating Integrity, and Integrity Leadership.

1. Design Integrity

This requires design engineers to assess the Process Safety risks of proposed facilities, and design and build assets to specific engineering standards:

DEM1 defines the Process Safety requirements in technical standards for design and construction that have a direct relationship to the control of process hazards with risk assessment. DEM2 focuses on preventing the re-occurrence of known major process safety incidents by addressing the main causes and key barriers.

2. Technical Integrity

This involves maintaining hardware through proactive testing, inspection, maintenance and repair following the Shell Global Reliability and Integrity maintenance plan. It's critical that inspection, monitoring, preventive maintenance and equipment repairs preserve the design integrity of the asset throughout its operating life.

3. Operating Integrity

This means operating all our facilities within the prescribed operating envelope from startup to shutdown. We define and comply with operating procedures, especially critical processes such as permit to work systems, use of safeguarding systems, and change management.

In managing operational risks, we operate our facilities using a Front Line Barrier Management (FLBM) programme to prevent the occurrence of undesirable incidents or limit the consequences in the event of such incidents.

4. Integrity Leadership

This describes the accountability of business leaders to ensure our assets are safe through all phases of their life cycle.

Championed by our President and Chief Executive Officer, safety is mandated as everybody's responsibility. Business and function heads, and HSSE managers, work together to ensure everyone understands and adheres to the HSSE&SP Control Framework. The Asset Manager assigns the roles and responsibilities for the operation of the asset, in compliance with the control framework. **(103-2)**

At the refinery, various managers are accountable on the requirements of Asset Integrity and Process Safety Management (AI-PSM), as specified in the control framework. This includes setting expectations, prioritising, and assigning resources. **(103-1)**

MANAGING PROCESS SAFETY

All our physical assets are well-designed, properly maintained, and safely operated. We implement a process safety management system to achieve our Goal Zero ambition of “no harm, no leaks” across all operations

Our supply and distribution arm adheres to an Asset Management Policy that helps prevent process safety incidents. **(103-2)**

For maritime safety, we follow the Shell Maritime Safety Requirements for Design, Engineering, Construction and Operations. **(103-2)**

Similarly, road transport has its own checks and safeguards. Vehicles used by field-based staff (e.g. Retail Territory Managers, Account Managers, etc.) must be rated at least four stars in the Global New Car Assessment Programme (NCAP), as vetted by our Global Road Safety Technical Expert. NCAP-4 rating indicates overall good performance in crash protection, with additional crash avoidance technology. Meanwhile, our contracted lorries follow the Shell Global Vehicle Standards, and are checked via the Road Transport Pillars audits to ensure that all safety requirements are met. **(103-2)**

For aviation equipment maintenance and operational safety, Pilipinas Shell follows the Shell Aviation Maintenance Manual (SAMM), Shell Aviation Quality System (SAQS), and Shell Airports Operations Manual (SAOM). **(103-2)**

At the refinery, we have an everyday zero incident target on Tier 1 and Tier 2 Loss of Primary Containment (LOPC) following the American Petroleum Institute (API) guide to reporting process safety. Certain mechanisms are implemented: permit to work; focused inspection programme for LOPC surveillance; process isolation using Lock-out Tag-out (LOTO) system; levelling up maintenance by doing mechanical handover to operations; and heightening operational discipline using a structured competency assessment for frontline. We also use an electronic system that monitors our employees’ exposure to work-related hazards at any given time. **(103-2)**

BEHAVIOUR-BASED SAFETY PROCESS

Visitors at Shell House must undergo a safety briefing before being allowed past the reception lobby. Similar safety protocols apply in fuel terminals and other shell office facilities. Prior to any activity, participants are oriented on the safety rules and the location of emergency exits.



Pilipinas Shell employees regularly discuss insights related to HSSE.

We foster a culture of safety and abide by the Shell Golden Rules, prominently displayed at various sites to remind us to:

1. Comply with the law, standards, and procedures;
2. Intervene in unsafe or non-compliant actions; and
3. Respect our neighbours.

Compliance to the Golden Rules extends to our contractors, as the Goal Zero ambition is embedded in our contracts, and articulated in the Contractor HSSE Manual.

12 LIFE-SAVING RULES

We follow the 12 Life-Saving Rules, which set out clear-cut “dos and don’ts” that cover activities with the highest potential safety risk. The rules help us ensure safety of operations and protection of our people. **(103-2)**

We conduct Toolbox Talks with contractors and third-party operators in the terminals to discuss tasks, operational issues, and safety considerations. Those who are not yet acquainted with the 12 Life-Saving Rules are oriented. Experienced employees are asked to share their HSSE insights. **(103-2)**

We also follow a Stop Work Policy, wherein a Shell employee or contractor is obliged to immediately suspend work when they discover an unsafe condition or act, such as personnel lacking personal protective equipment. Work resumes only after the unsafe condition has been rectified. **(103-2)**



Work with a valid work permit when required.



Conduct gas tests when required.



Verify isolation before work begins and use the specified life protecting equipment.



Obtain authorisation before entering a confined space.



Obtain authorisation before overriding or disabling safety critical equipment.



Protect yourself against a fall when working at height.



Do not walk under a suspended load.



Do not smoke outside of designated smoking areas.



No alcohol or drugs while working or driving.



While driving, do not exceed speed limits. Also, refrain from texting or calling on your mobile phone; instead, place your mobile on “Do Not Disturb” mode. If you use the phone as a navigational tool, activate voice guidance as a precaution.



Wear your seat belt.



Follow prescribed Journey Management Plan.

INCIDENT RESPONSE AND REPORTING

Incidents are reported and investigated following internally established standards and regulatory requirements. Pilipinas Shell utilises a unified information and communications technology (ICT) system called Fountain Incident Management (FIM) to report, review, and follow up on investigation results. It allows employees and contractors to report incidents, potential incidents, near misses, investigations, and action items, on a web-based database. The combined data pool in the FIM system allows for in-depth trend analysis and reports. By using one sharing tool, all Shell companies and third-party contractors can learn and work together more efficiently to prevent safety incidents. (103-3)

Number of process safety events, by business activity (OG13)

Due to our immediate response, the two cases each of Tier 1 and Tier 2 process safety incidents did not result in any fire or injury, nor affect the continuous supply of fuel products to the market:

PROCESS SAFETY EVENTS (PSE) ¹	NARRATIVE PER API RP 754
Tier 1 ²	Hydrocarbon oil leak coming from a portion of a pipeline
	Hydrocarbon leak coming from a flange
Tier 2 ³	Hydrocarbon LOPC from the removal of a blind flange
	LOSC ⁴ from a cold stream from a cooler

¹ A Process Safety Event (PSE) is an unplanned or uncontrolled release of any material, including non-toxic and non-flammable materials (e.g. steam, hot condensate, nitrogen, compressed CO₂ or compressed air).

² A Tier 1 Process Safety Event (T-1 PSE) is a loss of primary containment (LOPC) meeting a threshold as defined by API RP 754.

³ A Tier 2 Process Safety Event (T-2 PSE) is a LOPC with lesser volume of release than a Tier 1.

⁴ Loss of Secondary Containment

We have the necessary resources and competencies to deal with spills, leaks, fires and explosions. Our emergency response plans are routinely tested and improved after simulation exercises. We conduct drills to make sure that our employees and contractors can respond rapidly to an incident.

EVALUATION

Control Framework Audits and Integrated Assurance Plans (IAP) check the effectiveness of our management approach. The IAP involves a three-tier Line of Defence (LOD):

LOD 1: Internal self-assurance and checklist;

LOD 2: Peer review, which involves global and regional teams of subject matter experts that conduct evaluations across businesses; and

LOD 3: An independent review conducted by representatives from the Global HSSE&SP Assurance team. (103-3)

HSSE KPIs are regularly monitored to re-evaluate business plans in the short- (3-6 months) and long-term (one year). Management reviews, regular reports, and field walks help us identify and manage potential safety risks, and prevent their recurrence.

We also conduct an annual Assessment of Risks and Responses at Worksites of Shell (ARROWS), which is led by the Country Coordinating Team (CCT). This assures excellence in risk control management, prevention of HSSE-related incidents, and emergency response capabilities. (103-3)

Our monthly technical forum aids in the investigation of incidents and serves as a venue to discuss HSSE insights and improvements. (103-3)

Altogether, these evaluation mechanisms and business audits provide valuable input and enable us to meet our management commitments and to operate in a safe manner. (103-3)



Refuelling an aircraft is a complex process. At age 52, Nehemias B. Salaver, Shell Aviation (SAV) Philippines operator, makes it look easy. He goes through a precise sequence of steps — positioning the fuel tanker; making the necessary grounded connections between aircraft tank and hydrant; checking the gauge, opening valves, and activating fuel delivery — all within 15 minutes. Then he calmly reverses his steps and moves on to the next aircraft, navigating through the airport traffic.

Salaver joined SAV in 1987 as a contractor for maintenance, fresh off his scholarship under the Sanayan sa Kakahayang Industrial (SKIL) programme of the Pilipinas Shell Foundation, Inc. “If you don’t study all the functions, you’ll limit what you can do. I learned, so I don’t get nervous, even when the auditor asks questions,” he said, in Filipino.

A premium on safety

SAV is audited annually, solidifying its reputation of being a responsible business. The heart of its operations is situated in the Joint Oil Companies Aviation Fuel Storage Plant (JOCASP) within NAIA. These are premises

shared by Chevron and Petron since 1962. SAV escalated its advocacy when a contractor was involved in an incident at JOCASP in 1998.

“One of our goals is to bring HSSE to the highest level of consciousness. The dilemma for us, in a joint venture environment, is that we do not have sole responsibility. So we try to share our knowledge and influence,” said Melchor “Jun” Abina, Jr., SAV Country Operations Manager.

SAV is active in the Operations Committee and the HSSE Working Group at NAIA, and tries to intercede where there are unsafe conditions. When NAIA equipment proved insufficient to detect lightning strikes in 2014, for example, SAV furnished the Manila International Airport Authority (MIAA) with portable lightning detectors. “MIAA was able to establish a protocol. Eventually, they purchased their own equipment. Now, whenever there are lightning strikes within a 5-kilometre radius, MIAA issues a warning to stop operations,” Abina said.

SAV is also represented in the global Joint Inspection Group (JIG), which develops standards to govern the operation of shared fuel storage and handling facilities worldwide. Pilipinas Shell's latest contribution has been to determine better controls to test aviation equipment and lower the risk of fuel-related incidents. Internally, the Company is already introducing a more efficient water separator. "You're keeping your equipment and processes safe, and at the same time you're keeping the passengers in the airlines safe," said Abina.

Bigger footprint, better impacts

For its 55th year, SAV expanded its refuelling network to include Mactan-Cebu International Airport (CEB), the second busiest terminal in the country. With this latest entry, Pilipinas Shell now supplies jet fuel at three of the key international airports in the country, including Manila (MNL) and Clark, Pampanga (CRK).

"Customers prefer Shell, they see how we work," said SAV Manila Airport Operations Manager Boyet Pastrana, whose focus is safety. They've recorded 7,093 days of zero harm since 1998—that's 1,893,944 safety man-hours for the past 20 years—and 3,806 days of zero leaks since 2007. SAV Manila was one of only three finalists for the Shell Diamond Award on Safety. This 2017, the business has been awarded another win by the Safety Organization of the Philippines (SOPI), and is slated for a Double Platinum Award from Shell Global HSSE.

Since 1998, the only "spots" in their record are from a seatbelt issue in 2013, and a moving vehicle issue in 2015. "We're actually proud that we chose to report that isolated case of not wearing a seatbelt," said Patrick Manalo, a supervisor whose focal is vehicular maintenance. "Regardless of the consequence, you own your mistake, and you don't compromise on the safety of your co-workers."

There are 14 members in the SAV Manila team: a country manager, a site manager, three supervisors, and nine into-plane operators. Many of them are long-time employees: Manalo is clocking 18 years;

Abina, 22; Salaver, 31; and Pastrana, 32. All operators are required to complete their Aviation Centre of Excellence (ACE) Training, which is renewed every three years. They are trained in safe and effective operations, including use of modern equipment, marketing support, supply security, and customer care. All three supervisors also undergo shifts in roles—from administration and purchasing, to vehicle maintenance, to safety.

"Our group has initiative. There's always someone asking for another's help to learn a new expertise," said Manalo, in Filipino. "But the core is safety, and delivering the goods that we need to deliver. We excel at that."

Ninoy Aquino International Airport (NAIA) has one of the busiest runways in the world:

108,995

international passenger flights logged in 2017¹

On average, Shell Aviation (SAV) Manila serves:

36

international flights

25,000 litres

of Jet A-1 fuel per short-haul flight

100,000 litres

per long-haul flight

¹ Figures from the Manila International Airport Authority

PERSONAL SAFETY, HEALTH AND WELLNESS

For Pilipinas Shell, there are two general approaches to the management of personal health and safety: risk-based task management and promotion of wellness among our people. (103-2)

Apart from the 12 Life-Saving Rules that our workers abide by, the Shell Health Manual specifies our approach and policy: we prohibit alcohol and drug use; practice fatigue risk management; and evaluate fitness to work of employees. If an employee is found to have a health condition that renders him or her temporarily unable to perform his or her usual activities at work, line managers would determine appropriate job activities while the employee recovers. (103-2)

Our service providers include Occupational Health Nurses (OHNs) and Occupational Health Advisers (OHAs) who are guided by Health Manuals from the HSSE&SP Framework. (103-1) We conduct Health Risk Assessments (HRA) for each of our work sites, and for every activity conducted therein. Through this HRA, we are able to identify, assess, and manage any potential risks to health of employees and contractors – whether chemical, biological, or physical hazards. Our OHNs make necessary changes and recommend adjustments to mitigate risks. (103-2)

If there are health-related incidents, the OHA and OHNs report on reasons for the incident and control measures breached or ineffective procedures. They are responsible for updating and elevating the issues to the HSSE focal on-site, who will then make further recommendations to the business for implementation. HSSE tracks recordable cases and lost time injury due to incidents.

We learn from our experience: post-incident evaluation prompts engineering to further improve our facilities—and avoid recurrence. (103-3)

EMPLOYEE HEALTH SERVICES

	TRC ¹ FREE MAN-HOURS	YEARS TRC FREE
Pilipinas Shell	6,906,064	0.05
Manufacturing	193,376	0.05
Supply and Distribution	6,037,368	1.58
Retail	13,484,158	7.45
Lubricants	3,486,318	5.14
Aviation	1,893,943	8
Specialities	3,605,906	8
Real Estate	1,646,682	4.93
Lubricants Supply Chain	293,175	2.60

¹ Total Recordable Cases

In 2017, Pilipinas Shell implemented a new scheme for the healthcare benefits of employees. Health and Human Relations collaborated to develop a programme utilising a combination of third-party administration and premium-based health care to provide medical benefits and coverage for Pilipinas Shell employees. This strategy enabled the Company to provide health care benefits to employees and dependents in a cost-effective manner. (103-2)

We have a Blood Supply Programme in partnership with tertiary hospitals. This makes it possible for employees and their immediate dependents in emergency situations to have immediate access to blood at no cost. We also conduct quarterly bloodletting activities, wherein blood is donated by our employees. Our Live Donors Programme also has volunteers that will donate blood at a moment's notice. (103-2)

Pilipinas Shell prioritises human performance and care, where Resilience, Shell Be Well, and HIV/AIDS awareness and prevention are at the forefront. (103-2)



Employees benefit from the annual physical exam, where they are also given the opportunity to engage in a Wellness Talk with a healthcare professional. Having articulated their health and wellness goals, employees will be encouraged to commit to their goals through the Be Well Scorecard and participate in Shell's health promotion activities. The scorecard serves as a personal tracker and reminder for employees to monitor their progress and help them achieve their goals.

SHELL BE WELL PROGRAMME

Under the supervision of the Health Promotion Manager, the Shell Be Well programme promotes a healthy lifestyle and reinforces wellness and productivity among employees. It includes five aspects of wellness: (1) Eat Well, to recommend healthy food options; (2) Move More, to promote regular physical activity; (3) Breathe Well, which includes a smoking cessation support campaign; (4) Sleep Well, to address fatigue; (5) and Think Well, which empowers employees to build resilience. Pilipinas Shell also has a programme to help employees manage stress positively.

WELLNESS HUBS

To further strengthen our approach to wellness, we transformed our clinics into Wellness Hubs in 2017, which now offer a more holistic and wide range of health services, such as skincare, optical, dental, and mental health services to our employees. There are currently three Wellness Hubs located at Shell House in Valero, Makati; the Tabangao Refinery in Batangas; and Cebu.

(103-2)

Through the Breathe Well Programme, employees who wish to quit smoking could participate in the Weaning from Smoking Journey where support from the Wellness Hubs are felt. There is a wide array of smoking cessation initiatives offered, which include detoxification sessions, focused group discussions, and individual counselling.

Pilipinas Shell also conducts other health promotion activities throughout the year. Activities are scheduled every month according to identified themes. For example, February focuses on the heart, March is for the first quarterly blood donation activity, and July is Nutrition Month.

Overall, employees that participated in the wellness programmes showed marked improvements in lifestyle-related indices, such as reduced cholesterol levels and Body Mass Index (BMI) rates. Boosting employee health has also benefited the business: between 2015 to 2017, we achieved a 5% savings in our HMO costs attributed to the Be Well programme.

HIV/AIDS AWARENESS AND PREVENTION

Pilipinas Shell recognises that the issue of HIV/AIDS has an effect on our people and the overall business environment. In response, it seeks to create a supportive work environment and promote non-discrimination for employees living with HIV/AIDS, whether they are employees, contractors, customers or suppliers.

Our nurses and doctors in the Wellness Hub are certified counsellors for HIV/AIDS, and employees (and their dependents) may voluntarily avail of HIV/AIDS-related services, such as counselling, testing, and management. Pilipinas Shell's efforts are intended to raise awareness, as well as reduce fear or stigma in relation to HIV/AIDS.

WELLNESS CHAMPIONS: PILIPINAS SHELL EMPLOYEES COMPETE IN GLOBAL CHALLENGE



Pilipinas Shell ranked third in the Virgin Pulse Global Challenge, formerly known as the Global Corporate Challenge (GCC), a 100-day challenge posed to companies worldwide to promote a culture of health and wellness in and out of the workplace. With the ranking, Pilipinas Shell bested more than 53,000 teams from up to 3,000 companies worldwide.

For 2017, 56 teams, composed of seven members each, competed in the Global Challenge. This is the seventh year that Pilipinas Shell has enjoined employees to “move more” by taking a “virtual walk” around the world. The teams have a daily target of 10,000 steps, which is documented via an activity tracker. Since the challenges are done in teams, our employees feel supported while enjoying some friendly competition.

Pilipinas Shell even went beyond the 100-day challenge, extending our programme participation to six months to allow for a more holistic approach. It also extended a fun activity to motivate teams.

“I am more determined this year to join at least one of the health programmes, like the Global Challenge. With these programmes, I can see that if there are people who are willing to invest time and effort into living a healthy lifestyle, then so can I,” said Czarina Cabatay-Arabe, Sourcing Specialist, Contracting and Procurement.

SUPPLIER ASSESSMENT

Our suppliers are our partners and they make it possible for us to deliver new projects and run our operations efficiently.

Our Contracting and Procurement team is responsible for nearly all of our purchases and contracts. The team works with our business managers to assess and evaluate potential suppliers.

Supplier pre-qualification ensures that our contractors and service providers comply with the Shell Supplier Principles and are able to effectively deliver our requirements. (103-1)

The Shell Supplier Principles outlines four principles that are important to us and the commitments that we expect from our suppliers:

1. Business integrity,
2. HSSE,
3. Labour conditions and human rights, and
4. Social Performance.

In accordance with our Shell General Business Principles and our Code of Conduct, we seek to work only with contractors and suppliers who contribute to sustainable development, and we purchase products and services that support our approach to sustainability.

Pilipinas Shell manages supplier assessment through the global Shell Supplier Qualification System (SQS), which was introduced in January 2012. It provides a streamlined process to supplier

pre-qualification by gathering data and making assessments that are aligned to Shell's requirements. For high-risk contracts, HSSE checks are included to help us understand how suppliers manage these aspects and to ensure that they comply with Shell's principles. Suppliers' pre-qualification results are valid for three years, after which, they must undergo the process again to ensure that they are still compliant with requirements.

Pilipinas Shell also has internal controls to ensure that we comply with the regulatory frameworks that govern contracting and subcontracting agreements, as mandated by the Department of Labour and Employment (DOLE). Anti-bribery and corruption (ABC) due diligence obligations are incorporated into high-value contract assessments to avoid significant risks related to supplier transactions. On a yearly basis, we conduct workshops on ABC and HSSE compliance for suppliers to help them meet the SQS requirements. (103-2)

We also conduct regular business performance reviews with suppliers. This enables us to monitor their adherence to contract agreements and to help avoid recordable incidents related to HSSE, bribery, and corruption. With respect to supplier concerns and feedback, we conduct internal monitoring to ensure proper management and response. (103-3)



Pilipinas Shell addresses supplier concerns and feedback.

IMPACT ON THE ENVIRONMENT

Pilipinas Shell works to provide energy in a responsible manner. **(103-1)** Running a safe and responsible business means that we understand the impact we can have on the environment and the communities we share it with – before, during, and at the end of our operations. We carry out detailed assessments of potential environmental, social, and health impacts when we plan new projects. These help us to manage and reduce our impact on the environment and on communities throughout the lifetime of the project, from initial planning to final decommissioning.

Standards that cover our environmental performance include: managing emissions of greenhouse gases, using energy more efficiently, flaring and burning off less gas during oil production, preventing spills and leaks of hazardous materials, reducing fresh water use, and conserving biodiversity.

ENVIRONMENTAL COMPLIANCE

Our efforts include full compliance with regulatory requirements, stringent environmental impact assessment, and meaningful community relations. Our environmental performance is tied to our social performance. Both are managed to maintain our licence to operate. Effective management of any activity that could impact the environment means that we avoid a Notice of Violation and complaints from the community. Avoiding any damage to the environment, and preventing any misunderstanding or cause for complaint, means we preserve our reputation and mitigate any risk of business loss.

Guided by the Environment Manual of the Shell HSSE&SP Control Framework, all our operations and facilities follow a strict compliance protocol, risk management frameworks, and assurance processes for impact monitoring. Accordingly, a major facility such

as the Tabangao Refinery is certified ISO 14001 for environmental management. The Tabangao Refinery Leadership Team leads the implementation and monitoring of the Control Framework with support from Health, Safety, Security and Environment (HSSE), and External Relations (ER) teams.

MANAGING ENVIRONMENTAL FOOTPRINTS

A key element of managing our environmental impact and maintaining our Environmental Compliance Certificate is the effective monitoring of our consumption metrics.

The HSSE Core Team and Safety Steering Committee monitor our performance through key performance indicators, as reflected in the HSSE dashboard, as well as regular audits and updates.

Since 2016, we have also been monitoring our performance at Pilipinas Shell through the Sustainability Scorecard published in our Annual and Sustainability Report. **(103-3)**

ENERGY AND WATER CONSUMPTION

The Tabangao Refinery generates its own electricity, using cleaner-burning natural gas from the Malampaya Deepwater Gas-to-Power project and, in case the Malampaya platform is on maintenance or on emergency shutdown, back-up Euro IV (PH) diesel (i.e. low sulphur fuel) is being used momentarily (maximum 45 days every two years, based on the past year's agreement).

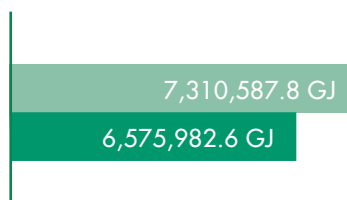
Our excess power is sold to internal consumers. In 2017, the Department of Energy (DOE) endorsed Pilipinas Shell's plan to sell electricity to external consumers via the Wholesale Electricity Spot Market.

Energy Consumption (302-1)

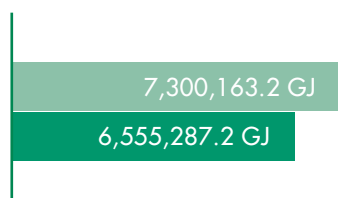
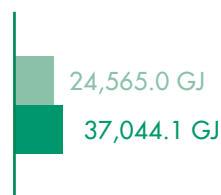
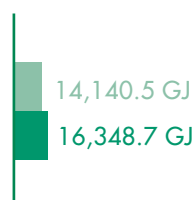
2016 2017

ENERGY CONSUMPTION¹

(Natural gas + Electricity)

**OWN ENERGY GENERATED**

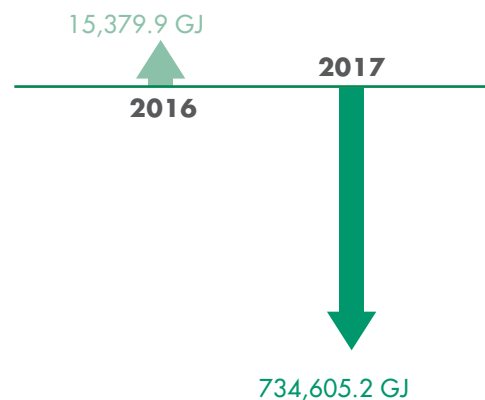
(Natural Gas)

**ELECTRICITY IMPORTED²****ELECTRICITY EXPORTED³**

¹ Refers to total energy used, which includes own energy generated, imported electricity and exported electricity



² Refers to energy purchased from the national grid

³ Electricity is sold to the Bitumen Import Facility (BIF), the Tabangao Depot, and some are returned to the National Grid Corporation of the Philippines if there is excess power supply.

Energy Reduction (302-4)

Reduction in energy consumption in 2017 is primarily attributed to the planned turnaround where the refinery was on shutdown for two months. Hence, overall energy consumption is low compared to the previous year. Other energy reduction tactics are still being developed and should be fully implemented by 2021-2023.

Water Withdrawal by Source (303-1)

Water Sources	Volume of water withdrawn (Mm ³)
 Surface water (non-fresh water)	11.0
 Groundwater ¹	2.0
TOTAL	13.0

¹ Groundwater consumption is metered by Utilities Technology.

The Tabangao Refinery uses fresh water sourced from deep wells, and surface water from Batangas Bay. The refinery does not use any water from municipal water sources.

Water Sources Significantly Affected by Withdrawal of Water (303-2)

20.1 Mm³/yr
Groundwater¹

¹ Figure is taken from the Tabangao Refinery Water Management Plan

This is the average annual water balance for the combined Malitam-Tabangao catchment expressed in annual volumetric flow. Pilipinas Shell is aware that its source of water is important to local communities and indigenous peoples in the surrounding area.

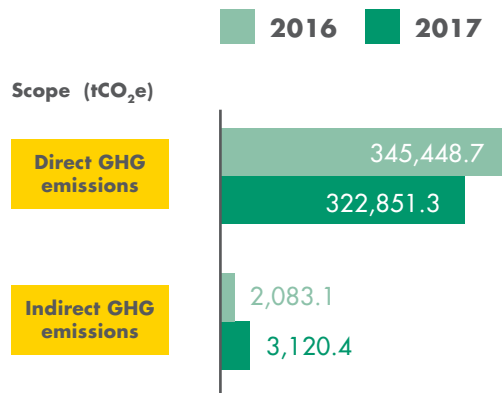
EMISSIONS

Pilipinas Shell endeavours to reduce our own greenhouse gas (GHG) emissions particularly in our manufacturing operations over the long term. We maintain a CO₂ Business Plan which includes: an inventory of GHG emissions based on the reporting requirements in the current Performance Monitoring and Reporting (PMR) Specification; a forecast with a 10-year projection; and targets and performance monitoring in support of the Company's GHG and energy management objectives.

This year, the 6.54% decrease in Direct GHG emissions (Scope 1) is due to the non-production of energy during the two-month refinery turnaround. Only one gas turbine was used to run utilities, since there was no demand from the process units. To ensure reliability, back-up electricity to run off-plots, offices, and oil movements, including jetties, was sourced from the national grid. Indirect GHG emissions (Scope 2) emission increased by 49.80% in 2017 due to the increase in purchased electricity.

Other reductions in emissions can also be attributed to the manufacturing turnaround.

Direct and indirect GHG emissions (305-1, 305-2)



* The Tabangao Refinery's Greenhouse Gas (GHG) Accounting and Management System has been assured by Lloyd's Register Quality Assurance (LRQA), a global provider of management system certification, validation, verification, and training on international standards.

We follow the maximum annual limits as prescribed by the Control Framework for Sulphur Oxides (SO_x) and Nitrogen Oxides (NO_x).

Part of our strategy to reduce sulphur as a by-product at the Tabangao Refinery is to capture some of the waste material for eventual sale to third parties engaged in the production of batteries, soap, and fertiliser, and other specialty products.

NO_x, SO_x, and other significant emissions (305-7)

	2016 (tonnes)	2017 (tonnes)
NO _x	1,077.7	1,433.2
SO _x	3,635.3	3,100.6
Volatile organic compounds (VOC)	1,038.8	680.1

Shell's policy under the Control Framework is to reduce any routine flaring or venting of associated gas at our operations to a level as low as technically and financially feasible. We also aim to minimise operational flaring required for safety reasons, such as during the start-up of a new facility.

As an active member of the World Bank-sponsored Global Gas Flaring Reduction (GGFR) partnership and a signatory of "Zero Routine Flaring by 2030" initiative, Shell seeks to reduce flaring by working collaboratively to find alternative uses for gas that would otherwise be flared.

Volume of flared and vented hydrocarbon **(OG6)**

4,039.9 tonnes

0.16% volume flared for gas production in relation to total volume produced

Note: All volatile hydrocarbons are flared and not vented to atmosphere. Information provided is metric tonnes of flared gas/metric tonnes of volume of products produced.

EFFLUENTS AND WASTE

The Tabangao Refinery has an existing Environmental Monitoring Plan (EMP), which stipulates the site's environmental monitoring strategy and commitments. The refinery is fully compliant to the EMP. This compliance is being observed by the Department of Environment and Natural Resources - Environmental Management Bureau (DENR-EMB) via the STAR-TREC Multi-Partite Monitoring Team.

The Tabangao Refinery follows DENR Administrative Order No. 2016-08 - Water Quality Guidelines and General Effluent Standards. For 2017, the total oil discharged to surface water amounts to 18.9 tonnes. The refinery takes proactive measures to manage incidents that might impact water quality.

Refinery wastes on the other hand, are treated by DENR- and Shell-accredited treatment facilities. These facilities are audited to make sure that they fully comply with both local and international standards.

Waste by type and disposal method**(306-2)**

We practise waste segregation and recycling.

TYPE	METHOD	AMOUNT (tonnes)	REMARKS
Hazardous Waste	Recovery, treatment	4,387.0	Waste oil from tank maintenance is recovered and sold to an accredited third party, to be used by a cement plant. Other hazardous waste are collected and treated by a facility accredited by the DENR-EMB.
Non-hazardous Waste	Landfill	93.1	Industrial non-hazardous waste is disposed via landfill.
	Recycling	491.4	Scrap materials and scrap metals are sold to a trusted scrap buyer, and recycled.
Domestic Waste	Landfill, recycling	100.0	Domestic waste is collected by the Materials Recovery Facility, which separates recyclables from biodegradable waste. The biodegradable materials are reprocessed as compost by a government-owned disposal facility; the residuals are disposed in a government-owned landfill.

SPILLS (306-3)

As already discussed, Shell has clear requirements and procedures in place to prevent operational spills. At the Tabangao Refinery, we execute the Goal Zero Renewal Strategy. We aim for zero incidents of environmental non-compliance, including zero spills to land or water bodies, and zero incidents of loss of primary containment. **(103-2)**

Pilipinas Shell's Tabangao Refinery documented three spills in 2017:

Based on a third-party report, the spills were effectively controlled and contained, which prevented the occurrence of any environmental impact. In the event of spills, we follow procedures itemised in Shell's Spill Preparedness and Response Manual. We investigate the causes of spills and agree with the relevant authorities on what needs to be done. If necessary, we conduct clean-up and/or remediation. Pilipinas Shell has ongoing remediation activities at our decommissioned terminal in Pandacan, Manila. (See feature article, "A Graceful Exit..." on page 58)

NATURE OF SPILL	VOLUME (MT)
May 26, 2017 Fuel oil spill to land	1.71
August 6, 2017 Crude oil spill to surface water (Batangas Bay)	14.81
August 15, 2017 Kerosene spill to land	0.69

OUR DECOMMISSIONING APPROACH

Impacts on the local environment and the community (more on this on page 76) are of particular concern during the decommissioning of a project, defined as the process of terminating the operations of a facility.

Since 2015, Pilipinas Shell has decommissioned two terminal facilities: Sucat-Buli Terminal, which ceased operations and dismantled its facilities in 2016, and Pandacan Terminal, which ceased operations in 2015. We assessed both sites and determined that soil conditions in Sucat Buli met Industrial Zone requirements, whereas due to rezoning, Pandacan had to undergo soil remediation. **(OG11)**

The decommissioning plan is activated once the Company decides to move out from a certain site. Our approach to decommissioning is dependent on factors such as the types of structures, their age and location, and technical challenges. The plan also includes consultations with relevant stakeholders.

Upon decommissioning, the site's existing government permits, including its Environmental Compliance Certificate, will also be terminated.

REMEDIATION AND ITS EFFECTS

Among the decommissioning activities, remediation, in particular, is implemented to remove potential hazards and restore the surroundings in line with our own stringent standards on health and safety.

"In the Philippines, there are no concrete laws yet in terms of remediation. However, multinational companies, such as Shell, are very strict and already have some guidance in terms of remediation," said Jay Baquiran, Senior Programme Manager of Pilipinas Shell's Soil and Groundwater Focus Delivery Group.

Prior to remediation, we conduct an Environmental Site Assessment using the site's current zoning criteria. The results of this assessment, comparable to our Shell Screening Level for both soil and groundwater, are then used to determine whether or not a remediation is needed in a decommissioned site.

Different zoning criteria would mean different remediation requirements. The Sucat-Buli Terminal closure was due to operational redundancy; there was no zoning change. Pandacan Terminal, on the other hand, was decommissioned because local government changed the site's zoning criteria from industrial to commercial zone.

"We aim to improve the condition of the site to make it suitable for a particular use," Baquiran said.

In terms of soil remediation, excavating the soil and removing it for treatment using physical or chemical methods is both time-consuming and costly. The process is made much more efficient because of Pilipinas Shell's detailed records. Our focus on "no spills, no leaks" means acute awareness of where to excavate and test for contamination.

Pilipinas Shell's Soil and Groundwater Focus Delivery Group initiates soil and groundwater remediation not only for decommissioned sites, but also for commissioned fuel terminals, supply points, and retail stations.

Through our remediation efforts, we mitigate potential hazards not just to our assets and equipment, but also to our neighbouring communities and the environment.



A GRACEFUL EXIT: Decommissioning and Remediation of Pandacan Terminal

With the reclassification of Pandacan from an Industrial II to a Commercial I zone, fuel terminals and depots therein had to shut down and relocate by January 2016. Operations ceased on June 30, 2015 and the terminal was completely demolished on November 23, 2015.

(OG11)

Although not required by the ruling, we also initiated a soil remediation project so the old site would fit its new classification. "The land has to be suitable for commercial use when the lot owner decides to sell it or develop it," reasoned Jay Baquiran, Pilipinas Shell's Senior Programme Manager for Soil and Groundwater Focus Delivery Group, which performs the soil and groundwater assessment and remediation for the downstream business.

The Pandacan Remediation Project Team is currently employing soil aeration in Pandacan. This involves removing potentially contaminated and impacted soil from the top layer, and then aerating or puncturing this

soil to facilitate better water and oxygen absorption. An on-site mobile laboratory tests the soil to ensure that it does not pose any health hazards. Done properly, soil aeration has the potential to revitalise the site so it would be fit for gardening and agricultural purposes.

For achieving 100,000 man-hours free of lost time injury (LTI), the team received a Health, Security, Safety, Environment, and Social Performance (HSSE&SP) Award on November 10, 2017. As of March 31, 2018, we achieved 295 days of Goal Zero and 157,916 LTI-free man-hours.

Turnover of the site to its lot owner is targeted by December 2018.